

Cavity wall construction (350mm Masonry)

350mm cavity below DPC level up to 1m deep are to be constructed with two skins of 7N/mm² 100mm or 140mm if over 1m deep concrete blocks 1:3 - 4 cement mortar with plasticiser and in-filled with concrete to a maximum of 225mm below DPC level.
350mm external walls constructed in either 100mm minimum thickness

reconstituted coursed stone facing or facing brick or dense block with 2 coat K-Rend render, 100mm thick dense concrete block skin, 50mm cavity with a 100mm minimum thick PIR insulation on 100mm dense block inner leaf with either a 15mm lightweight plaster finish or 12.5mm plasterboard on dabs skimmed dry lining maintain a clear 50mm cavity at all times, Ancon ST1 wall ties at every course around openings and corners within 300mm and 750mm x 450mm

diamond pattern as manufactures details (suitable for 150mm cavity).

Proprietary purpose made lintels to be constructed over all external openings in accordance with lintel manufacturer's details which should be approved by building control before works commence on site.

Walls should be built in 1:5-1:6 cement /sand mortar mix with

plasticiser and tied with British All lintels to be sized from below or as specified by WDS Ltd, 150mm x 100mm PCCL - all internal masonry openings

Roof
Traditional timber roof to be fixed strictly in accordance with structural design details and calculations, concrete roof tiles sat on 50 x 25 treated softwood battens max head

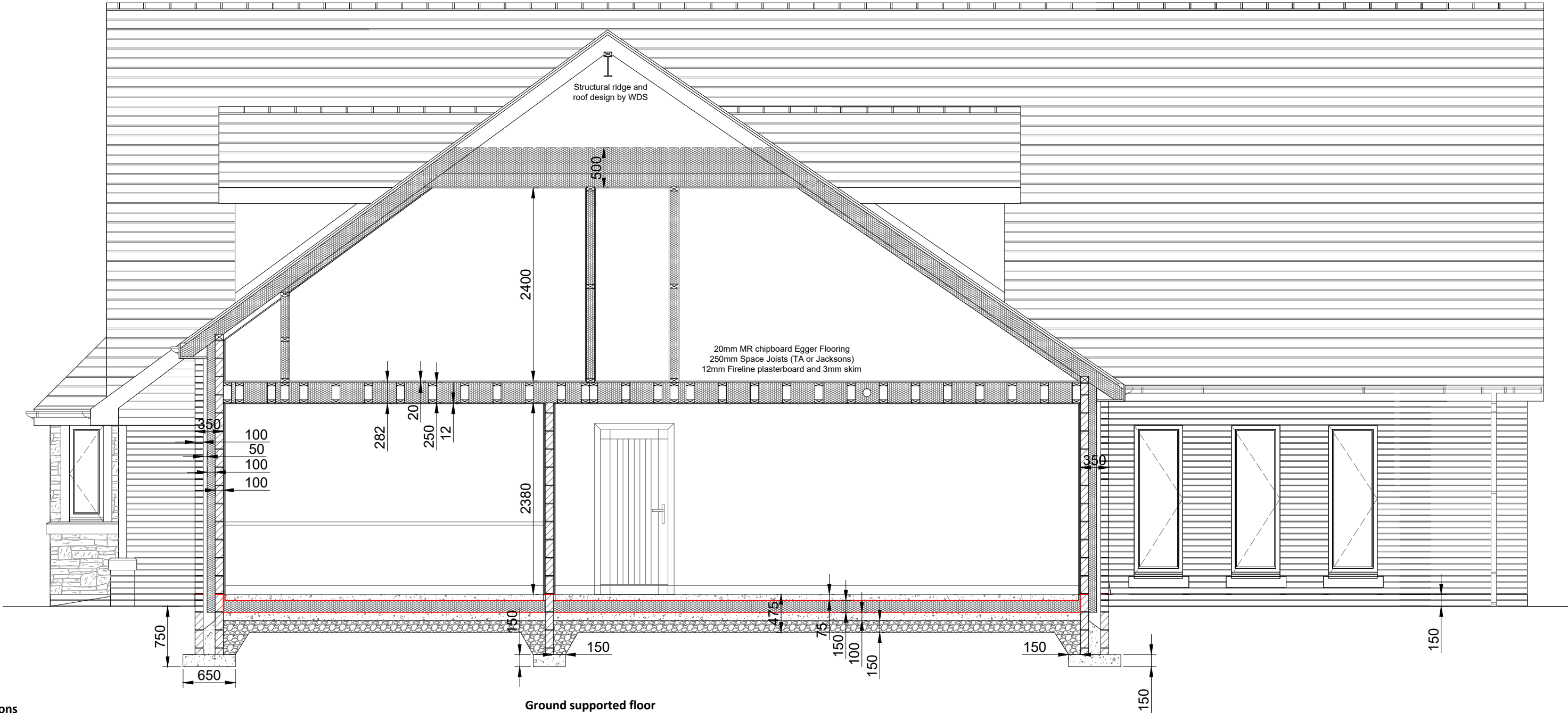
and side laps (as manufacturer) on Proctor breather roofing membrane laid over trussed rafters and lapped 75 horizontally and 450 vertically.
Rafters at 400mm spacing's to BS 5268:3 or PD 6693-2. Rafters to be fixed and braced strictly in accordance with BS 5268:3 or PD 6693-2, mechanically fixed to 100 x 50mm treated soft wood wall plates using proprietary truss clips to wall plate.

