

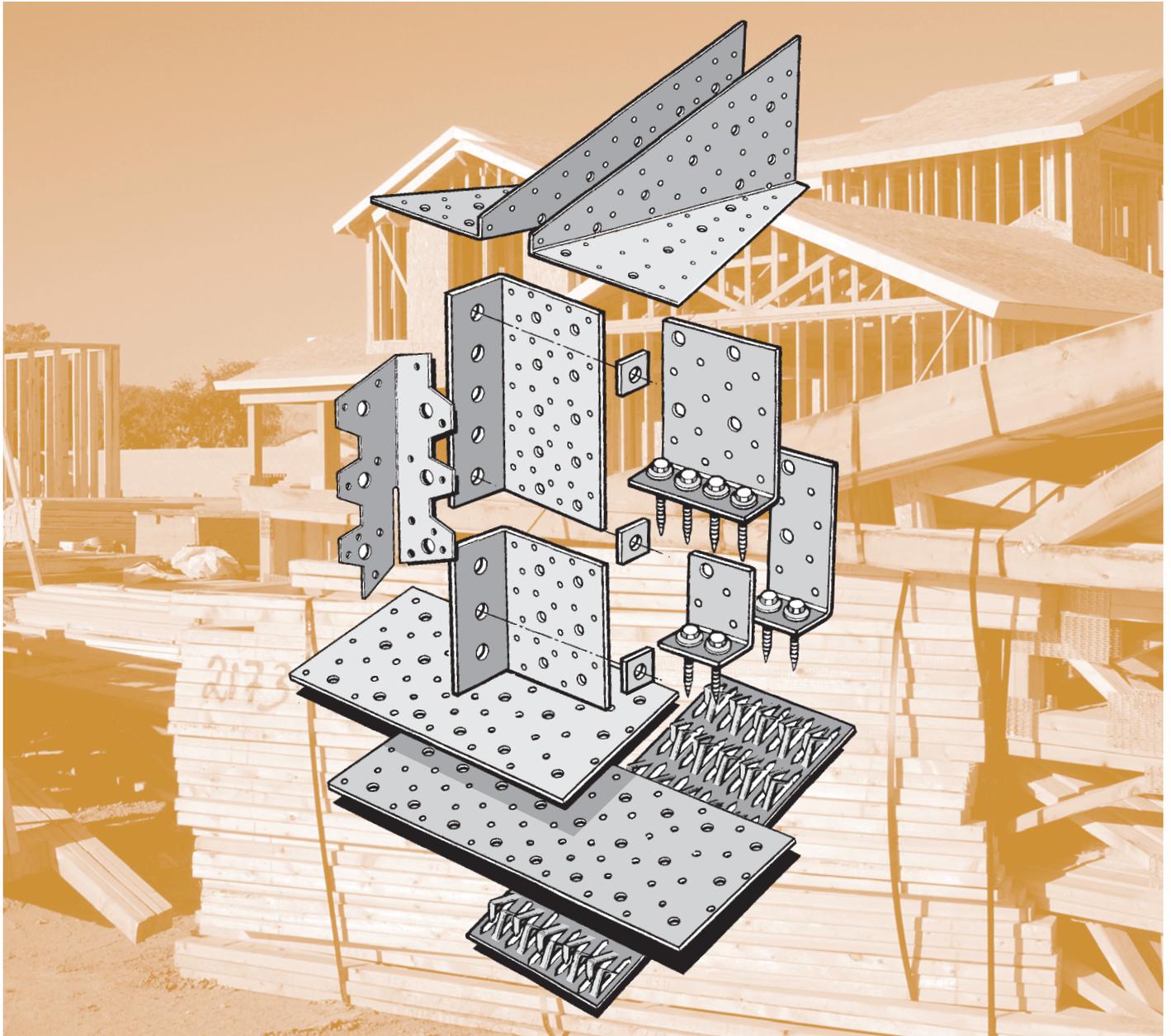


LUMBERLOK®

09/2011

TIMBER CONNECTORS

NOT TO BE USED IN
EXTERIOR SITUATIONS
Stainless Steel alternatives
are available where stated



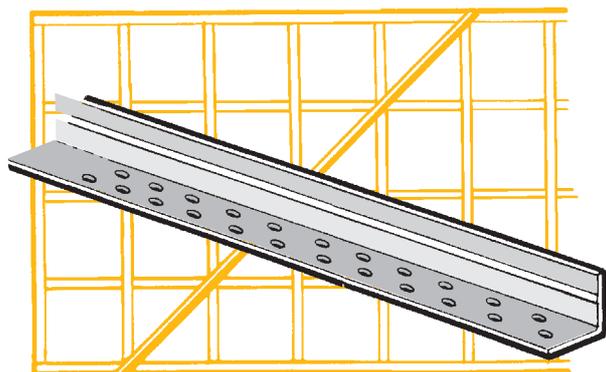
Timber to Timber - Timber to Concrete - Timber to Steel

MiTek manufactures and markets the range of LUMBERLOK Timber Connectors for the building industry. Each product has been designed and developed to meet the needs and changes to building methods, and is tested to conform with the relevant NZ Standards. These include NZS 3603:1993 for timber design and NZS 3604:2011 Timber Framed Buildings.



ANGLE BRACE

0.85mm G300 Z275 Galvanised Steel



Angle Brace may be used as either compression or tension brace.

Nail holes are fully punched for ease of nailing.

Fix with 60mm x 3.15mm diameter nails.

When used as a diagonal wall brace, it should be secured at each end with three nails, and two nails at each stud crossing.

Standard length is 3.6m, other sizes available on request (2.7m - 5.0m).

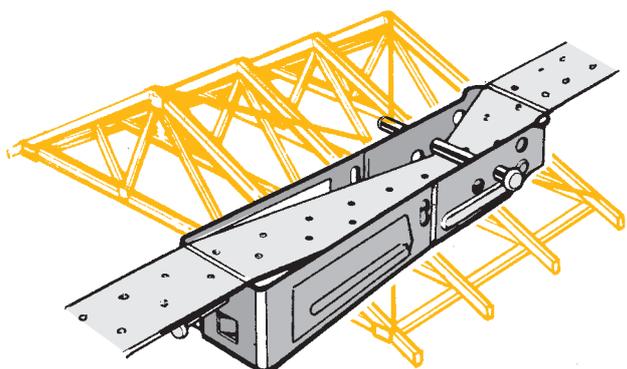
Angle Brace can be used as an anti-sag mechanism for purlins or girts.

Refer to Characteristic Loadings Brochure for design values.

STRIP BRACE

0.55mm x 27mm G550 Z275 Galvanised Steel

0.91mm x 25mm G300 Z275 Galvanised Steel (Export Grade)



Strip Brace is supplied in 10m, 15m and 30m coils for use as bracing or in short lengths as a jointing material.

Strip Brace provides an ideal bracing system for walls, or roof plane.

One crossed pair of strips may be used in each location where a diagonal brace is required. Fix using 5 x LUMBERLOK Product Nails 30mm x 3.15mm diameter at each end.

