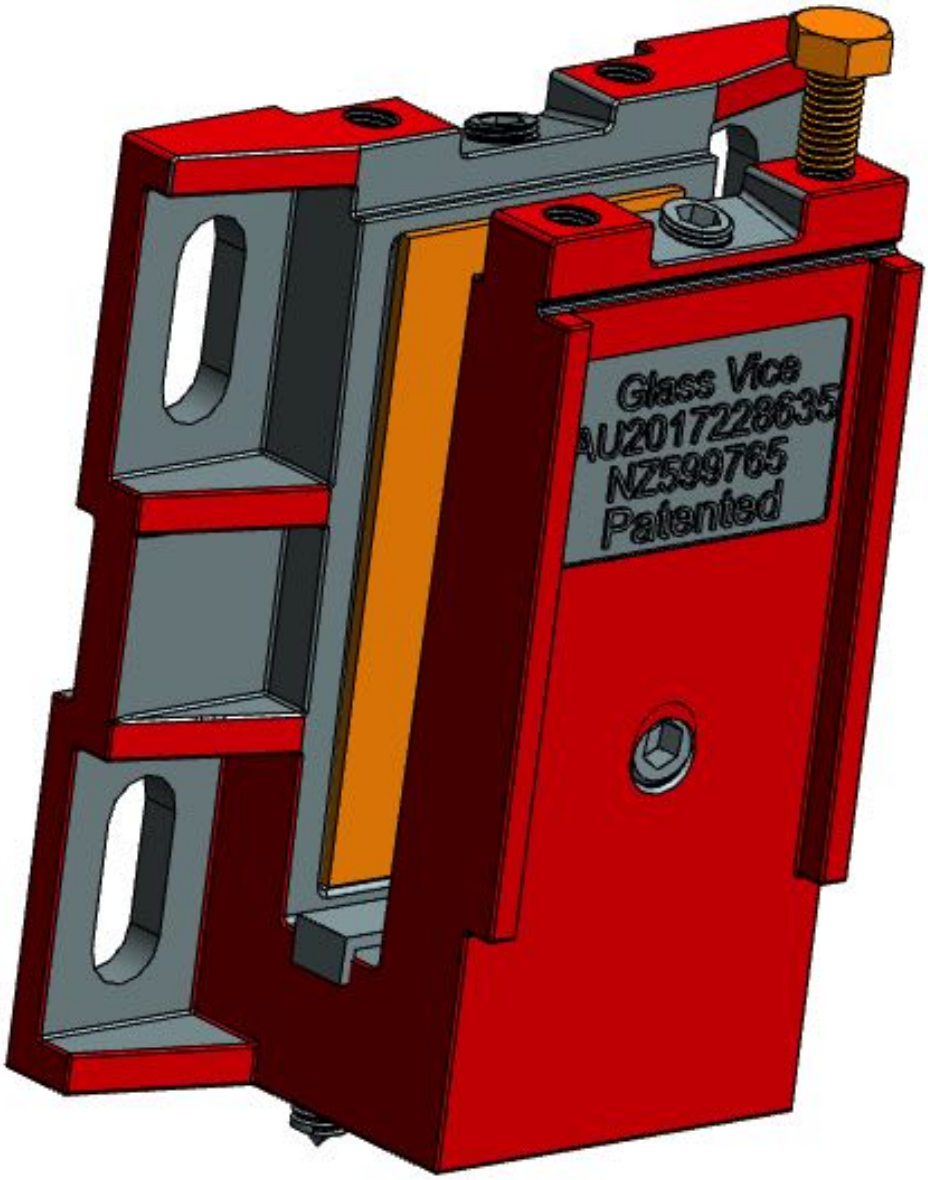
Glass Vice Clearline Railing and Balustrade System



