

MATERIAL PROPERTIES TRESPA ATHLON

Properties	Value	Unit	US Value	Unit	Standard
Physical properties					
Dimensional Stability	≤ 2.5	mm/m	≤ 0.3	in/ft	EN 438
Density	≥ 1,350	kg/m ³	≥ 84.27	lbs/ft ³	ISO 1183
Weight					
Thickness 6 mm (1/4 in)	± 8.5	kg/m ²	± 1.7	lbs/ft ²	
Thickness 8 mm (5/16 in)	± 11	kg/m ²	± 2.25	lbs/ft ²	
Thickness 10 mm (3/8 in)	± 14.0	kg/m ²	± 2.87	lbs/ft ²	
Thickness 13 mm (1/2 in)	± 18.5	kg/m ²	± 3.8	lbs/ft ²	
Thickness 16 mm (5/8 in)	± 22.5	kg/m ²	± 4.6	lbs/ft ²	
Thickness 20 mm (3/4 in)	± 28.0	kg/m ²	± 5.7	lbs/ft ²	
Thickness 25 mm (1 in)	± 35.0	kg/m ²	± 7.2	lbs/ft ²	
Panel Tolerance					
Length & Width	- 0.0 / +5	mm	- 0.0/+0.2	in	EN 438
Thickness	± 0.4 for 6	mm	± 0.016 for 1/4	in	EN 438
	± 0.5 for 8 and 10	mm	± 0.020 for 5/16 and 3/8	in	
	± 0.6 for 13	mm	± 0.024 for 1/2	in	
	± 0.7 for 16	mm	± 0.028 for 5/8	in	
	± 0.8 for 20 and 25	mm	± 0.031 for 3/4 and 1	in	
Optical properties					
Resistance to dry heat at 180°C (356°F)	≥ 4	Rating			EN 438
Resistance to wet heat at 100°C (212°F)	≥ 4	Rating			EN 12721
Resistance to crazing	≥ 4	Rating			EN 438
Resistance to color change (UV-A)	≥ 6	Wool scale			ASTM G53-91 (315 - 400nm)
Mechanical properties					
Modulus of elasticity	≥ 9,000	N/mm ²	≥ 1,300,000	psi	ISO 178
Tensile strength	≥ 70	N/mm ²	≥ 10,100	psi	ISO 527-2
Flexural strength	≥ 100	N/mm ²	≥ 14,500	psi	ISO 178
Resistance to impact by large diameter ball					
Drop height	1800	mm	71	in	
Diameter of indentation	≤ 10	mm	≤ 0.4	in	
Resistance to scratching	≥ 3	Rating			EN 438
Wear resistance for standard quality					
Initial point	≥ 150	Revolutions			EN 438
Wear value	≥ 350	Revolutions			
Chemical properties					
Resistance to staining	5	Rating			EN 438

Region	Quality	Flame Spread	Standard
Behavior in case of fire			
North America	Type FR	Class A	ASTM E84
	Type Standard 6 - 13 mm (1/4 - 1/2 in)	Class B	ASTM E84
	Type Standard 16 - 25 mm (5/8 - 1 in)	Class A	ASTM E84

Region	Quality	Smoke Generation	Standard
Behavior in case of fire			
North America	Type FR	Class A	ASTM E84
	Type Standard	Class A	ASTM E84

Region	Available	Standard
Certificates		
North America	New York City Product Accepted GREENGUARD Indoor Air Quality Certified® GREENGUARD Children & Schools SM	MEA 222-01-M FC2lp94711-2 FC2lp94711-2