



STAINLESS STEEL T-BLADE POST SUPPORTS

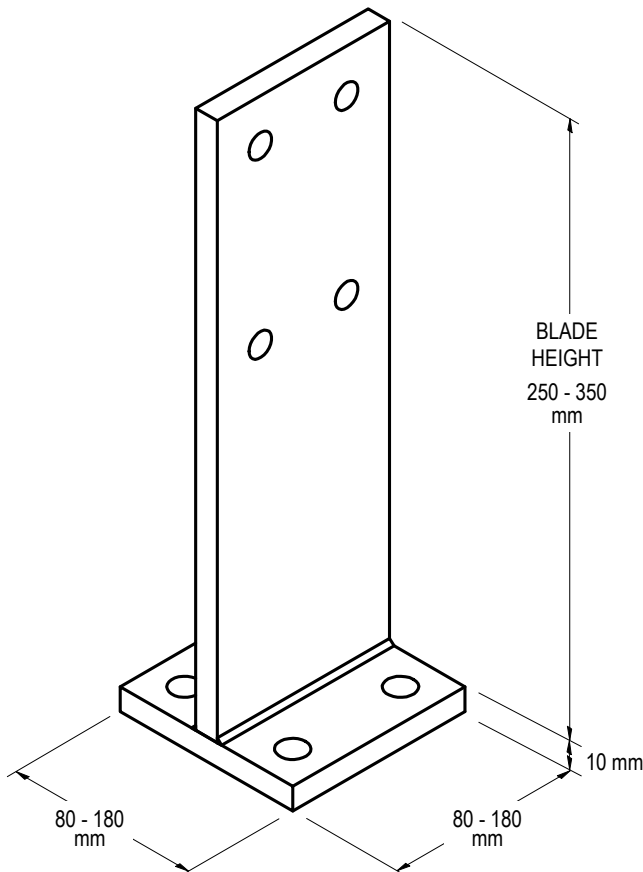
JUN23

Compliant with the requirements of AS1720.

304 STAINLESS STEEL

316 STAINLESS STEEL

BOLTED TO CONCRETE



APPLICATION

Stainless Steel T-Blade Post Supports are brackets ideal for concealed, bolted fixing of feature timber posts on the coast.

SPECIFICATION

VUETRADE Stainless Steel T-Blade Post Supports are made from 10mm thick steel and are available in two different materials, SS304 and SS316.

FASTENERS

Saddle: 4x Stainless Steel VUEBOLT or appropriate M12 / M16 bolts with hex nuts*

Base: 4x stainless steel M12 / M16 concrete bolts or equivalent*

* Based on product size.

Only use stainless steel fasteners (bolts) with stainless steel post support, usage of other steel materials may lead to bimetallic corrosion.

See installation guide for full fastening details.

SIZES

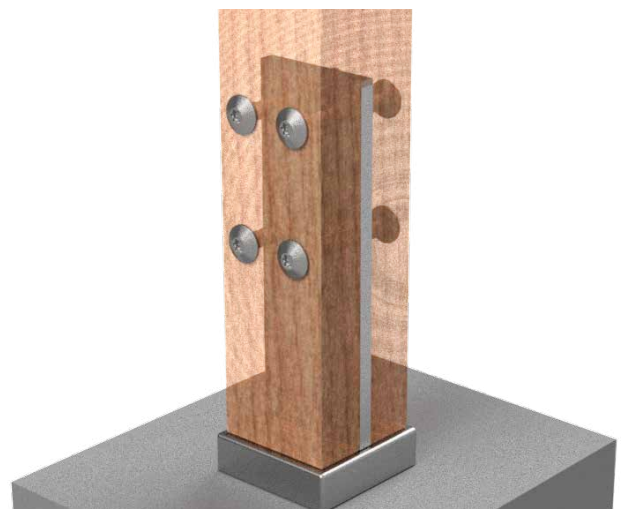
Table 1: Stainless Steel T-Blade Product Sizes

Product Code	Blade Height (mm)	Base Size (mm x mm)	Post Size Suitability (mm)	Bolt Size	Box Qty
VBPTB90100SS	250	80 x 80	90 - 100	M12	6
VBPTB115140SS	275	110 x 110	115 - 140	M16	6
VBPTB150180SS	300	140 x 140	150 - 180	M16	4
VBPTB180200SS	350	180 x 180	180 - 250	M16	2

Codes above are for Stainless Steel 304 products, for Stainless Steel 316 add '316' to the end of the code.

