

Chinese WPC Wood's Technical Data

COMPOSITE WOOD DECKING			
The composite wood decking materials shall meet the following technical requirement:			
NO	Technical Requirement	Standard	Minimum Results
1	Compression strength(at 50% deformation)	ASTM D695-08	181
2	Compressive strength	ASTM D695-08/2002a	20.6Mpa
3	Vicat softening temperature	ASTM D1525-07/2006	83.4Degree C
4	Mechanical fastener holding test	ASTM D1037-06a Section 16	777.0N
5	Impact resistance	ASTM D4495-00:2005	47J
6	Specific gravity	ASTM D2395-07a Method A/D792:2000	0.7415
7	Ignitability	AS/NZS 1530.3:1999	13/20
8	Spread of flame	AS/NZS 1530.3:1999	0/10
9	Heat evolved	AS/NZS 1530.3:1999	1/10
10	Smoke developed/Flame test	AS/NZS 1530.3:1999/D635:2000	7/10
11	Density(kg/m3)	ASTM D2395; 2007a/D792:2000	1376.640 kg/m3
12	Shore D Hardness,median	ASTM D2240:2000/D:2000	85
13	Water absorption(%)	ASTM D1037:2006a Section 23 Method A/D570:1998	After 2 hours-0.24%
		ASTM D1037:2006a Section 23 Method A/D570:1998	After 2 hours-0.69%
14	Nail pull resistance/Screw withdrawal test	ASTM D1037:2006a Section 14/D6117:1997	791N
15	Maximum tensile strength(Mpa)	ASTM D638:2003	15.6Mpa
	Modulus of elasticity(Mpa)	ASTM D638:2003	1684Mpa
16	Elongation at break(%)	ASTM D638:2003	2.7%
17	Flexural strength(Mpa)	ASTM D6109:2005	16.7Mpa
	Modulus of elasticity(Mpa)	ASTM D6109:2005	1921Mpa
18	Maximum compressive strength(Mpa)	ASTM D695:2002a	193Mpa
19	Coefficient of thermal expansion	ASTM E931:2000	A)After a1(25 to 50°C):92 um/m°C
			B)After a2(90 to 100°C):298 um/m°C
20	Fire test(performance)	A)BS476:Part 6:1989/ASTM E84:2009c/AS/NZS 1530.3:1999	Class 2
		B)BS476:Part 7:1997 or ASTM E84:2009c/AS/NZS 1530.3:1999	Class 2
		C)ASTM E84:Part 7:1997 or ASTM E84:2009c/AS/NZS 1530.3:1999	Class B
21	Linear thermal expansion coefficient	ASTM D696-2008	62.50um/m°C

