# Annex A – Advice for Building Owners[1] on assurance and assessment of flat entrance fire doors

## Summary

- Flat entrance fire doors leading to a shared or communal area are required to provide fire and smoke protection and are part of a layered approach to most fire strategies for buildings.

- It is important that all fire doors, including the compulsory closers, are routinely maintained by a suitably qualified professional. Residents should be made aware of the importance of a working self-closing device on all fire doors which under any circumstances should not be altered.

- Manufacturers of modern or replacement flat entrance fire doors will have test evidence demonstrating that they meet the performance requirement in Building Regulations guidance[2] for fire resistance and smoke control from both sides of the door.

- It is important to ensure that the specification within the test evidence relates to the doorset being installed.

- Building owners should aim to replace existing timber flat entrance doorsets[3] if they suspect they do not meet the fire or smoke resistance performance contained in the Local Government Association guide "Fire safety in purpose-built blocks of flats".[4] The building owner should use an appropriate risk assessment process to determine how urgently such doors should be replaced

[1] For the purposes of this document the term 'building owner' means the owner of the building or the person, group, company or other entity on whom duties are imposed or enforcement action could be taken under the following legislation: (i) the Housing Act 2004 in relation to certain hazards; or (ii) the Regulatory Reform (Fire Safety) Order 2005 to ensure the safety of occupants of a building from fire (see Articles 3 & 5 of Regulatory Reform (Fire Safety) Order 2005 for those with duties).

[2] 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)

[3] 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)."

[4] www.local.gov.uk/fire-safety-purpose-built-flats

## Introduction

1. This advice note provides general advice on building owners undertaking risk assessments of fire doors. A fire door risk assessment is likely to include the following aspects:

    - the fire strategy for the building (including evacuation strategy);
    - the building fire risk assessment;
    - the occupancy of the building, e.g. general needs or specialised housing;
    - the intended protection afforded by the door, e.g. flat front entrance, cross corridor, storage areas;
    - the likely resistance of the doorset (door and frame) to fire and smoke.

    If building owners need further assistance to determine whether existing or proposed fire doorsets meet the current standards, they should seek expert advice from a suitably qualified fire safety professional.

2. A fire door can only offer protection in limiting the spread of smoke and fire if the door can fully close effectively 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 overcoming the resistance of any latch and edge seals. All self-closing devices should be regularly maintained to ensure that they are operating correctly.

3. Building owners should also communicate with residents to ensure that they are aware of the importance of maintaining and not interfering with the operation of the self-closing devices on their flat entrance fire doors. Residents should also be told that fire doors must not be altered as that can reduce their fire resistance.

4. For new doorsets, for compliance with the Building Regulations in England, guidance in Approved Document B advises that 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 resistance to the passage of “cold” smoke (i.e. smoke at a temperature below that required to cause intumescent seals to expand and seal the gaps around the door leaf).[5] It is accepted that older timber doors, manufactured or installed before current fire resistance test standards came into force would not achieve the level of performance if tested to current test standards. These doors may still be acceptable if the doors are in good condition, with minimum gaps between the door leaf and the frame.[4]

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

5. This advice note primarily concentrates on fire safety; however, newly installed front doors to flats should also meet security requirements set out in Approved Document Q.[6] 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 the relevant requirements in one package, i.e. the same specification. The full suite of approved documents can be accessed from the Ministry of Housing, Communities and Local Government website.[7]

6. For existing doors, reference should be made to the Local Government Association guidance 'Fire Safety in purpose-built blocks of flats'[4] and the British Standard 'code of practice for fire door assemblies'.[8]

## Fire doors within a building other than flat entrance doors

### *Staircase and Cross Corridor doors*

8. **All fire doors must be fitted with a working self-closing device and must not be propped or wedged open under any circumstance.**

9. A functional self-closing device is essential in ensuring that the fire door performs when preventing fire and smoke. The self-closing device should be capable of closing the door securely into its frame from any open position and overcoming the resistance of any latch and edge seals.

