

All work is to be carried out in accordance with current building regulations, codes of practice and British standards. All dimensions in millimetres unless otherwise stated. Do not scale from this drawing. All dimensions to be checked on site prior to commencement of any work and any discrepancy to be reported to the Contract Administrator without delay. This drawing is to be read in conjunction with all relevant engineers and specialist's drawings, details and specifications. Check all levels and locations of existing foul and surface water drains and other services prior to commencing the works.

TO BE CONSTRUCTED USING ACCREDITED CONSTRUCTION DETAILS

Construction Design and Management Regulations (CDM) 2015 Generally: The Main Contractor must ensure a Principle Designer is appointed.

- The Main Contractor should:
- Prepare the Construction Phase Plan
 - Implement the Plan
 - Monitor the progress of the plan
 - Secure the site
 - Provide welfare facilities
 - Provide a site induction
 - Liaise with the Principle Designer
- The attention of the Contractor is drawn to the following hazards:
- Working at height
 - Working adjacent to glazed areas
 - Painting, adhesives and other hazardous substances in use in poorly ventilated areas
 - Deep excavations and concealed structures
 - Existing services including drainage, gas, electricity and water
 - Handling of heavy materials such as boilers, steelwork and bulk masonry
 - Working in confined spaces such as roof voids
 - Demolition works related to existing structures
 - The stability and structural integrity of the works
 - Overloading

The Main Contractor should provide fire protection to timber frame during and after construction, all in accordance with United Kingdom Timber Frame Association guidance. Consideration to be given to the risk of fire or radiant heat spreading to neighbouring properties. The contractor's attention is drawn to the requirements of the Party Wall Act and must ensure that compliance is achieved and all notices are issued before commencing works.

GROUND FLOOR

1. Remove existing slab
2. Reconstruct brick plinth if required.
3. Subsoil
4. Geotextile Membrane
5. Insulated Layer (compacted) – 150mm Geocell Foam Glass Aggregate
6. Geotextile Membrane
7. Lime screed and underfloor heating (electric or wet UFH to be confirmed). Cork board perimeter insulation 30mm
8. All new flooring surfaces are to be fabricated from natural stone, engineered natural timber incorporating a min 5mm natural solid hardwood timber veneer, or ceramic tiles.

MEZZANINE

9. Check suitability of existing joists

WALLS

10. Expose existing structure and tightly fix breathable Flexible woodfibre insulation (0.038W/mK) between studs (Pavaflex or equivalent). Internally walls to be clad with lime plaster over 9.5mm fire resistant insulating sheet (with vapour barrier) and Savolit plus board 75mm. Externally studs to be clad with 10mm sheathing board and 9.5mm fire resistant insulating sheet and Breather foil (or equivalent) (add Miner wool if required to achieve the required UValue). Finish with 25mm x 50mm tanalized battens and 150mm pre-treated and decorated featheredge board (achieving 1 hour Class D spread of flame protection when required). Insect mesh to be securely fixed along bottom edge of air cavity. (Reuse existing boards if possible).
11. Construct partition walls from 50mm x 100mm SW studs to C16 @ 400mm centres on 50mm x 100mm sole plate with rigid wood fibre insulation between studs. Finish with lime plaster. On the bathroom side, apply a first coat of fiber-reinforced plaster all over the shower-box and wet areas (such as our AntiCrack enriched with the Strong Adhesion Agent SAA). Once dry, apply a polyester or fiberglass mesh (180 gr per square meter) on the tap and faucet handles area, and fix it to the surface using the same fiber-reinforced plaster. When this second coat is dry, apply once again the same mesh to the entire shower wall and most wet areas, fixing it with the fibrous plaster. Finally, when the third and last coat is dry, apply the lime plaster.

ROOF

12. Remove tiles, tile battens and old felt and fit breathable Flexible woodfibre insulation between existing rafters. Fit BreatherQuilt multifoil breathable insulation across the rafters, creating unventilated air space. Fit counter battens vertically down the roof (min 50mm battens). Fit tile battens, then existing tiles. All according to manufacturer's instruction Finish internally with lime plaster (upgrade with Savolit plus boards if required to achieve min UValue).

