

LVSIA ANGLE BRACKET

Applications

LVSIA is a versatile bracket that can be used in a ‘horizontal’ direction as an angle SEAT to support beams or trusses coming in at any direction. This angle bracket can also be used in a ‘vertical’ direction as an angle CLEAT for beam to beam connections especially in situations where normal joist hangers cannot be used.

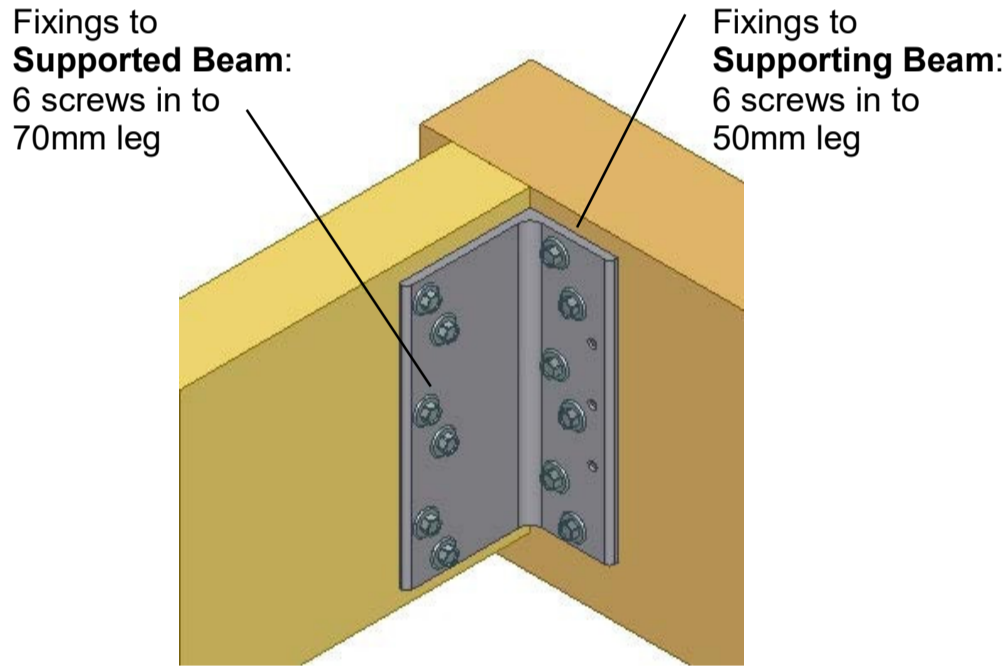
Specifications

LVSIA bracket is a 150mm long x 5.0mm thick un-equal angle of size 75 x 50 x 5.0 using G300 galvanized steel.

Design Capacities

(A) ‘Vertical’ Application as an angle CLEAT– Bracket fixed only on one face

Fixings – 6/Pryda WTF12-35 screws on each leg.



Installation: 50mm leg fixed to supporting beam

JOINT GROUP	Single LVSIA as an angle cleat for given Load Cases			
	1.35G	1.2G+1.5Qf	1.2G+1.5Qr	Wind Uplift
JD4	4.8	5.8	6.4	8.6
JD3 ⁽¹⁾	6.7	8.0	9.0	13.3

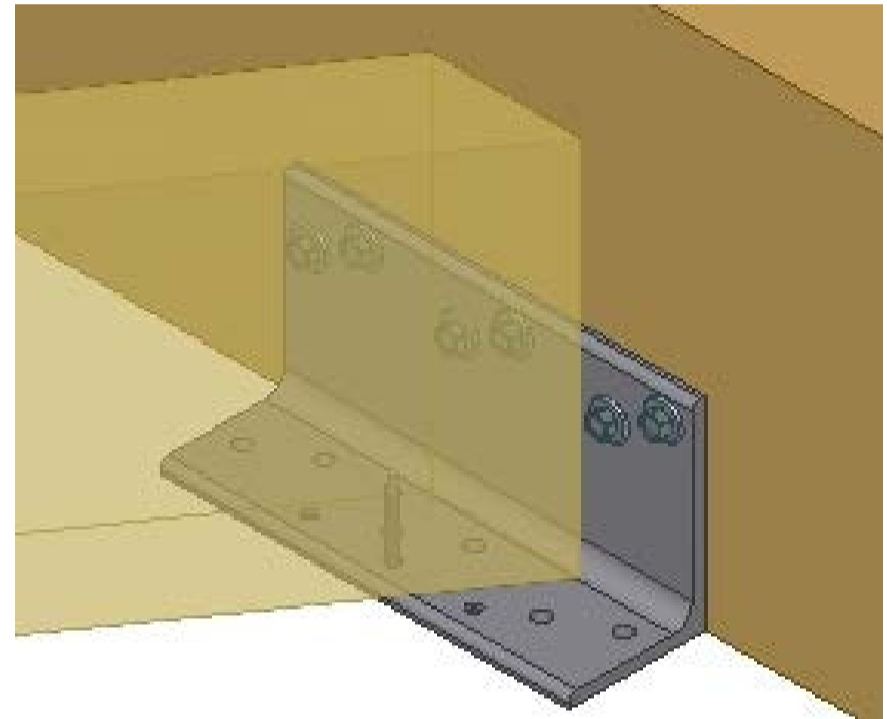
Notes:

- (1) Provide 2/No.14 x 90 Type 17 screws from the back of supporting beam in to end-grain of supported beam to resist twisting of supporting beam. Use longer screw lengths if required to ensure a minimum 35mm penetration.
- (2) When the supported member used is prone to splitting (like hardwoods-JD3), additional precautions should be taken. These can be in the form of prebored holes or provision of anti-split nailplates at ends of the supported beam.

- (3) Screws with longer lengths are required when LVSIA brackets are fixed into multiple laminated beams. For double laminates, use 65 long screws per flange.
- (4) Increase capacities by 15% for 40mm long screws.
- (5) If the bracket is used as a PAIR, the given capacities shall be increased by a factor of 2.5. Ensure the screws on supporting beam are at least 30mm from end grain.

(B) ‘Horizontal’ Application as an angle SEAT

Fixings – 6/Pryda WTF12-35 screws on vertical leg and 1/No.10x30 Type 17 counter-sunk screw on horizontal leg.



JOINT GROUP	LOAD CAPACITIES(kN) for LVSIA as an angle seat for given Load Cases			
	1.35G	1.2G+1.5Qf	1.2G+1.5Qr	Wind Uplift
JD5	4.8	5.8	6.5	1.0
JD4	6.7	8.2	9.1	1.4
JD3	9.5	11.5	12.9	1.8

Notes:

1. The above table values may be increased by 15% if 40mm screw lengths are used.
2. The support beam must be lateral tied to prevent rotation.

