VUETRADE for the builder

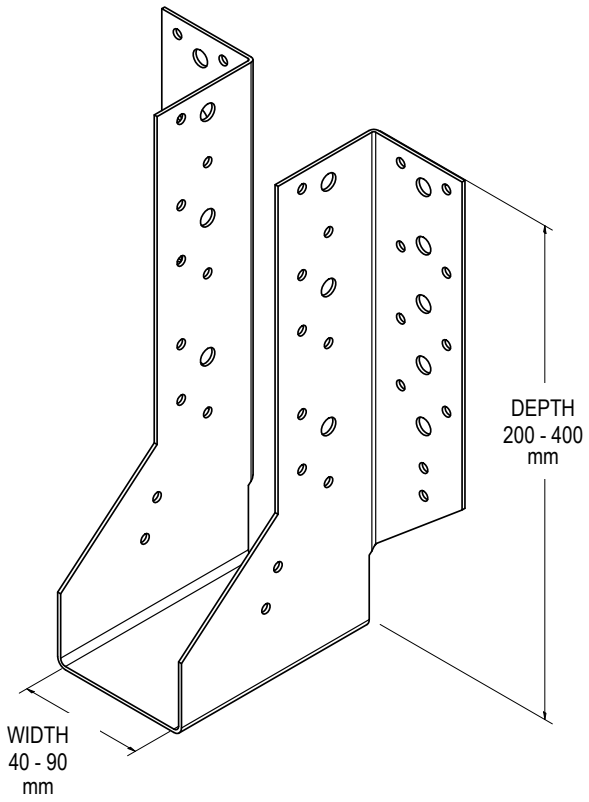
Timber Connectors
Technical Data Sheet

GALVANISED I-BEAM HANGERS

NOV23

Compliant with the requirements of AS1684 and AS1720.
Designed and tested to AS1649.

G GALVANISED



APPLICATION

VUETRADE I-Beam Hangers are multi-purpose hanger brackets for securely connecting I-Beams and large joists to framing structures.

SPECIFICATION

VUETRADE I-Beam Hangers are manufactured from G300 Z275 galvanised steel in 1.2mm thickness (TCT).

FASTENERS

Nails: Use VUETRADE 33mm x 3.15mm Ø Galvanised Connector Plate Nails **OR:**

Screws: VUETRADE Type 17 12G x 35mm screws.

Bottom Screw: 1x appropriate 6G x 30mm bugle head galvanised screw.

SIZES

Product Code	Nominal Size (mm)	Minimal Installation Quantity of:	
		12G x 35mm Screws	33 x 3.15mm Nails
VIBHF40240	40 x 240	6	16
VIBHF40300	40 x 300	8	18
VIBHF45200	45 x 200	6	12
VIBHF45240	45 x 240	6	16
VIBHF45300	45 x 300	8	18
VIBHF51240	51 x 240	6	16
VIBHF51300	51 x 300	8	18
VIBHF63200	63 x 200	6	12
VIBHF63240	63 x 240	6	16
VIBHF63300	63 x 300	8	18
VIBHF70240	70 x 240	6	16
VIBHF70300	70 x 300	8	18
VIBHF90200	90 x 200	6	12
VIBHF90240	90 x 240	6	16
VIBHF90300	90 x 300	8	18
VIBHF90360	90 x 360	10	20
VIBHF90400	90 x 400	10	20