CLAMP BODY
Cast from duplex steel

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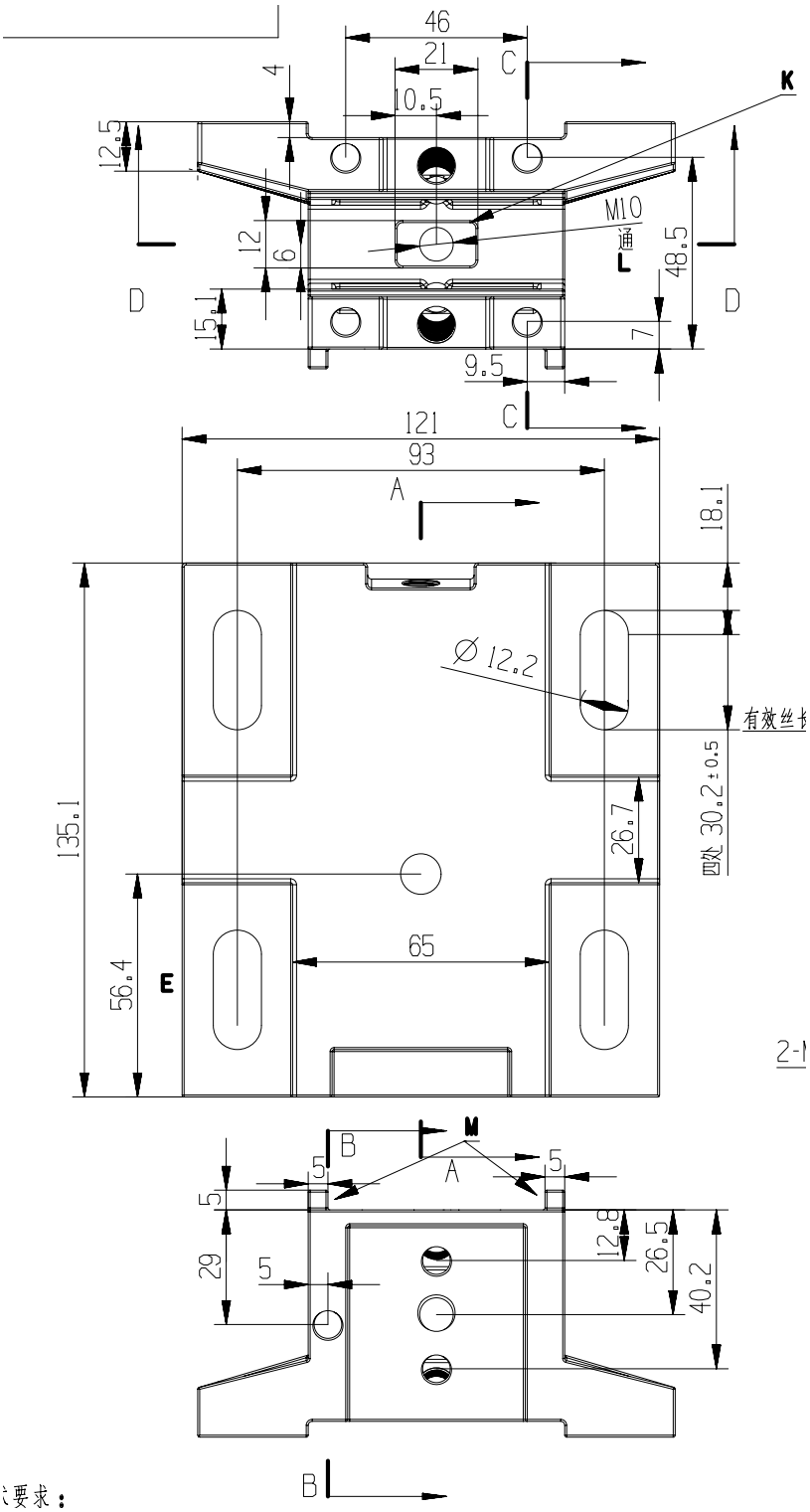

