Front Elevation Scale 1/100

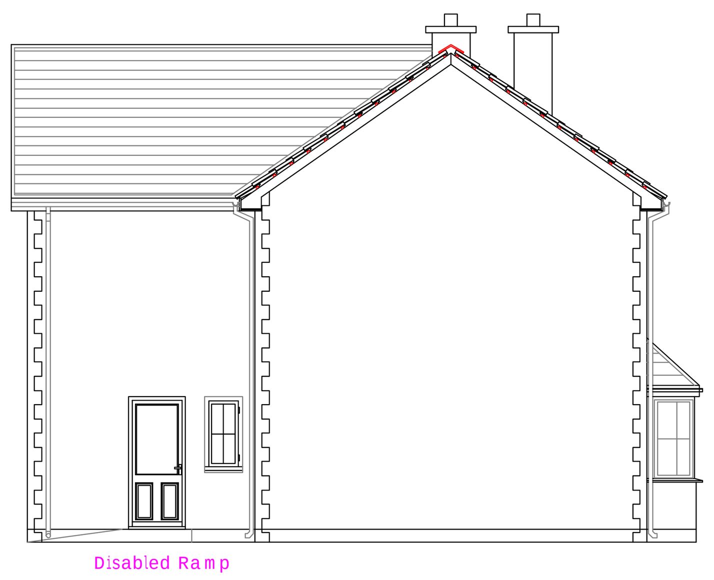
Black Flat Slates

Black PVC Fascia
Guttering & Downpipe

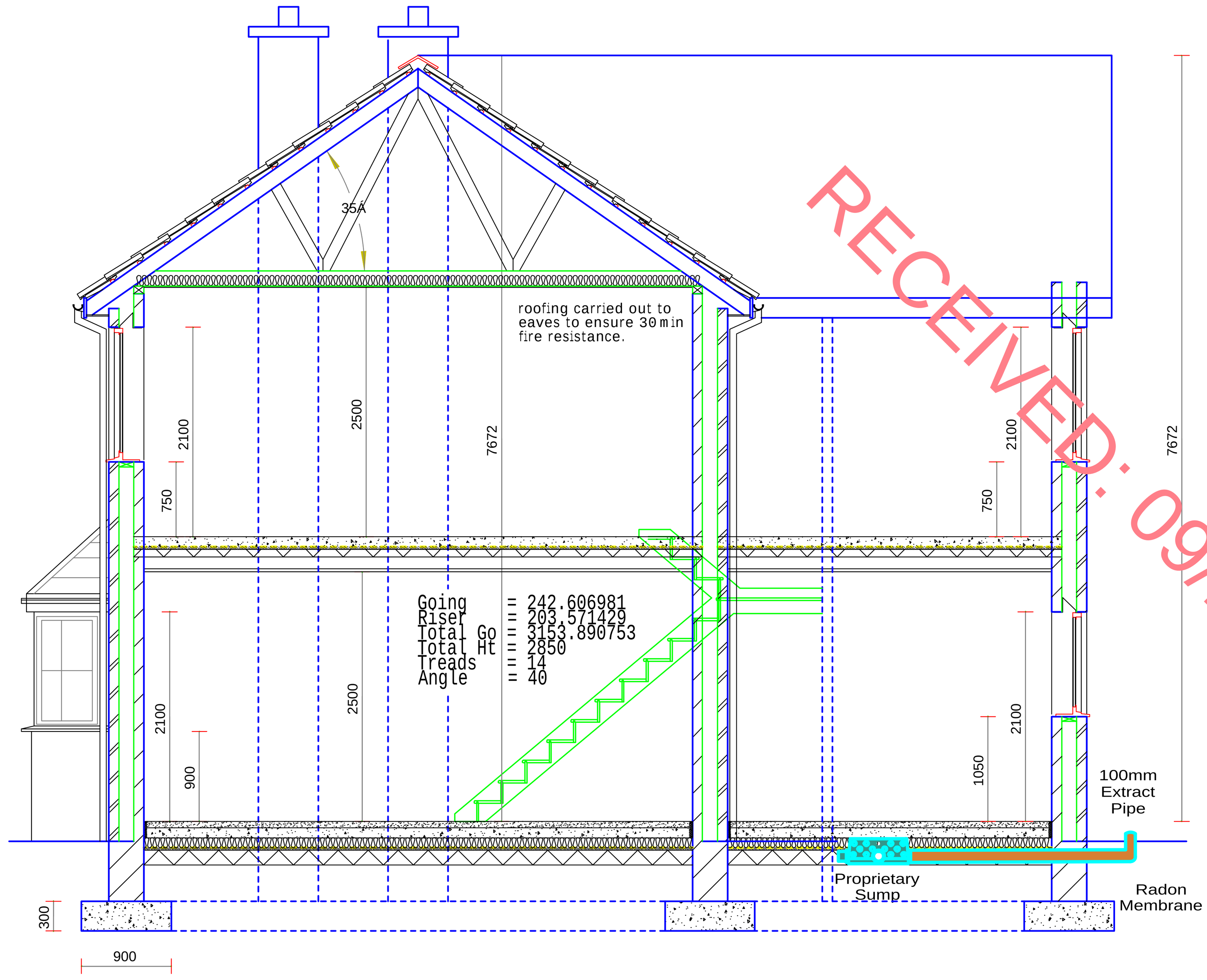
Smooth Plaster Finish

White PVC Windows
and Doors

Smooth Plaster Plinth

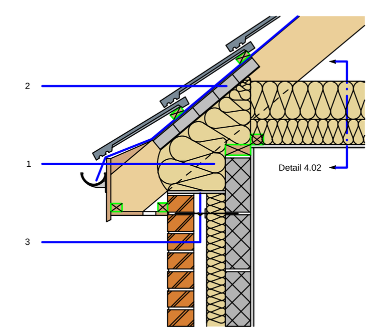


Side Elevation Scale 1/100



RECEIVED: 09/10/2024

4.01 Pitched roof. Ventilated loft. Eaves.



Notes

1. Apply 50mm (min) layer of compressible mineral wool or similar (R=1.2m|K/W) over wall and ensure loft insulation meets wall insulation.
2. Use proprietary crossflow ventilator or ensure 25mm (min) air gap.
3. Fully close cavity with mineral wool or calcium silicate board (shown).

This detail is also suitable for monopitch roofs subject to suitable ventilation provision.

This detail should be read in conjunction with detail 4.02.

Masonry: Cavity Wall Insulation: Partial-Fill robustdetails

DRAINAGE:

Contractor to establish existing drainage levels prior to commencement of the works.
Lay 110mm diameter pvc foul and storm drains laid at 1:80 fall bedded in pea gravel as per Diagram 8 & 9 of The Technical Guidance Document Booklet H with reference to paragraph 1.3.7.2 and paragraph 1.3.7.3.
All drainage pipes to BS 4514 and BS 4660.
