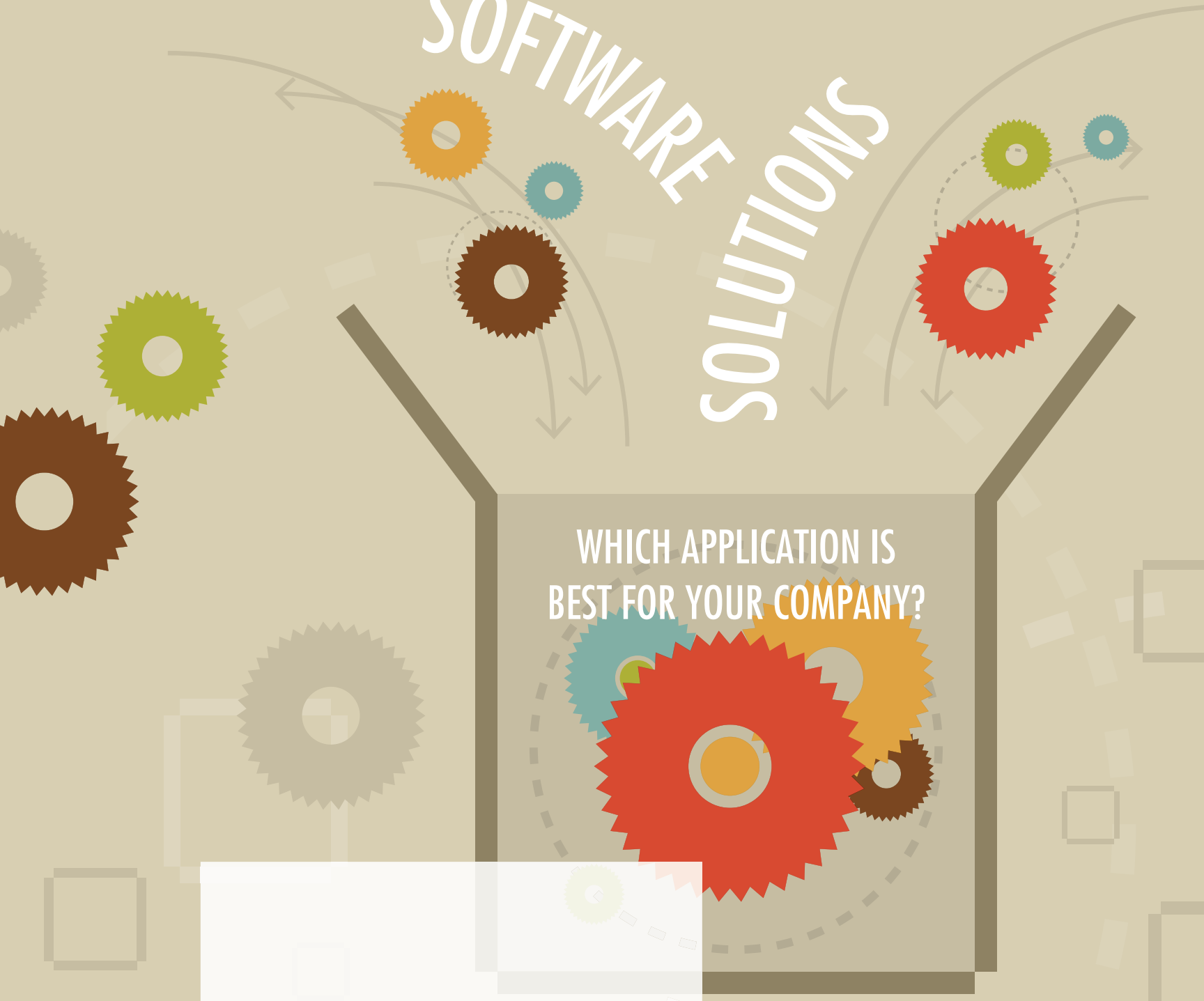
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Ready, set, draw!

by Ambika Puniani Bailey

NRCA will be celebrating National Roofing Week July 7-11 during its annual Midyear Meetings in Chicago. The week will honor the industry's positive works, share the story of the industry with the national media and feature the theme "Everybody needs a roof."

To build excitement for the week, NRCA is sponsoring an art contest for children whose relatives are employed by NRCA contractor members. The contest is open to children in grades 1-8 during the 2013-14 school year. Entrants will be asked to submit original artwork depicting why roofs are important. Submissions will be placed in three categories: grades 1-3, 4-6 and 7-8.

Finalists' artwork will be placed on NRCA's website, and all visitors to the website will be able to vote for their favorite in each category. One winner from each category will be named, and his or her artwork will be used in promotional material for National Roofing Week, as well as highlighted in NRCA's booth during the 2015 International Roofing Expo® in New Orleans. Winners also will be able to choose a $100 gift certificate from among several national retailers.

For the contest to be a success, NRCA needs members to show their pride in the industry and encourages you to ask your employees to involve their children, nieces, nephews and grandchildren in the contest.

As Pablo Picasso said: "Every child is an artist. The problem is how to remain an artist once he grows up."

The deadline for submissions is June 2; winners will be announced June 30. Complete contest rules, as well as an entry form, are available on www.nrca.net/artcontest. For further information, please contact Charlotte Norgaard, NRCA's media relations manager, at (847) 493-7548 or cnorgaard@nrca.net.



NRCA will be celebrating National Roofing Week July 7-11

Ambika

AMBIKA PUNIANI BAILEY is editor of *Professional Roofing* and NRCA's associate executive director of communications and production.

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LETTERS: Write to 10255 W. Higgins Road, Suite 600, Rosemont, IL 60018-5607; fax (847) 299-1183; or email professionalroofing@professionalroofing.net. Views expressed in Letters are not necessarily those of NRCA. Letters must include the sender's name and company name.

MISSION: *Professional Roofing*'s mission is to inform, educate and engage readers by providing timely, useful information and focusing on quality, innovation and responsiveness to readers' needs to help every roofing professional succeed.

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NRCA

The official publication of the National Roofing Contractors Association

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Professional Roofing (ISSN 0896-5552) is published monthly by the National Roofing Contractors Association. Periodicals postage paid at Des Plaines, Ill., and additional mailing offices. Postmaster: Send address changes to Starrcorp., P.O. Box 9045, Permit #17, Maple Shade, NJ 08052. Statements of fact and opinion are made on the responsibility of author alone and do not imply an opinion on the part of the officers or the membership of NRCA. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

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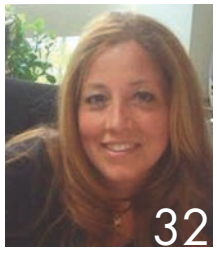
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the source for the roofing industry

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CLOSE-UP

NRCA Director Christian Madsen, president of Madsen Roofing & Waterproofing Inc., Sacramento, Calif., was one of more than 50 volunteers who helped renovate three homes during the 2014 International Roofing Expo®'s (IRE's) Community Service Day Feb. 25 in Las Vegas.

The IRE partnered with Rebuilding Together® Southern Nevada to host the home renovation and revitalization project. Volunteer workers painted, landscaped and performed other necessary repairs for disabled homeowners. Sika Sarnafil, Canton, Mass., was the event's primary sponsor. NRCA and OMG Roofing Products, Agawam, Mass., were co-sponsors.

To view more Community Service Day photos and learn how to submit a photo to Close-up, log on to www.professionalroofing.net.



Updating energy codes

States vary in their adoptions of the latest energy code

by Mark S. Graham

The Department of Energy (DOE) has issued a notice of final determination requiring U.S. states to file certification statements with DOE by May 17 indicating their residential energy codes meet or exceed the requirements of the *International Energy Conservation Code,® 2012 Edition* (IECC 2012). Previous similar determinations have prompted states to update their energy codes. Because IECC 2012 is notably more stringent than previous energy codes, states' energy code adoptions should concern you.

IECC 2012 is notably more stringent than previous energy codes

IECC 2012

IECC 2012 provides for notably more energy-efficient buildings than the code's previous editions.

As it applies to roof assemblies, IECC 2012 provides for increased minimum R-values; mandatory roof surface reflectivity requirements in climate zones 1 through 3; and requirements for continuous air barriers as components of building envelopes, including roof assemblies.

IECC 2012's minimum R-value requirements based on its prescriptive method are provided in the figure.

States' adoptions

NRCA has surveyed states regarding the status of their energy code adoptions.

ON *the* WEB

To see IECC 2012's climate zone map and the *Notice of Final Determination from the Federal Register* dated May 17, 2012, log on to www.professionalroofing.net.

To date, Illinois, Iowa, Maryland, Montana, North Carolina, Rhode Island and Washington have met DOE's May 17 certification deadline and adopted IECC 2012. California, Florida, Massachusetts and New York will adopt IECC 2012 on or before Jan. 1, 2015.

Georgia, Indiana, Louisiana, Maine, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Oklahoma, Pennsylvania, West Virginia and Wisconsin have indicated they do not intend to adopt IECC 2012. The remaining states have indicated they have no specific timetable for IECC 2012 adoption.

NRCA encourages roof system designers and specifiers to be aware of the status of energy code adoption and incorporate the applicable energy code's minimum requirements into their designs and specifications.

Detailed information about states' energy code adoptions is provided on NRCA's website, www.nrca.net/Technical/EnergyCodes. In addition, information regarding IECC 2012, including descriptions of its roof reflectivity and building envelope air barrier requirements, is provided in *Guidelines for Complying with Energy Code Requirements for Roof Assemblies: International Energy Conservation Code, 2009 and 2012 Editions*, which is available by calling (866) ASK-NRCA (275-6722) or visiting shop.nrca.net.

MARK S. GRAHAM is NRCA's associate executive director of technical services.

Minimum required R-value[1]				
Climate zone	Residential buildings[2]	Commercial buildings[3]		
	Ceiling R-value	Insulation entirely above deck	Metal buildings	Attics and other
1	R-30	R-20	R-19 + R-11	R-38
2	R-38			
3				
4	R-49	R-25		
5				
6		R-30	R-25 + R-11	R-49
7		R-35	R-30 + R-11	
8				

[1] Based on IECC 2012 building envelope prescriptive method

[2] Applicable to detached one- and two-family dwellings (townhouses), as well as Group R-2, R-3 and R-4 buildings as defined in the *International Residential Code,® 2012 Edition*, three stories or less in height above grade

[3] Applicable to buildings that do not meet the residential building definition

An unrelenting issue

Immigration reform is progressing but at a staggeringly slow pace

by Duane L. Musser

For more than a decade, NRCA has been working in support of immigration reform legislation as a leading member of the Essential Worker Immigration Coalition. And during the past year, substantial progress on the issue has been made. However, significant obstacles still must be overcome before the goal of a properly functioning immigration system that meets the roofing industry's workforce needs becomes a reality.

NRCA's position

NRCA supports immigration reform that enhances border security, improves interior enforcement without burdening employers, meets U.S. economic needs and deals with illegal workers already embedded in the workforce in a balanced manner.

To achieve these goals, legislation reform must provide an avenue for workers to enter the U.S. legally when warranted. This requires the establishment of a temporary visa program for key sectors of the economy that is governed by market forces, protects U.S. and foreign workers, and enables employers to grow their businesses.

Finding sufficient workers has been a serious problem for roofing contractors despite vigorous efforts to recruit U.S. workers. This is a result of an aging workforce, the physically demanding nature of roofing work and a larger share of U.S. workers pursuing college degrees. The Bureau of Labor Statistics projects employment in the roofing industry will grow 18 percent between 2010 and 2020, and this demand cannot be met by U.S. workers alone.

A temporary visa program that effectively meets the roofing industry's needs along with other sectors of the economy must be guided by market principles and accommodate the economy's constantly fluctuating demand for labor. It must ensure employers undertake vigorous efforts to hire U.S. workers first as well as protect temporary foreign workers. And it must be streamlined and relatively easy for employers to use.

ON *the* WEB

To read statistics about U.S. immigrants, log on to www.professionalroofing.net.

Two steps forward …

The comprehensive immigration reform bill (S. 744) passed by the Senate in 2013 with substantial bipartisan support was a positive step toward NRCA's goals. The legislation would enhance border security, improve interior enforcement and provide a system for addressing currently undocumented workers in a balanced manner.

Most important, the Senate bill achieved a significant milestone with the inclusion of a new W-visa program for construction and other similar industries. However, the W-visa program was saddled with too much bureaucracy and arbitrary constraints from labor unions and others who fear guest workers will displace U.S. workers. As such, the Senate bill is fatally flawed.

Another milestone was reached when House Republicans released broad principles for immigration reform in January. NRCA is pleased the principles recognize employers' workforce needs by establishing a temporary visa program that ends illegal immigration.

The issuance of these immigration principles signaled House Republican leaders want to move forward to address the issue with bills targeted at various aspects of the U.S. immigration system that ultimately could be packaged together to address the problem comprehensively.

In 2013, two House committees approved targeted bills on border security, interior enforcement and reforms to visa programs for the high-tech and agricultural industries. However, two major sticking points remain: the currently undocumented workers already in the U.S. and the establishment of a temporary worker program for construction and other industries that employ semi-skilled workers.

The prospects for immigration reform this year appear bleak

Since the issuance of the Republican principles, it has become apparent many House Republicans, while recognizing the need to address immigration generally, have serious misgivings about doing so in an election year. They argue moving forward on a highly divisive issue will detract from efforts to maintain unity leading up to the November midterm elections. Moreover, with the prospects of Republicans winning a Senate majority improving, they argue a Republican House and Senate working in tandem in 2015 will be able to produce better immigration reform legislation.

Hope remains

Given the continued gridlock in Congress and difficulty of addressing highly controversial issues in an election year, the prospects for immigration reform this year appear bleak. But significant progress has been made as NRCA and allied organizations have successfully convinced more lawmakers that immigration must be addressed.

NRCA will continue working to build support for effective immigration reform as Congress moves, however erratically, toward this elusive goal.

DUANE L. MUSSER is NRCA's vice president of government relations.

FLASHINGS

Breaking news *and* developments

PPG Industries receives government award

PPG Industries Inc., Pittsburgh, has received a $2.1 million award from the Department of Energy (DOE) to design an automated photovoltaic (PV) module manufacturing process that eliminates assembly time and labor. Delivered through DOE's SunShot Initiative, the funding will be used to develop liquid encapsulants that enable PV modules to be manufactured without the need for capital-intensive laminators.

PPG Industries will match the award, resulting in a $4.3 million project investment, and plans to partner with Flextronics International Inc., San Jose, Calif., to design and test the pilot line at the Flextronics Milpitas, Calif., facility that also will produce 60- and 72-cell modules.

"With the proposed manufacturing approach, we expect to increase module throughput by a factor of four at half the capital expense of the existing process," says Andy Meshanko, PPG Industries market development manager, industrial coatings. "With these cost savings and more efficient module designs, we can advance the goal of achieving grid parity for solar power."

The SunShot Initiative is funded through DOE's Office of Energy Efficiency and Renewable Energy and seeks to make solar energy fully cost-competitive with traditional energy sources by the end of the decade.

For more information about the PPG Industries project, visit www.ppgindustrialcoatings.com.

OSHA proposes compliance extension

The Occupational Safety and Health Administration (OSHA) issued a proposal to extend the compliance date for required crane operator certification from Nov. 10, 2014, to Nov. 10, 2017. The proposed three-year extension also would extend the existing phase-in requirement that employers ensure their crane operators are qualified to operate the equipment.



On Aug. 9, 2010, OSHA issued a final standard on requirements for cranes and derricks in construction work. The standard requires crane operators on construction sites to meet one of four certification options by Nov. 10, 2014. A number of parties raised concerns about the certification requirements, and after conducting public meetings, OSHA decided to extend the enforcement date so the certification requirements do not take effect during potential rulemaking or disrupt the construction industry.

