


DESCRIPTION

Atlas EnergyShield[®] is a high performance thermal insulation board composed of a closed cell polyisocyanurate foam core with tri-laminate reflective aluminium foil facers.

APPLICATIONS

Provides continuous insulation for residential, multi-family, and light commercial construction.

- Exterior framed walls with wood or steel studs
- Exterior framed walls with or without sheathing
- Exterior or interior insulation for masonry or concrete wall systems
- Interior insulation behind a thermal barrier for stud walls
- Attics and crawlspaces without requiring a thermal barrier
- Air and water resistive barrier when installed accordingly

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	VALUES
COMPRESSIVE STRENGTH	ASTM D1621	> 140 kPa (20 psi)
FLAME SPREAD	CAN/ULC S102	>25 <500
FLAME SPREAD	ASTM E84 /UL 723	<75
SMOKE DEVELOPED	ASTM E84 /UL 723	<450
WATER VAPOUR TRANSMISSION, METHOD A	ASTM E96	≤ 15.0 ng / Pa·s·m ² at 25.4 mm (<0.3 perm)
WATER ABSORPTION	ASTM D2842	<1% by Volume
TENSILE STRENGTH	ASTM D1623	>35 kPa (5 psi)
FLEXURAL STRENGTH, MIN	ASTM C203	>275 kPa (40 psi)
DIMENSIONAL STABILITY, LENGTH & WIDTH		
at -29°C, Ambient Humidity	ASTM D2126	±2%
at 80°C, Ambient Humidity	ASTM D2126	±2%
at 70°C, 97% Relative Humidity	ASTM D2126	±2%
SERVICE TEMPERATURE	-	-73°C to +122°C
MOULD RESISTANCE	UL 2824	4, Highly Resistant
AIR PERMEANCE	ASTM E2178	< 0.02L/s·m ² @ 75 Pa

Technical and physical properties listed are representative of typical values based on testing and are intended as general guidelines only and subject to manufacturing tolerances. No warranties are given except for those specifically written by Atlas for its products.

SUSTAINABILITY

Atlas polyiso insulation is manufactured using environmentally responsible processes and formulations.

- Contains no CFCs, HCFCs or HFCs
- Zero Ozone Depletion Potential (ODP)
- Negligible Global Warming Potential (GWP)
- GREENGUARD Gold Certification
- Contributes to LEED credits

For more information visit

wall.atlasrwi.com/about-wall/sustainability

ADVANTAGES

EnergyShield provides multi-functional protection by addressing the necessary control layers to create a high performing wall assembly and provides installation efficiency.



THERMAL



WATER



AIR



VAPOUR

CODE COMPLIANCE

- **CAN/ULC S704 Type 2, Class 1**
- **CCMC 12422-L**
- **ASTM E2178** Air Barrier Material
- **ASTM E2357** Air Barrier Assembly
- **ASTM E331** Water Penetration
- **DrJ TER 2202-01** Weather-Resistive Properties
- **ASTM E84/UL 723, Class B**
- **ICC-ES AC12** Appendix B

PRODUCT DATA

NOMINAL THICKNESS		THERMAL VALUES*		RECYCLED CONTENT
MM	INCHES	R-VALUE	RSI	
13	0.50"	3.3	0.58	9.5%
19	0.75"	5.0	0.88	10.7%
25	1.00"	6.5	1.14	11.5%
38	1.50"	9.8	1.73	12.3%
51	2.00"	13.1	2.31	12.8%
64	2.50"	16.0	2.82	13.1%
76	3.00"	19.7	3.47	13.3%
89	3.50"	22.2	3.91	13.5%
102	4.00"	26.0	4.58	13.6%

*Conditioned thermal values were determined by ASTM C518 Test Method at 24°C (75°F) mean temperature using materials conditioned in accordance with procedures outlined in CAN/ULC S704. "R" means resistance to heat flow. The higher the R-value, the greater the insulating power. Available in 4 ft x 8 ft and 4 ft x 9 ft boards. Additional sizes available upon request.

PRECAUTIONS

- Polyiso may contribute to flames and smoke spread when exposed to an ignition source of sufficient heat and intensity.
- Always follow local building code requirements.
- EnergyShield should be covered within 60 days after installation.

STORAGE AND PRE-INSTALLATION INSPECTION

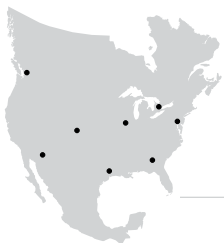
- Refer to Technical Bulletin 16 for detailed information on storage recommendations.
- Insulation shall be kept clean and dry and be protected from damage due to weather and physical abuse at all times.
- Prior to installation, ensure that the insulation and substrate are clean, dry and free of ice, dirt, oils, or any other material that could impede correct installation of the insulation or subsequent material layers.
- Do not install if surface conditions of the insulation or adjacent materials will impede correct installation.

FOR A COMPLETE LIST OF PRODUCT SIZES, SCAN OR CLICK QR CODE TO DOWNLOAD THE PACKAGE & LOADING GUIDE


WARRANTY

EnergyShield is backed by a Limited 15-Year Thermal Warranty.

For complete terms and conditions, visit wall.atlasrwi.com/warranty



Atlas Roofing Corporation
 2000 Riveredge Parkway, Suite 800 • Atlanta, GA • 30328
 770-952-1442 • wall.atlasrwi.com

