

Insulspan SIPs PIB 219

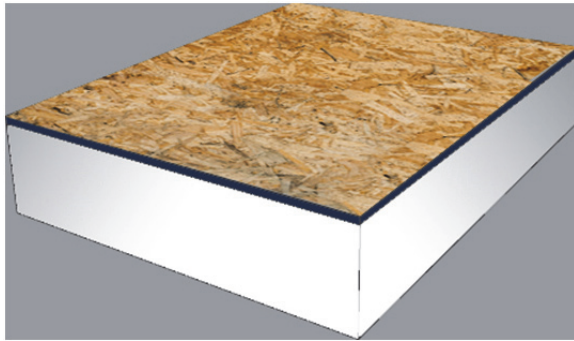
Insulspan Nailbase Panels Thermal Resistance Values

Product Information Bulletin

Insulspan® Nailbase Panels - Thermal Resistance Values

Insulspan® Nailbase panels offer an easy to use one step method of adding insulation complete with a nailable exterior surface. Insulspan Nailbase panels consist of 7/16" oriented strand board (OSB) laminated to the surface of expanded polystyrene (EPS) rigid insulation.

One typical application for Insulspan Nailbase panels is over structural roof decks providing an insulated roof system with a nailable OSB surface. Insulspan Nailbase panels can be used for both residential and commercial building applications.



Insulspan Nailbase Panel Benefits:

- Continuous insulation over a structural support system reduces energy loss by eliminating thermal breaks.
- Nailable surface for attachment of exterior cladding.
- Available in a variety of insulation thicknesses and panel sizes.

The table below provides thermal resistance values for some standard panel thicknesses.

Table 1 - Insulspan Nailbase Panel Thermal Resistance

| Nailbase Total Thickness | | EPS Insulation Thickness | | Thermal ¹ Resistance | | Thermal Transmittance | | SIP Weight | |
|--------------------------|-----|--------------------------|-----|--|--|--|--|--------------------|-------------------|
| Inches | mm | Inches | mm | $\frac{\text{ft}^2 \cdot \text{h} \cdot ^\circ\text{F}}{\text{BTU}}$ | $\frac{\text{m}^2 \cdot ^\circ\text{C}}{\text{W}}$ | $\frac{\text{BTU}}{\text{ft}^2 \cdot \text{h} \cdot ^\circ\text{F}}$ | $\frac{\text{W}}{\text{m}^2 \cdot ^\circ\text{C}}$ | lb/ft ² | kg/m ² |
| 1 7/16 | 37 | 1 | 25 | 4.4 | 0.78 | 0.227 | 1.287 | 1.54 | 7.5 |
| 1 15/16 | 49 | 1 1/2 | 38 | 6.3 | 1.11 | 0.158 | 0.900 | 1.58 | 7.7 |
| 2 7/16 | 62 | 2 | 51 | 8.2 | 1.45 | 0.122 | 0.691 | 1.63 | 7.9 |
| 2 15/16 | 75 | 2 1/2 | 64 | 10.1 | 1.78 | 0.099 | 0.562 | 1.67 | 8.1 |
| 3 7/16 | 87 | 3 | 76 | 12.0 | 2.12 | 0.083 | 0.473 | 1.71 | 8.3 |
| 3 15/16 | 100 | 3 1/2 | 89 | 13.9 | 2.45 | 0.072 | 0.408 | 1.75 | 8.5 |
| 4 7/16 | 113 | 4 | 102 | 15.8 | 2.78 | 0.063 | 0.359 | 1.79 | 8.7 |
| 4 15/16 | 125 | 4 1/2 | 114 | 17.7 | 3.12 | 0.056 | 0.321 | 1.83 | 9.0 |
| 5 7/16 | 138 | 5 | 127 | 19.6 | 3.45 | 0.051 | 0.290 | 1.88 | 9.2 |

¹ Thermal resistance values at mean temperature of 75 °F (24 °C) for Insulspan Nailbase panel only.