

Product Description

P600 is a rigid, closed cell, preformed, unfaced, polyisocyanurate foam material (polyiso). This CFC and HCFC free product provides outstanding physical properties in applications having a service temperature between -297 and +300°F (-183 and +149°C). P600 is grey in color and is available in blocks, sheets and fabricated shapes.

Physical Properties ^{1,2}	ASTM Method	Typical Values ³	
		English	Metric
Density	D1622	6.0 lb/ft ³	95.8 kg/m ³
Thermal Conductivity, k-factor ⁴	C518		
Initial at 75°F (24°C)		0.180 (BTU·in)/(hr·ft ² ·°F)	0.026 W/(m·°C)
Aged 10 days at 158°F (70°C)		0.192 (BTU·in)/(hr·ft ² ·°F)	0.028 W/(m·°C)
Thermal Conductivity, R-value per inch ⁴	C518		
Initial at 75°F (24°C)		5.5 (hr·ft ² ·°F)/BTU	0.97 (m ² ·°C)/W
Aged 10 days at 158°F (70°C)		5.2 (hr·ft ² ·°F)/BTU	0.92 (m ² ·°C)/W
Compressive Strength / Modulus	D1621		
Parallel to Rise		142 / 4,770 lb/in ²	978 / 32,865 kPa
Perpendicular to Rise ⁵		121 / 3,090 lb/in ²	834 / 21,290 kPa
Shear Strength / Modulus	C273		
Parallel to Rise		85 / 1,050 lb/in ²	585 / 7,234 kPa
Perpendicular to Rise ⁵		71 / 850 lb/in ²	489 / 6,063 kPa
Tensile Strength / Modulus	D1623		
Parallel to Rise		135 / 3,940 lb/in ²	930 / 27,146 kPa
Perpendicular to Rise ⁵		115 / 2,280 lb/in ²	792 / 15,709 kPa
Flexural Strength / Modulus	C203		
Parallel to Rise		241 / 5,991 lb/in ²	1,661 / 41,298 kPa
Perpendicular to Rise ⁵		170 / 3,896 lb/in ²	1,171 / 26,843 kPa
Closed Cell Content (by volume)	D6226		95%
Water Absorption (by volume)	C272		0.5%
Water Vapor Transmission	E96	2.0 perms-in	2.9 ng/Pa·s·m
Dimensional Stability ⁶ (length / volume change)	D2126		
+158°F(70°C), 97 ± 3% relativity humidity, 14 days			+0.6 / +1.7%
-40°F(-40°C), ambient relativity humidity, 14 days			+0.1 / -0.4%
+212°F(100°C), ambient relative humidity, 14 days			-0.2 / +0.5%
Coefficient of Linear Thermal Expansion	E228		
0 to +250°F (-17 to +121°C)		35 x 10 ⁻⁶ in/in·°F	63 x 10 ⁻⁶ mm/mm·°C
Hot Surface Performance at 300°F (149°C)	C411		Pass
Polyisocyanurate Insulation Requirements	C591		Grade 2, Type VI compliant