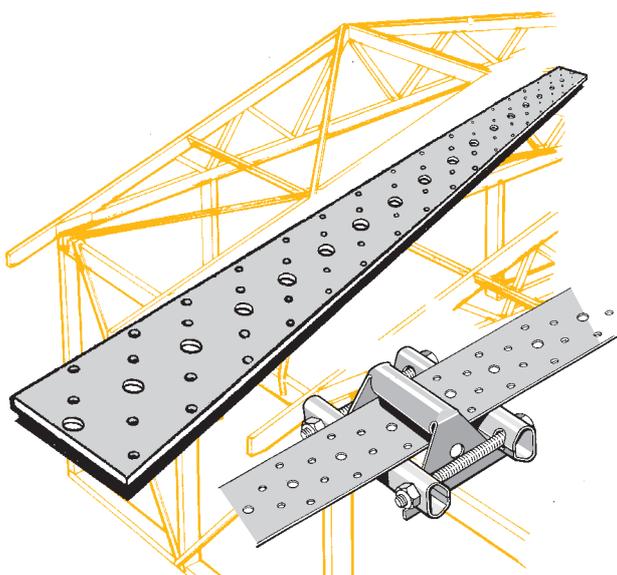
A heavier gauge Export Grade (item suffix EX) is also available in 10m and 30m coils. Tensioners are included with marked boxes of Strip Brace coils or available separately if required.

Refer to Characteristic Loadings Brochure for design values.

Available in Stainless Steel 304. (Stainless Steel tensioners not available)

*MULTI-BRACE

0.91mm x 53mm G300 Z275 Galvanised Steel



This product has been developed for commercial building situations as an alternative to steel rod or timber as a bracing element. Coils are available in lengths of 10m, 15m and 30m, punched to allow easy fixing, using 11 x LUMBERLOK Product Nails 30mm x 3.15mm diameter at each end.

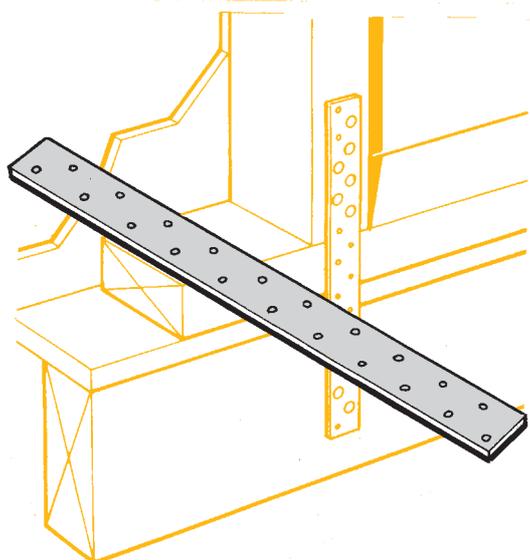
Tensioners are available separately if required.

Refer to Characteristic Loadings Brochure for design values.

Available in Stainless Steel 304. (Stainless Steel tensioners not available)

*SHEET BRACE STRAPS

0.91mm x 25mm G300 Z275 Galvanised Steel



Punched strap available in lengths of 200mm, 300mm, 400mm and 600mm, to provide a hold down for use with sheet bracing. As per NZS 3604:2011, a 6kN capacity can be obtained by one strap (6 nails per strap end) or 12kN per two straps (6 nails per strap end). Fixed with LUMBERLOK Product Nails 30mm x 3.15mm diameter.

Refer to brochure for application data.

Available in Stainless Steel 304.

* JOIST HANGERS

0.91mm G300 Z275 Galvanised Steel

Joist Hangers are designed for use where a strong, rigid joint is required between members meeting at 90°, e.g. truss/joist to beam, or rafter to bearer connection.

- i) **Joist Hanger 47 x 90**
Designed for use where gauged timber of 47mm width and up to 150mm deep.
- ii) **Joist Hanger 47 x 120**
Multi-use bracket suitable for gauged 47mm thick timber up to 200mm deep.
- iii) **Joist Hanger 47 x 190**
Used for gauged 47mm thick timber up to 300mm deep.
- iv) **Joist Hanger 70 x 180**
A special size joist hanger designed for gauged 69mm wide timbers.
- v) **Joist Hanger 95 x 165**
For use on gauged 94mm wide timber or double joists/trusses.

Note: Joist Hangers 52mm wide also available for rough sawn timber, and 37mm wide for 35mm kiln dried timber.

All of the above Joist Hanger connections should be fixed using LUMBERLOK Product Nails 30mm x 3.15mm diameter, or Type 17-12g x 35mm Hex Head Screws.

Refer to Characteristic Loadings Brochure for design values.
Available in Stainless Steel 304.

TYLOK PLATES

0.95mm G300 Z275 Galvanised Steel

Tylok Plate is designed for on-site use and can readily be applied by hammer as well as hydraulic press. Tylok Plates are suitable for a wide range of applications such as trusses, formwork, site splicing etc. Tylok Plates are manufactured from galvanised steel in a range of sizes.

Refer to Characteristic Loadings Brochure for design values.

Plate code example - 6T10 = 6 rows of teeth long x 10 teeth wide.

Code	Width	Length
2T5	34mm	60mm
4T5	34mm	120mm
6T5	34mm	180mm
8T5	34mm	240mm
10T5	34mm	300mm
12T5	34mm	360mm
14T5	34mm	420mm
16T5	34mm	480mm
Coil T5	34mm	15m

Code	Width	Length
2T10	68mm	60mm
4T10	68mm	120mm
6T10	68mm	180mm
8T10	68mm	240mm
10T10	68mm	300mm
12T10	68mm	360mm
14T10	68mm	420mm
16T10	68mm	480mm
Coil T10	68mm	15m

Code	Width	Length
4T15	102mm	120mm
6T15	102mm	180mm
8T15	102mm	240mm
10T15	102mm	300mm
12T15	102mm	360mm
Coil T15	102mm	15m

Code	Width	Length
6T20	136mm	180mm
8T20	136mm	240mm
10T20	136mm	300mm
12T20	136mm	360mm
14T20	136mm	420mm
Coil T20	136mm	15m

Tylok Plate is also available in coil form, in all four widths, as a convenient method of various applications by the builder on-site. By using metal cutters, any length plate can be cut from the 15m coils as required.

