Trisotech® CGF
Polyisocyanurate Roof Insulation Board

**DESCRIPTION**

Trisotech CGF consists of a rigid, closed cell polyisocyanurate foam core laminated on both sides to a white inorganic coated glass facer. Trisotech CGF is offered as 20 psi compressive strength as a standard, and a 25 psi compressive strength version is available upon request. Trisotech CGF is CFC and HCFC free and is highly resistant to microbial growth per the requirements of ASTM D6329.

Trisotech CGF is used to provide high thermal insulation under most roof membrane systems. Trisotech CGF is recommended for use in combination with a coverboard in hot and cold applied BUR and MB roof systems. Trisotech CGF is also available in tapered configurations. Trisotech CGF meets ASTM C 1289, Type II, Class II, Grade 2 (20 psi) and Grade 3 (25 psi). In addition, Trisotech CGF complies with CAN/ULC-S704 Type 2, Class 3 or Type 3, Class 3.

Refer to UL Roofing Materials Systems Directory and/or FM Approvals RoofNav for applicable roof system configurations.

**FEATURES**

- Closed cell foam
- Coated glass fiber facer
- FM Listed
- UL Approved

**BENEFITS**

- High thermal “R-Value”
- Low thermal conductivity
- Non-rotting, non-absorbent core
- Lightweight, rigid board, easy to handle
- Suitable for adhering to substrates in hot or cold applied adhesives
- Protects foam core
- Highly resistant to microbial growth
- Manufactured under a FM quality assurance inspection program
- Fire/wind protection
- Manufactured under UL quality assurance inspection program
- UL classified fire protection

**BASIC USES**

Trisotech CGF is used to provide high thermal insulation under most roof membrane systems. Trisotech CGF is recommended for use in combination with a coverboard in hot and cold applied BUR and MB roof systems. Trisotech CGF is also available in tapered configurations. Trisotech CGF meets ASTM C 1289, Type II, Class II, Grade 2 (20 psi) and Grade 3 (25 psi). In addition, Trisotech CGF complies with CAN/ULC-S704 Type 2, Class 3 or Type 3, Class 3.

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Trisotech CGF 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 CGF is specified for application in cold 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.

**APPLICATION**

**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.

INSTALLATION:

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 CGF. 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 CGF. 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/m²) ± 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 has been specifically tested and approved by Tremco.

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.

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 or gypsum cover board is required prior to the application of a hot applied roof membrane.
• 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”.

PROPERTY | TYPICAL VALUE | TEST METHOD
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Compressive Strength, min. | Grade 2 - 20 psi (137 kPA), Grade 3 - 25 psi (172 kPA) ASTM D1621 |  
Density, nominal | 2.0 lb/ft³ (32.0 kg/m³) ASTM D1622 |  
Flame Spread | 40-60 ASTM E84 (10 min) |  
Smoke Development | 50-170 ASTM E84 (10 min) |  
Conditioned Thermal Resistance at 75°F (24°C) R Value |  
| WEIGHT (lbs/sq ft) | RECYCLED CONTENT** |  
| LTR* | 1” (25.4mm) | 5.6 | 0.315 | 6.2%  
| 1.5” (38.1mm) | 8.5 | 0.383 | 7.7%  
| 2.0” (50.8mm) | 11.4 | 0.450 | 8.7%  
| 2.5” (63.5mm) | 14.4 | 0.518 | 9.4%  
| 3.0” (76.2mm) | 17.4 | 0.585 | 10.0%  
| 3.5” (88.9mm) | 20.5 | 0.653 | 10.9%  

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

Your local Tremco Roofing sales 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.

Users must read container labels and Safety Data Sheets for health and safety precautions prior to use.

Your local Tremco Roofing sales representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications.