

Test Method		Assured Premier Composite Decking	Assured Classic Composite Decking	Assured Elite Composite Decking	Assured Premier & Classic Fascia	Assured Premier & Classic Corner Trim	Assured Hollow Composite Joist
Density	ASTM D792-00	1.33g/cm ³					
Moisture Content	ASTM D7031-11 Section 5.15 ASTM D4442-16 Method B	0.20%	0.20%	0.18%	0.20%	0.20%	0.20%
Impact Resistance	ASTM D4495-16	>128 J	>132 J	>137 J			>133 J
Shore Hardness	ASTM D2240-15	D/70/1					
Mould Proof Level	ASTM G 21-15	0 [1]					
Fire Proof Level	EN ISO 9239-1:2010 EN ISO 11925- 2:2010+AC:2011	B-s1. d0					
Water Absorption	Refer to GB/T 17657-0213 Section 4.6	0.37% [2]	0.27% [2]	0.15% [2]	0.32% [2]	0.35% [2]	0.30% [2]
Tensile Strength	ASTM D638-14	9.97 MPa	9.88 MPa	1.05 MPa			8.71 MPa
Shear Strength	ASTM D732-17	14.0 MPa	14.4 MPa	15.2 MPa			13.8 MPa
Bending Strength	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	27.51 MPa	30.61 MPa	35.65 MPa			22.01 MPa
Linear Thermal Expansion	EN15534-1:2014	51.96 ⁻⁶ K ⁻¹					
Screw Withdrawal	ASTM D7032-17 Section 5.5 ASTM D1761-12	2842N	3038N	3173N	1556N	1007N	2453N
Nail Withdrawal	ASTM D7032-17 Section 5.5 ASTM D1761-12	328N	385N	408N	292N	201N	318N
Flexural Modulus	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	3417 MPa	3205 MPa	3833 MPa			3277 MPa
Flexural Strength	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	27.3 MPa	29.5 MPa	32.8 MPa			26.0 MPa
Formaldehyde Emission	ASTM D6007 -14	0.02ppm [3]					

[1] Mould rating standard: 0 — No mildew or discolouration on the surface

[2] Water absorption, %=(Mass after immersion-Mass before immersion)/Mass before immersion×100

[3] 1 ppm = 1 mg/kg = 0.0001%

Test Method		Assured Modern Sanded Composite Cladding	Assured Modern Grained Composite Cladding	Assured Modern Fascia	Assured Modern Corner Trim	Assured Hollow Composite Batten
Density	ASTM D792-00	1.33g/cm ³				
Moisture Content	ASTM D7031-11 Section 5.15 ASTM D4442-16 Method B	0.20%	0.20%	0.20%	0.20%	0.20%
Impact Resistance	ASTM D4495-16	>103 J	>112 J			>133 J
Shore Hardness	ASTM D2240-15	D/70/1				
Mould Proof Level	ASTM G 21-15	0 [1]				
Fire Proof Level	EN ISO 9239-1:2010 EN ISO 11925- 2:2010+AC:2011	B-s1. d0 (Tested on our composite material not on the product)				
Water Absorption	Refer to GB/T 17657-0213 Section 4.6	0.34% [2]	0.31% [2]	0.32% [2]	0.35% [2]	0.30% [2]
Tensile Strength	ASTM D638-14	9.22 MPa	9.24 MPa			8.71 MPa
Shear Strength	ASTM D732-17	13.9 MPa	14.1 MPa			13.8 MPa
Bending Strength	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	26.41 MPa	26.75 MPa			22.01 MPa
Linear Thermal Expansion	EN15534-1:2014	51.96 [°] K ⁻¹				
Screw Withdrawal	ASTM D7032-17 Section 5.5 ASTM D1761-12	1883N	1896N	1556N	1007N	2453N
Nail Withdrawal	ASTM D7032-17 Section 5.5 ASTM D1761-12	377N	389N	292N	201N	318N
Flexural Modulus	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	2135 MPa	2344 MPa			3277 MPa
Flexural Strength	ASTM D7031-11 Section 5.5 & ASTM D6109-13 Method A	34.6 MPa	34.1 MPa			26.0 MPa
Formaldehyde Emission	ASTM D6007 -14	0.02ppm [3]				

[1] Mould rating standard: 0 — No mildew or discolouration on the surface

[2] Water absorption, %=(Mass after immersion-Mass before immersion)/Mass before immersion×100

[3] 1 ppm = 1 mg/kg = 0.0001%

Test Method		Pedestals
Density	ASTM D792-08	0.8878g/cm ³
Tensile Strength	ASTM D638-14	31.21 MPa
Anti-UV	ASTM D695-10	Before Ageing:19483.39N - After Ageing:18365.20N
Flexural Strength	ASTM D790-17	33.52 MPa
Flexural Modulus	ASTM D790-17	1376.23 MPa
Shore Hardness	ASTM D2240-05	35D
Compression Load	ASTM D695-10	>19485.32N
Melting Point	ASTM D794-01	169.2 C°
Glass Transition Temperature	ASTM D3418-08	- 24.6 C°

Test Method	DIN EN ISO			Result
Density	1183-1			1.0529 g/cm ³
3 Point Bend	178	Flexural Stress	-5 °C	35.1 MPa
		Bending E-Modulus		2,261 MPa
		Flexural Stress	23 °C	24.0 MPa
		Bending E-Modulus		1,424 MPa
		Flexural Stress	65 °C	16.5 MPa
		Bending E-Modulus		856 MPa
Timed 3 Point Bend	899-2	Bending E-Modulus	1 hour	1,159 MPa
			24 hours	943 MPa
			100 hours	816 MPa
Tensile	527-2	Strength	15.6 MPa	
		Tensile E-Modulus	1,490 MPa	
		Elongation	1.7%	
Timed Tensile	899-1	Tensile e-modulus	1 hour	1,043 MPa
			24 hours	975 MPa
			100 hours	852 MPa
Pressure Characteristics	604	Compression Strength	1% Stress	2.5 MPa
			2% Stress	5.3 MPa
			10% Stress	27.9 MPa
			Compressive Stress at yield	29.0 MPa
		Pressure E-Modulus	815 MPa	
Charpy Test	179	Impact Resistance	12 KJ/m ²	
Impact Shore Hardness	868	Shore Hardness	62	
Water Absorption	62	23 °C, 50% r.L, 23 °C in water, 100 °C in water		< 1%
Resistance	60093 ⁴	Surface Resistance	1.5 x 10 ¹⁴ Ω	
		Specific Surface Resistance	1.5 x 10 ¹⁵ Ω	
		Flow/Contact Resistance	>2.0 x 10 ¹⁴ Ω	
		Specific Flow/Contact Resistance	>8.4 x 10 ¹⁴ Ω	
Ball Striking Test	2039-1	Ball Striking Hardness	39.52 N/mm ²	
Thermal Expansion		Coefficient Of Thermal Expansion	0.0001510648 1/°C	
Screw Pull Out Force		Drilled Material/Non Pre-Drilled	8,230 N/8,140 N	

