



### CERTIFICATE OF PRODUCT CONFORMITY

Dubai Central Laboratory Department (DCLD) of Dubai Municipality hereby attests that the product(s)

### Rigid Cellular Polystyrene Thermal Insulation

(Details as per the attached Scope of Certification)

manufactured by:

### ARABIAN CHEMICAL COMPANY LTD (POLYSTYRENE) P.O.BOX 30135-21477 JEDDAH IND.EST 3RD PHASE, JEDDAH, KSA

have been assessed in accordance with DCLD Document Ref. No. DM-DCLD-RD-DP21-2001 (IC) "General Rules for DM third party product certification system through factory assessment" and the relevant Specific Rules, and were found in conformity with the standard specification:

#### **ASTM C578 - 2018**

Accordingly, DCLD hereby authorizes the above manufacturer to affix the DCL Product Conformity Mark on the above-mentioned product(s).

> for / ENGR. AMIN AHMED AMIN Director, Dubai Central Laboratory Department **Dubai Municipality**





CL20020738 Certificate No: Valid Until: 21/03/2021



Current Issue Date: 22/03/2020 Original Issue Date: 22/03/2020

The attached Scope of Certification bearing the same Certificate Number forms an integral part of this Certificate. This Certificate is an electronic document subject to the Terms and Conditions of the Product Certification System and shall not be reproduced except in full.

DM-DCLD-F-IC-2031 Rev 16





## DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

### SCOPE OF CERTIFICATION REV.01 FOR CERTIFICATE NO. CL20020738

Certificate Issued To: ARABIAN CHEMICAL COMPANY LTD (POLYSTYRENE)

P.O.BOX 30135-21477 JEDDAH IND.EST 3RD PHASE, JEDDAH, KSA

**Applicable Standard Specification**: ASTM C 578 – 18 – Standard Specification for Cellular Rigid

Polystyrene Thermal Insulation

Applicable Specific Rules: DM-DCLD-RD-DP 21-2106 (IC) "Specific Rules for

Certification of Rigid Cellular Polystyrene Thermal Insulation as

per ASTM C 578 – 18 Through Factory Assessment".

S/N	PRODUCT DESCRIPTION	BRAND NAME	PRODUCT DETAILS
1	Rigid Cellular Extruded Polystyrene Thermal Insulation Board CFC Free (see Note 3)	WALLMATE: CW-TG	Size: 1250 x 600 mm & 2500 x 600mm  Thickness: 30 - 100 mm  ASTM Type IV
2	Rigid Cellular Extruded Polystyrene Thermal Insulation Board CFC Free (see Note 3)	FLOORMATE: FM 500 SL-G	Size: 1250 x 600 mm & 2500 x 600mm  Thickness: 30 - 100 mm  ASTM Type VII
3	Rigid Cellular Extruded Polystyrene Thermal Insulation Board CFC Free (see Note 3)	HIGH DENSITY HD 300 SL-G	Size: 1250 x 600 mm & 2500 x 600mm  Thickness: 30 - 100 mm  ASTM Type V
4	Rigid Cellular Extruded Polystyrene Thermal Insulation Board  CFC Free (see Note 3)	ROOFMATE: RMSL	Size: 1250 x 600 mm & 2500 x 600mm  Thickness: <b>40 - 100 mm*</b> ASTM Type VI

#### \*Revised scope to add thickness range.

NOTE1: This document forms part of the Certificate of Product Conformity bearing the same certificate number.

NOTE2: The above product shall bear the DCL Conformity Mark (applied on each product or on the packaging).

NOTE 3: CFC Free as per declaration from the company, in accordance with the 2017 Al Sa'fat Dubai Green Building

Evaluation System.

