

National Roofing Contractors Association

2005-2006

Steep-slope

Roofing

Materials

Guide



# **2005-2006 STEEP-SLOPE ROOFING MATERIALS GUIDE**

The information source for steep-slope roof system products for roof designers, specifiers, installers, manufacturers and users.



10255 W. Higgins Road, Suite 600  
Rosemont, IL 60018-5607  
(847) 299-9070  
FAX: (847) 299-1183  
E-mail: [nrca@nrca.net](mailto:nrca@nrca.net)  
Web site: [www.nrca.net](http://www.nrca.net)

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## Introduction

The National Roofing Contractors Association's (NRCA's) *2005-2006 Steep-slope Roofing Materials Guide* is a comprehensive report about steep-slope roofing products currently on the market in the United States. The guide also provides pertinent information about the warranties offered for most asphalt shingle products.

NRCA publishes the Guide biennially as a service to the roofing industry. The objective of the guide is to provide information that will be helpful to users in determining which specific manufacturers' products will best serve their particular needs. It is of special value to those associated with the design, specification, application and use of steep-slope roof systems.

The Guide's first edition was published in November 1992. From 1992 through 1998, this publication was titled *Residential Steep-slope Roofing Materials Guide*. The term "residential steep-slope" distinguished it from a companion publication, the *Commercial Low-slope Roofing Materials Guide*, which has been published since 1983. The *Commercial Low-slope Roofing Materials Guide* provided product information about built-up, polymer-modified bitumen, single-ply, spray polyurethane foam-based and structural metal panel roof system products, as well as warranty information for roof membrane systems.

When applied to the U.S. roofing market, the terms "commercial low-slope" and "residential steep-slope" are by no means definitive. Low-slope roofing products typically used on nonresidential buildings (e.g., commercial, industrial and institutional buildings) sometimes are used on residential buildings (e.g., single-family homes, townhouses). Conversely, steep-slope roofing products typically used on residential buildings sometimes are used on nonresidential buildings.

Beginning in 1999, the titles of these guides changed to the *Low-slope Roofing Materials Guide* and *Steep-slope Roofing Materials Guide*. The reason for these title changes and division of product categories is for consistency with other NRCA publications, including *The NRCA Roofing and Waterproofing Manual*.

Steep-slope roofing products are those primarily intended for roofs with slopes greater than 3:12 (14 degrees). Asphalt shingle, fiber-cement, clay and concrete tile, wood shake and shingle, slate, and architectural metal panel roof systems fit this category.

Low-slope roofing products are those primarily intended for roofs with slopes of 3:12 (14 degrees) or less. Built-up, polymer modified bitumen, single-ply, spray polyurethane foam-based and structural metal panel roof systems fit this category.

In publishing the *Steep-slope Roofing Materials Guide*, NRCA maintains a policy of objectivity in its reporting of data. To be listed, nothing is required from manufacturers other than to adhere to the prescribed reporting formats. Any manufacturer of a product in the product categories included in the guide can be listed by submitting information in accordance with the procedures developed for this purpose. Companies involved only in the distribution of other companies' brand-name roofing products are not included in this publication. Manufacturers interested in having their products listed in future editions of the Guide are encouraged to contact NRCA at:

National Roofing Contractors Association  
Attention: Roofing Materials Guide  
10255 W. Higgins Road, Suite 600  
Rosemont, Illinois 60018-5607

NRCA exercises due care in accurately reporting the data supplied by product manufacturers. NRCA does not audit test procedures used to arrive at the reported data nor assume responsibility for the accuracy or completeness of the data submitted. The presence or absence of a listing of products or manufacturers in the Guide does not imply NRCA's approval or disapproval of the products or companies. NRCA does not recommend any specific materials be used or not.

NRCA does not develop standards itself but instead works toward and supports the improvements of existing standards and development of new ones by those organizations responsible for standards development. The fact materials listed in the Guide meet or do not meet all the values of the

reference standards, documents, recommendations and/or criteria does not necessarily imply that listed materials will or will not produce acceptable roof systems.

### **How the Guide Is Organized**

The *Steep-slope Roofing Materials Guide* is divided into eight primary sections:

- Section 1: Asphalt Shingles
- Section 2: Fiber-cement
- Section 3: Clay and Concrete Tile
- Section 4: Metal Panels
- Section 5: Wood Shakes and Shingles
- Section 6: Slate
- Section 7: Underlayment Sheets
- Section 8: Incomplete Data

There is a general index listing all product manufacturers included in the guide and the locations of their specific product listings at the end of this introductory section. Also, a listing of all product manufacturers and the locations of their specific products is provided at the beginning of each section except for Section 8: Incomplete Data.

There is also an introduction for each section at the beginning of each section.

Finally, there are separate appendices at the end of each section except for Section 8: Incomplete Data. The purpose of these appendices is to provide manufacturer-supplied information that expands data listed in the category section itself. Appendix information can be found for a product when an "X" appears in the space at the end of the listing titled "See Appendix if Checked."

When reviewing the data in the Guide, users should keep in mind the format is designed to facilitate side-by-side product comparisons. For this reason, listing companies can only respond to existing items of requested information; they cannot add their own items. Footnoting is not permitted in Guide listings; companies instead may expand on or clarify information by providing copy for the appendix.

### **Product Listings With Incomplete Data**

Product manufacturers included in the guide are encouraged to provide NRCA with listing information for their products that is as

complete as possible for publication in the Guide. When manufacturers submit product information (e.g., test results) that is incomplete, these specific products have been omitted from the detailed listing sections of the Guide. Manufacturers and products with incomplete product listing information are included in a new section of the guide, Section 8: Incomplete Data. NRCA has established this policy regarding manufacturers' product listings with incomplete data at the request of users of the Guide, who are clearly seeking detailed and complete product information from the guide and the companies listed.

Users of the Guide who are interested in specific product information about a manufacturer's product that is included in Section 8: Incomplete Data are encouraged to contact the product manufacturer directly. Manufacturers' contact information is provided in the General Index section (page 7-12) of the Guide.







**General Index**

	Asphalt Shingles	Asphalt Shingle Warranties	Fiber-cement Products	Clay Tile	Concrete Tile	Metal Panels	Wood Shakes and Shingles	Slate	Underlayment Sheets	Incomplete Data
<p>IMERY TOITURE c/o NORTHERN ROOF TILE SALES 50 Dundas Street, East, Suite 2 Dundas, ON L9H 7K6 Canada 905/689-4035 FAX: 905/689-7099</p>				133 151 172						
<p>INTEGRIS METALS 455 85th Avenue NW Minneapolis, MN 55433 763/717-9000 FAX: 763/717-7184 E-mail: Web site:</p>						188				
<p>LUDOWICI ROOF TILE, INC. P.O. BOX 69 New Lexington, OH 43764 800/945-8453 (tile) FAX: 740/342-5229 E-mail: info@ludowici.com Web site: www.ludowici.com</p>				134 151 172						
<p>MALARKEY ROOFING PRODUCTS P.O. Box 17217 Portland, OR 97217 503/283-1191 FAX: 503/283-5405 E-mail: Web site: www.malarkeyroofing.com</p>	42 69	96							241	
<p>MBCI P.O. Box 17217 Houston, TX 77238 281/445-8555 FAX: 281/445-1791 E-mail: Web site: www.mbcicom</p>						190				
<p>M.C.A. CLAY ROOF TILE 1985 Sampson Ave. Corona, CA 92879 951/736-9590 OR 800/736-6221 FAX: 951/736-6052 E-mail: sales@mca-tile.com Web site: www.mca-tile.com</p>				143 160 172						
<p>MCELROY METAL CO. 1500 Hamilton Road Bossier City, LA 71111 318/747-8000 FAX: 318/747-8029 E-mail: marketing@mcelroymetal.com Web site: www.mcelroymetal.com</p>						191				
<p>METAL SALES MANUFACTURING CORP. 7800 State Road 60 Sellersburg, IN 47172 800/406-7387 FAX: 812/246-0829 E-mail: info@metalsales.us.com Web site: www.metalsales.us.com</p>						194				
<p>MET-TILE INC. 1745 E. Monticello Court Ontario, CA 91761 909/947-0311 FAX: 909/947-1510 E-mail: met-tile@met-tile.com Web site: www.met-tile.com</p>						197				

**General Index**

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NORTH COUNTRY SLATE 8800 Sheppard Ave. East Toronto, ON Canada M1B 5R4 416/724-4666 FAX: 416/281-8842 Ej-mail: info@ncslate.com Web site: www.northcountry slate.com								222		
OWENS CORNING One Owens Corning Pkwy. Toledo, OH 43659 419/248-8000 FAX: 419/248-7354 E-mail: Web site: www.owenscorning.com	43 70 115	100							241	
PABCO ROOFING MANUFACTURERS 1718 Thorne Rd. Tacoma, WA 98421 859/858-3266 FAX: same E-mail: katherine.boucher@paccoast.com Web site: www.pabcoroof.com	47 74 116	112								
PARKER CEDAR PRODUCTS 7543 Vantage Place Delta, BC V4C 1A5 Canada 604/946-4333 FAX: 604/946-3605 Web site:							213			
PETERSEN ALUMINUM CORP. 1005 Tonne Rd. Elk Grove Village, IL 60007 800/323-1960 FAX: 800/722-7150 E-mail: Web site: www.pac-clad.com						197				
SANDTOFT ROOF TILES c/o NORTHERN ROOF TILE SALES 50 Dundas Street, East, Suite 2 Dundas, ON L9H 7K6 Canada 905/689-4035 FAX: 905/689-7099				145 162 172						
SANTE FE TILE CORP. 8825 NW 95th Street Medley, FL 33178 305/885-9002 FAX: 305/888-0050 E-mail: Web site:				146 163						
UNICRETE ROOF TILE 9440 48th Street SE Calgary, Alberta T2C 2R2 Canada 403/279-8321 FAX: 403/279-0251 E-mail: info@unicrete.com Web: www.unicrete.com					165 169					
VANDE HEY-RALEIGH ARCHITECTURAL ROOF TILE 1565 Bohm Drive Little Chute, WI 54140 800/236-8453 FAX: 920/766-0776 E-mail: manager@vhr-roof-tile.com					165 169					



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Asphalt Shingles



## Information About Section 1: Asphalt Shingles

### General Information

Section 1: Asphalt Shingles in NRCA's *2005-2006 Steep-slope Roofing Materials Guide* provides a comprehensive listing of asphalt shingle products commonly used in steep-slope roofing.

Asphalt shingle products are composed of (1) a base material, either organic felt or glass fiber mat, that provides support for the weather-resistant components and gives the shingle strength; (2) asphalt; and (3) surfacing material, generally in the form of mineral granules, that provides protection from impact and ultraviolet degradation and improves fire resistance.

Asphalt shingles are categorized in different ways, depending on their reinforcements and shapes. Asphalt shingles that use an organic reinforcing mat are referred to as *organic-reinforced asphalt shingles*, and those that use a glass-fiber-reinforcing mat are referred to as *glass-fiber-reinforced asphalt shingles*.

The appearance and shape of asphalt shingles are generally identified as follows:

- *Strip Shingles*: These shingles are in a strip form and are one of the most common type of asphalt shingles produced. They generally are longer in width than height. Common dimensions for standard shingles are 12 inches (300 mm) by 36 inches (910 mm). For metric-sized shingles, the common dimensions are approximately 13-1/4 inches (335 mm) by 39-3/8 inches (1 m). These dimensions can vary depending on the manufacturer, and some newer products are available in larger dimensions than traditional standard- or metric-sized asphalt strip shingles. Products referred to as three-tab, four-tab, random-tab and no-cut-out shingles are all generally categorized as *strip shingles*. Most strip shingles are "self-sealing"; that is, they contain adhesive seal strips that bond to the overlying course of shingles for increased wind resistance.
- *Laminated strip shingles*: Sometimes called "dimensional" or "architectural" shingles, these shingles have additional material laminated to the strip to create random thicknesses giving the shingles a more dimensional look. Most laminated shingles are "self-sealing"; that is,

they contain adhesive seal strips that bond to the overlying course of shingles for increased wind resistance. Dimensions can vary depending on the manufacturer, and some newer products are available in larger dimensions than traditional standard- or metric-sized asphalt strip shingles.

- *Individual Shingles*: Individual shingles are typically smaller than strip shingles, and more pieces are required to cover the same roof area than with strip shingles. Particularly in the past, individual shingles were known for their unique visual patterns. Scalloped, fish scale, diagonal, diamond and octagon are a few of the different patterns that can be achieved with individual shingles depending on their design, and some of these products are still available. Some of the individual shingles offer a locking feature to provide for increased wind resistance because individual shingles typically do not contain self-sealing adhesive strips. The "T-Lock" design is an example of this locking-type feature.

### Specific Information Included in the Guide

Information about asphalt shingle products is presented in the Guide in three parts: Part 1 — General Information, Part 2 — Technical Data and Part 3 — Warranties.

Specific information included in Part 1 — General Information is as follows:

1. Company name
2. Product name
3. Product description
4. Shingle type
5. Color
6. Availability restricted regionally
7. Dimensions and coverage
8. Hip/ridge shingle available
9. Slope/underlayment recommendations
10. Recommended deck material
11. Year product first sold
12. Number of squares installed
13. Manufacturer's plant locations
14. Distribution
15. Sales and technical information contacts

In Part 2 — Technical Data, specific listing information is as follows:

1. Company name

2. Product name
3. Product description
4. Complies with ASTM standards
5. Masses of asphalt shingles
6. Physical requirements
7. Fire/wind/impact resistance
8. Code acceptance

Reporting of technical data in Items 5 and 6 is based on the following American Society for Testing and Materials (ASTM) standards:

- ASTM D225, titled “Standard Specification for Asphalt Shingles (Organic Felt) Surfaced With Mineral Granules”
- ASTM D3018, titled “Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules”
- ASTM D3462, titled “Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules”

Additional information regarding asphalt shingle roof systems is provided in *The NRCA Roofing and Waterproofing Manual, Fifth Edition*.

In Part 3 — Warranties, information is derived from two sources: an examination of the warranty or guarantee document itself and the manufacturer’s response to a questionnaire sent by NRCA.

All manufacturers listing asphalt shingles in the guide are invited to submit their warranties for examination and listing. Those without warranty listings have elected not to participate.

For each warranty, there are 20 categories, or items of information, listed. The information provided in the following categories was obtained by examination of the document itself and provided by the manufacturer in response to a questionnaire accompanying the warranty document.

<u>Category</u>	<u>Item of Information</u>
-----------------	----------------------------

- |    |  |
|----|--|
| 1. | Identity of issuing entity                                       |
| 2. | Title, original publication date and identifying symbol (if any) |
| 3. | Products covered   |
| 4. | Scope of coverage  |
| 5. | Length of coverage   |

- |     |  |
|-----|--|
| 6.  | Nature of remedy   |
| 7.  | Monetary limitations   |
| 8.  | Specific exclusions from coverage                              |
| 9.  | Wind coverage/exclusion  |
| 10. | Notification requirements                                      |
| 11. | Determination of warranty applicability and coverage           |
| 12. | Issuing entity manufacturers and/or sells shingles             |
| 13. | Specific conditions that make the warranty ineffective or void |
| 14. | Inclusion of consequential damages                             |
| 15. | Assignability  |
| 16. | Cost to obtain   |
| 17. | Warranty backed by insurance coverage                          |
| 18. | Warranty an additional or exclusive remedy for the owner       |
| 19. | Special features/conditions                                    |
| 20. | Executed by owner  |

NRCA endeavors to prepare an accurate, comprehensive and objective listing for each warranty submitted by each manufacturer. Generally, a separate listing is generated for each document. Sometimes, however, a manufacturer uses the same warranty document to cover different products — the length of coverage, cost to obtain it, minimum charge or monetary limitations vary. In such cases, there may be more than one listing for a particular warranty reflecting these differences.

A blank space appears for a category of information if a manufacturer does not provide the relevant data. Brackets ([ ]) are used in listings to indicate information a manufacturer feels is pertinent but may not be contained in the document or at least was not apparent to NRCA in its review. In effect, the use of bracketed statements provides a means for manufacturers to disagree with the analyses made of documents by NRCA; in some instances, these statements may even contradict NRCA’s conclusions concerning the import of language in a warranty.

It should be noted the name of the manufacturer as it appears in Item 1— Identity of Issuing Entity may not necessarily be identical or even similar to the one listed in the General Index or Asphalt Shingles sections. This is because the name appearing in the warranty section is the name of the entity *appearing in the warranty document itself*. For example, if a manufacturer changes its

corporate name but does not change a warranty document that bore its original name, the original name will appear in the warranty section. In other sections of the Guide, if one company purchases the assets of another, upon request, NRCA simply moves the products of the acquired company under the name of the company that acquired it. In the warranty section, on the other hand, this may not be possible until warranty documents bearing the new corporate name are provided to NRCA. Until that time, the name of the entity must remain as it appears in the documents. An explanation of such situations is sometimes provided in a footnote in the warranty section to clarify an apparent discrepancy in corporate names.

By necessity, the warranty listings in the Guide present rather succinctly a great deal of information contained in manufacturers' warranties, as well as the policies surrounding them. For this reason, users should obtain and examine the warranty document itself, discuss additional questions with a representative of the party issuing the warranty, and obtain professional advice from counsel when desired. A warranty has significant legal consequences; therefore, all parties should understand the document at the outset of a construction project to preclude subsequent misunderstandings.

In cooperation with NRCA staff, the firm of Hendrick, Phillips, Schemm & Salzman, Atlanta, Ga., prepares the warranty section of the *NRCA Steep-slope Roofing Materials Guide*.

### Understanding the Warranty Listing

Following are descriptions of the kind of data that is contained in the 20 categories of information included in each warranty listing.

**1. Identity of issuing entity:** This is the name of the legal entity that issues and is obligated to honor the warranty document. In most instances, this entity is the manufacturer of the product covered by the warranty (but see the explanation of Item 12 for information in this regard).

**2. Title, original publication date and identifying symbol (if any):** The title listed is the title printed on the warranty document. The original publication date is the date from which the manufacturer first promulgated the

warranty; the document subsequently may be reprinted in the exact same form. Some manufacturers' warranties contain identifying symbols, or codes, that are frequently a combination of numbers and letters and usually placed in the bottom right-hand or left-hand corner of the document. This identifying symbol indicates the precise document that was reviewed by NRCA. (For a user to be certain the warranty document he has in his possession is the same as listed in the Guide, the title of the document and identifying symbol, if any, should match exactly.)

**3. Products covered:** This is an enumeration of the manufacturer's asphalt shingle products that are covered by the warranty. If properly updated by the manufacturer, users should be able to identify these products in the asphalt shingle section.

**4. Scope of coverage:** Information supplied in this category usually corresponds to the language used in the warranty document. Item 4a addresses whether the warranty provides coverage for defects in manufacture as opposed to defects in application, which is covered in Item 4b. Virtually all asphalt shingle warranties provide coverage for leaks; others may provide coverage for other defects and conditions. This will be noted in item 4c. Few asphalt shingle warranties provide coverage for defects in other roofing work besides the shingles; if coverage is extended to flashings, metal work or related application, this will be noted in Item 4d.

**5. Length of coverage:** This is the number of years for which the manufacturer will issue the warranty. The length of coverage will generally be stipulated to specific asphalt shingle products. Most coverage is prorated—that is, the coverage declines from the original cost of the shingles based on a formula related to the number of months elapsed in the warranty. Details about the prorating schedule are provided in items 5a, b and c.

**6. Nature of remedy:** The heading states what action the manufacturer will take in the event there is a problem with the shingles covered under the warranty. The language used in this category generally parallels that appearing in the warranty document. For most asphalt shingle warranties, the remedy provided

is payment for the purchase or cost to repair or replace the shingles, often on a prorated basis.

**7. Monetary limitations:** The information provided for this category indicates whether the warranty contains a monetary limitation of the manufacturer's obligation under its warranty. The entry *none* indicates there is no monetary limitation stated in the document, meaning the manufacturer is obligated to spend whatever sum is necessary to honor its warranty.

**8. Specific exclusions from coverage:** Most roofing warranties state leaks resulting from certain enumerated causes (e.g., natural disasters, tornadoes, abuse or misuse) will not be covered. A numeric code is used in this category to reference specific exclusions from coverage, a key for which is provided below. The list of specific exclusions is a compilation of those appearing in warranty documents submitted to NRCA; the language appearing in the index is not necessarily the exact language appearing in a specific warranty document, but it reflects the same exclusion.

The absence of a specific exclusion from coverage does not necessarily mean a warranty will be applicable to a condition or occurrence not specifically excluded. The applicability of the warranty will generally be determined from the information contained under the category Scope of Coverage.

#### Index of specifically enumerated exclusions from coverage

1. Natural disasters and acts of God (lightning, hurricanes, tornadoes, earthquakes)
2. Hail
3. Acts of negligence, abuse or misuse, accidents, vandalism
4. Damage by structural failure; settlement; movement; distortion; warpage; or buckling or cracking of roof deck, walls, or foundation
5. Failure of material and/or metal work not supplied by the manufacturer issuing the warranty
6. Changes, repairs or alterations to roof, or installation of equipment, fixtures or utilities on or through the roof after application
7. Defects in, failure or improper application of: roof insulation, roof deck, or any other underlying surface or material used as a base over which the shingles are applied
8. Inadequate attic ventilation
9. Traffic or storage of materials on the roof
10. Improper storage of shingles
11. Damage resulting from lack of positive, proper or adequate drainage
12. Negligence or failure of the owner to use reasonable care in maintenance of the roof or failure to follow manufacturer's maintenance specifications
13. Variations in color caused by natural positioning of the granular surfacing material
14. Discoloration caused by algae, fungi, lichen, cyanobacteria or environmental sooting
15. Repairs performed on materials furnished by others unless specifically authorized and approved by manufacturer; unauthorized repairs
16. Fire
17. Any cost incurred for repair or replacement not authorized by manufacturer
18. Contaminants that have not been approved first or accepted by manufacturer; exposure to or contact with damaging or deteriorating substances or agents
19. Defects or failure caused by misapplication of materials or by application not in strict adherence with manufacturer's specifications, application instructions and approved practices
20. Application of shingles directly to insulation or an insulating deck without manufacturers' prior approval
21. Application of cleaning solutions, paint or coatings
22. Infiltration or condensation of moisture in or through underlying areas; vapor condensation beneath the roof
23. Damages caused by falling objects
24. Damage to the shingles due to any cause other than manufacturing defects or acts of parties other than manufacturer
25. Appearance problems related to multi-layer installation; application over old shingles

26. Force majeure; conditions of use of circumstances beyond the manufacturer's control

**9. Wind coverage/exclusion:** The purpose of this category is to convey the manufacturer's policy in regard to whether blow-off of the shingles or damage to them is limited to specific wind speeds and/or other conditions. Some manufacturer's warranties list gales, strong gales, windstorms, and/or hurricanes and tornadoes as examples of natural disasters or acts of God that are specifically excluded from warranty coverage. To provide more specific, affirmative information regarding the manufacturer's policy concerning wind coverage, NRCA asks manufacturers to identify the wind speed that is covered by each of their warranties or to state the warranty does not cover damage to the roof caused by wind regardless of speed — meaning that any damage resulting from wind, even at extremely low speeds, is excluded from warranty coverage.

If NRCA believes the manufacturer's response is potentially inconsistent with the wind exclusions stated in the warranty or creates an ambiguity, the manufacturer's response is included in brackets. If the warranty document does not address the subject of wind, the information is based exclusively upon the manufacturer's response to the NRCA questions. If the manufacturer does not respond to the wind questions but the warranty addressed the subject of wind, the information is based exclusively on an examination of the warranty document. If the category remains blank, the warranty does not address the wind issue and the manufacturer did not respond to the wind questions.

**10. Notification requirements:** This category contains information concerning the action an owner or other claimant is to take to make a warranty claim; of particular importance is the prescribed time period in which a leak or defect is to be reported to the manufacturer. If the warranty contains specific notification requirements, they are set forth here. Most warranties require that claimants provide the manufacturer with written notice of a warranty claim within 30 days of the discovery of a leak or purported defect. Some warranties require notice within 10 days and/or written notice be sent by registered or certified mail.

**11. Determination of warranty applicability:** Some warranties state explicitly the manufacturer has the right to determine whether a leak is covered or excluded from warranty coverage. The entry *manufacturer's determination* indicates the manufacturer reserves to itself the right to determine whether a leak is covered or excluded from warranty coverage. Under these circumstances, the manufacturer's determination may be binding, even if it is erroneous and regardless of whether other parties disagree, provided the manufacturer's determination was made in good faith.

If the entry in this category states *neutral (no provision)*, the manufacturer's warranty does not contain an explicit provision giving it the right to determine whether the warranty is or is not applicable to a problem. In the event of a dispute concerning the warranty's applicability, a neutral party would ultimately decide whether the warranty is applicable.

**12. Issuing entity manufactures and/or sells products:** This category indicates whether the entity issuing the warranty is both the manufacturer and seller of the shingles covered under the warranty or whether the party issuing the warranty is only the seller.

**13. Specific conditions to make the warranty ineffective or void:** In addition to excluding warranty coverage for leaks resulting from specifically enumerated exclusions, manufacturers' warranties may provide that the entire warranty is ineffective or void under certain conditions. Unlike Category 8: Specific Exclusions from Coverage, Category 13 refers to those conditions stated in the warranty document that will make the warranty null and void or ineffective in its entirety as opposed to simply not being responsive to a particular leak. For example, a warranty may indicate repairs, alterations or additions without the prior approval of the manufacturer makes the warranty null and void. This differs from the statement that a leak resulting from a repair or alteration not previously approved by the manufacturer is excluded or not covered under the warranty.

An alphabetic code is used in this category to reference specific conditions to make a warranty ineffective or void, a key for which is provided below. The list of specific conditions

is a compilation of conditions that appear in roof warranties submitted to NRCA; the language appearing in the various conditions is not necessarily the exact document appearing in a specific warranty document, but it reflects the intent.

#### **Index of specific conditions that make a warranty ineffective or void**

- A. Shingles are not applied in accordance with manufacturer's application instructions or specifications
- B. Deck over which the shingles have been applied does not meet building code minimum requirements
- C. Roof structure is not properly vented; roof structure does not have thorough ventilation meeting building code minimum requirements; ventilation does not meet FHA minimum property standards
- D. Absence of underlayment in new construction or tear-off to deck
- E. Repairs or expenditures incurred before manufacturer's acknowledgement and acceptance of claim
- F. Shingles that are purchased or installed outside the United States or Canada
- G. Warranty registration form is not executed and submitted to manufacturer upon application of shingles
- H. Shingles are not installed by a roofing contractor certified by the manufacturer
- I. Lack of proper notification

#### **14. Inclusion of consequential damages:**

The entry *no* in this category indicates the warranty does not cover consequential damages that may result from a roof leak, such as damage to the interior of the building. The majority of roof warranties expressly exclude consequential damages.

**15. Assignability:** Similar to other legal documents, warranties can generally be "assigned" or "transferred" by one party to another unless there is a specific prohibition against such assignment. Some roofing warranties contain such prohibitions, and some state specifically no assignment or transfer will be allowed without the prior written permission of the manufacturer. The entry *No restrictions stated* indicates the warranty contains no provision barring, limiting or conditioning the

owner's rights to assign the warranty to a subsequent owner or party.

**16. Cost to obtain:** This is the amount, if any, the manufacturer charges for the warranty. The entry *None* in this category means there is not a separate charge, apart from the cost of purchasing the materials, for the warranty. When there is a separate charge, it will generally be stated on a per-square (100 square feet) basis.

#### **17. Warranty backed by insurance**

**coverage:** This category indicates whether an insurance company is listed on the face of the warranty document and whether the manufacturer has insurance applicable to its warranty obligations. The entry *No* indicates no insurance company is named on the face of the warranty document, meaning the owner or other claimant would not be entitled to assert a claim against an insurance company in the event the manufacturer were unable to satisfy its warranty commitments.

NRCA also asks manufacturers whether they carry insurance covering their warranty obligations and, if so, the type and amount of coverage. The manufacturer's response is included as part of the information provided in this category.

**18. Exclusive or additional remedy:** Under general legal principles, unless the warranty document specifically excludes other warranties and remedies that may be available to the owner and the owner agrees to be bound by the warranty terms, the rights and remedies set forth in the warranty document are in addition to those warranties, rights and remedies that may be available to the owner or other claimant under state, statutory or common law. In addition to providing an owner with specific rights, warranty documents are frequently used as a liability-limiting device so that the liability of the party issuing the warranty is limited to what is prescribed in the warranty document. If the warranty states that it is an exclusive warranty and is issued in lieu of all other warranties, the claimant may not be entitled to seek recovery from the manufacturer based on the breach of any other warranties, express or limited.

The manufacturer's warranty may exclude or seek to exclude the implied and express warranties established by the Uniform

Commercial Code (UCC). UCC, as adopted in most states, provides that a warranty is implied in a contract for the sale of goods and that the goods shall be merchantable if the seller is a merchant of goods of that kind. To be merchantable, goods must be fit as least for the ordinary purposes for which such goods are used, must conform to the promise or affirmations made on the container or label, and must pass without objection in the trade under the contract description. An implied warranty of fitness for particular purpose is created under UCC when the seller at the time of contracting has reason to know any particular purpose for which the goods are required and that the buyer is relying on the seller's skill or judgment to select or furnish suitable goods.

In addition to those implied warranties, UCC provides that express warranties are created when the seller (1) makes an affirmation of fact or promise to the buyer that relates to the goods and becomes a part of the basis of the bargain; (2) gives a description of the goods that is made part of the basis of the bargain; (3) provides a sample or model of the goods that is made a part of the basis of the program.

UCC implied warranties may be excluded in accordance with the requirements set forth in the Uniform Commercial Code.

In addition to seeking to make the warranty an exclusive warranty, a manufacturer's warranty may seek to limit the other remedies that the law would otherwise make available to a claimant. A warranty that states it is the owner's exclusive remedy might limit the claimant's right to the terms of the warranty and preclude a claim based on another legal theory of liability. Some warranty documents state the remedy provided in the warranty is the owner's "sole and exclusive remedy" and is the manufacturer's sole liability and obligation in the event of a roof problem regardless of whether the owner might otherwise be entitled to pursue a legal claim for breach of contract, negligence or another legal theory of recovery.

The purpose of the category, "Exclusive or Additional Remedy," is to give users an indication as to how the manufacturer's warranty may affect other warranties and remedies that may be available to an owner. The entry *exclude UCC warranties* in this category means it appears the warranty

document complies with UCC requirements to exclude warranties established under the Uniform Commercial Code.

**19. Special features/conditions:** This category provides relatively unique or unusual features, conditions or limitations. This category is generally based on the warranty document itself but sometimes may be based on information supplied by the manufacturer.

**20. Executed by owner:** This category indicates whether the manufacturer's warranty form states on its face it is to be signed by the owner. Requiring the roofing warranty to be executed by the owner makes it more likely he will be bound to the terms and conditions set forth in the document in the event a question subsequently arises as to whether the owner agreed to the terms and conditions of the warranty.

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<b>ATLAS ROOFING CORPORATION</b>	24	
2000 Riveredge Parkway	50	
Atlanta, GA 30328	76	
770/933-4476	114	
FAX: 770/952-3170		
E-mail		
Web site: www.atlasroofing.com		
<b>CERTAINTED CORPORATION</b>	26	
ROOFING PRODUTS GROUP	53	
P.O. Box 1100	78	
1400 Union Meeting Street	114	
Blue Bell, PA 19422		
800/322-3060		
FAX: 610/341-6212		
Web site: www.certainteed.com		
<b>ELK PREMIUM BUILDING PRODUCTS</b>	33	
14911 Quorum Drive, #600	59	
Dallas, TX 75254-1491	80	
972/851-0500	115	
FAX: 972/851-0401		
E-mail:		
Web: www.elkcorp.com		
<b>GAF MATERIALS CORP.</b>	34	
1361 Alps Road	61	
Wayne, NJ 07470	88	
973/628-3000	115	
FAX: 973/628-3356		
E-mail:		
Web: www.gaf.com		

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<b>IKO MANUFACTURING</b>	37	
120 Hay Road	63	
Wilmington, DE 19809	94	
302/764-3100	115	
FAX: 302/764-5852		
E-mail:		
Web site: www.iko.com		
<b>MALARKEY ROOFING PRODUCTS</b>	42	
P.O. Box 17217	69	
Portland, OR 97217	96	
503/283-1191		
FAX: 503/283-5405		
E-mail:		
Web: www.malarkeyroofing.com		
<b>OWENS CORNING</b>	43	
One Owens Corning Parkway	70	
Toledo, OH 43659	100	
419/248-8000	115	
FAX: 419/248-7354		
E-mail:		
Web: www.owenscorning.com		
<b>PABCO ROOFING MANUFACTURERS</b>	47	
1718 Thorne Road	74	
Tacoma, WA 98421	112	
859/858-3266	116	
FAX: Same		
E-mail: katherine.boucher@paccoast.com		
Web: www.pabcoroof.com		

**Asphalt Shingles, Part 1 — General Information**

1.	COMPANY NAME	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION
2.	PRODUCT NAME	PINNACLE 45	PINNACLE 35	STORMMASTER LM SBS MODIFIED
3.	PRODUCT DESCRIPTION			
	Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
	Construction (laminated/nonlaminated)	LAMINATED	LAMINATED	LAMINATED
	Granule Composition	CERAMIC	CERAMIC	CERAMIC
4.	SHINGLE TYPE			
	Self-Sealing 3-Tab Strip			
	Self-Sealing Random-Tab Strip			
	Self-Sealing No Cutout	X	X	X
	Individual Interlocking			
	Architectural Laminated			
5.	WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	45	35	50
6.	COLOR:			
	Number of Colors Available (/ marks number by region)	6	8	5
	Color Availability (regional/national)	NATIONAL	NATIONAL	NATIONAL
	Colors	ANTIQUE BLACK BURNT SIENNA HEATHERBLEND HEARTHSTONE GRAY WEATHERED WOOD WOODLAND GREEN	ANTIQUE BLACK BURNT SIENNA DESERT SHAKE DOVE GRAY HEATHER BLEND HEARTHSTONE GRAY WEATHERED WOOD WOODLAND GREEN	BROWN BLEND COPPERWOOD HEARTHSTONE GRAY WEATHERED WODO WOODLAND GREEN
7.	AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
8.	DIMENSIONS AND COVERAGE			
	Shingle Dimensions (inches x inches)	38 13/16 X 13 1/8	38 13/16 X 13 1/8	38 13/16 X 13 1/8
	Exposure (inches)	5 5/8	5 5/8	5 5/8
	Headlap (inches)	7 1/2	7 1/2	7 1/2
	Shingles Per Roof Square	66	66	66
	Bundles Per Square	4	3	3
	Weight Per Roof Square (pounds)			
9.	HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	NATIONALLY	NATIONALLY	NATIONALLY
10.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
	Underlayment Recommended in Normal Application	15-LB. FELT	15-LB. FELT	15-LB. FELT
	Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	4:12
	Underlayment Recommended in Special Application	2 15-LB. FELTS, WEATHERMASTER OPTIONAL	2 15-LB. FELTS, WEATHERMASTER OPTIONAL	2 15-LB. FELTS, WEATHERMASTER OPTIONAL
11.	RECOMMENDED DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented-Strand Board	X	X	X
	Waferboard	X	X	X
	Other (specify)	VENTED-R NAILBASE	VENTED-R NAILBASE	VENTED-R NAILBASE
12.	YEAR PRODUCT FIRST SOLD			
13.	NUMBER OF SQUARES INSTALLED			
14.	MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	DANGERFIELD, TX FRANKLIN, OH MERIDIAN, MS	FRANKLIN, OH DAINGERFIELD, TX MERIDIAN, MS	DAINGERFIELD, TX MERIDIAN, MS
15.	DISTRIBUTION			
	Distributors (number handling product or no)	500+	500+	500+
	Direct (number of regional service locations or no)			
16A.	FOR SALES INFORMATION, CONTACT:	ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES
16B.	FOR TECHNICAL INFORMATION, CONTACT:	601/481-1470	601/481-1470	601/481-1470
17.	SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

**Asphalt Shingles, Part 1 — General Information**

ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION
STORMMASTER ST SBS MODIFIED	GLASSMASTER 25	GLASS MASTER 25 ALPINE	GLASSMASTER T-LOK	WEATHERMASTER 25	CHALET
FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	ORGANIC NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC
X	X	X		X	X
			X		
30	25	25	25	25	30
5	9	4	2	7	7
NATIONAL BROWN BLEND COPPERWOOD HEARTHSTONE GRAY SILVER WHITE WEATHERED WOOD	NATIONAL ANTIQUE BLACK BURNT SIENNA DESERT SHAKE DOVE GRAY HEATHERBLEND HEARTHSTONE GRAY SILVER WHITE WEATHERED WOOD WOODLAND GREN	REGIONALLY HEARTHSTONE GRAY TILE RED WEATHERED WOOD WOODLAND GREEN	REGIONALLY DESERT SHAKE SILVER WHITE	REGIONAL ACORN ANTIQUE BLACK DESERT SHAKE DOVE GRAY SILVER WHITE WEATHERED WOOD WOODLAND GREEN	REGIONALLY COLONIAL GRAY COLONIAL BLACK GRAYSTONE HEATERBLEND SLATE GRAY WEATHERED SHAKE WOODLAND GREEN
NO	NO	YES	NO	YES	YES
12 X 36	12 X 36	12 X 36	21 1/2 X 21	12 X 36	12 X 36
5	5	5	12 X 12-SHINGLE	5	5 5/16
7	7	7	NA	7	7
80	80	80	99	80	78
3	3	3	3	3	3
NATIONALLY	NATIONALLY	REGIONALLY	REGIONALLY	REGIONAL	REGIONALLY
2:12	4:12	4:12	4:12	4:12	4:12
15-LB. FELT	15-LB. FELT	15-LB. FELT	15-LB. FELT	15-LB. FELT	15-LB. FELT
2:12	2:12	2:12	STORMMASTER DG WEATHERMASTER	2:12	2:12
2 15-LB. FELTS, WEATHERMASTER OPTIONAL	2 15-LB. FELTS, WEATHERMASTER OPTIONAL	2 15-LB. FELTS, WEATHERMASTER OPTIONAL		2 15-LB. FELTS, WEATHERMASTER OPTIONAL	2 15-LB. FELTS, WEATHERMASTER OPTIONAL
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
VENTED-R NAILBASE	VENTED-R NAILBASE	VENTED-R NAILBASE	VENTED-R NAILBASE	VENTED-R NAILBASE	VENTED-R NAILBASE
DAINGERFIELD, TX MERIDIAN, MS	ARDMORE, OK FRANKLIN, OH HAMPTON, GA MERIDIAN, MS	ARDMORE, OK	ARDMORE, OK	ARDMORE, OK	HAMPTON, GA
500+	500+	500+	500+	500+	500+
ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES
601/481-1470	601/481-1470	601/481-1470	601/481-1470	601/481-1470	601/481-1470
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1.	COMPANY NAME	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	CERTAINTEED CORPORATION
2.	PRODUCT NAME	LEGEND	STRATFORD	WOODSCAPE 30
3.	PRODUCT DESCRIPTION			
	Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
	Construction (laminated/nonlaminated)	NONLAMINATED	OVERLAY	LAMINATED
	Granule Composition	CERAMIC	CERAMIC	CERAMIC
4.	SHINGLE TYPE			
	Self-Sealing 3-Tab Strip	X		
	Self-Sealing Random-Tab Strip			
	Self-Sealing No Cutout		X	
	Individual Interlocking			
	Architectural Laminated			X
5.	WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	25	30	30
6.	COLOR:			
	Number of Colors Available (/ marks number by region)	5	5	10
	Color Availability (regional/national)	REGIONALLY	REGIONALLY	REGIONAL
	Colors	BLACK SHADOW DESERT SHAKE HEARTHSTONE GRAY WEATHERED WOOD WOODLAND GREEN	COLONIAL BLACK GRAYSTONE HEATHERBLEND WEATHERED SHAKE WOODLAND GREEN	BIRCHWOOD CYPRESSWOOD DRIFTWOOD EBONYWOOD FOREST GREEN OAKWOOD PEWTERWOOD SLATE BLENDE SUNSET BRICK WEATHERED WOOD
7.	AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	YES	YES
8.	DIMENSIONS AND COVERAGE			
	Shingle Dimensions (inches x inches)	12 X 36	37 1/2 X 12	12 X 36
	Exposure (inches)	5	5 11/32 X 5 5/16	5
	Headlap (inches)	7	6 5/16	2
	Shingles Per Roof Square	80	72 / 76	78
	Bundles Per Square	3	3	3
	Weight Per Roof Square (pounds)			245
9.	HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	REGIONALLY	REGIONALLY	REGIONALLY
10.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
	Underlayment Recommended in Normal Application	15-LB. FELT	15-LB. FELT	ROOFERS' SELECT
	Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
	Underlayment Recommended in Special Application	2 15-LB. FELTS, WEATHERMASTER OPTIONAL	2 15-LB. FELTS WEATHERMASTER OPTIONAL	WINTERGUARD
11.	RECOMMENDED DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented-Strand Board	X	X	X
	Waferboard	X	X	X
	Other (specify)	VENTED-R NAILBASE	VENTED-R NAILBASE	
12.	YEAR PRODUCT FIRST SOLD			1987
13.	NUMBER OF SQUARES INSTALLED			
14.	MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	ARDMORE, OK	HAMPTON, GA	NORWOOD, MA
15.	DISTRIBUTION			
	Distributors (number handling product or no)	500+	500+	
	Direct (number of regional service locations or no)			NO
16A.	FOR SALES INFORMATION, CONTACT:	ATLAS REGIONAL SALES OFFICES	ATLAS REGIONAL SALES OFFICES	LOCAL OFFICE (SEE APPENDIX)
16B.	FOR TECHNICAL INFORMATION, CONTACT:	601/481-1470	601/481-1470	800/322-3060 (SEE APPENDIX)
17.	SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION
WOODSCAPE 50	CENTENNIAL SLATE	XT 25 / SEAL KING 25	JET 25	GRAND MANOR SHANGLE	CARRIAGE HOUSE SHANGLE
FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC
		X			
			X		
X	X			X	X
50	LIFETIME	25	25	LIFETIME	LIFETIME
10	6	39	7	8	8
REGIONAL BIRCHWOOD CYPRESSWOOD DRIFTWOOD EBONYWOOD FOREST GREEN OAKWOOD PEWTERWOOD SLATE BLENDE SUNSET BRICK WEATHERED WOOD	NATIONAL BLACK GRANITE COUNTRY SLATE FIELDSTONE NEW ENGLAND SLATE PLYMOUTH ROCK SMOKEY QUARTZ	REGIONAL SEE APPENDIX	REGIONAL BLACK BLENDE CHESTNUT BROWN FROST BLENDE MOIRE BLACK SLATE BLENDE SNOW WHITE WOOD BLENDE	REGIONAL BLACK PEARL BROWNSTONE COLONIAL SLATE GATEHOUSE SLATE GEORGIAN BRICK HEIRLOOM SILVER SHERWOOD FOREST STONEGATE GRAY	NATIONAL BLACK PEARL BROWNSTONE COLONIAL SLATE GATEHOUSE SLATE GEORGIAN BRICK SHERWOOD FOREST STONEGATE GRAY VICTORIAN BLUE
YES	NO	YES	YES	NO	NO
12 X 36	18 X 36	12 X 36	12 X 36	18 X 36	18 X 36
5	8	5	5	8	8
2	5	2	2	2	2
80	50	80	80	50	50
4	5	3	3	5	5
300	355	225	225	425	355
REGIONALLY	NATIONALLY	REGIONALLY	REGIONALLY	NATIONALLY	NATIONALLY
4:12	4:12	4:12	4:12	4:12	4:12
ROOFERS' SELECT	ROOFERS' SELECT	ROOFER'S SELECT	ROOFER'S SELECT	ROOFERS' SELECT	ROOFERS' SELECT
2:12	2:12	2:12	2:12	2:12	2:12
WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
1994	2004	1985	1987	1991	1993
NORWOOD, MA	OXFORD, NC	AVERY, OH NORWOOD, MA OXFORD, NC SHAKOPEE, MN SHREVERPORT, LA	NORWOOD, MA	OXFORD, NC	OXFORD, NC
NO	NO	NO	NO	NO	NO
LOCAL OFFICE (SEE APPENDIX) 800/322-3060 (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX) 800/322-3060 (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX) 800/322-3060 (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX) 800/322-3060 (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX) 800/322-3060 (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX) 800/322-3060 (SEE APPENDIX)
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1. COMPANY NAME	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION
2. PRODUCT NAME	HATTERAS	HALLMARK SHANGLE	INDEPENDENCE SHANGLE
3. PRODUCT DESCRIPTION			
Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
Construction (laminated/nonlaminated)	NONLAMINATED	LAMINATED	LAMINATED
Granule Composition	CERAMIC	CERAMIC	CERAMIC
4. SHINGLE TYPE			
Self-Sealing 3-Tab Strip		X	X
Self-Sealing Random-Tab Strip			
Self-Sealing No Cutout			
Individual Interlocking			
Architectural Laminated			
5. WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	40	40	50
6. COLOR:			
Number of Colors Available (/ marks number by region)	9	5	10
Color Availability (regional/national)	REGIONAL	REGIONAL	REGIONAL
Colors	LIGHTHOUSE RED NEWPORT GREEN OUTER BANKS OYSTER GRAY REGATTA BLUE SANDPIPER STORMY NIGHT WINDSWEPT GRAY WEATHERED WOOD	BRONZED BROWN GOLDEN TAN HICKORY BARK PEWTER GRAY WEATHERED SHAKE	BURNT SIENNA COLONIAL SLATE COTTAGE RED DRIFTWOOD HEATHER BLEND HUNTER GREEN WEATHERED WOOD ADDITIONAL COLORS BY REGION
7. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	YES	NO
8. DIMENSIONS AND COVERAGE			
Shingle Dimensions (inches x inches)	18 X 36	12 X 36	12 X 36
Exposure (inches)	8	5	5
Headlap (inches)	2	2	2
Shingles Per Roof Square	50	80	80
Bundles Per Square	3	5	4
Weight Per Roof Square (pounds)	235	315	300
9. HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	REGIONALLY	REGIONALLY	NATIONALLY
10. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
Underlayment Recommended in Normal Application	ROOFERS' SELECT	ROOFERS' SELECT	ROOFERS' SELECT
Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
Underlayment Recommended in Special Application	WINTERGUARD	WINTERGUARD	WINTERGUARD
11. RECOMMENDED DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented-Strand Board	X	X	X
Waferboard	X	X	X
Other (specify)			
12. YEAR PRODUCT FIRST SOLD	1998	1965	1976
13. NUMBER OF SQUARES INSTALLED			
14. MANUFACTURERS PLANT LOCATIONS (CITY, STATE)	OXFORD, NC	SHAKOPEE, MN	OXFORD, NC SHAKOPEE, MN AVERY, OH
15. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)	NO	NO	NO
16A. FOR SALES INFORMATION, CONTACT:	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)
16B. FOR TECHNICAL INFORMATION, CONTACT:	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)
17. SEE APPENDIX IF CHECKED		X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION
LANDMARK 50 / ARCHITECT 80 (METRIC)	LANDMARK 50	LANDMARK 40 (METRIC)	LANDMARK 40 IR	LANDMARK 30 (METRIC)	LANDMARK 30
FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC
X	X	X	X	X	X
50	50	40	40	30	30
27	27	27	5	27	27
NATIONAL SEE APPENDIX	REGIONAL SEE APPENDIX	NATIONALLY SEE APPENDIX	REGIONAL BURNT SIENNA COLONIAL SLATE MOIRE BLACK RESAWN SHAKE WEATHERED WOOD	NATIONAL SEE APPENDIX	REGIONAL SEE APPENDIX
NO	YES	NO	YES	NO	YES
13 1/4 X 38 3/4	12 X 36	13 1/4 X 38 3/4	13 1/4 X 38 3/4	13 1/4 X 38 3/4	12 X 36
5 5/8	5	5 5/8	5 5/8	5 5/8	5
2	2	2	2	2	2
66	80	66	66	66	80
4	4	4	4	4	4
300	300	260/265	260	240/245	240/245
NATIONALLY	REGIONALLY	NATIONALLY	REGIONALLY	NATIONALLY	REGIONALLY
4:12	4:12	4:12	4:12	4:12	4:12
ROOFERS' SELECT	ROOFERS' SELECT	ROOFERS' SELECT	ROOFERS' SELECT	ROOFERS' SELECT	ROOFERS' SELECT
2:12	2:12	2:12	2:12	2:12	2:12
WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
1996	2000	1996	2004	1997	2000
AVERY, OH BIRMINGHAM, AL ENNIS, TX PEACHTREE CITY, GA PORTLAND, OR SHAKOPEE, MN SHREVERPORT, LA WILMINGTON, DE	NORWOOD, MA	AVERY, OH BIRMINGHAM, AL ENNIS, TX PEACHTREE CITY, GA PORTLAND, OR SHAKOPEE, MN SHREVERPORT, LA WILMINGTON, DE	ENNIS, TX	AVERY, OH BIRMINGHAM, AL ENNIS, TX PEACHTREE CITY, GA PORTLAND, OR SHAKOPEE, MN SHREVEPORT, LA WILMINGTON, DE	NORWOOD, MA
NO	NO	NO	NO	NO	NO
LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)
800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1.	COMPANY NAME	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION
2.	PRODUCT NAME	CLASSIC HORIZON SHANGLE	NEW HORIZON SHANGLE	LANDMARK TL
3.	PRODUCT DESCRIPTION			
	Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
	Construction (laminated/nonlaminated)	OVERLAY	OVERLAY	LAMINATED
	Granule Composition	CERAMIC	CERAMIC	CERAMIC
4.	SHINGLE TYPE			
	Self-Sealing 3-Tab Strip	X		
	Self-Sealing Random-Tab Strip			
	Self-Sealing No Cutout		X	
	Individual Interlocking			
	Architectural Laminated			X
5.	WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	30	30	LIFETIME
6.	COLOR:			
	Number of Colors Available (/ marks number by region)	9/9/97	9/7	8
	Color Availability (regional/national)	REGIONAL	REGIONAL	NATIONAL
	Colors	GRAYSTONE HOMESTEAD SLATE HORIZON BLUE PRAIRIE WOOD RESAWN SHAKE SHADOW BLACK VALLEY FORGE GREEN WEATHERED WOOD WILLIAMSBURG GRAY	GRAYSTONE HARVEST BROWN HOMESTEAD SLATE HORIZON BLUE PRAIRIE WOOD SHADOW BLACK VALLEY FORGE GREEN WEATHERED WOOD WILLIAMSBURG GRAY	BURNT SIENNA COBBLESTONE GRAY CUMBERLAND MOIRE BLACK OLD OVERTON RESAWN SHENANDOAH WEATHERED WOOD
7.	AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	YES	NO
8.	DIMENSIONS AND COVERAGE			
	Shingle Dimensions (inches x inches)	12 X 36	12 X 36	13 1/4 X 40
	Exposure (inches)	5	5	5 5/8
	Headlap (inches)	2	2	2
	Shingles Per Roof Square	80	80	64
	Bundles Per Square	3	3	4
	Weight Per Roof Square (pounds)	250	245/250	340
9.	HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	REGIONALLY	REGIONALLY	NATIONALLY
10.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
	Underlayment Recommended in Normal Application	ROOFERS' SELECT	ROOFERS' SELECT	ROOFER'S SELECT
	Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
	Underlayment Recommended in Special Application	WINTERGUARD	WINTERGUARD	WINTERGUARD
11.	RECOMMENDED DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented-Strand Board	X	X	X
	Waferboard	X	X	X
	Other (specify)			
12.	YEAR PRODUCT FIRST SOLD	1982	1996	1995
13.	NUMBER OF SQUARES INSTALLED			
14.	MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	OXFORD, NC	AVERY, OH SHAKOPEE, MN	BIRMINGHAM, AL FREMONT, CA
15.	DISTRIBUTION			
	Distributors (number handling product or no)			
	Direct (number of regional service locations or no)	NO	NO	NO
16A.	FOR SALES INFORMATION, CONTACT:	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)
16B.	FOR TECHNICAL INFORMATION, CONTACT:	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)
17.	SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

**Asphalt Shingles, Part 1 — General Information**

CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION
HEARTHSTEAD	XT 30	XT 30 IR	PATRIOT	PRESIDENTIAL TL	SEALDON 25
FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	ORGANIC NONLAMINATED CERAMIC
	X	X	X		X
				x	
25	30	30	30	LIFETIME	25
6	26	5	9	6	10
REGIONAL DRIFTWOOD HEATHERWOOD PARK GREEN PEWTER SLATE GRAY WEATHERED GRAY	NATIONAL SEE APPENDIX	REGIONAL BURNT SIENNA COLONIAL SLATE MOIRE BLACK RESAWN SHAKE WEATHERED WOOD	REGIONAL COLONIAL SLATE GRAYSTONE HOMESTEAD SLATE PATRIOT BLUE PRAIRIE WOOD RESAWN SHAKE VALLEY FORGE GREEN WEATHERED WOOD WILLIAMSBURG GRAY	NATIONAL AUTUMN BLEND BARK BROWN CHARCOAL GRAY SHADOW GRAY SPANISH TILE WEATHERED WOOD	REGIONAL BLACK CINNAMON FROST EVERGREEN BLEND GRAY FROST NICKEL GRAY OAKWOOD SANDALWOOD STAR WHITE TIMBER BLEND WEATHERED WOOD
YES	NO	YES	YES	NO	YES
12 X 36	12 X 36	12 X 6	12 X 36	14 1/4 X 40	12 X 36
5	5	5	5	4	5
2	2	2	2	2	2
80	80	80	8-	90	80
3	3	3	3	6	3
225	245	245	235	480	225
REGIONALLY	REGIONALLY	REGIONALLY	REGIONALLY	NATIONALLY	REGIONALLY
4:12	4:12	4:12	4:12	4:12	4:12
ROOFERS' SELECT	ROOFERS' SELECT	ROOFERS' SELECT	ROOFERS' SELECT	ROOFER'S SELECT	ROOFERS' SELECT
2:12	2:12	2:12	2:12	2:12	2:12
WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD	WINTERGUARD
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
1985	1997	2004	2003	1999	1950s
SHAKOPEE, MN	AVERY, OH NORWOOD, MA OXFORD, NC PORTLAND, OR SHAKOPEE, MN SHREVEPORT, LA	SHREVEPORT, LA	OXFORD, NC	BIRMINGHAM, AL FREMONT, CA	SHAKOPEE, MN
NO	NO	NO	NO	NO	NO
LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)
800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1. COMPANY NAME	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION
2. PRODUCT NAME	CT 20	CUSTOM LOK 25	PRESIDENTIAL SHAKE
3. PRODUCT DESCRIPTION			
Reinforcing Material (organic/fiberglass)	FIBERGLASS	ORGANIC	FIBERGLASS
Construction (laminated/nonlaminated)	NONLAMINATED	NONLAMINATED	LAMINATED
Granule Composition	CERAMIC	CERAMIC	CERAMIC
4. SHINGLE TYPE			
Self-Sealing 3-Tab Strip	X		
Self-Sealing Random-Tab Strip			
Self-Sealing No Cutout			
Individual Interlocking		X	
Architectural Laminated			X
5. WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	20	25	50
6. COLOR:			
Number of Colors Available (/ marks number by region)	6/16/16	9	11
Color Availability (regional/national)	REGIONAL	REGIONAL	NATIONAL
Colors	MOIRE BLACK STAR WHITE WEATHR ADDITIONAL COLORS BY REGION SEE APPENDIX	BLACK EVERGREEN BLEND GRAY FROST MINT FROST OAKWOOD PEWTER STAR WHITE TIMBER BLEND WEATHERED WOOD	AUGUSTA GREEN AUTUMN BLEND BARK BROWN CHAPARRAL CEDAR CHARCOAL BLACK SHADOW GRAY SLATE GRAY SUNRISE CEDAR WEATHERED WOOD WOOD TONE YOSEMITE
7. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	YES	NO
8. DIMENSIONS AND COVERAGE			
Shingle Dimensions (inches x inches)	12 X 36	20 13/16 X 21 1/2	14 1/4 X 40
Exposure (inches)	5	14	4
Headlap (inches)	2	2	2
Shingles Per Roof Square	80	99	90
Bundles Per Square	3	3	5
Weight Per Roof Square (pounds)	200	250	355
9. HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	REGIONALLY	REGIONALLY	NATIONALLY
10. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
Underlayment Recommended in Normal Application	ROOFERS' SELECT	ROOFERS' SELECT	ROOFER'S SELECT
Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
Underlayment Recommended in Special Application	WINTERGUARD	WINTERGUARD	WINTERGUARD
11. RECOMMENDED DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented-Strand Board	X	X	X
Waferboard	X	X	X
Other (specify)			
12. YEAR PRODUCT FIRST SOLD	1970s	1960s	1985
13. NUMBER OF SQUARES INSTALLED			
14. MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	OXFORD, NC PORTLAND, OR SHREVEPORT, LA	SHAKOPEE, MN	BIRMINGHAM, AL FREMONT, CA
15. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)	NO	NO	NO
16A. FOR SALES INFORMATION, CONTACT:	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)	LOCAL OFFICE (SEE APPENDIX)
16B. FOR TECHNICAL INFORMATION, CONTACT:	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)	800/322-3060 (SEE APPENDIX)
17. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

