

# Timber Connectors **Technical Data Sheet**

## **GALVANISED** TAP IN PLATES

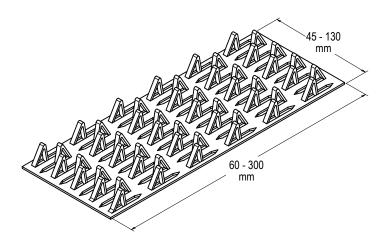
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Compliant with the requirements of AS1684 and AS1720.







#### **APPLICATION**

VUETRADE Galvanised Tap In Plates provide strong and secure joints in various timber connection applications, such as joining various timber wall frames and top plates together, manufacturing trusses and repairing timber ends.

#### **SPECIFICATION**

VUETRADE Galvanised Tap In Plates are manufactured in 1.2mm G250 Z275 galvanised steel to wide range of sizes to suit different sizes of timber, with precisely bent 'teeth' as a means of timber fastening.

#### **SIZES**

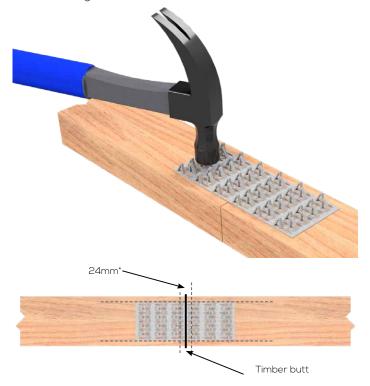
Product Code	Size (mm)	Box Qty	No. of teeth per plate
VTIP45120	45 x 120	100	24
VTIP45180	45 x 180	67	36
VTIP45240	45 x 240	50	48
VTIP7060	70 x 60	100	18
VTIP70120	70 x 120	75	36
VTIP70180	70 x 180	50	54
VTIP70240	70 x 240	38	72
VTIP70300	70 x 300	30	90
VTIP90120	90 x 120	50	48
VTIP90180	90 x 180	34	72
VTIP90240	90 x 240	25	96
VTIP90300	90 x 300	20	120
VTIP130120	130 x 120	30	72
VTIP130180	130 x 180	20	108

#### **INSTALLATION GUIDE**

Install VUETRADE Tap In Plate by driving each of the teeth on the Galvanised Tap In Plate into the both timber joint members using a hammer.

For application of butt jointing, ensure that the Tap In Plate are installed with equal length in the timber member (symmetrically) and fix one plate on each face of the timber member.

Hydraulic press may also be used on Tap In Plate for roof trusses manufacturing.



\* No nails should be driven within 12mm from timber butt end or within 6mm to the timber edge to reduce risk of timber splitting.

### **GALVANISED TAP IN PLATES**

#### **DESIGN CAPACITY DATA**

The method of obtaining design capacities for VUETRADE Tap In Plates was derived based on the test method established from Australian Standard AS1649-2001 - Timber - Methods of test for mechanical fasteners and connectors - Basic working loads and characteristic strengths.

The loads of standard timber joint groups shown in this document are defined based on the Australian Standard AS1720.1-2010 -Timber structures, Part 1: Design methods. Refer to VUETRADE's Timber Properties Technical Data for the classification of joint groups for various timber species.

Table 1: Design capacity data for Tap In Plates

Design Load Capacity (N/tooth) for Timber Joint Group: JD4				
Load Direction	Perpendicular	Parallel		
Dead Load	125	127		
Dead Load + Roof Live Load	169	172		
Dead Load + Wind Load	250	255		

#### NOTES:

- The duration factor k1 used to derive the values above are 0.57 for dead loads, 0.77 for combination of dead load and roof live load and 1.14 for combination of dead load and wind load. Modification factors k1 for different load cases are adopted from AS1720.1-2010.
- 2. Design capacities in the 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.
- 3. The design of timber joints as specified in the Australian AS1649-2001 states that teeth driven 12mm to the butt end and 6mm to the timber edges are ineffective (refer to illustration on previous page). VUETRADE Tap In Plates teeth are manufactured 30mm apart which means that all teeth deliver effective loading.

