

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b>	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي Dubai Municipality
	<b>Document Title:</b>	Certification of Factory Made Polyurethane Rigid Foam Thermal Insulation as per BS EN 13165:2012+A2:2016	عنوان الوثيقة:	
	<b>Doc Ref.</b>	DM-DCLD-RD-DP21-2124 (IC)	رقم الوثيقة :	

## Table of Contents

REVISION HISTORY .....	2
INTRODUCTION .....	4
SCOPE.....	4
PRODUCT IDENTIFICATION AND APPLICABLE STANDARD/NORMATIVE REFERENCE .....	4
DEFINITION OF TERMS .....	5
REQUIREMENTS FOR INITIAL CERTIFICATION .....	5
GRANTING OF THE DCL CERTIFICATION AND FEES .....	7

Approved by CQPSM	Authorized by CQPSM
Date of Issue : 27/03/2023	Rev. No. : 16
General / عام : Level of Confidentiality / درجة السرية	Page 1 of 7

*Note: Printed copy of this document shall be treated as 'Uncontrolled'. Always refer the controlled version 'Online*

بيانات مفتوحة / OPEN DATA

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b>	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي Dubai Municipality
	<b>Document Title:</b>	<b>Certification of Factory Made Polyurethane Rigid Foam Thermal Insulation as per BS EN 13165:2012+A2:2016</b>	عنوان الوثيقة:	
	<b>Doc Ref.</b>	<b>DM-DCLD-RD-DP21-2124 (IC)</b>	رقم الوثيقة :	

Issue Date	Rev. No.	Summary Of Amendments
22-02-2006	0	Final draft
27-02-2006	1	Issue for use
20-06-2006	2	Amendment of section 7.1.5 to include minimum requirement for compressive strength. Amendment of section 7.3.1.8 to include provision for the use of ASTM E 96 for water vapor transmission test. Amendment to section 9.1 regarding surveillance visit.
09-08-2009	3	Reviewed with the requirements of the current version of the standard and found to be still suitable. Document reference number and format is changed according to the new IMS, statement for the independent testing plan was changed, and the statement for surveillance was shortened by referring the appropriate procedure, RD-DP21-2096 (IC).
01-08-2010	4	Amended as per new documentation structure and to include the minimum required test facility and the raw materials, and amended the table of product quality assurance plan to include the frequency of the reaction to fire test.
22/10/2013	5	Reviewed with the requirements of the current version of the standard (2012) and found to be still suitable
27/05/2014	6	Amended some clauses related to factory production control frequency of testing (3.1.3) and some other minor changes as highlighted.
04/07/2017	7	Amendment to align the fire test requirement with the UAE Fire and Life Safety Code of Practice 2016 for clauses [1.3.3.5, 2.4.23.6 & 2.4.2.5]. Amended to clause 1.3.3.3. to be ISO 9001 as per applicable version. Revised Format according to the latest template. Added Annex
13/07/2017	8	Added Annex to incorporate requirements of the UAE Fire and Life Safety Code of Practice 2016
05/11/2018	9	Amendment to align the fire test requirement with the UAE Fire and Life Safety Code of Practice 2018
04/03/2019	10	Removal of the fire safety requirements for Factory Made Polyurethane Rigid Foam Thermal Insulation
25/03/2019	11	Revision of Scope to reflect that the DCL Certification of above subject product does not cover compliance to the requirements of UAE Fire & Life Safety Code of Practice 2018.
11/05/2020	12	Revised to align with the new BS EN 13165:2012+A2:2016 standard specification. Added sound absorption requirements (if declared). In addition to some editorial changes as per the new numbering
06/09/2020	13	Revised to add the options for initial audit by the approved CAB and remotely by PCAS. Adding definition for authorized auditor. Update for the new standard edition, new numbering system and followed terminologies. Add provision for accepting valid test reports.
26/09/2021	14	Removal of the documents in clause 2.1.2, in addition to further amendment in the provision for accepting valid test reports (clause 2.4.2.5), in line with DM 30% reduction of requirements (both service and specialized). Modifications in the auditing part for the factories already certified against ISO 9001 to opt for auditing only the areas of production and monitoring stages of product realization, quality control and final product testing and evaluation.

Approved by CQPSM	Authorized by CQPSM
Date of Issue : 27/03/2023	Rev. No. : 16
General / عام : Level of Confidentiality / درجة السرية	Page 2 of 7

**Note: Printed copy of this document shall be treated as 'Uncontrolled'. Always refer the controlled version 'Online**

 GOVERNMENT OF DUBAI	Organization/Unit:	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي Dubai Municipality
	Document Title:	Certification of Factory Made Polyurethane Rigid Foam Thermal Insulation as per BS EN 13165:2012+A2:2016	عنوان الوثيقة:	
	Doc Ref.	DM-DCLD-RD-DP21-2124 (IC)	رقم الوثيقة :	

