

TRI-BUILT® ISO III CGF ROOF INSULATION

DESCRIPTION

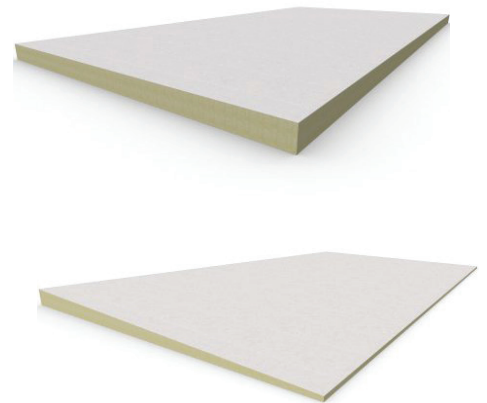
Available in both flat and tapered panels. Closed-cell polyisocyanurate (polyiso) foam core integrally bonded to inorganic coated glass facers (CGF) on both sides. TRI-BUILT® ISO III CGF Roof Insulation is offered in a variety of thicknesses (including tapered insulation), providing long-term thermal resistance (LTTR) values from 5.7 (4.3 for tapered) to 26.8. TRI-BUILT ISO III CGF Roof Insulation is available in 4ft x 8ft (1220mm x 2440mm) and 4ft x 4ft (1220mm x 1220mm) panels. Tapered TRI-BUILT ISO III CGF Roof Insulation is available in 4ft x 4ft (1220mm x 1220mm) panels. Manufactured in accordance with **ASTM C1289, Type II, Class 2, Grade 2 (20 psi) or Grade 3 (25 psi) and CAN/ULC-S704 Type 2, Class 3 or Type 3, Class 3.**

APPLICATIONS

Manufactured and tested for use in new and re-roofing applications. TRI-BUILT ISO III CGF Roof Insulation shall be installed over the roof deck. TRI-BUILT ISO III CGF Roof Insulation is used in built-up (BUR), modified bitumen, standing seam metal, ballasted single-ply, mechanically attached single-ply and adhered single-ply roofing systems. These roofing systems depend on proper installation for successful performance. Refer to roof cover manufacturer, FM Approvals® RoofNav and UL Product iQ® for additional application details.

INSTALLATION

TRI-BUILT ISO III CGF Roof Insulation shall be kept dry before, during and after installation. This product will burn if exposed to an ignition source of sufficient heat and intensity. Do not apply flame directly to TRI-BUILT ISO III CGF Roof Insulation. To minimize the effect of thermal bridging, and the impact of moisture/airflow into the roof system, TRI-BUILT strongly recommends the TRI-BUILT ISO III CGF Roof Insulation be installed in multiple layers. Prior to installation, TRI-BUILT® recommends, as applicable, you consult with your local building code official(s), contract documents, design professional, and all other relevant parties to ensure appropriate compliance.



PHYSICAL PROPERTIES

TRI-BUILT ISO III CGF ROOF INSULATION MEETS OR EXCEEDS THE FOLLOWING PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	ASTM C1289 OR CAN/ULC S704 (MIN REQUIREMENTS)
DIMENSIONAL STABILITY	ASTM D2126	<2%
COMPRESSIVE STRENGTH	ASTM D1621	20 psi (140 kPa) or 25 psi (172 kPa)
WATER ABSORPTION	ASTM C209	<1.5%
	ASTM C1763	<1.5%
	ASTM D2842	<3.5%
WATER VAPOR TRANSMISSION	ASTM E96	<4.0 perm (228.8ng/(Pa·s·m ²))
PRODUCT DENSITY	ASTM D1622	Nominal 2.0 pcf (32.04 kg/m ³)
FLAME SPREAD	ASTM E84/UL723	40–60
SMOKE DEVELOPMENT	ASTM E84/UL723	50–170
TENSILE STRENGTH	ASTM D1623	>730 psf (35 kPa)
SERVICE TEMPERATURE	–	-100° to +250°F

CODE COMPLIANCE

- ASTM C1289 Type II, Class 2, Grade 2 (20 psi) or Grade 3 (25 psi)
- CAN/ULC-S704, Type 2, Class 3 or Type 3, Class 3
- CCMC No. 12423-L
- UL Certified for Canada – Insulated Roof Deck Assemblies Construction No. C38 and 52. Meet CAN/ULC-S126, CAN/ULC-S101 and CAN/ULC-S107
- UL 1256 Classification Construction No. 120, 123 & 292
- UL 790 (ASTM E108) Roofing Systems Classification
- UL 263 (ASTM E119) Fire Resistance Classification
- FM 4450/4470 Refer to FM Approvals® RoofNav for Specific System Details
- IBC Chapter 26 & NBC Sections on Foam Insulation
- UL 2824 Resistant to Mold Growth as Validated by UL Environment

*Numerical ratings are not intended to reflect performance under actual fire conditions. Flame spread index of ≤75 and smoke development ≤450 meet code requirements for foam plastic roof insulation. Physical properties listed above are presented as typical average values as determined by referenced ASTM test methods and are subject to nominal manufacturing variations.

