

**Padstone.** Dense concrete padstones bedded in cement mortar and taken up tight under bottom flange of beams.  
**Structural Steel** All structural steelwork to be encased in stainless steel and rendered in 20mm perlite gypsum plaster.  
 Concrete C30P pad stones to be provided to each end of beams with a minimum size of 450x100x225 deep.  
 Steel Beams generally 203x102x23kg/m. Minimum 150 mm bearing to steel. If the steel is exposed it must be treated with Therm O Guard intumescent paint.

**Pitched Roof:** Plain tiles clipped at verge and fixed in accordance with manufacturer's instructions, at approximately 35 degree pitch. The Builder to ensure that the minimum pitch is achieved. 25x50 tanalised battens, on untearable Tyvek breathable felt, 50x150mm rafters at 400mm centres. 50x200 ceiling joist at 400mm centres. Timbers on 50x100 wall plates bolted to walls with 12.5mm rawl bolts at 600mm ccs. Ensure all rafters' members are double nailed each side with minimum 100mm long nails. Boxed rafter feet. Provide 5x30mm M.S. lateral restraint straps at 1.8m ccs fixed to 3 no members at right angles to rafters, joist, and wall plate. 150mm deep flow gutter and 100mm r.w.p.s. Discharge to storm water drainage system 5.0 metres from the building. System to discharge to storm drain via Hepsleeve or Marley upvc 110mm pipe work. Ensure solid blocking between walls and timber members under mild steel straps. 30x5 mm m.s straps at right angles and parallel to roof joist at 1.8m ccs. Screwed to three number members. Joist built into walls 100mm. All timber to be C24 grade regularised and tanalised. Double nail all passings and head and foot of all members. Ensure all rafters' members are double nailed each side with minimum 100mm long nails

**Trap Hatch.** Form openings in new ceiling with trimming in 100x150mm C24 tanalised timber. Supply and fix hinged and insulated roof access hatch. Double and treble rafters and roof joists around openings. Timbers bolted together with M16 bolts at 600mm centres staggered. Bolt holes minimum 50mm from edge of timber. Form opening and fix insulated trap hatch to loft with bolt fastening.

**Roof Structure:** Alternative. Donaldsons or Dover Roof Truss Company gang nail Attic Trusses to BS 5268 at 600mm centres. 25 x 100 diagonal bracing and binders. Use truss clips, as necessary. Provide and fix 25mm t and g chipboard flooring to top of ceiling joist of gang nail trusses. Double trusses as necessary to openings to take new roof load. 50x100mm struts at 400mm ccs Code 6 lead valleys.

**Hips:** 38x200mm C24 hips. Wall plates, ventilation, insulation and ceiling finishes as detail drawings and above.

Hip tiles and/or Code 4 lead weathering. 100mm deep flow gutter and 100 mm rainwater pipes. Discharge to rainwater system or to storm water Tank via Hepsleeve 110mm pipe work. Double and treble rafters and roof joists around openings.

**Roof Space:** 200mm fibreglass insulation between ceiling joist, and 200 mm fibreglass at right angles to ceiling joist. Total 400mm of fibreglass. In positions where the eps or fibreglass will fill the roof void line the ceiling in Celotex double R 90 100 mm thick to manufacturer's specification. 12.5mm plasterboard and set to soffit of ceiling joist.

**Roof Lights:** Rooflights size 780x 980mm to number 1,2,3 and 114x118 millimetres to number 4 and 5 suitable for a 25-degree pitch roof. Double 50x150mm trimming to openings. Allow for all making good.

**Roof Trimming:** 2 number 50x150 millimetre C24 joist bolted together at 600mm centres with M12 coach bolts, nuts and plate washers, Dogtooth connectors to be used with each bolt. Bolts to be staggered and kept 50mm from edge of timber.

**Roof Ventilation:** Continuous vent to all sides of roof to allow 25 mm air gap over the insulation laid between the ceiling joist and 75mm Celotex to the soffit of the ceiling joist. 1200-gauge polythene vapour barrier and 12.5 mm board finish

