Project No: ***4467***

Project Title: ***Housing Development – Birnam Wood Way***

Address: ***Birnam Wood Way, Wolfhill***

Client: ***Mckenzie Burke Homes Ltd.***

Detailed Specification

4467/WD/100

Revision Details

Rev	*Details*	*Date*	*Per*

1. Site Preparation:

The site and ground immediately adjoining the site to be cleared of any surface soil and vegetable matter to the extent necessary to prevent any harmful effect on the buildings or solums (the prepared area within the containing walls of the buildings) treated to prevent vegetable growth.

2. External Works:

a. Monoblock Paviors laid on 50mm well compacted sand laid on well compacted Hardcore 300mm min deep.
b. Grassed areas to be seeded and will be covered by undisturbed topsoil prepared as necessary, or topsoil 200mm thick provided and spread. Grass seed for all grass areas to be general purpose lawn seed, 45gm/m$_2$.
c. Private driveway to be constructed as follows -
(i). Tarmac Alternative
Wearing Course - 20mm thick 10mm nominal size open-textured coated tarmacadam.
Basecourse - 60mm thick 40mm nominal size open-textured coated tarmacadam.
Road Base - 200mm thick 75mm Crusher Run.
(or)
(ii). Blockwork Alternative
Wearing Course - 60mm thick concrete / clay paving blocks on 50mm Sharp Sand Zone 2 or 3 grading.
Sub-Base - 150mm Granular Type 1.
(or)
(iii). Gravel Alternative
Gravel 75mm deep laid on well compacted blinded hardcore, minimum 350mm deep, laid on well compacted as-dug backfill. Capable of withstanding a 3 tonne axle weight.

Finished driveway to be in accordance with Guidance Clause 4 of Building Standards (Scotland)

3. Strip Foundations:

Grade C30 concrete strip foundation with A193 mesh above underside of foundation. Min. 450mm ground cover to strip. 600x200mm, below external concrete walls. 450 x 200mm below sleeper walls and external steps.

4. External Wall – Below G.L.:

a. Below ground floor level to be: 100mm dense concrete block, 50mm cavity filled to ground level with weak mix concrete, 150mm dense concrete blockwork built off concrete strip foundations. Blockwork to be compressive strength 7N/mm.

5. Solum:

50mm oversite concrete, 'Visqueen' 1000 gauge dpm on min 25mm sand blinding, 150mm well compacted and consolidated hardcore upfill.

6. Underfloor Ventilation:

Length of external wall = 45.2m
Ventilation at 1500mm²/m ext. wall = 67800mm²
Divided by 7750mm² per air brick = 9no.
'Rytons - Multifix' (215x69x60mm) polypropylene airbricks. Colour: *to match stonework.*

7. Ground Floor: *(Max. U-value : 0.16W/m²K)*

a. 22mm tongued & grooved chipboard flooring (water resistant in Bathroom, en-suites, Kitchen and Utility room.) on 245x45mm C24 timber joists at 400/600mm ctrs on 140 x 45mm treated wallplate with 245mm *'Knauf - Earthwool Flexible Slab'* hung on 'Netlon' between joists. Minimum of 150mm air space to be maintained between underside of joists and solum.
b. Garage Floor: 150mm concrete slab with A142 mesh set 50mm from underside on 1000 gauge DPM on 25mm sand blinding on 150mm well compacted and consolidated hardcore

