Read This Before You Buy - What You Should Know About R-Values

The chart shows the R-value of this insulation. R means resistance to heat flow. The higher the R-value, the greater the insulating power. Compare insulation R-values before you buy. There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend upon the climate, the type and size of your house, the amount of insulation already in your house, and your fuel use patterns and family size. If you buy too much insulation, it will cost you more than what you'll save on fuel. To get the marked R-value, it is essential that this insulation be installed properly.

Properties | Soy Seal® HD Value | Soy Seal® XD Value | Test Method
---|---|---|---
Water Vapor Permeability† | | | ASTM E96
1½″ (38 mm) | < 1 perm | | 
½″ (12.7 mm) | < 1 perm | | 
Air Permeability | | | ASTM E283
½″ (12.7 mm) | 0.07 L/s/m² @ 75 pa | 0.04 L/s/m² @ 75 pa | ASTM D2856
Closed Cell Content (estimated) | > 90% | > 90% | ASTM D2856
Core Density (nominal) | 3.0 lbs./ft³ | 6.0 lbs./ft³ | ASTM D1622
Compressive Strength | 42 p.s.i. (290 kPa) | 40 p.s.i. (275 kPa) | ASTM D1621
Finished Foam Bio-Content | 15% | 15% | ASTM D6866
Dimensional Stability | | | ASTM D2126
180°F (82°C), Ambient Humidity | < 1% | < 1% | ASTM D2126
73°F (23°C), 50% Relative Humidity | < 1% | < 1% | ASTM D2126
Surface Burning Characteristics* | | | ASTM E84-04
1½″ (38 mm) (nominal) | Not Rated | | 
Flame Spread Index | < 25 | Not Rated | ASTM E84-04
Smoke Developed Index | < 450 | Not Rated | ASTM E84-04
Thermal Transmission Properties | | | ASTM C518
Initial R-Value | R - 5.0 at 1″ | R - 1.25 at ½″ | ASTM C518

† ASHRAE defines a Class II vapor retarder as a material having between 0.1 and 1 perms. Soy Seal® HD, when installed at 1½″ thickness; and Soy Seal® XD, when installed at ½″ thickness qualify under this definition as a Class II vapor retarder.

* This numerical flame spread and all other data presented is not intended to reflect the hazards presented by this or any other material under actual fire conditions.