

TrussLok

FAST METHOD OF TYING DOWN TRUSS TO TOP PLATE

The MiTek TrussLok screw provides fast and secure truss to top plate connection to resist wind uplift.



For durability information, please refer to **Corrosion Resistance of MiTek Metal Connectors**, available on the MiTek website at mitek.com.au

ADVANTAGES

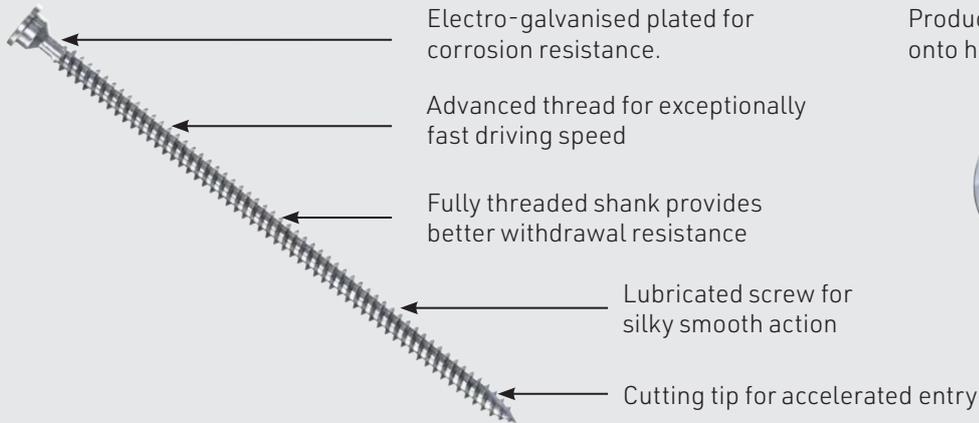
- Fully threaded shank provides better withdrawal resistance.
- Cutting tip for accelerated entry.
- Hexagonal drive bits are included in every box.
- Screw length and product identification stamped onto head for easy inspection.
- Zinc plated for corrosion resistance.
- Fully engineered and tested to Australian Standards.

SPECIFICATIONS

Length	150mm
Coating	Electro-galvanised
Product Code	TL150



This Certified Engineering Building Product complies with the National Construction Code and Australian Standards.



Product identification stamped onto head for easy inspection.



FOR TRUSS TO PLATE CONNECTIONS

TrussLok Screw Uplift Capacity			
Top Plate (mm)	Limit State Design Wind Uplift Capacity (kN) per TrussLok		
	Australian & New Zealand grown pine/JD4	Australian & New Zealand grown pine/JD5	Imported White Baltic Pine & European Spruce / JD6
35	3.1	2.6	1.9
45	3.8	3.1	2.3
70	5.2	4.2	3.1
80	4.4	3.5	2.6
90	3.5	2.8	2.1

- Design capacities have been obtained from laboratory testing and procedures given in AS 1649.
- Full design capacity is achieved when the screw is installed entirely inside the timber.
- Design capacities in the tables incorporate the Category 1 factor (\emptyset) for houses. For other categories, multiply the design capacities by the following factors. Refer to AS 1720.1 for full definition of each category.

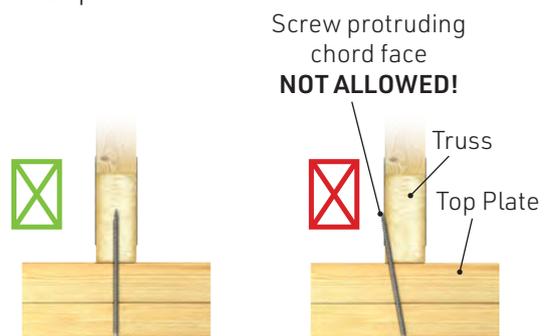
Category	1	2	3
Adjustment factor	1.00	0.94	0.88

- Adopt JD4 values for LVL and hardwoods.
- When the joint groups of truss and top plates varies, use value of the lower joint group for design.
- Top plate thickness of 70 and 90 are made up of multiple members in accordance with AS 1684. e.g. 70 = 35+35, 80 = 35+45 and 90 = 45+45.

IMPORTANT NOTE!

