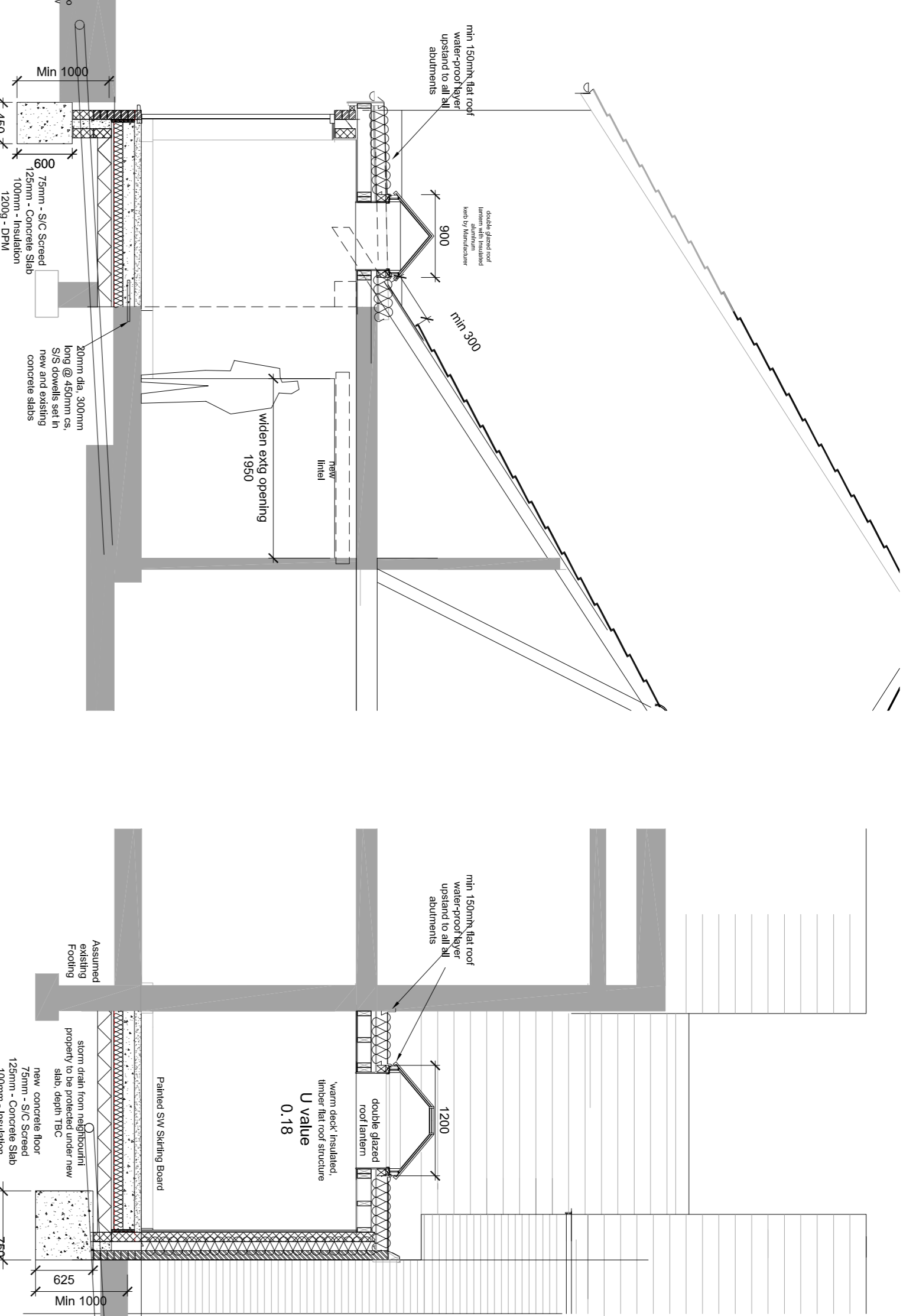