Additional information about the proposed extension, including a list of frequently asked questions and detailed notes from the stakeholder meetings, is available at www.osha.gov/cranes-derricks/index.html.

UL announces new partnership

Underwriters Laboratories (UL), Northbrook, Ill., announced a partnership agreement with PRI Construction Materials Technologies LLC (PRI), Tampa, Fla., an independent, accredited testing laboratory dedicated to construction materials. Through the partnership, PRI will participate in UL's Data Acceptance Program, enabling PRI-generated data to be used toward UL product certification. Products tested at PRI now may be eligible to bear UL's trademark.

"The agreement provides our mutual customers with all the testing services they need at their location of choice and have their products bear the UL mark as evidence of code compliance for building officials, engineers, architects and specifiers," says Kevin Faltin, UL's director of building materials and suppression.

For more information about the partnership, visit www.ul.com.

ERA challenges LBNL study

The EPDM Roofing Association (ERA) is challenging a study released by Lawrence Berkeley National Laboratory (LBNL), Berkeley, Calif., that cites white roofs are the most "cost-effective" roofing option during a 50-year time span and calls for the phasing out of black roofs. The LBNL study was published in the March 2014 issue of *Energy and Buildings*.

"Our members make black and white roof membranes," says Ellen Thorp, ERA's associate executive director. "We strongly oppose any recommendation that irresponsibly promotes the use of one of our products over another based on faulty science. We question the validity of this study since it is based on a sample size of only 22 roofs, and we are challenging the conclusions that the authors draw from the data."

ERA convened a panel of experts to discuss the LBNL study and its findings. The panel concluded the study was marked by "a systematic failure to understand that roofs are systems, not a single component."

More information about ERA's review of the LBNL study is available at www.epdmroofs.org. To view the study online, visit www.sciencedirect.com/science/article/pii/S0378778813007652.



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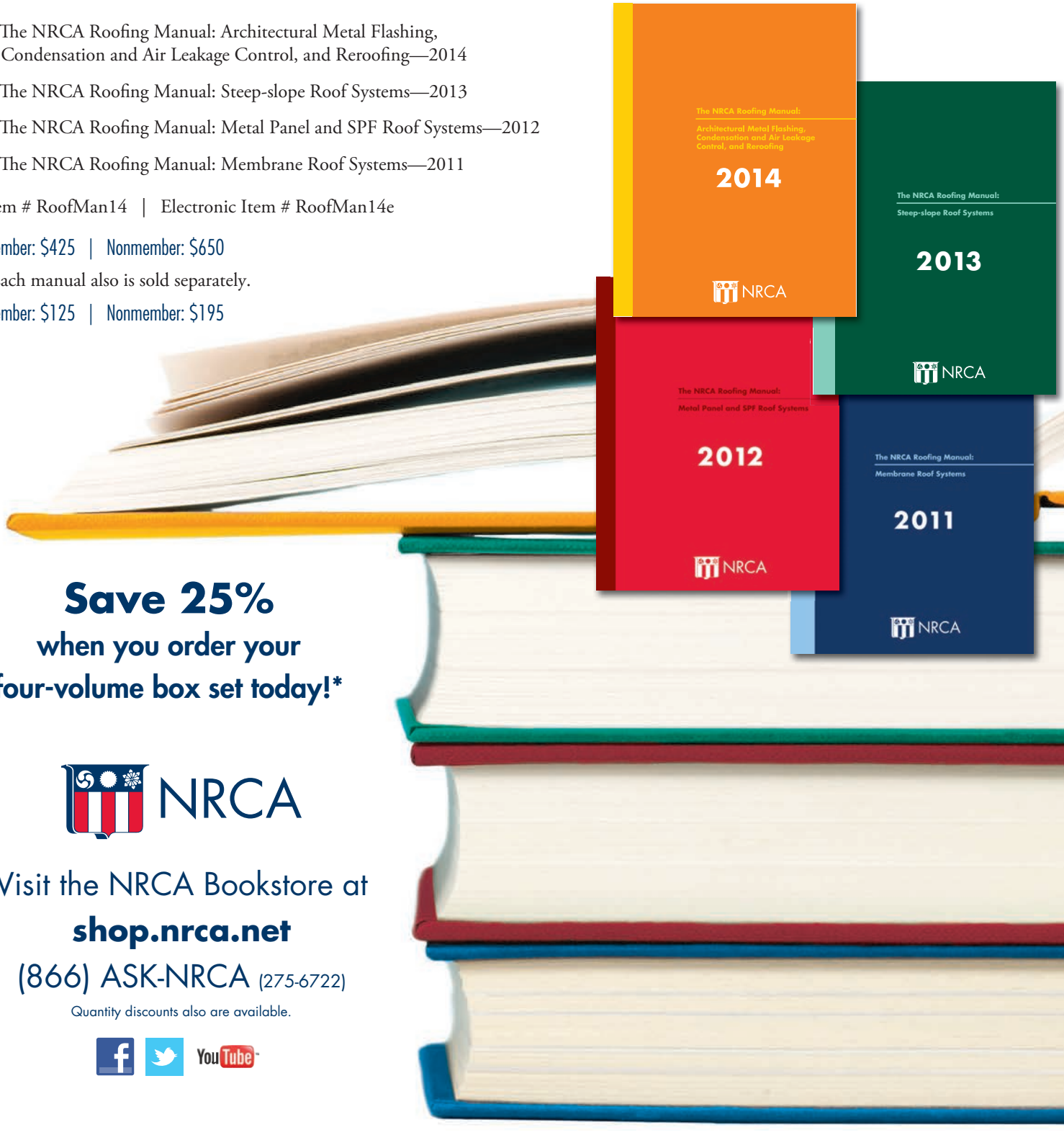
- The NRCA Roofing Manual: Architectural Metal Flashing, Condensation and Air Leakage Control, and Reroofing—2014
- The NRCA Roofing Manual: Steep-slope Roof Systems—2013
- The NRCA Roofing Manual: Metal Panel and SPF Roof Systems—2012
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Guardian Fall Protection recalls self-retracting lifelines

Guardian Fall Protection, Kent, Wash., has recalled certain self-retracting lifelines after discovering a potential performance problem in complying with ANSI/ASSE Z359.14-2012,



"Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems," for -40 F cold conditioning tests. There have been no reported injuries resulting from the issue, but failure to return the specified units may result in serious injury or death. The part numbers being recalled are #109010 (20-foot, 3⁄16-inch Galvanized Cable Edge Series Self-Retracting Lifeline) and #10915 (30-foot, 3⁄16-inch Galvanized Cable Edge Series Self-Retracting Lifeline). The recall is limited to 20- and 30-foot self-retracting lifelines and does not affect other Guardian products.

If a unit's serial number starts with the letter "A" and there is not a stamped "G" on the front cover, the unit needs to be returned. To ensure safety, please inspect your inventory serial numbers and ship products back to Guardian Fall Protection. All affected units will be recertified free of charge. Guardian Fall Protection's customer service will provide instructions for shipping returned products.

For more information, contact David Gambini, Guardian Fall Protection's quality assurance director, at DavidG@guardianfall.com or visit www.guardianfall.com.



DETAILS



Phil Dregger



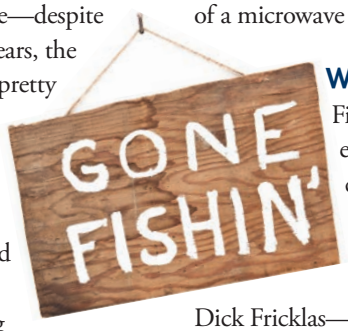


What is your position within your company?

I am president of Technical Roof Services, Concord, Calif.

What is the most unusual roofing project of which you have been a part?

I was asked to design roofs for World War II concrete pillboxes in Guam that would last 50 years without maintenance—despite being covered with jungle vegetation. After about 30 years, the pillboxes still are leak-free despite going through some pretty nasty typhoons.



What is your roofing industry involvement?

I currently serve on the boards of the Special Interest Group for Dynamic Evaluation of Roofing Systems and the Cool Roof Rating Council. I also have served as an RCI Inc. director, an RCI representative to the Roofing Industry Committee on Weather Issues Inc. and a Roofing Industry Educational Institute faculty member.

Why did you become involved in the roofing industry?

Soon after I started working as a geotechnical engineer, I realized my field was fairly "mature" and hadn't changed much during the past 10 years. The firm where I worked had a roofing department and was looking for help. It sounded interesting, so I signed up.



If you could travel anywhere in the world, where would you go?

Stonehenge—I want to sit in the remains of the ring of standing stones and contemplate how our Bronze Age brothers and sisters managed to carve and erect such massive stones and why.

What are the most challenging aspects of your job?

Balancing work and home—there's always something more that can and "should" be done, but I'm no good to anyone unless I take time to rest a bit or go jogging in the hills near my home.

What is your favorite food?

Anything my wife makes for me—we have a deal: If she does all the cooking, I'll do all the dishes without complaining.

What's the most adventurous thing you've done?

Torque testing ¾-inch-diameter bolts 230 feet in the air near the top of a microwave tower as it swayed back and forth in the breeze

What is your fondest childhood memory?

Fishing off the dock at my grandparents' cabin in northern Minnesota—no matter how small or few fish I caught, my grandmother always exclaimed how fine they were and cooked them up.

Who's your hero?

Dick Fricklas—he knows his stuff, he tells it like it is and he is willing to share his knowledge with anyone who asks.

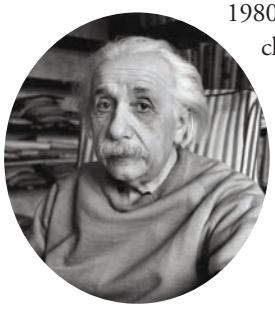
What's your favorite movie?

"Independence Day"—two misunderstood guys win against technically superior but heartless aliens and impress their women in the end. What's not to like?



If you could invite any three people to dinner (dead or alive), whom would you invite? Why?

Paul the Apostle, Albert Einstein and Herb Brooks—I'd ask Paul his thoughts that day on the road to Damascus when Jesus appeared to him, Einstein to explain his long-standing objection to the probabilistic theories of quantum mechanics and how Brooks motivated the 1980 U.S Olympic hockey team to believe they had a chance against the Soviet Union.



What are your best and worst habits?

My best and worst habit is trying to anticipate what will happen before it does happen.

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2. **CNA** (p. 7) is NRCA's endorsed insurance carrier for more than 44 years. Visit www.cna.com/nrca for information.

Metal roofing

3. **Aztec Washer Co.** (p. 48) Visit www.aztecwasher.com.

NRCA

4. **2014 Roofing Manual.** (p. 16) Visit shop.nrca.net.
5. **Building codes publications.** (p. 53) Visit shop.nrca.net.
6. **Digital subscriptions to *Professional Roofing*.** (p. 19)
7. **Fall-protection program.** (p. 31) Visit shop.nrca.net.
8. **HazCom compliance DVD program.** (p. 25) Visit shop.nrca.net.
9. **Membership.** (p. 4) Visit www.nrca.net.
10. **National Roofing Week art contest.** (p. 51)
11. **Select all the above from NRCA**

Other

12. **VELUX Skylights.** (insert) Increase profits on reroofing jobs by replacing old skylights with VELUX skylights. Learn more at skylightoffers.com/reroofing.
13. **Western States Roofing Contractors Association (WSRCA).** (p. 9) Since 1974, WSRCA services the Western U.S. roofing industry by providing technical, educational and legal information to members.
14. **Select all the above from Other**

Shingles

15. **GAF.** (p. 56) North America's largest roofing manufacturer. Please visit us at www.gaf.com.

Single-ply roofing

16. **Firestone Building Products.** (regional p. 15 and 17) Your partner in building performance solutions. Visit www.firestonebpco.com for more information.
17. **Flex Membrane International Corp.**, Leesport, Pa. (p. 55) Call (610) 916-9500 or visit www.FlexRoofingSystems.com.
18. **Select all the above from Single-ply roofing**

Software

19. **AccuLynx** (p. 47) is a software built to help specialty trade contractors succeed. Call (866) 981-5969 or visit www.AccuLynx.com.

Offer expires June 30, 2014

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MANY SOFTWARE OFFERINGS ARE AVAILABLE WITH SEVERAL DISTINGUISHING CHARACTERISTICS

by Joan P. Crowe, AIA

Managing a roofing company is not easy, and many roofing contractors don't want to spend an inordinate amount of time with office and project administration. Additionally, roofing contractors are increasingly interested in customer relationship and sales-tracking software—referred to as customer relationship management (CRM)—to help manage the customer service side of their businesses.

There are products that integrate business and CRM features, and some allow buyers to customize their packages to only pay for the applications they want. And because each roofing company has distinctive needs, NRCA has compiled a list of business-related software applications to help you distinguish the wide variety of products available. Most of the information was found in various trade publications and on companies' websites; it is not meant to be all-inclusive.

The information is categorized into the following columns in the figure:

- Accounts payable/receivable
- Payroll
- Invoicing
- Inventory
- Proposal/estimating
- Project management
- CRM
- Dashboard/portal interface
- Mobile
- Price

Company information	Product	Accounts payable/receivable	Payroll	Invoicing	Inventory	Proposal/estimating	Project management	CRM	Dashboard/portal interface	Mobile	Price
AccuLynx™ (866) 981-5969 www.acculynx.com	AccuLynx has accounting, project management, estimating, business analysis and CRM capabilities designed specifically for roofing companies.	X		X		X	X	X		X	Call for pricing
Applied Computer Systems Inc. (800) 776-6556 www.jobpow.com	JOBPOWER is an integrated construction accounting, job costing and document management system.	X	X	X		X		X	X	X	Call for pricing
C/F Data Solutions LLC (800) 370-0050 www.cfdatasystems.com	STRUCTURE software offers solutions for accounting, operations, procurement and project management.	X	X	X	X		X	X		X	Call for pricing
ClaimExpress.com (877) 240-7722 www.claimexpress.com	ClaimExpress is CRM software with a focus on insurance claim work.			X				X		X	Free trial Call for pricing
Contractors Software Group (800) 866-3083 www.contractorssoftwaregroup.com	Contractors Software Group has three series of fully integrated roofing contractor software solutions based on the size and needs of a construction business.	X	X	X	X	X	X	X		X	Call for pricing
Dataforma (866) 764-9992 www.dataforma.com	Dataforma is business management and CRM software designed specifically for roofing companies.	X		X		X	X	X	X	X	Call for pricing
Dexter + Chaney (800) 875-1400 www.dexterchaney.com	Spectrum® Construction Software is accounting software, and Venture® Project Collaboration Software is project management software.	X	X	X	X	X	X	X	X	X	Call for pricing
Estimation Pro LLC (800) 939-5373 www.estimationpro.com	estimationPRO™ is estimating software, and JOBTRACKER is CRM software. Both programs are written specifically for roofing.					X		X		X	Free 30-day trial $49 per month per user* *Price is for both programs.
Fortuna Logistics LLC (855) 922-8546 www.maxconsoftware.com	MaxCon is CRM and project management software; the available features depend on the level purchased.	X	X	X			X	X	X	X	Maxcon Basic = free for one user Maxcon CRM = $25 per month per user Maxcon Pro = $65 per month per user Maxcon Pro Elite = $75 per month per user
Foundation Software Inc. (800) 246-0800 www.foundationsoft.com	FOUNDATION for Windows is job-cost construction accounting software.	X	X	X	X				X	X	Call for pricing
Intac International LLC (800) 724-7899 www.intacinternational.com	Wintac Pro is software for field service, installation and service contracting companies.	X	X	X	X	X		X	X	X	Wintac Pro = $2,495 $1,150 each additional user
JobNimbus (855) 964-6287 www.jobnimbus.com	JobNimbus is CRM and project management software.			X		X	X	X		X	Basic = free for one user Professional = $25 per month per user
Jonas™ Construction Software (905) 470-4600 www.jonas-construction.com	Jonas Construction Software offers two levels; the available features depend on the level purchased.	X	X	X	X	X	X	X	X	X	Call for pricing

