



Typical Physical Properties of EPS Specification Reference ASTM C 578-05

| Property | Units | ASTM Test | Type XI | Type I | Type VIII | Type II | Type IX |
|----------------|-------------|-----------|----------|----------|-----------|-----------|-----------|
| | | | | | | | |
| Density | PCF | D303/ | .75 | .90 | 1.15 | 1.35 | 1.80 |
| Range | 1 | D1622 | .7589 | .90/1.14 | 1.15/1.34 | 1.35/1.79 | 1.80-2.20 |
| Thermal Con- | btu/hr | C177/ | 25°F .29 | .23 | .22 | .21 | .22 |
| ductivity (k) | (ft²)(F/in) | C518 | 40°F.30 | .24 | .23 | .22 | .21 |
| Thermal Resis- | 25°F | 1" Thick | 3.5 | 4.4 | 4.5 | 4.8 | 5.0 |
| tance (R) | 40°F | (e | 3.3 | 4.2 | 4.3 | 4.6 | 4.8 |
| | 75°F | | 3.2 | 3.9 | 4.0 | 4.0 | 4.2 |
| Compressive | psi | D1621 | 6-10 | 10-14 | 13-18 | 15-21 | 25-33 |
| Flexural | psi | C203 | 30.38 | 25-30 | 30-38 | 40-50 | 50-75 |
| WVT | perm | E96 | 2.0-5.0 | 2.0-5.0 | 2.0-3.0 | 2.0-3.0 | 2.0 |
| Absorption | % | C272 | <4% | <4% | <3% | <3% | <2% |
| Capillarity | | | none | none | none | none | none |
| COEFF | ln/(in)/(F) | D696 | .000035 | .000035 | .000035 | .000035 | .000035 |
| Expansion | | | | | | | |
| Svc Temp LT | °F | | 167 | 167 | 167 | 167 | 167 |
| Intermittent | | | 180 | 180 | 180 | 180 | 180 |
| Oxygen Index | % | D2863 | 24 | 24 | 24 | 24 | 24 |

The information presented in this table is offered in good faith and believed to be accurate, all statements and suggestions are made without warranty, expressed or implied, including any implied warranties of merchantability of fitness for any purpose.

Caution

Polar Industries' Polystyrene Foamed Plastic Insulation

Like many construction materials this product is combustible. It should not be exposed to flame or other ignition sources. It is the buyer's responsibility to see that the product is installed in accordance with applicable building codes. Local codes may require a protective or thermal barrier.

Meets IBC/IRC requirements for foam plastic insulation.

Refer to section 2603 of IBC for details.

See product listings: NER-479, ESR-1798, ESR-1640, ESR-1095 and ESR-1634

Meets ASTM C-578 and HUD Specifications