

CREATING ROOFSCAPES WITH TRUSSED RAFTERS

Trussed Rafters have become part of the modern building vocabulary. Around 95% of all new house roofs are constructed using trussed rafters as are an increasing proportion of roofs for nondomestic premises such as offices, retail outlets, hospital extensions, leisure developments etc.

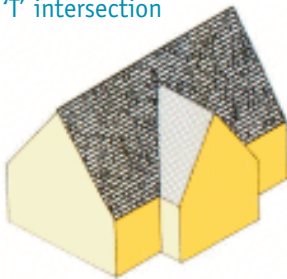
The trussed rafter form of construction is well known for its economy, off site prefabrication, speed of erection and the minimal environmental impact of its timber base. What is not always so readily recognised is the flexibility and adaptability of the system and its ability to cope with a wide range of roof shapes such as hips, intersections, corners etc without the need for any special forms of construction. The variation in roofing styles possible with trussed rafters is unlimited.

Within this Product Data Sheet are a series of standard details of differing roof styles. These are the most commonly constructed roof shapes and the detailed solutions indicate a way of achieving them. It must be stressed that these are not absolute solutions but simply give an idea of how roofscapes may be easily achieved.

It is hoped that by showing these few solutions users and specifiers will see that many differing roof profiles may be solved using the same simple, readydesigned techniques.

However, it must be stressed that each specific case will have its own individual characteristics and readers are strongly recommended to contact a TRA Member fabricator/designer as early as possible in a project in order to discuss a detailed solution.

