

| Organization/Unit: | إدارة مختبر دبي المركزي Dubai Central Laboratory Department | الوحدة التنظيمية: |
|--------------------|--|-------------------|
| Document Title: | Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | عنوان الوثيقة: |
| Doc Ref. | DM-DCLD-RD-DP21-2172 (IC) | رقم الوثيقة: |



| Issue Date | Rev. No. | Summary Of Amendments |
|------------|----------|---|
| | | |
| 06-08-2009 | 0 | First draft for comments |
| 24-02-2010 | 0 | Second draft for comments |
| 28-02-2010 | 0 | Final draft (TC Meeting 2010-02) |
| 03-03-2010 | 1 | Issue for use |
| 05-04-2010 | 2 | Revised to align with the amended DMS, and the guidelines for the factory production control system. |
| 28/06/2010 | 3 | Amended the reference document for the fee structure of block factories in section 5.1 |
| | | Inclusion of the types of paving blocks samples n in section 2.4.1 |
| 16/02/2011 | 4 | Distribution of tests for the different types of paving block samples in section 2.4.2 |
| 18/08/2011 | 5 | Reviewed with the requirements of the current version of the standard (2011) and found to be still suitable |
| 23/10/2013 | 6 | Reviewed with the requirements of the current version of the standard (2013) and found to be still suitable |
| 18/12/2016 | 7 | Aligning with DMS1 Part 4 2016 and inclusion of the GBRS requirements. |
| 17/03/2019 | 8 | Updated format as per new DM template and new DM logo |
| 20/05/2020 | 9 | Updated with the new revised DM Standard and changing fonts. In addition to some editorial changes as per the new numbering system and terminologies |
| 14/09/2020 | 10 | Add the options for initial audit by the approved CAB and remotely by PCAS. Adding definition for authorized auditor. Update for the new numbering system and followed terminologies. Add provision for accepting valid test reports. |
| 26-09-2021 | 11 | Removal of the documents in clause 2.1.2, in addition to further amendment in the |
| | | provision for accepting valid test reports (clause 2.4.1.4), 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. |
| | | testing and evaluation. |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / General | Page 1 of 8 |



| Organization/Unit: | إدارة مختبر دبي المركزي Dubai Central Laboratory Department | الوحدة التنظيمية: |
|--------------------|--|-------------------|
| Document Title: | Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | عنوان الوثيقة: |
| Doc Ref. | DM-DCLD-RD-DP21-2172 (IC) | رقم الوثيقة: |



1. GENERAL

1.1 INTRODUCTION

- 1.1.1 This document prescribes the Specific Rules for the implementation of the DM Third Party Product Certification Scheme through factory assessment as applied to the specific product(s) identified herein, taking into consideration the applicable normative references and standard specifications.
- 1.1.2 The applicant shall comply with these specific rules, and with those already mentioned in the "General Rules for DM Third Party Product Certification Scheme Through Factory Assessment", DM-DCLD-RD-DP21-2001 (IC).

1.2 SCOPE

This Specific Rules covers the requirements for the certification of precast concrete paving blocks that will be used in the Emirate of Dubai.

1.3 PRODUCT IDENTIFICATION AND APPLICABLE STANDARD/NORMATIVE REFERENCE

1.3.1 Product Name: Precast Concrete Paving Blocks

1.3.2 Applicable Standard/Normative Reference: DMS 1: Part 4: 2020 Specification for precast concrete

blocks Part 4: Paving blocks

1.3.3 Additional References:

ISO 9001 - Quality Management System - Requirements ISO 19011 - Guidelines for Auditing Management System.

1.4 DEFINITION OF TERMS

In addition to the definitions given in DMS 1: Part 4: 2020 and DM-DCLD-RD-DP21-2001(IC) the following shall also apply:

- 1.4.1 Independent Testing Laboratory Dubai Central Laboratory (DCL) or any testing laboratory recognized by the DM Certification Body.
- 1.4.2 Independent Test test performed or conducted by the recognized Independent Testing Laboratory
- 1.4.3 Standard Specification DMS 1 Part 4: 2020 Specification for precast concrete blocks Part 4: Paving blocks
- 1.4.4 Factory Production Control System (Product Quality Assurance Plan) a document being agreed upon both by the certified client and the certification body being used to ensure continuous compliance of the certified product (DM-DCLD-RD-DP21-2090 (IC)).
- 1.4.5 QMS Quality Management System aligned with the requirements of ISO 9001 Standard

