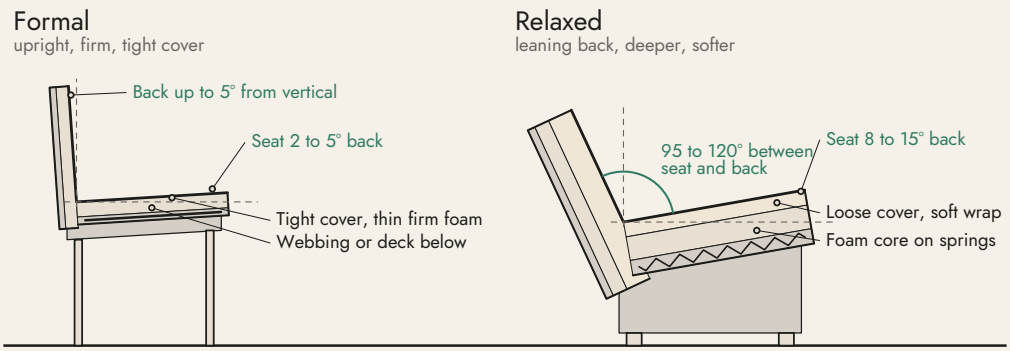
Formal *versus relaxed* seating: the comfort matrix

The four levers behind a formal or relaxed seat (geometry, fill, suspension and covering), typical combinations for four characters, and paste-in wording. Angles are published ranges; everything else is conventional practice to be confirmed by the workshop on a mock-up.

AT A GLANCE

Lever	Formal	Smart-casual	Relaxed	Deep lounge
Where it suits	Boardroom, dining, banquettes	Cafes, bars, hotel bedrooms	Hotel and club lounges	Snugs, reading chairs
Seat height and depth	Feet flat, easy to rise	Between the two	Lower and deeper	Lowest, deepest: partner to confirm
Seat slope (from horizontal)	Nearly level: about 2 to 5 degrees back	Between the two: set on a mock-up	About 8 to 15 degrees back	Steepest: partner to confirm
Back angle (state the datum)	Upright: up to 5 degrees from vertical	A little more recline: set on a mock-up	95 to 120 degrees between seat and back	Wide end of that range: partner to confirm
Seat fill	Solid foam, firm, no wrap	Firm foam with a thin fibre wrap	Foam core with a fibre or feather wrap	Deep feather and down wrap over a foam core
Back fill	Firm foam, fixed into the frame	Foam with a fibre wrap	Softer than the seat: feather, fibre	Loose feather back cushions, chambered
Seat suspension	Webbing or deck: firm, even	Sinuous springs: firm, slimmer seat	Hand-tied or pocket springs: deeper give	Eight-way hand-tied: the deepest give
Cover	Tight and fitted, crisp piping	Tailored, with a seat cushion	Looser, box cushions	Loose and generous, softly crushed
First sit	Firm: supported at once	Firm to medium	Softer: sinks a little, then holds	Sinks in and envelops
Care over time	Little or no plumping: keeps its line	Occasional turning	Plumping and turning wanted	Daily plumping: settles by design

Typical combinations, not products. Angle figures come from one published teaching guide (see Standards and sources); everything else is conventional practice, to be confirmed by our partner upholsterer. Fit is judged on a mock-up, not from a table.



A formal seat and a relaxed seat in section. Angles are the published teaching-guide ranges (seat slope from horizontal; back lean from vertical for the formal seat, angle between seat and back for the relaxed seat). Schematic and not to scale: upholstery thickness is exaggerated. Original drawing by Make Bespoke Studio.

SPECIFICATION WORDING

FORMAL COMFORT PROFILE

Seat: formal comfort profile. Seat slope [3] degrees back from horizontal; back lean [4] degrees from vertical, both measured on the finished, unloaded upholstery. Seat fill [solid foam] of hardness [ ] N and density [ ] kg/m3, with no feather; back fill [firm foam]; suspension [webbing or deck]; tight, fitted cover. One full-size mock-up and a build-up drawing to be approved by sit test before production. Fire: BS 7176 [Medium] Hazard certificate to be supplied for this exact build (cover, interliner and filling).

RELAXED COMFORT PROFILE

Seat: relaxed comfort profile. Seat slope [10] degrees back from horizontal; angle between seat and back [105] degrees, both measured on the finished, unloaded upholstery. Seat fill [foam core] of hardness [ ] N with a [fibre or feather] wrap; back fill [softer than the seat, chambered]; suspension [eight-way hand-tied or pocket springs]; looser cover with box cushions. One full-size mock-up to be approved by sit test before production. Fire: BS 7176 [Medium] Hazard certificate for this exact build.

DEEP LOUNGE COMFORT PROFILE

Seat: deep lounge comfort profile. Seat slope and back angle [ ] degrees, with the datum stated, to be proposed by the workshop for the frame and suspension and approved on a mock-up. Seat fill [deep feather and down wrap over a foam core]; back fill [loose feather cushions, chambered]; suspension [eight-way hand-tied]; loose cover. Care: [daily plumping] is expected and is to be stated in the maintenance sheet. Fire: BS 7176 [Medium] Hazard certificate for this exact build.

TERMS USED

Tight seat

A seat where the cover is fixed over the padding with no removable cushion. It keeps its shape and stays formal, which suits dining chairs and banquettes, but the seat cannot be flipped or refilled without the workshop.

Seat rake

How much the seat surface tilts back from horizontal. A small backward tilt helps people stay seated and feel supported; too much makes standing up difficult.

Back rake

The angle of the backrest. It can be measured from the vertical or as the angle between seat and back, so the drawing must say which; the two conventions give very different numbers.

Eight-way hand-tied springs

A seat suspension where coil springs are tied to each other and the frame by hand in eight directions, giving support that is firm but gives slightly. It is the most labour-intensive and costly system.

Foam hardness

How firm the foam feels, measured by the force needed to compress a test piece by a set amount. It is separate from density, so a heavy foam can still be soft.

Upholstery composite

The exact combination of cover, interliner and filling that was tested together. A fire certificate applies to that combination, so changing the filling or the cover can make it invalid.

STANDARDS AND SOURCES

- FIRA and the British Furniture Confederation, Fire safety of furniture and furnishings in the contract and non-domestic sectors (2010, updated 2011): composite testing, the re-test rule, hazard category.
- BS 7176:2007+A1:2011: non-domestic upholstered seating, tested as composites (as described in the FIRA guide; the standard itself was not read).
- BS EN 16139:2025: safety, strength and durability of non-domestic seating (FIRA news, 1 August 2025); not a comfort standard; not read.
- University of Melbourne Machine Workshop: Ergonomics and Product Interactions: undated teaching guide; the only angle ranges used here.

Full guide: https://makebespoke.com/trade/technical/formal-vs-relaxed-seating. 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.