

Construction Notes:

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It is agreed this drawing will be checked and verified by you prior to work commencing on site. We shall not be liable for any defects in this drawing unless prior to work commencing this drawing and all its dimensions has been so checked and verified.
Whether or not indicated on the drawing:
All workmanship and materials shall comply with current Building Regulations, British Standards and Codes of Practice. All materials shall be fixed, applied or mixed in accordance with the Manufacturers' Instructions and Specifications. All materials shall be suitable for the purpose for which they are used. Any discrepancy shall be immediately reported and resolved prior to work commencing. The contractor shall consider everything necessary for the proper execution of the works. Subject to confirmation – similar approved materials of equal performance may be substituted where those specified are not available.

LEVEL APPROACH:
Level approach to have a firm and even surface 900mm minimum width and a maximum permitted gradient of 1 in 20. Cross fall to level approach to be 1 in 40 maximum.

RAMPED APPROACH:
A ramped approach is to be provided on sloping sites where the route to the entrance storey from the point of access to the site or from the car parking space is at a gradient exceeding 1 in 20 but not exceeding 1 in 15.

STEPS TO THE ENTRANCE:
If external steps are required, the rise is to be a maximum of 150mm and the treads a minimum of 500mm deep. If the overall rise is greater than 600mm and where site conditions dictate provide a suitable handrail with grippable profile to one side of the steps between 850mm and 1000mm above the pitch line. Guarding to be constructed and fixed to withstand 0.36kN/m horizontal force.

FOUNDATIONS & SUBSTRUCTURE:
Pile foundations and steel ring beam to be constructed in accordance with Structural Engineer's details to suit site conditions.

STEEL BEAMS:
All beams to be wire brushed, hand chipped, hot dip galvanised and receive 2 coats of high-build epoxy or water-based paint, including polyurethane, prior to fixing. All structural steel to be painted or encased to give half hour fire resistance. Coatings for fire protection and corrosion resistance must be compatible.
For size position and fixing instructions refer to consultant engineer's drawings

BELOW GROUND DRAINAGE:
Any new underground drainage to be in 100mm diameter uPVC pipes laid a minimum 1:40 with 'pea' gravel bed and surround. Drains passing under building should be flexible jointed – provide concrete inlets over drains where passing through walls and install proprietary sleeve/collar with water/rodent seal and movement provision in accordance with manufacturer's details.
All new gullies to be raddable and access chambers provided at changes of direction.
Any new manholes to be proprietary GRP or 600x450mm medium duty airtight covers on 225mm thick engineering brickwork built of 150mm concrete base.

ABOVE GROUND DRAINAGE:
Gutters to be 100mm half round uPVC with 68mm diameter rwp. New svp to terminate minimum 900mm above nearest opening window and be fitted with a bird-proof terminal.
Bath & shower wastes to be min 40mm diameter, basin wastes to be 32mm and common wastes to be min 50mm diameter. All appliances on single stack system to be fitted with 75 deep seal traps.
SUSPENDED GROUND FLOOR CONSTRUCTION: U Value 0.13W/m²K
18mm t&g softwood boarding on 50mm Kingspan TF70 insulation on 18mm sheathing board. 47x220mm sw joists, hung off steel ring beam, direction and centres as indicated on drawing. 100mm Kingspan TF70 insulation with 25x25mm sw support battens. Herringbone strutting at mid span. Galv ms BAT straps at max 2m ctrs over 3no. joists with noggin.

225mm clear ventilated void is to be provided directly beneath the ground floor formation, depth to be confirmed by engineer.

WALLS:
Preservative treated vertical timber 'hit & miss' cladding on 38mm treated horizontal battens, top edge of batten angle cut to min. 15° to external. Breather membrane on 9mm OSB or plywood sheeting fixed to 140x38 timber stud at max. 600mm centres. 120mm Kingspan Kooltherm K112 Framing Board between studs with 32.5mm Kingspan Kooltherm K118 Plasterboard fixed on internal face of stud with 2 coat lightweight plaster finish, max U value 0.35W/m.sq.K.
Alternative: Rendered finish on paper backed lath on 38mm treated vertical battens. Breather membrane on 9mm OSB or plywood sheeting fixed to 140x38 timber stud at max. 600mm centres. 120mm Kingspan Kooltherm K112 Framing Board between studs with 32.5mm Kingspan Kooltherm K118 Plasterboard fixed on internal face of stud with 2 coat lightweight plaster finish, max U value 0.35W/m.sq.K.