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / | Page 2 of 8 |



| Organization/Unit: | إدارة مختبر دبي المركزي Dubai Central Laboratory Department | الوحدة التنظيمية: |
|--------------------|--|-------------------|
| Document Title: | Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | عنوان الوثيقة: |
| Doc Ref. | DM-DCLD-RD-DP21-2172 (IC) | رقم الوثيقة: |



- 1.4.6 Client: Manufacturer of precast concrete paving (Factory/Yard in Dubai)
- 1.4.7 DM Certification Body Products Conformity Assessment Section- Dubai Central Laboratory (DCLD-PCAS)
- 1.4.8 Authorized auditor: is any approved auditor by DCLD-PCAS either internal within DCLD or external (Approved CAB's auditor or approved auditor based on a signed contract)

2. REQUIREMENTS FOR CERTIFICATION

- 2.1 APPLICATION
- 2.1.1 The client shall apply to DCLD-PCAS for the certification and authorization to use of DCL Conformity Mark.
- 2.1.2 Application form shall be submitted by client to DCLD-PCAS
- 2.1.3 Separate application shall be submitted for each product type or group of products that refers to a different specific rules.
- 2.2 FACTORY OPERATION
- 2.2.1 Quality Management System

The client of precast concrete paving blocks shall have a Quality Management System that is aligned to the requirements of ISO 9001 standard. NOTE: Having a certificate of ISO 9001 is not a mandatory requirement; however the structure of the manufacturer's QMS shall be in line with its requirements.

2.2.2 Laboratory

The client of precast concrete paving blocks shall have a quality assurance laboratory to carry out factory production control testing to ensure that the blocks comply with the requirements of the standard specification. The laboratory can be part of the factory facilities, or, can be through a documented agreement with an accredited external laboratory. As a minimum requirement, the laboratory shall have the following testing equipment:

- a. Compressive testing machine for paving blocks
- b. Dimensional measuring instruments
- 2.2.3 Unique Factory Identification Mark

The client shall submit to DCLD-PCAS a unique factory identification mark for their products for approval. The DCLD-PCAS approved mark shall be applied to the products covered by the certification.

- 2.3 INITIAL FACTORY AUDIT
- 2.3.1 Initial factory audit will be carried out by duly authorized auditor(s) which will cover auditing of the quality

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / General | Page 3 of 8 |



| Organization/Unit: | إدارة مختبر دبي المركزي Dubai Central Laboratory Department | الوحدة التنظيمية: |
|--------------------|--|-------------------|
| Document Title: | Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | عنوان الوثيقة: |
| Doc Ref. | DM-DCLD-RD-DP21-2172 (IC) | رقم الوثيقة: |



management system to verify its compliance with the requirements of ISO 9001, in addition to verify the implementation of DCLD-PCAS certification's requirements. Where possible; the audit can be carried out remotely as per (DM-DCLD-RD-DP21-2098 (IC) Guidelines for Remote Audit) or as per the related approved guidelines which are followed by the approved outsourced CAB.

NOTE: An independent certification to ISO 9001 issued by a QMS certification body recognized by DCLD-PCAS may be considered as having satisfied this requirement; however, DCLD-PCAS may still opt to carry out verification audit to confirm that the factory is in compliance with requirements of DCLD certification schemes and rules, mainly the areas of production and monitoring stages of product realization, quality control and final product testing and evaluation.

2.3.2 Factory audit shall be conducted by designated audit team in accordance with ISO 19011 – Guidelines for Auditing Management Systems.

2.4 PRODUCT EVALUATION

2.4.1 Sampling

- 2.4.1.1 Sampling for initial testing shall be taken randomly by the authorized auditor from the products to be certified (sizes and quantity to be determined) either from production lines or the factory warehouse, in accordance with the requirements specified in Clause 8 of the Standard Specification.
- 2.4.1.2 Three sets of sample per product per type shall be subjected to testing; the first set, where possible, will be tested in the plant witnessed by DCLD-PCAS duly authorized auditor, the second set will be sent to DCLD-PCAS approved independent testing laboratory. The third set will be kept by the client as reference for future use.

The types of paving block samples are classified into

- 1. Rectangular Paving Blocks (60 mm)
- 2. Rectangular Paving Blocks (80 mm)
- 3. Non-Rectangular Paving Blocks (60 mm)
- 4. Non-Rectangular Paving Blocks (80 mm)

Note: Any thickness other than 60 mm and 80 mm shall be considered another type

- 2.4.1.3 Sample(s) for independent test shall be packed/sealed and signed in the presence of the authorized auditor and shall be submitted to DCLD-PCAS approved lab.
- 2.4.1.4 Where applicable, Independent test should only be conducted if the result of the in-plant test shows satisfactory result. DCLD-PCAS shall accept available valid test reports conducted by an approved DCLD-PCAS independent laboratory within one year from the date of the initial assessment, in line with the internal quality control testing plan of the factory. In such case, the testing of that particular parameter(s) shall be waived accordingly.

