

Dubai Central Laboratory
Engineering Materials Laboratory Section – Structural Unit
TEST REPORT
 Steady-State Heat Flux Measurements and Thermal Transmission Properties by Guarded-Hot-Plate Apparatus

REPORT NO. : 2014030884 DATE : 14/04/2014
 WEB REQUEST NO. : DCL-25032014-0110
 REQUEST NO. : 2014017612 SAMPLE NO. : 2014025397
 PROJECT NO. : PS-1661
 PROJECT NAME : TESTING SERVICE FOR LECA BUILDING MAT. TRADING LLC
 CONSULTANT : NO SPECIFIC CONSULTANT
 CONTRACTOR : NO SPECIFIC CONTRACTOR
 LOCATION : LECA - UAE
 SOURCE : NOT GIVEN
 SAMPLE DESCRIPTION : LIGHT EXPANDED CLAY AGGREGATE(LECA)
 SAMPLE TYPE : LECA AGGREGATE
 SUPPORT / FACING : NIL
 NOM. THICKNESS (mm) : NG NOM. DENSITY (kg/m³) : NG

Date of Sampling	: 24/03/2014	Time	: 10:30	Lot No.	: NG
Date of Receiving Sample	: 24/03/2014	Time	: 11:15	Lot Size	: NG
Size of Sample	: 8.3 kg.	Area No.	: -	Sender No.	: NG

APPARATUS : TAURUS HOTPLATE APPARATUS (TLP 800-S)

SIZE OF PLATE (mm)	500
SHAPE OF PLATE	SQUARE
ORIENTATION OF PLATE	HORIZONTAL
SINGLE OR DOUBLE SIDE OPERATION	SINGLE
SECONDARY GUARDING DETAILS	NA
FILL GAS PRESSURE (Pa)	NA

CALIBRATION DETAILS

TYPE OF MATERIAL USED FOR CALIBRATION	CERTIFIED REFERANCE MATERIAL 1RMM-440
DATE OF CERTIFICATION	MARCH - 2010
SOURCE OF CERTIFICATION	INSTITUTE OF REFERENCE MATERIALS AND MEASUREMENTS

SPECIMEN

DEGREE OF HOMOGENITY OR ANISOTROPY : LIGHT EXPANDED CLAY AGGREGATE
 SPECIMEN CONDITIONING TEMP; HUMIDITY & DURATION : 35±2°C, 60±5% RH, 24 h

Specimen No.	BEFORE CONDITIONING				AFTER CONDITIONING				AFTER TEST
	Length (mm)	Width (mm)	Thickness (mm)	Mass (Kg.)	Length (mm)	Width (mm)	Thickness (mm)	Mass (Kg.)	Mass (Kg.)
1	500.0	500.0	70.0	5.1146	500.0	500.0	70.0	5.1146	5.1146

**AUTHORIZED BY
 HEAD OF UNIT**

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

Dubai Central Laboratory
 Engineering Materials Laboratory Section – Structural Unit
TEST REPORT
 Steady-State Heat Flux Measurements and Thermal Transmission Properties by Guarded-Hot-Plate Apparatus

REPORT NO. : 2014030884 DATE : 14/04/2014
 WEB REQUEST NO. : DCL-25032014-0110
 REQUEST NO. : 2014017612 SAMPLE NO. : 2014025397
 PROJECT NO. : PS-1661
 PROJECT NAME : TESTING SERVICE FOR LECA BUILDING MAT. TRADING LLC
 CONSULTANT : NO SPECIFIC CONSULTANT
 CONTRACTOR : NO SPECIFIC CONTRACTOR
 LOCATION : LECA - UAE
 SOURCE : NOT GIVEN
 SAMPLE DESCRIPTION : LIGHT EXPANDED CLAY AGGREGATE(LECA)
 SAMPLE TYPE : LECA AGGREGATE
 SUPPORT / FACING : NIL
 NOM. THICKNESS (mm) : NG NOM. DENSITY (kg/m³) : NG

Date of Sampling	: 24/03/2014	Time	: 10:30	Lot No.	: NG
Date of Receiving Sample	: 24/03/2014	Time	: 11:15	Lot Size	: NG
Size of Sample	: 8.3 kg.	Area No.	: -	Sender No.	: NG

TEST DETAILS & MEASURED VALUES

TEST / SPECIMEN NO.	THICKNESS (MEASURED)	DENSITY (MEASURED)	HOT SURFACE TEMP.	COLD SURFACE TEMP.	TEMP. DIFFERENCE ON SAMPLE	HEATING POWER	MEASURED SECTION AREA	SPECIFIED MEAN TEMP.	THERMAL CONDUCTIVITY AT SPECIFIED MEAN TEMP.	THERMAL RESISTANCE AT SPECIFIED MEAN TEMP.
	mm	kg/m ³	°C	°C	K	W	m ²	°C	W/m.K	m ² K/W
1	70.0	292.3	47.5	27.0	20.5000	6.657	0.250	35.0	0.09025	0.73286

SAMPLED BY : HAMED (TRADER) TESTED BY : JAI GOVIND
 SAMPLES BROUGHT IN BY : HAMED (TRADER) TEST START DATE : 26/03/2014
 SAMPLING METHOD : NOT GIVEN
 SAMPLING REPORT NO. : NG
 TEST METHOD : ASTM C 177:10
 TEST METHOD VARIATION : NIL
 REMARKS : THIS REPORT REPRESENTS THE SUBMITTED SAMPLE ONLY.
 TESTED AS LOOSE FILL INSULATION. SAMPLE FILLED IN A FRAME OF SIZE 500 X 500 X 70mm.

**AUTHORIZED BY
 HEAD OF UNIT**

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