8. External Wall – Above G.L: *(Max. U-value: 0.20W/m²K)*

a. Above ground level to be 100mm reconstituted stone and 100mm Class 1 concrete blockwork with 20mm Enewall SureRend Wet dash with white aggregate. PVC weep slots installed at maximum 900mm ctrs.
b. Garage Wall: 150mm blockwork with 20mm Dry dash roughcast on the outside
c. 10mm min. expansion joints provided to blockwork in positions shown, around proprietary flexible stop beads *('Catnic' ref: 163 or equal). Maximum spacing 6m and 3m from any return.* 50mm cavity*, 'Proctor - Frameshield 100', Cat.1* sheathing on 140x50mm studs at 600mm centres, 140mm *'Knauf - Frametherm 32*' timber frame slab insulation friction fitted between studs, *'DuPont - Airguard Reflective'* air/vapour barrier to face of timber frame, 20mm Eurothane GP rigid insulation board, 25x38mm timber straps to create service void, 12.5mm *'Gyproc - Wallboard'* with all joints taped and filled.
d. Wall at window reveals, to be insulated using 25mm Eurothane GP rigid insulation board to inside, for prevention of cold bridging.
e. Cavity between leaves to be fire stopped with 50x38mm timber fire stops installed at corners of dwelling, sides of all windows/doors and vertically at ground and first floor levels and at wallhead (Raking fire stops at wallhead).
f. Galvanised HFTA 30x5mm mild steel holding down strap to be located in the external wall a minimum of 3 brickwork courses below dpc level. Cavity to be filled with weak mix concrete up to ground level.
g. 30x5mm M.S holding down strap nailed to studs with 6 no. 100mm long x 5mm dia. galvanised nails for 45mm stud width or 8 No. 90mm long x 4mm dia galvanised nails for 38mm CLS stud width. Straps to be provided at sides of openings, corners and at 2.4m max. ctrs. between.
h. Suitable air tightness testing to be carried out upon completion to comply with mandatory standard 6.2.5.
i. Ancon Staifix wall ties to be provided with 4no. per square metre (fix through OSB to studs)

9. DPC:

a. Sweated to sides, underside and back of all sills, lintels & thresholds.
b. 150mm minimum above finished ground level.
c. To all sides of doors and window frames.

10. Air Infiltration: Method of limiting as follows:

a. During installation, junction between jamb, sill & head of windows to be filled with FEB Handyfoam. After foam has cured & been trimmed the external joint is to be sealed with silicone.
b. Sealing the gaps at roof space openings between dry-lining and masonry walls at the edges of windows and door openings and at junction between walls, floors and ceiling.
c. Sealing vapour control membranes in the timber frame panels.
d. Sealing at service penetrations of the fabric or around boxing/ducting for services.

e. Fitting draught seals to the openable parts of windows, doors, access hatches and rooflights.
f. Use joist hangers or sealing around joist ends into the inner leaf of external cavity wall

11. Internal Partitions:

a. Internal walls between apartments and an apartment and an internal space where noise is likely to occur to consist of 75x50mm C16 studs at 600mm ctrs with absorbent layer of min. 25mm mineral wool (min. 10kg/m³) hung between studs. 12.5mm Gyproc Wallboard TEN' TE plasterboard (min.10kg/m²) either side *(MR to Bathroom, Shower Room & En-Suites).*
Shower Room - 75x50mm C16 studs at 400mm ctrs with 15mm WBP plywood to Shower Room side only. Absorbent layer of min. '25mm mineral wool (min. 10kg/m³) hung between 45x65mm (non load bearing) or 45x95mm (load bearing) C16 studs at 600mm centres. 12.5mm *'Gyproc Wallboard TEN'* TE plasterboard (min.10kg/m²) either side *(MR to Shower Room side only).*
b. All joints to be sealed. Finishes to have scrim, taped, filled and finished joints. In accordance with Guidance Clause 5.2.2.
c. Racking partitions to be as per internal partitions with 9mm plywood fully nailed to 1 side of timber frame. 12.5mm '*Gyproc Wallboard'* TE plasterboard either side to finish.
d. Partition between Garage and dwelling to be 30min fire resistant. Wall to be lined with 1no layers of 19mm 'Gyproc' plank and 1no layer of 12.5mm 'Gyproc' Fireline board with staggered joints taped and filled.