Dimensions in mm, 1” = 25.4mm

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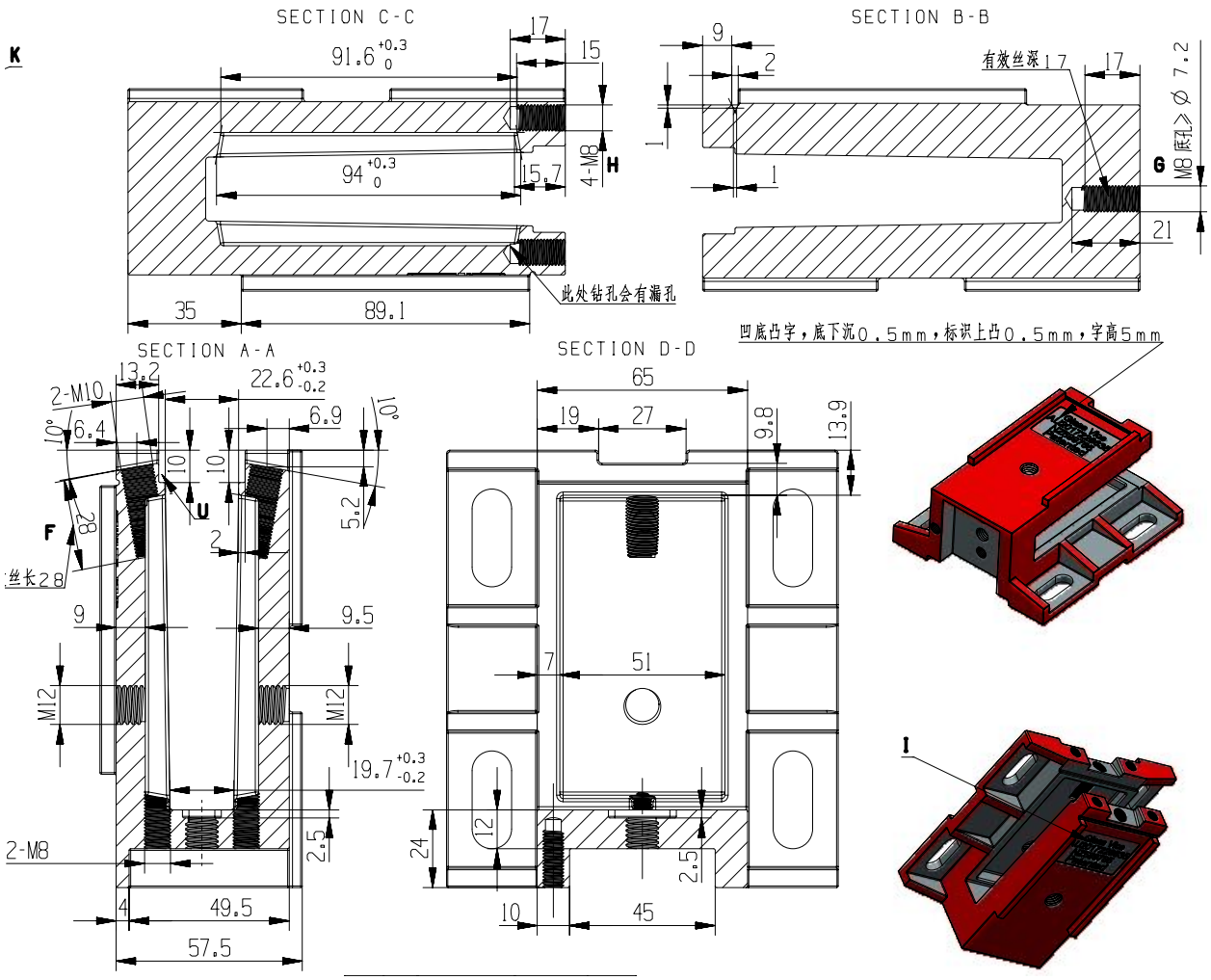

