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**EVALUATION OF “MODEL PAN” BOARD MATERIAL
FOR MOISTURE MOVEMENT PROPERTIES
IN ACCORDANCE WITH ICC-ES AC308 (FEB 2016), SECTION 3.1.4**

A Report to: **Ak Alev Manyezit Levha Üretim San. ve Tic. A.Ş.**
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Proposal No.: 16-006-401691, Revision 6

Report No.: 16-06-P0117-MM, RV1
3 pages, 1 appendix

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1.0 INTRODUCTION

At the request of Ak Alev Manyezit Levha Üretim San. ve Tic. A.Ş., Exova was retained to evaluate a cement / gypsum board type material for select physical properties in accordance with ICC-ES AC 386 (Feb 2016), "Acceptance Criteria for Fiber Reinforced Magnesium-Oxide-Based Sheets.", Section 3.1.4, referencing ASTM C1185 test method.

Upon receipt, the sample was assigned the following Exova Sample No.:

Client Sample Identification	Exova Sample No.
"Modelpan" a fire protective glass fiber reinforced magnesium-oxide board Board size: 8' x 4' x 1/2" (nominal)	16-06-P0117-MM

2.0 PROCEDURE

The sample was tested using the following sections ICC-ES AC386:

Test Description	AC 386, Section	Referenced Test Method
Moisture Movement	3.1.4	ASTM C1185, Section 8

3.0 RESULTS

A summary of test results is presented in Table 1. Detailed test results are shown in Appendix A. SI units are the primary units of measure.

Result Table 1 – Physical Properties Result Summary Evaluated against ICC-ES AC386 (Feb 2016) requirement Exova Sample No.: 16-06-P0117 – Modelpan			
Test Description	Requirement	Result	Comment
Moisture Movement, %	-	0.14	No comment

4.0 CONCLUSIONS

The "Modelpan" material submitted by *Ak Alev Manyezit Levha Üretim San. ve Tic. A.Ş.*, has undergone 0.14% linear change when tested as described this report set by ICC –ES AC 386, section 3.1.4.

5.0 REVISION HISTORY

Date:	Revision:	Comments:
2016-12-12	Original Document	N/A
2016-12-28	1	"Modelplan" is replaced by "Modelpan"

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APPENDIX A

Detailed Test Results

Applicable Standard: ICC ES AC 386, Section 3.1.4, Referencing ASTM C1185, Section 8
(1 page)

A1 MOISTURE MOVEMENT

Method ICC-ES AC 386, Section 3.1.4, referencing ASTM C1185, Section 8

Specimen size: 350 mm x 75 mm x 12.5 mm (Nominal)

Equipment: Mitutoyo digital calipers, MII# B10644
THERMOTRON Environment Chamber MII# B04271
Wt. Balance, MII# A10731

Test Start Date: 2016-06-17

Test End Date: 2016-06-28

Table A1 – Width & Length Measurements					
ASTM C 1185 Sections 8					
<i>Exova Sample No. 16-06-P0117-MM</i>					
Sample ID	30%RH , 23°C		90%RH , 23°C		Linear Change, %
	Constant mass, g	Length, mm	Constant mass, g	Length, mm	
Longitudinal -1	277.84	301.56	299.14	301.68	0.04
Transverse -1	272.69	301.29	293.51	301.67	0.13
Longitudinal -2	272.69	301.46	353.98	301.64	0.06
Transverse -2	308.64	300.34	346.94	300.83	0.16
Longitudinal -3	308.15	300.52	334.02	301.57	0.35
Transverse -3	313.55	302.26	340.01	302.61	0.12
Average	-	-	-	-	0.14