



TECHNICAL INFORMATION SHEET

BM TRADA Q-MARK CERTIFICATION:

Fire Door Processing Scheme

EN 13501-2

Q-MARK FIRE DOOR PROCESSING SCHEME (EN 13501-2)

This technical resource explains the aim, objectives and fundamental processes of the new BM TRADA Q-Mark Certification scheme that has been developed to facilitate certification of processed elements for manufacturing timber doorsets and door assemblies for classification 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Note: On 2nd September 2024, the UK Government confirmed that the National Classes fire testing standards will be withdrawn from Approved Document B (England) in favour of the EN 13501 series of European classification standards.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 fabricator?

A fabricator is a company that takes a door blank/leaf and conducts further processes, such as sizing, lipping, trimming, cutting of apertures, glazing an aperture, and manufacture of frames. A fabricator may also manufacture a basic fire door leaf finished to a condition that includes lipping, facings, and glazed apertures in accordance with the supporting evidence.

The performance claim for door assemblies is based on the supporting evidence supplied by the fabricator. Q-Mark certified fabricators can use their own supporting evidence (non-systems house) or supporting evidence cascaded from a systems house.

What is the purpose of a fabricator?

Q-Mark certified fabricators can supply certified door elements to Q-Mark certified doorset manufacturers, as part of the supply chain, or they can supply certified door elements direct to market for the purpose of constructing EN classified door assemblies, to meet specification requirements based on the location and use of the door assembly within a building.

What is the aim of the Q-Mark Fire Door Processing Scheme (EN 13501-2)?

The aim of this certification scheme is to ensure that critical elements of fire doors are effectively and consistently manufactured in accordance with the relevant supporting documentation (i.e. DIAP/EXAP and associated classification reports). The scheme provides added assurance to end users that when the elements are used as part of a certified timber doorset, or door assembly, they can be expected to maintain the intended performance classification under EN 13501-2.

Does the Q-Mark Fire Door Processing Scheme (EN 13501-2) interact with other Q-Mark schemes?

The scheme has been specifically designed to support the supply chain of certified door elements (e.g. leaves and frames) to Q-Mark certified timber doorset manufacturers under Q-Mark scheme 088.

For fabricators 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 fabricator's scope of certification, allowing the end user to identify what supporting evidence was used to construct the products. For supply of certified elements to Q-Mark certified doorset manufacturers, the same supporting evidence will be listed on the fabricator's scope of certification as the doorset manufacturers.

What is a Q-Mark certified fabricator responsible for?

A Q-Mark certified fabricator will:

- Identify the 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 fabrication process (e.g. satellite factories)
- Provide the relevant information to market or to a Q-Mark certified doorset manufacturer to support the further processing of the door assembly in accordance with the specific classification or certified doorset specification to EN 13501-2
- Comply with scheme requirements, e.g. sampling of initial type testing, audit testing, Factory Production Control (FPC) audit visits.

Do fire door components under the Q-Mark Fire Door Processing Scheme (EN 13501-2) also require third-party certification?

The following components require third-party certification to work within the Q-Mark scheme.

DOOR BLANK

To produce Q-Mark door leaves as a Q-Mark fabricator using pre-manufactured door blanks, the door blank must first be certified under the Q-Mark door blank certification (scheme 047) and identified with the appropriate marking.

DOOR LEAVES

For a Q-Mark fabricator to process pre-manufactured door leaves from other manufacturers, the door leaf must be certified under Q-Mark certification (scheme 087) and identified with the appropriate marking. The individual components that make up the door leaf do not require Q-Mark certification, other than a Q-Mark certified door blank.

OTHER COMPONENTS

From 2nd September 2029, the following components must have certification under WTCL (i.e. Certifire or Q-Mark) and/or be CE/UKCA marked, for use within all EN 13501-2 fire door schemes where required:

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

What supporting evidence is acceptable for use within the Q-Mark Fire Door Processing Scheme (EN 13501-2)?

The requirements for supporting evidence to be used within Q-Mark Certification schemes are given in a separate technical information sheet.

What door types are covered by the Q-Mark Fire Door Processing Scheme (EN 13501-2)?

This scheme covers the fabrication of key door elements for constructing timber-based door assemblies and doorsets.

Do fabricators have to undertake pre-certification testing under this Q-Mark scheme?

Yes. For a fabricator to obtain Q-Mark certification, a pre-certification test must be conducted by the fabricator for fire resistance only. This test is 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.

Do fabricators have to undertake audit testing under this Q-Mark scheme?

Yes, ongoing periodic audit testing of one of the designs on the scope of certification of the fabricator is a requirement of the scheme.

How does the Q-Mark Fire Door Processing Scheme (EN 13501-2) provide added assurance to the end user?

The scheme includes conformity assessment activities that provide robust, evidence-based assurance in line with the performance requirements set out in guidance documents for meeting building regulations.

The essential components of these certification schemes are listed below:

- 01 Sampling of ITT (i.e. verification of the specimen components and processes being constructed for testing)
- 02 Review of the supporting evidence used for certification (e.g. to check independence and technical requirements)
- 03 Pre-certification testing to confirm the fabricator is capable of constructing key elements of doors that are capable of meeting the minimum performance requirements intended for the product
- 04 Initial and ongoing FPC checks against the supporting evidence and other technical and procedural documentation
- 05 Records of fabricator personnel competencies
- 06 Calibration records of measuring equipment
- 07 Conformity marking (e.g. labels)
- 08 Record of fabricators scope of certification
- 09 Successful audit testing at defined intervals
- 10 Periodic review of supporting evidence (e.g. in response to a revised supporting standard such as EN 15269 series).

