



## **CERTIFICATE OF PRODUCT CONFORMITY**

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

### EXPANDED POLYSTYRENE THERMAL INSULATION

(Details as per the attached Scope of Certification)

manufactured by:

### STYRO INSULATION MATERIAL INDUSTRY

P.O. Box 29272 Sharjah UAE

have been assessed in accordance with DCLD Document Ref. No. 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 C 578 - 15

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

> MENGR. HAWA ABDULLA BASTAKI Executive Director, Dubai Central Laboratory Department Dubai Municipality

Certificate No: CL05020005 Valid Until: 30 June 2017

Current Issue Date: 01 July 2016 Original Issue Date: 11 December 2005

The attached Scope of Certification bearing the same Certificate No. forms an integral part of this certificate. This certificate is subject to the Terms and Conditions of the Product Certification System and shall not be reproduced except in full.

**PRODUCT** CONFORMITY

F-IC-2031 R8







# DUBAI CENTRAL LABORATORY DEPARTMENT DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

#### SCOPE OF CERTIFICATION FOR CERTIFICATE NO. CL05020005

Certificate Issued To: STYRO INSULATION MATERIAL INDUSTRY

P.O. Box 29272 Sharjah UAE

Applicable Standard Specification: ASTM C 578-15 - Standard Specification for Cellular Rigid

Polystyrene Thermal Insulation

Applicable Specific Rules: RD-DP21-2106 (IC) "Specific Rules for Certification of

Rigid, Cellular Polystyrene Thermal Insulation (ASTM C

578-15) Through Factory Assessment".

No.	Product Description	Brand Name	Siz	Type	
			Dimension	Thickness	
1	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade* CFC Free**	STYRO 380 (29-38) kg/m3 STYRO 380 B (29-38) kg/m3	Various Sizes	4 mm up to 1300 mm	ASTM Type IX (As per Table 1)
2	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade* CFC Free**	STYRO 460 (38-46) kg/m3 STYRO 460 B (38-46) kg/m3	Various Sizes	4 mm up to 1300 mm	ASTM Type XIV (As per Table 1)
3	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade*	STYRO 290 (22-29) kg/m3 STYRO 290 B (22-29) kg/m3	Various Sizes	4 mm up to 1300 mm	ASTM Type II (As per Table 1)
4	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade* CFC Free**	STYRO 220 (18-22) kg/m3 STYRO 220 B (18-22) kg/m3		4 mm up to 1300 mm	
	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade* CFC Free**	STYRO Graypor 220 (18-22) kg/m3	Various Sizes		ASTM Type VIII (As per Table 1)

Page 1 of 3 F-IC-2032 R5





5	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade* CFC Free**	STYRO 180 (15-18) kg/m3 STYRO 180 B (15-18) kg/m3		4 mm up to 1300 mm		
	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade*	STYRO Graypor 180 (15-18) kg/m3	Various Sizes		ASTM Type I (As per Table 1)	
	CFC Free**  Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet  Fire Retardant Grade*  CFC Free**	STYRO 180 D (15-18) kg/m3				
6	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade* CFC Free**	STYRO 150 (12-15) kg/m3 STYRO 150 B (12-15) kg/m3		4 mm up to 1300 mm	ASTM Type XI (As per Table 1)	
	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade*	STYRO SEF 14W	Various Sizes			
	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade*	STYRO Graypor 150 (12-15) kg/m3				
7	Rigid Cellular Expanded Polystyrene Thermal Insulation Sheet Fire Retardant Grade*	STYRO 500 (min 46) kg/m3 STYRO 500 B (min 46) kg/m3	Various Sizes	4 mm up to 1300 mm	ASTM Type XV (As per Table 1)	

Note 1: \* Minimum acceptable oxygen index as per ASTM C578 is 24%

Note 2: \*\* CFC Free as per declaration from the company, in accordance with the Dubai Green Building Regulations and Specifications

Note 3: This document forms part of the Certificate of Product Conformity bearing the same certificate number.

Note 4: The above products shall bear the DCL Conformity Mark (applied on each product or on the packaging).

Page **2** of **3** 





# TABLE 1. PHYSICAL PROPERTY REQUIREMENTS OF RIGID CELLULAR EXPANDED POLYSTYRENE THERMAL INSULATION

SN	PROPERTIES	TYPE XI	TYPE	TYPE VIII	TYPE II	TYPE IX	TYPE XIV	TYPE
1	COMPRESSIVE RESISTANCE @ yield or 10% deformation, which occurs first, min kPa	35	69	90	104	173	276	414
2	THERMAL RESISTANCE of 25.4 mm thickness, @ mean temp. of 24±1°C min, K-m²/W	0.55	0.63	0.67	0.70	0.74	0.74	0.76
	THERMAL RESISTANCE (min) of 25.4 mm thickness, @ 35°C, K-m²/W	0.53	0.61	0.64	0.67	0.71	0.71	0.73
3	THERMAL CONDUCTIVITY, max, W/m·K @ 35°C and 60% RH	0.0482	0.0419	0.0394	0.0377	0.0356	0.0356	0.0347
4	FLEXURAL STRENGTH, min, kPa	70	173	208	240	345	414	517
5	WATER VAPOR PERMEANCE of 25.4 mm thickness, max, perm	5.0	5.0	3.5	3.5	2.5	2.5	2.5
6	water absorption by total immersion, max volume %	4.0	4.0	3.0	3.0	2.0	2.0	2.0
7	(change in dimension), max, %	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	OXYGEN INDEX, min, volume %	24	24	24	24	24	24	24
9	DENSITY, min, kg/m³	12	15	18	22	29	38	46

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

Original Issue Date: 11 December 2005 Current Issue Date: 01 July 2016

Current Issue Date: 01 July 2016 Valid Until : 30 June 2017

ARIF HUSAIN AL MARZOOQI

Head of Products Conformity Assessment Section Dubai Central Laboratory Department

Page **3** of **3** 

