

**Notes:**  
 Building Regulation Approval: The owners of the property are advised that an approval of the calculations and drawings by the Local Authority Building Control should be obtained prior to any ordering of material or fabrication. No liability is accepted for any changes that may be required as a result of work having commenced prior to such an approval having been obtained. - This drawing remains the copyright of Express Plans and is not to be copied, altered or changed without permission.  
 This drawing to be read in conjunction with architects and project specifications. Any discrepancy between this drawing and all other project drawings should be brought to the attention of Express Plans for clarification prior to commencing the works.  
 Local Authority's building inspector is to be informed by the contractor in writing at least 48 hours prior to the works starting on site and their agreement obtained that work can commence. Structural Steelwork: All steel members grade to be BS EN 10025 S275 J0 (Hollow sections to be S355). Length of the beams and the columns should be provided by the contractor allowing minimum bearing. DO NOT SCALE THE DRAWING.  
 Steel Corrosion Protection: Preparation: Shot blast to SA2.5. Shop primer, Zinc phosphate (pH 7.5 max) Fire Protection to steel Beams & columns: Box around all steels with 50 x 50 s.w. framework and 2 layers of 12.5mm Fire line plasterboard with staggered joints and 3mm skim finish.  
 Pad stones: Pad stones to be grade C30 concrete. Beam bearing on pad stones to be minimum 100mm unless otherwise noted specified on Structural Timber: All timber grade C24 unless otherwise stated. Joints may be notched over bearing, maximum depth of notch 1/3 joist depth. Use steel beam with solid timber packing plates bolted through web of beams M12@500 centres behind joists hangers and for end stop fixing. Temporary Works: The contractor is to accept full responsibility for the stability and safety of the works during the total construction period. No undermining of existing structure is to be carried out prior to consultation of structural engineer.

**COLD FLAT ROOF (GRP).**  
 To achieve U value 0.15 W/m<sup>2</sup>K  
 GRP (Fibreglass) over 18mm plywood decking with 50mm air gap above the insulation, 200 x 50 tanalised C24 s/w joists @ 400 c/c on heavy duty joists hangers, firing pieces with fall 1:40. Insulation to be 150mm K107 Kingspan insulation between Ceiling Joists and K118 - 37.5mm under with 12.5 mm plasterboard and 3mm skim. 20 mm fascia board. 1000 x 30 x 5 mild steel straps screwed to the underside of joists and wall at 1800 mm c/c. Provide Stone Chippings where built up felt is to be used.

a continuous 5mm wide opening or the equivalent area is required to the length of the ridge or provide high level tile vents as agreed with the building control officer

treated flat roof joists fixed to beam and bolted to rafters. all connections and structure to structural engineers details and calculations

Existing ridge not to be moved or altered

all lead flashings to be laid according to lead development association

provide 2 nos of timber joists bolted together around new velux window

50x150mm c24 timber rafters at 400mm centres bolted with existing rafters

eaves ventilator tray to ensure a 50mm ventilation gap

angle bracket typ

12 mm bolt between the two joists

cross ventilation to be provided by a proprietary eaves ventilation strip equivalent to a 25mm continuous gap at eaves level with insect grill and 50mm air gap between felt and insulation

double up 50x100mm timber wall plate with metal straps at 800mm c/c

all new rainwater goods to match profile and colour of existing retained, any new rainwater drainage system installed to be linked to either existing or new soak away system min +5m away from building foundation (tbc on site)

the responsibility of the client / contractor to be achieved minimum 2.0m height & the given heights are for indicative only and the final height to be checked on site by the builder before commencement of any works.

staircase

rise 220mm max

treads 220mm min

pitch 42° max

headroom 2000mm min above pitch line

handrail 900mm high min

spindals 100mm/c max

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