EnergyShield® Ply
Continuous Wall Insulation

EnergyShield® Ply Pro
Continuous Wall Insulation

Installation Instructions for Nailable Continuous Wall Insulation

For the purposes of this document, the reference to EnergyShield is inclusive of both **EnergyShield® Ply Pro** and **EnergyShield® Ply** Continuous Wall Insulation products, unless specifically noted.

THIS DOCUMENT ADVISES INSTALLATION OF ENERGYSHIELD REQUIRED FOR RESISTING WIND FORCES AND CLADDING WEIGHT. OTHER STRUCTURAL RESISTANCE ASPECTS OF THE WALL ARE NOT INCLUDED IN THESE INSTRUCTIONS, SUCH AS RACKING RESISTANCE OR LOAD PATH CONSIDERATION.

MATERIALS CHECKLIST

- Proper PPE
- EnergyShield continuous insulation
- Fasteners
- Straight edge
- Measuring tape
- Pencil
- Preferred cutting tools: utility or insulation knife, circular or table saw.
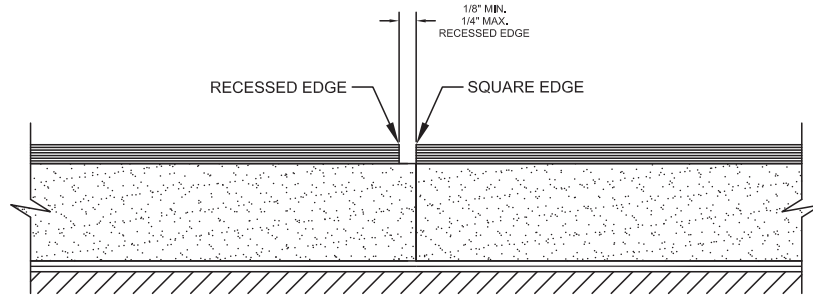
PREPARATION

- Materials should be delivered to the jobsite undamaged and in original packaging. Inspect EnergyShield for damage related to transportation, handling, or weather. Separate and discard any product damaged or beyond repair as it may not be fit for intended use.
- Confirm compatibility with any components adjacent to EnergyShield. Follow component manufacturer's instructions for specific surface preparation and installation requirements.
- Always refer to local building codes and/or consult with a design professional to ensure compliance with applicable codes & regulations.

GENERAL APPLICATION

- Orient EnergyShield vertically along base wall starting at a point providing firm, permanent support.
- Install EnergyShield direct to stud or concrete base wall with plywood to the exterior of the structure.
- By design, the foam core slightly overhangs two adjacent edges of the composite board by 1/8" to allow for proper expansion and contraction of wood per APA recommendations. Tightly abut foam core joints per **Figure 1** to ensure continuous layer of thermal performance and minimize the potential for buckling. Reference *Recessed Edge Detail* for more assistance.
- Precut boards along flush edges of board to fit openings and projections using a power saw. If necessary, route wood on-site by 1/8" minimum gap from foam core edge to maintain APA recommended recessed edge.
- Fasten through the panel into the base wall using the appropriate spacing to accommodate the design. Set fasteners no less than 3/8" from board edges.
- Corners:
    o For inside corners, it may be necessary to add stud to support fastening required beyond existing framing.
    o For outside corners, extend insulation board so that the edge is flush with the exterior surface of the insulation board on the adjacent wall.
- As is common with any wood application, avoid exposure for extended periods of time. If boards should get wet, replace or allow to dry completely before sealing the building envelope. Apply a water-resistive barrier as soon as possible after installation.

GENERAL APPLICATION (Cont.)

Figure 1

1/8" MIN.
1/4" MAX.
RECESSED EDGE

RECESSED EDGE — SQUARE EDGE

FASTENING

Fastening pattern is dependent on several factors, including but not limited to overall board thickness, cladding weight, base wall substrate and spacing requirements. Refer to **DrJ TER 2305-04: Cladding Attachment for Atlas EnergyShield PLY. ThermalStar Nailbase, and wood Structural Panels Over Atlas ThermalStar & EnergyShield Products** to determine required connection to relevant base wall to support cladding weight in accordance with IBC and IRC. **Table 1** offers a quick reference to locate the relevant table in the report for the proposed assembly. At a minimum, all Atlas products must be installed to resist positive and negative wind pressures exerted on a building per location and height. See Section 5.5. Review fastener attachment requirements listed in Section 5.6, 5.7 and 5.8 outlining important criteria, including but not limited to:

- Defining board thickness
- Minimum penetration of fasteners into structural members/substrate.
- Permitted fasteners
- Maximum fastener spacing per subsequent tables

Table 1 Reference to fastener attachment requirements based on wall design

	BASE WALL			SPACING			PLYWOOD THICKNESS	
	WOOD STUD	STEEL STUD	CONCRETE	16" O.C.	24" O.C.	48" O.C.	5/8"	3/4"
Table 5	✓			✓			✓	
Table 6	✓				✓		✓	
Table 7	✓			✓				✓
Table 8	✓				✓			✓
Table 9		✓		✓			✓	
Table 10		✓			✓		✓	
Table 11		✓		✓				✓
Table 12		✓			✓			✓
Table 15			✓	✓			✓	✓
Table 16			✓		✓		✓	✓
Table 17			✓			✓	✓	✓