10. Where a new or replacement self-closing device is fitted it should not affect the fire resistance of the door when tested in accordance with BS EN1364-1 or BS 476-22. Self-closing devices in communal areas should be regularly checked and maintained to ensure that they are working effectively.

11. Building owners should act responsibly to inform and engage with residents. Residents must be informed of the purpose of their fire door as a life saving device, with attention and explanation given to the role of self-closing devices.

12. Residents should be encouraged to report any defects to fire doors in communal areas to their building owner.

[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
[8] BS 8412:2016 (https://shop.bsigroup.com/ProductDetail/?pid=000000000030332501)

### *Cupboard, storage and refuse areas fitted with fire doors*

13. The above guidance should be used to assess cupboards, storage and refuse areas fitted with fire doors. However, cupboards, storage and refuse areas fitted with fire doors would normally have signage in accordance with BS-5449-10.

14. These doors are required to have a self-closer or be kept locked shut when not in use. These doors must not be propped or wedged open.

## Fire door risk assessments

15. The following sections provide information on how test evidence should be considered as part of the assessment of fire doors and provide for different scenarios where test evidence is, or isn't, available for the fire doors installed.

### *Where test evidence is available for timber and GRP composite fire doors:*

16. Where test evidence is available and a fire door has been shown to meet the required standard, no immediate remediation action is required. All fire doors should be routinely maintained by a suitably qualified professional, including closers.

17. Where test evidence shows that an existing GRP composite fire door does not meet the required standard, building owners should refer to the flow chart in Appendix A for guidance on remediation action.

### *Where no test evidence is available for **timber** fire doors:*

18. Where no test evidence is available for timber fire doors, the building owner should refer to the Local Government Association guidance 'Fire Safety in purpose-built blocks of flats'[4] and should seek advice from a competent person.

19. A competent person may wish to consider what test evidence is available, or the original "deemed to satisfy" status of the doors as a potential indicator of acceptability; if timber doors with no test evidence meets the requirement detailed in Local Government Association guidance 'Fire Safety in purpose-built blocks of flats' is equates to meeting the standard required. These doors may be treated as notional fire doors and the competent person may wish to consider the advice on notional fire doors given in the Local Government Association guidance 'Fire Safety in purpose-built blocks of flats'.[4]

**20. GRP composite fire doors cannot be considered as notional[9] fire doors under any circumstances.**

[9] There is a difference between modern fire doors and their requirements and older type doors, often called 'Notional fire doors'. These doors may have been in place for many years and met earlier standards of manufacture and legislation. However, this doesn't mean that they are now not fit for purpose, providing they are still in good condition they will still provide the service for which they were intended.

21. Where a large number of doors are involved, and there is significant uncertainty as to the likely fire resistance, advice should be sought from a specialist and/or a sample door might be tested in accordance with BS 476-22 / EN 1634-1. Subject to test results, any remedial or replacement action should be guided by the advice outlined above.

*Where no test evidence is available for GRP composite fire doors:*

22. Where no test evidence is available for GRP composite fire doors, Building Responsible Persons should seek advice from a competent person.

23. A competent person may wish to consider what test evidence is available as a potential indicator of failure, particularly test evidence from those tests undertaken by the MHCLG fire doors investigation.

24. Where a large number of doors are involved, and there is significant uncertainty as to the likely fire resistance, advice should be sought from a specialist and/or sample door might be tested in accordance with BS 476-22 / EN 1634-1. Subject to test results, any remedial or replacement action should be guided by the advice outlined above.

## Guidance on testing of fire doors

25. All new composite doorsets must have undergone fire resistance testing on both sides.

26. The guidance provided in Approved Document B (2019) Volume 1 and 2 Appendix C3 is clear that fire doors should be tested separately on both sides.

