

Bracing of trusses – Directives

General rules

Trusses, or other structures with connector plates, are building elements that due to their slenderness in one direction need interaction with other elements in the building, for example the roof surface boarding.

It is very important that the trusses are assembled straight and vertical!

The building designer is responsible for the stability of the roof. This includes for example check of the sheeting interaction and that bracings can be attached to fixed points.

The truss drawing shows the design bracing conditions that are used for design. It is very important to follow these conditions when assembling the roof! The specified bracing distance cannot be exceeded. *Neglecting bracing can cause total collapse of the building!*

Top chord (compressed members)

Usually braced with the roof boarding or purlins.

The horizontal top chord on hip trusses sometimes needs extra bracing between the connected hip mono trusses.

You need to be particularly observant on bracing on roof beams in combination with ceiling without sheeting interaction.

Webs

Compressed webs may require bracing in one or more points to prevent buckling. Webs that need bracing are marked with a symbol on the truss drawing.

See also Type drawing TB96-10.

Bottom chord

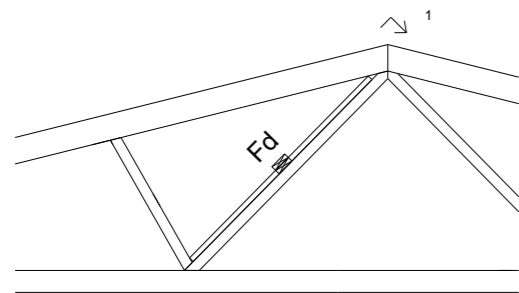
Has usually only small compression forces and is braced by the ceiling.

The total stability should be considered in particular on roofs with no ceiling.

