

Increase thermal efficiency by installing R-Tech over the roof deck and under the roofing.

R-Tech insect-resistant sheathing upgrades the thermal insulation value of exterior walls under many types of exterior finishes.

R-Tech provides a solid, level base for new siding while helping to minimize air leaks.

Add thermal resistance to interior basement walls by adding R-Tech prior to installing drywall.

R-Tech compressive strength and moisture resistance allows peak performance in the most demanding of below concrete slab applications.

R-Tech skinned surfaces provide excellent thermal, mechanical, and moisture resistant properties necessary when used below grade in foundation applications.

# R-TECH®

Interior and Exterior Sheathing Insulation

R-TECH is an engineered rigid insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS) with advanced polymeric laminate facers. It is made with factory-adhered facers that provide superior insulation and protect against moisture. The core of R-Tech is the same high-quality EPS as our InsulFoam brand insulations and meets or exceeds the requirements of ASTM C578, Type I, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. R-Tech has excellent dimensional stability, compressive strength and water resistance properties. R-Tech is an ENERGY STAR® qualified insulation and can contribute towards LEED® credits.



**Installation**

R-TECH Insulation boards can be attached using mechanical fasteners and compatible adhesives. When installing R-TECH insulation as an exterior sheathing; all joints and seams may be sealed with sheathing tape or code compliant flashing tape; ICC-ES (AC 148).

**INSTALLING THE INSULATION BOARD (FASTENERS):** Insulation fasteners such as cap nails, minimum 6d ring-shank nails and 15/16" diameter plastic washers or equivalent should be installed maximum 24.0 inches on center or use of minimum 1.0" wide crown nails or No. 16 gage staples spaced at 6 inches on center around the panel perimeter, and 16 inches on center in the field to framing members. Exterior window flanges should be treated like vertical and horizontal foam seams: they must be taped. There should be no vertical seams in the foam sheathing above the head of any window or door.

No caulk should be installed under the bottom window flange. The top window flange (or drip cap, if one has been installed) should be covered with head flashing — either metal flashing or self adhering membrane. If metal flashing is used, create a horizontal reglet (a groove) in the foam sheathing above the window head

and then insert a leg of the metal flashing into the reglet. The top of the head flashing should always be sealed with a layer of house-wrap tape or sheathing tape. Products and attachment methods for commercial EIFS and Stucco systems will vary. Consult the manufacturer on recommended installation methods and system specifications.

**INSTALLING THE INSULATION BOARD (ADHESIVES):** The adhesive to be used for bonding R-TECH to the substrate depends upon the type of substrate. The table below is a guide for matching adhesives with substrates. All bonding adhesives **MUST NOT** contain solvents or their vapor as it will attack the EPS core of the R-TECH insulation board.

In all adhesively bonded wall installations the material should be applied in vertical ribbons/beads.

Substrate	Adhesive Type (Tube)	Application Rate
WOOD	URETHANE	¼" BEAD— 16" OC
METAL	URETHANE	¼" BEAD— 16" OC
CONCRETE	URETHANE	¼" BEAD— 16" OC

**Uses**

R-TECH has been used successfully for numerous interior and exterior sheathing insulation applications. The following are examples of the many R-TECH applications:

- Interior Basement Walls
- Interior Cavity Walls
- Crawl Spaces
- Interior Walls
- Waterproofing Protection Board
- Radiant-Heated Floors
- Exterior Siding Underlayment & Cladding
- Stucco Underlayment
- Concrete Slabs
- Wall Sheathing
- Below-grade Insulation

**Advantages**

- Environmentally Friendly. R-TECH does not contain any dyes, may contain recycled material and the foam core is 100% recyclable.
- Insect and Mold Resistance. R-TECH is manufactured with an inert additive that deters termites and carpenter ants. R-TECH does not sustain mold and mildew growth.
- Water Resistance. R-TECH polymeric facers provide a surface that is virtually impervious to moisture.

- Enhanced R-Values. In certain applications, increased R-Values can be obtained by placing the metallic reflective side of the R-Tech towards a dead air space. R-Value gain is dependent on the amount of dead air space between the R-Tech and outer surface. R-Value gains are based on the ASHRAE Handbook of Fundamentals.
- Proven Performance. EPS has been manufactured using the same chemistry since the mid-1950s, providing proven performance.

Property	Type I
Nominal Density (pcf)	1.0
C-Value (Conductance) ■ BTU/(hr•ft2•°F)	
(per inch) @ 25° F	.23
@ 40° F	.24
@ 75° F	.26
R-value (Thermal Resistance) ■ (hr•ft2•°F)/BTU	
(per inch) @ 25° F	4.35
@ 40° F	4.17
@ 75° F	3.85
Compressive Strength (psi, 10% deformation)	13
Absorption (% vol.)	< 1.0

Product properties and testing standards, refer to: UL Evaluation Report UL ER14313-01

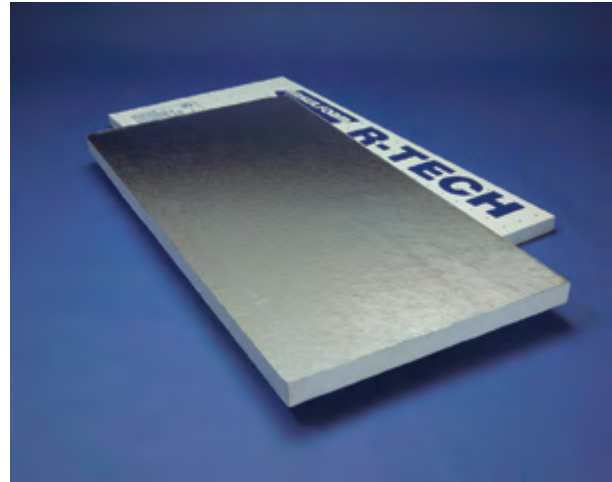


## Storage & Handling

As a general rule, it is considered good practice to store the boards in a protected, covered, and dry location on site and to limit the amount of time the boards are left exposed before being covered over by the cladding material.

R-TECH contains a flame retardant; however, it should be considered combustible and should not be exposed to sources of ignition. Do not allow highly solvent extended mastics, coal-tar products or their vapors to come in contact with INSULFOAM R-TECH.

Do not allow highly solvent extended mastics, coal-tar products or their vapors to come in contact with INSULFOAM R-TECH.



19727 57th Ave. E. ■ Puyallup, WA 98375  
Toll Free: (800) 248-5995 ■ Fax: (253) 271-3265

***The Nation's Largest Manufacturer of  
Block-molded Expanded Polystyrene (EPS).***

*Insulfoam- a division of Carlisle Construction Materials Inc., does not make any warranty with respect to suitability of the above adhesive products. Please consult with the adhesive manufacturer to confirm the compatibility of their adhesive/sealants with expanded polystyrene (EPS) and specific applications.*

InsulFoam and R-Tech are trademarks of Insulfoam. © 2015 Insulfoam.  
0215