

FLEXURAL STRENGTH OF GYPSUM SHEATHING BOARD - TEST REPORT

Client	United Mining Industries Co.	Report Date	12 July 2015
Project	United Mining Industries, LIP Area, MYAS	Job No.	SA15-9531
Material Description	Gypsum Sheathing Board	Lab No.	276/1-4
Test Method	ASTM C-473-10	Sample Received by FSL	10 June 2015
Product Description	Fire and Water-Resistant Gypsum Sheathing Board	Sampled by	United Mining Industries

FSL has performed standard testing on samples of gypsum sheathing board to determine the flexural strength. The testing was carried out by supporting the specimen near the ends and applying a transverse load midway between the supports at a uniform rate. The test results and pertinent information are as follows:

1. DIMENSION OF FULL-SIZE GYPSUM SHEATHING BOARD		
Specified Dimensions (mm) (Nominal)	Measured Dimensions (mm) (Average)	Permissible Tolerances (mm) (ASTM C-1396 Requirements)
Length : 2400	2400	-
Width : 1200	1200	- 3
Thickness : 12.5	12.6	± 0.4
2. FLEXURAL STRENGTH (Method A-Constant Rate of Loading)		
(Bearing Edges Perpendicular to Panel Length) Test Specimens	Breaking Load (N)	ASTM C-1396-11 Specification Requirements
S-1	498	
S-1	505	
S-3	510	
S-4	495	
Average Value	502	489 (Minimum)
3. FLEXURAL STRENGTH (Method A-Constant Rate of Loading)		
(Bearing Edges Parallel to Panel Length) Test Specimens	Breaking Load (N)	ASTM C-1396-11 Specification Requirements
S-1	235	-
S-1	204	-
S-3	229	-
S-4	196	-
Average Value	216	178 (Minimum)
Note: ASTM C-1396-11 "Standard Specification for Gypsum Sheathing board"		

Remarks: The test results indicated **conformance** to the ASTM C-1396-11 specification requirement for the flexural strength.



Approved by: 
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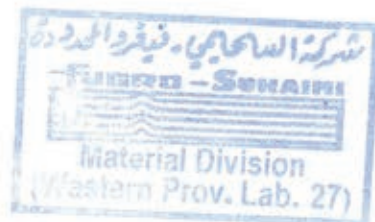
WATER ABSORPTION OF GYPSUM SHEATHING BOARD - TEST REPORT

Client	United Mining Industries Co.	Report Date	12 July 2015
Project	United Mining Industries, LIP Area, MYAS	Job No.	SA15-9531
Material Description	Gypsum Sheathing Board (Nominal Size: L: 2400 x W: 1200 x T: 12.5 mm)	Lab No.	276/1-4
Test Method	ASTM C-473-10	Sample Received by FSL	10 June 2015
Product Description	Fire & Water Resistant Gypsum Sheathing Board	Sampled by	United Mining Industries

FSL has performed standard testing on samples of gypsum sheathing board to determine water absorption. The water absorption of the gypsum sheathing board specimens is determined after conditioning and subsequently immersing the specimens in water for the specified 2 hours elapsed time. The test results and pertinent information are as follows:

Determination	Test Specimens	Test Results (%)	ASTM C-1396-11 Specification Requirements
Water Absorption after 2 hours Immersion (% of the original weight)	S-1	9.1	-
Water Absorption after 2 hours Immersion (% of the original weight)	S-2	9.4	-
Water Absorption after 2 hours Immersion (% of the original weight)	S-3	9.8	-
Water Absorption after 2 hours Immersion (% of the original weight)	S-4	9.6	-
	Average Value	9.5	10.0 (Max.)

Remarks: The test results indicated the test specimens have an average water absorption of 9.5 % by weight which is within the specified permissible limit of 10.0 %. The specimens tested **conform** to the ASTM C-1396-11 specification requirement for the water resistance of Gypsum Sheathing Board.



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