Dimensions in mm, 1” = 25.4mm

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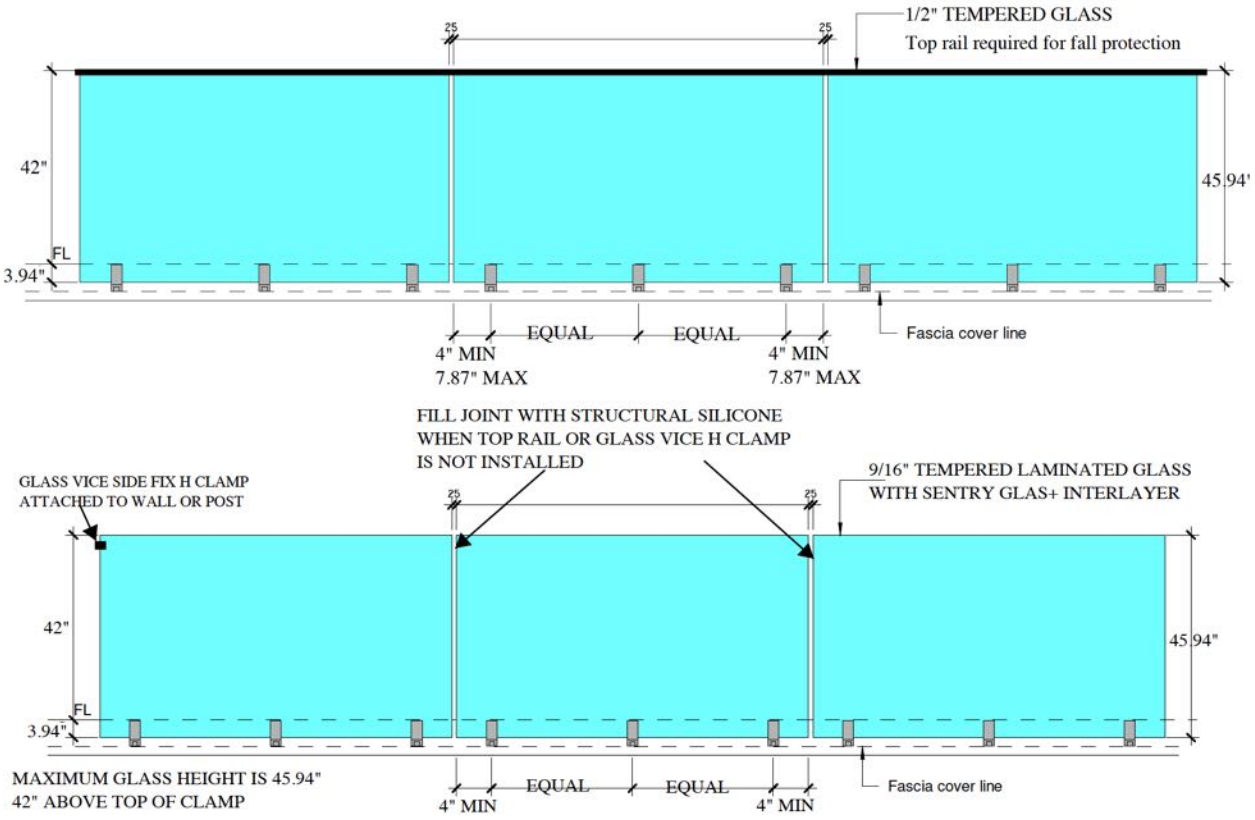
Typical installation configuration:
For 1/2” monolithic tempered glass or 9/16” tempered laminated glass with Sentry Glas+ interlayer.
Maximum glass light size:
Residential: 24” ≤ L ≤ 74.8” x h ≤ 45.7” Glass height must be adequate for the required minimum guard height above finish floor, typically 42” with the 45.7” width

