



**ROOF CONSTRUCTION:**

1. BLUE/BLACK 'TRUETONE' CEMENT FIBRE SLATES, ON 50x38mm TANALISED SOFTWOOD BATTENS, ON UNTEARABLE SARKING FELT (TO I.S.36) LAPPED MIN 100mm HORIZONTALLY, ON PREFABRICATED ROOF TRUSSES (DESIGNED AND FABRICATED IN ACCORDANCE WITH IS 193 OR BS 5268).
2. 300mm FIBREGLASS INSULATION IN BETWEEN TRUSSES.
3. 100x75mm TIMBER WALL PLATE, STRAPPED TO WALL WITH GALVI STRAP 750MM LONG MINIMUM AT 1.2m CENTRES.
4. 30x5mm GABLE RESTRAINT STRAPS AT 1.2m CENTRES.
5. 75x30mm TIMBER SOFFIT BEARERS TO EVERY TRUSS; INCLUDING PVC VENTILATED SOFFIT AND FASCIA FIXED TO 150x19mm BOARD.

**WALL CONSTRUCTION:**

1. 100mm SOLID BLOCK OUTER LEAF, 100mm CAVITY WITH 60mm KINGSPAN THERMALL TWSO INSULATION, 215mm SOLID BLOCK INNER LEAF.
2. MINIMUM CHARACTERISTIC BLOCK STRENGTH TO BE 7.5N/mm<sup>2</sup> TO BS5628. MORTAR TO BE CLASS (M5).
3. S/S CAVITY WALL TIES @ MAX 750mm HORIZONTALLY AND 450mm VERTICALLY. ADDITIONAL TIES AT 225mm VERTICAL CENTRES AT OPES.
4. MASS CONCRETE CAVITY FILL TO 225mm BELOW D.P.C.
5. PRECAST UNTELS OVER ALL OPENINGS U.N.O. MINIMUM BEARING 150mm.
6. S/S BED JOINT REINFORCEMENT TO BE LADDER TYPE AND EXTEND MIN 600mm EACH SIDE OF OPE FOR TWO COURSES.
7. LAPS IN DPCs TO BE A MINIMUM OF 225mm AND ARE TO BE SEALED WITH AN APPROVED BITUMINOUS WATER PROOFING COMPOUND.
8. DPCs SHALL BE CONTINUOUS WITH OR SEALED TO THE DPM/RADON OF THE FLOOR AND SHALL CONFORM TO I.S. 57:1987.

**FLOOR CONSTRUCTION:**

1. 150mm RC FLOOR SLAB (C28/35) (CLASS U3 FINISH) WITH A393 MESH TOP (40mm COVER) & A393 MESH BOTTOM (50mm COVER), ON HIGH DENSITY KINGSPAN INSULATION (70mm KINGSPAN THERMAFLOOR TF70, OR SIMILAR) ON MONARFLEX RMB400 RADON BARRIER, OR EQUIVALENT ON 50mm SAND BLINDING ON 250mm COMPACTED 10-50mm STONE WITH NO FINES, IN LAYERS NOT EXCEEDING 150mm, WITH 8No. PASSES OF 1800kg/m<sup>2</sup> VIBRATING-PLATE COMPACTOR). RADON BARRIERS LAPPED AND SEALED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. PROVIDE 1No. RADON SUMP PER 200m<sup>2</sup> WITH #110mm uPVC DISTRIBUTION PIPES FALLING TOWARDS THE SUMP UNIT, CAPPED AND SEALED EXTERNAL TO THE BUILDING 150mm ABOVE GROUND LEVEL.

**FOUNDATION CONSTRUCTION:**

1. GRADE C28/35 CONCRETE.
2. A393 MESH TOP AND BOTTOM WITH 50mm COVER.
3. STRIP FOUNDATION DIMENSIONS AS PER SECTIONS.
4. PROVIDE MINIMUM 50mm CONCRETE BLINDING (C16/20) UNDER FOUNDATIONS TO FIRM STRATA TO THE ENGINEER'S SATISFACTION.

**Dpc's:**

TO BE PROVIDED AS FOLLOWS:

1. AT BASE OF ALL WALLS OR PIERS (EXCEPT RETAINING WALLS)
2. DPC TO OUTERLEAF TO BE ABOVE FINISHED PATH/GROUND LEVEL.
3. UNDER ALL COPINGS AND CHIMNEY CAPS.
4. AT JAMBS AND HEADS OF OPENINGS, ELSEWHERE WHERE CAVITY IS BRIDGED, ALL HORIZONTAL DPC'S TO BE STEPPED OUTWARDS SO AS TO DISCHARGE MOISTURE EXTERNALLY. OMIT WHERE HEAD IS PROTECTED BY EAVES OVERHANG.

**VENTILATION:**

VENTILATION IN ACCORDANCE WITH THE BUILDING REGULATIONS  
CONTINUOUS VENTILATION STRIP TO BE PROVIDED TO SOFFIT FOR VENTILATION OF ROOF SPACE.

**NOTE:**

ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE BUILDING REGULATIONS 1997 OR ANY AMENDMENT OF THE REGULATIONS CURRENT AT CONSTRUCTION TIME.

ALL DIMENSIONS ARE IN MILLIMETERS U.N.O.

MAXIMUM AVERAGE ELEMENTAL U-VALUES (W/m <sup>2</sup> K) FOR NEW BUILDINGS & EXTENSIONS	
FABRIC ELEMENT	U-VALUE (W/m <sup>2</sup> K)
PITCHED ROOF, INSULATION	0.16
HORIZONTAL AT CEILING	0.20
PITCHED ROOF, INSULATION ON SLOPE	0.22
FLAT ROOF	0.27
EXTERNAL WALLS	0.25
OTHER EXPOSED FLOORS	0.25
EXTERNAL PERSONNEL WINDOWS AND ROOF LIGHTS, VEHICLE ACCESS AND SIMILAR LARGE DOORS	1.5



ScottishPower Renewables  
320 St Vincent Street  
Glasgow  
G2 5AD

Email: [info@scottishpowerrenewables.com](mailto:info@scottishpowerrenewables.com)  
Web: [www.scottishpowerrenewables.com](http://www.scottishpowerrenewables.com)

**Notes**

1. This drawing is the property of ScottishPower Renewables UK Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. Scale 1:100 @ A3

Rev.	Date	By	Amendments

**Project**

BARNESMORE WINDFARM  
REPOWERING

**Title**

PROPOSED IPP  
CONTROL BUILDING  
SECTION  
  
FIGURE 2.12(c)

**Issue Details**

Designed: JOD	Information	X
Drawn: AMcC	Approval	
Checked: S.M.	Tender	
Approved: D.K.	Construction	
Scale: 1:100 (A3)	Record	

**Office Use Only**

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