

PV Panel loads applied
To be installed in place of tiles.

Flat roof by others

Flat roof by others

Gable end panel installed to ITW continuous
wallplate restraint bracket detail

T1

Gable end panel installed to ITW continuous
wallplate restraint bracket detail

METALWORK LEGEND
TCL 32 OFF 38mm Truss Clip. (TC-38)
T1x32
J2 4 OFF 38mm Kwiki Hanger. (KH-38)
J4 4 OFF 75mm Kwiki Hanger. (KH-75)

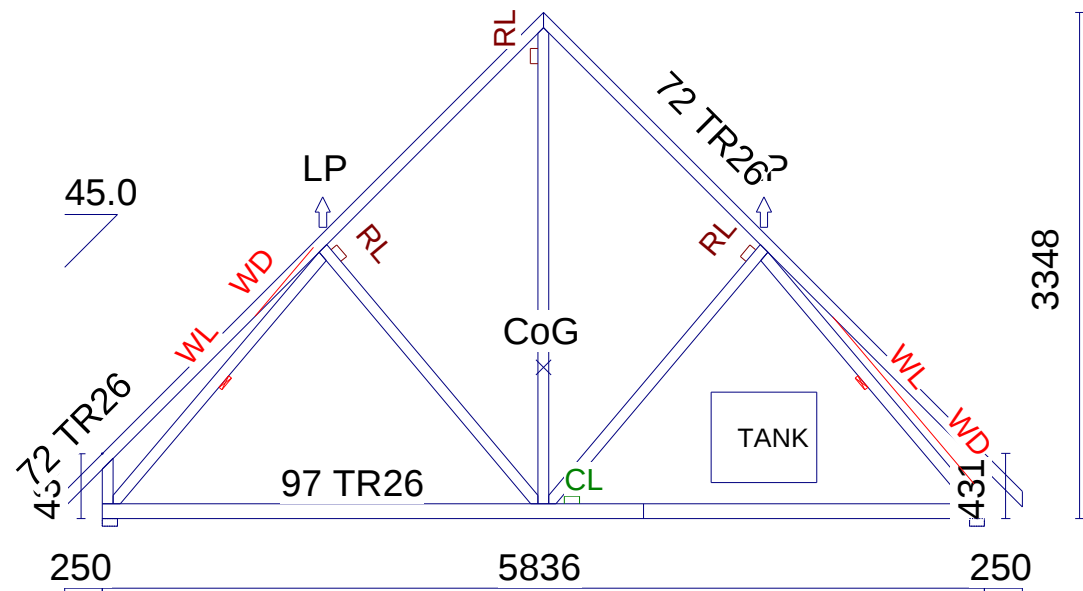
Bracing Colours
Rafter Diagonal (RD) ———
Rafter Longitudinal (RL) ———
C/Tie Longitudinal (CL) ———
Web Diagonal (WD) ———
Web Longitudinal (WL) ———

LIMITS FOR STANDARD BRACING
WALL PLATE HT. HIGHEST WIND ZONE
< 3.0 m B
< 5.7 m A
< 8.4 m 0
IN ACCORDANCE WITH PD 6693-1 ANNEX E

THIS INFORMATION IS SUPPLIED IN GOOD
FAITH BUT WITHOUT LIABILITY. IT IS THE
BUILDING DESIGNERS RESPONSIBILITY TO
ENSURE THE STABILITY OF THE OVERALL
STRUCTURE.

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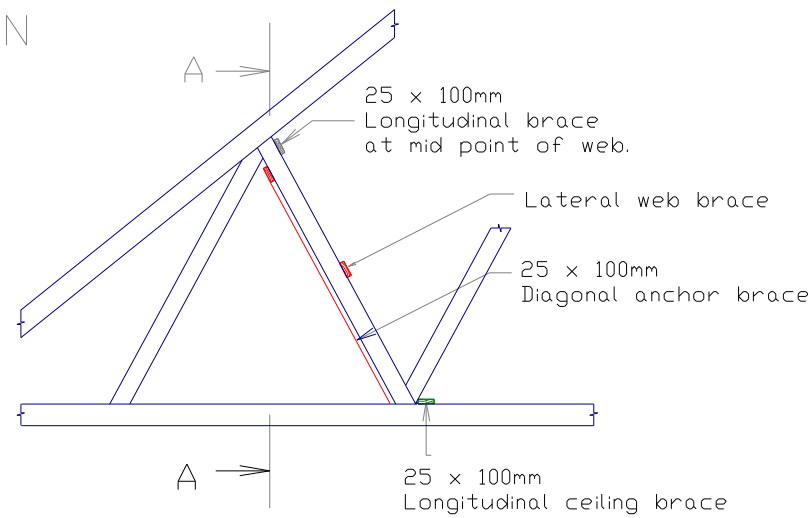
T1 16 OFF - 40 kg/ply

