

Polyiso storage guidelines

Guidelines vary among manufacturers, and further clarity is needed

by Mark S. Graham

In November 2017, the Polyisocyanurate Insulation Manufacturers Association (PIMA) issued an updated bulletin addressing job-site storage of polyisocyanurate insulation. Suppliers and users of polyisocyanurate roof insulation should be aware of this bulletin, as well as manufacturers' instructions and NRCA's guidelines.

PIMA bulletin

PIMA Technical Bulletin #109, "Storage and Handling Recommendations For Polyiso Roof Insulation," provides some guidance about job-site storage of polyisocyanurate roof insulation.

The bulletin indicates polyisocyanurate insulation typically is shipped protected by a plastic wrap, plastic bag or both. The factory packaging is intended for handling in the manufacturing plant and during transit. You should not rely on factory packaging as protection at job sites or other outdoor storage locations unless otherwise specified by the manufacturer.

The bulletin also indicates insulation bundles should be stored flat above the ground using included feet (dunnage) or on raised pallets. If possible, bundles should be placed on a finished surface such as gravel,



pavement or concrete rather than on dirt or grass. Unless otherwise specified by the manufacturer, cover bundles and pallets with a waterproof covering and secure to prevent wind displacement.

The bulletin notes polyisocyanurate insulation is fully cured and fit for installation upon delivery. No additional storage time is required.

Manufacturers' instructions

Review of polyisocyanurate insulation manufacturers' storage guidelines reveals some differences from PIMA recommendations.

For example, GAF's installation instructions indicate factory-installed plastic wrap should be removed, and breathable-type coverings, such as tarpaulins, should be used to allow venting and protection from weather and moisture.

Hunter Panels indicates original shipment packaging is adequate for outdoor storage without tarpaulins for up to two weeks provided the bundles arrive with packaging intact. Outdoor storage is permitted from two weeks up to 90 days provided the four sides of the shipment packaging are slit and the bundles are completely covered with a breathable tarpaulin. For outdoor storage in excess of 90 days, additional precautions or alternative storage locations may be needed.

Johns Manville's criteria regarding insulation packaging is similar to Hunter Panels' except slitting the plastic shipment packaging and covering insulation bundles with a breathable tarpaulin are appropriate for outdoor storage for two weeks to one month. For storage longer than one month, indoor storage in a well-ventilated warehouse is recommended.

> "I encourage manufacturers to consider printing product storage instructions on factory shipment packaging"

In humid climates, Johns Manville recommends slitting or completely removing plastic shipment packaging before covering insulation bundles with a breathable tarpaulin.

NRCA guidelines

NRCA recommends all rigid board insulation materials be protected from weather during storage. When moisture-sensitive insulation materials are stored outdoors, they should be placed on pallets or platforms raised off the ground or roof surface and covered with water-resistant coverings that are secured.

NRCA considers manufacturers' factory-applied, polywrap insulation packaging to be an appropriate water-resistant covering for short-term outdoor storage provided it is intact.

When separate water-resistant coverings are used, NRCA prefers "breathable" coverings, such as water-resistant tarpaulins.

Closing thoughts

Comparing the storage guidelines in PIMA Technical Bulletin #109 with polyisocyanurate insulation manufacturers' instructions reveals inconsistencies and conflicts, which create a lack of clear understanding and confusion for users of polyisocyanurate insulation.

Polyisocyanurate insulation manufacturers need to make their product storage instructions, including any additional product covering instructions, more readily available to distributors, suppliers and roofing contractors. The manufacturers' installation instructions and bulletins I reviewed were located many clicks into the manufacturers' websites. Clearly, this information is not readily accessible to distributors' and suppliers' shipment and warehouse personnel or roofing contractors' field personnel.

I encourage polyisocyanurate insulation manufacturers to consider printing product storage instructions, including any additional product covering instructions, on factory shipment packaging. This not only would make storage instruction more accessible, but it also would likely improve product protection during job-site storage.

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To access PIMA Technical Bulletin #109, "Storage and Handling Recommendations For Polyiso Roof Insulation," go to www.professionalroofing.net.

RCI Inc. issues call for abstracts



RCI Inc. has issued a call for abstracts for its 2018 Building Envelope Technology Symposium Nov. 16-17 at the Gaylord Opryland Resort and Convention Center in Nashville, Tenn.

