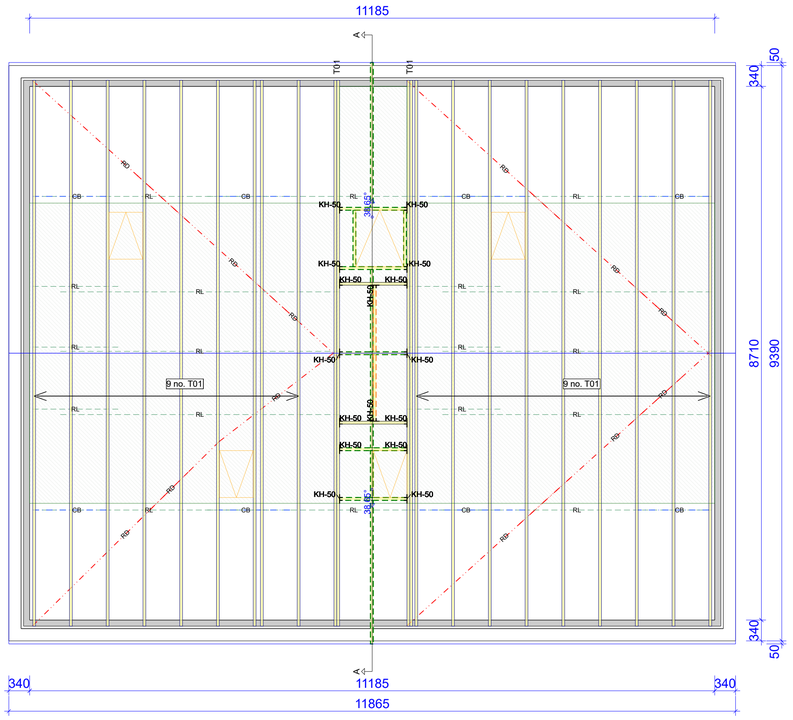
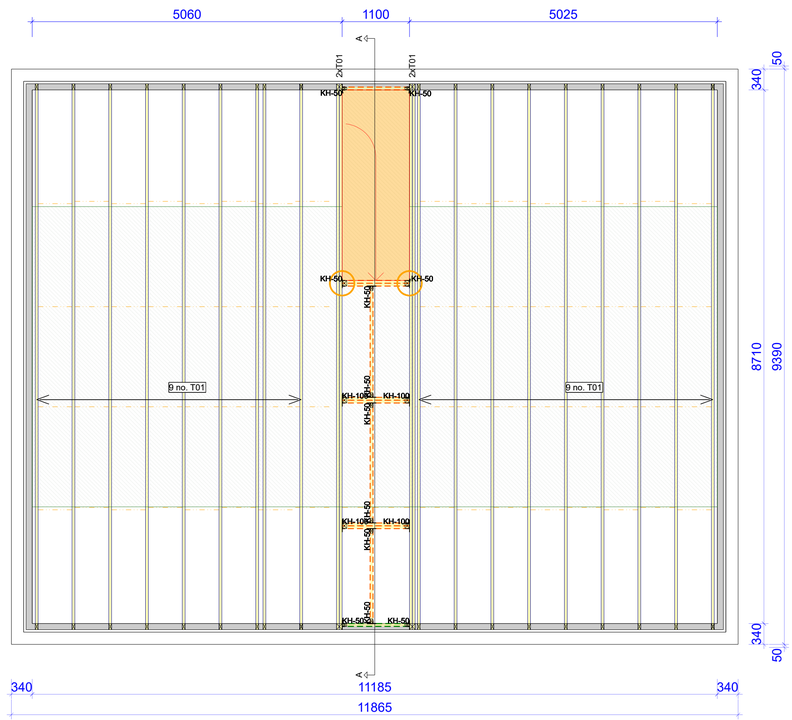
APPLIED TRUSS LOADS: 0.900 kN/m² Rafter dead load on slope 0.750 kN/m² Rafter live load on slope 0.250 kN/m² Ceiling dead load on plan 0.250 kN/m² Ceiling live load on plan 0.250 kN/m² Attic room dead load 1.500 kN/m² Attic room live load 0.350 kN/m² Partition Load (For Attic/Floors)

