

SINGLE STOREY BARN CONVERSION

GENERAL NOTE

ALL MATERIALS AND COMPONENTS MUST BE SUITABLE FOR THEIR INTENDED PURPOSE AND LOCATION, AND MUST BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH ALL RELEVANT, CURRENT BRITISH STANDARDS AND CODES OF PRACTICE, AGREEMENT CERTIFICATES AND MANUFACTURERS SPECIFICATIONS. Alternatively the materials should be marked, stamped, independantly certified, or otherwise justified by test or calculation to show their suitability. Standard of workmanship should meet the relevant BS 8000 series.

Any reference to an approved document in this specification relates to the relevant Approved Document of the current Building Regulations.

SUB STRUCTURE

Existing foundations are shown indicatively and are to be checked on site. New foundations to the Structural Engineer's details and calculations.

Substructure blockwork below DPC level to be 215mm medium density solid concrete blockwork to the Structural Engineer's details. Note outer face of the blockwork to be set out flush with the outer faces of the existing steel columns. Where exposed the 215mm wide wall to be constructed in 215mm solid brickwork construction in semi-engineering brickwork bonded in designation ii mortar cement: lime:sand mortar 1:0.5: 4

Horizontal damp proof course to be Ruberoid Hyload polymeric DPC or equal approved, 150mm minimum above adjoining ground level. Refer to construction sections for details.

EXTERNAL TIMBER FRAME INFILL BETWEEN THE EXISTING STEEL FRAMEWORK (PRE-COLOURED METAL 32/1000 PROFILED CLADDING EXTERIOR FINISH) CALCULATED U Value 0.17W/m²K WALL TYPE EWT.01

Timber framed infill and rooflight trimming all to the appointed Structural Engineer's details and calculations including sundry steelwork associated with the timber frame, external sheathing. Install 140mm rigid PIR insulation tightly fitted within the stud voids, thermal conductivity 0.023W/mK. External face of sheathing to be overlaid with a proprietary BBA certified breather membrane, Kingspan Nilvent or equal approved. Internally line external walls with 25mm rigid PIR insulation fixed to the internal face of the timber stud framework internally line with a proprietary BBA certified vapour control layer, with double lapped and sealed junctions to achieve air tightness. Overlay with 2no. layers 12.5mm plasterboard, fixed break joint and inner lining to receive skim coat plaster set finish, all to achieve half hour fire resistance. External walls externally clad in pre-coloured metal 32/1000 profiled cladding panels fixed to pretreated 25 x 50mm horizontal battens at 600mm centres fixed to pretreated 25mm x 50mm softwood vertical battens located at vertical stud locations. Panels installed with the cladding system standard fixings and seals all in compliance with the cladding system installation instructions including system standard corner and stop trims and drip flashing and closure trims to openings.

INTERNAL GROUND FLOOR ACOUSTIC PARTITIONS - PARTITION TYPE PTN.01

89 x 38mm cls timber stud framework framework at 400mm maximum centres and noggins at 1200mm maximum centres . Partitions lined both sides with minimum 12.5mm 10kg/m² density plasterboard skim coat plaster set. insert 25mm 10kg/m³ density unfaced mineral wool bats within stud voids.

GROUND FLOOR CONSTRUCTION - CALCULATED U-value 0.xxW/m²K

75mm cement:sand floating floor screed on: waterproof building paper on: 150mm rigid urethane foam flooring grade insulation, Kingspan thermafloor TF70 or equal approved on: BBA certified 1200 gauge polymer damp proof membrane, dressed vertically at perimeter and lapped and sealed to horizontal dpc. 150mm Reinforced ground bearing floor slab and sub-base to the Structural Engineer's details.

