

# InSoFast® Specifications



Patent Pending

**InSoFast** is a closed-cell expanded polystyrene panel with three integrated polypropylene attachment studs. The tongue-and-groove edge design provides tight connection between panels. The panel is 48" x 24" x 2" thick.

**Moisture Drainage:** The back side of the *InSoFast* panel is ribbed to provide moisture drainage channels but is not classified as a water proofing material.

**Wiring Chases:** Chases are located 1-1/4" below the surface of the panel and spaced 16" o.c. vertically and 24" o.c. horizontally (National Electric Code - NEC Article 330-4d and 300-41a).

**Attachment Studs:** Attachment studs provide solid attachment for drywall. They have no nutrient value to animals, insects, or micro-organisms. There is no nutrient value to bacterial growth including mold. Polypropylene attachment stud (ASTM D 1929, ASTM D 635, ASTM D 2843, ASTM D 638).

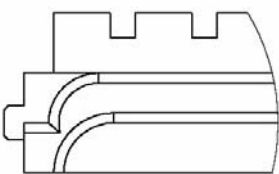
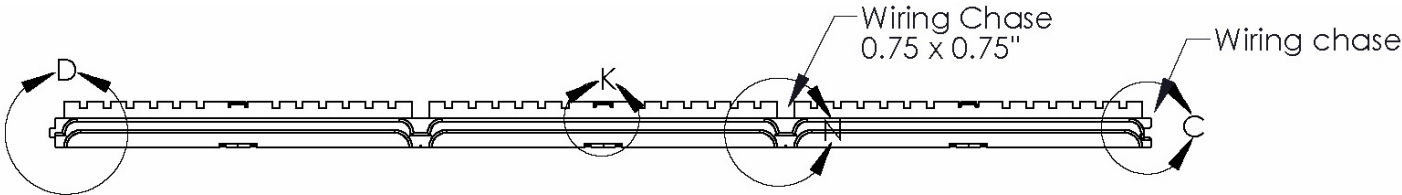
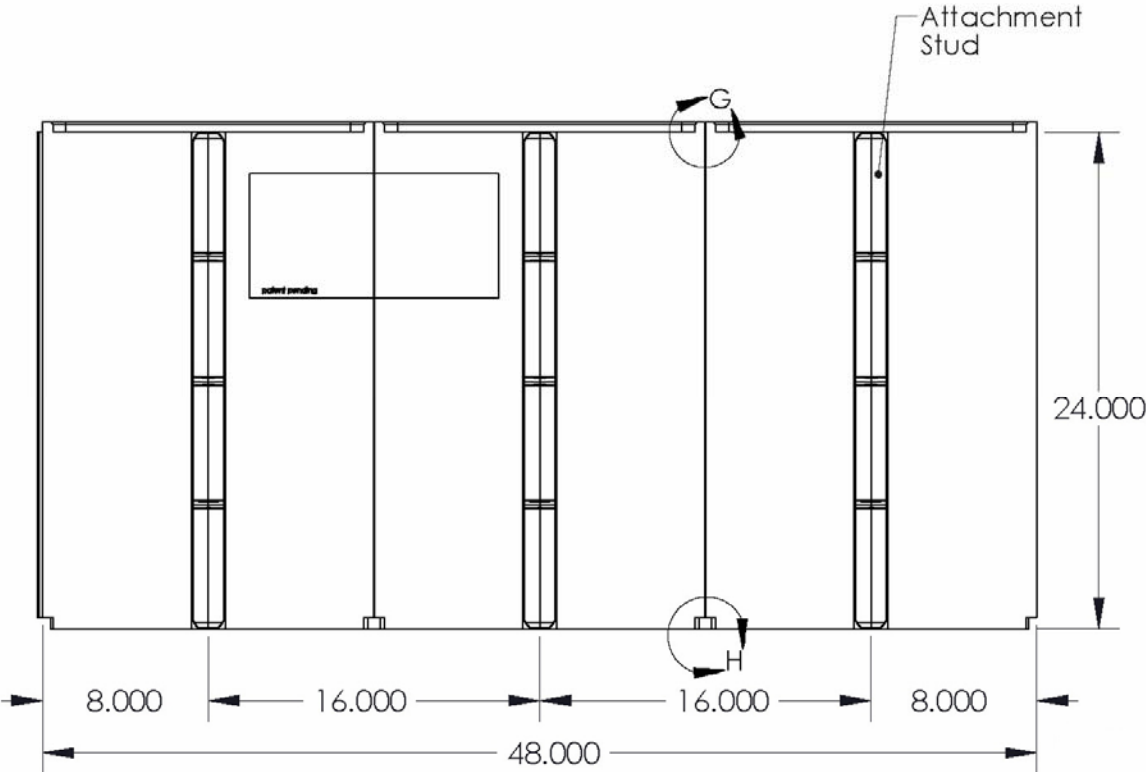
**EPS (Expanded Polystyrene):** *InSoFast* is shape molded at 1.25 pcf with Type VIII - Flame Retardant Expanded Polystyrene. EPS is a moisture resistant closed-cell foam which contains no ozone depleting CFCs or HCFCs and is 100% recyclable. No toxins or formaldehydes are produced. EPS is inert and experiences no physical or chemical breakdown over time. There is no nutrient value to animals, insects, bacteria, or mold.