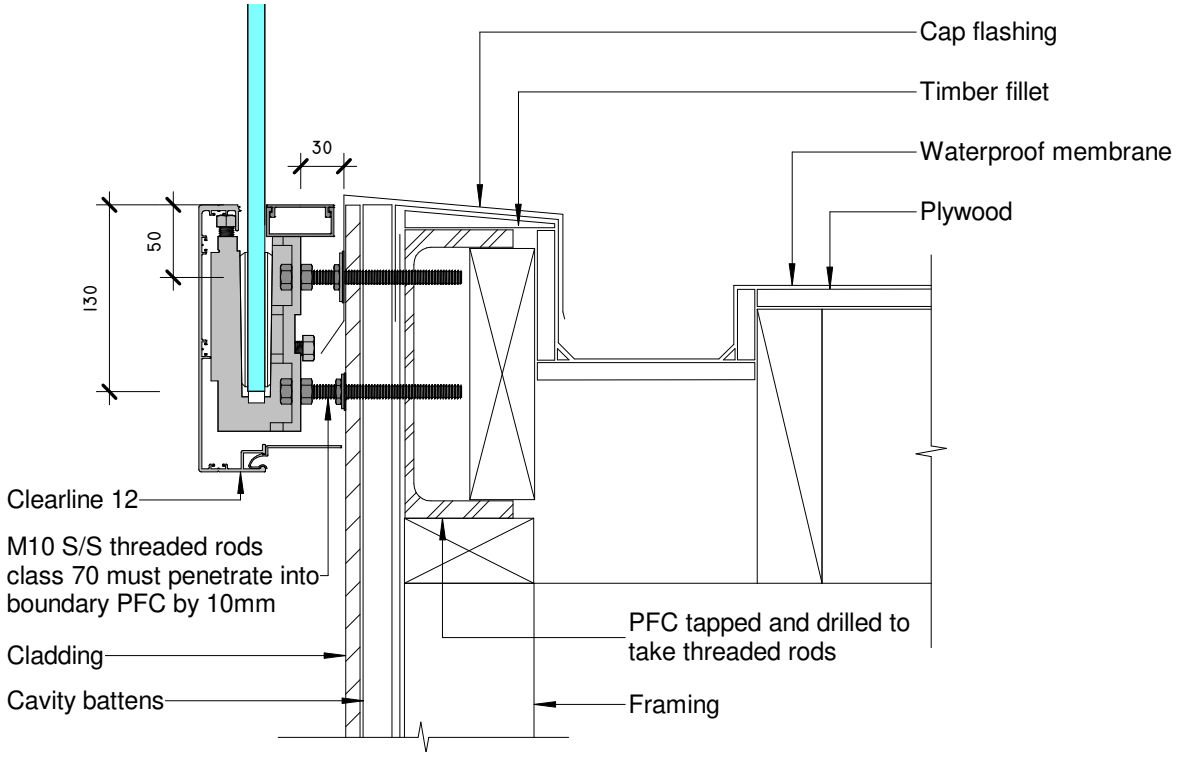
Commercial and applications where the 50 plf live load applies: 30” ≤ L ≤ 36” and h ≤ 45.7”
Three clamps per light are always required to support the 50 plf top rail live load.



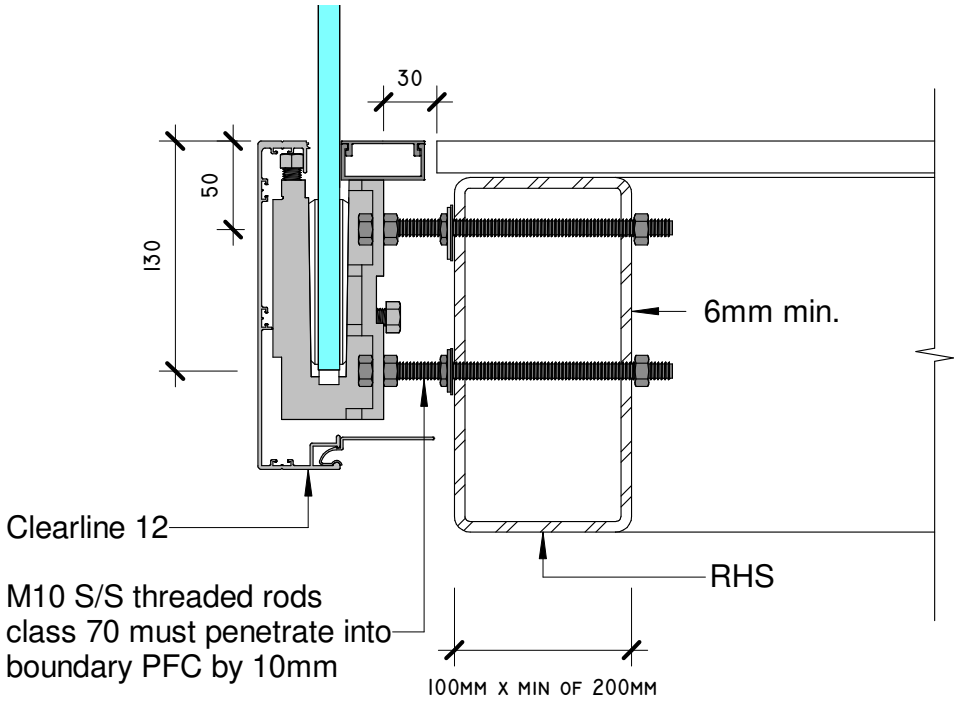
Bracket standoff distance: The typical installation is to install the bracket at 1 3/16” standoff from the fascia face. This may be increased to 3” maximum. Standoff distance may be reduced a minimum of 9/16”

Fascia Cladding: The cladding is non-structural and is optional. Omission of the cladding doesn’t impact any other aspects of the system installation or performance.

