



Storage & Unloading Details

UNLOADING TRUSSED RAFTERS

When a delivery of trussed rafters arrives on site, the contractor(s) involved should be prepared and have already allocated sufficient and suitable resources to ensure the trussed rafters are unloaded safely and in a manner such that they are not overstressed or damaged the trusses.

Normally, trussed rafters will be delivered in tight bundles using steel bindings. This will often require mechanical handling equipment, such as a fork lift or crane, to enable the safe manoeuvring of these large units.

SITE STORAGE OF TRUSSED RAFTERS

Trussed rafters can be safely stored vertically or horizontally at ground level or on any other properly designed temporary storage platform above ground level. Whichever method and location is chosen the temporary support should be set out to ensure that the units do not make direct contact with the ground or any vegetation and be so arranged as to prevent any distortion.

Where long periods of storage are anticipated then the trusses should be protected with covers fixed in such a way as to allow proper ventilation around the trusses.

When stored vertically bearers should be positioned at the locations where support has been assumed to be provided in the design with stacking carried out against a firm and safe support or by using suitable props. (Fig. 1)

When trusses are stored horizontally level bearers should be positioned beneath each truss node (minimum) to prevent any deformation and distortion (Fig. 2). No other method of storing trussed rafters is considered to be suitable, except where specific provision has been made in the design for an alternative temporary support load case.

Extreme care should be exercised when removing the pre-tensioned steel bindings from a bundle of trusses. As a precaution against destabilisation of the whole bundle, it is recommended that prior to the removal of the steel bands, timber battens are fixed across the bundle at several locations with a part driven nail into every truss. Such a simple precaution will allow the safe removal of single trusses once the steel bands are removed. A suggested arrangement of batten locations for a standard Fink truss is shown in Fig. 3.