12. Steelwork:

a. All steelwork as per Structural Engineer's specification & Certification.
b. Min. 25mm polyurethane insulation fitted round inner face at service zone and to sides within timber frame for prevention of cold bridging.

13. Precast Units & Lintels:

a. Lintels: 'Robeslee' Type K9: Non Composite: 100x215mm for spans of 900mm - 3900mm depending on UDL. Lintel to have minimum 150mm rest each end.
b. Precast concrete sill units by specialists.
c. Step units: Concrete natural OPC finish.
d. Threshold units: Concrete natural OPC finish.
e. 3no. 200x50mm C16 timber lintels well spiked together and with a minimum of 150mm rest either side.

14. Windows & Doors: *(Max . U-value: 1.4/m²K)*

a. 12000mm² trickle vent to be installed to windows in livingroom, kitchen/ dining room and bedrooms.
All trickle vents to be installed at least 1750mm above finished floor level.
b. Measures to limit the infiltration of air: During installation, junction between jamb, sill & head of windows to be filled with FEB Handyfoam. After foam has cured & been trimmed the external joint is to be sealed with silicone.
c. Fixing at Head and Sill: Direct fixed.
d. Fixing at Jambs: Galvanised steel strap fixings length 300x20x2.5mm straps spaced at maximum 600mm centres. Screws not more than 150mm from head & sill thereafter at maximum 600mm centres.
e. All windows to be uPVC double glazed units hung as per elevations.
f. All glazing below 800mm above finished floor level to comply with BS6262 and BS6206.
g. All doors with multipoint locking and insurance approved mechanisms to BS EN 1303: 2005, grade 5 key security and grade 2 attack resistance as a minimum.
h. Joints at all abutments to be sealed with silicone.
i. Every apartment to have a window or windows giving a glazed area of not less than 1/15th and an opening area of not less than 1/30th of floor area of apartment to which it serves.
j. Side Hung Windows are to have a 90° Friction Stays

Window Schedule

uPVC Windows to manufacturers spec. (Colour RAL

Window Type 1:
(2660 x 2742/4305mm) Fixed panels and tilt and turn openings as shown.
Windows W1a + W1b

Window Type 2:
(535 x 1200mm) Tilt and turn opening as shown.
Windows W2a + W2b

Window Type 3:
(1760 x 2200mm) Tilt and turn openings as shown.
Windows W3a + W4a + W3b + W4b

Window Type 4:
(1760 x 2200mm) Side hung openings as shown.
Windows W5a + W5b

Window Type 5:
(1760 x 1215mm) Tilt and turn openings as shown.
Windows W6a + W6b

Window Type 6:
(1790 x 2200mm) Side Hung openings as shown.
Windows W7a + W7b

Door Schedule

Door Type 1:
1315 x 2200mm External Penny Farthing Fully Accessible Door.
Doors ExD1a +ExD1b

Door Type 2:
996 x 2100mm Internal Doorset.
Doors D2a +D2b + D3a +D3b + D4a +D4b + D5a +D5b + D7a +D7b + D9a +D9b + D14a +D14b + D15a +D15b

Door Type 3:
1260 x 2100mm Internal Sliding Doorset.
Doors D6a +D6b + D8a +D8b + D10a +D10b + D11a +D11b