Issue Date	Rev. No.	Summary Of Amendments
04/10/2022	15	Changing section name as per the new organizational structure, and replace HOU by CQPSM (Section's Manager).
27/03/2023	16	Full re-structuring and transfer of common provisions to the general rules. Clause are re- numbered accordingly. Adding reference to SA'AFAT relevant section under additional references. Use of New DM Logo

Approved by CQPSM	Authorized by CQPSM
Date of Issue : 27/03/2023	Rev. No. : 16
General / عام : Level of Confidentiality / درجة السرية	Page 3 of 7

**Note: Printed copy of this document shall be treated as 'Uncontrolled'. Always refer the controlled version 'Online**

OPEN DATA / بيانات مفتوحة

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b>	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي Dubai Municipality
	<b>Document Title:</b>	Certification of Factory Made Polyurethane Rigid Foam Thermal Insulation as per BS EN 13165:2012+A2:2016	عنوان الوثيقة:	
	<b>Doc Ref.</b>	DM-DCLD-RD-DP21-2124 (IC)	رقم الوثيقة :	

## 1. INTRODUCTION

- 1.1 This document prescribes the specific rule for certification of the product(s) as identified herein, in accordance with the requirements of DM Third Party Product Certification Scheme Through Factory Assessment, taking into consideration the applicable normative references and standard specification, in addition to the requirements for conformity evaluation, as stated below.
- 1.2 The applicant/client shall comply with this specific rule, and to all provisions under the “**General Rule for DM Third Party Product Certification Scheme Through Factory Assessment**”**DM-DCLD-RD-DP21-2001 (IC)**.
- 1.3 This specific rule **is an integral part of the general rule** and both shall always be read together.

## 2. SCOPE

- 2.1 This specific rule applies only to factory made polyurethane (PUR) and Polyisocyanurate (PIR) thermal insulation materials with a minimum thickness required to achieve a U value in accordance with DM Regulation.
- 2.2 This specific rule does not -by itself- permit the use of the below product in the construction sites. However, it does provide the necessary general conformity assessment criteria, which are required for the evaluation and issuance of the certification and the authorization of the use of the DCLD Conformity Mark. Other relevant requirements issued by the regulatory bodies if any; shall always be fulfilled.

## 3 PRODUCT IDENTIFICATION AND APPLICABLE STANDARD/NORMATIVE REFERENCE

- 3.1 Product name: Thermal Insulation Products for Buildings – Factory Made Rigid Polyurethane Foam (PUR)
- 3.2 Applicable standard/Normative reference: BS EN 13165:2012+A2: 2016 Thermal Insulation Products for Buildings Factory Made Rigid Polyurethane Foam (PU) products –Specification.
- 3.3 Additional reference:
- ISO 9001 Quality Management System – Requirements
- ISO 19011 Guidelines for Auditing Management Systems
- Al Sa'fat – Dubai Green Building System-2nd edition, January 2023 – Section 701.01 (Thermal and Acoustical Insulation Materials).

Approved by CQPSM	Authorized by CQPSM
Date of Issue : 27/03/2023	Rev. No. : 16
General / عام : Level of Confidentiality / درجة السرية	Page 4 of 7

**Note: Printed copy of this document shall be treated as 'Uncontrolled'. Always refer the controlled version 'Online**

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b>	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي Dubai Municipality
	<b>Document Title:</b>	<b>Certification of Factory Made Polyurethane Rigid Foam Thermal Insulation as per BS EN 13165:2012+A2:2016</b>	عنوان الوثيقة:	
	<b>Doc Ref.</b>	<b>DM-DCLD-RD-DP21-2124 (IC)</b>	رقم الوثيقة :	

#### 4 DEFINITION OF TERMS

4.1 In addition to the definitions given in EN ISO 9229, BS EN 13165:2012+A2: and the General Rule of the scheme [DM-DCLD-RD-DP21-2001 (IC)], the following shall apply:-

4.1.1 Standard Specification – BS EN 13165:2012+A2: 2016 Thermal Insulation Products for Buildings Factory Made Rigid Polyurethane Foam (PU) products –Specification.

#### 5 REQUIREMENTS FOR INITIAL CERTIFICATION

5.1 The process of application, initial assessment and product sampling shall be in line with the related provisions in the general rule and the standard specifications.

5.2 The factory shall have a laboratory with the following testing equipment as a minimum:

- Length, width, thickness
- Squareness and flatness
- Density

5.3 Product Evaluation and testing

5.3.1 The manufacturer/applicant shall submit to (DCLD-CQPS) declaration of product specification Subject for certification. This shall include but not limited to:

5.3.1.1 Thermal Resistance and Thermal Conductivity (*initial and the aged value*)

5.3.1.2 Dimension (Length, Width)

5.3.1.3 Thickness

5.3.1.4 Flatness

5.3.1.5 Dimensional Stability

5.3.1.6 Compressive Strength

*Note: For structural applications, declared compressive strength shall be not less than 100 kPa*