ELK PREMIUM BUILDING PRODUCTS, INC.	ELK PREMIUM BUILDING PRODUCTS, INC.	ELK PREMIUM BUILDING PRODUCTS, INC.	ELK PREMIUM BUILDING PRODUCTS, INC.	ELK PREMIUM BUILDING PRODUCTS, INC.	ELK PREMIUM BUILDING PRODUCTS, INC.
PRESTIQUE PLUS HIGH DEFINITION	PRESTIQUE I HIGH DEFINITION	PRESTIQUE HIGH DEFINITION	PRESTIQUE GALLERY COLLECTION	PRESTIQUE GRANDE	DOMAIN WINSLOW
FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC
X	X	X	X	X	X
50	40	30	50	40	50
11/10/10/10 REGIONAL	11/10/10/10 REGIONAL	11/10/10/10 REGIONAL	3/3/3/3/ NATIONAL	4 NATIONAL	5 NATIONAL
ANTIQUE SLATE SHAKEWOOD SABLEWOOD FOREST GREEN HICKORY BARKWOOD BIRCHWOOD WEDGEWOOD SANDALWOOD ASPEN WHITE WEATHERWOOD	ANTIQUE SLATE SHAKEWOOD SABLEWOOD FOREST GREEN HICKORY BARKWOOD BIRCHWOOD WEDGEWOOD SANDALWOOD ASPEN WHITE WEATHERWOOD	ANTIQUE SLATE SHAKEWOOD SABLEWOOD FOREST GREEN HICKORY BARKWOOD BIRCHWOOD WEDGEWOOD SANDALWOOD ASPEN WHITE WEATHERWOOD	BALSAM FOREST WEATHERED SAGE SIENNA SUNSET	WEATHERED WOOD BARKWOOD SABLEWOOD ANTIQUE SLATE	BRONN CASTLE CIMARRON SHADOW GRAY RAVENSWOOD
NO	NO	NO	NO	NO	NO
13 1/4 X 39 3/8 5 5/8	13 1/4 X 39 3/8 5 5/8	13 1/4 X 38 3/4 5 5/8	13 1/4 X 39 3/8 5 5/8	18 5/8 X 36 1/4 8 1/4	19 3/8 X 40 5 5/8
64 4	64 4	66 3	64 4	48 3	64 4
REGIONALLY	REGIONALLY	REGIONALLY	REGIONALLY	REGIONALLY	REGIONALLY
4:12 15-LB. FELT	4:12 15-LB. FELT	4:12 15-LB. FELT	4:12 15-LB. FELT	4:12 15-LB. FELT	4:12 15-LB. FELT
2:12 2 15-LB. FELTS	2:12 2 15-LB. FELTS	2:12 2 15-LB. FELTS	2:12 - 4:12 2 15-LB. FELTS		
X X	X X	X X	X X	X X	X X
CHIPBOARD	CHIPBOARD	CHIPBOARD	CHIPBOARD	CHIPBOARD	CHIPBOARD
1985	1978	1982	2001	2002	2001
ENNIS, TX SHAFTER, CA TUSCALOOSA, AL MYERSTOWN, PA	ENNIS, TX SHAFTER, CA TUSCALOOSA, AL MYERSTOWN, PA	ENNIS, TX SHAFTER, CA TUSCALOOSA, AL MYERSTOWN, PA	SHAFTER, CA TUSCALOOSA, AL	ENNIS, TX	SHAFTER, CA
1000+ NO	1000 NO	1000 NO	1000+ NO	1000 NO	1000+ NO
REG. SALES OFFICE (SEE APPENDIX)	REG. SALES OFFICE (SEE APPENDIX)	REG. SALES OFFICE (SEE APPENDIX)	REG. SALES OFFICE (SEE APPENDIX)	REG. SALES OFFICE (SEE APPENDIX)	REG. SALES OFFICE (SEE APPENDIX)
TECHNICAL DEPT. (SEE APPENDIX)	TECHNICAL DEPT. (SEE APPENDIX)	TECHNICAL DEPT. (SEE APPENDIX)	TECHNICAL DEPT. (SEE APPENDIX)	TECHNICAL DEPT. (SEE APPENDIX)	TECHNICAL DEPT. (SEE APPENDIX)
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1. COMPANY NAME	ELK PREMIUM BUILDING PRODUCTS, INC.	GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION
2. PRODUCT NAME	RAISED PROFILE	GRAND CANYON	COUNTRY ESTATES
3. PRODUCT DESCRIPTION			
Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
Construction (laminated/nonlaminated)	LAMINATED	LAMINATED	LAMINATED
Granule Composition	CERAMIC	GRANULAR	GRANULAR
4. SHINGLE TYPE			
Self-Sealing 3-Tab Strip			
Self-Sealing Random-Tab Strip		X	
Self-Sealing No Cutout			X
Individual Interlocking			
Architectural Laminated	X		
5. WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	30	LIFETIME	LIFETIME
6. COLOR:			
Number of Colors Available (/ marks number by region)	11/10/10/10	6	5
Color Availability (regional/national)	REGIONAL	REGIONAL	NATIONAL
Colors	ANTIQUE SLATE SHAKEWOOD SABLEWOOD FOREST GREEN HICKORY BARKWOOD BIRCHWOOD WEDGEWOOD SANDALWOOD ASPEN WHITE WEATHERWOOD	SEDONA SUNSET BLACK OAK STONE WOOD MOSS GREEN MISSION BROWN STORM CLOUD GRAY	AGED OAK BROWNSTONE COTTAGE RED OLDE PEWTER WEATHERED GREEN
7. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
8. DIMENSIONS AND COVERAGE			
Shingle Dimensions (inches x inches)	13 1/4 X 38 3/4	40 X 17	17 X 40
Exposure (inches)	5 5/8	5	7-1/2
Headlap (inches)		7	2
Shingles Per Roof Square	66	72	48
Bundles Per Square	3	5	6
Weight Per Roof Square (pounds)			
9. HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	REGIONALLY	REGIONALLY	NATIONALLY
10. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
Underlayment Recommended in Normal Application	15-LB. FELT	SHINGLE MAT OR 15-LB. FELT	SHINGLE MAT OR 15-LB. FELT
Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12-4:12	2:12-4:12
Underlayment Recommended in Special Application	2 15-LB. FELTS	2 SHINGLE MATE OR 2 15-LB. FELTS	2 SHINGLE MATE OR 2 15-LB. FELTS
11. RECOMMENDED DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented-Strand Board	X	X	X
Waferboard			
Other (specify)	CHIPBOARD		
12. YEAR PRODUCT FIRST SOLD	1982	2000	2000
13. NUMBER OF SQUARES INSTALLED			
14. MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	ENNIS, TX SHAFTER, CA TUSCALOOSA, AL MYERSTOWN, PA	FONTANA, CA MT. VERNON, IN	MT. VENRON, IN
15. DISTRIBUTION			
Distributors (number handling product or no)	1000+		
Direct (number of regional service locations or no)	NO		
16A. FOR SALES INFORMATION, CONTACT:	REG. SALES OFFICE (SEE APPENDIX)	GAF REGIONAL OFFICE	GAF REGIONAL OFFICE
16B. FOR TECHNICAL INFORMATION, CONTACT:	TECHNICAL DEPT. (SEE APPENDIX)	800/ROOF-411	800/ROOF-411
17. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION
JUMBO ROYAL SOVERIGN	GRAND SEQUOIA	MARQUIS WEATHER MAX	ROYAL SOVEREIGN	SENTINEL	SLATELINE
FIBERGLASS LAMINATED GRANULAR	FIBERGLASS LAMINATED CERAMIC COATED	FIBERGLASS NONLAMINATED CERAMIC COATED	FIBERGLASS NONLAMINATED CERAMIC COATED	FIBERGLASS NONLAMINATED CERAMIC COATED	FIBERGLASS NONLAMINATED CERAMIC COATED
X	X	X	X	X	X
25	LIFETIME	30	25	20	40
3 NATIONAL	6 REGIONAL	5/7 REGIONAL	6/11 REGIONAL	6/10 REGIONAL	6 REGIONAL
	CEDAR BLEND CHARCOAL BLEND MESA BROWN BLEND SAGE GREEN BLEND SLATE BLEND WEATHER WOOD BLEND				ENGLISH GRAY EMERALD GREEN MARINER BLUE WEATHERED SLATE SLATE RED
NO	YES	YES	NO	NO	YES
17 X 40 7-1/2 2 48 3	40 X 17 5 7 72 5	12 X 36 5 2 80 3	12 X 36 5 2 80 3	12 X 36 5 2 80 3	17 X 40 7 1/2 2 48 4
NO	REGIONALLY	NO	NO	NO	REGIONALLY
4:12 SHINGLT MAT OR 15-LB. FELT 2:12-4:12 2 SHINGLE MATE OR 2 15-LB. FELTS	4:12 SHINGLE MATE OR 15-LB. FELT 2:12-4:12 2 SHINGLE MATE OR 2 15-LB. FELTS	4:12 SHINGLE MATE OR 15-LB. FELT 2:12-4:12 2 SHINGLE MATE OR 2 15-LB. FELTS	4:12 SHINGLE MATE OR 15-LB. FELT 2:12-4:12 2 SHINGLE MATE OR 2 15-LB. FELTS	4:12 SHINGLE MATE OR 15-LB. FELT 2:12-4:12 2 SHINGLE MATE OR 2 15-LB. FELTS	4:12 SHINGLE MATE OR 15-LB. FELT 2:12-4:12 2 SHINGLE MATE OR 2 15-LB. FELTS
X X	X X	X X	X X	X X	X X
2001	1996	1991	1984	1980	1988
MT. VERNON, IN MICHIGAN CITY, IN	FONTANA, CA MT. VENRON, IN	MINNEAPOLIS, MN MILLIS, MA SAVANNAH, GA	BALTIMORE, MD DALLAS, TX; ERIE, PA FONTANA, CA GOLDSBORO, NC MILLIS, MA MINNEAPOLIS, MN MOBILE, AL MT VERNON, SAVANNAH,GA TAMPA, FL	BALTIMORE, MD DALLAS, TX; ERIE, PA FONTANA, CA GOLDSBORO, NC MILLIS, MA MINNEAPOLIS, MN MOBILE, AL MT VERNON, SAVANNAH,GA TAMPA, FL	MT. VERNON , IN
GAF REGIONAL OFFICE 800/ROOF-411	GAF REGIONAL OFFICE 800/ROOF-411	GAF REGIONAL OFFICE 800/ROOF-411	GAF REGIONAL OFFICE 800/ROOF-411	GAF REGIONAL OFFICE 800/ROOF-411	GAF REGIONAL OFFICE 800/ROOF-411
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1. COMPANY NAME	GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION
2. PRODUCT NAME	TIMBERLINE 30	TIMBERLINE SELECT 40	TIMBERLINE ULTRA
3. PRODUCT DESCRIPTION			
Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
Construction (laminated/nonlaminated)	LAMINATED	LAMINATED	LAMINATED
Granule Composition	CERAMIC COATED	CERAMIC COATED	CERAMIC COATED
4. SHINGLE TYPE			
Self-Sealing 3-Tab Strip			
Self-Sealing Random-Tab Strip			
Self-Sealing No Cutout	X	X	X
Individual Interlocking			
Architectural Laminated			
5. WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	30	40	LIFETIME
6. COLOR:			
Number of Colors Available (/ marks number by region)	17	15	17
Color Availability (regional/national)	REGIONAL	REGIONAL	REGIONAL
Colors			
7. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	YES	YES
8. DIMENSIONS AND COVERAGE			
Shingle Dimensions (inches x inches)	12 X 36-15/16	12 X 36	12 X 36
Exposure (inches)	5	5	5
Headlap (inches)	2	2	2
Shingles Per Roof Square	78	80	78
Bundles Per Square	3	4	4
Weight Per Roof Square (pounds)	245	270	310
9. HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	NATIONALLY	NATIONALLY	NATIONALLY
10. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
Underlayment Recommended in Normal Application	SHINGLE MATE OR #15 FELT	SHINGLE MATE OR #15 FELT	SHINGLE MATE OR #15 FELT
Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
Underlayment Recommended in Special Application	SHINGLE MATE, #15 FELT OF #30 FELT WITH 19" OVERLAP	SHINGLE MATE, #15 FELT OF #30 FELT WITH 19" OVERLAP	SHINGLE MATE, #15 FELT OF #30 FELT WITH 19" OVERLAP
11. RECOMMENDED DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented-Strand Board	X	X	X
Waferboard			
Other (specify)	LOADMASTER	LOADMASTER	LOADMASTER
12. YEAR PRODUCT FIRST SOLD	2001	2001	1990
13. NUMBER OF SQUARES INSTALLED			
14. MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	BALTIMORE, MD DALLAS, TX GOLDSBORO, NC MOBILE, AL TAMPA, FL MINNEAPOLIS, MN	BALTIMORE, MD DALLAS, TX FONTANA, CA GOLDSBORO, NC MOBILE, AL TAMPA, FL MINNEAPOLIS, MN	BALTIMORE, MD DALLAS, TX FONTANA, CA GOLDSBORO, NC MOBILE, AL TAMPA, FL MINNEAPOLIS, MN
15. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)			
16A. FOR SALES INFORMATION, CONTACT:	GAF REGIONAL OFFICE	GAF REGIONAL OFFICE	GAF REGIONAL OFFICE
16B. FOR TECHNICAL INFORMATION, CONTACT:	800/766-3411	800/766-3411	800/766-3411
17. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

GAF MATERIALS CORPORATION	GAF MATERIALS CORPORATION	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.
GRAND SLATE	CAMELOT	ARMOUR LOCK 20	ARMOUR PLUS 20	SKYLINE 25	ULTRA LOCK 25
FIBERGLASS LAMINATED CERAMIC COATED	FIBERGLASS LAMINATED CERAMIC COATED	ORGANIC NONLAMINATED CERAMIC	ORGANIC NONLAMINATED CERAMIC	ORGANIC NONLAMINATED CERAMIC	ORGANIC NONLAMINATED CERAMIC
			X		
X	X	X		X	X
LIFETIME	LIFETIME	20	20	25	25
5	6	5	5	7	8
NATIONAL BRISTOL GRAY ESSEX GREEN MIDDLEBURY BROWN SHEFFIELD BLACK WELLS GRAY	NATIONAL AGED OAK ANTIQUE SLATE ESSEX GREEN OLDE PEWTER SHEFFIELD BLACK WELSH GRAY	REGIONAL DUAL BLACK DUAL BROWN DUAL GRAY EARTHTONE CEDAR DRIFTWOOD	REGIONAL DUAL BLACK DUAL BROWN DUAL GRAY EARTHTONE CEDAR DRIFTWOOD	REGIONAL DUAL BLACK DUAL BROWN CHARCOAL GRAY DRIFTWOOD EARTHTONE CEDAR FOREST GREEN DUAL GRAY	REGIONAL WHITE DUAL BLACK DUAL BROWN DUAL GRAY FOREST GREEN DRIFTWOOD WEATHERWOOD EARTHTONE CEDAR
NO	NO	YES	YES	YES	NO
17 X 40 7-1/2 2 48 3 425	17 X 34-1/2 7-1/2 2 56 7 460	20 7/8 X 23 7/8 16 2 86 3 223	13 1/4 X 39 3/8 5 5/8 2 65 3 214	13 1/4 X 39 3/8 5 5/8 2 65 3 238	20 7/8 X 23 7/8 16 2 86 3 235
NATIONALLY	NATIONALLY	REGIONALLY	REGIONALLY	REGIONALLY	REGIONALLY
4:12 SHINGLE MATE OR #15 FELT 2:12 SHINGLE MATE, #15 FELT OF #30 FELT WITH 19" OVERLAP	4:12 SINGLE MATE OR #15 FELT 2:12 SHINGLE MATE, #15 FELT OF #30 FELT WITH 19" OVERLAP	4:12 NA	4:12 NA 2:12 2 NO.-15 FELTS OR ICE & WATER PROTECTOR	4:12 NA 2:12 2 NO.-15 FELTS OR ICE & WATER PROTECTOR	4:12 NA
X	X	X	X	X	X
X	X	X	X	X	X
LOADMASTER 2003	LOADMASTER 2004	1959	1979	1978	1990
MT. VERNON, IN	MT. VERNON, IN	NA B	NA A, B, E	NA A, B	NA B
		NO	NO	NO	NO
GAF REGIONAL OFFICE 800/766-3411	GAF REGIONAL OFFICE 800/766-3411	800/323-7171 800/323-7171 800/387-2318	800/323-7171 800/323-7171 800/387-2318	800/323-7171 800/323-7171 800/387-2318	800/323-7171 800/323-7171 800/387-2318
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1. COMPANY NAME	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.
2. PRODUCT NAME	ARISTOCAT 25	CATHEDRAL XL	RENAISSANCE XL
3. PRODUCT DESCRIPTION			
Reinforcing Material (organic/fiberglass)	ORGANIC	ORGANIC	ORGANIC
Construction (laminated/nonlaminated)	NONLAMINATED	NONLAMINATED	NONLAMINATED
Granule Composition	CERAMIC	CERAMIC	CERAMIC
4. SHINGLE TYPE			
Self-Sealing 3-Tab Strip	X	X	X
Self-Sealing Random-Tab Strip			
Self-Sealing No Cutout			
Individual Interlocking			
Architectural Laminated			
5. WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	25	25	25
6. COLOR:			
Number of Colors Available (/ marks number by region)	12	5	6
Color Availability (regional/national)	REGIONAL	REGIONAL	REGIONAL
Colors	WHITE DUAL BLACK DUAL BROWN DUAL GRAY EARTHTONE CEDAR HARVARD SLATE DRIFTWOOD CHARCOAL GRAY RAINBOW GREEN RAINBOW RED FOREST GREEN TILE RED	BEACHWOOD SHALESTONE CHESTNUT BLACK GRAYSTONE CHARCOAL SLATE	BLACK SLATE BLUE SLATE GRAY SLATE HARVEST SLATE TAUPE SLATE REDWOOD SLATE
7. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	YES	YES
8. DIMENSIONS AND COVERAGE			
Shingle Dimensions (inches x inches)	13 1/4 X 39 3/8	13 1/4 X 39 3/8	13 1/4 X 39 3/8
Exposure (inches)	5 5/8	5 5/8	5 5/8
Headlap (inches)	2	2	2
Shingles Per Roof Square	65	65	65
Bundles Per Square	3	3	3
Weight Per Roof Square (pounds)	238	238	248
9. HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	NO	NO	NO
10. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
Underlayment Recommended in Normal Application	NA	NA	NA
Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
Underlayment Recommended in Special Application	2 NO. 15 FELTS OR ICE & WATER PROTECTOR	2 NO. 15 FELTS OR ICE & WATER PROTECTOR	2 NO.-15 FELTS OR ICE & WATER PROTECTOR
11. RECOMMENDED DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented-Strand Board	X	X	X
Waferboard			
Other (specify)			
12. YEAR PRODUCT FIRST SOLD	1967	1999	1992
13. NUMBER OF SQUARES INSTALLED	NA	NA	NA
14. MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	A, B, C	A	E
15. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)	NO	NO	NO
16A. FOR SALES INFORMATION, CONTACT:	800/323-7171	800/323-7171	800/323-7171
16B. FOR TECHNICAL INFORMATION, CONTACT:	800/323-7171 800/387-2318	800/323-7171 800/387-2318	800/323-7171 800/387-2318
17. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable



**Asphalt Shingles, Part 1 — General Information**

1. COMPANY NAME	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.
2. PRODUCT NAME	CAMBRIDGE 30	CAMBRIDGE 30 AR	CAMBRIDGE 40
3. PRODUCT DESCRIPTION			
Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
Construction (laminated/nonlaminated)	LAMINATED	LAMINATED	LAMINATED
Granule Composition	CERAMIC	CERAMIC	CERAMIC
4. SHINGLE TYPE			
Self-Sealing 3-Tab Strip			
Self-Sealing Random-Tab Strip			
Self-Sealing No Cutout			
Individual Interlocking			
Architectural Laminated	X	X	X
5. WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	30	30	40
6. COLOR:			
Number of Colors Available (/ marks number by region)	10	11	6
Color Availability (regional/national)	NATIONAL	NATIONAL	REGIONAL
Colors	DUAL BLACK DUAL BROWN HARVARD SLATE WEATHERWOOD CHARCOAL GRAY EARTHTONE CEDAR DUAL GRAY DRIFTWOOD FOREST GREEN AGED REDWOOD	DUAL BLACK DUAL BROWN HARVARD SLATE WEATHERWOOD CHARCOAL GRAY EARTHTONE CEDAR DUAL GRAY DRIFTWOOD FOREST GREEN AGED REDWOOD NATIONAL BLUE	DUAL BLACK NW DRIFTWOOD HARVARD SLATE AGED REDWOOD WEATHERWOOD CASTLE GRAY
7. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	YES
8. DIMENSIONS AND COVERAGE			
Shingle Dimensions (inches x inches)	13 3/4 X 40 7/8	13 3/4 X 40 7/8	13 3/4 X 40 7/8
Exposure (inches)	5 7/8	5 7/8	5 7/8
Headlap (inches)	2	2	2
Shingles Per Roof Square	60	60	60
Bundles Per Square	3	3	3
Weight Per Roof Square (pounds)	249	249	263
9. HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	NATIONALLY	NATIONALLY	REGIONALLY
10. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
Underlayment Recommended in Normal Application	NO.-15 FELT (4:12 - 8:12)	NO.-15 FELT (4:12 - 8:12)	NO.-15 FELT (4:12 - 8:12)
Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
Underlayment Recommended in Special Application	2 NO. 15 FELTS OR ICE & WATER PROTECTOR	2 NO. 15 FELTS OR ICE & WATER PROTECTOR	2 NO. 15 FELTS OR ICE & WATER PROTECTOR
11. RECOMMENDED DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented-Strand Board	X	X	X
Waferboard			
Other (specify)			
12. YEAR PRODUCT FIRST SOLD	1994	2000	1998
13. NUMBER OF SQUARES INSTALLED	NA	NA	NA
14. MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	B, C, F, G, I	B, F, H, I	I
15. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)	NO	NO	NO
16A. FOR SALES INFORMATION, CONTACT:	800/323-7171	800/323-7171	800/323-7171
16B. FOR TECHNICAL INFORMATION, CONTACT:	800/323-7171 800/387-2318	800/323-7171 800/387-2318	800/323-7171 800/387-2318
17. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.	IKO MANUFACTURING INC.
CAMBRIDGE 50	CAMBRIDGE 50 AR	CHATEAU	REGENCY	GRANDEUR	CROWNE SLATE
FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	ORGANIC LAMINATED CERAMIC	FIBERGLAS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC
X	X	X	X	X	X
50	50	35	50	50	50
6	7	9	4	6	4
NATIONAL NW DRIFTWOOD NW HARVARD SLATE WEATHERWOOD DUAL BLACK AGED REDWOOD CASTLE GRAY	NATIONAL HARVARD SLATE DUAL BLACK WEATHERWOOD DUAL BROWN DRIFTWOOD FOREST GREEN DUAL GRAY	REGIONAL DUAL BLACK DUAL BROWN EARTHTONE CEDAR DRIFTWOOD HARVARD SLATE FOREST GREEN WEATHERWOOD DUAL GRAY	NATIONAL WEATHERWOOD MOUNTAIN GRAY CHALET WOOD DUAL BLACK	REGIONAL AGED REDWOOD DUAL BLACK CASTLE GRAY CORNERSTONE FOREST GREEN OLD WORLD SLATE	NATIONAL GREYSTONE JADE REGAL STONE REDSTONE ROYAL GRANITE
YES	NO	NO	NO	YES	NO
13 1/2 X 40 1/2	13 3/4 X 40 7/8	13 3/4 X 40 7/8	13 1/4 X 39 3/8	13 3/4 X 40 7/8	13 1/4 X 36
5 3/4	5 7/8	5 7/8	3 3/4	5 5/8	9 3/4
2	2	2	2	2	3 1/2
62	60	60	100	60	40
4	4	4	5	4	4
300	300	300	360	300	232
REGIONALLY	NATIONALLY	NATIONALLY	NATIONALLY	REGIONALLY	NATIONALLY
4:12	4:12	4:12	4:12	4:12	4:12
NO.-15 FELT (4:12 - 8:12)	NO.-15 FELT (4:12 - 8:12)	NO.-15 FELT (4:12 - 8:12)	NO.-15 FELT (4:12 - 8:12)	NO.-15 FELT (4:12 - 8:12)	NO.-15 FELT (4:12 - 8:12)
2:12	2:12	2:12		2:12	
2 NO. 15 FELTS OR ICE & WATER PROTECTOR	2 NO. 15 FELTS OR ICE & WATER PROTECTOR	2 NO. 15 FELTS OR ICE & WATER PROTECTOR		2 NO. 15 FELTS OR ICE & WATER PROTECTOR	
X	X	X	X	X	X
X	X	X	X	X	X
1998	2000	1978	2001	2004	2004
NA	NA	NA	NA	NA	NA
B, I	F, H, I	B, C	E	I	H
NO	NO	NO	NO	NO	NO
		800/323-7171	800/323-7171	800/323-7171	800/323-7171
800/323-7171 800/387-2318	800/323-7171 800/387-2318	800/323-7171 800/387-2318	800/323-7171 800/387-2318	800/323-7171 800/387-2318	800/323-7171 800/387-2318
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1.	COMPANY NAME	MALARKEY ROOFING PRODUCTS	MALARKEY ROOFING PRODUCTS	MALARKEY ROOFING PRODUCTS
2.	PRODUCT NAME	#202 DURA-SEAL 20	#204 DURA-SEAL 25	#230 ALASKAN SBS MODIFIED
3.	PRODUCT DESCRIPTION			
	Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	POLYGLASS
	Construction (laminated/nonlaminated)	NONLAMINATED	NONLAMINATED	NONLAMINATED
	Granule Composition	CERAMIC	CERAMIC	CERAMIC / COPPER
4.	SHINGLE TYPE			
	Self-Sealing 3-Tab Strip	X	X	X
	Self-Sealing Random-Tab Strip			
	Self-Sealing No Cutout			
	Individual Interlocking Architectural Laminated			
5.	WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	20	25	35
6.	COLOR:			
	Number of Colors Available (/ marks number by region)	8	8	7
	Color Availability (regional/national)	NATIONAL	NATIONAL	NATIONAL
	Colors	ANTIQUE BROWN MIDNIGHT BLACK OXFORD GREY SIENNA BLEND SILVERWOOD GOLDEN BROWN SIENNA SHADOW DOVE WHITE	ANTIQUE BROWN MIDNIGHT BLACK OXFORD GREY RAIN FOREST SIENNA BLEND SILVERWOOD WEATHERWOOD DOVE WHITE	ANTIQUE BROWN MIDNIGHT BLACK OXFORD GRAY RAINFORREST SIENNA BLEND SILVERWOOD WEATHERED WOOD
7.	AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
8.	DIMENSIONS AND COVERAGE			
	Shingle Dimensions (inches x inches)	13 1/4 X 39 3/8	13 1/4 X 39 3/8	13 1/4 X 39 3/8
	Exposure (inches)	5 5/8	5 5/8	5 5/8
	Headlap (inches)	7 5/8	7 5/8	7 5/8
	Shingles Per Roof Square	66	66	66
	Bundles Per Square	3	3	3
	Weight Per Roof Square (pounds)	200	235	235
9.	HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	NATIONALLY	NATIONALLY	NATIONALLY
10.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
	Underlayment Recommended in Normal Application	15- OR 30-LB. FELT "RIGHT START" UDL	15- OR 30-LB. FELT "RIGHT START" UDL	15- OR 30-LB. FELT "RIGHT START" UDL
	Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
	Underlayment Recommended in Special Application	2 15-30 LB. FELTS OR 2 RIGHT START UDL	2 15-30 LB. FELTS OR 2 RIGHT START UDL	2 15-30 LB. FELTS OR 2 RIGHT START UDL
11.	RECOMMENDED DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented-Strand Board	X	X	X
	Waferboard			
	Other (specify)			
12.	YEAR PRODUCT FIRST SOLD	1977	1978	1986
13.	NUMBER OF SQUARES INSTALLED			
14.	MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	PORTLAND, OR SOUTHGATE, CA	PORTLAND, OR SOUTHGATE, CA	PORTLAND, OR
15.	DISTRIBUTION			
	Distributors (number handling product or no)	200+	200+	200+
	Direct (number of regional service locations or no)	NO		
16A.	FOR SALES INFORMATION, CONTACT:	G. MALARKEY 800/545-1191	G. MALARKEY 800/545-1191	G. MALARKEY 800/545-1191
16B.	FOR TECHNICAL INFORMATION, CONTACT:	A. SCHWAB J. KOUBA	A. SCHWAB J. KOUBA	J. KOUBA
	SEE APPENDIX IF CHECKED			

NA=not applicable

Asphalt Shingles, Part 1 — General Information

MALARKEY ROOFING PRODUCTS	MALARKEY ROOFING PRODUCTS	MALARKEY ROOFING PRODUCTS	MALARKEY ROOFING PRODUCTS	MALARKEY ROOFING PRODUCTS	OWENS CORNING
#240 HURRICANE SBS MODIFIED ALGAE RESISTANT	#270 NORTHWEST XL	#271 HIGHLANDER CS	#272 LEGACY SBS MODIFIED	#273 LEGACY SBS MODIFIED ALGAE RESISTANT	OAKRIDGE PRO 50 DEEP SHADOW ARCHITECTURAL
POLYGLASS NONLAMINATED CERAMIC / COPPER	FIBERGLASS LAMINATED CERAMIC / COPPER	FIBERGLASS LAMINATED CERAMIC / COPPER	POLYGLASS LAMINATED CERAMIC	POLYGLASS LAMINATED CERAMIC / COPPER	FIBERGLASS LAMINATED CERAMIC
X					X
	X	X	X	X	
	40	30	50	50	50
7	9	8	9	8	9
NATIONAL ANTIQUE BROWN MIDNIGHT BLACK OXFORD GRAY RAINFOREST SIENNA BLEND SILVERWOOD STORM GRAY NATURAL WOOD WEATHERED WOOD	NATIONAL BLACK OAK MIDNIGHT BLACK OXFORD GRAY SIENNA BLEND SILVERWOOD STORM GRAY NATURAL WOOD WEATHERED WOOD ANTIQUE BLACK	NATIONAL ANTIQUE BROWN BLACK OAK OXFORD GRAY SIENNA BLEND SILVERWOOD STORM GRAY WEATHERED WOOD	NATIONAL ANTIQUE BROWN MIDNIGHT BLACK OXFORD GRAY RAINFOREST NATURAL WOOD SIENNA BLEND SILVERWOOD STORM GRAY WEATHERED WOOD	NATIONAL ANTIQUE BROWN MIDNIGHT BLACK OXFORD GRAY RAINFOREST NATURAL WOOD SIENNA BLEND SILVERWOOD STORM GRAY WEATHERED WOOD	REGIONAL COLORS VARY BY REGION
NO	NO	NO	NO	NO	NO
13 1/4 X 39 3/8	13 1/4 X 40	13 1/4 X 40	13 1/4 X 40	13 1/4 X 40	13 1/4 X 39 3/8
5 5/8	5 5/8	5 5/8	5 5/8	5 5/8	5 5/8
7 5/8	7 5/8	7 5/8	7 5/8	7 5/8	7 5/8
66	64	64	64	64	64
3	4	4	4	4	4
235	260	245	275	275	
NATIONALLY	NATIONALLY	NATIONALLY	NATIONALLY	NATIONALLY	NATIONALLY
4:12	4:12	4:12	4:12	4:12	4:12
15- OR 30-LB. FELT "RIGHT START" UDL	15- OR 30-LB. FELT "RIGHT START" UDL	15- OR 30-LB. FELT "RIGHT START" UDL	15- OR 30-LB. FELT "RIGHT START" UDL	15- OR 30-LB. FELT "RIGHT START" UDL	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES
2:12	2:12	2:12	2:12	2:12	2:12
2 15-30 LB. FELTS OR 2 RIGHT START UDL	2 15-30 LB. FELTS OR 2 RIGHT START UDL	2 15-30LB. FELTS OR 2 RIGHT START UDL	2 15-30 LB. FELTS OR 2 RIGHT START UDL	2 15-30 LB. FELTS OR 2 RIGHT START UDL	2 NO.-15 FELTS AND WEATHERLOCK
X	X	X	X	X	X
X	X	X	X	X	
1993	1998	1997	1997	1997	1987
					MILLIONS
PORTLAND, OR	PORTLAND, OR	PORTLAND, OR	PORTLAND, OR	PORTLAND, OR	BROOKVILLE, IN COMPTON, CA DENVER, CO HOUSTON, TX KEARNY, NJ MEDINA, OH PORTLAND, OR
200+	200+	200+	200+	200+	
G. MALARKEY 800/545-1191	G. MALARKEY 800/545-1191	G. MALARKEY 800/545-1191	G. MALARKEY 800/545-1191	G. MALARKEY 800/545-1191	800/GET-PINK
A. SCHWAB J. KOUBA	A. SCHWAB J. KOUBA	A. SCHWAB J. KOUBA	A. SCHWAB J. KOUBA	A. SCHWAB J. KOUBA	800/GET-PINK
					X

**Asphalt Shingles, Part 1 — General Information**

1. COMPANY NAME	OWENS CORNING	OWENS CORNING	OWENS CORNING
2. PRODUCT NAME	OAKRIDGE PRO 50 AR DEEP SHADOW ARCHITECTURAL	OAKRIDGE PRO 40 SHADOW ARCHITECTURAL	OAKRIDGE PRO 40 AR SHADOW ARCHITECTURAL
3. PRODUCT DESCRIPTION			
Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
Construction (laminated/nonlaminated)	LAMINATED	LAMINATED	LAMINATED
Granule Composition	CERAMIC	CERAMIC	CERAMIC
4. SHINGLE TYPE			
Self-Sealing 3-Tab Strip			
Self-Sealing Random-Tab Strip	X	X	X
Self-Sealing No Cutout			
Individual Interlocking			
Architectural Laminated			
5. WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	50	30	30
6. COLOR:			
Number of Colors Available (/ marks number by region)	6	10	6
Color Availability (regional/national)	REGIONAL	REGIONAL	REGIONAL
Colors	COLORS VARY BY REGION	COLORS VARY BY REGION	COLORS VARY BY REGION
7. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	NO	YES
8. DIMENSIONS AND COVERAGE			
Shingle Dimensions (inches x inches)	13 1/4 X 39 3/8	13 1/4 X 39 3/8	13 1/4 X 39 3/8
Exposure (inches)	5 5/8	5 5/8	5 5/8
Headlap (inches)	7 5/8	7 5/8	7 5/8
Shingles Per Roof Square	64	64	64
Bundles Per Square	4	4	4
Weight Per Roof Square (pounds)			
9. HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	REGIONALLY	NATIONALLY	REGIONALLY
10. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
Underlayment Recommended in Normal Application	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES
Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
Underlayment Recommended in Special Application	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK
11. RECOMMENDED DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented-Strand Board			
Waferboard			
Other (specify)			
12. YEAR PRODUCT FIRST SOLD	1987	1987	1987
13. NUMBER OF SQUARES INSTALLED	MILLIONS	MILLIONS	MILLIONS
14. MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	HOUSTON, TX MEDINA, OH SAVANNAH, GA BROOKVILLE, IN MINNEAPOLIS, MIN	BROOKVILLE, IN COMPTON, CA DENVER, CO HOUSTON, TX IRVING, TX KEARNY, NJ MEDINA, OH PORTLAND, OR	BROOKVILLE, IN HOUSTON, TX SAVANNAH, GA MINNEAPOLIS, MN
15. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)			
16A. FOR SALES INFORMATION, CONTACT:	800/GET-PINK	800/GET-PINK	800/GET-PINK
16B. FOR TECHNICAL INFORMATION, CONTACT:	800/GET-PINK	800/GET-PINK	800/GET-PINK
17. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

OWENS CORNING	OWENS CORNING	OWENS CORNING	OWENS CORNING	OWENS CORNING	OWENS CORNING
OAKRIDGE PRO 30 ARCHITECTURAL	OAKRIDGE PRO 30AR ARCHITECTURAL	PROMINENCE 30 YEAR PERFORMANCE	SUPREME 25 YEAR TRADITIONAL	SUPREME AR 25 YEAR TRADITIONAL	SUPREME (METRIC) 25 YEAR TRADITIONAL
FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC
		X	X	X	X
X	X				
25	25	30	25	25	25
10	7	12	29	9	10
REGIONAL COLORS VARY BY REGION	REGIONAL	REGIONAL COLORS VARY BY REGION	REGIONAL COLORS VARY BY REGION	REGIONAL COLORS VARY BY REGION	REGIONAL COLORS VARY BY REGION
NO	YES	NO	NO	YES	YES
13 1/4 X 38 3/4	13 1/4 X 38 3/4	12 X 36	12 X 36	12 X 36	13 1/4 X 39 3/8
5 5/8	5 5/8	5	5	5	5 5/8
7 5/8	7 5/8	7	7	7	7 5/8
66	66	80	80	80	65
3	3	3	3	3	3
NATIONALLY	REGIONALLY	REGIONALLY	NO	NO	REGIONALLY
4:12	4:12	4:12	4:12	4:12	4:12
NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES
2:12	2:12	2:12	2:12	2:12	2:12
2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK
X	X	X	X	X	X
1987	1987	1995	1978	1986	1986
MILLIONS	MILLIONS	MILLIONS	MILLIONS	MILLIONS	MILLIONS
BROOKVILLE, IN COMPTON, CA DENVER, CO HOUSTON, TX IRVING, TX KEARNY, NJ MEDINA, OH PORTLAND, OR	BROOKVILLE, IN HOUSTON, TX PORTLAND, OR SAVANNAH, GA MEDINA, OH	MEDINA, OH	BROOKVILLE, IN COMPTON, CA DENVER, CO IRVING, TX JESSUP, MD KEARNY, NJ MEDINA, OH MEMPHIS, TN MINNEAPOLIS, MN SUMMIT, IL	ATLANTA, GA BROOKVILLE, IN JACKSONVILLE, FL JESSUP, MD MEMPHIS, TN PORTLAND, OR	COMPTON, CA PORTLAND, OR
800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK
800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK
X	X	X	X	X	X

**Asphalt Shingles, Part 1 — General Information**

1.	COMPANY NAME	OWENS CORNING	OWENS CORNING	OWENS CORNING
2.	PRODUCT NAME	CLASSIC 20 YEAR TRADITIONAL	CLASSIC AR 20 YEAR TRADITIONAL	CLASSIC (METRIC) 20 YEAR TRADITIONAL
3.	PRODUCT DESCRIPTION			
	Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
	Construction (laminated/nonlaminated)	NONLAMINATED	NONLAMINATED	NONLAMINATED
	Granule Composition	CERAMIC	CERAMIC	CERAMIC
4.	SHINGLE TYPE			
	Self-Sealing 3-Tab Strip	X	X	X
	Self-Sealing Random-Tab Strip			
	Self-Sealing No Cutout			
	Individual Interlocking			
	Architectural Laminated			
5.	WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	20	20	20
6.	COLOR:			
	Number of Colors Available (/ marks number by region)	29	8	11
	Color Availability (regional/national)	REGIONAL	REGIONAL	REGIONAL
	Colors	COLORS VARY BY REGION	COLORS VARY BY REGION	COLORS VARY BY REGION
7.	AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	YES	YES
8.	DIMENSIONS AND COVERAGE			
	Shingle Dimensions (inches x inches)	12 X 36	12 X 36	13 1/4 X 39 3/8
	Exposure (inches)	5	5	5 5/8
	Headlap (inches)	7	7	7 5/8
	Shingles Per Roof Square	80	80	65
	Bundles Per Square	3	3	3
	Weight Per Roof Square (pounds)			
9.	HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	NO	NO	REGIONALLY
10.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
	Underlayment Recommended in Normal Application	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES	NO. 15 FELT; WEATHER-LOCK OPT AT EAVES
	Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
	Underlayment Recommended in Special Application	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK	2 NO.-15 FELTS AND WEATHERLOCK
11.	RECOMMENDED DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented-Strand Board			
	Waferboard			
	Other (specify)			
12.	YEAR PRODUCT FIRST SOLD	1959	1986	1987
13.	NUMBER OF SQUARES INSTALLED	MILLIONS		MILLIONS
14.	MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	ATLANTA, GA BROOKVILLE, IN DENVER, CO IRVING, TX JACKSONVILLE, FL JESSUP, MD; MEDINA, OH MINNEAPOLIS, MN SUMMIT, IL MEMPHIS, TN	JACKSONVILLE, FL	COMPTON, CA PORTLAND, OR
15.	DISTRIBUTION			
	Distributors (number handling product or no)			
	Direct (number of regional service locations or no)			
16A.	FOR SALES INFORMATION, CONTACT:	800/GET-PINK	800/GET-PINK	800/GET-PINK
16B.	FOR TECHNICAL INFORMATION, CONTACT:	800/GET-PINK	800/GET-PINK	800/GET-PINK
17.	SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Asphalt Shingles, Part 1 — General Information

OWENS CORNING	OWENS CORNING	OWENS CORNING	OWENS CORNING	OWENS CORNING	PABCO ROOFING PRODUCTS
GLASLOCK 25 YEAR INTERLOCKING	BERKSHIRE	WOODCREST	WOODMOOR	WEATHERGUARD HP	PREMIER ADVANTAGE
FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC
					X
X					
	X	X	X	X	
25	LIFETIME	50	LIFETIME	40	50
8	8	7	7	6	5
REGIONAL COLORS VARY BY REGION	NATIONAL	REGIONAL COLORS VARY BY REGION	REGIONAL COLORS VARY BY REGION	REGIONAL	REGIONAL
YES	NO	YES	YES	YES	NO
21 1/16 X 21 9/16	18 3/4 X 38 8 3/8	14 1/4 X 40 4	14 1/4 X 40 4	13 1/4 X 39 3/8 5 5/8	13 1/4 X 40 5 5/8 7 5/8
96	45	90	90	64	64
3	5	5	6	4	5 1/3
	425	360	465		400
NO	NATIONALLY	REGIONALLY	REGIONALLY	REGIONALLY	REGIONALLY
4:12	4:12	4:12	4:12	4:12	4:12
NO. 15 FELT; WEATHER- LOCK OPT AT EAVES	NO. 15 FELT	NO. 15 FELT	NO. 15 FELT	NO. 15 FELT	15-LB. FELT
4:12	2:12	2:12	2:12	2:12	2:12
2 NO.-15 FELTS AND WEATHERLOCK	2 NO. 15 FELTS AND WEATHERLOCK	2 NO. 15 FELTS	2 NO. 15 FELTS	2 NO. 15 FELTS AND WEATHERLOCK	2 15-LB. FELTS
X	X	X	X	X	X
	X	X	X	X	X
1977	2002	2004	2004	2003	1999
MILLIONS					
DENVER, CO	MINNEAPOLIS, MN	COMPTON, CA	COMPTON, CA	HOUSTON, TX	TACOMA, WA
					100 NO
800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	R. VANDENBERG 253/272-0374
800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	800/GET-PINK	S. DINWIDDIE 859/858-3266
X	X	X	X	X	

**Asphalt Shingles, Part 1 — General Information**

1.	COMPANY NAME	PABCO ROOFING PRODUCTS	PABCO ROOFING PRODUCTS	PABCO ROOFING PRODUCTS
2.	PRODUCT NAME	PABCO PREMIER 50	PABCO PREMIER 30 SCOTCHGARD	PABCO PREMIER 30 YEAR
3.	PRODUCT DESCRIPTION			
	Reinforcing Material (organic/fiberglass)	FIBERGLASS	FIBERGLASS	FIBERGLASS
	Construction (laminated/nonlaminated)	LAMINATED	LAMINATED	LAMINATED
	Granule Composition	CERAMIC	CERAMIC	CERAMIC
4.	SHINGLE TYPE			
	Self-Sealing 3-Tab Strip			
	Self-Sealing Random-Tab Strip			
	Self-Sealing No Cutout	X	X	X
	Individual Interlocking			
	Architectural Laminated			
5.	WARRANTY (YEARS), SEE WARRANTY SECTION FOR DETAILS	50	30	30
6.	COLOR:			
	Number of Colors Available (/ marks number by region)	5	5	10
	Color Availability (regional/national)	REGIONAL	REGIONAL	REGIONAL
	Colors			
7.	AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
8.	DIMENSIONS AND COVERAGE			
	Shingle Dimensions (inches x inches)	13 1/4 X 40	13 1/4 X 40	13 1/4 X 40
	Exposure (inches)	5 5/8	5 5/8	5 5/8
	Headlap (inches)	7 5/8	7 5/8	7 5/8
	Shingles Per Roof Square	64	64	64
	Bundles Per Square	4	4	4
	Weight Per Roof Square (pounds)	320	260	260
9.	HIP/RIDGE SHINGLE AVAILABLE (nationally, regionally, no)	REGIONALLY	REGIONALLY	REGIONALLY
10.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (in. per ft.)	4:12	4:12	4:12
	Underlayment Recommended in Normal Application	15-LB. FELT	15-LB. FELT	15-LB. FELT
	Minimum Slope Recommended For Special Application (in. per ft.)	2:12	2:12	2:12
	Underlayment Recommended in Special Application	2 15-LB. FELTS	2 15-LB. FELTS	2 15-LB. FELTS
11.	RECOMMENDED DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented-Strand Board	X	X	X
	Waferboard	X	X	X
	Other (specify)			
12.	YEAR PRODUCT FIRST SOLD	2002	1997	1991
13.	NUMBER OF SQUARES INSTALLED			MILLIONS
14.	MANUFACTURER'S PLANT LOCATIONS (CITY, STATE)	TACOMA, WA	TACOMA, WA	TACOMA, WA
15.	DISTRIBUTION			
	Distributors (number handling product or no)	100	100	100
	Direct (number of regional service locations or no)	NO	NO	NO
16A.	FOR SALES INFORMATION, CONTACT:	R. VANDENBERG 253/272-0374	R. VANDENBERG 253/272-0374	R. VANDENBERG 253/272-0374
16B.	FOR TECHNICAL INFORMATION, CONTACT:	S. DINWIDDIE 859/858-3266	S. DINWIDDIE 859/858-3266	S. DINWIDDIE 859/858-3266
17.	SEE APPENDIX IF CHECKED			

NA=not applicable

**Asphalt Shingles, Part 1 — General Information**

PABCO ROOFING PRODUCTS	PABCO ROOFING PRODUCTS	PABCO ROOFING PRODUCTS	PABCO ROOFING PRODUCTS	PABCO ROOFING PRODUCTS
PABCO PREMIER 40 YEAR	PABCO SG-25	PABCO GG-20	PRECISE	SHADOW CAP 4 HIP & RIDGE
FIBERGLASS LAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS NONLAMINATED CERAMIC	FIBERGLASS LAMINATED CERAMIC	FIBERGLASS NON-LAMINATED CERAMIC
	X	X		
X			X	X
40	25	20	40	
10 REGIONAL	11 REGIONAL	8 REGIONAL	3 REGIONAL	11 REGIONAL
NO	NO	NO	NO	NO
13 1/4 X 40 5 5/8 7 5/8 64 4 290	13 1/4 X 39 3/8 5 5/8 7 5/8 65 3 230	13 1/4 X 39 3/8 5 5/8 7 5/8 65 3 205	13 1/4 X 40 5 5/8 7 5/8 64 4 290	13 1/4 X 9 7/8 5 5/8 7 5/8
REGIONALLY	REGIONALLY	REGIONALLY	REGIONALLY	NO
4:12 15-LB. FELT	4:12 15-LB. FELT	4:12 15-LB. FELT	4:12 15-LB. FELT	
2:12 2 15-LB. FELTS	2:12 2 15-LB. FELTS	2:12 2 15-LB. FELTS	2:12 2 15-LB. FELTS	
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
1991	1984	1984	2001	1997
MILLIONS TACOMA, WA	MILLIONS TACOMA, WA	MILLIONS TACOMA, WA	TACOMA, WA	TACOMA, WA
100	100	100	100	100
NO	NO	NO	NO	NO
R. VANDENBERG 253/272-0374	R. VANDENBERG 253/272-0374	R. VANDENBERG 253/272-0374	R. VANDENBERG 253/272-0374	R. VANDENBERG 253/272-0374
S. DINWIDDIE 859/858-3266	S. DINWIDDIE 859/858-3266	S. DINWIDDIE 859/858-3266	S. DINWIDDIE 859/858-3266	S. DINWIDDIE 859/858-3266

## Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME	ATLAS ROOFING CORPORATION
2.	PRODUCT NAME	PINNACLE 45
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)	FIBERGLASS
4.	COMPLIES WITH:	
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style	
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing	X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)	YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES	
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0
	Mass of asphalt saturant based on the mass of the dry felt, min %	165
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES	
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0 70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0 73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35 1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0 15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0 25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0 70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES	
	Behavior on heating	
	Loss of volatile matter, % max.	1.5 1.5
	Sliding of granular surfacing, in. min.	1/16 1/16
	Tear strength, g min.	1700 1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20 20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23 23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15 15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max. 230
	Weight of displaced granules, max.	1.0 g 1.0
7.	FIRE/WIND/IMPACT RESISTANCE	
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)	
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)	
	Wind resistance (max. wind speed allowable)	70
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	N/A
8.	CODE ACCEPTANCE	
	BOCA Evaluation Service, Inc. (report number)	
	ICBO Evaluation Service, Inc. (report number)	
	ICC Evaluation Service, Inc. (report number)	
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)	
	National Evaluation Service, Inc. (report number)	
	Other agencies (agency & report identification number)	
9.	SEE APPENDIX IF CHECKED	



Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		ATLAS ROOFING CORPORATION
2.	PRODUCT NAME		STRATFORD
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	1.5
	Sliding of granular surfacing, in. min.	1/16	1/16
	Tear strength, g min.	1700	1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	200
	Weight of displaced granules, max.	1.0 g	1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		110
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		NA
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		
	ICC Evaluation Service, Inc. (report number)		
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		DADE COUNTY 02-0708.01
9.	SEE APPENDIX IF CHECKED		



## Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		CERTAINTEED CORPORATION
2.	PRODUCT NAME		LANDMARK TL
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	1.5
	Sliding of granular surfacing, in. min.	1/16	1/16
	Tear strength, g min.	1700	1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	190-235
	Weight of displaced granules, max.	1.0 g	1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		CLASS F
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		110
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		CLASS 4
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		
	ICC Evaluation Service, Inc. (report number)		PENDING
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		MIAMI-DADE 02-0110.03
9.	SEE APPENDIX IF CHECKED		X



## Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME	CERTAINTEED CORPORATION
2.	PRODUCT NAME	SEALDON 25
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)	ORGANIC
4.	COMPLIES WITH:	
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style	X
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing	
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)	
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES	
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0
	Mass of asphalt saturant based on the mass of the dry felt, min %	165
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES	
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES	
	Behavior on heating	
	Loss of volatile matter, % max.	1.5
	Sliding of granular surfacing, in. min.	1/16
	Tear strength, g min.	1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.
	Weight of displaced granules, max.	1.0 g
7.	FIRE/WIND/IMPACT RESISTANCE	
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS C
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)	
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)	
	Wind resistance (max. wind speed allowable)	60
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	
8.	CODE ACCEPTANCE	
	BOCA Evaluation Service, Inc. (report number)	
	ICBO Evaluation Service, Inc. (report number)	
	ICC Evaluation Service, Inc. (report number)	
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)	
	National Evaluation Service, Inc. (report number)	
	Other agencies (agency & report identification number)	
9.	SEE APPENDIX IF CHECKED	X



## Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		CERTAINTEED CORPORATION
2.	PRODUCT NAME		WOODSCAPE 50
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	1.5
	Sliding of granular surfacing, in. min.	1/16	1/16
	Tear strength, g min.	1700	1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	190-235
	Weight of displaced granules, max.	1.0 g	1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		90
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		
	ICC Evaluation Service, Inc. (report number)		PENDING
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		
9.	SEE APPENDIX IF CHECKED		X



Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME	ELK PREMIUM BUILDING PRODUCTS, INC.
2.	PRODUCT NAME	CAPSTONE
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)	FIBERGLASS
4.	COMPLIES WITH:	
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style	
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing	X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)	YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES	
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0
	Mass of asphalt saturant based on the mass of the dry felt, min %	165
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES	
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0 70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0 73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35 1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0 15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0 25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0 70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES	
	Behavior on heating	
	Loss of volatile matter, % max.	1.5 1.5
	Sliding of granular surfacing, in. min.	1/16 1/16
	Tear strength, g min.	1700 1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20 20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23 23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15 15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max. 190-235
	Weight of displaced granules, max.	1.0 g 1.0
7.	FIRE/WIND/IMPACT RESISTANCE	
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)	
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)	
	Wind resistance (max. wind speed allowable)	110
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	
8.	CODE ACCEPTANCE	
	BOCA Evaluation Service, Inc. (report number)	
	ICBO Evaluation Service, Inc. (report number)	ER-5414
	ICC Evaluation Service, Inc. (report number)	
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)	
	National Evaluation Service, Inc. (report number)	
	Other agencies (agency & report identification number)	METRO-DADE 01-0523.01
9.	SEE APPENDIX IF CHECKED	X



**Asphalt Shingles, Part 2 — Technical Data**

1.	COMPANY NAME		GAF MATERIALS CORPORATION
2.	PRODUCT NAME		SLATELINE
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	1.5
	Sliding of granular surfacing, in. min.	1/16	1/16
	Tear strength, g min.	1700	1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	190-235
	Weight of displaced granules, max.	1.0 g	1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		
	ICC Evaluation Service, Inc. (report number)		
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		
9.	SEE APPENDIX IF CHECKED		



Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		IKO MANUFACTURING INC.
2.	PRODUCT NAME		ULTRA LOCK 25
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		ORGANIC
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		X
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	>89.7
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	>85.7
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	NA
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	>9.0
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	>165
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	>23.0
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	>23.0
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	>3.0
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	<10
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	>18.5
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	>55
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	>5.0
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	<60
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	
	Sliding of granular surfacing, in. min.	1/16	
	Tear strength, g min.	1700	
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	
	Weight of displaced granules, max.	1.0 g	
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS C
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		90
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		
	ICC Evaluation Service, Inc. (report number)		
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		
9.	SEE APPENDIX IF CHECKED		

