مجلس أبـــوظبـي للـجـودة والـمـطابـــقـة
ABU DHABI QUALITY & CONFORMITY COUNCIL

The Environmental Trustmark

Abu Dhabi Certification Scheme for Constructional Steel

Assessment and Surveillance Plan

Amendment Page

To ensure that each controlled copy of this ASP contains a complete record of amendments, the Amendment Page is updated and issued with each set of revised/new pages of the document.

Amendment			Discard		Insert	
No	**Date**	**Sections Changed**	**Page(s)**	**Issue no**	**Page(s)**	**Issue no**
1	03/05/2016	Scheme Launched	-	-	9	1.0
2	13/06/2016	Section 4: References added. Section 5.5: Level of inspection added			9	1.0

Approved by:

Salem Al Qassimi
Director Conformity Scheme Services

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1 ABOUT THE ABU DHABI QUALITY AND CONFORMITY COUNCIL

The Abu Dhabi Quality and Conformity Council (QCC) was established by law No. 3 of 2009, issued by His Highness Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE and ruler of Abu Dhabi.

The QCC consists of a council of regulators that facilitate the provision of quality infrastructure in line with global standards. This quality infrastructure enables industry and regulators to ensure that products, systems and personnel can be tested and certified to UAE and International Standards. In addition to supporting regulators and government organizations through offering quality and conformity assessment facilities, expertise and resources, the Council is also engaged in promoting a culture of quality towards consumers. Additionally, the QCC is responsible for raising the quality of local products and ensuring Abu Dhabi exports meet international standards to improve interactions with global trade and integration into the global economy, as envisioned by Abu Dhabi Economic Vision 2030.

Products certified by certification schemes administered by the QCC receive the Abu Dhabi Trustmark. The Trustmark is designed to communicate that products, personnel or systems conform to various safety, quality and performance standards that are set by Abu Dhabi regulators.

2 FOREWORD

The Abu Dhabi Certification Scheme for Constructional Steel, enables manufacturers, suppliers and distributors of reinforced steel (rebar, coil and de-coiled products) to obtain voluntary certification which demonstrates that the product(s) meet quality and performance specifications suitable for the Emirate of Abu Dhabi. These specifications incorporate the following requirements:

- Quality assurance of the manufacturing process through a suitable Quality Management System (QMS)
- Performance testing and certification from a QCC-recognized certification program
- Third-party inspection and verification

It is anticipated that implementation of this certification scheme will significantly benefit the Emirate of Abu Dhabi by improving the quality and environmental performance of these products in the construction industry.

3 THE ENVIRONMENTAL TRUSTMARK

Products that achieve certification, through formal evaluation against the QCC certification scheme criteria defined in this document, will be granted a Certificate of Conformity and are licensed to bear the Abu Dhabi Trustmark in product promotion and merchandising. The Certificate of Conformity enables manufacturers, distributors and suppliers of reinforced steel products to present evidence of meeting appropriate standards for Abu Dhabi's built environment.

The Certificate of Conformity can be used to support the submission requirements of the Estidama Pearl Rating System **PBRS credit SM-10, PVRS credit SM-5 and PCRS credit SM-3,** to demonstrate the structural rebar steel products meet either the recycled content requirements or the CARES Sustainable Constructional Steel scheme certification.

The QCC's market surveillance inspectors actively ensure the integrity of the Trustmark for Environmental Performance is maintained through market surveillance and testing of products bearing the Trustmark.

Advisory note: A number of factors additional to the characteristics addressed in this assessment and surveillance plan may influence the performance of products, e.g. fabrication, installation, maintenance, modification and incorrect operation. Such factors are beyond the scope of the third party product certification described in this document. The QCC recommends that suitable precautions, such as third party inspection and the use of qualified fabricators and installers are taken by the end users, to improve the likelihood of compliance of manufactured products.

The requirements herein may from time to time be varied by the issue of one or more 'QCC Notices' issued as controlled documents to certificate holders.

4 REFERENCES

The following statutory documents have been used to define the required performance requirements within this Assessment and Surveillance Plan:

- Abu Dhabi International Building Code (ADIBC), as issued by the Abu Dhabi Department of Municipal Affairs in 2013.
- The Pearl Rating System for Estidama: Community Rating System – Design and Construction V 1.0, April 2010
- The Pearl Rating System for Estidama: Building Rating System – Design and Construction V 1.0, April 2010
- The Pearl Rating System for Estidama: Villa Rating System – Design and Construction V 1.0, April 2010

In addition, the following standards and specifications are referenced as acceptable means to demonstrate compliance with the minimum performance requirements outlined in Section 5 for the respective steel products. Familiarity and/or access to these documents, dependant on the product(s) applying for certification, is expected of the applicant. In all cases, the most recent edition of the document shall apply:

- **BS 4449: 2005+A2:** Steel for the reinforcement of concrete. Weldable reinforcing steel. Bar, coil and decoiled product. Specification
- **ASTM A706/706M - 14** Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement
- **ASTM A615/615M - 14** Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- **BS 6744:2001+A2:** Stainless Steel Bars for the reinforcement of and use in concrete. Requirements and test methods
- **ASTM A955/955M - 14** Standard Specification for Deformed and Plain Stainless Steel Bars for Concrete Reinforcement
- **ASTM A1035** Standard Specification for Deformed and Plain, Low-Carbon, Chromium, Steel Bars for Concrete Reinforcement.
- **ASTM A184/A184M-06** Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement.
- **ASTM A496 - 78** Standard Specifications for Deformed Steel Wire for Concrete Reinforcement.
- **ASTM A185** Steel Welded Wire Reinforcement, Plain, for Concrete.
- **ASTM A497** Steel Wire, Deformed, for Concrete Reinforcement**.**
- **ASTM A767/A767M-09** Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.
- A**STM A775/A775M-16** Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
- **ASTM A934/A934M-16** Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars.
- **ASTM A884/A884M-14** Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Reinforcement.
- **ASTM A1022/A1022M-16a** Standard Specification for Deformed and Plain Stainless Steel Wire and Welded Wire for Concrete Reinforcement.
- **ASTM A970/A970M-16** Standard Specification for Headed Steel Bars for Concrete Reinforcement.
- **ASTM A82 - 02** Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.

- **ASTM A1044/A1044M-16a** Standard Specification for Steel Stud Assemblies for Shear Reinforcement of Concrete.
- **BS 4482**. Steel wire for the reinforcement of concrete products.
- **BS 4483**. Steel fabric for the reinforcement of concrete.
- **BS EN 1011-1** Welding. Recommendations for welding of metallic materials. General guidance for arc welding.

5 CERTIFICATION REQUIREMENTS

5.1 General Requirements

In order to receive the Trustmark for Environmental Performance, the product applying for certification must be assessed according to QCC's criteria (clause 5.2). Applicants shall complete the product certification form included in APPENDIX 1 and available electronically in the QCC website (http://jawdah.qcc.abudhabi.ae).

The general requirements for certification, along with the terms and conditions for QCC certification of products and license of the Trustmark are contained in the application form, which is available in the QCC website (refer to APPENDIX 2).

In addition, the applicant shall provide the following:

- Valid UAE Trade License
- Authorisation letter from the manufacturer to deal with the product(s) seeking certification (if applying on the manufacturers' behalf).

5.2 Specific Requirements

5.2.1 Product Certification

In order to receive the Trustmark, the rebar steel products applying for certification must be assessed according to the QCC's criteria listed in clause 5.2 and shown to meet the requirements of one or more of the following international recognized certification programs:

- Certification Authority for Reinforcing Steels (CARES) (http://www.ukcares.com/)
- Australasian Standards Certification & Verification of Reinforcing, Prestressing & Structural Steels (ACRS) (http://www.steelcertification.com/)
- Dubai Central Laboratory (DCL) Conformity Mark (http://www.dcl.ae/DCLD/Major/ServicesNew/Certification/ReinforcingSteel.htm)

The certification bodies that issue certificates associated with the above certification programs must be accredited to ISO 17065 by an accreditation body signatory to IAF MLA.

Demonstration of certification through a program other than those listed above shall be considered by the QCC provided suitable evidence is supplied by the applicant of comparability between the alternative certification program and one/all of the listed programs. Where an applicant chooses to supply evidence of the constructional steel products performance independent of the above established certification programs, the following additional requirements shall be met:

- The certificate must certify conformity with the requirements of a type 5 scheme as mentioned in ISO/IEC 17067:2013 section 5 and issued by a certification body accredited to ISO 17065 by an accreditation body signatory to IAF MLA.
- The testing laboratory used for performance measurement of rebar steel products shall be certified to ISO/IEC 17025 within the scope of the testing performed
- The ISO/IES 17025 certification shall be issued by a certification body signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC-MRA)
- The factory shall have a production control system (similar to ISO 9000 series), which must be checked regularly by an accredited inspector.

5.2.2 Demonstration and acceptance through comparable standards

Demonstration of compliance through comparable standards may be accepted by QCC provided suitable evidence, such as performance test reports and verified manufacturer's product declarations are supplied by the applicant, demonstrating the ability for the steel products to meet the minimum performance requirements. The information provided must include detailed analysis of the actual composition and properties of the steel products and its own detailed mechanical and physical properties in comparison with the reference standard (American or British) limits.

Where an applicant chooses to supply evidence of the steel products performance independent of an established certification programme, the testing laboratory used for performance rating shall be certified to ISO/IEC 17025 within the scope of the testing performed, with the certification being issued by a qualified accreditation body which is a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC/MRA).

Clarification of acceptance by QCC of compliance through testing by comparable standards may be sought by the applicant via email or face to face meeting prior to preparing the application.