Door Type 4:
796 x 2100mm Internal Doorset.
Doors D12a +D12b + D13a +D13b

Door Type 5:
996 x 2100mm External Door
Doors D16a +D16b + D17a +D17b

15. Access:

a. Internal doors, except en-suite and cupboards, to have a clear opening width of not less than 800mm *(Min. 926x1981mm single leaf).*
b. Accessible entrance to comply with Guidance Clause 4.1.7. by having minimum 1200mm sq platt to front, clear opening width not less than 800mm and a low accessible threshold
c. External steps to have a maximum rise of 150mm and a minimum tread of 250mm. Generally, *'Robeslee - Type ST1'* pre-cast concrete. All in accordance with Mandatory Standard 4.3.3.
d. Space of 1.1 x 0.8m to be clear of door swing into Kitchen and WC.
e. Kitchen to have an unobstructed manoeuvring space of not less than 1.5 x 1.5m square or 1.4 x 1.8m ellipse.
f. Cooker to have activity space of 1.0m over appliance width.
g. WC to have an activity space of 0.8m x 1.1mm.
h. WHB to have an activity space of 0.8m x 0.7mm.
i. Handrail to external decking to be provided in accordance with Guidance Clauses 4.4.2 and to have a height not less than 1100mm.
j. Existing access road is min. 3.7m wide with turning area at site access in accordance with Guidance Clauses 2.12 & 4.1.
k. External access ramp to be protected to edge by 100mm masonry upstand either side. In accordance with Mandatory Standard 4.3.13.
l. Ramp to be 600mm paviors laid on 50mm sand blinding laid on well compacted hardcore at 150mm depths.

Plot 1 Ramp: Gradient 1:15, a width of 1350mm and a landing and level platt of 1500mm minimum length. Length of ramp approx 6300mm. Max rise of 300mm.
Plot 2 Ramp: Gradient 1:20, a width of 1350mm and a level platt of 1500mm minimum length. Length of ramp approx 8100mm. Max rise of 300mm.

16. Roof: ***(Max. U-value: 0.13W/m²K)***

a. To comprise of concrete interlocking roof tiles to be 'Marley' Edgemere in Smooth Grey on 19 x 38mm tanolith counter battens on 25 x 38mm tanolith battens on "Roofshield" breathable memebrane on 19mm square edged timber sarking fixed to roof trusses. 5mm air gap maintained between sheets. Universal eaves vent system and Ventilated dry ridge system as supplied by 'Marley' to provide continuous ventilation. Continuous rafter roll by 'Marley' to maintain min 25mm ventilation gap
b. Roof structure: Tied down and braced for wind loading in compliance with BS5268: Parts 2 + 3. Roof trusses by specialist manufacturer at 600mm ctrs with a pitch of 50deg.
c. Gable verge ties to occur at 2m maximum centres.
d. Holding down straps to be 'BAT' or equal and approved. The standard type to be used to provide vertical restraint against wind pressure and uplift forces. Standard size 27.5x2.5mm, the installation of restraint straps must comply with the current Building Regulations, BS 5628: Part 1 and Part 3 and BS 8103: Part 1.
e. Roof Flat Ceiling: insulation 150mm *'Knauf - Earthwool Loft Roll 40'* between ties with 200mm over. *'DuPont - Airguard Reflective'* air/vapour barrier to face of ceiling joists. 25x38mm timber straps to create service void.
f. Roof Pitched Ceiling (Living room): insulation 225mm *'Knauf - Earthwool Rafter Roll'*. 30mm Eurothane GP rigid insulation board, 25x38mm timber straps to create service void, 12.5mm *'Gyproc - Wallboard'* with all joints taped and filled.
g. Cavity trays installed to outer leaf above line at gable abutments - as shown. Integrated lead flashings dressed down below roof tiles. All in accordance with manufacturers installation guidelines.
h. *Trusses by specialist manufacturer at 600mm centres. Certification to be provided upon appointment of manufacturer and be passed on to Building Standards prior to erection on site.*

17. Rainwater Goods:

a. Black uPVC 100mm half round with 68mm Ø downpipes trapped foot.
b. Hand hole access 300mm above finished ground level.
c. Rainwater pipes and gutters to be constructed and installed in accordance with recommendations in BS EN 12056 - 3: 2000.
d. Surface water to discharge via 110mm Ø connection to soakaway as designed and specified by engineer.