JOINERY

13. Windows and doors to be aluminium (steel frame to be agreed).
14. All windows to be draught striped and have flexible sealant around perimeters 4mm/16mm/4mm sealed low E=0.05 double glazed units achieving a minimum of 1.4W/m²K.
15. Safety glass (to BS.6206) to all window areas below 800mm from FFL and 1500mm to doors and sidelights. Safety glass to all windows within 300mm of a door and any window pane in or surrounding a door whose width or height is greater than 250mm.
16. Reuse existing mezzanine panels if possible to suit building regulation (min height 1.1m), reinforced glass to mezzanine opening.

PLUMBING

17. Wastes to be via deep seal traps to 100mm uPVC soil and vent pipe, which is to terminate via a cowl a minimum of 900mm above any opening lights to free air. Connect to drain via easy bend and rodding eye. No waste pipe to enter SVP within 200mm of soil entry. Anti-siphonage valves to be fitted to unventilated waste runs that exceed 4m in length.
18. All taps etc. to have in line valves to allow for maintenance.
19. No joints to be used in inaccessible pipework (eg where run in screed).
20. Protect copper pipework from concrete with Densotape. Do not run hot and cold pipework together. Where pipes run through joists allow adequate cut out and sleeve pipes to allow for expansion.
21. Sanitary installation to BS.5572 and design of soil/waste pipe systems in accordance with relevant COP and BRE Digest No.80. Generally, basins with branch length up to 1.7m and 75 deep seal and 32 dia branch. Basins with branch length between 1.7 and 3.0m to have 40 dia branch and 125 deep seal trap. Sinks with branch length up to 3.0m and showers to have 40 dia trap, 75 deep seal and 40 dia branch. Baths and sinks with branch length between 3.0 and 4.0m to have 50 dia branch and sinks with 125 deep seal trap. Basin waste to connect above WC. Waste pipes and traps to be unobtrusive and concealed where possible. Waste pipes to entire soil pipe direct with access above floor for cleaning.
22. The hot water system, including associated storage or expansion vessels, shall be designed, constructed and installed so as to resist the effects of temperature and pressure that may occur either in normal use or as a consequence of a reasonably anticipated malfunction, and must be adequately supported.
23. Any part of a hot water system that has a hot water storage vessel shall incorporate precautions to ensure that the temperature of the stored water does not exceed 100°C and that any discharge from safety devices is safely conveyed to where it is both visible and will not cause a danger to persons in or about the building.
24. The cold water supply must be installed so as to give a supply of wholesome water for the purposes of drinking and food preparation, wholesome or softened wholesome water for the purpose of washing and water of a suitable quality to any sanitary convenience fitted with a flushing device.

