

Timber frame wall Construction

- Timber frame construction to be tied to existing wall construction by Hilti

- DPC to all walls 150mm above ground level and lapped with 1200

The Roof construction will give a U - Value of 0.13W/m²k

drawings / spec)

- Treated timber 100x32mm wall plate with - P/A = 1

- 170mm Kingspan K103 insulation between joists on battens - 150mm min. Ventilated air space between base of joists and solumn

New Window:- U-value of 1.6W/m²K

- New windows to be UPVC to match existing with white gloss finish and mastic pointing around all edges, fixed into rebated openings within wall and with DPC and insulated cavity closers all round. Window to have cill to match existing, laid on DPC. Window to be double glazed, hermetically sealed units, tilt n turn. Window to be supplied treated and primed for final decoration on site, complete with locking handle. Strap & line ingoes with Gyproc insulated plasterboard. Glazing to be 24mm Double glazed Units. All windows to be lockable All windows to be 60mm Tilt /Turn c/w stay hinges, shoot bolt locking mechanisms and standard cockspur fittings.

- Windows & Doors to be fitted 'secured by design locks' as per standard 4.13 - Windows & Doors to be installed to BS8213-4:2007 - Standard D4.13.5 (2013) and product standard and component performance to BS7412:2007 for PVCu Units - New window to be confirmed by client

Exterior Door:- U-value of 1.6W/m²K

- New rear door to be UPVC colour white to match existing. Door to be fitted with weather bar to base, draught excluders / weather beaters to top and sides. Include for all escutcheons and associated accessories. Doors to have shoot bolt locking mechanisms and standard cockspur fittings. Strap & line ingoes with Gyproc insulated plasterboard. - Supply and install threshold units at external door opening, complete with DPC's. - New door to be confirmed by client

- Doors to be fitted secure by design locks - Windows to BS:7950, Door locks to BS:3621 and doors of enhanced security to BS PAS 24-1

- Doors & Windows :

- to be designed and constructed in accordance with the material used BS 7412: 2007, for PVCu units;

BS 4873: 2009, for aluminium alloy units; - Fixing of a doorset should be in accordance with recommendations given in section 8 of BS8213-4: 2007

Exterior Sliding Doors:- U-value of 1.4W/m²K

- New rear external doors to be aluminium. Doors to be from www.thefoldingslidingdoors.com or similar 70mm thk.

- Doors & Windows :-- to be designed and constructed in accordance with the material used

BS 7412: 2007, for PVCu units: BS 4873: 2009, for aluminium alloy units: - Fixing of a doorset should be in accordance with recommendations given in section 8 of

BS8213-4: 2007

Velux Window:- U-value of 1.4W/m²K - Rear Extension - 2No. Velux windows - 780x980mm. Client to confirm if to be used manually or electrically operated

Roof Lights:- U-value of 1.0W/m²K - Garage Conversion - 2No Rooflight 1000x1000mm from EOS - www.eosrooflights.co.uk

Draught sealing / stripping

Windows. Doors, Ceiling Hatches and Access Panels to be draught stripped. Window Seals to conform to BS 6375 relating to performance of windows and air infiltration. House entrance doors, windows and ceiling hatches to be fitted with external quality weather seals and draught stripping.

Kitchen :-

- Oven / hob will comply with Building (Scotland) Regulations 2013 Part 3.11.2 whereby there will be provisions for an oven with the appropriate surrounding 1000x600mm activity space. The Oven will have incoming services to be gas or electric supply. - Within the kitchen there will be a minimum storage space of 1m³ to comply with Building (Scotland) Regulations 2013 Part 3.11.2

Smoke Detector :-

- To be interconnected in accordance with BS 5839:Part 6 : 2019 - To be installed to comply with the recommendations of BS5839:Part 1:2013 for a Grade D type LD3 system and Building (Scotland) Regulations 2013 Section 2.11.2. The system to be permanently wired to an independent circuit at the mains distribution board. Where two or more alarms installed in a dwelling they shall be interconnected.

