



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.