technical@bellevuegroup.com.au
1300 850 520 www.vuetrade.com

GALVANISED I-BEAM HANGERS

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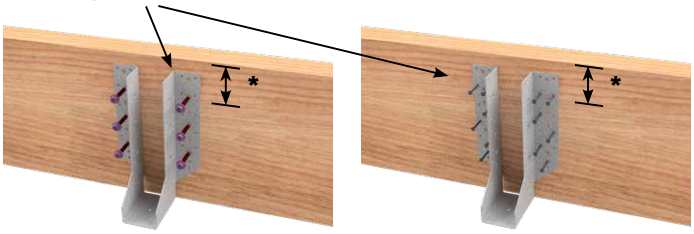
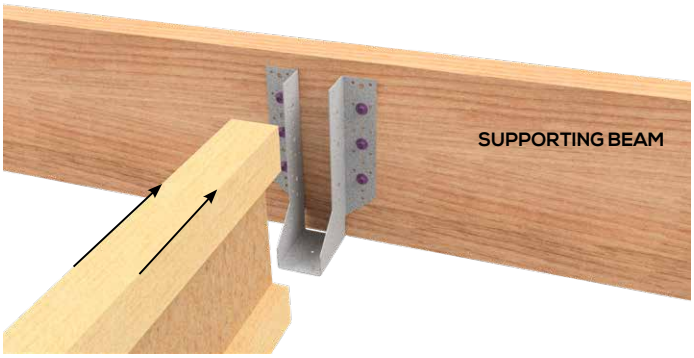
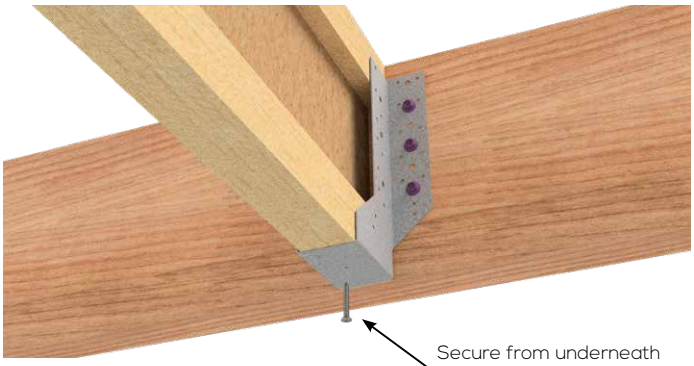
INSTALLATION GUIDE

Fix I-Beam Hanger with VUETRADE Type 17 12G x 35mm screws or 33mm x 3.15mm Ø Galvanised Connector Plate Nails to the supporting beam

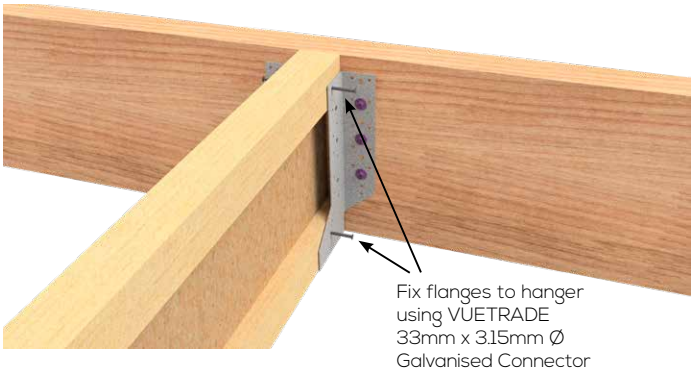


* Ensure minimum distance to edge of timber from the nearest fastener is no closer than 30mm (screws) or 17mm (nails).





Secure from underneath with 6G x 30mm bugle head galvanised screw



Fix flanges to hanger using VUETRADE 33mm x 3.15mm Ø Galvanised Connector Plate Nails

1. Select suitable size I-Beam Hanger using size table on previous page, ensuring sufficient minimum hanger depth for each of the beams/joists.

2. Attach the I-Beam Hanger to the supporting member first using the recommended number of VUETRADE Type 17 12G x 35mm screws **OR** 33mm x 3.15mm Ø Galvanised Connector Plate Nails as detailed in Table 1.

   I-Beam hangers will have more fixing holes than the recommended amount of fasteners. For screws, begin on the highest possible row (taking into account minimum distance to the timber edge), and space evenly through the hanger. For nails, secure the highest possible outer hole first, and non-aligned on each row below (zig-zag). Refer to the charts on Page 4 for visual representation.

   Ensure to only drive fasteners no closer than 30mm for screws, or 17mm for nails from the timber edge to prevent timber splitting, as required by AS1720.1.

3. Place the supported I-Beam or joist and secure an appropriate 6G x 30mm bugle head galvanised screw through the bottom hole. Fix nails through the hanger into the bottom and top flanges of the I-Beam.

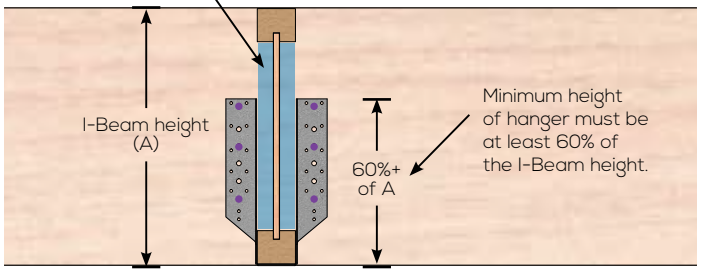
NOTE:

The I-Beam hanger must cover at least 10mm of the top flange.

If the height of the I-Beam hanger is covering less than 10mm of the top flange, install a web stiffener to restrict rotation. The height of the hanger must be at least 60% of the I-Beam height.

For any other installation methods please contact VUETRADE for more information about risks and considerations along with installation guide and design capacities.

