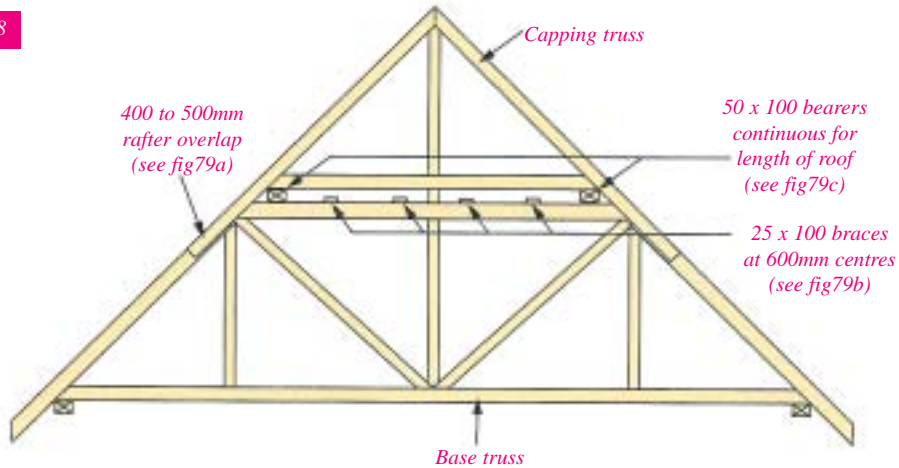


### Two Tier Construction

It is necessary to use two tier trussed rafters when the vertical dimension of a single component would be too large for manufacturing or transportation. This

dimension is generally 3.9 - 4.4m but your MiTek fabricator will advise you when to expect trusses in this form.

Figure 78



The two tier truss (figure 78) comprises a flat-topped base truss and a triangular capping truss, fitting alongside the base truss on longitudinal bearers. Each truss may be one of a large selection of types. The base truss will generally be made as high as practical but not so high that the span of the capping truss is less than 2-3m. Although a duo-pitched shape is shown in figure 78, all basic configurations can be constructed by the two tier method.

The bracing of the flat top chord of the base truss is important in ensuring its performance in compression.

The base trusses should be erected, full permanent bracing installed and battens fixed, up to the top position of the capping trusses. The resulting structure then forms a safe, rigid working platform for the erection of the capping trusses. Tiling or loading of the base trusses should not proceed until the capping trusses are fully installed and braced.

Figure 79a

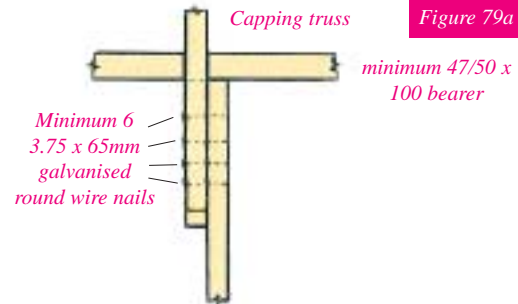


Figure 79b

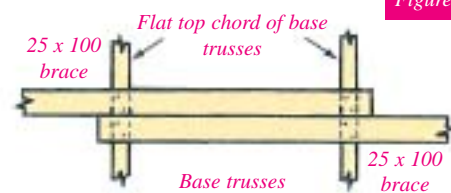


Figure 79d

Often the cap truss sits in the same plane as the base truss and they are connected together using a MiTek Field Splice plate

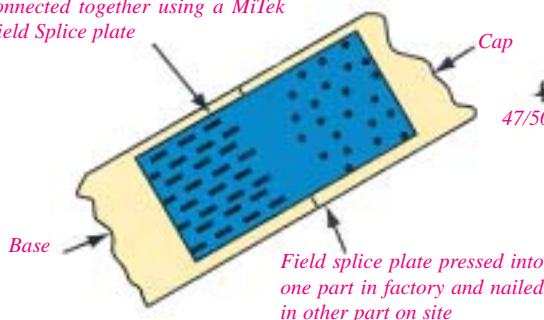


Figure 79c

