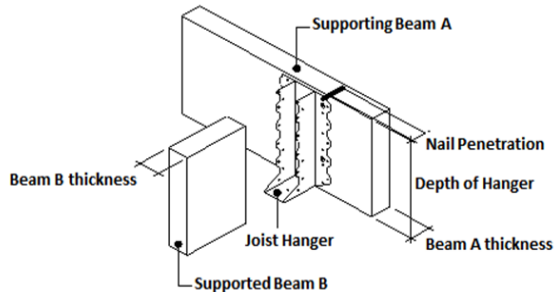


VUETRADE STAINLESS STEEL JOIST HANGERS

FAST FIXING, MULTI-PURPOSE HANGERS FOR CONNECTING JOISTS TO BEAMS, TRUSSES TO BEAMS, AND ROOF TRUSSES TO GIRDERS



Application

VUETRADE Stainless Steel Joist Hangers are a quick and effective solution for fixing a variety of timber joints, used primarily for joining joists to beams, rafters to fascia's and floor trusses to beams. All VUETRADE Stainless Steel Joist Hangers are manufactured with VUESPIKES for easy and fast installation.

Specification

VUETRADE Stainless Steel Joist Hangers are manufactured from 316 Stainless Steel in 1.0 mm thickness (TCT).

Fasteners

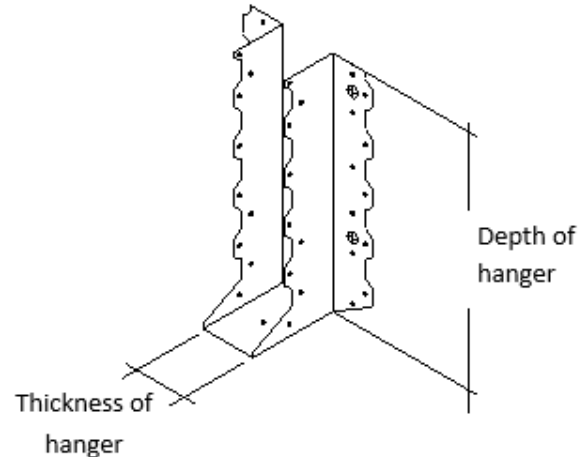
Nails: Use only 30mm x 2.8mm VUETRADE stainless steel connector plate nails.

Bolts: M10 4.6/S Bolts.

Note: Do not use both types of fasteners on the same joist hanger.

Installation

1. A correct joist hanger size is selected based on timber size using Table 1. The depth of the joist hanger must be selected using Table 2 and Table 3 to ensure a safe carrying capacity for the load applied.
2. Joist Hanger should be fixed to the supporting member first. It can be quickly and easily held in place by the VUESPIKES. Do not include VUESPIKES in the number of nails specified in Table 2.
3. Supported member is fixed into the joist hanger ensuring that it is firmly against the supporting member. The required number of nails are driven into supported member as shown in Table 3.



Product Sizes

Table 1: Stainless Steel Joist Hanger Dimensions

Code	Nominal Size (thickness x depth)	Box Quantity
VJH3590SS	35mm x 90mm	45
VJH35120SS	35mm x 120mm	30
VJH35140SS	35mm x 140mm	30
VJH35180SS	35mm x 180mm	30
VJH4590SS	45mm x 90mm	45
VJH45120SS	45mm x 120mm	30
VJH45140SS	45mm x 140mm	30
VJH45180SS	45mm x 180mm	30
VJH45220SS	45mm x 220mm	20
VJH5090SS	50mm x 90mm	45
VJH50120SS	50mm x 120mm	30
VJH50140SS	50mm x 140mm	30
VJH50180SS	50mm x 180mm	30
VJH50220SS	50mm x 220mm	20

VUETRADE STAINLESS STEEL JOIST HANGERS

Design Capacity Data

Table 2: Design Capacity Table based on Floor Live Loads ($k_1 = 0.69$)

Sizes	fixing to supported beam A	Timber Specifications											
		J1	J2	J3	J4	J5	J6	JD1	JD2	JD3	JD4	JD5	JD6
220mm	26 nails	21.59	17.02	12.17	8.60	6.50	4.85	28.64	21.59	17.02	12.17	9.97	7.59
180mm	22 nails	18.27	14.40	10.30	7.28	5.50	4.10	24.23	18.27	14.40	10.30	8.44	6.43
140mm	18 nails	14.95	11.78	8.42	5.95	4.50	3.36	19.83	14.95	11.78	8.42	6.90	5.26
120mm	14 nails	11.63	9.16	6.55	4.63	3.50	2.61	15.42	11.63	9.16	6.55	5.37	4.09
90mm	10 nails	8.30	6.55	4.68	3.31	2.50	1.87	11.01	8.30	6.55	4.68	3.84	2.92