TRI-BUILT® ISO III CGF ROOF INSULATION

FLAT CGF ROOF INSULATION

THICKNESS	THERMAL RESISTANCE		PIECES PER UNIT	SQUARE FEET PER UNIT		TRUCKLOAD QUANTITIES (SQUARES)	AVERAGE WEIGHT (LB/SF)	RECYCLED CONTENT		
	AVERAGE ¹ LTRR VALUE	² RSI		4×8	4×4			POST CONSUMER	PRE CONSUMER	TOTAL
1.0"	5.7	1.00	48	1536	768	368.64	0.315	-	6.2%	6.2%
1.5"	8.6	1.50	32	1024	512	245.76	0.383	-	7.7%	7.7%
2.0"	11.4	2.01	24	768	384	184.32	0.450	-	8.7%	8.7%
2.5"	14.4	2.53	19	608	304	145.92	0.518	-	9.4%	9.4%
3.0"	17.4	3.06	16	512	256	122.88	0.585	-	10.0%	10.0%
3.5"	20.5	3.60	13	416	208	99.84	0.653	-	10.5%	10.5%
4.0"	23.6	4.15	12	384	192	92.16	0.720	-	10.9%	10.9%

TAPERED CGF ROOF INSULATION

SLOPE	LABEL	THICKNESS			THERMAL RESISTANCE		BOARD FT PER PIECE	PIECES PER UNIT	BOARD FT PER UNIT	SQUARE FT PER UNIT	WEIGHT (LB/SF)	RECYCLED CONTENT		
		MIN	MAX	AVERAGE	AVERAGE ¹ LTRR VALUE	² RSI						POST CONSUMER	PRE CONSUMER	TOTAL
1/8"	AA	0.5"	1.0"	0.75"	4.3	0.76	12	64	768	1024	0.281	-	5.2%	5.2%
1/8"	A	1.0"	1.5"	1.25"	7.1	1.25	20	38	760	608	0.349	-	7.0%	7.0%
1/8"	B	1.5"	2.0"	1.75"	10.0	1.76	28	26	728	416	0.416	-	8.2%	8.2%
1/8"	C	2.0"	2.5"	2.25"	12.9	2.27	36	20	720	320	0.484	-	9.1%	9.1%
1/4"	X	0.5"	1.5"	1.0"	5.7	1.00	16	48	768	768	0.315	-	6.20%	6.20%
1/4"	Y	1.5"	2.5"	2.0"	11.4	2.01	32	24	768	384	0.450	-	8.68%	8.68%
1/2"	Q	0.5"	2.5"	1.5"	8.6	1.51	24	32	768	512	0.383	-	7.66%	7.66%

¹LTRR (long term thermal resistance) values were determined in accordance with CAN/ULC-S770. Test samples were third-party selected and tested by an accredited material testing laboratory.

²RSI is the metric expression of R-value (m² • K/W).

³To minimize the effects of thermal bridging, and the impact of moisture/airflow into the roof system, TRI-BUILT strongly recommends the TRI-BUILT insulation assembly be installed in multiple layers.

WARRANTY

TRI-BUILT ISO III CGF Roof Insulation is backed by a Limited 20-Year Thermal Warranty.

Other than the aforementioned representations and descriptions, TRI-BUILT® (hereafter, “Seller”) makes no other representations or warranties as to the insulation sold herein. The Seller disclaims all other warranties, express or implied, including the warranty of merchantability and the warranty of fitness for a particular purpose. Seller does, however, have a limited warranty as to the LTRR-Value of the insulation, the terms of which are available upon request from the Seller. Seller shall not be liable for any incidental or consequential damages including but not limited to the cost of installation, removal, repair or replacement of this product. Buyer's remedies shall be limited exclusively to, at Seller's option, the repayment of the purchase price or resupply of product manufactured by TRI-BUILT in a quantity equal to that of the nonconforming product. Distributors, agents, salespersons or other independent representatives have no authority to waive or alter the above limitation of liability and remedies.