

Government Building Safety Programme – advice for building owners on assurance and replacing of flat entrance fire doors

This Advice Note is for the attention of anyone responsible for the fire safety of residential flats that are concerned about the fire and smoke resistance performance of flat entrance front doors.

This note was developed by MHCLG's Independent Expert Advisory Panel on building safety drawing on the advice of industry experts. It has been developed to support those who want to replace their fire doors or review their performance.

Summary

- Flat entrance fire doors leading to a shared or communal area are required to provide fire and smoke protection and are critical to most fire strategies for buildings.
- All fire doors, including their closers, should be routinely checked or inspected by a suitably qualified professional.
- Residents should be made aware of the importance of working self closer on all fire doors.
- Flat entrance fire doors should have test evidence demonstrating they meet the performance requirement in Building Regulations guidance¹ for fire resistance and smoke control from both sides.
- Test evidence used should be carefully checked to ensure it is to the same specifications of the doorsets being installed.
- Landlords or building owners should replace flat entrance doorsets² if they suspect they do not meet the fire or smoke resistance performance in the Building Regulations guidance. Fire risk assessment processes should be used to determine how urgently such doors should be replaced.
- The Expert Panel advise that third party certification by a UKAS accredited body can provide landlords and building owners greater assurance on the performance of the doors.

¹ Building Regulations Approved Document B: Volume 2 (Buildings Other than Dwelling Houses) Appendix B pages 132 to 134 (www.gov.uk/government/publications/fire-safety-approved-document-b)

² Building Regulation Approved Document Q page 6 defines a doorset as "A complete door assembly, assembled on site or delivered as a completed assembly, consisting of the door frame, door leaf or leaves, essential hardware and any integral side panel or fanlight (but excluding coupled assembly, a doorset and window that are supplied as separate self-contained frames and fixed together on site)."

Introduction

1. Flat entrance doorsets that allow access directly into the dwelling from a shared or communal area are required to provide fire and smoke protection³. It is fundamental to most fire strategies for buildings, providing critical protection within a building to escape routes and to effective separation.
2. Doorsets are becoming increasingly complex and are designed to perform reliably in order to ensure compliance with the Building Regulations. It is therefore important that doorsets' fire resistance performance is measured and is routinely professionally assessed⁴.
3. A fire door can only offer protection in limiting the spread of smoke and fire if the door seals are working effectively and if the door can fully close under the action of its door closer. The self-closing device should be capable of closing the door securely into its frame from any open position, and overcoming the resistance of the door latch and edge seals. All fire door self-closing devices should be regularly checked and maintained to ensure that they are operating correctly.
4. The Building Regulations in England and associated guidance in Approved Document B clarify flat entrance doorsets that allow access directly into the dwelling from a shared or communal corridor should achieve at least 30 minutes fire resistance, with additional requirements for smoke leakage⁵.
5. This advice note primarily concentrates on fire safety; however, front doors should also meet security requirements set out in Approved Document Q⁶. There are also requirements for doorsets in other relevant Building Regulations guidance included in other Approved Documents including part E, L & M. Therefore it is imperative that doorsets are designed to meet all of the relevant requirements in one package i.e. the same specification. The full suite of approved documents can be accessed from the Ministry for Housing and Communities and Local Government website⁷

³ Requirements are set out in Building Regulations Approved Document B: Volume 2 (Buildings Other than Dwelling Houses) Appendix B pages 132 to 134 (www.gov.uk/government/publications/fire-safety-approved-document-b).

⁴ HM Government guidance recommends monthly checks 'Fire safety risk assessment: sleeping accommodation', page 30 section 3.4.6 (www.gov.uk/government/publications/fire-safety-risk-assessment-sleeping-accommodation) & LGA guidance recommends inspecting timber doors every 6 months, page 124 paragraph 82.3 (www.local.gov.uk/sites/default/files/documents/fire-safety-purpose-built-04b.pdf).

⁵ www.gov.uk/government/publications/fire-safety-approved-document-b

⁶ www.gov.uk/government/publications/security-in-dwellings-approved-document-q, pages 3 & 4 and Appendix B pages 7 & 8

⁷ www.gov.uk/government/collections/approved-documents

6. Landlords or building owners may also want to refer to the Local Government Association guidance 'Fire Safety in purpose built blocks of flats'⁸ and the British Standard 'code of practice for fire door assemblies'⁹.
7. Landlords or building owners should also communicate with residents to ensure that they are aware of the importance of maintaining the self closing devices on all fire doors, including flat entrance doors.