Table 3: Design Capacity Table based on Wind Uplifts ($k_1 = 1.14$)

Sizes	fixing to supported beam B	Timber Specifications											
		J1	J2	J3	J4	J5	J6	JD1	JD2	JD3	JD4	JD5	JD6
220mm	18 nails	24.70	19.47	13.92	9.84	7.43	5.55	32.76	24.70	19.47	13.92	11.41	8.69
180mm	14 nails	19.21	15.14	10.83	7.65	5.78	4.31	25.48	19.21	15.14	10.83	8.87	6.76
140mm	12 nails	16.47	12.98	9.28	6.56	4.95	3.70	21.84	16.47	12.98	9.28	7.60	5.79
120mm	10 nails	13.72	10.81	7.73	5.47	4.13	3.08	18.20	13.72	10.81	7.73	6.34	4.83
90mm	8 nails	10.98	8.65	6.19	4.37	3.30	2.47	14.56	10.98	8.65	6.19	5.07	3.86

NOTE:

1. Minimum depth of nail penetration in both members is 30mm.
2. Design capacities in Table 2 and Table 3 are for 30mm x 2.8mm VUETRADE 316 stainless steel connector plate nails only. Design capacities are determined based on the maximum number of nails in each joist hanger.
3. Modification factor, k_1 is as recommended in AS 1720.
4. Design capacities in the Table 2 and Table 3 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.
5. NEVER punch nails through sheet metal as it results in weaker, non-compliant connections.

Design Capacity Data

Table 4: Design Capacity Table using Two M10 4.6/S Bolts

For JH180, JH140, JH120, and JH90 Joist Hangers													
b _{eff}	Parallel to Grain (1.2G+1.5Qf), kN						b _{eff}	Parallel to Grain (1.2G+1.5Qf), kN					
	J1	J2	J3	J4	J5	J6		JD1	JD2	JD3	JD4	JD5	JD6
25	8.09	6.45	5.16	4.11	3.28	2.70	25	10.09	8.09	6.45	5.16	4.11	3.28
38	10.79	9.03	7.86	6.22	4.93	3.99	35	13.37	11.38	9.03	7.27	5.75	4.57
50	10.79	9.03	8.33	6.57	5.63	5.04	40	13.37	11.38	10.32	8.33	6.57	5.16
75	10.79	9.03	8.33	6.57	5.63	5.04	45	13.37	11.38	10.32	8.33	7.27	5.87
100	10.79	9.03	8.33	6.57	5.63	5.04	70	13.37	11.38	10.32	8.33	7.27	6.22
150	10.79	9.03	8.33	6.57	5.63	5.04	90	13.37	11.38	10.32	8.33	7.27	6.22
200	10.79	9.03	8.33	6.57	5.63	5.04	105	13.37	11.38	10.32	8.33	7.27	6.22
							120	13.37	11.38	10.32	8.33	7.27	6.22

Table 5: Design Capacity Table using Four M10 4.6/S Bolts

For JH 220 Joist Hangers													
b _{eff}	Parallel to Grain (1.2G+1.5Qf), kN						b _{eff}	Parallel to Grain (1.2G+1.5Qf), kN					
	J1	J2	J3	J4	J5	J6		JD1	JD2	JD3	JD4	JD5	JD6
25	16.19	12.90	10.32	8.21	6.57	5.40	25	20.18	16.19	12.90	10.32	8.21	6.57
38	21.58	18.06	15.72	12.43	9.85	7.98	35	26.74	22.76	18.06	14.55	11.50	9.15
50	21.58	18.06	16.66	13.14	11.26	10.09	40	26.74	22.76	20.64	16.66	13.14	10.32
75	21.58	18.06	16.66	13.14	11.26	10.09	45	26.74	22.76	20.64	16.66	14.55	11.73
100	21.58	18.06	16.66	13.14	11.26	10.09	70	26.74	22.76	20.64	16.66	14.55	12.43
150	21.58	18.06	16.66	13.14	11.26	10.09	90	26.74	22.76	20.64	16.66	14.55	12.43
200	21.58	18.06	16.66	13.14	11.26	10.09	105	26.74	22.76	20.64	16.66	14.55	12.43
							120	26.74	22.76	20.64	16.66	14.55	12.43

NOTE:

1. Modification factor, k_1 is as recommended in AS 1720.
2. Design capacities in the Table 4 and Table 5 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.
3. Timber joint groups are in accordance to AS 1720.1.
4. b_{eff} = thickness of supporting Beam A.