BUILDSTORE
FOR SMART HOMEBUILDERS

GUIDE

CONSTRUCTING YOUR ROOF

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OPTIONS FOR CONTRUCTING YOUR ROOF

Constructing the roof on-site is time consuming and therefore costly and many houses these days are built with a pre-fabricated trussed roof. These trusses come in two basic forms; those which are simply designed to act as the support for the roof covering and those, attic trusses, where the roof void can be occupied.

Timber frame companies almost always include the complete pre-fabricated roof within their package. Those building traditionally have to order their roof separately and can choose between ordering a complete pre-fabricated roof or just the trusses with the ancillary timber being purchased separately.

The more complex a roof is, the more expensive it will be. Occupying the roof space by the use of attic trusses or a cut and pitch roof will increase the overall costs of the roof construction. However, this is a very good and relatively inexpensive way of providing extra space within the home.

ROOF TYPES

Flat roofs are often considered as potentially high maintenance areas, and in design terms, they have fallen out of favour. However, they still have their place. A flat roof can have a concrete or timber deck. In previous times most flat roofs were constructed as 'cold roofs' where the insulation was beneath the decking. This is now banned in Scotland and frowned upon in the rest of the UK and instead, roofs are usually built with the insulation on top of the decking beneath the waterproofing. The traditional waterproofing is two or three layers of felt laid onto hot bitumen, finished off with a layer of protective chippings. Modern alternatives use four layers of glass reinforced polyester bonded permanently to each other and the decking, with no joints or seams.

'Cut and Pitch' roofs are constructed on-site from loose sawn lumber delivered to site. This style of roof is sometimes referred to as a purlin and spar roof because the construction usually takes the form of timber or steel purlins spanning between gable walls supporting rafters or spars between the wallplate and the ridge. Such a roof has to be designed by an expert who will calculate the various sizes of timber needed to perform the many different functions such as purlins, rafters, ceiling tiles, collar ties, hip and valley trees.

INSULATING YOUR ROOF

All roofs must be insulated. A cold roof has the insulation at ceiling joist level and, unless a breathable membrane underlay is used, the roof void must be ventilated by the use of proprietary soffit, eaves and ridge ventilation in order to prevent condensation. A warm roof has the insulation directly below the roof covering making condensation unlikely; it does not require ventilation.