5.3 Product Quality Requirements

In order to obtain the QCC certification, the applicant shall provide current/valid evidence that the constructional steel product(s) applying for certification currently hold a valid conformity certificate from one of the certification bodies listed in clause 5.1.

In addition, the applicant shall provide performance testing reports generated in accordance with the conformity certificate showing compliance with the physical and chemical properties, and the dimensions, mass per metre tolerances and marking requirements defined by the relevant standard.

5.4 Sustainability Attributes

In accordance with Estidama Pearl Building Rating System Credit SM-10, Pearl Villa Rating System Credit SM-5 and Pearl Community Rating System Credit SM-3; projects would attain one credit point if they use structural steel with post-consumer recycled content. For steel-framed buildings, 50% of the steel by weight should have a minimum of 25% post-consumer recycled steel; or for concrete-framed buildings using steel as part of the concrete reinforcing, 80% of the steel by weight must have a minimum of 90% post-consumer recycled steel. Steel with post-consumer recycled content refers to steel that has completed the end of its life cycle after being used by consumers (e.g. scrap metal) and has been diverted back to the manufacturing process. The steel supplier or manufacturer shall provide formal documentation detailing the post-consumer recycled content.

Alternatively, steel products from companies certified under CARES Sustainable Reinforcing Steel Appendix 01 “Production of continuously cast steel billets” and “Production of hot rolled steel bar and coil for the reinforcement of concrete” will count as recycled.

5.5 Quality Management System Requirements

The manufacturer (not the importer/distributor/retailer) must be certified according to ISO 9001:2008, the certificate being issued by a certification body accredited according to ISO/IEC 17021:2012 by an accreditation body signatory to the International Accreditation Forum Multilateral Recognition Agreement (IAF MLA).

5.6 Inspection and Verification Requirements

In addition to the documentation requirements outlined above, the steel products applying for certification shall be subject to onsite inspection and verification activities performed by QCC recognized third-parties. In this regard, two levels are applicable:

a. Low level inspection for producers holding CARES, ACRS or DCL certifications.

b. High level inspection and testing for producers not holding any of the above certifications.

6 ASSESSMENT OF THE APPLICATION

The assessment is based on the submitted documentation defined in clauses 5.1 and 5.2, including additional product information such as; product specifications, product descriptions and product photo documentation, which is evaluated for consistency, completeness and overall quality. Refer to APPENDIX 1 for diagram of the application-assessment process.

7 IDENTIFICATION AND LABELLING

Each certified product component must be provided with an evident marking on the existing tag labels of the products bearing the QCC Trustmark for Environmental Performance (depending on product and subject to agreement with the QCC Communications department) in accordance with brand guidelines specified in the Application, Terms and Conditions and License for Certification (QCC-QP-CSS/PCS-F01).

8 SURVEILLANCE / AUDIT PROCEDURES

8.1 General

At a minimum, the surveillance and audit requirements listed under this section shall be applied to the certified product(s) on an annual basis. When the validity of a certificate is to be demonstrated; this includes the validity of the accreditation of the certificate issuer.

8.2 Quality Management System Audits of Manufacturer

Proof of continued compliance (certification) is to be presented to the QCC annually or 30 days after expiry of the submitted ISO 9001:2008 certificate (whichever comes first).

8.3 Market Surveillance of QCC Certified Products

Products carrying the QCC Trustmark of Environmental Performance will be subject to the following unannounced inspection activities:

- Annually, the QCC will undertake market surveillance activities to test certified products available in the Abu Dhabi market
- Samples can be inspected i) on-site at installed locations of Abu Dhabi government/municipal owned buildings, ii) at point of entry to the Abu Dhabi Market, and/or iii) in the market
- Samples will be assessed for compliance to selected specific requirements given in Clause 5 including review of the current certification
- The sampling schedule will target previously untested products on a year-on-year basis to ensure eventual testing of all certified products

- If any product fails to meet the certification requirements during inspection, in the first instance, the QCC will liaise with the third party certification body to verify validity of the certification, and subsequently, request the supplier corrective actions, e.g. product withdraw, re-testing or re-certification.
- If one of these additional samples also fails to meet the certification specifications, the certification status of all products from the applicant will be reviewed.

Proof of continued compliance to the requirements of the QCC certification must be provided if; i) a referenced standard listed in clause 4 has changed, or ii) the product has been modified in such a way that would affect its ability to meet the requirements of certification, or iii) annually following issuance of the QCC certificate, whichever comes first.

In cases i) or ii), the continued validity of the supplied product certification shall be demonstrated; in case iii) an affidavit shall be provided by the applicant and the manufacturer that the production system has not been modified and the specification of the product remains unchanged.

9 FEES

The applicant shall pay the necessary fees in accordance with the **Schedule of Fees** issued by the Abu Dhabi Executive Council, which is available in jawdah.abudhabi.ae under the respective product scheme.

APPENDIX 1: PRODUCT ASSESSMENT AND CERTIFICATION PROCESS