A web stiffener must be installed whenever the hanger does not cover 10mm of the I-Beam top flange



technical@bellevuegroup.com.au
1300 850 520 www.vuetrade.com

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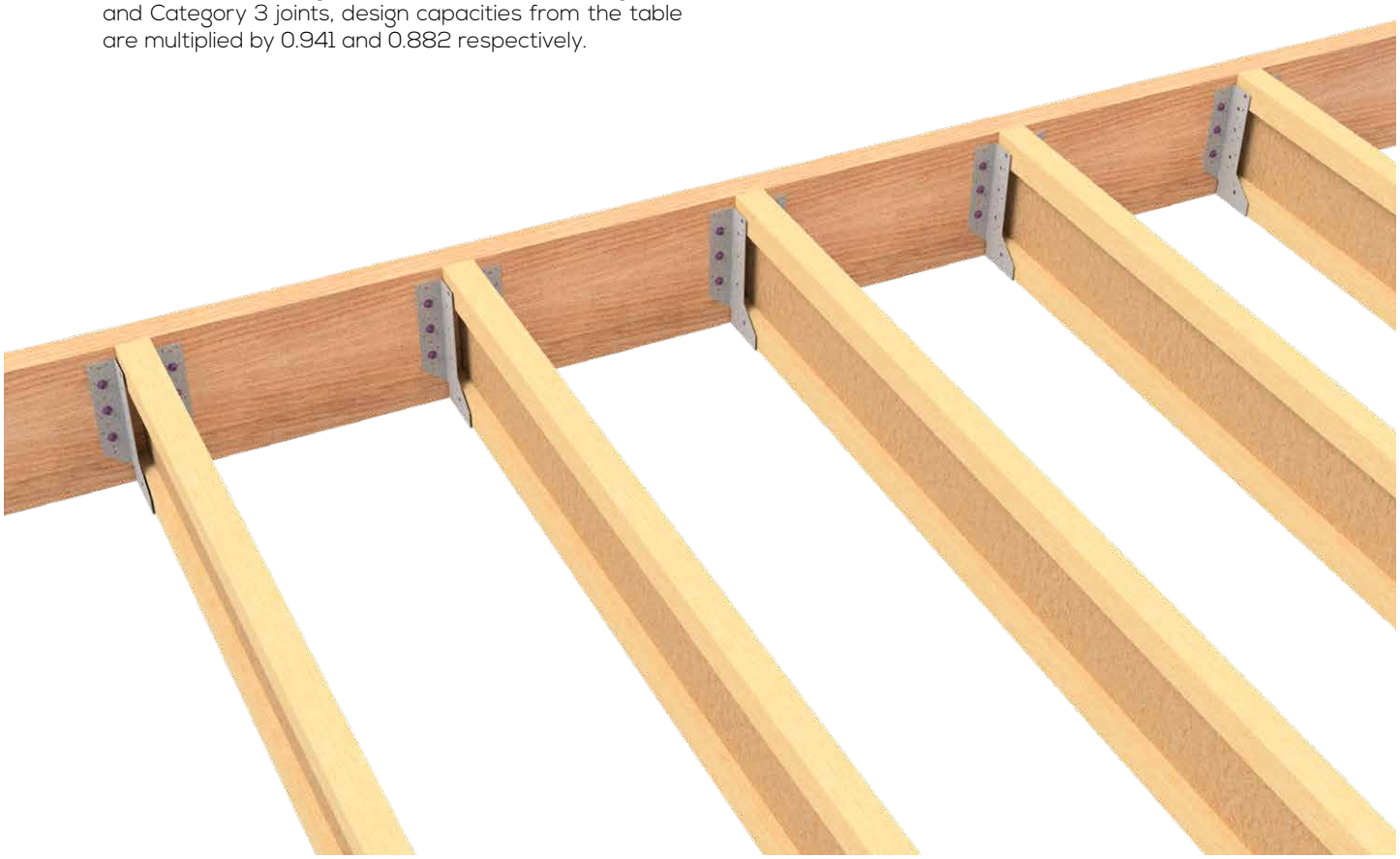
DESIGN CAPACITY DATA

Table 1: Design Capacity data for screw or nail fixing of I-Beam Hanger

Height of hanger	Number of fixings on supporting Beam A		Type of load	Joint Group		
	Screws	Nails		JD3	JD4	JD5
200mm	6 (3 on left + 3 on right)	12 (6 on left + 6 on right)	Dead Load	7.4	5.3	4.5
			Dead Load + Floor Live Load	9.0	6.4	5.4
240mm	6 (3+3)	16 (8+8)	Dead Load	9.7	6.9	5.6
			Dead Load + Floor Live Load	11.7	8.4	6.8
300mm	8 (4+4)	18 (9+9)	Dead Load	10.8	7.7	6.5
			Dead Load + Floor Live Load	13.1	9.3	7.8
360mm	10 (5+5)	20 (10+10)	Dead Load	11.9	8.5	7.1
			Dead Load + Floor Live Load	14.4	10.3	8.6
400mm	10 (5+5)	20 (10+10)	Dead Load	11.9	8.5	7.1
			Dead Load + Floor Live Load	14.4	10.3	8.6

