

# INSULFOAM®

## TILT-UP INSULATION SYSTEMS

### R-TECH INSULATED TILT UP WALL

#### Description

R-Tech® for Insulated Tilt-up applications is a high-performance, rigid insulation consisting of superior closed-cell, lightweight and resilient expanded polystyrene (EPS) with advanced polymeric laminate facers. R-Tech is available with factory laminated metallic-reflective facers on one side and a white protective facer on the other side.

R-Tech facers act as the slip sheet to minimize bonding between the foam, facia wythe and structural wythe wall. 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 IV Standard Specification for Rigid Cellular Polystyrene Thermal Insulation. In addition, R-Tech Insulated Tilt-up has excellent dimensional stability, compressive strength and water resistance properties. R-Tech is an ENERGY STAR® qualified insulation and can contribute towards LEED® credits.

#### Uses

R-Tech Insulated Tilt-up is designed for both commercial and residential tilt-up wall applications.

#### Advantages

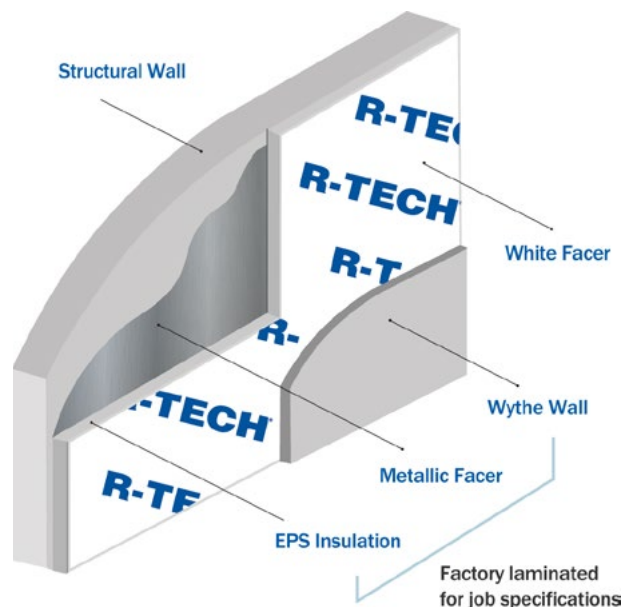
- **Labor Savings.** R-Tech Insulated Tilt-up comes in large lightweight panels that are easy to install, reducing labor time significantly.
- **Environmentally Friendly.** R-Tech FF does not contain any ozone-depleting blowing agents, may contain recycled material and the foam core is 100% recyclable.
- **Stable R-value.** The product's thermal properties remain stable over its entire service life. There is no thermal drift, so a complimentary 20-Year Thermal Performance Warranty is available.
- **Water Resistance.** R-Tech facers provide a surface that is virtually impervious to moisture, and EPS does not readily absorb moisture.
- **Insect and Mold Resistance.** R-Tech can be manufactured with an inert additive that deters termites and carpenter ants. R-Tech FF does not sustain mold and mildew growth (improved IAQ).
- **Jobsite Durability.** With a polymeric facer on either side of it, R-Tech is extremely durable and resilient.
- **Cost Effective.** R-Tech Insulated Tilt-up is typically less expensive than comparable insulation products.
- **Enhanced R-values.** R-value gains are based on the ASHRAE Handbook of Fundamentals. See R-value chart on reverse side.

#### THE PROVEN STANDARD FOR WALLS.



#### Sizes

R-Tech Insulated Tilt-up is available in 4'x8' sheets with thicknesses ranging from 0.5" to 4.5". It can also incorporate the InsulSnap feature, which allows the end user to clean break the 4'x8' sheets into a desired width. Custom sizes are available upon request (lengths up to 16').



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### Key Product Comparisons

Property	R-Tech IV	Type IV XPS	Test Method
Density (min. pcf)	1.80	1.55	ASTM C303
Compressive Strength (psi, 10% deformation)	25	25	ASTM D1621
Flexural Strength (psi)	50	50	ASTM C203
Water Absorption (max. % vol.)	0.3	0.3	ASTM C272
Water Vapor Permeance (max. perm.)	< 1.1	1.1	ASTM E96
Dimensional Stability (maximum %)	2.0	2.0	ASTM D2126
Flame Spread	< 25	< 25	ASTM E84
Smoke Developed	< 450	< 450	ASTM E84

### Product Feature Summary

Product Features	R-Tech IV	Type IV XPS
Stable R-value	Yes	No
Free of HCFCs and Dyes	Yes	No
Available with Metallic Reflective Films	Yes	No
Available in a wide range of sizes and thicknesses	Yes	No

### Effective R-values\* (metallic-reflective facer & dead air space)

R-Tech IV Thickness	Design Temp.	Effective R-value* (R-Tech MR + Air Space)
0.5"	40 °F	5.40
	75 °F	5.20
0.75"	40 °F	6.60
	75 °F	6.30
1.00"	40 °F	7.80
	75 °F	7.40
1.25"	40 °F	9.00
	75 °F	8.50
1.50"	40 °F	10.20
	75 °F	9.60
1.75"	40 °F	11.40
	75 °F	10.70
2.00"	40 °F	12.60
	75 °F	11.80
2.25"	40 °F	13.80
	75 °F	12.90
2.50"	40 °F	15.00
	75 °F	14.00

\* Requires 0.75" - 3.50" dead air space and the R-Tech metallic-reflective facer towards the dead air space.

### R-value Comparisons

R-Value	R-Tech IV	Type IV XPS	Test Method
<b>Warranted R-values @ 20 years</b>	4.8/inch	Not Warranted	ASTM C518 @ 40 °F
	4.4/inch	Not Warranted	@ 75 °F
<b>Warranted R-values @ 15 years</b>	4.8/inch	4.9/inch	ASTM C518 @ 40 °F
	4.4/inch	4.5/inch	@ 75 °F
<b>Published R-value (Thermal Resistance)</b>	4.8/inch	5.4/inch	ASTM C518 @ 40 °F
	4.4/inch	5.0/inch	@ 75 °F