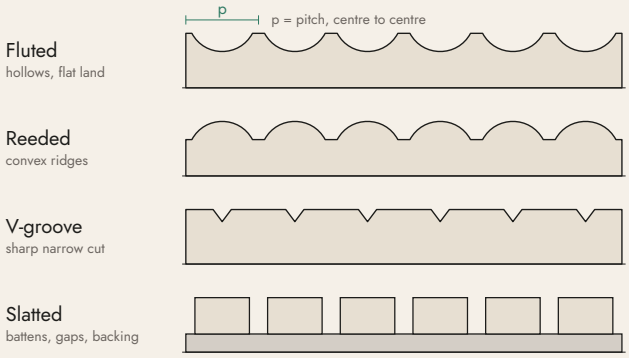
Fluted, reeded and *slatted* profiles

Fluting, reeding and slatting are set out the same way: pitch, width, depth and a whole number of repeats. No standard fixes the sizes.

AT A GLANCE

Profile	Section	Set-out numbers	Watch for
Fluted (concave)	Hollows, a flat land or a sharp arris between	Pitch, flute width, depth, web	Thin lands chip; the finish must reach into the hollow
Reeded (convex)	Rounded ridges, with a valley or a land between	Pitch, reed width, height	Crests take the knocks; valleys collect dust
Half-round	A reed whose height is half its width	Width only: depth = w/2	The deepest single arc; the edge is easily chipped
V-groove	A straight-sided cut with a sharp edge	Width at the face, depth	Arrises are sharp; set out from a land
Square channel	A rectangular groove	Channel width, rib width, depth	Cutters leave a radius in the corners; finish builds up there
Slatted	Separate battens with gaps, over a backing	Slat width, gap, thickness, backing	The gap shows the backing: colour it

Sizes in the drawings and worked examples are our illustrations, in millimetres. No standard fixes them.



Fluted, reeded, V-grooved and slatted faces in section, each repeating every 24 mm. Original drawing by Make Bespoke Studio; sizes are illustrative.

FIVE NUMBERS

Pitch p = width w + land l. Depth d. Board thickness t; web = t – d. For a single circular arc, $R = (w^2/4 + d^2) / 2d$, and d cannot exceed w/2 (a half-round).

w, mm	d, mm	R, mm	Web in 18 mm, mm
20	3	18.17	15
20	6	11.33	12
20	10	10.00	8

WORKED WALL: 2,963 MM

With 20 mm flutes and a 4 mm target land: n = (2,963 – 4) / 24 = 123.3, so 123 flutes. Land l = (2,963 – 123 x 20) / 124 = 4.056 mm, so pitch 24.056 mm (+0.24 per cent). Edge strips equal the land. Flute 62 sits on the centre line; sheet joints through flutes 42 and 82 give sheets of 1,000.4, 962.3 and 1,000.4 mm. With a fixed 4 mm land the edge strips are 7.5 mm.

CORNERS

A land on an external corner keeps the full board thickness at the arris (18 mm in our example). A flute on the corner leaves about 13.1 mm.

SPECIFICATION WORDING

FLUTED OR REEDED PANELLING

Ref [P-03]: [fluted / reeded] panelling, profile as detail [D-31] at 1:1: flute width [20] mm, land [4] mm, depth [6] mm, board [18] mm thick, web at the flute root not less than [12] mm. Set out symmetrically about [the centre line of the chimney breast], whole flutes only, edge strips equal to the land, land adjusted by not more than [2] per cent from the nominal [4] mm. Sheet joints down flute centres. External corners [mitred with a land on the arris]. Finish [ ]. A [600] mm wide full-height sample, set out as drawn, to be approved before production.

SLATTED PANELLING

Ref [P-04]: slatted panelling, slats [18 x 12] mm at [24] mm pitch ([6] mm gap) on [ ] mm backing board, the backing finished [black / to match] so the gap reads as shadow. Set out from the centre line, whole slats only, end gap equal to the slat gap. Slat ends [square / returned]. Substrate flat to [ ] mm over [2] m.

FLUSH DOOR IN A FLUTED WALL

Door leaf and frame in the [fluted] wall cut down flute centre lines, so the [3] mm gap falls in a flute. Leaf width [36] pitches less the gap, [863] mm, from the drawing. Pattern to run unbroken across the leaf, frame and wall.

TERMS USED

Fluting
A pattern of parallel concave grooves cut into a surface, originally on classical columns and now common on panels, doors and furniture fronts.

Reeding
A decorative pattern of parallel convex ridges, the opposite of fluting. Reeded panels are sold in timber and veneered boards.

Land
The flat strip left between two flutes. Our word for it on a panel drawing; in classical work a flat band between two flutes is a fillet.

Pitch
One repeat of a pattern, measured centre to centre: the width of a flute or slat plus the land or gap beside it.

Web
The thickness of board left under a flute: the board thickness less the flute depth.

Arris
The sharp edge where two flutes meet, or where a face meets a side.

STANDARDS AND SOURCES

- No standard fixes flute, reed or slat sizes: they come from the cutter, the board and the partner workshop.
- Wikipedia: Fluting (architecture): flute, arris and fillet.
- Make Bespoke Studio: Fluted wood panels: profiles and sheet sizes.
- Approved Document B Vol 2 Table 6.1; Decision 2006/213/EC: fire cross-reference only: see the fire performance sheet.

Full guide: https://makebespoke.com/trade/technical/fluted-reeded-and-slatted-profiles. 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.