




Hawaii Construction Foam molded polystyrene insulation is a closed cell, moisture resistant rigid foam used for all types of construction applications. Hawaii Construction Foam insulation conforms to ASTM C578, "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation".

Hawaii Construction Foam insulation is manufactured under an industry leading quality control program monitored by UL and further recognized in UL Evaluation Report UL ER40267-01.



| PRODUCT | |  HAWAII CONSTRUCTION FOAM | | | | | | |
|--|------|---|---------------|---------------|---------------|---------------|---------------|---------------|
| | | 100 | 130 | 150 | 250 | 400 | 600 | |
| Compressive Strength ^{1,2} @ 10% deformation, min. ASTM D1621 | | psi (kPa) | 10 (69) | 13 (90) | 15 (104) | 25 (173) | 40 (276) | 60 (414) |
| R-value ¹ , Thermal Resistance, per inch, ASTM C518 | 25°F | °F·ft ² ·h/Btu (°K·m ² /W) | 4.4 (0.77) | 4.5 (0.80) | 4.8 (0.84) | 5.0 (0.88) | 5.0 (0.88) | 5.1 (0.90) |
| | 40°F | °F·ft ² ·h/Btu (°K·m ² /W) | 4.2 (0.74) | 4.3 (0.76) | 4.6 (0.81) | 4.8 (0.85) | 4.8 (0.85) | 4.9 (0.86) |
| | 75°F | °F·ft ² ·h/Btu (°K·m ² /W) | 3.9 (0.69) | 3.9 (0.69) | 4.2 (0.74) | 4.4 (0.77) | 4.4 (0.77) | 4.5 (0.79) |
| Density, Nominal ASTM C303 | | lb/ft ³ (kg/m ³) | 1.0 (16) | 1.25 (20) | 1.5 (24) | 2.0 (32) | 2.5 (40) | 3.0 (48) |
| Flexural Strength ¹ , min. ASTM C203 | | psi (kPa) | 25 (173) | 30 (208) | 35 (242) | 50 (345) | 60 (414) | 75 (517) |
| Water Vapor Permeance ¹ of 1.0 in. thickness, max., perm ASTM E96 | | | 5.0 | 3.5 | 3.5 | 2.5 | 2.5 | 2.5 |
| Water Absorption ³ volume % ASTM C272 | | | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Flame Spread ASTM E84 | | | <25 | <25 | <25 | <25 | <25 | <25 |
| Smoke Developed ASTM E84 | | | <450 | <450 | <450 | <450 | <450 | <450 |
| ASTM C578 Compliance, Type | | | I | VIII | II | IX | XIV | XV |

¹ Please refer to ASTM C578 specification for complete information.

² Compressive strength is measured at 10 percent in accordance with ASTM C578. A safety factor is required to prevent long-term creep for sustained loads. For static loads, a safety factor of 3:1 is recommended.

³ ASTM C272 24 hour immersion followed by 24 hour storage in 75°F/50%RH air.