Company information	Product	Accounts payable/receivable	Payroll	Invoicing	Inventory	Proposal/estimating	Project management	CRM	Dashboard/portal interface	Mobile	Price
Maxwell Systems (800) 688-8226 www.maxwellsystems.com	ProContractorMX® is all-in-one construction software that includes estimating, project management and accounting.	X	X	X	X	X	X	X		X	Call for pricing
My Service Depot (888) 518-0818 www.smartserviceinfo.com	Smart Service™ is routing, scheduling and dispatching software for the service industry. iFleet is the mobile version.				X		X	X		X	Call for pricing
Penta Technologies Inc. (262) 782-7700 www.penta.com	PENTA is accounting, project management and CRM software for specialty contractors.	X	X	X	X		X	X		X	Call for pricing
Procore™ Technologies (866) 477-6267 www.procore.com	Procore is construction project management software.					X	X		X	X	Call for pricing
Project-SalesAchiever® (800) 915-3597 www.constructioncrm.com	Project-SalesAchiever is specifically designed to manage the complex sales process around the construction industry.							X		X	Call for pricing
Sage Software Inc. (866) 996-7243 www.na.sage.com	Sage Software offers Sage 100 Contractor, Sage 300 Contractor, Sage 300 Trade Specialty and Sage Estimating, including extra modules.	X	X	X	X	X	X	X	X	X	Call for pricing
ServiceCEO (866) 606-6256 www.serviceceo.com	ServiceCEO is field service software.			X				X	X	X	Standard = $95 per month per user Enterprise = $125 per month per user
Site Armor Inc. (877) 285-0084 www.contractorscloud.com	Contractors Cloud is a web-based construction management solution designed for the sales-oriented general contractor.					X	X	X		X	$800 activation fee $70 per month per user
Textura® Corp (866) 839-8872 www.texturacorp.com	Textura is a project management tool for a project's life cycle.	X		X		X	X		X	X	Call for pricing

ACCOUNTING

The first four categories—accounts payable/receivable, payroll, invoicing and inventory—are accounting features and typically most of the profiled accounting software products have these features. Some products include general ledger and financial reporting capabilities; purchase order management; job-cost data analysis; aging information; check writing; and maintenance of state and federal documents such as I-9, W-2 and W-4 forms. Additionally, many of the software applications have the ability to charge inventory and/or equipment by project.

One advantage to having accounting software is the ability to generate reports that can summarize job-cost history; show budget vs. actual cost; track project commissions; and reflect the status of billings, purchase orders, lien waivers and change orders.

There also are a couple of applications that work with different currencies and integrate third-party software, such as QuickBooks.™

PROPOSAL/ESTIMATING

Some business/accounting software products incorporate estimating. They have features that perform take-offs from construction drawings, integrate with computer-assisted drawing programs, have sketching and drawing capabilities, and create proposals.

Some applications tie in estimation with accounting and project management data, helping with job-cost analysis.

PROJECT MANAGEMENT

Project management software generally manages the bidding process and project status and tracks work schedules. It can maintain project documentation, such as submittals, requests for information, daily logs, meeting minutes, punch lists, drawings and photos. Many project management applications also include the ability to manage subcontracts.

A couple of the products feature dispatching fleet management and routing and/or mapping services.

CRM

CRM software applications help automate, maintain and streamline customer relations and can be used for marketing. CRM systems vary widely in capabilities and pricing, from basic contact management to elaborate packages for sales, services and marketing.

The primary purpose of CRM software is to consolidate customer information so users can better organize and manage customer relationships. Additionally, these applications automate common processes and provide tools for monitoring performance and productivity. Systems vary, but most CRM software will include the following basic functions:

- Manage customer data by providing a searchable database to store customer contact information and relevant documents, such as estimates, proposals and contracts
- Track communications via telephone, in person, through email or by other means. These exchanges can be logged manually or automated with telephone and email system integrations. Some systems also can track interactions on Facebook, Twitter and other social media platforms.
- Coordinate workflow by standardizing business processes, such as scheduling or dispatching, usually through a combination of task lists, calendars and reminders or alerts
- Track performance and productivity, for instance, how many new contacts were added to the database on a given day or how much revenue was generated

For articles related to this topic, see:

"The future is now," February 2013 issue

"Seeking assistance," August 2008 issue

DASHBOARD/PORTAL INTERFACE

A dashboard is a user interface that organizes and presents information in a way that is easy to read on a single screen. The dashboard concept is akin to a control panel for a software application. One advantage of a dashboard is it provides real-time information for the user. Many business and project management software packages have dashboard interfaces. Some products will allow users to customize their dashboard interfaces, and one company offers a multilingual capability for users to view their applications' interfaces in English, Spanish or Portuguese.

MOBILE

The trend in the construction industry is users want to be able to access information when they are away from the office, especially when they are on a job site. You will notice all the listed software applications have some type of mobile viewing capability.

PRICING

Most companies want you to contact them for pricing information because the companies offer different levels of service, multiple add-on features or prices depending on the number of users. But a majority of products offer free demos so you can get a cursory look at the products. Training also is available from some companies.

HELPING YOU

Listed companies were found by researching advertisements in magazines that market to the construction industry and searching the Internet. NRCA attempted to include products for different-sized companies and varying price ranges. Keep in mind, this list is not all-inclusive, and inclusion or exclusion of any software does not imply an endorsement or condemnation by NRCA.

We encourage you to review the products, visit software companies' websites and contact the companies for further information.

JOAN P. CROWE, AIA, is an NRCA director of technical services.

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Another successful year

NRCA's 127th Annual Convention and the 2014 International Roofing Expo® break attendance records

by Sarah Perkins

NRCA's 127th Annual Convention and the 2014 International Roofing Expo (IRE) struck gold this year with record-breaking attendance. The trade show held Feb. 26-28 in Las Vegas boasted 426 companies in 1,045 booths, with a total attendance of 9,568. The only previous trade show to come near these numbers was the 1987 convention celebrating NRCA's centennial with approximately 9,300 in attendance.

CONVENTION KICK-OFF

NRCA's convention began Monday, Feb. 24, with NRCA's Executive Committee meeting and lunch, NRCA's Affiliate Executive meeting and lunch, and NRCA's board of directors meeting. There also was a reception held by ROOFPAC, NRCA's political action committee, which featured Rep. Mark Amodei (R-Nev.) as a special guest. Amodei spoke about the need for regulatory and immigration reform. In addition, Sen. Dean Heller (R-Nev.) provided a video welcome to ROOFPAC guests.

COMMUNITY SERVICE WORK

On Tuesday, Feb. 25, Sika Sarnafil, Canton, Mass., sponsored IRE's Community Service Day; NRCA and OMG Roofing Products, Agawam, Mass., were co-sponsors. More than 50 volunteers focused on helping rebuild three homes. The first home, owned by Humberto Santana, a 65-year-old who uses a walker and cane and lives by himself, needed roof system replacement, ceiling repair, washing machine and oven repairs, exterior painting, property cleanup and tree trimming.

The second home, owned by Sharon Wilson, a 60-year-old disabled woman living with her ex-husband and 23-year-old son, needed ceiling repair and exterior painting.




WELCOME
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NEVADA





Top: Rebuilding Together team
Bottom: Las Vegas' local Fox News affiliate covered the Community Service Day.

And the third home, owned by Maria Hernandez, a single, disabled senior raising her three grandchildren and great-grandchild, needed wood fencing across the front yard; removing and replacing kitchen cabinets, counter, sink and faucet; repairing a leaking bathroom faucet; exterior painting; and cleaning debris.

Las Vegas' local Fox News affiliate covered the event. Sika Sarnafil was proud to help sponsor the hard work: "Congratulations to the Rebuilding Together organization and Hanley Wood for another successful Community Service Day," says Jay Thomas, Sika Sarnafil's vice president of marketing, roofing and flooring. "It is a great feeling to work together with a great group of volunteers on behalf of some very deserving homeowners. And besides, who can complain about a day out in the warm sunshine during this long winter?"

LEGAL LUNCHEON

The National Roofing Legal Resource Center (NRLRC) hosted a two-part luncheon program Wednesday, Feb. 26. The first part of the program focused on contract and technical issues posing major liability risks to roofing contractors, including the most critical provisions commonly included in contracts. John Embow, president of Grove Roofing Services Inc., Buffalo, N.Y.; Curt Boyd, president of Academy Roofing Inc., Aurora, Colo.; and J.J. Smithey, president of Frost Roofing Inc., Wapakoneta, Ohio, shared their experiences with negotiating equitable construction contracts.

The second half of the luncheon featured an expert technical panel that included Mark Graham, NRCA's associate executive director of technical services; Dane Bradford, president of Bradford Roof Management Inc., Billings, Mont.; and Stephen Phillips, partner with Atlanta-based law firm Hendricks, Phillips, Salzman & Flatt. The panel discussed how contractors can limit liability and protect themselves from a number of legal and technical problems, such as moisture in lightweight structural concrete roof decks, code requirement changes and new long-term thermal resistance values.

ROOFPAC

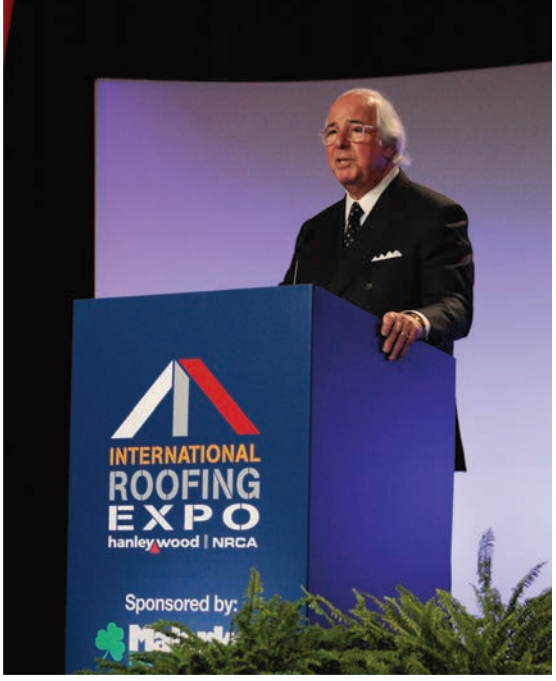
ROOFPAC hosted its annual golf tournament and a silent auction to raise money for pro-business congressional candidates. The golf tournament took place Tuesday, Feb. 25, at the Angel Park Golf Course and was sponsored by Johns Manville, Denver. The silent auction took place Wednesday, Feb. 26, through Thursday, Feb. 27. Participants had the opportunity to bid on vacations, jewelry, electronics and one-of-a-kind memorabilia. The total revenue earned from the welcome reception, golf tournament and silent auction was more than $50,000.

THE EXPO

The IRE began Wednesday, Feb. 26, with a keynote address by Frank Abagnale. Abagnale is the subject of Steven Spielberg's film "Catch Me if You Can" and one of the world's most respected authorities on forgery, embezzlement and secure documents. He has advised, consulted and worked with hundreds of financial institutions, corporations and government agencies around the world for more than 30 years.

There also was a welcome party that evening at LIGHT nightclub where attendees enjoyed food, beverages, music and dancing.

The IRE also offered a number of educational information sessions for contractors to learn more about the roofing industry and how to grow their businesses. Events included CERTA Train-the-trainer Authorization Programs; NRCA's Young Contractors Committee Roundtable Discussion: Emerging Business Technology in the Roofing Industry; the Executive Leadership Roundtable Discussion: Challenges Facing Leaders Today; and information sessions led by NRCA staff members.



Frank Abagnale, IRE's keynote speaker

HONORING THE BEST

On Thursday, Feb. 27, NRCA celebrated excellence in the roofing industry with NRCA's Awards Ceremony and Cocktail Reception. The ceremony recognizes recipients of the industry's most prestigious awards: the J.A. Piper Award, CNA/NRCA Community Involvement Award, NRCA's Gold Circle Awards, The Roofing Industry Alliance for Progress' Most Valuable Player (MVP) Awards and Charlie Raymond Award.

The 67th J.A. Piper Award was awarded to Rob Therrien, president of The Melanson Co. Inc., Keene, N.H. The award is the industry's highest honor, recognizing those who have devoted constant outstanding service to NRCA and the roofing industry. The award is named for former NRCA President Joseph A. Piper, who worked to keep the association alive during the Great Depression.

Therrien served as NRCA's president from 2008-09; he currently serves as chairman of the association's National Roofing Council and is a ROOFPAC supporter. Therrien also has served as NRCA's senior vice president, vice president and an NRCA director, NRLRC's president, and has served on many committees, including the Architectural Sheet Metal, Manual Update, Technical Operations, and Health and Safety committees; he also has served on the Insurance Board of Governors and the NRCA/RCI Task Force on Safety Design. In addition, Therrien has served as The Roofing Industry Alliance for Progress' president.

The CNA/NRCA Community Involvement Award honored charitable works performed by NRCA contractor members between Jan. 1, 2013, and Dec. 31, 2013. This year's winner is Oklahoma City-based Oklahoma Roofing and Sheet Metal LLC for its efforts to help children of deployed members of the U.S. military.

Oklahoma Roofing and Sheet Metal sponsored "Horseback Heroes," an annual event to honor children of Oklahoma service men and women. The event took place on a farm and gave children the opportunity to take part in horseback riding, cattle roping, and tack and grooming. The event took place at the ranch of Gerry Shepherd, Oklahoma Roofing and Sheet Metal's president and chief executive officer (CEO), and was offered free to more than 80 children.

The CNA Foundation will award the Oklahoma 4-H Foundation with $5,000 on behalf of Oklahoma Roofing and Sheet Metal; the 4-H Foundation helped co-sponsor the event.

This year's honorable mentions each will receive $1,000 from the CNA Foundation for their charities. The honorable mentions are Commercial Roofers Inc., Las Vegas, for its work with the University of Nevada Las Vegas Scholarship Program and Showalter Roofing Services Inc., Naperville, Ill., for its support of the Willow Creek Community Church's Camp Paradise, Paradise, Mich.

NRCA's 2014 Gold Circle Awards recognized 12 members who performed outstanding contributions to the roofing industry, including unique roofing-related jobs, programs and services. The winners are as follows:

- Outstanding Workmanship: Low-slope—James R. Walls Contracting Co. Inc., Clinton, Md., for the International Monetary Fund Headquarters, Washington, D.C.
- Outstanding Workmanship: Steep-slope—Bregenzer Brothers Inc., Hopewell, N.J., for The Lawrenceville School, Lawrenceville, N.J.; Hayden Building Maintenance Corp., West Nyack, N.Y., for Vassar College, Poughkeepsie, N.Y.; James Myers Co. Inc., Beltsville, Md., for Dumbarton Oaks, Washington, D.C.; and W.A. Lynch Roofing Co. Inc., Charlottesville, Va., for the University of Virginia, Charlottesville
- Innovative Solutions: New Construction—D.C. Taylor Co., Cedar Rapids, Iowa, for TD Ameritrade Headquarters, Omaha, Neb.
- Innovative Solutions: Reroofing—Clark's Quality Roofing Inc., Murray, Utah, for Salt Palace Convention Center, Salt Lake City; Ruff Roofers Inc., Baltimore, for Union Square Pavilion, Baltimore; and W.A. Lynch Roofing Co. Inc., Charlottesville,

Did you **KNOW**?

