



RESIDENTIAL

INSULATION PRODUCT GUIDE

BUILDING TRUST



For more than 35 years, Rmax has been creating insulation solutions based on the latest building science. Our complete line of high-quality, polyiso-based wall and specialty insulation products for commercial, industrial and residential applications deliver maximum R-values and minimum environmental impact, with efficiency in installation, cost and design.

As new developments in building science emerge, rest assured that Rmax will remain at the forefront, manufacturing tested, engineered solutions that serve Architects, builders, owners and occupants alike.

Our people understand the diverse markets that utilize our products, making their integrity and responsiveness work to your advantage. With our manufacturing plants and sales offices coast-to-coast, we stand ready to serve you.

Rmax polyiso insulation products are designed and tested to provide building envelopes with superior insulating protection while meeting the newest codes and requirements.



SUPERIOR INSULATING PERFORMANCE

ENERGY-EFFICIENT

With a high R-value per inch compared to other insulation, polyiso meets and exceeds the highest energy-efficient standards.

ALL AROUND SAVINGS

Exceeds codes and requirements with less building materials - saving time, labor and material costs.

Polyiso also provides more insulation value for your dollar - lowering energy consumption, therefore lowering energy bills.

CONTINUOUS EFFICIENCY. CONTINUOUS INSULATION.

Continuity is key when ensuring the highest performance of a home. Utilizing Rmax polyiso to provide a continuous layer of insulation on a home's exterior is extremely beneficial. It eliminates thermal bridging, significantly increasing the overall thermal performance and energy efficiency of a home.

Why design with polyiso continuous insulation?

Rmax polyiso continuous insulation

Can be used with a variety of structural wall systems and cladding materials such as wood, vinyl, aluminum or cement board.



EASE OF USE & PEACE OF MIND

Polyiso products are designed for use in an expansive assortment of tested, approved and code-compliant applications.

REDUCED AIR LEAKAGE

Up to **40%** of energy loss and **30-50%** of heating and cooling costs are due to air leakage. Effects of air leakage include mold, occupant discomfort, and reducing the life span of a home.

Rmax continuous insulation with properly taped or sealed joints creates an **air barrier system** restricting unwanted air movement through the wall, preventing air leaks and the any adverse effects.

MOISTURE CONTROL

Over **90%** of the moisture that enters a wall assembly is in the form of vapor due to air leaks. Moisture can also enter a wall assembly through bulk water leaks and the transition of vapor through a building material.

Rmax continuous insulation with properly taped or sealed joints acts as a **water-resistive barrier** resisting water intrusion and moisture migration and defends against the growth of mold and mildew.

INCREASED THERMAL PERFORMANCE

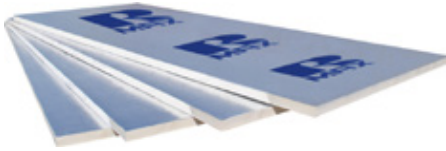
Typical construction leaves **20-23%** of the home's exterior walls uninsulated as insulation is installed between the studs creating thermal bridging (heat loss or gain).

Rmax continuous insulation insulates **100%** of the exterior walls when installed continuously over the studs - eliminating thermal bridging, resulting in a more energy-efficient home.

NOTE: Properly taped or sealed Rmax polyiso continuous insulation can be a building code compliant WRB or air barrier. Rmax insulation can eliminate material and labor costs associated with installing a separate WRB or air barrier products such as house wraps.

SURROUND YOUR HOME WITH THE BEST

Our polyiso products & solutions deliver maximum R-values & minimum environmental impact, with efficiency in design, cost & installation within all types of homes.



