Glass *shelves* and table tops

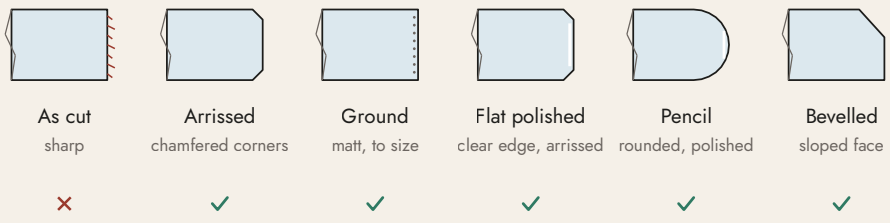
Which glass for a shelf, a cabinet door or a table top, the edges to name, weights, and the status of the standards. It gives no span, load or minimum-thickness table.

Compliance guidance. Figures and statuses come from the documents named, read on 6 November 2026; no glass standard was read and no span, load or minimum thickness is given. Guidance, not engineering or legal advice: glass type, thickness, supports and safety evidence come from the glass supplier or a glazing engineer for the piece in question, and glass that forms part of a wall, door or partition is a question for building control.

AT A GLANCE

Use in a piece	Glass usually chosen	How it breaks	Edge to name	Ask for
Freestanding table top	Toughened, or laminated; heat-soaked for large or public tops	Toughened: small pieces. Laminated: cracks, stays in one sheet	Polished or smooth ground, arrissed corners, radiused corners	Supplier's calculation for supports and overhang; a test report on the finished table
Shelf in a cabinet, within reach	Toughened	Small pieces	Polished or smooth ground; never as cut	Span and load calculation; support detail; certificate
Shelf out of reach, light load	Annealed float may be chosen: a risk decision for the safety adviser	Large, sharp pieces	Arrissed at least; polished for a visible front	Agreement of the safety adviser; thermal check if lit
Cabinet or wardrobe door glass	Toughened or laminated	As above	Polished; edge protected in its frame	Safe-breakage class if building control or the adviser asks (see lit joinery sheet)
Door, screen or panel that must stay in place when broken	Laminated (plies chosen by the supplier)	Cracks, stays on the interlayer	Polished or sealed	Build-up, interlayer, edge treatment
Splashback, back panel, mirror (not load bearing)	Annealed float or low-iron; a back-painted or antiqued face cannot be toughened afterwards	Large, sharp pieces	Arrissed behind a frame; polished if visible	Fixing method; whether toughened before coating
Edge-lit or lamp-lit shelf	Low-iron; toughened or heat-strengthened if the thermal check needs it	Depends on the glass	Polished (it is seen)	Thermal assessment with lamp power and distance

General descriptions: the test class, not the name, shows how a pane breaks. Where the glass is chosen is a risk decision with the supplier and the safety adviser: we found no rule that sets a type for a shelf or a table as such.



Enlarged section of the glass edge, not to scale.
Tick: can be named for an exposed edge. Cross: should not be used for one.

Six glass edge finishes in section, enlarged. As cut, arrissed, ground and polished are edge classes in the glass standards; pencil, flat polished and bevelled are fabricators' terms. Original drawing by Make Bespoke Studio, not to scale.

STRENGTH OF FLOAT GLASS BY KIND (MPA)

Kind	Mean modulus of rupture	Design value, 8 in 1,000
Annealed (float)	41	19
Heat-strengthened	83	39
Fully tempered (toughened)	166	77

National Glass Association FM05-12 (2023), North American float glass; short loads, undamaged glass, four-sided support, surface not edge. Weight: 2.5 kg per m^2 for each mm of thickness.

STANDARDS: STATUS AS SEEN ON BSI KNOWLEDGE, 6 NOV 2026

Current: BS EN 572-1:2012+A1:2016 (float); BS EN 12150-1:2015+A1:2019 and BS EN 14179-1:2016 (toughened; heat-soaked), both under review; BS EN ISO 12543-2:2021 (laminated); BS EN 12600:2002 and BS 6206:1981 (impact); BS EN 16612:2019 (design by calculation). Tables: BS EN 15372:2023 (non-domestic) and BS EN 12521:2023 (domestic), both current and both including tables with glass; the 2016 and 2015 editions are withdrawn. FIRA-FRQG G0001:2017 is a best-practice guide for domestic furniture with glass (not read). None of these was read.

SPECIFICATION WORDING

TOUGHENED SHELF OR PANEL

Glass: [10] mm [clear / low-iron] thermally toughened soda lime silicate safety glass to BS EN 12150-1 [edition]; [heat soaked to BS EN 14179-1 [edition] with the process record: yes / no]. All edges [polished / smooth ground], corners [radiused [ ] mm]. Holes and cut-outs as drawing [ref], all made before toughening. Supplier's certificate of conformity for each batch. Supports as drawing [ref]; span [ ] mm; load [ ] kg per metre and [ ] kg at a point; deflection limit [ ]; the supplier's calculation attached.

GLASS TABLE TOP

Glass top: [12] mm [low-iron] [toughened and heat soaked / laminated toughened, plies [ ] + [ ] mm], [ ] x [ ] mm, corners [radius [ ] mm], edge [flat polished, arrissed]. Supported on [soft pads of [ ] mm diameter at [ ] mm from the edge] with a stop against sliding and [held down by [ ] / not held down]; overhang [ ] mm; no metal in contact with the glass. The supplier is to attach the calculation for the supports and overhang. The complete table is to be supported by a test report to the current edition of [BS EN 15372 / BS EN 12521], severity level [ ], and the supplier is to state how the top is fixed to the understructure for that test.

LAMINATED GLASS

Laminated safety glass to BS EN ISO 12543-2 [edition], [ ] mm build-up of [ ] mm [toughened / annealed] plies and [interlayer type] [ ] mm, polished edges [with edge protection], supplied with the supplier's declaration.

EVIDENCE AND HANDLING

The supplier is to provide, before delivery, [the certificate of conformity / the heat-soak record / the BS EN 12600 class where safe breakage is required]. Each pane is to carry the supplier's permanent mark at the position shown on drawing [ref], and is to be packed with edge protection and lifted by the method agreed with the supplier.

TERMS USED

Float glass
Ordinary flat glass made by floating molten glass on molten tin, then cooling it slowly (annealing). It is easily cut but breaks into sharp shards.

Toughened glass
Glass heated and cooled rapidly so it is several times stronger and breaks into small granules. It must be cut and edged before toughening and cannot be altered after.

Heat-soaked glass
Toughened glass that has been held at high temperature to break any pieces with nickel sulphide inclusions before they leave the factory, reducing the chance of delayed spontaneous breakage.

Laminated glass
Two or more sheets of glass bonded with a plastic interlayer so broken pieces stay stuck together. It is used where breakage must not leave sharp openings.

Arrissed edge
A glass edge on which small chamfers, at about 45 degrees, remove the sharp margins left by cutting. Also called a seamed edge.

STANDARDS AND SOURCES

- BSI Knowledge, status as seen 6 Nov 2026: BS EN 572-1, 12150-1, 14179-1, ISO 12543-2, 12600, 6206, 16612, 15372:2023 and 12521:2023 current. Listings only.
- National Glass Association, Glass Technical Paper FM05-12 (2023): glass density, E, strength.
- FIRA-FRQG G0001:2017, Glass in Furniture: Best Practice Guide: title and scope only; not read.
- Bukieda, Meyer, Engelmann and Weller, Glass Structures & Engineering (2024): glass edges.

Full guide: https://makebespoke.com/trade/technical/glass-shelves-and-table-tops. 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.