One™
Laminated Structural Continuous Wall Insulation

Get Sheath Done with ThermalStar One!

ThermalStar One is the ultimate 3-in-1 panel that allows you to install your structural sheathing, continuous exterior insulation and water resistant barrier, all in one trip around the building.

- Designed for single family, multi-family and light commercial construction

EPS^{X®} TECHNOLOGY ADVANTAGE

- Moisture Resistant
- (R) Stable R-value
- Environmentally Friendly
- Limited Lifetime Warranty

Property & ASTM Test Method	ASTM Test Method	Product ID		
		ThermalStar One R3	ThermalStar One R5	ThermalStar One R7.5
Total Panel Thickness (nominal)	-	1-1/8″	1-5/8″	2-1/4″
Compressive Strength (minimum psi) at 10% Deformation	D1621	15	15	15
Total Foam Core R-value at 75ºF Mean Temperature*	C518	3	5	7.5
Total Foam Core R-value at 40ºF Mean Temperature*	C518	3.1	5.1	7.6
Total Foam Core R-value at 25ºF Mean Temperature*	C518	3.2	5.2	7.7
Vapor Permeance (excluding OSB)	E96 Desiccant Method	Class II	Class II	Class II
Foam Surface Burning - Flame Spread and Smoke Developed	E84	Flame Spread 20, Smoke Developed 400 (meets code)		
Maximum Use Temperature	-	180ºF	180ºF	180ºF

* To get the total panel R-value, add 0.6 to the listed R-value to incorporate the OSB layer
This product is to be installed and treated the same as a typical OSB layer. Proprietary ThermalStar One nailer must be used for installation.

Standard features include:
- 15 psi continuous insulation laminated to 7/16″ Exposure I OSB with integral water resistant barrier
- Available as 4′x8′ and 4′x9′ sheets. 4′x10′ sheets available upon request
- Meets climate zones 4, 5 & 6 assembly ratings for IRC prescriptive continuous insulation use
- Qualifies as an air barrier material (E2178 compliant) and water resistant assembly (AC71 compliant)
- Apply ThermalStar seam tape to assure a weather tight assembly

ATLAS®

ThermalStar®
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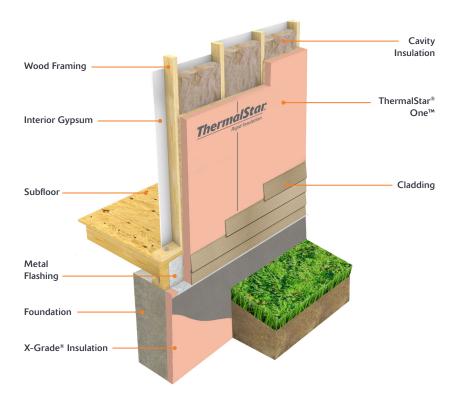# Advantages of ThermalStar One:

HIGH EFFICIENCY ADVANTAGES

By providing a 3-in-1 product, ThermalStar One combines all of the benefits of a continuous envelope insulation, high structural racking capacity and a water resistive barrier.

NO STRUCTURAL COMPROMISES

ThermalStar One is installed with the OSB side of the product tight to the wall framing to ensure there is no loss of structural shear capacity. In addition, ThermalStar One requires the use of a patent pending SENCO nailer, which secures the head of the sheathing nails on the surface of the OSB. Overall, ThermalStar One uses 2 to 3 times fewer fasteners than competing products and provides a more structurally sound, weather tight wall.

STABLE, LONG TERM R-VALUE

While XPS products degrade from initial R5 per inch as gases escape, the thermal performance of the EPS core of ThermalStar One is stable long term, assuring the R-value meets design requirements over the life of the structure.

Wood Framing

Interior Gypsum

Subfloor

Metal Flashing

Foundation

X-Grade® Insulation

Cavity Insulation

ThermalStar® One™

Cladding

INSTALLATION AND HANDLING

Refer to the ThermalStar One Installation Guide for further installation and handling instruction.

SAFETY

SDS for this product are available at AtlasEPS. com. Dust generated from sanding or cutting ThermalStar One should be avoided using a dust mask. ThermalStar One is combustible and the product should be protected from ignition sources such as open flames or welder's torch. Applications not specifically listed in UL ER16529.1 require permanent separation of ThermalStar One from the interior of the building by a thermal barrier such as drywall or concrete for fire safety.

WARRANTY

ThermalStar One is backed by a limited lifetime warranty. The patent pending SENCO nailer, specifically created for ThermalStar One, and SENCO nails, must be used in order for the limited lifetime warranty to apply.

CODE COMPLIANCE

ThermalStar complies with the model building codes when properly installed:

- DRJ Engineering TER Report 1701-03
- Surface Burning – UL BRYX.R16529
- Physical Properties – UL QORW.R16529
- International Energy Conservation Code
- International Residential Code (IRC) – UL ER16529.1
- International Building Code (IBC) – UL ER16529.1
- Horizontal racking verified via DRJ TER 1701-03, UL ER16529-01

EXCLUSIVE DISTRIBUTION BY THE COMPANIES OF UNIVERSAL FOREST PRODUCTS
www.ThermalStar.com/Products/One

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BY ATLAS EPS

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