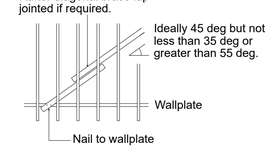


Rafter Level

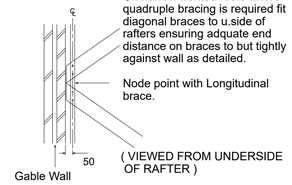


Ceiling Level

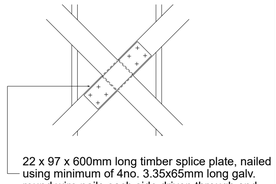
BRACING DETAILS



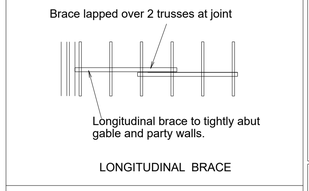
RAFTER BRACE



RAFTER BRACE (ABUTTING WALL)

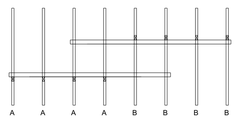


RAFTER BRACE (CROSSING)

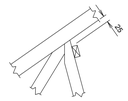


LONGITUDINAL BRACE

Locate braces to minimize distance between them & continue over 2 trusses into adjacent section

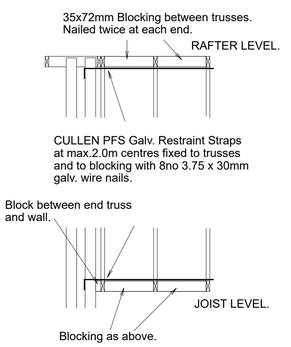


LONGITUDINAL BRACE (OFFSET NODE POINTS)



Longitudinal brace offset 25mm from rafter to clear diagonal brace.

LONGITUDINAL BRACE (OFFSET)



GABLE RESTRAINT DETAIL.

GENERAL NOTES

1. Roof Trusses Designed in accordance with EC5, to EN1990:2002 + EN1995-1-1:2004 + A1:2008 + UK-NAPD6693-1:2012

2. This drawing to be read in conjunction with all relevant Architects and Engineer's drawings. It is to be read and fully understood before work commences. IF IN DOUBT - ASK

3. Trusses and loose timbers to be 600mm centres maximum unless otherwise stated.

4. Provide truss clips to trusses at wallplate bearings.

5. Secure girder trusses to wallplate using 2no. Framing Anchors.

6. The Building Designer is responsible for the design and detailing of anchorages to secure wallplates to the building structure.

7. Internal walls to be stopped below underside of truss bottom chords to allow adequate gap for truss deflection, except where shown otherwise.

8. Water tanks are to be supported on the trusses in accordance with fig 7 of BS5268 part 3 but using bearer sizes as stated.

9. Multiple Girders bolted together in accordance with David Smith St. Ives specification.

10. The bracing shown is indicative only. It remains the responsibility of the Building Designer to ensure all bracing is sufficient

11. All bracing to be minimum 22mm x 97mm

12. Bracing Legend :-
RD Denotes diagonal rafter bracing
WL Denotes Design Bracing. Fixed at right angle to trusses, positioned at centre of each web spanning truss type.
RL Denotes Rafter Longitudinal Bracing.
CB Denotes Web Chevron Bracing.
WD Denotes diagonal raking Bracing. Fixed at ends of longitudinal web brace runs and at 6m intervals.
CL Denotes Ceiling Longitudinal Bracing

13. All bracing to be fixed to each truss using 2-no 3.35mm x 65 long galvanised wire nails. Bracing to be lapped as required over a minimum two trusses.

14. Longitudinal braces to be fixed to all trusses of the same type and be fixed to at least two adjacent trusses of the next type where possible.

15. longitudinal bracing is to be provided at all node points: as shown on truss profiles.

16. Longitudinal braces are to butt tightly against gable and party walls.

17. Stability bracing for this roof assumes that there will be a rigid plasterboard ceiling fixed to the underside of the trusses unless noted otherwise.

