

Are individual Fire Test Reports suitable for Composite Fire Door Compliance?

For Composite Fire Door Compliance, specifiers or buyers often ask for primary fire test reports – But individual test reports do not and cannot prove the necessary size range for UK fire door set compliance.

- Any individual test report is only suitable for the EXACT size of the tested door, any changes to the door set size are not allowed.
- Some small variance of size could be created based on an individual test report performance, but this would only be a small % difference in size relative to the specific tested door set size. Practically small variance to one door size would not cover a size range suitable for the UK market.
- The only legal document that can state a size range compliance (from smallest to largest door set, based on various test reports) is a Field of Application document.
- During 2018 many door set manufacturers had to cease production until they had tested a range of doors and created a new Field of Application. They could not re-enter the market based on one individual test report.

How many fire door tests are necessary to prove compliance?

The more test reports you have – the more proof of consistent performance you have, but for example, the minimum number of test reports required to prove compliance for non-glazed solid composite fire doors would (if following the general principles of EN 15725:2010, the Passive Fire Protection Forum and the UK Fire Test Study Group the Q Mark 3rd Party Accredited scheme) require...

- Usually composite door blank suppliers have 3 door blank sizes in the range. Assuming the composite door leaf construction is the same for all door leaf sizes in the range...
 - Test largest door leaf - inside and out
 - Test largest door leaf, trimmed to its minimum size -inside and out
 - Test smallest door leaf, trimmed to its minimum size - inside and out
- Therefore minimum number of tests required to prove compliance in this case would be three, which includes six doors burnt.

Alternatively if...

- Composite door suppliers have 3 door blank sizes in the range. BUT if the door blank construction is different for all door leaf sizes in the range...
 - All three sizes of the door leaf would have to be tested at maximum size and trimmed minimum size inside and outside.
- Therefore minimum number of tests required to prove compliance in this case would be six, which includes 12 doors burnt.

In both cases the tests highlighted above could prove compliance for solid non-glazed doors but if glazed door leafs are required then the same rules would apply and another three (6 doors) or six (12 doors) fire tests would have to be completed for the glazed leaf solutions.

Should a specifier or buyer understand every aspect of the rules above?

It is not reasonable for a specifier, buyer or even Building Control inspectors to understand the complicated rules of how many tests are required relative to the internal construction of a composite fire door - This is why the MHCLG have advised within Annex A, that composite fire doors should be supplied only by manufacturers audited by a 3rd Party Accreditation Scheme, Q Mark or similar.

- The 3rd Party Accreditation scheme necessitates a Field of Application (FoAp). The FoAp is created by suitably qualified professionals following the general principles of EN 15725:2010 and the Passive Fire Protection Forum and members of the UK Fire Test Study Group. These professionals are qualified and trained to interpret the special minimum testing conditions of the composite fire door. It is only when ALL the necessary evidence is presented to the FoAp, that the statement to allow the complete size range of the fire door can be made.
- The 3rd Party Accreditation scheme then audits that the information contained in the FoAp is CORRECT AND CURRENT. For example if the fire test method for doors suddenly changed and required higher temperatures in the furnace during the test - then all the previous test evidence would have to be repeated at the higher temperature. It is not reasonable for a specifier, buyer or even Building Control inspectors to follow these technical changes - this is why the MHCLG have recommended that fire doors are supplied via a 3rd Party Accreditation Scheme that has a CONTROLLED FoAp that is the only document that can effectively prove current compliance of the fire door size range.
- The 3rd Party Accreditation scheme additionally audits the Factory Production Controls at the door set manufacturer. Checking that the all the departments in the manufacturing chain from receiving the orders, component buying, warehouse storage, manufacture and dispatch are all controlled by a persons with the relevant skills and appropriate training records. This ensures that the products are manufactured with exactly the same specification as the tested products day in day out, consistently.

Are 3rd Party Accredited Fire Door Inspectors qualified to interpret if single primary test evidence is current and correct?

- No, they are not suitably qualified to interpret the suitability of the evidence in the FoAp. Only FoAp writers (product assessors) with the necessary compliance who subscribe to the Passive Fire Protection Forum (PFPF) and members of the UK Fire Testing Study Group are qualified to interpret if test reports are suitable to prove performance and be included in a field of application.
- Third Party Accredited Fire Door Inspectors are qualified to identify when a fire door is required in a building and what grade the fire door should be FD30 / FD60 / insulation rated etc. Plus they are also qualified to examine the FoAp (rule book) and check that the supplied / installed door has been manufactured AND installed in accordance with the FoAp rules