

# 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).

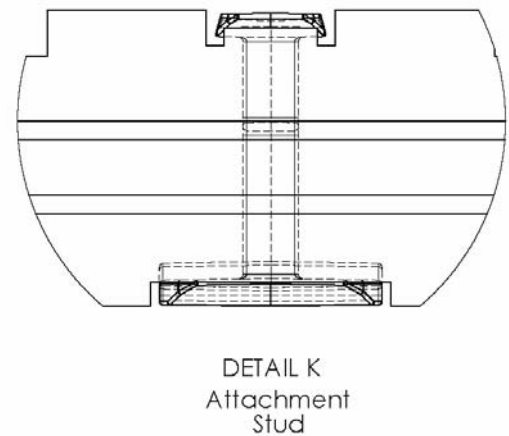
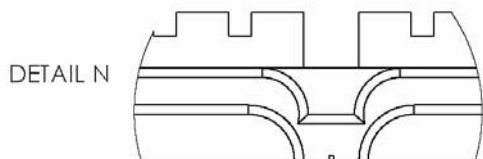
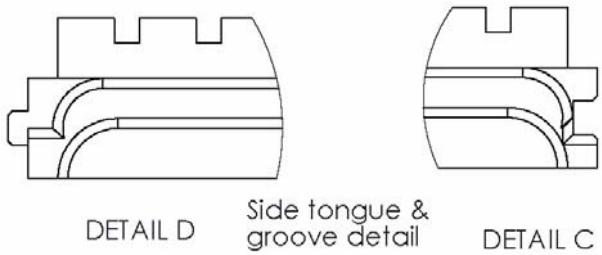
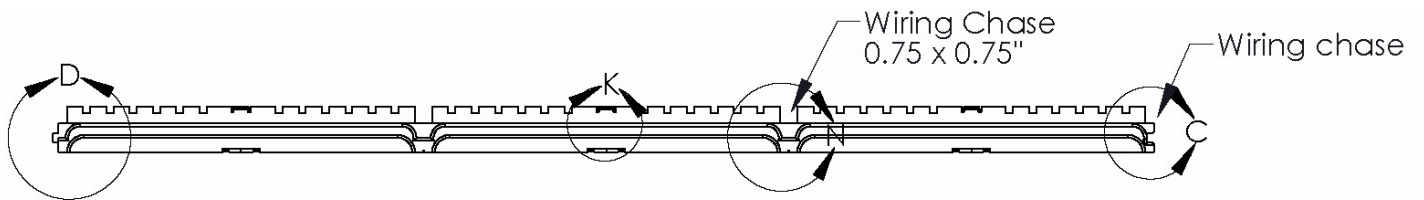
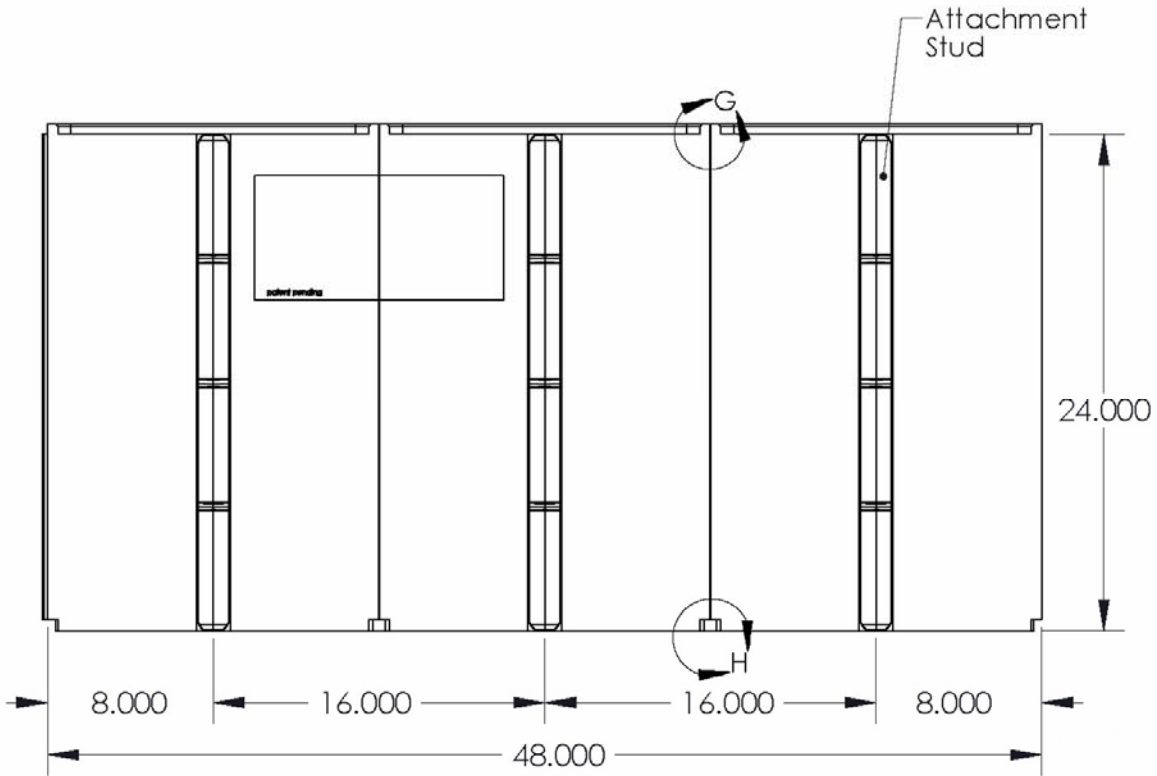
**EPS (Expanded Polystyrene):** *InSoFast* is shape molded at 1.25 pcf with Type VIII - Flame Retardant Expanded Polystyrene. EPS is a moisture resistant closed-cell foam which contains no ozone depleting CFCs or HCFCs and is 100% recyclable. No toxins or formaldehydes are produced. EPS is inert and 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<br>Flexural Strength  | Min psi (kPa)<br>Min psi (kPa) | D 1621, C 165<br>C 203 | 13.0 (90)<br>30.0 (208)      |
| Thermal Resistance (R-Value)<br>75 +/- 2 F<br>40 +/- 2 F   | Min R for 1" thickness         | C 177, C 518           | 3.92<br>4.25                 |
| Thermal Conductivity (K-Value)<br>75 +/- 2 F<br>40 +/- 2 F   | BTU/(hr) (Sq.Ft.) (F/in.)      | C 177, C 518           | 0.225 (1.46)<br>0.235 (1.35) |
| Coefficient of Thermal Expansion   | In./(in.)(F)                   | D 696                  | 0.000035                     |
| Moisture Resistance<br>Water Adsorption by total immersion<br>Class III Vapor Retarder:<br>Water Vapor Permeability of 1" thickness max perm | % by volume Max<br>Max perm/in | C 272<br>E96           | 3.0<br>3.5                   |
| Max. Service Temperature<br>Long Term / Intermittent   | F                              |                        | 167 / 180                    |
| Flame Spread<br>Smoke Developed  |                                | E84-81A<br>E84-81A     | 5 @ 4"<br>105 - 190          |
| Density, minimum<br>Density, nominal   | Min lb/ft                      | C 303                  | 1.15 (18)<br>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.

