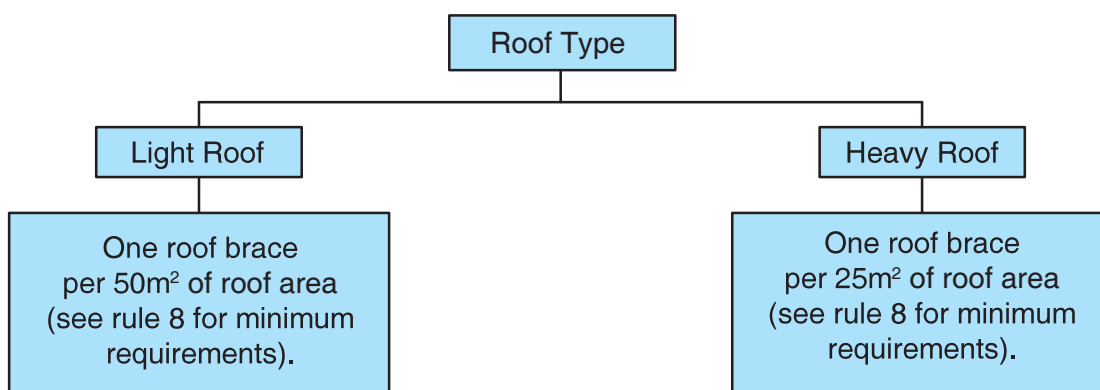


ROOF BRACING SPECIFICATION AS PER NZS 3604:2011

- Covers roof bracing requirements to resist horizontal loads as set out in Section 10 NZS 3604:2011
- A definitive guide to the description and installation of Roof Plane Braces and Roof Space Braces

Roof Bracing Requirements



Roof Bracing - Rules & Definitions

1. The bracing described in this brochure covers both framed roofs and fully trussed roofs.
2. Roof planes less than 6m² (e.g. dormers & porches) do not require bracing.
3. Roof braces can consist of either
 - i) Roof Plane Brace or
 - ii) Roof Space Brace or combination of the two.
4. Roof braces are not required on roofs where sarking is installed as per Clause 10.4.4 NZS 3604:2011 or where a ceiling diaphragm is installed and is attached to the rafters.
5. Roof area is the actual plan area of the roof and includes overhangs.
6. A hip or valley rafter running continuously from ridge to top plate can be classed as one roof plane brace.
7. A pair of crossed LUMBERLOK Strip Brace (preferred for ease of installation) can be classed as one roof plane brace and shall be installed as detailed in this brochure.
8. There must be at least one roof plane brace in each roof plane. Each ridge line shall have a minimum of two roof braces.
9. Every design effort should be made to distribute the roof braces as evenly as possible over the entire roof area and run alternately in opposite directions.

Roof Bracing Options

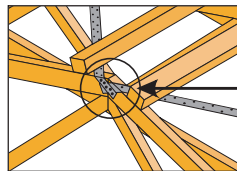
i) ROOF PLANE BRACE

Each roof plane brace can be:

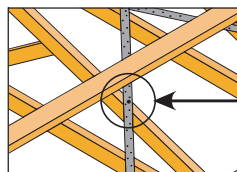
- A hip or valley rafter running continuously from ridge to the top plate in accordance with Clauses 10.2.1.3.2 or 10.2.1.3.3 NZS 3604:2011.

OR

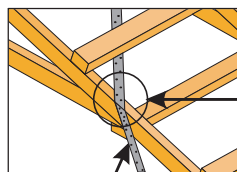
- A pair of tensioned and crossed LUMBERLOK Strip Brace running continuously from ridge to wall frame installed as detailed below.