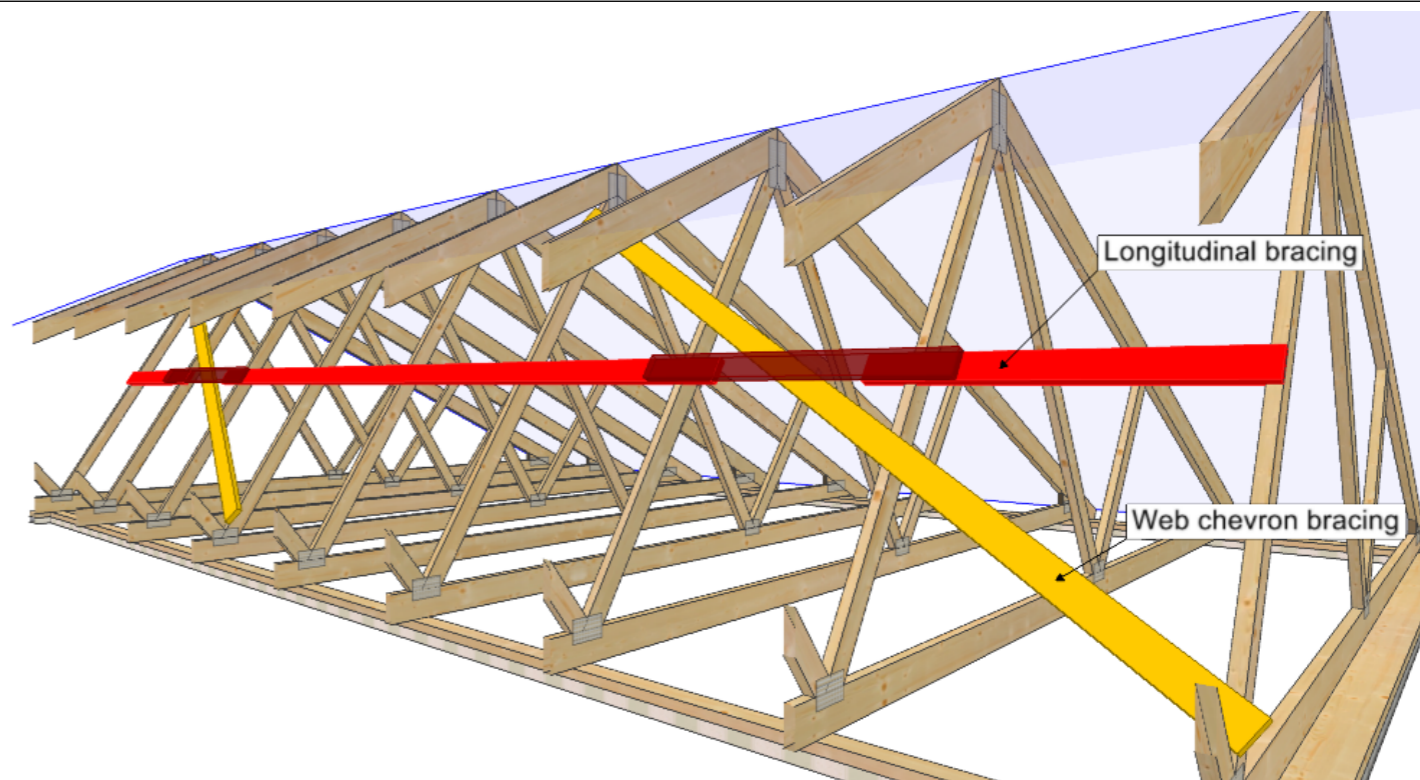
Type drawing

Attachments:

- This information about general instructions
- TB96-10** Bracing of compressed webs (maximum F_d -force = 1.1 kN)

