



# STAINLESS STEEL T-BLADE POST SUPPORT WITH LEG

JUN23

Compliant with the requirements of AS1720.

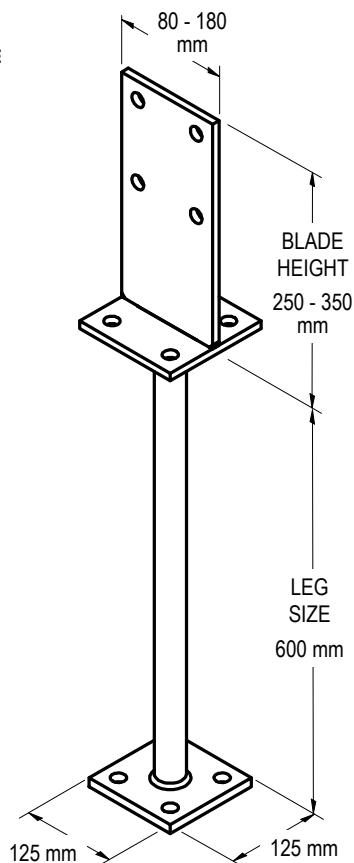
**304 STAINLESS STEEL**

**316 STAINLESS STEEL**

**BOLTED TO CONCRETE**



**CAST INTO CONCRETE**



## APPLICATION

Stainless Steel T-Blade Post Supports with Legs are concealed anchors ideal for coastal use, installed by bolting timber posts onto or setting them into concrete.

## SPECIFICATION

VUETRADE Stainless Steel T-Blade Post Supports are SS304, with a 600mm long x 73mm diameter leg.

## 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.

## SIZES

All VUETRADE T-Blade Post Supports are 10mm in thickness.

Product Code	Blade Height (mm)	Base Size (mm x mm)	Suits Post Size (mm)	Bolt Size	Leg Dimensions (mm)
VHDBLPS 60080SS	250	80 x 80	90-100	M12	600 x 35Ø
VHDBLPS 600110SS	275	110 x 110	115-140	M16	600 x 35Ø
VHDBLPS 600140SS	300	140 x 140	150-180	M16	600 x 73Ø
VHDBLPS 600180SS	350	180 x 180	180-200	M16	600 x 73Ø

\* Stainless Steel 316 and custom sizes are also available, refer to the VUETRADE Stainless Steel T-Blade Post Support with Leg webpage.

## 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.

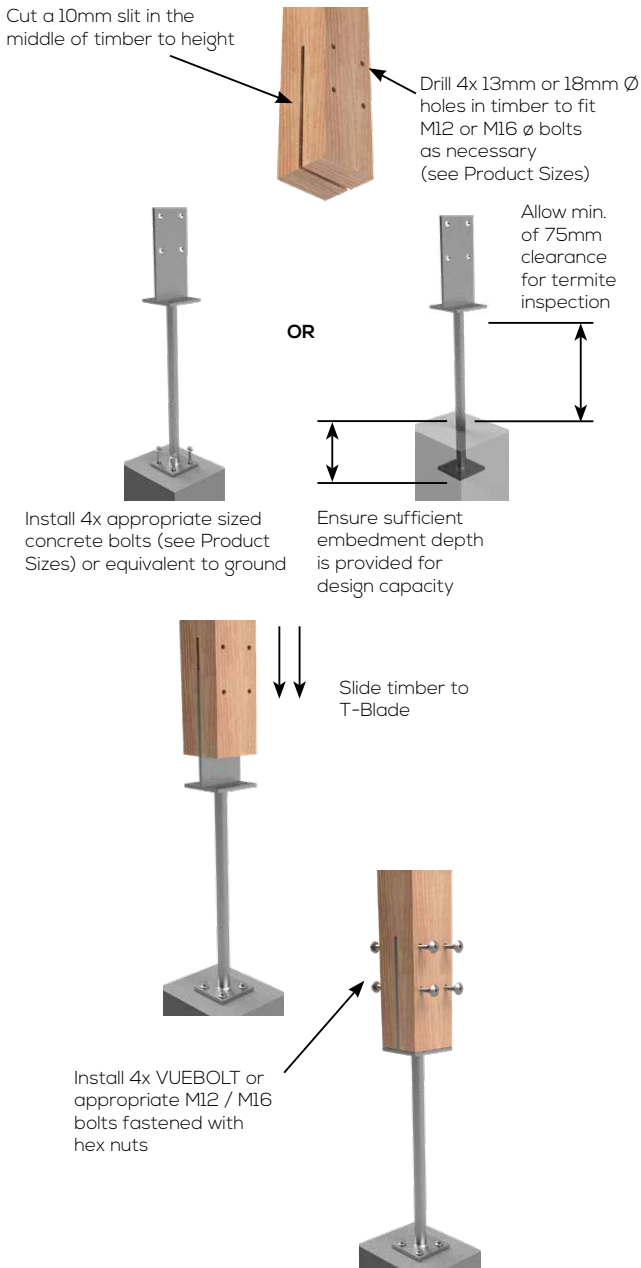




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**INSTALLATION GUIDE AND BOLT FIXING SCHEDULE**

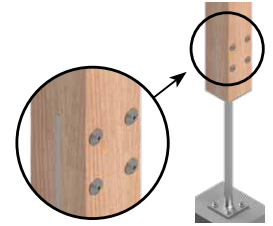


**NOTES:**

1. Embedment depth of the T-Blade post support should be determined and calculated by a Structural Engineer in order to achieve the reported design load. This usually depends on the type of concrete used, aggregate ratio etc.
2. 75mm clearance must be provided to conform to the requirements set out by AS3660.1:2014 - *Termite management, Part 1: New building work*.
3. Use only Stainless Steel bolts when fastening with a Stainless Steel post support; do not use galvanised bolts as it may lead to accelerated corrosion to the post support and the bolts.

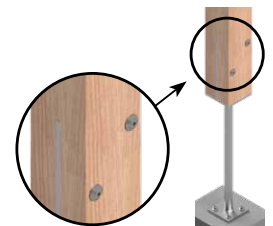
**DESIGN CAPACITY DATA**

*Table 1: Design capacity of Stainless Steel T-Blade Post Support with Leg fixed with 4x bolts on various timber joint groups*



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

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



Joint Group	J3	J4	J5	JD3	JD4	JD5
<b>M12 Bolt</b>	23.7	18.8	16.3	29.5	23.7	20.7
<b>M16 Bolt</b>	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  $k_l$  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 25m<sup>2</sup>. 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).