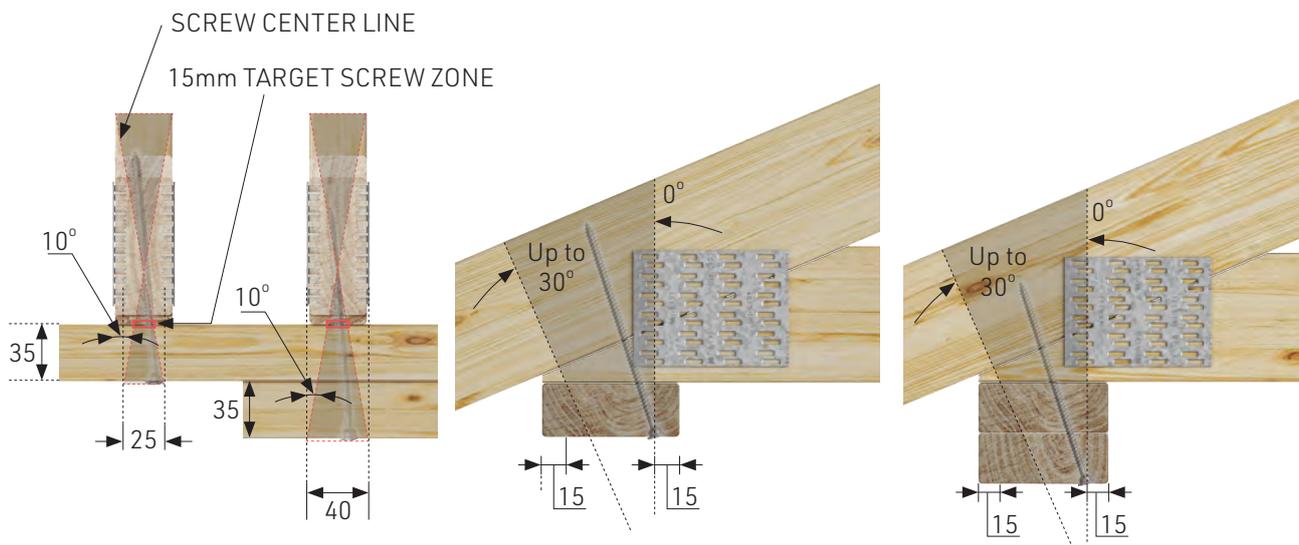
Ensure there is no screw point protruding the truss chord face to achieve full design capacity in Table 1.

In case of an incorrect install, where screw protrudes out of truss, DO NOT remove the screw for correction. Reinforce the hold down connection with a suitable alternate product such as 1.0mm MiTek Cyclone Tie or MiTek MultiGrip



FIXING TO TRUSS BETWEEN STUDS

1. Align the TrussLok between min. 15mm from edge of the top plate. Drive until the head of the screw is fully embedded into the top plate. Install TrussLok only in the shaded region of timber as shown.
2. TrussLok is also not to be used at a junction involving Strapnails (or similar).

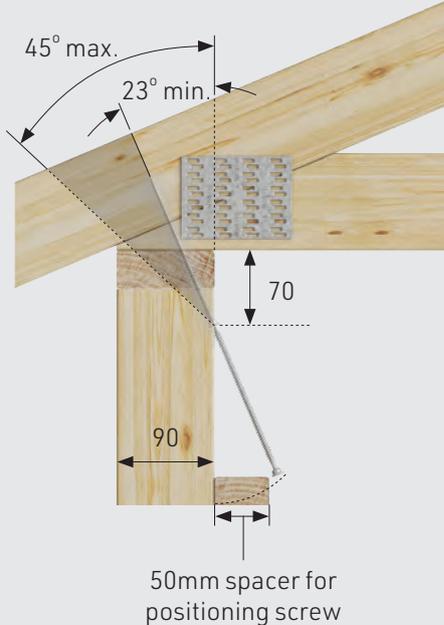
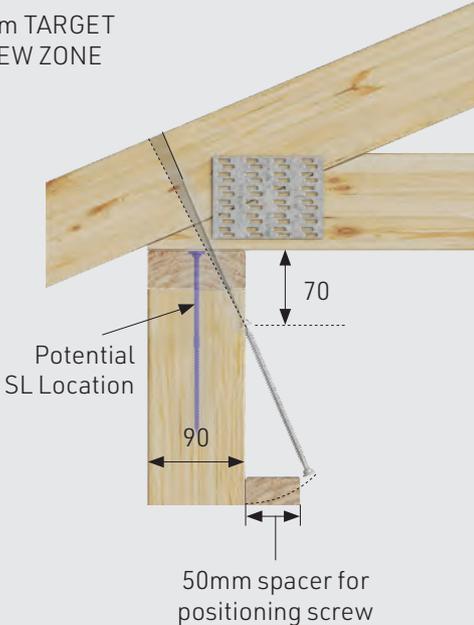
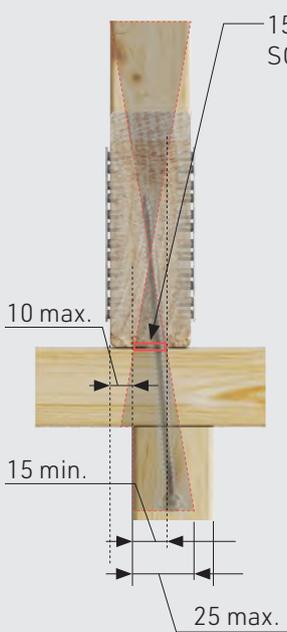