**Rainwater pipes:** To be connected to trapped gullies

**Openings.** Allow for forming openings as shown on the drawings including all support and finishing.

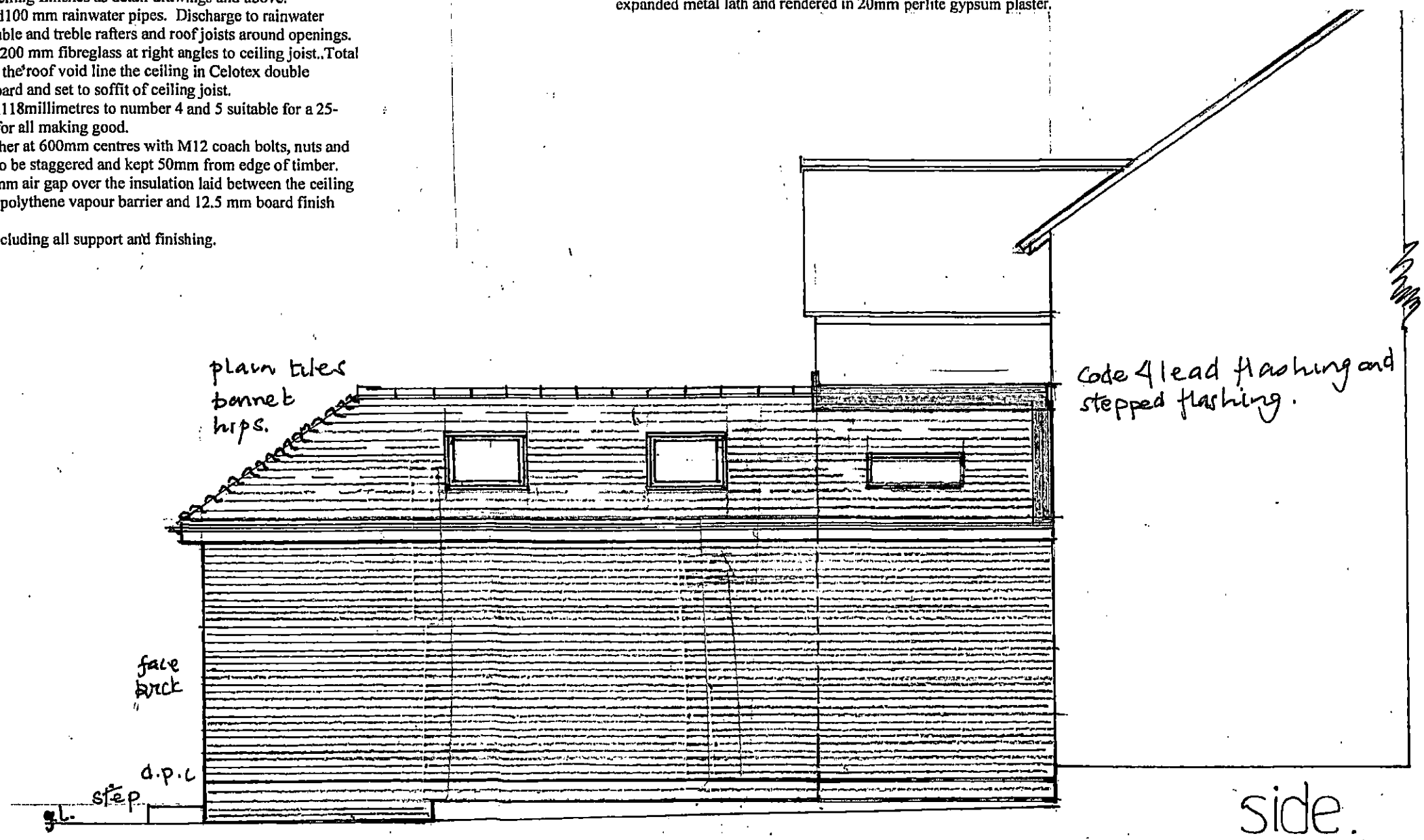
**PROPOSED ELEVATIONS.**

**SINGLE STOREY REAR EXTENSION AT 9 NOAHS ARK, KEMSING, SEVENOAKS, KENT. TN15 6PA DRAWING No: 220221/06. A**

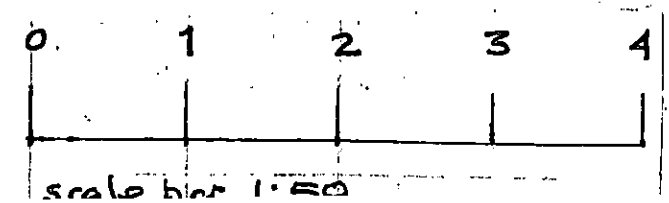
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**Walls:** Masonry. 100mm cavity. External skin of 102mm facing bricks. Internal skin of 100mm Celcon blocks. (Medium density 0.12 W/m2K) with 100mm of Rock wool cavity fill insulation. See wall detail. Thermabate cavity closers to be used. 50mm PIR and 8mm lightweight plaster internally. U=0.12 W/m2 degree K. Catnic Classic lintels as detail for external openings, with tray over. Check lintel type with Catnic before ordering due to load on components. Damp proof course to be a minimum of 150mm above ground level. Additional damp proof course at high and low level as required. Cavity continuing at least 225mm below lowest dpc. Supply and fix Code 4 lead cavity trays and flashings as necessary. 150mm wide vertical and horizontal d.p.c to frames. Provide movement joints in brickwork at 12m centres and block work at 6 metre centres. See details. For special brick treatment features to elevations. All frames to be draught stripped and double glazed. with 20mm air gap and low "e" coating, argon filled to achieve 1.8W/m2 degree C. All glazing to BS 6206 1981. 38mm softwood or upvc window boards. Where solid returns are not provided use Thermabate cavity closers to horizontal and vertical sides of openings. Code 6 lead flashings to be used under frames. Bond new blockwork correctly. Cavities to be continuous. Check Celcon details to ensure correct mix and application of mortar to block work generally. Minimum of 150mm bearing on walls and other supports is provided for lintels and beams. Stainless steel wall ties at 750mm horizontal and 450mm vertical centres staggered and each block course to reveals. Ensure solid blocking between walls and floor members. Ensure a minimum of 150mm bearing on walls and other supports is provided for lintels and beams. Cavities to be continuous. Stainless steel wall ties at 750mm horizontal and 450mm vertical centres staggered.

**Steelwork.** Beam sizes in accordance with the structural calculations. All steel work to be S275 (Grade 43) blast cleaned to Grade SA2.5 and primed with high build zinc phosphate (75 microns). All external steelwork and steel work in contact with exposed external leaf to be hot dipped galvanised to BS EN ISO 1461 (85 microns). Steel work in cavities to be painted with RIW. Fire protection to steel work to be a minimum of half hour resistance unless directed otherwise by the Architect/Surveyor. Timber blocking to web to take fire protection. All structural steelwork to be encased in stainless steel expanded metal lath and rendered in 20mm perlite gypsum plaster.



SEVENOAKS DISTRICT COUNCIL  
 REC'D 01 MAR 2022  
 COMMUNITY & PLANNING SERVICES



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