Trisotech® Insulation

Polyisocyanurate Roof Insulation Board

Composition: Trisotech® Insulation consists of a rigid, closed cell polyisocyanurate foam core laminated on both sides to a black, fiber reinforced, non-asphaltic facer. Trisotech Insulation is offered as 20 psi compressive strength as a standard, and a 25 psi compressive strength version is available upon request. Trisotech insulation is CFC and HCFC free and the facers are manufactured from 100% recycled material (combination pre-consumer and post-consumer)

Basic Uses: Trisotech Insulation is used to provide high thermal insulation under most roof membrane systems. Trisotech is recommended for use in combination with a coverboard in hot and cold applied BUR and MB roof systems. Trisotech Insulation is also available in tapered configurations. Trisotech Insulation meets ASTM C 1289-11, Type II, Class I, Grade 2 (20 psi) and Grade 3 (25 psi).

Limitations:

- Not intended for use under ponding conditions. Positive drainage is required.
- Not to be exposed to solvents, oils or other contaminants harmful to polyisocyanurate foam insulation.
- Insulation stops are required on roofs with slopes of 2:12 (2" per foot) or greater.
- Not for use directly under hot applied roof membranes. A wood fiber overlay board is required prior to the application of a hot applied roof membrane.
- Not for use in direct contact with lightweight insulating concrete or recently poured gypsum decks.
- For adhered systems where a cover board is not specified, multiple layers of Trisotech must be used when the total insulation thickness is 3.0" or greater.
- For adhered single ply systems when a cover board is not specified, the maximum thickness for the top layer of Trisotech is 2.7".

Product Advantages

Features	Benefits
Closed cell foam	• High thermal "R-Value" • Low thermal conductivity • Non-rotting, non-absorbent core • Lightweight, rigid board, easy to handle
Thick fiber facer	• Suitable for adhering to substrates in hot or cold applied adhesives • Protects foam core
FM Approved	• Manufactured under a FM quality assurance inspection program • Fire/wind protection
UL Approved	• Manufactured under UL quality assurance inspection program • UL classified fire protection

Sizes: Trisotech Insulation is available in truckload quantities in 4' x 4' (1220mm x 1220mm) or 4' x 8' (1220mm x 2440mm) board panels and packaged on dunnage. Thicknesses range from 1" (25mm) to 4" (101mm). Contact your Tremco Representative for a full list of available thicknesses.

When Trisotech Insulation is specified for application in FAS-n-FREE Adhesive or hot bitumen, the recommended board size is 4' x 4'. Board sizes of 4' x 8' are only acceptable when mechanical attachment of insulation is specified.

GENERAL APPLICATION DATA:
Roof replacement usually involves more complexities than new construction roofing. Often encountered are situations such as rusted/deteriorated decks, rotted wood components, rooftop equipment which cannot be moved or shut down, and numerous other conditions.

The following application information is designed to serve as a general guide. Your local Tremco Representative will prepare detailed specifications based on the condition of your roof.

Structural Decks: Must be properly designed and structurally sound.

Drainage: Ponding conditions are unacceptable and will adversely affect the performance of any roofing system. If positive drainage does not exist, water removal from the roof surface must be facilitated by lowering drains, and/or installing additional drains, tapered insulation, or Tremco approved cellular concrete system.

Insulation Storage: Insulation must be dry and kept dry. When stored outdoors, stack insulation on pallets at least 4 inches (100mm) above ground level. Upon receipt of insulation on the job site, remove the factory plastic packaging. Cover the top and sides of the insulation with waterproof tarpaulin (not polyethylene) and secure. Do not stack more than two pallets high.

Surface Preparation: Prior to installing the insulation, the substrate must be clean, dry and free of dust, dirt, oil, or other contaminants. Concrete and gypsum decks must be properly cured and sufficiently dry prior to installing insulation.

TREMCO

Roofing & Weatherproofing Peace of Mind™

Installation: The use of FAS-N-FREE Adhesive for solvent free, fastener free insulation attachment is the preferred method of attachment unless otherwise specified.

Multiple Layers: The use of two separate layers of insulation is recommended, but required over steel decks. After securing the first layer of insulation, install the additional layer(s) with the board joints offset a minimum 6 inches (150mm) from the joints of the preceding layer. Two layers, with board joints offset, can minimize stress on the roof membrane which results from thermal movement of the deck.