5 x 30mm x 3.15 dia.
Nails each end

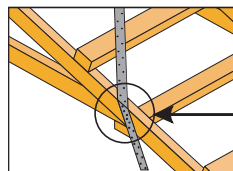


1 x 30mm x 3.15 dia.
Nail at crossing
(after tensioning)

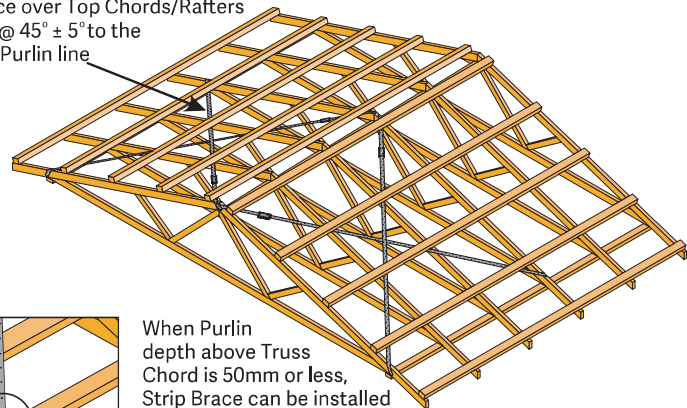


5 x 30mm x 3.15 dia.
Nails each end

6 x 30mm x 3.15 dia.
Nails to Wall Frame



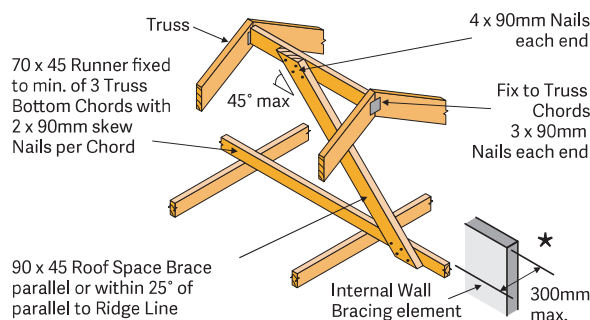
A pair of tensioned and crossed LUMBERLOK Strip Brace over Top Chords/Rafters installed @ 45° ± 5° to the Rafter or Purlin line



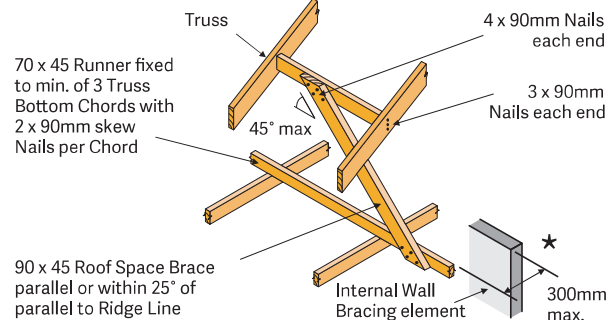
When Purlin depth above Truss Chord is 50mm or less, Strip Brace can be installed over top of purlins. Fix with 1 x 30mm x 3.15 dia. Nail at the Purlin closest to the Rafter/Truss crossing

ii) ROOF SPACE BRACE

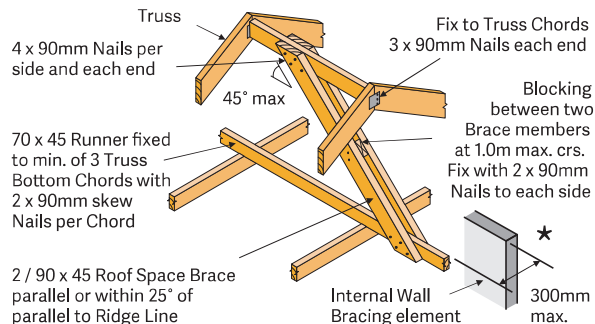
(A) Less than 2m long



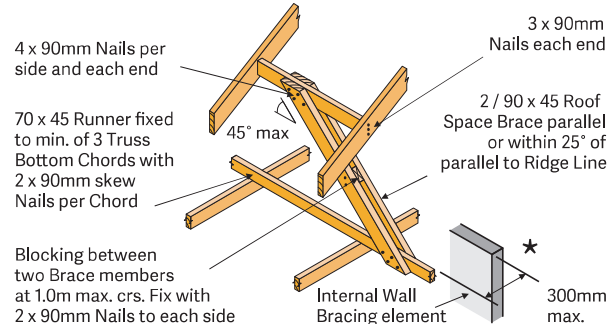
(C) Not directly under the ridge - less than 2m long



(B) More than 2m long (Max. 4.8m)



(D) Not directly under the ridge - more than 2m long



*Not required when a ceiling diaphragm complying with Clause 13.5 NZS 3604:2011 is used.