NOTE:

'Tea-staining' is a cosmetic issue with some VUETRADE Stainless Steel Post Supports (more prevalent in SS304) but this does not affect the structural integrity or material lifetime of the post support.





STAINLESS STEEL T-BLADE POST SUPPORTS

JUN23

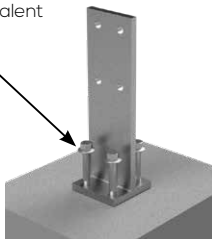
INSTALLATION GUIDE AND BOLT FIXING SCHEDULE

Cut a 10mm slit in the middle of timber to the height (see note 1)

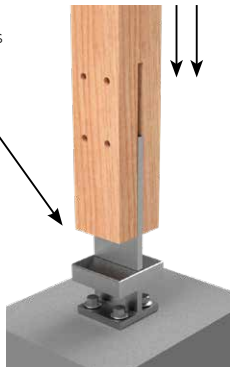


Drill appropriate Ø holes in timber to fit bolts as defined in Table 1.

Install 4x appropriate sized concrete bolts or equivalent to ground

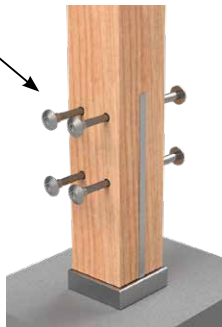


Place a T-Blade cap to hide concrete bolts (see note 2)



Slide timber to T-Blade

Install 4x VUEBOLT or appropriate M12 / M16 bolts fastened with hex nuts

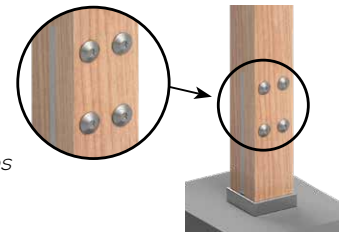


NOTES:

1. VUETRADE has prepared a comprehensive cutting schedule for all sizes of T-Blade post supports containing precise cutting and drilling measurements. Refer to the VUETRADE T-Blade Post Support webpage to access the cutting schedule.
2. T-Blade cap sold separately, VUETRADE recommends fitting T-Blade caps on T-Blade for concealed finish. Visit the VUETRADE T-Blade cap page here for more information.
3. VUEBOLT may be used as an alternative to standard bolts when fixing post support to timber posts for a concealed and smooth finish.

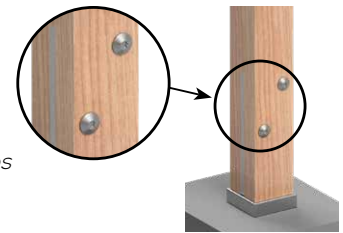
DESIGN CAPACITY DATA

Table 2: Design capacity of Stainless Steel T-Blade Post Support fixed with 4x bolts on various timber joint groups



Joint Group	J3	J4	J5	JD3	JD4	JD5
M12 Bolt	47.4	37.7	32.6	57.0	47.4	41.4
M16 Bolt	57.0	57.0	57.0	57.0	57.0	57.0

Table 3: Design capacity of Stainless Steel T-Blade Post Support fixed with 2x bolts on various timber joint groups



Joint Group	J3	J4	J5	JD3	JD4	JD5
M12 Bolt	23.7	18.8	16.3	29.5	23.7	20.7
M16 Bolt	42.3	33.3	28.8	52.3	42.3	36.7

NOTES:

1. The design capacity of Stainless Steel T-Blade is capped at 57kN. 57kN is the maximum uplift force from the test carried out before the bolt from the base of the grip failed. At this point, there were no signs of failure in the T-Blade except for minor cupping at its base.
2. The capacities were determined based on loads that are acting parallel to the grain of the timber.
3. Modification factors k_1 for different load cases are adopted from AS1720.1-2010.
4. Design capacities in the above tables 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. VUETRADE Post Supports should only be used to resist wind uplift / dead load as specified in the TDS and should not be assumed to provide lateral stability. Sufficient bracing should be provided and approved by a structural engineer for lateral stability.
6. Two bolts may be used instead of four, however strength verification must be conducted by a structural engineer to ensure that the two bolt usage is acceptable.
7. If fixing using two bolts, bolts should be fixed using non-adjacent bolt holes (use holes diagonally as shown in figure above).