Provide polypropylene inspection chambers and build manholes as shown with Galv. m.s. covers, heavy duty covers when positioned on driveways or roads to meet the road authority standards and details.
Provide 100mm dia.pvc soil vent pipe terminating 1.0m above window head with plastic mesh balloon. Where a length of branch pipe cannot be accessed by a trap, a rodding point shall be provided.
All drainage lines within 1m of foundations to be encased in concrete or pea gravel equal to the thickness of the pipe. 100mm dia.upvc gutter & 75mm downpipe connected to vbigt's & to new manholes.

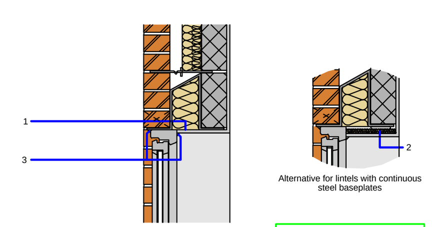
FOUNDATIONS:

The foundations have been designed to be adequate if bearing on sub-soil type 3 or better as defined in the Table 5 of the Technical Guidance Document A on Structure. If Sub-soil of this type is not found at normal depths, an alternative foundation design based on soil investigation report will be submitted to the Building Control.
Minimum Depth of foundations to be 900mm below finished ground level.
900mm x 300mm min. concrete foundations to 300mm & 215mm wide walls and 600mm x 300mm min foundations to 100mm wide walls as per Diagram 11, Diagram 12, and Diagram 13.
A layer of A393 mesh to be placed in bottom section of all founds.

