

with the latest British Standard and Code of Practice. are to take preference over scaled dimensions. with their requirements.

# FOUNDATIONS

Strip footings shall be constructed of 25 N/mm concrete (sulphate resistant if necessary) with a min thickness of 200mm and a min width of 600mm. Foundations shall be founded on suitable sub-strata to the satisfaction of the BCO and below invert level of any drains within 1m of the building. Foundations with increased loading to be exposed for inspection by the BCO, to determine load-bearing capacity and underpinned if required.

### WALLS

Cavity walls shall be 102mm outer leaf of approved facing brick, 10mm cavity, 90mm Celotex thermaclass 21 insulation, 100mm Celcon Standard block inner leaf with 9.5mm plasterboard on dabs to give a U-value of 0.18W/m2. Movement joints to be provided in accordance with block and brick manufacturers recommendations. The cavity is to be concrete filled up to 225mm below dpc. Wall ties are to be stainless steel to BS EN845-1 and DD140-2 spaced at 750mm horizontally, 450mm vertically and 225mm vertically at reveals. Hyload dpc's to be 150mm min above ground level to coincide with top of slab level and laid on mortar bed above and below, and to all cavity closures. Tooth and bond new brickwork to existing, and maintain clear cavity where new joins existing. All cavity closures to have Kingspan Kooltherm cavity closures installed.

### FLOOR SLAB

150mm thick layer of mechanically compact hardcore; 25mm sand blinding; 1200g visqueen DPM, lapped with dpc to walls on 110mm Celcon XR4000 floor board or similar insulation with 25mm thick vertical layer of insulation board to the external perimeter of the floor; 100mm thick 25N/mm concrete slab with 25mm asphalt or 65mm reinforced screed. Provide 500g visqueen as a VCL (vapour control layer) above floor insulation.

# PITCHED ROOF VAULTED CEILING

Concrete interlocking tiles on 50x25mm battens on layer Kingspan Nil vent roof tile underlay drapped between the 50 x 150 mm rafters @ 400 mm centres all installed in accordance with instructions issued by Kingspan insulation Ltd . Double rafters to be provided each side of velux roof lights. 120mm Celotex XR4000 insulation laid between the rafters Wallplates to be 50 x 100mm sw and to be anchored to blockwork at 1500mm centres, with 900 x 32 x 2.5mm galv., ms anchor straps. Rafters to be birdsmouthed over bearings and fixed with truss clips. Provide visqueen vapour control layer under the rafters then underdraw with 52.5mm (12.5 +40) Celotex PL4000 insulated plasterboard and skimed to give u-value of 0.15W/m2C

# **GRP FLAT ROOF**

Installed by specialist flat roofing company and consisting of Cure it GRP (ssf AB) on 18mm OSB3 T&G decking boards on CelotexXR4000 (150mm), on 1000g vapour control layer on 18mm ply tapered firings on 47 x 170 flat roof joists. Double joists around roof lanterns Plate the ceiling with 12mm plasterboard and skim. to give u-value of 0.15W/m2C

# LIGHTING

Internal lighting shall incorporate a fixed light fitting that only takes lamps having a luminous efficiency greater than 75 lumens per circuit-watt e.g. fluorescent tubes and compact fluorescent lamps. Min 1 fitting to be provided and additionally 3 for every 4 fittings or 1 per 25m2 of floor area whichever is greater

## HEATING

The heating system shall be extended and controlled by the provision of either a room thermostat or thermostatic radiator valves, all in accordance with Approved Document L1B 2010, Conservation of Fuel and Power.

## VENTILATION

not less than 8000 mm2. The following measures are to be taken to limit infiltration: b) Sealing around any loft hatches hollow constructions or voids.

#### DRAINS

Surface water drains shall be 100mm UPVC (or other approved) with flexible joints, laid to a min fall of 1 in 40 on 100mm granular bed. Separate drainage system to be maintained unless it can be shown on site to be a combined system. Any Inspection chambers up to 0.6m deep to be 190mm diameter. Inspection chambers up to 1.2m deep to be 450mm diameter. Inspection chambers over 1.2m to be 450mm diameter and fitted with access restrictor to 350mm. Drains under the building shall be encased in 150mm concrete. Rainwater goods are to be UPVC, deep flow gutters, 75mm diameter drops.