NOTES:

- Modification factors k1 for different load cases in the design capacities of Table 1 are adopted from AS1720.1-2010.
- Design capacities in Table 1 are based on Category 1 joints where it is applicable for failures that would be unlikely to affect an area of greater than 25m2. For Category 2 and Category 3 joints, design capacities from the table are multiplied by 0.941 and 0.882 respectively.
- NEVER punch nails through sheet metal as it results in weaker, non-compliant connections.



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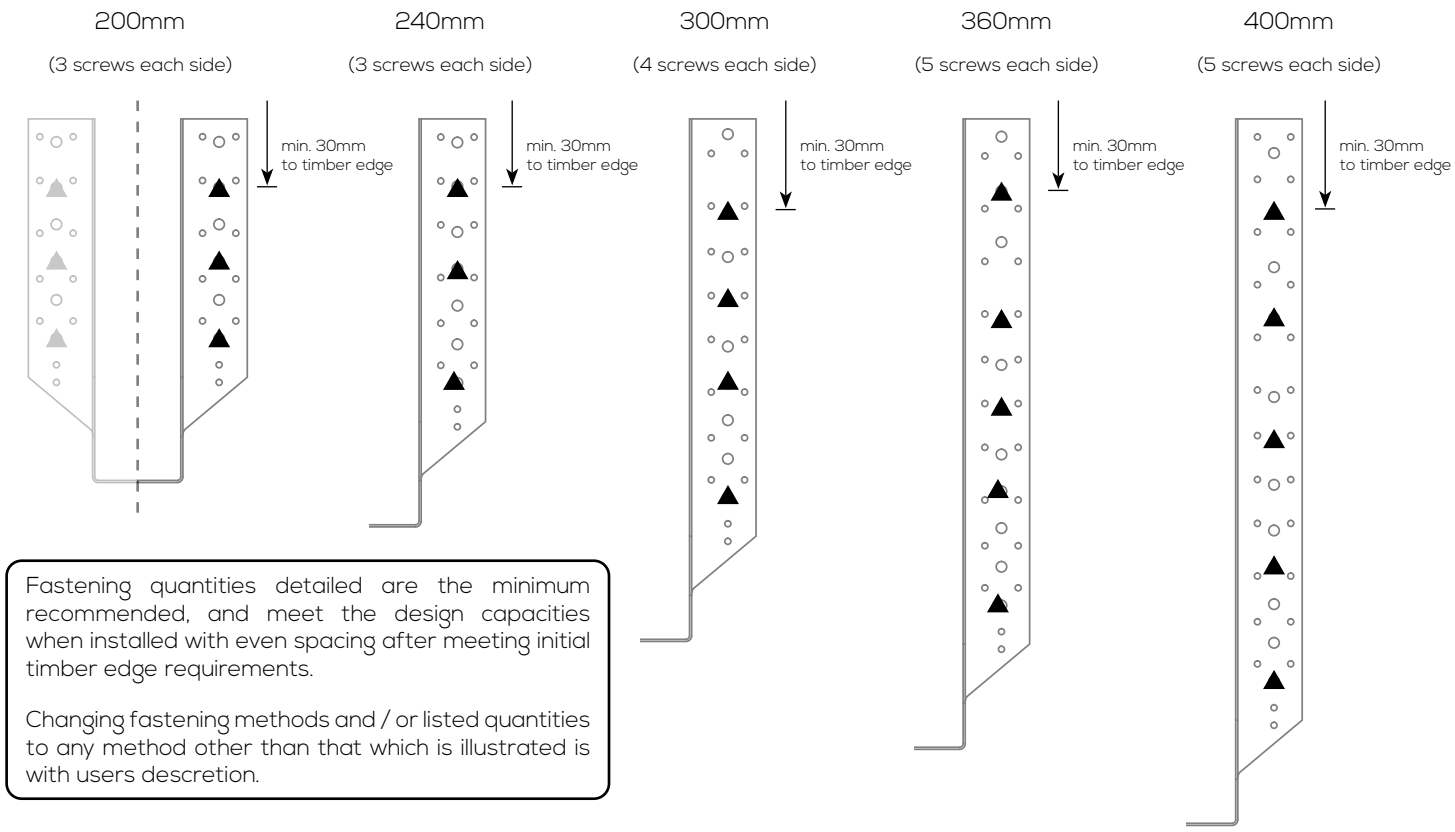
