Technical Data Sheet

IB® Energy Board III

IB Roof Systems®

Product Description:

IB Energy Board III (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 is a product that offers Long-Term-Thermal-Resistance (LTTR) values from 5.7 to 23.6 and is available in 4' x 4' and 4' x 8' panels.

Packaging:

IB Energy Board III 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:

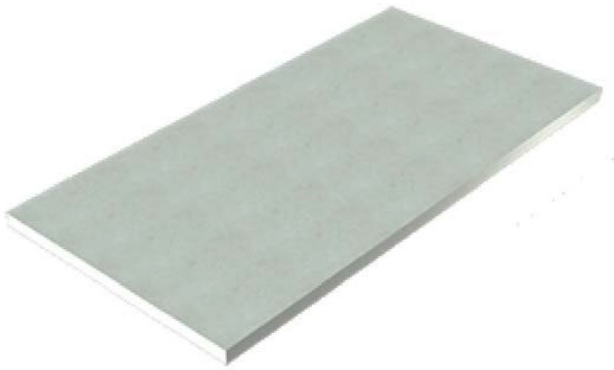
IB Energy Board III can be installed over approved substrates. Refer to IB Specifications and Construction Details for additional installation instructions.

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.



Thickness	[1]Avg. LTTR	Flute Span	Weight lb/sf	Recycled Content		
				Post	Pre	Total
1.0"	5.7	2.6"	.315	-	6.2%	6.2%
1.5"	8.6	4.3"	.383	-	7.7%	7.7%
1.6"	9.1	4.3"	.396	-	7.9%	7.9%
1.8"	10.3	4.3"	.423	-	8.3%	8.3%
2.0"	11.4	4.3"	.450	-	8.7%	8.7%
2.3"	13.2	4.3"	.490	-	9.2%	9.2%
2.5"	14.4	4.3"	.518	-	9.4%	9.4%
2.6"	15.0	4.3"	.531	-	9.6%	9.6%
2.7"	15.6	4.3"	.545	-	9.7%	9.7%
*3.0"	17.4	4.3"	.585	-	10.0%	10.0%
*3.5"	20.5	4.3"	.653	-	10.5%	10.5%
*4.0"	23.6	4.3"	.720	-	10.9%	10.9%

[1]LTTR (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.
*To minimize the effects of thermal bridging, IB recommends the use of multiple layers when the total desired or specified R-value requires an insulation thickness greater than 2.7" thick.

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.)	[1]40-60
Smoke Development	ASTM E84 (10 min.)	[1]50-170
Tensile Strength	ASTM D6123	> 730 psf
Service Temperature		-100° to +250°F

[1]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. Codes exempt foam plastic insulation when used in FM 4450 or UL 1256.
* Physical properties shown are based on data obtained under controlled conditions and are subject to normal manufacturing tolerances.