

ATLAS CAVITY WALL PRODUCT DATA SHEET



Product Descriptions

ENERGY SHIELD® for use in cavity wall construction is a non-ozone depleting, rigid polyiso foam board insulation manufactured with a triplex facer (foil-kraft-foil) on the front side and a foil or triplex facer on the unprinted back side.

CAVITY WALLS Install thin profile Energy Shield®, with its high R-value and moisture resistance, into the narrow cavities of masonry construction. Energy Shield® is easily installed as the exterior wall is being constructed. The optional 16" and 24" widths fit between the masonry ties. Energy Shield® is easily fabricated on the job. Block masonry walls' efficiency can also be supplemented for greater thermal resistance by the installation of Energy Shield®, on the interior or the exterior side.

The foil based facers shed water to help prevent moisture accumulation in the wall cavity. The stability provided by the thermoset foam core assures optimum performance at all extremes of temperatures found in a normal structure. When the board joints are sealed with a self adhering, flashing grade tape, the Energy Shield® envelope also acts as an air barrier.

FOUNDATION/UNDER SLAB installation of Energy Shield® offers physical properties which make this rigid insulation ideal for foundation and under slab applications. Its resistance to moisture and decay, together with its ability to withstand loading and long-term thermal requirements, make Energy Shield® Insulation a cost-effective solution to on-grade and below-grade insulation. Energy Shield® Insulation can be attached mechanically or with approved adhesives to the interior or exterior of the foundation wall. Protect Energy Shield® from damage when backfill is performed.

Typical Product Physical Properties

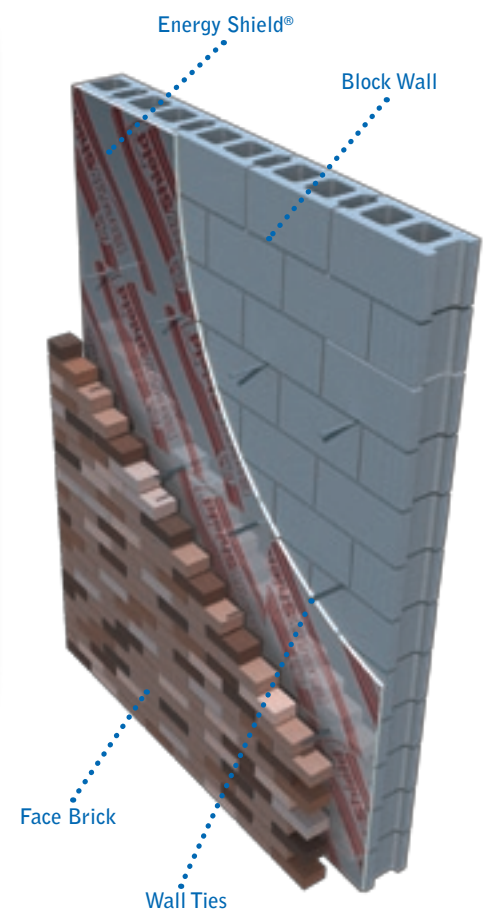
Property	Test Method	Typical Results
Dimensional Stability	ASTM D 2126	<2% linear change
Water Absorption	ASTM C 209	<1% by volume
Moisture Vapor Trans.	ASTM E 96	< One (1) Perm (57.5ng/(Pa·s·m ²))
Product Density	ASTM D 1622	Nominal 2.0 pcf
**Flame Spread	ASTM E 84	<75
** Smoke Development	ASTM E 84	<450
Service Temperature	-	-100° F to + 250° F Max (-73° to 122° C)

Product Technical Data

Nominal Thickness (Std. 4' x 8')	in.	1.0"	1.5"	2.0"	2.5"	3.0"
	mm.	25.40	38.10	50.80	63.50	76.20
Product R-value		6.5	9.6	12.8	16.0	19.0
System R-value*		9.3	12.4	15.6	18.8	21.8
RSI**		1.14	1.69	2.25	2.82	3.34
Pieces Per Package		23	15	11	18	15
4' x 8' Size - Sq. Ft./Pkg		736	480	352	576	480
4' x 9' Size - Sq. Ft./Pkg		828	540	396	648	540
(Add 2.8 R-value with min. 3/4" Dead Air Space with Reflective Surface)						
Available cut or scored @ 16" or 24" O.C.						

* System R-value is the product R-value plus the 2.8 R-value as indicated in the ASHRAE Handbook Fundamentals, for 3/4" dead airspace with reflective foil one side. This information is for use in designing wall systems to comply with FTC Regulations.

** RSI is the metric expression of LTR (m² · K/W)



▶ Storage

All sheathings should be stored with weather protection. If stored outdoors for any length of time, keep dry by covering completely with a waterproof tarpaulin. Store flat on pallets elevated at least 4" above the floor or ground and standing water.