PARTY WALLS:
157mm overall thickness. 75x38mm timber stud at max. 600mm centres with 50mm Isover acoustic partition roll between studs. Gyproframe RB1 resilient bars fixed horizontally to both sides at 600mm centres. 2 layers 15mm Gyproc SoundBloc plasterboard either side. Finish to be 8mm render 'scratch' coat, joints filled and taped and with plaster skim, all to give a mass of 300 kg/m. Cavity between the outer leaf and party wall to be sealed with flexible closer. Party walls taken up to underside of roof finish and fire stopped with mineral wool insulation quilt.

FLASHINGS:
Install Code 4 lead flashings/cover flashings/soakers at roof/wall/chimney abutments, and lead DPC trays to chimneys all to the details and specifications of The Lead Sheet Association and with the appropriate cavity tray DPC's and weep holes over.

INTERNAL PARTITIONS:
63x38mm CLS studding at 600 ctrs with 12.5mm plasterboard each side. Provide sound insulation quilt to partitions rooms. Sound insulated partitions to have minimum 10kg/sgm plasterboard. Dpc to be fixed below soleplates to all ground floor stud walls. Stud walls to kitchens, bathrooms, ensuites, utility rooms and sanitary accommodation to incorporate additional horizontal and vertical studs as required to take heavy fixtures. Walls to all moist rooms to be finished with 15mm thick moisture resistant soundblock plasterboard. Where stud walls are to be finished with wall tiling they are to include two horizontal rows of studs for additional support to the boards.

ROOF:
Approved roof finish on preservative treated battens on breathable roof felt. Prefabricated s/wood roof trusses by specialist manufacturer at maximum 600mm centres to be designed, constructed, fixed and braced in accordance with BS5268 and manufacturers detail. 140x75mm s/wood wallplate fixed to timber frame.
Where parallel roof to be strapped to wall at rafter and ceiling level with noggin's at max 1.8m ctrs with 38x5mm galvanised m/s straps. 225x25mm s/wood GRP lined valley boards when required.
100mm Knul Earthwood Loft Roll quilt between the ceiling joists with a further 200mm quilt placed over and across. 12.5 roll backed plasterboard and skim to ceiling – maximum U value 0.15W/m.sq.K.
Ventilation at eaves provided by a proprietary over fascia vent and to be the equivalent of a 10mm continuous strip for normal pitched roofs and 25mm where a sloping ceiling is used. Insulation to be taken tight up to proprietary eaves ventilator and made continuous with top of cavity wall insulation.

VENTILATION:
Rapid ventilation to each room equal to minimum 5% of floor area and background ventilation min 8000mm.sq.
Mechanical ventilation to Kitchen operated intermittently to extract 60L of air/second or 30L if operated through cooker hood. Utility room extracts to be 30litres/sec.
Bathroom with window to have mechanical ventilation to extract 15L of air/second and worked independent of light switches.
Bathroom without a window to have a ceiling mounted extract fan ducted to external air at a rate of 15L of air/second and worked from the light switch with a minimum 15-minute over-run once the light is switched off. Ensure a min 10mm gap under the door.

DOORS & WINDOWS:
All dimensions relate to nominal structural opening sizes. Manufacturer is responsible for checking structural opening sizes on site prior to fabrication. All glazing to windows within 800mm of finished floor level and to side lights or windows both within 300mm of a door opening and 1500mm of finished floor level to be either laminated, safety glazing or toughened glass. Small panes (max width 250mm and not exceeding 0.5m²) to be 6mm minimum thickness annealed glass when fitted to doors. All glazing to have a maximum centre pane U value of 2.0 W/m.sq.K unless stated otherwise.
Escape windows where specified are to have a minimum clear opening size of 450x750mm and maximum 1100mm above finished floor level.
All opening windows on and above the first floor are to be fitted with easy clean hinges incorporating restrictor stops to allow for windows to be cleaned from inside the building and for means of escape where required.