Asphalt Shingles, Part 2 — Technical Data

| IKO MANUFACTURING INC. |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| ARISTROCAT 25          | CATHEDRAL XL           | RENAISSANCE XL         | MARATHON 25            | GENTRY 25              | GENTRY 25 AR           | ROYAL VICTORIAN        | MARATHON ULTRA         |
| ORGANIC                | ORGANIC                | ORGANIC                | FIBERGLASS             | FIBERGLASS             | FIBERGLASS             | FIBERGLASS             | FIBERGLASS             |
|                        |                        |                        |                        |                        |                        |                        |                        |
| X                      | X                      | X                      |                        |                        |                        |                        |                        |
|                        |                        |                        | X                      | X                      | X                      | X                      | X                      |
|                        |                        |                        | YES                    | YES                    | YES                    | UES                    | YES                    |
| >89.7                  | >89.7                  | >89.7                  |                        |                        |                        |                        |                        |
| >85.7                  | >85.7                  | >85.7                  |                        |                        |                        |                        |                        |
| NA                     | NA                     | NA                     |                        |                        |                        |                        |                        |
| >9.0                   | >9.0                   | >9.0                   |                        |                        |                        |                        |                        |
| >165                   | >165                   | >165                   |                        |                        |                        |                        |                        |
| >23.0                  | >23.0                  | >23.0                  |                        |                        |                        |                        |                        |
| >23.0                  | >23.0                  | >23.0                  |                        |                        |                        |                        |                        |
| >3.0                   | >3.0                   | >3.0                   |                        |                        |                        |                        |                        |
| <10                    | <10                    | <10.0                  |                        |                        |                        |                        |                        |
| >18.5                  | >18.5                  | >18.5                  |                        |                        |                        |                        |                        |
| >55.0                  | >55.0                  | >55.0                  |                        |                        |                        |                        |                        |
| >5.0                   | >5.0                   | >5.0                   |                        |                        |                        |                        |                        |
| <60.0                  | <60.0                  | <60.0                  |                        |                        |                        |                        |                        |
| NA                     | NA                     | NA                     |                        |                        |                        |                        |                        |
|                        |                        |                        | >70                    | >70                    | >70                    | >70                    | >70                    |
|                        |                        |                        | >73                    | >73                    | >73                    | >73                    | >73                    |
|                        |                        |                        | >1.35                  | >1.35                  | >1.35                  | >1.35                  | >1.35                  |
|                        |                        |                        | >15                    | >15                    | >15                    | >15                    | >15                    |
|                        |                        |                        | >25                    | >25                    | >25                    | >25                    | >25                    |
|                        |                        |                        | <70                    | <70                    | <70                    | <70                    | <70                    |
|                        |                        |                        |                        |                        |                        |                        |                        |
|                        |                        |                        | <1.0                   | <1.0                   | <1.0                   | <1.0                   | <1.0                   |
|                        |                        |                        | <1/16                  | <1/16                  | <1/16                  | <1/16                  | <1/16                  |
|                        |                        |                        | >1700                  | >1700                  | >1700                  | >1700                  | >1700                  |
|                        |                        |                        | >20                    | >20                    | >20                    | >20                    | >20                    |
|                        |                        |                        | >23                    | >23                    | >23                    | >23                    | >23                    |
|                        |                        |                        | >15                    | >15                    | >15                    | >15                    | >15                    |
|                        |                        |                        | 200-215                | 200-215                | 200-215                | 200-215                | 200-215                |
|                        |                        |                        | <1.0                   | <1.0                   | <1.0                   | <1.0                   | <1.0                   |
| CLASS C                | CLASS C                | CLASS C                | CLASS A                | CLASS A                | CLASS A                | CLASS C                | CLASS A                |
|                        |                        |                        |                        |                        |                        |                        |                        |
| 60                     | 60                     | 60                     | 60                     | 60                     | 60                     | 60                     | 60                     |
|                        |                        |                        |                        |                        |                        |                        |                        |
|                        |                        |                        | ER-5796                |                        |                        |                        | ER-5796                |
|                        |                        |                        |                        |                        |                        |                        |                        |
|                        |                        |                        |                        |                        |                        |                        |                        |
|                        |                        |                        | X                      |                        |                        |                        | X                      |

Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		IKO MANUFACTURING INC.
2.	PRODUCT NAME		GENTRY ULTRA
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	>70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	>73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	>1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	>15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	>25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	<70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	<1.0
	Sliding of granular surfacing, in. min.	1/16	<1/16
	Tear strength, g min.	1700	>1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	>20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	>23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	>15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	200-215
	Weight of displaced granules, max.	1.0 g	<1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		60
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		
	ICC Evaluation Service, Inc. (report number)		
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		
9.	SEE APPENDIX IF CHECKED		

Asphalt Shingles, Part 2 — Technical Data

| IKO MANUFACTURING INC. |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| CAMBRIDGE 30           | CAMBRIDGE 30 AR        | CAMBRIDGE 40           | CAMBRIDGE 50           | CAMBRIDGE 50 AR        | CHATEAU                | CROWNE SLATE           | REGENCY                |
| FIBERGLASS             | FIBERGLASS             | FIBERGLASS             | FIBERGLASS             | FIBERGLASS             | ORGANIC                | FIBERGLASS             | FIBERGLASS             |
|                        |                        |                        |                        |                        |                        |                        |                        |
|                        |                        |                        |                        |                        | X                      |                        |                        |
| X                      | X                      | X                      | X                      | X                      |                        | X                      |                        |
| YES                    | YES                    | YES                    | YES                    | YES                    |                        | YES                    |                        |
|                        |                        |                        |                        |                        | >89.7                  |                        |                        |
|                        |                        |                        |                        |                        | >85.7                  |                        |                        |
|                        |                        |                        |                        |                        | NA                     |                        |                        |
|                        |                        |                        |                        |                        | >9.0                   |                        |                        |
|                        |                        |                        |                        |                        | >165                   |                        |                        |
|                        |                        |                        |                        |                        | >23                    |                        |                        |
|                        |                        |                        |                        |                        | >23                    |                        |                        |
|                        |                        |                        |                        |                        | >3.0                   |                        |                        |
|                        |                        |                        |                        |                        | <10                    |                        |                        |
|                        |                        |                        |                        |                        | >18.5                  |                        |                        |
|                        |                        |                        |                        |                        | >55                    |                        |                        |
|                        |                        |                        |                        |                        | >5.0                   |                        |                        |
|                        |                        |                        |                        |                        | <60                    |                        |                        |
|                        |                        |                        |                        |                        | NA                     |                        |                        |
| >70.0                  | >70.0                  | >70.0                  | >70                    | >70                    |                        | >70                    | >70                    |
| >73.0                  | >73.0                  | >73.0                  | >73                    | >73                    |                        | >73                    | >73                    |
| >1.35                  | >1.35                  | >1.35                  | >1.35                  | >1.35                  |                        | >1.35                  | >1.35                  |
| >15.0                  | >15.0                  | >15.0                  | >15                    | >15                    |                        | >15                    | >15                    |
| >25.0                  | >25.0                  | >25.0                  | >25                    | >25                    |                        | >25                    | >25                    |
| <70.0                  | <70.0                  | <70.0                  | <70                    | <70                    |                        | <70                    | <70                    |
|                        |                        |                        |                        |                        |                        |                        |                        |
| <1.0                   | <1.0                   | <1.0                   | <1.0                   | <1.0                   |                        | <1.0                   | <1.0                   |
| <1/16                  | <1/16                  | <1/16                  | <1/16                  | <1/16                  |                        | <1/16                  | <1/16                  |
| >1700                  | >1700                  | >1700                  | >1700                  | >1700                  |                        | >1700                  | >1700                  |
| >20                    | >20                    | >20                    | >20                    | >20                    |                        | >20                    | >20                    |
| >23                    | >23                    | >23                    | >23                    | >23                    |                        | >23                    | >23                    |
| >15                    | >15                    | >15                    | >15                    | >15                    |                        | >15                    | >15                    |
| 200-215                | 200-215                | 200-215                | 200-215                | 200-215                |                        | 200-215/230-235        | 200-215                |
| <1.0                   | <1.0                   | <1.0                   | <1.0                   | <1.0                   |                        | <1.0                   | <1.0                   |
| CLASS A                | CLASS C                | CLASS A                | CLASS A                |
|                        |                        |                        |                        |                        |                        |                        |                        |
| 70                     | 60                     | 80                     | 90                     | 90                     | 80                     | 90                     | 90                     |
|                        |                        |                        |                        |                        |                        |                        |                        |
| ER-5796                | ER-5796                | ER-6796                | ER-6796                | ER-6796                |                        |                        |                        |
|                        |                        |                        |                        |                        |                        |                        |                        |
|                        |                        |                        |                        |                        |                        |                        |                        |
|                        | X                      |                        | X                      | X                      |                        |                        |                        |

## Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		IKO MANUFACTURING INC.
2.	PRODUCT NAME		GRANDEUR
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	>70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	>73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	>1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	>15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	>25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	<70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	<1.0
	Sliding of granular surfacing, in. min.	1/16	<1/16
	Tear strength, g min.	1700	>1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	>20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	>23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	>15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	200-215/230-235
	Weight of displaced granules, max.	1.0 g	<1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		90
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		ER-6796
	ICC Evaluation Service, Inc. (report number)		
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		
9.	SEE APPENDIX IF CHECKED		



## Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		OWENS CORNING
2.	PRODUCT NAME		OAKRIDGE PRO 50
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	1.5
	Sliding of granular surfacing, in. min.	1/16	1/16
	Tear strength, g min.	1700	1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	235
	Weight of displaced granules, max.	1.0 g	1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		90
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		ER-5443
	ICC Evaluation Service, Inc. (report number)		
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		
9.	SEE APPENDIX IF CHECKED		X



## Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME		OWENS CORNING
2.	PRODUCT NAME		PROMINENCE A AR - 30 YEAR PERFORMANCE
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)		FIBERGLASS
4.	COMPLIES WITH:		
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style		
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing		X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)		YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES		
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7	
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7	
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA	
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0	
	Mass of asphalt saturant based on the mass of the dry felt, min %	165	
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0	
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0	
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0	
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10	
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5	
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0	
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0	
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0	
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA	
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES		
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0	70
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0	73
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35	1.35
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0	15
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0	25
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0	70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES		
	Behavior on heating		
	Loss of volatile matter, % max.	1.5	1.5
	Sliding of granular surfacing, in. min.	1/16	1/16
	Tear strength, g min.	1700	1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20	20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23	23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15	15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max.	235
	Weight of displaced granules, max.	1.0 g	1.0
7.	FIRE/WIND/IMPACT RESISTANCE		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)		
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)		
	Wind resistance (max. wind speed allowable)		80
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
8.	CODE ACCEPTANCE		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		ER-5443
	ICC Evaluation Service, Inc. (report number)		
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)		
	National Evaluation Service, Inc. (report number)		
	Other agencies (agency & report identification number)		MIAMI-DADE APPROVED
9.	SEE APPENDIX IF CHECKED		X



Asphalt Shingles, Part 2 — Technical Data

1.	COMPANY NAME	PABCO ROOFING PRODUCTS
2.	PRODUCT NAME	PREMIER ADVANTAGE
3.	PRODUCT DESCRIPTION Reinforcing (organic/fiberglass/polyglass)	FIBERGLASS
4.	COMPLIES WITH:	
4A.	ASTM D 225-03 <i>Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Uniform or nonuniform thickness shingles of any style Type III -- Uniform or nonuniform thickness shingles of any style	
4B.	ASTM D 3018-03 <i>Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules</i> (indicate type or NA) Type I -- Self-sealing Type II -- Non-self-sealing	X
4C.	ASTM D 3462-03 <i>Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules</i> (YES/NO/NA)	YES
5A.	MASSES OF ASPHALT SHINGLES: ORGANIC SHINGLES	
	Average net mass per unit area, min, lb/100 ft <sup>2</sup>	Type I: 95.0; Type II: 95.0; Type III: 89.7
	Net mass of weather-exposed portion (ea. bundle) min, lb/100 ft <sup>2</sup>	Type I: 91.0; Type II: 110.0; Type III: 85.7
	Net mass of upper portion (ea. bundle), min, lb/100 ft <sup>2</sup>	Type I: NA; Type II: 72.0; Type III: NA
	Mass of desaturated, moisture-free felt, min, lb/100 ft <sup>2</sup>	Type I: 11.0; Type II: 11.0; Type III: 9.0
	Mass of asphalt saturant based on the mass of the dry felt, min %	165
	Mass of weather-side coating on the weather-exposed portion, min, lb/100 ft <sup>2</sup>	Type I: 23.0; Type II: 30.0; Type III: 23.0
	Mass of weather-side coating on the upper portion, min lb/100ft <sup>2</sup>	Type I: 23.0; Type II: 15.0; Type III: 23.0
	Mass of reverse-side coating, min, lb/100 ft <sup>2</sup>	3.0
	Ash of the desaturated felt, max %	Type I: NA; Type II: 10.0; Type III: 10
	Mass of weather-side mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, min, lb/100 ft <sup>2</sup>	18.5
	Mass of weather-side mineral matter retained on a No. 20 sieve, based on the mass passing a No. 6 sieve and retained on a No. 70 sieve, min, %	55.0
	Mass of weather-side mineral matter passing a No. 40 sieve, based on the mass of passing a No. 6 sieve, and retained on a No. 70 sieve, max %	5.0
	Mass of weather-side mineral matter passing a No. 70 sieve, based on the mass of the weather-side coating asphalt and the mineral matter passing the No. 70 sieve, max %	60.0
	Mass of total mineral matter including surfacing and stabilizer on both sides, based on the net mass of the finished product, min %	Type I: NA; Type II: 35.0; Type III: NA
5B.	MASSES OF ASPHALT SHINGLES: FIBERGLASS SHINGLES	
	Minimum net mass per area of shingles (individual bundle), lb/100 ft <sup>2</sup> , min.	70.0 160
	Average net mass per area of shingles (total sample), lb/100 ft <sup>2</sup> , min.	73.0 170
	Mass per area of mat, lb/100 ft <sup>2</sup> , min.	1.35 2.3
	Mass per area of asphalt, lb/100 ft <sup>2</sup> , min.	15.0 28
	Mass per area of mineral matter passing a No. 6 sieve and retained on a No. 70 sieve, lb/100 ft <sup>2</sup> , min	25.0 83
	Mass percent of mineral matter passing a No. 70 sieve based on the total asphalt and mineral matter passing the No. 70 sieve, max.	70.0 <70
6.	PHYSICAL REQUIREMENTS: FIBERGLASS SHINGLES	
	Behavior on heating	
	Loss of volatile matter, % max.	1.5 <1.5
	Sliding of granular surfacing, in. min.	1/16 <1/16
	Tear strength, g min.	1700 >1700
	Fastener pull-through resistance at 73 ±4 F, lbf, min	20 >20
	Fastener pull-through resistance at 32 ±4 F, lbf, min	23 >23
	Penetration of asphalt, 0.1mm (tested w/o mineral stabilizer) min.	15 >15
	Asphalt softening point, F (tested w/o mineral stabilizer) min/max	190 min.; 235 max. 190-235
	Weight of displaced granules, max.	1.0 g <1.0
7.	FIRE/WIND/IMPACT RESISTANCE	
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS A
	Wind resistance, UL 997 or ASTM D3161 (Class A, D or F)	
	Wind resistance, UL 2390 and ASTM D6381 (Class D, F, G or H)	
	Wind resistance (max. wind speed allowable)	110
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	
8.	CODE ACCEPTANCE	
	BOCA Evaluation Service, Inc. (report number)	
	ICBO Evaluation Service, Inc. (report number)	ER-5600
	ICC Evaluation Service, Inc. (report number)	
	SBCCI Public Safety Testing & Evaluation Service, Inc. (report number)	
	National Evaluation Service, Inc. (report number)	
	Other agencies (agency & report identification number)	
9.	SEE APPENDIX IF CHECKED	X



## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Atlas Roofing Corporation</b>
2	Title, original publication date, identifying symbol if any	"Limited Shingle Warranty"
3	Products covered	StormMaster LM, StormMaster ST, Pinnacle 45, Pinnacle 35, GlassMaster 25, GlassMaster 25, Glassmaster 20, Alpine, GlassMaster T-LOK, Chalet, Legend, Stratford and WeatherMaster T-LOK.
4	Scope of coverage	Atlas warrants the roofing products are free from manufacturing defects, which would result in leaks. Atlas warrants that its algae resistant shingles (i.e., Stratford, StormMaster ST, StormMaster LM and Chalet) will remain free of obvious and unsightly discoloration due to algae growth. Algae resistance is optional on Pinnacle 35, Pinnacle 45 and GlassMaster.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	Some shingles are also warranted for algae resistance.
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<p><b>For Manufacturing Defects:</b>  50 years: StormMaster LM  45 years: Pinnacle 45  35 years: Pinnacle 35  30 years: Chalet, Stratford  25 years: GlassMaster 25, Alpine, Legend, GlassMaster T-LOK, WeatherMaster T- LOK  20 years: GlassMaster 20</p> <p><b>For Algae Resistance:</b> 10 years;</p> <p><b>For Wind Coverage:</b> 5 years</p>
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After 5 years: StormMaster LM, Pinnacle 45, Pinnacle 35 After 3 years: StormMaster ST, GlassMaster 25, Alpine, GlassMaster 20, GlassMaster T-LOK, Chalet, Legend, Stratford, WeatherMaster T-LOK
5c	What is the prorating formula?	<p>StormMaster LM: After initial five years, warranty is reduced by 1/600 for each month since original application (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/600).</p> <p>Pinnacle 45: After initial five years, warranty is reduced by 1/540 for each month since original application (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/540).</p> <p>Pinnacle 35: After initial five years, warranty is reduced by 1/420 for each month since original application (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/420).</p> <p>Chalet, Stratford: After initial three years, warranty is reduced by 1/360 for each month since original application (so that at the beginning of the 4<sup>th</sup> year, warranty would be reduced by 36/360).</p> <p>Alpine, Legend, GlassMaster 25, GlassMaster T-LOK, WeatherMaster T-LOK: After initial three years, warranty is reduced by 1/300 for each month since original application (so that at the beginning of the 4<sup>th</sup> year, warranty would be reduced by 36/300).</p> <p>Glass Master 20: After initial three years, warranty is reduced by 1/240 for each month since original application (so that at the beginning of the 4<sup>th</sup> year, warranty would be reduced by 36/240).</p>
6	Nature of remedy	Atlas is liable for cost to repair or replace defectively manufactured shingles. For algae resistant shingles, Atlas' sole and only liability shall be to pay the reasonable cost of repair or replacement subject to pro-rating. During the initial three or five year period (depending upon the type of shingle), the maximum repair or replacement cost to Atlas shall be the replacement cost of those shingles exhibiting discoloration due to algae, including replacement installation costs. For the remainder of the algae warranty, the maximum repair or replacement cost to Atlas shall be the replacement cost of those shingles exhibiting discoloration, in proportion to the unexpired warranty period, excluding all installation costs.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	For the first five years for StormMaster LM, Pinnacle 45 and Pinnacle 35 and, for the first three years for all other Atlas shingles, warranty covers replacement application cost, exclusive of metal work, flashing or other work. For the balance of the warranty, replacement installation costs, including tear-off, are excluded.

6c	Warranty provides for labor to remove defective shingles?	For the first five years for StormMaster LM, Pinnacle 45 and Pinnacle 35 and, for the first three years for all other Atlas shingles, warranty covers replacement application cost, exclusive of metal work, flashing or other work. In no event shall Atlas' liability extend to any cost for the tear-off of the Atlas shingles or for replacement installation cost of the new product during the prorated period.
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	For the first five years for StormMaster LM, Pinnacle 45 and Pinnacle 35 and, for the first three years for all other Atlas shingles, the maximum repair or replacement cost to Atlas shall not exceed the replacement cost to the owner for the product, plus replacement application cost, exclusive of metal work, flashing or other costs. For the balance of the warranty, Atlas' liability excludes any cost for tear-off or replacement installation of new product and is pro-rated.
8	Exclusions from coverage (See warranty introduction)	1, 2, 4, 8, 13, 19, 24, 27
9	Wind coverage/exclusion	Atlas warrants that its shingles will resist damage by wind gusts for the first five years after installation up to the following speeds:  StormMaster LM, StormMaster ST - 102 mph Pinnacle 45, Chalet (high wind application), Stratford (high wind application) - 80 mph Pinnacle 35 - 70 mph Alpine, Chalet (standard application), GlassMaster 25, GlassMaster T-Lok - 60 mph GlassMaster 20 - 54 mph  If, during this five year period, damage occurs to the shingles as a result of wind gusts between 54 mph and 102 mph depending upon the product, Atlas will furnish at no charge, replacement shingles for the damaged shingles only, but no replacement labor. Shingles installed under conditions which temporarily or permanently preclude activation of the sealant must be hand sealed at the time of installation. In the event the shingles fail to self-seal after proper installation and climatic exposure, Atlas' sole responsibility shall be to pay a reasonable cost to hand seal the affected shingles. In order to activate the sealant feature, the shingles must be exposed to warm sunlight for a continued period of time.
10	Notification requirements	Any claim made must be made within 30 days after discovery of the alleged defect by calling 1-800-478-0258 or writing to Atlas Roofing Corporation, Attn: Consumer Services, 2564 Valley Road, Meridian, MS 39307. Claimants are asked to provide and forward, at claimant's expense, pictures of shingles and/or 2 full shingle samples for Atlas to test. The original proof of purchase must be submitted with all claims.
11	Determination of warranty applicability	Repairs made prior to or during the investigation period without Atlas' prior written approval shall be at owner's expense.
12	Does issuing entity manufacture and/or sell shingles?	Atlas manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	C, E
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred to the subsequent owner. If transferred during the initial 3 or 5 year non-prorated period, the remaining portion of the warranty for the new owner will be the same as the original owner. If transferred after the first 3 or 5 year non-prorated period has elapsed, the remaining portion of the transferred warranty shall be 2 years from the date of the real estate transfer.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty is owner's sole and exclusive remedy. Atlas makes no representation or warranty of any kind other than as set forth in the limited warranty. Atlas' liability is limited to the provisions of the warranty, whether any claim against it is based upon strict liability, negligence, breach of warranty or any other theory or cause of action. No person is authorized to alter the warranty either orally or in writing.
19	Special features/conditions	Repairs made prior to or during the period of Atlas' investigation of a claim without Atlas' prior written approval shall be at owner's expense.
20	Executed by owner?	Owner must complete and mail warranty registration card and within 30 days of installation date to qualify for warranty coverage.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Certain Teed Corporation</b>
2	Title, original publication date, identifying symbol if any	"Asphalt Shingle Products Limited Warranty;" 8/04; 20-20-1890
3	Products covered	Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL, Landmark TL, Presidential Shake (and AR), Independence Shingle (and AR), Landmark 50 (and AR), Hatteras, Woodscape 50 AR, Landmark 40 (and AR and IR), Hallmark Shingle, Landmark 30 (and AR), Custom Sealdon 30, XT 30 (and AR and IR), Woodscape 30 AR, Landmark 30 (and AR), Classic Horizon Shingle (and AR), New Horizon Shingle, Hearthstead, Custom Lok 25, XT 25 (and AR)/Seal King 25 AR, Sealdon 25, Patriot AR, Jet 25, CT 20 (and AR)
4	Scope of coverage	CertainTeed warrants that its asphalt roofing shingles will be free from manufacturing defects. In addition, CertainTeed warrants that shingles sold as algae resistant will remain free from algae growth which adversely affects overall appearance.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects and wind damage and algae resistance for shingles sold as algae resistant.
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<b>For Manufacturing Defects:</b> Lifetime: Grand Manor Shingle, CentennialSlate, Carriage House Shingle, Presidential TL, Landmark TL; 50 years: Presidential Shake (and AR), Independence Shingle (and AR), Landmark 50 (and AR), Woodscape 50 AR; 40 years: Hatteras, Landmark 40 (and AR and IR), Hallmark Shingle; 30 years: Landmark 30 (and AR), Custom Sealdon 30, XT 30 (and AR and IR), Woodscape 30 AR, Patriot AR, Classic Horizon Shingle, New Horizon Shingle 25 years: Hearthstead, Custom Lok 25, XT 25 (and AR), Seal King 25 AR, Sealdon 25, Jet 25; 20 years: CT 20 (and AR); 10 years: Any shingle applied to an inadequately ventilated roof deck (except for certain premium shingles installed on commercial buildings - See item no. (19)). <b>For Algae Resistance:</b> 15 years: Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL, Landmark TL, Presidential Shake, Hatteras; 10 years: Landmark 50, Woodscape 50, Independence Shingle, Landmark 40, Hatteras, Landmark 30, XT 30, XT 25, Seal King 25, Woodscape 30, Patriot, Classic Horizon Shingle. <b>For Wind Damage:</b> 10 years: Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL, Landmark TL, Presidential Shake, Hatteras 5 years: All others
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After 10 yrs: Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential TL, Presidential Shake, Landmark TL; After 5 years: Landmark 50, Independence Shingle, Landmark 40, Hatteras, Woodscape 50, Hallmark Shingle, Landmark 30, Custom Sedan 30, XT 30, Woodscape 30, Landmark 30, Patriot, Classic Horizon Shingle, Hearthstead, Custom LOK 25, XT 25, Seal King, Sealdon 25,
5c	What is the prorating formula?	Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL, Landmark TL, Presidential Shake: After ten years, warranty is reduced by 1/600 for each month since original application until the 40 <sup>th</sup> year after application at which time the reduction figure will remain at 480/600, or 20% of the total maximum liability. Landmark 50, Woodscape 50, Independence Shingle; After five years, warranty is reduced by 1/600 for each month since original application (so that at the beginning of the 6 <sup>th</sup> year, warranty is reduced by 60/600). Landmark 40, Hatteras: After five years, warranty is reduced by 1/480 for each month since original application (so that at the beginning of the 6th year, warranty is reduced by 60/480). Hallmark Shingle, Landmark 30, Custom Sealdon 30, XT 30, Woodscape 30, Patriot, Classic Horizon Shingle, New Horizon Shingle: After five years, warranty is reduced by 1/360 for each month since original application (so that at the beginning of the 6th year, warranty is reduced by 60/360). Hearthstead, Custom Lok 25, XT 25, Seal King 25/Sealdon 25: After five years, warranty is reduced by 1/300 for each month since original application (so that at the beginning of the 6th year, warranty is reduced by 60/300). Jet 25: After four years, warranty is reduced by 1/300 for each month since original application (so that at the beginning of the 5th year, warranty is reduced by 48/300). CT 20: After three years, warranty is reduced by 1/240 for each month since original application (so that at the beginning of the 4th year, warranty is reduced by 36/240). Any shingles applied to an inadequately vented roof deck: Warranty is reduced by 1/120 for each month starting at completion of original application.
6	Nature of remedy	For the nonprorated period (3, 4, 5 or 10 years depending upon the shingle), CertainTeed, at no charge, will repair or replace, at its option, any shingles proven to be defective, including labor, excluding costs of tear-off and disposal and flashing and metal work, except for Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL and Landmark TL for which the cost of tear-off and disposal is covered. After the nonprorated period, CertainTeed will contribute a prorated amount toward the cost of repairing or replacing defective shingles, exclusive of costs of labor, tear-off and disposal. For algae resistant shingles, CertainTeed reserves the right to clean the algae stains rather than repair or replace the contaminated shingles. In instances in which CertainTeed has agreed to pay the cost of labor required to repair, replace, or clean defective or contaminated shingles, CertainTeed will provide reimbursement only upon receipt of a copy of the contractor's invoice or written evidence of the completion of such work which CertainTeed, in its sole discretion, deems acceptable.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes, during the nonprorated period. No, after the nonprorated period
6c	Warranty provides for labor to remove defective shingles?	Yes, for Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL, Landmark TL. No, for all other shingles

6d	Does warranty cover disposal of defective shingles?	Yes, for Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL, Landmark TL. No, for all other shingles
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	After the nonprorated period, CertainTeed's maximum material liability is: Grand Manor Shingle, Centennial Slate, Presidential Shake TL - \$140/sq; Carriage House Shingle - \$110/sq; Landmark TL - \$120/sq; Presidential Shake (& AR) - \$95/sq; Landmark 50 (& AR), Woodscape 50, Independence Shingle (& AR), Hatteras, Hallmark Shingle - \$55/sq; Landmark 30 (& AR), Woodscape 30 AR, Patriot AR, Classic Horizon Shingle (& AR), New Horizon Shingle, - \$40/sq; Custom Sealdon 30, XT 30 (& AR & IR), Hearthstead, Custom Lok 25 - \$35/sq; XT 25 (& AR), Seal King 25 AR, Sealdon 25, Jet 25 - \$30/sq; CT 20 (& AR) - \$25/sq.
8	Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 10, 14, 16, 21, 23 (also excludes damage caused by ice back up or ice damming)
9	Wind coverage/exclusion	Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL, Landmark TL, Presidential Shake (& AR) & Hatteras are warranted against blow-off damage due to wind velocities up to 110 mph for ten (10) yrs. All other CertainTeed shingles are warranted against blow-off damage for five (5) years due to wind velocities as follows: Independence Shingle (and AR): 100 mph; Landmark 50 (and AR), Woodscape 50 AR: 90 mph (wind coverage can be upgraded to 110 mph if shingles are installed using 6 fasteners per shingle in the common bond area.) Landmark 40 (and AR and IR), Hallmark Shingle, Custom Sealdon 30, XT 30 (and AR and IR): 80 mph (Landmark 40 can be upgraded 90 mph if installed with 6 fasteners per shingle, in the common bond area.) Landmark 30 (AR), Woodscape 30, Classic Horizon Shingle (and AR), New Horizon Shingle: 70 mph (Wind coverage for Landmark 30 and Woodscape 30 can be upgraded to 80 mph if installed with 6 fasteners per shingle, in the common bond area.) Patriot AR, Hearthstead, Custom Lok 25, XT 25 (& AR)/Seal King 25 AR, Sealdon 25, Jet 25, CT 20 (& AR): 60 mph If the applied shingles contain self-sealing asphalt strips, and if any of these strips fail to activate within the first year following application, CertainTeed shall have no liability for such defect unless CertainTeed is afforded the opportunity to hand-seal, at its sole expense, any non-sealing shingles.
10	Notification requirements	Owner must promptly notify CertainTeed in writing of any manufacturing defect or algae contamination and provide proof of the date of purchase and date of application of the shingles. Notification should be sent to CertainTeed Corporation, 1400 Union Meeting Road, Blue Bell, PA 19422, Attention: RPG Technical Services Department.
11	Determination of warranty applicability	CertainTeed will investigate claim and confirm if there is a defect covered by the warranty.
12	Does issuing entity manufacture and/or sell shingles?	CertainTeed manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	A, F
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred by the original consumer to the subsequent property owner. For Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL and Landmark TL, if the warranty is transferred during the first ten years after application, the warranty will extend for 50 years from original installation. For all other shingles, if the warranty is transferred during the nonprorated period, the duration of the warranty will remain the same as for the original consumer. If the warranty is transferred by the original consumer after the nonprorated period, the warranty duration following the transfer is two (2) years from the date of the real estate transfer.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty replaces all other oral or written warranties, liabilities, or obligations of CertainTeed. No field representative, distributor or dealer of CertainTeed is authorized to make any change or modification to this warranty.
19	Special features/conditions	The lifetime coverage for Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential Shake TL and Landmark TL offered by this warranty is designed to cover individual homeowners only. In the instance of shingles purchased by or installed upon property owned by, for example, corporations, governmental agencies, partnerships, trusts, religious organizations, schools, condominiums or cooperative housing arrangements, or installed on apartment buildings or any other type of building or premises not used by individual homeowners as their residence, the warranty period for Grand Manor Shingle, Centennial Slate, Carriage House Shingle, Presidential ShingleTL and Landmark TL will be 50 years. For all shingles normally warranted for less than 40 years, the duration of the warranty will be ten (10) years when shingles are installed on an inadequately ventilated roof deck. When CertainTeed's Atop-of-the-line® shingles (i.e. those shingles covered by a 40-year or longer warranty) are installed on commercial buildings without adequate ventilation installed directly beneath the shingled roof deck, CertainTeed will extend its normal warranty under certain circumstances including using only structural insulated panels or nailboard insulation panels having either minimum 3/8" plywood or minimum 7/16" OSB on their top surface as the substrate for the shingles. CertainTeed shall not be liable as a result of discontinuance or modification of its products and shall not be liable in the event replacement material varies in color in comparison to the original product as a result of normal weathering. CertainTeed may substitute products designated by CertainTeed to be of comparable quality or price if the product initially installed has been discontinued or modified.
20	Executed by owner?	CertainTeed provides for electronic warranty registration. Failure to register shall not void the warranty.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Elk Corporation of Alabama and Elk Corporation of Texas</b>
2	Title, original publication date, identifying symbol if any	"Hip and Ridge Limited Transferable Warranty;" January 2002; HRWAR 1/02.
3	Products covered	ELK RidgeCrest Vented High Profile Ridge, Ridgecrest High Profile Hip & Ridge, Seal-A-Ridge with formula FLX, Z ridge and other Elk hip and ridge shingles
4	Scope of coverage	Elk warrants that the Elk hip and ridge shingles are free from defects in materials or manufacturing workmanship that would adversely affect performance and, when manufactured with StainGuard treatment, will inhibit the discoloration of roofing granules caused by growth of algae. The StainGuard warranty is only available in Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that affect performance, algae resistance and wind damage
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<p><b>For Manufacturing Defects:</b> for the duration of the warranty applicable to the primary shingles installed on sloped surfaces of the same building where the hip and ridge shingles are installed. If the primary shingles carry no warranty or the duration cannot be determined, the warranty on hip and ridge shall be 25 years.</p> <p><b>For Algae Resistance</b> (if StainGuard treatment): 10 years;</p> <p><b>For Wind Damage:</b> 5 years</p> <p>If warranty is transferred to a subsequent building owner more than one (1) year after the original application, warranty is limited to five (5) years from the date of transfer and is prorated. (See Item 15 below)</p>
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After five (5) years
5c	What is the prorating formula?	Warranty is prorated in the same manner as the primary shingles used in the installation
6	Nature of remedy	<p><b>For Manufacturing Defects:</b> For warranty claims of original owners, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles and application labor, (2) provide replacement shingles only or pay the reasonable cost of replacement shingles of similar design, or (3) pay the reasonable cost for repair of the shingles. For warranty claims of transferees, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles, without application labor, or (2) pay the reasonable cost for replacement shingles of a similar design without application labor or (3) pay the reasonable cost for repair of the defective shingles.</p> <p><b>For StainGuard Resistance:</b> If shingles are manufactured, labeled and sold with StainGuard protection, then Elk warrants against discoloration of roofing granules caused by growth of algae for 10 years. Elk's obligation is to pay the reasonable cost of commercially cleaning or treating shingles that have become discolored or, if Elk elects, replacing discolored shingles. Owner is responsible to find, hire and complete treatment by a qualified professional as recommended by Elk and the cleaning professional will have sole responsibility for completing such treatment in a competent manner</p>
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes for original owner; no for transferees
6c	Warranty provides for labor to remove defective shingles?	No
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	For the non-prorated warranty period applicable to the primary shingles up to a maximum of five (5) years, Elk's liability is limited to the reasonable replacement cost of defective shingles and application labor or providing replacement shingles of similar design or paying the reasonable cost for repair of the defective shingles. Thereafter, the replacement cost which Elk will pay will be reduced by the amount of usage received from the shingles.
8	Exclusions from coverage (See warranty introduction)	1, 2, 3, 4, 8, 9, 10, 11, 13, 16, 17, 19, 21, 24. Warranty also excludes damage caused by decking nails or staples backing out and either perforating or pushing up the shingles.

<p>9 Wind coverage/exclusion</p>	<p>Shingles are warranted against blow-offs in winds up to 70 mph for the first five (5) years after installation.</p> <p>Elk's liability for wind damage is limited to Elk's obligation to pay the reasonable cost of replacing shingles that have blown off including, only in the case of an original owner, the cost of reasonable application labor, and in the case of self-sealing shingles, the reasonable cost of manually sealing any unsealed shingles which have had adequate exposure to heat. Elk's wind warranty is conditioned upon installation of the shingles in accordance with Elk's application instructions as printed on the shingle wrapper and in the case of Seal-A-Ridge FLX or other Elk hip and ridge shingles with a factory applied sealant. Shingles must be exposed to adequate heat from direct sunlight for sealing to occur.</p>
<p>10 Notification requirements</p>	<p>Written notification of alleged defect with a copy of warranty card and proof of purchase to Elk at one of its four offices within 30 days after discovery of a problem. Owner may be required to provide samples of shingles and photographs and other requested materials at Owner's expense.</p>
<p>11 Determination of warranty applicability</p>	<p>Decision on which of the stated remedies is provided shall be at Elk's sole discretion. Within a reasonable time from receipt of the claim, Elk will review claim and may ask for samples and photographs. Elk will make investigation, including roof top inspection by an Elk employee and laboratory testing of the suspect shingles. If the investigation reveals manufacturing defects covered by warranty, Elk will provide a settlement within a reasonable time.</p>
<p>12 Does issuing entity manufacture and/or sell shingles?</p>	<p>Elk manufactures and sells the shingles</p>
<p>13 Specific conditions to make warranty ineffective or void (See warranty introduction)</p>	<p>A, C, E, G</p>
<p>14 Inclusion of consequential damages</p>	<p>No</p>
<p>15 Assignability</p>	<p>Warranty may be transferred during the first 10 years by the original owner to the first successor purchaser who purchases or is otherwise transferred the building or premises on which the shingles were properly installed. The purchaser or transferee must complete and return a Transfer Notification Card and pay a transfer fee of \$5.00 per square within 30 days after the transfer of the building. The Transferee will have five (5) years of prorated coverage unless the transfer took place within one (1) year of installation, in which case the Transferee will have the same rights and remedies of the original owner.</p>
<p>16 Cost to obtain</p>	<p>None</p>
<p>17 Is warranty backed by insurance coverage?</p>	<p>No</p>
<p>18 Is warranty an addition or exclusive remedy for owner?</p>	<p>Warranty is the sole and exclusive remedy provided by Elk for manufacturing defects. Elk makes no representation or warranty of any kind, other than what is stated in the warranty. Elk shall not be liable based upon any theory of liability, including negligence, breach of warranty, strict liability, product liability or any other theory</p>
<p>19 Special features/conditions</p>	<p>No limited warranty assures that the covered products will last the entire length of the applicable warranty period.</p> <p>Any claim for shingles, which have been replaced prior to Elk's receipt of written notice, samples and on-site inspection, constitutes spoilage and will be denied.</p> <p>Any claim not settled within a reasonable time, as a prerequisite to any litigation, shall be submitted to mediation before a mediator(s) mutually selected by the parties, or if they are unable to agree, by any federal district court judge whether or not having jurisdiction on the matter or acting in an official capacity.</p> <p>No person is authorized to alter the warranty either orally or in writing.</p>
<p>20 Executed by owner?</p>	<p>Yes; Owner is to sign and submit warranty registration form to one of Elk's four offices within 30 days following installation.</p>

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Elk Corporation of Alabama or Elk Corporation of Texas</b>
2	Title, original publication date, identifying symbol if any	"Elk Limited Transferable Warranty;" May 2004, FLTW 5/04
3	Products covered	Prestique Plus High Definition, Prestique Plus High Definition with StainGuard, Prestique Gallery Collection, Prestique Gallery Collection with StainGuard, Prestique Grandé High Definition, Prestique Grandé High Definition with StainGuard, Prestique 1 High Definition, Prestique 1 High Definition with StainGuard, Prestique High Definition, Prestique High Definition with StainGuard, Raised Profile, Raised Profile with StainGuard.
4	Scope of coverage	Elk warrants that the Elk asphalt shingles are free from defects in materials or manufacturing workmanship that would adversely affect performance and, when manufactured with StainGuard treatment, will inhibit the discoloration of roofing granules caused by growth of algae. The StainGuard warranty is only available in Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that affect performance, algae resistance and wind damage.
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<p><b>For Manufacturing Defects:</b></p> <p>50 years: Prestique Plus High Definition, Prestique Plus High Definition with StainGuard, Prestique Gallery Collection, Prestique Gallery Collection with StainGuard.</p> <p>40 years: Prestique Grandé High Definition, Prestique Grandé High Definition with StainGuard, Prestique 1 High Definition, Prestique 1 High Definition with StainGuard.</p> <p>30 years: Prestique High Definition, Prestique High Definition with StainGuard, Raised Profile, Raised Profile with StainGuard.</p> <p><b>For Algae Resistance</b> (if StainGuard treatment): 10 years</p> <p><b>For Wind Damage:</b> 5 years</p> <p>If warranty is transferred to a subsequent building owner more than one (1) year after the original application, warranty is limited to five (5) years from the date of transfer and is prorated. (See Item 15 below)</p>
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After seven (7) years when a full Elk roof system is installed; otherwise after five (5) years
5c	What is the prorating formula?	<p>For Prestique Plus High Definition and Prestique Gallery Collection, warranty is prorated after 7 or 5 years at the rate of 1/600 for each month from date of application.</p> <p>For Prestique Grandé High Definition and Prestique 1 High Definition, warranty is prorated after 7 or 5 years at the rate of 1/480 for each month from date of application.</p> <p>For Prestique High Definition and Raised Profile, warranty is prorated after 7 or 5 years at the rate of 1/360 each month from date of application.</p>
6	Nature of remedy	<p><b>For Manufacturing Defects:</b> For warranty claims of original owners, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles and application labor for such shingles, (2) provide replacement shingles only or pay the reasonable cost of replacement shingles of similar design, or (3) pay the reasonable cost for repair of the shingles. For warranty claims of transferees, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles without application labor provided from the date of transfer; or (2) pay the reasonable cost for replacement shingles of a similar design without application labor, prorated from the date of transfer; or (3) pay the reasonable cost for repair of the defective shingles.</p> <p><b>For StainGuard Resistance:</b> If shingles are manufactured, labeled and sold with StainGuard protection, Elk warrants against discoloration of roofing granules caused by growth of algae for 10 years. Elk's obligation is to pay the reasonable cost of commercially cleaning or treating shingles that have become discolored or, if Elk elects, replacing discolored shingles. Owner is responsible to find, hire and complete treatment by a qualified professional as recommended by Elk and the cleaning professional will have sole responsibility for completing such treatment in a competent manner.</p>
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes for original owner; no for transferees
6c	Warranty provides for labor to remove defective shingles?	No

6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	For the non-prorated warranty period, Elk's liability is limited to the reasonable replacement cost of defective shingles and application labor or providing replacement shingles of similar design or paying the reasonable cost for repair of the defective shingles. Thereafter, the replacement cost which Elk will pay will be reduced by the amount of usage received from the shingles.
8	Exclusions from coverage (See warranty introduction)	1, 2, 3, 4, 8, 9, 10, 11, 13, 16, 17, 19, 21, 24. Warranty also excludes damage caused by decking nails or staples backing out and either perforating or pushing up the shingles.
9	Wind coverage/exclusion	<p>For the first five (5) years after installation, Prestique Plus High Definition and Prestique Gallery Collection are warranted against blow-offs due to winds up to 110 mph if at least six (6) properly placed nails and Elk Starter Strip shingles are installed and for winds up to 80 mph if application instructions on shingle wrapper are followed.</p> <p>For the first five (5) years after installation, Prestique Grandé High Definition and Prestique 1 High Definition are warranted against blow-offs due to winds up to 90 mph if at least six (6) properly placed nails and Elk Starter Strip shingles are installed and for winds up to 80 mph if application instructions on shingle wrapper are followed.</p> <p>For the first five (5) years after installation, Prestique High Definition are warranted against blow-offs due to winds up to 80 mph if at least six (6) properly placed nails and Elk Starter Strip shingles are installed and for winds up to 80 mph if application instructions on shingle wrapper are followed.</p> <p>Elk's liability for wind damage is limited to Elk's obligation to pay the reasonable cost of replacing shingles that have blown off and the reasonable cost of manually sealing any unsealed shingles which have had adequate exposure to heat. Elk's wind warranty is conditioned upon installation of the shingles in accordance with Elk's application instructions as printed on the shingle wrapper and the thermal sealing of the shingles. Shingles must be exposed to adequate heat from direct sunlight for sealing to occur.</p>
10	Notification requirements	Written notification of alleged defect with a copy of warranty card and proof of purchase to Elk at one of its four offices, within 30 days of discovery of a problem. Owner may be requested to submit samples of shingles and photographs and other requested materials at Owner's expense.
11	Determination of warranty applicability	Decision on which of the stated remedies is provided shall be at Elk's sole discretion. Within a reasonable time from receipt of the claim, Elk will review claim and may ask for samples and photographs. Elk will make investigation, including roof top inspection by an Elk employee and laboratory testing of the suspect shingles. If the investigation reveals manufacturing defects covered by warranty, Elk will provide a settlement within a reasonable time.
12	Does issuing entity manufacture and/or sell shingles?	Elk manufacturers and sells the shingles
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	A, C, E, G
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred during the first 10 years by the original owner to the first successor purchaser who purchases or is otherwise transferred the building or premises on which the shingles were properly installed. The purchaser or transferee must complete and return a Transfer Notification Card and pay a transfer fee of \$2.00 per square within 30 days after the transfer of the building. The Transferee will have five (5) years of prorated coverage unless the transfer took place within one (1) year of installation, in which case the Transferee will have the same rights and remedies of the original owner.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty is the sole and exclusive remedy provided by Elk for manufacturing defects. Elk makes no representation or warranty of any kind, other than what is stated in the warranty. Elk shall not be liable based upon any theory of liability, including negligence, breach of warranty, strict liability, products liability or any other theory.
19	Special features/conditions	No limited warranty assures that the covered products will last the entire length of the applicable warranty period. Any claim for shingles which have been replaced prior to Elk's receipt of written notice, samples and on-site inspection, constitutes spoilage and will be denied.
20	Executed by owner?	Yes; the owner is to sign and submit warranty registration form and return it to one of Elk's four office within 30 days following installation.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Elk Corporation of Alabama</b>
2	Title, original publication date, identifying symbol if any	"Capstone 40 with formula <i>FLX</i> Roofing Products Limited Warranty," July 23, 2001, CAPWAR 7/01.
3	Products covered	Capstone 40, Capstone 40 with StainGuard.
4	Scope of coverage	Elk warrants that the Elk Capstone 40 asphalt shingles with formula <i>FLX</i> are free from defects in materials or manufacturing workmanship that would adversely affect performance and, when manufactured with StainGuard treatment, will inhibit the discoloration of roofing granules caused by growth of algae. The StainGuard warranty is only available in Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that affect performance, algae resistance and wind damage.
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<b>For Manufacturing Defects:</b> 40 years <b>For Algae Resistance:</b> 10 years <b>For Wind Damage:</b> 5 years  If warranty is transferred to a subsequent building owner more than one (1) year after the original application, warranty is limited to five (5) years from the date of transfer and is prorated. (See Item 15 below.)
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After ten (10) years.
5c	What is the prorating formula?	After 10 years, warranty is reduced by 1/480 for each month since the original installation (so that at the beginning of the 11 <sup>th</sup> year, warranty is reduced by 120/480).
6	Nature of remedy	<b>For Manufacturing Defects:</b> For warranty claims of original owners, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles and application labor, (2) provide replacement shingles only or pay the reasonable cost of replacement shingles of similar design, or (3) pay the reasonable cost for repair of the shingles. For warranty claims of transferees, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles, without application labor, or (2) pay the reasonable cost for replacement shingles of a similar design without application labor or (3) pay the reasonable cost for repair of the defective shingles.  <b>For StainGuard Resistance:</b> Capstone 40 with StainGuard is warranted against discoloration of roofing granules caused by growth of algae for 10 years for original consumers and for 5 years for authorized transferees. Elk's obligation is to pay the reasonable cost of commercially cleaning or treating shingles that have become discolored or, if Elk elects, replacing discolored shingles. Owner is responsible to find, hire and complete treatment by a qualified professional as recommended by Elk and the cleaning professional will have sole responsibility for completing such treatment in a competent manner.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes for original owner; no for transferees
6c	Warranty provides for labor to remove defective shingles?	No
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	Elk hip and ridge will be warranted if installed on the same building with the Elk shingles.
7	Is there monetary limitations?	For the first ten (10) years, Elk shall pay the reasonable replacement cost of shingles and application labor or provide replacement shingles of similar design or pay the reasonable cost for repair of the shingles. Thereafter, the replacement cost which Elk will pay will be reduced by the amount of usage received from the shingles.