ANCHORAGE TO STEEL



Typical anchorage to steel uses 10mm stainless steel rods, studs or bolts



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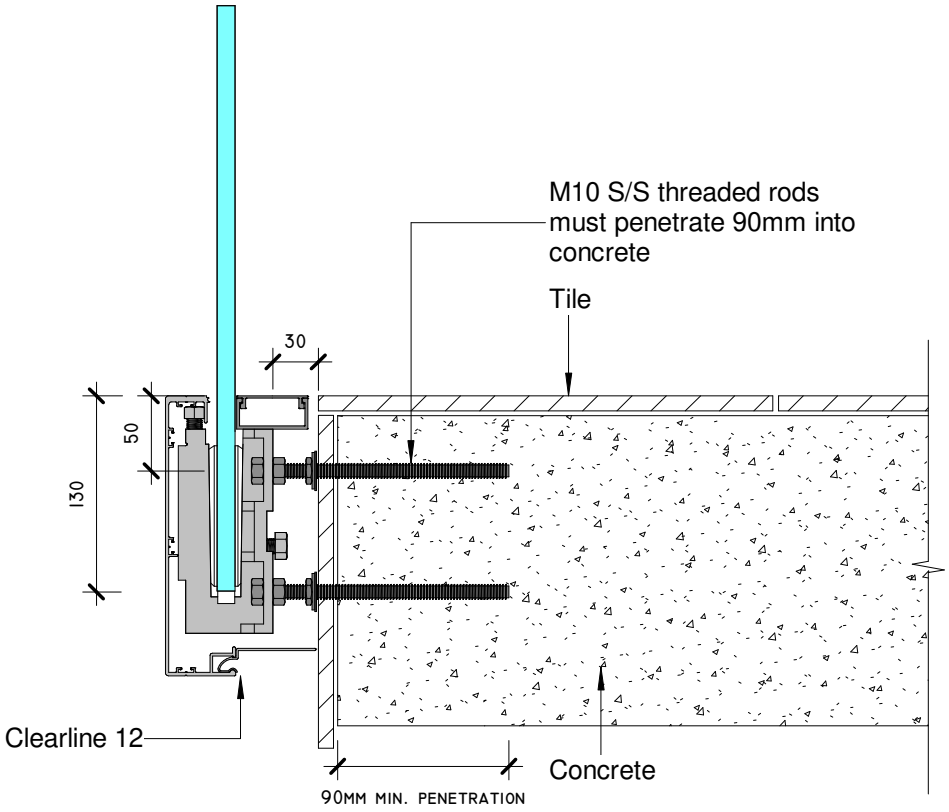
ANCHORAGE TO CONCRETE