TYLOK ANGLES

0.95mm G300 Z275 Galvanised Steel

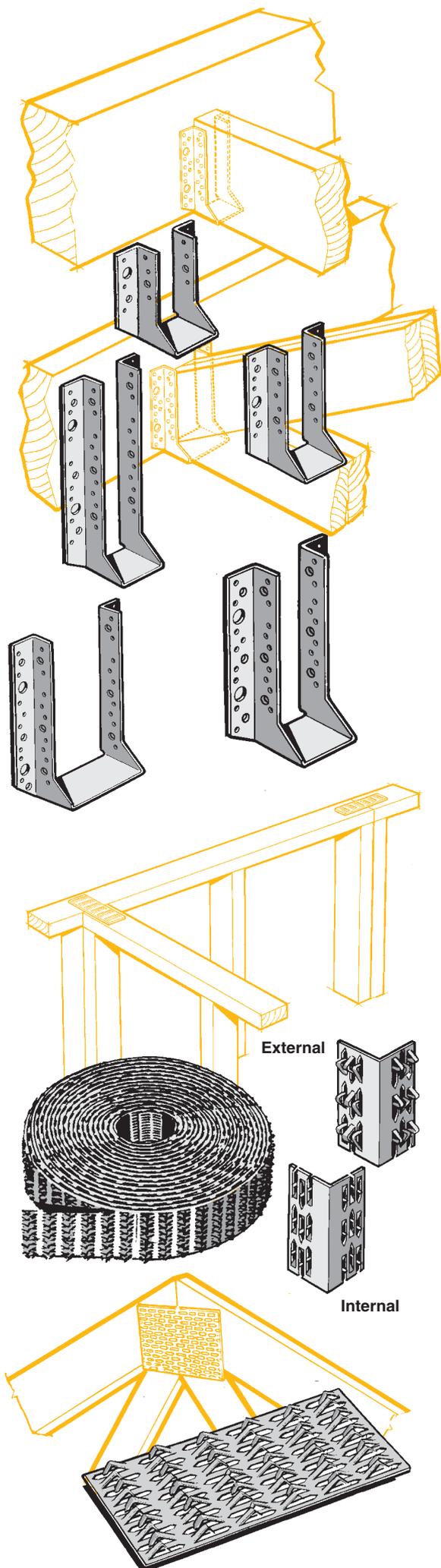
Available internal (Int.) or external (Ext.) versions

3A6 35mm x 35mm x 90mm

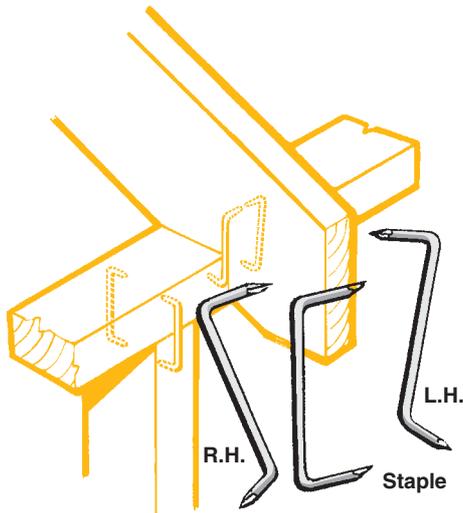
5A6 35mm x 35mm x 150mm

6A6 35mm x 35mm x 180mm

* Detailed product sheet available

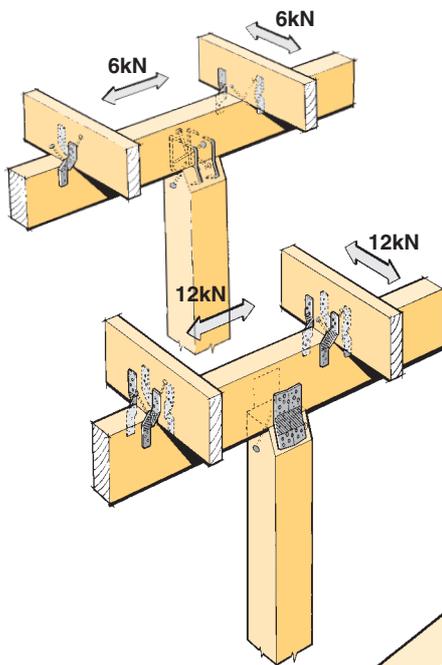


WIRE DOGS (LH, RH or STAPLE)



Wire Dogs are manufactured as left handed, right handed, and staples, from 4.9mm diameter galvanised wire. Each has a 95mm shank, and a 35mm leg. Wire Dogs have been proven by test to be the strongest and most economical timber fastener of its type on the New Zealand market. Typical use in a wind uplift situation, such as truss or rafter to top plate, and top plate to stud connection.

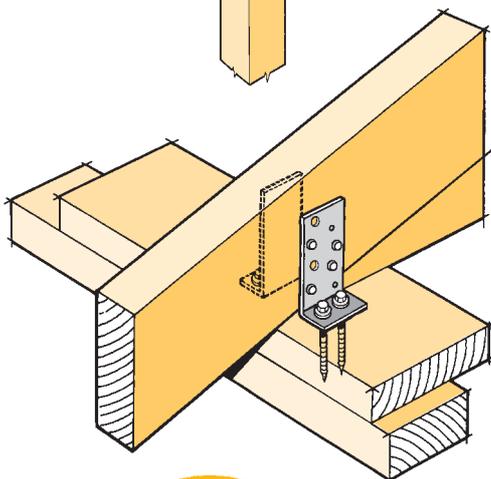
Refer to Characteristic Loadings Brochure for design values. Available in Stainless Steel 304.



*12kN & 6kN PILE FIXINGS

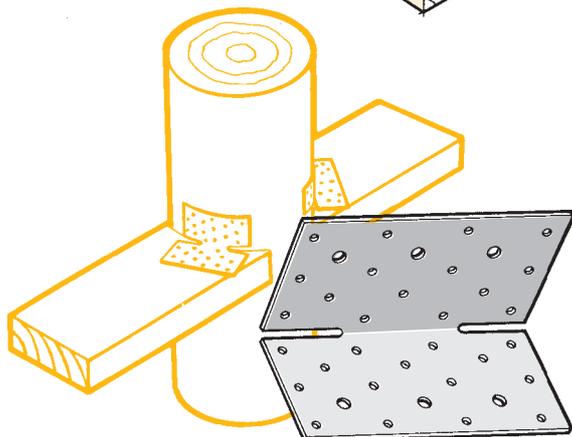
Both these products comply with NZS 3604:2011 as a fixing method for timber piles to bearers to joists. The 12kN product pack is suitable for both Anchor and Brace pile situations whilst the 6kN pack is used with cantilever piles. Each product is manufactured in a hot dip galvanised or stainless steel option to suit the corrosive environment intended to be used on, and all packs are supplied inclusive of all necessary nails.

Refer to brochure for application data.



*9kN & 16kN TRUSS TO TOP PLATE FIXINGS

Used in pairs, the CPC40 cleats achieve 9kN and the CPC80 cleats for 16kN. The required pack comes supplied with the appropriate cleats, nails and Type 17-14g x 75mm Hex Head Screws to penetrate through the timber top plate packer and into the top plate. Compliant with NZS 3604:2011, these conveniently top mounted fixings allow additional face fixing if required.



GIRT PLATE

0.91mm G300 Z275 Galvanised Steel

Specifically designed for girt to pole fixing, as per Farm Building Designs. 120mm long Nailon Plate, slit and pre-folded to 90 deg. Fixed with min. 8 x LUMBERLOK Product Nails 30mm x 3.15mm diameter each face (16/cleat).

Available in Stainless Steel 304.

