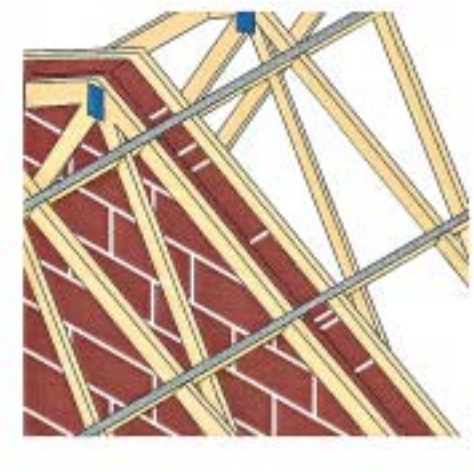
General Construction details

In general, it is preferable to use one of the proprietary types of fixings, 'A', between the ends of the trussed rafters and the wall plates or bearings as shown in figure 103.

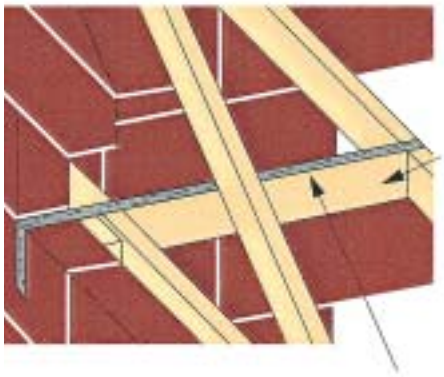
Where proprietary fixings are not used, the minimum fixing at each bearing position should consist of two 4.5 x 100mm long galvanised round wire nails, which are skew nailed from each side of the trussed rafter into the wallplate or bearing. Where nailing through the punched metal plate cannot be avoided, the nails should be driven through the holes in the fasteners. This method of fixing should not be used with stainless steel metal plate fasteners or where the workmanship on site is not of a sufficiently high standard to ensure that the fasteners, joints, timber members and bearings will not be damaged by careless positioning or overdriving of nails.

Figure 101



The Building Designer should ensure that, when required, adequate holding down fixings, 'C', are specified for both the trussed rafter and the wall plates or bearings.

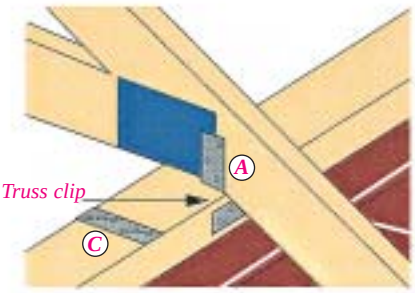
Figure 102 Restraint strap at ceiling level



Noggings to be provided and set horizontal unless the strap has a twist to line it up with the roof slope

Strap fixed to solid noggings with a minimum of four fixings of which at least one is to be in the third joist/rafter or in a noggin beyond the third joist/rafter

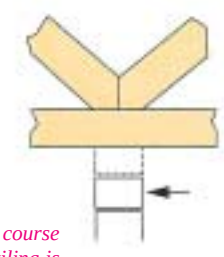
Figure 103



Internal non-loadbearing walls

It is advisable to erect non-loadbearing walls after the tiling has been completed thus allowing deflection to take place under the dead load, thereby reducing the risk f cracking appearing in the ceiling finishes. If partitions are of brick or block, then as an alternative the final course may be omitted until tiling has been completed

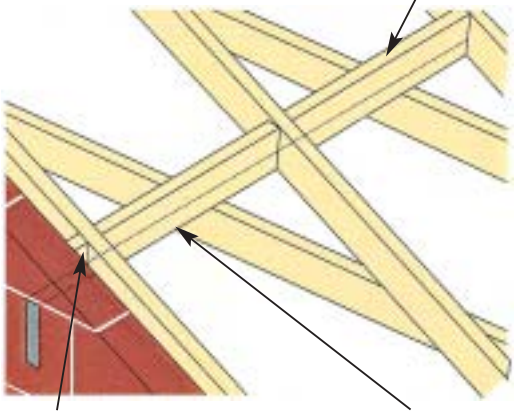
Figure 104



Partition

Omit final course until tiling is completed

Figure 105 Restraint strap at rafter level



Packing piece between inner leaf and first rafter

Strap bedded under a cut block

General Construction details

Hogging over party walls

Party walls should be stopped 25mm below the tops of rafters. During construction layers of non-combustible compressible fill such as 50mm mineral wool should be pressed onto the locations shown to provide a fire stop as figure 106.

