

R-TECH®

IW INTERIOR WALL INSULATION

BY **INSULFOAM**

Description

R-Tech IW (Interior Wall) is an engineered rigid insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS) with advanced polymeric laminate facers. R-Tech IW is available with factory laminated MR (metallic-reflective) facers, white facers or a combination of the two. The core of R-Tech is the same high-quality EPS as our InsulFoam insulations and meets or exceeds the requirements of ASTM C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. R-Tech has excellent dimensional stability, compressive strength and water resistance properties. In addition, R-Tech IW is an ENERGY STAR® qualified insulation and can contribute towards LEED® credits.

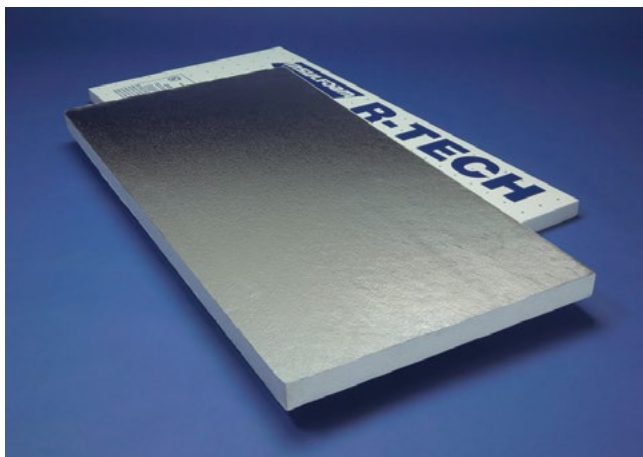
Uses

R-Tech IW is designed for both commercial and residential interior wall applications.

Advantages

- **Enhanced R-values.** Increased R-values can be obtained by placing the MR side of the R-Tech towards the dead air space within the interior wall. R-value gain is dependent on the amount of dead air space between the R-Tech and the inner wall. R-value gains are based on the ASHRAE Handbook of Fundamentals.
- **Jobsite Durability.** With a polymeric facer on either side of it R-Tech IW is extremely flexible and durable insulation.
- **Water Resistance.** R-Tech IW facers provide a surface that is virtually impervious to moisture.
- **Stable R-value.** The product's thermal properties will remain stable over its entire service life. There is no thermal drift, so Insulfoam offers a 20-Year Thermal Performance Warranty.
- **Cost Effective.** R-Tech IW offers the highest R-Value per dollar, is typically less expensive than other interior wall insulations, and available in custom sizes to help with installation labor savings.
- **Environmentally Friendly.** R-Tech IW does not contain any ozone-depleting blowing agents, may contain recycled material, the foam core is 100% recyclable, is an ENERGY STAR® qualified insulation and can contribute towards LEED® credits.
- **Insect and Mold Resistance.** R-Tech IW can be manufactured with an inert additive that deters termites and carpenter ants. R-Tech does not sustain mold and mildew growth.
- **Proven Performance.** EPS has been manufactured using the same chemistry since the mid-1950s, providing proven performance.
- **Code Approvals.** Insulfoam insulations are recognized by the International Code Council Evaluation Service (ICC-ES), and have numerous Underwriters Laboratory and Factory Mutual Approvals.

THE PROVEN STANDARD FOR WALLS.



Sizes

R-Tech IW is available in 4' x 8' sheets with thicknesses ranging from .5" to 4.5". Custom sizes are available upon request. In addition, custom sizes are available upon request with little or no impact on lead times..

Effective R-values^a (metallic-reflective facer and dead air space)

R-Tech Thickness	Design Temp. °F	Effective R-value (R-Tech MR + Air Space) ^b	Effective R-value (R-Tech MR + Air Space) ^b
0.5"	40	4.4	4.6
	75	4.3	4.4
0.75"	40	5.4	5.7
	75	5.2	5.4
1.00"	40	6.5	6.9
	75	6.2	6.5
1.25"	40	7.5	8.0
	75	7.1	7.5
1.50"	40	8.6	9.1
	75	8.1	8.6
1.75"	40	9.6	10.3
	75	9.1	9.6
2.00"	40	10.6	11.4
	75	10.0	10.6
2.25"	40	11.7	12.5
	75	11.0	11.7
2.50"	40	12.7	13.6
	75	11.9	12.7

a Effective R-values determined using InsulFoam I and InsulFoam II.

b Requires 0.75" - 3.50" dead air space and the R-Tech MR facer towards the dead air space.

INSULATION ENGINEERED TO MAKE A DIFFERENCE.

R-TECH®

IW INTERIOR WALL INSULATION

BY **INSULFOAM**

Typical Physical Properties of R-Tech*

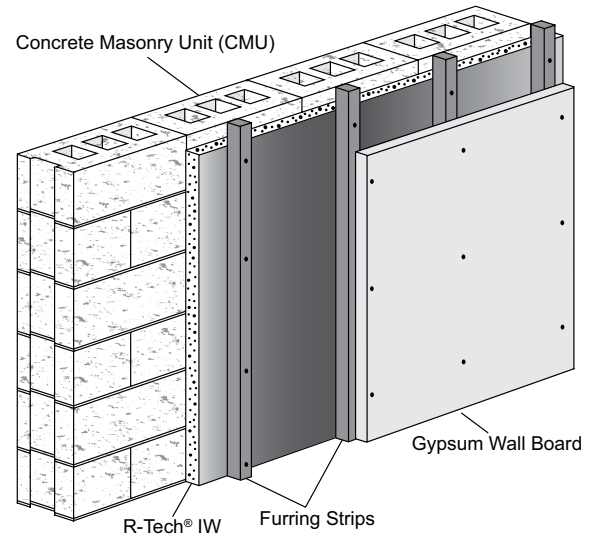
Property	Type I	Test Method
Nominal Density (pcf)	1.0	ASTM C303
C-Value (Conductance) BTU/(hr•ft ² •°F) (per inch)	@ 25° F	ASTM C518 or ASTM C177
	@ 40° F	.24
	@ 75° F	.26
R-value (Thermal Resistance) (hr•ft ² •°F)/BTU (per inch)	@ 25° F	ASTM C518 or ASTM C177
	@ 40° F	4.35
	@ 75° F	4.17 3.85
Compressive Strength (psi, 10% deformation)	13	ASTM D1621
Flexural Strength (psi)	33	ASTM C203
Dimensional Stability (maximum %)	< 2%	ASTM D2126
Water Vapor Transmission (perms)	< 1.0	ASTM E96
Absorption (% vol.)	< 1.0	ASTM C272
Capillarity	none	–
Flame Spread	< 20	ASTM E84
Smoke Developed	150 - 300	ASTM E84

*Properties are based on data provided by resin manufacturers, independent test agencies and Insulfoam.

Physical Properties

Please refer to the appropriate R-Tech data sheet for typical physical properties.

Typical Interior Wall Installation



Installation Recommendations

1. Cut the inner wall's mortar joints flush with the CMU to provide an even surface for the R-Tech IW.
2. Install R-Tech IW directly to the CMU with an approved mastic or mechanical fastener. The MR side of the R-Tech should be facing outward.
3. Mechanically attach the furring strips through the R-Tech IW and into the CMU with an approved fastener.
4. Attach the gypsum wall board to the furring strips and finish the wall per appropriate specifications.