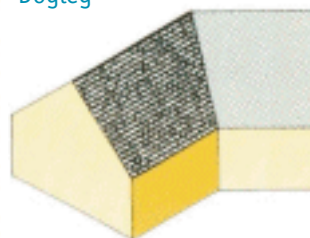
T' intersection



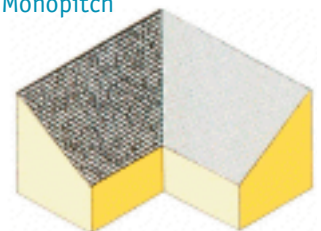
Dormer



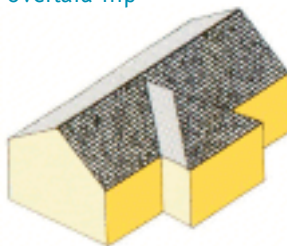
Dogleg



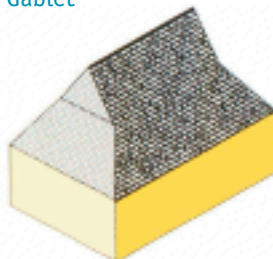
Monopitch



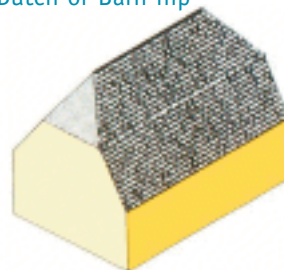
Overlaid hip



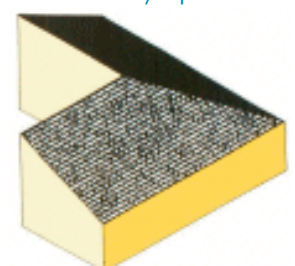