- To be located 3m from any sleeping accommodation - Located a min. 300mm away from any lighting

- Smoke alarm to be an Optical smoke Alarm suitable for kitchen open plans areas -Heat Alarm to conform to BS 5446:Part 2:2003

Carbon Monoxide Detector :-

- To be installed to any room where a new combustible appliance is fitted to comply with Building (Scotland) Regulations 2013 3.20.20 excluding an appliance solely for cooking. Carbon monoxide detectors to comply with BS EN 50291-1:2010 and be powered by a battery designed to operate for the working life of the detector.Detector to be within 1-3m away from the appliance

All work to be carried out in accordance with Building (Scotland) Regulations 2013 Parts 3.17, 3.18, 3.19, 3.20, 3.21 & 3.22 The appliance, chimney's and flue's will meet the following BS and Building (Scotland) Regulations 2013

BS 5440 Part 1 & 2 :2000

BS 5871 Part 2 & 3 : 1991 - As amended Part 3 amd 7033 - All works to alter / extend existing internal gas supplies to be carried out by a Gas Safe Registered Installer Gas Fired appliances loacted within bathrooms to be installed to achieve compliance with

Regulation 30 of the Gas Safety (Installation and use) Regulations 1998

Central Heating System :-- New Radiators within proposed Extension to connect to existing heating system and have thermostatic valves (TRV's). (Contractor to inspect existing boiler to make sure it can supply new radiators) - Client to confirm radiator positions to contractor.

Gas Boilers:-

- New boiler in an existing dwelling to be a condensing boiler with a min. energy rating of 90%

- New boiler to have boiler interlock and heater controls to comply with Building (Scotland) Regulations 2013 Parts 6.38

- Water supply to sanitary fittings to have a thermostatic mixing valve to prevent scalding and comply with Building (Scotland) Regulations 2013 Part 4.9.5 - Adequate ventilation to be provided to comply with Building (Scotland) Regulations 2013 Parts 3.17 to 3.22 and according to the manufacturers installation instructions

Vent Pipes for Boilers:-

Vent pipes from central heating boilers will be located to comply with Regulation P2.6 of the Building Standards (Scotland) Regulations 2013. Ventilation to Boiler are not to be taken through to adjacent wardrobe/ bedroom. Note: Not to protected hallway

External Works:-

- Make good all external areas following completion of the works and re-grade ground as necessary to suit DPC levels

Extension - Suspended Timber Floor Notes Floor Construction :- U-value of 0.15W/m²K

- Constructed from 22mm treated T&G moisture resistant chipboard flooring - 170x50mm treated timber joists at 400mm centres on (See Engineers

- 170x50mm timber bearer fixed to existing wall using M12 Hilti bolts at 400crs

Drainage Any New Drainage will be installed as per BS EN 12056-2: 2000 (Sanitary Pipework), BS EN 752-3: 1997 (amendment 2), BS EN 752-4; 1998 and BS EN 1610:1998 (For Drainage System outside a building), and BSEN 12056-3;2 2000 (For Rainwater Pipes and Gutters). Drainage & Plumbing work to comply with Sections 3.5, 3.6 & 3.7 of the Building (Scotland) Regulations 2013

Electrical

Electrical work will be carried out in accordance with the 18th edition of the I.E.E. including current amendments, together with the current BRITISH STANDARDS & CODES OF PRACTICE The building Will be provided with electrical power in accordance with BS 7671: 2018

Lighting and socket outlets are to be provided to comply with Building (Scotland) Regulations 2013 Parts 4.6.1, 4.6.2 & 4.6.4. Contractor - Electrician /Client - All electrical work to be carried out by a SELECT or NICEIC registered contractor and supply electrical certificate upon completion of works to building control Min socket requirements to be :- In the Kitchen - 6 sockets, in each apartment - 4 sockets and anywhere in the dwelling an additional 4 sockets

- Sockets to comply with 4.8.5 - whereby sockets must be a min. of 350mm from an internal corner and not more than 1.2m A.F.F.L. Also light switches should be positioned between 900 & 1100mm A F F L - TV, BT & socket points to be positioned Min. 400mm A.F.F.L and 150mm above any worktop

- Client to confirm socket and lighting positions before commencement of works - All light fittings within extension to be low energy type including lamps to comply with Building (Scotland) Regulations 2013 D6.5.1

Leadwork

BS6915:2001

Natural Ventilation

3.14.2

approved :-

Drainage:-

Utility Room :-

Wash-Hand Basins -

Kitchen Sinks / Showers -

one W.C. is connected.

thick pre-stressed lintel over.

or equally approved.

