

Rainscreen Application

Utilizing Rmax Thermasheath®-3 and Cedar Siding

Choose the Best Side with Rmax Thermasheath®-3

Cedar siding has been a popular siding choice for years as it offers an attractive yet durable finish - providing a premiere sustainable option. Utilizing Rmax Thermasheath®-3 and R-SEAL Construction Tape provides continuous insulation for a more energy-efficient home, adding a full air barrier to the walls of the structure as well as a drainage plane for rainscreen applications. This allows for a more efficient building process - saving on labor and material.

GREEN ATTRIBUTES

Rmax Thermasheath®-3 utilizes CFC, HCFC, HFC free blowing agent with virtually no global warming potential and

zero ozone depletion potential. This low environmental impact insulation is cost effective, optimizes energy performance and provides a long service life.



Why Rmax Thermasheath®-3

CONTINUOUS INSULATION

Thermasheath®-3, can be installed continuously, meeting the newer, more stringent code requirements. Eliminates thermal bridging improving thermal efficiency, home comfort and reduces energy costs.

HIGHEST R-VALUE

Thermasheath®-3 is composed of a closed-cell polyisocyanurate (polyiso) foam core with up to 29% higher R-value than XPS. 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.

WATER-RESISTIVE BARRIER

Properly sealed with R-SEAL Construction Tape, Thermasheath®-3 is an approved, tested WRB. Resisting water intrusion and moisture migration, it helps defend against the growth of mold and mildew.

AIR BARRIER

Properly sealed with R-SEAL Construction Tape, Thermasheath®-3 prevents air infiltration. Keeping homes comfortable while making your HVAC systems run more efficient.

RADIANT BARRIER

A reflective surface is built into the product providing all the benefits of stand-alone radiant barrier products.

FIRE PERFORMANCE

Thermasheath®-3 is a thermoset material that will not melt or drip within a fire or even at elevated temperatures. It can be used without a code prescribed interior thermal or ignition barrier within many attics spaces, such as on gable ends – reducing material and labor costs.

LIGHTWEIGHT

Thermasheath®-3 is lightweight, durable and easy to handle. Making it easier and faster to install which positively affects labor time and your bottom line.

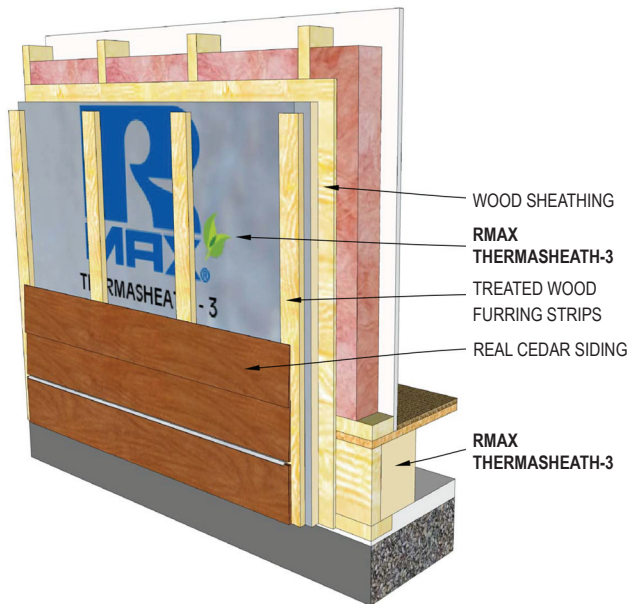
INSTALLATION: Step by step construction tips for basic rainscreen construction utilizing Rmax Thermasheath-3 under cedar siding (check with local building codes for specific requirements).

Before You Begin: For additional information and good practice on general construction details, reference the following documents from the Foam Sheathing Coalition (FSC) and Western Red Cedar Lumber Association (WRCLA):

- FSC *Guide to Attaching Exterior Wall Coverings Through Foam Sheathing to Wood or Steel Wall Framing*
- FSC TER No. 1205-05 *Construction Details for the Use of Foam Plastic Insulating Sheathing (FPIS) in Light-Frame Construction*
- WRCLA *How to Install Western Red Cedar Siding*

Step 1: Thermasheath®-3 Continuous Insulation

Install panels vertically with the length dimension parallel to framing. Fasten boards using weather resistant bugle-head screws, galvanized roofing nails or common nails driven through cap washers. When necessary, a circular saw with a fine tooth blade can be used to cut Thermasheath-3 panels.



Step 2: WRB/Air Barrier

- *Option 1:* Thermasheath-3 as the tested WRB and Air Barrier
 - Tape all joints with 3" R-SEAL Construction Tape.
 - Center the tape over clean, dry joints to cover fasteners and apply. Refer to tape data sheet for additional information.
 - Fasteners in the field of the board do not need to be taped to achieve WRB.
- *Option 2:* Alternate WRB/Air Barrier
 - Install per manufacturer's instructions over continuous insulation. (Taping the insulation joints is not required.)

NOTE: The WRB/Air Barrier created in Step 2 shall be maintained with all subsequent work (i.e., sealing through-wall penetrations, repairing damage to exterior surface, etc.).

Step 3: Furring Strips

Install furring strips vertically ensuring they line up with the stud framing behind. Use fasteners of sufficient length to secure through the insulation and wood sheathing into the structural framing. Keep insects and small critters out of the rain screen cavity with screen material attached across the top/bottom of the furring strips/cavity. Fold the screen material over and staple to the front of the furring strips.

NOTE: For additional protection, use a self-sealing butyl based tape behind all furring strips. When used, it can replace the standard joint tape referenced above.

Step 4: Cedar Siding

- Attach per manufacturer's instructions.

Nominal Thickness	Thermal R-Value ¹
Inches	°F·ft ² ·hr/Btu
0.5	3.2
0.75	5.0
1.0	6.0
1.5	9.6
1.55	10.0

¹Thermal values are determined by using ASTM C518 test method at 75°F mean temperature on material conditioned according to PIMA Technical Bulletin No. 101.

Visit www.rmax.com for a complete list of thicknesses and packaging information.