



TYPICAL PROPERTIES OF PULTRUDED COMPONENTS

Thomas & Betts Non-Metallic Cable Tray systems are manufactured from glass fiber-reinforced plastic shapes that meet ASTM E-84, Class 1 Flame Rating and self-extinguishing requirements of ASTM D-635. A surface veil is applied during pultrusion to insure a resin-rich surface and ultraviolet resistance.

Properties	Test Method	Unit/ Value	3" & 4" Cable Tray, Cable Channel		6" Cable Tray	
			Longitudinal	Transverse	Longitudinal	Transverse
Tensile Strength	ASTM D638	psi	30,000	7,000	40,000	4,500
Tensile Modulus	ASTM D638	psi x 10 ⁶	2.5	0.8	3.2	0.6
Flexural Strength	ASTM D790	psi	30,000	10,000	40,000	10,000
Flexural Modulus	ASTM D790	psi x 10 ⁶	1.6	0.8	2.1	0.8
Izod Impact	ASTM D256	ft-lbs/in	28	4	28	4
Compressive Strength	ASTM D695	psi	30,000	15,000	40,000	10,000
Compressive Modulus	ASTM D695	psi x 10 ⁶	2.5	1.0	3.2	0.7
Barcol Hardness	ASTM D2583	-	45	45	45	45
Shear Strength	ASTM D732	psi	5,500	5,500	5,500	5,500
Density	ASTM D1505	lbs/in ³	0.058-0.62	-	0.072-0.076	-
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	5.0 x 10 ⁻⁶	-	5.0 x 10 ⁻⁶	-
Water Absorption	ASTM D570	Max %	0.5	-	0.5	-
Dielectric Strength	ASTM D149	V/mil (vpm)	200	-	200	-
Flammability Classification	UL94	VO	-	-	-	-
Flame Spread	ASTM E-84	20 Max	-	-	-	-

FLAME RATING RESULTS

Test	Ignition	Burning	Rating
Flame Resistance (FTMS 406-2023)	75 seconds	75 seconds	-
Intermittent Flame Test (HLT- 15)	-	-	100
Flammability Test (ASTM D635)	None	0 second	-