FIXING TO TRUSS ABOVE STUD

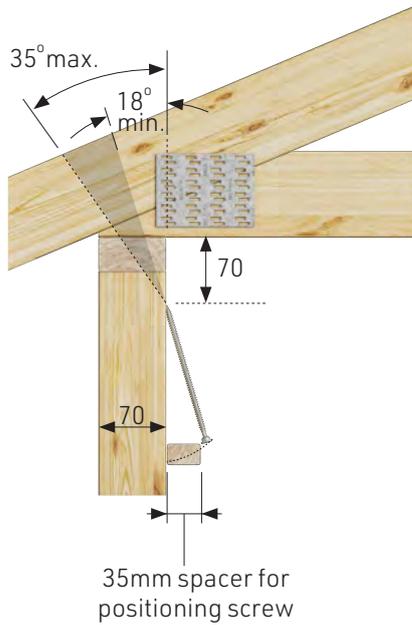
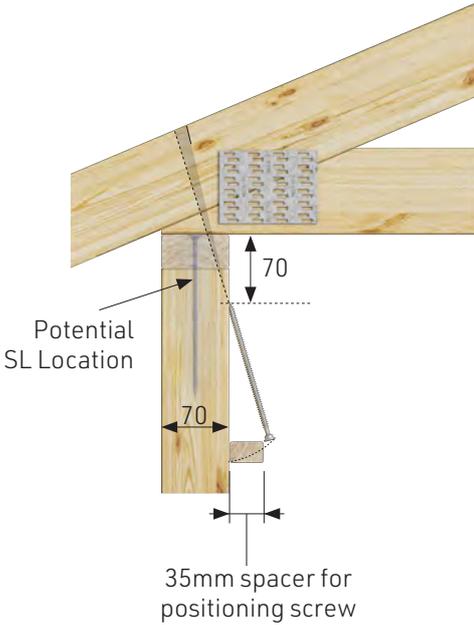
1. Position the driving tip of TrussLok 70mm below the bottom face of roof trusses in the shaded zone as shown.
2. Use a 35mm spacer for 70mm wall frame and a 50mm spacer for 90mm wall frame if the wall frame uses StudLok for Top Plate to Wall Stud Connection. Rest the head of screw on the spacer for positioning. Drive till head of TrussLok is fully embedded in timber.
3. If wall frame does not use StudLok screws, the spacer may or may not be used. Drive in the shaded zone till head of TrussLok is fully embedded in timber.