The Building Envelope Technology Symposium is a two-day educational program offering cutting-edge information about the design, construction, maintenance and repair of modern and older building envelopes.

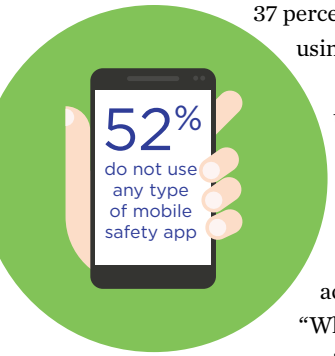
RCI is seeking abstracts spanning a variety of topics, including roofing, brick masonry, stone masonry, waterproofing, air barrier systems, and innovative technologies and practices. Abstracts of each paper should be 200 words and received at RCI headquarters by April 20. The RCI Building Envelope Symposium Committee will review abstracts, and authors will be notified regarding acceptance of abstracts by May 11. If accepted, papers should be received at RCI headquarters by July 13 for peer review.

For more information about the 2018 RCI Building Envelope Technology Symposium, visit rci-online.org/call-abstracts-2018-rci-inc-building-envelope-symposium. To receive a copy of the Abstract Submittal Form and RCI Guidelines for Presentations, which offer formatting guidance for abstracts and papers, contact RCI's headquarters at (800) 828-1902 or email rci@rci-online.org.

Construction companies underuse safety training apps

Although safety training apps and data are available, most construction contractors and insurers have not made the transition from paper methods to digital technology, according to www.businessinsurance.com.

The results of a survey conducted by information technology services company JBKnowledge Inc. revealed 52 percent of responding construction companies do not use any type of mobile safety app. In addition, the survey asked construction companies how they collect data on job sites. Forty-five percent of respondents reported they collect data using a manual, paper-based process; 37 percent collect data using spreadsheets; and 26 percent collect data using a software or mobile product.



Speaking during the International Risk Management Institute (IRMI) Inc.'s 2017 IRMI Construction Risk Conference in November, Rob McKinney, an Atlanta-based consultant at JBKnowledge, explained the manual process lacks efficacy and makes the process of collecting safety data more difficult.

"How easy is it [to use paper] when you are trying to do an accident, fatality or damage investigation?" McKinney asked. "When you start interviewing 16 people who wrote scribbles down on a notepad, it's not easy. [But when] you start asking people for their reports that are digital and include photos, it's a lot easier."

Digital technology, which can include features such as times, dates, geotagging and device stamps, can provide safety professionals a clearer picture of what happens on job sites instead of relying solely on workers' recollections, he added.

McKinney said many apps and devices people use daily can be adapted for workplace safety purposes. And apps likely also will be important when companies offer safety training to a new generation of workers who can learn how to do things such as put on a harness by using game-like apps.

"Another way to think about it is we are in a new age," McKinney said. "How are we going to train this generation of employees coming into construction and manufacturing?"

Solar Rating & Certification Corp. joins ICC Evaluation Service

The International Code Council (ICC) has announced the Solar Rating & Certification Corp. (ICC-SRCC) is joining ICC Evaluation Service LLC (ICC-ES). All certifications currently conducted by ICC-SRCC now will be coordinated within the ICC-ES framework.

ICC-SRCC develops and implements national rating standards and certification programs for solar energy equipment. Since joining the ICC Family of Companies in 2014, ICC-SRCC also has begun certifying the photovoltaic conversion of solar energy and providing small and medium wind power alternatives through the Small Wind Certification Council. Moving ICC-SRCC to ICC-ES allows ICC-SRCC to grow and offer customers additional value.

"Since our acquisition of ICC-SRCC, we have been focused on streamlining its operational and certification processes," says ICC CEO Dominic Sims. "We believe it is time to bring all ICC-SRCC programs under the control of ICC-ES to better utilize the myriad resources of ICC-ES. With this move, we aim to strengthen the renewable energy product and service offerings we have available to our members and clients."

"With our history of excellent evaluation services, we are well-positioned to take on this new area of certification services," says Shahin Moinian, president of ICC-ES. "Our customers are our priority, and we look forward to serving the evaluation needs of solar energy product manufacturers."