Loose Timber Connection Details

The use of loose infill members and purlins is quite common on the more complex trussed rafter roofscapes. The nett result is an increased load imposed upon the trussed rafters, which has to be accommodated in the design and the requirement of a secure fixing of the loose timbers to the trusses.

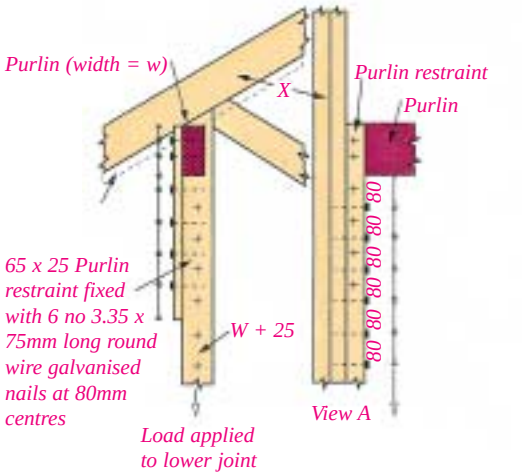
It is important to position incoming purlins at the node points of the trusses and details 80 to 83 show practical fixing methods for variants in web arrangements at a joint.

It is necessary to manufacture trussed rafters either side of a loose infill area, with webs that align to ease the fixing.

It is also practical to manufacture trussed rafters with wider than normal webs to allow more tolerance for the fixing of the infill members, and is essential for the fixing of special girder hangers where larger size bolts are required.

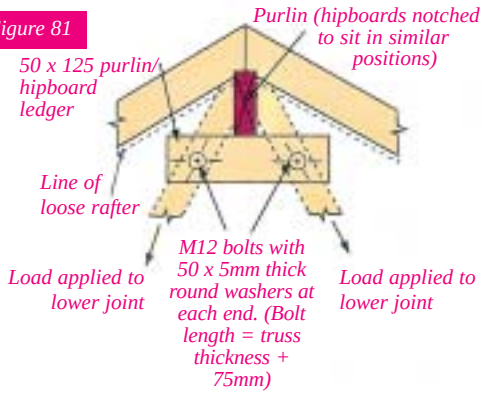
Figure 80 *For skew corner situation read in conjunction with figure 82*

Use similar detail at apex for hipboard support



Purlin support post. Size 50 x (W + 25), extending to ceiling joist. Fix with one row of 4.0 x 100mm long round wire galvanised nails at 80mm centres for full length of post

Figure 81



Max allowable load for this detail: 4.0Kn for C24
5.0Kn for TR26

Figure 83

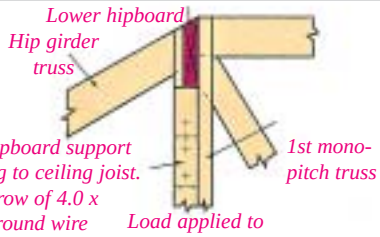
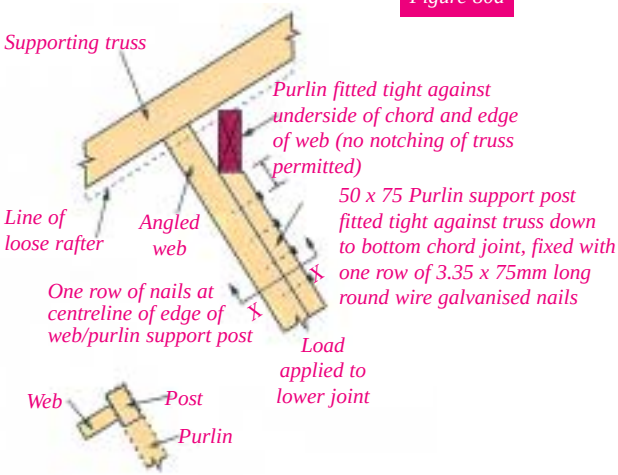
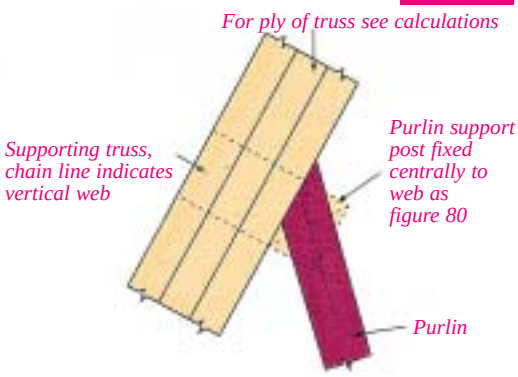


Figure 80a



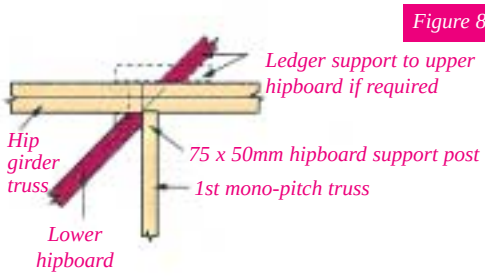
Section X - X

Figure 82



NB. Centreline of oncoming purlin is set out to intersect with centre point of purlin support post/ledger

Figure 83a



NB. To support lower edge of upper hipboard use 50 x 150 hipboard ledger bolted to vertical/angled web using M12 bolts (refer to purlin, hipboard support at apex with non-vertical webs for typical fixing details See figure 81)