8	Exclusions from coverage (See warranty introduction)	1, 2, 3, 4, 8, 9, 10, 11, 13, 16, 17, 19, 21, 24. Warranty also excludes damage caused by decking nails or staples backing out and either perforating or pushing up the shingles.
9	Wind coverage/exclusion	<p>Shingles warranted against winds up to 110 mph for five years if at least six (6) properly placed nails and Elk starter strip shingles have been installed. Warranty coverage for maximum wind velocity up to 80 mph is provided when at least four (4) properly placed fasteners have been installed.</p> <p>Elk's liability for wind damage is limited to Elk's obligation to pay the reasonable cost of replacing shingles that have blown off and the reasonable cost of manually sealing any unsealed shingles which have had adequate exposure to heat. Elk's wind warranty is conditioned upon installation of the shingles in accordance with Elk's application instructions as printed on the shingle wrapper and thermal sealing. Shingles must be exposed to adequate heat from direct sunlight for sealing to occur. The application instructions for Capstone 40 shingles contain special techniques required before the shingles will carry the maximum limited wind warranty.</p>
10	Notification requirements	Notification to Elk Corporation of Alabama, 4600 Stillman Blvd., Tuscaloosa, AL 35401, within 30 days after discovery of any alleged defect. Notice should include copy of warranty card and proof of purchase. Owner may be required to provide samples of shingles and photographs and other requested materials at Owner's expense.
11	Determination of warranty applicability	Elk will make investigation, including roof top inspection by an Elk employee and laboratory testing of the suspect shingles. If the investigation reveals manufacturing defects covered by warranty, Elk will provide a settlement within a reasonable time.
12	Does issuing entity manufacture and/or sell shingles?	Elk manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	A, C, E, G
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred during the first 10 years by the original owner to the first successor purchaser who purchases or is otherwise transferred the building or premises on which the shingles were properly installed. The purchaser or transferee must complete and return a Transfer Notification Card and pay a transfer fee of \$2.00 per square within 30 days after the transfer of the building. The Transferee will have five (5) years of prorated coverage unless the transfer took place within one (1) year of installation, in which case the Transferee will have the same rights and remedies of the original owner.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty is the sole and exclusive remedy provided by Elk for manufacturing defects. Elk makes no representation or warranty of any kind, other than what is stated in the warranty. Elk shall not be liable based upon any theory of liability, including negligence, breach of warranty, strict liability, product liability or any other theory.
19	Special features/conditions	<p>No limited warranty assures that the covered products will last the entire length of the applicable warranty period.</p> <p>Any claim for shingles which have been replaced prior to Elk's receipt of written notice, samples and on-site inspection, constitutes spoilage and will be denied.</p> <p>Any claim not settled within a reasonable time, as a prerequisite to any litigation, shall be submitted to mediation before a mediator(s) mutually selected by the parties, or if they are unable to agree, by any federal district court judge whether or not having jurisdiction on the matter or acting in an official capacity.</p> <p>No person is authorized to alter the warranty either orally or in writing.</p>
20	Executed by owner?	Yes; original homeowner and contractor must complete warranty registration form and return it to Elk, 4600 Stillman Blvd., Tuscaloosa, AL 35401, within 30 days after the installation has been completed.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Elk Corporation of Texas, California Division</b>
2	Title, original publication date, identifying symbol if any	"Domain Roofing Products Limited Warranty;" October 2004, DOMWAR 10/04
3	Products covered	Domain Winslow, Domain Winslow with StainGuard
4	Scope of coverage	Elk warrants that the Elk Domain asphalt shingles are free from defects in materials or manufacturing workmanship that would adversely affect performance and, when manufactured, labeled and sold with StainGuard treatment, will inhibit the discoloration of roofing granules caused by growth of algae. The StainGuard warranty is only available in Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington D.C., and West Virginia.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that affect performance and algae resistance if treated with StainGuard.
4d	Warranty provides coverage for flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<b>For Manufacturing Defects:</b> 50 years. <b>For Algae Resistance</b> (if StainGuard treatment): 10 years <b>For Wind Damage:</b> 5 years  If warranty is transferred to a subsequent building owner more than one (1) year after the original application, warranty is limited to five (5) years from the date of transfer and is prorated.
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After ten (10) year.
5c	What is the prorating formula?	After ten (10) years, warranty is reduced by 1/600 for each month from date of application (so that at the beginning of the 11 <sup>th</sup> year, warranty would be reduced by 120/600).
6	Nature of remedy	<b>For Manufacturing Defects:</b>  For warranty claims of original owners, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles and application labor for such shingles, (2) provide replacement shingles only or pay the reasonable cost of replacement shingles of similar design and pay the reasonable cost of application labor for such shingles, or (3) pay the reasonable cost for repair of the defective shingles. For warranty claims of transferees, Elk, at its sole discretion, shall either (1) pay the reasonable replacement cost of defective shingles, without application labor, prorated from the date of transfer; or (2) pay the reasonable cost for replacement shingles of a similar design without application labor,, prorated from date of transfer; or (3) pay the reasonable cost for repair of the defective shingles.  <b>For StainGuard Resistance:</b>  If shingles are manufactured, labeled and sold with StainGuard protection, Elk warrants against discoloration of roofing granules caused by growth of algae. Elk's obligation is to pay the reasonable cost of commercially cleaning or treating shingles that have become discolored or, if Elk elects, replacing discolored shingles. Owner is responsible to find, hire and complete treatment by a qualified professional as recommended by Elk and the cleaning professional will have sole responsibility for completing such treatment in a competent manner.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes for original owner; no for transferees
6c	Warranty provides for labor to remove defective shingles?	Np
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No

7	Is there monetary limitations?	For the non-prorated warranty period, Elk's liability is limited to the reasonable replacement cost of defective shingles and application labor or providing replacement shingles of similar design or paying the reasonable cost for repair of the defective shingles. Thereafter, the replacement cost which Elk will pay will be reduced by the amount of usage received from the shingles.
8	Exclusions from coverage (See warranty introduction)	1, 2, 3, 4, 8, 9, 10, 11, 13, 16, 17, 19, 21, 24. Warranty also excludes damage caused by decking nails or staples backing out and either perforating or pushing up the shingles.
9	Wind coverage/exclusion	For the first five (5) years after installation, shingles are warranted against blow-offs in winds up to 110 mph if at least six (6) properly placed nails and Elk Starter Strip shingles are installed and in winds up to 80 mph if at least four (4) properly placed fasteners are installed.  Elk's liability for wind damage is limited to Elk's obligation to pay the reasonable cost of replacing shingles that have blown off and the reasonable cost of manually sealing any unsealed shingles which have had adequate exposure to heat. Elk's wind warranty is conditioned upon installation of the shingles in accordance with Elk's application instructions included with each bundle and thermal sealing of the shingles. Shingles must be exposed to adequate heat from direct sunlight for sealing to occur.
10	Notification requirements	Written notification of alleged defect with a copy of warranty card and proof of purchase to Elk at one of its four offices within 30 days after discovery of a problem. Owner may be required to provide samples of shingles and photographs and other requested materials at Owner's expense.
11	Determination of warranty applicability	Decision on which of the stated remedies is provided shall be at Elk's sole discretion. Within reasonable time from receipt of the claim, Elk will review claim and may ask for samples and photographs. Elk will make investigation, including roof top inspection by an Elk employee and laboratory testing of the suspect shingles. If the investigation reveals manufacturing defects covered by warranty, Elk will provide a settlement within a reasonable time.
12	Does issuing entity manufacture and/or sell shingles?	Elk manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	A, C, E, G
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred during the first 10 years by the original owner to the successor purchaser who purchases or is otherwise transferred the building or premises on which the shingles were properly installed. The purchaser or transferee must complete and return a Transfer Notification Card and pay a transfer fee of \$2.00 per square within 30 days after the transfer of the building. The Transferee will have five (5) years of prorated coverage for materials unless the transfer took place within one (1) year of installation, in which case the Transferee will have the same rights and remedies of the original owner.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty is the sole and exclusive remedy provided by Elk for manufacturing defects. Warranty is in place of all others, superseding any prior, contrary or other representations. Buyer waives and releases all other remedies, claims and rights.
19	Special features/conditions	No limited warranty assures that the covered products will last the entire length of the applicable warranty period.  Any claim for shingles which have been replaced prior to Elk's receipt of written notice, samples and on-site inspection, constitutes spoilage and will be denied.  Any claim not settled within a reasonable time, as a prerequisite to any litigation, shall be submitted to mediation before a mediator mutually selected by the parties, or if they are unable to agree, by any federal district court judge whether or not having jurisdiction on the matter or acting in an official capacity.
20	Executed by owner?	Yes; Owner is to sign and submit warranty registration form to Elk at 6200 Zerker Road, Shafter, CA within 30 days after installation has been completed.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>GAF Materials Corporation</b>
2	Title, original publication date, identifying symbol if any	"GAF Smart Choice System Plus Limited Warranty;" June 2004; RESWT 162 76954-0604.
3	Products covered	Royal Sovereign, Jumbo Royal Sovereign, Marquis WeatherMax, Timberline 30, Timberline Select 40, Timberline Ultra, Slateline, Grand Slate, Country Mansion, Country Estates, Grand Sequoia, Grand Canyon, Camelot; all GAF Weather Stopper™ products (See Item No. 19 below)
4	Scope of coverage	GAF warrants that its products will remain free from manufacturing defects that adversely affect their performance. If shingles were sold with Algae-Easter™ protection, GAF warrants that blue-green algae will not cause a pronounced discoloration.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that adversely affect performance and blue-green algae discoloration
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No; however, warranty covers all GAF Weather Stopper™ system components, including ridge vents and underlayment.
5	Length of coverage	<b>For Manufacturing Defects:</b> Life: Timberline Ultra, Grand Slate, Grand Canyon, Grand Sequoia, Country Mansion, Country Estates, Camelot; 40 years: Slateline, Timberline Select 40; 30 years: Timberline 30, Marquis WeatherMax; 25 years: Royal Sovereign, Jumbo Royal Sovereign <b>For Algae Discoloration:</b> 10 years <b>For Wind Damage:</b> 5 years (Slateline - 10 years)
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	50 year coverage period for material defect applies only to single family detached residences; for all other structures, coverage period is 15 years. <b>After 50 years:</b> Timberline Ultra, Slateline, Grand Canyon, Grand Sequoia, Country Mansion, Country Estates, Grand Slate, Camelot. <b>After 10 years:</b> Royal Sovereign, Jumbo Royal Sovereign, Marquis Weathermax, Timberline 30, Timberline Select 40.
5c	What is the prorating formula?	50 year coverage period for material defect applies only to single family detached residences; for all other structures, coverage period is 15 years. Timberline Ultra, Slateline, Grand Slate, Grand Sequoia, Grand Canyon, Country Mansion, Country Estate, Camelot: After 15 years, warranty is reduced by 1/600 for each month of service from date of installation (so that at the beginning of the 16 <sup>th</sup> year, warranty would be reduced by 180/600). Timberline Select 40: After 10 years, warranty is reduced by 1/480 for each month of service from date of installation (so that at the beginning of the 11 <sup>th</sup> year, warranty would be reduced by 120/480). Timberline 30, Marquis Weathermax: After 10 years, warranty is reduced by 1/360 for each month of service from date of installation (so that at the beginning of the 11 <sup>th</sup> year, warranty would be reduced by 120/360). Royal Sovereign, Jumbo Royal Sovereign: After 10 years, warranty is reduced by 1/360 for each month of service from date of installation (so that at the beginning of the 11 <sup>th</sup> year, warranty would be reduced by 120/300). Proration Schedule for Weather Stopper™ products where "Lifetime" Shingles are installed on structures other than single family residences: Years of service/proration adjustment as follows (years/%): 16/75; 17-18/70; 18-20/65; 21-22/60; 23-24/55; 25-26/50; 27-28/45; 29-30/40; 31-32/35; 33-34/30; 35-40/25; 41-50/20; 51-lifetime/10
6	Nature of remedy	<b>For Manufacturing Defects:</b> For the first 10, 15 or 50 years (depending upon the shingle type or building structure), GAF will pay the full reasonable cost of labor to repair or recover any part of the GAF products that are found to have a manufacturing defect that affects performance and will provide replacement products. After the 10, 15 or 50 year period, the repair or recover cost that GAF will pay and the roof products to be provided will be reduced by the amount of use received. <b>For Algae Discoloration:</b> During the first year, GAF will be responsible for either the cost of cleaning shingles or the cost to repair or recover shingles up to a maximum of the original installed cost of the affected shingles. For the 9 year balance of the 10 year warranty period, GAF's maximum contribution will be reduced by the amount of use received
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes
6c	Warranty provides for labor to remove defective shingles?	No
6d	Does warranty cover disposal of defective shingles?	No

6e	Does warranty apply to any material other than shingles?	Warranty covers all GAF Weather Stopper™ components.
7	Is there monetary limitations?	<p><b>For Manufacturing Defects:</b> After the initial 10, 15 or 50 period (depending upon the shingle type or building structure), GAF's maximum liability shall not exceed three times the applicable dollar per square value (before any reduction for use): Royal Sovereign: \$30/sq; Jumbo Royal Sovereign, \$34/sq; Marquis Weathermax: \$35/sq; Timberline 30: \$40/sq; Timberline Select 40: \$45/sq; Timberline Ultra: \$55/sq; Slateline: \$55/sq; Grand Slate: \$130/sq; Grand Sequoia: \$90/sq; Grand Canyon: \$120/sq; Country Mansion: \$120/sq. Country Estate: \$120/sq; Camelot: \$140/sq.</p> <p><b>For Algae Discoloration:</b> During the first year, GAF's maximum contribution shall be the original installed cost of the affected shingles. After the first year, GAF's maximum contribution will be based upon the dollar per square value, reduced by the amount of use received.</p>
8	Exclusions from coverage (See warranty introduction)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14 (unless shingles were sold with Algae-Eater protection), 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26
9	Wind coverage/exclusion	<p>For the first 10 years for Slateline and for the first 5 years after application for all others, GAF warrants against shingle blow-off and damage by winds up to the maximum wind speeds listed below after thermal sealing should have occurred and did not due to a manufacturing defect: Timberline Ultra*, Slateline, Grand Slate, Grand Sequoia(, Grand Canyon**, Country Mansion, Country Estate, Camelot, Jumbo Royal Sovereign – 100 mph (*110 mph warranty applies only when 6 nails per shingles and Timbertex ridge cap is used, **110 mph warranty applies only when 6 nails per shingles and GAF ridge cap is used, otherwise the warranty is 90 mph), Timberline Select 40, Marquis Weathermax – 80 mph; Timberline 30 – 70 mph; Royal Sovereign – 60 mph.</p> <p>GAF will reimburse for the reasonable costs of replacing blown-off shingles and hand sealing any remaining unsealed shingles. All self-sealing shingles must be subjected to warm sunlight for several days before full thermal sealing can occur. Shingles installed in fall or winter may not seal until the following spring. Failure to seal or shingles that blow off under these circumstances result from the nature of self-sealing shingles, not a manufacturing defect.</p>
10	Notification requirements	Owner must send written notice of claim, together with proof that warranty was registered to claimant (or proof of transfer if the second owner has properly transferred coverage), to GAF Materials Corporation, Warranty Service Department, 1361 Alps Road, Wayne, NJ 07470, within 30 days after discovery of alleged claim. Owner may be required, at its expense, to submit sample roof products for testing and photographs. Notice to contractor or dealer is not notice to GAF.
11	Determination of warranty applicability	Decisions as to the extent of repair, recover or cleaning required, whether the GAF products should be repaired, recovered or cleaned, and the reasonable cost of such work, will be made solely by GAF.
12	Does issuing entity manufacture and/or sell shingles?	GAF manufacturers and sells the products.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	F, G, H, I
14	Inclusion of consequential damages	No
15	Assignability	Warranty may not be transferred or assigned, directly or indirectly, except for one transfer to a new owner as follows: (a) The second owner must notify GAF in writing within 30 days after the property transfer has occurred; (b) If the transfer takes place within the non-prorated period (i.e. 10, 15 or 50 depending upon type of shingle or building structure), the second owner shall be entitled to all benefits contained in warranty; (c) If the transfer takes place after the initial 10, 15, or 50 year period ends, the length of the warranty shall be reduced to a two-year period after ownership changes. During this two-year period, GAF's reimbursement to the second owner will be based on the dollar per square value, reduced by the amount of use that has been received from date of installation.
16	Cost to obtain	GAF charges for this warranty; contact GAF for pricing information.
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty is exclusive and replaces all other warranties, express or implied. Warranty is exclusive remedy from GAF and represents the sole remedy available to any owner of GAF's roofing products. GAF makes no other representations or warranty of any kind. Warranty may not be changed or modified. No one, including any representative or employee of GAF, has authority to assume any additional liability or responsibility for GAF.
19	Special features/conditions	<p>In order to obtain this warranty, the roof must be installed by a GAF licensed contractor and at least two GAF Weather Stopper products, in addition to GAF asphalt shingles, must be installed such as GAF Cobra ventilation products, Weather Watch leak barrier, Shingle-Mate roof deck protection, and ridge cap shingles. GAF reserves the right to arrange directly for roof products to be repaired, recovered or cleaned instead of reimbursing owner for such work. GAF reserves the right to discontinue or modify its shingles, including the colors available, so any replacement shingles may not be an exact match.</p> <p>GAF will send owner notification that warranty has been registered. If notification has not been received within 45 days after installation, contact GAF at 1-888-532-5767. Warranty not effective until written confirmation received from GAF.</p>
20	Executed by owner?	No; GAF licensed contractor must complete and return warranty application form, along with proof of purchase and the appropriate fee. (See Special Features/Conditions.)

Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>GAF Materials Corporation</b>
2	Title, original publication date, identifying symbol if any	"GAF Golden Pledge Limited Warranty;" June, 2004; RESWT161 76952-0604
3	Products covered	Royal Sovereign, Jumbo Royal Sovereign, Marquis WeatherMax, Timberline 30, Timberline Select 40, Timberline Ultra, Slateline, Grand Slate, Grand Sequoia, Grand Canyon, Country Mansion, Country Estate, Camelot; all GAF Weather Stopper™ products.
4	Scope of coverage	GAF warrants that the complete GAF Weather Stopper roof system will remain free from manufacturing defects and application errors in the Weather Stopper roof system or covered flashings that adversely affect their performance. If shingles were sold with Algae-Eater™ protection, GAF warrants that blue-green algae will not cause a pronounced discoloration. GAF Weather Stopper roof system includes GAF roof shingles, ridge cap shingles, attic ventilation products and underlayments. Misapplication of the Weather Stopper products and flashings at valleys, dormers, chimneys and plumbing vents are also covered. (See Special Features/Conditions)
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	Yes
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects, application errors and covered flashings that adversely affect performance and blue-green algae discoloration.
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	Yes; warranty covers GAF products and application of flashings at valleys, dormers, chimneys and plumbing vents.
5	Length of coverage	<p><b>For Manufacturing Defects:</b>                      Life: Timberline Ultra, Grand Slate, Grand Canyon, Grand Sequoia, Country Mansion, Country Estate, Camelot                      40 years: Timberline Select 40, Slateline,                      30 years: Timberline 30, Marquis WeatherMax                      25 years: Royal Sovereign, Jumbo Royal Sovereign</p> <p><b>For Misapplication, Wind Damage and Failure to Seal:</b> 12 years</p> <p><b>For Algae Discoloration:</b> 10 years</p>
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	<p><b>For Manufacturing Defect:</b> 50 year coverage period for lifetime shingles material defect applies only to single family detached residences; for all other structures, coverage period is 15 years. After 50 years: Timberline Ultra, Slateline, Grand Canyon, Grand Sequoia, Country Mansion, Country Estate, Grand Slate, Camelot. After 12 years: Royal Sovereign, Jumbo Royal Sovereign, Marquis Weathermax, Timberline 30, Timberline Select 40.</p> <p><b>For Misapplication:</b> 20 year coverage period for lifetime shingles misapplication applies only to single family detached residences; for all other structures, coverage period is 20 years. After 20 years: Timberline Ultra, Slateline, Grand Canyon, Grand Canyon, Grand Sequoia, Country Mansion, Country Estate, Grand Slate, Camelot. After 12 years: Royal Sovereign, Jumbo Royal Sovereign, Marquis Weathermax, Timberline 30, Timberline Select 40.</p>
5c	What is the prorating formula?	<p>50 year coverage period for material defect applies only to single family detached residences; for all other structures, coverage period is 15 years.</p> <p>Timberline Ultra, Slateline, Grand Slate, Grand Sequoia, Grand Canyon, country Mansion, Country Estate, Camelot: After 15 years, warranty is reduced by 1/600 for each month of service from date of installation (so that at the beginning of the 16<sup>th</sup> year, warranty is reduced by 180/600).</p> <p>Timberline Select 40: After 12 years, warranty is reduced by 1/480 for each month of service from date of installation (so that at the beginning of the 13<sup>th</sup> year, warranty is reduced by 144/480).</p> <p>Timberline 30, Marquis Weathermax: After 12 years, warranty is reduced by 1/360 for each month of service from date of installation (so that at the beginning of the 13<sup>th</sup> year, warranty is reduced by 144/360).</p> <p>Royal Sovereign, Jumbo Royal Sovereign: After 12 years, warrant is reduced by 1/300 for each month of service from the date of installation (so that at the beginning of the 13<sup>th</sup> year, warranty is reduced by (144/300)).</p> <p>Proration Schedule for Weather Stopper™ products where "Lifetime" shingles are installed on structures other than single family residences: Years of service/proration adjustment as follows [years/%]: 16-75; 17-18/70; 19-20/65; 21-22/60; 23-24/55; 25-26/50; 27-28/45; 29-30/40; 31-32/35; 33-34/30; 35-40/25; 41-50/20; 51-lifetime/10</p>
6	Nature of remedy	<p><b>For Manufacturing Defects:</b> For the first 10, 15 or 50 years (depending upon the shingle type or building structure), if any part of the roof system is found to have manufacturing defects or there are application errors, GAF will arrange to have roof repaired or recovered or, at its sole option, will provide replacement roofing products and reimbursement for the full reasonable cost of labor and other materials to repair or recover roof, including flashings at valleys, dormers, chimneys, and plumbing vents. After 10, 15 or 50 year period, the repair or recover cost which GAF will pay and the roofing products to be provided, will be reduced to reflect the amount of use received.</p> <p><b>For Workmanship Defects:</b> For the first 12, 15 or 20 years (depending upon the shingle type or building structure), if during the warranty term for misapplication any part of the GAFMC Weather Stopper system or covered flashings to have application errors, GAFMC will arrange to have the roof repaired or recovered or, at its sole option, will provide with replacement roofing products or components and reimburse the full reasonable cost of labor and other materials to repair or recover the roof, including flashings at valleys, dormers, chimneys, plumbing vents, and around GAFMC skylights. The cost of labor to tear off some of all of the Weather Stopper Systems and disposal are included, if necessary to repair the roof.</p> <p><b>For Algae Discoloration:</b> During the first year, GAF will contribute either the cost of cleaning shingles or repairing or replacing shingles up to the maximum of the original installed cost of the affected shingles. For the 9 year balance of the 10 year warranty period, GAF's maximum contribution will be reduced by the amount of use received (See Item #7).</p>
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes

6c	Warranty provides for labor to remove defective shingles?	Yes
6d	Does warranty cover disposal of defective shingles?	Yes
6e	Does warranty apply to any material other than shingles?	Warranty covers all GAF Weather Stopper™ products.
7	Is there monetary limitations?	<p><b>For Manufacturing Defects:</b> After the initial 12, 15 or 50 year period (depending upon the shingle type or building structure), GAF's maximum liability shall not exceed three times the applicable dollar per square value (before any reduction for use): Royal Sovereign: \$30/sq; Jumbo Royal Sovereign: \$34/sq; Marquix WeatherMax: \$35/sq; Timberline 30: \$40/sq; Timberline Select 40: \$45/sq; Timberline Ultra: \$55/sq; Slateline: \$55/sq; Grand Slate: \$130/sq; Grand Sequoia: \$90/sq; Grand Canyon: \$20/sq; Country Mansion: \$120/sq; Country Estate: \$120/sq; Camelot: \$140/sq</p> <p><b>For Algae Discoloration:</b> During the first year, GAF's maximum contribution shall be the original installed cost of the affected shingles. After the first year, GAF's maximum contribution will be based upon the above dollar per square value, reduced by the amount of use received.</p>
8	Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 8, 9, 10, 11, 13, 14, (unless shingles were sold with Algae-Eater protection), 15, 17, 19, 20, 23, 24. Warranty also excludes improperly designed or installed gutter or downspout systems.
9	Wind coverage/exclusion	For the first 12 years after application, GAF warrants its shingles against blow-off or damage by winds up to the maximum wind speeds listed below and that its shingles will not fail to seal. Timberline Ultra*, Slateline, Grand Slate, Grand Sequoia**, Grand Canyon**, Country Mansion, Country Estate, Camelot, Jumbo Royal Sovereign – 100 mph (*100 mph warranty applies only when 6 nails per shingles and Timbertex ridge cap shingle is used, otherwise, wind warranty is 90 mph, **110 mph warranty applies only when 6 nails per shingles & GAF ridge cap is used, otherwise the warranty is on Grand Sequoia–80 mph & Grand Canyon–100 mph) Timberline Select 40, Marquix Weathermax–80 mph; Timberline 30–70 mph; Royal Sovereign–60 mph. GAF will reimburse only for the reasonable costs of replacing the blown-off shingles and hand sealing any remaining unsealed shingles. All self-sealing shingles must be subjected to warm sunlight for several days before full thermal sealing can occur. Shingles installed in the fall or winter may not seal until the following spring. Failure to seal or shingles that blow off under these circumstances result from the nature of self-sealing shingles not a manufacturing defect.
10	Notification requirements	Owner must send a notice of claim in writing, together with proof that warranty was registered to claimant (or proof of transfer if the second owner has properly transferred coverage), to GAF Materials Corporation, Warranty Service Department, 1361 Alps Road, Wayne, NJ 07470, within 30 days after discovery of alleged claim. Owner may be required, at its expense, to submit sample roof products for testing and photographs. Notice to contractor or dealer is not notice to GAF.
11	Determination of warranty applicability	Decisions as to the extent of repair, recover or cleaning required, whether the shingles should be repaired, recovered or cleaned, and the reasonable cost of such work, will be made solely by GAF.
12	Does issuing entity manufacture and/or sell shingles?	GAF manufacturers and sells the products
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	D, F, G, H, I
14	Inclusion of consequential damages	No
15	Assignability	Warranty may not be transferred or assigned, directly or indirectly, except for one transfer to a new owner as follows: (a) The second owner must notify GAF in writing within 30 days after the property transfer has occurred; (b) If the transfer takes place within the non prorated period (i.e., 12, 15 or 50 years depending upon the shingle or building structure), the second owner shall be entitled to all benefits contained in the warranty; (c) if the transfer takes place after the initial 12, 15 or 20 year period ends, the length of the warranty shall be reduced to a two-year period after ownership changes. During this two-year period, GAF's reimbursement to the second owner will be based on the dollar per square value, reduced by the amount of use that has been received from date of installation.
16	Cost to obtain	GAF charges for this warranty; contact GAF for pricing information
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty is exclusive and replaces all other warranties, express or implied. Warranty is exclusive remedy from GAF and represents the sole remedy available to any owner of GAF's shingles. GAF makes no other representations or warranty of any kind. Warranty may not be changed or modified. No one, including any representative or employee of GAF, has authority to assume any additional liability or responsibility for GAF.
19	Special features/conditions	<p>In order to obtain this warranty, roof must be installed by a GAF Master Elite Residential Roofing Contractor. The roof system must not be installed over an existing roof; all existing materials must be removed to deck. COBRA ridge ventilation must be used in conjunction with adequate soffit ventilation.</p> <p>GAF ridge cap shingles or shingles that correspond to the shingle product installed on the roof must be used. GAF WeatherWatch or StormGuard leak barrier must be used in valleys and around dormers, sidewalls, farewells, chimneys and plumbing vents. In northern climates, WeatherWatch or StormGuard leak barrier must also be used at all eaves to at least 24" inside of the warm wall. GAF Shingle-Mate roof deck protection or Leatherback underlayment must be used. New metal flashing must be installed unless existing flashing is in like-new condition.</p> <p>If claim arises out of an application error in the roof system or covered flashings which are discovered or discoverable within the first two years after installation, it is the obligation of the Master Elite roofing contractor to make all necessary repairs. In the event that the Master Elite roofing contractor is unable or unwilling to perform these repairs, GAF will arrange to have roof repaired. GAF reserves the right to discontinue or modify its shingles, including the colors available, so any replacement shingles may not be an exact match. Owner will receive Golden Pledge Limited Warranty from GAF within 45 days. If warranty is not received, contact Master Elite Contractor or GAF at 1-888-532-5767.</p>
20	Executed by owner?	GAF Master Elite contractor must complete and return warranty application form and the appropriate fee.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>GAF Materials Corporation</b>
2	Title, original publication date, identifying symbol if any	"GAF Smart Choice Shingle Limited Warranty;" January 1, 2004
3	Products covered	Sentinel, Royal Sovereign, Jumbo Royal Sovereign, Marquis WeatherMax, Timberline 30, Timberline Select 40, Timberline Ultra, Slateline, Grand Slate, Country Mansion, Country Estates, Grand Sequoia, Grand Canyon, Camelot.
4	Scope of coverage	GAF warrants that its roofing shingles will remain free from manufacturing defects that adversely affect their performance (during an initial 3, 5 or 10 year period) (See Item No. 5b below) or cause leaks (during the entire warranty term). If shingles were sold with Algae-Eater™ protection, GAF warrants that blue-green algae will not cause a pronounced discoloration.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that adversely affect performance and blue-green algae discoloration
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<b>For Manufacturing Defects:</b> Life: Timberline Ultra, Grand Sequoia, Grand Canyon, Country Mansion, Country Estate, Grand Slate, Camelot; 40 years: Timberline Select 40, Slateline; 30 yrs: Timberline 30, Marquis WeatherMax; 25 yrs: Royal Sovereign, Jumbo Royal Sovereign; 20 yrs: Sentinel <b>For Algae Discoloration:</b> 10 years: Royal Sovereign, Jumbo Royal Sovereign, Marquis WeatherMax, Timberline 30, Timberline Select 40, Timberline Ultra, Slateline, Grand Slate, Grand Sequoia, Grand Canyon, Country Mansion, Country Estates, Camelot; 7 years: Sentinel
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After 10 years: Timberline Ultra, Slateline, Grand Slate, Country Mansion, Country Estates, Grand Sequoia, Grand Canyon, Camelot. After 5 years: Jumbo Royal Sovereign, Royal Sovereign, Marquis WeatherMax, Timberline 30, Timberline Select 40. After 3 years: Sentinel
5c	What is the prorating formula?	Timberline Ultra, Slateline, Grand Slate, Grand Sequoia, Grand Canyon, Country Mansion, Country Estate, Camelot: After 10 years, warranty is reduced by 1/480 for each month of service from date of installation (so that at the beginning of the 11 <sup>th</sup> year, warranty would be reduced by 120/480).  Timberline Select 40: After 5 years, warranty is reduced by 1/480 for each month of service from date of installation (so that at the beginning of the 6 <sup>th</sup> year, warranty would be reduced by 60/480).  Timberline 30, Marquis WeatherMax: After 5 years, warranty is reduced by 1/360 for each month of service from date of installation (so that at the beginning of the 6 <sup>th</sup> year, warranty would be reduced by 60/360).  Royal Sovereign, Jumbo Royal Sovereign: After 5 years, warranty is reduced by 1/300 for each month of service from date of installation (so that at the beginning of the 6 <sup>th</sup> year, warranty would be reduced by 60/300).  Sentinel: After 3 years, warranty is reduced by 1/240 for each month of service from date of installation (so that at the beginning of the 6 <sup>th</sup> year, warranty would be reduced by 36/240).  Timberline Ultra, Grand Slate, Grand Sequoia, Grand Canyon, Country Mansion, Country Estate, Camelot: After 10 years, warranty is reduced in accordance with the following schedule: Years of service/proration adjustment as follows (years/%): 11-12/ 85; 13-14/ 80; 15-16/75; 17-18/70; 19-20/65; 21-22/60; 23-24/55; 25-26/50; 27-28/45; 29-30/40; 31-32/35; 33-34/30; 35-40/25; 41-50/20; 51-lifetime/10
6	Nature of remedy	<b>For Manufacturing Defects:</b> For the first 3, 5 or 10 years (depending upon the shingle type, see Item 5b), GAF will pay the full reasonable cost of labor to repair or recover the defective shingles (exclusive of underlayment, metal work or flashings) and will provide replacement shingles. After the first 3, 5 or 10 year period, GAF will contribute a pro-rated amount or, at GAF's sole option, provide replacement shingles. <b>For Algae Discoloration:</b> During the first year, GAF will contribute either the cost of cleaning shingles or repairing or replacing shingles up to a maximum of the original installed cost of the affected shingles. For the next 6 years for Sentinel and for the next 9 years for the other GAF shingles, GAF's maximum contribution will be reduced by the amount of use received.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes; however, after the initial 3, 5 or 10 year period (depending upon shingle type), GAF may provide replacement shingles at its sole option.
6c	Warranty provides for labor to remove defective shingles?	No
6d	Does warranty cover disposal of defective shingles?	No

6e	Does warranty apply to any material other than shingles?	Yes; approved GAFMC accessories																												
7	Is there monetary limitations?	<p><b>For Manufacturing Defects:</b> After the initial 3, 5 or 10 year period (depending upon the shingle type), GAF's contribution will be based on either the following dollar per square value or, at GAF's sole option, on providing replacement shingles, reduced by the amount of use received:</p> <table border="0"> <tr> <td>Grand Canyon:</td> <td>\$120/square</td> <td>Grand Sequoia:</td> <td>\$ 90/square</td> </tr> <tr> <td>Timberline Ultra:</td> <td>\$ 55/square</td> <td>Slateline:</td> <td>\$ 55/square</td> </tr> <tr> <td>Timberline Select 40:</td> <td>\$ 45/square</td> <td>Timberline 30:</td> <td>\$ 40/square</td> </tr> <tr> <td>Marquis WeatherMax:</td> <td>\$ 35/square</td> <td>Royal Sovereign:</td> <td>\$ 30/square</td> </tr> <tr> <td>Jumbo Royal Sovereign:</td> <td>\$ 34/square</td> <td>Sentinel:</td> <td>\$ 25/square</td> </tr> <tr> <td>Country Mansion:</td> <td>\$120/square</td> <td>Country Estate:</td> <td>\$120/square</td> </tr> <tr> <td>Grand Slate:</td> <td>\$130/square</td> <td>Camelot:</td> <td>\$140/square</td> </tr> </table> <p><b>For Algae Discoloration:</b> During the first year, GAF's maximum contribution shall be the original installed cost of the affected shingles. After the first year, GAF's maximum contribution will be based upon the above dollar per square value, reduced by the amount of use received.</p>	Grand Canyon:	\$120/square	Grand Sequoia:	\$ 90/square	Timberline Ultra:	\$ 55/square	Slateline:	\$ 55/square	Timberline Select 40:	\$ 45/square	Timberline 30:	\$ 40/square	Marquis WeatherMax:	\$ 35/square	Royal Sovereign:	\$ 30/square	Jumbo Royal Sovereign:	\$ 34/square	Sentinel:	\$ 25/square	Country Mansion:	\$120/square	Country Estate:	\$120/square	Grand Slate:	\$130/square	Camelot:	\$140/square
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Country Mansion:	\$120/square	Country Estate:	\$120/square																											
Grand Slate:	\$130/square	Camelot:	\$140/square																											
8	Exclusions from coverage (See warranty introduction)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 (unless shingles were sold with Algae-Eater protection), 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26																												
9	Wind coverage/exclusion	<p>For the first 10 years for Slateline and for the first 5 years after application for all others, GAF warrants its shingles against blow-off or damage by winds up to the maximum winds speeds listed below after thermal sealing should have occurred and did not due to manufacturing defect: Timberline Ultra*, Slateline, Grand Slate, Country Mansion, Country Estate, Grand Canyon**, Grand Sequoia**, Camelot, Jumbo Royal Sovereign – 100 mph (*100 mph warranty applies only when 6 nails per shingles and Timbertex ridge cap shingle is used, **110 mph warranty applies only when 6 nails per shingles and GAF ridge cap is used, otherwise the warranty is 90 mph); Timberline Select 40, Marquis Weathermax – 80 mph; Timberline 30 – 70 mph; Roval Sovereign, Sentinel – 60 mph.</p> <p>GAF will reimburse for the reasonable costs of replacing blown-off shingles (exclusive of underlayment, metal work or flashings) and hand sealing any remaining unsealed shingles. All self-sealing shingles must be subjected to warm sunlight for several days before full thermal sealing can occur. Shingles installed in fall or winter may not seal until the following spring. Failure to seal or shingles that blow off under these circumstances result from the nature of self-sealing shingles, not a manufacturing defect.</p>																												
10	Notification requirements	Owner must send a notice of claim in writing, together with proof of purchase to establish original ownership (or proof of transfer if the second owner has properly transferred coverage) and proof of application date, to GAF Materials Corporation, Warranty Service Department, 1361 Alps Road, Wayne, NJ 07470, within 30 days after discovery of alleged defect. Owner may be required, at its expense, to submit sample shingles for testing and photographs. Notice to contractor or dealer is not notice to GAF.																												
11	Determination of warranty applicability	Decisions as to the extent of repair, recover or cleaning required, whether the shingles should be repaired, recovered or cleaned, and the reasonable cost of such work, will be made solely by GAF.																												
12	Does issuing entity manufacture and/or sell shingles?	GAF manufacturers and sells the shingles																												
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	F																												
14	Inclusion of consequential damages	No																												
15	Assignability	Warranty coverage terminates upon sale of building and warranty may not be transferred or assigned, directly or indirectly, except for one transfer as follows: (a) The second owner must notify GAF in writing within 30 days after the property transfer has occurred; (b) If the transfer takes place within the first 10 years for Timberline Ultra, Grand Slate, Slateline, Grand Canyon, Grand Sequoia, Country Mansion, Country Estate, Camelot, or within the first 5 years for Royal Sovereign, Jumbo Royal Sovereign, Marquis WeatherMax, Timberline 30, Timberline Select 40, or within the first 3 years for Sentinel, the second owner shall be entitled to all benefits contained in warranty; (C) If the transfer takes place after the initial 10, 5 or 3 year period ends, the length of the warranty shall be reduced to a two-year period after ownership changes. During this two-year period, GAF's reimbursement to the second owner will be based on the dollar per square value, reduced by the amount of use that has been received from date of installation.																												
16	Cost to obtain	None																												
17	Is warranty backed by insurance coverage?	No																												
18	Is warranty an addition or exclusive remedy for owner?	Warranty is exclusive and replaces all other warranties, express or implied. Warranty is exclusive remedy from GAF and represents the sole remedy available to any owner of GAF's shingles. GAF makes no other representations or warranty of any kind. Warranty may not be changed or modified. No one, including any representative or employee of GAF, has authority to assume any additional liability or responsibility for GAF.																												
19	Special features/conditions	GAF reserves the right to arrange directly for shingles to be repaired, recovered or cleaned instead of reimbursing owner for such work. GAF reserves the right to discontinue or modify its shingles, including the colors available, so any replacement shingles may not be an exact match.																												
20	Executed by owner?	Owner should sign and submit to GAF at P.O. Box 395, Ingomar, PA 15127-0395 warranty registration form, but registration is not required for warranty coverage																												

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>IKO Manufacturing Inc.</b>
2	Title, original publication date, identifying symbol if any	"Asphalt Shingle Limited Warranty"; September 1, 2001.
3	Products covered	Chateau, Cambridge 50, Cambridge 50AR, Cambridge 30, Cambridge, 40, 40 AR, Renaissance XL, Aristocrat 25, Marathon Ultra, Gentry 25, Royal Victorian, Skyline 25, Cathedral XL, Regency, Marathon 20, 25; Crowne Slate; Grandeur, Gentry Ultra, Gentry 25 AR; ArmourLock 20, Ultralock 25.
4	Scope of coverage	IKO warrants to the original consumer-purchaser that its shingles are free from manufacturing defects that result in leaks.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	Yes
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	50 years: Cambridge 50, 50 AR, Grandeur, Regency, Crowne Slate 40 years: Cambridge 40 35 years: Chateau 30 years: Cambridge 30, 30 AR, Gentry Ultra, Marathon Ultra 25 years: Renaissance XL, Aristocrat 25, Gentry 25, Royal Victorian, Skyline 25, Cathedral XL, Marathon 25, Gentry 25AR, Ultralock 25 20 years: ArmourLock 20  (See Item 15 for effect of transfer.)
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After 5 yrs: Cambridge 30, Cambridge 30 AR, Cambridge 40, Cambridge 50, Cambridge 50 AR, Grandeur, Regency, Crowne Slate, Chateau, Gentry Ultra, Marathon Ultra, Renaissance XL, Aristocrat 25, Gentry 25, Royal Victorian, Skyline 25, Cathedral XL, Marathon 25, Gentry 25AR, Ultralock 25 After 3 yrs: ArmourLock 20, Marathon 20
5c	What is the prorating formula?	After the initial period (three or five years, depending upon the product (s Item 5b above), all IKO warranties are reduced by 1/225 per month for the first 15 years of the warranty period. After the first 15 years, the monthly reduction figure changes as follows: for ArmourLock 20 and Marathon 20, the warranty is reduced by 1/300 per month; for Gentry 25/25AR, Marathon 25, Aristocrat 25, Cathedral XL, Royal Victorian, Renaissance XL, Skyline 25 and Ultralock 25, the warranty is reduced by 1/600 per month; for Marathon Ultra, Gentry Ultra, Cambridge 30/30AR, the warranty is reduced by 1/900 per month; for Chateau the warranty is reduced by 1/1200 per month, for Cambridge 40, the warranty is reduced by 1/1500 per month, and for Cambridge 50/50AR, Grandeur, Regency and Crowne Slate, the warranty is reduced by 1/2100 per month (so that at the beginning of the sixteenth year, each warranty would be reduced by 180/225 and then either 1/300, 1/600 or 1/900 for each month thereafter, depending upon the type of shingle.)
6	Nature of remedy	IKO will at its option have the shingles repaired or replaced free of charge, exclusive of costs for tear-off, flashings, and metal work.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes, for the first five years for Cambridge 30, Cambridge 30 AR, Cambridge 40, Cambridge 50, Cambridge 50 AR, Grandeur, Regency, Crowne Slate, Chateau, Gentry Ultra, Marathon Ultra, Renaissance XL, Aristocrat 25, Gentry 25, Royal Victorian, Skyline 25, Cathedral XL, Marathon 25, Gentry 25AR, Ultralock 25 and, for the first three years for ArmourLock 20 and Marathon 20, the warranty includes labor to install replacement shingles; no, for the balance of each warranty.
6c	Warranty provides for labor to remove defective shingles?	No
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	During the first five years for Cambridge 30, Cambridge 30 AR, Cambridge 40, Cambridge 50, Cambridge 50 AR, Grandeur, Regency, Crowne Slate, Chateau, Gentry Ultra, Marathon Ultra, Renaissance XL, Aristocrat 25, Gentry 25, Royal Victorian, Skyline 25, Cathedral XL, Marathon 25, Gentry 25AR, Ultralock 25 and, for the first three years for ArmourLock 20 and Marathon 20, IKO's maximum liability shall be equal to the reasonable replacement cost of the defective shingles that are proven to have a manufacturing defect which has resulted in leaks. After the initial period applicable to the specific product, IKO's maximum liability toward repairs or replacement shall be a prorated amount of the current value of the shingles only (exclusive of labor, disposal, and tear-off).

8 Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 8, 9, 13, 14, 17, 19, 23, 24. Warranty also excludes any back surfacing transfer or asphalt staining, any costs related to disposal, and any costs related to the removal of any asbestos present in the roof to which IKO shingles are installed.
9 Wind coverage/exclusion	<p>IKO warrants most of its shingles for five years against wind blow-off damage due to wind velocities, including "gusts" up to a maximum of 60 mph. For Grandeur, Crowne Slate, Regency, Cambridge 50/50AR, UltraLock 25 wind speed coverage up to 90 mph. For Cambridge 40, Chateau wind coverage up to 80 mph. For Cambridge 30/30AR wind speed coverage up to 70 mph. In the event that it is proven that there has been wind damage from winds up to 60 mph, IKO will furnish similar shingles necessary for replacement for damaged shingles. Warranty does not cover the labor costs for the removal of damaged shingles or the application of the replacement shingles.</p> <p>All self-sealing strip shingles must be subjected to direct sunlight for several days before full sealing will occur. Shingles installed in fall or winter may not seal until the following spring. Shingles that do not receive direct sunlight or that are not exposed to adequate surface temperatures may not seal. Damage to the factory applied self-sealing strip by dust, sand or foreign matter will prevent the sealing strip from activating. Failure to seal down under such circumstances is not a manufacturing defect.</p> <p>For shingles which fail to activate during the first year after application, IKO will have no liability under warranty for defects unless proper written notification has been made and IKO has been allowed the opportunity to hand seal any non-sealed shingles at its own expense.</p>
10 Notification requirements	Claims must be filed within thirty days of discovery of the alleged defect in the following manner: (1) contact IKO Quality Services at 1-800-433-2811; (2) furnish the information as requested by the quality services representative; (3) complete, sign and return the home owner inquiry survey, including proof of purchase indicating the IKO product involved, the required number of pictures, and two full sample shingles; and (4) provide access to the IKO products in question for the purpose of investigation if requested.
11 Determination of warranty applicability	IKO will, within approximately sixty days of receipt of the completed home owner inquiry survey, evaluate the claim and respond. Any claimed defect for which notice is not received by IKO within the applicable warranty period is not covered by this warranty. Failure to provide requested information will cause the claim not to be considered.
12 Does issuing entity manufacture and/or sell shingles?	IKO manufactures and sells the shingles.
13 Specific conditions to make warranty ineffective or void (See warranty introduction)	I; no warranty coverage if shingles are installed over insulated roof deck panels.
14 Inclusion of consequential damages	No
15 Assignability	<p>Warranty may be transferred by the original consumer-purchaser only to a subsequent property owner within ten years following shingle installation under the following conditions: (1) notification of a request for transfer must be received in writing by IKO at 6600 S. Central Ave., Chicago, IL 60638, Attn: Quality Services, from the original consumer-purchaser, within thirty days after the date of the real estate transfer. Request must include a copy of the original invoice showing proof of purchase of the IKO product and a copy of the real estate transfer; and (2) a transfer fee of \$100 must accompany all requests for warranty transfer.</p> <p>Should a transfer occur during the initial five years for Chateau, Cambridge 30/40, and Renaissance XL, the duration of the warranty shall be the balance of the initial five-year period plus an additional five years rather than the normal 30 or 25 years. Except as stated above, if there is a transfer within ten years of installation, the remaining duration of the warranty shall be two years from the date of real estate transfer; the warranty will be prorated using the date of installation as the start date, and the warranty will exclude labor costs.</p>
16 Cost to obtain	None
17 Is warranty backed by insurance coverage?	No
18 Is warranty an addition or exclusive remedy for owner?	This warranty replaces all other oral or written warranties, liabilities, or obligations of IKO; all implied warranties are excluded. IKO will not be liable for any oral statement or other written statement about the shingle, whether such statements are made by an agent or employee of IKO or by any other person. IKO does not authorize its representatives, distributors, contractors, or dealers to make any changes or modifications to warranty.
19 Special features/conditions	<p>For all products, the original consumer-purchaser may extend the initial three or five years of nonprorated warranty coverage, which includes labor to install replacement shingles, for up to two years. This optional purchase must take place during the first year of warranty coverage only. IKO will charge a one time fee of \$5.00/100 sq. ft. of roofing per year of additional coverage for this extension. Call the IKO quality services dept. at 800-433-2811 to purchase this additional coverage.</p> <p>No action for breach of this limited warranty shall be brought against IKO later than one year after any cause of action has accrued. IKO reserves the right to discontinue or modify any of its products, including the color blend of its shingles, without notice to the original consumer-purchaser and shall not be liable to the original consumer-purchaser as a result of this modification or discontinuance.</p> <p>IKO will have no liability in the event that replacement material may vary in color in comparison to the original product as a result of product changes or normal weathering.</p>
20 Executed by owner?	No

## Asphalt Shingles, Part 3 — Warranties

1 Identity of issuing entity	<b>Malarkey Roofing Products</b>
2 Title, original publication date, identifying symbol if any	"Your Choice Warranty Program Legacy, Northwest XL, Highlander-CS;" 2/04
3 Products covered	Highlander - CS, Northwest XL, Legacy, Legacy w/AB
4 Scope of coverage	Malarkey warrants that the Malarkey shingles are free from manufacturing defects. If shingles are equipped with Scotchgard Algae Resistant Roofing System, Malarkey warrants that the shingles will resist discoloration or staining due to algae growth, which causes an obvious and unsightly appearance on the granules.
4a Does warranty cover defects in manufacture?	Yes
4b Does warranty cover defects in application?	No
4c Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects. Shingles equipped with Scotchgard Algae Resistant Roofing System are warranted against discoloration or staining due to algae growth.
4d Warranty provides coverage for flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5 Length of coverage	<p><b>Manufacturing Defects:</b></p> <p>50 years: Legacy, Legacy w/AB  40 years: Northwest - XL  20 years: Highlander – CS</p> <p><b>Algae Resistance:</b> 20 years</p> <p><b>Wind:</b> 5 years</p>
5a Is warranty prorated?	Yes
5b When does prorating begin?	<p><b>For Manufacturing Defects:</b></p> <p>After 10 years for Legacy w/ Legacy w/AB  After 5 years for Northwest - XL  After 3 years for Highlander - CS</p> <p><b>For algae resistance:</b> pro-rating begins after 1 year</p>
5c What is the prorating formula?	<p>After three years, warranty is reduced by 1/300 for each month since original application, less all sums previously paid (so that at the beginning of the 4<sup>th</sup> year, warranty would be reduced by 36/300 plus any sums previously paid).</p> <p>For Legacy with Legacy w/AB, after 10 years warranty is reduced by 1/600 for each month since original application, less all sums previously paid (so that at the beginning of the 11<sup>th</sup> year, warranty would be reduced by 120/600 plus any sums previously paid).</p> <p>For Northwest-XL, after 5 years warranty is reduced by 1/480 for each month since original application, less all sums previously paid (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/480 plus any sums previously paid).</p> <p>For algae resistance: After the first year, warranty is reduced by 1/240 for each month since original application (so that at the beginning of the 2<sup>nd</sup> year, warranty would be reduced by 12/240).</p>
6 Nature of remedy	Malarkey shall, at its option, repair, replace or provide payments for the defective shingles. After verification that the shingles are defective, Malarkey will perform its obligations within 45 days of receipt of notice, unless performance is delayed by causes beyond Malarkey's control. For shingles equipped with Scotchgard Algae Resistant Roofing System, Malarkey's sole liability is to, at its option, repair or replace defective shingles or pay to the owner an amount not exceeding \$35 to \$65 per square depending upon the type of shingle (see Item 7 below).
6a Does warranty provide for replacement shingles?	Yes
6b Warranty provides for labor to install replacement shingle?	Yes during the initial 3, 5 or 10 year non-prorated period; no thereafter. For algae resistance, warranty includes reasonable installation costs as defined by R S Means for claims arising in the first year.
6c Warranty provides for labor to remove defective shingles?	No
6d Does warranty cover disposal of defective shingles?	No
6e Does warranty apply to any material other than shingles?	Malarkey indicates that the warranty applies to other Malarkey products such as underlayment and ice and water shield.

7	Is there monetary limitations?	<p>For the initial non-prorated period, Malarkey's maximum liability shall be \$35/square for Highlander-CS, \$45/square for Northwest-XL, \$60/square for Legacy, and \$65/square for Legacy w/AB, plus reasonable installation costs as defined by R S Means.</p> <p>After the non-prorated period, Malarkey's maximum liability shall be \$35/square for Highlander-CS, \$45/square for Northwest-XL, \$60/square for Legacy, and \$65/square for Legacy w/AB for plus reasonable installation costs as defined by R S Means, less a percentage based on the number of months elapsed in the warranty period divided by the number of months on the warranty period, less all sums previously paid under this warranty.</p>
8	Exclusions from coverage (See warranty introduction)	1, 4, 5, 6, 7, 8, 9, 10, 13, 16, 19, 23
9	Wind coverage/exclusion	<p>Malarkey warrants that for up to five years from the date of installation, Highlander-CS will resist damage from winds of up to 70 mph; Northwest-XL will resist damage from winds up to 80 mph; and Legacy and Legacy w/AB will resist damage from winds up to 100 mph.</p> <p>Malarkey's wind warrant applies only if the shingles are sealed, whether by hand sealing or by activation of self-sealing strips. Malarkey's liability is, at its option, to repair or replace the defective shingles or to pay to the owner an amount not exceeding amounts stated above (Item 7) plus reasonable installation costs. No amount shall be paid for removal or disposal of damaged shingles. In high wind areas as listed by the National Weather Service, shingles should be attached using six (6) nails as per Malarkey's printed instructions.</p> <p>All shingles which contain a factory applied self-sealing strip must be subjected to sunlight for several days before full sealing will occur. Shingles installed in the fall or winter may not seal until the following spring; consequently, the shingles should be hand sealed. Shingles which do not receive direct sunlight or which are not exposed to adequate surface temperature may never seal. This is the nature of shingles and failure to seal down under such circumstances is not a manufacturing defect. If any self-sealing shingles that have been exposed to adequate temperatures and direct sunlight fail to activate the self-sealing strips during the first year after application, Malarkey will have no liability under this warranty for such defects unless proper written notification has been made and Malarkey has been allowed the opportunity to hand seal any non-sealed shingles at its own expense.</p>
10	Notification requirements	Claims shall be made in writing, by certified or registered mail, within 30 days of discovery, and prior to any repairs being made and accompanied by proof of purchase.
11	Determination of warranty applicability	Malarkey verifies that shingles are defective.
12	Does issuing entity manufacture and/or sell shingles?	Malarkey manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	C, G, I
14	Inclusion of consequential damages	No
15	Assignability	<p>Warranty may be transferred to a subsequent owner, within 3 (Highlander-CS), 5 (Northwest-XL) or 10 years (Legacy, Legacy w/AB) of initial application by notifying Malarkey in writing within 30 days from the date of change in title of the property. If Malarkey is not notified of the transfer, the warranty shall not transfer and Malarkey will have no further liability. Once the warranty transfer has taken place, the new owner's warranty shall be for 10 years from the date of transfer. The notification to Malarkey must include (1) name and address of the current holder of the warranty, (2) date of original completed installation, (3) proof of purchase of the shingles, (4) the address where the shingles are installed, (5) the name and address of the new owner, and (6) the date of title transfer of the property.</p>
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranties are the only express warranties made by Malarkey in connection with the sale of its product. No person is authorized to alter these limited warranties either orally or in writing.
19	Special features/conditions	<p>In lieu of accepting the Malarkey warranty, the consumer can chose another manufacturer's warranty coverage applicable to the comparable product manufactured by the selected manufacturer. The consumer can select warranties offered by Atlas, Certain- Teed, Elk, Emco, GAF, IKO, Owens Corning and Pabco by filling out and sending the Warranty Selection and Activation form to Malarkey Roofing, Warranty Activation Service, P.O. Box 17217, Portland, OR 97217, within 30 days of installation of shingles. Within 10 business days of receipt, Malarkey will send confirmation of warranty selection and activation. Malarkey is to be provided with samples before any steps are taken to repair the roof. Any repairs made prior to or during the investigation period without Malarkey's prior written approval will be at Owner's expense.</p>
20	Executed by owner?	<p>Yes; warranty will not be valid unless the Owner completes the warranty selection and activation form and returns it to Malarkey Roofing, P.O. Box 17217, Portland, Oregon 97217-0217, within 30 days of installation. Failure to comply shall void all warranties and the product shall be sold as is and without warranty.</p>

## Asphalt Shingles, Part 3 — Warranties

1 Identity of issuing entity	<b>Malarkey Roofing Products</b>
2 Title, original publication date, identifying symbol if any	"3-Tab Shingle Limited Warranty;" 01/03
3 Products covered	Type 202, 204, 230, 240
4 Scope of coverage	Malarkey warrants its shingles to be free from manufacturing defects. Hurricane shingles will resist discoloration or staining due to algae growth which causes an obvious and unsightly appearance.
4a Does warranty cover defects in manufacture?	Yes
4b Does warranty cover defects in application?	No
4c Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects and Hurricane shingles will resist discoloration or staining due to algae growth.
4d Warranty provides coverage for flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5 Length of coverage	<p><b>Manufacturing Defects:</b>  35 years; Type 240 Hurricane; Type 230  25 years: Type 204  20 years: Type 202</p> <p><b>Algae Resistance; 20 years</b></p>
5a Is warranty prorated?	Yes
5b When does prorating begin?	Immediately upon application for manufacturing defects. One year after installation for algae resistance.
5c What is the prorating formula?	The prorated adjustment will be calculated by multiplying the original reasonable cost of the material and installation, times the number of squares of defective shingles, divided by the total number of years in the applicable warranty period, and then multiplied by the number of years remaining. For algae resistance, after one year, the warranty is reduced by 1/240 for each month from original application (so that at the beginning of the 2 <sup>nd</sup> year, warranty is reduced by 12/240).
6 Nature of remedy	Malarkey shall, at its option, elect to repair or replace the defective shingles or pay to the owner an amount not to exceed the original reasonable cost of the shingles and installation, prorated for the number of years remaining on the warranty, less all sums previously paid under the warranty. Malarkey shall perform its obligations under the warranty within 45 days from receipt of notice, unless performance is delayed by causes beyond Malarkey's control.
6a Does warranty provide for replacement shingles?	Yes
6b Warranty provides for labor to install replacement shingle?	Yes for manufacturing defects; no for wind claims or for algae resistance claims after the first year.
6c Warranty provides for labor to remove defective shingles?	Warranty states Malarkey will repair or replace defective shingles or pay to owner a prorated amount not to exceed the original reasonable cost of the shingles and installation. [Malarkey indicates warranty does not provide labor to remove defective shingles.]
6d Does warranty cover disposal of defective shingles?	No
6e Does warranty apply to any material other than shingles?	No
7 Is there monetary limitations?	Malarkey's maximum liability shall not exceed the original reasonable cost of the shingles and installation, prorated for the number of years remaining in the warranty, less all sums previously paid. Maximum liability will not exceed values as stated in RS Means Residential Cost Data.
8 Exclusions from coverage (See warranty introduction)	1, 4, 5, 6, 7, 8, 9, 10, 13, 16, 19, 23
9 Wind coverage/exclusion	<p>Malarkey warrants that up to five (5) years from the date of installation, the shingles will resist damage from winds up to 54 mph for Types 202 and 204, and for winds up to 100 mph for Types 230 SBS and 240.</p> <p>Malarkey's sole liability for wind damage shall be to supply new shingles to replace those damaged or blown off by the wind. No amount will be paid by Malarkey for removal of damaged shingles or installation of replacement shingles.</p> <p>Types 230 SBS and 240 shingles are to be hand sealed when average daytime temperature drops below 50F.</p>
10 Notification requirements	Written notice of the discovery of manufacturing defects, by registered or certified mail, shall be given to Malarkey within 30 days after discovery.

11	Determination of warranty applicability	Malarkey verifies the shingles are defective.
12	Does issuing entity manufacture and/or sell shingles?	Malarkey manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	C, G, I
14	Inclusion of consequential damages	No
15	Assignability	Warranty is valid only to the original owner and is not transferable.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	The limited shingle warranty and limited wind warranty are the only express warranties made by Malarkey in connection with the sale of its product. No representative of Malarkey or any other person has any authority whatsoever to accept from or for Malarkey any additional or different liability or responsibility for Malarkey products.
19	Special features/conditions	Malarkey shall be given opportunity to inspect the material and to be provided with samples before any steps are taken to adjust the claim.
20	Executed by owner?	Yes; Owner must complete warranty registration card and return it to Malarkey Roofing Products, P.O. Box 17217 Kenton Station, Portland, Oregon 97217-0217, within 30 days of installation or warranty will be void.

## Asphalt Shingles, Part 3 — Warranties

1 Identity of issuing entity	<b>Owens Corning</b>
2 Title, original publication date, identifying symbol if any	Limited Warranty on WeatherGuard HP Shingles and WeatherGuard HP Hip & Ridge;" February 2003; Pub. No. 57933
3 Products covered	WeatherGuard HP shingles; WeatherGuard HP hip & ridge
4 Scope of coverage	Owens Corning warrants that the Owens Corning WeatherGuard HP shingles are free from any manufacturing defects that materially affect their performance and are warranted against discoloration caused by algae, fungi, lichen or cyanobacterial growth.
4a Does warranty cover defects in manufacture?	Yes
4b Does warranty cover defects in application?	No
4c Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that materially affect shingle performance and are warranted against discoloration caused by algae growth.
4d Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5 Length of coverage	<b>For Manufacturing Defects: 40 years</b> <b>For Algae Resistance: 10 years</b> <b>For Wind Damage: 10 years</b>
5a Is warranty prorated?	Yes
5b When does prorating begin?	<b>For Manufacturing Defects:</b> after ten (10 )years <b>For Algae Resistance: after one (1) year</b>
5c What is the prorating formula?	<b>For Manufacturing Defects:</b> After 10 years, warranty is reduced by 1/480 for each month since original installation (so that at the beginning of the 11 <sup>th</sup> year, warranty would be reduced by 120/480). <b>For Algae Resistance:</b> After 1 year, warranty is reduced by 1/120 for each month since original installation (so that at the beginning of the second year, warranty would be reduced by 12/120).
6 Nature of remedy	<p>During the first ten (10) years, Owens Corning will pay 100% of the material and labor costs, as reasonably determined by Owens Corning, to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for costs to remove or dispose of shingles. After ten (10) years, Owens Corning will pay only for reasonable material costs, not labor, to repair, replace or recover shingles, and the amount will be prorated. Alternatively, Owens Corning may provide replacement shingles at its sole reasonable discretion.</p> <p>If shingles are discolored by algae growth during the first year, Owens Corning will cover the cost, including labor, as reasonably determined by Owens Corning, to repair, replace or recover the affected shingles and hip and ridge, but not to exceed the initial cost of the Owens Corning materials and their installation.</p>
6a Does warranty provide for replacement shingles?	Yes
6b Warranty provides for labor to install replacement shingle?	Yes for the first ten (10) years No for the balance of the warranty
6c Warranty provides for labor to remove defective shingles?	No
6d Does warranty cover disposal of defective shingles?	No
6e Does warranty apply to any material other than shingles?	Yes; warranty covers Owens Corning WeatherGuard hip and ridge.
7 Is there monetary limitations?	For manufacturing defects, during the first ten years, Owens Corning's maximum costs shall be the labor and material costs, as reasonably determined by Owens Corning to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work and exclusive of the cost to remove or dispose of defective shingles. For algae resistance, during the first year, Owens Corning's maximum cost shall not exceed the initial cost of the shingles and their initial installation. For the balance of the warranty, Owens Corning's maximum costs for material shall be prorated and labor will not be covered.
8 Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 8, 9, 14, 17, 19, 21, 23, 24
9 Wind coverage/exclusion	<p>During the first ten (10) years after installation, WeatherGuard HP shingles and WeatherGuard HP hip and ridge, when installed together, are warranted against wind damage in winds up to 130 mph.</p> <p>Shingles contain strips of asphalt sealant that require direct warm sunlight for several days to seal properly. Prior to sealing, shingles are more vulnerable to blow-offs and wind damage. Owens Corning is not responsible for any blow-offs or wind damage that may occur prior to thermal sealing having occurred; this is not a manufacturing defect.</p>

10	Notification requirements	Claims must be submitted within 30 days after discovery of the problem. Claims can be submitted by calling 1-800-ROOFING or writing to Owens Corning, Customer Response Center, One Owens Corning Parkway, Toledo, Ohio 43659, with proof of purchase.
11	Determination of warranty applicability	Owens Corning reasonably determines material and labor costs owner can recover. Owens Corning has sole reasonable discretion to provide replacement shingles as an alternative to paying pro-rated, reasonable material cost to repair, replace or recover shingles.
12	Does issuing entity manufacture and/or sell shingles?	Owens Corning manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	E
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred one time, any time during the life of the warranty. Homeowner must complete and return warranty transfer card and pay \$100.00 transfer fee to Owens Corning within 60 days of real estate transfer. Proof-of-purchase of WeatherGuard HP products and application date must be submitted at the same time. Warranty can not be transferred to any subsequent purchasers.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Owner's remedy for defective shingles is fully described in the warranty and Owner is not entitled to anything more than what is described in the warranty.
19	Special features/conditions	Owens Corning may require consumer to submit, at consumer's expense, sample shingles for testing and for photographs.  Owens Corning not liable if there is a warranty claim and replacement shingles vary in color either because of normal weathering or changes in product line. Owens Corning reserves right to provide substitute shingles that are comparable only in quality and price.
20	Executed by owner?	No; completion of registration card is optional.