▶ What You Should Know about R-values

R means resistance to heat flow. The higher the R-value, the greater the insulating power. Compare insulation R-values before you buy.

There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend upon the climate, the type and size of your building, the amount of insulation already in your building, and your fuel use patterns and occupancy load. To get the marked R-value, it is essential that this insulation be installed properly.

▶ Availability and Cost

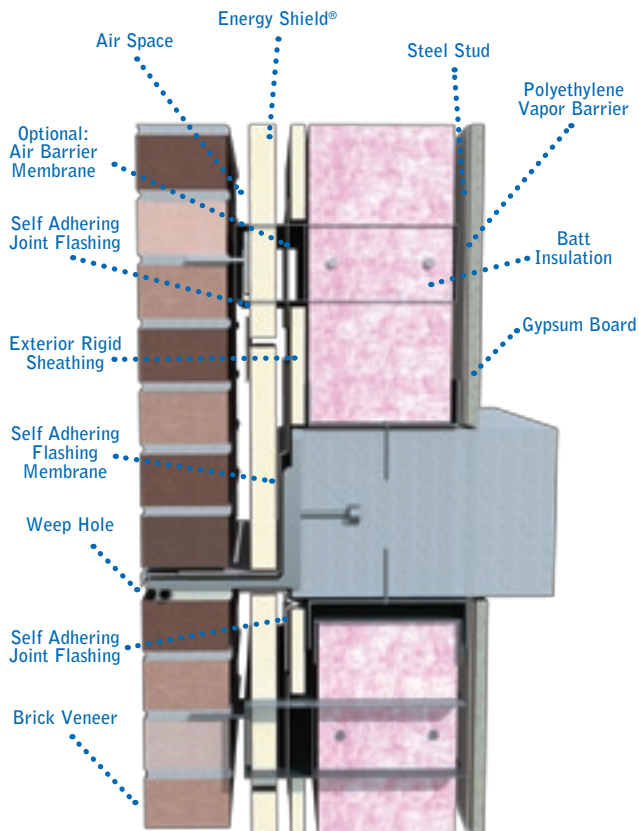
Availability: Marketed throughout North America and available for export shipment.

Cost: Prices are available from your local dealers.

Warranty: Manufacturer will replace at point of original destination within North America all material shown not to comply with manufacturer's specifications. Atlas Roofing Corporation assumes no responsibility for building design or construction, which is solely the responsibility of the owner, architect, engineer or contractor.

Maintenance: No maintenance required.

Typical Cavity Wall Cross Section With Energy Shield® Insulation



Codes & Compliances

Atlas sheathing products comply with the requirements of the following building codes & compliance agencies when properly installed:

- International Building Code, Section 1404.2 (ESR-1375)
- International Residential Code, Section R703 (ESR-1375)
- BOCA National Building Code, Section 1404.3 (ESR-1375)
- Standard Building Code, Section 2303.3 (ESR-1375)
- Uniform Building Code, Section 1402.1 & 2506.4 (ESR-1375)
- Federal Specification, HH-I-1972
- ASTM C 1289 Standard for Polyiso Insulation
- CCMC Evaluation Report, #12422-R (Meets CAN/CGSB 51.86-M86-Type 2)
- Miami-Dade County, Florida, 4/14/13, NOA No. 08-0111.01
- California State Insulation Quality Standards and Title 25 Foam Flammability Criteria - #TC 1231
- CAN/ULC S704-01, Type 2, Class C

Energy Shield® has been tested at Factory Mutual Research Corp. for surface burning characteristics, ASTM E 84 with the following results:

Factory Mutual Research Specification Tested Per ASTM E 84 Test Method Report J.I. 3009226
Atlas Roofing Corporation



Energy Shield®, Energy Shield® Plus, Rboard®, Stucco-Shield®
Tested with Facings Removed

Foam Density 1.5 - 1.9 PCF (24-30kg/m3) core
ASTM E 84-98 FIRE TEST RESULTS
1/2" Thru 4" Thickness (13 to 102 mm Thickness)

**Flame Spread - 75 or less

**Smoke Density - 450 or less

** These numerical values are not intended to reflect hazards presented by this material under actual fire conditions.

▶ Sales Offices

Camp Hill, PA

(800) 688-1476
Fax: (717) 975-6957

Diboll, TX

(800) 766-1476
Fax: (936) 829-5363

Phoenix, AZ

(800) 477-1476
Fax: (480) 655-9209

East Moline, IL

(800) 677-1476
Fax: (309) 752-7127

LaGrange, GA

(800) 955-1476
Fax: (706) 882-4047

Northglenn, CO

(800) 288-1476
Fax: (303) 252-4417

Toronto, ONT

(888) 647-1476
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www.AtlasRoofing.com