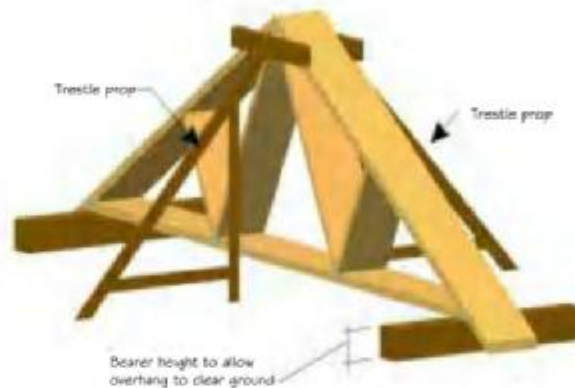


Fig 1 . SAFE VERTICAL STORAGE

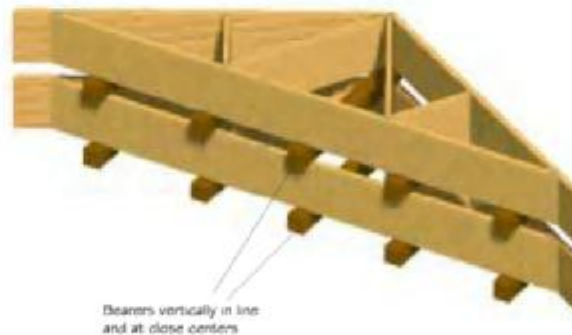


Fig2. SAFE HORIZONTAL STORAGE

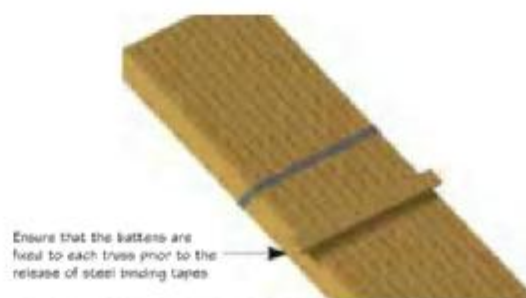


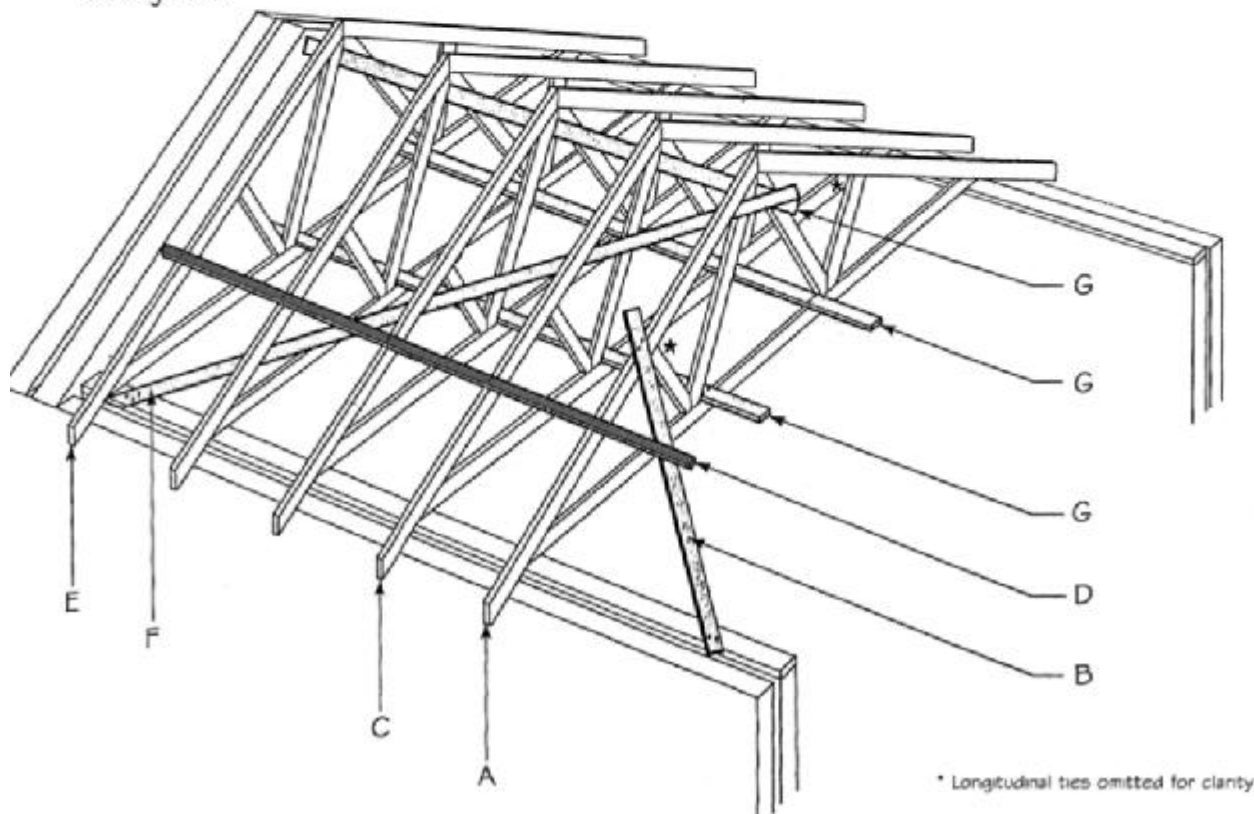
Fig3. SAFE METHOD OF BREAKING A BUNDLE OF TRUSSES

Erection Details

ERECTION

The following procedure is recommended for the erection of trussed rafters.

- 1) Mark the centres of trusses along each wallplate.
- 2) The first truss to be erected, designated 'A', occurs at the uppermost point of the diagonal brace 'F'. For further information on this bracing, see the section Stability Bracing.
- 3) Truss 'A' should be correctly plumbed & held in position with temporary raking braces 'B' which are nailed to the top chord of the truss and to the wallplate. For purposes of clarity, only one brace is shown. They should occur at each side and be of sufficient length to give adequate temporary stability whilst erecting the remaining trusses upto the gable wall.
- 4) Position truss 'C' and brace back to the truss 'A' with temporary battens 'D' at suitable intervals along the rafters and ceiling ties.
- 5) Proceed in this manner until the last truss E is reached.
- 6) Apply diagonal braces 'F' making sure that a firm connection is obtained at the apex of the truss and at the wallplate level. Only one brace has been indicated for purposes of clarity.
- 7) Finally apply longitudinal members at all nodes (see Longitudinal Bracing section).
- 8) Diagonal bracing should run continuously along a roof so that all roof trusses are fixed to a diagonal brace. Repeat this erection procedure for each set of diagonal braces.



* Longitudinal ties omitted for clarity

TRUSS SHOULD NOT HAVE BEEN CUT OR DRILLED AT ANY TIME!