Evaluating existing doorsets and assurance of performance

8. Landlords or building owners should reference the manufacturer's test evidence/certification and documentation for existing or proposed fire doorsets. "Any test evidence used to substantiate the fire resistance rating of a door or shutter should be carefully checked to ensure that it adequately demonstrates compliance and is applicable to the adequately complete installed assembly. Small differences in detail (such as glazing apertures, intumescent strips, door frames and ironmongery etc.) may significantly affect the rating".¹⁰
9. Flat entrance fire doors should have test evidence demonstrating they meet the performance requirement in the Building Regulations guidance for fire resistance and smoke control from both sides.
10. The self-closing device should be capable of closing the door securely into its frame from any open position, and overcoming the resistance of the door latch and edge seals.
11. Where additional assurance that existing or proposed fire doorsets meet the current benchmarks is desired, professional advice can be sought. Using an independent UKAS¹¹ accredited certification body whose engineers are qualified and adhere to the latest Passive Fire Protection Federation guidance¹² would be a good way of securing this professional advice.

Repair and renovation of existing doorsets

12. Where doorsets have parts that need replacing, care should be taken to ensure replacements are of the same specification used in the original design as evidenced in the manufacturer's test evidence/certification and documentation for the doorset.

⁸ www.local.gov.uk/sites/default/files/documents/fire-safety-purpose-built-04b.pdf

⁹ BS 8412:2016 (<https://shop.bsigroup.com/ProductDetail/?pid=00000000030332501>)

¹⁰ www.gov.uk/government/publications/fire-safety-approved-document-b, Appendix B, page 132

¹¹ United Kingdom Accreditation Service (www.ukas.com)

¹² www.pfpf.org

Where the manufacturer or supplier is unknown, then an assessment can be carried out by a competent expert.

13. All assessments and repairs should be carried out in line with the manufacturer's instructions by a suitably qualified person or organisation that can demonstrate the appropriate levels of skill and competency. Certification under a UKAS accredited door installer scheme¹³ would be a way of establishing those criteria.
14. The British Standard 8214¹⁴ provides recommendations for the specification, installation and maintenance of timber-based fire door assemblies.

Replacing flat or apartment entrance doorsets

15. Landlords or building owners should replace flat entrance doorsets if they suspect they do not meet the fire or smoke resistance performance in the Building Regulations guidance¹⁵. Fire risk assessment processes should be used to determine how urgently such doors should be replaced.
16. Replacement doorsets should have test evidence from a UKAS accredited test facility, or equivalent¹⁶, to ensure they meet the standards set out in the Building Regulations guidance. Test evidence used should be carefully checked to ensure it is to the same specifications of the doorsets being installed. Small differences in detail (such as glazing apertures, intumescent strips, door frames and ironmongery etc.) may have a detrimental effect to the fire, smoke or security performance of a doorset.
17. The Expert Panel advise that doorsets which aim to meet fire resistance as well as security criteria, should be based on a single combined design specification, which is certified for fire resistance and for security. Additionally there should be test evidence for smoke control based on the same doorset design.
18. The self-closing device should be capable of closing the door securely into its frame from any open position, and overcoming the resistance of the door latch and edge seals.

¹³ www.ukas.com

¹⁴ <https://shop.bsigroup.com/ProductDetail/?pid=00000000030332501>

¹⁵ Concerns with performance may be triggered by a number of factors including lack of test evidence, evidence of sub-standard performance in testing, visual damage, wear and tear, age of the door etc.

¹⁶ An equivalent test facility will be accredited by a signatory of the European Accreditation Multilateral Agreement. This a signed agreement between the EA Full Members whereby the signatories recognise and accept the equivalence of the accreditation systems operated by the signing members (www.european-accreditation.org/the-mla)

19. The Expert Panel advise that third party certification¹⁷ by a UKAS accredited body of manufacture, installation, maintenance, and inspection for fire, smoke and security can provide landlords and building owners greater assurance on the performance of the doors. Doorsets certificated and supplied to the same specification for fire, smoke and security performance will provide additional assurance of performance, as will certification in the name of the company producing the doorset with the doorset name listed on the certificate.

¹⁷ UKAS accredit organisation separately for manufacture, installation, maintenance, and inspection.