



مجلس أبوظبي للجودة والمطابقة
ABU DHABI QUALITY & CONFORMITY COUNCIL



Abu Dhabi Certification Scheme for Ceiling and Wall Board Products

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.

<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 Ceiling and Wall Board Products, developed through consultation with regulators and industry, enables suppliers of these materials to obtain voluntary certification of products that meet the Abu Dhabi International Building Code and to satisfy other desirable performance characteristics related to sustainability, energy efficiency and safety requirements.

The scope of certification applies to gypsum wallboard, cement plaster board, lath, gypsum sheathing, gypsum base for gypsum veneer plaster, exterior gypsum soffit board, pre-decorated gypsum board or water-resistant gypsum backing board, used in interior and exterior building applications.

It is anticipated that implementation of this certification scheme will significantly benefit the Emirate of Abu Dhabi by improving the quality and sustainability performance of the built environment and reducing waste generation associated with construction activities.

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 plasterboard 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 Building Rating System (PBRs) credits RE-R1 and RE-1 and Pearl Villa Rating System (PVRS) credits RE-R1, RE-1 and RE-2** to demonstrate the plasterboard product thermal performance used within the submitted u-value calculations.

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 key 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, including all applicable standards related to gypsum board products.
- 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
- UAE Fire and Life Safety Code of Practice
- UAE Fire and Life Safety Code of Practice Annexure A.1.21. Rev.2 Fire stopping, exterior wall, cladding/curtain wall and roofing systems

In addition, the following standards and specifications are referenced as acceptable means to demonstrate compliance with the minimum performance requirements outlined in Table 1 for the respective insulation materials. 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:

- ASTM C208, Specification for Cellulosic Fiber Insulating Board
- ASTM C1177, Specification for Glass Mat Gypsum Substrate for Use as Sheathing



- ASTM C1178, Specification for Coated Glass Mat Water Resistant Gypsum Backing Panel
- ASTM C1186, Specification for Flat Fiber Cement Sheets
- ASTM C1278, Specification for Fiber-reinforced Gypsum Panels
- ASTM C1325, Standard Specification for Non-asbestos Fiber-mat Reinforced Cementitious Backer Units
- ASTM C1396, Standard Specification for Gypsum Board
- ASTM C1658, Standard Specification for Glass Mat Gypsum Panels
- ASTM C1629 / C1629M, Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels
- ASTM C518, Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- ASTM C177, Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus
- ASTM C1363, Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus
- ASTM D5116, Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products
- ASTM E136, Standard Test Method for Behaviour of Materials in a Vertical Tube Furnace at 750°C
- ASTM E2178, Standard Test Method for Air Permeance of Building Materials
- ASTM E1354, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter
- ISO 8336, Fibre-cement flat sheets — Product specification and test methods
- BS EN 520+A1, Gypsum plasterboards. Definitions, requirements and test methods
- BS EN 12467, Fibre-cement flat sheets. Product specification and test methods
- AS 2588-1998, Gypsum Plasterboard.

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

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:

- 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 Mandatory Performance Requirements

In order to gain certification, the ceiling and wall board products shall meet the minimum performance requirements outlined in Table 1 below, when tested in accordance with the defined test criteria.

In order to demonstrate compliance, test reports must be provided from an ISO/IEC 17025 certified laboratory where the applicable test standards is within the scope of certification. The certification body which provided the ISO/IEC 17025 certification to the laboratory must be a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC-MRA). Alternatively, the testing facility shall have the QCC recognition based on the scope of the certification sought.

Test reports validity: In all cases, the test reports submitted must not be older than 12 months on the day of submission.

Physical testing analysis or equivalent: Test reports shall demonstrate applicability and traceability to the products sold in the UAE.

Test standard equivalency: Test reports using alternative standards to those listed in Table 1 will be considered and reviewed by the QCC to determine if the standard is equivalent with, and/or meets the intent of, the requirements of the ADIBC and UAE Fire and Life Safety Code.

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).

Table 1. The QCC minimum performance requirements for plasterboard products certification

Product Properties	Requirements	Test Procedure ¹
Physical properties	<p>Tested in accordance with the standard applicable specifically for the product type.</p> <ul style="list-style-type: none"> For all fibre cement panels used as exterior wall claddings, minimum thickness is 6.35mm measured from bottom of decorative groove and 12.7mm for all fibreboard siding and for fibreboard and gypsum wall panels Air leakage: Results shall be reported in units of L/s-m² at a test pressure differential of 75 Pa Impact resistance: Wall and ceiling assemblies shall meet the requirements of the ADIBC for the intended application and report the impact classification level measured. 	<p>Refer to Clause 4 for a list of acceptable standards. In addition, refer to ASTM E2178 for air leakage test (if not included in the product standard).</p> <ul style="list-style-type: none"> ASTM C 1629/ C 1629M
Fire properties	<ul style="list-style-type: none"> To be classified as Type X for use in assemblies specified in the ADIBC, gypsum boards must be tested in accordance with Annex A of ASTM C1396. 	<ul style="list-style-type: none"> ASTM C1396 Annex A
	<ul style="list-style-type: none"> To be classified as non-combustible, sheathing boards must comply with the requirements of ASTM E136, or comparable 	<ul style="list-style-type: none"> ASTM E136
	<ul style="list-style-type: none"> Reports of testing in accordance with ASTM E1354, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter 	<ul style="list-style-type: none"> ASTM E1354
Thermal resistance	<p>Test must be:</p> <ul style="list-style-type: none"> conducted at 35°C conducted at the thickness intended for use. reported in units of W / (m²-°K) for thermal conductivity. reported in units of (m²-°K) / W for thermal resistance. 	<ul style="list-style-type: none"> ASTM C518, or ASTM C177, or ASTM C1363.
<p>1. Comparable test procedures would be accepted by the QCC after assessment on a case by case basis in accordance with the provisions of Section 104.11 of the ADIBC.</p>		

6 ASSESSMENT OF THE APPLICATION

The assessment is based on the submitted documentation defined in clauses 5.1, 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. Appendix 1 outlines the application-review process.

7 IDENTIFICATION AND LABELLING

Each certified product must be provided with an evident label bearing the 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-CSSPCS-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 and systems.
- If any product fails to meet the certification requirements during inspection the product certification in question will be withdrawn and the applicant required to perform testing of an agreed number of samples to verify compliance.
- 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