Wet Areas:

comply with standard 3.27.1 & 3.27.2

trapped and connected separately to S.V.P.

100mm layers, to 400mm above the pipe crown.

plasterboard. Tiles to be confirmed by client.

Kitchen [.]

W.C.

minute

New drainage required to :-

Toilet & En-Suite Toilets:-

1) WC - 100mmØ PVC Waste pipe

2) WHB - 40mmØ PVC Waste pipe

3) Shower - 50mmØ PVC Waste pipe

Windows :- Safety Glazing -

inside in accordance with BS8213 Part 1

Building (Scotland) Regulations 2013 Part 3.16.1

the BRE Digest or the table to this specification

above all windows & patio doors.

Infiltration and natural ventilation

Mechanical Ventilation:-

All timber used to be installed to BS5268.

Roof Trusses

Trussed rafters to be designed and manufactured to BS5268 Part 2 2002, Part 3 1998, BS6399 Part 1, Part 2 1997, Part 3 1988 - Contractor to supply truss design certificate upon completion of works - See Engineers drawings for rafter details

All Leadwork to be in accordance with 'Leadsheet Association Recommendations' and to

All glazing to conform to BS6262:Part 4 2005 and BS 6206 and the Building (Scotland) Regulations 2013 Parts 4.8.2, 4.8.3 & 4.8.4. All glazed openings to be safely cleanable from

- All glazing as appropriate to be installed in accordance with BS6262: Part 4:2005 - All apartments to have a min. glazed area of 1/15th of the floor area to comply with

- Window controls must be positioned not more than 1.5m above F.F.L. - New windows to conform to BS6399 Part1 1996 for pedestrian barrier protection to comply with Building (Scotland) Regulations 2013 D4.4.3 - New toilet / bathroom windows to have frosted / obscure glazing

- Window will provide an unobstructed openable area for emergency escape requirements of 0.33m² and be min. 450mm wide & 735mm tall. - Fire Escape windows to have opening part of window max. 1100 A.F.F.L.

Guarding of windows should be designed and comply with Building (Scotland) Regulations 2013 4.8.4. so that it is not easily climbable by young children

- Ventilation will comply with Building (Scotland) Regulations 2013 Parts 3.14 & conform to

- The rooms will be ventilated to min. 1/30th of the floor area it serves by trickle ventilators

- Natural Ventilation to comply with CIBSE Guide A:1986, Design Data, Section A4, Air

- Windows & doors to have permanent ventilators built into head of frames to comply with - Apartments to have ventilators capable of 12000mm²

- All other rooms to have ventilators capable of 10000mm²

- Mechanical Ventilation to be carried out in accordance with the BS5720: 1979 or CIBSE Guide B: 1996, Section B2 and Natural Ventilation to be comply with CIBSE Guide A:1986, Design Data, Section A4, Air Infiltration and natural ventilation. - Provide the mechanical / natural ventilation to the following rooms from Ventaxia or similar

- Utility Room :- Mechanical extraction capable of 60litres/sec - min. 4000mm²

- Toilet :- Mechanical extraction capable of 15litres/sec min.4000mm² - Kitchen :- Mechanical extraction capable of 60litres/sec - min. 4000mm²

The fan outlets are to be ducted through the outside wall as indicated on the proposed floor plans. All external fans to be provided with vermin control covers.