Extra 25mm added to overhangs for site trimming tolerance.

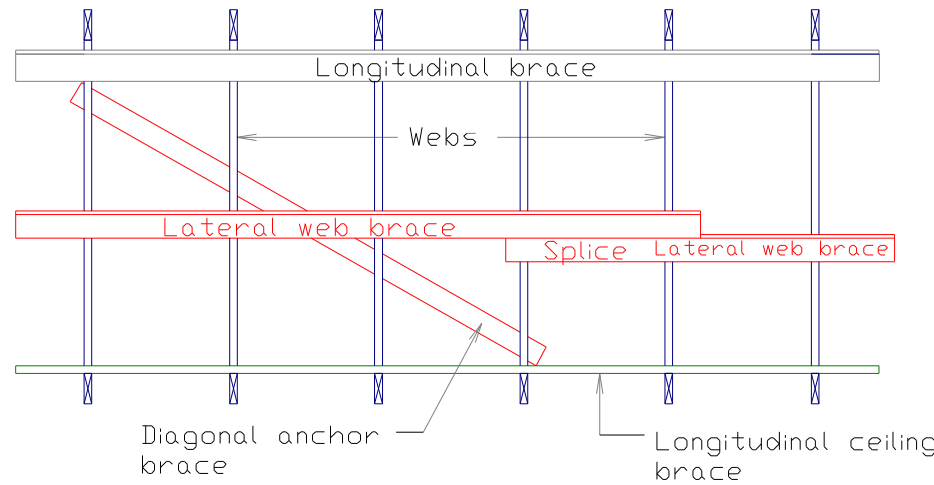
Compulsory Lateral Web Bracing.

See Additional Trussed Rafter Bracing
Details For Applicable Truss Webs.

ELEVATION



SECTION A-A



FIXINGS: Use 2No 3.75 dia x 75mm long round wire galv nails
at each crossing.
NOTE: Install web diagonal anchor brace at each end of the web
longitudinal brace & at every 6 meters maximum distance between.
For run of trusses less than 3 no. use the alternative "T" Brace
detail.

GENERAL NOTES:
This drawing to be read in conjunction with relevant Architect's and Engineer's details.
Truss rafters designed to BS EN1995-EC5 (UK) and generally spaced at 600mm centres. All truss rafters to be erected truly vertical and parallel.
All single trussed rafters to be fixed to wallplate using truss clips. All multiple truss rafters to be fixed to wallplate using 4 no. framing anchors.
Wallplates (Generally 50mm x 100mm TR26) to be securely fixed to brickwork and/or steel beams. Where required lateral restraint straps to be fixed at every gable and party wall. Straps to be 30mm x 5mm thick (or equivalent) galvanized steel, fixed to minimum 3 No. trusses and nogginns using at least 4 no. fixings of which at least one to be in the third rafter.
All trussed rafter details to be checked and approved by client prior to manufacture.

BRACING NOTES:
Layout and bracing scheme based on PD 6693-1. The bracing scheme shown is for roof stability only and to resist the effects of wind drag on the roof surface. It is assumed that sufficient wall stability is provided by the ceiling level bracing in conjunction with the plasterboard. All braces (unless stated otherwise) to be ex 25x100mm and fixed to every truss they cross and the wallplate using minimum 2 No. 3.35mm x 65mm galvanized round wire nails (3.1 x 90mm long mechanically driven gun nails may be substituted for the 3.25 x 65mm nails). All lap joints to be side by side and over at least two trusses. Where bracing members cross each other, one brace should be stopped at adjacent trusses and an extra 25x100mm continuity provided and fixed to a minimum two trusses either side of the break. Where chevron web bracing is specified, it should be installed continuously along the line of the web, each brace should be inclined approximately 45 deg over at least three trusses. The ends of all braces to be securely anchored.