Final trade show numbers for 2014:

- 426 companies
- 1,045 booths
- 9,568 total attendance



Gerry Shepherd (center), president and chief executive officer of Oklahoma Roofing and Sheet Metal LLC, Oklahoma City, accepts the CNA/NRCA Community Involvement Award from NRCA Executive Vice President Bill Good and Rhonda Lohmar, CNA's consulting underwriting director.



Rob Therrien, president of The Melanson Co. Inc., Keene, N.H., and winner of the 2014 J.A. Piper Award, is surrounded by former Piper Award recipients.

Va., for University of Virginia, Charlottesville

- Service to the Community—Chamberlin Roofing & Waterproofing, Oklahoma City, for Chamberlin Volunteer Day for Moore, Okla., tornado recovery
- Service to the Industry—Trent Cotney, P.A., Tampa, Fla., for his service to the industry
- Gold Circle Safety Awards—Castro Roofing of Texas LP, Dallas, for Dallas City Performance Hall and Douglass Colony Group Inc., Commerce City, Colo., for Children's Hospital Colorado, Aurora

ON *the* WEB

To view a gallery of convention photos, log on to www.professionalroofing.net.

The Roofing Industry Alliance for Progress presented its 14th annual MVP Awards, recognizing roofing workers for outstanding on-the-job performance; on-the-job safety performance; contributions to a team effort; community service and volunteerism; and other noteworthy contributions. The 2014 MVP Award winners are: Javier Contreras, foreman for Chamberlin Roofing & Waterproofing, Dallas; Jim Dieckmen, superintendent of Academy Roofing Inc., Aurora, Colo.; Roberto Valdez, superintendent of Supreme Roofing Systems Inc., Dallas; Ryan Watts, foreman for Jurin Roofing Services Inc., Quakertown, Pa.; and Coy Wilson, foreman for CentiMark Corp., Canonsburg, Pa. Watts also was named the Best of the Best, a special honor co-sponsored by *Professional Roofing* magazine and OMG Roofing Products.



Ryan Watts, foreman for Jurin Roofing Services Inc., Quakertown, Pa., receives the Best of the Best Award from Tim Rainey (left),president of Supreme Systems Inc., Dallas, and Josh Kelly, vice president and general manager of OMG Roofing Products.

The Charlie Raymond Award honors contractors and associate members for their efforts to recruit NRCA members. The award was named for former NRCA president and J.A. Piper Award winner Charlie Raymond, who became chairman of NRCA's Membership Committee and is responsible for recruiting many members. The 2014 associate member recipient of the Charlie Raymond Award is Nelson R. Braddy Jr., current NRCA president and president and CEO of King of Texas Roofing Co. LP, Grand Prairie, Texas. The roofing manufacturer award winner is GAF, Wayne, N.J.

ASSOCIATION'S LEADERSHIP

During the convention, NRCA members elected the 2014-15 NRCA slate of officers and directors. Richard Nugent, CEO of Nations Roof LLC, Lithia Springs, Ga., has been elected president, and Lindy Ryan, president of Tecta America Southeast LLC, Sanford, Fla., was elected senior vice president. Dennis Conway, principal and vice president of Commercial Roofers Inc., Las Vegas; Scott Kawulok, executive project manager at B&M Roofing of Colorado Inc., Frederick, Colo.; Rod Petrick, president of Ridgeworth Roofing Co. Inc., Frankfort, Ill.; and Nick Sabino, president of Deer Park Roofing Inc., Cincinnati, were elected vice presidents.

Additionally, the following were elected NRCA directors: Bill Baley, president of C.I. Services, Mission Viejo, Calif.; Jim Barr, president of Barr Roofing Co., Abilene, Texas; Suzan Boyd, vice president of Academy Roofing Inc., Aurora, Colo.; Pat Dorsey, project manager at Tecta America Kentucky, Louisville; John Embow, president of Grove Roofing Services Inc., Buffalo, N.Y.; Steve Harvey, president of J&S Building Exteriors Inc., Attleboro, Mass.; David Hesse, vice president of Kalkreuth Roofing & Sheet Metal Inc., Frederick, Md.; Joseph Lancaster, vice president of Metalcrafts Inc., Savannah, Ga.; John Miller Jr., president of Acme Roofing & Sheet Metal Co. Inc., Dothan, Ala.; Kyle Redd, project manager at Redd Roofing Co. Inc., Ogden, Utah; Brad Sutter, executive vice president of Sutter Roofing Co. of Florida, Sarasota; Jayne Williams, chief financial officer of KPOST Co., Dallas; and Robert Willis, general manager of Tecta America Zero Co. LLC, Dayton, Ohio.

2014 was clearly a successful year for the convention and IRE.

Bill Good, NRCA's executive vice president, says: "The 2014 IRE and NRCA's 127th Annual Convention turned out to be the largest ever, and certainly among the best. Most members are optimistic about prospects for the remainder of the year as was obvious by a busy exhibit hall. It also helped that the weather cooperated, allowing for two great events to occur just prior to the show: our ROOFPAC golf tournament and a Community Service Day that featured the rehabilitation of three homes. Believe it or not, planning already is under way for the 2015 event in New Orleans Feb. 24-26 where we expect even bigger and better things."

SARAH PERKINS is *Professional Roofing*'s editorial assistant.

Are you prepared to comply fully with OSHA's fall-protection regulations?

NRCA's new fall-protection compliance program, **Serving up Safety: A Recipe for Avoiding Falls on the Job**, is your tool for training new and seasoned workers about all aspects of fall protection for roofing work.

With this comprehensive program, you receive everything you need to comply with OSHA's fall-protection requirements for roofing work, including:

- A **DVD with six hours of video content** explaining all fall-protection rules pertaining to each of the 50 United States
- Printable PDFs, including:
  - An **instructors guide** to assist your trainer in conducting and delivering informational classroom sessions
  - A **student workbook** and **student handout** that summarize key fall-protection rules and components
  - **Regulatory excerpts** from federal and state agencies
  - **Examinations tailored to specific states** that test students' knowledge of the unique fall-protection rules that apply
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Photos courtesy of James R. Walls Contracting Co. Inc., Clinton, Md.



James R. Walls rebuilds four roof systems on the International Monetary Fund's headquarters

by Chrystine Elle Hanus

The International Monetary Fund in Washington, D.C., was founded more than 60 years ago near the end of World War II. Its founders aimed to build a framework for economic cooperation to avoid the repetition in economic policies that contributed to the Great Depression and global conflict that followed.

Chartered through the United Nations, the International Monetary Fund works in a variety of sectors to promote global growth and sound economics. It tracks global economic trends and performance, alerting its 188 member countries when it sees problems on the horizon, and provides policy advice and financing during economic difficulties. It also works with developing nations to help them achieve macroeconomic stability and reduce poverty.

Designed by architect Vincent Kling, the International Monetary Fund's Headquarters Building 1 was constructed in phases between 1973 and 1998. Its 100,000 square feet houses about 2,300 employees. Headquarters Building 2 was designed by Henry Cobb and Yvonne Szeto of Pei Cobb Freed & Partners, New York, and was completed in 2005.

Sustainability study

The International Monetary Fund's reroofing project began as a sustainability study to investigate the options of replacing the roof systems on Headquarters Building 1 and retrofitting Headquarters Building 2's roof to mitigate ongoing ecological effects on the building. Power generation, "cool" surfacing and vegetative roof systems were investigated and analyzed based on costs, returns on investment and feasibility.

The sustainability design team, Restoration Engineering Inc., Fairfax, Va., determined a vegetative roof system was the best option for Headquarters Building 2. The initial design intent of Headquarters Building 2 included a view and connection to two adjacent urban parks. A sense of openness and nature was to pervade as much of the building as possible. Retrofitting the building with a vegetative roof was a means to improve the building's sustainability and elaborate on the original design. Because the building was constructed with a hot-applied rubberized asphalt membrane still under warranty, it was well-suited for an extensive vegetative roof system.

To make the project as energy-, cost- and waste-efficient as possible, the existing hot-applied rubberized asphalt membrane, existing extruded polystyrene insulation and concrete paver ballast were to be reused. The existing gravel ballast would not be reused on the reroofing project but recycled for landscaping at other properties.

Project name: International Monetary Fund Headquarters
Project location: Washington, D.C.
Project duration: December 2010-April 2012
Roof system types: Hot-applied rubberized asphalt; vegetative
Roofing contractor: James R. Walls Contracting Co. Inc., Clinton, Md.
Product manufacturers: Barrett Co., Millington, N.J.
Gold Circle Awards categories: Outstanding Workmanship: Low-slope; Innovative Solutions: Reroofing





Top to bottom: one of the new vegetative roof systems; the repaired 3,000-square-foot skylight

ON *the* WEB

For more information about the International Monetary Fund, log on to www.professionalroofing.net.

James R. Walls Contracting Co. Inc., Clinton, Md., was chosen for the roofing project because of its experience with hot-applied rubberized asphalt roof systems and attention to detail.

"James R. Walls' extensive experience with hot-applied rubberized asphalt roof systems and reputation for details were key elements in the selection process," says Jeffery M. Hugney, P.E., president of Restoration Engineering. "It is one of the few contractors whom we could trust to meet the challenges."

Headquarters Building 1

Work on Headquarters Building 1 was performed on two primary roof areas, as well as work on the cooling tower.

Roof area one

In December 2010, James R. Walls began work on the first roof section that consisted of repairing skylights; resealing and recapping the skylights, including replacement of gaskets; and replacing the gutter liner throughout the network of built-in gutters surrounding the skylights. More than 70 percent of the gutters were 4½ inches wide and adjacent to a 10-foot rising wall, making access and mobility especially challenging.

The existing EPDM and insulation were removed down to the structural steel gutter frame. James R. Walls covered the skylight glass with reclaimed EPDM to prevent damage while sandblasting the existing structural steel down to bright metal.

To ensure the building remained watertight during skylight repairs and to prevent disruption to the occupied building spaces, James R. Walls developed a two-step system. First, it constructed temporary skylight access framing and a de facto temporary roof system to bridge the gaps between skylights, and then it covered the perimeter gutters with EPDM at the end of each workday.

The skylights' gutter walls were insulated with 2 inches of extruded insulation and covered with ¾-inch-wide plywood fastened to the ¼-inch-thick steel frame using right-angle drills and structural screws. All inside gutter corners were canted with Soprema®'s two-component methyl methacrylate Alsan RS Paste.

The structural steel on the bottom and sides near the rising wall were drilled every 2 feet, followed by spray polyurethane foam (SPF) under and behind the structural steel gutter to provide insulation. All angle changes in the gutter, joints in the plywood and holes to install the SPF were pre-flashed. James R. Walls then coated the entire gutter with Alsan RS Paste and fabric. Mechanics cut the skylights' existing counterflashings and installed new ones. All the retainer bars and gaskets were replaced, joints were recaulked, and new retainers were wet-glazed.

A new system of catwalks was installed around the skylights to improve future maintenance access, and about 13,000 square feet of surrounding gutters and drains were rehabilitated.

Roof area two

The second section of work was performed on the building's fifth level and consisted of an 8,500-square-foot garden terrace renovation, including underlying waterproofing membrane replacement, and repairs to a 3,000-square-foot skylight.

The large skylight is surrounded by pavered terrace space and deep garden planters. Most of the granite pavers are custom-patterned to fit the walkway, so they were identified and marked accordingly before removal to ensure proper reinstallation and orientation. Planter vegetation, including trees and growth medium, was removed during the night through the building. The granite planter walls also were removed, stored for use and marked for existing elevations and outlet locations, so during reinstallation they would assume their previous positions.

The granite pavers and wall panels were hoisted to the penthouse roof via crane and spread out to distribute the weight for temporary storage. Additional night work included demolishing the Bituthene® waterproofing membrane, terrace topping slab and grout-filled block. All debris was hauled out through the building to the loading dock.

During the day, the concrete deck was waterproofed with Barrett Co.'s ram-Tough 250 hot-applied rubberized asphalt membrane. Concrete backup walls were laid out and constructed to accommodate the reinstallation of the granite walls and pavers. The concrete was mixed on the deck area with a small mixer, 3 cubic feet at a time. Rapid-curing concrete allowed the walls to be flashed more quickly to remain on schedule.

After the concrete walls cured, they were flashed with neoprene and a protection sheet. James R. Walls built a hood above the asphalt melter and installed two in-line fans to draw the smoke and smell of hot rubber away from the terrace to the penthouse roof, out of range of building air intakes. A new electric line was installed and outlets relocated so they would line up with the existing cutouts in the granite.

The waterproofing membrane on the deck areas and planters was tested using electric field vector mapping. Five inches of extruded insulation and filter fabric were installed in the walkway to prevent damage to the waterproofing membrane while the granite walls were installed. James R. Walls lowered the salvaged granite wall panels from the penthouse roof via crane as sections of the granite planter walls were completed.

The pavers also were lowered down from the penthouse roof, oriented and reset at the original locations during the day; plants were brought in and planted at night. For the skylight work, all retainer bars and gaskets were removed. Caulk joints were cut out, cleaned and resealed. Wet-glazing secured new retainers.

The cooling tower

Work on the cooling tower began with removing the existing PVC membrane. Located two stories below the penthouse, all materials and equipment had to be hoisted by crane to the penthouse roof and hand-carried down to the cooling tower level.

Tear-off of the existing pavers, PVC membrane and pitch vapor barrier was performed at night. Because of access restrictions, material removal was done by hand and manually transported through a circuitous back route through the building.

A new hot-applied rubberized asphalt membrane was installed and water-tested and then covered with extruded polystyrene insulation, filter fabric and pavers. The pavers were crane-loaded on the penthouse roof and hoist-lowered with a custom-fabricated pan that held four pavers upright, so they could fit through a 2-feet-wide by 3-feet-high space between pipes while lowered to the cooling tower.

Headquarters Building 2

Work on Headquarters Building 2 included removing existing gravel overburden and installing a new hot-applied rubberized asphalt membrane with a root barrier set in hot-applied rubberized asphalt over about 40,000 square feet of existing hot-applied rubberized asphalt.

James R. Walls made extensive repairs to the existing membrane where deficiencies were identified. The repaired membrane then was re-covered with existing insulation plus additional new insulation wherever possible for increased energy-efficiency followed by 215-mil-thick hot-applied rubberized asphalt. After installation of a drainage board with integral filter fabric and a root barrier, about 4 inches of engineered soil medium were installed in areas designated for vegetation. Pre-grown vegetated sedum mats were installed throughout vegetative areas, and original concrete pavers and stone ballast were reinstalled in remaining areas.

Numerous leaks occurred along the building's perimeter soon after the building's initial construction, so the coping system was removed to make repairs to perimeter flashings. The leaks were attributable to poor detailing of the flashings beneath the coping system. To remedy the original construction's deficient work, James R. Walls installed neoprene and polymer-modified bitumen flashing plies set in hot-applied rubberized asphalt and extended the flashing plies across the parapet's top. Workers exercised extreme care to avoid spilling and splattering of materials onto the sidewalk 12 floors below.

On the penthouse, the existing parapet did not have adequate height to accommodate installation of a vegetative roof assembly. Consequently, a wooden-framed parapet clad with aluminum flashings was installed along the perimeter.

