

bmtrada





TECHNICAL INFORMATION SHEET

BM TRADA Q-MARK CERTIFICATION: EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS

Scheme references: 078, 088, 098

INTRODUCTION

This technical information sheet explains the aim, objectives and fundamental processes of the new BM TRADA Q-Mark Certification schemes that have been developed to facilitate certification of doorsets that are classified using the EN 13501-2 standard.

Note: On 2nd September 2024, the UK Government confirmed that the National Classes fire testing standards will be withdrawn from Approved Document B (England) in favour of the EN 13501 series of European classification standards. A transition period of 5 years was given by the UK Government for fire resisting construction products, meaning products such as fire resisting doorsets will need to be classified to EN 13501-2 for the relevant performance characteristics by 2nd September 2029.

WHAT IS A DOORSET MANUFACTURER?

A doorset manufacturer is a company that constructs complete doorsets for supply to market. The performance claim of the doorset supplied to market is under the responsibility of the doorset manufacturer, who must be able to provide supporting evidence. Q-Mark certified fire door manufacturers can manufacture doorsets using their own supporting evidence (non-systems house) or using supporting evidence cascaded from a systems house.

WHAT IS THE PURPOSE OF A DOORSET MANUFACTURER?

A doorset manufacturer provides the market with doorsets that have certain design and performance attributes, to meet specification requirements based on the location and use of the doorset within a building.



WHAT IS THE AIM OF THE Q-MARK EN 13501-2 SCHEMES FOR **DOORSET MANUFACTURERS?**

The aim of these certification schemes is to ensure that doorsets are effectively and consistently manufactured in accordance with the relevant supporting documentation (i.e. Direct Application (DIAP), Extended Field of Application (EXAP) and associated classification reports). They provide added assurance to end users that a particular doorset can provide the intended performance classification under EN 13501-2 as stated by the manufacturer.

These schemes also provide feedback loops, via periodic audit testing. Audit testing provides confidence to the manufacturer regarding the consistency of product performance but also helps identify any potential reduced performance from that expected. It also allows information on doorset performance to be fed back to the systems house where the doorset manufacturer is relying on cascaded evidence.

DO THE Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS INTERACT WITH OTHER Q-MARK SCHEMES?

For doorset manufacturers that rely on systems houses, the appropriate supporting evidence will be cascaded to the manufacturer under Q-Mark scheme 171.

The design and relevant supporting evidence will be identified on the manufacturer's scope of certification, allowing the end user to identify what supporting evidence was used to manufacture the doorset.

WHAT IS A Q-MARK CERTIFIED DOORSET MANUFACTURER (NON-SYSTEMS HOUSE) RESPONSIBLE FOR?

A Q-Mark certified fire doorset manufacturer (non-systems house) will:

- Identify the doorset design specifications they want to be included in their scope of certification
- Identify and supply details of all companies involved in any aspect of the doorset manufacture (e.g. satellite factories)
- Identify the classifications to EN 13501-2 that they are looking to claim for the doorset design specifications
- Understand scheme requirements, e.g. sampling of initial type testing, audit testing and the definition of acceptable test evidence under this scheme.

WHAT IS A Q-MARK CERTIFIED DOORSET MANUFACTURER (SYSTEMS HOUSE) RESPONSIBLE FOR?

A Q-Mark certified fire doorset manufacturer (systems house) will:

- Identify the systems house doorset DIAP/EXAP and associated classification report/s they want to be included in their scope of certification
- Identify and supply details of all companies involved in any aspect of the doorset manufacture (e.g. satellite factories)
- Understand scheme requirements, e.g. sampling of audit testing and the definition of acceptable test evidence under this scheme.





DO THE COMPONENTS OF THE DOORSET DESIGNS MANUFACTURED UNDER THE Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS ALSO REQUIRE THIRD PARTY CERTIFICATION?

Third party certification schemes are designed to ensure consistency of product conformity and the standard of workmanship being provided (e.g. Certifire or Q-Mark) and can be used to evidence that the manufacturer has a suitable system of FPC.

The following components require third party certification.

Door leaf/blank

For manufacturing Q-Mark certified doorsets for European classification applications, door leaf/blanks, as approved in the relevant supporting evidence for the system design, must have third party certification provided by Q-Mark.

Other components

For manufacturing Q-Mark certified doorsets from 2nd September 2029, the following components, must have certification under WTCL (e.g. Certifire or Q-Mark) and/or be CE/UKCA marked, where required:

- Closers, hinges and locksets
- Intumescent and/or smoke seals
- Glass

WHAT SUPPORTING EVIDENCE IS ACCEPTABLE FOR USE WITHIN THE Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS?

