

(The Code clause and table references given below apply to Part 2 and Part 3 unless specifically noted)

Background

Tables 9.12 and 9.24 provide the net uplift forces and tie-down details respectively for ridgeboards and hip rafters. For tile roofs in wind classifications N1 and N2, specific tie down of the ridgeboard and hip rafters is not required and nominal nailing is adequate. See also Guide Note 2, Tie-Down of Coupled Roofs.

The diagrams in **Table 9.24** indicate that the tie-down straps or bolts are vertical and the question is frequently asked, can they be at an angle and what happens if there is no wall directly under the tie-down points?

Acceptable Practice

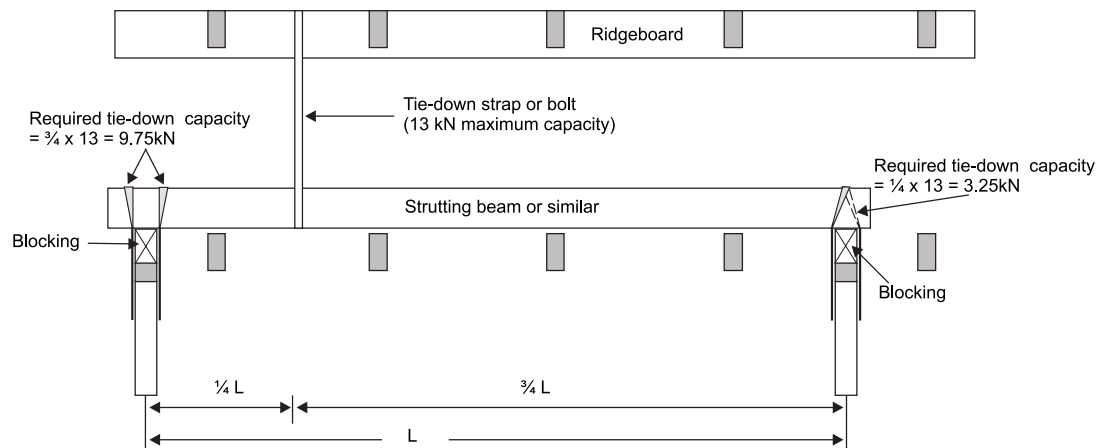
As is indicated in **Table 9.23** for underpurlins, tie-down at an angle to the vertical is acceptable for the same types of tie-down details.

It is recommended that the maximum angle that the tie-down straps or bolts are placed at does not exceed 30° from the vertical.

If there are no walls directly under the tie-down point or within the 30° angle, then the tie down can be taken to a strutting or hanging beam or similar and the ends of the beam can in turn be tied down to the wall frame or supporting structure using any of the appropriate connection details given in **Tables 9.16 to 9.22**.

Note: If the ridgeboard or hip rafters are tied down to a beam, the uplift forces at the ends of the beam should be determined to ensure that it is proportional to the number and location of the tie-down from the ridge/hip.

Example:





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