SMOKE DETECTION:
Self-contained, interlinked mains operated smoke detectors in the position indicated on plan. The detectors must be fitted with a battery back-up.
Commissioning certificates are required on completion of installation.

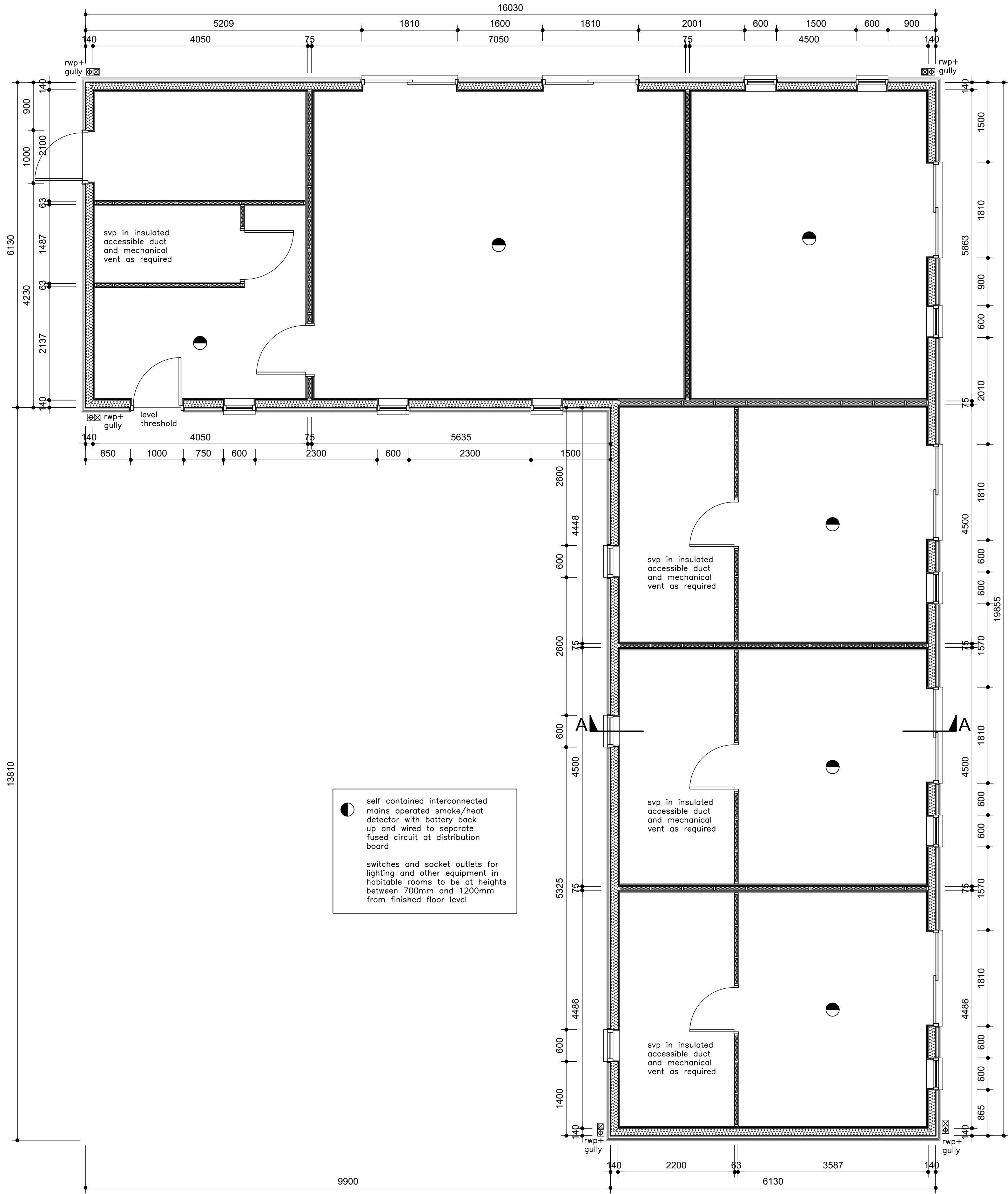
WATER HEATER:
Any new hot water storage and supply systems to be designed and installed in accordance with BS 6700:2008 or BS EN 12897:2006. Good workmanship is essential and should be in accordance with BS 8000-15:1990.
A gas fired boiler with a high SEDBUK rating is to be used with timing controls and interlocks. Provide wire cage protection to balanced flue outlet if within 1800mm of adjacent ground level. Provide zone controls located in appropriate areas dependent upon the design of the system.
Thermostatic valves are to be fitted to all radiators except those located within the area of the control thermostat.

