

Roofs and roof frames in general

Where the standard housing depth of multi-storey housing is around 10 metres, roofing structures using a collar beam framework are usually inter-supported by a wooden post wall.

Roof frames of a standard size designed to support roofing tiles of brick, concrete or natural slate are made of timber with a square cross-section and having a dimension of around 12.5 x 12.5 cm, or occasionally 10 x 10 cm – often described as lightweight timber.

Valley rafters are of stronger whole timber, unlike hip rafters, which often have a narrower but higher cross-section – in both cases due to the different loading conditions and construction of trimmed rafters.

Trimming in roof frames for chimneys and dormers that are wider than the rafter interval are constructed in the same manner as trimming work in the joist framework.

In early buildings, top storeys designed for habitation were simply boarded and plastered on the inside face of the rafters and collar beam framework and constructed as the ceilings in the floors below.

The wall separating the living space from the roof space was constructed in a similar fashion, and simply supported by a light wooden skeleton.

Where a half-timber construction is likely to restrict room area, the post structure is placed inside the wall, which is otherwise simply plastered.

There may be cases (as per local regulations) where boards are inserted between the rafters and any separating wall is constructed as a double board partition. Such insertions between rafters have been a legal requirement in certain municipalities where the attic has been converted into a living space.

on the roof floor and finished with several layers of roofing felt (built-up roof).