

 GOVERNMENT OF DUBAI	Organization/Unit:	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	Document Title:	Specific Rules for FA Certification of Steel Fabric for Reinforcement of Concrete as per BS 4483	عنوان الوثيقة:	
	Doc Ref.	DM-DCLD-RD-DP21-2191 (IC)	رقم الوثيقة :	

Issue Date	Rev. No.	Summary Of Amendments
11-07-2015	0	First draft for comments
12-06-2016	0	Final draft
23-06-2016	1	Issue for use
11/11/2017	2	Added reference to Fee Structure in clause [5].
24/03/2019	3	Updated format as per new DM template and new DM logo

Approved by HOU	Authorized by PCASM
Date of Issue : 24/03/2019	Rev. No. : 03
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'

 GOVERNMENT OF DUBAI	Organization/Unit:	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	Document Title:	Specific Rules for FA Certification of Steel Fabric for Reinforcement of Concrete as per BS 4483	عنوان الوثيقة:	
	Doc Ref.	DM-DCLD-RD-DP21-2191 (IC)	رقم الوثيقة :	

--	--	--

Approved by HOU	Authorized by PCASM
Date of Issue : 24/03/2019	Rev. No. : 03
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:	Specific Rules for FA Certification of Steel Fabric for Reinforcement of Concrete as per BS 4483	عنوان الوثيقة:	
	Doc Ref.	DM-DCLD-RD-DP21-2191 (IC)	رقم الوثيقة :	

1. GENERAL

1.1 INTRODUCTION

This document describes the specific rules for the certification of factory-made machine-welded steel fabric for the reinforcement of concrete, manufactured from weldable reinforcing steel conforming to BS 4449:2005 or manufactured from wire conforming to BS 4482.

Applicants for certification under this scheme shall comply with this Specific Rules and also with the provisions of DM-DCLD-RD-DP21-2001 (IC) "General rules for Third Party Product Certification through Factory Assessment". In case of inconsistencies of requirements (between the General Rules and Specific Rules), the provisions of this Specific Rules shall prevail.

1.2 SCOPE

The certification is applicable to steel fabric concrete reinforcement manufacturers.

The certification shall be carried at each specific location, regardless of the number of production line.

1.3 PRODUCT DESCRIPTION AND APPLICABLE STANDARDS AND NORMATIVE REFERENCES

- 1.3.1 Product Name: Steel Fabric for the Reinforcement of Concrete
- 1.3.2 Applicable Standard: BS 4483: 2005 Amd No. 1
Steel fabric for the reinforcement of concrete - Specification
- 1.3.3 Additional References: ISO 9001: 2015 Quality management system - Requirements
ISO 19011: 2012 Guidelines for quality and environmental management systems auditing

1.4 DEFINITIONS

- 1.4.1 The definitions given in the BS 4483 shall apply.
- 1.4.2 Certification – procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements.
- 1.4.3 Specific Rules – a document specifying the set of rules that are applicable to a particular certification scheme. The rules shall be based on the requirements of the standard specification and applicable regulations, if available.
- 1.4.4 DM Certification Body – Products Conformity Assessment Section – Dubai Central Laboratory Department

2. REQUIREMENTS FOR CERTIFICATION

2.1 APPLICATION

The applicant manufacturers shall submit application to the DM Certification Body.

Application forms shall be filled-up by the applicant-manufacturer and submitted to DM Certification Body together with the following supporting documents:

- Industrial Trade License
- Complete product description and specifications
- Brief Description of Manufacturing Process

Approved by HOU	Authorized by PCASM
Date of Issue : 24/03/2019	Rev. No. : 03
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'

 GOVERNMENT OF DUBAI	Organization/Unit: إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية: التنظيمية	 بلدية دبي DUBAI MUNICIPALITY
	Document Title: Specific Rules for FA Certification of Steel Fabric for Reinforcement of Concrete as per BS 4483	عنوان الوثيقة: عنوان الوثيقة	
	Doc Ref. DM-DCLD-RD-DP21-2191 (IC)	رقم الوثيقة : رقم الوثيقة	