RAINWATER GOODS

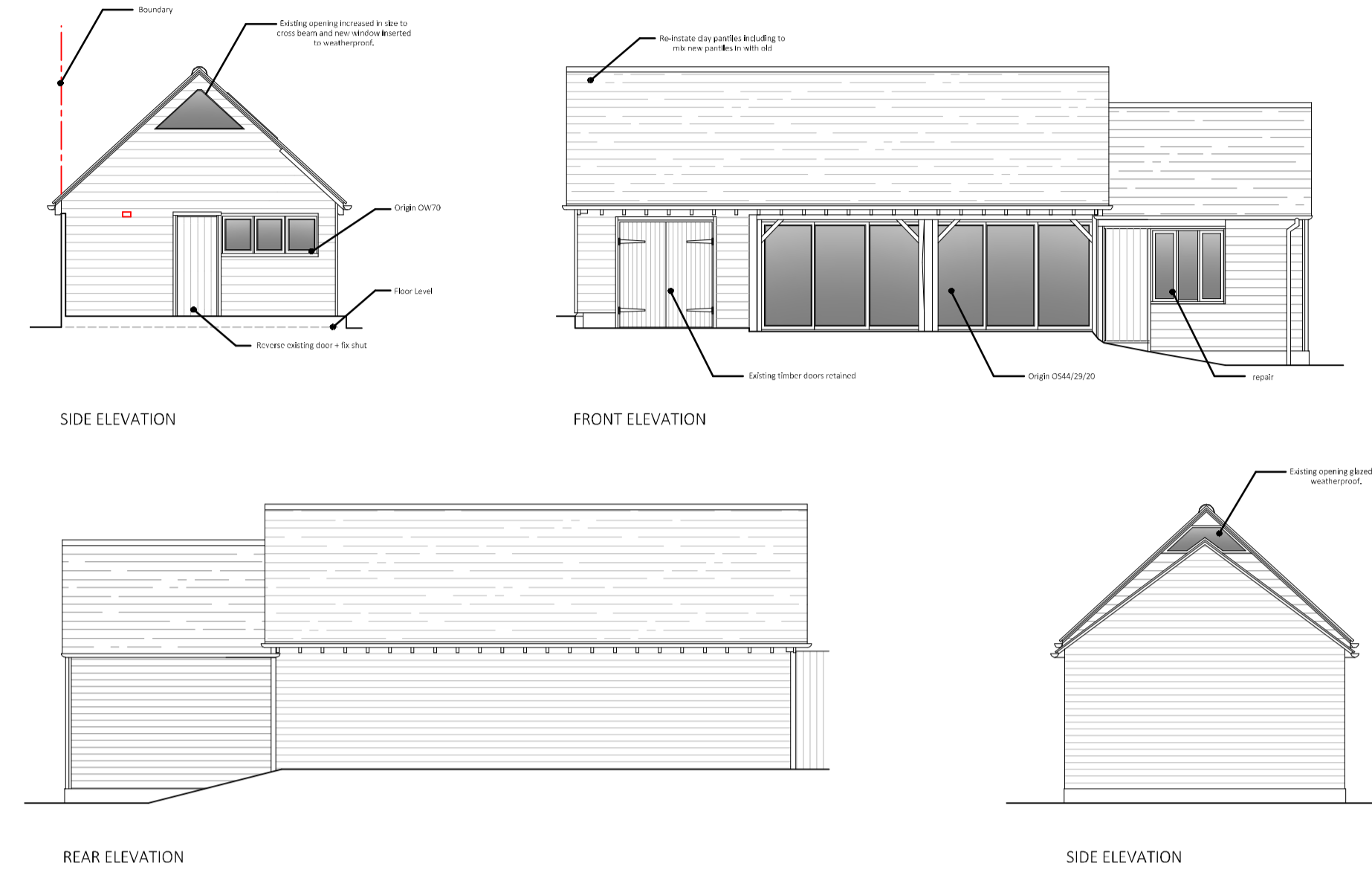
25. External goods to be 100mm uPVC gutters laid to falls and 61mm uPVC down pipes with roddable access shoe at base.
26. All surface water drainage to connect to existing.
27. Aco drain

DRAINAGE

28. Existing drain runs to be utilised as indicated.
29. Provide pre-cast concrete lintels over pipes passing through foundations and/or walls with 50mm gas resistant flexible surround. Drains are not to pass through or below foundations/walls at less than 45° to the face of the wall.

SERVICES

- HEATING AND HOT WATER**
30. Under floor heating. Each area to be independently controlled and to be laid in accordance with manufacturer's instructions.
 31. Smoke and heat detectors - Generally the dwelling is to have a suitable number of mains-operated and independently wired to distribution board or a single regularly used local lighting circuit with battery back-up, self-contained smoke alarms to BS5839-6:2019, fixed to ceiling at approximate locations shown on drawings, within 7m of doors to kitchens and living rooms and within 3m of bedroom doors. Alarms should be located min 300 mm from any wall or light fitting. A minimum provision of one unit to each storey is to be provided. Where more than one alarm is fitted, they should be interconnected, in accordance with manufacturer's instructions and to meet BS5839-6:2019. (dwellings)
 32. Within domestic premises consumer units and similar switchgear assemblies shall comply with BS. EN61439-3 and shall: have their enclosure manufactured from non-combustible material, or be enclosed in a cabinet or enclosure constructed of non-combustible material and complying with Regulation 132.2. Consumer unit is to be mounted so that the switches are between 1350mm and 1450mm above floor level.
 33. All electrical work is to meet the requirements of Part P and be designed, installed, inspected and tested by a person both competent to do so and registered with the NIC or equivalent body. A BS.7671 electrical installation certificate shall be issued by that person and submitted to Building Control prior to completion.
 34. Fixed internal lighting to be low energy light fittings.
 35. (If wet UFH used) Air to water heat pump to provide hot water for under floor heating and pre-heating to hot water storage cylinder. Pump to be to BS.EN 378-1 and -2 Safety & Environmental; to BS.EN 14511-2 -3 and -4 Test Requirements; to BS. EN 60335-2-40 Electrical Safety. Output to water to be 7Kw. A commissioning certificate is to be provided at completion.



