

# INSTALLATION INSTRUCTIONS

EnergyShield® Pro Interior Exposed Application



# **Description**

Atlas EnergyShield® Pro product is composed of a Class A closed cell polyisocyanurate (polyiso) foam core faced with a reflective 12 mil reinforced foil facer on one side and a white 12 mil reinforced acrylic-coated aluminum facer on the other. The blowing agent used to produce the polyiso foam core does not contain any CFCs, HCFCs or HFCs. EnergyShield Pro has zero Ozone Depletion Potential (ODP) and negligible Global Warming Potential (GWP). EnergyShield Pro combines high R-value, Class A foam core, durable aluminum facers, and water resistive barrier attributes in a high performance rigid wall insulation. EnergyShield Pro is designed to be used in interior applications in compliance with NFPA 286 for interior walls only or ceilings only where a clean white surface is desirable.

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

# **Preparation**

- Store products indoors on risers elevated at least 4" above floor/grade. When product must be stored outdoors, completely protect it from moisture (Manufacturer's packaging is not sufficient protection from moisture).
- If building interior is not protected from exterior moisture, protect Product as if stored outdoors.
- Do not allow standing water to collect on the top of protection or below product.
- Product that has been damaged by moisture is not fit for intended use and must be discarded.
- Take appropriate measures to secure Product from wind events.
- Install products only over clean, dry substrates that will provide adequate support for the Product.
- All wall applications are for above grade installations only.
- Keep open flame away from Product at all times.

# **Application**

EnergyShield Pro is recommended for use in both commercial and residential construction (Type I through Type V) where a Class A flame spread is needed. This guidance document addresses the installation of Product in interior exposed applications with white facer facing outward (to the interior) for interior walls only or interior ceilings only.



Illustration 1
Engineered Metal Building Ceiling



Illustration 2
Engineered Metal Building Wall



#### General

- Choose the appropriate attachment method based on substrate and conditions of use.
- Product may be installed vertically or horizontally.
- For interior exposed applications only, board joints do not need to be staggered and may be aligned for improved visual appeal.

#### **Mechanical Fastener Attachment**

## For stud framing

• Fasten Product through to stud framing with white side facing interior. If building interior is not protected from exterior moisture, protect Product as if stored outdoors.

### Fastener types for metal stud framing

- Self-drilling screws with minimum 1<sup>3</sup>/<sub>4</sub> inch diameter washer, <sup>3</sup>/<sub>4</sub> inch minimum penetration
- Plasti-Grip® CBW by Rodenhouse or equivalent

#### **Fastener spacing**

- Product perimeter: every 12 inches on center. One 13/4 inch or greater washer style fastener at joint can bridge two Productboards.
- Product field: every 16 inches on center.
- Drive correct length fastener flush to Product surface. Do not countersink fasteners or washers.

#### For Concrete or CMU walls:

Fasten Product through to masonry substrate with white side facing interior

#### **Fastener types for Concrete or CMU walls**

- Masonry fastener with minimum 2 % inch diameter washer, 1 ½ inch minimum masonry penetration.
- Plasti-Grip® PMF Fastener by Rodenhouse or equivalent
- Powder actuated fasteners by Ram-Set or equivalent

#### **Fastener spacing**

- Product perimeter: every 12 inches on center. One 2% inch washer style fastener at joint can bridge two Product boards.
- Product field: every 16 inches on center.
- Drive correct length fastener flush to Product surface. Do not countersink fasteners or washers.

#### **Adhesive Attachment**

- As an alternative to using fasteners alone, adhere Product to metal or masonry with suitable construction adhesive such as Loctite
  PL Premium or equivalent. Follow adhesive manufacturer's installation instructions for conditions, preparation, installation and curing
  time.
- As a guide for installation on studs, apply adhesive with a minimum ¼ inch bead on stud face with beads spaced no more than 24 inches on center.
- As a guide for installation on concrete and CMU, apply adhesive in  $\frac{3}{8}$  inch thick by 3 inch diameter pads to the back of Product in four rows with a minimum of seven pads per row. Space adhesive pads evenly across the length of the Product at no more than 16 inches on center. Space pads in rows no more than 16 inches on center and no more than 3 inches from Product ends and edges.
- Immediately place insulation Product against the wall surface before adhesive "skins". If adhesive "skins," remove and apply
  fresh material.
- Supplement Product adhesive attachment with mechanical fasteners as required as an installation aid during adhesive curing.



# **Taping Joints**

Follow all the requirements in Application above, then proceed as follows.

- Prepare facer at joints of Product per tape manufacturer's recommended instructions to ensure a clean, dry, bondable surface. Use a sample of tape to test adhesion prior to taping. Only prepare as much Product facer as you intend to tape in a day's work.
- Apply minimum 3 inch wide tape to joints of clean, dry Product.
- Use tape manufacturer's recommended primer for improved adhesion.
- Use 3 inch "J" Roller with firm pressure to apply tape centered over all joints, corners, fastener heads and joints between dissimilar materials.
- Center tape on vertical joints starting at lowest point and work upward in shingle fashion to ensure correct lap of intersecting tapes for water shed
- Follow tape manufacturer's applications instructions for preparation, primer application and required installation temperature.

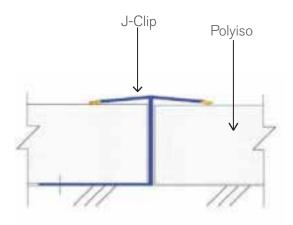
# **Clip or Channel Attachment**

#### J-Clips (see illustration 3)

- Align the clips or channels at widths appropriate for the insulation size.
- Clips or channels may be horizontal, vertical or a combination
- Nail or staple the clips or channels into place.
- Install the insulation into the clips or channels

# T-Clips (see illustration 4)

- Align the T clips horizontally at the desired height and check for level. Fasten into place.
- Align the female clip vertically at desired spacing and check for plumb. Fasten 3/4" to 1" into place.
- Install insulation and male clip, seating the male clip firmly, then repeat.



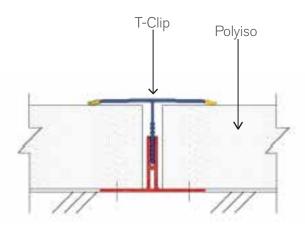


Illustration 3

Illustration 4



#### **About Atlas**

Atlas EnergyShield® products are designed and manufactured in the United States and Canada by Atlas Roofing Corporation for the ultimate utility in modern building envelopes. For over 35 years, Atlas Roofing Corporation has served as an innovative, customer-oriented manufacturer of residential and commercial building materials. Atlas Roofing Corporation promotes multiple state-of-the-art manufacturing plants in North America, with several dedicated to the Atlas EnergyShield product family.

# **Atlas International Polyiso Manufacturing**

With multiple manufacturing locations, Alta can help earn LEED credit for local/regional materials, with less than 500 mile distance from most projects to a production facility.

# Why Atlas EnergyShield?

- Leading performance compared to Extruded Polystyrene (XPS), Expanded Polystyrene (EPS) and rock wool. True CI with no thermal bridging.
- Air and moisture barriers that are field proven, code compliant and material tested. Energy efficiency levels to match IECC and current building codes, as well as ASHRAE 90.1, required per LEED
- Meets fire ratings and codes with low flame/smoke propagation, and a preferred response to fire over polystyrenes. It's stable, durable, non-corrosive and compatible with solvents.
- Atlas EnergyShield is lightweight and easy to work with standard tools and available fasteners, and can be installed in almost any temperature.

# **CONTACT US:**



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