The payoff

Averaging 20 workers per day, James R. Walls completed the $3.3 million reroofing project in April 2012, within 15 months. The International Monetary Fund project was technically complex, labor-intensive and required a great deal of work performed at night. In addition, noise and fumes had to be abated to ensure building occupants were able to work with minimal disruption, and maneuvering of material, recycling and trash delivery via an on-site tower crane between two buildings with simultaneous work required intense coordination.

"Despite numerous challenges, James R. Walls' performance on this project exceeded our expectations and the client's expectations," Hugney says. "The tight access, scheduling and client constraints resulted in James R. Walls finding many ways to innovate through the course of work."

For its exceptional work and innovation exhibited during the International Monetary Fund project, James R. Walls received a 2014 Gold Circle Award in the Outstanding Workmanship: Low-slope category and an Honorable Mention in the Innovative Solutions: Reroofing category.

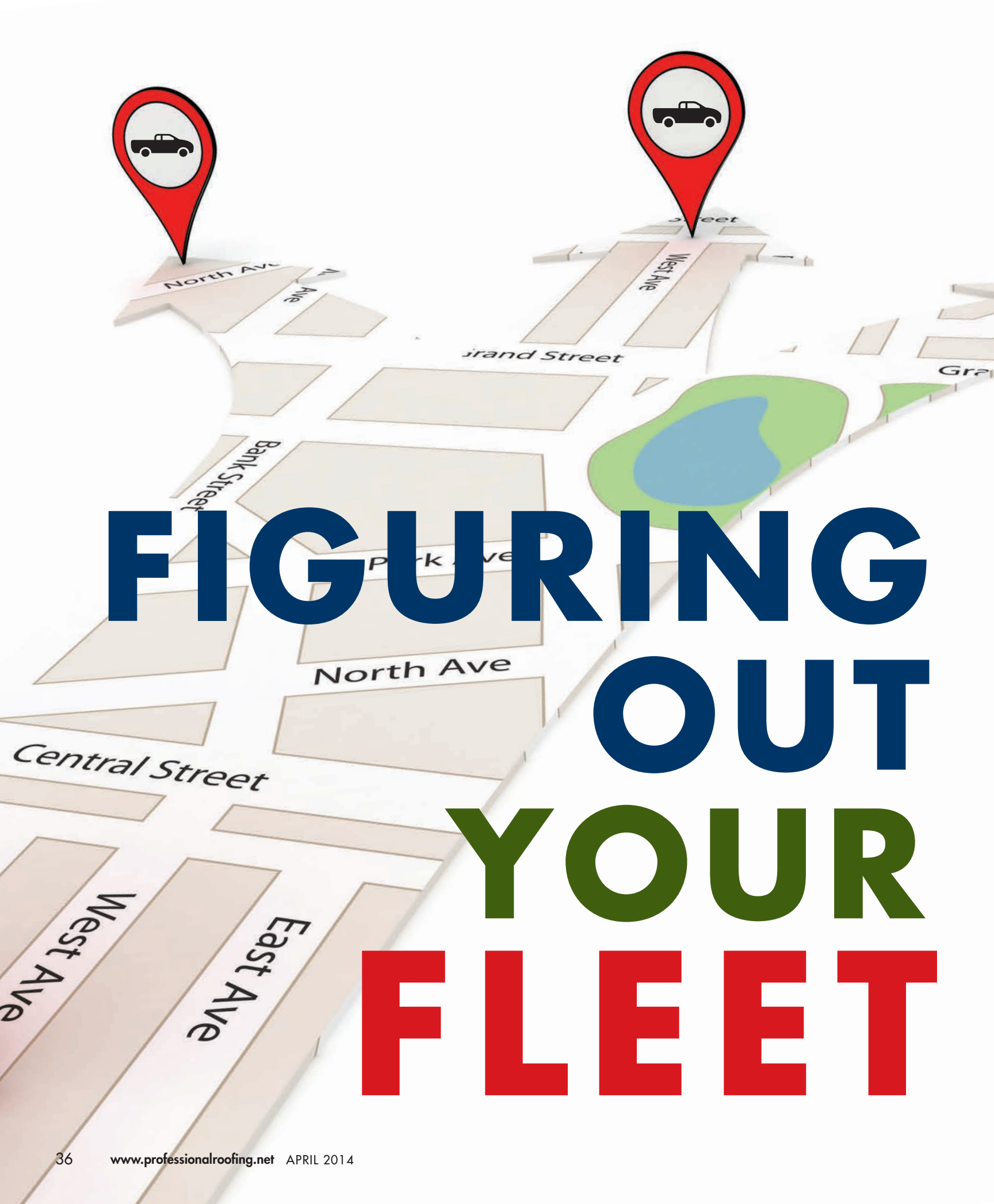
CHRYSTINE ELLE HANUS is *Professional Roofing*'s associate editor and NRCA's director of communications.







Top to bottom: Granite pavers, walls and vegetation were removed and stored during roof system repairs and then reinstalled; work on various roof levels included an 8,500-square-foot garden terrace renovation and a new system of catwalks; some work areas were 4½ inches wide and adjacent to a 10-foot rising wall, making access and mobility especially challenging.



FIGURING OUT YOUR FLEET



Fleet management software can help your company run more efficiently

by Todd Ewing

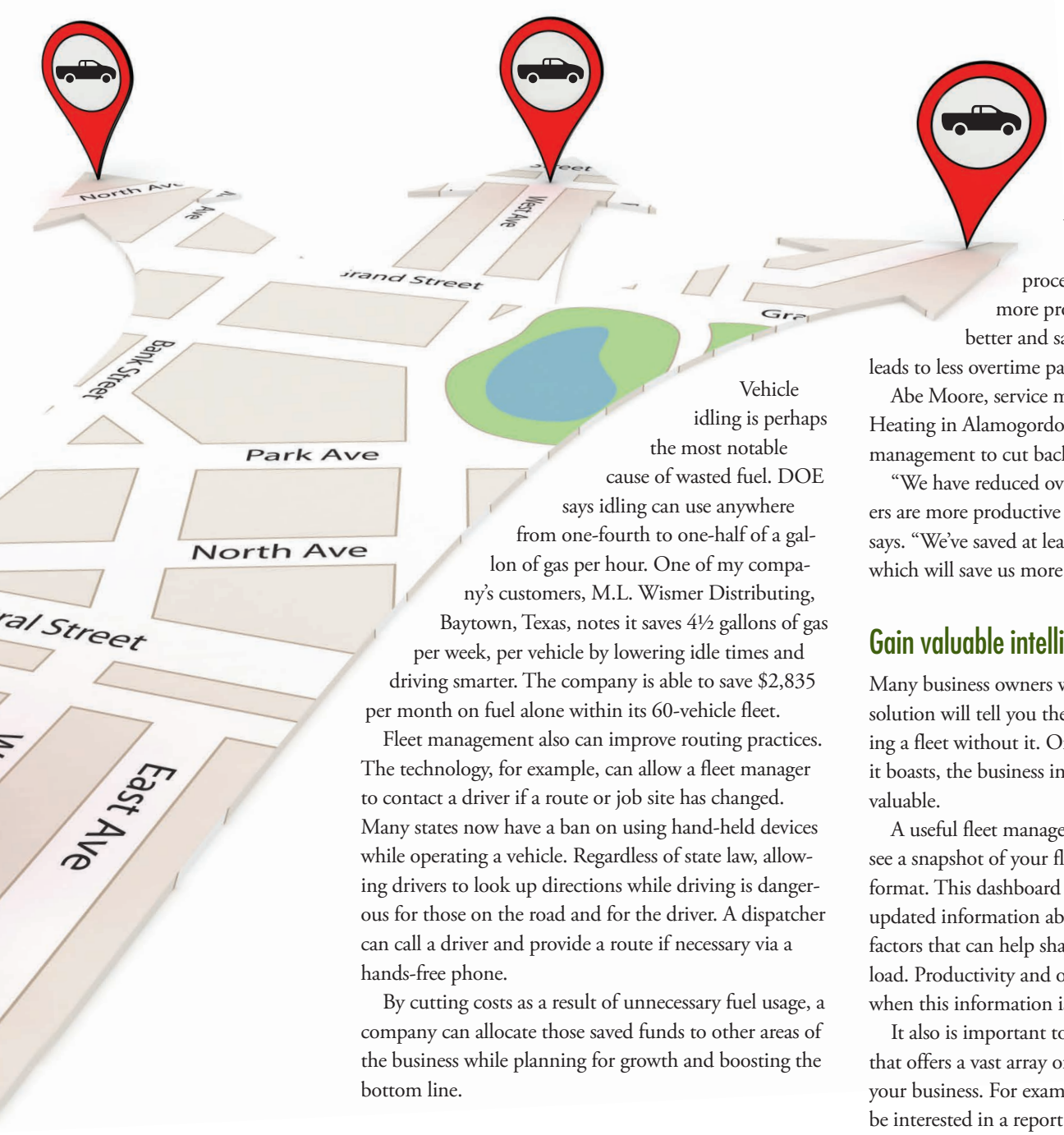
As you look to grow your business, you may be evaluating several tools and strategies to help accomplish your goals. With increasing pressures such as rising fuel costs and narrowing margins, business owners always are looking for new ways to generate operational efficiency without increasing costs. If you don't already use fleet management software, it should be on your horizon for 2014.

Drive down fuel costs

Fuel always will be an unavoidable expense for a business that relies on a fleet. And as a roofing contractor, you probably have a heightened interest in keeping your fuel costs as low as possible. Not only do you have multiple vehicles that rely on gasoline to service customers, but you also have the responsibility of ensuring drivers are making the most efficient use of the vehicles.

Driving habits can seriously affect fuel usage. Speeding can be dangerous not only for those on the road, but also for business costs. According to the Department of Energy (DOE), fuel economy rapidly decreases at speeds above 50 mph. You can assume each 5 mph driven above 50 mph is equivalent to paying an additional $0.24 per gallon for gas. It may seem insignificant, but this wasted fuel can add up and become a big financial drain with no return.

Rapid acceleration and harsh braking also contribute to reduced fuel economy. Fleet management technology can provide the necessary information to make changes about the way fleet vehicles are operated. Many solutions offer driver scoring to identify which employees are the most aggressive on the road. Once it's identified where fuel is slipping through the cracks, steps can be taken to ensure fuel isn't being wasted.



Vehicle idling is perhaps the most notable cause of wasted fuel. DOE says idling can use anywhere from one-fourth to one-half of a gallon of gas per hour. One of my company's customers, M.L. Wismer Distributing, Baytown, Texas, notes it saves 4½ gallons of gas per week, per vehicle by lowering idle times and driving smarter. The company is able to save $2,835 per month on fuel alone within its 60-vehicle fleet.

Fleet management also can improve routing practices. The technology, for example, can allow a fleet manager to contact a driver if a route or job site has changed. Many states now have a ban on using hand-held devices while operating a vehicle. Regardless of state law, allowing drivers to look up directions while driving is dangerous for those on the road and for the driver. A dispatcher can call a driver and provide a route if necessary via a hands-free phone.

By cutting costs as a result of unnecessary fuel usage, a company can allocate those saved funds to other areas of the business while planning for growth and boosting the bottom line.

Controlling payroll processes

Payroll can be a mess for a company's administrative department when there are numerous workers and overtime hours being logged. A quality fleet management solution can simplify the process. In addition to decreasing manual paperwork for administrative staff, time sheets that are automatically created based on engine-on and engine-off times can be more accurate.

Without vehicle reporting, many businesses rely on staff to manually track hours worked, which can be time-consuming and lead to all kinds of clerical errors. High-end fleet management software provides reporting for actual start and finish times, hours worked, days worked, average daily hours and weekly totals. This kind of report can be emailed to the fleet manager for approval daily or weekly, depending on preference.

Beyond streamlining payroll processes, employees also become more productive when they are routed better and save more time on the road. This leads to less overtime payout.

Abe Moore, service manager for Lane Plumbing and Heating in Alamogordo, N.M., was able to use fleet management to cut back on overtime pay.

"We have reduced overtime hours because my drivers are more productive throughout the day," Moore says. "We've saved at least 20 hours per week on payroll, which will save us more than $20,000 this year."

Gain valuable intelligence

Many business owners who already have a fleet-tracking solution will tell you they simply can't imagine managing a fleet without it. Of all the features and benefits it boasts, the business intelligence gained is the most valuable.

A useful fleet management solution will allow you to see a snapshot of your fleet upon login in a dashboard format. This dashboard screen can provide you with updated information about drivers, vehicles and other factors that can help shape a fleet manager's daily workload. Productivity and overall efficiency can increase when this information is readily available in real time.

It also is important to choose a fleet-tracking solution that offers a vast array of reporting options suitable for your business. For example, a roofing contractor would be interested in a report that can show how much time was spent at a certain job site. Fleet management software will allow you to save customer site information; when reviewing reports, it is easy to see when a driver arrived at "Joe Smith's Building," how much time was spent there and when the driver departed for the day.

Additionally, reporting can show whether a driver is making unauthorized stops before and after assigned work hours.

Reports can be accessed via a cloud-based website, so a fleet manager can access vehicle information anywhere on a mobile device.

Fleet management also offers automatic, preset alerts that will let you know immediately when something is amiss within the fleet. Alerts can be sent to a mobile phone via text or email and are saved in the cloud so you have a record of them. An idling alert can let you know

when a vehicle has surpassed a preset idling threshold. Another useful feature would be an alert that shows when a vehicle is going over a posted speed.

Jerry Ladner, fleet manager for Advanced Roofing Inc., Fort Lauderdale, Fla., uses fleet management technology to track his fleet to ensure his team is working efficiently in the field.

"I want to know when drivers get to and leave jobs, how long they are idling and whether they are speeding," Ladner says. "All this is monitored by fleet management technology. I can set the reports and alerts to specifically focus on those key points."

An alert that identifies when a vehicle is being used outside of a specific time frame can inform you of unauthorized use.

According to October 2013 data from consulting firm FreightWatch, Austin, Texas, cargo and commercial vehicle theft activity is increasing and the average cost per incident is $154,866.

This type of tracking can help stop the use of company vehicles for side jobs and increase the chance of recovery in the event of a theft. With a fleet-tracking alert, you will find out immediately when a vehicle is taken off the premises and be able to see where it stopped along the way.

Improving customer service

As online communities grow, a customer's experience with any company is under more scrutiny than ever before. A bad service experience can be instantaneously broadcast via social media, putting a company's brand at risk of serious damage. When researching options for roofing services, a homeowner or building owner most likely will turn to online reviews when making a decision. Keeping up with customer expectations is important not only for current customers, but also for future business.

With an effective fleet management strategy, you can spend less time calling employees for status updates because you easily can see where everyone is and how long they've been there. In the event of traffic or construction, a fleet manager can call ahead to a customer to let him or her know the driver is delayed. More accurate estimated time arrivals can help create a better experience for customers while improving customer relationships.

Vehicle tracking technology also provides historical proof of service. A customer always will appreciate working with a business that keeps accurate records and is accountable.

Reduce maintenance

Any mechanic can tell you vehicles that receive regular care and maintenance operate more efficiently and with better fuel economy than neglected vehicles. In a service industry such as roofing where vehicles are constantly on the go, there is a greater likelihood of serious wear and tear on fleet vehicles and the chances of a vehicle breakdown increase.



Fleet management technology can help keep track of vehicle maintenance, increasing the life expectancy of fleet vehicles

Fleet management technology can help keep track of vehicle maintenance, increasing the life expectancy of fleet vehicles. A fleet manager can set individual alerts per vehicle based on calendar time, engine-on time or mileage depending on the service.

A properly maintained fleet can help save you money by keeping healthy vehicles on the job.

