Moulding *materials* compared

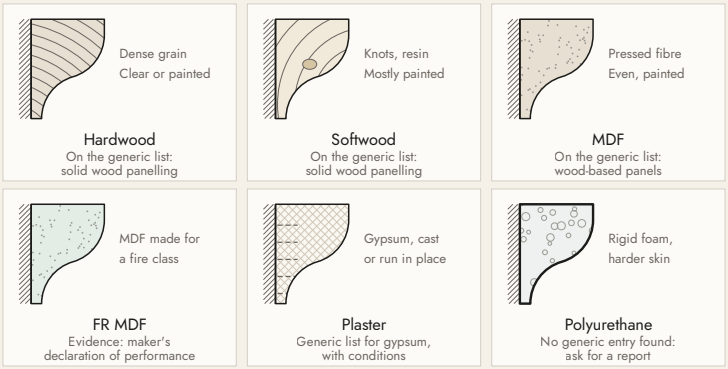
Six moulding materials compared, and what Approved Document B says about mouldings and fire in England.

Compliance guidance. Figures and paragraph references are taken from the editions named, read in November 2026, and apply to England. This is guidance, not fire safety or legal advice: your fire engineer or building control body decides which class applies and whether the evidence is enough. No product is claimed here to reach any class.

AT A GLANCE

Material	Where it fits	Strengths	Watch for	Fire evidence route found
Hardwood (solid)	Clear or stained rails; rails that take knocks	Dense; can be re-finished	Moves with humidity; mitres can open	Generic list, solid wood panelling (conditions apply)
Softwood (solid)	Painted skirtings, architraves, rails	Easy to work; widely stocked	Knots show through paint; dents; light species	Same list: check the species' density
MDF	Painted mouldings, long even runs	Even face, crisp profile	Swells if wet; arrises chip; dust	Generic list, wood-based panels (conditions apply)
FR MDF	Where a lining class is asked for	Sold with a stated class	Class is for the board as tested; finish can change it	Maker's Declaration of Performance and report
Plaster (gypsum)	Cornices, coving, period runs	Crisp detail; run in place	Heavy; cracks at joints; needs a plasterer	Generic list, gypsum plasters (conditions apply)
Polyurethane (rigid foam)	Large or curved cornices	Light; curves	Less crisp detail; joints; paint	No generic entry found: ask for a report

First four columns: general trade knowledge, to be confirmed by partners. Last column: what the documents we read say; no class is claimed for any product.



One S-curve moulding section drawn in six materials, with the fire evidence route found for each. Original drawing by Make Bespoke Studio; patterns are schematic, not photographs of the materials.

MOULDINGS AND FIRE IN ENGLAND

Approved Document B leaves doors and frames, architraves, cover moulds, picture rails, skirtings and similar narrow members out of what counts as a wall (Volume 2 paragraph 6.3, Volume 1 paragraph 4.3; ceilings 6.6 and 4.6). The wall behind is still a lining. Cornices, rails and applied mouldings are not named: ask building control. England only.

GENERIC LISTS, IN BRIEF

Material	The generic list and what it says
Solid timber	Decision 2006/213/EC Table 2: mean density 390 kg/m³ or more; 12 mm and 8 mm at the thinnest point: D-s2,d0; 9 mm and 6 mm: D-s2,d2.
MDF	Decision 2003/43/EC Table 1: 600 kg/m³ or more and 9 mm, directly against a suitable substrate: D-s2,d0; air gap up to 22 mm: D-s2,d2.
Plaster	Decision 96/603/EC: gypsum plasters count as A1 if made only from listed materials, 1.0 per cent organic at most.
FR MDF, polyurethane	No generic entry: ask for the maker's classification report for the moulding as installed.

A board that fits these lists reaches class D: enough for small rooms (D-s3,d2), not for other rooms (C) or circulation (B).

SPECIFICATION WORDING

TIMBER MOULDING

Ref [M-01]: [skirting / dado rail], profile as detail [D-12] at 1:1, [120 x 25] mm finished. Material: [oak, dried to [ ] per cent moisture content] / [softwood, species [ ], paint grade]. Finish [ ]. Seal all faces and ends before fixing. The drawn section governs over any catalogue name.

MDF MOULDING

Ref [M-02]: [skirting] moulding, profile as detail [D-12] at 1:1. Board: MDF to BS EN 622-5 [type MDF / MDF.H], [ ] mm thick, supplied with a Declaration of Performance. Primed and finished [ ]. All faces and cut ends sealed. Substitution only with the designer's written approval.

PLASTER, POLYURETHANE AND FIRE EVIDENCE

Ref [M-03]: [cornice], profile as detail [D-20] at 1:1, in [plaster, run in place / cast] / [polyurethane]. [Cornices, rails and applied mouldings] to be confirmed by [building control / the fire engineer] in writing as [outside / inside] the lining classes. Where a class is required, supply the Declaration of Performance or classification report for the moulding as installed.

TERMS USED

Wall lining

The surface of walls and ceilings that Approved Document B asks to meet a class (Table 6.1). Skirtings and similar narrow members are not counted.

Classification without further testing (CWFT)

A list, in a Commission Decision, of products that may be given a reaction-to-fire class without a test if they meet stated density, thickness and mounting conditions.

STANDARDS AND SOURCES

- Approved Document B Volumes 1 and 2 (England), 2019 edition, amendments to 2026: Vol 2 paras 6.1 to 6.6; Vol 1 paras 4.1 to 4.6; Appendix B.
- Decisions 2003/43/EC (amended by 2007/348/EC), 2006/213/EC, 96/603/EC: legislation.gov.uk.
- BS EN 13501-1:2018 and BS EN 622-5:2009: current on BSI Knowledge; not read.
- USDA Wood Handbook FPL-GTR-282 (2021): Tables 4-6a, 5-3a.

Full guide: https://makebespoke.com/trade/technical/moulding-materials-compared. 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.