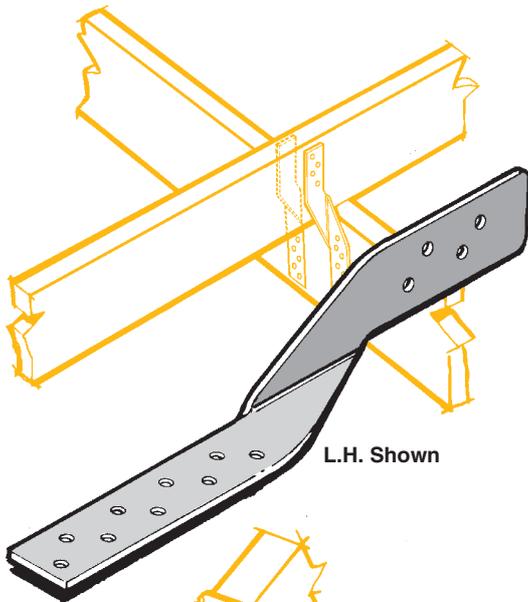
* Detailed product sheet available

CEILING TIES CT160 & CT200 (LH or RH)

0.95mm NZCC-2D Hot Dip Galvanised Steel (CT160)
0.91 G300 Z275 Galvanised Steel (CT200)

Overall length 160mm and 200mm – A very useful connector primarily for fixing ceiling joists to rafter or truss members. It also provides an excellent truss or rafter to top plate connection. Fix with LUMBERLOK Product Nails 30mm x 3.15mm diameter.

Refer to Characteristic Loadings Brochure for design values.
Available in Stainless Steel 304.



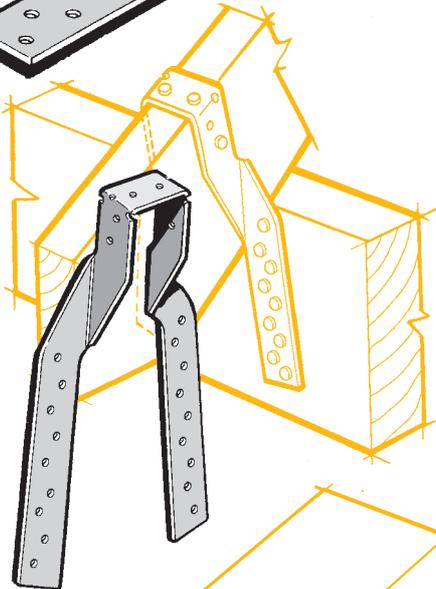
L.H. Shown

CYCLONE TIES CT400 & CT600

0.91mm G300 Z275 Galvanised Steel

Overall length 400mm and 600mm – Designed specifically for fixing down rafters or purlins in high wind situations. These are produced in straight pre-twisted lengths which are then folded over timber members on-site, therefore accommodating various width purlins or rafters. Fix with LUMBERLOK Product Nails 30mm x 3.15mm diameter.

Refer to Characteristic Loadings Brochure for design values.
Available in Stainless Steel 304.



*NAILON PLATES

0.91mm G300 Z275 Galvanised Steel
1.55mm G300 Z275 Galvanised Steel
3.0mm Black Steel NZCC - SD ungalvanised

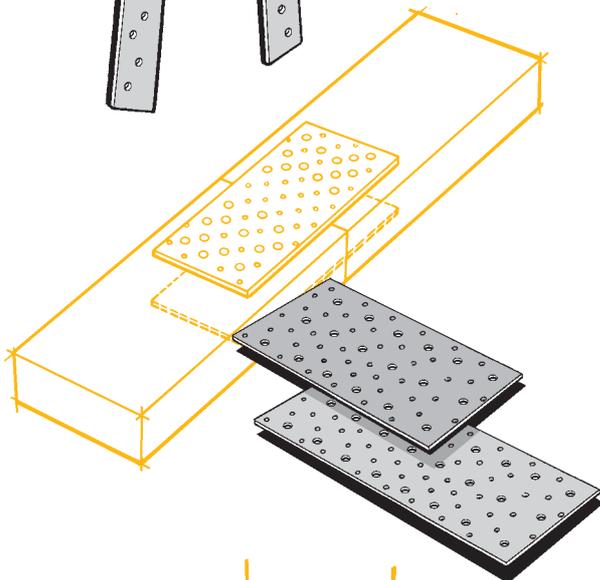
LUMBERLOK Nailon is produced as a flat steel plate with prepunched holes to accommodate LUMBERLOK Product Nails 30mm x 3.15mm diameter. Plate sizes vary in thickness, width and length. Standard products are manufactured using Nailon, as well as a range of special products. Use of Nailon Plate fixings is far quicker and more economic than alternate methods.

Nailon Plate - Available as a flat plate, cut to required length, in 40mm increments. (min. 80mm length)

Refer to Characteristic Loadings Brochure for design values.

Plate thickness	1.0mm	2.0mm	3.0mm
Width	110mm	113mm	130 or 240mm

Nailon provides a very strong site joint for truss splicing, rafter connections, etc. 3.0mm can also be welded to form timber to steel or concrete connections. 1.0mm Nailon Plate available in Stainless Steel 304.



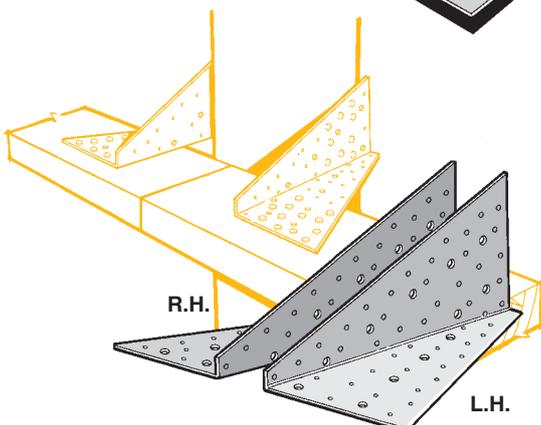
DIAGONAL CLEAT N21 (LH or RH)

0.91mm G300 Z275 Galvanised Steel

This diagonally folded Nailon Plate 240mm long, provides a solution for fixing and aligning girts to timber poles.

Can also be used for fixing purlins to rafters in high wind uplift situations, or to provide a strong 90° butt joint for large timber sizes. Fixed with LUMBERLOK Product Nails 30mm x 3.15mm diameter.

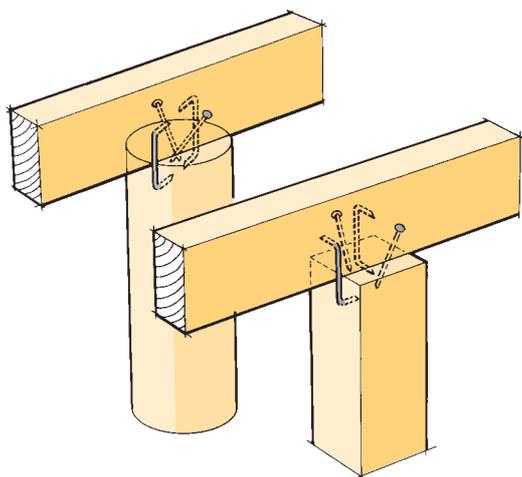
Refer to Characteristic Loadings Brochure for design values.
Available in Stainless Steel 304.



