



# EnergyShield<sup>®</sup> Ply Pro

## Continuous Wall Insulation

**DESCRIPTION:** Atlas EnergyShield Ply Pro is a high performance insulation panel composed of a glass faced closed cell polyisocyanurate foam core bonded to 5/8" or 3/4" fire treated plywood. It is designed to be a component of commercial wall assemblies requiring a Class A, NFPA 285 compliant (TER 1306-03), continuous insulation. This product has been validated by UL Environment as resistant to mold growth based on independent testing to UL 2824.

**APPLICATION:** EnergyShield Ply Pro is recommended for use in both commercial and residential applications due to the Class A fire rating.

Common applications include:

- Exterior cavity walls with wood or steel studs
- CMU or concrete construction
- Substrate for mechanical attachment of claddings
- Compatible with a variety of claddings, including brick, stucco, limestone, natural stone veneer, artificial stone, terracotta cladding, fiber cement and metal panels.

### ENERGYSHIELD PLY PRO FOAM CORE MEETS OR EXCEEDS 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	1.2 Perm at 1-inch
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)

### THERMAL DATA

R VALUE <sup>1,2,3</sup>	COMPOSITE THICKNESS <sup>4</sup> WITH 5/8" FRT	R VALUE <sup>1,2,3</sup>	COMPOSITE THICKNESS <sup>4</sup> WITH 3/4" FRT
6.8	1.625"	7.0	1.75"
9.8	2.125"	10.0	2.25"
12.9	2.625"	13.1	2.75"
16.1	3.125"	16.3	3.25"
19.3	3.625"	19.5	3.75"
22.5	4.125"	22.7	4.25"

<sup>1</sup> Conditioned thermal values were determined by ASTM Test Method C 518 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> Plywood R Value Per 2009 ASHRAE Handbook of Fundamentals, Chapter 26, Table 4: 5/8" FRTP R-Value 0.85, 3/4" FRTP R-Value 1.08

<sup>4</sup> Other sizes available upon request. Contact your local Atlas sales office.

### CODES AND COMPLIANCES

- **ASTM C1289, Type V**
- **UL Standard 263 (ASTM E119)** hourly rated wall approvals (see UL online directory)
- **International Building Code (IBC)**, Section 2603
- **Resistant to mold growth** as validated by **UL Environment (UL 2824)**
- **International Residential Code (IRC)**, Section R316
- **PE Evaluation of fire properties**, see TER 1306-03
- **U.S. Voluntary Product Standard PS 2 Compliant**
- **NFPA 285: TER 1306-03**





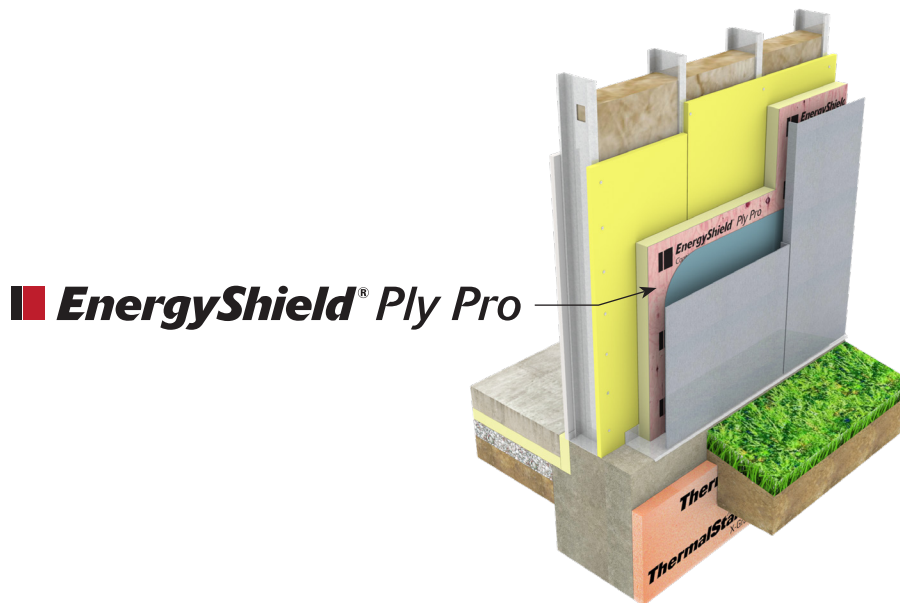
# EnergyShield® Ply Pro

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**INSTALLATION:** Atlas requires mechanical attachment of Atlas EnergyShield Ply Pro with Atlas Fasteners to approved structural wall components. EnergyShield Ply Pro shall be kept dry before, during and after installation. This product will burn if exposed to an ignition source of sufficient heat and intensity. Do not apply flame directly to EnergyShield Ply Pro insulation. Refer to product packaging and *PIMA Technical Bulletin #109* for storage and handling recommendations.

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

The configuration of weather resistive barriers and/or air barriers used in conjunction with EnergyShield Ply Pro is the responsibility of the designer. Atlas recommends sealing into rough opening flashing and to other portions of the building, including the roof and below grade. Consult the product manufacturer for specific compatibility.



### PRECAUTIONS / LIMITATIONS:

- While EnergyShield Ply Pro is a Class A rated product, it 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 Ply Pro is not a structural product, 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 Ply Pro is 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 [wall.atlasrwi.com](http://wall.atlasrwi.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.

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