ROOF DETAIL:

38 X 100mm rafters @ 400mm centres on
44 x 225mm ceiling joists @ 400mm centres &
100 x 50mm supports from joists to rafters.
100 x 38mm ties every 3rd rafter.
200 x 38mm ridgeboard.
All timbers must refer to Technical Building regulations Booklet A paragraph 1.1.2.7.
Code no.6 lead flashings & valley boards & gutters
50 x 100mm wallplate anchored at 1800 centres to wall with 30 x 2.5 galvanised m.s. straps.
300mm fibre-glass insulation between joists (150mm over & 150mm between).
Trim out and form insulated trap door.
Ceilings to be 12.5mm plaster lath bonded and skimmed.
uPVC Eaves & pointed barges 225 x 25mm fascia 9mm upvc soffit with continuous vents 100mm dia upvc gutter & 68mm upvc downpipes connected to vbigt's & new manholes & to 100mm dia storm line.

4.10 Windows and doors.Folded Lintel.



To achieve R=0.34m|K/W (note 2)	
λ* (W/mK)	Thickness (mm)
0.020	7
0.025	9
0.030	10
0.035	12
0.040	14

Notes

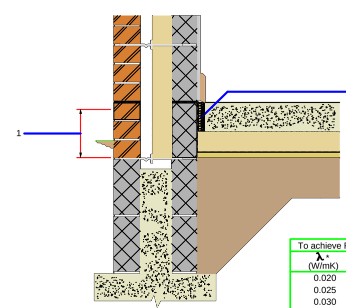
1. No baseplate or perforated baseplate with effective conductivity not exceeding 30W/mK (manufacturer's certified data).
2. For lintels with continuous solid steel baseplates soffit should be lined with insulation of minimum R-value of 0.34m|K/W (alternative provision for trickle ventilation may be required).
3. Sealant to front and back of frame.

Seperate cavity trays may be required depending on exposure and lintel specification.

* Thermal conductivity

Masonry: Cavity Wall Insulation: Partial-Fill robustdetails

4.14 Ground bearing floor. Insulation below slab.



To achieve R=0.75m|K/W (note 2)	
λ* (W/mK)	Thickness (mm)
0.020	15
0.025	19
0.030	23
0.035	26
0.040	30

Notes

1. Continue wall insulation at least 150mm below top of perimeter insulation and support on row of ties.
2. Perimeter insulation with minimum R-value of 0.75m|K/W - see table.

Any screed must have perimeter insulation with a minimum R-value of 0.75m|K/W (not shown).