THERMASHEATH® Building Envelope Insulation

Reinforced aluminum facers with a clear coating for limited protection against oxidation

Product Benefits

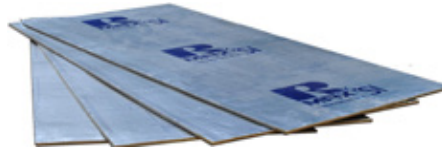
- Air barrier material
- Lightweight & ease of use
- Easy & efficient install
- Reduces energy costs
- Reduces labor & material costs
- Mold resistant

Residential Applications

- Stud wall
- Cavity wall
- Attic & crawl space
- Vaulted ceiling
- Below-grade exterior wall
- Concrete foundation
- Re-siding
- Exterior ductwork

Key Compliances

- ASTM C1289 Type I, Class 1 & 2
- IBC, IRC, IECC, ASHRAE 90.1
- DrJ TER 1309-03
- ICC-ES ESR-1864
- Air Barrier Material
- Water-Resistive Barrier
- Exposure Rated (attics/crawl spaces)
- UL Time Rated Assemblies
- CA Insulation Directory



THERMASHEATH®-SI Structural Insulated Sheathing

Designed for lateral bracing and transverse loads, including portal frames and seismic design

Product Benefits

- Air barrier material
- Lightweight & efficient install
- Optimizes design costs
- Reduces energy costs
- Reduces labor & material costs

Residential Applications

- Stud walls
- Brick veneer
- Stone
- Stucco
- Exterior siding
*wood, vinyl, aluminum
and cement board*

Key Compliances

- ASTM C1289 Type I, Class 1 & 2
- IBC, IRC, IECC, ASHRAE 90.1
- DrJ TER 1207-01
- Structural Shear Wall Testing
- Air Barrier Material
- Water-Resistive Barrier
- Exposure Rated (attics/crawl spaces)
- UL Time Rated Assemblies
- CA Insulation Directory



DURASHEATH® Building Envelope Insulation

Offers superior durability with its non-metallic, inorganic polymer-coated glass fiber mat facers

Product Benefits

- Air barrier material
- Reduces heat loss
- Reduces energy costs
- Strong facer withstands additional wear & tear
- Mold resistant

Residential Applications

- Stud wall
- Cavity wall
- Attics & crawl spaces
- Vaulted-ceilings
- Exterior stucco
- Re-siding

Key Compliances

- ASTM C1289 Type II, Class 2
- IBC, IRC, IECC, ASHRAE 90.1
- DrJ TER 2202-02
- Air Barrier Material
- Exposure Rated (attics/crawl spaces)
- UL Time Rated Assemblies
- CA Insulation Directory



SIKA®RMAX®PRO SELECT Polyiso Insulation Board

Versatile, multi-application boards with a durable white-matte (non-glare) reinforced aluminum facer on one side and a reflective reinforced aluminum facer on the reverse.

Sika® Rmax®Pro Select is an excellent choice for many do-it-yourself applications to add insulation value to any project. Available at big-box retailers.





THERMABASE-C1
Insulation for Cladding Attachment

Composite product manufactured with Thermasheath® or Durasheath® as the insulation layer bonded to a standard 7/16" OSB (APA rated) nailing surface. Alternate surfaces available upon request.

Product Benefits

- Surface for cladding attachments
- Allows for normal expansion of wood without gapping insulation layer
- Air barrier material
- Eliminates air infiltration
- Reduces heat loss

Residential Applications

- Stud wall
- New or retro-fit

Key Compliances

- ASTM C1289 Type V
- IBC, IRC, IECC, ASHRAE 90.1
- DrJ TER 1504-05
- Air Barrier Material
- UL Time Rated Assemblies
- CA Insulation Directory



NAILABLE BASE-3
All-In-One Roof & Nailable Board

Roof insulation board manufactured with durable glass fiber/organic facers bonded to a standard 7/16" OSB (APA rated) nailing surface. Alternate surfaces available upon request.