Roof details of and bracing diagram is to be prepared by WDS , which must be submitted and approved by building control prior to commencing roof construction.
Wind bracing to comply with B.S. 5268 Part 3: 1985. Design and calculations to be submitted to Local Authority 21 days prior to commencement on site.

100 x 50 mm softwood treated wall

plate anchored using 1200mm lateral restraint straps at 1500mm centres also installed at ceiling and rafter level and noggin under spanning 3no trussed, all as manufactures details.

Timber valley boarding with Code No. 5 lead open valley minimum 300 mm wide. Lead in lengths not exceeding 1.5 m in accordance with LSA guidance.



Foundations

350mm cavity walls foundations to be minimum 650mm x 150mm and 450mm from ground level, (trench fill) internal wall foundations to be minimum 400mm x 150mm (all 150mm projection). Ready mixed concrete in foundations to comply with B.S. 5328: 1992 not less than 20 N/mm2 minimum cement content 220 Kg/m3, 20 mm maximum aggregate - foundations to place no loading on existing lateral drain, not exceeding the requirements of table 10 & dia 23 of ADA.

Concrete mixes for foundations
Foundation work to comply with BS 8000:1, 2 and 5 and BS 8004. General purpose concrete mixes for non-hazardous conditions to comply with BS 8500 and BS EN 206-1.

Stepped foundation section detail (not to scale)

Steps in strip foundations should not exceed its thickness and should overlap by twice its thickness or 300mm if greater.

Ground supported floor

Topsoil and vegetable matter to be cleared from site and floor area to be in filled between walls with minimum 150mm/maximum 600mm clean, sand blinded, mechanically compacted, hardcore. 1200g (300 micrometer) type 1 - continuous polythene damp proof membrane (DPM) barrier is to be laid over sand blinded, lapped DPM & DPC and sealed at all joints and linked to stepped DPC's in walls as per manufactures details.
Lay 100mm minimum thick ST2, or Gen1 concrete floor slab with a trowel smooth surface ready for insulation, (note: 500g polythene separating layer is to be installed both sides of insulation board.)
Sealing of joints in the barrier and sealing around service penetrations in compliance with part C of this guidance. Lay 150m PIR kingspan floor grade insulation over DPM, minimum thickness and type in accordance with the SAP including 25mm thick insulated up-stands between slab and external walls.
Proprietary under floor heating system to be installed it should be fixed above insulation and under screed layer in compliance with heating pipe manufacturer's/heating specialist details. 75mm Screeds over under floor heating should be sub divided into bays not exceeding 40m2 in area.
Expansion/contraction joints in screeds should be consistent with joints in slabs, and pipes protected in accordance with heating pipe manufacturer's/heating specialist details with a minimum 100m structural slab under the insulation.

Address	Plot 2 Arlecdon Road, Arlecdon, Frizington, Cumbria		
Project	Proposed Dormer Bungalow Proposed Dwelling Section Plan		
Ref	P2AR-KM-005	Rev	B
Scale	1/50	Date	2nd Jan 2023
Client	Mr & Mrs McGonagle		Paper Size A3