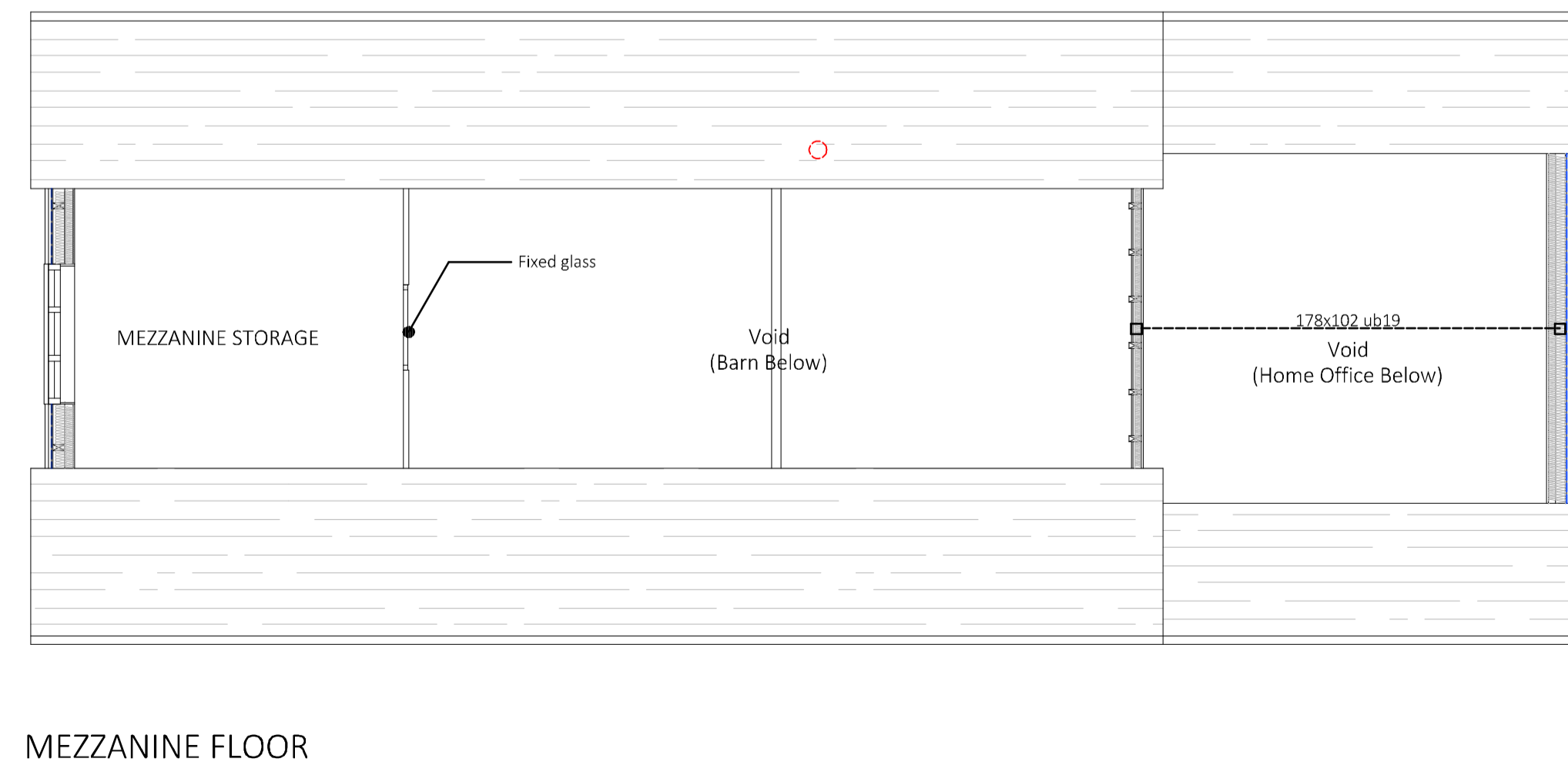
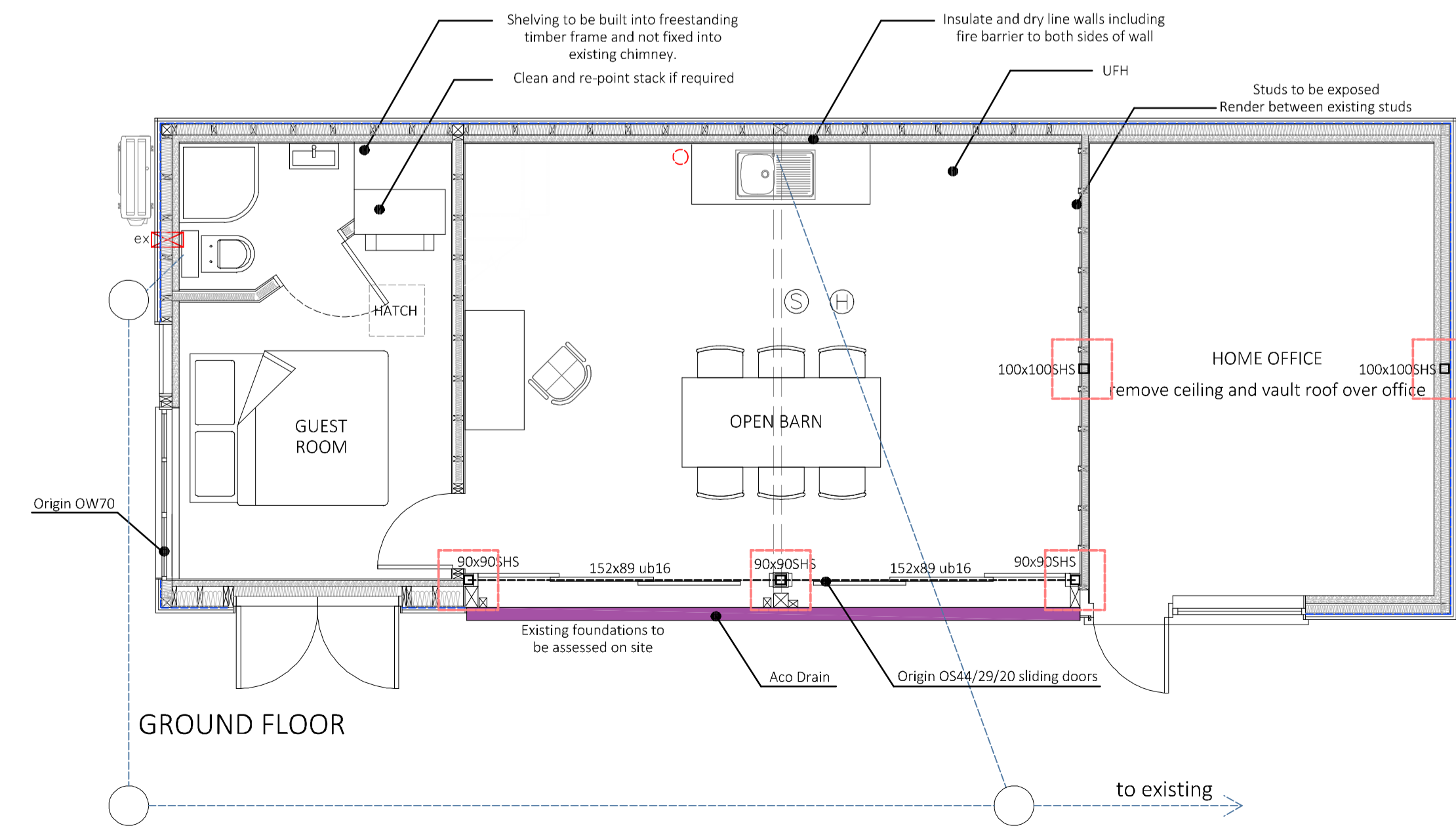
- FIRE PREVENTION**
36. All inset light fittings to be fire rated and shielded to separate the insulation.
 37. All wiring connections in ceiling voids to be within sealed enclosures.
 38. Exposed roof timbers treated with fire resistant varnish giving class 0 or class 1 spread of flame protection.