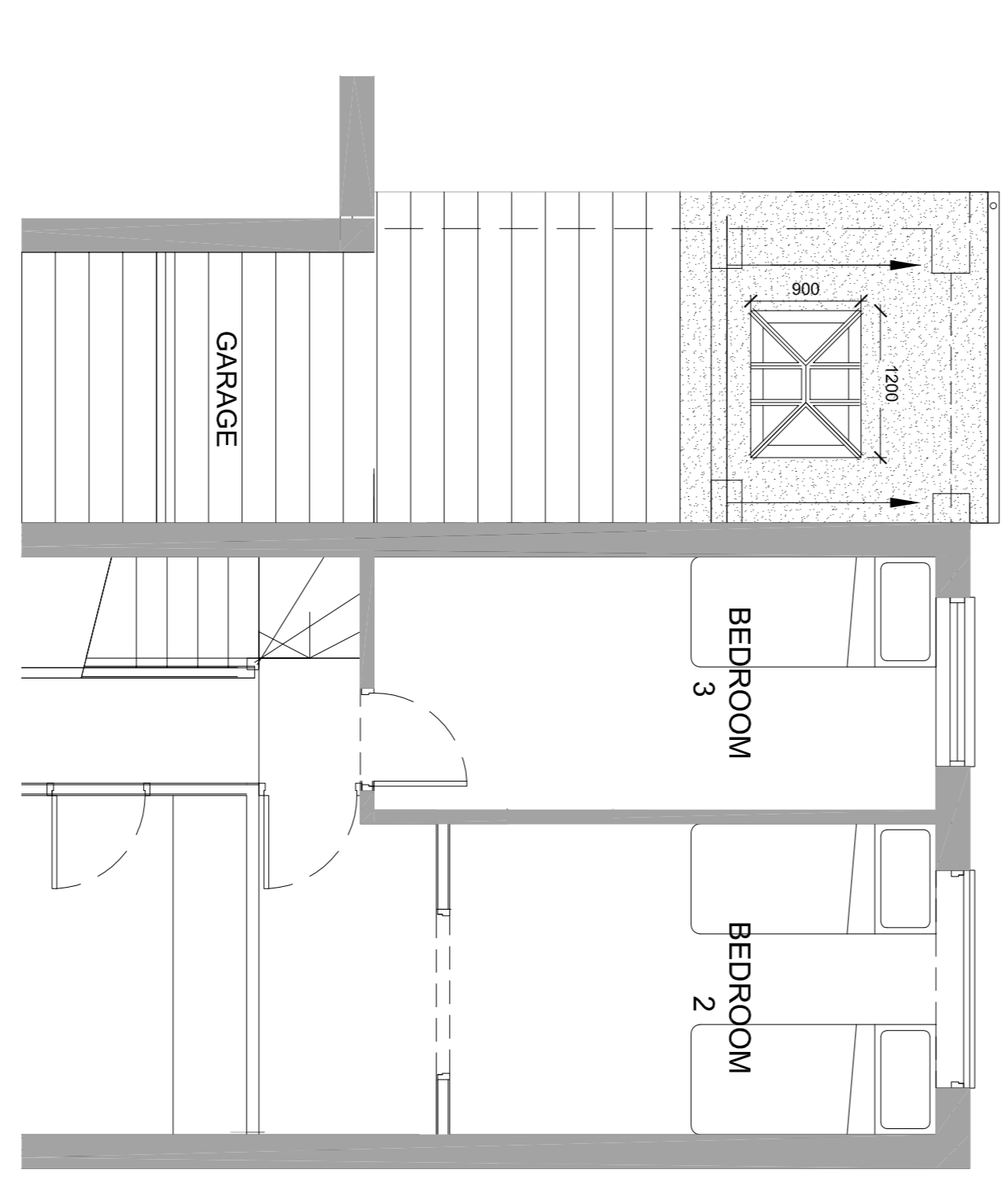


