

Test Report

Report Number: 160316008SHF-BP-3

Applicant Name: FACTORY OF UNITED MINING INDUSTRIES **Report Date:** 2016.4.18**Applicant Address:** AL-RAZI STREET, LIGHT INDUSTRIAL AREA, YANBU AL-SINAYAH, YANBU-KSA**Attn:** MR. SHAKEER HUSSAIN**Sample Description:**

Product: Fiber cement board
Model: 12mm
Sample Quantity: 15 pieces
Sample ID: S160316008SHF.003
Date Received: 2016.2.24
Date Test Conducted: 2016.3.16~2016.4.18

Tests Conducted:

As requested by the applicant, for details refer to attached pages(s).

Conclusion:

For details refer to attached page(s).
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.

Test Items, Method and Results:

Test Items	Test Method	Test Requirements			Test Results	Verdict
		Grade	Wet (Mpa)	Equilibrium (Mpa)		
Flexural strength	ASTM C1185-08(2012)	I	≥4	≥4	Wet: 5.1 Mpa	Grade I
		II	≥7	≥10		
		III	≥13	≥16	Equilibrium: 7.6 Mpa	
		IV	≥18	≥22		

Note:

1. The requirements was for Type A sheets in accordance with ASTM C1186-08(2012).

Test Items, Method and Results:

Test Items	Test Method	Test Requirements	Test Results	Verdict
Density	ASTM C1185-08(2012)	Comply with the value stated by the manufacturer.	Stated: no claimed Tested: 1350 kg/m ³	NA

Note:

1. The requirements was in accordance with ASTM C1186-08(2012).

Test Items, Method and Results:

Test Items	Test Method	Test Requirements	Test Results	Verdict
Length and width	ASTM C1185-08(2012)	Tolerance: $\pm 0.5\%$ & max. variation $\pm 6\text{mm}$	Norminal: Length: 2400 mm Width: 1200 mm Tested: Length: 1200 mm Tolerance: 0 % Max. Variation: 0 mm Width: 1202 mm Tolerance: 0.2 % Max. Variation: 2 mm	Pass
Thickness		± 1.3 mm	Norminal: 12 mm Tested: 11 mm	Pass
Squareness		$\leq 2.6\text{mm/m}$	0 mm/m	Pass
Edge Straightness		$\leq 2.6\text{mm/m}$	Length: 0.4 mm/m Width: 0.8 mm/m	Pass

Note:

1. The requirements was in accordance with ASTM C1186-08(2012).

Test Items, Method and Results:

Test Items	Test Method	Test Requirements	Test Results	Verdict
Mositure movement	ASTM C1185-08(2012)	The linear variation with change in moisture content shall be stated in length based on a relative humidity change from 30 to 90%.	Length change: 0.04 % Width change: 0.05 %	NA

Note:

1. The requirements was in accordance with ASTM C1186-08(2012).

Test Items, Method and Results:

Test Items	Test Method	Test Requirements	Test Results	Verdict
Water absorption	ASTM C1185-08(2012)	Submersion time: 48 hour Room temperature Increase in weight	Absorption: 32.6 %	NA

Note:

1. The requirements was in accordance with ASTM C1186-08(2012).

Test Items, Method and Results:

Test Items	Test Method	Test Requirements	Test Results	Verdict
Mositure content	ASTM C1185-08(2012)	Equilibrium condition: 23°C, 50% R.H. Dry condition: 90°C in oven	M: 11.9 %	NA

Note:

1. The requirements was in accordance with ASTM C1186-08(2012).

Test Items, Method and Results:

Test Items	Test Method	Test Requirements	Test Results	Verdict
Water Tightness	ASTM C1185-08(2012)	Not prohibited from showing traces of moisture on the underside of the sheet, but in no instance shall there be any formation of drops of water.	There was no drops of water but showing traces of moisture on the underside of the sheet.	Pass

Note:

1. The requirements was for Type A sheets in accordance with ASTM C1186-08(2012).

Test Items, Method and Results:

Test Items	Test Method	Test Requirements	Test Results	Verdict
Surface Burning	ASTM E84-15	Flame spread index=0 Smoke developed index \leq 5	Flame spread index= 0 Smoke developed index= 0	Pass

Note:

1. The requirements was in accordance with ASTM C1186-08(2012).

Appendix A: Sample received photo



Approved by:

Name: Sun Sun
Title: Approver

Name: Sally Xie
Title: Reviewer

Name: Jodie Zhou
Title: Project Engineer

The End of Report

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.