R.H.

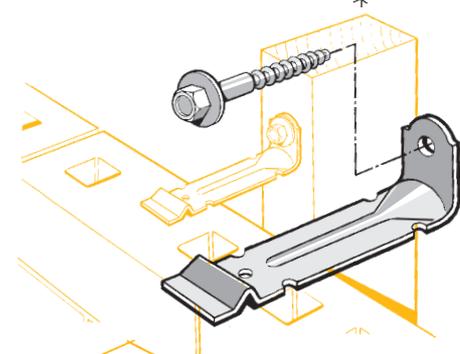
L.H.

* Detailed product sheet available



*ORDINARY PILE FIXING

Stainless Steel Wire Dogs and nails to comply with the fixing of ordinary piles to bearers as per NZS 3604:2011.



*SCREW TIE

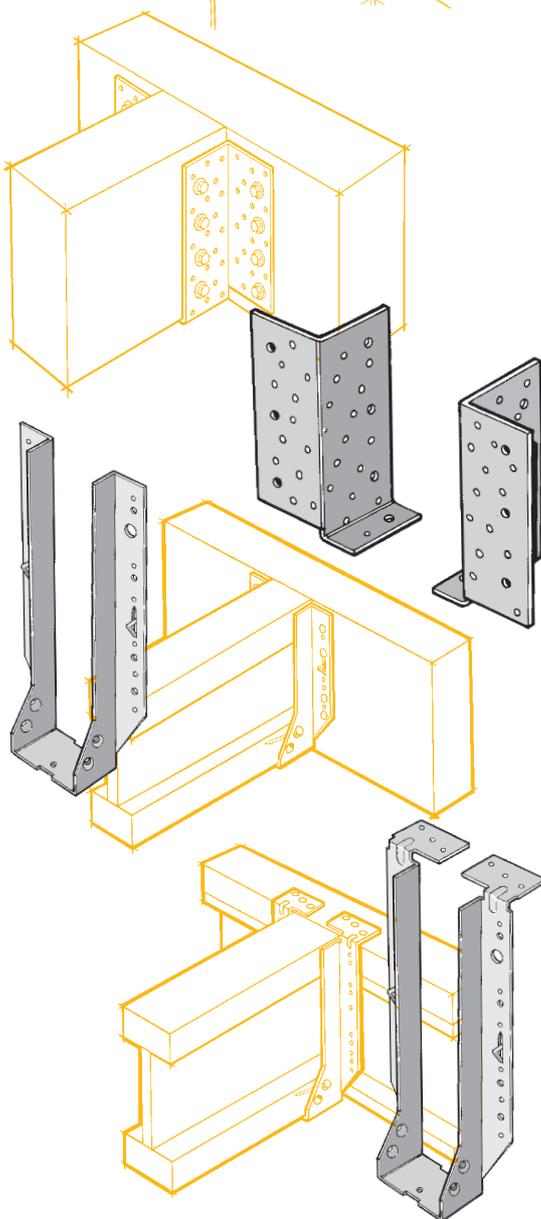
1.2mm NZCC-SD Hot Dip Galvanised Steel

Meets NZS 3604:2011 and AS/NZS 2699.1:2000. This product is used to tie brick veneer to timber framework using a Type 17-12g x 35mm Hex Head Screw. The actual 'Tie' is available in 85mm and 105mm lengths to suit various cavity sizes and brick widths.

Suitable for all timber including dry stress graded 90mm x 35mm studs.

Refer to brochure for application data.

Available in Stainless Steel 316.



*SPLIT HANGERS

1.55mm G300 Z275 Galvanised Steel

Designed to provide a strong 90 degree connection for larger timber widths and/or double joist/trusses to supporting members. Always used as pairs, Split Hangers are available to depths of 140, 180 and 220mm and are fixed with Type 17-14g x 35mm Hex Head Screws or LUMBERLOK Product Nails 30mm x 3.15mm diameter (dependent on timber member types and load requirements).

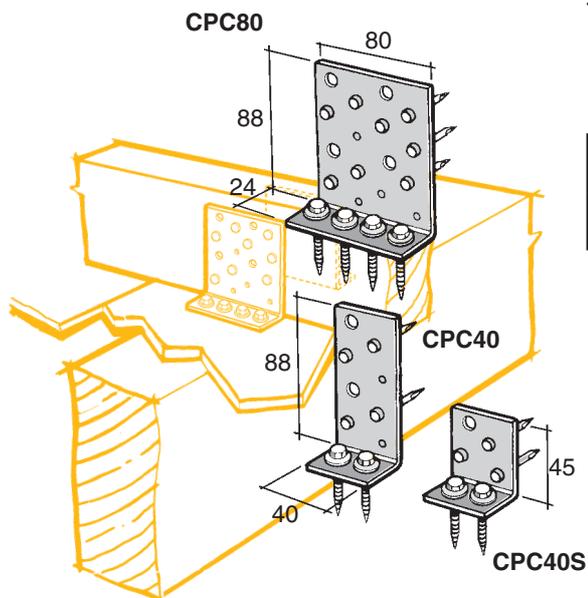
*I-BEAM HANGERS

1.15mm G300 Z275 Galvanised Steel

Developed to provide an effective method of fixing timber I-Beams in floor situations, the Face Fix option is suitable for connecting to supporting timber beams, whereas the Top Fix option can be used to fix to supporting steel beams with a timber top plate. Several sizes available to accommodate a wide range of I-Beams. Fixed with 35mm x 3.75mm diameter nails (supplied). Face Fix option also allows for fixing with Type 17-12g x 35mm Hex Head Screws.

* CONCEALED PURLIN CLEATS CPC40, CPC80, CPC40S

1.55mm G300 Z275 Galvanised Steel

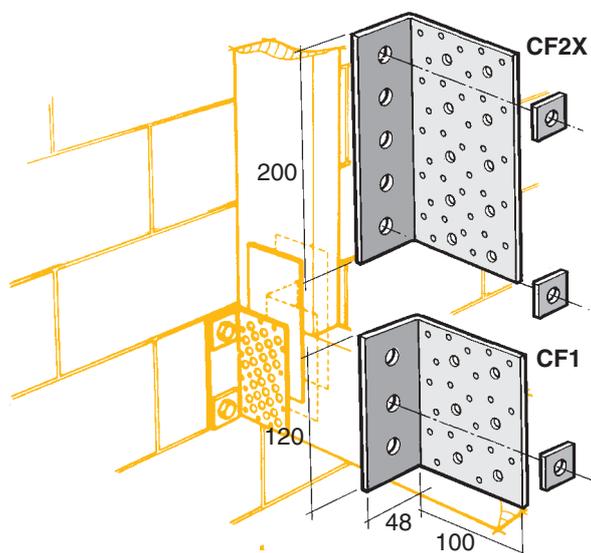


Nominal Rafter Width	50	100
Cleat	CPC40 or CPC40S	CPC80

CPC cleats provide an excellent purlin/rafter fixing in exposed situations, resisting any wind uplift.