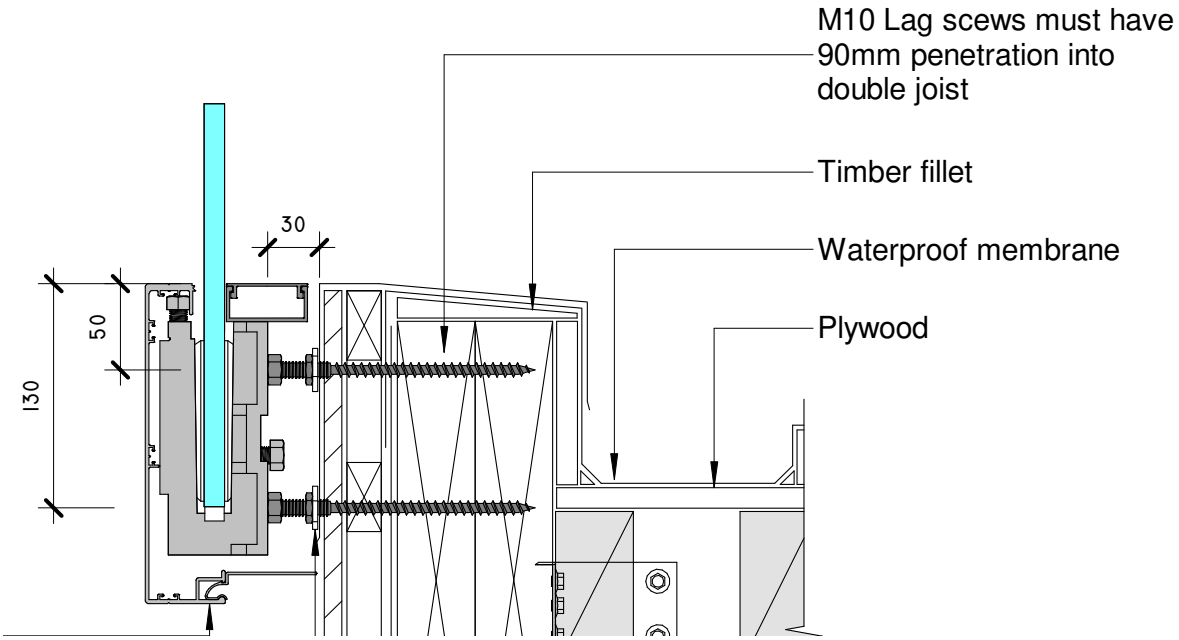


Typical top edge distance is 2" to centerline of top anchor.
Typical installation to concrete: 10mm stainless steel threaded rod set with adhesive. The embedment and adhesive to be designed based on project conditions.
For the standard installations covered in this report (50 plf top live load)
Minimum loads: 2,420# tension live load on anchor pair (top 2 or bottom 2)
75# shear (dead load) on anchor group.
Loads are unfactored

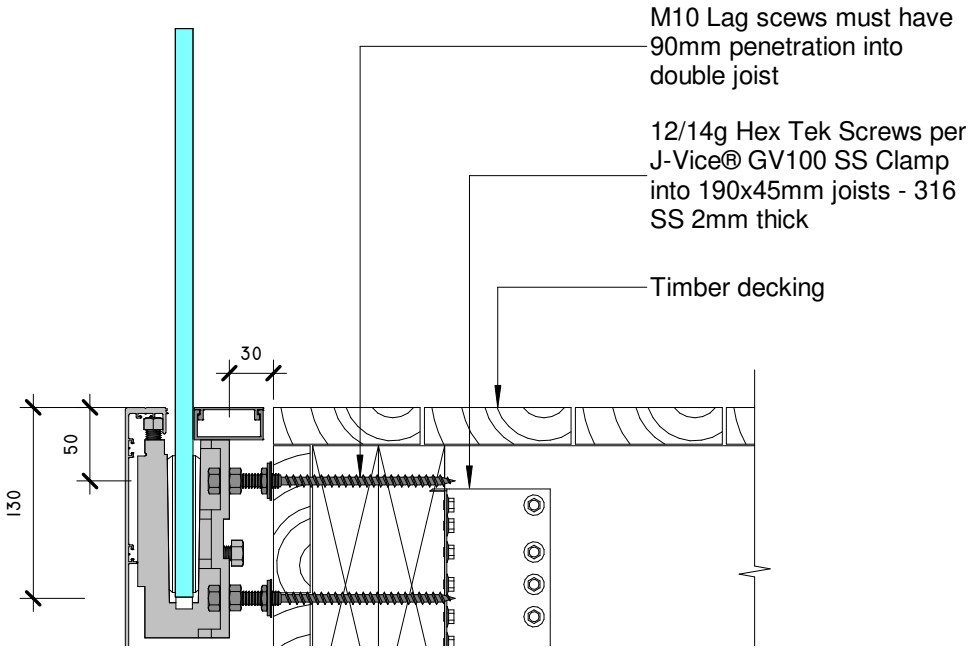
Expansion bolt alternative:
3/8" SS Hilti Kwikbolt TZ per ESR 1917 or similar designed for the same strength
3/8" SS Hilti Kwikbolt TZ to have at least 3-1/16" nominal embedment in concrete.