18. Drainage:

a. Kitchen - Sink drains via 75mm DST into 38mm Ø drop into 50mm Ø run to 110mm SVP.
b. Dish washer drains as per sink.
c. Utility Room - Sink drains via 75mm DST into 38mm Ø drop into 50mm dia run to 110mm SVP.
d. Washing machine drains as per sink.
e. Bathroom - WC drains via P-trap into 110mm Ø run to 110mm Ø SVP.
f. WHB drains via 75mm DST into 32mm Ø drop into 50mm Ø run ito 110mm dia SVP.
g. Bath drains via 75mm DST into 38mm Ø drop into 50mm Ø run to 110mm SVP.
h. Shower Room - WC drains via P-trap into 110mm Ø run to 110mm Ø SVP.
i. WHB drains via 75mm DST into 32mm Ø drop into 50mm Ø run ito 110mm Ø SVP.
j. Shower drains via 75mm DST into 38mm Ø drop into 50mm Ø run to 110mm SVP.
k. All shower trays to be fitted with accessible trap.
l. Foul connection drains via 110mm Ø connection to manhole. Discharging by way of 150mm Ø pipe outlet to existing 225mm Ø combined sewer system, which runs down the northern boundary of the site. N.B.:

Generally -
(i) Drainage pipes laid on granular material to BS 882 compacted in 100mm deep layers. Backfill with excavated material.
(ii) Above floor drainage, 38 & 50mm Ø uPVC pipework.
(iii) 76mm Ø anti-syphon trap to whb.
(iv). New length of 110mm Ø uPVC drain laid under building. Drain to be fully encased in 150mm concrete.
(v) All internal runs to a fall of not less than 1:40.
(vi) All external runs to a fall of not less than 1:60.
(vii) All connections on SVP to be either above or 200mm below the centre line of WC connection.
(viii) SVP to have large radius bend installed at foot.
(ix) SVP to be taken up between trusses and terminated with vent terminal tile.
(x) Any pipework passing under hardstanding area to be a minimum of 900mm deep or encased in 150mm concrete with 150mm minimum rest each side.
(xii) Drainage system outside building to be constructed and installed in accordance with recommendations of BS EN12056-1: 2000, BS EN 752-3: 1997 (amendment 2), BS EN 752-4: 1998 and BS EN 1610: 1998.
(xiii). Sanitary pipework to be installed and constructed in accordance with recommendations of BS EN 12056-2: 2000.
(xiv) Drainage system to be ventilated in accordance with the guidance in sections 4,5,6 and National Annex ND of BS EN 12056-2: 2000.
(xv) Drainage system to be tested in accordance with guidance in National Annex NG of BS EN 12056-2: 2000 for sanitary pipework and BS EN 1610: 1998 for drainage system under and around a building.
(xvi) All drainage taken either above or below floor joist.
(xvii) A suitable label to be provided within dwelling confirming that the dwelling is served by private treatment works.
NO JOISTS TO BE NOTCHED

19. Heating:

a. Worcester Greenstar 42CDi Classic LPG boiler. Flue installed at roof per manufacturers guidelines.
b. Ground floor heated via radiators.
c. Heating system to be controlled by:
i) Room thermostats or thermostatic radiator valves for each part of the heating system, designed to be separately controlled (eg. separate living and sleeping areas).
ii) A manually adjustable 7-day automatic timing device to control periods of operations.
iii) An automatic control which shuts off the system when heat is not required (after an over-run time if this is specified by the manufacturer).
Pipework to be insulated with 25mm polyurethane lagging.
System to have suitably positioned label of durable material indelibly marked to indicate its limitations of use.
Heating and hot water system to be inspected and commissioned in accordance with manufacturer's instructions to ensure optimum energy efficiency.
Hot water, at point of delivery, to bath or bidet to not exceed 48°C by use of thermostatic mixing valve complying with BS EN 1111 or BS EN 1287, fitted as close to point of delivery as practicable.
d. Room-sealed boiler to have a flue with a minimum designation:
T250 N2 D V1 Oxx
T250 N2 D 1 Oxx
In accordance with Mandatory Standard 3.18.2, Tab. 3.6.
e. Service Penetrations: Where extract fan flues and fresh air duct in garage pass through garage wall, intumescent interlocking collars must be installed to act as fire stops.
Where boiler flue passes through wall in garage, a fire stop joist shield must be used to maintain 75mm air gap and act as a fire stop. All in accordance with Mandatory Standard 2.2.9.
f. A flue-pipe should be of a material that will safely discharge the products of combustion into the flue under all conditions that will be:
(i) encountered, have the same diameter or equivalent cross sectional area as that of the appliance flue outlet and should be to the size recommended by the appliance manufacturer. In accordance with Mandatory Standard 3.18.5.
(ii) Distance of flue to combustible material should meet the standards as set out in Mandatory Standard 3.19.4 or as recommended by the boiler and flue manufacturer.
(iii) In accordance with Guidance Clause 3.20.3, flue-pipe should be constructed and installed in accordance to the recommendations of

BS 5410: Part 1: 1997 or OFTEC Technical Book 3 and OFTEC Standard OFS E106 as appropriate.
Satisfactory specification of chimneys and flue-pipes depends upon the gas temperature to be expected in normal service. Flue gas temperatures depend upon appliance types and the age of their design. Older appliances are likely to produce flue gas temperatures greater than 250ºC while modern boilers that bear the CE mark indicating compliance with the Boiler (Efficiency) Regulations 1993 will normally have flue gas temperatures less than 250ºC.
Information for individual appliances should be sought from manufacturer's installation instructions, from the manufacturers themselves or from OFTEC. Where this is not available, flues should be constructed for an assumed flue gas temperature of more than 250ºC.
High flue gas temperatures - where the flue gas temperatures are more than 250ºC, under normal working conditions, custom-built chimneys, system chimneys and flue-pipes should be designed and constructed for use with a solid fuel appliance.
Low flue gas temperatures - where the flue gas temperatures are not more than 250ºC, under normal working conditions, chimneys and flue-pipes may be of a lower specification as follows:
(i) in accordance with the guidance in clauses 3.18.3, 3.18.4, 3.18.5, relating to gas and
(ii) where the oil-firing appliance burns Class D fuel, the inner surfaces of the chimney or flue-pipe should not be manufactured from aluminium.
The flue gas temperatures are quoted in manufacturer's product data and can be measured in accordance with OFTEC Appliance Standard OFS A100 for boilers, OFS A101 for cookers or OFS A102 for room heaters.
g. Combustion gases at the point of discharge can be at a high temperature. Therefore flues discharging at low level where they may be within reach of people should be protected with a terminal guard. A flue terminal should be protected with a guard if a person could come into contact with it or if it could be damaged. If the flue outlet is in a vulnerable position, such as where the flue discharges within reach of the ground, or a balcony, veranda or window, it should be designed to prevent the entry of matter that could obstruct the flow of gases. In accordance with Mandatory Standard 3.20.15.
h. The condensate plume from a condensing boiler can cause damage to external surfaces of a building if the terminal location is not carefully considered.
The manufacturer's instructions should be followed in accordance with Mandatory Standard 3.20.16.
i. Flue terminal to be not less than 600mm horizontally adjacent to a window or door. In accordance with Mandatory Standard 3.20.18.
j. In accordance with Mandatory Standard 3.20.7. boiler flue to be protected, within the roof void, in line with recommendations of BS 5440: Part 1: 2000.
k. Provision of cool air supply to LPG boiler to be in accordance with Mandatory Standard 3.21.4. (c) BS 5440-2: 2000 recommendations.

