

## Plumbing Installation

Complete installation to be subject to and capable of withstanding testing in accordance with BS 5572:1978. Above ground level foul drainage pipe work shall be PVC-u to BS 4514

Pipework must be designed in accordance with BS 5572 and installed to ensure that appliances drain efficiently without causing crossflow, backfall, leakage or blockage. No air from the drainage system shall be permitted to enter the building. Adequate support to lengths and at junctions - changes of direction to be provided. No branch connection to be within 450mm above foot of soil pipe. All PVC-u pipework to be installed to BS 4514.

Minimum pipe sizes for sanitary plumbing to be;

WC's soil pipes Handbasins s - 100mm dia Nominal size.
- 32mm dia Nominal size.
- 32mm dia Nominal size.
- 19mm dia Nominal size.
- 32mm dia Nominal size.

All fittings to have a 75mm deep seal traps, All waste pipes to be laid to falls 25mm per metre run. All sanitary fittings to be installed as per manufacturers instructions

The maximum lengths of waste pipes shall be as follows

32mm pipe - 1.7m Maximum length. 40mm pipe - 3.0m Maximum length. 50mm pipe - 4.0m Maximum length. 100mm pipe - 6.0m Maximum length.

Soil and ventilating stacks @ head of drainage run to be ventilated to the external air via rigid ducting.

(Min 900mm above any openable window head or within 3m horizontally).

Soil pipes passing through habitable rooms (including kitchens) to be lagged with minimum 50mm sound deadening quilt and 2 layers of 12.5mm plasterboard in 38mm x 38mm softwood framing. Access and rodding eye fittings to be provided to ensure all pipework is accesible as required. Pipework laid between joists to be adequately supported. Underground pipes with less than 750mm ground cover shall be insulated. Any rising mains are to be insulated.

New 100mm dia stub stack as indicated with rodding access to serve new shower/ensuites.

Surface water to be conveyed to existing rainwater drainage system.

Ventilation

All habitable rooms to have rapid ventilation via windows/doors of an openable area of at least 1/20th of the floor area, part of the ventilation area is to be 1.75m above floor area.

Windows are to provide 4000 sq/mm minimum of background ventilation via controlled trickle vents in utility room, en suite and bedroom. All habitable rooms to acheive 8000 sq/mm. Alternatively the sum of all trickle vents must equal 6000 sq/mm as specified in Table 1 of approved document F1.

Shower/Barthrooms to be ventilated mechanically extract to external air @ 15 litres per second. /entilated with a wall mounted fan which can acheive

Mechanical vents are to be tested and commisioned in accordance with regulation 42 and part F1 2010.

Electrical Installation.

All the electrical installation is to be in full accordance with BS 7671 and with the latest addition of IEE wiring regulations.part 'P' building regs, and should be carried out in accordance installation techniques applicable to the material and equipement being used. Full completion certificates to be issued by a certified electrical engineer to be provided upon completion of the electrical installation. with current

Note that all wiring which is covered or surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A of BRE 'Thermal isulation'; avoiding the surrounded with Appendix A ช with thermal insulation to าg risks 2002 edition. be

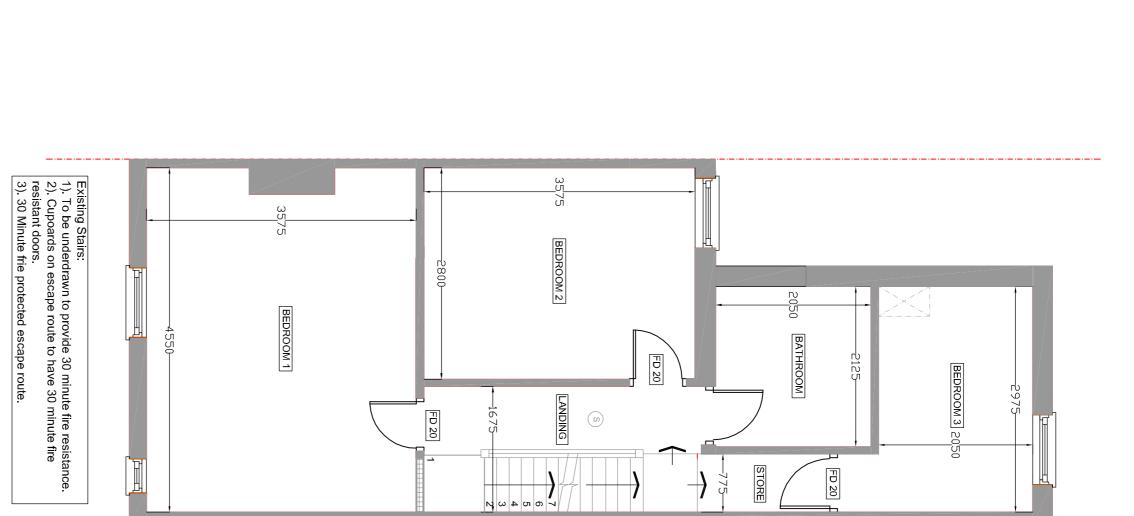
All downlighters in ceiling voids are to be fitted with intume covers to maintain half hour

