## GENERAL SPECIFICATION

## 1. FOUNDATIONS

- Concrete strip foundations to engineers details and subject to site conditions. see drawing no TCCE 2020-044-12-C-10-03
- for foundation details. • Foundations for external walls to be 1200mm (min.) x 300mm (min.) WITH A393 mesh
- bottom • Foundations for internal walls to be 600mm (min.) X 300mm (min.) with A393 mesh
- Foundations for party wall to be 1000mm (min.) X 300mm (min.) with A393 mesh bottom • Foundations to be made on undisturbed ground and any soft spots to be removed and made good with a lean mix concrete to Engineers approval.
- All concrete for foundations to 35N20 in accordance with BS8110. • Min cover to A393 mesh to be 50mm.
- 2. RISING WALLS
- Rising wall constructed in solid blockwork. Allow minimum 4 courses subject to ground • 50mm clearance to surround service pipes. For larger openings a concrete lintel should be provided.

## 3. FLOORS

- 75mm 30N10 thick reinforced concrete screed with polyproplene fibres anti-crack reinforcement to engineers spec and detail Polythene layer (500 gauge)
- 150mm Xtratherm Thin-R insulation board (or similar approved), with vertical strip of 30mm Xtratherm Thin-R (or similar approved) to perimeter of slab. Combined DPM/radon membrane 1200 gauge laid to manufacturers specification. Radon barrier to be lapped at least 150mm and sealed at all joints and at D.P.C. Any punctures in barrier should be patched with the same type of membrane, lapped at least 150mm and sealed beyond the limits of the puncture.
- 150mm 35N20 concrete subfloor with A393 mesh. 50mm sand blinding
- 225mm compacted Clause 804 stone compliant with S.R 21-2014
- Annex E on • 400mm of 75mm dia clean broken stone compliant with SR.21-2014 Annex E.
- Underfloor heating pipes clipped to the insulation. Thermal block to be fitted to perimeter of the slab

## • Fit ceramic Pilkington floor tiles with a slip resistant value of R11, to the bathroom floor. Install a 150mm high skirting tile complete with trim to top. Use flexible adhesive and

## 4. WALLS

- Generally 350mm cavity walls to be constructed of 100mm solid block/ brick (refer to elevations) external leaf, 100mm solid blocks internal leaf with a 150mm cavity between Note front & rear elevation to allow for 215mm blockwork internal leaf to carry concrete first floor slabs. The internal leaf reduces back to 100mm block at first floor level in these
- 150mm Xtratherm CavityTherm X021 (TC: 0.021W/mK) or similar approved cavity insulation (full fill board, thermal conductivity)
- Steel lintels to structural engineers spec & detail to be used. Austenitic stainless steel vertical twist dovetailed wall ties with clips for insulation
- positioned every 750mm (min) horizontally and 450mm (min) vertically. Additional ties to be used at opes and jambs. Cavity closers Kingspan Thermabate or equivalent
- Concrete cills on PVC DPC turned up at back and sides.
- Painted nap render finish to walls and plinth. • 2 coats of Dulux Weathershield to be applied to external walls/plith/cills etc. Colour to be

## ROOF

- Nail every second row of roof tiles, and all perimeter tiles. New slate on treated battens on Tyvek Breather membrane or equal approved on
- NSAI approved prefabricated roof trusses to suppliers design (include for certification as required by Assigned Certifier) on 100x75 treated wall plates. All roof timbers to be pressure treated incl. fascia, soffit, barge and gable ladder timbers.
- Include for all necessary purlins, hips, bearers, tilting fillets, ridge boards etc. Provide adequate bracing to roof.
- Connect roof truss to wall plate using proprietary truss clips in accordance with manufacturers instructions
- Eave ventilators to be fitted. roof vent tile to be fitted at ridge level as per manufactures spec & details
- Batt roof/wall straps at 2m centres with 4 no. fixings to walls, 3 no. fixings to truss and 2
- no, fixings to wall plate. 300mm fibreglass insulation
- Patination oil finish to all code 5 lead, to manufactures specification and detail. • Dry verge system. easy trim verge u complete with ridge caps, starter caps and end caps.