- d. Copy of the Quality Manual (Controlled Copy)
- e. Vicinity Map and Factory Layout
- f. Valid Certification to ISO 9001 (If available)
- g. List of personnel and their designation
- h. Total Number of effective personnel involved in the manufacture of the product (technical, managerial, and support personnel)
- i. List of available testing equipment and tests conducted internally
- j. Others

2.2 REQUIREMENTS FOR THE OPERATION OF THE ORGANIZATION

2.2.1 Quality Management System

The applicant manufacturer shall have a Quality Management System that is aligned to the requirements of ISO 9001 standard. NOTE: Certification to ISO 9001 by a third party QMS certification body is not mandatory but it will be advantageous to ensure that the full requirements of the ISO 9001 is addressed

2.2.2 Laboratory

The manufacturer shall have a laboratory (or access to a laboratory) that can carry out the following tests to check product compliance with the standard specifications:

- a. Tensile
- b. Bend
- c. Dimension
- d. Geometry (if applicable)
- e. Shear force of welded joint

2.2.3 Factory production control system

The company shall implement a factory production control system that will ensure conformity of product with the specified requirements. The company production control system shall be fully documented (procedures, plans, and records).

2.3 INITIAL FACTORY AUDIT

2.3.1 DCL duly authorized representative shall visit the applicant's factory with the aim of ascertaining that the requirements as per clause [2.2] are satisfactorily implemented. Members of the Audit Team shall [collectively] have appropriate qualification and training in the field of quality management system auditing, fabric welding processing, testing, inspection and quality assurance.

2.3.2 Verification audit shall be conducted by the designated audit team based on ISO 19011 – Guidelines for Quality and Environment Management System Auditing.

2.3.3 The factory audit shall include (but not limited to) the following:

- a. Quality management system
- b. Production facilities
- c. Factory production control system
- d. Verification of the long-term quality level as defined in BS 4483.

2.4 PRODUCT EVALUATION

Approved by HOU	Authorized by PCASM
Date of Issue : 24/03/2019	Rev. No. : 03
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	Organization/Unit: إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	Document Title: Specific Rules for FA Certification of Steel Fabric for Reinforcement of Concrete as per BS 4483	عنوان الوثيقة:	
	Doc Ref. DM-DCLD-RD-DP21-2191 (IC)	رقم الوثيقة :	

2.4.1 Sampling

2.4.1.1 Three sets of samples shall be taken either from the production line or warehouse; the first set, if applicable, shall be tested in the plant to be witnessed by a duly authorized DCL representative, the second set shall be sent to an independent testing laboratory while the third set will be kept by the manufacturer as reference for future use.

2.4.1.2 Test sample(s) for independent test shall be prepared and packed in the presence of DCL representative. DCL Representative shall affix his signature on the sample and shall be submitted to DCL or to an independent testing laboratory.

2.4.1.3 Number of Samples for testing shall be at least 10 pieces by one meter length per size within the size range.

2.4.2 Testing

2.4.1 Chemical Composition

All elements listed in BS 4449:2005 or BS 4482, as appropriate, and the carbon equivalent shall be determined.

The chemical composition of the bars shall conform to the requirements of BS 4449:2005.

2.4.2 Mechanical Properties

Note: All bars shall be free from defects such as seams, porosity, segregation and metallic inclusions, which can adversely affect the mechanical properties.

- Tensile properties of the bars shall comply with the characteristic values specified in Table 4 of Standard Specification.
- Bend Performance as per 7.2.5 of the Standard Specification shall show no sign of fractures or cracks visible to a person of normal or corrected vision.
- Dimensions, mass per meter and tolerances shall comply with the requirements as specified in section 7.3 of the Standard Specification.
- Geometry of the bars shall comply with the requirements of BS 4449:2005.

2.4.3 Independent test shall only be conducted if the result of the applicable in-plant test shows satisfactory results.

2.4.4 If the result of the test conducted by the independent testing laboratory shows non-conformance to the specified requirements, the provision for rejection specified in the standard shall apply. The retest shall be carried out on the reference sample kept by the manufacturer or on new samples collected by DM Certification Body, on which full testing shall be carried out, if necessary.

