### Technical Data Sheet

# IB® Energy Board III Tapered

## IB Roof Systems®

## **Product Description:**

IB Energy Board III Tapered (by Atlas AC Foam II or Hunter Panels H-Shield) is a closed-cell polyisocyanurate foam core integrally bonded to inorganic coated glass facers. IB Energy Board III Tapered is offered in a variety of slopes, to achieve positive drainage as well as Long-Term-Thermal-Resistance (LTTR) values. Available in 4' x 4' panels with 1/8", 1/4", and 1/2" per foot slope.

#### Packaging:

IB Energy Board III Tapered is shrink-wrapped and job site delivered.

#### Features:

- Manufactured using CFC-, HCFC- and HFC- free foam blowing technology
- · Excellent LTTR to thickness ratio
- · Sustainable Building Material
- Zero Ozone Depletion Potential (ODP)
- Virtually no Global Warming Potential (GWP)\*
- Reduces cooling and heating loss transmission through roofing assemblies
- Covered component under the IB Total Systems Warranty
- Can be used for mechanically attached, induction attached, fully adhered, or ballasted roof assemblies

#### **Application:**

IB Energy Board II Tapered can be installed over approved substrates. Refer to IB Specifications and Construction Details for additional installation instructions.

## **Multi-Layer Installation:**

Improved insulation thermal performance and a reduction of thermal bridging can be obtained by the installation of two or more layers with all joints offset. Avoid continuous vertical joints on all multi-layer applications by staggering and offsetting the joints of each layer from those of preceding layers.

#### **Approvals:**

- ASTM C1289, Type II, Class 2, Grade 2 (20 psi) or Grade 3 (25 psi)
- UL Standard 1256 Classification Construction No. 120, 123 & 292
- UL Standard 790 (ASTM E108) Roofing Systems Classification
- UL Standard 263 (ASTM E119) Fire Resistance Classification
- UL Standard 1897 Uplift Resistance
- CAN/ULC-S704, Type 2, Class 3 or Type 3, Class 3
- CCMC No. 12464-L
- · FM Standard 4450/4470 Approved
- UL Certified for Canada Insulated Roof Deck Assemblies Construction No. C38 and 52. Meet CAN/ULC-S126, CAN/ULC-S101 and CAN/ULC-S107
- GWP of IB Energy Board II is negligible and is considered zero (0) by the U.S. EPA.



Slope	Label	Thick	Avg.	Wt	Recycled Content		
		ness	1LTTR	lb/sf	Post	Pre	Total
1/8"	AA	0.5"-1.0"	4.3	.281	-	5.2%	5.2%
1/8"	Α	1.0"-1.5"	7.1	.349	-	7.0%	7.0%
1/8"	В	1.5"-2.0"	10.0	.416	-	8.2%	8.2%
1/8"	С	2.0"-2.5"	12.9	.484	-	9.1%	9.1%
1/4"	X	0.5"-1.5"	5.7	.315	-	6.2%	6.2%
1/4"	Y	1.5"-2.5"	11.4	.450	-	8.68%	8.68%
1/2"	Q	0.5"-2.5"	8.6	.383	-	7.66%	7.66%

\*ILTTR (long term thermal resistance) values were determined in accordance with CAN/ULC-S770-09. Test samples were third-party selected and tested by an accredited material testing laboratory. The LTTR results were reviewed by FM Global and certified by the PIMA Quality Mark Program.

Typical Physical Properties*						
Property	Test Method	Result				
Dimensional Stability	ASTM D2126	< 2%				
Compressive Strength	ASTM D1621	20 psi or 25 psi				
Water Absorption	ASTM C209 & D2842	< 1.5%, < 335%				
Water Vapor Transmission	ASTM E96	< 4.0 perm				
Product Density	ASTM D1622	Nominal 2.0 pcf				
Flame Spread	ASTM E84 (10 min.)	<sup>1</sup> 40-60				
Smoke Development	ASTM E84 (10 min.)	<sup>1</sup> 50-170				
Tensile Strength	ASTM D6123	> 730 psf				
Service Temperature		-100° to +250°F				

Numerical ratings are not intended to reflect performance under actual fire conditions. Flame spread index of  $\leq$  75 and smoke development  $\leq$  450 meet code requirements for foam plastic roof insulation Codes exempt foam plastic insulation when used in FM 4450 or UL 1256.

<sup>\*</sup> Physical properties shown are based on data obtained under controlled conditions and are subject to normal manufacturing tolerances.