NON-VENTILATED COLD PITCHED ROOF CONSTRUCTION- CALCULATED U-value 0.xxW/m²K

The existing steel framed portal structure is to be retained, any remedial works to be carried out to the appointed Structural Engineer's instructions and details. General roof finish to comprise: Remove the existing profiled metal roof finish and all associated rooflight panels and trims and 'Z' purlins. on Install new 'Z' purlins as specified by the Structural Engineer. Install new pre-coloured 32/1000 metal profiled roof sheeting, including all perimeter trims and flashings. Overlay the 'Z' purlins with a BBA certified as specified by the cladding manufacturer. Fix 25mm x 50mm pretreated counterbattens on top of the existing rafters Install 400mm overal mineral wool laid in 3no. layers comprising a 250mm bottom layer and 2no. overlying layers of 125mm each layer laid perpendicular to the undelying layer.

FASCIAS AND SOFFITS

Pretreated softwood fascia fixed to pretreated softwood battens.

RAIN WATER GUTTERS AND DOWNPIPES

pblack plastics deepflow gutters and circular downpipes comprising Ø75mm with swan neck offsets and access plates at low level for rodding.

BELOW GROUND FOUL WATER DRAINAGE

PLEASE REFER TO THE APPOINTED CIVIL ENGINEER'S DRAWINGS AND DETAILS.

BELOW GROUND SURFACE WATER DRAINAGE

PLEASE REFER TO THE APPOINTED CIVIL ENGINEER'S DRAWINGS AND DETAILS.

INTERNAL ABOVE GROUND DRAINAGE

Waste fittings to have 75mm deep sealed easy clean traps and separate connections to soil and stub stacks and to be installed in accordance with BS EN 12056-2.

Waste pipe diameters to be as follows:- Kitchen sink, dishwasher and washing machine 40mm Ø for runs up to 3m Wash hand basins 32mm Ø for runs not exceeding 1.7m 40mm Ø for runs up to 3m Baths and showers 40mm Ø for runs up to 3m WC's 100mm Ø with 20mm overflow SVP's to be encased in 2no. layers 12.5mm plasterboard, skim coat plaster set fixed to 44 x 44mm softwood batten framework. Provide removable access panels at rodding points. SVP to be wrapped in 25mm mineral wool insulation. SVPs to be fitted with a proprietary weathering slate suitable for the profiled roof cladding system and bird proof cowl and terminate 900 mm minimum above any opening into the building within 3 metres of the SVP.

Stub stack SS serving utility appliances pipework to be fitted with a proprietary BBA certified air admittance valve AOV

EXTERNAL NEW WINDOWS AND GLAZING

New windows to be timber casement windows with side hung and top hung casements. Glazing to be sealed unit 24mm double glazed sealed units. Low E glazing with argon filled cavity. Windows with glazing area below 800mm above floor level and glazed areas within 300mm of glass doors are to have toughened safety glass. Windows to have operable area of 1/10th of floor area.

Refer to elevation drawings for window styles and to the window schedule

Accessible windows to be PAS 24: 2012 certified in compliance with Approved Document Q.

NOTE:the proposed windows designated 'OBSCURE' shall be obscure glazed to not less than the equivalent of Pilkington Glass Privacy Level 3 .

windows to be fitted with controllable trickle ventilators.

ROOFLIGHTS TO ROOF - manufacturer's specified U-value 1.3W/m²K

Velux GGL centre pivot rooflights 1198mm x 660mm ref: FK06 complete with system integrated blinds. System standard sealed unit double glazing. Rooflights installed with pre-coloured metal flashings specific to selected profiled roof panel finish and installed strictly in accordance with the manufacturer's installation instructions. All structural trimming to the Structural Engineer's details.

ENTRANCE DOOR

Timber vertically boarded door and frame complete with system standard heavy duty one and a half pairs steel butt hinges, stainless steel lever handles and integrated latch bolt, cylinder lock with internal thumbturn and system standard aluminium postal plate. Secure by Design standard PAS 24: 2012 certified Alternative approved security ratings and further requirements for Approved Document Q compliance: STS 201 Issue 5:2013 LPS 1175 Issue 7:2010 security rating 2 STS 202 Issue 3:2011 burglary rating B Letter plates to have a maximum aperture of 260mm x 40mm and be located and/or designed to hinder anyone attempting to remove keys with sticks and/or insert their hand. Door to be fitted with a proprietary approved door viewer and chain/limiter device. The door frame to be mechanically fixed to the structure in accordance with the doorset manufacturer's instructions

Provide flush access threshold detail with integrated surface water drainage channel, comprising a lower threshold unit to a maximum height of 15mm above FFL and a cill gradient of 15° maximum, refer to detail section 6.6. the entrance door is to provide a minimum clear opening of 775mm.