1) Waste connection & connection taps for washing machine, dishwasher 2) Sink - 40mm Ø PVC Waste pipe connected to new soil pipe

1) Sink - 40mm Ø PVC Waste pipe connected to existing sink waste pipe

- 32mm dia UPVC un-vented branch pipe (with anti-syphonic waste traps) at a gradient to suit length of waste pipe, up to maximum length of 1.7 metres.

(0.50 metres = 1:11 gradient); (0.75 metres = 1:12 gradient);(1.00 metres = 1:20 gradient):(1.25 metres = 1:30 gradient):

(1.50 metres = 1:40 gradient);(1.75 metres = 1:50 gradient).- 40mm dia UPVC un-vented branch pipe (with anti-syphonic waste traps) @ gradient of 1:20 (1:20min - 1:11max), up to maximum length of 3.0 metres.

- 50mm dia UPVC un-vented branch pipe (with anti-syphonic waste traps) @ gradient of 1:40 (1:40min - 1:11max), up to maximum length of 4.0 metres.

- 100mm dia UPVC un-vented branch pipe (with anti-syphonic waste traps) @ gradient of 1:40 (1:60min - 1:11max), up to maximum length of 6.0 metres or 12.0 metres if more than

- Water efficiency fittings should be provided to all WC's and WHB's within a dwelling to

i.e. Dual flush WC cisterns should have an average flush volume of not more than 4.5 litres. Single flush WC cisterns should have a flush volume of not more than 4.5 litres. Taps serving wash or hand rinse basins should have a flow rate of not more than 6 litres per

- New foundations to be stepped below existing drainage - Where underground drains pass through under-building / solum walls, an opening should be formed to allow at least 100mm thick pea-gravel around the drain, including a new 65mm - All new drainage as indicated internally is to be installed in heat resistant UPVC by Marley

- All internal wastes to be installed to manufacturers instructions and recommendations

- All new underground drains to be 110mmØ Upvc pipes - Proposed 100mm UPVC RWP's to be trapped and connect to existing RWP. - All pipes laid on 150mm well compacted granular material. side fill to be granular material

well compacted to half the pipe depth, and top fill in granular material well compacted in - All pipework above ground will be UPVC. The connection between fireclay and UPVC

pipework to be by a suitable proprietary connector. - All stacks and stub stacks (below ground) will be 100mmØ Upvc, and include a min. 200mm radius bend at the foot, and have a distance from lowest branch to invert of drain not less than 450mm (in the case of a stub stack, the distance from the lowest branch of any other appliance to invert of drain will not exceed 2500mm) - Where any pipe passes through the polythene DPM, the DPM to be fitted with a sealed

collar, lapped up and sealed to the pipe at the top of the ground floor slab and to the DPM.

All wet areas - Shower, Whb's, Sink etc. to be tiled to prevent water infiltration to

Existing Walls:- Alterations.

- Any alteration works to be carefully carried out to match / complement existing walls.

SCALE 1:50C

Solum Construction - Base to be 150mm thick hardcore,

- 50mm well blinded sand

- 1200 Visgueen DPM on top lapped up into DPC - 50mm concrete screed on top.

Foundation Construction

- Concrete foundation to be 600x200mm foundation pad c/w 1 layer of A252 mesh - The proposed foundations will be the same type as the existing and taken to the same depth or a minimum of 450mm below ground level. Whichever is greater. Foundations to be stepped to reach different ground levels

- Movement joint to be installed between existing and new foundations and walls in accordance with regulation Structure 1.C.5. - Proposed foundations to lap over existing foundations by a distance of 300mm plus

existing scarcement with an overall thickness of 200mm plus the foundation thickness of 200mm. Alternatively 4No. 20mm diameter dowel bars 400mm long to be resin grouted 200mm into existing foundations - If when the existing foundations are exposed they comprise of a non standard design,

works must cease and building standards must be contacted' - Building standards to be contacted and given the opportunity to inspect foundation trenches prior to pouring concrete

DPC's also to be provided at all construction joints, under all wall plates, at stepped cavity tray, all cavity barriers and behind all pre-cast concrete cills and lintels and thresholds to comply with Section 3.10.0 Precipitation of the Building (Scotland) Regulations 2013. DPC to be stepped where required to maintain a min. 150mm A.G.L.