Cast-in-Place anchors: 10mm rods designed for the load

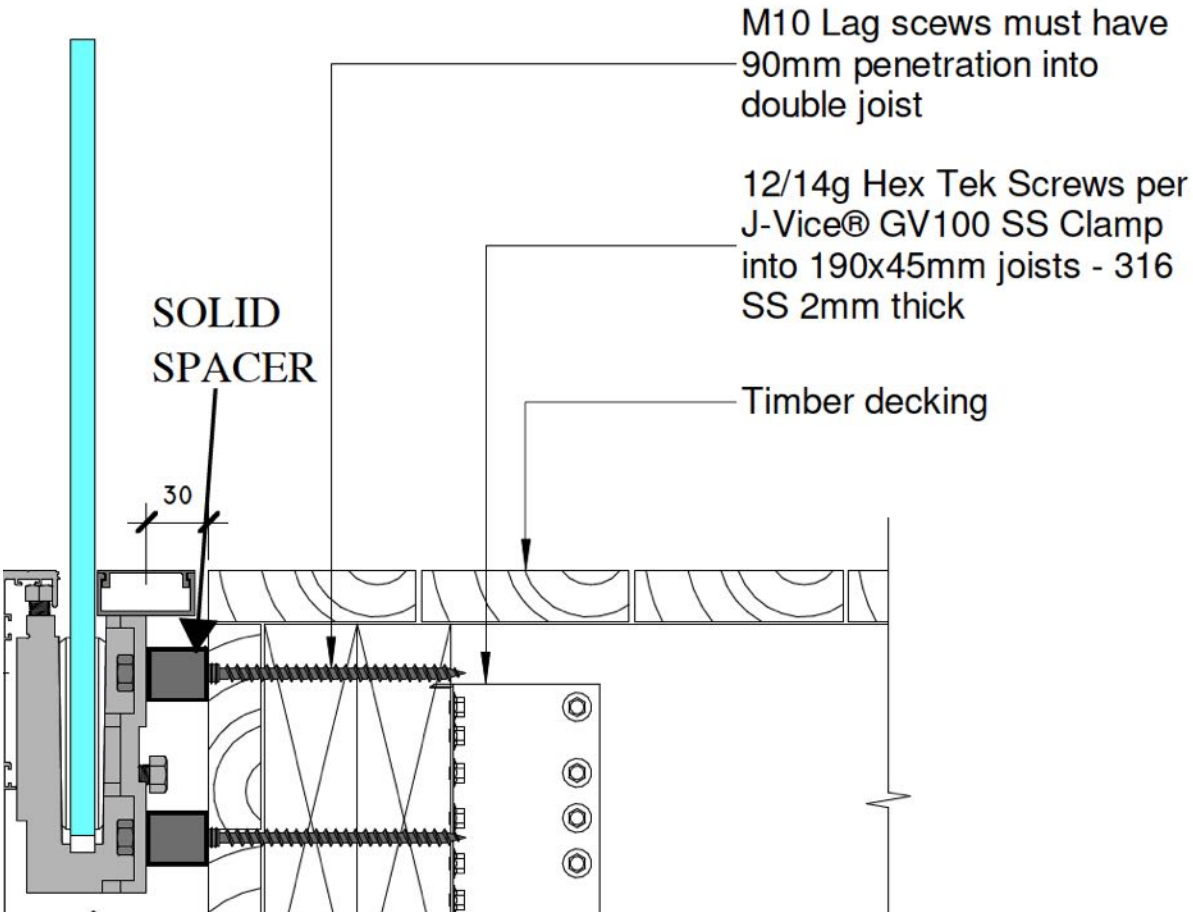
ANCHORAGE TO WOOD



10mm or 3/8” Stainless steel hanger screw with minimum
Use double nut on the standard threaded stud portion of hanger screw to secure the bracket.
Minimum lag screw thread embedment into solid wood = 3.54”, 3 11/16” nominal with tip.
If wood is subject to wetting then the lag embedment length must be increased to 5 1/4” with tip.



LAG SCREW WITH SPACER:



Use lag screw of sufficient length to achieve the required embedment, 3.54” (3 11/16” with tip) Typically this will require a minimum length of at least 5”.
If wood is subject to wetting then the lag embedment length must be increased to 5 1/4” with tip.

Lag screw to be installed through 7/16” diameter hole in spacer. Spacer may be round or square minimum 1” diameter and 9/16” ≤ thickness ≤ 3”.

The lag screw is secured to the clamp body so that the compression reaction is resisted by compression in the lag screw rather than by compression against the wood surface.

The spacer may also be used with the connection to steel or concrete.