## Asphalt Shingles, Part 3 — Warranties

1 Identity of issuing entity	<b>Owens Corning</b>
2 Title, original publication date, identifying symbol if any	"Limited Lifetime Warranty on Berkshire Shingles and Berkshire Hip & Ridge;" December 2002, Pub. No. 57735
3 Products covered	Berkshire shingles; Berkshire Hip & Ridge
4 Scope of coverage	Owens Corning warrants that its Berkshire shingles are free from any manufacturing defects that materially affect shingle performance and are warranted against discoloration caused by algal, fungal, lichen or cyanobacterial growth.
4a Does warranty cover defects in manufacture?	Yes
4b Does warranty cover defects in application?	No
4c Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that materially affect shingle performance and are warranted against discoloration caused by algae growth.
4d Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5 Length of coverage	<p>After 15 years, warranty is reduced by 10% and covers replacement material costs only so that in year 16 Owens Corning would pay 90% of material costs, as reasonably determined by Owens Corning to repair or replace the defective product. After 15 years, the warranty is reduced by 5% each year thereafter until year 30. For the balance of the warranty, Owens Corning will pay 20% of reasonable material costs.</p> <p><b>For Algae Resistant Shingles:</b> 15 years</p> <p><b>For Wind Damage:</b> 10 years</p>
5a Is warranty prorated?	Yes
5b When does prorating begin?	<p><b>For Manufacturing Defects:</b> after fifteen (15) years.</p> <p><b>For Algae Resistance:</b> after 1 year.</p>
5c What is the prorating formula?	After 15 years, warranty is reduced by 10% and covers replacement material costs only so that in year 16 Owens Corning would pay 90% of material costs, as reasonably determined by Owens Corning to repair or replace the defective product. After 15 years the warranty is reduced by 5% each year thereafter until year 30. For the balance of the warranty, Owens Corning will pay 20% of reasonable material costs.
6 Nature of remedy	For the first 15 years Owens Corning will pay 100% of material and labor costs, as reasonably determined by Owens Corning, to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the cost to remove or dispose of shingles. After 15 years, Owens Corning will pay only for the materials and reasonable cost, not labor, to repair, replace or recover shingles, and the amount will be prorated. Owens Corning retains the right to provide materials in lieu of compensation.
6a Does warranty provide for replacement shingles?	Yes for the first 15 years. No for the balance of the warranty.
6b Warranty provides for labor to install replacement shingle?	Yes
6c Warranty provides for labor to remove defective shingles?	No
6d Does warranty cover disposal of defective shingles?	No
6e Does warranty apply to any material other than shingles?	No
7 Is there monetary limitations?	For manufacturing defects, during the first 15 years, Owens Corning's maximum costs shall be the labor and material costs, as reasonably determined by Owens Corning to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the cost to remove or dispose of defective shingles. For algae resistance, during the first year, Owens Corning's maximum cost shall not exceed the initial cost of the shingles and their initial installation. For the balance of the warranty, Owens Corning's maximum costs shall be prorated and the prorating formula for algae resistance shall exclude the cost of installation labor.
8 Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 8, 9, 14, 17, 19, 21, 23, 24

9	Wind coverage/exclusion	<p>During the first ten (10) years after installation and thermal sealing has taken place, Berkshire shingles with Berkshire hip and ridge are warranted against blow-offs or wind damage in winds up to 110 mph.</p> <p>Shingles contain strips of asphalt sealant that require direct warm sunlight for several days to seal properly. Prior to sealing, shingles are more vulnerable to blow-offs and wind damage. Owens Corning is not responsible for any blow-offs or wind damage that may occur prior to thermal sealing having occurred; this is not a manufacturing defect.</p>
10	Notification requirements	Claims must be submitted within 30 days after discovery of the problem. Claims can be submitted by calling 1-800-ROOFING or writing to Owens Corning, Customer Response Center, One Owens Corning Parkway, Toledo, Ohio 43659, with proof of purchase.
11	Determination of warranty applicability	Owens Corning reasonably determines material and labor costs owner can recover. Owens Corning has sole reasonable discretion to provide replacement shingles as an alternative to paying pro-rated, reasonable material cost to repair, replace or recover shingles.
12	Does issuing entity manufacture and/or sell shingles?	Owens Corning manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	E
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred one time, any time during the life of the warranty as a 50-year warranty. Homeowner must complete and return warranty transfer card and pay \$100.00 transfer fee to Owens Corning within 60 days of real estate transfer. Proof-of-purchase of the Berkshire components and application date must be submitted at the same time.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Owner's remedy for defective shingles is fully described in the warranty and Owner is not entitled to anything more than what is described in the warranty.
19	Special features/conditions	<p>Owens Corning may require consumer to submit, at consumer's expense, sample shingles for testing and for photographs.</p> <p>Owens Corning is not liable if there is a warranty claim and replacement shingles vary in color either because of normal weathering or changes in product line. Owens Corning reserves the right to provide substitute shingles that are comparable only in quality and price.</p>
20	Executed by owner?	No; completion of registration card is optional.

## Asphalt Shingles, Part 3 — Warranties

1 Identity of issuing entity	<b>Owens Corning</b>
2 Title, original publication date, identifying symbol if any	"Limited Warranty on Woodcrest and Woodmoor Collection Shingles; January 2004; Pub. No. 59546
3 Products covered	Woodcrest and Woodmoor shingles and high style hip and ridge.
4 Scope of coverage	Owens Corning warrants that its roofing shingles are free from manufacturing defects that materially affect their performance.
4a Does warranty cover defects in manufacture?	Yes
4b Does warranty cover defects in application?	No
4c Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that materially affect shingle performance.
4d Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5 Length of coverage	<p><b>For Manufacturing Defects:</b>  Woodcrest shingles and high style hip and ridge: 50 years  Woodmoor shingles and high style hip and ridge: Lifetime for individual homeowners; 50 years for others</p> <p><b>For Wind Damage:</b> 10 years</p>
5a Is warranty prorated?	Yes
5b When does prorating begin?	After ten (10) years.
5c What is the prorating formula?	<p>For Woodcrest shingles, after ten (10) years, warranty is reduced by 1/600 for each month of service from the date of installation and covers replacement material costs only (so that at the beginning of the 11<sup>th</sup> year, warranty would be reduced by 120/600).</p> <p>For Woodmere shingles, after ten (10) years, warranty is reduced by 20% and covers replacement material costs only so that in year 11 Owens Corning would pay 80% of material costs, as reasonably determined by Owens Corning, to repair or replace the defective product and warranty is reduced by 2% each year thereafter until year 40. For the balance of the warranty, Owens Corning will pay 20% of reasonable material costs.</p>
6 Nature of remedy	<p>For the first ten years, Owens Corning will pay 100% of the material and labor costs, as reasonably determined by Owens Corning, to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the cost to remove or dispose of shingles. After ten years, Owens Corning will pay only for the reasonable material cost, not labor, to repair, replace or recover shingles, and the amount will be prorated. Alternatively, Owens Corning will provide replacement shingles at its sole reasonable discretion.</p>
6a Does warranty provide for replacement shingles?	Yes
6b Warranty provides for labor to install replacement shingle?	<p>Yes for the first ten (10) years.</p> <p>No for the balance of the warranty.</p>
6c Warranty provides for labor to remove defective shingles?	No
6d Does warranty cover disposal of defective shingles?	No
6e Does warranty apply to any material other than shingles?	No
7 Is there monetary limitations?	<p>For manufacturing defects, during the first ten years, Owens Corning's maximum costs shall be the labor and material costs, as reasonably determined by Owens Corning to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the costs to remove or dispose of shingles.</p>
8 Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 8, 9, 14, 17, 19, 21, 23, 24.
9 Wind coverage/exclusion	<p>During the first ten (10) years after installation and after thermal sealing has taken place, Woodcrest shingles are warranted against blow-offs or wind damage in winds up to 90 mph and in winds up to 110 mph with six-nail application and High Style Hip and Ridge with four-nail application. Woodmoor shingles and High Style Hip and Ridge are warranted against blow-offs and wind damage in winds up to 110 mph with four-nail application.</p> <p>Shingles contain strips of asphalt sealant that require direct warm sunlight for several days to seal properly. Prior to sealing, shingles are more vulnerable to blow-offs and wind damage. Owens Corning is not responsible for any blow-offs or wind damage that may occur prior to thermal sealing having occurred; this is not a manufacturing defect.</p>

10	Notification requirements	Claims must be submitted within 30 days after discovery of the problem. Claims can be submitted by calling 1-800-ROOFING or writing to Owens Corning, Customer Response Center, One Owens Corning Parkway, Toledo, Ohio 43659, with proof of purchase.
11	Determination of warranty applicability	Owens Corning reasonably determines material and labor costs owner can recover. Owens Corning has sole reasonable discretion to provide replacement shingles as an alternative to paying pro-rated, reasonable material cost to repair, replace or recover shingles.
12	Does issuing entity manufacture and/or sell shingles?	Owens Corning manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	E
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred one time, any time during the life of the warranty as a 50-year warranty. Homeowner must complete and return warranty transfer card and payment of \$100.00 transfer fee to Owens Corning within 60 days of real estate transfer. Proof of purchase of the Woodcrest or Woodmoor components and application date must be submitted at the same time.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Owner=s remedy for defective shingles is fully described in the warranty and Owner is not entitled to anything more than what is described in the warranty.
19	Special features/conditions	Owens Corning may require consumer to submit, at consumer=s expense, sample shingles for testing and/or photographs.  Owens Corning is not liable if there is a warranty claim and replacement shingles vary in color either because of normal heating or changes in product line. Owens Corning reserves right to provide substitute shingles that are comparable only in quality and price.
20	Executed by owner?	No; completion of registration card is optional.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Owens Corning</b>
2	Title, original publication date, identifying symbol if any	"Tru Protection Preferred Limited Warranty;" May 2002; Pub. No. 16-RR45404-A
3	Products covered	Oakridge PRO 50 Deep Shadow, Oakridge PRO 40 Shadow, Oakridge PRO 30, WeatherGuard 40 High Wind 110, WeatherGuard PRO 40 AR High Wind 110, Prominence, Supreme, Glaslock, Classic (See Item 19 - Special Features)
4	Scope of coverage	Owens Corning warrants that its roofing shingles are free from manufacturing defects that materially affect shingle performance. Shingles specifically labeled as Algae Resistant (AR) are warranted against discoloration caused by algal, fungal, lichen or cyanobacterial growth.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that materially affect shingle performance. Algae resistant shingles are warranted against discoloration.
4d	Warranty provides coverage for flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<p><b>For Manufacturing Defects:</b>  50 years: Oakridge PRO 50 Deep Shadow  40 years: Oakridge PRO 40 Shadow, WeatherGuard 40 High Wind 110, WeatherGuard PRO 40 AR High Wind 110  30 years: Oakridge PRO 30, Prominence  25 years: Supreme, Glaslock  20 years: Classic</p> <p><b>For Algae Resistance:</b> 10 years</p> <p><b>For Wind Damage:</b> 10 years for WeatherGuard High Wind 110 shingles  5 years for all others</p>
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	<p><b>For Manufacturing Defects:</b>  After 15 years for Oakridge PRO 50 Deep Shadow</p> <p>After 10 years for Oakridge PRO 40 Shadow, Oakridge PRO 30, WeatherGuard 40 High Wind 110, WeatherGuard PRO 40 AR High Wind 110, Prominence, Supreme and Glaslock</p> <p>After 5 years for Classic</p>
5c	What is the prorating formula?	<p>For Oakridge PRO 50 Deep Shadow, after 15 years, warranty is reduced by 1/600 for each month since installation (so that at the beginning of the 16<sup>th</sup> year, warranty would be reduced by 180/600).</p> <p>For Oakridge PRO 40 Shadow, WeatherGuard 40 High Wind 110, WeatherGuard PRO 40 AR High Wind, after ten (10) years, warranty is reduced by 1/480 for each month since installation (so that at the beginning of the 11<sup>th</sup> year, warranty would be reduced by 120/480).</p> <p>For Oakridge PRO 30 and Prominence, after ten (10) years, warranty is reduced by 1/360 for each month since installed so that at the beginning of the 11<sup>th</sup> year, warranty would be reduced by 120/480).</p> <p>For Supreme and Glaslock: After ten (10) years, warranty is reduced by 1/300 for each month since installation (so that at the beginning of the 11<sup>th</sup> year, warranty would be reduced by 120/300).</p> <p>For Classic: After five (5) years, warranty is reduced by 1/240 for each month since installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/240).</p>
6	Nature of remedy	For the first 15 years for Oakridge PRO 50 Deep Shadow and for the first 10 years for Oakridge PRO 40 Shadow, Oakridge PRO 30, WeatherGuard 40 High Wind 110, WeatherGuard PRO 40 AR High Wind 110, Prominence, Supreme and Glaslock and for the first 5 years for Classic, Owens Corning will pay 100% of material and labor costs, as reasonably determined by Owens Corning, to repair, replace or recover defective roofing components, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the cost to remove or dispose of roof system components. After the initial nonprorated period, the amount Owens Corning will pay for materials and labor will be prorated.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes
6c	Warranty provides for labor to remove defective shingles?	No

6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	Warranty covers all Owens Corning Roofing System components, same as VentSure ventilation.
7	Is there monetary limitations?	For manufacturing defects, during the non-prorated period, Owens Corning's maximum costs shall be the labor and material costs, as reasonably determined by Owens Corning to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning does not pay for the cost to remove or dispose of defective shingles. For algae resistance, during the first year, Owens Corning's maximum cost shall not exceed the initial cost of the shingles and their initial installation. For the balance of the warranty, Owens Corning's maximum costs shall be prorated and the prorating formula for algae resistance shall exclude the cost of installation labor.
8	Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 8, 9, 14, 17, 19, 21, 23, 24
9	Wind coverage/exclusion	<p>During the first ten (10) years, WeatherGuard 40 High Wind 110 shingles and WeatherGuard PRO 40 AR High Wind, when installed with WeatherGuard High Wind 110 hip and ridge, are warranted against blow-off or wind damage in winds up to 110 mph. During the first five (5) years, Oakridge PRO 50 Deep Shadow is warranted against blow-off or wind damage in winds up to 90 mph; Oakridge PRO 40 Shadow and Prominence are warranted against blow-off or wind damage in winds up to 80 mph; Oakridge PRO 30 is warranted against winds up to 70 mph, and Supreme, Glaslock and Classic are warranted against winds up to 60 mph.</p> <p>Shingles contain strips of asphalt sealant that require direct warm sunlight for several days to seal properly. Prior to sealing, shingles are more vulnerable to blow-offs and wind damage. Owens Corning is not responsible for any blow-offs or wind damage that may occur prior to thermal sealing having occurred; this is not a manufacturing defect.</p>
10	Notification requirements	Claims must be submitted within 30 days after discovery of the problem. Claims can be submitted by calling 1-800-ROOFING or writing to Owens Corning, Customer Response Center, One Owens Corning Parkway, Toledo, Ohio 43659, and include warranty registration.
11	Determination of warranty applicability	Owens Corning reasonably determines material and labor costs owner can recover. Owens Corning has sole reasonable discretion to provide replacement shingles as an alternative to paying pro-rated, reasonable material cost to repair, replace or recover shingles.
12	Does issuing entity manufacture and/or sell shingles?	Owens Corning manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	E
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred one time, any time during the life of the warranty. Homeowner must complete and return warranty transfer card and pay \$100.00 transfer fee to Owens Corning within 60 days of real estate transfer.
16	Cost to obtain	Yes; varies by size and type of job.
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Owner's remedy for defective shingles is fully described in the warranty and Owner is not entitled to anything more than what is described in the warranty.
19	Special features/conditions	<p>In order to obtain the warranty, the original consumer purchaser (i.e. homeowner) must purchase a complete roofing system from Owens Corning and install the Owens Corning materials on a single-family dwelling with a roof that is no larger than 150 roofing squares. The single-family dwelling must be owned and maintained by the consumer and does not include dwellings such as condominiums, duplexes, zero lot-line residences or patio homes where the roofing system is owned or maintained by an association or third party or shared with another owner. The roofing system must be installed over a clean roofing deck and not over existing shingles or other materials and the following materials must have been purchased and installed:</p> <ol style="list-style-type: none"> <li>Owens Corning asphalt shingles;</li> <li>Owens Corning VentSure ventilation products, in conjunction with functional eave and/or soffit intake vents;</li> <li>Owens Corning hip and ridge products or a comparable Owens Corning shingle product;</li> <li>Owens Corning WeatherLock underlayment if required in state where home is located; and</li> <li>Any breather-type No. 15 or No. 30 asphalt-saturated felt intended for use as shingle underlayment.</li> </ol> <p>Owens Corning may require consumer to submit, at consumer's expense, sample shingles for testing and for photographs.</p> <p>Owens Corning is not liable if there is a warranty claim and replacement shingles vary in color. Owens Corning reserves right to provide substitute shingles that are comparable only in quality and price.</p>
20	Executed by owner?	No

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>OWENS CORNING</b>
2	Title, original publication date, identifying symbol if any	"Limited Warranty on Roofing Shingles;" December 2002; Pub. No. 16-RR-24767-D
3	Products covered	Oakridge PRO 50 Deep Shadow, Oakridge PRO 40 Shadow, Oakridge PRO 30, Prominence, Supreme, Glaslock, Classic
4	Scope of coverage	Owens Corning warrants that its roofing shingles are free from manufacturing defects that materially affect their performance. Shingles specifically labeled as algae resistant (AR) are warranted against discoloration caused by algal, fungal, lichen or cyanobacterial growth.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that materially affect shingle performance. Algae resistant shingles are warranted against discoloration caused by algae growth.
4d	Warranty provides coverage for flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<p><b>For Manufacturing Defects:</b>  50 years: Oakridge PRO 50 Deep Shadow  40 years: Oakridge PRO 40 Shadow  30 years: Oakridge PRO 30, Prominence  25 years: Supreme, Glaslock  20 years: Classic</p> <p><b>For Algae Resistance:</b> 10 years</p>
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	<p><b>For Manufacturing Defects:</b>  After three (3) years for Classic shingles</p> <p>After five (5) years for Oakridge PRO 50 Deep Shadow, Oakridge 40 Shadow, Oakridge PRO 30, Prominence, Supreme and Glaslock</p>
5c	What is the prorating formula?	<p>Oakridge PRO 50 Deep Shadow: After five years, warranty is reduced by 1/600 for each month of service from the date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/600).</p> <p>Oakridge 40 PRO Deep Shadow: After five (5) years, warranty is reduced by 1/480 for each month of service from the date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/480).</p> <p>Oakridge PRO 30, Prominence: After five (5) years, warranty is reduced by 1/360 for each month of service from the date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/360).</p> <p>Supreme, Glaslock: After five (5) years, warranty is reduced by 1/300 for each month of service from the date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/300).</p> <p>Classic: After three (3) years, warranty is reduced by 1/240 for each month of service from the date of installation (so that at the beginning of the 4<sup>th</sup> year, warranty would be reduced by 36/240).</p>
6	Nature of remedy	<p>For the first five years for all shingles except Classic and for three years for Classic, Owens Corning will pay 100% of the material and labor costs, as reasonably determined by Owens Corning, to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the cost to remove or dispose of shingles. After five years for all shingles except Classic and after three years for Classic, Owens Corning will pay only for the reasonable material cost, not labor, to repair, replace or recover shingles, and the amount will be prorated. Alternatively, Owens Corning will provide replacement shingles at its sole reasonable discretion.</p> <p>If algae resistant shingles are discolored by algae growth during the first year, Owens Corning will cover the cost, including labor, as reasonably determined by Owens Corning, to repair, replace or recover the affected AR shingles, but not to exceed the initial cost of the Owens Corning materials and their installation. After one year, labor will not be covered and coverage will be prorated. Repair refers to cleaning or otherwise removing any algae growth from affected AR shingles. Decision whether AR shingles should be repaired, replaced or recovered will be made solely by Owens Corning.</p>
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes for the first five (5) years for all shingles except Classic Yes for the first three (3) years for Classic No after the initial 5 and 3 year periods

6c	Warranty provides for labor to remove defective shingles?	No
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	For manufacturing defects, during the first five years for all shingles except Classic, and during the first three years for Classic, Owens Corning's maximum costs shall be the labor and material costs, as reasonably determined by Owens Corning to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work and the cost to remove or dispose of defective shingles. For algae resistance, during the first year, Owens Corning's maximum cost shall not exceed the initial cost of the shingles and their initial installation. For the balance of the warranty, Owens Corning's maximum costs shall be prorated and the prorating formula for algae resistance shall exclude the cost of installation labor.
8	Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 8, 9, 14, 17, 19, 21, 23, 24
9	Wind coverage/exclusion	During the first five (5) years after installation and after thermal sealing has taken place, Oakridge PRO 50 Deep Shadow are warranted against blow-offs and wind damage in winds up to 110 mph. Oakridge PRO 40 Shadow and Prominence are warranted against winds up to 80 mph, Oakridge PRO is warranted against winds up to 70 mph, and Supreme, Glaslock and Classic shingles are warranted against winds up to 60 mph.  Shingles contain strips of asphalt sealant that require direct warm sunlight for several days to seal properly. Prior to sealing, shingles are more vulnerable to blow-offs and wind damage. Owens Corning is not responsible for any blow-offs or wind damage that may occur prior to thermal sealing having occurred; this is not a manufacturing defect.
10	Notification requirements	Claims must be submitted within 30 days after discovery of the problem. Claims can be submitted by calling 1-800-ROOFING or writing to Owens Corning, Customer Response Center, One Owens Corning Parkway, Toledo, Ohio 43659, with proof of purchase.
11	Determination of warranty applicability	Owens Corning reasonably determines material and labor costs owner can recover. Owens Corning has sole reasonable discretion to provide replacement shingles as an alternative to paying pro-rated, reasonable material cost to repair, replace or recover shingles.
12	Does issuing entity manufacture and/or sell shingles?	Owens Corning manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	E
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred one time, any time during the life of the warranty. Homeowner must complete and return warranty transfer card and pay \$100.00 transfer fee to Owens Corning within 60 days of real estate transfer. Proof-of-purchase of Owens Corning shingles and installation date must be submitted at the same time. Warranty can not be transferred to any subsequent purchasers.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Owner's remedy for defective shingles is fully described in the warranty and Owner is not entitled to anything more than what is described in the warranty.
19	Special features/conditions	Owens Corning may require consumer to submit, at consumer's expense, sample shingles for testing and/or photographs.  Owens Corning not liable if there is a warranty claim and replacement shingles vary in color either because of normal weathering or changes in product line. Owens Corning reserves right to provide substitute shingles that are comparable only in quality and price.
20	Executed by owner?	No; contractor or dealer should sign and date the warranty upon completion to help establish proof of purchase. There is an optional registration card.

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>OWENS CORNING</b>
2	Title, original publication date, identifying symbol if any	"Limited Warranty on Roofing Shingles with Tru Protection Coverage;" December 2002; Publication No. 16-RR-24767-D
3	Products covered	Oakridge Pro 50 Deep Shadow, Oakridge Pro 40 Shadow, Oakridge Pro 30 Shadow, Prominence, Supreme, Glaslock, Classic
4	Scope of coverage	Owens Corning warrants that Owens Corning shingles are free from any manufacturing defects that materially affect their performance. Shingles specifically labeled as algae resistant (AR) are warranted against discoloration caused by algal, fungal, lichen or cyanobacterial growth.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty covers manufacturing defects that materially affect shingle performance. Shingles labeled as Algae Resistant are warranted against discoloration.
4d	Warranty provides coverage for flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<p><b>For Manufacturing Defects:</b>  50 years: Oakridge Pro 50 Deep Shadow; 40 years: Oakridge Pro 40 Shadow;  30 years: Oakridge Pro 30 Shadow, Prominence  25 years: Supreme, Glaslock  20 years: Classic</p> <p><b>For Algae Resistance:</b> 10 years  <b>For Wind Damage:</b> 5 years</p>
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	<p><b>For Manufacturing Defects:</b>  After three (3) years for Classic shingles  After five (5) years for Oakridge Pro 50 Deep Shadow, Oakridge Pro 40 Shadow, Oakridge Pro 30, Prominence, Supreme and Glaslock</p> <p><b>For Algae Resistance:</b> after one (1) year</p>
5c	What is the prorating formula?	<p><b>For Manufacturing Defects:</b>  Oakridge Pro 50 Deep Shadow: After five (5) years, warranty is reduced by 1/600 for each month of service from date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty will be reduced by 60/600).  Oakridge Pro 40 Shadow: After five (5) years, warranty is reduced by 1/480 for each month of service from the date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/480).  Oakridge Pro 30 Shadow, Prominence: After five (5) years, warranty is reduced by 1/360 for each month of service from the date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/360).  Supreme, Glaslock: After five (5) years, warranty is reduced by 1/300 for each month of service from the date of installation (so that at the beginning of the 6<sup>th</sup> year, warranty would be reduced by 60/300).  Classic: After three (3) years, warranty is reduced by 1/240 for each month of service from the date of installation (so that at the beginning of the 4<sup>th</sup> year, warranty would be reduced by 36/240).  <b>For Algae Resistance:</b> After one (1) year, warranty is reduced by 1/240 for each month of service from date of installation (so that at the beginning of the 2<sup>nd</sup> year, warranty would be reduced by 12/240).</p>
6	Nature of remedy	<p>For the first five years for all shingles except Classic and for three years for Classic, Owens Corning will pay 100% of the material and labor costs, as reasonably determined by Owens Corning, to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the cost to remove or dispose of shingles. After five years for all shingles except Classic and after three years for Classic, Owens Corning will pay only for the reasonable material cost, but labor will not be covered, to repair, replace or recover shingles, and the amount will be prorated. Alternatively, Owens Corning, may elect, at its sole discretion, to provide replacement shingles rather than a prorated payment.</p> <p>If algae resistant shingles are discolored by algae growth during the first year, Owens Corning will cover the cost, including labor, as reasonably determined by Owens Corning, to repair, replace or recover the affected AR shingles, but not to exceed the initial cost of the Owens Corning materials and their installation. After one year, labor will not be covered and coverage will be prorated. Repair refers to cleaning or otherwise removing any algae growth from affected AR shingles. Decision whether AR shingles should be repaired, replaced or recovered will be made solely by Owens Corning.</p>

6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes for the first five (5) years for all shingles except Classic Yes for the first three (3) years for Classic No after the initial 5 and 3 year periods
6c	Warranty provides for labor to remove defective shingles?	No
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	For manufacturing defects, during the first five years for all shingles except Classic, and during the first three years for Classic, Owens Corning's maximum costs shall be the labor and material costs, as reasonably determined by Owens Corning to repair, replace or recover defective shingles, exclusive of metal work, flashing or other related work. Owens Corning will not pay for the cost to remove or dispose of defective shingles. For algae resistance, during the first year, Owens Corning's maximum cost shall not exceed the initial cost of the shingles and their initial installation. For the balance of the warranty, Owens Corning's maximum costs shall be a prorated portion of the reasonable material cost and will not cover any labor costs.
8	Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 8, 9, 14, 17, 19, 21, 23, 24
9	Wind coverage/exclusion	During the first five (5) years after installation and after thermal sealing has taken place, Oakridge Pro 50 Deep Shadow shingles installed with 6-nail application and high ridge hip and ridge with 4-nail application are warranted against blow-off or wind damage in winds up to 110 mph. Oakridge Pro 50 Deep Shadow shingles are warranted against winds up to 90 mph. Oakridge Pro 40 Deep Shadow and Prominence shingles are warranted against winds up to 80 mph. Oakridge Pro 30 shingles are warranted against winds up to 70 mph. Supreme, Glaslock and Classic shingles are warranted against winds up to 60 mph.  Shingles contain strips of asphalt sealant that require direct warm sunlight for several days to seal properly. Prior to sealing, shingles are more vulnerable to blow-offs and wind damage. Owens Corning is not responsible for any blow-offs or wind damage that may occur prior to thermal sealing having occurred; this is not a manufacturing defect.
10	Notification requirements	Claims must be submitted within 30 days after discovery of the problem. Claims can be submitted by calling 1-800-ROOFING or writing to Owens Corning, Customer Response Center, One Owens Corning Parkway, Toledo, Ohio 43659, with proof of purchase.
11	Determination of warranty applicability	Owens Corning reasonably determines material and labor costs owner can recover. Owens Corning has sole reasonable discretion to provide replacement shingles as an alternative to paying pro-rated, reasonable material cost to repair, replace or recover shingles.
12	Does issuing entity manufacture and/or sell shingles?	Owens Corning manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	E
14	Inclusion of consequential damages	No
15	Assignability	Warranty may be transferred one time, any time during the life of the warranty, if the original homeowner sells the home upon which the Owens Corning materials have been installed, upon submitting warranty transfer card and payment of \$100.00 transfer fee to Owens Corning within 60 days of real estate transfer. The second purchaser may not transfer the warranty to any subsequent purchaser.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Owner's remedy for defective shingles is fully described in the warranty and Owner is not entitled to anything more than what is described in the warranty.
19	Special features/conditions	Owens Corning may require consumer to submit, at consumer's expense, sample shingles for testing and/or photographs.  Owens Corning is not liable if there is a warranty claim and replacement shingles vary in color either because of normal weathering or changes in product line. Owens Corning reserves right to provide substitute shingles that are comparable only in quality and price.
20	Executed by owner?	No; contractor or dealer should sign and date the warranty upon completion to help establish proof of purchase

## Asphalt Shingles, Part 3 — Warranties

1	Identity of issuing entity	<b>Pabco Roofing Products, Division of PABCO Building Products, LLC</b>
2	Title, original publication date, identifying symbol if any	"Pabco Limited Shingle Warranty;" March 4, 2004; PR005b PR 03/4/04
3	Products covered	Premier Advantage, Precise, Premier 50, Premier 40, Premier 30, SG-30, GC-20, Premier 30 Scotchgard Algae Resistant System, Premier 40 Scotchgard Algae Resistant Roofing System, SG-30 Scotchgard Algae Resistant System
4	Scope of coverage	PABCO warrants that PABCO shingles are free from manufacturing defects that adversely affect performance. PABCO warrants that its Scotchgard Algae Resistant Roofing System will remain free from algae growth.
4a	Does warranty cover defects in manufacture?	Yes
4b	Does warranty cover defects in application?	No
4c	Does warranty limit coverage to leakage, if no, what defects or conditions are covered?	No; warranty states that shingles are free from manufacturing defects that adversely affect performance. Scotchgard Algae Resistant Roof System is warranted to remain free from algae growth.
4d	Does warranty cover flashing, metal work, or related work that may be affected and/or need to be repaired/removed?	No
5	Length of coverage	<b>For Manufacturing Defects:</b> 50 years: Premier Advantage, Premier 50 40 years: Premier 40 30 years: Premier 30 20 years: GG-20 10 years: Any PABCO shingle installed over a non-ventilated deck  <b>For Algae Resistance:</b> 20 years: Premier 30, Premier 40 and Scotchgard Algae Resistant Roofing System remain free from algae growth.
5a	Is warranty prorated?	Yes
5b	When does prorating begin?	After five years for Premier Advantage, Precise, Premier 50, Premier 40, Premier 30 and SG-30 shingles. After three years for GC-20 shingles.
5c	What is the prorating formula?	Advantage: After five years, warranty is reduced by 1/600 for each month since original application (so that at the beginning of the 6 <sup>th</sup> year, warranty would be reduced by 60/600). Precise, Premier 40: After five years, warranty is reduced by 1/480 for each month since original application (so that at the beginning of the 6 <sup>th</sup> year, warranty would be reduced by 60/480). Premier 30, SG-30: After five years, warranty is reduced by 1/360 for each month since original application (so that at the beginning of the 6 <sup>th</sup> year, warranty would be reduced by 60/360). GG-20: After three years, warranty is reduced by 1/240 for each month since original application (so that at the beginning of the 4 <sup>th</sup> year, warranty would be reduced by 36/240).  Shingles installed over any non-ventilated deck: Warranty is reduced by 1/120 for each month effective upon installation.
6	Nature of remedy	During the non-prorated coverage period, PABCO will pay the reasonable material and installation costs to repair, replace or recover, as PABCO determines, defective shingles. After the period of non-prorated coverage, the amount of payment for the reasonable cost of the shingle to repair, replace or recover the defective shingles will be reduced in accordance with the prorating schedule or, in PABCO's sole reasonable discretion, PABCO will provide replacement shingles.
6a	Does warranty provide for replacement shingles?	Yes
6b	Warranty provides for labor to install replacement shingle?	Yes, during the initial non-prorated warranty coverage period; no during the prorated period.
6c	Warranty provides for labor to remove defective shingles?	Yes; during the initial non-prorated warranty coverage period; warranty covers reasonable installation costs to repair; replace or recover defective shingles. The only items not covered are disposal costs, metal work, flashing or other related work.
6d	Does warranty cover disposal of defective shingles?	No
6e	Does warranty apply to any material other than shingles?	No
7	Is there monetary limitations?	During the initial non-prorated warranty coverage period, PABCO's maximum liability is the reasonable material and installation costs to repair, replace or recover defective shingles. After the non-prorated coverage period, PABCO's liability is limited to a pro-rated portion of the reasonable cost of the shingle to repair, replace or recover defective shingles or providing replacement shingles.

8	Exclusions from coverage (See warranty introduction)	1, 2, 4, 6, 7, 8, 9, 13, 14, 19, 24
9	Wind coverage/exclusion	<p>Premier Advantage shingles are warranted for 5 years against wind damage due to winds up to 110 mph following proper application and sealing of the shingles.</p> <p>Precise shingles are warranted for 5 years against wind damage due to winds up to 100 mph following proper application and sealing of the shingles.</p> <p>Premier 50 shingles are warranted for 5 years against wind damage due to winds up to 90 mph following proper application and sealing of the shingles.</p> <p>Premier 40 shingles are warranted for 5 years against wind damage due to winds up to 80 mph following proper application and sealing of the shingles.</p> <p>Premier 30 and shingles are warranted for 5 years against wind damage due to winds up to 70 mph following proper application and sealing of the shingles.</p> <p>Premier SG-30 and shingles are warranted for 5 years against wind damage due to winds up to 60 mph following proper application and sealing of the shingles.</p> <p>GC-20 and PABCO shingles installed over a non-ventilated deck are warranted for 3 years against wind damage due to winds up to 60 mph following proper application and sealing of the shingles.</p> <p>PABCO shingles contain self-sealing asphalt strips that must be subjected to direct sunlight for several days before thermal sealing will occur. When shingles are installed during cool weather conditions, they may not seal until the conditions warm or the seasons change. Shingles which do not receive direct sunlight or which are not exposed to adequate surface temperatures may never seal. Failure to seal under such circumstances is not a manufacturing defect.</p>
10	Notification requirements	PABCO must be notified within 30 days of discovery of a claimed manufacturing defect by phone (800-426-9762 or 253-272-0374), e-mail ( <a href="http://www.pabcoroofing.com">www.pabcoroofing.com</a> ) or letter addressed to Pabco at 1718 Thorne Road, Tacoma, WA 98421-3207 so that a claim packet can be forwarded. Owner must complete and submit the claim form to PABCO, with two full shingles that clearly demonstrate the claimed defect and photos, at the owner's expense.
11	Determination of warranty applicability	Upon receiving two full shingles demonstrating the claimed defect, PABCO will analyze claim to determine if there is a manufacturing defect that adversely affects shingle performance.
12	Does issuing entity manufacture and/or sell shingles?	PABCO manufactures and sells the shingles.
13	Specific conditions to make warranty ineffective or void (See warranty introduction)	PABCO shingles installed on "Geodesic Dome" construction is not warranted nor approved under any circumstances.
14	Inclusion of consequential damages	No
15	Assignability	Warranty is transferable; warranty automatically transfers to additional purchasers without notification to PABCO.
16	Cost to obtain	None
17	Is warranty backed by insurance coverage?	No
18	Is warranty an addition or exclusive remedy for owner?	Warranty is expressly in lieu of any other guarantees and/or warranties, oral or written, expressed or implied such as those made by dealers, contractors, distributors or applicators. Such as those made by dealers, contractors, distributors or applicators. Warranty is in lieu of all other theories of liability, causes of action, and claims whatsoever, against PABCO.
19	Special features/conditions	<p>PABCO reserves the right to discontinue or modify any of its products, including the color of shingles, without notice to the original homeowner/consumer and shall not be liable to the original homeowner/consumer as a result of discontinuance or modification.</p> <p>Warranty applies to shingles applied from January 1, 2001 to December 31, 2005</p>
20	Executed by owner?	No

## Manufacturers Appendix, Asphalt Shingles

### Atlas Roofing Corporation

For roofing shingle products, Atlas regional sales offices are: Ardmore, Okla. 800/261-2852 Fax: 405/223-6894; Daingerfield, Texas 800/270-2852; Fax: 903/645-2291; Franklin, Ohio 800/260-2852 Fax: 513/746-6040; Hampton, Ga. 800/251-2852 Fax: 770/946-5249; Meridian, Miss. 800/933-2721 Fax: 601/483-7344; Quakertown, Pa. 800/254-2852 Fax: 215/536-3002.

Atlas corporate addresses are: Corporate Sales and Marketing, 1775 The Exchange, Suite 160, Atlanta, Ga. 30339; Corporate Office, 802 Hwy 19 North, Suite 190, Meridian, Miss. 39307; or, access its Web site at [www.atlasroofing.com](http://www.atlasroofing.com).

### CertainTeed Corporation

CertainTeed uses several patented technologies to produce some of its unique shingle products. Grand Manor Shangle, Centennial Slate and Carriage House Shangle products are made using "Super Shangle" construction, which consists of two full-size, one-piece base shingles laminated together, and in the case of Grand Manor Shangle, additional random tabs are applied. Independence and Hallmark also use random tabs but do so on a single base shingle. Presidential TL and Landmark TL utilize three layers of mat laminated together for an extra-thick profile. Classic and New Horizon shingles are constructed using an overlay technology that creates a dimensional look without lamination. Hatteras is constructed with dual sealant strips to provide 110 mph wind protection.

CertainTeed's shingle products are available in the following geographic regions:

Northeast	NE	781/551-0656
Atlantic South	AS	919/693-1141
Lake Central	LC	800/432-9256
North Central	NC	800/328-7825
South Central	SC	972/580-5608
Northwest	NW	888/217-8170
Southwest	SW	800/995-7735

Technical Information: Telephone: 800/322-3060; Fax 610/341/6212. Architectural Support 800/233-8990; Fax: 610/341-7940. Corporate

Office:

CertainTeed Corp.  
Roofing Products Group  
750 E. Swedesford Rd.  
Valley Forge, Pa. 19482

CertainTeed shingles are available on a national/regional basis as follows with algae-resistant versions determined by color and region. A variety of accessory products are also available for hip and ridge applications:

Grand Manor Shangle	National
Carriage House Shangle	National
Centennial Slate	National
Presidential TL	National
Landmark TL	National
Presidential Shake	National
Independence Shangle	National
Hatteras (except Calif.)	National
Landmark 50	National
Landmark 40	National
Landmark 40 IR	National
Landmark 30	National
Hallmark Shangle	LC, NC, SC
Woodscape 50	NE
Woodscape 40	NE
Woodscape 30	NE
Classic Horizon	AS, NE
New Horizon	LC, NC
Hearthstead	NC
Sealdon 25	LC, NC
Custom Lok 25	LC, NC
Landmark 50/Architect 80	Hawaii only
XT 30	National
XT 30 IR	National
XT-25	National
CT-20	AS, SC, NW
Jet 25	NE

Refer to individual application instructions provided with the shingles for special instructions regarding using self-adhering WinterGuard Waterproofing Shingle Underlayment for protection against wind-driven rain and ice-dam protection. Its shingle application manual and bundles wraps contain the most up-to-date information on deck and fastening installations.

Other color availability:

- CT 20: black, burn sienna, cedar brown, charcoal black, cinnamon frost, cobblestone gray, colonial slate, dove gray, driftwood,

evergreen blend, forest gray, georgetown gray, granite gray, gray frost, heather blend, hunter green, mint frost, nickel gray, oakwood, resawn shake, shadow gray, silver birch, silver lining, slate gray, tile red blend and timber blend.

- Landmark 50, 40, 30: atlantic blue, birchwood, black walnut, burnt sienna, charcoal black, cobblestone gray, granite gray, heather blend, hunter green, mist white, mojave tan, moiré black, mountain timber, painted desert, resawn shake, sandstone, shadow gray, silver birch, slate blende, spanish tile, sunrise cedar, terra cotta, thunderstorm gray and weathered wood.
- XT 30: autumn brown, black, bronzed brown, burnt sienna, cedar brown, colonial slate, coral frost, cinnamon frost, dove gray, evergreen blend, gray frost, heather blend, hunter green, maple red blend, mint frost, moiré black, nickel gray, oakwood, resawn shake, sandalwood, silver lining, slate gray, snow white, tile red blend, timber blend and weathered wood.
- EX 25: autumn brown, black, brick red, burn sienna, cedar brown, charcoal black, chestnut brown, cinnamon frost, cobblestone gray, colonial slate, coral frost, driftwood, dove gray, evergreen blend, Georgetown gray granite gray, gray frost, heather blend, hunter green, maple red blend, mint frost, moiré black Nantucket gray, nickel gray, oakwood, pewter, regal bark, resawn shake, sandalwood, sea green, shadow gray, shadow green, silver birch silver lining, slate gray, star white, tile red blend, timber blend and weathered wood.

### Elk Corporation

Following are Elk Corporation's regional sales offices and its telephone numbers:

- Sales information: Western 800/791-8545; Southwestern 800/288-6789; Midwest 800/266-6111; Southeastern / Atlantic 800/945-5551; Northern 800/ 944-4344; Northwest 877/840-7635.
- Technical information: Texas 800/289-9876; California 800/355-4968; Alabama 800/ 945-5545; Pennsylvania 800/944-4344.

### GAF Materials Corporation

GAF regional sales offices are: Dallas, Texas, 214/637-1060; Fontana, Calif., 909/360-4200; Naperville, Ill., 630/778-0390; North Brunswick, N.J., 908/297-0091; and Tampa, Fla., 813/248-

6202. Regional technical services office is: Wayne, N.J., 800/ROOF-411.

Timberline shingles comply with ASTM D3462-93a in Dade County, Fla. Timberline 25 shingles, in select colors, comply with ASTM 3462-93a.

### IKO Manufacturing Inc.

For additional information, contact plant offices as per the following: Plant A: IKO Brampton, 71 Orenda Road, Brampton, Ont. Canada, L6W 1V8; Plant B: IKO 1600 42<sup>nd</sup> Avenue SE, Calgary, Alberta, Canada, T2P 2L2; Plant C: IKO Hawkesbury 1451 Spence Ave., Hawkesbury, Ont, Canada, K6A 3IKO; Plant D: IKO Winnipeg, 421 Archibald Street, Winnipeg, Manitoba, Canada, R2J 0X2; Plant E: Canroof Corporation, 560 Commissioners St., Toronto, Ont., Canada, M4M 1A7; Plant F: IKO Wilmington, 120 Hay Road, Wilmington, Del., 19809; Plant G: IKO Chicago, 6600 S. Central Ave., Chicago, Ill., 60638; Plant H: IKO Franklin, 1200 Main Street, Franklin, Ohio 45005; Plant I: IKO Sumas, 850 West Front Street, Sumas, Wash. 98295. Aristocrat (standard size 12-1/4 by 36) white, dual black, dual brown, dual gray, earthtone cedar, driftwood, charcoal gray, rainbow green, rainbow red, forest green and weatherwood. Other color availability:

- Aristocrat (metric size 13-1/4 by 39-3/8) white, dual black, dual gray, earthtone cedar, harvard slate, regal blue, driftwood, charcoal gray, rainbow red, rainbow green, chapel slate, weatherwood, tile red, brown, forest green and black lustre.
- Imperial Gentry 25 - white, dual black, dual brown, dual gray, earthtone cedar, driftwood, weatherwood, charcoal gray, rainbow red, forest green, rainbow green, harvard slate, national blue and slate.
- Marathon 25 - dual gray, dual black, nw driftwood, harvard slate, aged redwood, weatherwood, forest green, heatherwood, castle gray, earthtone cedar, white, charcoal gray and dual brown.
- Cambridge 25 - dual black, nw driftwood, harvard slate, aged redwood, weatherwood, castle gray, dual gray, earthtone cedar, dual brown, charcoal gray, driftwood and forest green.

## Owens Corning

Owens Corning roof systems consist of the following products: WeatherLock waterproofing shingles (High Style on the west coast and High Ridge for the balance of the country), and Heart-of-Pink shingles. A System Advantage warranty is available to consumers who install a complete Owens Corning roof system — see the actual warranty for regional requirements. The System Advantage warranty is enhanced coverage that offers an extended, upfront period on nonproration that includes all applicable components of the roof system. The warranty is transferable one time.

All Owens Corning asphalt shingles have a tough fiberglass mat at the core of each shingle with weather-grade asphalt to help protect the roof against curling, blistering and buckling. Algae-resistant products are available on a regional basis. Color availability varies by region. There are three lines of asphalt shingles and our specialty lines, as shown below:

Shingle Name	Standard Warranty Year	Standard Warranty True Protection (Non-proration period)	System Advantage Warranty True Protection (non-proration period)
<b>Architectural</b>			
Oakridge 40 Deep Shadow	40	5	15
Oakridge 30 Shadow	30	5	10
Oakridge 25	25	5	10
<b>Performance</b>			
Prominence	30	5	10
Weatherguard 30AR	30	5	10
Weatherguard 40	40	5	15
<b>Traditional</b>			
Supreme	25	5	10
Classic	20	5	10
Gaslock	25	5	10
<b>Specialty</b>			
MiraVista Slate	50	NA	NA
MiraVista Shake	50	NA	NA
MiraVista Copper	50	NA	NA
MiraVista Designer Metal	30	NA	NA

For additional product or technical information and assistance, call 1-800-GET-PINK or visit Owens Corning's Web site at [www.owenscorning.com](http://www.owenscorning.com).

## Pabco Roofing Products

Product information, as offered, applies to product made to comply with ASTM D3462. This product information may not apply if compliance to D3462 has not been requested.

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Fiber-cement Products



## Information About Section 2: Fiber-cement Products

### General Information

Section 2: Fiber-cement products in NRCA's *2005-2006 Steep-slope Roofing Materials Guide* provides a comprehensive listing of fiber-cement products commonly used in steep-slope roofing.

The category of fiber-cement components encompasses those products made of cement and reinforcing fibers, either organic and/or inorganic, that are designed as substitutes for wood shingles/shakes, slate and tile in steep-slope applications. As such, fiber-cement products are made to look like, or simulate, one of these products, and in many instances are installed in a similar manner.

### Specific Information Included in the Guide

Information about fiber-cement products is presented in the Guide in two parts: Part 1 — General Information and Part 2 — Technical Data.

Specific information included in Part 1— General Information is as follows:

1. Company name
2. Product name
3. Style
4. Material composition
5. Factory-applied coatings
6. Availability
7. Color
8. Dimensions and coverage
9. Hip/ridge pieces available
10. Slope/underlayment-interlayment requirements
11. Recommended deck material
12. Year product first sold
13. Number of squares installed
14. Manufacturer's plant locations
15. Distribution
16. Sales and technical information contacts

In Part 2 — Technical Data, specific listing information is as follows:

1. Company name
2. Product name
3. Complies with ASTM Standard
4. Physical properties

5. Fire/wind/impact resistance
6. Code acceptance

Reporting of technical data in Item 3 is based on the following American Society for Testing and Materials (ASTM) standards:

- ASTM C 1225 titled, "Standard Specification for Non-Asbestos Fiber-Cement Roofing Shingles, Shakes and Slates"
- ASTM C 1459 titled, "Standard Specification for Performance of Non-Asbestos Fiber-Reinforced Cement Shake, Shingle and Slate Roofing Systems"

Additional information regarding fiber-cement roof products is provided in *The NRCA Roofing and Waterproofing Manual, Fourth Edition*.

## Index to Fiber-cement Products

NO PRODUCT INFORMATION WAS SUPPLIED BY ANY MANUFACTURER

**Fiber-cement Products, Part 1 — General Information**

1. COMPANY NAME	NO PRODUCT INFORMATION SUPPLIED BY ANY MANUFACTURER			
2. PRODUCT NAME				
3. STYLE				
Simulated Shingle (specific type if applicable)				
Simulated Shake (specific type if applicable)				
Simulated Slate (specific type if applicable)				
Simulate Tile (specific type if applicable)				
Other				
Number of Colors Available				
4. MATERIAL COMPOSITION				
5. FACTORY-APPLIED COATING (yes/no)				
6. AVAILABILITY RESTRICTED REGIONALLY (yes/no)				
7. COLOR				
Number of colors available				
Colors				
8. DIMENSIONS AND COVERAGE				
Dimensions (inches x inches)				
Exposure (inches)				
Headlap (inches)				
Pieces Per Roof Square				
Bundles Per Square				
Weight Per Roof Square (ambient temp.,pounds)				
Fasteners Required (nails, staples, or specify)				
9. HIP/RIDGE PIECES AVAILABLE? (yes/no)				
10. SLOPE/INTERLAYMENT-UNDERLAYMENT RECOMMENDATIONS				
Minimum Slope Recommended for Normal Application (inches per foot)				
Interlayment Recommended in Normal Application				
UNDERLAYMENT RECOMMENDED IN NORMAL APPLICATION				
Minimum Slope Recommended For Special Application (inches per foot)				
Interlayment Recommended In Special Application				
Underlayment Recommended In Special Application				
11. RECOMMENDED DECK MATERIAL:				
Plywood/Wood				
Oriented-strand Board				
Waferboard				
Other (specify)				
12. YEAR PRODUCT FIRST SOLD				
13. NUMBER OF SQUARES INSTALLED				
14. MANUFACTURER'S PLANT LOCATION(S) (City, State)				
15. DISTRIBUTION				
Distributors (number handling product or no)				
Direct (number of regional service locations or no)				
16. FOR SALES INFORMATION, CONTACT:				
FOR TECHNICAL INFORMATION, CONTACT:				
17. SEE APPENDIX IF CHECKED				

NA=not applicable

## Fiber-cement Products, Part 2 — Technical Data

1. COMPANY NAME	<b>NO PRODUCT INFORMATION WAS SUPPLIED BY ANY MANUFACTURER</b>
2. PRODUCT NAME	
3. COMPLIES WITH:	
3A. ASTM C 1225-00 <i>Standard Specification for Non-Asbestos Fiber-Cement Roofing Shingles, Shakes and Slates</i> (indicate grade or NA)	
Grade 1 -- 0 freeze/thaw cycles, NA retained strength; use limitations	
Grade 2 -- 25 freeze/thaw cycles; 75% retained strength, use limitations	
Grade 3 -- 100 freeze/thaw cycles, 75% retained strength, no use limitations	
3B. ASTM C 1459-00, <i>Standard Specification for Performance of Non-Asbestos Fiber-Reinforced Cement Shake, Shingle and Slate Roofing Systems</i> (indicate X or NA)	
4. PHYSICAL PROPERTIES	
Modulus of rupture, saturated, psi, min. 798	
Breaking moment, saturated, ft. lb./ft., min. 5.6	
Water absorption, 48 hr., % by mass	
Moisture content, 73 ±4 F, 50 ± 5% RH, %	
5. FIRE/WIND/IMPACT RESISTANCE:	
Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	
Wind resistance (indicate maximum wind speed allowable)	
Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	
6. CODE ACCEPTANCE:	
BOCA Evaluation Service, Inc. (report number)	
ICBO Evaluation Service, Inc. (report number)	
International Evaluation Service (report number)	
SBCCI Public Safety Testing & Evaluation Service (report number)	
National Evaluation Service, Inc. (report number)	
Other Agencies (agency & report identification number)	
7. SEE APPENDIX IF CHECKED	

NA=not applicable

**Manufacturers Appendix, Fiber-cement Products**

NO PRODUCT INFORMATION WAS SUPPLIED BY ANY MANUFACTURER

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Clay and Concrete Tile



## Information About Section 3: Clay and Concrete Tile

### General Information

Section 3: Clay and Concrete Tile in NRCA's *2005-2006 Steep-slope Roofing Materials Guide* provides a comprehensive listing of clay and concrete tile products commonly used in steep-slope roofing.

Clay tile is produced by baking molded clay into tile. The density of the clay is determined by the length of time and temperature at which it is heated. Tiles may be glazed and may also have surface texture treatment. As a result, there are a wide variety of tile profiles, styles, finishes and colors available. In addition, each tile may have separate field, ridge, hip, gable and terminal tiles of various shapes.

Installation methods depend upon the nature of the tile being installed, e.g., whether it is two-piece, one-piece, interlocking, flat, etc.

The terms used to refer to tile types are not necessarily consistent among manufacturers. Sometimes, a proprietary name is used instead of a generic term that might be more descriptive of the tile product.

Concrete tiles are made of portland cement, sand and water in varying proportions. The material is mixed and extruded on molds under high pressure. The exposed surface of the tile may be finished with cementitious material colored with synthetic oxide additives. The tiles are then cured to reach the required strength. They generally have lugs on the underside for anchoring to batten strips. There are additional waterlocks, or interlocking ribs, on the longitudinal edge that are for impeding movement and preventing water infiltration.

Similar to clay tile, there are a wide variety of profiles, styles, finishes and colors available. Color may be added to the surface of the tile or dispersed throughout, termed "color-through." Special texture may be added in surface treatment. In addition, each tile type may have separate field, ridge, hip, gable and terminal tiles that are of various shapes.

Concrete tile types can be associated with the roof component that the tile is simulating—whether it be clay tile or shingles, shakes or slate.

### Specific Information Included in the Guide

Information about clay tile and concrete tile roof products is presented in the guide in two parts: Part 1 — General Information and Part 2 — Technical Data.

For clay tile, specific listing information is as follows:

1. Company name
2. Product name
3. Tile type
4. Tile description
5. Accessory tiles available
6. Dimensions and coverage
7. Slope/underlayment recommendations
8. Recommended decks and fastening requirements
9. Year product first sold
10. Number of squares installed
11. Distribution
12. Manufacturer's plant locations
13. Sales and technical contact information

In Part 2 — Technical Data, specific listing information is as follows:

1. Company name
2. Product name
3. Complies with (ASTM Standard)
4. Fire/wind/impact resistance
5. Code acceptance

Reporting of technical information in Item 3 is based on American Society for Testing and Materials (ASTM) Standard C1167, titled "Standard Specification for Clay Roof Tiles."

For concrete tile, specific listing information is as follows:

1. Company name
2. Product name
3. Tile type
4. Tile description
5. Accessory tiles available
6. Dimensions and coverage
7. Slope/underlayment recommendations
8. Recommended decks and fastening requirements
9. Year product first sold
10. Number of squares installed
11. Distribution

12. Manufacturing plant locations
13. Sales and technical contact information

In Part 2 — Technical Data, specific listing information is as follows:

1. Company name
2. Product name
3. Complies with (ASTM Standard)
4. Fire/wind/impact resistance
5. Code acceptance

Reporting of technical information in Item 3 is based on American Society for Testing and Materials (ASTM) Standard C1492, titled “Standard Specification for Concrete Roof Tiles.”

Additional information regarding clay and concrete tile roof systems is provided in *The NRCA Roofing and Waterproofing Manual, Fifth Edition*.