Vapour Control Membranes

Vapour membranes to be overlapped at junctions by 150mm mm and bonded with mastic strip and sealed with jointing tape In accordance with manufacturers written instructions. Dry lining junctions between wails, ceilings, floors, around window/door openings to be sealed

General Construction Information :-

- All wall construction to dwelling to comply Section 6.0.3/6.0.4 Thermal Conductivity of the Building (Scotland) Regulations 2013 - All concrete to be class C35min.

- No high alumina cement to be used.

- All brickwork to be a minimum course strength of 21N/m in class (iii) mortar brickwork to

be 'Frost free'. - Wall ties to be min. class (ii) at max 600mm c/c horizontally and 450mm vertically. Ties to be stainless steel. Ties every 3rd course. Wall ties to be 'BT-2' stainless Steel ties by Catnic or equal and approved & 600mm crs.

- Wall ties to be max 300mm apart vertically and within a distance of 225mm from the vertical edges where the aperture has been formed - New brickwork to be fixed to existing structure using galvanised steel connector Wall

Starter by Catnic or similar approved - Anchors to be Vertical V-Type galvanised mild steel 30x2.5x1200mm restraint straps by Catnic or equal and approved @ 600mm crs fixed to timber framing, lower brickwork course and roof. The holding down straps 30x2.5mm to be attached to the stud by 6No.

3.36x65mm ring shank nails at 2.4m centres, at every opening and at the end studs of a wall attaching the strap to the stud and placing the L-shaped end of the strap at least three courses under the masonry cladding

Internal Walls :-

- Internal partitions to be 75x50mm treated timber studs at 600mm centres complete with top, bottom and mid runners/ dwangs with 80mm Rockwool RWA45 insulation between studs for acoustic purposes. 1No. layer 12.5mm moisture resistant plasterboard to each side of partition, taped filled and decorated in base coat and 2 top coats emulsion in colour selected by client.

Additional dwangs as required to suit radiators / kitchen units and additional fixings as required by the end user

Sealing Junctions between Elements

Infiltration to be limited by sealing dry lining junctions between walls, ceilings and floors and at window, door and roof space openings

Lintels: - Refer to Engineers Details & Specifications G32 9LH

Cavity Barriers :-

Cavity barriers to be 50x50mm wrapped in DPC and provided around all openings of the cavity, at corners/ junction of 2No. walls, ceiling level and between roof space to comply with Section 2.4.1/2.4.2 Cavity barriers of the Building (Scotland) Regulations 2013 Part, whereby the maximum distance between barriers is 10m.

Cavity wall ventilation :-

- Catnic 'weep vents' to be used on brickwork, and to be spaced to max. 500mm² per metre length of wall. Vents to be staggered so they are not aligned vertically. Cavity to be ventilated below DPC level and at eaves and verge level with the equivalent of an open brick perpend every 1.2m.

- Front intake of air to be every horizontal 2m min. Proposed front intake air brick vents c/w proprietary clay cavity liner (225x75mm), DPC and cavity tray

Fire Protection :

End wall nearest neighbouring land (less than 500mmm from boundary) to have Medium fire resistance protection to conform to Building (Scotland) Regulations Regulations 2013 Part 2.6.1.

- Timber kit at boundary to have 2No. layers of 12.5mm plasterboard with staggered joints - To achieve medium fire resistance on the side walls all sockets, switches to have galvanised steel back boxes with Firetherms 'Intulec' secured behind. - All steelwork to have 2no. layers 12.5mm plasterboard with staggered joints

Descriptio

Client and Project Address Mr & Mrs Wasim Kiyani 20 Ledcameroch Park Bearsden G61 4AT

Drawing Title Proposed Side / Rear Extension **Proposed Details & Notes**



PLANNING

Drawn by CAF

Scale

1:50

Drawing no

CAD Location C:\Drawings\061-20

Date Sept 20 Paper Size

A1