

ElastoTherm™ E

Roof Insulation



Product Information:

ElastoTherm E is a closed cell polyisocyanurate thermal insulation panel with an integrally bonded inorganic glass fiber reinforced facer and is compatible with Bitec roof membranes.

- Available in both flat and tapered panels
- Manufactured using a CFC-free, HCFC-free, and HFC-free foam blowing technology that has zero ozone depletion potential (ODP) and virtually no global warming potential.
- Available in both Grade 2 (20 psi) and grade 3 (25 psi) compressive strengths tested per ASTM C 1289.

Approvals:

- UL 1256 Insulated Metal Deck Constructions No. 120, 123, & 292
- UL 790 Roofing Systems Classification
- UL 263 Fire Resistance Classification
- UL 1897 Uplift Resistance
- FM 4450/4470 (refer to RoofNav for specific details)
- Florida Approved (FL17989)



Flat Panels:

- Sizes:
 - 4 ft X 4 ft
 - 4 ft X 8 ft
 - Thickness: 1 to 4 inches
- Refer to table 1 for flute spans and R value information

Tapered Panels

- Sizes
 - 4 ft X 4 ft
 - Thickness: ½ to 4-½ inches
- Taper designs and shop drawings available.



ElastoTherm E

Table 1 - Thermal Data

Thickness		LTTR Value	RSI	Flute Spanability	
in	mm			in	mm
1.0	25.4	5.7	1.00	2.625	66.68
1.5	38.1	8.6	1.50	4.375	111.13
2.0	50.8	11.4	2.01	4.375	111.13
2.5	63.5	14.4	2.53	4.375	111.13
3.0	76.2	17.4	3.06	4.375	111.13
3.5	88.9	20.5	3.60	4.375	111.13
4.0	101.6	23.6	4.15	4.375	111.13

Storage:

- Store panels flat and in a horizontal position to prevent damage.
- Store elevated (at least 3 inches) and covered to protect from environmental damage.
- Do not use wet or damaged panels.
- Refer to PIMA Tech Bulletin No. 109 for additional guidelines.

Table 2 - Tapered Thermal Data

Panel	LTTR	RSI	Thickness	
			in	mm
AA	4.3	0.76	0.5-1.0	12-25
A	7.1	1.25	1.0-1.5	25-38
B	10.0	1.76	1.5-2.0	38-50
C	12.9	2.27	2.0-2.5	50-63
X	5.7	1.00	0.5-1.5	12-38
Y	11.4	2.01	1.5-2.5	38-63
Q	8.6	1.51	0.5-2.5	12-63

Installation:

- Panels must be kept dry from storage through installation. Install only as much as can be covered with roofing that day.
- When using multiple layers of insulation, joints should be staggered a minimum of 6 inches to prevent thermal bridging.
- Panels must be fitted neatly to the roof deck and with no more than a ¼ inch gap around penetrations.
- Panels should be abutted together and adjacent panels should have their joints staggered.
- New concrete decks must be fully hydrated and are no longer releasing moisture.

Physical Properties

Property	Result	ASTM Test
Compressive Strength, psi	20 (grade 2)	D1621
Dimensional Stability, %	<2	D2126
Water Absorbtion, %	<1.5	C209
Vapor Transmission, perm	<4.0	E96
Flame Spread	<75	E84
Smoke Developed	<450	E84
Density, pcf	2.0	D1622