TRUSS OFFSET 10mm MAX. ABOVE STUD

Fixing to 90mm wall frame

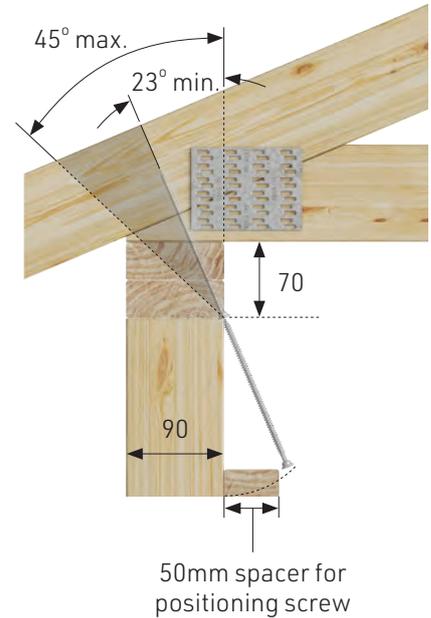
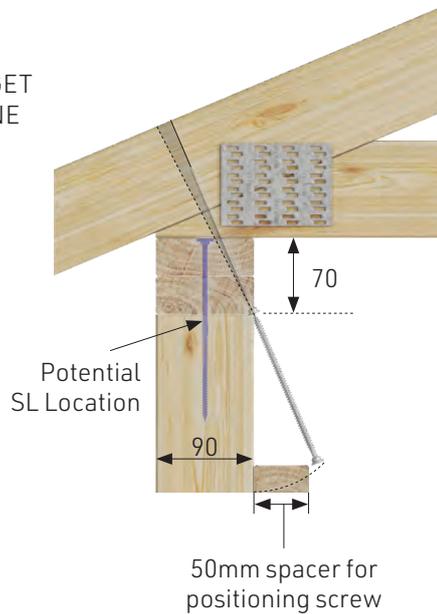
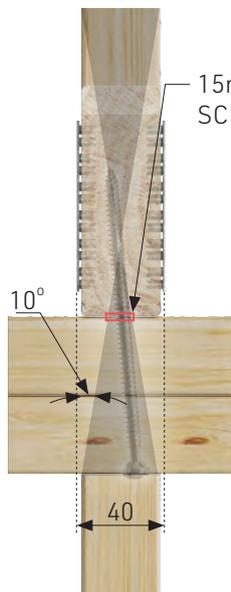


Fixing to 70mm wall frame

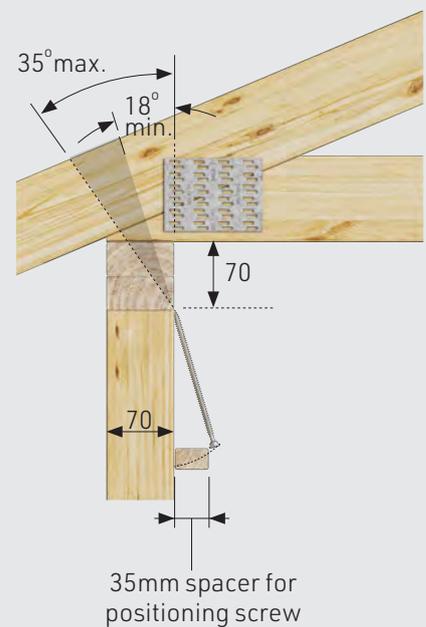
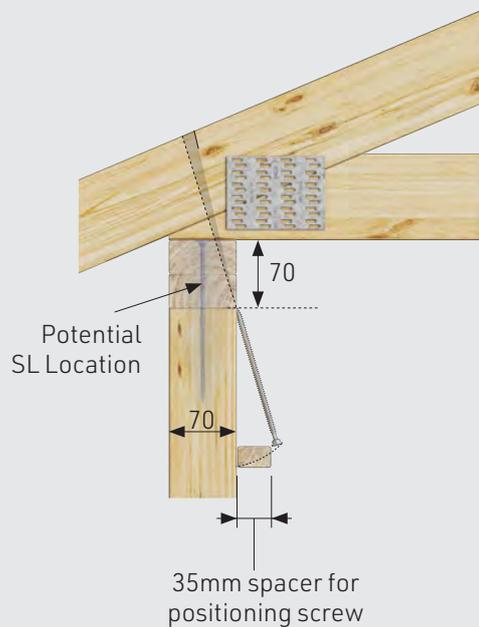


TRUSS DIRECTLY ABOVE STUD

Fixing to 90mm wall frame



Fixing to 70mm wall frame



NOTES

1. SAME DETAILS APPLY FOR INSTALLATION OF ROOF TRUSSES ON RAISED LINTELS.
2. TrussLoks are not suitable to hold-down trusses directly over studs where the top plate to wall stud connection is any of the following products:
 - Tiedown Strap
 - StudStrap
 - WallStrap
 - PlateTie

FOR TRUSS TO TRUSS TIE-DOWN CONNECTIONS

The design capacities for the following truss to truss tie-down connections are listed in Table 2.