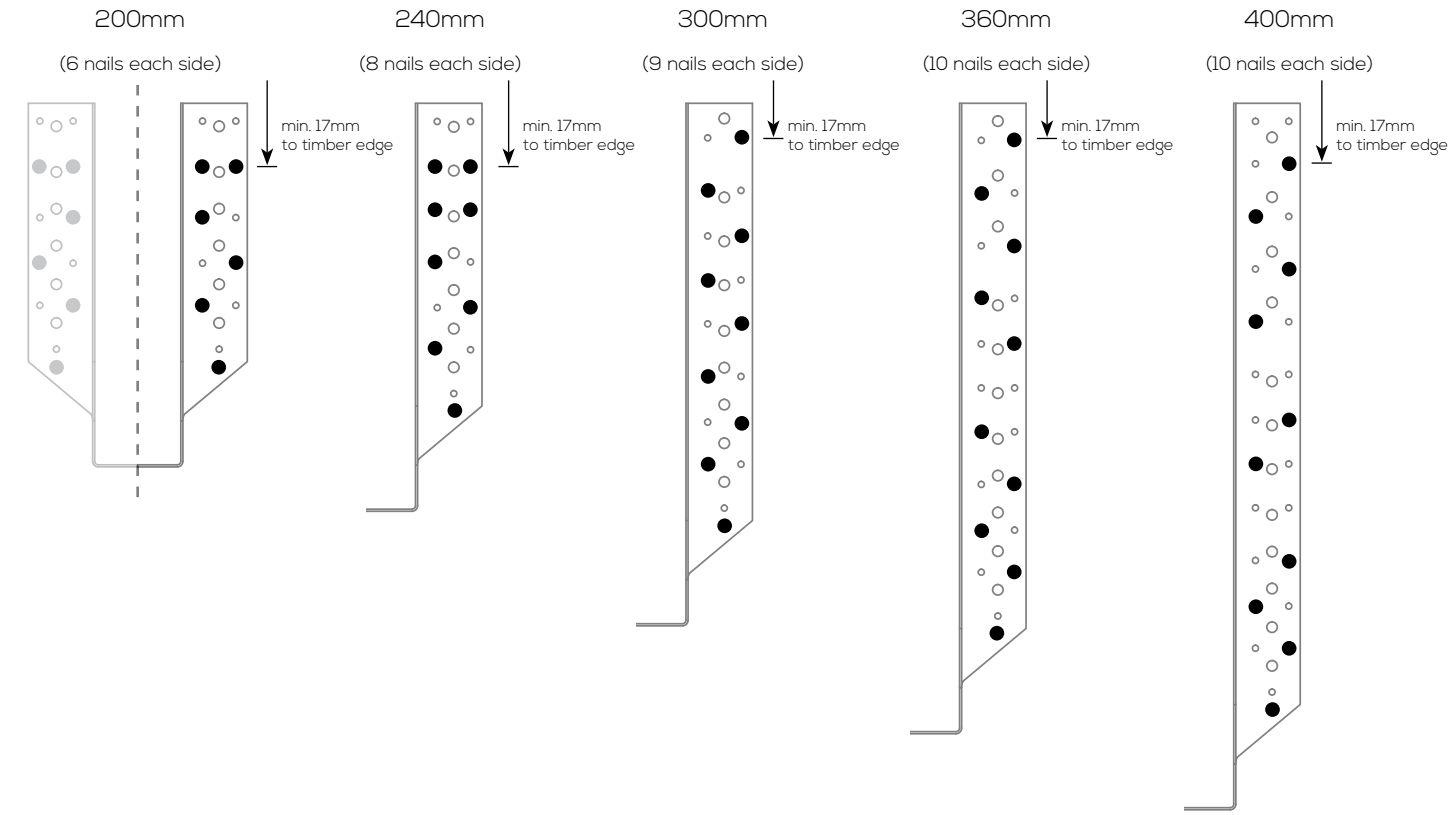
VUETRADE TYPE 17 12G X 35mm MINIMUM SCREW FASTENING METHOD



Fastening quantities detailed are the minimum recommended, and meet the design capacities when installed with even spacing after meeting initial timber edge requirements.

Changing fastening methods and / or listed quantities to any method other than that which is illustrated is with users descretion.

VUETRADE 33 x 3.15mm NAIL MINIMUM FASTENING METHOD



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