# SOAKAWAYS

CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015 All work to comply with the Construction, Design and Management Regulations 2015.

# of contractor.

You will be responsible for:a) Preparing a plan b) Organising the work

# GENERAL

noggins. Walls are to be tied to all roof joists at max 2m centres with galvanised m.s. straps. Provide adequate flashings and cavity trays at roof abutments.

New windows and doors to be double glazed(Low-E soft coat, n=0.05) with 20mm argon filled gap between panes (u-value 1.4W/m2C) Window and door set energy rating to be Band B or better. Insulated plasterboard to be used in all reveals. Windows to be purpose made UPVC by agreed Manufacturer to agreed specification and fitted into brickwork openings using proprietary straps to suit window frames. Heads to windows over 1200mm to be provided with head fixings into steel lintels using self-tapping screws. Mastic seal window and door frames externally. The following to be safety glass to BS6206: a) Any glazing within 800mm of floor level b) Any glazing in doors within 1500mm of floor level c) Any glazing in side panels within 1500mm of floor level All electric switches, sockets and lighting positions to be agreed with client prior to commencement of work All radiator positions and specifications to be agreed with client prior to commencement of work

# **ELECTRICAL INSTALLATION**

All construction materials to be used in accordance with manufacturer's recommendations and appropriate British Standards or **Agreement Certificates** 

#### SPECIFICATION

These plans shall not be acted upon until they have been approved in accordance with clause 14 and 12(2)(b) of the Building Regulations 2010. Should the owner or builder commence work without the above approval they do so at their own risk. Dimensions given on foundations are only indicative for normal soil conditions. Should it be necessary to provide raft foundation or other construction the builder shall contact the surveyor as soon as possible. All goods and materials unless otherwise specified shall be in accordance

The terms Builder or Contractor shall mean the person responsible for the construction. Deviations from the approved drawings can be made but only with the consent of the client and Building Control Officer. No trial holes have been taken on site and the builder must acquaint himself with the ground conditions of both the site and adjoining areas.

All dimensions given whether figured or scaled are to be checked on site by the contractor prior to commencement of work. Figured dimensions The contractor must furnish the Local Authority with all statutory notices for inspections and must liase with the statutory undertakers and comply

Habitable rooms shall have ventilated openings of at least 1/20 of the floor area. In addition it shall be provided with a controllable trickle ventilator

a) Fitting draught-stripping in the frames of operable elements of windows, doors and roof lights

c) Ensuring boxing for concealed services is sealed at floor and ceiling levels, and sealing piped services where they penetrate or project into

Any soakaways are to be designed and installed in accordance with BRE Digest 365

If you are working for a domestic client you the builder will be the `Principal Contractor` and must carry out the clients duties, as well as the duties In practice, this involves managing the work to ensure Health & Safety at all times.

c) Working together with others to ensure health and safety

HSE construction phase template has been issued to the client for you the builder to complete. It must be kept available on site for inspection

All elements of structure to be protected to 1/2 hr standard. Steel beams to have single layer of 15mm Gyproc fireline board screwed to timber

Catnic lintels or other approved are to be provided to all door and window openings. Lintels to be checked with manufacturer for suitability to take loading over span required. All lintels in external walls to be insulated and dpc's with preformed stop end cavity trays to be provided above all lintels.

All electric work required to meet the requirements of Part P (Electrical Safety) should be either

a) Installed by an electrician who is registered with a Part P Self-Certification Scheme or

b) Installed/supervised by an electrician qualified to at least City and Guilds 2391 (18th edition) In both cases a completion certificate to BS 7671 must be forwarded to the Local Authority within 30 days of installation.



# **19 FOREST GROVE**

# Proposed Plans & Elevations

Drg No 23/010

Scale 1:50 & 1:100