All light switches are to be fitted 1200mm 450mm above finished floor levels. from finis shed floor level and all switched outlets to be fitted

Gas; All works to the boiler and heating system to be ca arried out bya Gas Safety Registered person

Lighting. 75 % of new light fittings to be energy efficient

The hot water supply to baths/sinks/showers must in of the water does not exceed 48 degrees celcius. The pipes to be insulated to conserve heat in unheated 40 degrees celcius not exceeding 0.035 W/m2K, has a maximum of 40mm. t incorporate measures to ensure that the temperature Thermostatic mixing valves to be provided. Hot Water I spaces with material having a thermal conductivity at naving a thickness equal to the diameter of the pipe up



New Staircase.

Staircase to be closed plan - min going 220mm maximum pitch to be 42 degrees.

Maximum riser to be 190mm. Staircase balustrade designed to prevent a 100mm sphere passing through. Balusters to be vertical and at 100 c/c, handrail to be min 900mm above pitch line max 1000mm.

Clear unobstructed width min 800mm minimum lar to be 800mm.

2000mm headroom to be obtained to proposed staircase. Two way switches to be fitted to top & bottom of stairs.

FD 20 LANDING

DINING

FD 20

DOUBLE GLAZED DOORS
WITH 16mm AIR GAP, LOW 'e' COATING
TO ACHIEVE A U VALUE OF 1.0W/m2K
WITH INCORPORATED BACKGROUND VENTS

DOUBLE GLAZED WINDOWS
WITH 16mm AIR GAP, LOW 'e' COATING
TO ACHIEVE A U VALUE OF 1.1W/m2K
WITH INCORPORATED BACKGROUND VENTS

Internal Wall - Stud partition;
Internal walls offering seperation between a room containing a water closet and other rooms within the dwelling to achieve a reasonable resistance to the passage of sound (Minimum 40db).

Timber stud walls to have a minimum of 75mm between linings with one layerof 15mm plasterboard to both sides achieving a minimum mass of 10kg/m2 between the stud partitioning Sound deadening quilt insulation to fill cavity.

OBSCURE GLAZED

n treated timber
\$ 747,
\$ 747,
d to 47mm x 100mm
n c/c. Celotex
ween timber studs,
yr studs
Plaster skim.

Glazing.
All glazing installed within 800mm of the finished floor level & 1500mm if installed in a door to be toughened safety glass & to conform to the safe break characteristics as defined by BS 6206.

KITCHEN

PROPOSED FIRST FLOOR SCALE BAR 1:50 @ A1

PROPOSED GROUND FLOOR

LIVING ROOM

HALL

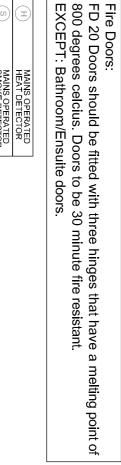
FD 20

300

SCALE BAR 1:50 @ A1

PROPOSED LOFT FLOOR SCALE BAR 1:50 @ A1

Ashlar walls 12mm plywood nailed to 47mm x 100mm vertical timber studs @400mm c/c Celotex Insulation to be 100mm Between timber studs, 50mm Celotex insulation over studs Joints taped as VCL, 12.5mm Knauf wallboard.



WALLS TO ACHIEVE: 0.18W/m2K
 FLOORS TO ACHIEVE: 0.13W/m2K
 PITCHED ROOF INSULATION @ CEILING LEVEL TO ACHIEVE: 0.11W/m2K
 PITCHED ROOF INSULATION @ RAFTER LEVEL TO ACHIEVE: 0.11W/m2K
 FLAT ROOFS TO ACHIEVE: 0.11W/m2K
 DOORS TO ACHIEVE: 1.0W/m2K
 WINDOWS: 1.1W/m2k.

Co Design Ltd

SITE ADDRESS: 215

DATE: 23.02.23 DRAWING NO: NEW/03

PART L1B. CONSERVATION OF FUEL AND POWER. MAINS OPERATED
HEAT DETECTOR
MAINS OPERATED
SMOKE DETECTOR

SCALE BAR 1:50 @ A1