Product Benefits

- Allows for normal expansion of wood without gapping insulation layer
- Reduces thermal loss
- Saves on energy dollars
- Reduces material & labor costs

Residential Applications

- Concrete, slate & clay roofing tiles
- Wood shakes
- Metal panel roofing
- Asphalt shingles (limited)

Key Compliances

- ASTM C1289 Type V
- IBC, IRC, IECC, ASHRAE 90.1
- Factory Mutual
- CA Insulation Directory
- City of LA



SEAL YOUR HOME ONCE & FOR ALL

Our R-SEAL tapes & flashing products are used to seal insulation joints, windows & doors for a permanent weather-tight seal.

R-SEAL Construction Tape

3mil white translucent BOPP Film; acrylic pressure sensitive adhesive

R-SEAL 3000 & 3000W Tape

2mil high strength soft aluminum; cold weather acrylic pressure sensitive adhesive

R-SEAL 6000 Flashing

35mil black woven polyethylene membrane with butyl rubber adhesive

R-SEAL 2000 LF

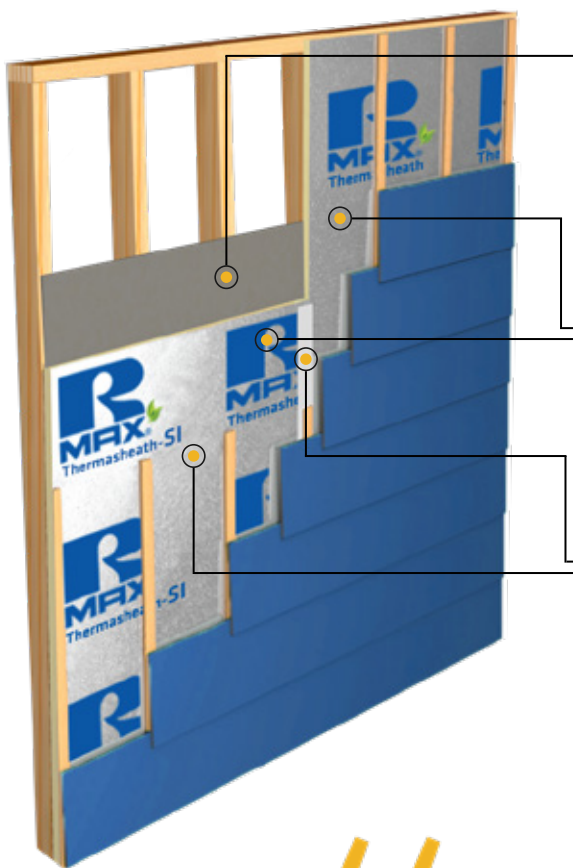
Liquid flashing & water barrier sealant designed for primerless adhesion



SUPERIOR SOLUTIONS

A LAYERED APPROACH TO SAVINGS Thermasheath® -SI Structural Insulation Solution

Our solution combines a continuous layer of structural stability with superior continuous insulation, an air barrier, and a water-resistive barrier - providing a 4-in-1 home solution.



STRUCTURAL RIGID FIBERBOARD

lateral bracing & transverse loads; portal frames & seismic design

- Offers flexible design options
 - Used continuously to simplify the design or as a braced wall panel with Thermasheath® to optimize design costs
- Eliminates the need for heavy OSB sheathing
- Decreases time & costs associated with materials & labor

POLYISO CONTINUOUS INSULATION

closed-cell, rigid foam board

- High R-value per inch compared to other insulation
- Eliminates thermal bridging
- Meet & exceed energy code & requirements
- Lowers energy consumption & energy bills

AIR & WATER-RESISTIVE BARRIER

properly sealed with R-SEAL Construction Tape or R-SEAL 3000

- Prevents air infiltration
- Keeps the home comfortable
- Ensures your HVAC systems run more efficiently
- Eliminates need for house wrap or felt
- Resists water intrusion & moisture migration
- Defends against the growth of mold & mildew

Thermasheath® & Thermasheath®-SI have impermeable aluminum facers that repel water & guard against air infiltration.

