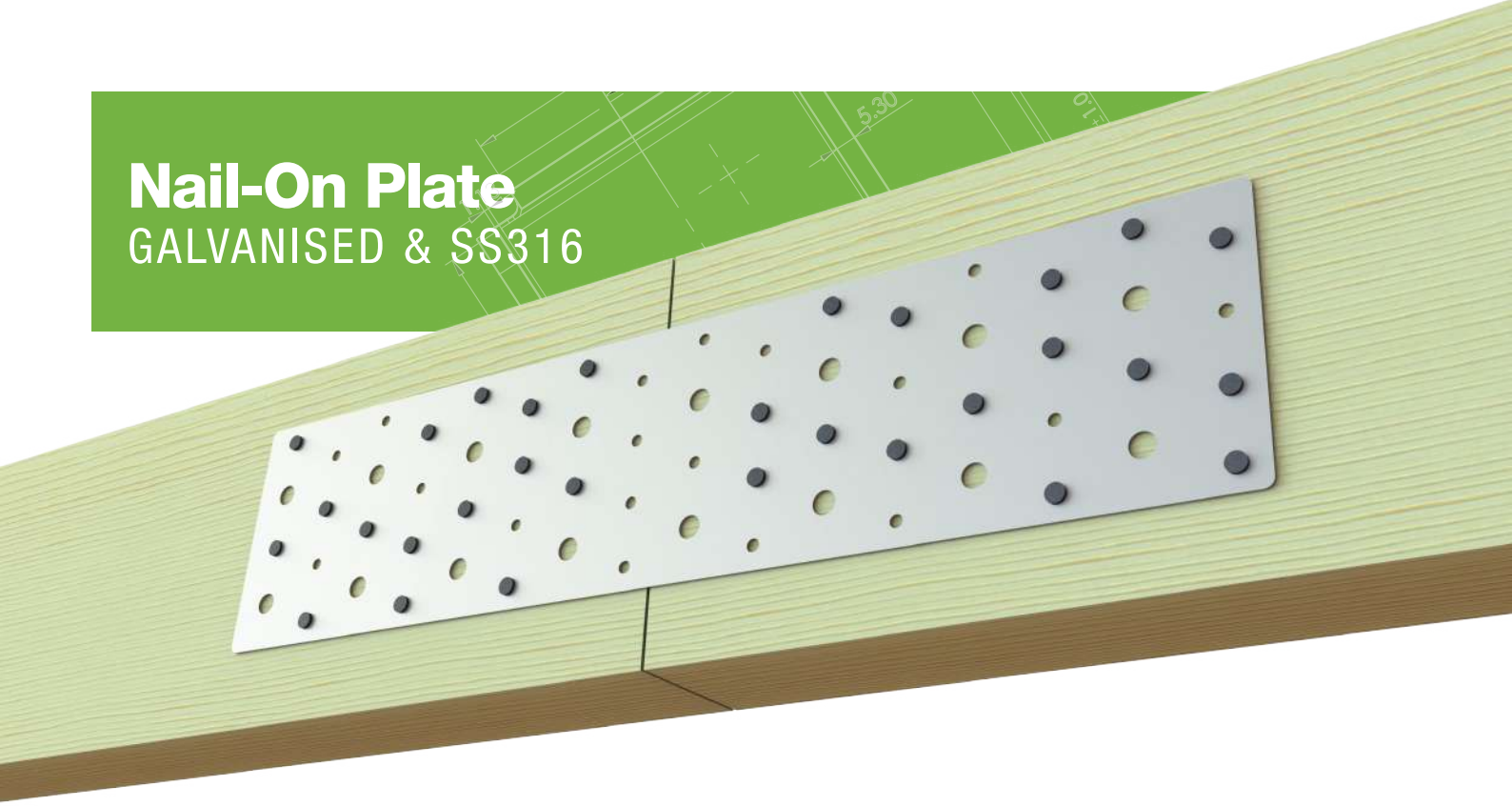
Nail-On Plate
GALVANISED & SS316



Application

The Bremick® Nail-On Plates are nail-fixed to timber to form numerous medium to high-capacity timber jointing applications. They are ideally suited for on-site applications. Typical tasks include:

- Butt jointing timber
- Joining timber side by side
- Joining wall frames at the top plate
- Repair work over existing connections
- Joining oversized prefabricated timber trusses on site, that have been made in modules
- In lieu of a Tap-In Nailplate where the required capacities cannot be achieved
- Formwork construction

Advantages

The Bremick® Tap-In Plate provides numerous benefits including:

- **Large Design Capacities:** Where the connection demands a medium to large design capacity, the nail-on plate is the ideal solution
- **Perfect for Onsite Repairs:** Product design ensures the nail-on plate can be easily applied onsite with Bremick® Timber Connector nails or Bremick® timber fixing screws while achieving the required design capacities
- **Nail or Screw Fixing Option:** Can be fastened with either the Bremick® Timber Connector nail or Bremick® timber fixing screw. When using screws, at least half the number, compared to nails is required.
- **Z275 – Galvanised or Stainless Steel:** Available in 2 coating options. Stainless steel is suitable when building outdoor structures such as pergolas and decks

Specifications

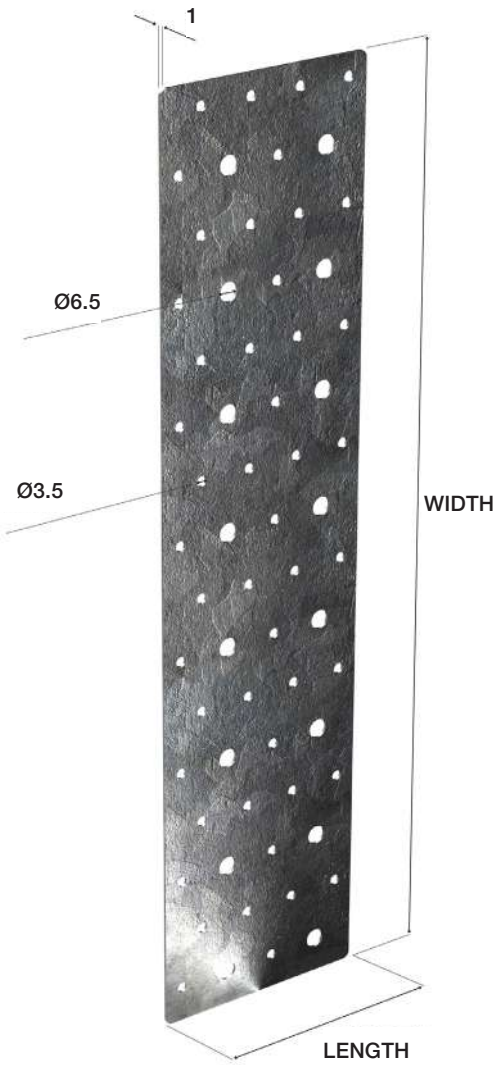
Steel Grade	G300
Coating	Z275 – Galvanised & SS316
Thickness	1.0mm
Width	75mm, 80mm, 100mm
Length	120mm, 125mm, 180mm, 190mm, 240mm, 250mm, 300mm, 320mm, 380mm

AS1684 Compliant

Engineered Performance ★ Compliance Tested ★

Bremick® Ranging

Product Code	Dimensions	Coating	Pack Qty
TNPG075125104	75mm x 125mm x 1.0mm	Z275 – Galvanised	60
TNPG075190104	75mm x 190mm x 1.0mm	Z275 – Galvanised	40
TNPG075250104	75mm x 250mm x 1.0mm	Z275 – Galvanised	30
TNPG075320104	75mm x 320mm x 1.0mm	Z275 – Galvanised	25
TNPG075380104	75mm x 380mm x 1.0mm	Z275 – Galvanised	20
TNPG100190104	100mm x 190mm x 1.0mm	Z275 – Galvanised	30
TNP6080120104	80mm x 120mm x 1.0mm	SS316	10
TNP6080180104	80mm x 180mm x 1.0mm	SS316	10
TNP6080240104	80mm x 240mm x 1.0mm	SS316	10
TNP6080300104	80mm x 300mm x 1.0mm	SS316	10



Installation Instructions

1

Locate the Bremick® Tap-In Nail-On Plate into position. For butt joining, ensure an equal length on both sides of the joint.

2

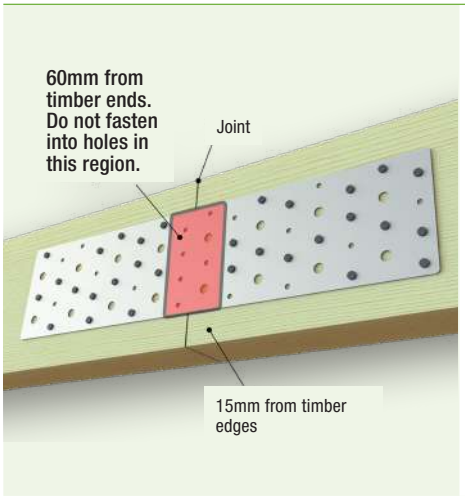
Fasten the Nail-On Plate with either Bremick® Timber Connector nails or Bremick® timber fixing screws. Note, stainless steel fasteners must be used when fixing the stainless steel nail-on plate.