PROPOSED REAR ELEVATION

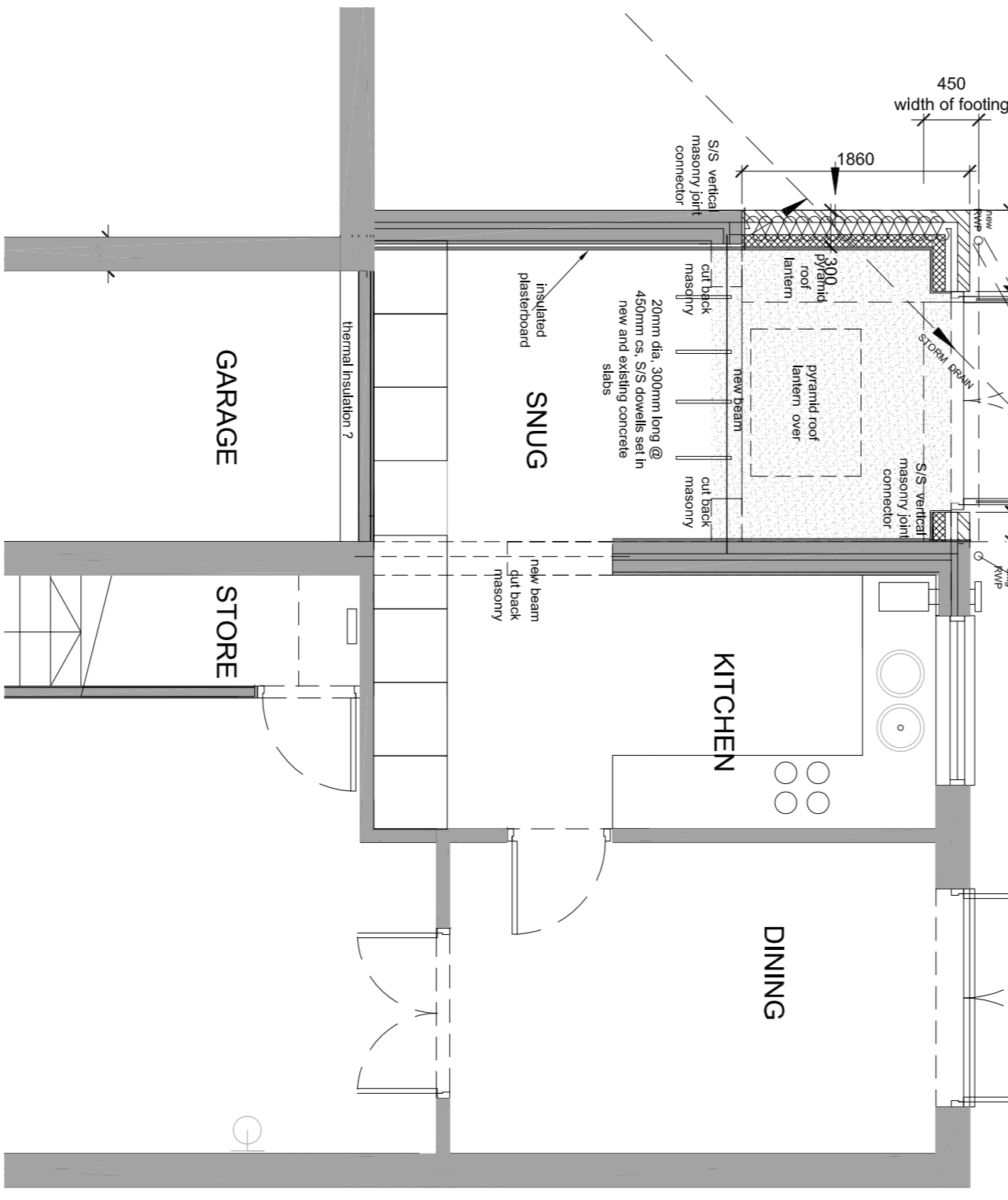


PROPOSED CROSS SECTION A - A

PROPOSED CROSS SECTION X - X



PROPOSED ROOF / FIRST FLOOR PLAN



PROPOSED GROUND FLOOR

EXCAVATIONS:

Site to be free of all vegetable matter & levelled to the underside of the new hard-core. No excavations adjacent to existing walls are to be carried out until the foundation depth is established by digging by hand small trial holes & inspected by the Building Control Officer (B.C.O.) / Approved Inspector (AI). Any underpinning or stabilising concrete infill required is to be confirmed by the B.C.O. / AI

FOUNDATIONS:

Designed to sustain & transmit the loads safely, & not deform the ground as BS8103pt1 & to counter swelling, shrinking & freezing. Design to account for any adjacent trees within 30m, using National House Builders Council Practice Note 3. Foundations not to encroach over boundaries without prior permission of owners. Deep strip (trench fill) concrete footings to be min 1m depth below ground level or 150mm below the invert level of any adjacent drains. Actual depth to satisfaction of the B.C.O. / AI

MASONRY WALLS TO DPC:

Width as well above. Clay bricks (50/sqmm) or proprietary trench blocks approved by the B.C.O. Mortar 1:6 mix, cavity fill 1:3:6 mix, to 225mm below DPC, sloped to weepholes at 900mm cs. DPC min 150mm above gl, installed as CP 102, to be 5mm polythene to BS6515, or bitumen based BS6539, or 2 coarse bitumen based BS6539. DPC fully lapped at joints & with DPM, & external edge projecting beyond the face of the wall.

LOADBEARING WALLS:

Facing brick / blockwork cavity walls and solid walls to BS628. Structural use of masonry. Cavity Wall ties BS1243, at 750mm horizontal centres & 450mm vertical centres, staggered, extra ties at 300mm vertical centres within 225mm of all opening jambs, verges & vertical joints.

NEW INSULATED CAVITY WALLS

Thermal performance U value to be max **0.18 W/m² K**. External leaf / Internal leaf 100mm concrete blocks bs6073, density 430 kg/cu m. Min strength: single storey 2.8 n/sq mnt. **Lambda value 0.15 or lower**, 'calson solar, Celcon standard or thermatite turbo or similar Internal leaf 100mm blockwork, Density 694/783 kg/cu m. Min strength 3.5N/mnt: 100mm cavity. Full cavity fill resin-bonded rock mineral wool bats, by 'Crown Dritherm 34 / 37', or 'Cynroc Isowool' or 'Rockwool' 12mm plasterboard on datos internally.

CONCRETE FLOOR:

If plan dimensions are less than 9m, thermal performance U value to be max **0.22 W/m² K**. Min 50mm, 1:3 cement/sand screed (min 75mm reinforced screed if above insulation) Min 100mm, concrete ground bearing slab. Perimeter / area ratio = 0.46; Insulation to be: 125mm 'Jablite' hi-performance plus (expanded polystyrene/EPS) insulation board or similar or 90mm 'Kingspan K103 kooltherm' (rigid urethane phenolic) insulation board or similar on 1200mm polythene dpm on 25mm sand blinding throughout all new works, fully lapped to new dpm, dpm existing dpm's.

STEEL STRUCTURAL DESIGNMEMBERS:

In accordance with BS449, BS4360 & BS5950 (GRADE 43) as necessary (see calculations/details set out elsewhere). Hot rolled steel beam, angles and hollow sections to BS4848, & BS4, protection as BS5493. All beams to have min end bearing of 150mm, resting on concrete pad stones or steel spreaders as approved by the B.C.O. Pad stone min strength 10 N/sqmm. All beams to have one coat high build zinc phosphate primer & one coat bituminous paint corrosion protection, BS5493. 1/2 HR Fire protection to steel to be 2 layers of 9mm plasterboard, with staggered joints, & skim coat, or two coats of intumescent paint.

