



DEPARTMENT OF BUILDING AND ENERGY TECHNOLOGIES
KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH

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LABORATORY TESTING REPORT

TEST REPORT NO. 44/2012


Client : Al-Qatami Insulation Material Factory.

Sample : Expanded Polystyrene Board; White Colour

Date : 20th June 2012.

Tests Performed : - Apparent Density
- Compressive Strength.
- Thermal Conductivity.


The results in this report relate to the samples
submitted by the client and to no other.


Approved by
PM/CBM
Eng. Suad Al-Bahar

No Liability


Lab Supervisor
Eng. Ali M. Ali


Checked and Verified by
Mr. Amer Alarbeed


Test conducted by
Mr. Tarun K. Mukherjee

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LABORATORY TESTING RESULTS

Client : Al-Qatami Insulation Material Factory.


Test : Apparent Density; ASTM D 1622

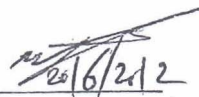
Sample : Expanded Polystyrene Board; White Colour

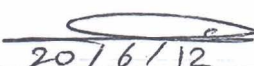
Procedure : Standard procedure of ASTM D 1622 was applied Specimen dimensions and weight were measured and then density was calculated.

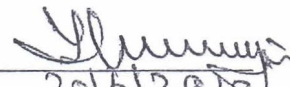
Results :

Specimen No.	Apparent Density (kg/m ³)
1	17.16
2	17.86
3	18.02
4	16.92
5	16.74
Average	17.34


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20/6/2012
Lab Supervisor
Eng. Ali M. Ali


20/6/12
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20/6/2012
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LABORATORY TESTING RESULTS

Client : Al-Qatami Insulation Material Factory.


Test : Compressive Strength; ASTM D 1621.


Sample : Expanded Polystyrene Board; White Colour

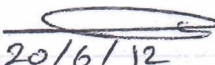
Procedure : The standard procedure of ASTM D 1621 was applied on 100 mm cube specimens received from client.

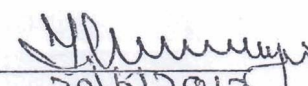
Results

Specimen No.	Compressive Strength at 10% Deformation (kPa)
1	102
2	108
3	110
4	102
5	101
Average	105


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LABORATORY TESTING RESULTS

Client : Al-Qatami Insulation Material Factory.


Test : Thermal Conductivity; ASTM C 518.

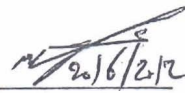
Sample : Expanded Polystyrene Board; White Colour.

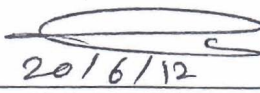
Procedure : Standard procedure of ASTM C 518 was applied at mean temperature of 40 °C (25 °C to 55°C). Specimen size was 300 mm x 300mm x 50 mm. were used.

Results :

Sample No.	Thermal Conductivity, K	
	(W/m °K)	(Btu in/hr ft ² °F)
1	0.04166	0.28885
2	0.04183	0.29000
Average	0.04175	0.2893


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2016/2/2
Lab Supervisor
Eng. Ali M. Ali


2016/1/2
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2016/2018
Test conducted by
Mr. Tarun K. Mukherjee

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Date: 13th December, 2017.

To: Ibrahim Mohammed Abbas Production Manager, Styroq

Prepared by: Dr. Milind Mhalgi MDTs-Rigid Support.

Subject: Test Report Styroq

SABIC laboratory tests have shown the following results for Polystyrene Foam samples submitted by Styroq

Test Description	Test Method	Unit	Average Result
Density	Normal Density	Kg/m ³	21
Thermal Conductivity (k-value)	DIN 52 612	W/m K	0.027
Compression Resistance at 10%	ASTM D695-10	kPa	131
Flexural Strength	ASTM D790-10	kPa	266
Flexural Modulus	ASTM D638-10	MPa	7.1
Water Vapor Permeability	DIN 53 429	g/m ² /day	33.3
Oxygen Index	In-house	%	37.2

Please note that the above figures are only test results, can only be used as a guidance and cannot be used as a certificate. SABIC is not responsible for any consequences which were made based on the above test results.