Good morning, after the meeting yesterday here is relevant information regarding flat entrance doors, I have highlighted the two parts in green. Carl

HM Government

The Building Regulations 2010

Fire safety

APPROVED DOCUMENT

B

VOLUME 2 – BUILDINGS OTHER THAN DWELLINGHOUSES

B1	Means of warning and escape
B2	Internal fire spread (linings)
B3	Internal fire spread (structure)
B4	External fire spread
B5	Access and facilities for the fire service

Came into effect April 2007

FIRE KILLS
YOU CAN PREVENT IT

2006 edition
incorporating 2007, 2010 and 2013 amendments

For use in England*

Appendix B: Fire doors

1. All fire doors should have the appropriate performance given in Table B1 either:

a. by their performance under test to BS 476-22 *Fire tests on building materials and structures. Methods for determination of the fire resistance of non-loadbearing elements of construction*, in terms of integrity for a period of minutes, e.g. FD30. A suffix (S) is added for doors where restricted smoke leakage at ambient temperatures is needed; or

b. as determined with reference to Commission Decision 2000/367/EC of 3 May 2000 implementing Council Directive 89/106/EEC as regards the classification of the resistance to fire performance of construction products, construction works and parts thereof. All fire doors should be classified in accordance with BS EN 13501-2: 2003, *Fire classification of construction products and building elements. Classification using data from fire resistance tests (excluding products for use in ventilation systems).* They are tested to the relevant European method from the following:

- BS EN 1634-1:2008 *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware. Fire resistance tests for doors, shutters and openable windows;*
- BS EN 1634-2: 2008 *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware. Fire resistance characterisation test for elements of building hardware;*
- BS EN 1634-3:2004 *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware. Smoke control test for door and shutter assemblies;* or

c. as determined with reference to European Parliament and Council Directive 95/16/EC (applies to lifts permanently serving buildings and constructions and specified safety components) of 29th June 1995 on the approximation of laws of Member States relating to lifts ('Lifts Directive') implementing the Lifts Regulations 1997 (S.I. 1997/831) and calling upon the harmonised standard BS EN 81-58: 2003 *Safety rules for the construction and installation of lifts – Examination and tests. Landing doors fire resistance test.*

The performance requirement is in terms of integrity (E) for a period of minutes. An additional classification of S_a is used for all doors where restricted smoke leakage at ambient temperatures is needed.

The requirement (in either case) is for test exposure from each side of the door separately, except in the case of lift doors which are tested from the landing side only.

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.

Note 1: The latest version of any standard may be used provided that it continues to address the relevant requirements of the Regulations.

Note 2: Until such time that the relevant harmonised product standards are published, for the purposes of meeting the Building Regulations, products tested in accordance with BS EN 1634-1 (with or without pre-fire test mechanical conditioning) will be deemed to have satisfied the provisions provided that they achieve the minimum fire resistance in terms of integrity, as detailed in Table B1.

2. All fire doors should be fitted with a self-closing device except for fire doors to cupboards and to service ducts which are normally kept locked shut and fire doors within flats (self-closing devices are still necessary on flat entrance doors).

Note: All rolling shutters should be capable of being opened and closed manually for firefighting purposes (see Section 17, paragraph 17.15).

3. Where a self-closing device would be considered a hindrance to the normal approved use of the building, self-closing fire doors may be held open by:

a. a fusible link (but not if the door is fitted in an opening provided as a means of escape unless it complies with paragraph 4 below); or

b. an automatic release mechanism actuated by an automatic fire detection and alarm system; or

c. a door closer delay device.

4. Two fire doors may be fitted in the same opening so that the total fire resistance is the sum of their individual fire resistances, provided that each door is capable of closing the opening. In such a case, if the opening is provided as a means of escape, both doors should be self-closing, but one of them may be fitted with an automatic self-closing device and be held open by a fusible link if the other door is capable of being easily opened by hand and has at least 30 minutes fire resistance.

5. Because fire doors often do not provide any significant insulation, there should be some limitation on the proportion of doorway openings in compartment walls. Therefore no more than 25% of the length of a compartment wall should consist of door openings, unless the doors

Table B1 Provisions for fire doors

Position of door	Minimum fire resistance of door in terms of integrity (minutes) when tested to BS 476-22 [1]	Minimum fire resistance of door in terms of integrity (minutes) when tested to the relevant European standard [3]
1. **In a compartment wall separating buildings**	As for the wall in which the door is fitted, but a minimum of 60	As for the wall in which the door is fitted, but a minimum of 60
2. **In a compartment wall:**		
a. If it separates a flat from a space in common use;	FD 30S [2]	E30 S_a [2]
b. Enclosing a protected shaft forming a stairway situated wholly or partly above the adjoining ground in a building used for Flats, Other Residential, Assembly and Recreation, or Office purposes;	FD 30S [2]	E30 S_a [2]
c. enclosing a protected shaft forming a stairway not described in (b) above;	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum and with suffix S [2]	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum and with suffix S_a [2]
d. enclosing a protected shaft forming a lift or service shaft;	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum
e. not described in (a), (b), (c) or (d) above.	As for the wall it is fitted in, but add S (2) if the door is used for progressive horizontal evacuation under the guidance to B1	As for the wall it is fitted in, but add S_a [2] if the door is used for progressive horizontal evacuation under the guidance to B1
3. **In a compartment floor**	As for the floor in which it is fitted	As for the floor in which it is fitted
4. **Forming part of the enclosures of:**		
a. a protected stairway (except as described in item 9) ; or	FD 30S [2]	E30 S_a [2]
b. a lift shaft (see paragraph 5.42b); which does not form a protected shaft in 2(b), (c) or (d) above.	FD 30	E30
5. **Forming part of the enclosure of:**		
a. a protected lobby approach (or protected corridor) to a stairway;	FD 30S [2]	E30 S_a [2]
b. any other protected corridor; or	FD 20S [2]	E20 S_a [2]
c. a protected lobby approach to a lift shaft (see paragraph 5.42)	FD 30S [2]	E30 S_a [2]
6. **Affording access to an external escape route**	FD 30	E30
7. **Sub-dividing:**		
a. corridors connecting alternative exits;	FD 20S [2]	E20 S_a [2]
b. dead-end portions of corridors from the remainder of the corridor	FD 20S [2]	E20 S_a [2]
8. **Any door within a cavity barrier**	FD 30	E30
9. **Any door forming part of the enclosure to a protected entrance hall or protected landing in a flat;**	FD 20	E20
10. **Any door forming part of the enclosure**		
a. to a place of special fire risk	FD30	E30
b. to ancillary accomodation in care homes (see paragraph 3.50).	FD30	E30

Note:
1. To BS 476-22 (or BS 476-8 subject to paragraph 5 in Appendix A).
2. Unless pressurization techniques complying with BS EN 12101-6:2005 Smoke and heat control systems – Part 6: Specification for pressure differential systems – Kits are used, these doors should also either:
   (a) have a leakage rate not exceeding $3m^3/m/hour$ (head and jambs only) when tested at 25 Pa under BS 476 *Fire tests on building materials and structures*, Section 31.1 *Methods for measuring smoke penetration through doorsets and shutter assemblies, Method of measurement under ambient temperature conditions*; or
   (b) meet the additional classification requirement of S_a when tested to BS EN 1634-3:2004 *Fire resistance tests for door and shutter assemblies*, Part 3 – *Smoke control doors*.
3. The National classifications do not automatically equate with the equivalent classifications in the European column, therefore products cannot typically assume a European class unless they have been tested accordingly.