

Contract **Proposed House at Orchard Eggs,  
Brambletye Lane, Forest Row**Part of  
Structure **Timber Kit Summary.  
And Panel Summary Sheet****CALCULATION**

Sheet No: rev.0

Cont. No: A/16016/214

Date: 08-Jun-2016

Designer: GJS

**Non-standard panel summary.**

Panel No. (see over- marks)	Panel Sheathing		Timber-to-timber nailing		Sole plate to underbuilding fixing	
	Type of	Nailing crs (mm)	No. and type of	crs (mm)	Type of anchor	crs (mm)
1	2 x 9mm OSB	75	2 x Paslode Nails	600	ITW - Spit HIT 8-60/92	1000
2	2 x 9mm OSB	50	2 x Paslode Nails	320	ITW - Spit HIT 8-60/92	400
3	2 x 9mm OSB	50	2 x Paslode Nails	230	ITW - Spit HIT 8-60/92	270
4	2 x 9mm OSB	50	2 x Paslode Nails	260	ITW - Spit HIT 8-60/92	300
5	2 x 9mm OSB	50	2 x Paslode Nails	380	ITW - Spit HIT 8-60/92	510
6	9mm OSB + Pb	50	2 x Paslode Nails	350	ITW - Spit HIT 8-60/92	420
7	9mm OSB + Pb	75	2 x Paslode Nails	600	ITW - Spit HIT 8-60/92	1100
8	9mm OSB + Pb	75	2 x Paslode Nails	600	ITW - Spit HIT 8-60/92	1200

**Wall Panels.**

**External:** 38 x 235mm C16 studs at 600mm c/c unless shown otherwise on overmarked drawings. Complete with double top and bottom rails.

**Internal Load Bearing:** 38 x 90mm C16 studs at 600mm c/c unless shown otherwise on overmarked drawings. Complete with double top and bottom rails.

**Standard Lintels.** - (all to be provided with 1 No. 38mm wide cripple stud unless noted (x) on marked up layouts)

Type 14: 2 / 45 x 220mm C24 timbers

Type 15: 3 / 45 x 220mm C24 timbers

Type 3: 150 x 90 PFC

Type 4: 180 x 90 PFC

**Wall Ties**

Net wind load applied to wall ties =  $0.85 \times 0.85 \times 0.936$   
= 0.68 kN/m<sup>2</sup>

Stud c/c = 600 mm

Cavity Width = 50 mm

so, provide CULLEN FT-50 wall ties at an average  
density of 3.7 per m<sup>2</sup>.

**Disproportionate Collapse**

In accordance with UKTFA technical bulletin 3, and Trada publication 'Timber Frame Housing: UK Structural Recommendations' 3.1mm diameter nails at 300mm c/c between the lower rails of the wall panels to the upper rails of the panels below is sufficient to provide the effective horizontal tying required.

**Temporary Stability**

Ensure all walls are accurately aligned, temporarily braced and stable. Temporary bracing on the walls should remain in place until the roof is wind-braced. Temporary bracing that provides racking resistance should not be removed until the wall lining is installed.

**Factory Nailing Schedule.**

**External And Apex Panels:**

Component		Nail Size (mm)	Type	Qty.	Spacing	
from	to					
Rails	Stud	88 x 3.1	Screw Galv Strip	2	Each end	*
Stud	Dwang	88 x 3.1	Screw Galv Strip	2	Each end	*
Lintel	Lintel	75 x 2.8	Ring Galv Strip	2	300 crs both faces	
Stud	Stud	75 x 2.8	Ring Galv Strip	2	300 crs both faces	
Stud	Lintel	88 x 3.1	Screw Galv Strip	4	Each end	
Top Rail	Lintel	88 x 3.1	Screw Galv Strip	2	See Panel Summary Sheet	*
Transome	Stud	88 x 3.1	Screw Galv Strip	2		*
OSB	All	50 x 2.8	Paper/Plastic Galv Collated	1	75 crs perimeter of sheet	
				1	150mm intermediate studs	

**Load Bearing Panels:**

Component		Nail Size (mm)	Type	Qty.	Spacing	
from	to					
Rails	Stud	88 x 3.1	Screw Galv Strip	2	Each end	
Stud	Dwang	88 x 3.1	Screw Galv Strip	2	Each end	
Lintel	Lintel	75 x 2.8	Ring Galv Strip	2	300 crs both faces	
Stud	Stud	75 x 2.8	Ring Galv Strip	1	300 crs both faces	
Stud	Lintel	88 x 3.1	Screw Galv Strip	4	Each end	
Top Rail	Lintel	88 x 3.1	Screw Galv Strip	2	See Panel Summary Sheet	
Transome	Stud	88 x 3.1	Screw Galv Strip	2		
OSB	All	50 x 2.8	Paper/Plastic Galv Collated	1	75 crs perimeter of sheet	
				1	150mm intermediate studs	

\* Denotes 3 nails provided for panels over 2400mm high.

**A/16016/214 – SF24708 – Size A3**

CAMERON + ROSS OVER MARK - 3 of 3 (rev 0) - 08/06/2016.

(Engineer – GJS)

**TO BE READ IN CONJUNCTION WITH STANDARD DETAILS  
AND CALCULATIONS.**

Unless noted otherwise above, timber-to-timber panel nailing (i.e. headbinder to top rail of panel, bottom rail of panel to soleplate etc...) is to be via pairs of 90x3.1mm paslode nails at 600mm crs and the soleplate should be fixed to the underbuilding with Spit HIT 8/60/92 anchors at 1200mm crs

Holding Down Straps to be located each side of any opening which cuts the bottom rail, at each external corner of the building and at 3600mm centres between the noted locations.

NOTE - This Summary Sheet is to be read in conjunction with Site Nailing Schedule and Standard details.