NOTE4: This scope superseded previous issued scope on 22 MARCH 2020





## DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

# SCOPE OF CERTIFICATION REV.01 FOR CERTIFICATE NO. CL20020738

TABLE 1 (EXTRUDED)

## PHYSICAL PROPERTY REQUIREMENTS OF RIGID CELLULAR POLYSTYRENE THERMAL INSULATION

10% deformation, which occurs first, min kPa  2 THERMAL RESISTANCE of 25.4 0.77 0.84 0.65 0.84 0.84 0.84 0.84 mm thickness, @ mean temp. 35°C and 60% RH min, K-m²/W  3 THERMAL CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH  4 FLEXURAL STRENGTH, min, kPa 276 276 310 345 414 517 690  5 WATER VAPOR PERMEANCE of 25.4 1.5 1.5 1.5 1.1 1.1 1.1 mm thickness, max, perm  6 WATER ABSORPTION	S	PROPERTIES	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE
RESISTANCE @ yield or 10% deformation, which occurs first, min kPa         10% deformation, which occurs first, min kPa         10% deformation, which occurs first, min kPa         2         THERMAL RESISTANCE of 25.4 mm thickness, @ mean temp. 35°C and 60% RH min, K-m²/W         0.84         0.93         0.0303         0.0303 <th< th=""><th>N</th><th></th><th>XII</th><th>x</th><th>XIII</th><th>IV</th><th>VI</th><th>VII</th><th>v</th></th<>	N		XII	x	XIII	IV	VI	VII	v
10% deformation, which occurs first, min kPa  2 THERMAL RESISTANCE of 25.4 mm thickness, @ mean temp. 35°C and 60% RH min, K-m²/W  3 THERMAL CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH 60% RH  4 FLEXURAL STRENGTH, min, kPa  276  5 WATER VAPOR PERMEANCE of 25.4 mm thickness, max, perm  6 WATER ABSORPTION by total immersion, max volume %  7 DIMENSIONAL STABILITY (change in dimension), max, %  8 OXYGEN INDEX, min, 24 24 24 24 24 24 24 24 24 24 24 24 24 2	1	COMPRESSIVE							
Occurs first, min kPa		RESISTANCE @ yield or	104	104	<i>138</i>	173	276	414	690
THERMAL RESISTANCE of 25.4 mm thickness, @ mean temp. 35°C and 60% RH min, K-m²/W  THERMAL CONDUCTIVITY, max, W/m-K @ 35°C and 60% RH  4 FLEXURAL STRENGTH, min, kPa  THERMAL		10% deformation, which							
RESISTANCE of 25.4 mm thickness, @ mean temp. 35°C and 60% RH min, K-m²/W         0.77         0.84         0.65         0.84         0.84         0.84           3         THERMAL CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH         0.0330         0.0303		occurs first, min kPa							
mm thickness, @ mean temp. 35°C and 60% RH min, K-m²/W       0.0330 0.0303	2	THERMAL							
temp. 35°C and 60% RH min, K-m²/W  THERMAL CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH  FLEXURAL STRENGTH, min, kPa  THICKNESS, max, perm  WATER ABSORPTION by total immersion, max volume %  WATER STRENGEN  TO DIMENSIONAL STABILITY (change in dimension), max, %  OXYGEN INDEX, min, VACUATION  A.0330  A.0303  A.0		RESISTANCE of 25.4	0.77	0.84	0.65	0.84	0.84	0.84	0.84
min, K-m²/W         3         THERMAL CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH         0.0330         0.0303		mm thickness, @ mean							
3         THERMAL CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH         0.0330         0.0303		temp. 35°C and 60% RH							
CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH  4 FLEXURAL STRENGTH, min, kPa 276 276 310 345 414 517 690  5 WATER VAPOR PERMEANCE of 25.4 1.5 1.5 1.5 1.1 1.1 1.1 mm thickness, max, perm  6 WATER ABSORPTION by total immersion, max volume %  7 DIMENSIONAL STABILITY (change in dimension), max, %  8 OXYGEN INDEX, min, 24 24 24 24 24 24 24 24 24 24 24 24 24		min, K-m²/W							
W/m·K @ 35°C and 60% RH  4 FLEXURAL STRENGTH, min, kPa 276 276 310 345 414 517 690  5 WATER VAPOR PERMEANCE of 25.4 1.5 1.5 1.5 1.1 1.1 1.1 mm thickness, max, perm  6 WATER ABSORPTION by total immersion, max volume %  7 DIMENSIONAL STABILITY (change in dimension), max, %  8 OXYGEN INDEX, min, 24 24 24 24 24 24 24 24 24 24 24 24 24	3	THERMAL							