20. Ventilation:

a. 12000mm² trickle vent to be installed to windows in livingroom, kitchen/ dining room and bedrooms.
c. All trickle vents to be installed at least 1750mm above finished floor level.
d. Extract fan to Kitchen to be capable of an intermittent extraction rate of not less than 60l/sec or 30l/sec above hob.
e. Extract fan to Bathroom and En-Suite to be capable of an intermittent extraction rate of not less than 15l/sec.
To aid ventilation where overall infiltration is less than 5m3//h/m2/ @ 50Pa, due to incorporation of air tightness membranes.
'Greenwood - Unity CV2GIP' continuously operating mechanical extraction fan to be installed to the Utility Room, in accordance with the guidance in BRE Digest 398.
g. Fans to be ducted to outside via roof or walls and terminated with appropriate weathering slate piece/terminal. Condensation traps fitted as required.
h. Fan linked to lighting with appropriate run on times after lights are switched off. Ventilation rates to be in accordance with CIBSE Guide B: 1986, Section B2.

21. Electrical:

a. Generally: To be carried out in accordance with current I.E.E regulations BS 7671: 2001 as amended. All work to be carried out by a SELECT or NICEIC approved contractor.
b. Smoke Detectors to be installed to comply with BS 5839: Part 6:1995. Grade D Type LD3 System to be hard wired and interlinked. Smoke alarms and heat alarms to be ceiling mounted (smoke alarm between 25mm and 600mm below the ceiling, and at least 300mm away from any wall or light fittings, heat alarm - between 25mm and 150mm below the ceiling)
The system comprise of:
-min 1 smoke alarm installed in the principal habitable room a smoke alarm in the principal habitable room should be sited such that no point in the room is more than 7.5m from the nearest smoke alarm
-min 1 smoke alarm in every circulation space (maximum of 3m from any bedroom, 7m from any other habitable room and at least 300mm from any light fitting)
-min 1 smoke alarm in every access room serving an inner room
-min 1 heat alarm installed in every kitchen (no point in the kitchen should be more than 5.3m from the nearest heat detector)
b. Outlets and controls of electrical fixtures and systems should be positioned at least 350mm from any internal corner, projecting wall or similar obstruction and, unless the need for a higher location can be demonstrated, not more than 1.2m above floor level. This would include fixtures such as sockets switches, fire alarm call points and timer controls or programmers, within this range:
- light switches should be positioned at a height of between 900mm and 1100mm above floor level.
- standard switched or unswitched socket outlets and outlets for other services such as telephone or television should be positioned at least 400mm above floor level. Above an obstruction, such as a worktop, fixtures should be at least150mm above the projecting surface.
Where socket outlets are concealed, such as to the rear of white goods in a kitchen, separate switching should be provided in an accessible position, to allow appliances to be isolated. All to be in accordance with Mandatory Standard 4.8.5 (Access to manual controls).
d. All light fittings are to be of the low energy type.
e. PIR Light (passive infrared) motion sensor to detect heat and movement to be installed to accessible entrance door as indicated.
2.75Kw power to be generated from Photovoltaic Panels.

22. Energy Performance Certificate:

Laminated Energy Performance Certificate to be fixed in a prominent position adjacent to electricity meter.

23. Sustainability:

Dwelling to meet, at minimum, the Bronze Active level for sustainability by meeting the functional standards set out in sections 1 – 6 of the Building Standards.

24. Finishes / Fitments:

a. Plasterboard walls & ceilings: Vinyl matt emulsion applied in 3 coats: initial top coat with 2no. finishing coats.
b. Internal doors, facings, skirtings & window sills: Wood stain to match UK Western red cedar Lining.
Kitchen Fitments to be supplied and fitted by others.

25. Pointing / Sealant:

a. Between windows, door frames, screens & render Thioflex
b. Clear acetoxy silicone sealant to joints between fittings & tiles to Bathrooms & Shower Rooms

26. Drying of Washing:

(Externally): Provision for a whirly gig providing at least 1.7m of clothes line has been allocated in the garden ground of the proposed dwelling.
(Internally): an area above the bath has been designated for a wall mountable appliance, (pulley) the designated space will allow for atleast 1.7m of line. All in accordance with Mandatory Standards 3.11.6