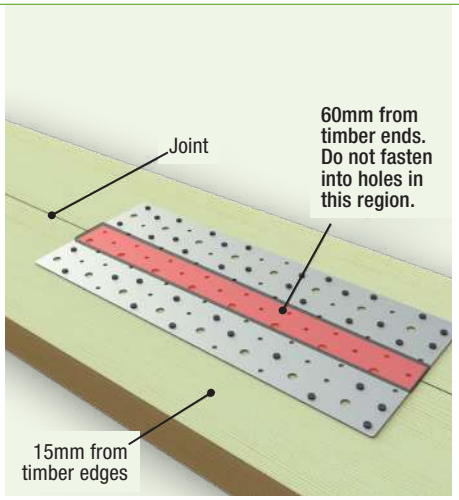
3

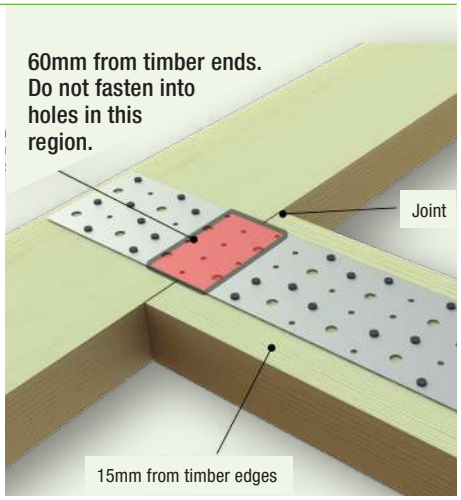
Fasteners must fill all holes of the Nail-On Plate to achieve the design capacities.

4

Do not fasten into the holes within 60mm of the timber ends and 15mm of the timber edges as there is a risk of splitting the timber.







Technical Data

NAIL-ON PLATE

LIMIT STATE TENSILE CAPACITY (1.2G+1.5Q_R) TENSION CAPACITY FOR PLATE LENGTH

Table 1 CAPACITY: FOR 3.15mm DIAMETER NAILS IN ALL HOLES MORE THAN 50MM FROM THE JOINT

PLATE WIDTH (MM)	MINIMUM TIMBER WIDTH (MM)	DESIGN CAPACITY øNJ (KN) FOR A PAIR OF PLATES IN JD4 TIMBER - CATEGORY 1										
		PLATE LENGTH (mm)									Steel Capacities	
		120	125	180	190	240	250	300	320	380	Max Tension	Max Shear
75	90		NS		5.1		12.7		20.3	24.9	26.8	16.7
80 *	100	NS		5.1		12.7		17.8			29.5	12.5
100	120				5.1						39.8	24.8

Table 2 CAPACITY: FOR 12g SCREWS USED IN ALL HOLES MORE THAN 50MM FROM THE JOINT

PLATE WIDTH (MM)	MINIMUM TIMBER WIDTH (MM)	DESIGN CAPACITY øNJ (KN) FOR A PAIR OF PLATES IN JD4 TIMBER - CATEGORY 1										
		PLATE LENGTH (mm)									Steel Capacities	
		120	125	180	190	240	250	300	320	380	Max Tension	Max Shear
75	90		NS		5.5		5.5		11.0	16.5	26.8	16.7
80 *	100	NS		5.5		5.5		11.0			29.5	12.5
100	120				5.5						39.8	24.8

REMARKS

- * Stainless products.
- Plates are placed central on the joint. All nail or screw holes 50mm or more from the joint are filled
- These design capacities apply directly for Category 1 joints as described in Table 2.2 of AS1720.1:2010. For Category 2 and Category 3 joints, multiply these capacities by 0.94 and 0.88 respectively.
- The design capacities tabulated above apply directly to joints on JD4 timber for 1.2G+1.5QR load case using k1 = 0.77. For other load cases and timber joint groups, multiply these capacities by the load factors given below. The resultant capacity must not exceed the maximum Steel Tension and Steel Shear values tabulated above.
- The use of this product may be limited by splitting of the timber. The user should ensure that the load, fastener spacing, and timber are compatible.

Load factor				
Load Case	1.35G	1.2G+1.5QF	1.2G+1.5QR	1.2G+WD or 0.9G - Wu
Factor	0.74	0.9	1	1.48

Nails - Multiplier for timber joint groups												
Joint Group	J6	J5	J4	J3	J2	J1	JD6	JD5	JD4	JD3	JD2	JD1
Multiplier	0.40	0.55	0.71	1.00	1.40	1.78	0.62	0.84	1.00	1.40	1.78	2.37

Load factor												
Joint Group	J6	J5	J4	J3	J2	J1	JD6	JD5	JD4	JD3	JD2	JD1
Multiplier	0.33	0.52	0.71	1.00	1.41	1.79	0.52	0.71	1.00	1.41	1.79	2.37