A beneficial tool

For the minimal cost required to get a fleet management system (about $40 per vehicle per month) running in your fleet, the benefits far outweigh the expense. The technology helps companies of all sizes to significantly increase mobile workforce and fleet productivity, safety and security while decreasing costs related to fuel consumption, unauthorized use, payroll discrepancies and more. Fleet intelligence will empower you with the knowledge and tools necessary to keep customers satisfied, outpace competitors and put more money in your pocket.

TODD EWING is director of product marketing for Fleetmatics, co-headquartered in Waltham, Mass., and Dublin, Ireland.

An Idea's Journey

A Texas roofing contractor invents and brings to market one-of-a-kind technology

by Jim D. Koontz, P.E., RRC

On March 22, following a winter with some of the most significant snowfall in history, Beldon Technologies Inc., San Antonio, launched Roof Monitor,™ a product that offers a technological solution to a serious problem.

According to a survey conducted by Paramount Disaster Recovery, Palos Verdes, Calif., more than 3,000 roof collapses occur in the U.S. every year. These collapses cost businesses and insurance companies millions of dollars in building repairs, damaged inventory and lost business—and they endanger lives.

With no way to know the actual weight of snow on a roof, building owners sometimes undertake unnecessary roof clearings. Such roof clearings can be just as dangerous and costly as collapses even though they may prevent them. Workers clearing roofs face a variety of hazards, including hidden skylights and slippery surfaces. Clearing snow and water can damage a roof membrane, resulting in a patched roof with a shorter life span, and forced shutdowns during clearings can result in lost business.

Although Roof Monitor is an innovative approach for managing safety risks and minimizing business interruption caused by large loads of water or snow on roofs, the real story is how this product was conceived, developed and brought to market by a roofing contractor whose passionate determination was to find a solution to a problem.

The **idea** guy

Brad Beldon, president and chief executive officer (CEO) of Beldon Roofing Company, San Antonio, has been involved in his family's roofing business since he was 12. Together with other companies in The Beldon Group of Companies, Beldon Roofing is a family-owned business that has been in operation for more than 68 years and currently employs more than 500 people.

Active in the roofing community his entire career, Beldon served as president of the San Antonio Roofing Contractors Association and has served multiple terms on the board of directors for NRCA and the National Roofing Legal Resource Center.

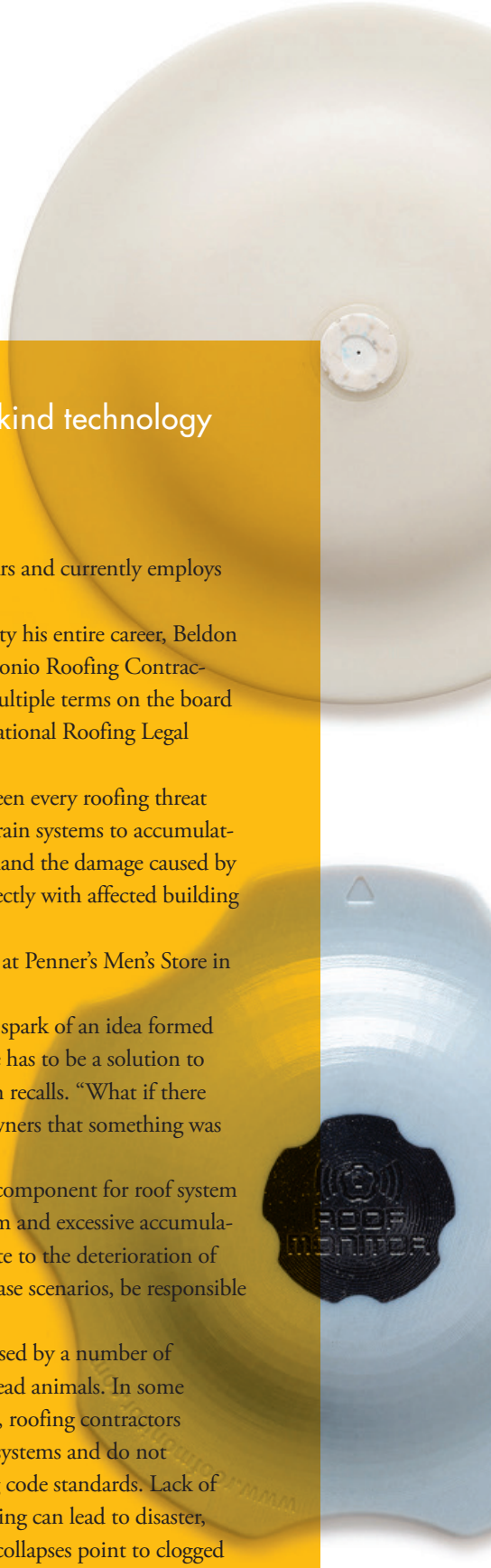
During the years, Beldon has seen every roofing threat from building head pressure on drain systems to accumulating snow. He has witnessed first-hand the damage caused by roof collapses and has worked directly with affected building and business owners.

In 2002, a roof drain collapsed at Penner's Men's Store in San Antonio.

"As I surveyed the damage, the spark of an idea formed in the back of my mind that there has to be a solution to prevent such occurrences," Beldon recalls. "What if there was some way to alert building owners that something was wrong?"

Proper drainage is an essential component for roof system performance. It prevents long-term and excessive accumulation of water, which can contribute to the deterioration of most roof systems and, in worst-case scenarios, be responsible for structural collapses.

Clogged roof drains can be caused by a number of factors—from trash to leaves to dead animals. In some cases, especially reroofing projects, roofing contractors alter the designs of roof drainage systems and do not bring roofs up to current building code standards. Lack of regular maintenance and monitoring can lead to disaster, and many historical cases of roof collapses point to clogged drains and water accumulation.





Photos courtesy of Beldon Technologies Inc., San Antonio.

ON *the* WEB

To watch a video about how to obtain a U.S. patent, log on to www.professionalroofing.net.

WHAT IS IT?

Roof Monitor™ is a technology-based system designed to monitor live loads of water and snow on low-slope roof systems and inform businesses of potential risks.

It takes the guesswork out of knowing when to take action by providing objective metrics with actual load measurements, a single point of technology for real-time monitoring of live load conditions, and alerts and alarms with protocols defined by the end user.

The system consists of several components:

- **Nonpenetrating battery-operated wireless sensors** installed on the exterior surface of the roof measure live loads, providing real-time information about even small changes in the environment.
- **Ethernet-based controllers** receive the wireless signal from sensors and send data to multiple redundant servers in data centers across the U.S.
- **A custom web-based interface** works with any operating system, delivering a live, pictorial representation of load conditions and using inferential data to reduce false alarms.
- **Monitoring and alert service operators** have access to live data and can dispatch information simultaneously to multiple users, including service representatives.

The system is designed for low-slope roofs on which water and snow can easily accumulate. These types of roofs are common in commercial buildings, such as large retail facilities and warehouses. Although retail businesses face the threat of damage to or loss of inventory, which can be costly, the same safety risks and threats of business disruptions occur in almost every industry, including government and education.

At a 30-year-old mall in Beaumont, Texas, which had recently been reroofed, the roofing contractor installed smaller inserts to all existing drains. During the first heavy rain following the reroofing project, the mall's roof collapsed in seven places. With the event occurring just before Christmas, stores inside the mall lost millions of dollars in inventory, and the mall remained closed for a year.

In another more tragic incident that resulted in the deaths of two people, the collapse of a loading dock roof area at a Houston grocery store was blamed on pine needles blocking two scuppers in the drainage system—a situation that could have been prevented with active monitoring and roof system maintenance.

Beldon says: "This is a major threat to businesses, especially because building and business owners expect drains to function properly in severe weather, such as heavy rain. They aren't necessarily watching their roofs closely for standing water, so when damage occurs, it's a complete surprise. With the number of situations like this that occur every year, I'm surprised an adequate warning system did not already exist."

In August 2006, Beldon attended a peer meeting with fellow roofing contractors Jack Scalo, president of Burns & Scalo Roofing Inc., Pittsburgh; Bob Bechtholdt, president and CEO of Douglass Colony Group, Denver; and Doug Sutter, president of Sutter Roofing, Sarasota, Fla.

"I noticed a common issue emerging in our discussion," Beldon says. "We all agreed that, in snowy conditions, there was no good way to prioritize one customer's request to remove accumulating snow over another's. In inclement weather, everyone is scrambling to prevent serious damage, and businesses are getting pressure from regulatory bodies to clear snow or shut down for safety reasons. Without measurements to compare and help prioritize situations and proactive notification systems that catch problems before they cause serious damage, roofing contractors are left guessing where they should most urgently send their crews."

Beldon recalls the moment an idea occurred to him: "Although one was related to water and the other to snow, the Penner's Men's Store drain collapse and the roofing contractors' issue shared a connection. In both cases, there was a need for a way to objectively measure load accumulation on a roof and alert necessary parties when a situation needed attention."

Of all the alert solutions that exist in the roofing industry, none address snow and water; they ignore the need to measure head pressure on drains. Existing solutions also are reactive in nature because they only measure a structure's deflection. By the time a problem has been detected, the damage is done. Beldon set out to provide a solution that would tell building owners and other appropriate contacts when action was needed before damage occurs.

Building on an idea

Although it would later morph into something quite different, Beldon's initial idea took shape in the form of an array system with solar-powered cameras that would be set in place to actively monitor a roof, measuring snow and water as they accumulate and providing live information at all times. In addition to measuring live loads, the concept was to include a monitoring service, similar in structure to a typical alarm company.

"I saw a lot of similarities in my proposed system to that of a security monitoring system," Beldon says. "I consulted Vallance Security Systems, Schertz, Texas, to better understand the monitoring business model, and I learned, among other things, that there is a market for reselling the monitoring service that security companies offer. This confirmed the feasibility of my idea and provided me a potential resource that I could later tap into."

With the invention beginning to take shape, Beldon began his search for a product development team.

"I attended an educational session July 18, 2008, on commercialization delivered by Dr. Cory Hallam of the University of Texas at San Antonio's (UTSA's) Center for Innovation and afterwards approached Hallam requesting his assistance," Beldon says. "Along with a team of graduate students and Dr. Arturo Ayon, a UTSA associate professor and dean of physics and astronomy, Hallam researched my proposed system to determine the feasibility of the concept."

The UTSA team concluded the camera array system might not be the best solution because snow could potentially bury the cameras. However, the team proposed a more technological system that would measure

live loads using pressure sensors—a concept that would develop into the basis for Roof Monitor.

To secure the invention, Beldon hired New York patent attorney Sean J. Grygiel of Fish & Richardson. Four patents are pending in 50 countries, and a fifth has been filed as of press time.

Commercialization

Beldon needed partners to transform a product concept into a business.

"I needed the guidance of someone who had been here before, so I asked a business consultant friend of mine, Richard Wilson, for a recommendation," Beldon explains. "He referred me to Rich Glomski, a former CEO with experience launching a successful business from scratch. Glomski helped me develop the business plan and assemble the right team."

With the help of Glomski, Beldon registered the company to do business in all 50 states and hired an operations director with 15 years of experience, a chief financial officer who also is a certified public accountant, and an executive assistant with an extensive call-center and customer service background.

The next step was to find local partners to help with the commercialization.

"I wanted to be able to drive over to a building and sit down face to face," Beldon says.

He spent the past couple of years sourcing and working with commercialization partners, starting with an engineer to help develop the product for commercialization and two separate manufacturing facilities—one to build the sensors and controllers and one to build case molds and cases. Additionally, he contracted a firm to develop software and hired a packaging company and creative firm to develop the brand, marketing collateral and website. The components were all in place for a successful product launch, pending product testing, which would require multiple stages.

Product **testing**

From 2010-14, the Roof Monitor team went through seven sensor prototypes, testing and revising different shapes, plastics and electronic components. Although the electronics and casings will be fabricated in the U.S., injection molds for the sensors were manufactured in China. Beldon describes the final stages of lab testing as a whirlwind of activity.

"We kept getting prototypes of the injection molds that didn't work, and the turnaround time to get each test in hand took too long," Beldon says. "I booked a flight to China with only five days to plan, and it took four days to get a visa. I spent a busy three days in China testing the product—adding and shaving components off the existing mold—to get to a prototype we could work with. Every time we changed the mold, we had to create another and retest it."

Size and shape weren't the only quality control concerns.

"It was important our casings were a certain color, but units kept coming out in different shades of yellow," Beldon says. "We had to find an expert to help develop a new colorant that would be more stable. To get this done in three days wasn't easy. I had to find somebody who knew somebody. From what I've learned, that's how this works—it's all about leveraging relationships."

At the completion of lab testing, installing the product on actual roofs is the final step. The first systems are planned to be installed on buildings in Colorado, Florida, New York, Pennsylvania and Texas to test the monitoring and functionality before releasing the product to the public.

If Beldon has learned anything throughout this long process, it's that a great idea does not make a successful product. It takes dedication and an investment of time and money.

"I never thought it would be so expensive or take so long to develop a new product," Beldon says. "Changes in the roofing industry typically are changes to existing products. This is a brand-new system, and we are learning the science daily. To date, we have spent more than $900,000 on research and development. We're writing algorithms that didn't exist before, taking into account, for example, the relative density of dry snow, wet snow and water. This has been a grueling process, but I'm excited to introduce this product into the market."







Top and middle: To date, more than $900,000 has been spent on research and development, including lab testing on electronics and casings for system components. Bottom: From 2010-14, the Roof Monitor team went through seven sensor prototypes, testing and revising different shapes, plastics and electronic components before the final product was achieved.

JIM D. KOONTZ, P.E., RRC, is president of Jim D. Koontz & Associates Inc., Hobbs, N.M.

BRIEFINGS

Keeping up *with the* industry

MANUFACTURER NEWS

GAF featured on television show

GAF, Wayne, N.J., was featured on NBC's "The Ellen DeGeneres Show" Jan. 30 for its charitable work to help build a new home for the Conway family of San Diego. The family was chosen by DeGeneres after the family's daughter wrote a letter requesting show tickets for her parents. GAF has had an ongoing relationship with "The Ellen DeGeneres Show" and specifically was chosen for the project. GAF will be featured on several follow-up episodes; the air dates will be announced on GAF's Facebook page, www.facebook.com/GAFRoofing.

In addition, GAF has expanded its consumer outreach through a multiplatform advertising campaign based on A&E's "Duck Dynasty." GAF was featured on the television program Feb. 19; has digital advertising on the show's A&E website; and debuted its new national television commercial highlighting GAF Master Elite™ Contractors, GAF Premier Roofing Dealers and Pro-Grade™ Master Distributors during the Feb. 19 episode.

GAF also held an event with Kid Rock Feb. 26 during the 2014 International Roofing Expo® in Las Vegas. Guests were invited to have their pictures taken with the musician and receive an autographed photo. GAF and Kid Rock have teamed up to support Operation FINALLY HOME, a charity that provides custom-built, mortgage-free homes to U.S. veterans and their widows. GAF will give back to the foundation by including Kid Rock in its summer contractor promotion. With every promotion entry, GAF will make a donation to Operation FINALLY HOME.

Sika Sarnafil contributes to Winter Olympics

Sika Sarnafil Corp., Lyndhurst, N.J., contributed roofing materials from its Russian headquarters in Lobnya to help build stadiums, infrastructure and hospitality facilities for the 2014 Winter Olympics in Sochi. Materials included roof systems, waterproofing solutions, concrete additives, flooring, strengthening fibers, impregnating resins, sealing and bonding chemicals, and protective coatings. Sika Sarnafil also supported the international competition by sponsoring uniforms and equipment.