## Index to Clay and Concrete Tile

	Clay	Concrete		Clay	Concrete
<b>ALTUSA/CLAY FOREVER</b> 6801 N.W. 77th Avenue #301 Miami, FL 33166 305/471-5830 FAX: 305/471-5883 E-mail: info@altusa.com Web: www.altusa.com	130 148 172		<b>LUDOWICI ROOF TILE, INC.</b> P.O. Box 69 New Lexington, OH 43764 800/945-8453 (tile) FAX: 740/342-5229 E-mail: info@ludowici.com Web: www.ludowici.com	134 151 172	
<b>COLUMBIA CONCRETE PRODUCTS, LTD.</b> 8650 130th Street Surrey, BC V3W 1G1 Canada 604/596-3388 or 877/388-8453 FAX: 604/597-4481 E-mail: rooftile@columbiarooftile.com Web: columbiarooftile.com		164 168	<b>M.C.A. CLAY ROOF TILE</b> 1985 Sampson Avenue Corona, CA 92879 951/736-9590 or 800/736-6221 FAX: 951/736-6052 E-mail: sales@mca-tile.com Web: www.mca-tile.com	143 160 172	
<b>DANIEL PLATT, LTD.</b> c/o NORTHERN ROOF TILE SALES 50 Dundas Street, East, Suite 2 Dundas, ON L9H 7K6 CANADA 905/689-4035 FAX: 905/689-7099 E-mail: Web:	130 149 172		<b>SANDTOFT ROOF TILES</b> c/o NORTHERN ROOF TILE SALES 50 Dundas Street, East, Suite 2 Dunda, ON L9H 7K6 CANADA 905/689-4035 FAX: 905/689-7099 E-mail: Web:	145 162 172	
<b>ENTEGRAS SALES, INC.</b> 819 S. Federal Highway, Suite 103 Stuart, FL 34994 561/223-0005 FAX: 561/221-9690 E-mail: Web: www.entegrasales@rooftile.com		164 169	<b>SANTA FE TILE CORP.</b> 8825 NW 95th Street Medley, FL 33178 305/885-9002 FAX: 305/888-0050 E-mail: Web:	146 163	
<b>GLADDING MCBEAN</b> P.O. Box 97 Lincoln, CA 95648 800/964-2529 FAX: 916/645-1723 E-mail: rooftile@paccoast.com Web: www.gladdingmcbbean.com	131 149		<b>UNICRETE ROOF TILE</b> 9440 48th Street, SE Calgary, Alberta T2C 2R2 Canada 403/279-8321 FAX: 403/279-0251 E-mail: info@unicrete.com Web: www.unicrete.com		165 169
<b>IMERY TOITURE</b> c/o NORTHERN ROOF TILE SALES 50 Dundas Street, East, Suite 2 Dunda, ON L9H 7K6 CANADA 905/689-4035 FAX: 905/689-7099 E-mail: Web:	133 151 172		<b>VANDE HEY-RALEIGH ARCHITECTURAL ROOF TILE</b> 1565 Bohm Drive Little Chute, WI 54140 800/236-8453 FAX: 920/766-0776 E-mail: manager@vhr-roof-tile.com		165 169

Clay Tile, Part 1 — General Information

1. COMPANY NAME	ALTUSA / CLAY FOREVER	ALTUSA / CLAY FOREVER	DANIEL PLATT LTD.
2. PRODUCT NAME	ALTUSA S	BARREL	TUNSTALL
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece	X		
Tapered Mission, Two Piece		X	
Flat, One Piece			X
Flat, Interlocking, One Piece			
Flat Pan and Cover, Two Piece			
4A. TILE DESCRIPTION			DISTRESSED
Texture (specify or NA)			
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available	4 / --	4 / --	2 / --
Color Availability (regional/national)	4 / --	4 / --	2 / --
Custom Colors/Blends Available (yes/no)	NO / --	NO / --	YES /
Custom Shapes Available (yes/no)	NO / --	NO / --	YES /
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)			YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	8-1/2 X 10-1/2	18-1/2 X 9-1/4	15 X 7-1/4
Minimum Headlap (inches)	2		2
Exposed Size (inches x inches)	16 X 9-1/2	16	6-1/2 X 7-1/4
Pieces Per Roof Square	100	144	305
Weight Per Roof Square (pounds)	700	1008	1450
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	2-1/2:12	2-1/2:12	4:12
Underlayment Recommended In Normal Application	30/90	30/90	40 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)	2-1/2:12	2-1/2:12	
Underlayment Recommended in Special Application	30 LB. TIN CAP 90 LB. MOPPED	2 30 LB. FELTS NAILED & SOLID MOPPED	
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing			X
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood	SEE APPENDIX	SEE APPENDIX	X
Oriented Strand Board	SEE APPENDIX	SEE APPENDIX	
Waferboard	SEE APPENDIX	SEE APPENDIX	
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]			
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]	STAINLESS STEEL SCREWS	STAINLESS STEEL SCREWS	
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			X
9. YEAR PRODUCT FIRST SOLD	1986	1986	2001
10. NUMBER OF SQUARES INSTALLED	590,000	400,000	
11. DISTRIBUTION			
Distributors (number handling product or no)	60	60	
Direct (number of regional service locations or no)			
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)			ENGLAND
13. FOR SALES INFORMATION, CONTACT:	305/471-5830	305/471-5830	S. MATTHEWS 905/689-4035
FOR TECHNICAL INFORMATION, CONTACT:	FAX 305/471-5833	FAX 305/471-5833	S. MATTHEWS 905/689-4035
14. SEE APPENDIX IF CHECKED	X	X	

NA=not applicable



Clay Tile, Part 1 — General Information

1. COMPANY NAME	GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN
2. PRODUCT NAME	LINCOLN GLAZED SHINGLE	ITALIAN PAN AND ITALIAN COVER	BERKELEY PAN AND BERKELEY COVER
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece			
Flat, One Piece			
Flat, Interlocking, One Piece	X		
Flat Pan and Cover, Two Piece		X	X
4A. TILE DESCRIPTION			
Texture (specify or NA)	SMOOTH	SMOOTH	SMOOTH
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available	CUSTOM / CUSTOM	8 / CUSTOM	5 / CUSTOM
Color Availability (regional/national)	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
Custom Colors/Blends Available (yes/no)	YES / YES	YES / YES	YES / YES
Custom Shapes Available (yes/no)	YES / YES	YES / YES	YES / YES
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES / YES	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	11-1/2 X 15	12 X 18	8-1/2 X 18
Minimum Headlap (inches)			
Exposed Size (inches x inches)	10-3/4 X 12	12 X 14	11 X 14
Pieces Per Roof Square	114	108	187
Weight Per Roof Square (pounds)	850	1040	1400
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	4:12	4:12	4:12
Underlayment Recommended In Normal Application	30 OR 40 LB. FELT	30 OR 40 LB. FELT	30 OR 40 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)	3:12	3:12	3:12
Underlayment Recommended in Special Application	2 30 LB. FELTS NAILED & SOLID MOPPED	2 30 LB. FELTS NAILED & SOLID MOPPED	2 30 LB. FELTS NAILED & SOLID MOPPED
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing			
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood			
Oriented Strand Board			
Waferboard			
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]			
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
9. YEAR PRODUCT FIRST SOLD	1875	1875	1875
10. NUMBER OF SQUARES INSTALLED			
11. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)	50	50	50
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)			
13. FOR SALES INFORMATION, CONTACT:	800/964-2529	800/964-2529	800/964-2529
FOR TECHNICAL INFORMATION, CONTACT:	800/964-2529	800/964-2529	800/964-2529
14. SEE APPENDIX IF CHECKED			

NA=not applicable

Clay Tile, Part 1 — General Information

GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN	IMERY TOITURE
ITALIAN PAN AND BERKELEY COVER	ITALIAN PAN AND CORDOVA COVER	BERKELEY PAN AND CORDOVA COVER	COTSWOLD	PLACER INTERLOCKING	HPO
			X		
X	X			X	X
SMOOTH	SMOOTH	SMOOTH	TEXTURED	SMOOTH	SMOOTH
NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE			
5 / CUSTOM	6 / CUSTOM	5 / CUSTOM	3 / CUSTOM	8 / CUSTOM	2 / --
NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	2 / --
YES / YES	YES / YES	YES / YES	YES / YES	YES / YES	NO / --
YES / YES	YES / YES	YES / YES	YES / YES	YES / YES	NO / --
YES	YES	YES	YES	YES	YES
8-1/2 X 18 / 12 X 18	12 X 18 / 8 X 18	8-1/2 X 18 / 8 X 18	6-1/2, 7-1/4, 8-1/2 & 9 X 14	11 X 15	18 X 12
				3	3
15 X 14	14-1/2 X 14	10-3/4 X 14	6-10	10 X 12	14 3/4 X 10 1/2
138	142	192	308-485	120	95
1200	1080	1250	1510 - 907	960	900
4:12	4:12	4:12		4:12	4:12
30 OR 40 LB. FELT	30 OR 40 LB. FELT	30 OR 40 LB. FELT		30 OR 40 LB. FELT	40 LB. FELT
3:12	3:12	3:12	3:12	N/A	
2 30 LB. FELTS NAILED & SOLID MOPPED	2 30 LB. FELTS NAILED & SOLID MOPPED	2 30 LB. FELTS NAILED & SOLID MOPPED	2 30 LB. FELTS NAILED & SOLID MOPPED	N/A	
				X	X
				X	X
				NA	OPTIONAL
				X	
				X	X
1875	1875	1875	1875	2001	1999
				2000	
				YES	
50	50	50	50	NO	X
				LINCOLN, CA	FRANCE
800/964-2529	800/964-2529	800/964-2529	800/964-2529	800/964-2529	S. MATTHEWS 905/627-4035
800/964-2529	800/964-2529	800/964-2529	800/964-2529	800/964-2529	S. MATTHEWS 905/627-4035

Clay Tile, Part 1 — General Information

1. COMPANY NAME	IMERY TOITURE	LUDOWICI ROF TILE, INC.	LUDOWICI ROOF TILE, INC.
2. PRODUCT NAME	ST. FOY	CELADON CERAMIC SLATE	AMERICANA
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece			
Flat, One Piece	X		
Flat, Interlocking, One Piece		X	X
Flat Pan and Cover, Two Piece			
4A. TILE DESCRIPTION			
Texture (specify or NA)		NATURAL SLATE	TREE BARK/SANDED
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available		1 / 47	1 / 47
Color Availability (regional/national)		NATIONAL / NATIONAL	NATIONAL / NATIONAL
Custom Colors/Blends Available (yes/no)	NO / --	NO / YES	NO / YES
Custom Shapes Available (yes/no)	NO / --	YES / YES	YES / YES
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	10 3/4 X 6 3/4	16 x 10 5/8	14 X 9
Minimum Headlap (inches)	2		
Exposed Size (inches x inches)	4 3/8 X 6 3/4	13 x 10	11 X 8-1/4
Pieces Per Roof Square	500	11	158
Weight Per Roof Square (pounds)	1400	598	800
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	6:12	3:12	3:12
Underlayment Recommended In Normal Application	40 LB. FELT	43 LB. FELT	43 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)		3:12	
Underlayment Recommended in Special Application		WINTERGUARD OR BUR EQUIVALENT	
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing	X	X	X
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood	X	3/4"/1"	3/4"/1"
Oriented Strand Board			
Waferboard			
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]	OPTIONAL	NO	NO
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile	X		
9. YEAR PRODUCT FIRST SOLD		1994	1948
10. NUMBER OF SQUARES INSTALLED		>120,000	>500,000
11. DISTRIBUTION			
Distributors (number handling product or no)		>50	>50
Direct (number of regional service locations or no)	X		1
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)	FRANCE	NEW LEXINGTON, OH	NEW LEXINGTON, OH
13. FOR SALES INFORMATION, CONTACT:	S. MATTHEWS 905/627-4035	800/945-8453	800/945-8453
FOR TECHNICAL INFORMATION, CONTACT:	S. MATTHEWS 905/627-4035	800/945-8453	800/945-8453
14. SEE APPENDIX IF CHECKED		X	X

NA=not applicable

Clay Tile, Part 1 — General Information

LUDOWICI ROOF TILE, INC. XL AMERICANA	LUDOWICI ROOF TILE, INC. ANTIQUE	LUDOWICI ROOF TILE, INC. BRITTANY	LUDOWICI ROOF TILE, INC. CALAIS	LUDOWICI ROOF TILE, INC. CLASSIC	LUDOWICI ROOF TILE, INC. XL CLASSIC
X	X	X	X	X	X
TREE BARK	HAND TREATED IRREGULAR	SANDED AND INDENTED	CRATERED/SANDED	SMOOTH	SMOOTH
NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
1 / 47	1 / 47	1 / 47	1 / 47	1 / 47	1 / 47
NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
NO / YES	NO / YES	NO / YES	NO / YES	NO / YES	NO / YES
YES / YES	YES / YES	YES / YES	YES / YES	YES / YES	YES / YES
YES	YES	YES	YES	YES	YES
16 X 10-3/4	12 X 7	12 X 7	15 X 7	14 X 9	16 X 10-7/8
13 X 10-1/8	5 X 7	5 X 7	6-1/2 X 7	11 X 8-1/4	13 X 10-1/8
109	412	412	317	158	109
750	1650	1900	1600	800	750
3:12	5:12	5:12	5:12	3:12	3:12
43-LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT
	3:12	3:12	3:12		
	WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT		
3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"
NO	NO	NO	NO	NO	NO
1996	1900	1900	1993	1948	1996
>10,000	>5,000	>50,000	<5,000	>500,000	>20,000
>50	>50	>50	>50	50	50
1	1	1	1	1	1
NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
X	X	X	X	X	X

Clay Tile, Part 1 — General Information

1. COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2. PRODUCT NAME	COFFEYVILLE ENGLISH	COLONIAL	8" CONSOSERA
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece			
Flat, One Piece		X	
Flat, Interlocking, One Piece	X		X
Flat Pan and Cover, Two Piece			
4A. TILE DESCRIPTION			
Texture (specify or NA)	SMOOTH	SANDED & INDENTED	
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available	1 / 47	1 / 47	1 / 47
Color Availability (regional/national)	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
Custom Colors/Blends Available (yes/no)	NO / YES	NO / YES	NO / YES
Custom Shapes Available (yes/no)	YES / YES	YES / YES	YES / YES
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	13-1/4 X 8-3/4	14-5/8 X 7-3/8	13 X 8-3/4
Minimum Headlap (inches)			
Exposed Size (inches x inches)	10-1/8 X 7-3/4	6-5/16 X 7-3/8	10-3/4 X 7-3/4
Pieces Per Roof Square	182	310	173
Weight Per Roof Square (pounds)	1380	1800	1000
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	3:12	5:12	3:12
Underlayment Recommended In Normal Application	43 LB. FELT	43 LB. FELT	43 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)		3:12	
Underlayment Recommended in Special Application		WINTERGUARD OR BUILT-UP ROOFING	
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing			
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood	3/4"/1"	3/4"/1"	3/4"/1"
Oriented Strand Board			
Waferboard			
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]	NO	NO	NO
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
9. YEAR PRODUCT FIRST SOLD	1920	1950	1880
10. NUMBER OF SQUARES INSTALLED	>50,000	>15,000	>10,000
11. DISTRIBUTION			
Distributors (number handling product or no)	50	50	50
Direct (number of regional service locations or no)	1	1	1
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
13. FOR SALES INFORMATION, CONTACT:			
FOR TECHNICAL INFORMATION, CONTACT:	800/945-8453	800/945-8453	800/945-8453
	800/945-8453	800/945-8453	800/945-8453
14. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Clay Tile, Part 1 — General Information

LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
CRUDE	18" CUBANA	DESIGNER	EARLY AMERICAN OLD TYPE	FRENCH	GEORGIAN
X	X				X
		X	X	X	
	SMOOTH/SANDED	MULTIPLE	TREE BARK/SANDED	DEEP FLUTED/SANDED	HAND ROUGHED
NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
1 / 47	1 / 47	1 / 47	1 / 47	1 / 47	1 / 47
NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
NO / YES	NO / YES	NO / YES	NO / YES	NO / YES	NO / YES
YES / YES	YES / YES	YES / YES	YES / YES	YES / YES	YES / YES
YES	YES	YES	YES	YES	YES
12 X 6	18-3/8 X 8-1/4 TAPERS TO 7	14 X 9	13-3/4 X 8-5/8	16-1/4 X 9	15 X 8
5 X 6	15-3/8 X 5-5/8	11 X 8-1/4	10-3/4 X 7-7/8	13-3/8 X 8-1/8	6-1/2 X 8
480	163	158	173	133	276
1850	1200	800	825	1025	1635
5:12	5:12	3:12	3:12	3:12	5:12
43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT
3:12	3:12				3:12
WINTERGUARD OR BUILT-UP ROOFING	WINTERGUARD OR BUR EQUIVALENT				WINTERGUARD OR BUR EQUIVALENT
3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"
NO	NO	NO	NO	NO	NO
1900	1900	1910	1900	1890	1900
>10,000	>5,000	>100,000	>250,000	>500,000	>20,000
50	>50	>50	>50	>50	>50
1	1	1	1	1	1
NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
X	X	X	X	X	X

Clay Tile, Part 1 — General Information

1. COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2. PRODUCT NAME	GREEK	IMPERIAL SLATE	JAMESTOWN
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece			
Flat, One Piece			
Flat, Interlocking, One Piece		X	X
Flat Pan and Cover, Two Piece	X		
4A. TILE DESCRIPTION			
Texture (specify or NA)	SMOOTH	NATURAL SLATE	HAND ROUGHED
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL	NATURAL / CERAMIC GLAZE
Number of Colors Available	1 / 28	4	1 / 47
Color Availability (regional/national)	NATIONAL / NATIONAL	NATIONAL	NATIONAL / NATIONAL
Custom Colors/Blends Available (yes/no)	NO / YES		NO / YES
Custom Shapes Available (yes/no)	YES / YES		YES / YES
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	2-3/4 X P 9-3/4 X C 6-1/2	10 3/16 X 16	11 X 8-3/4
Minimum Headlap (inches)			
Exposed Size (inches x inches)	10 X 6	9 1/2 X 13	8 X 8
Pieces Per Roof Square	240	117	225
Weight Per Roof Square (pounds)	1250	890	900
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	5:12	3:12	3:12
Underlayment Recommended In Normal Application	43 LB. FELT	43 LB. FELT	43 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)	<5:12		
Underlayment Recommended in Special Application	WINTERGUARD OR BUILT-UP ROOFING	WINTERGUARD OR BUR EQUIVALENT	
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing		X	
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood	3/4" / 1"	3/4" / 1"	3/4"/1"
Oriented Strand Board			
Waferboard			
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]	NO	NO	NO
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
9. YEAR PRODUCT FIRST SOLD	1900	2004	1910
10. NUMBER OF SQUARES INSTALLED	>5,000		>250,000
11. DISTRIBUTION			
Distributors (number handling product or no)	>50	>50	>50
Direct (number of regional service locations or no)	1		1
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
13. FOR SALES INFORMATION, CONTACT:			
800/945-8453	800/945-8453	800/945-8453	800/945-8453
FOR TECHNICAL INFORMATION, CONTACT:			
800/945-8453	800/945-8453	800/945-8453	800/945-8453
14. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Clay Tile, Part 1 — General Information

LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.			
LANAI	XL LANIA	LIGHTWEIGHT INTERLOCKING	14-1/4" MISSION	16" MISSION	16" TAPERED MISSION
			X	X	X
X	X	X			
SANDED	SANDED	SMOOTH OR SANDED	FINE MACHINE SCORED	FINE MACHINE SCORED	SMOOTH
NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE			
-- / 4	-- / 4	1 / 47	1 / 47	1 / 47	1 / 47
NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
NO / YES	NO / YES	NO / YES	NO / YES	NO / YES	NO / YES
YES / YES	YES / YES	YES / YES	YES / YES	YES / YES	YES / YES
YES	YES	YES	YES	YES	YES
14 X 9	16 X 10-3/4	13-3/4 X 8-5/8	14-1/4 X 8	16 X 8	16 X 7 TAPERS TO 4-3/4
11 X 8-1/4	13 X 10-1/8	10-3/4 X 7-7/8	11-1/4 X 5-3/4	13 X 5-3/4	13 X 5-1/4
158	109	173	225	192	212
800	750	825	1250	1190	1230
3:12	3:12	3:12	5:12	5:12	5:12
43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT
			3:12	3:12	3:12
			WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT
3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"
NO	NO	NO	NO	NO	NO
1948	1996	1900	1900	1900	1900
>500,000	>10,000	>100,000	>10,000	>500,000	>500,000
>50	>50	>50	>50	>50	>50
1	1	1	1	1	1
NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
X	X	X	X	X	X

Clay Tile, Part 1 — General Information

1. COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2. PRODUCT NAME	PALM BEACH TAPERED MISSION	NORMAN	PROVINCIAL
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece	X		
Flat, One Piece		X	X
Flat, Interlocking, One Piece			
Flat Pan and Cover, Two Piece			
4A. TILE DESCRIPTION			
Texture (specify or NA)	FINE MACHINE SCORED	WEATHERED/CRATERED	FINE MACHINE SCORED
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available	1 / 47	-- / 1	1 / 47
Color Availability (regional/national)	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
Custom Colors/Blends Available (yes/no)	NO / YES	NO / YES	NO / YES
Custom Shapes Available (yes/no)	YES / YES	YES / YES	YES / YES
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	18-3/8 X 8 TAPERS TO 6-7/16	15 X 7	15 X 7
Minimum Headlap (inches)			
Exposed Size (inches x inches)	15-3/8 X 5-3/4	6-1/2 X 7	6-1/2 X 7
Pieces Per Roof Square	163	317	317
Weight Per Roof Square (pounds)	1100	1600	1600
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	4:12	5:12	5:12
Underlayment Recommended In Normal Application	43 LB. FELT	43 LB. FELT	43 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)	3:12	3:12	3:12
Underlayment Recommended in Special Application	WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing			
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood	3/4"/1"	3/4"/1"	3/4"/1"
Oriented Strand Board			
Waferboard			
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]	NO	NO	NO
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
9. YEAR PRODUCT FIRST SOLD	1997	1920	1920
10. NUMBER OF SQUARES INSTALLED	>2,000	>100,000	>50,000
11. DISTRIBUTION			
Distributors (number handling product or no)	>50	>50	>50
Direct (number of regional service locations or no)	1	1	1
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
13. FOR SALES INFORMATION, CONTACT:			
800/945-8453	800/945-8453	800/945-8453	800/945-8453
FOR TECHNICAL INFORMATION, CONTACT:			
800/945-8453	800/945-8453	800/945-8453	800/945-8453
14. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Clay Tile, Part 1 — General Information

LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
ROMAN	18" SBM	CLOSED SHINGLE	FLAT SLAB SHINGLE	SPANISH	18" SPANISH
	X		X	X	X
X		X			
SMOOTH	FINE MACHINE SCORED	SMOOTH/SANDED	SMOOTH/SANDED	SMOOTH	SMOOTH/SANDED
NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
1 / 47	1 / 47	1 / 47	1 / 47	1 / 47	1 / 47
NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
NO / YES	NO / YES	NO / YES	NO / YES	NO / YES	NO / YES
YES / YES	YES / YES	YES / YES	YES / YES	YES / YES	YES / YES
YES	YES	YES	YES	YES	YES
12-3/4 X P 9-3/4 X C 6-1/2	18-3/8 X 8	11 X 8-3/4	12 X 6	13 1/4 X 9-3/4	18-3/8 X 9-3/4
10 X 6	15-3/8 X 5-3/4	8 X 8	5 X 6	10-1/4 X 8-1/4	15-3/8 X 8-1/4
240	163	225	480	171	114
1250	1165	1130	1300/1780	900	800
5:12	5:12	3:12	5:12	4:12	4:12
43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT	43 LB. FELT
3:12	3:12		3:12	3:12	3:12
WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT		WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT	WINTERGUARD OR BUR EQUIVALENT
3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"	3/4"/1"
NO	NO	NO	NO	NO	NO
1900	1996	1900	1900	1900	1996
>5,000	>10,000	>250,000	>5,000	>500,000	>10,000
>50	>50	>50	>50	>50	>50
1	1	1	1	1	1
NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453	800/945-8453
X	X	X	X	X	X

Clay Tile, Part 1 — General Information

1. COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2. PRODUCT NAME	TILESTONE	WILLIAMSBURG	XL WILLIAMSBURG
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece			
Flat, One Piece			
Flat, Interlocking, One Piece	X	X	X
Flat Pan and Cover, Two Piece			
4A. TILE DESCRIPTION			
Texture (specify or NA)	STONE	HAND ROUGHED	HAND ROUGHED
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available	1 / 47	1 / 47	1 / 47
Color Availability (regional/national)	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
Custom Colors/Blends Available (yes/no)	NO / YES	NO / YES	NO / YES
Custom Shapes Available (yes/no)	YES / YES	YES / YES	YES / YES
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	11 X 8-3/4	14 X 9	16 X 10-3/4
Minimum Headlap (inches)			
Exposed Size (inches x inches)	8 X 8	11 X 8-1/4	13 X 10-1/8
Pieces Per Roof Square	225	158	109
Weight Per Roof Square (pounds)	900	800	750
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	3:12	3:12	3:12
Underlayment Recommended In Normal Application	43 LB. FELT	43 LB. FELT	43 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)			
Underlayment Recommended in Special Application			
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing			
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood	3/4"/1"	3/4"/1"	3/4"/1"
Oriented Strand Board			
Waferboard			
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]	NO	NO	NO
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
9. YEAR PRODUCT FIRST SOLD	1900	1925	1996
10. NUMBER OF SQUARES INSTALLED	>10,000	>500,000	>10,000
11. DISTRIBUTION			
Distributors (number handling product or no)	>50	>50	>50
Direct (number of regional service locations or no)	1	1	1
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)	NEW LEXINGTON, OH	NEW LEXINGTON, OH	NEW LEXINGTON, OH
13. FOR SALES INFORMATION, CONTACT:			
800/945-8453	800/945-8453	800/945-8453	800/945-8453
FOR TECHNICAL INFORMATION, CONTACT:			
800/945-8453	800/945-8453	800/945-8453	800/945-8453
14. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Clay Tile, Part 1 — General Information

M.C.A. CLAY TILE	M.C.A. CLAY TILE	M.C.A. CLAY TILE	M.C.A. CLAY TILE	M.C.A. CLAY TILE	M.C.A. CLAY TILE
ONE-PIECE "S"	10" STRAIGHT BARREL MISSION	8" STRAIGHT BARREL MISSION	ORIENTAL	MF 108 INTERLOCKING FLAT TILE	IMPROVED - S
X	X	X			X
			X	X	
SMOOTH/PEBLE	SMOOTH / PEBBLE	SMOOTH / PEBBLE	SMOOTH	SMOOTH / PEBBLE	SMOOTH
NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
MANY / MANY	MANY / MANY	MANY / MANY	MANY	MANY	MANY
NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL	NATIONAL / NATIONAL
YES / YES	YES / YES	YES / YES	YES / YES	YES / YES	YES / YES
YES / YES	YES / YES	YES / YES	NO / NO	NO / NO	NO / NO
YES	YES	YES	YES	YES	YES
19 X 14	19 X 10	19 X 8	12 X 12	13-3/4 X 13-3/4	12-3/8 X 12-3/8
3	3	3	2.5	2.5	2
16 X 12	16 X O.C.	16 X 11	10-1/2 X 9-1/2	11-1/8 X 12	10-1/2 X 10-1/2
75	134	164	144	108	131
788	1020	1070	840	850	950
3:12	3:12	3:12	4:12	4:12	4:12
30 LB. FELT	30 LB. FELT	30 LB. FELT	30 LB. FELT	2 PLY 30 LB. FELT	30 LB. FELT
<3:12	<3:12	<3:12	4:12	<4:12	<4:12
2 PLY #30 LB FELT OR UPGRADE	2 PLY # 30 FELT OR UPGRADE	2 PLY #30 FELT OR UPGRADE	2 PLY #30 FELT OR UPGRADE	2 PLY #30 FELT OR UPGRADE	2 PLY #30 FELT OR UPGRADE
X	X	X	X	X	X
X	X	X	X	X	X
CONCRETE / METAL	CONCRETE / WOOD	CONCRETE / WOOD	CONCRETE / METAL	CONCRETE / METAL	CONCRETE / METAL
NO	NO	NO	ANY SLOPE	ANY SLOPE	ANY SLOPE
NO			X	X	X
			EACH TILE	EACH TILE	EACH TILE
			1	1	1
EACH TILE	EACH TILE	EACH TILE			
1	1	1			
1985	1985	1985	1911	1987	1932
>1,000,000	>1,000,000	>1,000,000	>1,000,000	>1,000,000	>1,000,000
725	725	725	725	725	725
NO	NO	NO	NO	NO	NO
CORONA, CA	CORONA, CA	CORONA, CA	AIKI, JAPAN	AWAJI, JAPAN	AICHI, JAPAN
800/736-6221	800/736-6221	800/736-6221	800/736-6221	800/736-6221	800/736-6221
800/736-6221	800/736-6221	800/736-6221	800/736-6221	800/736-6221	800/736-6221
			X	X	X

Clay Tile, Part 1 — General Information

1. COMPANY NAME	M.C.A. CLAY TILE	M.C.A. CLAY TILE	M.C.A. CLAY TILE
2. PRODUCT NAME	TURRET TILE	CORONA TAPERED MISSION	CLASSIC TAPERED MISSION
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece			
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece	X	X	X
Flat, One Piece			
Flat, Interlocking, One Piece			
Flat Pan and Cover, Two Piece			
4A. TILE DESCRIPTION			
Texture (specify or NA)	SMOOTH/PEBBLE	SMOOTH/PEBBLE	SMOOTH/PEBBLE
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available	MANY	MANY	MANY
Color Availability (regional/national)	NATIONAL / NATIONAL	NATIONAL/NATIONAL	NATIONAL/NATIONAL
Custom Colors/Blends Available (yes/no)	YES / YES	YES / YES	YES / YES
Custom Shapes Available (yes/no)	YES / YES	YES / YES	YES / YES
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	VARY	19 X 8.7	19 X 7-1/4
Minimum Headlap (inches)	3	3	3
Exposed Size (inches x inches)	VARY	18 X 12	16 X 10
Pieces Per Roof Square	VARY	130	180
Weight Per Roof Square (pounds)	VARY	1070	1040
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	3:12	3:12	3:12
Underlayment Recommended In Normal Application	ICE & SHEET WITH 30# FELT	30 LB. FELT	30 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)	<3:12	<3:12	<3:12
Underlayment Recommended in Special Application	ICE & SHEET WITH 30# FELT	2 PLY #30 FELT OR UPGRADE	2 PLY #30 FELT OR UPGRADE
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing	X	X	X
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood	X	X	X
Oriented Strand Board			
Waferboard			
Other (specify)		CONCRETE / METAL	CONCRETE / METAL
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]		NO	NO
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows	EACH TILE	EACH TILE	EACH TILE
each tile	1	1	1
9. YEAR PRODUCT FIRST SOLD	1987	1987	1987
10. NUMBER OF SQUARES INSTALLED	>3,000	>1,000,000	>100,000
11. DISTRIBUTION			
Distributors (number handling product or no)	725	725	725
Direct (number of regional service locations or no)	NO	NO	NO
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)	CORONA, CA	CORONA, CA	CORONA, CA
13. FOR SALES INFORMATION, CONTACT:	800/736-6221	800/736-6221	800/736-6221
FOR TECHNICAL INFORMATION, CONTACT:	800/736-6221	800/736-6221	800/736-6221
14. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Clay Tile, Part 1 — General Information

M.C.A. CLAY TILE	SANDTOFT ROOF TILES				
ROMAN TILE	COUNTY PAN TILE	EUROPA	FLEMISH	GOXHILL HANDMADE	20/20
	X	X	X		
				X	
X					X
SMOOTH/PEBBLE	SMOOTH	SMOOTH	SMOOTH	RUSTIC	SMOOTH
NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
MANY	4 / --	6 / --	6 / --	3 / --	6 / --
NATIONAL/NATIONAL	NATIONAL / --				
YES / YES	NO / --				
YES / YES	NO / --				
YES	YES	YES	YES	YES	YES
19 X 12	14-3/4 X 10-3/4	15 X 10-1/2	15 X 10-1/2	10-1/2 X 6-1/2	14-1/2 X 8-3/4
3					
16 X 16	12 X 9	12-1/2 X 8-1/2	12-1/2 X 8-1/2	4-1/4 X 6-1/2	10-1/2 X 7-1/4
114	135	135	135	550	186
1040	850	850	850	1400	900
3:12	4:12	4:12	4:12	8:12	4:12
30 LB. FELT	30 LB. FELT	30 LB. FELT	30 LB. FELT	40 LB. FELT	30 LB. FELT
<3:12					N/A
2 PLY #30 FELT OR UPGRADE		NA	NA	NA	
X					
X					
CONCRETE / METAL					
NO					
EACH TILE					
1					
1987	1981	1996	1996	1981	1998
>3,000	450,000	N/A	N/A	26,000	N/A
X	--	--	--	--	--
NO	X	X	--	X	X
CORONA, CA					
800/736-6221	S. MATTHEWS 905/627-4035				
800/736-6221	S. MATTHEWS 905/627-4035				
X					

Clay Tile, Part 1 — General Information

1. COMPANY NAME	SANTA FE TILE CORP.	SANTA FE TILE CORP.	SANTA FE TILE CORP.
2. PRODUCT NAME	SPANISH "S"	ROYAL "R"	MISSION
3. TILE TYPE			
"S" (Spanish) Mission Barrel, One Piece	X	X	
Straight Barrel Mission, Two Piece			
Tapered Mission, Two Piece			X
Flat, One Piece			
Flat, Interlocking, One Piece			
Flat Pan and Cover, Two Piece			
4A. TILE DESCRIPTION			
Texture (specify or NA)	COLOR THROUGH	MATTE / SHINY	CERAMIC
4B. FINISHES	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE	NATURAL / CERAMIC GLAZE
Number of Colors Available	29 / --	29 / --	-- / 29
Color Availability (regional/national)			
Custom Colors/Blends Available (yes/no)	YES / --	NO / --	-- / NO
Custom Shapes Available (yes/no)	YES / --	NO / --	-- / NO
5. ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	NO	YES	YES
6. DIMENSIONS AND COVERAGE			
Tile Dimensions (inches x inches)	18 X 11	18 X 11	18 x 8 and 18 x 7
Minimum Headlap (inches)	3	3	3
Exposed Size (inches x inches)	15 X 10	15 X 10	15 X 10
Pieces Per Roof Square	96	96	96
Weight Per Roof Square (pounds)	663	663	663
7. SLOPE/UNDERLAYMENT RECOMMENDATIONS			
Minimum Slope Recommended For Normal Application (inches per foot)	2:12	2:12	2:12
Underlayment Recommended In Normal Application	30 LB. FELT 90 LB. FELT	30 LB. FELT 90 LB. FELT	30 LB. FELT 90 LB. FELT
Minimum Slope Recommended For Special Applications (inches per foot or NA)	NA	NA	NA
Underlayment Recommended in Special Application	NA	NA	NA
8. RECOMMENDED DECKS AND FASTENING REQUIREMENTS:			
8A. DECK TYPES			
Solid Sheathing	X	X	X
Spaced Sheathing			
8B. DECK MATERIAL			
Plywood/Wood			
Oriented Strand Board			
Waferboard			
Other (specify)			
8C. FASTENING REQUIREMENTS			
1. Battens Required [at given slope(s), no, or NA]			
a. Solid Sheathing			
b. Spaced Sheathing			
2. Nailing Requirements, Field Tiles			
a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
not required			
each tile, alternate rows			
each tile			
9. YEAR PRODUCT FIRST SOLD	1993	1993	1993
10. NUMBER OF SQUARES INSTALLED	362000	2974	11062
11. DISTRIBUTION			
Distributors (number handling product or no)	70	70	70
Direct (number of regional service locations or no)	--	--	--
12. MANUFACTURER'S PLANT LOCATION(S) (City, State)	BOGOTA, COLUMBIA	BOGOTA, COLUMBIA	BOGOTA, COLUMBIA
13. FOR SALES INFORMATION, CONTACT:	BETH GROSSMAN 305/885-9002	BETH GROSSMAN 305/885-9002	BETH GROSSMAN 305/885-9002
FOR TECHNICAL INFORMATION, CONTACT:	ARTURO PODADA	ARTURO PODADA	ARTURO PODADA
14. SEE APPENDIX IF CHECKED			

NA=not applicable

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Clay Tile, Part 2 — Technical Data

1.	COMPANY NAME	ALTUSA / CLAY FOREVER	ALTUSA / CLAY FOREVER
2.	PRODUCT NAME	ALTUSA S	BARREL
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile	X	X
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)		
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		
	Wind resistance (indicate maximum wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)		
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)	9914	
	National Evaluation Service, Inc. (report number)		9914
	Other Agencies (agency & report identification number)	MIAMI-DADE, BROWARD COUNTY FLORIDA 00-0822-07 CHAPTER 34	MIAMI-DADE- BROWARD COUNTY FLORIDA 00-0822-07 CHAPTER 34
6.	SEE APPENDIX IF CHECKED		

NA=not applicable

Clay Tile, Part 2 — Technical Data

DANIEL PLATT	DANIEL PLATT	GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN
TUNSTALL	HANDCRAFTED	PLACER INTERLOCKING	COTSWOLD	BERKELEY PAN & CORDOVA COVER	ITALIAN PAN & CORDOVA COVER	ITALIAN PAN & BERKELEY COVER
				X	X	
X	X	X	X			X
X	X	X	X			X
CLASS A	CLASS A	CLASS A	CLASS A	CLASS A	CLASS A	CLASS A
120	120					
CLASS 1	CLASS 1					
		4642	4642	4642	4642	4642
		LOS ANGELES REPORT 24997	LOS ANGELES REPORT 24997	LOS ANGELES REPORT 24997	LOS ANGELES REPORT 24997	LOS ANGELES REPORT 24997

**Clay Tile, Part 2 — Technical Data**

1.	COMPANY NAME	GLADDING MCBEAN	GLADDING MCBEAN
2.	PRODUCT NAME	LINCOLN INTERLOCKING	SPANISH S-TILE
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile		X
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)	X	
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS A	CLASS A
	Wind resistance (indicate maximum wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	4642	4642
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	LOS ANGELES REPORT 24997	LOS ANGELES REPORT 24997
6.	SEE APPENDIX IF CHECKED		

NA=not applicable

Clay Tile, Part 2 — Technical Data

GLADDING MCBEAN	GLADDING MCBEAN	GLADDING MCBEAN	IMERY TOITURE	IMERY TOITURE	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
LINCOLN S-TILE	CORDOVA TAPERED CUSTOM	CORDOVA	HPO	ST. FOY	CELADON CERAMIC SLATE	AMERICANA
X	X	X				
			X			
				X	X	X
X	X	X	X	X	X	X
CLASS A	CLASS A	CLASS A				
4642	4642	4642			ER 4872	ER 4872
LOS ANGELES REPORT 24997	LOS ANGELES REPORT 24997	LOS ANGELES REPORT 24997			METRO-DADE COUNTY, FL 00-0426.02	METRO-DADE COUNTY, FL 00-0426.01

Clay Tile, Part 2 — Technical Data

1.	COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2.	PRODUCT NAME	XL AMERICANA	ANTIQUE
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile		
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)	X	X
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		
	Wind resistance (indicate maximum wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	ER 4872	ER 4872
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	METRO-DADE COUNTY, FL 00-0426.02	METRO-DADE COUNTY, FL 00-0426.01
6.	SEE APPENDIX IF CHECKED		

NA=not applicable

Clay Tile, Part 2 — Technical Data

LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.			
BRITTANY	CALAIS	CLASSIC	XL CLASSIC	COFFEYVILLE ENGLISH	COLONIAL	CONOSERA
X	X	X	X	X	X	X
X	X	X	X	X	X	X
ER 4872	ER 4872	ER 4872	ER 4872	ER 4872	ER 4872	ER 4872
METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.02		METRO-DADE COUNTY, FL 00-0426.01	

Clay Tile, Part 2 — Technical Data

1.	COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2.	PRODUCT NAME	CRUDE	18" CUBANA
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile		X
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)	X	
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		
	Wind resistance (indicate maximum wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	ER 4872	ER 4872
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.04
6.	SEE APPENDIX IF CHECKED		

NA=not applicable



Clay Tile, Part 2 — Technical Data

1.	COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2.	PRODUCT NAME	LANAI	XL LANAI
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile		
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)	X	X
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		
	Wind resistance (indicate maximum wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	ER 4872	ER 4872
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.02
6.	SEE APPENDIX IF CHECKED		

NA=not applicable

Clay Tile, Part 2 — Technical Data

LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
LIGHTWEIGHT INTERLOCKING	STRAIGHT BARREL MISSION 14-1/4	STRAIGHT BARREL MISSION 18-3/8	16" TAPERED MISSION	PALM BEACH TAPERED MISSION	NORMAN	PROVINCIAL
	X	X	X	X		
X	X				X	X
X	X	X	X	X	X	X
ER 4872	ER 4872	ER 4872	ER 4872	ER 4872	ER 4872	ER 4872
	METRO-DADE COUNTY, FL 00-0426.04	METRO-DADE COUNTY, FL 00-0426.04	METRO-DADE COUNTY, FL 00-0426.04	METRO-DADE COUNTY, FL 00-0426.04	METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.01

Clay Tile, Part 2 — Technical Data

1.	COMPANY NAME	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
2.	PRODUCT NAME	ROMAN	16" STRAIGHT BARREL MISSION
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile		X
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)	X	
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		
	Wind resistance (indicate maximum wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	ER 4872	ER 4872
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)		METRO-DADE COUNTY, FL 00-0426.04
6.	SEE APPENDIX IF CHECKED		

NA=not applicable

Clay Tile, Part 2 — Technical Data

LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.	LUDOWICI ROOF TILE, INC.
CLOSED SHINGLE	FLAT SLAB SHINGLE	13-1/4" SPANISH	18-3/8" SPANISH	TILESTONE	WILLIAMSBURG	XL WILLIAMSBURG
		X	X			
X	X			X	X	X
X	X	X	X	X	X	X
ER 4872	ER 4872	ER 4872	ER 4872	ER 4872	ER 4872	ER 4872
	METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.05	METRO-DADE COUNTY, FL 00-0426.05		METRO-DADE COUNTY, FL 00-0426.01	METRO-DADE COUNTY, FL 00-0426.02

Clay Tile, Part 2 — Technical Data

1.	COMPANY NAME	MCA CLAY TILE	MCA CLAY TILE
2.	PRODUCT NAME	ONE-PIECE "S"	10" WIDE STRAIGHT BARREL (MISSION)
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile	X	X
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)		
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS A	CLASS A
	Wind resistance (indicate maximum wind speed allowable)	155	155
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	N/A	N/A
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	4202	4202
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	ICC-ES LEGACY REPORT ER-4202  CITY OF LOS ANGELES 24576  METRO-DADE COUNTY, FLORIDA 99-0212.07    FLORIDA BLDG CODE APPROVAL FL1109	ICC-ES LEGACY REPORT ER-4202  CITY OF LOS ANGELES 24576  METRO-DADE COUNTY, FLORIDA 99-0212.07    FLORIDA BLDG CODE APPROVAL FL1109
6.	SEE APPENDIX IF CHECKED	X	X

NA=not applicable

Clay Tile, Part 2 — Technical Data

MCA CLAY TILE	MCA CLAY TILE	MCA CLAY TILE				
8" WIDE STRAIGHT MISSION	CORONA TAPERED MISSION	CLASSIC TAPERED MISSION	ROMAN TILE	MF 108 INTERLOCKING FLAT TILE	IMPROVED-S	ORIENTAL TILE
X	X	X	X		X	
						X
				X		
X	X	X	X	X	X	X
CLASS A	CLASS A	CLASS A				
155	155	155	155	155	155	155
N/A	N/A	N/A	N/A	N/A	N/A	N/A
4202	4202	4202	4202	4202	4202	4202
ICC-ES LEGACY REPORT ER-4202	ICC-ES LEGACY REPORT ER-4202	ICC-ES LEGACY REPORT ER-4202				
CITY OF LOS ANGELES 24576	CITY OF LOS ANGELES 24576	CITY OF LOS ANGELES 24576				
X	X	X	X	X	X	X

Clay Tile, Part 2 — Technical Data

1.	COMPANY NAME	MCA CLAY TILE	SANDTOFT ROOF TILES
2.	PRODUCT NAME	TURRET TILE	COUNTRY PAN TILE
3.	COMPLIES WITH:		
3A.	ASTM C 1167-96, <i>Standard Specification for Clay Roof Tiles</i> (indicate type and grade, or NA)		
	Type I -- High profile tile	X	X
	Type II -- Low profile tile		
	Type III -- Other tile (e.g., flat)		
	Grade 1 -- Severe frost action	X	X
	Grade 2 -- Moderate frost action		
	Grade 3 -- Negligible frost action		
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS A	CLASS A
	Wind resistance (indicate maximum wind speed allowable)	155	120
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	N/A	CLASS 1
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	4202	
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	ICC-ES LEGACY REPORT ER-4202  CITY OF LOS ANGELES 24576  FLORIDA BLDG. CODE APPROVAL FL1109	
6.	SEE APPENDIX IF CHECKED	X	

NA=not applicable

Clay Tile, Part 2 — Technical Data

SANDTOFT ROOF TILES	SANDTOFT ROOF TILES	SANDTOFT ROOF TILES	SANDTOFT ROOF TILES	SANTA FE TILE CORP.	SANTA FE TILE CORP.	SANTA FE TILE CORP.
EUROPA	FLEMISH	GOXHILL HANDMADE	20/20	SPANISH "S"	ROYAL "R"	MISSION
X	X			X		X
					X	
		X	X			
X	X	X	X		X	X
				X		
CLASS A	CLASS A	CLASS A	CLASS A			
120	120	120	120			
CLASS 1	CLASS 1	CLASS 1	CLASS 1			
				MIAMI -DADE 04-0420.03	MIAMI-DADE 03-0114-05	MIAMI-DADE 03-0114-06
				FLORIDA BUILDING CODE FL 2019.3	FLORIDA BUIDING CODE FL 2019.2	FLORIDA BUILDING CODE FL 2019.1

Concrete Tile, Part 1 — General Information

1.	COMPANY NAME	COLUMBIA CONCRETE PRODUCTS LTD.	COLUMBIA CONCRETE PRODCUTS LTD.	ENTEGRA SALES, INC.
2.	PRODUCT NAME	DOUBLE ROMAN	LOW BARREL	ESTATE
3.	TILE TYPE			
	"S" (SPANISH) MISSION BARREL			
	DOUBLE "S"			X
	FLAT, SHINGLE- (SLATE-) SHAPE	X	X	
	FLAT, SHAKE-SHAPE	X	X	
	FLAT, RIBBED			
4.	TILE DESCRIPTION			
	Textured (yes or no )	YES	YES	YES
	Color Production (surface or through-color)	THROUGH-COLOR	THROUGH-COLOR	BOTH
	Number Of Colors Available	8	8	300+
	Color Availability (regional/national)	NATIONAL	NATIONAL	REGIONAL
	Custom Colors/Blens AvailableE (yes/no)	YES	YES	YES
5.	ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)			YES
6.	DIMENSIONS AND COVERAGE			
	Tile Dimensions (inches x inches)	17 X 12-3/8	17 X 12 3/8	13 X 16 1/2
	Minimum Headlap (inches)	3	3	2
	Exposure (inches)	14	14	14 1/2 X 12
	Pieces Per Roof Square	89	94	87
	Weight Per Roof Square (pounds)	1050	950	900
7.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (inches per foot)	4:12	4:12	2:12
	Underlayment Recommended In Normal Application	SPACED SHEATHING	SPACED SHEATHING	#30-90 FELT
	Minimum Slope Recommended For Speical Application (inches per foot)	4:12	4:12	2:12
	Underlayment Recommended In Special Application	PEEL & STICK	PEEL & STICK	
8A.	RECOMMENDED DECKS AND FASTENING REQUIREMENTS			
	DECK TYPES			
	Solid Sheathing	X	X	X
	Spaced Sheathing	X	X	
8B.	DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented Strand Board	X	X	
	Waferboard			
	Other (specify)			
8C.	FASTENING REQUIREMENTS			
	1. Battens Required [at given slope(s), no, or NA]	ALL SLOPES	ALL SLOPES	
	a. Solid Sheathing	X	X	
	b. Spaced Sheathing	X	X	
	2. Nailing Requirements, Field Tiles	CODES & PITCH COUNT	CODES & PITCH COUNT	
	a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
	not required			
	each tile, alternate rows			
	each tile			X
	b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]	N/A	N/A	
	not required			
	each tile, alternate rows			
	each tile			
9.	YEAR PRODUCT FIRST SOLD	1972	1972	1986
10.	NUMBER OF SQUARES INSTALLED	>100,000	>100,000	
11.	DISTRIBUTION			
	Distributors (number handling product or no)			
	Direct (number of regional service locations or no)	2	2	
12.	MANUFACTURER'S PLANT LOCATION(S) (City, State)	SURREY, BC	SURREY, BC	INDIANTOWN, FL POMPANO, FL
13A.	FOR SALES INFORMATION, CONTACT	A. DOLAN 604/596-3388	A. DOLAN 604/596-3388	F. GALLIGAN 561/223-0005
13B.	FOR TECHNICAL INFORMATION, CONTACT	A. DOLAN 604/596-3388	A. DOLAN 604/596-3388	G. DESIDERIO 561/223-0005
14.	SEE APPENDIX IF CHECKED			

NA=not applicable

Concrete Tile, Part 1 — General Information

ENTEGRSA SALES, INC.	UNICRETE ROOF TILE	UNICRETE ROOF TILE	UNICRETE ROOF TILE	UNICRETE ROOF TILE	VANDE HEY-RALEIGH ARCHITECTURAL TILE
SKANDIA	ESTATE TILE	ESTATE TILE LIGHTWEIGHT	SLATE TILE	SPLIT-SHAKE TILE	HIGH BARREL SPANISH
					X
	X	X			
X			X		
X				X	
X					
YES	NO	NO	YES	YES	YES
BOTH	THROUGH-COLOR	THROUGH-COLOR	THROUGH-COLOR	THROUGH-COLOR	THROUGH-COLOR
300+	40	5	40	40	60
REGIONAL	NATIONAL	NATIONAL	NATIONAL	NATIONAL	60
YES	YES		YES	YES	YES
YES	YES	YES	YES	YES	YES
13 X 16 1/2	16 1/2 X 13	17 1/4 X 13			
2	3	3	3	3	3
14 1/2 X 12	13 1/2	13 1/2	13 1/2	13 1/2	14 X 12
87	90	90	90	93	86
900	850	685	1050	1050	1,000
2:12	4:12	4:12	4:12	4:12	4:12
#30-90 FELT	#30 FELT	#30 FELT	#30 FELT	#30 FELT	#43 FELT
2:12	2:12	2:12	2:12	2:12	3:12
	MEMBRANE	MEMBRANE	MEMBRANE	MEMBRANE	EPDM
X	X	X	X	X	X
	X	X	X	X	
X	X	X	X	X	X
	X	X	X	X	
	X	X	X	X	
	LOCAL STANDARDS VARY	LOCAL STANDARDS VARY	LOCAL STANDARDS VARY	LOCAL STANDARDS VARY	BATTENS X
	LOCAL STANDARDS VARY	LOCAL STANDARDS VARY	LOCAL STANDARDS VARY		
X					X
	LOCAL STANDARDS VARY	LOCAL STANDARDS VARY	LOCAL STANDARDS VARY		
					X
1986	1978	2001	1984	1994	1982
					>50
					>50
INDIANTOWN, FL	CALGARY, ALBERTA CANADA	CALGARY, ALBERTA CANADA	CALGARY, ALBERTA CANADA	CALGARY, ALBERTA CANADA	LITTLE CHUTE, WI
F. GALLIGAN 561/223-0005	SALES DEPT. 403/279-8321	SALES DEPT. 403/279-8321	SALES DEPT. 403/279-8321	SALES DEPT. 403/279-8321	DON VANDE HEY 800/236-8453
G. DESIDERIO 561/223-0005	TECHNICAL DEPT. 403/279-8321	TECHNICAL DEPT. 403/279-8321	TECHNICAL DEPT. 403/279-8321	TECHNICAL DEPT. 403/279-8321	BOB VANDE HEY 800/236-8453

Concrete Tile, Part 1 — General Information

1.	COMPANY NAME	VANDE HEY-RALEIGH ARCHITECTURAL TILE	VANDE HEY-RALEIGH ARCHITECTURAL TILE	VANDE HEY-RALEIGH ARCHITECTURAL TILE
2.	PRODUCT NAME	FLAT TILE	DOUBLE ROMAN LIGHTWEIGHT	ENGLISH SHINGLE
3.	TILE TYPE			
	"S" (SPANISH) MISSION BARREL			
	DOUBLE "S"		X	
	FLAT, SHINGLE- (SLATE-) SHAPE	X		X
	FLAT, SHAKE-SHAPE	X		
	FLAT, RIBBED	X		
4.	TILE DESCRIPTION			
	Textured (yes or no )	YES	NO	YES
	Color Production (surface or through-color)	THROUGH-COLOR	THROUGH-COLOR	THROUGH-COLOR
	Number Of Colors Available	60	5	60
	Color Availability (regional/national)	60	5	60
	Custom Colors/Blens AvailableE (yes/no)	YES	NO	YES
5.	ACCESSORY TILES AVAILABLE [e.g., ridge, hip, starter] (yes/no)	YES	YES	YES
6.	DIMENSIONS AND COVERAGE			
	Tile Dimensions (inches x inches)	15 3/8 X 10 1/4	16 1/2 X 13	15 X 7 1/2
	Minimum Headlap (inches)	3	3	9
	Exposure (inches)	12 X 8	14 X 12	6 X 7 1/2
	Pieces Per Roof Square	135	92	315
	Weight Per Roof Square (pounds)	1,100	325	1,800
7.	SLOPE/UNDERLAYMENT RECOMMENDATIONS			
	Minimum Slope Recommended For Normal Application (inches per foot)	4:12	4:12	6:12
	Underlayment Recommended In Normal Application	#43 FELT	#43 FELT	#43 FELT
	Minimum Slope Recommended For Speical Application (inches per foot)	3:12	3:12	3:12
	Underlayment Recommended In Special Application	EPDM	EPDM	EPDM
8A.	RECOMMENDED DECKS AND FASTENING REQUIREMENTS			
	DECK TYPES			
	Solid Sheathing	X	X	X
	Spaced Sheathing			
8B.	DECK MATERIAL			
	Plywood/Wood	X	X	X
	Oriented Strand Board			
	Waferboard			
	Other (specify)			
8C.	FASTENING REQUIREMENTS			
	1. Battens Required [at given slope(s), no, or NA]	BATTENS	BATTENS	NO
	a. Solid Sheathing	X	X	X
	b. Spaced Sheathing			
	2. Nailing Requirements, Field Tiles			
	a. Solid/Spaced Sheathing With Battens [slope(s) or NA]			
	not required			
	each tile, alternate rows	X		
	each tile		X	X
	b. Solid/Spaced Sheathing Without Battens [slope(s) or NA]			
	not required			
	each tile, alternate rows			
	each tile	X	X	X
9.	YEAR PRODUCT FIRST SOLD	1972	2000	1982
10.	NUMBER OF SQUARES INSTALLED			
11.	DISTRIBUTION			
	Distributors (number handling product or no)	>50	>50	>50
	Direct (number of regional service locations or no)	>50	>50	>50
12.	MANUFACTURER'S PLANT LOCATION(S) (City, State)	LITTLE CHUTE, WI	LITTLE CHUTE, WI	LITTLE CHUTE, WI
13A.	FOR SALES INFORMATION, CONTACT	DON VANDE HEY 800/236-8453	DON VANDE HEY 800/236-8453	DON VANDE HEY 800/236-8453
13B.	FOR TECHNICAL INFORMATION, CONTACT	BOB VANDE HEY 800/236-8453	BOB VANDE HEY 800/236-8453	BOB VANDE HEY 800/236-8453
14.	SEE APPENDIX IF CHECKED			

NA=not applicable

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**Concrete Tile, Part 2 — Technical Data**

1.	COMPANY NAME	COLUMBIA ROOF TILE	COLUMBIA ROOF TILE
2.	PRODUCT NAME	DOUBLE ROMAN	LOW BARREL
3.	COMPLIES WITH:		
3A.	ASTM C 1492-01, <i>Standard Specification for Concrete Roof Tile</i> (indicate grade or NA)		
	Type I -- High profile tile		
	Type II -- Medium profile tile	X	X
	Type III -- Low profile tile	X	X
	Type IV -- Accessory tile	X	X
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)		
	Wind resistance (indicate maximum wind speed allowable)		
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)		
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	PENDING	PENDING
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	CSA A220.M91	CSA A220.M91
6.	SEE APPENDIX IF CHECKED		

NA=not applicable

Concrete Tile, Part 2 — Technical Data

ENTEGRASALES, INC.	ENTEGRASALES, INC.	UNICRETEROOF TILE	UNICRETEROOF TILE	UNICRETEROOF TILE	UNICRETEROOF TILE	VANDE HEY-RALEIGHMANUFACTURING
ESTATE	SKANDIA	ESTATE TILE	LIGHTWEIGHTESTATE TILE	SLATE	SPLIT SHAKE	HIGHBARRELSPANISH
		X	X	X	X	X
X		X	X	X	X	X
	X	X	X	X	X	X
		X	X	X	X	X
		CLASS A				
140	140	125	125	125	125	125
						CLASS 1
						4907
9933	9933					
		CSA A.220.1.M91 CCMC 10091-L	CSA A.220.1.M91 CCMC 10091-L	CSA A.220.1.M91 CCMC 10091-L	CSA A.220.1.M91 CCMC 10091-L	METROPOLITAN DADE COUNTY, FLORIDA 97-0506.03

Concrete Tile, Part 2 — Technical Data

1.	COMPANY NAME	VANDE HEY- RALEIGH MANUFACTURING	VANDE HEY- RALEIGH MANUFACTURING
2.	PRODUCT NAME	FLAT TILE	DOUBLE ROMAN LIGHTWEIGHT
3.	COMPLIES WITH:		
3A.	ASTM C 1492-01, <i>Standard Specification for Concrete Roof Tile</i> (indicate grade or NA)		
	Type I -- High profile tile	X	X
	Type II -- Medium profile tile	X	X
	Type III -- Low profile tile	X	X
	Type IV -- Accessory tile	X	X
4.	FIRE/WIND/IMPACT RESISTANCE:		
	Fire resistance, UL 790 or ASTM E 108 (Class A, B, or C)	CLASS A	CLASS A
	Wind resistance (indicate maximum wind speed allowable)	125	125
	Impact resistance, UL 2218 (Class 1, 2, 3, or 4)	CLASS 1	CLASS 1
5.	CODE ACCEPTANCE:		
	BOCA Evaluation Service, Inc. (report number)		
	ICBO Evaluation Service, Inc. (report number)	4907	4907
	International Evaluation Service (report number)		
	SBCCI Public Safety Testing & Evaluation Service (report number)		
	National Evaluation Service, Inc. (report number)		
	Other Agencies (agency & report identification number)	METROPOLITAN DADE COUNTY, FLORIDA 97-0506.03	METROPOLITAN DADE COUNTY, FLORIDA 97-0506.03
6.	SEE APPENDIX IF CHECKED		

NA=not applicable

Concrete Tile, Part 2 — Technical Data

VANDE HEY- RALEIGH MANUFACTURING
ENGLISH SHINGLE
X
X
X
X
CLASS A
125
CLASS 1
4907
METROPOLITAN DADE COUNTY, FL 97-0506.03

## Manufacturers Appendix, Clay and Concrete Tile

### Altusa/Clay Forever

Ring shank nails, hurricane spikes or stainless steel screws are recommended for plywood/wood, oriented strand board or waferboard deck material.

