

# Caldene STRUCTURAL TIMBER SOLUTIONS

# Standard Details & Documents

# Calldene Structural Timber Solutions

Building 1063 Cornforth Drive, Kent Science Park, Sittingbourne, Kent, ME9 8PX enquiries@calldene.co.uk

T 0207 046 0971

www.calldene.co.uk

### **Dover Truss Timber Engineering**

Shelvin Manor, Shelvin, Canterbury, Kent, CT4 6RL sales@dovertruss.co.uk T 01903 844303

www.dovertruss.co.uk

### **Triad Timber Component**





# **Standard Details & Documents**

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# **Notching and Drilling—Solid Timber Joists**

# Notching and drilling should be designed by an engineer where:

- the joist is deeper than 250mm
- it does not meet the guidelines in this document, or
- it is close to heavy loads, such as those from partitions, cisterns, cylinders and stair trimming.

# holes located on the centre line in a zone (0.25-0.4 x span) from the end and max. notch depth = 0.25 x joist depth notches located in a zone (0.1-0.2 x span) from the end and max. notch depth = 0.15 x joist depth

### Notching and drilling should:

- have a minimum horizontal separation of 100mm
- be in accordance with Table 1.

# 100mm min. between notches and holes

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Table 1: Notching and drilling solid timber joists

	<u> </u>	,
	Location	Maximum size
Notching joists up to 250mm depth	Top edge 0.1-0.2 x span	0.15 x depth of joist
Drilling joists up to 250mn depth	nCentre line 0.25-0.4 x span	0.25 x depth of joist





# **Notching and Drilling—Engineered Joists**

### **I-Joists**

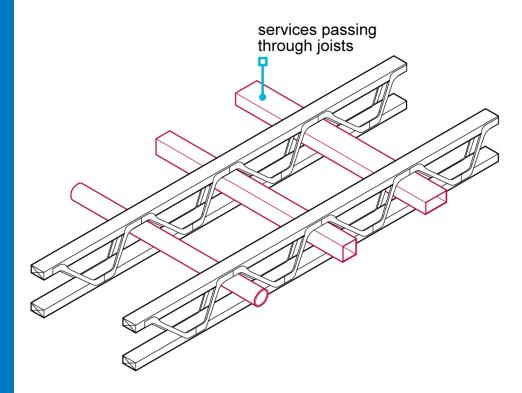
Preformed holes should be provided in the web and:

- Holes or notches should not be cut without the approval of the manufacturer
- Restraint straps can be slotted into webs immediately below the top flange.

### **Metal web Joists**

### In metal web joists:

- Service conduits should run in the gaps between the metal webs
- Maximum duct sizes should be in accordance with the manufacturer's recommendations
- Large service ducts may have to be inserted before fixing the joists, as it may not be possible after the joists have been fixed.



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# **Notching and Drilling—Attic Trusses**

The cutting, notching or drilling of trussed rafters is not generally permitted unless the Trussed Rafter Designer has allowed this for in the design. With the specific exception of the rules for cutting and drilling shown below, it should be assumed that trussed rafters must NOT be cut, notched or drilled unless there are specific instructions on site, prepared by the Trussed Rafter Designer.

### **Standard Trussed Rafters**

- Overhangs and flying rafters may be trimmed unless otherwise advised by the trussed rafter supplier.
- Cutting, notching and drilling is NOT permitted. 'Room in the Roof' (Attic)
  Trussed Rafters

The following actions are **NOT** permitted:

- Notching anywhere within the trussed rafter. (See Note 1 Below)
- Drilling of the rafter or internal members.

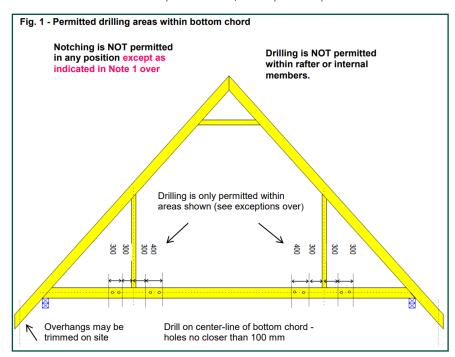
Drilling of the bottom member of the truss is permitted within the following constraints:

- Holes may be drilled only within the areas indicated in Fig. 1 overleaf
- Holes must be drilled on the centre-line of the member.
- Minimum spacing between adjacent holes is 100 mm.
- Maximum size of drilled holes is as shown in Table 1 overleaf.
- Under no circumstances should holes be drilled within 500 mm of a loadbearing support or within 250 mm of a plated splice joint.