As a minimum, the documents that provide the field of application for the doorset design, such as the DIAP/EXAP and associated classification report, are acceptable. In addition, all supporting evidence including test evidence and sampling reports shall be made available to BM TRADA.

Supporting evidence is a critical aspect of establishing a product's performance to the relevant test standard and must meet specific requirements to be considered for the purpose of certification based on impartiality, performance and relevance. The requirements for supporting evidence to be used within Q-Mark Certification schemes are given in a separate technical information sheet.

WHAT DOORSET TYPES ARE COVERED BY THE Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS?

Three new Q-Mark doorset manufacturing schemes have been developed for EN classification, covering timber, metal and composite doorsets.



DO DOORSET MANUFACTURERS HAVE TO UNDERTAKE PRE-CERTIFICATION/AUDIT TESTING UNDER THESE Q-MARK SCHEMES?

Pre-certification testing and audit testing are key components of third party certification schemes as they provide a vital feedback loop on product performance for the manufacturer and other parties with a vested interest in the product's performance (e.g. component supplier, systems houses, end users).

For a manufacturer to obtain Q-Mark certification, pre-certification tests must be conducted by the manufacturer for each characteristic to be certified (e.g. fire integrity and smoke control). These tests are required when the supporting evidence has not been obtained on sampled specimens taken from the production facility that is to be certified. Where the supporting evidence has been completed by the company to be certified, at least one successful sampled test must have been completed within the preceding three years to qualify as a pre-certification test.

In addition to pre-certification testing, ongoing periodic audit testing of one of the doorset designs on the scope of certification of the doorset manufacturer is a requirement of each scheme.

All pre-certification tests and audit tests that have indicated a shortfall in the intended performance of the doorset, and require further investigation, must be addressed by the doorset manufacturer, which may require sharing information with other relevant parties such as component manufacturers and/or systems houses. The primary purpose is to ensure appropriate action is taken by the relevant party to help maintain ongoing consistency in the doorset design's performance.

WHAT ACTIVITIES WILL BM TRADA UNDERTAKE UNDER THE Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS?

BM TRADA will audit each doorset manufacturer and take into account the following areas:

- a. A system of FPC
- **b.** Competency of staff
- c. Purchase and delivery controls
- **d.** Control over any satellite factory functions
- e. Marking of doorsets in line with Q-Mark certification scheme requirements
- f. Continued maintenance of EXAP and associated classification reports and/or continued permission for use and management of DIAP/EXAP and associated classification reports cascaded from a systems house
- g. Undertake audits as per certification scheme requirements
- **h.** Undertake audit testing as per certification scheme requirements.

Please note: This is not an exhaustive list.



HOW DO THE Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS PROVIDE ADDED ASSURANCE TO THE END USER?

These Q-Mark schemes are based on a Type 5 certification scheme as defined in ISO/IEC 17067. The schemes include conformity assessment activities that go beyond the minimum evidence-based requirements given the guidance documents for meeting the requirements of the building regulations.

The essential components of these certification schemes are listed below:

- 1. Sampling of ITT i.e. verification of the specimen being constructed for testing
- 2. Review of the supporting evidence used for certification (e.g. to check independence and technical requirements)
- 3. Pre-certification testing to confirm the manufacturer is capable of constructing doorsets that meet the minimum performance requirements intended for the product
- 4. Initial and ongoing FPC checks against the supporting evidence and other technical documentation
- 5. Records of manufacturer competencies
- **6.** Conformity marking (e.g. labels)
- 7. Record of manufacturer's scope of certification
- 8. Ongoing audit testing
- 9. Periodic review of supporting evidence (e.g. in response to a revised supporting standard such as EN 15269 series).

NB: For manufacturers that rely on systems house supporting evidence, the same conformity assessment activities outlined above related to ITT are placed on the systems house.

The schemes provide confidence to the manufacturer that the doorset designs should be capable of the indicated performance, which in turn provides added assurance of the product performance to the end users.

ARE THESE Q-MARK SCHEMES FOR DOORSET MANUFACTURERS LIMITED TO EN CLASSIFICATION?