27. Fire Resisting Doorsets currently on sale in the UK will have been tested in accordance with either BS 476-22 or EN1634-1 standards. Both standards acknowledge that it may not always be necessary to carry out tests from both sides of a door set. Clause 13.4 of EN 1634-1 states when it may be appropriate to test on one side. Annex C of EN 1634-1 sets out the rationale for these rules and specifically excludes composite doors by stating that:

***"Doorsets made from other or composite materials are specifically excluded from this annex as there is not sufficient evidence of their behaviour in fire to be able to provide guidance on the weakest side against fire attack."***

28. The view of the Expert Panel is that Clause 13.4 of EN 1634-1 should be followed regardless of whether the doorset is being classified to BS 476-22 or EN 1634-1.

29. Information on the department's fire door testing programme including results of the tests carried out can be found here: https://www.gov.uk/guidance/fire-door-investigation

## Incomplete fire test evidence for composite flat entrance fire doors

30. The Expert Panel published initial advice on the need to test composite fire doors on both sides in early 2018, it is therefore expected that any door installed after this date will have been appropriately tested. However, it is recognised that, there may be limited circumstances where it may be possible to retain existing fire resisting composite flat entrance doors where the door was tested on one side.

31. In the absence of obvious defects (e.g. glazing units fixings, etc.) it is the expectation of the Expert Panel that:

- The fire resistance from the internal side should accord with the guidance set out in Appendix A;
- An assessment by a fire risk assessor determines that a fire of a severity similar to that in the British/ European fire resistance tests within the common parts is an event of remote probability;
- Management standards are likely to ensure that the fire load (the amount of combustible material in a building or confined space and the amount of heat this can generate) within the common parts remains low and that the need for this is identified in all fire risk assessments.

Note that any replacement door should be tested from both sides.

32. Further information on best practice is provided in the Passive Fire Protection Federation's "Guide to undertaking technical assessments" (2019) available at: http://pfpf.associationhouse.org.uk/default.php?cmd=210&doc_category=308

## Repair and renovation of existing doorsets

33. 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 and that the doorset itself has not been altered in any way. Where the manufacturer or supplier is unknown, then an assessment can be carried out by a competent expert.
34. 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 scheme[10] would be a way of establishing those criteria.

35. The British Standard 8214[11] provides recommendations for the specification, installation

[10] United Kingdom Accreditation Service (www.ukas.com)
[11] https://shop.bsigroup.com/ProductDetail/?pid=000000000030332501

and maintenance of timber-based fire door assemblies.

## Replacing flat entrance doorsets

36. Existing doorsets should be replaced if the Building Owner suspects they do not meet the fire or smoke resistance performance[12] in the Local Government Association guidance.[4] A risk assessment process should be used to determine the priority and how urgently such doors should be replaced.

37. Replacement doorsets should have test evidence from a UKAS accredited test facility, or equivalent,[13] 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.

38. 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.

39. 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 any latch and edge seals.