The cleats can also be used for exposed rafter to ridge beam connections. Fixed with Type 17-14g Hex Head Screws and LUMBERLOK Product Nails 30mm x 3.15mm diameter (not supplied with product).

Refer to Characteristic Loadings Brochure for design values.
Available in Stainless Steel 304.



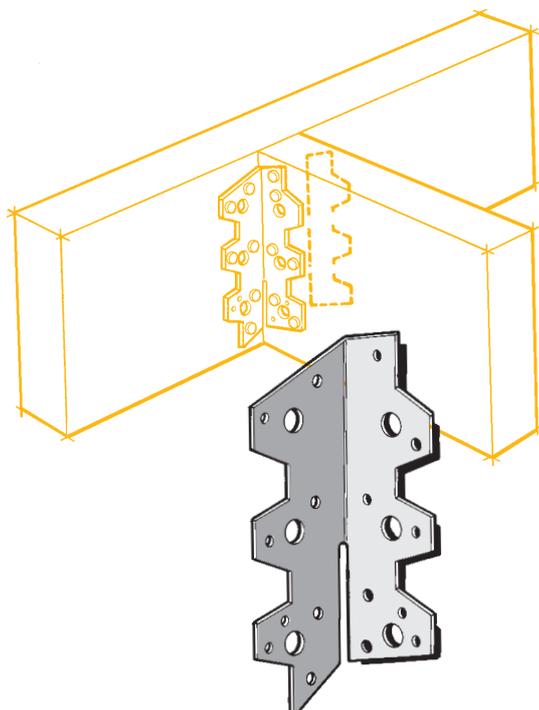
CONCRETE FIXING CLEATS CF1 & CF2X

1.55mm G300 Z275 Galvanised Steel

Both cleats provide a quick and economical method of joining timber trusses, beams, columns to solid concrete or grouted concrete blockwork.

Both cleats can be used on one or two sides of timber members, depending on the loads required. Fixed with LUMBERLOK Product Nails 30mm x 3.15mm diameter and appropriate M12 bolts (not supplied with product). 40x40x5mm washer supplied.

Refer to Characteristic Loadings Brochure for design values.



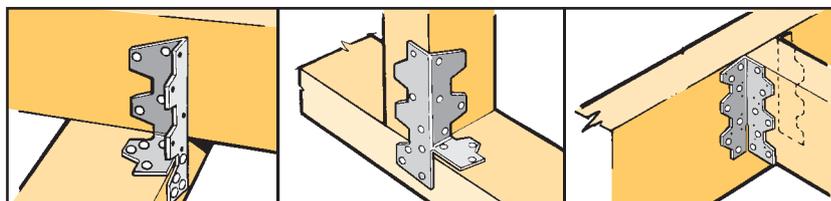
MULTIGRIP

0.91mm G300 Z275 Galvanised Steel

LUMBERLOK Multigrrips are a multipurpose product that can be bent into any of five combinations. One product provides for all alternatives with the bending slot enabling easy on-site bending.

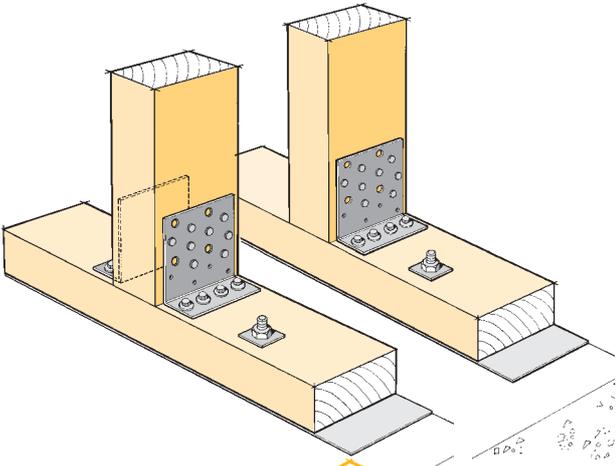
Size 125mm high x 38mm flanges. Fix with LUMBERLOK Product Nails 30mm x 3.15mm diameter.
Correct nailing shown below.

Refer to Characteristic Loadings Brochure for design values.
Available in Stainless Steel 304.



*6kN & 12kN STUD TO BOTTOM PLATE FIXINGS

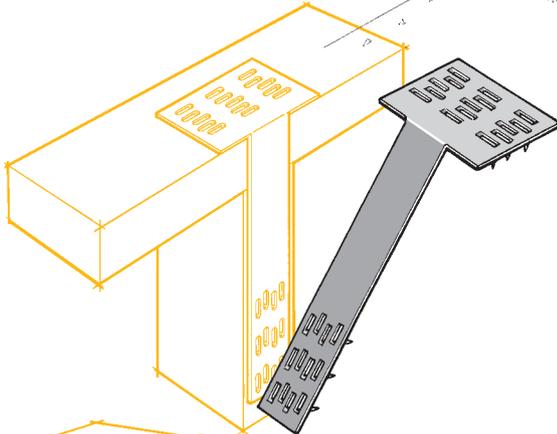
Also referred to as 'Stud Anchor' due to being used for stud to top plate fixing, these are a great alternative to the Sheet Brace Straps as they sit within the wall frame. Also an ideal retro fit fixing after lining/cladding is installed. Packs are supplied with two LUMBERLOK CPC80 cleats and the appropriate nails and screws to provide 1 x 12kN or 2 x 6kN fixings.



STUD STRAP

1.0mm G300 Z275 Galvanised Steel

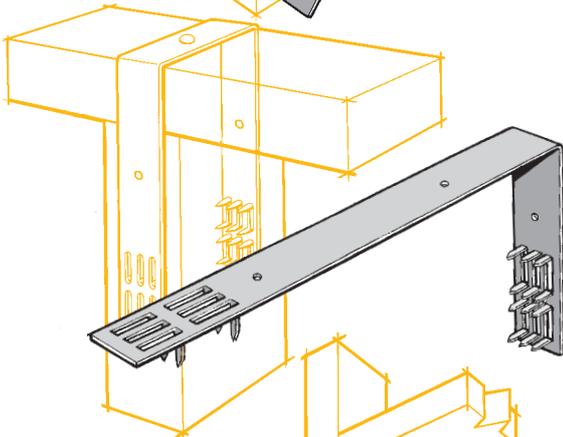
Designed to secure studs to top plate, this pre-bent strap product can be applied to one face only, saving time over alternative fixing methods. In addition, when fixing to the outside of timber stud wall frames, it provides a flat internal surface for plastering. The pre-formed teeth are designed to be applied by blows from a broad face hammer. The 195mm length of strap for fixing to the stud makes this product suitable for double 45mm top plates.