Gablet



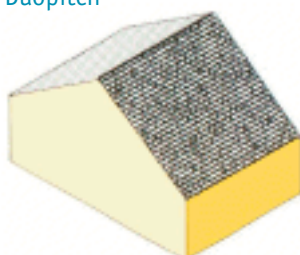
Dutch or Barn hip



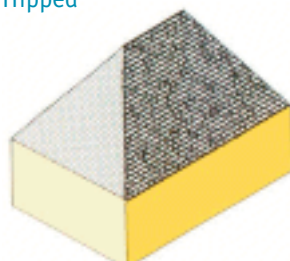
Mono 'L' return/hip



Duopitch



Hipped



'L' return

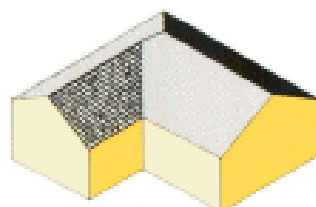


Fig. 1 Flat top hip

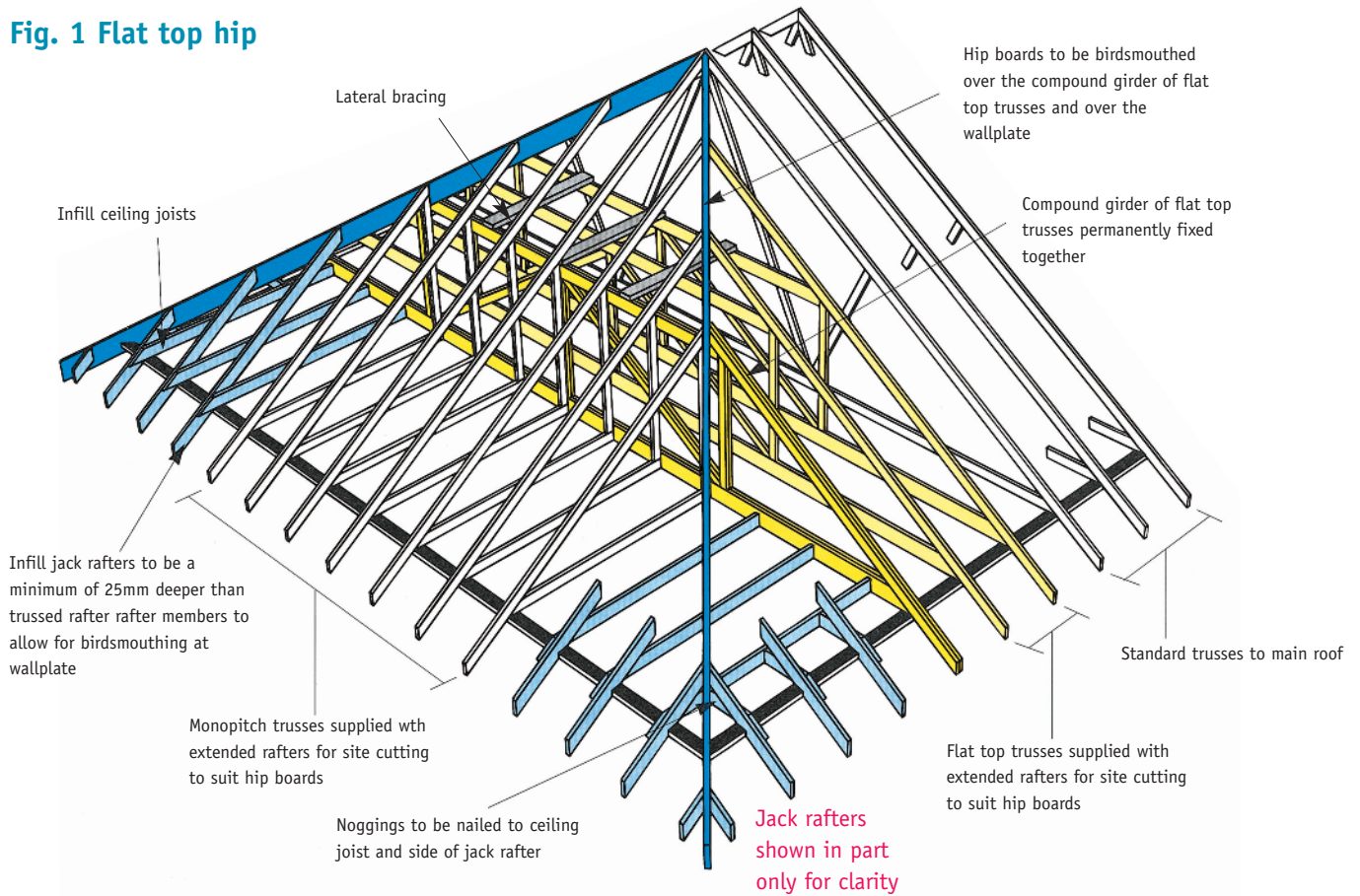
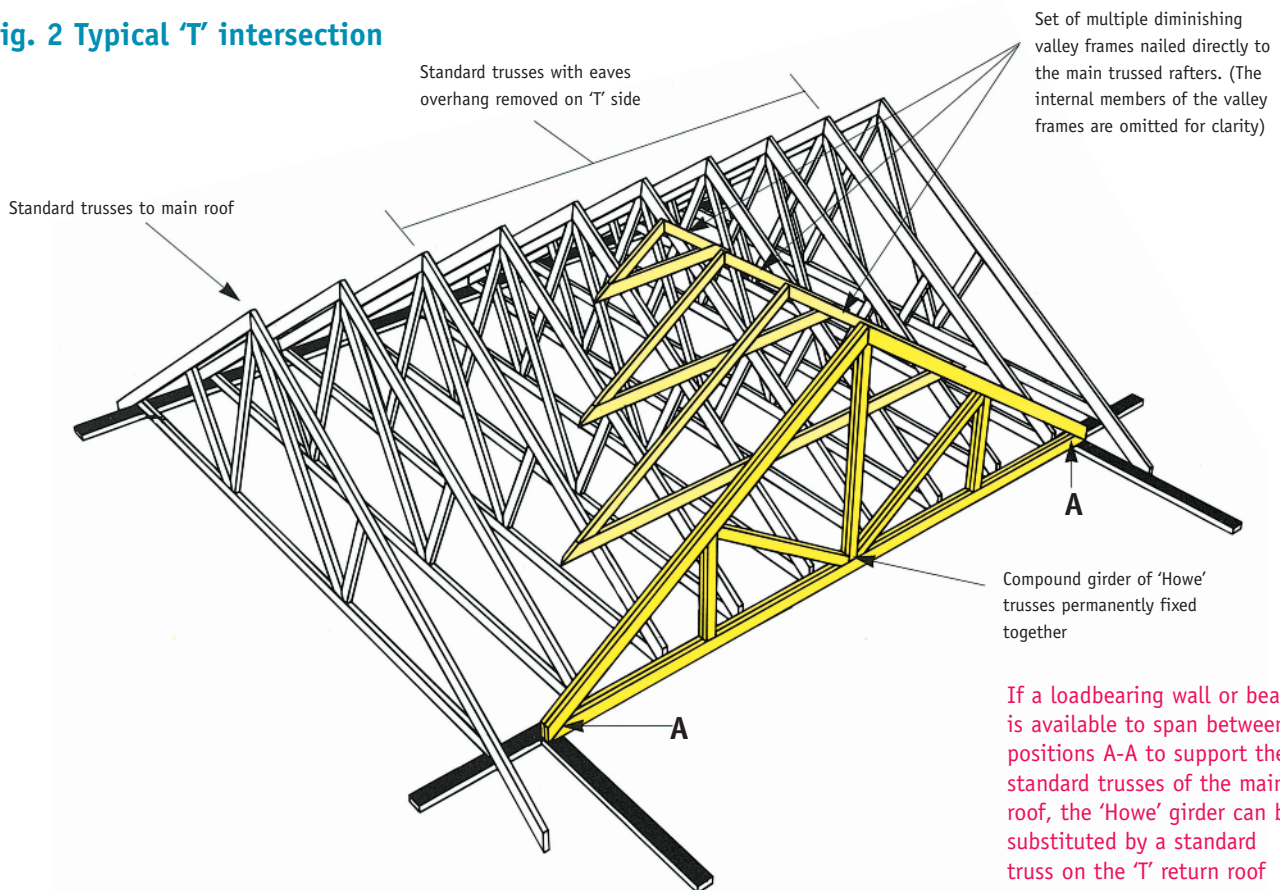