EXTERNAL DOUBLE DOORS WITH FIXED SIDELIGHTS AND GLAZING AND SINGLE DOORS - Target U-value XXX W/m²K

New external double doors and fixed sidelights to be timber units with an extended hardwood cill .Thermally broken glazing sections bonded to structurally calculated insulating glass units Standard glazing details: Hermetically sealed double glazed units to BS6262, BS EN 12600, BS5713 with black spacer bars and a P.I.B primary seal and silicone backing seal 32/34mm thick with a 16mm Argon filled cavity. Incorporating: An outer pane of 10mm toughened float glass and an inner pane of 6mm toughened soft coat low-E glass. Glass to be toughened to BS EN 12150. Accessible Bi-folding doors to be PAS 24: 2012 certified in compliance with Approved Document Q.

Ironmongery and fittings: To Client's specification. Door units to be fitted with trickle ventilators

UTILITY DOOR

Open inwards thermally broken aluminium door and frame complete with system standard hinges, stainless steel lever handles and integrated latch bolt, cylinder lock with internal thumbturn.Accessible doors to be PAS 24: 2012 certified in compliance with Approved Document Q.

WOOD BURNER WITHIN LIVING ROOM - OPEN FLUED APPLIANCE - default efficiency 65% Client to confirm precise specification

HETAS approved wood burner to the Client's specification. Woodburning appliances are to be designed, installed and commissioned by a person/company who is a member of an approved government competent person scheme (BESCA, Certsure, Hetas etc.) Flue to be twin wall insulated sectional stainless steel system, specification to the manufacturer's details routed externally. Ensure a minimum of 50mm clearance or that specified by the flue manufacturer (whichever is the greater) is provided clear between the outer surface of the flue pipe and any combustible material. Flue to be installed complete with system standard stainless steel support brackets and cowl. Provide permanently open air vents to a minimum free area stipulated by the appliance manufacturer and to be located so not to cause unnecessary draughts in close proximity to the appliance i.e. floor vents ducted to external substructure walls terminated in air bricks. Vermin mesh to have apertures no less than 5mm.

VENTILATION SERVING SOLID FUEL APPLIANCE

Air bricks to be provided in external wall located to avoid undue draughts, to a minimum clear ventilation area of 50% of cross sectional flue: 225mm diameter flue: 20,000mm² minimum clear ventilation area requirement

CARBON MONOXIDE DETECTORS

Carbon monoxide alarm to be provided between 1-3m of the solid fuel appliance. The alarm should be fitted with a battery designed to operate for the working life of the alarm or powered by mains fixed wiring and fitted with a sensor failure warning device. carbon monoxide alarms should be installed within the same room as the appliance as follows: on the ceiling at least 300mm from any wall or if located on a wall, as high up as possible (above any door or window openings but not within 150mm of the ceiling; an between 1m and 3m measured horizontally from the appliance.

VENTILATION AND EXTRACTION

BACKGROUND VENTILATION - APPROVED DOCUMENT F 2010 VOLUME 1 2021 EDITION

Location of background ventilators: nominally at 1.7m above FFL and positioned to avoid draughts. Provide minimum 10,000mm² clear background ventilation area per habitable room and kitchen and 4,000mm² to ventilated bathrooms and toilets. If a bathroom has no window or external façade through which a ventilator can be installed, the minimum equivalent area specified should be added to the ventilator sizes specified in other rooms. Adopt background ventilators of similar area on opposing sides of the dwelling to encourage good air flow throughout the dwelling.