PLUMBING:
The water supply temperature to a fixed bath should not exceed a maximum of 48°C by use of an inline blending valve or other appropriate temperature control device.
The estimate water consumption of wholesome water in a new dwelling should not exceed 125L per person per day.

SVP DUCT CONSTRUCTION:
Svp to be located within a sound insulated duct and wrapped in a minimum 25mm mineral fibre quilt and encased with 2 layers of 12.5mm plasterboard and skim on 50 x 50mm softwood framing. This encasement and insulation is to go from ground floor level up to underside of roof covering OR to the lower pipe termination as applicable.

ELECTRICAL INSTALLATIONS:
All electrical work required to meet the requirements of Part P (Electrical Safety) will be designed, installed, inspected and tested by a person competent to do so.
Prior to completion the Local Authority must be satisfied that either:
An electrical installation certificate issued under a Competent Person Scheme has been issued:
OR
Appropriate certificates and forms defined in BS7671 (as amended) have been submitted that confirm that the work has been inspected and tested by a competent person. A competent person will have a sound knowledge and experience relevant to the nature of the work undertaken and to the technical standards set down in BS7671, be fully versed in the inspection and testing procedures contained in the regulations and employ adequate testing equipment.

SERVICES:
All work and installations to comply with the regulations and recommendations of the respective 'Board' or 'Authority' and to the satisfaction of the 'Inspector'. Meter cupboards are to comply with Appendix G of Approved Document B.
LIGHTING:
All internal light fittings are to be low energy light fittings. Outlets to only accept lamps having a luminous efficiency greater than 40 lumens per circuit watt (for example fluorescent tubes and compact fluorescent lamps).
All external light fittings to be low energy space lighting fitted with PIR's and daylight cut off sensors.
THERMAL BRIDGING AND AIR LEAKAGE:
Thermal bridging and air leakage to be limited by compliance with Robust Construction Details for dwellings and similar buildings. Provide air leakage measures designed to reduce air leakage from the building. Air tightness measures will depend on the form of construction and level of workmanship with the objective being to form a definable continuous air leakage barrier around the dwelling. Ways of preventing air leakage are to be considered at every penetration of this barrier.
Care on site should be paid to:
1. Joints between structural components e.g. wall to floors, walls to roofs.
2. Joints around components and opening within walls.
3. Services penetrations – plumbing, electrical, and ventilation.
In General:
Cavity insulation and wall insulation must meet at top of wall while retaining ventilation to roof.
Cavity wall insulation must be taken up full height of all gables.
Floor joists must be sealed with expanding foam where built into external walls.
All cavity closures to be insulated.
Close any vertical ducts at top and bottom (e.g. boxing in to svp's).
Seal any service penetrations.
Select the appropriate sealant or gap filler for the size of gap and degree of movement anticipated.
Seal under skirting boards with flexible acoustic sealant.
Accredited details to be adopted for all construction junction details.



Floor Plan

Project

Outbuilding at

Thorneyholme Hall, Dunsop Bridge

PWL

ARCHITECTURE

Title

Floor Plan and

Specification

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Date
April 2025

Drawn
CTA

Drwg No
1178-WD02