Fig. 2 Typical 'T' intersection



If a loadbearing wall or beam is available to span between positions A-A to support the standard trusses of the main roof, the 'Howe' girder can be substituted by a standard truss on the 'T' return roof

Fig. 3 Typical 'L' return

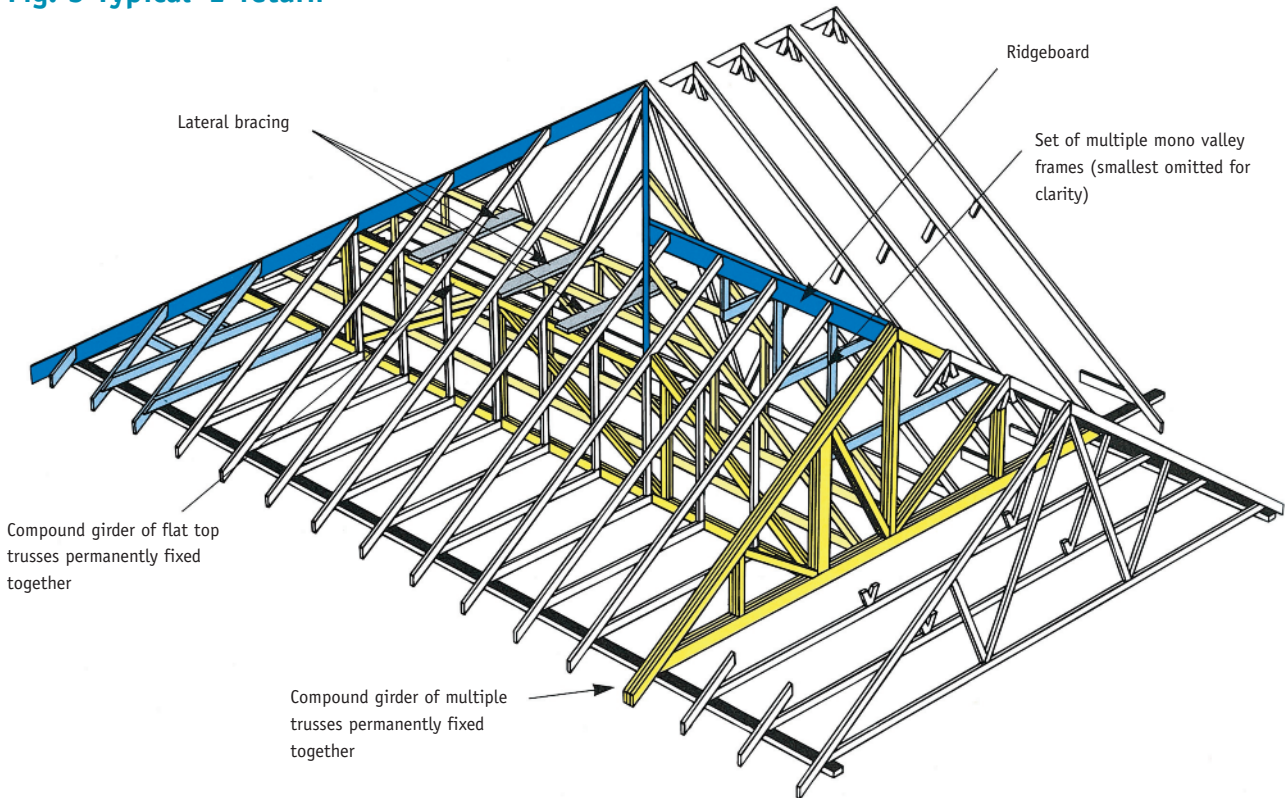


Fig. 4 Overlaid hip

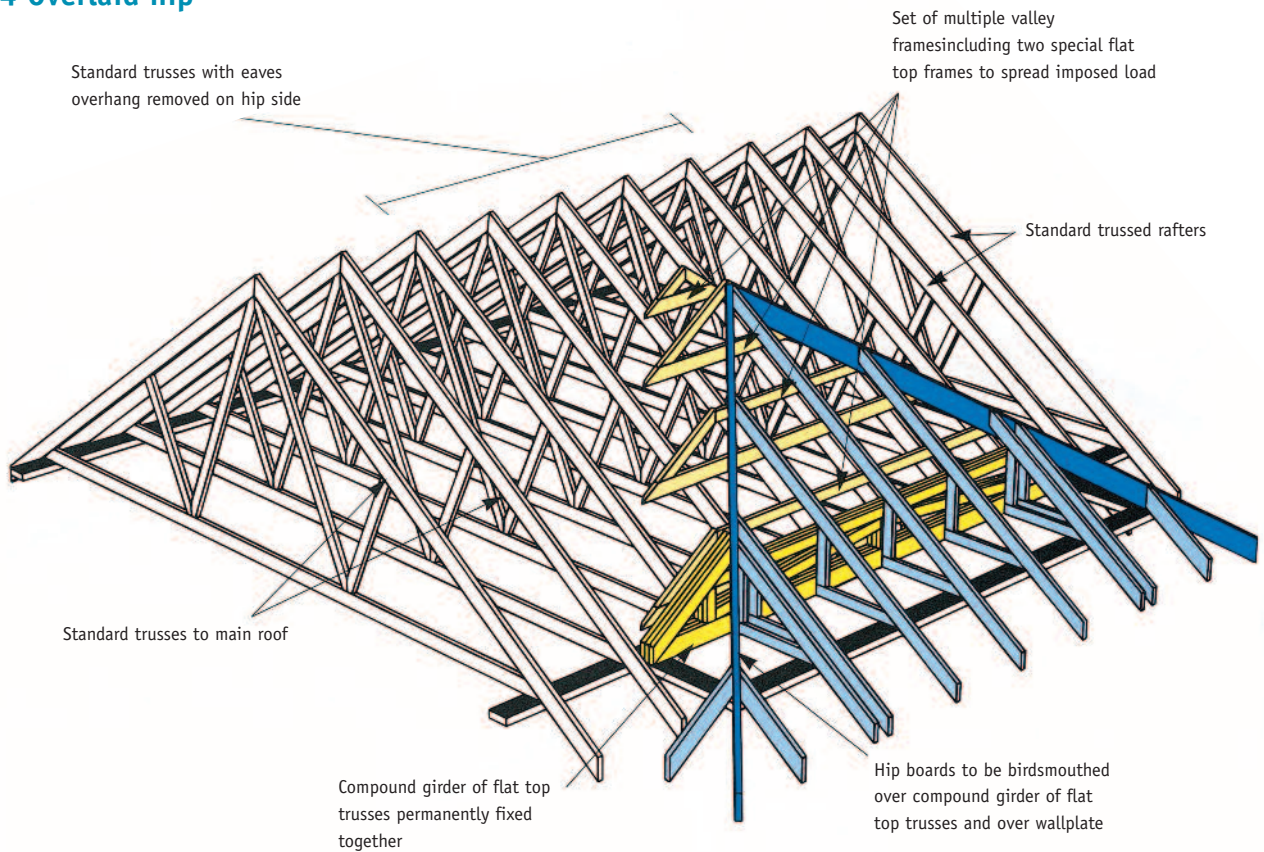
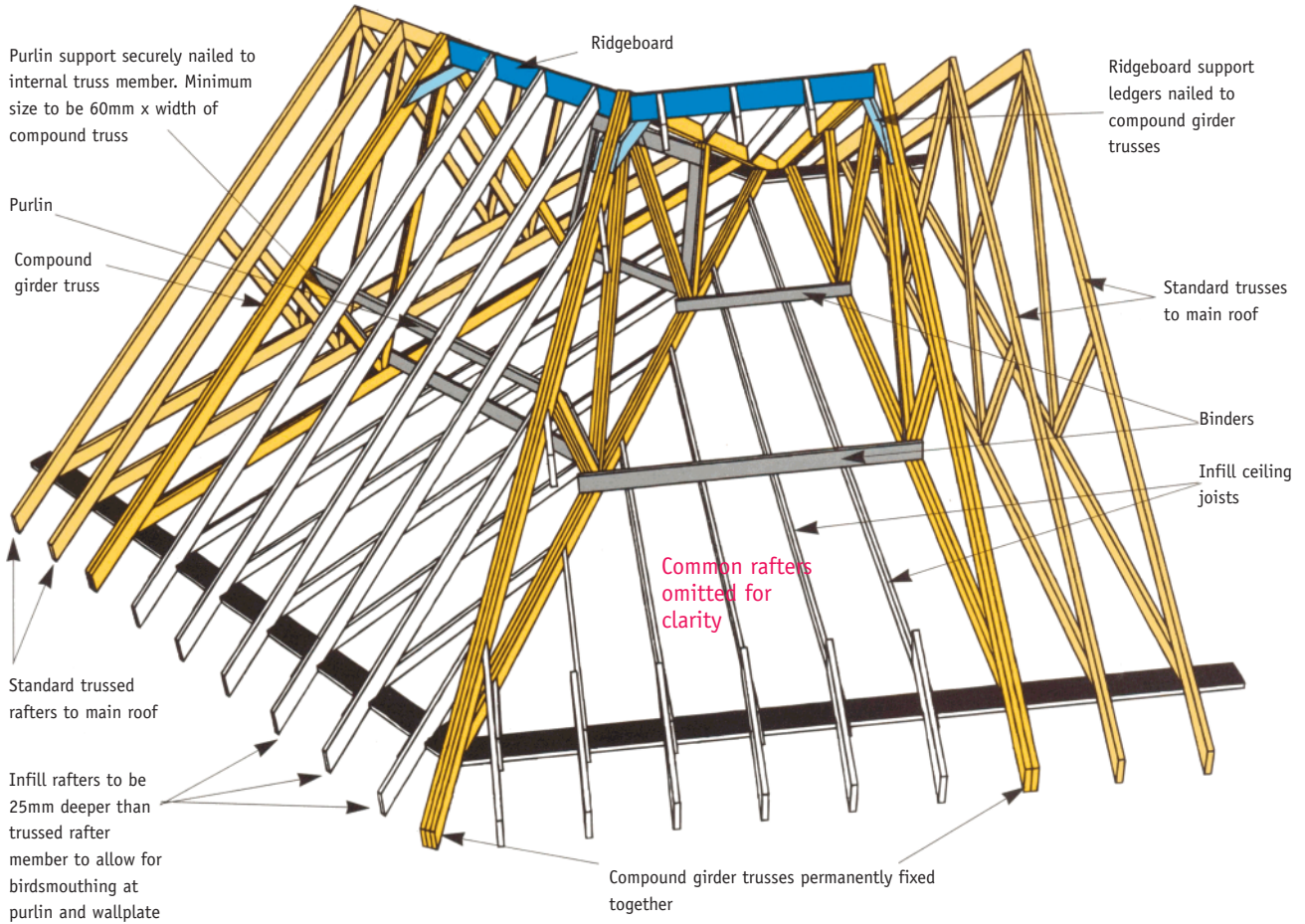


Fig. 5 Dogleg intersection



The five roofscapes illustrated on this Product Data Sheet are those most commonly constructed. There are many other ways of framing hips, corners, and intersections etc with trussed rafters. Please contact your TRA trussed rafter fabricator for details. Throughout this document required wind and stability bracing has been omitted for clarity

This product Data Sheet has been produced to give some ideas on how trussed rafter construction may be adapted in order to provide a range of roof intersections within the overall roof structure. However, it must be stressed that these are typical solutions and each roof will have its own individual characteristics, readers are strongly recommended to contact a TRA Member fabricator/designer as early as possible in a project in order to discuss a detailed solution.

More details on trussed rafter construction are contained within the TRA 'Technical Handbook' which is a priced publication available from the Trussed Rafter Association at the address given below.

The guidelines within this Data Sheet are issued in good faith but without liability and its use is entirely at the user's risk.