PIMA's advice about storage and handling

by **Mark S. Graham**

In October 2004, the Polyisocyanurate Insulation Manufacturers Association (PIMA) issued a technical bulletin addressing its storage and handling recommendations for polyisocyanurate roof insulation. I will provide a brief overview of PIMA's recommendations contained in this bulletin and NRCA's comments about the recommendations.

PIMA 109

PIMA Technical Bulletin #109, "Storage and Handling Recommendations For Polyiso Roof Insulation," is a three-page document that addresses storage, handling, product application, construction traffic and safety.

Specific to the storage of polyisocyanurate insulation, the bulletin indicates deliveries should be carefully coordinated with roof system application so polyisocyanurate insulation is not stored outside at job sites for extended time periods. The bulletin also indicates if polyisocyanurate insulation needs to be stored more than two weeks before installation, it should be stored in dry, well-ventilated warehouses.

The bulletin also indicates manufacturers' protective packaging (plastic wrap or bag or both) is intended for handling the product in the manufacturing plant and during shipment. PIMA states the packaging should not be relied on as protection from weather.

When it is necessary to store polyisocyanurate insulation outside, the bulletin recommends bundles of insulation be stored flat and placed on raised pallets or platforms at least 4 inches (102 mm) above the surface. Where possible, storage should occur on a finished surface rather than on dirt or grass. Coverings should be waterproof and breathable, such as a canvas tarpaulin, and cover products' packages and pallets.

Regarding handling, the bulletin indicates care should be exercised to prevent breaking or crushing square edges and surfaces of the roof insulation.

The bulletin specifically indicates pushing bundles off trucks and rolling bundles across roof surfaces must be avoided.

> I encourage PIMA to extend applicability of its recommendations to its member manufacturers

NRCA's comments

If PIMA's sole intention with this bulletin is to notify its members' customers of proper storage and handling practices applicable to polyisocyanurate insulation, it is to be complimented for its effort. Some recommendations contained in PIMA's bulletin are similar to guidelines contained in *The NRCA Roofing and Waterproofing Manual, Fifth Edition*, and a column I wrote titled "Material storage and handling," June 2001 issue, page 72.

However, the bulletin appears to make several blatant attempts to shift responsibility and liability for proper storage and handling solely to roofing contractors.

For example, the PIMA bulletin specifically recommends protecting polyisocyanurate insulation from weather at job sites but is silent about the need for similar protection before delivery to roofing contractors. Most manufacturers ship polyisocyanurate insulation from their plants on trucks with no weather protection other than a plastic bag or wrap, which the bulletin indicates is intended for handling. Similarly, outside storage of materials at distributors' yards is not unusual, but this is not addressed in the bulletin.

Another example is the bulletin's recommendation for the job-site use of pallets or platforms that measure at least 4 inches (102 mm) above the surface. Bundles of polyisocyanurate insulation usually are shipped from manufacturers with dunnage that measures about 2 inches (51 mm) high.

The bulletin attempts to establish an obvious higher standard of care for polyisocyanurate insulation when it is in roofing contractors' custody than when it is in manufacturers' or distributors' care.

In NRCA's opinion, responsibility for proper material storage and handling is best shared between designers, manufacturers, suppliers, distributors and contractors. I encourage PIMA to extend applicability of its bulletin's recommendations to its member manufacturers and suppliers and distributors. Also, polyisocyanurate insulation manufacturers should re-evaluate their packaging to better facilitate proper job-site storage and handling by contractors.

Editor's note: *In the February issue, PIMA will clarify its recommendations related to material storage.*

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