

## RMAX THERMASHEATH-SI – A LAYERED APPROACH TO SAVING

This 4-in-1 approach saves builders time and money on installation and is designed to work seamlessly with our non-structural Thermasheath<sup>®</sup>-3 to meet the continuous insulation (c.i.) requirements. This single building product solves four requirements in one application: structural bracing, thermal resistance (R), air barrier, and water barrier. Reduce material and labor costs by replacing other structural bracing methods, as well as house wrap or another independent air barrier system with only one pass around the house.

### Product Description

The insulation component of Thermasheath-SI is an energy-efficient thermal insulation board composed of a closed-cell, Polyiso foam bonded to reflective, reinforced aluminum facers. The foam core, with foil facings, provides superior physical and thermal properties, along with a durable, radiant barrier surface. The structural component provides stability for lateral bracing and transverse loads.

### Features and Incentives

- **Four Concepts in One** – Thermasheath-SI satisfies structural and energy code requirements, as well as acts as an air and water barrier...allows for greater management of trade by having confidence in the compatibility of each component, along with reducing labor and installation costs by only needing one layer to complete the envelope.
- **Flexible Design** – Thermasheath-SI can be used continuously across the wall or can be used as a braced wall panel in conjunction with Thermasheath-3.... Simplifies design or optimizes design costs, respectively.
- **Structural** – Thermasheath-SI complies with the requirements for conventional wall bracing, transverse wind loading, continuously sheathed braced walls, and can be seamlessly integrated into applications requiring braced wall panels.... Eliminates the need for heavy OSB sheathing, let-in bracing and/or T-bracing which decreases time and costs associated with materials and labor. (Includes seismic design and portal frames.)
- **One-to-One** – Thermasheath-SI can be used prescriptively with 1/2" interior gypsum.... Simplifies calculations and design work.
- **Exposure Rating** – Thermasheath-SI and Thermasheath-3 can be used without the code prescribed thermal or ignition barrier in many attic spaces.... Reduces material and labor costs.
- **Highest R-Value** – Thermasheath-SI utilizes Polyiso which has the highest R/inch of any foam plastic insulation.... Allows you to meet or exceed energy codes and provides you more insulation value for your dollar – lowering the home's energy consumption, therefore lowering energy bills.
- **Continuous Insulation** – Thermasheath-SI, either installed continuously or in conjunction with Thermasheath-3, meets the newer, more stringent continuous insulation requirements.... Eliminates thermal bridging which improves thermal efficiency and home comfort not to mention reduces energy costs.
- **Water Barrier** – Properly sealed with R-SEAL Construction Tape, Thermasheath-SI acts as a water barrier.... Defends against the growth of mold and mildew by resisting water intrusion and moisture migration.
- **Air Barrier** – Properly sealed with R-SEAL Construction Tape, Thermasheath-SI prevents air infiltration.... Keeps homes comfortable while making your HVAC systems run more efficient.
- **Lightweight** – Rmax Thermasheath-SI at a 1/2" thickness weighs over 75% less than an equivalent thickness of a 7/16" thick OSB.... Makes it easier and faster to install which positively affects labor time and your bottom line.
- **LEED Credits** – Thermasheath-SI can help contribute toward multiple LEED credits within both the Energy & Atmosphere and Materials & Resources categories – the structural component is made up of **97% recycled content**.... Creates a sustainable and environmentally responsible home.

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## Compliances

- ASTM C1289 Type I, Class 1 Polyiso
- International Building Code (IBC)
- International Residential Code (IRC)
- International Energy Conservation Code (IECC)
- ASHRAE 90.1
- DrJ TER 1207-01
- Structural and Shear Wall Panels Over Wood Framing
- Seismic Design Categories (A, B, C, D<sub>0</sub>, D<sub>1</sub>, D<sub>2</sub>)
- Portal Frames (CS-PF)
- Thermal Insulation, Water-Resistive Barrier and Air Barrier
- Exposure Rated per ICC-ES AC12 Appendix B

## Typical Physical Properties

Physical properties shown are for the Polyiso insulation layer only, and are based on data obtained under controlled conditions, and are subject to normal manufacturing tolerances.

Property	Test Method	Results
Flame Spread, Foam Core <sup>1</sup>	ASTM E84	75 or Less
Smoke Developed, Foam Core <sup>1</sup>	ASTM E84	< 450
Water Vapor Transmission	ASTM E96	< 0.03 perm
Installation Temperature		>20°F
Service Temperatures		-40°F to +250°F

<sup>1</sup>Flame spread and smoke numbers are shown for comparison purposes only and are not intended to represent the performance of Thermasheath-SI and related components under actual fire conditions.

## Thermal Properties

"R" means resistance to heat flow. The higher the R-value, the greater the insulating power.

Nominal Thickness (inches)	Thermal R-Value <sup>1</sup> (°F.ft <sup>2</sup> .hr/Btu)
0.5	3.2
0.75	5.0
1.0	6.0

<sup>1</sup>Thermal values are for the Polyiso foam portion only and are determined by using ASTM C518 test method at 75°F mean temperature on material conditioned according to PIMA Technical Bulletin No. 101.

### Corporate & Technical Location

Rmax Operating, LLC  
Dallas, Texas  
(800) 527-0890

### Customer Service & Plant Locations

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