Table 02	TrussLok Screw Uplift Capacity for Truss to Truss Tie-Down Connection		
	Limit State Design Wind Uplift Capacity (kN) per TrussLok		
	Australian & New Zealand grown pine/JD4	Australian & New Zealand grown pine/JD5	Imported White Baltic Pine & European Spruce / JD6
	3.1	2.6	1.9

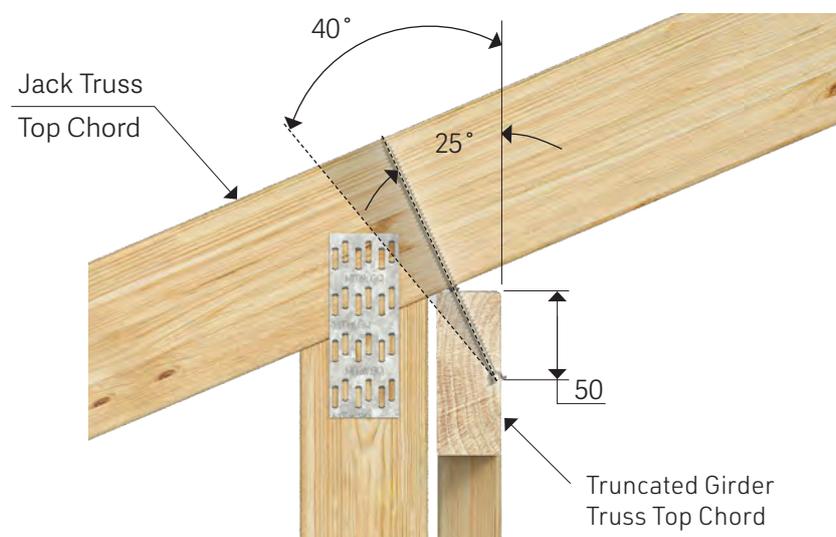
- Design capacities in the tables incorporate the Category 1 factor (ϕ) for houses. For other categories, multiply the design capacities by the following factors. Refer to AS 1720.1 for full definition of each category.
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Category	1	2	3
Adjustment factor	1.00	0.94	0.88

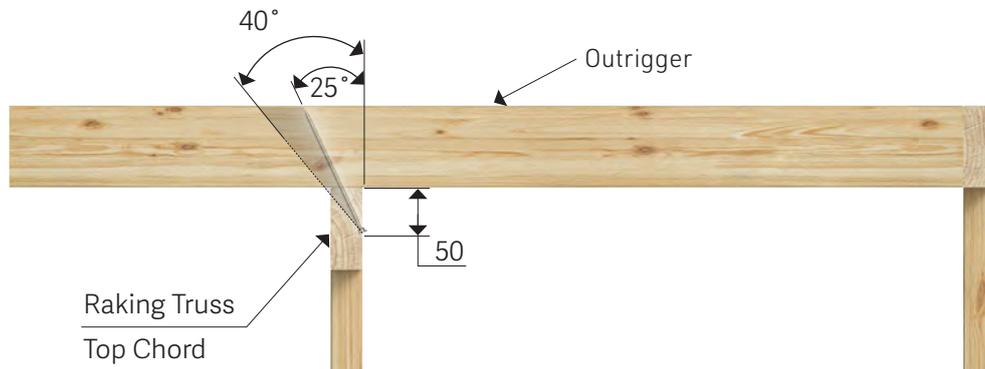
- Adopt JD4 values for LVL and hardwoods.
- When different timbers are used in trusses, use value of the lower joint group for design.

TIE-DOWN JACK TRUSS TOP CHORD TO TRUNCATED GIRDER TRUSS TOP CHORD

- Position screw tip 50mm below top of Truncated Girder Truss Top Chord at an angles between 25° and 40°.
- Drive the TrussLok until the head of the screw is fully embedded into the Truncated Girder Truss Top Chord.

