



مجلس أبوظبي للجودة والمطابقة
ABU DHABI QUALITY & CONFORMITY COUNCIL



Abu Dhabi Certification Scheme for Water Flow Rate Regulators

Assessment and Surveillance Plan



Amendment Page

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

<u>Amendment</u>			<u>Discard</u>		<u>Insert</u>	
<u>No</u>	<u>Date</u>	<u>Sections Changed</u>	<u>Page(s)</u>	<u>Issue no</u>	<u>Page(s)</u>	<u>Issue no</u>
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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 Water Flow Rate Regulators, developed through consultation with regulators and industry, enables manufacturers, suppliers and distributors of these products to obtain voluntary certification which demonstrates that the products 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 performed by a recognized certification body
- Estidama Pearl Rating System requirements for Water Fixtures and Fittings issued by Abu Dhabi Urban Planning Council (UPC)
- Uniform Plumbing Code of Abu Dhabi Emirate requirements issued by the Environment Agency of Abu Dhabi

The scope of certification applies to water flow rate regulators intended to be mounted on tapware used with sanitary appliances in lavatories, washrooms and kitchens (single taps, combination tap assemblies, mechanical mixing valves, thermostatic mixing valves, ablution troughs and shower heads).

It is anticipated that implementation of this certification scheme will significantly benefit the Emirate of Abu Dhabi by reducing potable water consumption and associated energy usage in water desalination and pumping processes.

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 for Environmental Performance in product promotion and merchandising. The Certificate of Conformity enables manufacturers, distributors and suppliers of water flow rate regulators 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 credit **PBRs/PVRS credits PW-R1 and PW-1**, to demonstrate allowable flow rates in water fittings and fixtures that incorporate water flow regulators.

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

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. 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 the use of competent and/or accredited/approved product installers, to improve the likelihood of continued compliance of installed 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 international standards and guidance documents have been used to define the performance and testing requirements within this Assessment and Surveillance Plan:

- AS 5200.037.2 – Plumbing and Drainage Products: Flow controllers for use with heated or cold water systems
- EN 246 - Sanitary tapware – General specifications for flow rate regulators
- AS/NZS 6400 - Water efficient products—Rating and labelling
- BS 6920 (Parts 1 & 2) - Suitability of non-metallic materials and products for use in contact with water intended for human consumption with regard to their effect on the quality of the water
- [The Voluntary Water Efficiency Labelling Scheme on Flow Controllers of the Government of the Hong Kong Special Administrative Region](#)



- [KIWA BRL-K617 – Assessment for the Kiwa product certificate for flow rate regulators](#)
- [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](#)

5 CERTIFICATION REQUIREMENTS

5.1 General Requirements

In order to receive the QCC Trustmark for Environmental Performance, the product 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:

- [WaterMark](#) – demonstrating conformity to AS 5200.037.2
- [Kiwa Water Mark](#) - demonstrating conformity to EN 246
- [Hong Kong Voluntary Water Efficiency Labelling Scheme \(WELS\) on Flow Controllers](#) - demonstrating conformity to ATS 52000:037.2:2005
- [US EPA Water Sense Program](#) - demonstrating conformity to ASME 112.18.1/CSA B125.1

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 of the certification programs listed above. In this case, the performance requirements outlined below shall be demonstrated via testing in a laboratory accredited to ISO/IEC 17025:2005 by an accreditation body signatory of the ILAC MRA, or in a laboratory recognised by the QCC.

Acceptance of certification through an alternative program is at the discretion of the QCC after subsequent review of evidence of comparability between the proposed certification with the recognized certification programs listed above.

The general requirements for certification, along with the terms and conditions for the QCC certification of products and license for use of the Trustmark are contained in the Application, Terms and Conditions and License for Certification form QCC-QP-CSS/PCS-F01, which can be downloaded from the QCC website at:

<http://www.qcc.abudhabi.ae/English/Activities/Documents/Application%20form%20and%20Terms%20and%20Conditions.pdf>

Complete applications for certification shall be submitted electronically through the QCC's Jawdah website <http://jawdah.qcc.abudhabi.ae/en/Pages/default.aspx>.

In addition, the applicant shall provide the following:

- A valid UAE trade license for a supplier/distributor/retailer of the products seeking certification.
- A letter from the manufacturer authorising the supplier/distributor/retailer to deal with the QCC certification of the product(s) (if applying on the manufacturers' behalf)

5.2 Performance Requirements

In order to receive the QCC Trustmark for Environmental Performance, the product applying for certification must be tested against the requirements of all the following standards or internationally recognised comparable standards:

- a) **Nominal flow rate:** Water flow regulators shall be tested to demonstrate compliance with the performance requirements defined in AS 5200.037.2 (clause 9.2) or EN 246 (clause 8.3) or a comparable standard: The difference between the highest and lowest average flow rates, measured at each of the dynamic flow pressures of 150 kPa, 250 kPa, 350 kPa and 500 kPa when the flow rate has stabilized and at ambient water temperature shall not exceed 2.0 L/min.

In accordance with the Estidama Pearl Rating System Credits PW-R1 and PW-1 performance requirements:

- Products which demonstrate a maximum average nominal flow rate of 9.5 l/min at 551.6 kPa shall be considered as suitable for mounting in showerhead fixtures.
 - Products which demonstrate a maximum average nominal flow rate of 6 l/min at 417.7 kPa shall be considered as suitable for mounting in bathroom taps for private installations, kitchen sink faucets and bidets/bidet sprays.
 - Products which demonstrate a maximum average nominal flow rate of 1.9 l/min at 417.7 kPa shall be considered as suitable for mounting in bathroom taps for public installations.
- b) **Water safety:** Water flow controllers consisting of non-metallic components shall be tested to demonstrate that they are safe for potable water use in accordance with BS 6920 or comparable standard.
- c) **Water-tightness:** No signs of cracks, leakages or other failures should be observed in accordance with the water-tightness test procedure defined in AS 5200.037.2, or EN 246 or in a comparable standard.
- d) **Endurance:** The flow rate which is re-measured after the endurance test defined in AS 5200.037.2 or comparable standard shall be within 1.0 litre/min of the nominal flow rate test.

Demonstration of the above performance requirements through comparable standards shall be considered by the QCC provided suitable evidence is supplied by the applicant.

Product(s) certificate(s) submitted must be currently valid.

5.3 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).

6 ASSESSMENT OF THE APPLICATION

The assessment is based on the submitted documentation defined in clause 5.2 and 5.3, 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 must be provided with an evident label 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

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 Testing and Inspection

Products carrying the 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/systems 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 (if applicable), and subsequently, request the supplier corrective actions, e.g. product 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.

APPENDIX 1: PRODUCT ASSESSMENT AND CERTIFICATION PROCESS