PURGE VENTILATION - APPROVED DOCUMENT F 2010 VOLUME 1 2021 EDITION

Window and door openings serving habitable rooms to provide the following clear openable area: • hinged or pivot windows with an opening angle of 15° to 30° - 1/10 of the floor area of the room hinged or pivot windows with an opening angle greater than or equal to 30° - 1/20 of the floor area of the room.

EXTRACT VENTILATION

Provide mechanical extraction as follows: Kitchen: Extraction canopy installed directly above the hob ducted external louvre outlet achieving 30 litres/second Utility: 30 litres per second operated intermittently extractor to be controlled from lighting. En-Suite and Bathroom: 15 litres/second operated intermittently extractor to be controlled from lighting. WC: 6 litres per second operated intermittently, extractor to be controlled from the lighting Ventilation to be in accordance with approved document F.

©This drawing is the copyright of GARY tidwell ASSOCIATES LIMITED and should not be copied or reproduced without written consent. All Rights Reserved. Check all dimensions before fabrication and notify of any discrepancies.

HEATING AND DOMESTIC HOT AND COLD WATER SYSTEM

The heating and domestic hot and cold water system is to be designed by the Main Contractor's appointed mechanical services sub-contractor around the following principles: • Air Source Heat pump installation - 12kW Samsung Monobloc Heat Pump & a 200 Litre Kodiak 3 Zone Cylinder. • Ground floor wet system underfloor heating system, manifolds positions to be located in discrete locations, underfloor heating system to be installed with time and temperature controls. • Megaflo 300 litre hot water indirect cylinder with minimum 60mm factory spray applied CFC/HCFC free insulation, with thermostat and separately timed from the heating, max losses 2.1 kWh/24hr. • Electric towel rails to be fitted within the family bathroom and bedroom 1 en-suite. • The design proposals to be submitted by the Main Contractor to both the Client and Building Control for approval prior to installation.

FIRE RESISTANCE

All steel work and lintels supporting floors and load bearing walls to be encased with 2no. layers 12.5mm plasterboard to give ½ hour fire resistance.

ELECTRICAL INSTALLATION

The electrical installation is to comply with the current IEE regulations and all relevant codes of practice.It is to meet the requirements of Part P (Electrical Safety) and must be designed and installed inspected and tested by a registered person competent under Part P to do so.

Electrical socket outlets and switches are to be placed on walls between 450mm and 1200mm above finished floor level.

Internal lighting to rooms having the most use to be fitted with outlets or luminaries that can take lamps having a luminous efficacy greater than 40 lumens per circuit watt. Provision of energy efficient light fittings to be not less than the greater of: 1.no. energy efficient fitting per 25m² of floor area; or 1 no. energy efficient fitting per 4no. fixed light fittings

External lighting to have fittings that will extinguish on daylight or to have fittings that can only be used with lamps having an efficacy greater than 40 lumens per circuit watt.

FIRE DETECTION AND ALARM INSTALLATION

Fire detection and fire alarm systems to be in accordance with BS 5839-6: 2004 to a minimum Grade D category LD3 standard. Smoke and heat alarms to be mains operated with battery standby power source. Smoke alarms to conform to BS 5446-1: 2000 heat alarms to conform to BS 5446-2: 2003. Positioning of smoke and heat alarms to be inaccordance with BS 5839-6: 2004, refer to floor plans for precise locations.

COMMISSIONING, CERTIFICATION AND INFORMATION PROVISION

An appropriate BS7671 electrical certificate to be submitted to Building Control from an electrician with a recognised trade body, such as NICEIC, ECA and NAPIT.

Installation certification to be submitted to Building Control for any new or altered gas appliance.

GARYtidwell ASSOCIATES LIMITED
architecture - planning - construction technology
The Old Square, The Street, Woodnesborough, Kent . CT13 0NQ.
T: 07599 916454 E: garytidwell@hotmail.co.uk

Client:
HIGHPOINT DEVELOPMENTS
Project:
LAND NORTH EAST OF 'THE HURST'
STAN LANE
WEST PECKHAM
ME18 5JU
Title:

Building Regulation Specification

Scale: Date: Drawn:
NTS @ A2 FEB 25 GT

Drawing Number: Revision: