

Construction Notes

All works and materials to comply with The Building Regulations 1991 (latest Revision) and all All timber unless otherwise stated to be C24 All timber used externally to be pressure impregnated with an approved type preservative before British Standards and Codes of Practice. delivery to site. All dimensions indicated are to unplastered and un-rendered brick/blockwork faces and studwork timber faces. All setting out dimensions to be checked on site before work commences. This drawing to be read in conjunction with Structural Engineers details, calculations and sketches.

Preparation and demolition

Where indicated on plans, existing structures are to be carefully demolished, foundations and sub structures etc to be taken up and all materials deposited off site to an approved tip. Structures exceeding 50 cubic meters in volume to be demolished will require a notice of demolition to be served on the Local Authority. Provide all necessary scaffolding, access ladders, material hoists, temporary protection and working platforms etc which are to be erected, maintained, certificated, dismantled and removed by suitably qualified and insured specialists. All plumbing, drainage, heating, electrical services, appliances/boilers/flues etc to be installed by suitably qualified & experience specialists or registered competent persons, tested & appropriate certification issued where required in this specification. Any asbestos/contaminated soil is to be inspected by a specialist, removed and disposed off site by a specialist licensed contractor. Ground to be prepared for new works as described including location and alteration/ modifications to all existing services as necessary, including sealing up, capping off, disconnecting, removing redundant services as necessary. Prior to and during works, the person carrying out the works is to liaise with and meet the requirements of the relevant Service Authorities, including the location and protection of all services as necessary. External paths, drives, patios, walls, fences & gardens etc, to be taken up and relayed/ extended as necessary to accommodate the new works as described. All timber is to be protected on site to minimize moisture content which must not exceed 22%.

Foundations

Foundations to be constructed at a minimum depth of 1000mm, below the influence of drains, and or surrounding trees on level firm natural undisturbed ground of adequate ground bearing capacity to the approval of the Local Authority Building Control Surveyor. Strip foundations to be a minimum width of 600mm and thickness of 225mm and trench fill foundations should have a minimum width of 450mm and a minimum 500mm thickness of concrete. The concrete mix should be ST2 or GEN1. Foundations are to be provided centrally positioned under all exterior, party and interior load bearing walls, steps in foundation level should not exceed its thickness and should overlap by twice its thickness. Walls below DPC level up to 1 m deep are to be constructed with 7N/mm² concrete blocks 1 :3 cement mortar in-filled with concrete to a maximum of 225mm below DPC level.

Ground floor Construction

65mm screed with u/floor heating pipes on 150mm RC concrete with A142 mesh top and bottom on DPM on Celotex FF4000 100mm thick PIR insulation board with DPM below sitting on ash-blinded hardcore
Radon protection
Basic radon protection to be provided at all floors and walls, via the DPM being taped and sealed at joints, laps, junctions, service entry points and sealed to a cavity tray in the inner leaf which is supported by the cavity infill at ground level and brought through the external wall leaf with weep holes to the external skin.

Masonry Walls

Single leaf concrete blocks to be Celcon Solar blocks 440mm x 215mm x 215mm thick (3.6N/mm strength) Thin-Joint laid ie with 2mm Celfix Mortar beds External finish to be painted smooth finish external insulated render system with 50mm PIR insulation sheet fixed to blockwork Internal finish to be 60mm Celotex PL4000 insulation board with 13mm plasterboard finish on dabs - all walls to achieve a U value of 0.25W/m²K
Internal timber studwork non-load bearing partitions
Non-load bearing stud partitions are to be constructed of 100 x 50mm soft wood with head and sole plates and intermediate noggins fixed at 600mm with a minimum of 25 mm of 10Kg/m³ proprietary sound insulation quilt suspended in the stud and finished with 13 mm plasterboard and skim both sides.

Wall Abutments

Vertical junctions of new and old walls to be secured with proprietary profiled stainless steel metal crocodile type system pointed with flexible mastic as manufacturer's details.

Lintels

Lintels are to be provided over all structural openings. The positions, types, sizes, end bearings etc of lintels must be in compliance with the lintel manufacturers standard tables or as annotated on the drawing. Stop end and dpc trays to be provided above all externally located lintels in compliance with lintel manufacturer's details.

Structural Columns/Beams Etc

Non proprietary beams/lintels/columns including pad stone to be fabricated and installed in compliance with details and structural calculations carried out by a suitably qualified and experienced person, which must be approved by building control before works commence on site. Dpc trays to be provided above all externally located beams. Beams either coated in intumescent paint or encased in Fireline plasterboard to provide min half hours fire resistance.

Strapping and restraint

Walls to be restrained at roof level by the provision of 30 x 5 x 1000mm lateral restraint straps at maximum 2m centres carried across at least 3 joists or rafters, etc, with a minimum of 38mm wide x ¼ depth noggins.

Dpc's

Horizontal Dpc's and Dpc trays with stop ends and weep holes to be provided 150mm above ground level continuous with the floor Dpm. Stepped and horizontal Ope/cavity trays are to be provided over all openings, roof abutments/projections and over existing walls with different construction or materials. Install vertical dpc or proprietary insulated cavity closers at all closings, returns, abutments to cavity work and openings etc.

Sealing Measures

All external door and window frames, service penetrations to walls, floors and ceilings, etc, should be sealed both internally and externally with proprietary sealing products such as proprietary waterproof mastic, expanding foam or mineral wool or tape to ensure air tightness.

Single-Ply membrane

Single-Ply membrane Sarnifil or similar roofing system. Moisture content of timber should not exceed 20% and to be kiln dried & grade C24. Workmanship to comply to BS 8000:4. All fixings to be approved stainless steel or galvanized mild steel. Single layer system with a current BBA or WIMLAS Certificate fixed onto 22mm external quality plywood decking or similar approved laid to 1 :80 minimum gradient, fixed onto timber flat roof joists constructed of kiln dried structural grade timber with sizes and spacing suitable for the proposed clear span. Restrain flat roof to external walls by the provision of 30 x 5 x 1000mm lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and internal wall faces. Flat roof insulation is to be continuous with the wall insulation. Note: Warm roof applications ie insulation above the structural deck do not require ventilation. Metallic roof trims to be of non-corrodible material & resistant to sunlight & not fixed through the water proof covering. All timber to be treated using CCA vacuum/pressure or O/S double vacuum to BS 5268:5, including all cut ends of timber etc 300mm of any joint. All flat roofing works to be carried out by a specialist flat roofing contractor and all materials etc to be fitted in compliance with manufacturer's details. Work should not be carried out during wet weather or when the deck has not fully dried out. A 500g vapour control barrier is required on the underside of the roof below the insulation level. Fix 12.5mm foil backed plasterboard (Joints staggered) and 5mm skim coat of finishing plaster to the underside of all ceilings using galvanized plasterboard nails. - Warm roof to achieve a U value of 0.20W/m²K

Purge ventilation

Windows to be of size, style and position as indicated on the drawings but window opening areas to habitable rooms and toilets to be a minimum of 5% of the room they serve (increased to 10% where the window opens less than 30 degrees) and typically 1.75m above floor level. Other rooms, for example kitchens, utility rooms, bathrooms etc to have opening windows or doors for rapid ventilation. Background/trickle ventilation To be provided to all rooms via hit and miss or 2 stage catches to windows equivalent to 8000mm² or equivalent ventilator area.

Mechanical ventilation

To be provided to the rooms listed below directly ducted to the outside air equivalent to the following rates. Kitchen 30 litres per second over hob or 60 litres elsewhere Utility room 30 litres per second Bathroom 15 litres per second Toilet 6 litres per second (even if fitted with an opening window) Mechanical ventilation to rooms without openable windows to be linked to light operation and have 15 minutes overrun and a 10mm gap under the door for air supply.

Safety glass and glazing

Doors and adjacent sidelights/windows in critical locations within 1500mm of ground and floor level, and 300mm of doors and windows within 800mm of floor/ground to be safety glazed to BS 6206. Double-glazing All external doors, windows, roof lights to be draft stripped and glazed to provide minimum standard of minimum U value required 1.8W/m²K

Sanitary appliances and waste pipes

All W/Cs to have trapped outlet connected to 100mm diameter pipes, and to be provided, with a wash hand basin with hot and cold running water. Sanitary appliances such as wash hand basin, baths, showers, sinks etc, to be provided with 50mm diameter waste pipes laid to falls and 75mm deep seal traps. Where waste pipe runs exceed 4m BBA approved air admittance valves are to be fitted above appliance spill over level. Waste pipes to either discharge below trapped gully grating or into soil and vent pipes via proprietary waste manifolds or bossed junctions. Internally all waste and drainage pipes to have rodding access/eyes at changes of direction and be adequately clipped/supported and provided with 30 minutes fire protection where passing through floors. All fixtures and fitting locations are to be agreed with the client.

Foul, Rainwater & Storm water drainage systems

Both storm and foul drainage to consist of 100mm diameter UPVC proprietary underground drainage laid at a minimum gradient of 1 :40 surrounded in pea gravel a minimum of 900mm deep in drives and roads and 400mm elsewhere, unless provided with a 100mm reinforced concrete slab with compressible material under and 300mm min bearing on original ground. Proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of direction or at 45m maximum spacings in straight runs up to 1.2m in depth. All gullies to be trapped and have rodding access where serving branches. Inspection chamber covers to be mechanically fixed and suitable for vehicular loads in drives and roads and double sealed in buildings. Foul water to be discharged to existing facilities as shown on plans/specification and storm water from individual down pipes to be piped 5m away from buildings and to be disposed in a minimum 1.2m³ clean filled rubble soakaways covered with polythene and top soil or to other methods as shown on the drawing/specification. Foul drainage systems to low lying buildings or basements which carry storm water or other vulnerable drainage systems should be provided with anti flood protection such as one way valves, etc, to prevent flooding and sewerage entering the building. Rainwater gutters and down pipe sizes and number to be suitable for roof area to be drained and fixed in compliance with manufactures details. Surface water drainage around the building Paths and paved areas around the building to have a non slip finish and if not porous propriety design to be provided with a cross fall of 1 :40 - 1 :60 and a reverse gradient of at least 500mm away from walls of building. Surface water to be disposed of by an adequately sized and roddable drainage system via soakaways, or other approved means.

Electrical Installations

New electrical circuits or systems must be designed, installed, tested and certified to comply with the current editions of BS 7671 or the IEE regulations by a competent person. All switches and sockets including the consumer unit 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. A competent electrician or a member of a competent person scheme must test and certify in writing 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 Building Control for approval at completion, so the Building Control completion certificate can be issued. All fixtures and fitting locations are to be agreed with the client.

Energy efficient lighting

Fixed internal energy efficient lighting to be provided at the rate of 1 per 25m² floor area, or 1 per 4 fixed light fittings with a luminous efficiency greater than 40 lumens per circuit-watt Fixed external energy efficient lighting to have 150 watts maximum per light and fitted with a PIR or only used with fittings that can only take luminous efficiency greater than 40 lumens per circuit-watt All fixtures and fitting locations are to be agreed with the client.

Smoke/heat alarms

All floors to be provided with mains operated interconnected smoke alarms with battery back up, fixed at ceiling level in circulation areas and within 7.5m of all doors to habitable rooms. Where the kitchen is not separated from the stairway or circulation space by a door, compatible interconnected heat alarm is to be provided in the kitchen in addition to the smoke alarms required.

Heating

Heating to be by extending existing system. Heating Engineer to check adequacy of existing boiler.

GENERAL NOTES

1. Details dimensions and levels to be checked on site by builder prior to commencement of works. Any works commenced prior to all necessary local authority approvals are entirely at the risk of the owner & builder.
2. Structural details are subject to exposure of existing construction and verification by L.A Surveyor and any necessary revised details are to be agreed with the L.A Surveyor prior to carrying out the affected works.
3. All materials are to be used in accordance with the manufacturers' guidelines and all relevant British Standards Codes of Practice & Regulation 7 of Building Regs.
4. All works are to be carried out in accordance with Local Authority requirements.
5. The intended works fall within the Party Wall Act 1996 and any adjoining owners affected must be notified prior to commencement of any works.
6. Thames Water Authority permission to be obtained if building over or adjacent to sewers within 3 metres. (Tel: 08459 200 800)

SITE:

9 South Drive Cuffley Potters Bar EN6 4HP

PROJECT : NEW SWIMMING POOL AND SINGLE STOREY POOL HOUSE ENCLOSURE
OUTBUILDING

TITLE:

CONSTRUCTION NOTES

THE ALPHA STUDIOS

10 THE LINK ENFIELD LONDON EN3 5HU



DRAWN BY:

SP

CHECKED BY:

SP

DATE:

June 2023

PROJECT NO:

230324

DRAWING NO:

- 06

REVISION:

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SCALE:

As indicated

SHEET SIZE:

A3