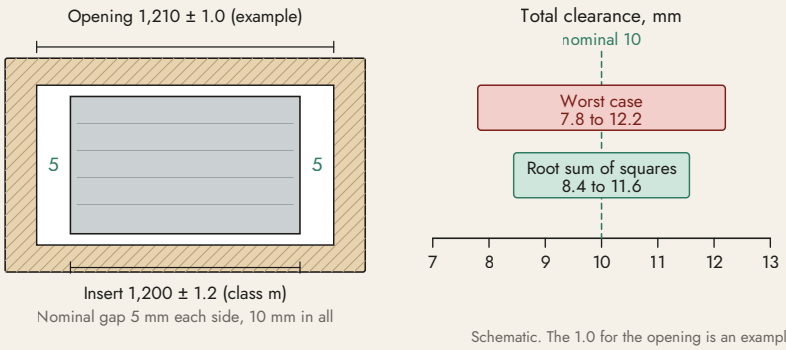
Tolerances for *visible metalwork*

Name one general tolerance in the title block, then add individual tolerances only where metal meets joinery, stone or glass. Say which standard fits the part and confirm its status.

AT A GLANCE

Standard	What it covers	Status we saw	What to write
EN ISO 13920:2023	Welded assemblies: lengths, angles, shape and position. Four classes, chosen by function.	Published Nov 2023; replaced the 1996 edition. BSI listing page not found; retailers show it current.	"General tolerances: EN ISO 13920, class [ ]". Class values not read.
ISO 2768-1:1989 (BS EN 22768-1:1993)	Lengths and angles with no individual tolerance, on parts machined or formed from sheet. Classes f, m, c, v.	ISO: "to be revised" (Oct 2022). BSI: current, under review.	"ISO 2768-m"
ISO 2768-2:1989	Geometrical tolerances (flatness and form) for the same parts.	Cancelled and replaced by ISO 22081:2021 (read in its foreword).	Do not cite for new work. Old title blocks that read "2768-mK" point to it.
ISO 22081:2021	General geometrical and general size specifications on a drawing.	First edition 2021. BSI: BS EN ISO 22081:2021, current.	Ask the partner whether it works to it. Front pages only read.
EN ISO 9013:2017	Quality of thermal cuts: flame, plasma and laser (laser 0.5 to 32 mm).	Published 2017; amendment 2024 listed. Text not read.	Name a cut quality for visible cut edges, after asking the partner.
EN 1090	Structural steelwork: not covered here.	Not checked here.	The engineer's job: see the EN 1090 sheet.

For non-structural interior metalwork. Status was read on 5 and 6 November 2026 from standards listings, not from the standards, except ISO 2768-1 (public preview) and the foreword of ISO 22081. Confirm each against the current edition.



Schematic. The 1.0 for the opening is an example.

A steel insert in a joinery opening and the clearance range by two ways of adding tolerances. Original drawing by Make Bespoke Studio; arithmetic checked by script. The opening's tolerance is a placeholder.

SPECIFICATION WORDING

GENERAL TOLERANCES (TITLE BLOCK)

General tolerances: welded assemblies to EN ISO 13920, class [ ] for lengths and angles and class [ ] for straightness, flatness and parallelism; parts machined or formed from sheet without welds to ISO 2768-1, class [m]; geometrical tolerances on those parts [as stated on the drawing / to ISO 22081 as agreed with the fabricator]. The fabricator is to confirm in writing the class it works to before pricing. Edition of each standard: [current edition at the date of the drawing].

INDIVIDUAL TOLERANCES AT INTERFACES

Individual tolerances apply only at: [inlay gap to timber [ ] mm]; [metal insert to joinery opening, clearance [ ] mm, tolerance [ ] mm]; [door or panel in frame [ ] mm]; [edge to stone [ ] mm]. All other dimensions take the general tolerance. Dimensions are finished sizes from datum [ ]. Interfaces to joinery, stone and floors are to be set out from the surveyed opening, not the drawing.

FLATNESS OF VISIBLE PANELS

Visible flat panels [ ] mm by [ ] mm are to be flat to [ ] mm over their length, and to show no waves in [raking light] at [ ] m, judged against approved sample [ref. __]. Flatness is tolerated separately from thickness and size.

ACCEPTANCE

Parts outside the general tolerance are to be [rejected / referred to [name] for a decision on function and appearance]. Dimensions are to be checked against the shop drawing at [ ] hold points, and the results kept with the approved sample.

TERMS USED

General tolerance class
A default tolerance applied to dimensions on a drawing that carry no individual tolerance. Drawings without one are considered incomplete.

Tolerance stack
The combined effect of the tolerances of every part in a joint on the gap or fit that results. Added at worst case, or statistically as the root sum of squares.

Independency principle
The rule that each tolerance on a drawing, such as size and flatness, is met separately, so a size tolerance does not by itself control flatness or straightness (ISO 8015).

Flatness
How far a surface departs from a perfect plane. It is tolerated separately from a size tolerance.

STANDARDS AND SOURCES

- EN ISO 13920:2023, welding: general tolerances for welded constructions: listing read: published 15 Nov 2023, replaces EN ISO 13920:1996. Text not read; BSI page not found.
- ISO 2768-1:1989 (BS EN 22768-1:1993): text read from a public preview; ISO stage 90.92 'to be revised' (4 Oct 2022); BSI listing: current, under review.
- ISO 22081:2021 (BS EN ISO 22081:2021): front pages read; it cancels and replaces ISO 2768-2:1989; BSI listing: current, published 28 Feb 2021.
- EN ISO 9013:2017, thermal cutting quality: listing read: published 2017, amendment A1:2024 listed; text not read.
- ISO 8015, EN 1090-2: named only; status and text not checked.

Full guide: https://makebespoke.com/trade/technical/tolerances-for-visible-metalwork. 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.