

### DATA SHEET

#### Product Description:

Atlas EnergyShield<sup>®</sup> PRO and PRO2 are composed of a Class A fire rated closed cell polyisocyanurate (polyiso) foam core faced with an embossed white acrylic-coated aluminum foil facer on the front and a reflective foil facer on the back. EnergyShield<sup>®</sup> PRO2 features glass reinforcement in the polyiso core. Both boards combine high R-value, Class A durable aluminum facers, and water resistive barrier attributes in a high performance rigid insulation board.

Panel sizes are 4' by 8' or 4' by 9'. Panels can be supplied in nominal 16" or 24" widths for use in cavity wall applications. Custom sizes are also available.



#### RECOMMENDED APPLICATIONS:

EnergyShield<sup>®</sup> PRO and PRO2 are recommended for use in both commercial and residential applications due to the Class A fire rating.

Common applications include:

- Exterior cavity walls
- Exterior or interior insulated sheathing for walls framed with wood or steel studs
- Exterior or interior CI (continuous insulation) for cmu/block/concrete wall systems
- Exterior CI for installation over wood or gypsum sheathings
- Use over existing cladding to improve energy efficiency and provide a level surface prior to installing new cladding
- Interior walls only, or interior ceilings only, without requiring a code approved thermal barrier (approval per NFPA 286) in certain building types

#### COMPLIANCES:

- ASTM C1289 Type I, Class 1 (PRO), ASTM C1289 Type I, Class 2 (PRO2)
- NFPA 285 (consult Atlas for our extensive list of approved assemblies)
- ASTM E84 Flame Spread, 25 or less
- NFPA 286 Interior Walls Only or Interior Ceilings Only
- ASHRAE 90.1/ASHRAE 189.1/IECC/IgCC Continuous Insulation Standards
- International Building Code (IBC), Section 2603
- International Residential Code (IRC), Section R316
- Foil faced polyiso greater than 1/2" thick is prescriptively defined as an air barrier material by IECC & ASHRAE 90.1
- Water Resistive Barrier – ICC-ES ESR 1375
- California Approved Insulation Registry: #TC1231
- UL Listed for flame spread, see BRYX.R13089
- ANSI/UL 263 (E119) hourly rated wall approval via UL designs U425, U426, and V499 (see UL Online Directories for details)
- PE Evaluation of fire properties, see TER 1306-03

#### THERMAL VALUES:

R-value <sup>1,2</sup>	Nominal Board Thickness <sup>3</sup>
5.0	0.75"
6.5	1.0"
7.5	1.2"
9.8	1.5"
10.5	1.6"
13.1	2.0"
16.0	2.5"
19.7	3.0"
20.2	3.1"

<sup>1</sup> Conditioned thermal values were determined by ASTM Test Method C518 at 75° mean temperature. Test specimens were conditioned in accordance with procedures outlined in ASTM C1289, Section 11.1.2.1  
<sup>2</sup> "R" means resistance to heat flow. The higher the R-value, the greater the insulating power.  
<sup>3</sup> Other sizes available upon request. Contact your local Atlas sales office.

#### ENERGYSHIELD<sup>®</sup> PRO AND PRO2 MEET OR EXCEED THE FOLLOWING PHYSICAL PROPERTIES:

Property	Test Method	Test Method Minimum Requirements
Flame Spread	ASTM E84	<25
Smoke Development	ASTM E84	<450
Moisture Vapor Transmission (ASTM E96 desiccant method)	ASTM E96	<0.3 Perm (17.2ng/(Pa•s•m <sup>2</sup> )) *Typical Results <.01 Perm (5.7ng/(Pa•s•m <sup>2</sup> ))
Compressive Strength	ASTM D1621	Meets ASTM C1289, Type I, Grade 3 (25 psi)
Water Absorption	ASTM C209	<1% by Volume *Typical Results <0.5% by Volume
Dimensional Stability	ASTM D2126	<2% Linear Change *Typical Results <1% Linear Change
Service Temperatures	–	-100°F to +250°F (-73°C to 122°C)
Potential Heat	NFPA 259	12,000 Btu/lb
Auto-ignition Temperature	ASTM D1929	Report in °F (800°F)








**INSTALLATION:**

EnergyShield<sup>®</sup> PRO and PRO2 may be installed over common types of construction substrates using fasteners and adhesives. This includes concrete, wood, wood stud, steel stud, glass-mat gypsum and air and vapor barrier membranes. For specific installation instructions, contact Atlas.

**CONFIGURATION FOR WATER RESISTIVE BARRIER (WRB) AND AIR BARRIER:**

The use of EnergyShield<sup>®</sup> PRO or PRO2 can be considered a WRB and potentially part of an air barrier assembly. In these types of installations it is required to tape or seal all joints between boards and at penetrations and openings. Atlas recommends sealing into rough opening flashing and to other portions of the building, including the roof and below grade. Atlas EnergyShield<sup>®</sup> PRO and PRO2 foil facers are compatible with most standard joint fillers, sealants and adhesives. Consult the product manufacturer for specific compatibility.

