

**Dubai Central Laboratory**

Engineering Materials Laboratory Section – Structural Unit

**TEST REPORT**

THERMAL TRANSMISSION PROPERTIES BY HEAT FLOW METER

REPORT NO. : 2012087899 DATE : 20/11/2012  
 WEB REQUEST NO. : DCL-12112012-0148  
 REQUEST NO. : 2012063425 SAMPLE NO. : 2012084968  
 PROJECT NO. : PS-1516  
 PROJECT NAME : TESTING SERVICE FOR STYRO INSULATIONS MAT.IND.LLC  
 CONSULTANT : NO SPECIFIC CONSULTANT  
 CONTRACTOR : NO SPECIFIC CONTRACTOR  
 LOCATION : STYRO INS. MAT. IND. LTD. - SHARJAH ,UAE  
 SOURCE : STYRO INSULATION MAT.IND - SHARJAH  
 SAMPLE DESCRIPTION : MOLDED (EXPANDED) POLYSTYRENE SHEET  
 SAMPLE TYPE : SF 20  
 SUPPORT / FACING : NIL  
 NOM. THICKNESS (mm) : 50 NOM. DENSITY (kg/m<sup>3</sup>) : 18 - 20

Date of Sampling	: 09/11/2012	Time	: 10:00	Lot No.	: NG
Date of Receiving Sample	: 12/11/2012	Time	: 11:40	Lot Size	: NG
Size of Sample	: 1 Piece	Area No.	: -	Sender No.	: SF 20

DATE SPECIMEN RECEIVED	12/11/2012
TEST START DATE	13/11/2012
NOM. THICKNESS OF SPECIMEN (mm)	50
TEMPERATURE, RH & TIME AT WHICH SPECIMEN CONDITIONED	35±2°C, 60±5% RH, 48 h
DATE OF CALIBRATION	18/11/2012
TYPE OF MATERIAL USED FOR CALIBRATION	STANDARD REFERENCE MATERIAL
TEST ARRANGEMENT	HORIZONTAL
METERING (TEST) AREA	100mm X 100mm

TEST / SPECIMEN NO.	THICKNESS (MEASURED) mm	DENSITY (MEASURED) kg/m <sup>3</sup>	MEAN TEMP. °C	THERMAL CONDUCTIVITY		THERMAL RESISTANCE		AVG. TEMP. GRADIENT K/m	HEAT FLUX W/m <sup>2</sup> .K.	CHANGE IN MASS (%)	DURATION OF TEST h:mm:ss
				W / (m • K)	Btu-in/h•ft <sup>2</sup> °F	(m <sup>2</sup> •K) / W	°F•h•ft <sup>2</sup> / Btu				
1/1	50.8	19.2	35.06	0.0390	0.2701	1.3030	7.3982	413.63	1243	0.034	01:01:45

Uncertainty of measurement for thermal conductivity 0.0010 W/m.K @ 95% confidence level, k factor 2.  
Abridged ASTM C 518 Test Report.

SAMPLED BY : AHMED SALAH(Mfr.) TESTED BY : MAITHA AL JUMAIRI  
 SAMPLES BROUGHT IN BY : MOHD. SHAFIQ(Mfr.)  
 SAMPLING METHOD : NOT GIVEN  
 SAMPLING REPORT NO. : NG  
 TEST METHOD : ASTM C518 : 2010  
 TEST METHOD VARIATION : NIL  
 REMARKS : THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY.

VERIFIED BY  
HEAD OF UNIT

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



LB 014