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / General | Page 4 of 8 |



| Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | e |
|---|---|
| قم الوثيقة : Doc Ref. DM-DCLD-RD-DP21-2172 (IC) | , |



2.4.2 Product Evaluation and testing

- 2.4.2.1 Samples collected as per Clause 8 of the Standard Specification shall be subjected to the following tests: For each types of paving block samples [in-plant (mandatory) + independent]:
 - 2.4.2.1.1 Dimensional tolerances
 - 2.4.2.2.2 Compressive Strength
 - 2.4.2.2.3 Visual Aspects

Additional tests to be conducted on any one of the types only [in-plant (optional) + independent]:

- 2.4.2.2.4 Chloride and sulphate content
- 2.4.2.2.5 Water Absorption
- 2.4.2.2.6 Abrasion resistance
- 2.4.2.2.7 Solar Reflective Index
- 2.4.2.2 If the factory is outsourcing the routine tests to an accredited laboratory, in-plant tests may be waived, provided that records of routine tests are available and in-line with the frequency of testing as per DM-DCLD-RD-DP21-2090 (IC).
- 2.4.2.3 Results of both the in plant and independent tests shall comply with clauses 4 & 5 & 6 & 7 of the Standard Specification.
- 2.4.2.4 Independent test shall only be conducted if the result of the in-plant test shows satisfactory results. DCLD-PCAS may opt to accept available valid test reports conducted by an approved DCLD-PCAS independent laboratory within one year from the date of the initial assessment, in line with the internal quality control testing plan of the factory. In such case, the testing of that particular parameter(s) shall be waived accordingly.
- 2.4.2.5 If the result of the test conducted by DCLD-PCAS approved independent testing laboratory shows non-conformance to the specified requirements, the retest shall be carried out on the reference sample kept by the manufacturer or on new samples collected by DCLD-PCAS authorized auditor, on which full testing shall be carried out, if necessary.
- 2.4.2.6 If the retest passed, the initial product assessment is considered conforming to product specification. If not, the manufacturer will be advised to take corrective action.
- 2.4.2.7 Only after reassessment and subsequent product compliance shall the client be allowed to use DCL Conformity Mark on his product(s) that have been tested and found complying with the certification requirements.

3. GRANTING OF THE DCL CERTIFICATION

- 3.1 CONDITIONS FOR GRANTING THE DCL PRODUCT CONFORMITY CERTIFICATE
- 3.1.1 When the results of the factory audit (clause 2.3) and product evaluation (clause 2.4) show conformity to the requirements specified in the General Rule and Specific Rule, the Certificate of Conformity and authorization to

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / General | Page 5 of 8 |



| Organization/Unit: | إدارة مختبر دبي المركزي Dubai Central Laboratory Department | الوحدة التنظيمية: |
|--------------------|--|-------------------|
| Document Title: | Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | عنوان الوثيقة: |
| Doc Ref. | DM-DCLD-RD-DP21-2172 (IC) | رقم الوثيقة: |



use the DCL Conformity Mark shall be issued to the client for the type(s) and size of the product covered by the assessment.

- 3.1.2 The client shall agree with DCLD-PCAS for the preparation and implementation of a product quality assurance plan to ensure continuing compliance with the Standard Specifications and the requirements of this certification scheme. It shall consist of (1) an internal product quality assurance plan, and (2) an independent testing plan.
- 3.1.3 Factory Production Control System (Internal Product Quality Assurance Plan)

The client shall prepare and submit to DM Certification Body for approval a factory production control system (internal product quality assurance plan) which shall conform to DM-DCLD-RD-DP21-2090 (IC) .

The plan shall take into consideration the production process, the volume of production, the criticality of the test to be specified, and other relevant factors. This will include as a minimum, the following details):
(1) location of sampling; (2) frequency of sampling; (3) quantities of samples; (4) tests to be carried out; (5) results acceptance criteria; and (6) responsible person to carry out the activity.

3.1.4 Independent Testing Plan

The client shall agree to an independent testing plan to be carried out on samples which are collected in accordance with DM-DCLD-RD-DP21-2096 (IC) — Surveillance of Certified Clients under the Factory Assessment Scheme, and implemented by the DCLD-PCAS. The cost of testing under the independent testing plan shall be borne by the factory.