### 6 FASCIA, SOFFIT AND DOWNPIPES • Aluminium fascia and soffit, 10mm continuous vent gap between fascia and soffit (250mm overhang).

• 125mm seamless aluminium gutters with 75mm x 75mm PVC down pipes.

### INTERNAL DOORS • Door frames to be deal.

- Finish size to be ex 150mm x 50mm rebated with 75mm x 20mm splayed architraves standard to flush doors.
- Solid ply veneer flush doors throughout Locks and handles to be brass Sonnato BW450PB.
- 3 steel butt hinges per door 22mm white/red deal saddle boards, varnished
- Door stops to be fitted to all doors

## 8. D.P.C.

- DPC at minimum 150mm above ground level Stepped DPC over all opes
- DPC to be used under wall plate

## 8. OPES

• Row of masonry mesh reinforcement for full length of all walls above lintels

## WINDOWS & DOORS

- Grey UPVC double glazed argon filled soft low-e windows. Manufacturer's certificate for window & door u-values (min. 1.2) is to be obtained and provided to Assigned Certifier.
- Fit thumb-turn lock to all external doors. Allow for installation of security chain to door by door manufacturer.
- Sample of door & window to be provided prior to ordering. All bedroom windows to have min. clear ope of 850x500mm, ( in compliance with current
- building regs) to allow adequate means of escape. Child safety restrictors to be fitted to bedroom windows. Non lockable handles to be fitted.
- Glazing to bathroom to be obscured Precast concrete sills to be used throughout.
- 19mm bullnose white deal window boards, painted. Window boards in kitchen and athroom to be tiled.

Drawing Legend Section No. Sheet No. Detail Reference Detail 05 C00 Drawing Numbe Ridge Level Levels (Elevations) 114.760 L Spot Levels (Plans) Surface Water Foul Water \_\_\_\_ Mechanical Legend Underfloor heating manifold Ceiling Extractor Grille for demand EX controled ventilation, Aereco BCX or equal approved Wall Vent with hit and miss external grille  $\geq$ & Aereco EHT humidity sensitive air inlet internally or equal approved Aereco Heat Pump exhaust fan Internal Uni NOTE: Include for all builders work as required for Mechanical & Electrical installation Electrical Legend Lightswitch - (1 gang / 2 gang / 3 gang, number 2 denotes two way switching) - Pendant Bathroom dome fitting External Bulkhead External soffit mounted fitting Over sink strip light with shaver socket 
 L
 Single / Double switched socket above counter top
Single / Double switched socket at 450mm above FFL Cooker / Hob Isolator switch & isolator switches to concealed sockets △ Telephone Point TV TV Co-Ax Consumer Unit (Distribution Board) Doorbell

Doorbell Sounder

HC Heating Controls (Digital)

Smoke detector with sounder

(f) Heat detector with sounder

Hardwired smoke alarm remote

test, hush & locate switch

Category LD2: Interconnected self-contained mains powered/battery backed Smoke/Heat Alarms (Grade D - see

(1) all circulation areas that form part of an escape route

(2) all high fire risk areas/rooms e.g. kitchen, living rooms,

mains-powered smoke or heat alarms each provided with an integral standby power supply. Where multiple units are provided all devices shall be interconnected so that

detection of fire by any one unit will provide an audible alarr

For Grade D installations interconnections may be by radio or wiring. Where radio interconnection is used,

strength/reception at each device shall be carefully followed

Installation: Smoke, heat & carbon detectors to be installed a minimum of 500mm away from walls / light fittings

located in every habitable room through which a flue passes

Carbon monoxide detector c/w integral sounder to be

manufacturer's recommendations on testing of signal

Grade D system: An installation of selfcontained

Carbon monoxide detector with sounder

note below) shall be suitably located in:

T Thermostat

Telecoms Box

ESB Meter

Fire Safety

Fire Detection & Alarm System:

within the dwelling, and

garages, utility rooms and

(3) all bedrooms.

from each unit.

and records kept.





Proposed Ground Floor Plan

- Doors & windows to include all necessary ironmongery. Receiver type on external doors
- cuttings and trims. tiled window board to kitchen. • Flush solid doors painted with undercoat and satin wood paint. timbers to be primed before applying undercoat and paint All shower and bath fitting to be fitted to wall using Classi-Seal or e/a flexible waterproof

## One row of tiling to be provided above wash-hand basin in bathroom. walls surrounding bath/shower to be tiled to ceiling. Standard 200x200 ceramic pilkington oea. Appropriate

adhesive and grout to be used. include for all necessary cuttings and trims. Primer and bal tanking system to be applied to walls prior to tiling. Tile window board in bathroom. 12. VENTILATION • Ventilation to be "Demand Control" with Aereco V4A (or equal approved) continuous

to be of the hooked type. 5 point locking system.

10. THERMAL BRIDGING & AIR TIGTHNESS

• All electrical conduit in attic space to be sealed.

Acceptable Construction details'

11. WALL & CEILING FINISHES

at a later date).

Front door to have max. threshold height of 15mm, with exposed edges chamfered.

• After fitting of windows & doors all gaps to be sealed & air tightness tapes applied before

Ensure continuity of insulation to limit thermal bridging around windows, doors, other wall

• walls and ceiling to be painted with 3 coats of soft sheen emulsion (colour to be chosen

pilkington oea. appropriate adhesive and grout to be used. include for all necessary

• Wall to be tiled in kitchen to underside of overhead units, standard 100x100 ceramic

Fuel & Energy - Dwellings 2019. Refer to the document ' Limiting Air Infiltration -

openings and at any junctions between elements as required by TGD L Conservation of

• All internal plaster finishes of sand/cement scratch coat to go down to floor level.

• Attic hatch to be Minka "Loft Ladder" insulated airtight hatch or equal approved.

• 13mm thick plaster finish made up of scud coat, scratch coat and skim coat.

All pipe and service penetrations of building envelope to be sealed

• 12mm foil backed plasterboard to ceiling with skim finish

Moisture resistant plasterboard to be used in bathroom

• 112mm x 20mm bullnosed softwood skirting throughout.

- mechanical extract unit located in storage area. • Ducting in attic to be 125Ø rigid ducting. All ducting to be fully insulated
- Extract grilles typically to be Aereco BXC1842 humidy sensitive units, bathroom extract to be BXC275, humidity sensitive extract unit with boost via motion sensor (or equal

All wall vents to be 125mm cores with Aereco EHT acoustic kit with Aereco EHT humidity sensitive air inlets (or equal approved) with external canopy & insect grille Extract from "Wet Rooms" to meet the requirements of Table 1 of TGD Part F

Ventilation, minimum extract rate from Kitchen 13 litres/sec and from Bathroom 8 litres/sec.

## • Extract through suitable roof tile vent. 13. KITCHEN

- Fitted kitchen as per plans. 18mm MDF carcass and frame. pvc foil wrapped doors, max width 500mm. Double carcass on hinge side of doors. 30mm Formica counter top. 180° degree stainless steel hingeS. Wall mounted overhead cupboards
- Stainless steel sink, 2 taps or deck mixer acceptable. • Fit integrated cooker hood, with 150mm ducting pipe to vent. extraction rate to be
- 150m<sup>3</sup>/h (assuming 6 air changes per hour). • Deck mixer taps to be installed at kitchen sink unit.
- Stainless steel sink, 2 taps or deck mixer acceptable. • Fit new `combimate water descaling unit` (softner) under sink unit.
- Allow for plumbing under sink and leave all ready for dish washer and washing machine. Supply and fit new cooker vent hood and extract through external wall as indicated.
- All new sockets, switches and light fittings as per drawing. • Lay new ceramic tiles 150mm by 150mm from kitchen unit worktop to underside of wall units for the full length of worktop and down behind cooker with white ceramic tiles on all
- Supply fire extinguisher and fire blanket to kitchen.

## 14. ATTIC ACCESS

- Form attic access hatch in ceiling • The access hatch shall be accommodated within the truss spacing.
- Install airtight insulated attic access hatch with folding ladder 1/2 hour fire rating is required as per Part B of the Building Regulations Finish with 75 x 19mm architrave and painted.

## 15. RADON

- Radon sump/collector to be provided with 100mm dia. PVC pipe which is to terminate outside external wall with bend, capped flush with path. pipe can be extended and fan fitted should subsequent readings require it.
- 100mm min. to be left every 4th block in course below radon barrier to provide airflow to radon sump.

## tested in accordance with 10S 1421. • or, > or =12 when tested in accordance with 10S 1421.

# 16. PLUMBING & HEATING

# controls for two zones as follows:

- Zone 1: Kitchen/Dining, Living Room Zone 2: Bedroom, Hallway & Bathroom
- with Part L 2019".
- All pipes, valves and switches to be visible and clearly labeled.

- Shank. drawings.
- Fit 'Combimate' water softener to all units.
- Fit 'Magnaclean Professional' filter system. outside to allow for overflow.
- Provide reinforced radon barrier with tear resistance > or = 100N with vapour

scale: 1:50



# Proposed First Floor Plan

transmission of < or =  $0.4/m^2/24$  hours with elongation (at max. load) or, > or = 12 when

Heating & hot water to be provided by Joule Victorum exhaust air heat pump or equal approved. Any suggested alternative to be approved by BER consultant to confirm  $\ensuremath{\mathsf{Part}}\xspace \ \mathsf{L}$ requirements are achieved. Aluminium radiators to be installed throughout with thermostat

All primary pipework to be insulated. Heating system to meet the requirements as set out in the DOEHLG "Heating and Domestic Hot Water Systems for Dwellings - Achieving Compliance

All pipes in attic to be lagged with 19mm Armaflex insulation.

- Include for supply and instillation of all new sanitary ware. toilets, seats, sinks, taps, shower doors, bath,toilet roll holders, mirror to complete all bathrooms in full. All to be Armitage
- White Armitage Shanks 'Sandringham Classic O.E.A sanitary ware to be installed. Lever taps to be installed. Low profile shower trays to be installed as ber bathroom layout Provide cold water storage tank of approx. 350 litre capacity in roof space. Provide expansion tank of approximately 45 litre capacity. Each tank should be provided with appropriate cover and supported in accordance with guidelines as set out in the building regulations. Walkway to be laid in attic from attic access hatch to water tank. Two lights
- to be fitted in attic with switch located beside attic access hatch. All sanitary fitting and appliances to have flexible pennyvalve feeds.
- Gully to be installed underneath heat pump system to collect water extract from system. Gully to be linked to foul water drainage system. PVC drop to be installed from unit to
- gully underneath to allow for condensation runoff 50mm (min) drain adjacent to the water tank unit of the heat pump - plumped to the
- All 90 degree bends on all waste pipes to have rodding facility. Certification of heating/plumbing system required upon completion to be provided to

- 17. ELECTRICAL
  - Bathroom & external lights to have led 12 watt cool white bulbs fitted. All smoke/heat detectors to be interlinked
  - All electrical work to be to current RECI standards No wall sockets are to be back to back on party wall
  - All smoke / heat / C02 detectors to be wired back to locate/test panel unit, located beside fuse board
- Shower installations to have esb cable tails from meter to board to be 16 square, and cable from board to shower must be 10 square. Bathroom light to be on an RCD. Certification of electrical system required upon completion
- 18. AIR TIGHTNESS TEST

Contractor is to include for carrying out an air tightness test. Required result is air permeability rate (Q50) of not greater than 4 cubic metres per hour per square metre of exposed envelope area, to allow an entry into the deap software for adjusted result of air permeability test in AC/H adj of not greater than 0.2.

# BUILDING ENERGY RATING (BER) CERTIFICATE

Contractor is to provide BER certificate on completion of construction - minimum acceptable BER rating is A2

20. FINAL CLEAN FOR HANDOVER Include for full clean and fogging of dwelling upon completion

Duct to GF athroon extract  $\mathbf{V}$ -1900-Laundry W/M & area 3.0 sqm DRYER area 10.9 sqm **\***\_\_\_\_1285\_\_\_\_**\*** 

