EnergyShield® XR
Continuous Insulation

PRODUCT DATA SHEET

DESCRIPTION

Atlas EnergyShield® XR is a high performance thermal insulation board comprised of a closed cell polyisocyanurate foam core with durable, impermeable 4.0 mil (nominal) foil facers on both sides.

APPLICATIONS

Provides continuous insulation for exterior above- and below-grade walls for Type I-V construction.

- Exterior framed walls with or without sheathing
- Exterior framed walls with wood or steel studs
- Exterior walls of masonry or concrete
- Air and water resistive barrier when installed accordingly
- Below grade exterior foundation walls
- Under slab foundation
- Attics and crawlspaces without requiring a thermal barrier
- Available scored at 16″ and 24″ o.c.

ADVANTAGES

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



PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	VALUES
COMPRESSIVE STRENGTH	ASTM D1621	25 psi
DENSITY	ASTM D1622	2.0 pcf
FLAME SPREAD, CORE	ASTM E84/UL 723	≤25
SMOKE DEVELOPED, CORE	ASTM E84 /UL 723	≤450
WATER VAPOR TRANSMISSION, METHOD A	ASTM E96	≤ 0.1 Perms
WATER ABSORPTION	ASTM C209/ASTM C1763	<1% by Volume
WATER ABSORPTION	ASTM C272	<0.3% by Volume
FLEXURAL STRENGTH	ASTM C203	>50 psi, min
DIMENSIONAL STABILITY, LENGTH & WIDTH	ASTM D2126	≤1% Linear Change
SERVICE TEMPERATURE	–	-100°F to +250°F
MOLD RESISTANCE	UL 2824	4, Highly Resistant
AIR PERMEANCE	ASTM E2178	<0.02 L/s·m² @ 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
www.atlasrwi.com/about-polyiso/sustainability

CODE COMPLIANCE

- **ASTM C1289, Type I, Class 1 and 2**
- **ASTM C578** Physical Properties Table 1 - Complies with Type IV
- **ASHRAE 90.1**
- **ASHRAE 189.1**
- **International Energy Conservation Code (IECC)**
- **International Green Construction Code (IgCC)**
- **International Building Code (IBC)**
- **International Residential Code (IRC)**
- **California Thermal Insulation Directory,** T 1231
- **Miami-Dade County Product Control Approved** NOA No. 24-1023.04
- **ASTM E2178** Air Barrier Material
- **ASTM E2357** Air Barrier Assembly
- **ASTM E331** Water Penetration
- **ICC-ES AC71** Water-Resistive Barrier
- **DrJ TER 2209-01** Termite Protection
- **DrJ TER 2202-01** Weather-Resistive Properties
- **ICC-ES ESR-1375**
- **ASTM E84 / UL 723, Class A**
- **ICC-ES AC12** Appendix B
- **DrJ TER 1306-03** Fire Performance
- **ANSI/UL 263 / ASTM E119:** 1, 2, 3 or 4 hour Fire Rated Assemblies as listed in the UL Product iQ™
- **NFPA 285** Compliant within numerous wall assemblies

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NOMINAL THICKNESS	R-VALUE*	BOARD SIZE	EDGE DETAIL	RECYCLED CONTENT	PIECES PER PACKAGE	SQ. FT. PER PACKAGE
0.75"	5.0	4′×8′	Square	10.7%	30	960
1.0″	6.5	4′×8′	Square	11.5%	23	736
1.2"	7.5	4′×8′	Square	11.9%	39	1,248
1.5″	10.0	4′×8′	Square	12.3%	30	960
2.0″	13.1	4′×8′	Square	12.8%	23	736
2.4″	15.4	4′×8′	Square	13.1%	19	608
3.0″	19.7	4′×8′	Square	13.3%	15	480
3.1"	20.2	4′×8′	Square	13.3%	15	480
3.5″	22.2	4′×8′	Square	13.5%	13	416
4.0″	26.0	4′×8′	Square	13.6%	11	352

*Thermal values were determined by ASTM C518 Test Method at 75°F mean temperature using materials conditioned in accordance with ASTM C1289.
"R" means resistance to heat flow. The higher the R-value, the greater the insulating power.
Additional sizes upon request. EnergyShield XR is shipped on standard 48′ truck with 24 packages per load. Truckload quantities may vary when mixed.

SCAN OR CLICK QR CODE TO DOWNLOAD THE PACKAGE & LOADING GUIDE

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 XR should be covered within 180 days after installation.

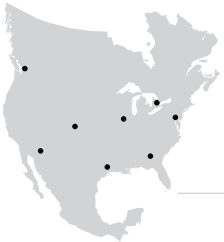
HANDLING

- 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 an 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.

WARRANTY

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

For complete terms and conditions, visit atlasrwi.com/wallwarranty



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