For fabricators that rely on systems house supporting evidence, the same conformity assessment activities outlined above related to ITT are placed on the systems house. Formal permission is required from systems houses for any cascaded supporting evidence before it can be used to support a certification application.

The scheme provides confidence that certified elements used in completed door assemblies and doorsets are capable of maintaining the indicated performance, which in turn provides added assurance of the product performance to the end users.

Is the Q-Mark Fire Door Processing Scheme (EN 13501-2) limited to EN Classification?

The Q-Mark Fire Door Processing Scheme (EN 13501-2) has been purposefully developed to accommodate the EN classification system. The certification scheme is designed to accommodate classification of timber door assemblies and support supply chains to certified timber doorset manufacturers in terms of EN 13501-2, and includes the following performance characteristics:

- Fire Integrity (E)
- Thermal Insulation (I₁ or I₂)
- Smoke Control (S_{a3} or S_{a4})
- Radiation Control (W)
- Self-closing (C)
- Durability of self-closing (C₀-C₅).

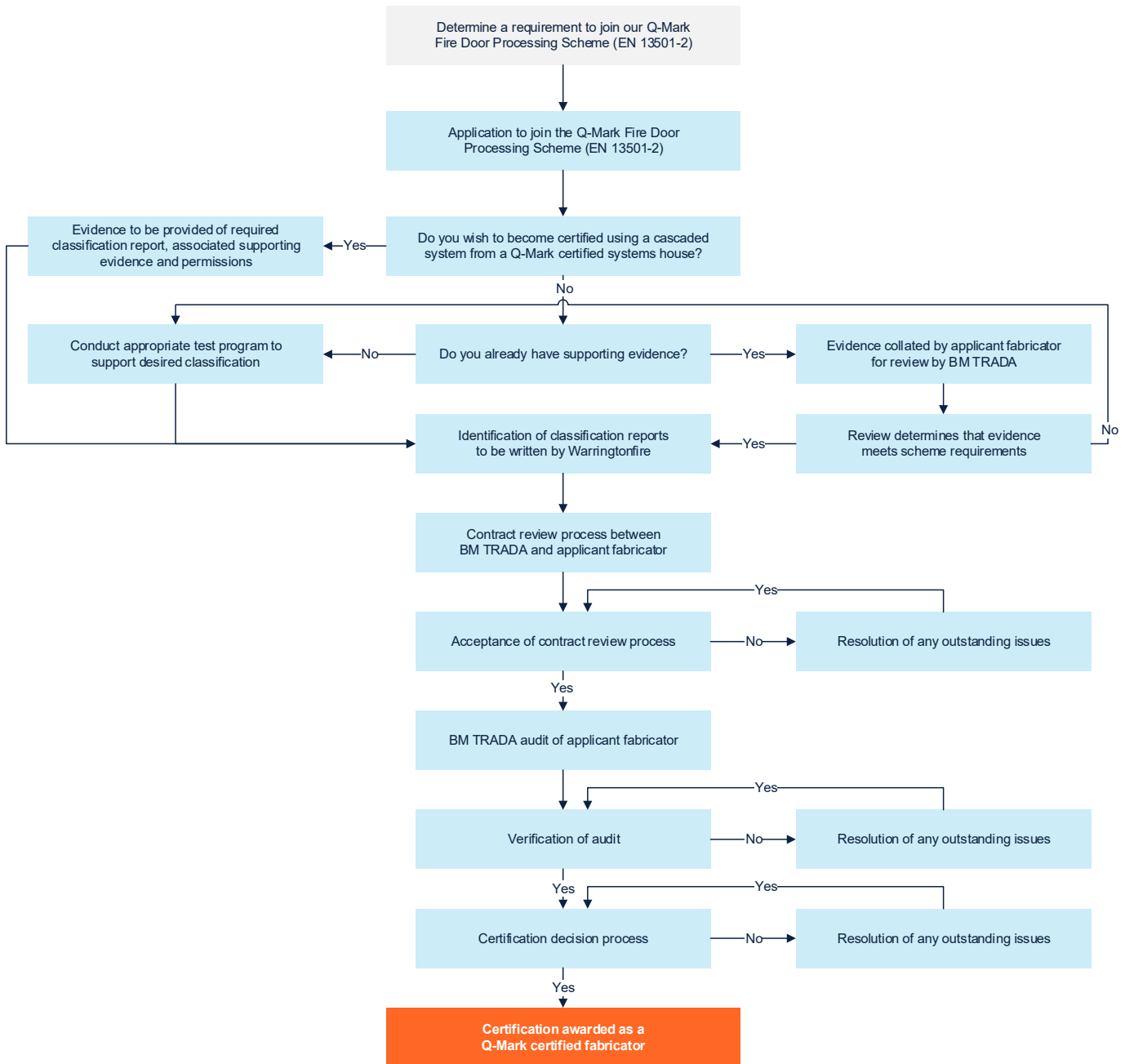
Do I need to join the Q-Mark Fire Door Processing Scheme (EN 13501-2)?

For any company that wishes to fabricate Q-Mark certified timber door elements or leaves for supply to Q-Mark certified doorset manufacturers for EN 13501-2 classification, they need to join the Q-Mark Fire Door Processing Scheme.

The scheme also provides a route for supplying certified timber door elements and leaves direct to market for the purpose of constructing door assemblies with a classified performance to EN 13501-2. The classified performance is supported by the information to be provided by the fabricator and compliance with the supporting evidence is under the responsibility of the company that completed the door assembly.

CERTIFICATION PROCESS FOR THE Q-MARK FIRE DOOR PROCESSING SCHEME (EN 13501-2)

For manufacturing elements for timber doorsets and door assemblies for classification using the EN 13501-2 standard





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