

		Symonite HD PVDF	Symonite FR Ultra PVDF
		Unit/Standard	Typical Values
General			
Available thickness:	mm	3 – 10	4
Standard thickness:	mm		4
Standard panel width:	mm		1220
Standard panel lengths:	mm		2150, 2500, 2850
Mass:	kg/m ²	6.66 (4mm) 9.42 (6mm)	8.78 (4mm)
Available surface quality:		Good one side, Good two sides	
Standard surface quality:		Good one side	
Use:		Internal, External	
Aluminium			
Nominal Thickness:	mm	0.5 face 0.5 back	0.5 face 1.4 core 0.5 back
Tensile Strength	Mpa	120	
Yield strength	Mpa	0.2% offset	
Elongation		≥ 12%	
Hardness:	Brignell	36	
Acoustic			
Field Sound Transmission Class:	AS1276-1979	29dB (4mm)	
Thermal			
Expansion:	mm/mm/°C	22 x 10 ⁻⁶ (4mm)	
Resistance (R Value):	m ² K/W	0.013 (4mm)	
Appearance			
Appearance:		AS2924 & AS2925.2	
Gloss level:		25% ± 5% (colour dependent)	
Durability:	ATSMB117-90	No change in bond strength after 1000 hours of salt spray	
Physical and Mechanical Properties			
Minimum radius	mm	600 (4mm) 850 (6mm)	
Modulus of rupture	Mpa	190 (4mm)	
Plate Bending stiffness (D) per mm width (test data, mean – 2std.dev.)	Nmm ² /mm	245,196 (4mm) 639,243 (6mm)	262,825 (4mm)
Recommended max bending moment (per mm width) To limit the extreme fibre stress in the al. skins to 71Mpa	Nmm/mm	115 (4mm) 196 (6mm)	121 (4mm)
Yield bending moment (per mm width) (Initiates permanent deformation of panel) (test data, mean – 2std.dev.)	Nmm/mm	287 (4mm) 490 (6mm)	247 (4mm)
Ultimate bending moment (per mm width) (causes failure in the al. skins) (test data, mean – 2std.dev.)	Nmm/mm	580 (4mm) 1018 (6mm)	606 (4mm)
Peak exposure temperature	°C	140 (4mm)	
Fire performance			
Non-Combustible	AS1530.1	-	Deemed Non-combustible
Early fire hazard properties	AS1530.3	0, 0, 0, 0-1 (3-10mm)	0, 0, 0, 0-1 (4mm)
Designation	BS476.5	P (4-5mm)	-
Fire propagation Index	BS476.6	0.7 (4-5mm)	-
Spread of flame	BS476.7	Class 1 (4-5mm)	-