### Daniel Platt Ltd.

A range of English-style shingle tiles, Triton smooth machine finished or handcrafted, which are irregular and distressed, are available.

A full range of fittings are available, such as valley tiles and Arris style hip tiles. These tiles can be laid directly to the deck or on a double-batten system. Custom sizes and finishes are available.

### Imery Toiture

A range of pressed clay roofing tiles with deep side and headlocks for maximum weather protection are available. Tiles can be laid directly to the deck or on a double-batten system. The St. Foy machine-made shingle tile offers a weathered and aged appearance.

### Ludowici Roof Tile, Inc.

A large range of standard tiles and historical patterns are available in a variety of surface finishes and in 47 colors. Ludowici also has custom color matching capabilities for all tiles and trim items produced. All tile patterns and styles are available with trim fittings for nearly every roof configuration.

All tiles are impervious to freeze-thaw cycles, heat, moisture, efflorescence, and meet or exceed ASTM C 1167-96, Grade 1, and most have Metro-Dade County and ICBO approvals. The tiles have an average of 1 percent or less water absorption.

Ludowici's design department specializes in conical roof application developed specifically per each individual roof.

### M.C.A. Clay Roof Tile

M.C.A. Clay Roof Tile produces Energy Star compliant products and also can help you achieve credits with Leadership in Energy &

Environmental Design (LEED) in the Green Building Rating System.

All tiles manufactured by M.C.A. have a Grade 1, ASTM C1167 rating. They are designed to stand up to the harshest elements including earthquakes, heavy rain, strong winds, fire and freeze/thaw conditions. All tiles are "Class A", ASTM E108 (UL790) approved. Other certifications include ICC-ES Legacy Report ER-4202, City of Los Angeles Approved Research Report No. 24576, Metro-Dade County Florida Acceptance No. 99-0212-07 and Florida Building Code Approval FL 1109.

M.C.A. tiles come in a wide variety of flashed, glazed, custom and blended colors. The Oriental Tile is a low-profile tile and the Turret Tile is a custom-sized barrel tile that graduates in size to fit any size and pitch of turret. The manufacturer designs each system according to the individual turret roof or fan-shaped application.

### Sandtoft Roof Tiles Ltd.

England's largest independent clay tile manufacturer. New profiles are available, all pressed with side and headlocks for maximum weather protection and fast installation.

The Goxhill handmade shingle tile replicates the Tudor/Elizabethan look.

All tiles can be laid directly to the deck, but a double batten system is always recommended.

2005-2006  
Steep-slope  
Roofing  
Materials  
Guide

Metal Panels



## Information About Section 4: Metal Panels

### General Information

Section 4: Metal Panels in NRCA's *2005-2006 Steep-slope Roofing Materials Guide* is a comprehensive listing of metal panel products commonly used in steep-slope roofing.

Metal panel roof systems are traditionally divided into two categories: structural metal panels and architectural metal panels. Generally, structural metal panel roof systems are installed on low-slope roofs, that is, roofs with slopes less than 3:12 (14 degrees). Architectural metal panel roof systems are generally installed on steep-slope roof systems, that is, roofs with slopes of 3:12 (14 degrees) or greater. Structural metal panel roof systems can support structural loads without being applied over separate roof decks. Architectural metal panel roof systems are applied over structural roof decks that resist structural loads.

Information about metal panel roof systems, including both structural metal panels and architectural metal panels used in steep-slope roof assemblies, is contained in the Guide.

### Specific Information Included in the Guide

Specific listing information for metal panel products is as follows:

1. Company name
2. Product name
3. Configuration
4. System recommendations
5. Panel configuration
6. Individual component configuration
7. Manufacturer/product data
8. ASTM Standards/FM/UL

Additional information regarding metal panel roof systems is provided in *The NRCA Roofing and Waterproofing Manual, Fifth Edition*.

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## Index to Metal Panels

Metal Panels	
<b>ATAS INTERNATIONAL INC.</b> 6612 Snowdrift Road Allentown, PA 18106 610/395-8445 FAX: 610/395-9342 E-mail: info@atas.com Web:	178
	202
<b>BERRIDGE MANUFACTURING CO.</b> 1720 Maury Street Houston, TX 77026 713/223-4971 FAX: 713/236-9422 E-mail: sales@berridge.com Web:	182
	202
<b>CLASSIC PRODUCTS, INC.</b> P.O. Box 701 Piqua, OH 45356 800/543-8938 FAX: 937/773-9261 E-mail: info@classicroof.com Web: www.classicroof.com	185
<b>DECRA ROOFING SYSTEMS</b> 1230 Railroad Street Corona, CA 92882 951/272-8180 FAX: 951/272-4476 E-mail: marketing@decra.com Web: www.decra.com	187
	202
<b>INTEGRIS METALS</b> 455 85th Avenue NW Minneapolis, MN 55433 763/717-9000 FAX: 763/717-7184 E-mail: Web:	188

Metal Panels	
<b>MBCI</b> P.O. Box 17217 Houston, TX 77238 281/445-8555 FAX: 281/445-1791 E-mail: Web: www.mbcicom	190
<b>MCELROY METAL CO.</b> 1500 Hamilton Road Bossier City, LA 71111 318/747-8000 FAX: 318/747-8029 E-mail: marketing@mcelroymetal.com Web: www.mcelroymetal.com	191
<b>METAL SALES MANUFACTURING CORP.</b> 7800 Satte Road 60 Sellersburg, IN 47172 800/406-7387 FAX: 812/246-0829 E-mail: info@metalsales.us.com Web: www.metalsales.us.com	194
<b>MET-TILE, INC.</b> 1745 E. Monticello Court Ontario, CA 91761 909/947-0311 FAX: 909/947-1510 E-mail: met-tile@met-tile.com Web: www.met-tile.com	197
<b>PETERSEN ALUMINUM CORP.</b> 1005 Tonne Road Elk Grove, IL 60007 800/323-1960 FAX: 800/722-7150 E-mail: Web: www.pac-clad.com	197

**Metal Panels**

1.	COMPANY NAME	ATAS INTERNATIONAL INC.
2.	PRODUCT NAME	PC SNAP-ON SEAM
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	SNAP-ON SEAM/BATTEN
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	15-1/4 X 65
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 22, 24 KYNAR 500
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes 24 MILL
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes 0.032, 0.040, 0.050 KYNAR 500
	COPPER (oz.)	Thicknesses Finishes 16, 20 MILL
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	
	Decking Not Required	
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	
	Slip Locked	
	Snap Together	1
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	145 (24 GA.)
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	SNAP 1"
	Adhesive/Sealant Required (yes/no)	NO
	Support Battens Required (yes/no)	NO
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1979
	Number of Squares Installed	>500,000
	Method Of Distribution (distributors, direct)	DISTRIBUTORS
	Number Of Regional Service Locations	3
	Licensed Applicator Agreement (yes/no)	NO
	For Sales Information, Contact	J. BUSH 610/395-8445
	For Technical Information, Contact	J. BUSH 610/395-8445
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	CLASS 90
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	X

NA=not applicable

**Metal Panels**

ATAS INTERNATIONAL INC.	ATAS INTERNATIONAL INC.	ATAS INTERNATIONAL INC.	ATAS INTERNATIONAL INC.
TECHO TILE	DUTCH SEAM MRD	MONARCH ROOF MRB	ADVANTA SHINGLE
			X
SPANISH	STANDING SEAM	BATTEN SEAM	
39 X 25	11, 15, 19-1/4 X 65	12, 16 X 65	12 X 26
24 KYNAR 500	24, 22 KYNAR 500	24, 22 KYNAR 500	29 KYNAR 500
	24 MILL	24 MILL	
0.032 KYNAR 500	0.032, 0.040 KYNAR 500	0.032, 0.40 KYNAR 500	
	16 MILL	16, 20 MILL	
3:12	2:12 2:12	2:12 2:12	3:12 3:12
X	X	X	X
X	X	X	
	X	X	
30 LB. FELT	30 LB. FELT	30 LB. FELT	30 LB. FELT
HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	1-1/2	2 /	X
	CONCEALED	CONCEALED	CONCEALED
145 (24 GA.)	145 (24 GA.)	145 (24 GA.)	80 12 X 36 33
EXPOSED SCREWS			NAILS 5
NO	INTERLOCK NO	INTERLOCK NO	NO
NO	NO	NO	NO
1992 >200,000 DISTRIBUTORES	1991 >500,000 DISTRIBUTORS	1979 >250,000 DISTRIBUTORS	1999 > 100,000 DISTRIBUTORS
3 NO	3 NO	3 NO	3 YES
J. BUSH 610/395-8445 J. BUSH 610/395-8445			
	NO LEAKAGE @ 12 PSF (69 MPH)	--	
	0.08 CFM PER SQ. FT @ 1.57 PSF (25 MPH)	0.13 CFM PER SQ FT @ 4.00 PSF	
	CLASS 90	CLASS 90	CONSULT FACTORY
X	X	X	X

**Metal Panels**

1.	COMPANY NAME	ATAS INTERNATIONAL INC.
2.	PRODUCT NAME	SCANROOF
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	SCANDINAVIAN
	Other (specify type)	
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	16-1/2 X 13 -10
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes
		24 KYNAR 500
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	2:12
	DECK TYPES'	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	
	Decking Not Required	X
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	
	Slip Locked	
	Snap Together	
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	EXPOSED AND CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1980
	Number of Squares Installed	>250,000
	Method Of Distribution (distributors, direct)	DISTRIBUTORS
	Number Of Regional Service Locations	3
	Licensed Applicator Agreement (yes/no)	NO
	For Sales Information, Contact	J. BUSH 610/395-8445
	For Technical Information, Contact	J. BUSH 610/395-8445
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	CLASS 90
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	X

NA=not applicable

**Metal Panels**

ATAS INTERNATIONAL INC.	ATAS I INTERNATIONAL INC.	ATAS INTERNATIONAL INC.	ATAS INTERNATIONAL INC.
GRANUTILE	PERMA SHAKE	STANDING SEAM SHINGLE	CASTLE TOP
	HAND SPLIT		
TILE		STANDING SEAM	DIAMOND
44 X 16	10 X 60	16 X 60	16 X 16
26 STONE COATED	29 KYNAR 500	29 KYNAR 500	
			0.032 KYNAR 500
		16 MILL	16 MILL
			0.028 QUARTZ
3:12	3:12	3:12	3:12
3:12	3:12	3:12	3:12
X	X	X	X
X			
30 LB. FELT	30 LB. FELT	30 LB. FELT	30 LB. FELT
HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
EXPOSED	CONCEALED CONCEALED	CONCEALED CONCEALED	EXPOSED
145	80	80	145
SCREWS	SCREWS	SCREWS	SCREWS
YES	NO	NO	YES
1994	1995	1995	1995
> 100,000	> 100,000	>200,000	>250,000
DISTRIBUTORS	DISTRIBUTORS	DISTRIBUTORS	DISTRIBUTORS
3	3	3	3
NO	NO	NO	NO
J. BUSH 610/395-8445	J. BUSH 610/395-8445	J. BUSH 610/395-8445	J. BUSH 610/395-8445
J. BUSH 610/395-8445	J. BUSH 610/395-8445	J. BUSH 610/395-8445	J. BUSH 610/395-8445
		NONE	
		NONE	
X	X	X	X

**Metal Panels**

1.	COMPANY NAME	BERRIDGE MANUFACTURING CO
2.	PRODUCT NAME	BERMUDA ROOF PANEL
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	"BERMUDA" STYLE HORIZONTAL PLANK
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	11 X UNLIMITED
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 24 KYNAR 500, HYLAR 5000
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes 24 KYNAR 500, HYLAR 5000
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes 24
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes 16
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	X
	Decking Not Required	X
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	1 / F
	Slip Locked	
	Snap Together	
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1992
	Number of Squares Installed	> 10,000
	Method Of Distribution (distributors, direct)	DISTRIBUTORS, DIRECT
	Number Of Regional Service Locations	7
	Licensed Applicator Agreement (yes/no)	YES
	For Sales Information, Contact	D. DOYLE 800/231-8127
	For Technical Information, Contact	B. MARKS 800/231-8127
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	NONE
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	X

NA=not applicable



**Metal Panels**

1.	COMPANY NAME	BERRIDGE MANUFACTURING CO.
2.	PRODUCT NAME	S-TILE
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	S-TILE
	Other (specify type)	
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	32-11/16 X 40
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 24 KYNAR 500, HYLAR 5000
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes 24 KYNAR 500, HYLAR 5000
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	X
	Decking Not Required	X
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	1-1/2 / E
	Interlocked	
	Slip Locked	
	Snap Together	
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	EXPOSED
	Clip (exposed or concealed, specify)	
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1993
	Number of Squares Installed	--
	Method Of Distribution (distributors, direct)	DISTRIBUTORS, DIRECT
	Number Of Regional Service Locations	7
	Licensed Applicator Agreement (yes/no)	YES
	For Sales Information, Contact	D. DOYLE 800/231-8127
	For Technical Information, Contact	B. MARKS 800/231-8127
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	NONE
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	

NA=not applicable

**Metal Panels**

CLASSIC PRODUCTS, INC. RUSTIC SHINGLE	CLASSIC PRODUCTS, INC. REGAL CREST	CLASSIC PRODUCTS, INC. CHATEAU SLATE	CLASSIC PRODUCTS, INC. TIMBERCREEK SHAKE
X	X		X
		X	
12 X 24	12 X 36	8 X 12	12 X 48
		28 KYNAR	26 THERMO BOND KYNAR
0.019 KYNAR / HYLAR	0.019 KYNAR / HYLAR	0.019 , 0.032 KYNAR / HYNAR 12	
3:12	3:12	3:12	3:12
3:12	3:12	3:12	3:12
X	X		X
30 LB. FELT	30 LB. FELT	30 LB. FELT	30 LB. FELT
HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
40	38	45 ALUMINUM; 105 STEEL, COPPER	105
12 X 24	12 X 36	8 X 12	12 X 48
50	33	132	25
CONCEALED CLIPS	CONCEALED CLIPS	CONCEALED	CONCEALED CLIPS
NAILS	NAILS	NAILS	NAILS
2	3	2	4
INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK
NO	NO	NO	NO
NO	NO	NO	NO
1960	1964	1992	2000
> 1,000,000	>750,000	15,000	20,000
DISTRIBUTORS	DISTRIBUTORS	DISTRIBUTORS	DISTRIBUTORS
--	--	--	--
NO	NO	NO	NO
J. KNIFE 800/543-8938 E. VORESS 800/543-8939			
NONE	NONE	NONE	NONE
NONE	NONE	NONE	NONE
NONE	NONE	NONE	NONE
NONE	NONE	NONE	NONE
NONE	NONE	NONE	NONE
NONE	NONE	NONE	NONE
NONE	NONE	NONE	NONE
NONE	NONE	NONE	NONE
90 PSF	NONE	NONE	90 PSF
NONE	NONE	NONE	NONE

**Metal Panels**

1.	COMPANY NAME	CLASSIC PRODUCTS, INC.
2.	PRODUCT NAME	OXFORD SHINGLE
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	X
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	
	Individual (dimensions: inches x inches)	12 X 60
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	3:12
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	
	Decking Not Required	
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	
	Slip Locked	
	Snap Together	
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	46
	Exposure (inches)	12 X 60
	Coverage (approx. no. of pieces per square at listed exposure)	20
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	CONCEALED CLIPS
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	NAILS
	Number Of Fasteners Per Piece (number or NA)	5
	Seam Snap-In Or Interlock (specify or NA)	INTERLOCK
	Adhesive/Sealant Required (yes/no)	NO
	Support Battens Required (yes/no)	NO
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	2001
	Number of Squares Installed	2000
	Method Of Distribution (distributors, direct)	DISTRIBUTORS
	Number Of Regional Service Locations	
	Licensed Applicator Agreement (yes/no)	NO
	For Sales Information, Contact	J. KNIFE 800/543-8938
	For Technical Information, Contact	E. VORESS 800/543-8939
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	NONE
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	NONE
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	NONE
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	NONE
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	NONE
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	NONE
9.	SEE APPENDIX IF CHECKED	

NA=not applicable

**Metal Panels**

DECRA ROOFING SYSTEMS	DECRA ROOFING SYSTEMS	DECRA ROOFING SYSTEMS	DECRA ROOFING SYSTEMS
DECRA TILE	DECRA SHAKE	DECRA SHINGLE PLUS	DECRA SHINGLE
	HAND SPLIT SHAKE	ARCHITECTURAL SHINGLE	ARCHITECTURAL SHINGLE
SPANISH BARREL			
16-1/2 X 52	15-1/2 X 53	16-1/2 X 52-1/4	21 X 51
26 STONE CHIP	26 STONE CHIP	26 STONE CHIP	ZINC/ALUMINUM 26 STONE CHIP
3:12	3:12	3:12	3:12
2-1/2:12	2-1/2:12	2-1/2:12	2-1/2:12
X	X	X	X
X	X	X	
X	X	X	
HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
150	150	150	125
14-1/2 X 50	12-5/8 X 51	14-1/2 X 49-1/2	19-3/4 X 49
20	22.4	20	15
EXPOSED NAIL OR SCREW	EXPOSED NAIL OR SCREW	EXPOSED NAIL OR SCREW	CONCEALED NAILS OR SCREWS
4	4	4	6 NAILS / 4 SCREWS
INTERLOCK	INTERLOCK	INTERLOCK	INTERLOCK
NO	NO	NO	NO
YES	YES	YES OR NO	NO
1957	1992	1996	2000
--	--	--	--
DIRECT / DISTRIBUTORS	DIRECT / DISTRIBUTORS	DIRECT / DISTRIBUTORS	DISTRIBUTORS
14	14	14	14
NO	NO	NO	NO
M.R. TWEDEL 817/695-1090 J. MILLER 909/292-8180			
--	--	--	--
CLASS 90	CLASS 90	CLASS 90	
205 PSF	205 PSF	205 PSF	125 PSF
X	X	X	X

**Metal Panels**

1.	COMPANY NAME	INTEGRIS METALS
2.	PRODUCT NAME	COLORKLAD SYSTEM I
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	STANDING SEAM
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	12, 16, 18, 22 X 40
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 24 KYNAR 500, MILL
	STAINLESS STEEL (ga.)	Thicknesses Finishes 24, 26 MILL
	GALVALUME (ga.)	Thicknesses Finishes 24 MILL
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes 0.032 KYNAR 500
	COPPER (oz.)	Thicknesses Finishes 16, 20 MILL
	TERNE METAL (ga.)	Thicknesses Finishes 24, 26, 28, 30 MILL
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	
	Decking Not Required	
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	
	Slip Locked	
	Snap Together	1, 1-1/2 / E, N
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1969
	Number of Squares Installed	--
	Method Of Distribution (distributors, direct)	DISTRIBUTORS & DIRECT
	Number Of Regional Service Locations	100
	Licensed Applicator Agreement (yes/no)	NO
	For Sales Information, Contact	R. OEHME
	For Technical Information, Contact	R. OEHME
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	NONE
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	

NA=not applicable



**Metal Panels**

1.	COMPANY NAME	MBCI
2.	PRODUCT NAME	CRAFTSMAN SERIES "HB" PROFILE
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	STANDING SEAM: SEPARATE SMALL BATTEN & PAN
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	12, 16-1/2 (40' MAXIMUM LENGTH)
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	3:12
	DECK TYPES'	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	
	Decking Not Required	
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	2 / F
	Interlocked	
	Slip Locked	
	Snap Together	SEPARATE SMALL SNAP-ON BATTEN & PAN
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1983
	Number of Squares Installed	--
	Method Of Distribution (distributors, direct)	DIRECT
	Number Of Regional Service Locations	21
	Licensed Applicator Agreement (yes/no)	YES
	For Sales Information, Contact	T. HENSON
	For Technical Information, Contact	B. JAKS
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	4.00 PSF - LEAKAGE RATE / NONE
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	4 PSF - LEAKAGE RATE / .048 (12") .035 (16-1/2")
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	NONE
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	CLASS 90
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	NONE
9.	SEE APPENDIX IF CHECKED	

NA=not applicable

**Metal Panels**

MBCI	MBCI	MBCI	MCELROY METAL INC.
CRAFTSMAN SERIES "SB" PROFILE	CRAFTSMAN "LB" PROFILE	LOKSEAM	MAXIMA
STANDING SEAM: SEPARATE SNAP ON SMALL BATTEN & PAN	STANDING SEAM: SEPARATE LARGE 2" X 2" BATTEN & PAN	STANDING SEAM: INTEGRAL BATTEN/PAN	STANDING SEAM: VERTICAL LEG PANEL
12, 16-1/2 (40' MAXIMUM LENGTH)	12, 16-1/2 (40' MAXIMUM LENGTH)	12, 16, 18 (40 FT. MAXIMUM LENGTH)	16, 18, 24 X 40 (MAXIMUM LENGTH)
26, 24, 22 BARE-SIGNATURE SERIES 200, 300, 300 METALLIC	26, 24, 22 BARE-SIGNATURE SERIES 200, 300, 300 METALLIC	26, 24, 22 BARE-SIGNATURE SERIES 200, 300, 300 METALLIC	24 BARE, KYNAR 500
			.032, .040 BARE, KYNAR 500
3:12	3:12	3:12	1/2:12
3:12	3:12	3:12	1/4:12
X	X	X	X
		X	X
		X	X
30 LB. FELT	30 LB. FELT		#30 FELT
HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
1 / F	2 / N	1-3/4 / F	2-1/16, 3-1/6 / F
SEPARATE SMALL SNAP-ON BATTEN & PAN	SEPARATE LARGE SNAP-ON BATTEN & PAN	INTEGRAL SNAP SEAM	
CONCEALED	CONCEALED	CONCEALED	CONCEALED
1983	1983	1990	1997
--	--	--	--
DIRECT	DIRECT	DIRECT	DISTRIBUTORS, DIRECT
21	21	21	20
NO	NO	YES	NO
T. HENSON	T. HENSON	T. HENSON	K. GIESEKE 800/950-6531
B. JAKS	B. JAKS	B. JAKS	E. OSTEN 800/950-6531
4.00 PSF - LEAKAGE RATE / NONE	NONE	1.57 PSF-LEAKAGE RATE / NONE	
NONE	NONE	NONE	NO LEAKAGE @ 12 PSF
4.00 PSF - LEAKAGE RATE / .048 (12") .035 (16-1/2")	NONE	1.57 PSF-LEAKAGE RATE / .0089 (18") .0100 (16") .0134 (12")	0.021 CFM/L.FT @ 12 PSF
			CONTACT MANUFACTURER
NONE	NONE	NONE	I-90, 1-165
CLASS 90	CLASS 90	CLASS 90	CLASS 90
NONE	NONE	NONE	CONTACT MANUFACTURER

**Metal Panels**

1.	COMPANY NAME	MCELROY METAL INC
2.	PRODUCT NAME	MERIDIAN
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	STANDING SEAM
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	16 X 40
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	
	Decking Not Required	
	Underlayment Recommended (type or NA)	#30 FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	
	Slip Locked	
	Snap Together	1 / N
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	CONCEALED
	Clip (exposed or concealed, specify)	
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1998
	Number of Squares Installed	
	Method Of Distribution (distributors, direct)	DISTRIBUTORS, DIRECT
	Number Of Regional Service Locations	20
	Licensed Applicator Agreement (yes/no)	NO
	For Sales Information, Contact	K. GIESEKE 800/950-6531
	For Technical Information, Contact	E. OSTEN 800/950-6531
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	NO LEAKAGE @ 12 PSF
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	.002 CFM/LF @ 6.24 PSF
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	

NA=not applicable



**Metal Panels**

1.	COMPANY NAME	METAL SALES MANUFACTURING CORP.
2.	PRODUCT NAME	PRO-LOC I, II, III
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	STANDING SEAM: INTEGRAL BATTEN
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	12, 15, 18 X 40
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 26 BARE, COLORFAST 30
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes 24 BARE, KYNAR 500 (PVF2)
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	
	Decking Not Required	
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	1-1/2, 1-7/8, 2 / N
	Slip Locked	
	Snap Together	
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1989
	Number of Squares Installed	--
	Method Of Distribution (distributors, direct)	DISTRIBUTORS, DIRECT
	Number Of Regional Service Locations	12
	Licensed Applicator Agreement (yes/no)	--
	For Sales Information, Contact	D. CUNNINGHAM
	For Technical Information, Contact	D. KIRCHGESSNER
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NONE
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	NONE
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	

NA=not applicable



**Metal Panels**

1.	COMPANY NAME	METAL SALES MANUFACTURING CORP.
2.	PRODUCT NAME	VERTICAL SEAM
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	STANDING SEAM: SNAP SEAM
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	10, 12, 16, 18 X 40
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 26 BARE, COLORFAST 30
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes 24 BARE, KYNAR 500 (PVF2)
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	X
	Decking Not Required	X
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	
	Slip Locked	
	Snap Together	1-3/4 / F
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1993
	Number of Squares Installed	--
	Method Of Distribution (distributors, direct)	DISTRIBUTORS, DIRECT
	Number Of Regional Service Locations	12
	Licensed Applicator Agreement (yes/no)	--
	For Sales Information, Contact	D. CUNNINGHAM
	For Technical Information, Contact	D. KIRCHGESSNER
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NO LEAKAGE
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	.110 CFM/SQ FT
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	

NA=not applicable



**Metal Panels**

1.	COMPANY NAME	PETERSEN ALUMINUM CORP.
2.	PRODUCT NAME	REDI-ROOF BATTEN
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	STANDING SEAM SNAP-ON BATTEN
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	12-18 X 45
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 24 KYNAR 500
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes 0.032 KYNAR 500
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	3:12
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	X
	Decking Not Required	
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	
	Slip Locked	
	Snap Together	1-1/2 / N
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1978
	Number of Squares Installed	> 100,000
	Method Of Distribution (distributors, direct)	DISTRIBUTORS, DIRECT
	Number Of Regional Service Locations	4
	Licensed Applicator Agreement (yes/no)	NO
	For Sales Information, Contact	800/323-1960
	For Technical Information, Contact	800/323-1960
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NO LEAKAGE @ 12 PSF
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	0.004 CFM/SQ FT @ 1.57 PSF
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	

NA=not applicable



**Metal Panels**

1.	COMPANY NAME	PETERSEN ALUMINUM CORP.
2.	PRODUCT NAME	INTEGRAL STANDING SEAM
3.	CONFIGURATION	
3.1	STYLE	
	Simulated Shingle (specific type if applicable)	
	Simulated Shake (specific type if applicable)	
	Simulated Slate (specific type if applicable)	
	Simulated Tile (specific type if applicable)	
	Other (specify type)	STANDING SEAM
3.2	COMPONENT TYPE AND SIZE	
	Panel [width (in.), maximum length (ft.)]	11-18 X 40
	Individual (dimensions: inches x inches)	
3.3	MATERIALS, THICKNESSES, AND FINISHES	
	GALVANIZED STEEL (ga.):	Thicknesses Finishes 24 KYNAR 500
	STAINLESS STEEL (ga.)	Thicknesses Finishes
	GALVALUME (ga.)	Thicknesses Finishes
	ALUMINIZED STEEL (ga.)	Thicknesses Finishes
	ALUMINUM (in.)	Thicknesses Finishes 0.032 KYNAR 500
	COPPER (oz.)	Thicknesses Finishes
	TERNE METAL (ga.)	Thicknesses Finishes
	ZINC (ga.)	Thicknesses Finishes
4.	SYSTEMS RECOMMENDATIONS	
	Min. Slope Recommended In Normal Application (in. per ft.)	3:12
	Min. Slope Recommended In Special Application (in. per ft.)	3:12
	DECK TYPES	
	Solid Deck, Wood	X
	Spaced Sheathing, Wood	X
	Decking Not Required	
	Underlayment Recommended (type or NA)	30 LB. FELT
5.	PANEL CONFIGURATION (For components in item 3.2A above; for individual components, see item 6.)	
5.1	INTERLOCKING METHOD, HEIGHT (inches), AND SEAM SEALANT	HEIGHT (inches) / SEAM SEALANT (F = Factory Applied; E = Field applied; N = None)
	Overlapped	
	Interlocked	1-1/2 / N
	Slip Locked	
	Snap Together	
5.2	FASTENING METHOD	
	Through Fastened (exposed or concealed, specify)	
	Clip (exposed or concealed, specify)	CONCEALED
6.	INDIVIDUAL COMPONENT CONFIGURATION (For components in item 3.2B above; for panels, see item 5.)	
6.1	DIMENSIONS	
	Weight Per Roof Square (pounds)	
	Exposure (inches)	
	Coverage (approx. no. of pieces per square at listed exposure)	
6.2	INSTALLATION PROCESSING	
	Through-Fastened (exposed or concealed, specify)	
	Kind(s) Of Fastener Required (nails, staples, screws, NA)	
	Number Of Fasteners Per Piece (number or NA)	
	Seam Snap-In Or Interlock (specify or NA)	
	Adhesive/Sealant Required (yes/no)	
	Support Battens Required (yes/no)	
7.	MANUFACTURER/PRODUCT DATA	
	Year Product First Sold	1978
	Number of Squares Installed	> 100,000
	Method Of Distribution (distributors, direct)	DISTRIBUTORS, DIRECT
	Number Of Regional Service Locations	4
	Licensed Applicator Agreement (yes/no)	NO
	For Sales Information, Contact	800/323-1960
	For Technical Information, Contact	800/323-1960
8.	ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	NO LEAKAGE @ 12 PSF
	ASTM E1646, Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (results or none)	
	ASTM E283, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen (results or none)	0.02 CFM/SQ FT @ 1.57 PSF
	ASTM E1680, Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems (results or none)	
	ASTM E 330, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference (results or none)	
	ASTM E 1592, Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference (results or none)	
	FM 4471, Approval Standard for Class 1 Panel Roofs (results or none)	
	UL 580, Test for Uplift Resistance of Roof Assemblies (results or none)	
	UL 1897, Uplift Test For Roof Covering Systems (results or none)	
9.	SEE APPENDIX IF CHECKED	

NA=not applicable



## **Manufacturers Appendix, Metal Panels**

### **Atas International, Inc.**

Atas International, Inc. produces a wide range of panel styles for the residential roofing market, from simulated roof tiles to conventional standing-seam profiles. Most materials are offered in the fluoropolymer Kynar 500 coating system. More than 20 standard colors are offered in this system, which is designed to give long life with excellent chalk and fade resistance. Contact ATAS for more information and technical assistance.

### **Berridge Manufacturing Company**

The Berridge Bermuda Roof Panel may be formed on-site in continuous lengths using a Berridge portable roll former and Berridge coil material.

### **Decra Roofing Systems/Tasman Roofing**

Decra Roofing panels are manufactured to international quality standards and are tested to comply with or exceed relevant building codes and regulations. Each panel is pressed from zinc/aluminum alloy-coated steel. The acrylic bonded, ceramic coated, stone granules manufactured by 3M for roofing use resist fading and UV penetration.

2005-2006  
Steep-slope  
Roofing  
Materials  
Guide

Wood Shakes and Shingles



## Information About Section 5: Wood Shakes and Shingles

### General Information

Section 5: Wood Shakes and Shingles in NRCA's *2005-2006 Steep-slope Roofing Materials Guide* is a comprehensive listing of wood shake and shingle products commonly used in steep-slope roofing.

Wood roofing products are generally separated into two categories: cedar shakes and shingles, and wood-fiber panels.

Shakes and shingles are manufactured from western red cedar, cypress, pine and redwood trees. Wood shingles are sawn on both sides and have an even taper and uniform thickness. The industry terms *Perfection* and *Royal*, when applied to shingles, mean nothing more than 18-inch (460 mm) and 24-inch (610 mm), respectively. Shakes are split from logs and reshaped by manufacturers for commercial use. Shakes are thicker at the butt end than shingles; generally one or both surfaces are split to obtain a textured effect. A split and resawn shake has a split face and sawn back. A taper-sawn shake has a natural taper and is sawn on both sides. Cedar shakes and shingles are available pressure-treated with fire retardants and chemical preservatives for increased fire protection and to prevent premature rot and decay in some climates. Cedar shakes and shingles are installed over both spaced and solid sheathing and mechanically fastened. Shakes are installed using felt interlays that act as baffles against wind-driven material and increase insulating values.

Pine shakes are made from southern yellow pine and are taper-sawn. They are also available pressure-treated with preservatives to protect against decay and insects. Pine shakes may be installed over spaced or solid sheathing and are mechanically fastened. Interlayment felts are required.

The category of wood fiber covers those products made of wood fibers, bonded together under heat and pressure to form shakes or shingles. Because of the size of the components, they are classified as panels rather than individual shakes or shingles. They are mechanically fastened over spaced or solid sheathing.

### Specific Information Included in the Guide

Specific listing information for wood shake and shingle products is as follows:

1. Company name
2. Product name
3. Wood species
4. Product style and size
5. Availability restricted regionally
6. Dimensions and coverage
7. Hip/ridge pieces available
8. Slope and interlayment/underlayment recommendations
9. Recommended decks
10. Year product first sold
11. Number of squares installed
12. Distribution
13. Fire ratings
14. Accepted by the following codes
15. Sales and technical information contacts

Additional information regarding wood shake and shingle roof systems is provided in *The NRCA Roofing and Waterproofing Manual, Fifth Edition*.

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## Index to Wood Shakes and Shingles

<i>Wood Shakes and Shingles</i>	
<b>ANBROOK INDUSTRIES LTD.</b> P.O. Box 3044 Sumas, WA 98295-3044 604/465-5657 FAX: 604/465-3657 E-mail: Web:	208
<b>B.C.F. SHAKE MILL LTD.</b> Site 25, C-1, RR # 1 Fanny Bay, BC V0R 1W0 Canada 250/335-2969 FAX: 250/335-1425 E-mail: Web:	208
<b>GREEN RIVER LOG SALES LTD.</b> P.O. Box 515 Sumas, WA 98295 800/663-8707 FAX: 604/820-3872 E-mail: Web:	209

<i>Wood Shakes and Shingles</i>	
<b>H &amp; L SALVAGE INC.</b> P.O. Box 19535 Thorne Bay, AK 99919 907/723-5302 FAX: None E-mail: Web:	213
<b>PARKER CEDAR PRODUCTS</b> 7543 Vantage Place Delta, BC V4C 1A5 Canada 604/946-4333 FAX: 604/946-3605 E-mail: Web:	213

Wood Shakes and Shingles

1. COMPANY NAME	ANBROOK INDUSTRIES LTD.	B.C.F. SHAKE MILL LTD.
2. PRODUCT NAME		
3. WOOD SPECIES	CEDAR	CEDAR
4. PRODUCT STYLE AND SIZE		
4A. CEDAR		
Shake, Split And Resawn, 24-Inch (24 IN. X 1/2 IN.)	X	X
Shake, Split And Resawn, 24-Inch (24 IN. X 3/4 IN.)	X	X
Shake, Taper-Sawn, 18-Inch	X	X
Shake, Taper-Sawn, 24-Inch	X	X
Shingle, Perfection 18-Inch	X	
Shingle, Royal 24-Inch	X	X
4B. PINE		
Shake, Taper-Sawn, 18-Inch X 13/16-Inch		
Shake, Taper-Sawn 24-Inch X 13/16-Inch		
Shingle, Royal 24-Inch		
4C. WOOD FIBER		
Panel, 12 IN. X 48 IN. X 7/16 IN.		
Panel, 12 IN. X 40 IN. X 1/2 IN.		
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO
6. DIMENSIONS AND COVERAGE		
Maximum Exposure (inches)		10
Headlap (inches)		14
Weight Per Roof Square (at ambient temperature, pounds)	200 - 300	385
Fasteners Required (nails, staples, or specify)	NAILS OR STAPLES	NAILS OR STAPLES
7. HIP/RIDGE PIECES AVAILABLE (yes/no)	YES	
8. SLOPE AND INTERLAYMENT/UNDERLAYMENT RECOMMENDATIONS		
Minimum Slope Recommended For Normal Application (inches per foot)		0.175
Interlayment Recommended In Normal Application		TYPE 30 FELT
Underlayment Recommended In Normal Application		NONE
Minimum Slope Recommended For Special Application (inches per foot)		
Interlayment Recommended In Special Application		
Underlayment Recommended In Special Application		
9. RECOMMENDED DECKS		
9A. TYPES		
Solid Sheathing		
Spaced Sheathing		X
9B. MATERIAL		
Plywood/Wood		
Oriented-strand Board		
Waferboard		
Other (specify)		
10. YEAR PRODUCT FIRST SOLD	1970	1945
11. NUMBER OF SQUARES INSTALLED		
12. DISTRIBUTION		
DISTRIBUTORS (number handling product or no)		
DIRECT (number of regional service locations or no)		YES
13. FIRE RATINGS		
Fire Rating(s) Available (per UL Standard 790)	CLASS A, B, C	
Fire Ratings(s) Available (per ASTM E108)		
14. ACCEPTED BY THE FOLLOWING CODES	UBC 32-8 CSA 0118.1	ICBO CSA UBC
15. FOR SALES INFORMATION, CONTACT:	BROOKE MEEKER 604/465-5657	ROGER LENNOX 250/335-1425
FOR TECHNICAL INFORMATION, CONTACT:	WWW.CEDARBUREAU.ORG	ROGER LENNOX 250/335-1425
16. SEE APPENDIX IF CHECKED		

NA=not applicable

Wood Shakes and Shingles

| GREEN RIVER LOG SALES LTD. |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| BLACK HAWK                 | BLACK HAWK                 | GREEN RIVER                | GREEN RIVER                | GREEN RIVER                |
| WESTERN RED CEDAR          |
X		X		
	X		X	
				X
NO	NO			
10	10	10	10	7 1/2
14	14	14	14	10 1/2
380 ±	250 ±	380 ±	250 ±	270 ±
NAILS OR STAPLES				
		YES	YES	YES
4:12	4:12	4:12	4:12	4:12
TYPE-30 FELT				
NONE	NONE	NONE	NONE	NONE
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
1985	1985	1969	1969	1969
160,000	275,000	800,000	1.3 MILLION +	250,000+
400 ±	400 ±	400 ±	400 ±	400 ±
NO	NO	NO	NO	NO
ICBO BOCA SBCCI	ICBO BOCA SBCCI	ICBO BOCA SBCCI	ICBO BOCA SBCCI	ICBO BOCA SBCCI
D. KNOTT 800/663-8707				
D. KNOTT 800/663-8707				

**Wood Shakes and Shingles**

1. COMPANY NAME	GREEN RIVER LOG SALES LTD.	GREEN RIVER LOG SALES LTD.
2. PRODUCT NAME	GREEN RIVER	GREEN RIVER
3. WOOD SPECIES	WESTERN RED CEDAR	WESTERN RED CEDAR
4. PRODUCT STYLE AND SIZE		
4A. CEDAR		
Shake, Split And Resawn, 24-Inch (24 IN. X 1/2 IN.)		
Shake, Split And Resawn, 24-Inch (24 IN. X 3/4 IN.)		
Shake, Taper-Sawn, 18-Inch		
Shake, Taper-Sawn, 24-Inch	X	
Shingle, Perfection 18-Inch		X
Shingle, Royal 24-Inch		
4B. PINE		
Shake, Taper-Sawn, 18-Inch X 13/16-Inch		
Shake, Taper-Sawn 24-Inch X 13/16-Inch		
Shingle, Royal 24-Inch		
4C. WOOD FIBER		
Panel, 12 IN. X 48 IN. X 7/16 IN.		
Panel, 12 IN. X 40 IN. X 1/2 IN.		
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO
6. DIMENSIONS AND COVERAGE		
Maximum Exposure (inches)	10	5 1/2
Headlap (inches)	14	12 1/2
Weight Per Roof Square (at ambient temperature, pounds)	380 +	250 +
Fasteners Required (nails, staples, or specify)	NAILS OR STAPLES	NAILS OR STAPLES
7. HIP/RIDGE PIECES AVAILABLE (yes/no)	YES	YES
8. SLOPE AND INTERLAYMENT/UNDERLAYMENT RECOMMENDATIONS		
Minimum Slope Recommended For Normal Application (inches per foot)	4:12	4:12
Interlayment Recommended In Normal Application	TYPE-30 FELT	NONE
Underlayment Recommended In Normal Application	NONE	NONE
Minimum Slope Recommended For Special Application (inches per foot)		3:12
Interlayment Recommended In Special Application		NONE
Underlayment Recommended In Special Application		NONE
9. RECOMMENDED DECKS		
9A. TYPES		
Solid Sheathing	X	X
Spaced Sheathing	X	X
9B. MATERIAL		
Plywood/Wood	X	X
Oriented-strand Board	X	X
Waferboard	X	X
Other (specify)		
10. YEAR PRODUCT FIRST SOLD	1969	1969
11. NUMBER OF SQUARES INSTALLED	580,000+	1 MILLION +
12. DISTRIBUTION		
DISTRIBUTORS (number handling product or no)	400 ±	400 ±
DIRECT (number of regional service locations or no)	NO	NO
13. FIRE RATINGS		
Fire Rating(s) Available (per UL Standard 790)		
Fire Ratings(s) Available (per ASTM E108)		
14. ACCEPTED BY THE FOLLOWING CODES	ICBO BOCA SBCCI	ICBO BOCA SBCCI
15. FOR SALES INFORMATION, CONTACT:	D. KNOTT 800/663-8707	D. KNOTT 800/663-8707
FOR TECHNICAL INFORMATION, CONTACT:	D. KNOTT 800/663-8707	D. KNOTT 800/663-8707
16. SEE APPENDIX IF CHECKED		

NA=not applicable

Wood Shakes and Shingles

| GREEN RIVER LOG SALES LTD. |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| GREEN RIVER                | SCOTT CEDAR                | SCOTT CEDAR                | CEDAR PLUS                 | CEDAR PLUS                 |
| WESTERN RED CEDAR          |
	X		X	
		X		X
X				
NO	NO	NO	NO	NO
7 1/2	10	10	10	10
16 1/2	14	14	14	14
270 +	380	250	380 +	260 +
NAILS OR STAPLES				
YES	YES	YES	YES	YES
4:12	4:12	4:12	4:12	4:12
NONE	TYPE-30 FELT	TYPE-30 FELT	TYPE-30 FELT	TYPE-30 FELT
NONE	NONE	NONE	NONE	NONE
3:12				
NONE				
NONE				
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
X	X	X	X	X
1969	1961	1981	1984	1984
230,000+	750,000 +	1.3 MILLION +	450,000	590,000
400 ±	400 ±	400 ±	400 ±	400 ±
NO	NO	NO	NO	NO
			A, B, C	A, B, C
			A, B, C	A, B, C
ICBO BOCA SBCCI	ICBO BOCA SBCCI	ICBO BOCA SBCCI	ICBO BOCA SBCCI	ICBO BOCA SBCCI
D. KNOTT 800/663-8707				
D. KNOTT 800/663-8707				

**Wood Shakes and Shingles**

1. COMPANY NAME	GREEN RIVER LOG SALES LTD.	GREEN RIVER LOG SALES LTD.
2. PRODUCT NAME	CEDAR PLUS	CEDAR PLUS
3. WOOD SPECIES	WESTERN RED CEDAR	WESTERN RED CEDAR
4. PRODUCT STYLE AND SIZE		
4A. CEDAR		
Shake, Split And Resawn, 24-Inch (24 IN. X 1/2 IN.)		
Shake, Split And Resawn, 24-Inch (24 IN. X 3/4 IN.)		
Shake, Taper-Sawn, 18-Inch	X	
Shake, Taper-Sawn, 24-Inch		X
Shingle, Perfection 18-Inch		
Shingle, Royal 24-Inch		
4B. PINE		
Shake, Taper-Sawn, 18-Inch X 13/16-Inch		
Shake, Taper-Sawn 24-Inch X 13/16-Inch		
Shingle, Royal 24-Inch		
4C. WOOD FIBER		
Panel, 12 IN. X 48 IN. X 7/16 IN.		
Panel, 12 IN. X 40 IN. X 1/2 IN.		
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO
6. DIMENSIONS AND COVERAGE		
Maximum Exposure (inches)	7 1/2	10
Headlap (inches)	10 1/2	14
Weight Per Roof Square (at ambient temperature, pounds)	280 +	280 ±
Fasteners Required (nails, staples, or specify)	NAILS OR STAPLES	NAILS OR STAPLES
7. HIP/RIDGE PIECES AVAILABLE (yes/no)	YES	YES
8. SLOPE AND INTERLAYMENT/UNDERLAYMENT RECOMMENDATIONS		
Minimum Slope Recommended For Normal Application (inches per foot)	4:12	4:12
Interlayment Recommended In Normal Application	TYPE-30 FELT	TYPE-30 FELT
Underlayment Recommended In Normal Application	NONE	NONE
Minimum Slope Recommended For Special Application (inches per foot)		
Interlayment Recommended In Special Application		
Underlayment Recommended In Special Application		
9. RECOMMENDED DECKS		
9A. TYPES		
Solid Sheathing	X	X
Spaced Sheathing	X	X
9B. MATERIAL		
Plywood/Wood	X	X
Oriented-strand Board	X	X
Waferboard	X	X
Other (specify)		
10. YEAR PRODUCT FIRST SOLD	1984	1984
11. NUMBER OF SQUARES INSTALLED	125,000	115,000
12. DISTRIBUTION		
DISTRIBUTORS (number handling product or no)	400 ±	400 ±
DIRECT (number of regional service locations or no)	NO	NO
13. FIRE RATINGS		
Fire Rating(s) Available (per UL Standard 790)	A, B, C	A, B, C
Fire Ratings(s) Available (per ASTM E108)	A, B, C	A, B, C
14. ACCEPTED BY THE FOLLOWING CODES	ICBO BOCA SBCCI	ICBO BOCA SBCCI
15. FOR SALES INFORMATION, CONTACT:	D. KNOTT 800/663-8707	D. KNOTT 800/663-8707
FOR TECHNICAL INFORMATION, CONTACT:	D. KNOTT 800/663-8707	D. KNOTT 800/663-8707
16. SEE APPENDIX IF CHECKED		

NA=not applicable

Wood Shakes and Shingles

GREEN RIVER LOG SALES LTD.	GREEN RIVER LOG SALES LTD.	H & L SALVAGE INC.	PARKER CEDAR PRODUCTS
CEDAR PLUS	CEDAR PLUS		
WESTERN RED CEDAR	WESTERN RED CEDAR	RED/YELLOW CEDAR	CEDAR
		X	X
		X	X
		X	X
X		X	X
	X		
NO	NO	NO	
5 1/2	7 1/2		10
12 1/2	16 1/2		
270 ±	295 ±		VARIES
NAILS OR STAPLES	NAILS OR STAPLES		NAILS
YES	YES	YES	NO
4:12	4:12	5:12	4-1/2:12
NONE	NONE		NO. 15 FELT
NONE	NONE		NO. 30 FELT
3:12	3:12		3:12
NONE	NONE		NO. 15 FELT
NONE	NONE		NO. 30 FELT
X	X		
X	X		
X	X		
X	X		
X	X		
			STRAPPING
1984	1984	1989	1985
350,000	110,000		
400 ±	400 ±		NO
NO	NO		1
A, B, C	A, B, C		
A, B, C	A, B, C		
ICBO BOCA SBCCI	ICBO BOCA SBCCI		CSSB
D. KNOTT 800/663-8707	D. KNOTT 800/663-8707	K. LANDERS 907/723-5302	A. SAMRA 604/946-4333
D. KNOTT 800/663-8707	D. KNOTT 800/663-8707	K. LANDERS 907/723-5302	A. SAMRA 604/946-4333

**Manufacturers Appendix, Wood Shakes and Shingles**

NO INFORMATION FOR THE APPENDIX WAS SUPPLIED BY ANY MANUFACTURER

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Materials  
Guide

Slate



## Information About Section 6: Slate

### General Information

Section 6: Slate in NRCA's *2005-2006 Steep-slope Roofing Materials Guide* is a comprehensive listing of slate products commonly used in steep-slope roofing.

Roofing slate is a dense, durable rock material that is basically nonabsorbent. Two properties of slate are cleavage and fracture. It has natural cleavage, which permits it to be easily split in one direction. Fracture, usually occurring at right angles to the cleavage, is called the grain. Roofing slates are commonly split so that the length of the slate runs in the direction of the grain. The surface texture of slate after being split for commercial use derives from the characteristics of the rock from which it was quarried. Some slate splits to a smooth, practically even surface, while other yield a surface that is rough and uneven.

The color of slate is determined by its chemical and mineral composition. Because these factors differ in various regions, roofing slates can be obtained in a variety of colors. In addition, exposure to weather causes slate to change in color. The degree of change varies depending on the slate. Those slates exhibiting minimal color change are known as "permanent" or "unfading." Slate that shows a more marked color change is known as "weathering" slate. Between unfading and weathering is "semi-weathering" slate.

There are several classifications for slate roofs. The first is standard slate, which refers to slate that is generally from 3/16-inch (5 mm) to 1/4-inch (6 mm) thick with uniform length. The category "Standard Smooth" used in Item 3 refers to standard slate that has a relatively smooth surface, in comparison with standard rough or just "rough". These slates have a rougher texture and are generally available in thicker pieces. Finally, there are graduated/textural slates; these are designed with varying lengths and thicknesses and are generally rougher than standard slates.

### Specific Information Included in the Guide

Specific listing information for slate roofing products is as follows:

1. Company name
2. Product name
3. Textures
4. Sizes
5. Colors available
6. Slope/underlayment recommendations
7. Recommended deck type
8. Flashing material
9. Year product first sold
10. Number of squares installed
11. Distribution
12. Technical information
13. Sale and technical information contacts

Reporting of technical information provided in Item 12 is based on American Society for Testing and Materials (ASTM) standard ASTM C406, titled "Standard Specification for Roofing Slate."

Additional information regarding slate roof systems is provided in *The NRCA Roofing and Waterproofing Manual, Fifth Edition*.