Adhesive Application: Tremco Fas-n-Free, Tremco Low Rise Foam Adhesive, and Tremco Low Rise Foam Adhesive Green are recommended for use with Trisotech Insulation. Obtain and read the Specification Data Sheets for adhesive products prior to use.

Bitumen Application: Hot applied asphalt can be used to adhere Trisotech to concrete decks, to base sheets which are mechanically attached to wood or gypsum decks, and to insulation layer(s) previously secured. Hot asphalt may also be used to adhere coverboards over Trisotech Insulation. Concrete decks should be primed with Tremprime WB and allowed to thoroughly dry. Adhere insulation to substrate in a full coverage of hot applied bitumen, at a coverage rate of 30 lbs. per 100 sq. ft. (1.5 kg/m^2) ± 20%. Place insulation immediately into the hot bitumen and step into place to achieve a solid bond.

Mechanical Fastener Application: Tremco Fasteners and Discs are recommended where mechanical attachment of the insulation is specified over steel and wood decks. Do not mix fasteners and discs of different brands unless the combination is Factory Mutual Approved.

Fasteners must be driven perpendicular to the deck. Do not overdrive the fastener, as the insulation may fracture and become susceptible to loss of attachment. Fastener should be driven tight enough so that the disc will not turn.

PRECAUTIONS:
User must read container labels and Material Safety Data Sheets for health and safety precautions prior to use.

AVAILABILITY AND COST:
Contact your local Tremco Representative for pricing and availability. For the name and number of your Representative, call the Roofing Division at 216/292-5000.

MAINTENANCE:
Your local Tremco Roofing Representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound roof program.

GUARANTEE/WARRANTY:
Tremco Inc. warrants Trisotech Insulation to be free of defects and to meet published physical properties when conditioned and tested according to ASTM and Tremco standards. Under this warranty, any Trisotech Insulation that is proved to be defective when applied in accordance with our written instructions and in applications recommended by Tremco as suitable for this product will be replaced with like product at no charge. THIS IS BUYER'S SOLE AND EXCLUSIVE REMEDY.

Physical Performance Characteristics

Trisotech® Insulation

Property	Typical Value	Test Method
Compressive Strength, min.	Grade 2 - 20 psi (137kPA) Grade 3 - 25 psi (172 kPA)	ASTM D 1621
Density, nominal	2.0 lb/ft^3 (32.0kg/m^3)	ASTM D 1622
Conditioned Thermal Resistance at 75°F (24°C)	**R Value**	ASTM C 518

	LTTR*	WEIGHT (lbs/sq ft)	RECYCLED CONTENT**
1" (25.4mm)	5.6	0.167	40%
1.5" (38.1mm)	8.5	0.250	30%
2.0" (50.8mm)	11.4	0.333	26%
2.5" (63.5mm)	14.4	0.417	23%
3.0" (76.2mm)	17.4	0.500	21%
3.5" (88.9mm)	20.5	0.583	19%

* Long Term Thermal Resistance, ASTM C 1289-11
** By weight, combined pre-consumer and post-consumer

All claims concerning product defects must be made in writing within twelve (12) months of shipment. The absence of such claims in writing during this period will constitute a waiver of all claims with respect to such product.

This warranty is IN LIEU of any and all other warranties express or implied, including but not limited to, any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

TECHNICAL SERVICES:
Your local Tremco Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications. The services of the Tremco Research Center, which has earned a unique reputation in weatherproofing technology, complement and extend the services of the Tremco Technical Service staff.

STATEMENT OF POLICY AND RESPONSIBILITY:
Tremco takes responsibility for the furnishing of quality roofing materials, and providing specifications and recommendations for their proper installation.

As neither Tremco itself nor its Representatives practice architecture or engineering, Tremco offers no opinion on, and expressly disclaims any responsibility for soundness of any structure on which its products may be applied. If questions arise as to the soundness of a structure or its ability to support a planned installation properly, the Owner should obtain the opinion of competent structural engineers before proceeding. Tremco accepts no liability for any structural failure or for resultant damages, and no Tremco Representative is authorized to vary this disclaimer.

TREMCO

3735 Green Road
Beachwood, OH 44122
216-292-5000

220 Wicksteed Ave
Toronto, ONT M4H 1G7
416-421-3300

R00-244 Rev. 1/14
Printed in USA