2.4.5 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.

2.4.6 Only after reassessment and subsequent product compliance shall the certification proceed with the granting of the DCL Certification.

Approved by HOU	Authorized by PCASM
Date of Issue : 24/03/2019	Rev. No. : 03
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'

 GOVERNMENT OF DUBAI	Organization/Unit:	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	Document Title:	Specific Rules for FA Certification of Steel Fabric for Reinforcement of Concrete as per BS 4483	عنوان الوثيقة:	
	Doc Ref.	DM-DCLD-RD-DP21-2191 (IC)	رقم الوثيقة :	

3. GRANTING OF THE DCL CERTIFICATION

3.1 CONDITIONS FOR GRANTING THE DCL CERTIFICATION

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 Rules and this Specific Rules, the certification shall be issued to the manufacturer for the type(s) of the product tested.

3.1.2 The factory shall agree with the DM Certification Body 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 factory production control system, and (2) an independent testing plan.

3.1.3 Factory Production Control System (Internal Product Quality Assurance Plan)

The factory shall prepare and submit to DM Certification Body for approval a factory production control system (internal product quality assurance plan).

The plan shall take into consideration the production process, the volume of production, the criticality of the test to be specified, frequency of sampling and testing, and other relevant factors.

3.1.4 Independent Testing Plan

The factory 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 Establishments under the Factory Assessment Scheme, and implemented by the DM Certification Body. The cost of testing under the independent testing plan shall be borne by the factory.

3.2 ISSUANCE OF DCL CERTIFICATION

If the conditions mentioned in clause 3.1 above have been complied, the manufacturer shall be issued a DCL Conformity Certificate and a Scope of Certification that covers the type(s) of the products that are certified.

3.3 RESPONSIBILITIES OF THE CLIENT

3.3.1 Every client shall ensure that his product, for which a DCL Conformity Certificate has been issued, conforms at all times to the requirements of the General Rule and Specific Rules and shall maintain to the satisfaction of DCL, a system of quality control including inspection and testing.

3.3.2 The client shall give the duly authorized representative(s) of DCL, 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 the DM Certification Body in writing of any change of management, transfer of plant site, modification in the product, manufacturing process or factory quality management system.

3.3.4 Upon transfer of plant site, the DCL Conformity 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 for the use of DCL Conformity Mark shall constitute

Approved by HOU	Authorized by PCASM
Date of Issue : 24/03/2019	Rev. No. : 03
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	Organization/Unit:	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY
	Document Title:	Specific Rules for FA Certification of Steel Fabric for Reinforcement of Concrete as per BS 4483	عنوان الوثيقة:	
	Doc Ref.	DM-DCLD-RD-DP21-2191 (IC)	رقم الوثيقة :	

sufficient grounds for suspension, withdrawal and cancellation of the DCL Conformity Certificate against a client.

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, labels, or markings, showing the DCL Conformity Mark, for approval by the DM Certification Body.
- 3.4.3 The certification and the authorization to use the DCL Conformity Mark is non-transferable.

4 SURVEILLANCE

- 4.1 DM Certification Body shall carry out routine surveillance to ensure consistent compliance with the requirements of this certification scheme in accordance with DM-DCLD-RD-DP21-2096 (IC) – Surveillance of Certified Establishments under the Company Assessment Scheme.
- 4.2 During surveillance, DM Certification body shall examine records of implementation of the factory production control system and may collect samples for verification testing at independent laboratories.
- 4.3 Non-routine/extra surveillance may be carried out in case of non-conformities found during routine surveillance; or as mandated by regulatory bodies.
- 4.4 Unresolved non-conformities during surveillance may be grounds for suspension or withdrawal of certification. Suspension, withdrawal, or termination of certification shall be in accordance with IMS-RD-07.

5 FEES

- 5.1 The fees shall be in accordance with DM-DCLD-RD-DP21-2079 (IC).

Approved by HOU	Authorized by PCASM
Date of Issue : 24/03/2019	Rev. No. : 03
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'