60% RH  4 FLEXURAL STRENGTH, min, kPa 276 276 310 345 414 517 690  5 WATER VAPOR PERMEANCE of 25.4 1.5 1.5 1.5 1.1 1.1 1.1 1.1 mm thickness, max, perm  6 WATER ABSORPTION by total immersion, max volume %  7 DIMENSIONAL STABILITY (change in dimension), max, %  8 OXYGEN INDEX, min, 24 24 24 24 24 24 24 24 24 24 24 24 24		CONDUCTIVITY, max,	0.0330	0.0303	0.0392	0.0303	0.0303	0.0303	0.0303
4       FLEXURAL STRENGTH, min, kPa       276       276       310       345       414       517       690         5       WATER VAPOR PERMEANCE of 25.4 mm thickness, max, perm       1.5       1.5       1.5       1.5       1.1 <td></td> <td>W/m⋅K @ 35°C and</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		W/m⋅K @ 35°C and							
min, kPa       276       276       310       345       414       517       690         5       WATER VAPOR PERMEANCE of 25.4 mm thickness, max, perm       1.5       1.5       1.5       1.1 </th <td></td> <td>60% RH</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		60% RH							
5       WATER VAPOR PERMEANCE of 25.4 I.5 I.5 I.5 I.5 I.5 I.1 I.1 I.1 I.1 II.1 I	4	FLEXURAL STRENGTH,							
PERMEANCE of 25.4   1.5   1.5   1.5   1.1   1.1   1.1   1.1   1.1   mm thickness, max, perm   6   WATER ABSORPTION   by total immersion, max volume %   7   DIMENSIONAL   STABILITY (change in dimension), max, %   8   OXYGEN INDEX, min, volume %   24   24   24   24   24   24   24		min, kPa	276	276	<i>310</i>	345	414	<i>517</i>	690
PERMEANCE of 25.4   1.5   1.5   1.5   1.1   1.1   1.1   1.1   1.1   mm thickness, max, perm   6   WATER ABSORPTION   by total immersion, max volume %   7   DIMENSIONAL   STABILITY (change in dimension), max, %   8   OXYGEN INDEX, min, volume %   24   24   24   24   24   24   24									
mm thickness, max, perm         6       WATER ABSORPTION by total immersion, max volume %       0.30       1.0       0.30	5	WATER VAPOR							
6 WATER ABSORPTION by total immersion, max volume %  7 DIMENSIONAL STABILITY (change in dimension), max, %  8 OXYGEN INDEX, min, volume %  1.0 0.30 0.30 0.30 0.30 0.30  1.0 0.30 0.30 0.30 0.30  2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0		PERMEANCE of 25.4	<i>1.5</i>	1.5	<i>1.5</i>	1.5	1.1	1.1	1.1
by total immersion, max volume %  7     DIMENSIONAL STABILITY (change in dimension), max, %  8     OXYGEN INDEX, min, volume %  1.0     0.30      0.30     0.30     0.30     0.30     0.30     0.30     0.30      0.30      0.30     0.30     0.30     0.30     0.30		mm thickness, max, perm							
volume %       7       DIMENSIONAL       2.0	6	WATER ABSORPTION							
7 DIMENSIONAL STABILITY (change in dimension), max, % 24 24 24 24 24 24 24 24 24 24 24 24 24		by total immersion, max	0.30	0.30	1.0	0.30	0.30	0.30	0.30
STABILITY (change in dimension), max, %         2.0		volume %							
dimension), max, %  8 OXYGEN INDEX, min, 24 24 24 24 24 24 24 24 24 24 24 24 24	7	DIMENSIONAL							
8 OXYGEN INDEX, min, 24 24 24 24 24 24 24 24 volume %		STABILITY (change in	2.0	2.0	2.0	2.0	2.0	2.0	2.0
volume %		dimension), max, %							
	8	OXYGEN INDEX, min,	24	24	24	24	24	24	24
9 <b>DENSITY</b> , min, kg/m³ 19 21 26 23 29 35 48		volume %							
	9	<b>DENSITY</b> , min, kg/m <sup>3</sup>	19	21	26	23	29	35	48

NOTE: THE ABOVE SPECIFICATION VALUES ARE EXTRACTED FROM TABLE 1 OF ASTM C578-18





## DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

# SCOPE OF CERTIFICATION REV.01 FOR CERTIFICATE NO. CL20020738

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Products Conformity Assessment Section Manager

Dubai Central Laboratory Department