CDM NOTES :
For CDM regulations we are required by law to confirm the Client is aware of their duties under CDM and have a copy of the pre-construction information from the health and safety file concerning the design. Without this information we cannot complete a full risk assessment. In the absence of this information this drawing is issued on a preliminary basis only.

For CDM considerations and regulations:
issued with these drawings is a set of trussed rafter component and trussed rafter roof assembly health and safety hazards which should be brought to the attention of the Principle Designer and Client for inclusion in the safety file.

HAZARD - WORKING AT HEIGHT :
We recommend the use of platforms to work from and as a last resort safety netting to restrict falls. We recommend the use boards below truss ceiling tie level, particularly for complex and top hat truss roofs and where extra services may be required. Board trusses at each level of construction at the earliest possible point. Consideration should be given to reducing erection and assembly work at high level by, for example, pre-fabrication of roof sections at ground level.

TRUSSES MAY NOT BE NOTCHED, DRILLED OR CUT WITH THE EXCEPTION OF OVERHANGS, WITHOUT THE EXPRESS PERMISSION OF THE ROOF TRUSS MANUFACTURER.

STRUCTURE :
The builder must ensure suitable strength support is provided at the bearing point of all trusses and in particular gable trusses and multiple components.

GIRDER FIXING :
Principle girders are formed from multiple components, i.e. 2,3 or 4 trusses fixed together. The components are supplied to site in separate pieces for fixing in situ. Truss chords must be bolted together and all other members may be nailed. Full details of fixings, i.e. size, spacings and positions are fully detailed on the girder fixing sheets attached to delivery tickets. If extra sets are required please do not hesitate to ask.

GIRDER SHOES / TRUSS SUPPORTS :
All truss to truss or truss to timber connections must be via girder truss shoes providing a min. 75mm bearing to the trusses. Fixing of the shoes must utilise all nail holes and bolt holes as appropriate and the nails should be 30x 3.75mm square twist nails. Bolt fixings will be specified accordingly. Special support details will be shown separately as necessary.

VALLEY AREAS :
Where roof areas overlay trussed rafters the members of the lower trusses must be restrained at a maximum spacing of 400mm. Tiling battens are sufficient for this purpose.

ERECTION :
The responsibility for correct erection rests with the site supervisory personnel. The drawings supplied by Merronbrook are intended to identify the main features and principle components. It is assumed the work will be carried out and supervised by experienced and competent personnel and that exhaustive detail is not required. For further construction details and other information required please refer to the Trussed Rafter Association technical handbook site installation guide. This is provided with the 1st delivery tickets per site and should be kept safely for reference by the site personnel. See delivery tickets for full cutting lists of loose material supplied to complete the roof. If these lists are not adhered to, then material shortages will occur. Merronbrook take no responsibility for shortages in these circumstances.

Roof specification :

600mm centres
Rafter Dead load - 835 N/m2 (Tiles up to 480N/m2
+ 115 N/m2 batten / felt / self-weight + 240N/m2 PV panels)
Tile type = Russell Lothian
Snow Load 386 N/m2
Ceiling Dead load - 250N/m2
Ceiling Imposed Load - 250N/m2

Trusses have NOT been designed to
take the weight of the following items:-

GRP Chimneys
Hoist

Construction Issue

REV		REVISIONS		Int
Rev	Date	Comment		
A	1-9-24	Flat roof dims		MA
B	13-9-24	PV Panels applied,		JRT
C	26-9-24	flat roof removed as comments Construction issue		JRT

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Drawn : Jon Thorp		Tel: 01252 844 747
Client: CALA Homes (Thames) Ltd		SITE :Brooklands College, Brooklands College Heath Road,
SPACING :600mm	DATE : 26-9-2024	
LOADS:Tiles=975	Snow=386 N/m2	Proj/Dwg No:H01045/HT 1 (Fir) [Plan 1]