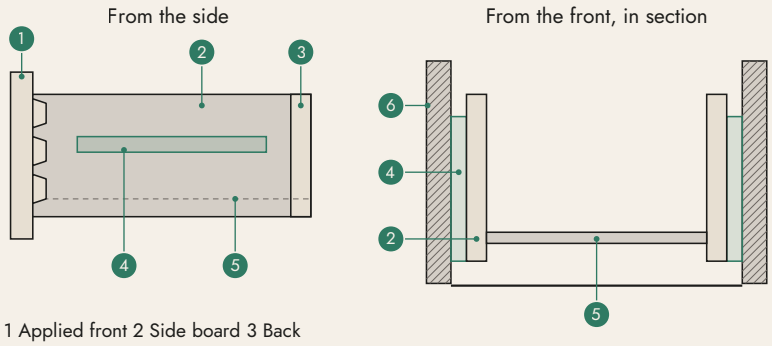
Drawer *construction* and runners

Joints, box materials, runner types and rated loads side by side, what a rating means, and wording that makes quotes comparable.

AT A GLANCE

Decision	Options	Write on the quote	What it changes
Corner joint	Through or half-blind dovetail; dowelled or rebated butt joint; steel sides held by brackets	The joint, and whether it is glued, pinned or screwed	Skill and machine time, and how the corner resists pull and slam
Box material	Solid timber (name the species); birch plywood; veneered or melamine-faced board; steel sides with a board base	Material and thickness of sides, back and bottom	Weight, stability and how the inside looks
Bottom	Let into grooves on all sides; or applied under the box	How it is fixed and its thickness	Sag under load, and rattles
Runner	Timber on timber; roller; side-mounted ball-bearing; concealed under the box; steel box system	Type, extension, mounting, soft-close or push-to-open	How far it opens, how it feels, how much width it takes
Rated load	Examples read: 6 to 25 kg (roller), 30 to 50 kg (steel box sets), 40 kg (concealed or ball-bearing at 400 to 500 mm), 65 to 100 kg (heavy-duty)	The load per pair at your runner length, and what it includes	A runner rated for the contents may not be rated for the drawer plus its contents
Proof	A runner's EN 15338 data sheet; a test on the drawer as built	Which of the two is supplied	The runner test does not test your drawer

Rated loads are examples from manufacturer pages and catalogues, in kilograms per pair, not a survey and not a recommendation. Sources and what was not read are set out below.



1 Applied front 2 Side board 3 Back
4 Runner 5 Bottom let into a groove 6 Carcase side

A drawer from the side and in front section. The runner shown is side-mounted. Schematic, not to scale. Original drawing by Make Bespoke Studio.

WHAT A RATING MEANS

One maker counts the drawer itself, its front and its contents; another counts the maximum load per pair at 80,000 cycles. A plain 560 mm box with an oak front weighs about 5 kg before anything goes in it. Specify the load, the length and the definition. The runner test (EN 15338) tests a runner, not your drawer.

SPECIFICATION WORDING

DRAWER BOX

Drawers [150] mm high internal. Box sides and back [15] mm [birch plywood, B/BB grade] with [through / half-blind dovetail] corners, glued. Bottom [6] mm [birch plywood] let into grooves on all sides and [glued / left free to move], [lacquered / sealed] on the inside to [ ]. Applied fronts [20] mm [species / finish], fixed from inside the box. Maker to confirm the construction of each drawer type before manufacture.

RUNNERS

[Full-extension concealed] runners, [soft-closing], tested to EN 15338, with a rated load of not less than [40] kg per pair at the [500] mm length used, the rating being defined as the weight of the drawer including its front and contents, fixed at every hole provided, for [ ] kg of contents in addition to the weight of the drawer, which the maker is to state. Runner maker, reference and data sheet to be submitted for approval before manufacture.

EVIDENCE

Maker to supply the runner maker's EN 15338 data sheet and, for [heavily used / contract] drawers, a test report on a drawer built as specified [to BS EN 16121 with BS EN 16122], or to state in writing that none is available. Fronts adjustable [3] mm in height and [1.5] mm sideways after installation.

TERMS USED

Extension

How far a drawer opens: single (about three quarters), full, or over-extension. A full-extension runner lets the whole drawer clear the carcase.

Rated load

The load a runner is declared to carry, in kilograms, at a reference length. Makers define it differently: check whether it includes the drawer's own weight.

STANDARDS AND SOURCES

- BS EN 15338:2024 Hardware for furniture. Strength and durability of extension elements and their components: status only; not read.
- BS EN 16122:2012; BS EN 16121:2023; BS EN 14749:2016+A1:2022: storage furniture; statuses only; not read.
- USDA Forest Products Laboratory, Wood Handbook FPL-GTR-282 (2021): Chapter 10, pp. 10-16 and 10-17: joints.
- Runner makers' data sheets and catalogue pages: manufacturer statements; names in our notes file.
- Make Bespoke Studio journal: Types of furniture joints: the wider guide to joints.

Full guide: https://makebespoke.com/trade/technical/drawer-construction-and-runners. 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.