3.2 ISSUANCE OF DCL CERTIFICATE OF CONFORMITY

If the conditions mentioned in clause 3.1 above have been complied, the client of precast concrete paving blocks shall be issued a DCL Certificate of Conformity and a Scope of Certification that covers the type(s) and size of the products that are certified. The client shall be authorized to use the DCL Conformity Mark on the certified products, and will be authorized to use the DCL Conformity Mark on the certified products.

3.2 RESPONSIBILITIES OF THE CERTIFIED CLIENT

- 3.3.1 The client shall ensure that his product, for which product conformity certificate has been issued, conforms at all times to the requirements of the General Rules and Specific Rules and shall maintain to the satisfaction of DCLD-PCAS, a system of quality control including inspection and testing.
- 3.3.2 The client shall give the duly authorized auditor(s) of DCLD-PCAS, access during working hours, without prior notification, to the premises of the factory where certified product is manufactured, for the purpose of evaluating the materials, production processes, finished products, quality assurance facilities, records and others in accordance with the requirements of the scheme.
- 3.3.3 The client shall inform DCLD-PCAS in writing of any change of management, transfer of plant site, modification in the product, manufacturing process or factory quality management system.

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / General | Page 6 of 8 |



| Organization/Unit: | إدارة مختبر دبي المركزي Dubai Central Laboratory Department | الوحدة التنظيمية: |
|--------------------|--|-------------------|
| Document Title: | Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | عنوان الوثيقة: |
| Doc Ref. | DM-DCLD-RD-DP21-2172 (IC) | رقم الوثيقة: |



- 3.3.4 In case of transfer of factory location, the certificate shall be deemed valid only after factory and product audit at the new site has been satisfactorily completed.
- 3.3.5 Any infraction stated in the Terms and Conditions of Certification scheme and the use of DCL Conformity Mark shall constitute sufficient grounds for suspension, withdrawal and termination of certification in accordance with DM-DCLD-IMS-RD-07.
- 3.3.6 Any dispute that may arise in connection with the Terms and Conditions of the certification scheme shall be settled in accordance with DM-DCLD-IMS-RD-08 Appeals, Disputes, and Complaints Procedure.
- 3.3.7 The client shall pay all applicable fees related to the certification process.
- 3.4 USE OF THE DCL CONFORMITY MARK
- 3.4.1 The design and use of the DCL Conformity Mark shall be in accordance with the Terms and Conditions for the Use of the DCL Conformity Mark, DM-DCLD-IMS-RD-13.
- 3.4.2 The client shall submit samples of tag showing the DCL Conformity Mark, for approval by DCLD-PCAS.
- 3.4.3 The Certificate of Conformity and the authorization to use the DCL Certification Mark is non-transferable.

4. SURVEILLANCE

- 4.1 DCLD-PCAS or their authorized auditor(s) shall carry out periodic surveillance to ensure consistent compliance with the requirements of this certification scheme as per DM-DCLD-RD-DP21-2096 (IC) Surveillance of Certified Clients under the Factory Assessment Scheme.
- 4.2 Testing as part of surveillance shall be in accordance with the Independent Testing Plan (clause 3.1.4) that has been agreed between the DCLD-PCAS and the client.

5. FEE SCHEDULE

- 5.1 The client shall pay the applicable fees and charges related to the granting of the certificate of conformity and the authorization to use the DCL Conformity Mark based on the Fee Structure for Factory Assessment of Block Factories, DM-DCLD-RD-DP21-2089 (IC)
- 5.2 The fees for this certification scheme shall include but not limited to the following;
 - 5.2.1 Application Fee
 - 5.2.2 Initial Assessment Fee
 - 5.2.3 Certification Fee
 - 5.2.4 Marking Fee
 - 5.2.5 Surveillance Fee
 - 5.2.6 Annual Renewal Fee
 - 5.2.7 Testing Fee

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / General | Page 7 of 8 |



| Organization/Unit: | إدارة مختبر دبي المركزي Dubai Central Laboratory Department | الوحدة التنظيمية: |
|--------------------|--|-------------------|
| Document Title: | Specific Rules for FA Certification of Precast Concrete Paving Blocks as per DMS 1 Part 4: 2020 | عنوان الوثيقة: |
| Doc Ref. | DM-DCLD-RD-DP21-2172 (IC) | رقم الوثيقة: |



 ${\bf 5.2.8}\quad {\bf Outsource\ Activity\ Fee\ ,\ where\ applicable}$

| Approved by HOU | Authorized by PCASM |
|--|---------------------|
| Date of Issue : 26/09/2021 | Rev. No. : 11 |
| درجة السرية / Level of Confidentiality : عام / General | Page 8 of 8 |