

Technical information (219x26)

Draign



The details of the composite material is as following:

- 30% HDPE (the first class recycled plastic)

-60% special treated wood powder.

-10% chemical additives including anti-UV agent , ant-oxidation agent, coupling agent, colorant , stabilizer and reinforcing agent etc.

The Composite Wall Cladding materials shall meet the following technical requirements:

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	10/ 10
11	Estimated Weight (kg/m)		3.1 (kg/m)
	Density (kg/m ³)	ASTM D2395:2007a/D792:2000	1.35 (kg/m ³)
12	Shore D Hardness, median	ASTM D2240:2000/D:2000	53
13	Water absorption (%)	ASTM D1037:2006a Section 23 Method A/D570:1998	After 2 hours-0.33%
		ASTM D1037:2006a Section 23 Method A/D570:1998	After 24 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	15.6 Mpa
	Modulus of elasticity (Mpa)	ASTM D638:2003	1684 Mpa
16	Elongation at break (%)	ASTM D638:2003	0.027
17	Flexural strength (Mpa)	ASTM D6109:2005	32.2 Mpa
	Modulus of elasticity (Mpa)	ASTM D6109:2005	2101 Mpa
18	Maximum compressive strength (Mpa)	ASTM D695:2002a	193 Mpa
19	Coefficient of thermal expansion	ASTM E831:2000	A) After a1(25 to 50°C):92um/m°C
		ASTM E831:2000	B) After a2 (90 to 110°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: 1999 or ASTM E84:2009c/AS/NSZ 1530.3:1999	Class B
21	Linear thermal expansion coefficient	ASTM D696-2008	62.5 um/m°C