VENTILATION

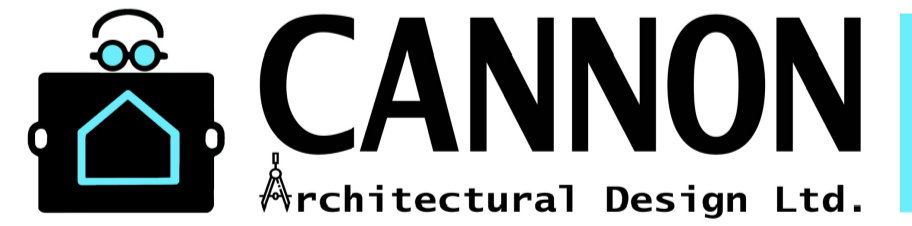
39. Minimum provision 8000mm² to each habitable room and 4000mm² to all other rooms. Vents to be of the pressure difference controlled variety, manually opened or closed. No extract fans to be within 500mm of ventilators.
40. Mechanical extract fans giving 30 l/s adjacent to hob, 60 l/s elsewhere in kitchen, 30 l/s in utility room; 15 l/s in bathroom and ensuite and 6 l/s in WC. Bathroom and ensuite extracts to be linked to light switch and to have 15 minute overrun. Intermittent extracts to be commissioned and air flows measured within 5 days of completion.
41. 10mm air gap to be provided under doors to internal Shower room.

TIMBER

- Unless noted otherwise all timber shall be grade C24.
- All timbers to be pressure treated against insect and fungal attack and all cut ends to be treated on site.
- Unless noted otherwise all joists shall be supported using proprietary hangers or minimum 100mm bearing onto loadbearing walls / beams.
- Unless noted otherwise all multiple joists shall be connected using 12mm diameter bolts and suitable washers at max 600mm centres.
- Unless noted otherwise all joist shall be connected to wall plates using proprietary truss clips.
- All wall plates shall be secured using 30mm x 5mm x 1200mm long holding down straps at max 1500mm centres plugged and screwed to masonry.
- Provide 30mm x 5mm lateral restraint straps to edges of all roofs at max 1500mm centres fixed to minimum 3 No. joist via suitable timber noggins.
- All joists exceeding 2.5m span shall be provided with continuous timber noggins or herringbone strutting at mid-span. For spans exceeding 4.5m provide continuous noggins / strutting at third points.
- Where applicable all JJI joists shall be installed strictly in accordance with manufacturer's recommendations.



- ⊙ Smoke Detector
- Ⓢ Carbon Monoxide Detector
- ⊙ Heat Detector
- ⊙ Radiator
- Towel Rail
- ⊗ Extract Over Hob
- ⊗ Extract Fan
- ⊙ Extract through roof



Client:
Sutherland

Project:
The Old Forge, Elmton

Drawing:
Drawings as Proposed

Scale: As indicated @ A1
Scale: 1:100 1:50 1:20

Drawn by: X
Checked By: X
Revision: C

Drawing No:
166 - 03

THIS DRAWING IS A COPYRIGHT
All dimensions to be checked on site or in the workshop before work commences. Only figured dimensions to be worked to. Any discrepancies to be reported to CANNON Architectural Design Ltd.