18. Proprietary hangers, anchors and fixings to be used in accordance with manufacturers instructions.

19. All loose timber to be TR26 grade.

20. All dimensions to be verified prior to manufacture.

21. Refer to individual truss calculations for Tank Load details.

21. TRUSSES ARE NOT TO BE CUT, NOTCHED OR DRILLED WITHOUT PRIOR APPROVAL

SITE SAFETY - CDM REGULATIONS

With regard the safety of site operatives during the construction of this roof structure we would recommend the following :-

Erection procedures should follow the guidance set out in BS5268; part 3 2006, including the provision of temporary bracing as appropriate.

Site storage / handling should follow the guidance set out in the TRA technical handbook, and accord with all manual handling directives.

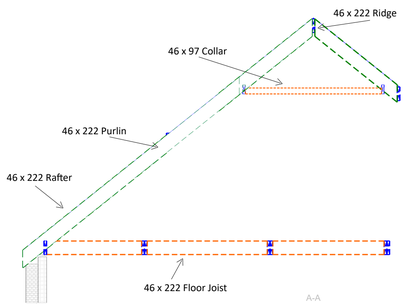
Truss weights, sizes and centre of gravity detailed on drawing. (weights are per ply unless otherwise noted)

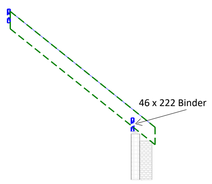
Where treated timber is specified operatives should wear gloves at all times.

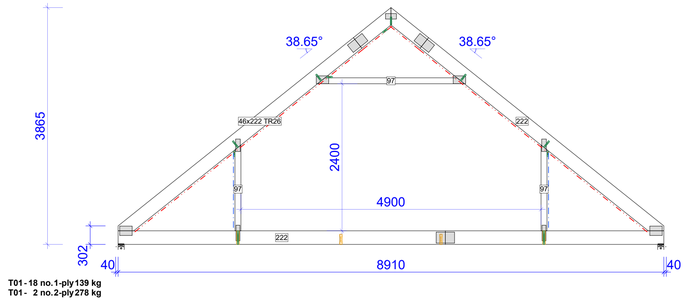
Trusses are manufactured with connector plates that may project past the timber. The edges of the connector plates are sharp - DSSI advise gloves are worn when handling trusses.

Suitable staging / working platforms should be constructed with adequate guarding / handrailing to facilitate accurate and safe placement and erection of trusses.

Hard hats and correct PPE should be worn at all times.





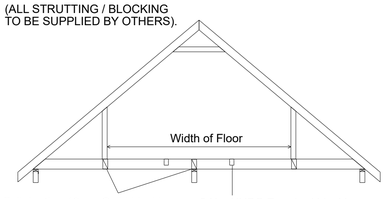


T01 - 18 no.1-ply139 kg
T01 - 2 no.2-ply278 kg

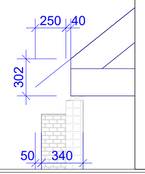
Strutting Requirements of Floor Widths over 4.5m

NHBC Require floor joist members of Attic trusses to be strutted as intermediate floor joists. Use either Herringbone Strutting (38x38 timber or propriety metal fasteners) or solid strutting not less than 3/4 the depth of the floor joist and at least 38mm thick.

(ALL STRUTTING / BLOCKING TO BE SUPPLIED BY OTHERS).

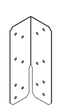


Eaves Detail



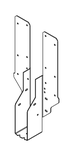
TC Metalwork Detail

Fix the Truss Clip, TC, using 3.75 x 30mm Square Twist nails to wallplate and Truss. Supplied to suit 35mm and 46mm Trusses.



FAS Metalwork Detail

Fix the Framing Anchor, FAS, using 3.75 x 30mm Square Twist nails to Wallplate and Truss. Supplied in Pairs to allow for location to Wallplate for Double, Triples and Quadruple 35mm and 46mm Trusses.



KH Metalwork Detail

Fix the Kwiki Hanger, KH, using 3.75 x 30mm Square Twist nails.

Rev.	Reason for revision	Date
B	**Amended in line with comments dated 29/08/18**	**30/08/18**
A	**Amended in line with comments dated 23/08/18**	**24/08/18**

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Client:	Paul Evans
Project:	R/O 65 High Street Upwood, Cambridgeshire
Drawing Title:	Plot 1 Roof Layout

Scale	Drawn	Date	Drawing No.	Rev.
A1@1:50	JH	30/08/2018	52329-S-01	**B**