STUD TIE

1.0mm G300 Z275 Galvanised Steel

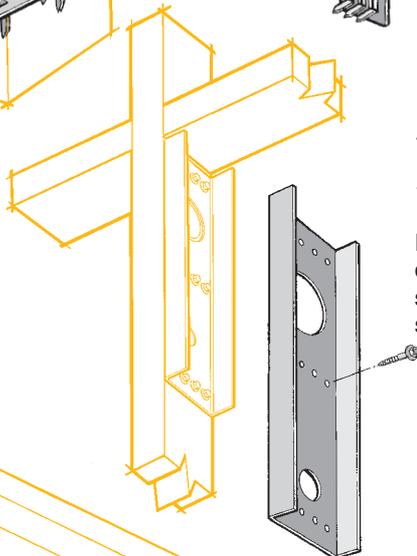
A fast effective way of securing top and bottom plates to studs. The pre-bent Stud Tie is wrapped over the wall plate and has pre-formed teeth which are hammered into both sides of the stud. Available in 300 & 400mm lengths, the longer option is suitable for double 90 x 45mm top plates.



*FRAMING STUD STIFFENER

1.55mm G300 Z275 Galvanised Steel

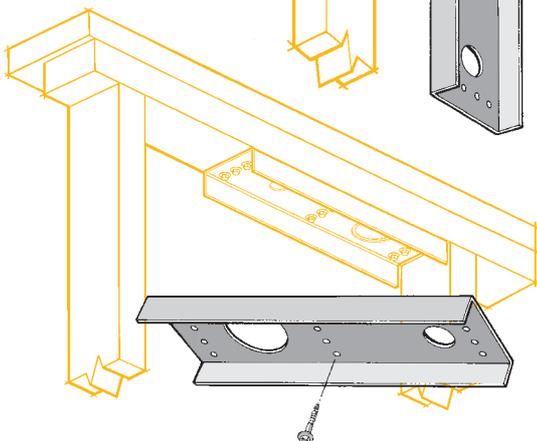
Replace the strength lost in 90 x 45mm framing studs as a result of holes being drilled through timber framing for plumbing or vacuum systems ducting. This solution to include holes up to 60mm diameter as per NZS 3604:2011. Fixed to side of stud with 3 rows of 4 x Type 17-14g x 35mm Hex Head Screws (supplied).



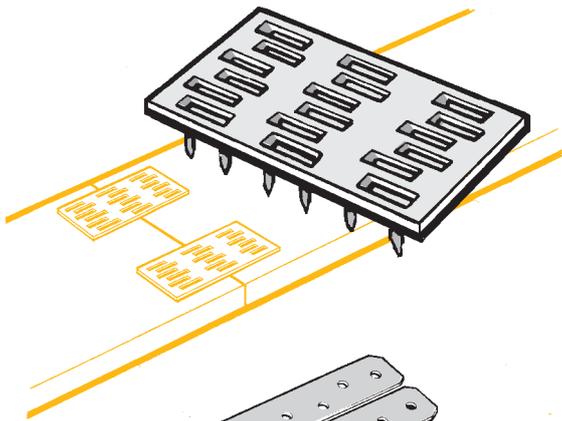
*TOP PLATE STIFFENER

1.55mm G300 Z275 Galvanised Steel

Tested to re-strengthen timber top plates where holes have been drilled for the installation of internal vacuum system ducting. This is an alternative solution to NZS 3604:2011 and includes holes up to 60mm diameter. Fixed through the top plate and into the timber packer with 3 rows of 4 x Type 17-14g x 75mm Hex Head Screws (supplied).



* Detailed product sheet available



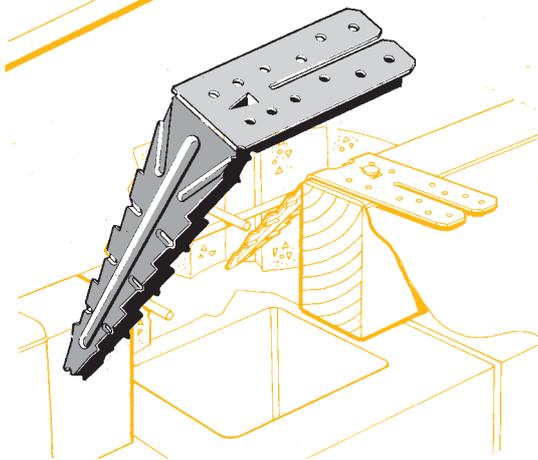
STRAP NAIL

0.95mm G300 Z275 Galvanised Steel

Is specifically designed for on-site use and many general applications where a strong, rigid load carrying joint is required. Strap Nails eliminate skew-nailing, scarf cutting and checking in.

The Strap Nail has many applications in the furniture and packaging industries, plus having many uses for the home-handyman. Size 39mm x 76mm.

Refer to Characteristic Loading Brochure for design values.



*BOTTOM PLATE FIXING ANCHOR

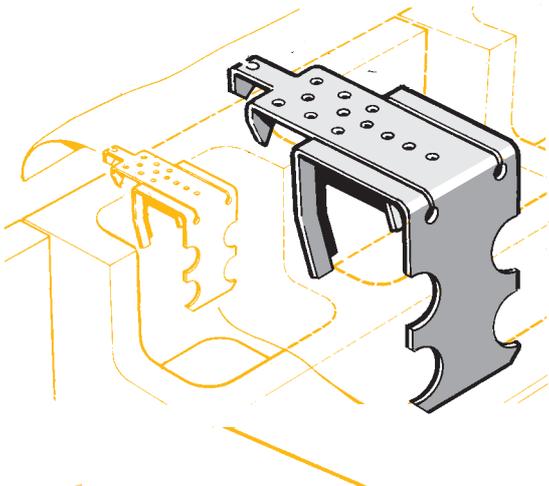
0.95mm G300 Z450 Galvanised Steel

Ingenious product designed to fix timber wall frames down onto concrete slab floors. Bottom Plate Anchors are temporarily fixed to the perimeter boxing at 900mm centres max. prior to the concrete pour, and folded around the bottom plate when the frames are located. LUMBERLOK Product Nails 30mm x 3.15mm diameter are then applied to secure the frames in position.

Alternative to concrete bolts, or the drilling of bottom plates and lifting of frame over cast-in steel rods.

Refer to brochure for application data.

Available in Stainless Steel 304.