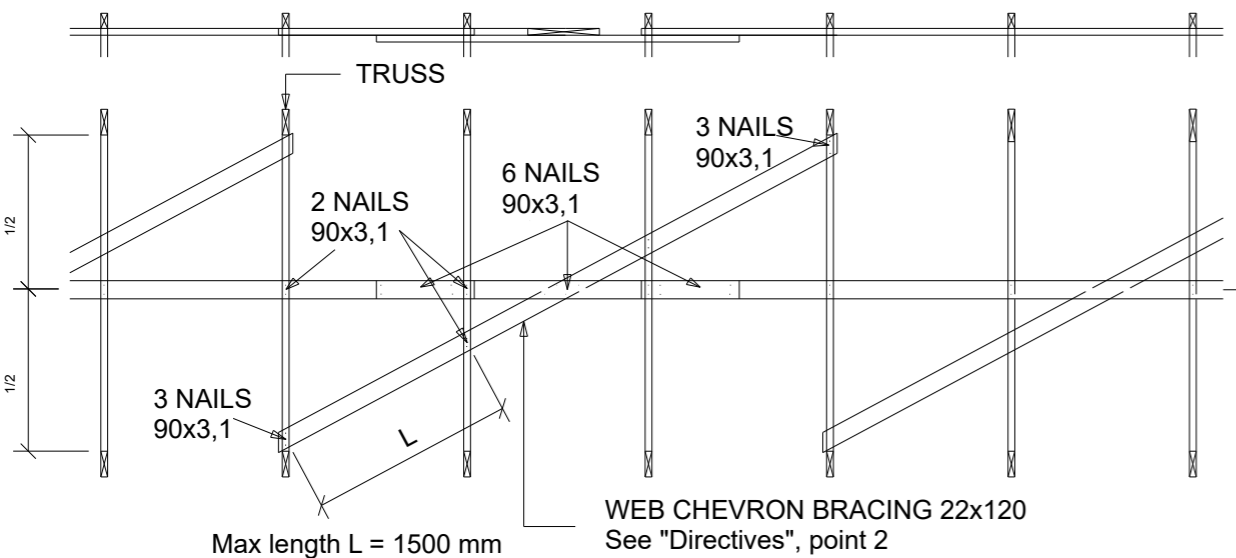


TRUSS ELEVATION



PRINCIPLE 3D DRAWING

1 PCS WEB CHEVRON PER 5 TRUSS BAYS



From above

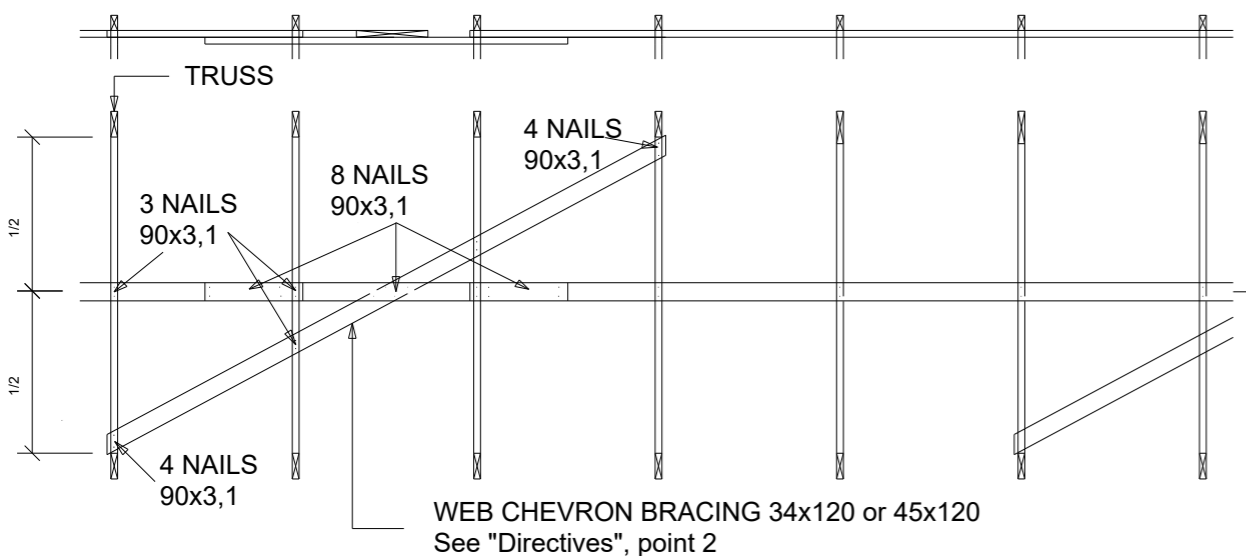
Alternative 1 (22x120)

LONGITUDINAL BRACING 22x120

WEB CHEVRON BRACING 22x120:

- For Fd 410 N - 1 pcs web chevron per 3 truss bays (see section)
- For Fd 310 N - 1 pcs web chevron per 4 truss bays
- For Fd 250 N - 1 pcs web chevron per 5 truss bays
- For Fd 200 N - 1 pcs web chevron per 6 truss bays
- For Fd 170 N - 1 pcs web chevron per 7 truss bays
- For Fd 150 N - 1 pcs web chevron per 8 truss bays
- For Fd 130 N - 1 pcs web chevron per 9 truss bays

SECTION 1-1 Ex. with 1 web chevron per 3 truss bays



From above

Alternative 2 (34x120 or 45x120)

LONGITUDINAL BRACING 34x120 or 45x120

WEB CHEVRON BRACING 34x120 or 45x120:

- For Fd 1100 N - 1 pcs web chevron per 3 truss bays
- For Fd 830 N - 1 pcs web chevron per 4 truss bays
- For Fd 650 N - 1 pcs web chevron per 5 truss bays (see section)
- For Fd 550 N - 1 pcs web chevron per 6 truss bays
- For Fd 450 N - 1 pcs web chevron per 7 truss bays
- For Fd 410 N - 1 pcs web chevron per 8 truss bays
- For Fd 370 N - 1 pcs web chevron per 9 truss bays

SECTION 1-1 Ex. with 1 web chevron per 5 truss bays

DIRECTIVES

THIS TYPE DRAWING IS FOR A WEB WITH ONE LONGITUDINAL BRACING THAT COVERS AT LEAST 3 TRUSSES. THE LONGITUDINAL BRACING IS NAILED WITH 2 PCS 90x3,1 TO WEB. (SEE TRUSS DRAWING).

1. THE LONGITUDINAL BRACING SHOULD BE JOINED WITH OVERLAPPING TIMBER.
2. WEB CHEVRON BRACING SHOULD BE ASSEMBLED ACCORDING TO TABLE AT EACH ALTERNATIVE. WEB CHEVRON SHALL BE NAILED TO A FIXED POINT. IN EACH END THE TYPE DRAWING IS VALID FOR WEBS WITH A REPORTED Fd-FORCE ON THE DRAWING UP TO 1100 N. THE NUMBER OF WEB CHEVRON BRACES DEPENDS ON THE SIZE OF Fd AND IS SELECTED ACCORDING TO THE TABLE AT EACH ALTERNATIVE.

FOR MORE INFORMATION, SEE TRUSS HANDBOOK



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			RITINGSNUMMER	REV.	