Firestone announces annual awards

Firestone Building Products Co. LLC, Indianapolis, has announced 251 firms earned the 2014 Master Contractor Award from within the Firestone Building Products Red Shield™ Licensed Roofing Contractors network. The Master Contractor Award program has three distinct annual industry awards: the Master Contractor Award, Inner Circle of Quality Award and President's Club Award. The awards were presented Feb. 9-12 in Scottsdale, Ariz.

The Master Contractor Award is awarded on the basis of total square footage installed and quality points accumulated for outstanding ratings on roof system installations completed in 2013 covered by the Red Shield Warranty. Two new categories were introduced this year for sustainability and underlayments.

To qualify for the Master Contractor Award, contractors must complete a minimum of four Red Shield warranted jobs annually and have a Preferred Quality Incidence Rating (QIR) not exceeding three times the average QIR for Red Shield Contractors; QIR is determined by the annual number of quality incidents per million square feet of roofing material under warranty.

To be eligible for an Inner Circle of Quality Award, contractors must install a minimum of four warranted Firestone Building Products roof systems in each of the past five years, maintain at least 2 million square feet of Firestone Building Products roofs under warranty and achieve an annual QIR of 2.0 or less.

To be eligible for a President's Club Award, contractors must accrue the highest number of quality points for superior inspection ratings and total square footage of Firestone Building Products Red Shield warranted roof system installations completed during the past year.

A listing of Firestone's Master Contractors is available at www.firestonebpco.com/contractors/firestone-contractor-recognition-program/firestone-master-contractor-award/2014-award-winners/.

Honeywell announces safety training courses

Honeywell Safety Products, Smithfield, R.I., has announced its 2014 open enrollment schedule of Miller® fall prevention and protection classes. Part of the Honeywell Safety Institute, the classes are held in more than 30 cities in the U.S. and Canada, including Honeywell training facilities in Franklin, Pa., and Houston, Texas. The courses feature experienced instructors, live demonstrations and hands-on training. Sessions are customized by location to address site-specific variables and performance requirements for fall prevention and protection.

For more information and to download the training schedule, visit www.millerfallprotection.com/pdfs/2014TrainingSchedule-web.pdf.

Metl-Span® opens new location

Metl-Span, Lewisville, Texas, has opened its seventh manufacturing facility in Colonial Heights, Va., positioned to serve the eastern U.S. The 109,000-square-foot plant is devoted to the production of Metl-Span's Envolution™ line of architectural insulated metal panels and custom fabrication.

In addition, Metl-Span's Texas plant has been upgraded with new equipment and processes to enhance fabrication capabilities.

CONTRACTOR NEWS

Roofing contractor passes away

Edward "Bud" Reifsteck, co-founder of Republic Roofing Co. Inc., Kirkwood, Mo., passed away Jan. 25. He was 87 years old.


Reifsteck

Reifsteck was born in Webster Groves, Mo., May 22, 1927, to Willa and Edward Reifsteck. He graduated from St. Louis University, was a World War II veteran and co-founded Republic Roofing in 1967. Bud is survived by his sisters, Elizabeth and Janet; children, Lee, Mary Lynn, Mark, Michele, Nance and Charles; nine grandchildren; and two great-grandchildren.

In lieu of flowers, please send donations to Missionaries of Charity, 3629 Cottage Ave., St. Louis, MO 63113 or The Leukemia and Lymphoma Society at Donor Services, P.O. Box 4072, Pittsfield, MA 01202, or www.lls.org.

Commercial Roofing & Waterproofing wins award

Commercial Roofing & Waterproofing Hawaii Inc., Honolulu, won the Top Job of the Year award during the Roofing Contractors Association of Hawaii awards banquet Jan. 25 in Waikiki Beach. Commercial Roofing & Waterproofing was recognized for multiple commercial projects completed in 2013. Nominations were judged for safety, job-site conditions, design factors, project deadlines or being a culturally sensitive, LEED,® green or photovoltaic job.

DISTRIBUTOR NEWS

ABC Supply opens branch

ABC Supply Co. Inc., Beloit, Wis., has opened a new branch in La Crosse, Wis., Feb. 17. The branch will offer low- and steep-slope roof systems, siding, gutter, windows, doors and related products and services. The branch will open with seven associates, and Garrett Meyer will act as branch manager.

SRS Distribution completes acquisition

SRS Distribution Inc., McKinney, Texas, has acquired Sioux City, Iowa-based WJ Co., an independent distributor of residential and commercial roofing products servicing the northwest Iowa region.

The location will carry a full line of roofing products and focus on servicing roofing contractors, remodeling contractors and home builders. Mike Clausen, WJ Co.'s current owner, will stay on as the branch manager, along with WJ Co.'s entire sales and operations team.

THE INDUSTRY ONLINE

OMG Roofing Products Inc. has introduced a new mobile app, **OMG Interactive**. The app is available for Apple and Android devices and features separate calculators for OMG's RhinoBond nonpenetrating insulation and attachment system; RhinoTrac automated insulation attachment tool; AccuTrac stand-up insulation attachment system; and RetroDrain systems.

Benjamin Obdyke Inc. has launched a newly designed website, **www.benjaminobdyke.com,** providing easy access to product information; industry, product and company resources; a job submission portal; video gallery; and product review submissions. The new enhancements include simplified navigation, responsive design, project submissions, resources, a blog, news area and contact form.

IKO has uploaded a new video to its YouTube channel at **www.youtube.com/user/IKORoof**. The video is side-by-side time-lapse photography showing the same roofing crew installing a competitor's product and IKO's advantage-size Cambridge shingles with a counter keeping track of time and how many shingles, nails and total bundles were used.

RoofLogic has released its new **RoofLogic** mobile app. The app produces inspection reports, drawings, proposals and reroof takeoffs.

RoofScreen Manufacturing has introduced an online store at **store.roofscreen.com** to showcase its entire line of pre-engineered modular rooftop framing systems designed to be used as equipment screens and rooftop mounting solutions. There also is a Design Ideas section to see how the products have been used in various applications.

Corecon Technologies Inc. has introduced its **Corecon Mobile App** for Android devices. The new app was developed for Corecon V7, an online estimating, project management and job cost suite of construction software. The Corecon Mobile App is free to subscribers of Corecon V7 and can be downloaded from the Google Play Store.

CertainTeed Corp. has launched its first webisode and music video on its CertainTeed Living Spaces® Facebook page, **www.facebook.com/certainteedlivingspaces**, and YouTube channel, **www.youtube.com/ctlivingspaces**. The webisode and music video were a part of the 2013 Living Spaces Facebook Home Makeover Video Contest and featured the Bielfelt family of Mentor, Ohio, receiving a $75,000 exterior makeover to their 100-year-old home. The new music video, "Sleeping on My Porch," was created in conjunction with the webisode series.

AFFILIATE NEWS

NERCA announces scholarship

The **North/East Roofing Contractors Association** (NERCA) has announced its 2014 North East Roofing Educational Foundation scholarship application now is available.

The scholarship program was established to assist employees, immediate family members of employees or immediate family members of NERCA members who plan to pursue post-secondary education in college, technical and vocational programs. Thirteen scholarships will be awarded for $2,500 each. The application is available at NERCA's website, www.nerca.org, or by calling NERCA's office

at (781) 849-0555. The application deadline is May 5.

OTHER NEWS

PIMA sponsors sustainable energy fact book

The **Polyisocyanurate Insulation Manufacturers Association** has sponsored Bloomberg New Energy Finance's *Sustainable Energy in America 2014 Factbook*, produced for the Business Council for Sustainable Energy.

Developed to provide policy makers, journalists and industry professionals with up-to-date market information, the fact book documents the upward trajectory of energy efficiency, natural gas and renewable energy using data from 2013 and documents the long-term transition to cleaner, lower-carbon sources of energy production.

According to the fact book, renewable energy provided 13 percent of the U.S.' electricity generation in 2013, up from 12 percent in 2012; renewable energy costs reached all-time lows; and small, distributed generators and off-grid installations began to emerge as transformative forces in the power industry.

MCA elects new officers

The **Metal Construction Association** elected its 2014 officers and directors during its annual meeting Jan. 27 in Clearwater Beach, Fla.

Karl L. Hielscher, president and chief executive officer for Metl-Span, Lewisville, Texas, is chairman; Norbert Schneider, president of Umicore Building Products, Raleigh, N.C., is vice chairman; Ed Karper, North American coil marketing manager for Akzo Nobel Coatings Inc., Columbus, Ohio, is secretary; Dale Nelson, president of Roof Hugger Inc., Odessa, Fla., is treasurer; and Todd E. Miller, president of Isaiah Industries Inc., Piqua, Ohio, is past chairman.

Also on the Executive Committee is Bill Croucher, director of engineering for Fabral, Lancaster, Pa., serving as technical committee chairman; Bill Hippard, vice president of sales for Precoat Metals, St. Louis, serving as president of the Metal Roofing Alliance; and Renee Ramey, marketing manager for Steelscape Inc., Kalama, Wash., serving as market development chairman.

A list of the directors is available on MCA's website, www.metalconstruction.org.

SPRI recanvasses technical documents

SPRI is recanvassing four technical documents for reapproval as American National Standards.

ANSI/SPRI WD-1 2012, "Wind Design Standard Practice for Roofing Assemblies," provides a methodology of designing for wind-uplift resistance of nonballasted built-up, polymer-modified bitumen and single-ply roof system assemblies installed over any type of roof deck and includes ASCE 7-10, "Minimum Design Loads for Buildings and Other Structures." ANSI/SPRI RP-14, "Wind Design Standard for Vegetative Roofing Systems," provides a methodology for designing for wind-uplift resistance of vegetative roof systems, helping to identify the ballast type to resist uplift forces, as well as drainage options. ANSI-SPRI GD-1, "Structural Design Standard for Gutter Systems Used with Low-Slope Roofs," provides designers, contractors and building code officials with information for proper structural design of gutters used with low-slope roofing and also is revised to comply with ASCE 7-10.

After ANSI/SPRI WD-1 2012, ANSI/SPRI RP-14 and ANSI-SPRI GD-1 have been recanvassed, the documents will be submitted for 2015 International Building Code® inclusion.

In addition, SPRI will reaffirm ANSI-SPRI RD-1 2009, "Performance Standard for Retrofit Drains," to comply with ANSI's five-year cycle requirements. The standard is for those who design, specify or install retrofit roof drains designed for installation in existing drain plumbing on roofs.

ARMA announces award winners

The **Asphalt Roofing Manufacturers Association** (ARMA) has announced the winners of its 2014 Quality Asphalt Roofing Case-Study (QARC) Awards. The QARC Awards honor architects, contractors and specifiers who use asphaltic roofing materials on low- and steep-slope building projects.

The winners of the 2014 QARC Awards are gold-winner Precision Roofing Corp., Hialeah, Fla., for Doral City Hall, Doral, Fla.; silver-winner Advanced Roofing Inc., Fort Lauderdale, Fla., for Publix, Miami; and bronze-winner Certified Inc., Highland, Md., for Everett Victorian, Laurel, Md. The winners received checks from ARMA in the amounts of $2,000, $1,000 and $500, respectively, and will be featured on ARMA's website, www.asphaltroofing.org.

NRCA NEWS

NRCA offers free webinars

NRCA is offering free webinars to its members. Each webinar offers a unique experience specifically tailored to roofing professionals. All webinars are presented on the third Thursday of each month at noon CST.

April's webinar, Customer Service, A Company Approach, will be held April 17. Bob Kulp, president of Kulp's of Statford LLC, Wausau, Wis., will present ways to engage employees in customer service.

May's webinar, Technical Roofing Industry Update, will be held May 15. Mark Graham, NRCA's associate executive director of technical services, will discuss current technical issues in the roofing industry.

June's webinar, Project Planning, will be held June 19. Rich Nugent, president and chief executive officer of Nations Roofing LLC, Lithia Springs, Ga., will demonstrate how to increase efficiency, productivity and profit using project planning techniques.

UP THE LADDER

ABC Supply Co. Inc. has named **Todd Buehl** chief financial officer and treasurer.

Atlas Roofing Corp. has named **Nisha George** marketing and communications manager.

Metal-Era Inc. has named **Nick Mallinger** vice president of operations.

10 EVENTS

APRIL

10
Roofing Safety: OSHA 10-hour Program
NRCA
Bay Area, Calif.
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722)
www.nrca.net

24-25
Roofing Safety: OSHA 10-hour Program
NRCA
Los Angeles
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722)
www.nrca.net

24-26
The Roofing Industry Alliance for Progress Member Meeting
The Roofing Industry Alliance for Progress
Fort Lauderdale, Fla.
Contact: The Roofing Industry Alliance for Progress
(847) 299-9070
www.roofingindustryalliance.net

27-30
Executive Management Institute (EMI)
NRCA
Chicago
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722)
www.nrca.net

MAY

8
For Foremen Only, Level 2
NRCA
Chicago
Contact: NRCA's Customer Service Department
(866) ASK-NRCA (275-6722)
www.nrca.net

15
Roofing Industry Fall Protection from A to Z
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Salt Lake City
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(866) ASK-NRCA (275-6722)
www.nrca.net

16-18
Roof India 2014
International Trade and Exhibitions India Pvt. Ltd.
Chennai, India
Contact: International Trade and Exhibitions India's Customer Service Department
+91 98400 43691
www.roofindia.com

22
CERTA Train-the-trainer Authorization
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River Grove, Ill.
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www.nrca.net

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CERTA Train-the-trainer Reauthorization
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www.nrca.net

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JUNE

9-13
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Crawford Contractor Connection
New Orleans
Contact: Crawford Contractor Connection's Customer Service Department
conference@contractorconnection.com
www.contractorconnection.com/contractorconference

12
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NEW IDEAS

Products *now* available

Vent stacks assist with code compliance

OMG Roofing Products Inc. has announced exclusive distribution of Tubos Inc.'s extending vent stacks under the OMG Tubos name.

The patent-pending vent stacks reportedly can be used when reroofing a commercial building to reach the height needed for code compliance. The 28-inch-long vent stacks are compatible with 2-, 3- and 4-inch diameter plumbing vent stacks; can be used to extend two vent stacks; reportedly can be installed in less than five minutes; and are compatible with all commercial roof systems.
Website: www.omgroofing.com
Telephone: (800) 633-3800

Glove line expanded

Ergodyne has expanded its ProFlex® Glove Line to include the ProFlex 921 Thermal Rubber-Dipped Doral Impact-Reducing (DIR) Glove.

The glove offers the same patent-pending dorsal protection, grip, flexibility and dexterity as the 920 Nitrile-Dipped Glove and uses thermal acrylic fleece and seamless knit construction for warmth. The gloves reportedly are ideal for cold weather, gripping and protection for the backs of hands.
Website: www.ergodyne.com
Telephone: (800) 225-8238

Paver edging spikes reduce separation

Edgetite Products Inc. has introduced Edgetite Spikes, angled paver edging spikes designed to strengthen paver installation projects. The angled tip reportedly allows the paver edging spike to hold the edging tighter and reduces separation, reducing the need for future repairs.
Website: www.edgetite.com
Telephone: (630) 514-0052

Sealant available in new colors

Chemlink Inc. has announced its MetaLink™ Metal Roof Sealant, a silicone adhesive and sealant, is available in new packaging and colors. The sealant now is packaged as 12 10.1-ounce cartridges and is available in a wide range of colors to match decorative metal roofing and siding products.

MetaLink is formulated for metal roofs, gutters, downspouts and other metal architectural surfaces such as walls, windows, doors and fixtures. It is said to bond to aluminum, steel and copper, as well as Kynar 500® PVDF and Tedlar® PVF. The sealant reportedly does not contain any solvents or isocyanates and meets North American volatile organic compound standards.
Website: www.chemlink.com
Telephone: (800) 826-1681

Plural-component sprayer features smaller footprint

Graco Inc. has introduced the Reactor® 2, a plural-component sprayer with software and hardware advancements to help contractors apply materials accurately.