Continuity across party walls

If the tiling battens are required to be discontinued over a party wall, then lateral restraint must be provided in addition to that required to transfer longitudinal bracing forces.

This should consist of straps adequately protected against corrosion. These straps should be spaced at not more than 1.5m centres and be fixed to two rafter members and noggins on each side of the party wall by 3.35mm diameter nails with a minimum penetration into the timber of 32mm.

Hipboards

Fixing over flat-top girder

Where hipboards pass over and are supported on flat top girder trusses, the hipboard must be notched in order to achieve the correct height for the hipboard and to provide horizontal bearing. The flying rafter of the truss may need to be trimmed but in no circumstances should the flat chord or the rafter below the joint be cut. In most cases the hipboard is supplied in two parts which can be joined over the flat top truss. One method of providing the necessary fixing is illustrated in figure 108.

Figure 106

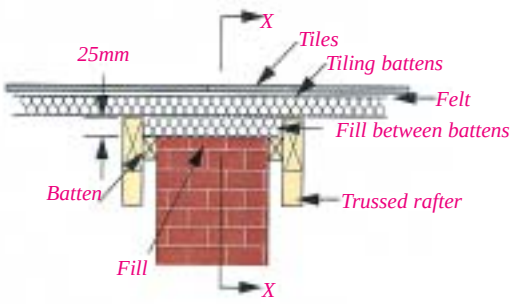


Figure 107

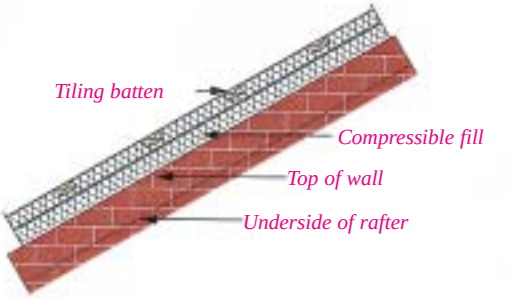


Figure 108

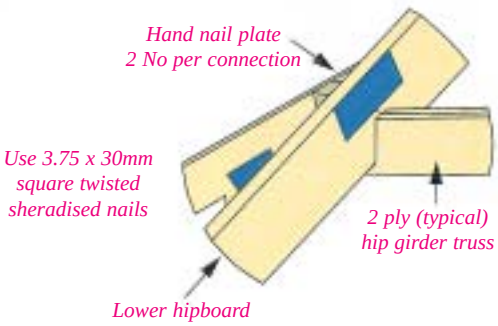
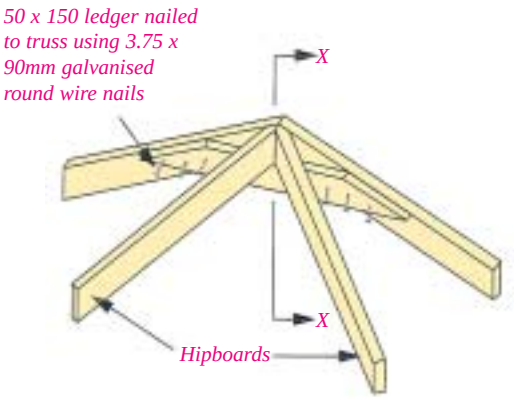
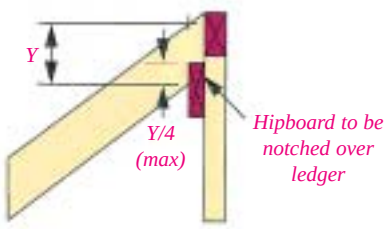


Figure 109



Hipboard to be notched over girder truss and butted together over centre of girder.



Section X - X