Physical Properties	Units	ASTM Test	Type VIII EPS
Compressive Resistance at 10% Strain Deformation Flexural Strength	Min psi (kPa) Min psi (kPa)	D 1621, C 165 C 203	13.0 (90) 30.0 (208)
Thermal Resistance (R-Value) 75 +/- 2 F InSoFast Wall Assembly over Concrete Wall	Min R for 1" thickness	C 177, C 518	4.45 R-10+
Thermal Conductivity (K-Value) 75 +/- 2 F 40 +/- 2 F	BTU/(hr) (Sq.Ft.) (F/in.)	C 177, C 518	0.225 (1.46) 0.235 (1.35)
Coefficient of Thermal Expansion	In./(in.)(F)	D 696	0.000035
Moisture Resistance Water Adsorption by total immersion Class III Vapor Retarder: Water Vapor Permeability of 1" thickness max perm	% by volume Max Max perm/in	C 272 E96	3.0 3.5
Max. Service Temperature Long Term / Intermittent	F		167 / 180
Flame Spread Smoke Developed		E84-81A E84-81A	5 @ 4" 105 - 190
Density, minimum Density, nominal	Min lb/ft	C 303	1.15 (18) 1.25

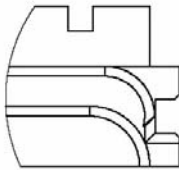
**Usage:** *InSoFast* is a non-structural panel installed on masonry block or cast-in-place concrete walls. The masonry block or concrete walls must be structurally sound. The *InSoFast* panel is bonded to the masonry block or concrete walls with construction adhesive as per manufacturer's recommendations.

**Construction Note:** In most installations, *InSoFast* panels must be covered with a 15 minute thermal barrier (typically 1/2" drywall) or otherwise installed in accordance with applicable building code requirements.

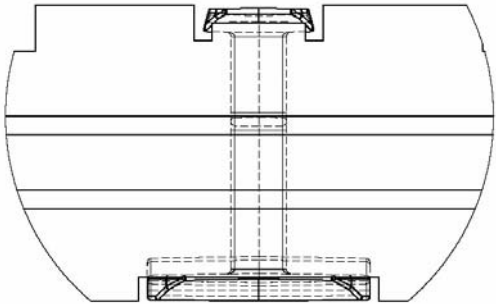
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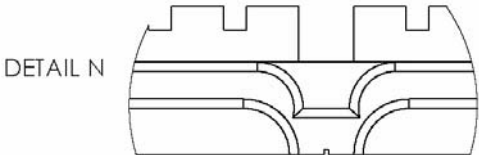
DETAIL D Side tongue & groove detail



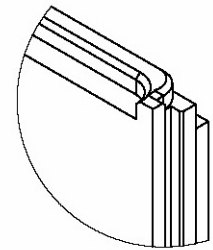
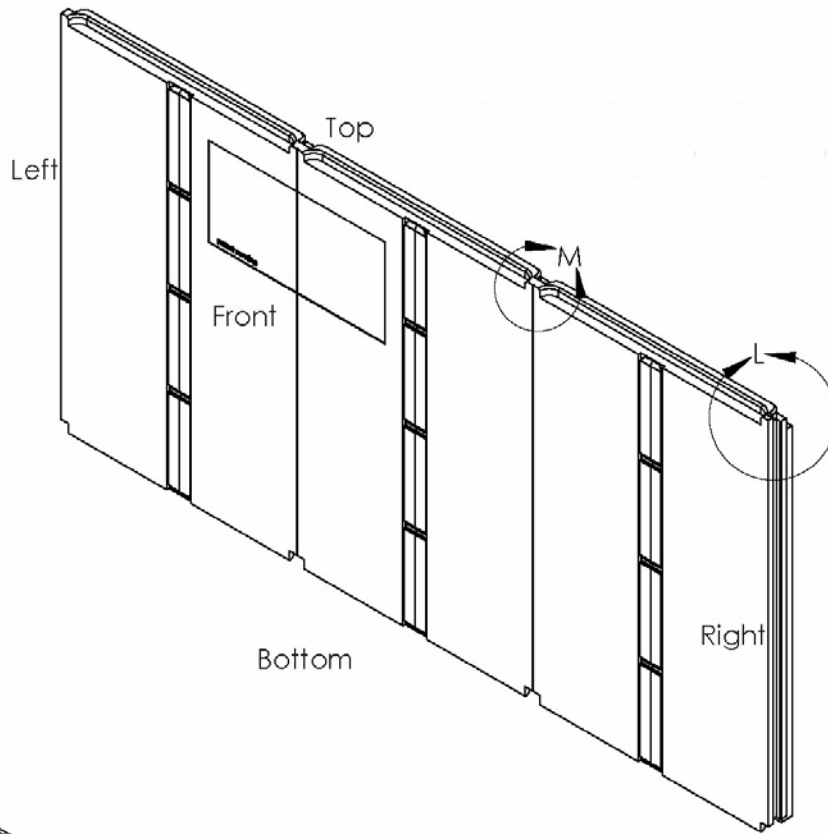
DETAIL C



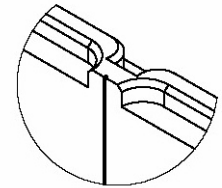
DETAIL K Attachment Stud



DETAIL N



DETAIL L  
Tongue



DETAIL M  
Alignment  
Tab