Rmax is wonderful and provides good quality material to our homeowners. Saves them energy, saves us time in construction and allows us to install the product correctly with minimal training of our labor.

— Jack Oppel, President of Bud Bartley Homes



POLYISO PERFORMS

Below-Grade Exterior Wall Solution

All building foundations come in contact with the ground. Wherever a building is located, water, temperature, air and soil on the foundation can impact the performance and integrity of the total structure.

Continuous polyiso rigid foam insulation is an effective way to reduce foundation energy loss and protect against moisture problems.

Advantages of Insulating with Rmax Thermasheath®

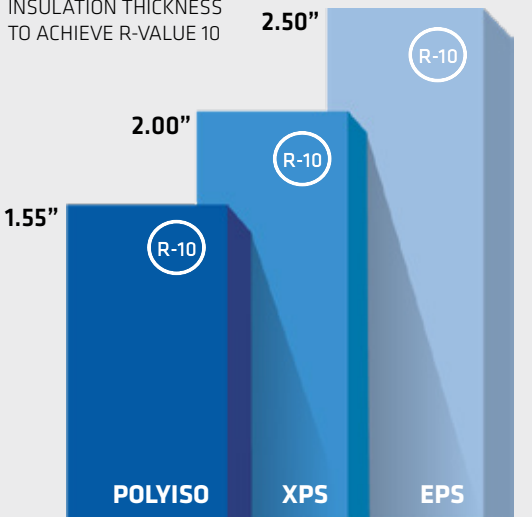
Exterior vs. Interior Side of The Wall

- Does not reduce the usable building space
- Completely continuous for optimal energy efficiency
- Mass of foundation within the insulated building envelope
- Warm wall solution minimizes condensation on interior side of wall
- Provides protection for the waterproofing

Delivering More with Less

Polyiso has a high R-value per inch when compared to other insulation products. This allows polyiso to meet R-value requirements with a thinner profile.

INSULATION THICKNESS TO ACHIEVE R-VALUE 10



Closed-cell foam

Keeps the wall warm, reducing the potential for condensation on the interior surface of the wall

Protects the waterproofing or damp-proofing from damage caused by backfill

Water shedding facer

Resists water absorption and compression from soil loads while retaining its thermal performance

LET'S COMPARE

Important Insulation Characteristics for Below-Grade Exterior Wall Applications

| | POLYISO Polyisocyanurate Continuous Insulation | XPS Extruded Polystyrene Insulation | EPS Expanded Polystyrene Insulation |
|---|--|---|---|
| AGED R10 THICKNESS ASTM C518 | 1.55" | 2.0" | 2.5" |
| WATER ABSORPTION ASTM C272 (MAX BY VOL) | 0.3% (with or without facers) | 0.3% | 2% |
| COMPRESSIVE STRENGTH ASTM D1621 (MIN) | 16-25 psi | 15-25 psi | 15-25 psi |
| ADDITIONAL PROTECTION | Reinforced Aluminum Facers | None | Optional (Additional Costs) |
| | THE BEST CHOICE | | |

TRUSTED STANDARDS. TRUSTED PRODUCTS.

RMAX IS CERTIFIED
CLEAN AIR GOLD

Proves our credibility in providing **SAFE, RELIABLE,**
and **ECO-CONSCIOUS** polyiso insulation products.



Becoming Certified ensures our polyiso insulation products are manufactured to maintain a minimum concentration level of Volatile Organic Compounds (VOC) emissions. This creates more sustainable products with the health and safety of consumers, space inhabitants, and builders/fabricators in mind.

For warranties, limitations and conditions refer to Rmax Sales Policy and applicable warranties. All documents are located at www.rmax.com. For technical support, email rmax.technical@us.sika.com. For sales support, pricing and availability, email rmax@rmax.com or call (800) 527-0890.

Proudly Made and Engineered in the U.S.A.



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