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**Index to Slate**

	Slate
<b>EVERGREEN SLATE CO., LLC</b> 68 E. Potter Avenue P.O. Box 248 Granville, NY 12832 518/642-2530 FAX: 518/642-9313 E-mail: slate@evergreenslate.com Web site:	220
	223
<b>GREENSTONE SLATE COMPANY</b> P.O. Box 134 Poultney, VT 05764 802/287-4333 FAX: 802/287-5720 E-mail: info@greenstoneslate.com Web site: www.greenstoneslate.com	220

	Slate
<b>HILLTOP SLATE INC.</b> P.O. Box 201 Route 22A Granville, NY 12849 518/642-2270 FAX: 518/642-1220 E-mail: info@hilltopslate.net Web site: www.hilltopslate.com	221
<b>NORTH COUNTRY SLATE</b> 8800 Sheppard Ave., East Toronto, ON CANADA M1B 5R4 416/724-4666 FAX: 416/281-8842 E-mail: info@ncslate.com Web site: www.northcountryslate.com	222

**Slate**

1. COMPANY NAME	EVERGREEN SLATE COMPANY, LLC	GREENSTONE SLATE COMPANY
2. PRODUCT NAME	VERMONT ROOFING SLATE	VERMONT ROOFING SLATE
3. TEXTURES	THICKNESSES (inches) / WEIGHTS PER ROOF SQUARE (lbs) (Standard 3-in. headlap)	
	Standard Smooth	3/16 - 1/4 700-800
	Rough	1-4 / 3/8 1,000 3/8 - 1/2 1,500 1/2 - 3/4 2,200 3/4 - 1 3,400
	Graduated -Textural	3/16, 1/4, 3/8, 1/2, 3/4 AVG. 1,800
4. SIZES	LENGTHS (in) / STANDARD WIDTH (in) / EXPOSURE (in) (Standard 3-in. headlap)	
	24	14, 12 10-1/2
	22	14, 12, 11 9-1/2
	20	14, 12, 11, 10 10-1/2
5. COLORS AVAILABLE (specify: weathering, semi-weathering, unfading, semi-unfading, or X)	Black	SEMI-UNFADING, UNFADING
	Blue-Black	UNFADING
	Gray	SEMI-WEATHERING, UNFADING
	Blue-Gray	
	Gray-Black	SEMI-WEATHERING, UNFADING
	Mottled Gray-Black	SEMI-UNFADING
	Gray-Green	SEMI-WEATHERING, UNFADING
	Green	SEMI-WEATHERING, UNFADING
	Mottled Gray-Green	UNFADING
	Purple	SEMI-UNFADING
	Mottled Purple/Green	UNFADING
	Green	SEMI-WEATHERING, UNFADING
	Purple - Variegated	SEMI-WEATHERING
Red	UNFADING	
6. SLOPE/UNDERLAYMENT RECOMMENDATIONS	Minimum Slope Recommended in Normal Application (in/ft)	8:12
	Underlayment Recommended In Normal Application	30 LB. FELT
	Minimum Slope Recommended For Special Application (in/ft)	4:12
	Underlayment Recommended In Special Application	
7A. RECOMMENDED DECK TYPE	Solid Sheathing	X
	Spaced Sheathing	
7B. RECOMMENDED DECK MATERIAL	Plywood/Wood	X
	Oriented Strand Board	
	Walterboard	
	Other (Specify)	
8. FLASHING MATERIAL	COPPER, STAINLESS STEEL	COPPER, TIN, GALVANIZED IRON, ZINC
9. YEAR PRODUCT FIRST SOLD	1916	1954
10. NUMBER OF SQUARES INSTALLED	5 MILLION	
11. DISTRIBUTION	Distributors (number handling product or no)	--
	Direct (number of regional service locations or no)	10
12. TECHNICAL INFORMATION	COMPLIES WITH ASTM STANDARD C 406-89 (1996) STANDARD SPECIFICATION FOR ROOFING SLATE (grade: check one)	
	GRADE S <sub>1</sub> Over 75 years service life	X
	GRADE S <sub>2</sub> 40 to 75 years service life	
	GRADE S <sub>3</sub> 20 to 40 years service life	
13. FOR SALES INFORMATION, CONTACT:	D. SCARLOTTA, J. BAKER 518/642-2530	J. HILL 802/287-4333
	FOR TECHNICAL INFORMATION, CONTACT:	D. SCARLOTTA, J. BAKER 518/642-2530
14. SEE APPENDIX IF CHECKED		

NA=not applicable

**Slate**

HILLTOP SLATE INC.			HILLTOP SLATE INC.			HILLTOP SLATE INC.		
VERMONT SLATE			NEW YORK SLATE			WELSH NATURAL SLATE		
THICKNESSES (inches) / WEIGHTS PER ROOF SQUARE (lbs) (Standard 3-in. headlap)			THICKNESSES (inches) / WEIGHTS PER ROOF SQUARE (lbs) (Standard 3-in. headlap)			THICKNESSES (inches) / WEIGHTS PER ROOF SQUARE (lbs) (Standard 3-in. headlap)		
3/16 - 1/4	700-800		3/16 - 1/4	700-800		3/16 - 1/4	700-800	
3/16 - 1/4 - 3/8	825-1,000		3/16 - 1/4 - 3/8	825-1,000		3/16 - 1/4 - 3/8	825-1,000	
FULL 1/4	900		FULL 1/4	900		FULL 1/4	900	
FULL 3/8	1,100		FULL 3/8	1,100		FULL 3/8	1,100	
FULL 1/2	1,700		FULL 1/2	1,700		FULL 1/2	1,700	
FULL 3/4	2,300		FULL 3/4	2,300		FULL 3/4	2,300	
FULL 1	3,400		FULL 1	3,400		FULL 1	3,400	
3/16, 1/4, 3/8, 1/2, 3/4, 1	NA		3/16, 1/4, 3/8, 1/2, 3/4, 1	NA		3/16, 1/4, 3/8, 1/2, 3/4, 1	NA	
LENGTHS (in) / STANDARD WIDTH (in) / EXPOSURE (in) (Standard 3-in. headlap)			LENGTHS (in) / STANDARD WIDTH (in) / EXPOSURE (in) (Standard 3-in. headlap)			LENGTHS (in) / STANDARD WIDTH (in) / EXPOSURE (in) (Standard 3-in. headlap)		
24	16, 14, 12	10-1/2	24	16, 14, 12	10-1/2	24	16, 14, 12	10-1/2
22	16, 12, 11,	9-1/2	22	16, 12, 11,	9-1/2	22	16, 12, 11,	9-1/2
20	14, 12, 11, 10,	8-1/2	20	14, 12, 11, 10,	8-1/2	20	14, 12, 11, 10,	8-1/2
18	14, 12, 11, 10, 9	7-1/2	18	14, 12, 11, 10, 9	7-1/2	18	14, 12, 11, 10, 9	7-1/2
16	14, 12, 11, 10, 9, 8, 7	6-1/2	16	14, 12, 11, 10, 9, 8, 7	6-1/2	16	14, 12, 11, 10, 9, 8, 7	6-1/2
14	14, 12, 11, 10, 9, 8, 7	5-1/2	14	14, 12, 11, 10, 9, 8, 7	5-1/2	14	14, 12, 11, 10, 9, 8, 7	5-1/2
12	12, 10, 9, 8, 7, 6	4-1/2	12	12, 10, 9, 8, 7, 6	4-1/2	12	12, 10, 9, 8, 7, 6	4-1/2
10	10, 9, 8, 7, 6	3-1/2	10	10, 9, 8, 7, 6	3-1/2	10	10, 9, 8, 7, 6	3-1/2
UNFADING			UNFADING			UNFADING		
UNFADING			UNFADING			UNFADING		
SEMI-WEATHERING			SEMI-WEATHERING			SEMI-WEATHERING		
UNFADING			UNFADING			UNFADING		
SEMI-WEATHERING			SEMI-WEATHERING			SEMI-WEATHERING		
SEMI-WEATHERING			SEMI-WEATHERING			SEMI-WEATHERING		
SEMI-WEATHERING			SEMI-WEATHERING			SEMI-WEATHERING		
UNFADING			UNFADING			UNFADING		
UNFADING			UNFADING			UNFADING		
UNFADING			UNFADING			UNFADING		
UNFADING			UNFADING			UNFADING		
SEMI-WEATHERING			SEMI-WEATHERING			SEMI-WEATHERING		
UNFADING			UNFADING			UNFADING		
UNFADING			UNFADING			UNFADING		
6:12			6:12			6:12		
30 LB. FELT			30 LB. FELT			30 LB. FELT		
4:12			4:12			4:12		
ICE / WATER SHIELD			ICE / WATER SHIELD			ICE / WATER SHIELD		
X			X			X		
COPPER, LEAD, STAINLESS STEEL			COPPER, LEAD, STAINLESS STEEL			COPPER, LEAD, STAINLESS STEEL		
1948			1948			1948		
1 MILLION			1 MILLION			1 MILLION		
12			12			12		
--			--			--		
X			X			X		
JAN EDWARDS 518/642-2270			JAN EDWARDS 518/642-2270			JAN EDWARDS 518/642-2270		
DAVE LUNDY 518/642-2270			DAVE LUNDY 518/642-2270			DAVE LUNDY 518/642-2270		

**Slate**

1. COMPANY NAME	NORTH COUNTRY SLATE	
2. PRODUCT NAME	NATURAL ROOFING SLATE	
3. TEXTURES	THICKNESSES (inches) / WEIGHTS PER ROOF SQUARE (lbs) (Standard 3-in. headlap)	
	Standard Smooth	3/16 - 1/4      650 - 800 1/4 - 3/8      800 - 1,200
	Rough	3/8 - 1/2      1,200 - 1,800
	Graduated -Textural	3/16, 1/4, 3/8, 1/2
4. SIZES	LENGTHS (in) / STANDARD WIDTH (in) / EXPOSURE (in) (Standard 3-in. headlap)	
	24	14, 12      10-1/2
	22	14, 12, 11      9-1/2
	20	14, 12, 11, 10      8-1/2
	18	14, 12, 11, 10, 9      7-1/2
	16	14, 12, 11, 10, 9, 8      6-1/2
	14	14, 12, 11, 10, 9, 8, 7      5-1/2
	12	12, 10, 9, 8, 7, 6      4-1/2
5. COLORS AVAILABLE (specify: weathering, semi-weathering, unfading, semi-unfading, or X)	Black	UNFADING
	Blue-Black	UNFADING
	Gray	SEMI-WEATHERING, UNFADING
	Blue-Gray	
	Gray-Black	SEMI-WEATHERING
	Mottled Gray-Black	
	Gray-Green	UNFADING
	Green	UNFADING
	Mottled Gray-Green	
	Purple	SEMI-WEATHERING, UNFADING
	Mottled Purple/Green	UNFADING
	Green	SEMI-WEATHERING, UNFADING
	Purple - Variegated	UNFADING
Red	UNFADING	
6. SLOPE/UNDERLAYMENT RECOMMENDATIONS	Minimum Slope Recommended in Normal Application (in/ft)	8:12
	Underlayment Recommended In Normal Application	30 LB. FELT
	Minimum Slope Recommended For Special Application (in/ft)	4:12
	Underlayment Recommended In Special Application	ICE / WATER SHIELD
7. RECOMMENDED DECK TYPE	Solid Sheathing	X
	Spaced Sheathing	X
	RECOMMENDED DECK MATERIAL	
	Plywood/Wood	X
	Oriented Strand Board	
	Wafterboard	
	Other (Specify)	2 X 3 WOOD BATTENS
8. FLASHING MATERIAL	COPPER, LEAD	
9. YEAR PRODUCT FIRST SOLD	1988	
10. NUMBER OF SQUARES INSTALLED	200,000	
11. DISTRIBUTION	Distributors (number handling product or no)	4
	Direct (number of regional service locations or no)	1
12. TECHNICAL INFORMATION	COMPLIES WITH ASTM STANDARD C 406-89 (1996) STANDARD SPECIFICATION FOR ROOFING SLATE (grade: check one)	
	GRADE S <sub>1</sub> Over 75 years service life	X
	GRADE S <sub>2</sub> 40 to 75 years service life	
	GRADE S <sub>3</sub> 20 to 40 years service life	
13. FOR SALES INFORMATION, CONTACT:	DAVE LARGE 800/975-2835	
FOR TECHNICAL INFORMATION, CONTACT:	DAVE LARGE 800/975-2835	
14. SEE APPENDIX IF CHECKED		

NA=not applicable

**Manufacturers Appendix, Slate**

**Evergreen Slate Company, LLC**

On slopes of 8:12 to 4:12, specify 4-inch head laps and use one layer of W.R. Grace Ice and Water Shield™ for greater protection.

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2005-2006  
Steep-slope  
Roofing  
Materials  
Guide

Underlayment



## Information About Section 7: Underlayment Sheets

### General Information

Section 7: Underlayment Sheets in NRCA's *2005-2006 Steep-slope Roofing Materials Guide* is a comprehensive listing of underlayment products used as components of steep-slope roofing.

Underlayments used in steep-slope roofing are generally organic felts, fiberglass mats, composites or modified bitumen sheets. Coated felts and self-adhering modified sheets are frequently used as eaves flashing, commonly referred to as "ice dam" or "ice shield" protection.

Asphalt-saturated, nonperforated organic felts are among the most common underlayments used for shingles; they are commonly designated as Type 15 and Type 30, or referred to as "No. 15" and "No. 30," which is reflective of a once-used pound-per-square weight designation. The saturation process involves impregnating the fibers of the dry felt with asphalt and filling the voids. The coating process involves the application to the top and bottom surface of the sheets of mineral-stabilized coating asphalt. A further step may consist of application of mineral surfacing to one or both sides of the sheet.

Underlayment sheets are used for a variety of steep-slope membrane products. In the case of wood shakes, these sheets are produced in 18-inch widths as "interlayment" felts.

Underlayments protect the deck until the roof covering is installed, maintain protection if part of a covering fails, and separate the covering from the deck. They are usually required for a fire rating classification. They are generally mechanically fastened but can also be fully adhered — for example, in the case of polymer modified bitumen ice dam protection membrane sheets.

### Specific Information Included in the Guide

Specific listing information for roofing underlayment products is as follows:

1. Company name
2. Product name or description
3. Product category

4. Product information
5. Availability restricted regionally
6. Recommended for application with:
7. Year product first sold
8. Number of squares installed
9. Distribution
10. UL-classified prepared roof accessory
11. Complies with (ASTM standards)
12. Accepted by the following codes
13. Sales and technical information contacts

Reporting of technical information in Item 11 is based upon the following American Society for Testing and Materials (ASTM) standards:

- ASTM D224, titled "Standard Specification for Smooth-Surfaced Asphalt Roll Roofing (Organic Felt)"
- ASTM D226, titled "Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing"
- ASTM D2626, titled "Standard Specification for Asphalt-Saturated and Coated Organic Felt Base Sheet Used in Roofing"
- ASTM D4869, titled "Standard Specification for Asphalt-Saturated Organic Felt Shingle Underlayment Used in Roofing"
- ASTM D1970, titled "Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection"

Additional information regarding underlayment is provided in *The NRCA Roofing and Waterproofing Manual, Fifth Edition*.

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## Index to Underlayment Sheets

	Underlayment Sheets
<b>ALCO-NVC, INC.</b> P.O. Box 14001 Detroit, MI 48214 313/823-7500 FAX: 313/331-4726 E-mail:alconvc@aol.com Web site: www.alconvc.com	230
<b>ANDEK CORPORATION</b> P.O. Box 392 Moorestown, NJ 08057 888-G0-ANDEK FAX: 856/786-0580 E-mail: email@andek.com Web site: www.andek.com	231
<b>ATLAS ROOFING CORPORATION</b> 2000 Riveredge Parkway Atlanta, GA 30328 770/933-4476 FAX: 770/984-1517 E-mail: Web site:	231
<b>CERTAINTED CORPORATION</b> ROOFING PRODUCTS GROUP 1400 Union Meeting Rd, P O Box 1100 Blue Bell, PA 19422 800/322-3060 FAX: 610/341-6212 Web site: www.certainteed.com	233
<b>DEWITT PRODUCTS CO.</b> 5860 Plumer Detroit, MI 48209 800/962-8599 313/554-0575 FAX: 313/554-2171 E-mail: dewittproducts@sbcglobal.net Web site:	234
<b>FIELDS CORPORATION, LLC</b> 2240 Taylor Way Tacoma, WA 98421 253/627-4098 FAX: 253/383-2181 E-mail: Web site:	235

	Underlayment Sheets
<b>GAF MATERIALS CORP.</b> 1361 Alps Road Wayne, NJ 07470 973/628-3000 FAX: 973/628-3356 E-mail: Web site: www.gaf.com	237 244
<b>THE GARLAND COMPANY, INC.</b> 3800 East 91st Street Cleveland, OH 44105 216/641-7500 FAX: 216/883-2593 E-mail: Web site:	239
<b>HENRY COMPANY</b> 3802 Miller Park Drive Garland, TX 75042 800/486-1278 FAX: 800/586-9919 E-mail: sleonard@henry.com Web site:	239
<b>MALARKEY ROOFING PRODUCTS</b> P.O. Box 17217 Portland, OR 97217 503/283-1191 FAX: 503/283-5405 E-mail: Web site: www.malarkeyroofing.com	241
<b>OWENS CORNING</b> One Owens Corning Parkway Toledo, OH 45369 419/248-8000 FAX: 419/248-7354 E-mail: Web: www.owenscorning.com	241
<b>WARRIOR ROOFING MANUFACTURING, INC.</b> P.O. Box 40185 Tuscaloosa, AL 35404 205/553-1734 FAX: 205/553-1755 E-mail: Web site: warriorroofing.net	242

Underlayment Sheets

1. COMPANY NAME	ALCO-NVC INC.	ALCO-NVC INC.	ALCO-NVC INC.
2. PRODUCT NAME OR DESCRIPTION	ALCO SHIELD ICE AND WATER PROTECTOR 100	ALCO SHIELD ICE AND WATER PROTECTOR 195	ALCO SHEILD ICE AND WATER PROTECTOR 200
3. PRODUCT CATEGORY			
A. Organic Asphalt-Saturated Felt, Unperforated			
B. Organic Asphalt-Saturated Felt, Coated			
C. Asphalt Fiberglass Felt			
D. Special "Ice Shield" Underlayment	X	X	X
4A. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3A, 3B, OR 3C)			
Type (ASTM standard [specify] or generic)			
Available as Sepcialty Underlayment (type, e.g., shake felt)			
Sheet Width (inches)			
Size Per Roll (sq. ft.)			
Weight Per Roll (pounds)			
4B. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3D)			
Kind of Sheet(s) (e.g., felts, modified bitumen)	MODIFIED BITUMEN	MODIFIED BITUMEN	MODIFIED BITUMEN
Number Of Ply(ies)/Sheets Comprising Underlayment	1	1	1
Waterproofing Medium (e.g., asphalt, modified asphalt)	MODIFIED ASPHALT	MODIFIED ASPHALT	MODIFIED ASPHALT
Application Method (e.g., mechanical, mopped, self-adhered)	SELF-ADHERED	SELF-ADHERED	SELF-ADHERED
Sheet Width (inches)	36	36	36
Size Per Roll (sq. ft.)	100	195	200
Weight Per Roll (pounds)	39	76	78
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
6. RECOMMENDED FOR APPLICATION WITH:			
Asphalt Shingles	X	X	X
Fiber-Cement Roof Components			
Clay Tile	X	X	X
Concrete Tile	X	X	X
Metal Roof Components	X		
Slate	X	X	X
Wood Shakes/Shingles	X	X	X
Other (specify)			
7. YEAR PRODUCT FIRST SOLD	1996	1996	1996
8. NUMBER OF SQUARES INSTALLED			
9. DISTRIBUTION			
Distributors (number handling product or no)	125	125	125
Direct (number of regional service locations or no)			
10. UL-CLASSIFIED PREPARED ROOFING ACCESSORY (yes/no)	YES	YES	YES
COMPLIES WITH:			
11A. ASTM D 224-89 STANDARD SPECIFICATION FOR SMOOTH- SURFACED ASPHALT ROLL ROOFING (ORGANIC FELT) (type or NA)	NA	NA	NA
Type I-Minimum net mass per unit area of roofing, 39.8lb/100 sq. ft			
Type II-Minimum net mass per unit area of roofing, 54.6 lb/100 sq. ft			
Type III-Minimum net mass per unit area of roofing, 51.1lb/100 sq. ft			
Type IV-Minimum net mass per unit area of roofing, 39.8 lb/100 sq. ft.			
11B. SATURATED ORGANIC FELT USED IN ROOFING & WATERPROOFING (type or NA)	NA	NA	NA
Type I-Commonly called No. 15 asphalt felt			
Type II-Commonly called No. 30 asphalt fell			
11C. ASTM D 2626-97 STANDARD SPECIFICATION FOR ASPHALT- SATURATED AND COATED ORGANIC FELT BASE SHEET USED IN ROOFING (yes, no or NA)	NA	NA	NA
11D. ASTM D 4869-88 (1993) STANDARD SPECIFICATION FOR ASPHALT - SATURATED ORGANIC FELT SHINGLE UNDERLAYMENT USED IN ROOFING (type or NA)	NA	NA	NA
Type I-Shingle Underlayment			
Type II-Heavy Duty Shingle Underlaymen			
11E. ASTM D 1970-00 STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION (yes, no, or NA)	YES	YES	YES
11F. OTHER ASTM SPECIFICATION (specify)			
12. ACCEPTED BY THE FOLLOWING CODES			
13. FOR SALES INFORMATION, CONTACT:	E. KARPINSKI 313/283-7500	E. KARPINSKI 313/283-7500	E. KARPINSKI 313/283-7500
FOR TECHNICAL INFORMATION, CONTACT:	B. BAIR 313/823-7500	B. BAIR 313/823-7500	B. BAIR 313/823-7500
14. SEE APPENDIX IF CHECKED			

NA=not applicable

Underlayment Sheets

ALCO-NVC INC.	ANDEK CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION
ALCO SHIELD ICE AND WATER PROTECTOR 225	FLASHBAND	NO. 15 STANDARD SATURATED FELT	NO. 30 STANDARD SATURATED FELT	NO. 15 ASTM D 4869 FELT	NO. 30 ASTM D 4869 FELT
		X	X	X	X
X	X				
		TYPE I	TYPE II	TYPE I	TYPE II
		36	36	36	36
		432	216	432	216
MODIFIED BITUMEN 1	MODIFIED BITUMEN 1				
MODIFIED ASPHALT SELF-ADHERED	MODIFIED ASPHALT SELF-ADHERED				
36	28				
225	77				
88	33				
NO	NO	NO	NO	NO	NO
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
1996	1973	1982	1982	1982	1982
	3.5 MILLION	500+	500+	500+	500+
125	127				
	14				
YES		NO	NO	NO	NO
NA	NA				
NA	NA			X	X
NA	NA				
NA	NA	X	X	X	
YES	YES	NA	NA	NA	NA
	ICBO			BOCA, ICBO, IBC, SBCCI	BOCA, ICBO, IBC, SBCCI
E. KARPINSKI 313/283-7500	H. LISS 800/800-2844	ATLAS REGIONAL SALES OFFICES (SEE APPENDIX)			
B. BAIR 313/823-7500	N. SHEARER 800/800-2844	601/481-1470	601/481-1470	601/481-1470	601/481-1470
		X	X	X	X

## Underlayment Sheets

1. COMPANY NAME	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION
2. PRODUCT NAME OR DESCRIPTION	NO. 15 ASTM D 226 SPECIFICATION FELT	NO. 30 ASTM D 226 SPECIFICATION FELT	WEATHERMASTER
3. PRODUCT CATEGORY			
A. Organic Asphalt-Saturated Felt, Unperforated	X	X	
B. Organic Asphalt-Saturated Felt, Coated			
C. Asphalt Fiberglass Felt			
D. Special "Ice Shield" Underlayment			X
4A. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3A, 3B, OR 3C)			
Type (ASTM standard [specify] or generic)	TYPE I (D226)	TYPE II (D226)	
Available as Specialty Underlayment (type, e.g., shake felt)	X	X	
Sheet Width (inches)	36	36	
Size Per Roll (sq. ft.)	432	216	
Weight Per Roll (pounds)			
4B. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3D)			
Kind of Sheet(s) (e.g., felts, modified bitumen)			MODIFIED BITUMEN
Number Of Ply(ies)/Sheets Comprising Underlayment			1
Waterproofing Medium (e.g., asphalt, modified asphalt)			SBS
Application Method (e.g., mechanical, mopped, self-adhered)			SELF ADHERED
Sheet Width (inches)			36
Size Per Roll (sq. ft.)			200
Weight Per Roll (pounds)			
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
6. RECOMMENDED FOR APPLICATION WITH:			
Asphalt Shingles	X	X	X
Fiber-Cement Roof Components	X	X	X
Clay Tile	X	X	X
Concrete Tile	X	X	X
Metal Roof Components	X	X	X
Slate	X	X	X
Wood Shakes/Shingles	X	X	X
Other (specify)			
7. YEAR PRODUCT FIRST SOLD	1982	1982	1985
8. NUMBER OF SQUARES INSTALLED	500+	500+	
9. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)			
10. UL-CLASSIFIED PREPARED ROOFING ACCESSORY (yes/no)			
COMPLIES WITH:			
11A. ASTM D 224-89 STANDARD SPECIFICATION FOR SMOOTH-SURFACED ASPHALT ROLL ROOFING (ORGANIC FELT) (type or NA)			
Type I—Minimum net mass per unit area of roofing, 39.8lb/100 sq. ft			
Type II—Minimum net mass per unit area of roofing, 54.6 lb/100 sq. ft			
Type III—Minimum net mass per unit area of roofing, 51.1lb/100 sq. ft			
Type IV—Minimum net mass per unit area of roofing, 39.8 lb/100 sq. ft.			
11B. SATURATED ORGANIC FELT USED IN ROOFING & WATERPROOFING (type or NA)			
Type I—Commonly called No. 15 asphalt felt	X		
Type II—Commonly called No. 30 asphalt felt		X	
11C. ASTM D 2626-97 STANDARD SPECIFICATION FOR ASPHALT-SATURATED AND COATED ORGANIC FELT BASE SHEET USED IN ROOFING (yes, no or NA)			
11D. ASTM D 4869-88 (1993) STANDARD SPECIFICATION FOR ASPHALT-SATURATED ORGANIC FELT SHINGLE UNDERLAYMENT USED IN ROOFING (type or NA)			
Type I—Shingle Underlayment			
Type II—Heavy Duty Shingle Underlayment			
11E. ASTM D 1970-00 STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION (yes, no, or NA)			YES
11F. OTHER ASTM SPECIFICATION (specify)			
12. ACCEPTED BY THE FOLLOWING CODES	BOCA, IBC, ICBO, SBCCI	BOCA, IBC, IBCO, METRO-DADE, SBCCI	BOCA, IBC, IBCO, METRO-DADE, SBCCI
13. FOR SALES INFORMATION, CONTACT:	ATLAS REGIONAL SALES OFFICES (SEE APPENDIX)	ATLAS REGIONAL SALES OFFICES (SEE APPENDIX)	ATLAS REGIONAL SALES OFFICES (SEE APPENDIX)
FOR TECHNICAL INFORMATION, CONTACT:	601/481-1470	601/481-1470	770/933-4478
14. SEE APPENDIX IF CHECKED	X	X	X

NA=not applicable

Underlayment Sheets

ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	ATLAS ROOFING CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION	CERTAINTEED CORPORATION
NO. 43 BASE SHEET	SLATE / TILE UNDERLAYMENT	PREMIUM FLAT FELT (PFF)	ROOFERS' SELECT	WINTERGUARD WATERPROOFING SHINGLE UNDERLAYMENT	#15 PLAIN FELT - UL
		X	X		
X	X		X		
CLASS S (D 6380)	TYPE II (D 249) / CLASS M (6380)	ASTM D 6757	ASTM D 6757		TYPE I (D 266)
36	36	36	36		36
216	108	432	432		432
			44		54
				MODIFIED ASPHALT 1	
				MODIFIED ASPHALT SELF-ADHERED	
				36	
				195/97.5	
				69/36	
	NO		NO	NO	YES
		X	X	X	X
	X		X	X	
	X		X	X	
		X			
	X	X		X	
		X		X	
	1982	1989	1998	1987	
		500+			
	500+				
			YES	YES	YES
			NA	NA	NA
			NA	NA	X
YES			NA	NA	NA
			NA	NA	YES
			NA	YES	NA
	ASTM D 249				
BOCA, IBC, IBCO, METRO-DADE, SBCCI	BOCA, IBC, IBCO, METRO-DADE, SBCCI		WISCONSIN DILHR	WISCONSIN DILHR	ICBO, MIAMI-DADE CNTY, FL
ATLAS REGIONAL SALES OFFICES (SEE APPENDIX)	ATLAS REGIONAL SALES OFFICES (SEE APPENDIX)	ATLAS REGIONAL SALES OFFICES (SEE APPENDIX)	LOCAL OFFICE	LOCAL OFFICE	LOCAL OFFICE
770/933-4478	770/933-4478	770/933-4478	800/322-3060	800/322-3060	800/322-3060
X	X	X	X	X	X

Underlayment Sheets

1. COMPANY NAME	CERTAINTED CORPORATION	DEWITT PRODUCTS COMPANY	DEWITT PRODUCTS COMPANY
2. PRODUCT NAME OR DESCRIPTION	#30 PLAIN FELT - UL	ROOF SHIELD 67 ICE & WATER	LITE 'N SMOOTH ICE & WATER
3. PRODUCT CATEGORY			
A. Organic Asphalt-Saturated Felt, Unperforated	X		
B. Organic Asphalt-Saturated Felt, Coated			
C. Asphalt Fiberglass Felt			
D. Special "Ice Shield" Underlayment		X	X
4A. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3A, 3B, OR 3C)			
Type (ASTM standard [specify] or generic)	TYPE II (D 266)		
Available as Specialty Underlayment (type, e.g., shake felt)			
Sheet Width (inches)	36		
Size Per Roll (sq. ft.)	216		
Weight Per Roll (pounds)	54		
4B. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3D)			
Kind of Sheet(s) (e.g., felts, modified bitumen)		MODIFIED BITUMEN	MODIFIED BITUMEN
Number Of Ply(ies)/Sheets Comprising Underlayment		1	1
Waterproofing Medium (e.g., asphalt, modified asphalt)		MODIFIED ASPHALT	MODIFIED ASPHALT
Application Method (e.g., mechanical, mopped, self-adhered)		SELF-ADHERED	SELF-ADHERED
Sheet Width (inches)		36	36
Size Per Roll (sq. ft.)		200	200
Weight Per Roll (pounds)		76 LBS	57 LBS.
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	YES	NO	NO
6. RECOMMENDED FOR APPLICATION WITH:			
Asphalt Shingles	X	X	X
Fiber-Cement Roof Components		X	X
Clay Tile			X
Concrete Tile		X	X
Metal Roof Components			X
Slate		X	X
Wood Shakes/Shingles			X
Other (specify)			
7. YEAR PRODUCT FIRST SOLD		1989	1996
8. NUMBER OF SQUARES INSTALLED			
9. DISTRIBUTION			
Distributors (number handling product or no)		UNLIMITED	UNLIMITED
Direct (number of regional service locations or no)		2	2
10. UL-CLASSIFIED PREPARED ROOFING ACCESSORY (yes/no)	YES	YES	YES
COMPLIES WITH:			
11A. ASTM D 224-89 STANDARD SPECIFICATION FOR SMOOTH-SURFACED ASPHALT ROLL ROOFING (ORGANIC FELT) (type or NA)	NA		
Type I-Minimum net mass per unit area of roofing, 39.8lb/100 sq. ft			
Type II-Minimum net mass per unit area of roofing, 54.6 lb/100 sq. ft			
Type III-Minimum net mass per unit area of roofing, 51.1lb/100 sq. ft			
Type IV-Minimum net mass per unit area of roofing, 39.8 lb/100 sq. ft.			
11B. SATURATED ORGANIC FELT USED IN ROOFING & WATERPROOFING (type or NA)			
Type I-Commonly called No. 15 asphalt felt			
Type II-Commonly called No. 30 asphalt felt	X		
11C. ASTM D 2626-97 STANDARD SPECIFICATION FOR ASPHALT-SATURATED AND COATED ORGANIC FELT BASE SHEET USED IN ROOFING (yes, no or NA)	YES		
11D. ASTM D 4869-88 (1993) STANDARD SPECIFICATION FOR ASPHALT-SATURATED ORGANIC FELT SHINGLE UNDERLAYMENT USED IN ROOFING (type or NA)			
Type I-Shingle Underlayment			
Type II-Heavy Duty Shingle Underlaymen			
11E. ASTM D 1970-00 STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION (yes, no, or NA)	NA	YES	YES
11F. OTHER ASTM SPECIFICATION (specify)			
12. ACCEPTED BY THE FOLLOWING CODES	ICBO, MIAMI-DADE CNTY, FL	ICBO 4887	ICBO 4887
13. FOR SALES INFORMATION, CONTACT:	LOCAL OFFICE	800/962-8599	800/962-8599
FOR TECHNICAL INFORMATION, CONTACT:	800/322-3060	800/962-8599	800/962-8599
14. SEE APPENDIX IF CHECKED	X		

NA=not applicable

Underlayment Sheets

DEWITT PRODUCTS COMPANY	DEWITT PRODUCTS COMPANY	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC
ALL-IN-ONE ICE & WATER STARTER STRIP	HIGH TEMP SMOOTH	F10 SHAKELINER	F12 SHAKELINER	F15 TYPE 30 ASTM SHAKELINER	F 20 2-SQUARE SHAKELINER
		X	X	X	X
X	X				
		NO. 30 SHAKE FELT	NO. 30 SHAKE FELT	TYPE II (D226) SHAKE FELT	NO. 30
		18	18	18	36
		180	180	180	200
		26	29	46	29
MODIFIED BITUMEN 1	MODIFIED BITUMEN 1				
MODIFIED ASPHALT SELF-ADHERED	MODIFIED ASPHALT SELF-ADHERED				
36	36				
100	200				
53 LBS.	75 LBS.				
		NO	NO	NO	NO
X	X				X
	X				X
	X				X
	X				X
X	X	X	X	X	X
2002	1996	1988	1988	1988	1988
		10 MILLION +	10 MILLION +	10 MILLION +	10 MILLION +
UNLIMITED	UNLIMITED	1,000 +	1,000 +	1,000 +	1,000 +
2	2				
YES	YES	NO	NO	YES	NO
		NA	NA	NA	NA
				TYPE II	
		NA	NA	NA	NA
		NA	NA	NA	
YES	YES	NA	NA	NA	NA
ICBO 4887	ICBO 4887				
800/962-8599	800/962-8599	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098
800/962-8599	800/962-8599	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098

## Underlayment Sheets

1. COMPANY NAME	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC
2. PRODUCT NAME OR DESCRIPTION	F 22 2-SQUARE NO. 30 FELT	F 25 2-SQUARE TYPE 30 ASTM FELT	F 30 3-SQUARE NO. 15 FELT
3. PRODUCT CATEGORY			
A. Organic Asphalt-Saturated Felt, Unperforated	X	X	X
B. Organic Asphalt-Saturated Felt, Coated			
C. Asphalt Fiberglass Felt			
D. Special "Ice Shield" Underlayment			
4A. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3A, 3B, OR 3C)			
Type (ASTM standard [specify] or generic)	NO. 30	TYPE II (D 226)	NO. 15
Available as Specialty Underlayment (type, e.g., shake felt)			
Sheet Width (inches)	36	36	36
Size Per Roll (sq. ft.)	216	216	300
Weight Per Roll (pounds)	35	56	21
4B. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3D)			
Kind of Sheet(s) (e.g., felts, modified bitumen)			
Number Of Ply(ies)/Sheets Comprising Underlayment			
Waterproofing Medium (e.g., asphalt, modified asphalt)			
Application Method (e.g., mechanical, mopped, self-adhered)			
Sheet Width (inches)			
Size Per Roll (sq. ft.)			
Weight Per Roll (pounds)			
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
6. RECOMMENDED FOR APPLICATION WITH:			
Asphalt Shingles	X	X	X
Fiber-Cement Roof Components	X	X	X
Clay Tile	X	X	X
Concrete Tile	X	X	X
Metal Roof Components	X	X	X
Slate	X	X	X
Wood Shakes/Shingles			
Other (specify)			
7. YEAR PRODUCT FIRST SOLD	1988	1988	1988
8. NUMBER OF SQUARES INSTALLED	10 MILLION +	10 MILLION +	10 MILLION +
9. DISTRIBUTION			
Distributors (number handling product or no)	1,000 +	1,000 +	1,000 +
Direct (number of regional service locations or no)			
10. UL-CLASSIFIED PREPARED ROOFING ACCESSORY (yes/no)	NO	YES	NO
COMPLIES WITH:			
11A. ASTM D 224-89 STANDARD SPECIFICATION FOR SMOOTH-SURFACED ASPHALT ROLL ROOFING (ORGANIC FELT) (type or NA)	NA	NA	NA
Type I—Minimum net mass per unit area of roofing, 39.8lb/100 sq. ft			
Type II—Minimum net mass per unit area of roofing, 54.6 lb/100 sq. ft			
Type III—Minimum net mass per unit area of roofing, 51.1lb/100 sq. ft			
Type IV—Minimum net mass per unit area of roofing, 39.8 lb/100 sq. ft.			
11B. SATURATED ORGANIC FELT USED IN ROOFING & WATERPROOFING (type or NA)			
Type I—Commonly called No. 15 asphalt felt			
Type II—Commonly called No. 30 asphalt felt		TYPE II	
11C. ASTM D 2626-97 STANDARD SPECIFICATION FOR ASPHALT-SATURATED AND COATED ORGANIC FELT BASE SHEET USED IN ROOFING (yes, no or NA)	NA	NA	NA
11D. ASTM D 4869-88 (1993) STANDARD SPECIFICATION FOR ASPHALT-SATURATED ORGANIC FELT SHINGLE UNDERLAYMENT USED IN ROOFING (type or NA)			
Type I—Shingle Underlayment			
Type II—Heavy Duty Shingle Underlayment			
11E. ASTM D 1970-00 STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION (yes, no, or NA)	NA	NA	NA
11F. OTHER ASTM SPECIFICATION (specify)			
12. ACCEPTED BY THE FOLLOWING CODES			
13. FOR SALES INFORMATION, CONTACT:	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098
FOR TECHNICAL INFORMATION, CONTACT:	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098
14. SEE APPENDIX IF CHECKED			

NA=not applicable

Underlayment Sheets

FIELDS COMPANY, LLC	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC	FIELDS COMPANY, LLC	GAF MATERIALS CORP.
F 32 3-SQUARE NO. 15 FELT	F 35 3-SQUARE TYPE 15 ASTM FELT	F 40 4-SQUARE NO. 15 FELT	F 42 4-SQUARE NO. 15 FELT	F 45 4-SQUARE TYPE 15 ASTM FELT	SHINGLE-MATE
X	X	X	X	X	
					X
NO. 15	TYPE 1 (D 226)	NO. 15	NO. 15	TYPE I (D 226)	COMPOSITE
36	36	36	36	36	36
324	324	400	432	432	400
30	38	34	40	53	30
NO	NO	NO	NO	NO	NO
X	X	X	X	X	X
X	X	X	X	X	
X	X	X	X	X	
X	X	X	X	X	
X	X	X	X	X	
X	X	X	X	X	
1988	1988	1988	1988	1988	1984
10 MILLION +	10 MILLION +	10 MILLION +	10 MILLION +	10 MILLION +	
1,000 +	1,000 +	1,000 +	1,000 +	1,000 +	
					NO
NO	YES	NO	NO	YES	NO
NA	NA	NA	NA	NA	NA
	TYPE I			TYPE I	YES
NA	NA	NA	NA	NA	NA
					YES
NA	NA	NA	NA	NA	NA
					D 226, D 4869
				BOCA ICBO SBCCI	
M. FIELDS 800/627-4098	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098	M. FIELDS 800/627-4098	GAF REGIONAL SALES OFFICE
T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098	T. VANDERLINDA 800/627-4098	800/ROOF-411
					X

Underlayment Sheets

1. COMPANY NAME	GAF MATERIALS CORP.	GAF MATERIALS CORP.	GAF MATERIALS CORP.
2. PRODUCT NAME OR DESCRIPTION	WEATHER WATCH	STORMGUARD WEATERPROOF] UNDERLAYMENT	STORMGUARD ULTRA FLEX
3. PRODUCT CATEGORY			
A. Organic Asphalt-Saturated Felt, Unperforated			
B. Organic Asphalt-Saturated Felt, Coated			
C. Asphalt Fiberglass Felt			
D. Special "Ice Shield" Underlayment	X	X	X
4A. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3A, 3B, OR 3C)			
Type (ASTM standard [specify] or generic)			
Available as Sepcialty Underlayment (type, e.g., shake felt)			
Sheet Width (inches)			
Size Per Roll (sq. ft.)			
Weight Per Roll (pounds)			
4B. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3D)			
Kind of Sheet(s) (e.g., felts, modified bitumen)	MODIFIED BITUMEN	MODIFIED BITUMEN	MODIFIED BITUMEN
Number Of Ply(ies)/Sheets Comprising Underlayment	1	1	1
Waterproofing Medium (e.g., asphalt, modified asphalt)	MODIFIED ASPHALT	MODIFIED ASPHALT	MODIFIED ASPHALT
Application Method (e.g., mechanical, mopped, self-adhered)	SELF-ADHERING	SELF-ADHERING	SELF-ADHERING
Sheet Width (inches)	36	36	39
Size Per Roll (sq. ft.)	150 / 200	200	200
Weight Per Roll (pounds)	65 / 85	64	51
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
6. RECOMMENDED FOR APPLICATION WITH:			
Asphalt Shingles	X	X	X
Fiber-Cement Roof Components	X	X	X
Clay Tile			
Concrete Tile			
Metal Roof Components			X
Slate			
Wood Shakes/Shingles			
Other (specify)			
7. YEAR PRODUCT FIRST SOLD	1987	1997	2003
8. NUMBER OF SQUARES INSTALLED			
9. DISTRIBUTION			
Distributors (number handling product or no)			
Direct (number of regional service locations or no)	NO	NO	NO
10. UL-CLASSIFIED PREPARED ROOFING ACCESSORY (yes/no)	YES	YES	YES
COMPLIES WITH:			
11A. ASTM D 224-89 STANDARD SPECIFICATION FOR SMOOTH-SURFACED ASPHALT ROLL ROOFING (ORGANIC FELT) (type or NA)	NA	NA	NA
Type I-Minimum net mass per unit area of roofing, 39.8lb/100 sq. ft			
Type II-Minimum net mass per unit area of roofing, 54.6 lb/100 sq. ft			
Type III-Minimum net mass per unit area of roofing, 51.1lb/100 sq. ft			
Type IV-Minimum net mass per unit area of roofing, 39.8 lb/100 sq. ft.			
11B. SATURATED ORGANIC FELT USED IN ROOFING & WATERPROOFING (type or NA)	NA	NA	NA
Type I-Commonly called No. 15 asphalt felt			
Type II-Commonly called No. 30 asphalt fell			
11C. ASTM D 2626-97 STANDARD SPECIFICATION FOR ASPHALT-SATURATED AND COATED ORGANIC FELT BASE SHEET USED IN ROOFING (yes, no or NA)	NA		NA
11D. ASTM D 4869-88 (1993) STANDARD SPECIFICATION FOR ASPHALT-SATURATED ORGANIC FELT SHINGLE UNDERLAYMENT USED IN ROOFING (type or NA)	NA	NA	NA
Type I-Shingle Underlayment			
Type II-Heavy Duty Shingle Underlaymen			
11E. ASTM D 1970-00 STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION (yes, no, or NA)	YES	YES	YES
11F. OTHER ASTM SPECIFICATION (specify)			
12. ACCEPTED BY THE FOLLOWING CODES	ICBO SBCCI	ICBO SBCCI	
13. FOR SALES INFORMATION, CONTACT:	GAF REGIONAL SALES OFFICE	GAF REGIONAL SALES OFFICE	GAF REGIONAL SALES OFFICE
FOR TECHNICAL INFORMATION, CONTACT:	800/ROOF-411	800/ROOF-411	800/ROOF-411
14. SEE APPENDIX IF CHECKED			

NA=not applicable

Underlayment Sheets

GAF MATERIALS CORP.	THE GARLAND CO., INC.	THE GARLAND CO., INC.	HENRY COMPANY	HENRY COMPANY	HENRY COMPANY
METAL-MATE	HPR ORGANIC BASESHEET	HPR FIRE-TITE BASESHEET	EAVEGUARD SHINGLE UNDERLAYMENT	PERMA SEAL FG METAL ROOF & TILE UNDERLAYMENT	PERMA SEAL PE 200 HT METAL ROOF & TILE UNDERLAYMENT
	X				
X		X	X		
	D-2626				
	36				
	200				
	75				
MODIFIED BITUMEN 1			MODIFIED BITUMEN 1	MODIFIED BITUMEN	MODIFIED BITUMEN 1
MODIFIED ASPHALT SELF-ADHERING		ASPHALT MECHANICAL / SELF-ADHERE	MODIFIED ASPHALT SELF-ADHERED	SELF-ADHESIVE	SELF-ADHESIVE
36		40	36	36	36
200		100	100/195/225	225	225
57		85	38/70/84	70	58
NO	NO	NO	NO	NO	NO
	X	X	X	X	X
	X	X		X	X
	X	X		X	X
	X	X		X	X
X	X	X		X	X
	X	X		X	X
		MODIFIED BITUMEN / BUR	X	X	X
2003			1998	1990	1998
	NO	NO	200+	200+	200+
	200	200	NO	NO	NO
YES		YES	YES	NO	NO
NA	N/A	N/A			
NA	N/A	N/A			
NA	YES	N/A			
NA	N/A	N/A			
YES	N/A	N/A	YES		
GAF REGIONAL SALES OFFICE 800/ROOF-411	BRIAN LAMBERT 216/641-7500 ERIC YOUNKIN 216/641-7500	BRIAN LAMBERT 216/641-7500 ERIC YOUNKIN 216/641-7500	TECHNICAL SERVICES 800/486-1278 S. LEONARD 800/486-1278	TECHNICAL SERVICES 800/486-1278 S. LEONARD 800/486-1278	TECHNICAL SERVICES 800/486-1278 S. LEONARD 800/486-1278

**Underlayment Sheets**

1. COMPANY NAME	HENRY COMPANY	HENRY COMPANY	HENRY COMPANY
2. PRODUCT NAME OR DESCRIPTION	RF 100 METAL ROOF UNDERLAYMENT	BLUESKIN PE 200 HT	BLUESKIN ROOF RF-200 SELF-ADHERED UNDERLAYMENT
3. PRODUCT CATEGORY			
A. Organic Asphalt-Saturated Felt, Unperforated			
B. Organic Asphalt-Saturated Felt, Coated			
C. Asphalt Fiberglass Felt			
D. Special "Ice Shield" Underlayment			
4A. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3A, 3B, OR 3C)			
Type (ASTM standard [specify] or generic)			
Available as Specialty Underlayment (type, e.g., shake felt)			
Sheet Width (inches)			
Size Per Roll (sq. ft.)			
Weight Per Roll (pounds)			
4B. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3D)			
Kind of Sheet(s) (e.g., felts, modified bitumen)	MODIFIED BITUMEN	MODIFIED BITUMEN	MODIFIED BITUMEN
Number Of Ply(ies)/Sheets Comprising Underlayment	1	1	1
Waterproofing Medium (e.g., asphalt, modified asphalt)		MODIFIED ASPHALT	MODIFIED ASPHALT
Application Method (e.g., mechanical, mopped, self-adhered)	SELF-ADHESIVE	SELF-ADHERED	SELF-ADHERED
Sheet Width (inches)	36	36	36
Size Per Roll (sq. ft.)	225	225	225
Weight Per Roll (pounds)	89	66	46
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	
6. RECOMMENDED FOR APPLICATION WITH:			
Asphalt Shingles		X	X
Fiber-Cement Roof Components		X	X
Clay Tile		X	X
Concrete Tile		X	X
Metal Roof Components	X	X	X
Slate		X	X
Wood Shakes/Shingles		X	X
Other (specify)			
7. YEAR PRODUCT FIRST SOLD	2000	1998	2002
8. NUMBER OF SQUARES INSTALLED			
9. DISTRIBUTION			
Distributors (number handling product or no)	200+	200+	200+
Direct (number of regional service locations or no)	NO	NO	NO
10. UL-CLASSIFIED PREPARED ROOFING ACCESSORY (yes/no)	NO	NO	NO
COMPLIES WITH:			
11A. ASTM D 224-89 STANDARD SPECIFICATION FOR SMOOTH-SURFACED ASPHALT ROLL ROOFING (ORGANIC FELT) (type or NA)			
Type I—Minimum net mass per unit area of roofing, 39.8lb/100 sq. ft			
Type II—Minimum net mass per unit area of roofing, 54.6 lb/100 sq. ft			
Type III—Minimum net mass per unit area of roofing, 51.1lb/100 sq. ft			
Type IV—Minimum net mass per unit area of roofing, 39.8 lb/100 sq. ft.			
11B. SATURATED ORGANIC FELT USED IN ROOFING & WATERPROOFING (type or NA)			
Type I—Commonly called No. 15 asphalt felt			
Type II—Commonly called No. 30 asphalt felt			
11C. ASTM D 2626-97 STANDARD SPECIFICATION FOR ASPHALT-SATURATED AND COATED ORGANIC FELT BASE SHEET USED IN ROOFING (yes, no or NA)			
11D. ASTM D 4869-88 (1993) STANDARD SPECIFICATION FOR ASPHALT-SATURATED ORGANIC FELT SHINGLE UNDERLAYMENT USED IN ROOFING (type or NA)			
Type I—Shingle Underlayment			
Type II—Heavy Duty Shingle Underlaymen			
11E. ASTM D 1970-00 STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION (yes, no, or NA)			YES
11F. OTHER ASTM SPECIFICATION (specify)			
12. ACCEPTED BY THE FOLLOWING CODES			
13. FOR SALES INFORMATION, CONTACT:	TECHNICAL SERVICES 800/486-1278	TECHNICAL SERVICES 800/486-1278	TECHNICAL SERVICES 800/486-1278
FOR TECHNICAL INFORMATION, CONTACT:	S. LEONARD 800/486-1278	S. LEONARD 800/486-1278	S. LEONARD 800/486-1278
14. SEE APPENDIX IF CHECKED			

NA=not applicable

Underlayment Sheets

MALARKEY ROOFING PRODUCTS	MALARKEY ROOFING PRODUCTS	OWENS CORNING	OWENS CORNING	OWENS CORNING	OWENS CORNING
ARCTIC SEAL #170	RIGHT START UDL FIBERGLASS SBS UNDERLAYMENT	WEATHERLOCK G GRANULATED SURFACE	WEATHERLOCK MAT MAT FACED	WEATHERLOCK P NON-REINFORCED	WEATHERLOCK METAL HIGH TEMPERATURE
X	X	X	X	X	X
	4601				
	39 3/8				
	200				
	75				
MODIFIED BITUMEN 1	MODIFIED BITUMEN 1	MODIFIED BITUMEN 1	MODIFIED BITUMEN 1	MODIFIED BITUMEN 1	MODIFIED BITUMEN 1
MODIFIED ASPHALT SELF-ADHERING	MODIFIED ASPHALT MECHANICAL	MODIFIED ASPHALT SELF-ADHERING	MODIFIED ASPHALT SELF-ADHERING	MODIFIED BITUMEN SELF-ADHERING	MODIFIED BITUMEN SELF-ADHERING
39 3/8	39 3/8	36	36	36	36
225	200	100/200	100/200	225	200
81	75				
NO	NO	YES	YES	YES	YES
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
WATERPROOFING					
2001	1997	1997	1999	2001	2000
100+	100+				
NO	NO				
NO					
NA	NA	NA	NA	NA	NA
NA			NA	NA	NA
	X				
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
YES	NA		NA		
ICBO	ICBO	ICC ER-4491	ICC ER-4991	ICC ER-4991	ICC ER-4991 METRO-DADE APPROVED
G. MALARKEY 800/545-1191	G. MALARKEY 800/545-1191	800/GET-PINK	800/GET PINK	800/GET PINK	800/GET-PINK
A. SCHWAB J. KOUBA	A. SCHWAB J. KOUBA	800/GET-PINK	800/GET PINK	800/GET PINK	800/GET-PINK

Underlayment Sheets

1. COMPANY NAME	WARRIOR ROOFING MANUFACTURING, INC.	WARRIOR ROOFING MANUFACTURING, INC.	WARRIOR ROOFING MANUFACTURING, INC.
2. PRODUCT NAME OR DESCRIPTION	Rosin(Builder's)Paper	#15 W	#30 W
3. PRODUCT CATEGORY			
A. Organic Asphalt-Saturated Felt, Unperforated		X	X
B. Organic Asphalt-Saturated Felt, Coated			
C. Asphalt Fiberglass Felt			
D. Special "Ice Shield" Underlayment			
4A. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3A, 3B, OR 3C)			
Type (ASTM standard [specify] or generic)		TYPE I (D 4869)	NO. 30
Available as Specialty Underlayment (type, e.g., shake felt)			
Sheet Width (inches)	36	36	36
Size Per Roll (sq. ft.)	432	432	216
Weight Per Roll (pounds)	18	40	40
4B. PRODUCT INFORMATION (FOR PRODUCTS IN CATEGORY 3D)			
Kind of Sheet(s) (e.g., felts, modified bitumen)			
Number Of Ply(ies)/Sheets Comprising Underlayment			
Waterproofing Medium (e.g., asphalt, modified asphalt)			
Application Method (e.g., mechanical, mopped, self-adhered)			
Sheet Width (inches)			
Size Per Roll (sq. ft.)			
Weight Per Roll (pounds)			
5. AVAILABILITY RESTRICTED REGIONALLY (yes/no)	NO	NO	NO
6. RECOMMENDED FOR APPLICATION WITH:			
Asphalt Shingles		X	X
Fiber-Cement Roof Components		X	X
Clay Tile		X	X
Concrete Tile		X	X
Metal Roof Components		X	X
Slate		X	X
Wood Shakes/Shingles			
Other (specify)			
7. YEAR PRODUCT FIRST SOLD	1984	1988	1988
8. NUMBER OF SQUARES INSTALLED		18 MILLION	3.5 MILLION
9. DISTRIBUTION			
Distributors (number handling product or no)	200 ±	200 ±	200 ±
Direct (number of regional service locations or no)	NO	NO	NO
10. UL-CLASSIFIED PREPARED ROOFING ACCESSORY (yes/no)		YES	YES
COMPLIES WITH:			
11A. ASTM D 224-89 STANDARD SPECIFICATION FOR SMOOTH-SURFACED ASPHALT ROLL ROOFING (ORGANIC FELT) (type or NA)	NA	NA	NA
Type I—Minimum net mass per unit area of roofing, 39.8lb/100 sq. ft			
Type II—Minimum net mass per unit area of roofing, 54.6 lb/100 sq. ft			
Type III—Minimum net mass per unit area of roofing, 51.1lb/100 sq. ft			
Type IV—Minimum net mass per unit area of roofing, 39.8 lb/100 sq. ft.			
11B. SATURATED ORGANIC FELT USED IN ROOFING & WATERPROOFING (type or NA)			
Type I—Commonly called No. 15 asphalt felt			
Type II—Commonly called No. 30 asphalt felt			
11C. ASTM D 2626-97 STANDARD SPECIFICATION FOR ASPHALT-SATURATED AND COATED ORGANIC FELT BASE SHEET USED IN ROOFING (yes, no or NA)	NA	NA	NA
11D. ASTM D 4869-88 (1993) STANDARD SPECIFICATION FOR ASPHALT-SATURATED ORGANIC FELT SHINGLE UNDERLAYMENT USED IN ROOFING (type or NA)			NA
Type I—Shingle Underlayment		X	
Type II—Heavy Duty Shingle Underlaymen			
11E. ASTM D 1970-00 STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION (yes, no, or NA)	NA	NA	NA
11F. OTHER ASTM SPECIFICATION (specify)			
12. ACCEPTED BY THE FOLLOWING CODES			
13. FOR SALES INFORMATION, CONTACT:	K. ARNOLD 800/749-3358	K. ARNOLD 800/749-3358	K. ARNOLD 800/749-3358
FOR TECHNICAL INFORMATION, CONTACT:	K. ARNOLD 800/749-3358	K. ARNOLD 800/749-3358	K. ARNOLD 800/749-3358
14. SEE APPENDIX IF CHECKED			

NA=not applicable



## **Manufacturers Appendix, Underlayment Sheets**

### **GAF Materials Corp.**

Shingle Mat is a fiberglass composite sheet.

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Incomplete Data



## Information About Section 8: Incomplete Data

### General Information

In publishing the *Steep-Slope Roofing Materials Guide*, NRCA maintains a policy of total objectivity in its reporting of data. Nothing is required from listing manufacturers other than to provide information about their products in the prescribed reporting format. Any manufacturer of a product in the categories included in the Guide can be listed by submitting its information in accordance with procedures developed for this purpose.

Product manufacturers included in the Guide are encouraged to provide NRCA with listing information for their products that is as complete as possible for publication in the Guide. In situations where manufacturers have submitted product information (e.g., test results) that is deemed to be incomplete, these specific products have been omitted from the detailed listing sections of the Guide. Manufacturers and products with incomplete product listing information are included in this new section of the Guide, titled Section 8: Incomplete Data.

NRCA has established this policy regarding manufacturers' product listings with incomplete data at the request of users of the Guide, who are clearly seeking detailed and complete product information from the Guide and the companies listed.

Users of the Guide who are interested in specific product information about a manufacturer's product that is included in Section 8: Incomplete Data are encouraged to contact the specific product manufacturer directly. Manufacturers' contact information is provided in the General Index section of the Guide.

### Incomplete Data

Incomplete product data was provided by the following manufacturers for the specific products indicated.

#### Section 1: Asphalt Shingles

Manufacturer	Products
None	None

#### Section 2: Fiber-cement Products

Manufacturer	Products
None	None

#### Section 3: Clay and Concrete Tile

Manufacturer	Product
None	None

#### Section 4: Metal Panels

Manufacturer	Products
None	None

**Section 5: Wood Shakes and Shingles**

Manufacturer	Products
None	None

**Section 6: Slate**

Manufacturer	Products
None	None

**Section 7: Underlayment Sheets**

Manufacturer	Products
None	None