Floor *reaction to fire*: Euroclass Bfl-s1, Cfl-s1 and Dfl-s1

Floors have their own reaction-to-fire classes, A1fl to Ffl, with a smoke grade s1 or s2. England's Approved Document B gives no guidance on the upper surfaces of floors, so it sets no class for an interior floor finish. A fire strategy, insurer or operator can still ask for one. No class is claimed for any product.

Compliance guidance. Read on 5 and 6 November 2026: Approved Document B volumes 1 and 2 for England (the 2019 edition with the 2020, 2022, 2025 and 2026 amendments), Scotland's non-domestic technical handbook (2022), EU instruments as published on legislation.gov.uk, and BSI listings. Wales and Northern Ireland were not read. The classes here are conditions in documents, not claims about any product: no product is claimed to reach a class. Fire class requirements depend on the nation, the building and its use. Check the current editions and take advice from a fire engineer and your building control body. Guidance, not legal or fire engineering advice.

AT A GLANCE

Class	Test and threshold (Delegated Regulation 2016/364, Table 2)	Deemed without testing, if every condition is met
A1fl	Non-combustible (EN ISO 1182 and EN ISO 1716)	Natural stone and slate, terrazzo, ceramics, concrete, floor screed mortars (on conditions)
A2fl	Limited combustibility; critical flux 8.0 kW/m² or more	None in the lists we read
Bfl	Critical flux 8.0 kW/m² or more	None in the lists we read
Cfl	Critical flux 4.5 kW/m² or more	Some coated oak, beech and multi-layer oak floors, as Cfl-s1
Dfl	Critical flux 3.0 kW/m² or more	Other coated wood floors; some uncoated floors; as Dfl-s1
Efl	Small flame test only	Some uncoated wood floors
Ffl	Fails the small flame test	None

Higher critical flux is better; the smoke grade s1 (750 %·min or less) or s2 follows the class. Deemed classes are conditions in Decisions 96/603/EC and 2006/213/EC and Regulation 1292/2014, not claims about any product.

DOES A FLOOR NEED A CLASS? WHAT THE DOCUMENTS SAY

Where	What the document says
England, Approved Document B volume 2 (B2 Intention, p.54) and volume 1 (p.43)	Requirement B2 'does not include guidance on … the upper surfaces of floors and stairs'. No interior floor class. Para 5.17 asks escape route floor finishes to minimise slipperiness when wet.
England, balconies (Regulation 7(3)(k); para 12.11)	Top floor layer of a balcony on a tall residential building: A1fl or A2fl-s1 over an imperforate substrate. External.
Scotland, non-domestic handbook 2022, Standard 2.5	Classes are for wall and ceiling surfaces. No floor class found.
Wales, Northern Ireland, Scotland (dwellings)	Not read. A fire strategy, insurer or operator may also ask for a class.

SPECIFICATION WORDING

REQUIREMENT

Floor finish in [areas] to achieve reaction to fire class [Cfl-s1] to BS EN 13501-1 [edition], as laid, as required by [fire strategy reference, section, date]. [Where no class is required: no floor class is required by [document]; the supplier is to declare the class of the floor as supplied.]

END-USE CONDITIONS

The class is to apply to the build-up as specified: substrate [type, class [ ]], adhesive [ ], underlay or air gap [ ], thickness [ ] mm, finish [coating type and quantity, g/m²]. A class for the board alone, or on a different substrate, is not accepted.

EVIDENCE

[A declaration of performance stating the class / a classification report from [a notified body / a UKAS accredited laboratory] to BS EN 13501-1 [edition], with the test methods and their editions / a statement naming the row of the classification-without-testing list relied on, with density, thickness, end use and coating quantity checked and recorded], submitted before ordering. Any change of substrate, adhesive, thickness or finish is to be referred to [the fire engineer] before ordering.

STONE, TERRAZZO OR CERAMIC FLOOR

[Natural stone / cement-bound terrazzo / ceramic] floor to be class A1fl without testing where the product is on the list in Decision 96/603/EC as amended and meets its general notes. The supplier is to confirm in writing, including any sealer, resin, coating or backing, or to give a declared class.

TERMS USED

Euroclass (reaction to fire)

The European scheme that classifies how much a product contributes to fire, with floor classes carrying an 'fl' suffix and a smoke rating such as s1.

Critical flux

In the radiant panel test (EN ISO 9239-1), the radiant flux in kW/m² at which the flame goes out, or the flux reached after 30 minutes, whichever is lower. A higher value is better.

Classification without further testing (CWFT)

A list of products and conditions, published by the European Commission, under which a product is deemed to reach a class without being tested. Approved Document B points to it in Appendix B, para B6.

Reaction to fire

How much a product contributes, by its own decomposition, to a fire under specified conditions (Approved Document B Appendix B, para B6). Fire resistance, how long a door, wall or floor structure holds, is a separate test.

STANDARDS AND SOURCES

- Approved Document B volume 2 (2019 edition incorporating 2020, 2022, 2025 and 2026 amendments, with the 2029 changes): B2 Intention (p.54), 5.17, Table 6.1, Regulation 7, 12.11, Appendix B (B5 to B8). Read 5 Nov 2026.
- Approved Document B volume 1 (same edition and amendments): B2 Intention (p.43), 3.43, Appendix B B6. Read 5 Nov 2026.
- Scotland: building standards technical handbook 2022, non-domestic, section 2.5: published 1 Jun 2022; read 5 Nov 2026. Domestic handbook and any 2026 change not read.
- Commission Delegated Regulation (EU) 2016/364, Decision 2006/213/EC, Regulation (EU) No 1292/2014, Decision 96/603/EC: as published on legislation.gov.uk; read 5 Nov 2026.
- BS EN 13501-1:2018, BS EN ISO 9239-1:2025, BS EN ISO 11925-2:2026, BS EN 13238:2026: BSI Knowledge listings: all Current; earlier editions withdrawn as stated. Standards not read.

Full guide: https://makebespoke.com/trade/technical/floor-reaction-to-fire. Make Bespoke Studio coordinates manufacture through its partner workshops. Figures are guidance only and your specification governs; some may be superseded, so contact the studio to verify.