* Thermal conductivity

Masonry: Cavity Wall Insulation: Partial-Fill robustdetails

Rear Elevation Scale 1/100

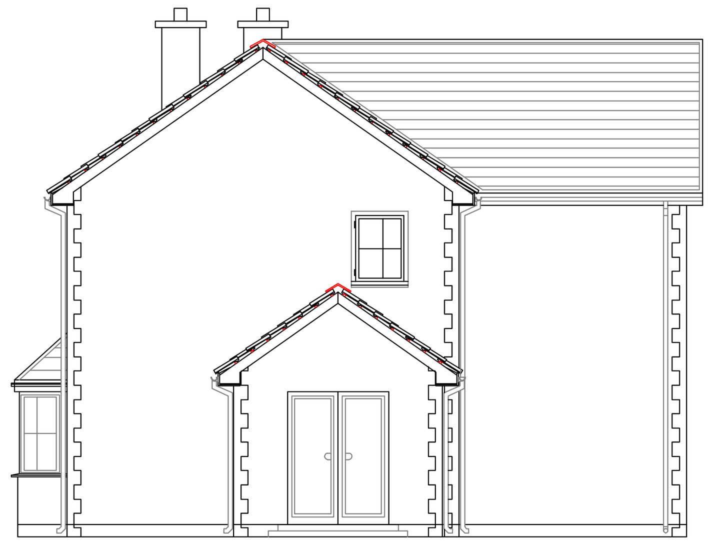
Black Flat Slates

Black PVC Fascia
Guttering & Downpipe

Smooth Plaster Finish

White PVC Windows
and Doors

Smooth Plaster Plinth



Side Elevation Scale 1/100

FLUES AND CHIMNEYS

1.Any room or space containing an appliance (other than a room-sealed appliance) shall have a permanent ventilation opening of free area at least 550sqmm, plus an additional 550sqmm for each kw of rated output above 6kw.
2.Sizes of flues:
a)The flue pipe size shall be at least the same as for the flue outlet on the appliance.
b)The chimney size shall be 100mm dia for an appliance with a rated output up to 20kw: 125mm dia with a rated output between 20kw & 32kw: 150mm dia for a rated output between 32kw & 45kw.
3)Factory made flues shall be:
a)constructed & tested to meet the relevant recommendations given in BS 4543:Part 1:1990 & Part 3: 1976 Specification for Chimneys for oil fired appliances and
b)Installed so as to meet the requirements of BS 6461: 1984:Part 2

4)Unless the appliance complies with the relevant recommendations of the appropriate Parts of BS 5386 the back, tops & sides of appliances, any draught-diverters shall be separated from any combustible material by:
a) A shield of non-combustible material at least 25mm thick or
b) An air space of at least 75mm.

DOORS:

All ground floor doors to be 1000mm wide doorsets allowing full clear opening of 800mm min.
All first floor room doors to be 900mm wide doorsets.
External door openings to be min 1022mm min 850mm clear.
All main door entrys to be level access with DPC level with floor on inner leaf & 150mm above ground level on outer leaf & fully wrapped around threshold blocks.

ECO-FRIENDLY REQUIREMENTS:

All insulation materials to be CFC & HCFC free
All main building elements of timber to be 95% PEFC Certified & remaining timber temperate.
All Finishing Elements of Timber to be 50% PEFC Certified & remaining under temperate.
Certificates confirming the above are to be provided by the Main Contractor from his suppliers.

BUILT CHIMNEYS:

All masonry built chimneys shall be constructed in complete compliance with Diagram 10 as defined in Booklet A within The Technical Guidance Document taking reference to Part 4 Paragraph 1.1.4.1

WALLS:

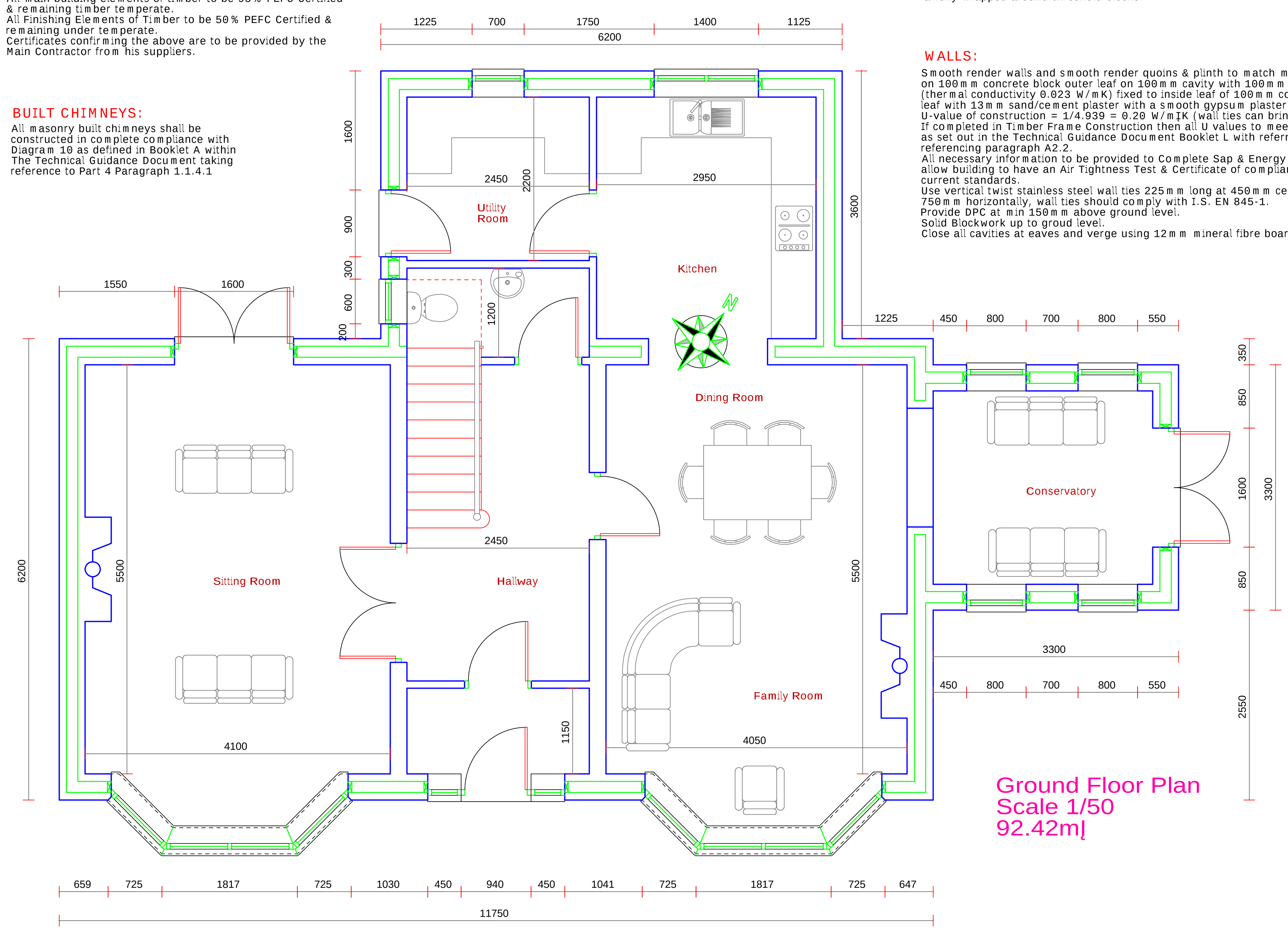
Smooth render walls and smooth render quoins & plinth to match main house finishes on 100mm concrete block outer leaf on 100mm cavity with 100mm thermal insulation (thermal conductivity 0.023 W/mK) fixed to inside leaf of 100mm concrete block inner leaf with 13mm sand/cement plaster with a smooth gypsum plaster skimmed finish.
U-value of construction = 1/4.939 = 0.20 W/m²K (wall ties can bring it below 0.21).
If completed in Timber Frame Construction then all U values to meet the regulation as set out in the Technical Guidance Document Booklet L with refernce to Diagram A2 referencing paragraph A2.2.
All necessary information to be provided to Complete Sap & Energy Calculations & to allow building to have an Air Tightness Test & Certificate of compliance to meet the current standards.
Use vertical twist stainless steel wall ties 225mm long at 450mm centres vertically and 750mm horizontally, wall ties should comply with I.S. EN 845-1.
Provide DPC at min 150mm above ground level.
Solid Blockwork up to groud level.
Close all cavities at eaves and verge using 12mm mineral fibre board.

GENERAL NOTES:

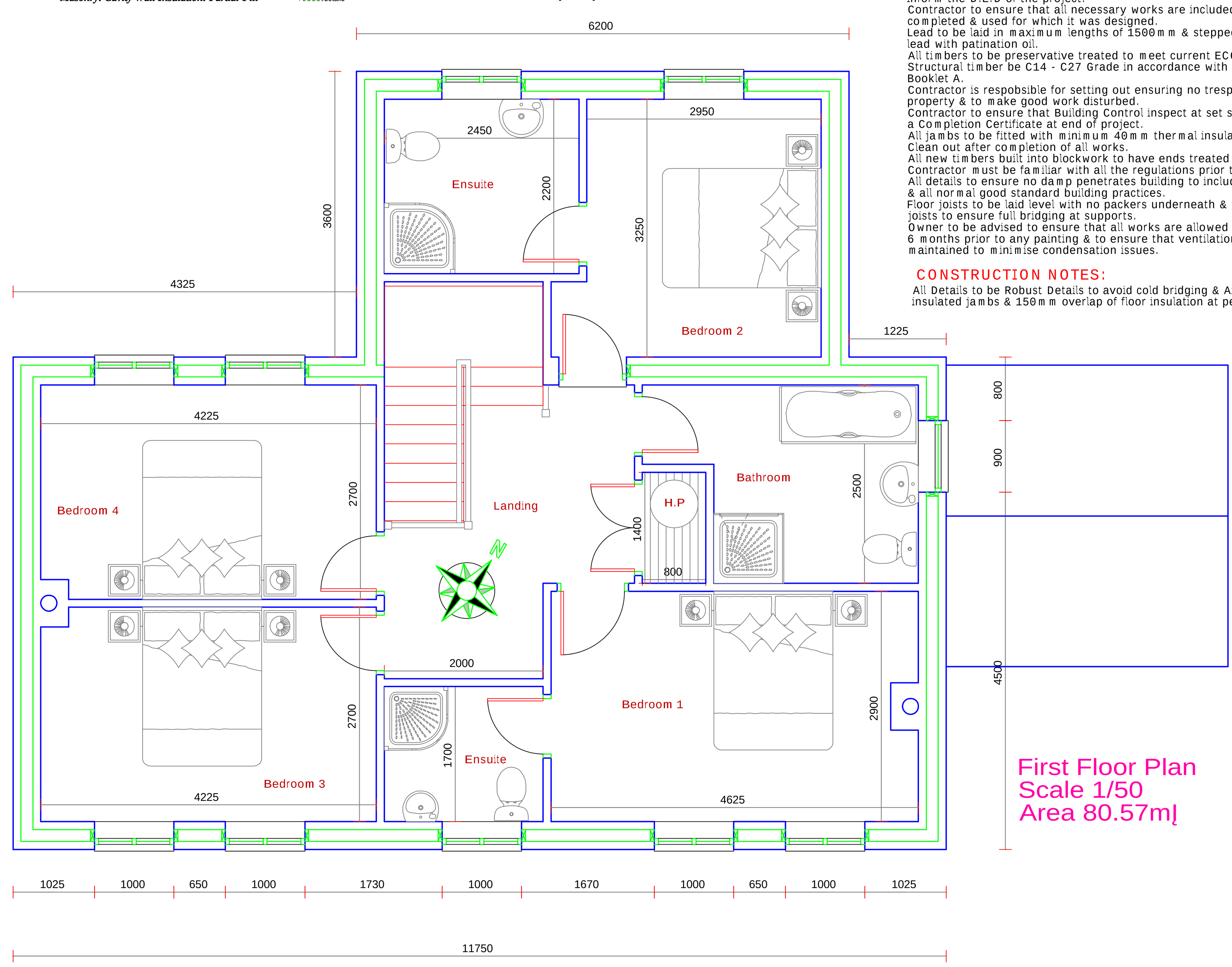
All workmanship and materials to Irish standards and Irish agrement approved.
Contractor to ensure compliance with TGD and CDM Health & Safety regulations including all workforce allowing all necessary weather protection & security & to inform the D.E.D of the project.
Contractor to ensure that all necessary works are included to allow building to be completed & used for which it was designed.
Lead to be laid in maximum lengths of 1500mm & stepped to falls. Treat all exposed lead with patination oil.
All timbers to be preservative treated to meet current ECO Friendly Product Standards.
Structural timber be C14 - C27 Grade in accordance with Technical Guidance Document Booklet A.
Contractor is respobsible for setting out ensuring no trespass occurs into adjoining property & to make good work disturbed.
Contractor to ensure that Building Control inspect at set stages of construction & request a Completion Certificate at end of project.
All jambs to be fitted with minimum 40mm thermal insulation.
Clean out after completion of all works.
All new timbers built into blockwork to have ends treated as recommended by specialists.
Contractor must be familiar with all the regulations prior to commencement of the works
All details to ensure no damp penetrates building to include stepped DPCs, cavity trays & all normal good standard building practices.
Floor joists to be laid level with no packers underneath & to be built solidly between joists to ensure full bridging at supports.
Owner to be advised to ensure that all works are allowed to dry out for a minimum of 6 months prior to any painting & to ensure that ventilation & heating balance is maintained to minimise condensation issues.

CONSTRUCTION NOTES:

All Details to be Robust Details to avoid cold bridging & Air Leakage with minimum 40mm insulated jambs & 150mm overlap of floor insulation at perimeter edge with insulation on horizontal.



Ground Floor Plan
Scale 1/50
92.42m²



First Floor Plan
Scale 1/50
Area 80.57m²

Client: Michael & Patricia Gallagher

Project: Proposed dwelling
At Aughnish, Ramelton
Co. Donegal

Scale: 1:50, 1:100

Floor Area 172.99m² 1862sq.ft.

Date:30th September 2024

Drawn By
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