**THE ELEMENTS OF AN ENERGY EFFICIENT WALL SYSTEM**

	Features	Advantages	Benefits
	<b>Thermal</b>	A higher R-value per inch of continuous insulation (CI) delivers a thinner wall profile and reduces thermal bridging.	Increased energy efficiency. Reduced cost for materials and labor.
	<b>Fire</b>	Class A thermoset material.	Mineral wool is not required above window headers. NFPA 285 and 286 approvals. Polyiso chars in place and does not drip.
	<b>Water</b>	Can qualify as a Water Resistive Barrier (WRB) in a wall assembly. Secondary moisture drainage plane.	Added protection from liquid water (rain) damage and mold.
	<b>Air</b>	Greater than 1/2" thickness of polyiso is prescriptively defined as an air barrier material (IECC & ASHRAE 90.1)	Can limit moisture-laden air infiltration and exfiltration. Improves energy efficiency.
	<b>Vapor</b>	Less than 0.1 perm at 1" thick	Can reduce the potential for condensation by its low perm rating and high insulating value.
	<b>Radiant</b>	Reflective insulation per ASTM C1371.	Polished side reflects radiant heat while reducing heat conduction when reflective foil surface is facing enclosed air space.
	<b>Environmental</b>	HCFC-, CFC-, HFC- Free blowing agent technology. Often supports <500 mile distance from production to project (LEED 2009/V3).	Zero Ozone Depletion Potential (ODP) and virtually no Global Warming Potential (GWP). Contains 10.4 - 13.8% recycled content by weight.

**PRECAUTIONS/LIMITATIONS:**

- While EnergyShield<sup>®</sup> PRO and PRO2 are Class A rated products, these products will burn and may contribute to flames spreading and smoke developing.
- Design use of this product must always follow local codes, especially with regards to WRB, Air Barrier and Vapor Retarder. Atlas highly recommends the use of a dew point calculation of the proposed wall assembly to determine the types and locations of weather resistive barriers as well as needed insulation thickness/ R-value to mitigate any condensation potential.
- EnergyShield<sup>®</sup> PRO and PRO2 are not structural products; local codes must be followed for bracing requirements.
- Storage: Boards should be stored indoors. If left outdoors for any length of time, keep dry by covering completely with a waterproof tarpaulin. Store on flat pallets elevated at least 4" above the floor or ground and standing water.
- Follow the cladding manufacturer's recommendation for attachment of the cladding.
- EnergyShield<sup>®</sup> PRO and PRO2 are not intended to be exposed in excess of 180 days. Atlas recommends that all of the wall cladding material be installed within 180 days of installing the product.

**WARRANTY:**

A 15-year limited thermal warranty is available. Please see [www.AtlasWallCi.com](http://www.AtlasWallCi.com) or contact your Atlas representative. Atlas Roofing Corporation assumes no responsibility for building design or construction, which is solely the responsibility of the owner, architect, engineer or contractor.

Technical specifications are intended as general guidelines only, physical properties are representative based on testing, no warranties are given except for those specifically written by Atlas for its products.

**LOCAL Production and Support:** Atlas has the largest production footprint of any polyiso manufacturer for quick access to the products you need.

Atlas Roofing Corporation  
Corporate Sales and Marketing  
2000 RiverEdge Parkway, Suite 800  
Atlanta, Georgia 30328  
(770) 952-1442

Camp Hill, PA  
(800) 688-1476  
Fax: (717) 975-6957

Diboll, TX  
(800) 766-1476  
Fax: (936) 829-5363

East Moline, IL  
(800) 677-1476  
Fax: (866) 740-6019

LaGrange, GA  
(800) 955-1476  
Fax: (706) 882-4047

Northglenn, CO  
(800) 288-1476  
Fax: (303) 252-4417

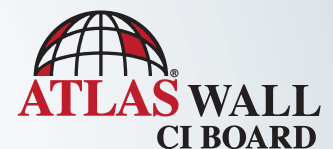
Phoenix, AZ  
(800) 477-1476  
Fax: (602) 477-8897

Toronto, ON  
(888) 647-1476  
Fax: (877) 909-4001

Vancouver, BC  
(855) 265-1476  
Fax: (604) 395-8365



MADE IN U.S.A. MADE IN CANADA  
© Copyright 2014, Atlas Roofing Corporation 2/14 ATL-131880-00  
[www.AtlasRoofing.com](http://www.AtlasRoofing.com)



[www.AtlasWallCi.com](http://www.AtlasWallCi.com)