The sprayer features a 40 percent smaller footprint than a standard Graco Reactor for more room in the spray rig; electronics relocation for easier service; an advanced motor control module and software to reportedly produce a smoother, more consistent spray performance; and an advanced display module featuring data download, chemical recipe storage, drum level indicators and on-screen troubleshooting.

The Reactor 2 comes in electric stand-alone models and integrated systems. The Reactor 2 Elite model comes with an inlet pressure and temperature sensor; Xtreme-Wrap™ Scuff Guard on heated hoses; and Graco Insite, remote reporting technology that enables business owners to view real-time job-site data via a smartphone, tablet or computer.
Website: www.graco.com/reactor2
Telephone: (800) 690-2894

Shingle line is expanded

Owens Corning Roofing and Asphalt LLC has introduced two products to its shingle line: Devonshire™ Shingles and DuraRidge™ Hip and Ridge Shingles.

The Devonshire Shingles are available in four colors and give the look of natural slate without the high cost or weight of real slate. The DuraRidge Hip and Ridge Shingles have patented SureNail® Technology with a layer of reinforcing fabric and a clearly defined nailing zone. The hip and ridge shingles are pre-cut, available in multiple colors and reportedly deliver a 130-mph wind warranty.
Website: www.owenscorning.com
Telephone: (800) 433-7465



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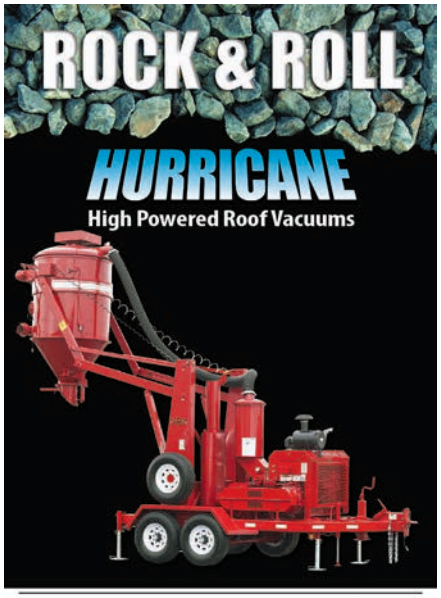
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Rosemont, IL 60018-5607
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CLASSIFIEDS

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Qualified candidates should email a resume and proven track record to Careers@NationsRoof.com.

NATIONS ROOF

For more information about Nations Roof, please go to our website www.NationsRoof.com.

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We are looking to grow. Whether you are concerned about succession planning or in expansion mode, we can help you take your business and team to the next level. We are looking to merge with companies whose values are aligned and who have like-minded business owners. With more than 3,000 employees and 30 years of experience, Flynn has grown by acquisition and subsequent organic growth, resulting in profitable long-term equity opportunities for its key leaders.

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CLASSIFIED RATES:

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Standard Classified

NRCA member rate
$2.60 per word (minimum charge $85)
$3.60 per boldface word

Nonmember rate
$3.00 per word (minimum charge $100)
$4.00 per boldface word

Display Classified

We will supply a border and include your logo if requested. We accept one-column format only (2¼ inches wide and up to 5 inches long).

Digital artwork is preferred for large display ads. Email artwork to Joan Kriete at jkriete@nrca.net.

Display classified NRCA member rate (per inch)

1x	3x	6x	9x	12x
$135	130	120	110	100

Display classified nonmember rate (per inch)

1x	3x	6x	9x	12x
$155	150	140	130	120

Frequency commitment must be in writing, and a short rate will apply if the frequency is not met or ad is cancelled.

Color is available:
4-color is free of charge for NRCA members.
4-color is $100 per issue for nonmembers.

Blind-box Numbers

Free of charge for NRCA members
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All ads and payments must be received by the closing dates listed below. Prepayment by credit card required for all ads.

All classified ads will be edited for grammar and consistency with *Professional Roofing*'s style.

Send ad copy and payment to Joan Kriete, *Professional Roofing*, 10255 W. Higgins Road, Suite 600, Rosemont, IL 60018-5607. For more information, call Joan Kriete at (847) 493-7524; fax (847) 544-0790; or email jkriete@nrca.net.

Closing Dates

June	4/28/14	September	7/28/14
July	6/2/14	October	8/25/14
August	6/25/14	November	9/24/14

NATIONAL ROOFING CONTRACTORS ASSOCIATION

National Roofing Week

CHILDREN'S ART CONTEST 2014



To promote the importance of roofs and the value of professional roofing contractors, NRCA is celebrating National Roofing Week July 6-12. A key component of the celebration will be a children's art contest!

The art contest offers children the opportunity to showcase their original artwork depicting why roofs are important.

- Three winners will have their artwork featured on National Roofing Week materials, which will be displayed at industry events throughout 2014-15, including the 2015 International Roofing Expo® and NRCA's 128th Annual Convention in New Orleans.
- Each winner will receive a $100 gift card from one of several national retailers.
- All entries must be submitted with a completed Art Contest Entry Form by June 2.
- Winners will be announced June 30.

NRCA

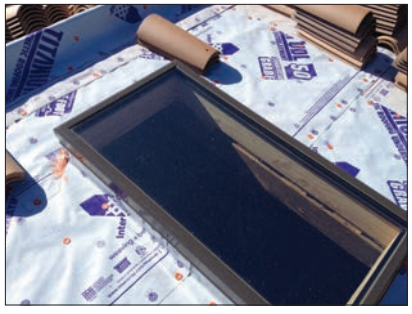
Visit www.nrca.net/artcontest for more information, or contact Charlotte Norgaard, NRCA's media relations manager, at (847) 493-7548 or cnorgaard@nrca.net.



New Duro-Tuff® and Duro-Fleece® membrane colors

A new spectrum of **Duro-Last®** roofing solutions in light tan, copper, patina, green, blue, light gray and charcoal is available. Options are Duro-Tuff 50 mil and 60 mil and Duro-Fleece 50 mil and 60 mil. Roll widths are available from 2½ feet to 10 feet. Duro-Last features the thickest top weathering film in the roofing industry. Top and bottom films are the same color to reduce bleed out. Membrane and vinyl rib accessories are available in matching colors. For more information, call (800) 248-0280 or visit www.Duro-Last.com.

Synthetic roof underlayment



All Titanium® UDL synthetic roof underlayments now feature Class 4 impact resistance classification. For 11 years, **InterWrap**'s Titanium has been recognized as the leading brand of synthetic underlayment for use under all types of steep-slope roofing materials. Continual research and design has resulted in the most advanced underlayments and industry-leading slip-resistant front and back surfaces, including the only patented mechanically enhanced nodular slip-resistant walking surface. InterWrap has a Titanium product to meet and exceed your expectations and now offers RhinoRoof,™ a 15-pound felt replacement specifically designed for use under asphalt roofing. Visit www.interwrap.com/roofing for more information.

Fall-protection warning-line system

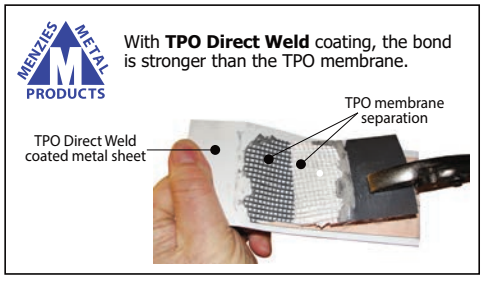


SpeedStand from **Quicksilver Engineering** makes protecting workers from falls quick and easy. Compact, one-piece stands transport easily and set up instantly. These durable steel stands are spaced 40 feet apart and meet Occupational Safety and Health Administration requirements. There also is a model for use on standing-seam metal roofs. See why SpeedStand has been the industry standard for 16 years. For more information, call (800) 460-7579 or visit www.qe-1.com.

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NRCA's hazard communication program

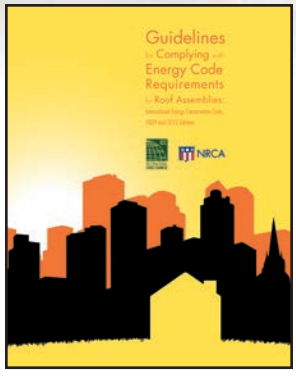


NRCA's Hazard Communication Program: Know the Signs offers a complete compliance program that will assist roofing contractors with providing the training required by the Occupational Safety and Health Administration for its new hazard communication standard, including a DVD with video content in English and Spanish, an instructors guide and student manual, a PowerPoint® presentation for use in facilitating training sessions, written examination to assess worker comprehension, sample hazard communication program, chemical inventory list template and safety data sheet request letter for use with developing a company program. For additional information, visit shop.nrca.net.



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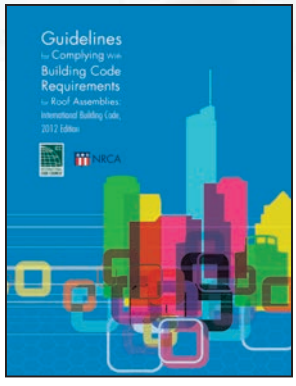
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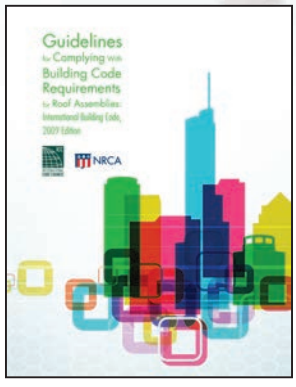
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Our broken immigration policy

by Bill Good



A majority of the roofing industry's workforce is made up of immigrants

I recently had the chance to participate in a first-time effort to bring together a number of associations related to the housing industry as part of the International Builders Show in Las Vegas. The group was asked to identify issues of concern to their respective industries and suggest opportunities for collaboration. Nearly everyone talked about workforce issues, specifically how we find, train and retain workers.



There are a number of initiatives already in place, to be sure. NRCA, for example, is developing more online training programs tied to the broader idea of establishing a well-defined career path for roofing workers. We've also begun working with construction management schools to make more students aware of career opportunities in specialty contracting. And we are partners with three programs looking to find work for veterans.

Sadly, these are only small-scale remedies. The fundamental problem we face is a demographic one: The U.S. population is aging, and the traditional source of roofing labor—18 to 22 year olds—is not looking to the construction industry as a first choice for a career.

A recent article in the *Dallas Morning News* reported the average age of a carpenter is 49; the average plumber is 56; and the average stonemason is 69. And during the next five years, 20 percent of skilled laborers in the construction industry are expected to retire.

Where does this leave us? Well, one solution, of course, is to find more (legal) immigrant labor. A majority of the roofing industry's workforce, according to most estimates, is made up of immigrants. And they are filling jobs that are not minimum-wage, low-paying positions.

In Washington, D.C., the debate about meaningful immigration reform appears, once again, to be on hold for political reasons. Neither party wants to touch the subject in an election year; it is, for sure, a subject that generates a lot of emotional response.

There is no question our current immigration system is broken and badly in need of repair. An intelligent immigration policy would ensure the borders are secure; allow immigrants into the U.S. to fill jobs that U.S. citizens, for whatever reason, choose not to fill; and provide a reasonable accommodation for the 12 million or so illegal immigrants currently here—most of whom are working and paying taxes. More than half of those 12 million, by the way, entered the U.S. legally and became "illegal" only after government policy didn't allow them to stay legally. And about 35 percent of them own homes, so simply deporting them isn't a viable option.

Absent an intelligent immigration policy, the black market for labor continues to flourish. We all know stories of "independent" contractors who are paid in cash and have no insurance; we all know contractors who could never survive a visit from the Immigration and Customs Enforcement agency.

It's time for meaningful change and for an adult conversation about the subject. Let's hope the next Congress can do the right thing.



BILL GOOD is NRCA's executive vice president.

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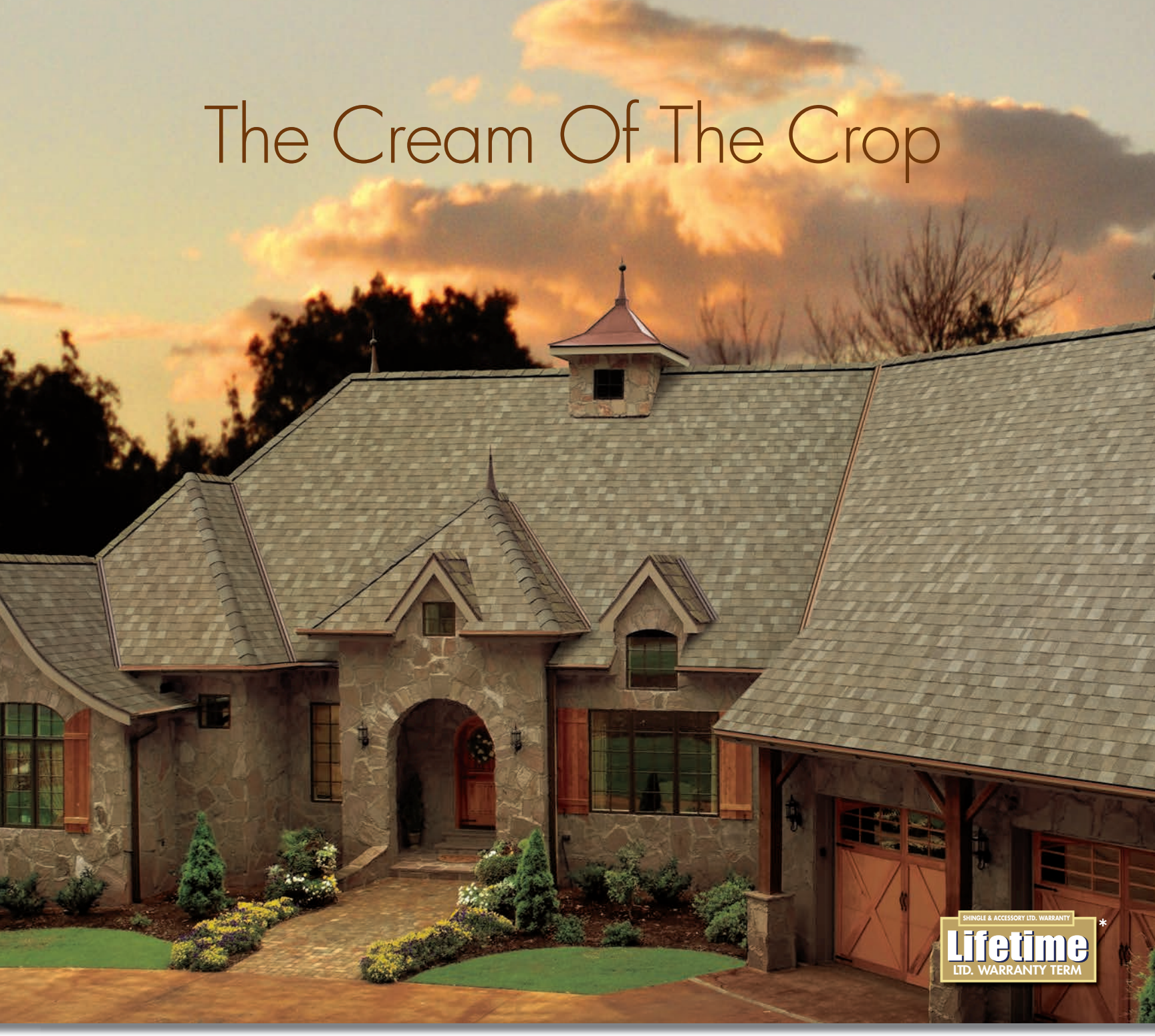
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