

**Dubai Central Laboratory**

Engineering Materials Laboratory Section – Structural Unit

**TEST REPORT**

THERMAL TRANSMISSION PROPERTIES BY HEAT FLOW METER

REPORT NO. : 2013044067 DATE : 22/05/2013  
 WEB REQUEST NO. : DCL-15052013-0098  
 REQUEST NO. : 2013030697 SAMPLE NO. : 2013041299  
 PROJECT NO. : PS13-0049  
 PROJECT NAME : TESTING SERVICE FOR ESPAC BUILDING MATERIALS CO.  
 CONSULTANT : NO SPECIFIC CONSULTANT  
 CONTRACTOR : NO SPECIFIC CONTRACTOR  
 LOCATION : ESPAC BUILDING MATERIALS CO.- K.S.A  
 SOURCE : ESPAC BUILDING MATERIAL CO.- KSA  
 SAMPLE DESCRIPTION : AUTO CLAVED AERATED CONC BLOCK  
 SAMPLE TYPE : NG  
 SUPPORT / FACING : NIL  
 NOM. THICKNESS (mm) : 200  
 NOM. DENSITY (kg/m<sup>3</sup>) : NG

Date of Sampling	: 11/04/2013	Time	: 10:00	Lot No.	: NG
Date of Receiving Sample	: 15/05/2013	Time	: 9:00	Lot Size	: NG
Size of Sample	: 1 No.	Area No.	: -	Sender No.	: NG

DATE SPECIMEN RECEIVED	15/05/2013
DATE OF MEASUREMENT	19/05/2013
DRYING TEMPERATURE (°C) & TIME (h)	105°C, 36 h
SPECIMEN NOMINAL THICKNESS (mm)	50
SPECIMEN NOMINAL DENSITY (kg/m <sup>3</sup> )	NG
SPECIMEN NO.	A

THICKNESS (MEASURED)	MEASURED DENSITY (DRY CONDITION)	MEAN TEMPERATURE	THERMAL CONDUCTIVITY		THERMAL RESISTANCE	
			W/(m·K)		(m <sup>2</sup> ·K) / W	
mm	kg/m <sup>3</sup>	°C	DRY CONDITION	@ 35°C, 60% RH*	DRY CONDITION	@ 35°C, 60% RH
50.6	469.5	35.54	0.1209	0.1295	0.4187	0.3910

**ABSORBED MOISTURE BY WEIGHT (%) @ 35°C & 60% RH**

**1.92**

*Uncertainty of measurement for thermal conductivity at dry condition 0.0011 W/m·K @ 95% confidence level, k factor 2.  
 Abridged ASTM C 518 Test Report.*

\* CALCULATED VALUE AS PER BS EN ISO 10456:2000

SAMPLED BY : ALLAM HANBALI (Mfr.) TESTED BY : MAITHA AL JUMAIRI  
 SAMPLES BROUGHT IN BY : ALLAM HANBALI (Mfr.) TEST START DATE : 16/05/2013  
 SAMPLING METHOD : NOT GIVEN  
 SAMPLING REPORT NO. : NG  
 TEST METHOD : ASTM C-518 : 2010  
 TEST METHOD VARIATION : NIL  
 REMARKS : TEST CARRIED OUT AT DRY CONDITION.  
 THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY.

**VERIFIED BY  
 HEAD OF UNIT**

**This report is computer approved, it does not require any signature**