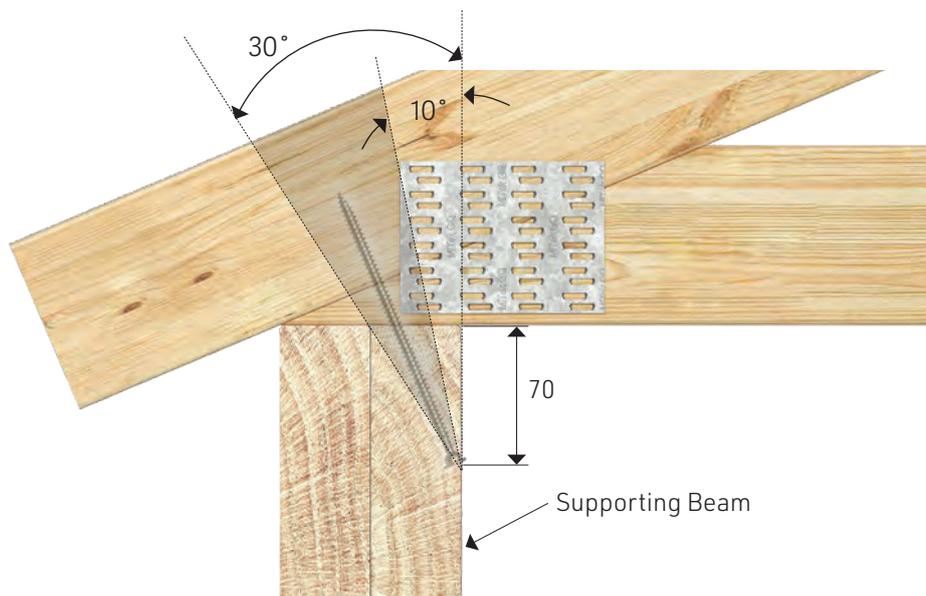


TIE-DOWN OUTRIGGER TO RAKING TRUSS TOP CHORD



TIE-DOWN TRUSS TO SUPPORTING BEAM

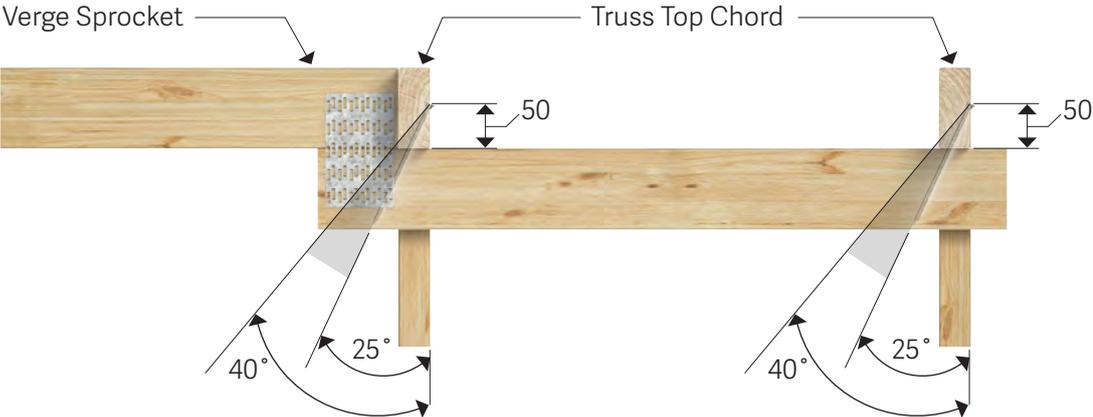
- Position screw tip 70mm against the supporting beam below the bottom chord of truss at an angles between 10° and 30°.
- Drive the TrussLok until the head of the screw is fully embedded into the supporting beam.



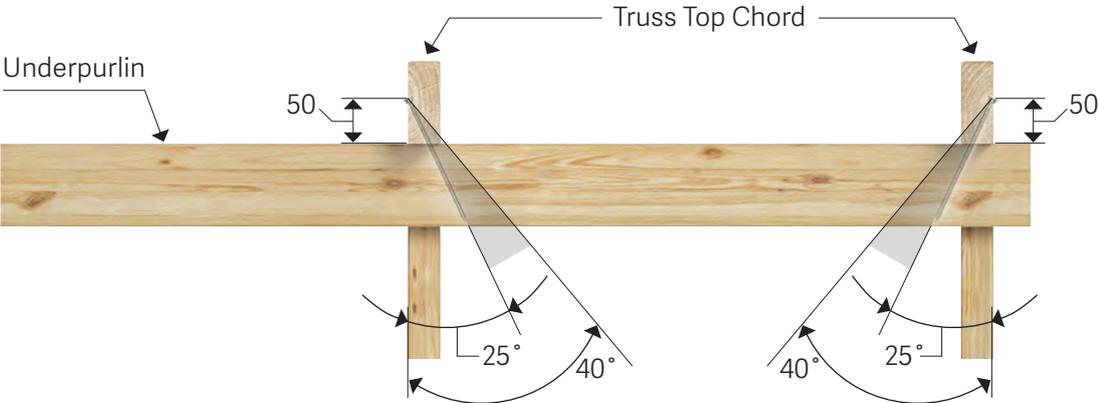
GABLE END FRAMING TO TRUSS

- Position screw tip a distance 50mm as shown against Truss Top Chord at an angles between 25° and 40°.
- Drive the TrussLok until the head of the screw is fully embedded into the Truss Top Chord.

FIXING VERGE SPROCKET TO TRUSS TOP CHORD



FIXING UNDERPURLIN TO TRUSS TOP CHORD



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