Storage and Handling Recommendations For Polyiso Roof Insulation

About Polyiso Insulation

Polyiso is a rigid foam insulation used in more than 70% of commercial roof construction and offers a continuous insulation solution for commercial and residential wall assemblies. As one of North America’s most widely used and readily available building products, Polyiso is a cost-effective insulation option for reducing building energy use and improving the overall service-life of roofs and walls.

The benefits of using Polyiso include:

- High R-value per inch of thickness
- Excellent fire test performance
- Extensive building code approvals
- Cost-effective continuous insulation (ci) solution
- Compatible with most roof and wall systems
- Dimensional stability
- Compressive strength
- Moisture resistance
- Thinner walls and roofs with shorter fasteners
- Long service life
- Preferred insurance ratings
- Virtually no global warming potential
- Zero ozone depletion potential
- Recyclable through reuse
- Recycled content (amount varies by product)
- Regional materials (nationwide production network)

Storage

Polyiso insulation is typically shipped protected by a plastic wrap, plastic bag or both. This factory packaging is intended for handling the polyiso in the manufacturing plant and during transit. The factory packaging should not be relied upon as protection at jobsites or other outdoor storage locations unless specified otherwise by the manufacturer.

Note: Polyiso insulation is fully cured and fit for installation upon delivery. No additional storage time is required.

Material delivery should be carefully coordinated with the roof application schedule to minimize outdoor storage. When short-term outdoor storage is necessary, whether at grade or on the roof deck, the following precautions should be observed unless specified otherwise by the manufacturer:

- Bundles should be stored flat above the ground (or other surface) utilizing included feet or on raised pallets. If possible, the bundles should be placed on a finished surface such as gravel, pavement, or concrete rather than on dirt or grass.
- Cover the package and pallet with a breathable tarpaulin and secure cover to prevent wind displacement.

Handling

Exercise care during handling of polyiso insulation to prevent breaking or crushing of the square edges and surfaces. Remove the polyiso bundles from trucks with proper equipment. Other means of mishandling, such as pushing pallets off the edge of the truck or “rolling” the pallet across the roof deck, must be avoided.

Product Application

Polyiso should always be installed on dry, clean roof decks in dry conditions. Follow the manufacturer’s recommendations regarding product application to ensure performance to the intended design life of the roofing system. Apply only as much polyiso roof insulation as can be covered by completed roofing the same day.

Construction Traffic

Avoid excessive traffic during roof construction or on a completed roof surface. Although polyiso has been designed to withstand limited foot traffic, protection from damage by construction traffic and/or abuse is extremely
important. Roof surface protection such as plywood should be used in areas where storage and staging are planned and heavy or repeated traffic is anticipated during or after installation.

Some designers and membrane manufacturers specify the use of cover boards as a means of protecting the insulation. If specified, installers should ensure that the cover board used is compatible with all components of the roofing system, acceptable to the membrane manufacturer, and meets specified fire, wind and other code requirements.

Final Thoughts
Polyiso roof insulation, like other roofing materials, requires a proper understanding of storage, handling and application practices in order to deliver a properly constructed roof system.

ABOUT PIMA
Since 1987, PIMA has served as the voice of the North American rigid polyiso insulation industry. PIMA is a leading advocate for safe, cost-effective, sustainable, and energy-efficient construction. The Association is comprised of polyiso manufacturers and industry suppliers, and represents the public policy interests of its membership at the local, national, and international levels to advance high-performance building practices.

PIMA produces technical bulletins to address key topics related to polyiso insulation. These publications inform architects, specifiers, and contractors about the performance characteristics of polyiso insulation. Always consult individual manufacturers for product specific information, including product data sheets and installation instructions.

For more information on polyisocyanurate insulation, visit www.polyiso.org