*HEADER BLOCK ANCHOR

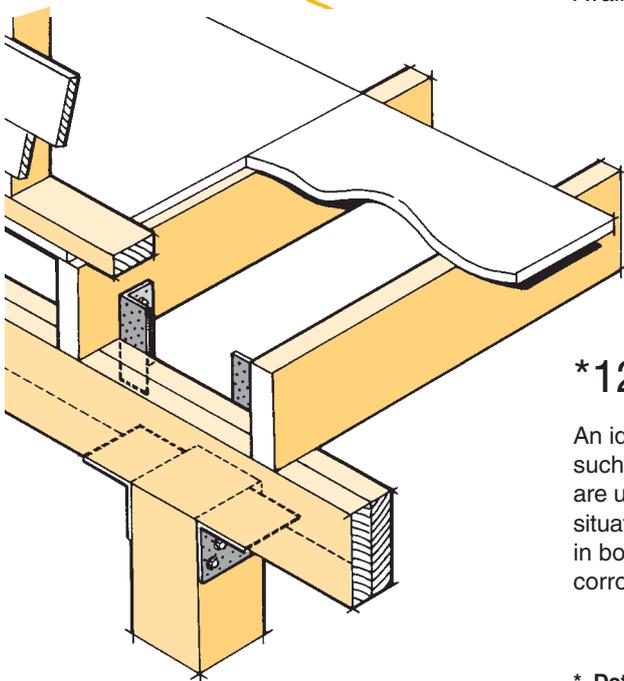
1.15mm G250 Z275 Galvanised Steel

This product has been developed to complement the Bottom Plate Anchor, where concrete header blocks are used to form the concrete slab perimeter. The product is clipped onto the block edge at 600mm centres max. and left until the slab is poured and frames ready to stand up.

The tongue is then lifted up off the surface and folded around the bottom plate for nailing using LUMBERLOK Product Nails 30mm x 3.15mm diameter.

Refer to brochure for application data.

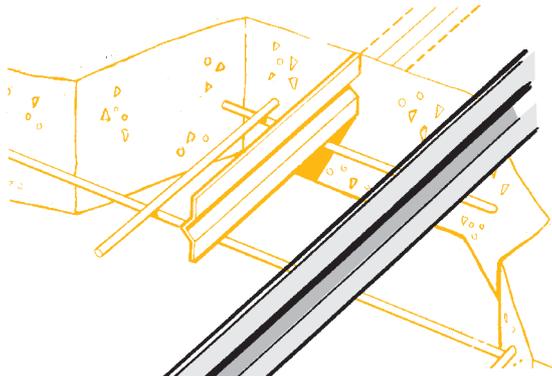
Available in Stainless Steel 304.



*12kN RETRO SUBFLOOR

An ideal fixing to be used when the outside face of the bearer is not accessible, such as with relocatable houses to piles. The specially developed Retro Plates are used for connecting pile to bearers to joists and are easily fixed in constricted situations with Type 17-12g x 35mm Hex Head Screws (supplied). Manufactured in both Hot Dip Galvanised and Stainless Steel options to suit the required corrosive environment.

* Detailed product sheet available



*KRACK MATE

0.85mm G250 Z275 Galvanised Steel

A preformed metal crack inducer for all types of concrete surfaces. Eliminates concrete cutting. 36mm overall width, supplied in 3m lengths. Krack Mate is inserted into wet concrete after screeding stage, flush with surface level.

Refer to brochure for application data.

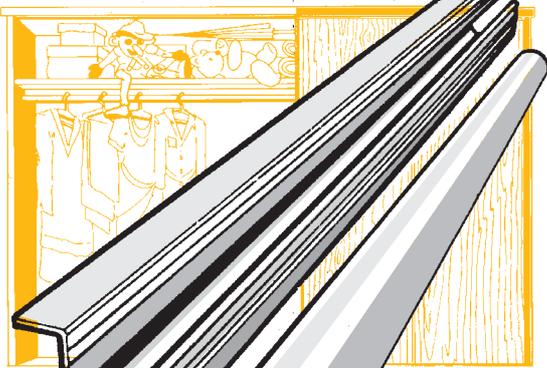
LITTLE GRIPPER

Available in strips of 5, this hammer on, snap off connector is suitable for economical quick fastening of building paper, shade cloth, plastic sheeting etc.



CLOSET RAIL

This attractive product provides an alternative to bar or timber rails in wardrobe situations. Manufactured from extruded aluminium, the closet rail enhances wardrobe appearances and also provides additional support strength to the closet shelf. The product is available in lengths of 1.8m, 2.4m and 3.6m, either standard mill finish or powder coated white.



CLOSET TUBE

This economical and attractive product is ideal as an alternative to galvanised pipe in wardrobe situations. Closet Tube is available in lengths of 1.8m or 2.4m, and powder coated finished in white. Strong sockets are also available to support the Closet Tube ends.

PRODUCT NAILS

30mm x 3.15mm diameter F.H.

Available in 25kg, 5kg packs and 500g bags. To be used for most products requiring nailing. Also available in Stainless Steel 316.

SPIRAL ROLLED NAILS

90mm x 3.55mm diameter F.H., 45mm x 3.55mm diameter F.H.

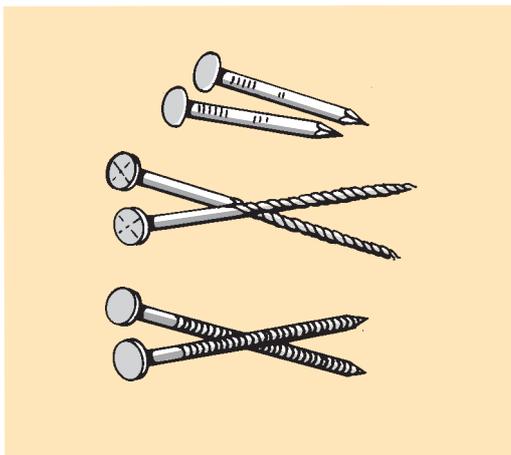
Available in 1kg packs.

ANNULAR GROOVED NAILS

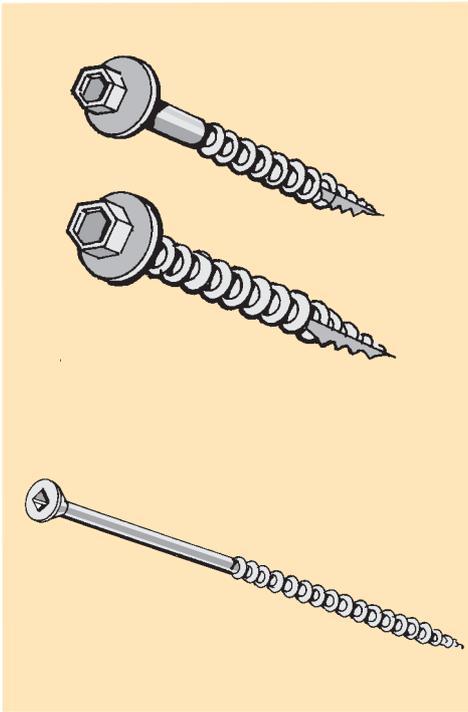
30mm x 3.15mm diameter F.H., 45mm x 3.3mm diameter F.H.,

90mm x 4.0mm diameter F.H.

Available in Stainless Steel 316.



* Detailed product sheet available



SCREWS

Type 17-12g x 35mm Hex Head Screws Galvanised, Electro. Galvanised and Stainless Steel.

Type 17-14g x 35mm Hex Head Screws Electro. Galvanised.

Type 17-14g x 75mm Hex Head Screws Electro. Galvanised.

Available in bags of 100.

BLUE SCREW

Specifically developed for use as a purlin and batten fixing. Complies with NZS 3604:2011. This unique 80mm x 10g screw is blue in colour making it easily identifiable.

Available in boxes of 250.