INSULFOAM
A CARLISLE COMPANY

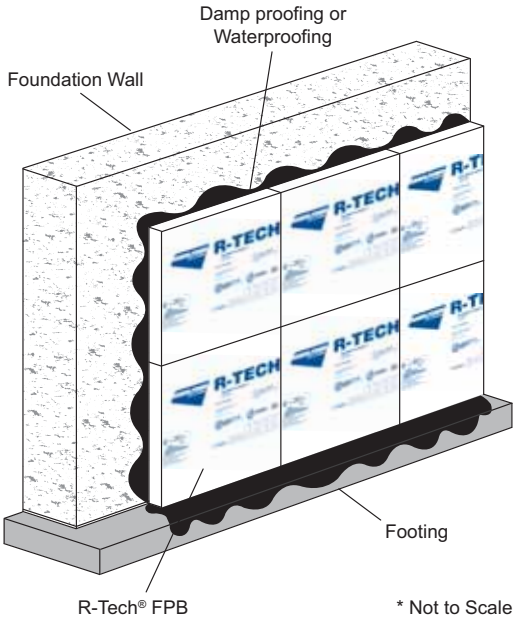
R-TECH® FF
FANFOLD PROTECTION BOARD

Description
R-Tech Fanfold Protection Board (FPB) is a high-performance, rigid insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS) with advanced polymeric laminate facers on both sides. The core of R-Tech is the same high-quality as our InsulGrade brand insulations and meets or exceeds the requirements of ASTM C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. In addition, R-Tech has excellent dimensional stability, compressive strength and water-resistant properties.

Uses
R-Tech FPB is ideal for use over foundation waterproofing and damp proofing applications. R-Tech FPB helps protect the waterproofing membrane from damage during backfill.

Advantages
- Labor Savings. R-Tech FPB comes in 200 ft² bundles and is lightweight enough for the average installer to carry 2 bundles at one time.
- Jobsite Durability. With a polymeric facer on either side of the R-Tech FPB, it is an extremely flexible and durable protection board.
- Water-Resistant. R-Tech FPB facers provide a surface that is virtually impervious to moisture.
- Environmentally Friendly. R-Tech FPB contains no dyes, formaldehyde or ozone-depleting HCFCs, may contain recycled material and the foam core is 100% recyclable.
- Stable R-Value. R-Tech FPB has no thermal drift. Designers are well served knowing the R-Tech FPB thermal properties will remain stable over its entire service life. R-Tech is eligible for an Insulfoam 20-Year Thermal Performance Warranty – a warranty that's not prorated or limited to a percentage of the published R-Value.
- Insect and Mold Resistant. R-Tech FPB can be manufactured with an inert additive that repels termites and carpenter ants. R-Tech FPB does not sustain mold and mildew growth.
- Code Approvals. R-Tech FPB meets IBC/IRC requirements for foam plastic insulation; see ICC-ES ESR-1788.

Sizes
R-Tech FPB is packaged accordion-style and available in two-square bundles. R-Tech is available in nominal ⅜", ¼", ½" and ¾" thicknesses with the 4' x 50' fanfold bundle (2 squares). Individual panel sizes within the fanfold bundle are 2' x 4'. R-Tech is also available in 4' x 8' and 4' x 9'.

Typical Below Grade Application


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Installation Recommendations

1. Any jagged surfaces or irregularities on the substrate should be removed prior to the application of the R-Tech FPB.
2. Ensure the waterproofing or damp proofing is properly cured prior to application of the R-Tech.
3. Begin by unfolding the bundles of R-Tech and adhering or hanging to the substrate. Edges should be butted tightly.
4. The R-Tech can be attached by gently pressing into the waterproofing or damp proofing or by using a polystyrene-compatible adhesive.
5. If the R-Tech FPB is to be exposed for an extended period of time, cover the above grade portions of the R-Tech FPB to protect from UV exposure and other trades.
6. Apply a polystyrene-compatible caulk or mastic to the top of the board to minimize water infiltration behind the R-Tech.
7. Carefully install backfill to avoid moving or damaging the protection board.

Typical Physical Properties of R-Tech*

Property	Type I	Type VIII	Type II	Type IX	Test Method
Compressive Strength (psi, 10% deformation)	13	16	20	28	ASTM D1621
Flexural Strength (psi)	33	40	50	70	ASTM C203
Water Vapor Transmission (perms)	< 1.0	< 1.0	< 1.0	< 1.0	ASTM E96
Absorption (% vol.)	< 1.0	< 1.0	< 1.0	< 1.0	ASTM C272

Typical Physical Properties of InsulFoam (foam core)*

Property	Type I	Type VIII	Type II	Type IX	Test Method
Nominal Density (pcf)	1.0	1.25	1.5	2.0	ASTM C303
C-Value (Conductance) BTU/(hr•ft2•°F)					ASTM C518 or ASTM C177
(per inch) @ 25° F	.23	.220	.21	.20	
(per inch) @ 40° F	.24	.235	.22	.21	
(per inch) @ 75° F	.26	.255	.24	.23	
R-value (Thermal Resistance) (hr•ft2•°F)/BTU					ASTM C518 or ASTM C177
(per inch) @ 25° F	4.35	4.54	4.76	5.00	
(per inch) @ 40° F	4.17	4.25	4.55	4.76	
(per inch) @ 75° F	3.85	3.92	4.17	4.35	
Compressive Strength (psi, 10% deformation)	10 - 14	13 - 18	15 - 21	25 - 33	ASTM D1621
Flexural Strength (psi)	25 - 30	32 - 38	40 - 50	55 - 75	ASTM C203
Dimensional Stability (maximum %)	< 2%	< 2%	< 2%	< 2%	ASTM D2126
Water Vapor Transmission (perms)	2.0 - 5.0	1.5 - 3.5	1.0 - 3.5	0.6 - 2.0	ASTM E96
Absorption (% vol.)	< 4.0	< 3.0	< 3.0	< 2.0	ASTM C272
Capillarity	none	none	none	none	–
Flame Spread	< 20	< 20	< 20	< 20	UL 723
Smoke Developed	150 - 300	150 - 300	150 - 300	150 - 300	UL 723

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