

Physical Properties of Alleguard EPS



| Property | Unit | ASTM Test | Type XI | Type I | Type VIII | Type II | Type IX | Type XIV | Type XV |
|--|-----------------|-----------|------------|------------|------------|------------|------------|------------|------------|
| Common Designation | pcf | | .75# | 1# | 1.25# | 1.5# | 2# | 2.5# | 3# |
| Density, minimum | pcf | D1622 | 0.70 | 0.90 | 1.15 | 1.35 | 1.80 | 2.25 | 2.70 |
| Density, range | pcf | C303 | .70-.89 | .90-1.14 | 1.15-1.34 | 1.35-1.79 | 1.80-2.20 | 2.25-2.69 | 2.70-3.1 |
| Thermal Resistance | (per inch) @25F | C518 | 3.6 | 4.4 | 4.6 | 4.8 | 5.0 | 5.0 | 5.1 |
| | (per inch) @40F | | 3.4 | 4.2 | 4.3 | 4.6 | 4.8 | 4.8 | 5.0 |
| R Value | (per inch) @70F | | 3.2 | 3.9 | 3.9 | 4.2 | 4.4 | 4.4 | 4.6 |
| Compressive Strength | psi | D1621 | 5.0 | 10.0 | 13.0 | 15.0 | 25.0 | 40.0 | 60.0 |
| Flexural Strength min. | psi | C203 | 10.0 | 25.0 | 30.0 | 35.0 | 50.0 | 60.0 | 75.0 |
| Water Vapor Permeability | (perms) | E96 | 5.0 | 5.0 | 3.5 | 3.5 | 2.5 | 2.5 | 2.5 |
| Water Absorption by total immersion | (max. % volume) | C272 | 4.0 | 4.0 | 3.0 | 3.0 | 2.0 | 2.0 | 2.0 |
| Oxygen index | % | D2863 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| Dimensional Stability | % Change | D2126 | max 2.0 | max 2.0 | max 2.0 | max 2.0 | max 2.0 | max 2.0 | max 2.0 |
| Coefficient of Thermal Expansion | in./(in.) (F) | D696 | 0.000035 | 0.000035 | 0.000035 | 0.000035 | 0.000035 | 0.000035 | 0.000035 |
| Maximum Service Temperature | F | | | | | | | | |
| Long Term Intermittent | | | 167 180 | 167 180 | 167 180 | 167 180 | 167 180 | 167 180 | 167 180 |

Alleguard EPS has a flame spread index of < 25 and smoke development of less than 450 when tested in accordance with ASTM E84 for all densities listed. See ASTM C578 for standard test methods and detailed information.

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Protective Foam Solutions