

Test Report

Report Number:150827004SHF-BP-2R1

Applicant Name: Zhejiang Terasun Air Duct Co., Ltd.**Original Report Date:** December 1, 2015**Revised Date:** December 7, 2015**Applicant Address:** (Maren) Chongren Industrial Clustering Area, Shengzhou, 312473, China**Attn:** Lisa**Sample Description:**

Product: FIBER CEMENT BOARD

Model: TSM

Samples Quantity: 15 pieces

Sample ID: S150827004SHF-001~015

Date Received: 2015-08-26

Date Test Conducted: 2015-08-27~2015-12-01

Tests Conducted:

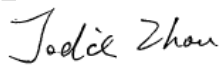
Test Methods: Please see the next page(s).

Conclusion:

For details refer to attached page(s). Supersede to Report No. 150827004SHF-BP-2 (add nominal thickness and density.)

The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

Should you have any queries about the test report, please contact:

Approved by:**Checked by:****Prepared by:**Sun Sun
Assistant ManagerJodie Zhou
Senior Technical SupervisorDaniel Zhang
Senior Project Engineer

Test Items, Method and Results:

Test Standard: EN 12467:2012

Clause	Test Requirement	Test Result	Verdict		
5.3.4	Tolerance on nominal dimensions				
5.3.4.1	Tolerance on length and width Tolerance on length and width shall be in accordance with Table 1, for the appropriate level.		Measured: average 2402 mm*1201 mm Deviation: 0% and +2mm Complied Level I	Pass	
	Nominal Dimension	Level I			Level II
	A ≤600mm	±3mm			±4mm
	600mm<a≤1000mm	±3mm			±5mm
	1000mm<a≤1600mm	±0.3%a			±0.5%a
	1600mm<a	±5mm			±8mm
a is the nominal width or length					
5.3.4.2	Tolerance on thickness For textured sheets, tolerance shall be in accordance with Table 3.		Measured: average 11.65 mm Max. 11.77 mm Min. 11.54 mm Nominal thickness was 12 mm	Pass	
	e≤6mm	±0.6mm			
	6mm<e≤20mm	-10%e +15%e			
	e>20mm	-2mm +3mm			
5.3.5	Tolerance on shape				
5.3.5.1	Straightness of edges The tolerance on the straightness of edges are defined as a percentage of the length of the edge of the relevant dimensions (length or width), and shall be in accordance with table 4 for the appropriate level.		Measured: Max. 0.04% Complied Level I	Pass	
	Level I	Level II			
	0.1%	0.3%			
5.3.5.2	Squareness of edges The tolerance on squareness of sheets shall be in accordance with table 5, for the appropriate level.		Measured: Max. 0.57 mm/m Complied Level I	Pass	
	Level I	Level II			
	2 mm/m	4mm/m			

5.4.2	<p>Apparent density</p> <p>The manufacture shall specify in his literature the minimum apparent density for each category of sheet. When tested in accordance with the method specified in 7.3.1 the density shall be not less than this value</p>	<p>Measured: average 0.95 g/cm³ From 0.94 g/cm³ to 0.99 g/cm³</p> <p>Nominal apparent density: <1 g/cm³</p>	Pass
5.4.4	<p>Mechanical characteristics—Bending strength</p> <p>When tested as specified in 7.3.2, the minimum modulus of rupture of the sheets, expressed in megapascals, shall be as specified in table 6. The MOR shall be the average of the values obtained from testing the sample in both directions.</p>	<p>Wet condition: average 6.2 MPa</p> <p>Class 1 (Category A&B requirement)</p>	Pass
5.4.5	<p>Water impermeability for Categories A, B and D</p> <p>When tested in accordance with 7.3.3, traces of moisture may appear on the under face of the sheet, but in no instance shall there be any formation of drops of water.</p>	<p>The product is Category A.</p> <p>There was no formation of drops of water.</p>	Pass
5.5.2	<p>Freeze-thaw for categories A, B and D</p> <p>When tested in accordance with 7.4.1, after 100 freeze-thaw cycles for Category A and 25 cycles for Category B and D, the ratio R_L as defined in 7.4.1.4 shall be not less than 0.75.</p>	<p>The product is Category A.</p> <p>R_L = 0.96</p>	Pass
5.5.3	<p>Heat-rain for categories A and B</p> <p>When tested in accordance with 7.4.2, after 50 heat-rain cycles for Category A and 25 cycles for Category B, any visible cracks, delamination, warping and bowing or other defects in the sheets shall not be of such a degree as to affect their performance in use.</p> <p>a) Water tightness is tested according to 5.4.5. b) Warping and bowing are visually assessed.</p>	<p>The product is Category A.</p> <p>1) No formation of drops of water; 2) No visible cracks, delamination, warping and bowing or other defects in the sheets</p>	Pass
5.5.4	<p>Warm water for categories A, B, C and D</p> <p>When tested in accordance with 7.3.5, after 56days at 60°C, the radio R_L as defined in 7.3.5.4 shall be not less than 0,75.</p>	<p>The product is Category A.</p> <p>R_L=0.92</p>	Pass
5.5.5	<p>Soak-dry for categories A, B, C and D</p> <p>When tested in accordance with 7.3.6, after 50 soak-dry cycles for category A and 25 cycles for category B, C and D the radio RL as defined in 7.3.6.4 shall be not less than 0,75</p>	<p>The product is Category A.</p> <p>R_L=0.95</p>	Pass

Appendix A: Sample photos



Fig.1 Sample as received

The End of Report

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