5.3.1.7 Water Vapor Transmission

5.3.1.8 Density

5.3.1.9 Sound Absorption (if declared or if DCL Attestation is applied / issued)

5.3.2 Samples drawn for independent test shall meet the requirements of the Standard Specification (SS) as follows:

5.3.2.1 Thermal Resistance and Thermal Conductivity as per SS clause 4.2.1

Approved by CQPSM	Authorized by CQPSM
Date of Issue : 27/03/2023	Rev. No. : 16
General / عام : Level of Confidentiality / درجة السرية	Page 5 of 7

**Note: Printed copy of this document shall be treated as 'Uncontrolled'. Always refer the controlled version 'Online**

بيانات مفتوحة / OPEN DATA

 GOVERNMENT OF DUBAI	Organization/Unit:	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي Dubai Municipality
	Document Title:	Certification of Factory Made Polyurethane Rigid Foam Thermal Insulation as per BS EN 13165:2012+A2:2016	عنوان الوثيقة:	
	Doc Ref.	DM-DCLD-RD-DP21-2124 (IC)	رقم الوثيقة :	

*Note: 1. Since BS EN 12667 or BS EN 12939 (for thick products) test method for thermal resistance and thermal conductivity, is equivalent to the ASTM C 518, ASTM C 177, ISO 8301 and ISO 8302, the (DCLD-CQPS) may opt to use any of these test methods.*

*Note 2. Temperature condition to be used in carrying out this test will be as per Dubai requirement, that is @ 35°C and 60% Relative Humidity and the reference mean temperature is 35 °C*

- 5.3.2.2 Length and Width as per (SS) clause 4.2.2
- 5.3.2.3 Thickness as per (SS) clause 4.2.3
- 5.3.2.4 Squareness as per (SS) clause 4.2.4
- 5.3.2.5 Flatness as per (SS) clause 4.2.5
- 5.3.2.6 Compressive Stress or Compressive Strength as per (SS) clause 4.3.4
- 5.3.2.7 Water Vapor Transmission as per (SS) clause 4.3.9

*Note: Since BS EN 12086 test method for water vapor transmission, is equivalent to that of the ASTM E 96, the DM Certification Body may opt to use this test method.*

- 5.3.2.8 Dimensional Stability under specified temperature and humidity per (SS) clause 4.3.2
- 5.3.2.9 Density as per (SS) clause D.5 of Annex D
- 5.3.2.10 Sound Absorption as per (SS) clause 4.3.10 (if declared)

*Note: If DCL attestation is applied/issued, or if there is a test report (validity of 3 years from issue date) issued by other accredited and (DCLD-CQPS) recognized testing laboratory and sampled by accredited/(DCLD-CQPS) recognized CAB, then no need to conduct the test.*

5.3.3 The results of testing must meet the requirements as per the standard specification.

#### 5.4 Internal Product Quality Assurance Plan

The client shall have an internal product quality assurance plan giving details of the tests to be carried out. It shall consist and comply with the requirements as per below :-

S/N	INSULATION PROPERTY	MINIMUM TESTING FREQUENCIES
1	Thermal Resistance and Thermal Conductivity	1 per 24 h
2	Length and Width	1 per 2 h
3	Thickness	1 per 2 h
4	Density	1 per 2 h
5	Squareness	1 per 8 h
6	Flatness	1 per 8 h
7	Compressive Strength	1 per 24 h
8	Sound Absorption (if declared)	1 per 5 years

*Note: Item No. 1 and 7 may be reduced to once per month provided that the results show continuing compliance to the declared value.*

Approved by CQPSM	Authorized by CQPSM
Date of Issue : 27/03/2023	Rev. No. : 16
General / عام : Level of Confidentiality / درجة السرية	Page 6 of 7

**Note: Printed copy of this document shall be treated as 'Uncontrolled'. Always refer the controlled version 'Online**

 GOVERNMENT OF DUBAI	<b>Organization/Unit:</b>	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي Dubai Municipality
	<b>Document Title:</b>	<b>Certification of Factory Made Polyurethane Rigid Foam Thermal Insulation as per BS EN 13165:2012+A2:2016</b>	عنوان الوثيقة:	
	<b>Doc Ref.</b>	<b>DM-DCLD-RD-DP21-2124 (IC)</b>	رقم الوثيقة :	

## 6 GRANTING OF THE DCLD CERTIFICATION

- 6.1 The DCLD product conformity certificate and the authorization to use the DCLD conformity mark shall be granted upon conformance with all related provisions in the general rule.
- 6.2 Fees shall be as per DM-DCLD-RD-DP21-2097 (IC) and other relevant provisions in the general rule.
- 6.3 DCLD-CQPS shall carry out surveillance of certified clients based on the approved periodic plans and related provisions in the general rule.
- 6.4 Appeals, disputes and complaints shall be in line with the relevant provisions in the General Rule.

Approved by CQPSM	Authorized by CQPSM
Date of Issue : 27/03/2023	Rev. No. : 16
General / عام : Level of Confidentiality / درجة السرية	Page 7 of 7

**Note: Printed copy of this document shall be treated as 'Uncontrolled'. Always refer the controlled version 'Online**