'Room in the Roof trussed rafters should never be cut to accommodate dormers or stairwells without obtaining detailed instructions from the Trussed Rafter designer.

Note 1 Notching the bottom Chords of 'Room in the Roof' (Attic) Trusses to a maximum depth of 5mm is permitted in order to accommodate gable lateral restraint straps as required by Building Regulations.

Table 1 - Maximum size of hole within permitted areas, based upon the depth of the bottom chord



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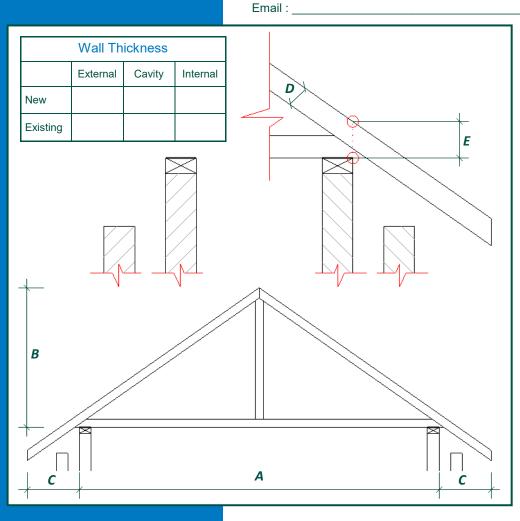




### **INFORMATION REQUIRED TO MATCH AN EXISTING ROOF**

### **Customer Contact Details**

Name :
Site Address :
Tel Phone Number :



PITCH	
SPACING	
TYPE OF TILE	
No. of TRUSSES	
GABLE LADDERS REQ'D	YES/NO
ANCILLARY TIMBERS REQ'D	YES/NO
TREATMENT	
DELIVERY DATE	

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### Triad Timber Component

Unit A, 17 Peter Road, Lancing Business Park Lancing, West Sussex BN15 8TH enquiries@triadtimber.co.uk T 01903 765 167

www.triadtimber.co.uk

A - Span of truss over outside wall plates	
B - Height of roof from top of apex to underside of ceiling (in cut roof top of rafters)	
C - Overhang from outside of wall plate to end of overhang	
D - Depth of rafter	
E - Distance top of wall plate outside of rafter (VERTICALLY).	

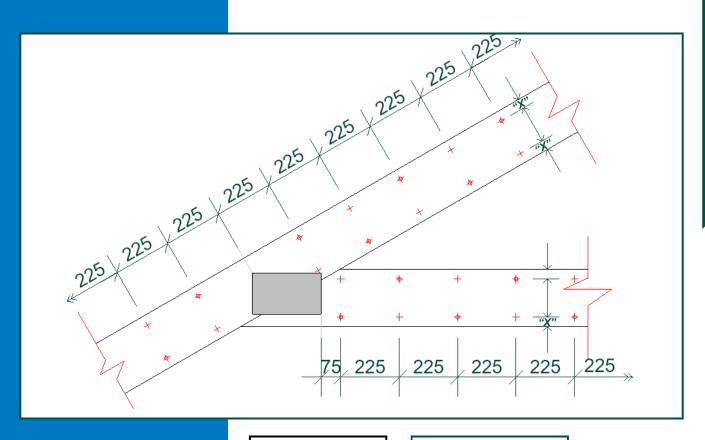




# **Nailing Pattern For Girder Trusses**

### **Use 9 Guage Round Wire Galvanised Nails**

63mm Long for 38mm Thick Timbers 75mm Long for 50mm Thick Timbers



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Nail Both

### 3 Ply Unit



Nail Both

### 4 Ply Unit



Centre Two Nailed
Together First

# \_

Nail Point side



Nail Head side

Timber Depth	DiM "x"
75x100	19mm
125	25mm
150 & Above	38mm





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