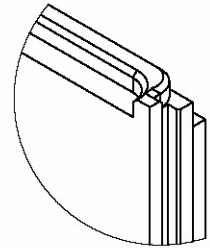
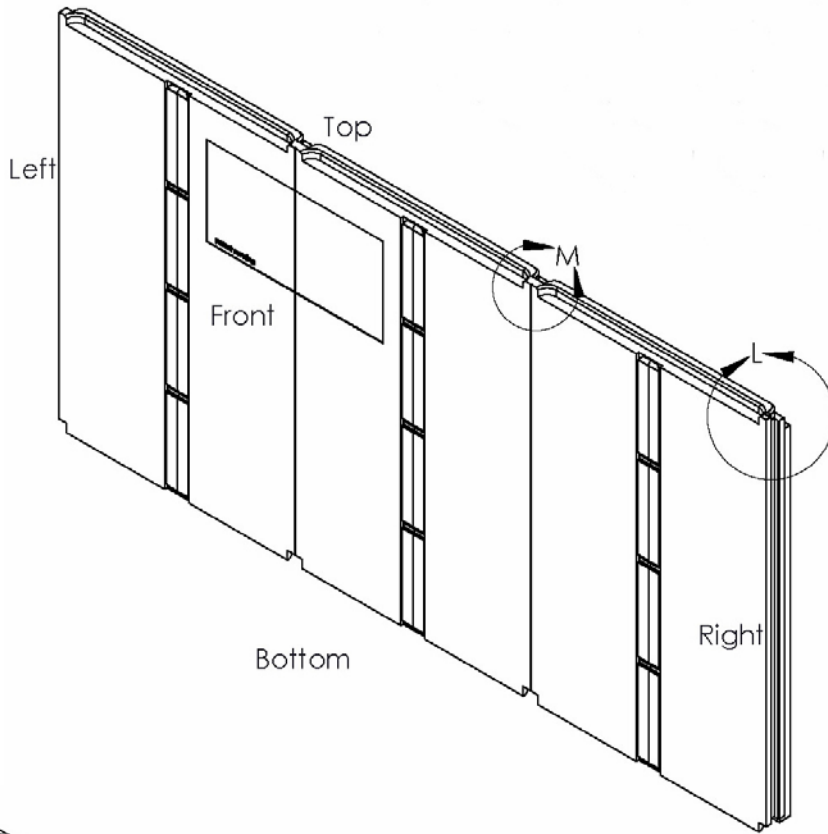
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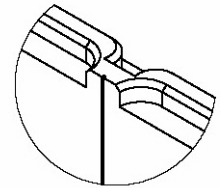
# InSoFast™ Details



Patent Pending



DETAIL L  
Tongue



DETAIL M  
Alignment  
Tab