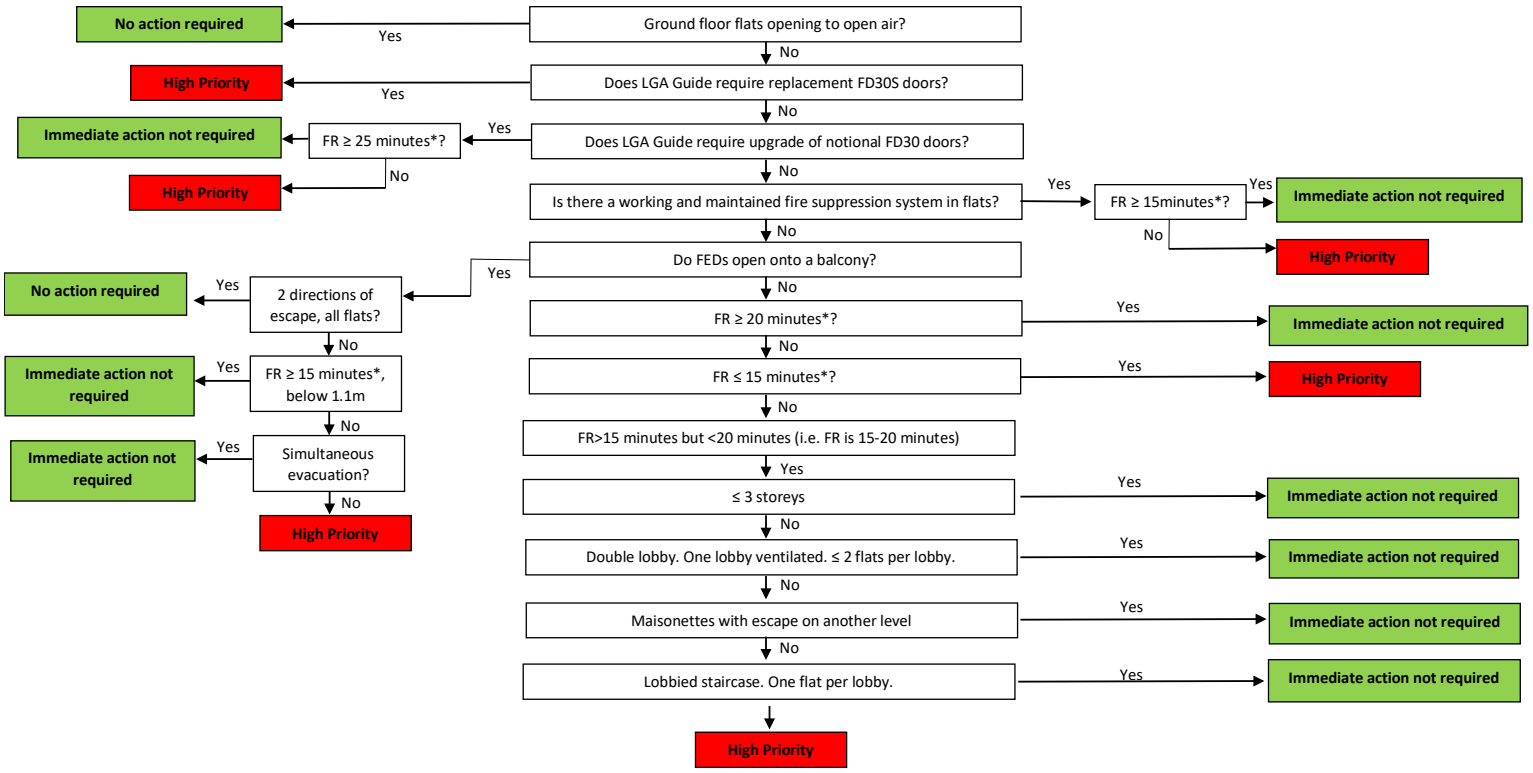
40. The Expert Panel advise that, while it should not be solely relied upon, third party certification[14] by a UKAS accredited body of manufacture, installation and maintenance and inspection for fire, smoke and security can provide building owners with greater assurance on the performance of the doors. Doorsets certificated and suppled 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.

[12] Concerns with performance may be triggered by a number of factors including the lack of test evidence, evidence of substandard performance in testing, visual damage, wear and tear, age of the door etc.
[13] 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)
[14] UKAS accredit organisations separately for manufacture, installation, maintenance and inspection

# Appendix A

## General needs blocks of Flats

This flow chart is provided to assist Building Responsible Persons to identify the priority of attention to their GRP composite fire doors. It is a matter of judgement for the Building Responsible Persons as to when to replace their doors which is likely to be when required as part of a routine maintenance programme. See paragraphs 30 to 32 when fire doors have only been tested on one side.




* These periods of fire resistance are extrapolated from historical standards that many older blocks will have been designed to. This is not intended to suggest that they would be appropriate for new buildings or where new door sets are being procured.

# Appendix A

## Specialised housing blocks of Flats

This flow chart is provided to assist Building Responsible Persons to identify the priority of attention to their GRP composite fire doors. It is a matter of judgement for the Building Responsible Persons as to when to replace their doors which is likely to be when required as part of a routine maintenance programme. See paragraphs 30 to 32 when fire doors have only been tested on one side.