The Q-Mark EN 13501-2 Schemes for Doorset Manufacturers have been purposefully developed to accommodate the EN classification system. The certification schemes are designed to communicate the classified performance of the doorset design in terms of EN 13501-2, and include the following performance characteristics:

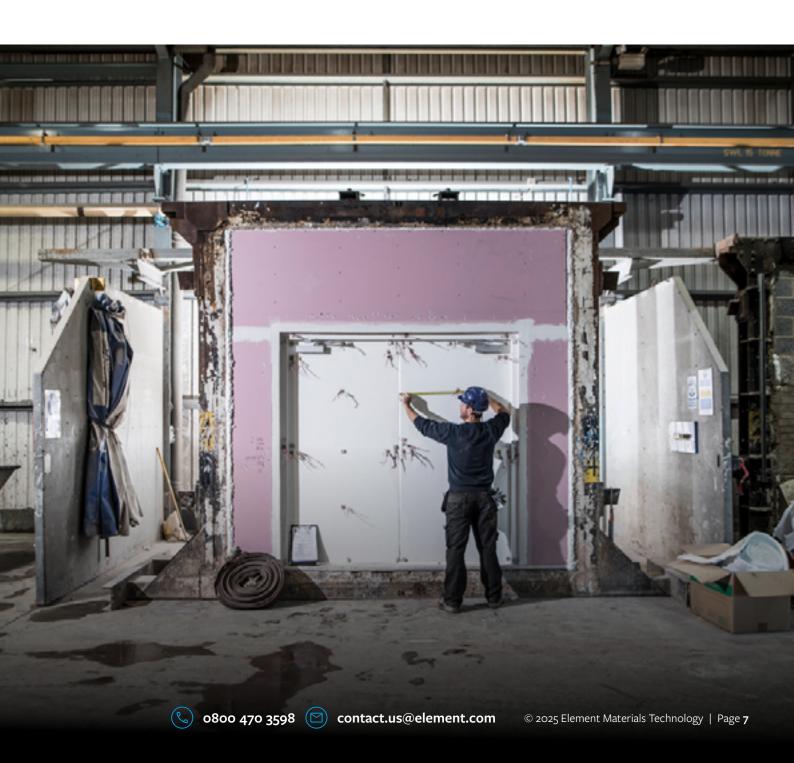
- Fire Integrity (E)
- Thermal Insulation (I₁ or I₂)
- Smoke Control (Sa3 or Sa4)
- Radiation Control (W)
- Self-closing (C)
- Durability of self-closing (C₀-C₅)



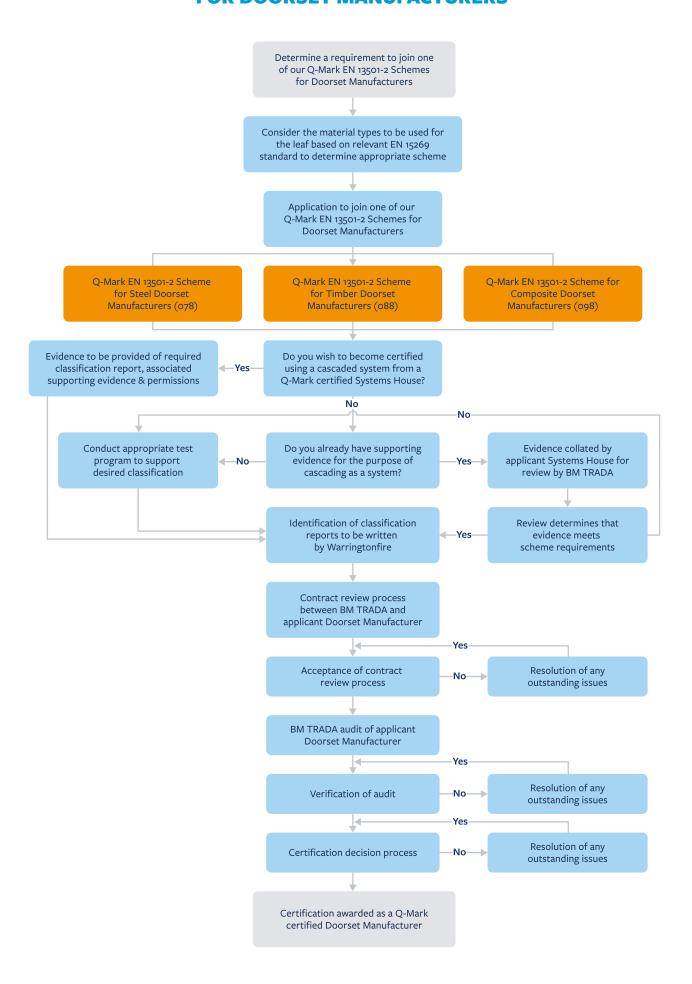


DO I NEED TO JOIN THE Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS?

For any company that wishes to manufacture Q-Mark certified performance doorsets and claim a classified performance to EN 13501-2, they must be certified within this Q-Mark scheme. See certification process flow on the next page.



CERTIFICATION PROCESSES FOR Q-MARK EN 13501-2 SCHEMES FOR DOORSET MANUFACTURERS





warringtonfire bmtrada



Making tomovrow safer than today