STEEL BEAM SIZES AS STRUCTURAL ENGINEER'S CALCULATIONS & DETAILS

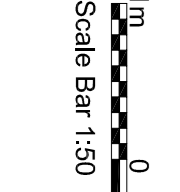
TIMBER STRUCTURAL Grades, species & workmanship in accordance with BS5268, CP 112, BS478, & Table B1 Approved Document 'A' of the Building Regs. Sizes for components selected from Tables B2 to 24 (Column 3, SC3 & SC4 GRADES). See Structural Engineers calculation as necessary. Max moisture content of timber 22%, all timbers double vacuum preservative treatment. Roofs & floors to be restrained to restrict lateral movement of supporting, & non-supporting masonry walls & transfer loads from roof to walls. SW wall plates secured at 1.8mm cs with 30 x 5 x 1200mm long galv. ms. straps with min 800mm leg screwed to inner leaf/face of masonry wall. Floor & flat roof joists use straps, at 1800mm cs with min 200mm screwed to masonry & 1200mm to face of joist, with sw packing between wall and parallel joists, 4 x no 8 screws / strap. Joist hangers to BS6178 38 x38mm. Nitches no deeper than 1/8th depth, no closer than 0.07 of span to supports, or further away than 1/4 span. Holes to have diameter no greater than 1/4 depth at center span, & no closer than 3 x diameter located between 0.25 & 0.4 times the span from supports.

FLAT ROOF:

WARM DECK single ply non-bituminous waterproof layer, Sarnafil or similar approved, fitted as manufacturers recommendations to insulation layer. **min 120mm thick PIR insulation boards (K value 0.002) Kingspan TR27 (fibre glass coated)** or similar approved, fixed using telescopic tube fasteners as manufacturers recommendations. **on vapour control layer**, with sealed joints and sealed all around perimeter on 18mm WBP plywood deck fully screwed to min 50mm 1:80 firings, fully screwed to SW joist structure, 125 x 47mm SW joists @ 450 cs

GLAZING

First floor habitable rooms to be fitted with egress windows, with unobstructed openable lights (no locking mechanisms) area 33sqm, with min width 450mm and 750mm height/cill to be min 800 & 1100mm above floor level. To be as BS6262 critical locations i.e. windows below 800mm from fit & doors/side panels (300mm either side), below 1500mm; glazing to be: glass that breaks safely (as set out in bs6206, i.e. laminated or toughened). Glass that is robust, in small panes max width 250mm, area not exceeding 0.55sqm (250 x 2000mm) i.e. annealed or polycarbonate. Permanently protected to a height 800mm above fit with a robust screen preventing a 75mm sphere contacting to glass & which is difficult to climb i.e. no horizontal members. The area of the openings in the enlarged building shall not exceed 25% of the area of the enlarged building. All glazing to be double unless otherwise specified. Windows to be timber or PVCu. Reg L1 SEC.1.14 extensions to existing; U value to be **1.4 W/m² K**. Double glazing units for all windows to be as L1 appendix A1, ie 12mm gap, low E (0.05) emissivity, Pilkington K glass (soft coated) or Pilkington EnergyKare 4mm optiwhite-16mm gap / argon gas 4mm K glass or similar approved



Scale Bar 1:50

ELECTRICAL INSTALLATION: PART P: ELECTRICAL SAFETY

New or works to existing electrical circuits or systems must be designed, installed, tested and certified to BS 7671 or with the current editions of the IEE regulations by a competent person in compliance with Approved Document P of the Building Regulations.

A competent electrician or a member of a

competent person scheme must test and certify all such works. The electrician must provide signed copies of an electrical installation certificate conforming to BS 7671 for the owner of the property and a copy must be forwarded to the Building Control surveyor for approval at completion, so the Building Control completion certificate can be issued.

All switches and sockets including the

consumer unit, ventilation & service controls etc, should be fixed between 450-1200mm above floor level. Accessible consumer units should be fitted with a child proof cover or installed in a lockable cupboard.

Light Fittings

Energy efficient light fittings provided, min 1 per 25m² of floor area or 1 per 4 fixed light fittings.

Rev	Date	Description	By
A	06-04-23	Drainage details added, notes added	NTS



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EXISTING & PROPOSED

Checked: MW CAD Ref: 7625-01.dwg
Drawing No: **7656-06A**
Drawn: NTS Date: 27-01-23 Scale: 1:50@ A1 ONLY
Date: 27-01-23 Scale: 1:50@ A1 ONLY