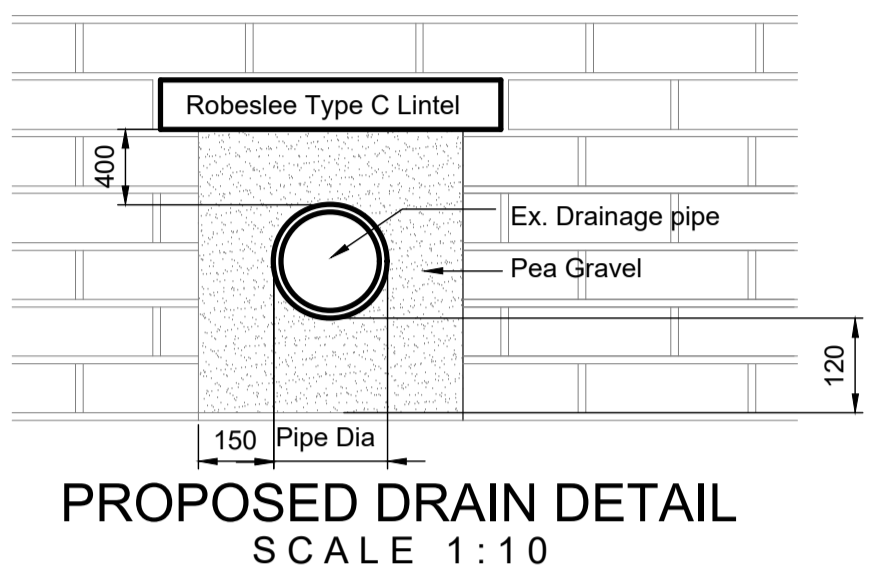
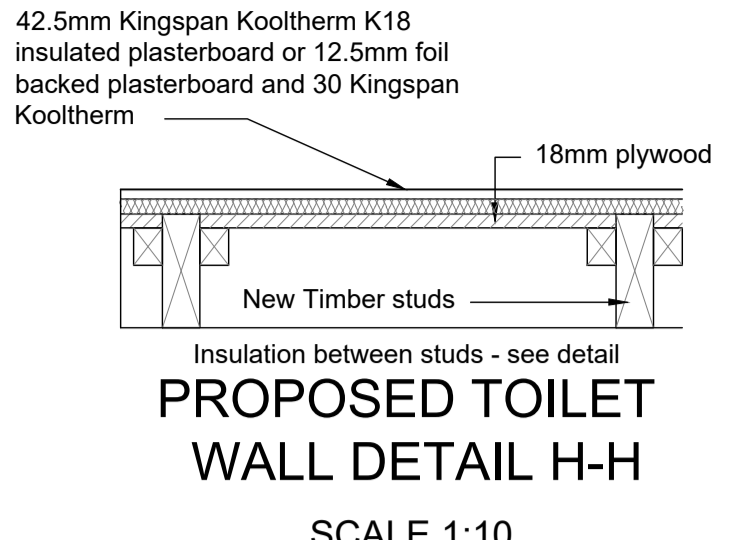
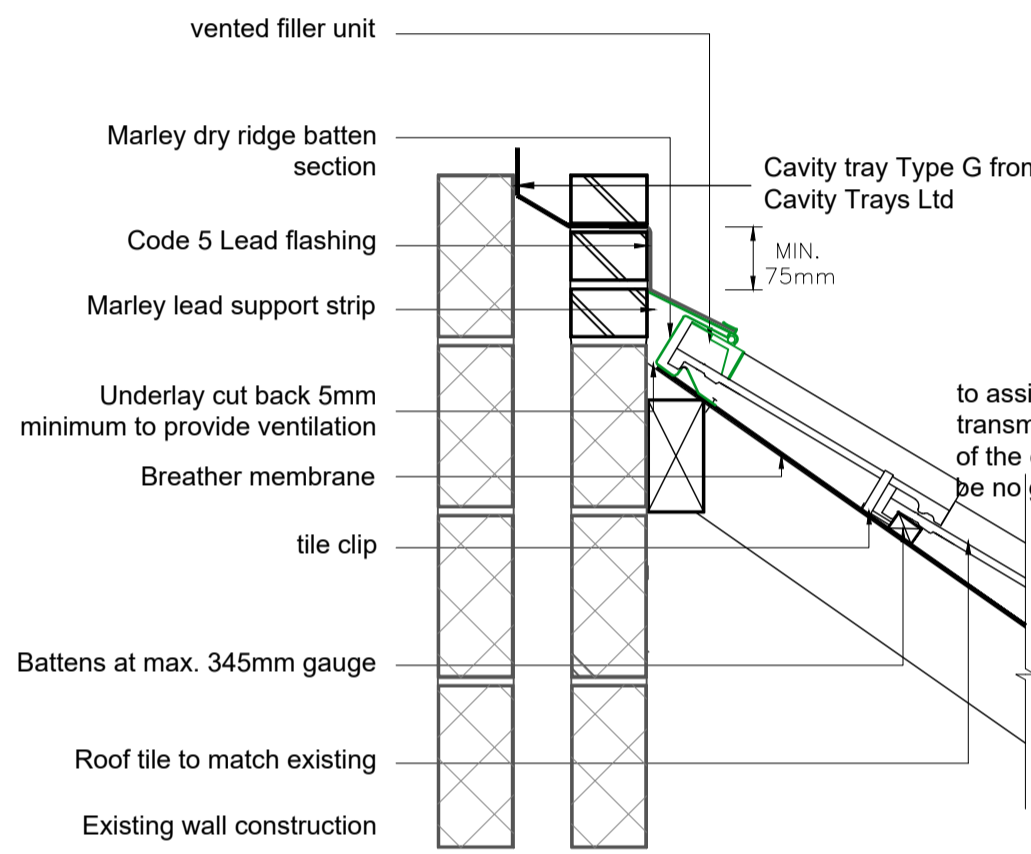


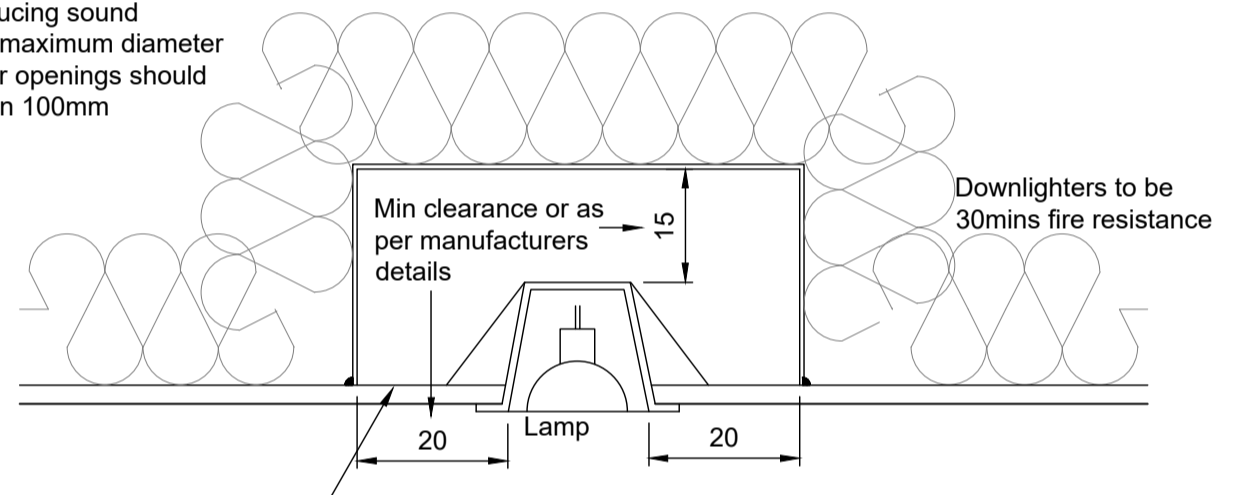
- Do Not scale from this drawing
- This drawing is to be read in conjunction with all relevant drawings and specifications, i.e. structural engineer's drawings etc
- The contractor must advise the Designer and Engineers of any discrepancies between the contract drawings and the existing site dimensions
- All dimensions to be checked on site prior to fabrication or erection
- Contractor to take exact measurements on the proposed roof to ensure roof construction c/w lead flashing sits under first floor window eaves and does not impede at its furthest projection the internal ceiling height.
- Contractor / Client to inform of any underground services within the proposed area prior to commencement of works or ordering of materials.
- No work to be begun until the appropriate approvals (i.e Building warrant and planning) have been received. Initial drawings submitted to the council may require altering to suit local authorities' comment. Councils stamped drawings should be used during construction.
- Client / Contractor responsibility to investigate existing ground prior to construction with regards to existing underground services. i.e. gas, water etc.
- Scottish Water - It is the Owners responsibility to obtain the appropriate consents from Scottish Water regarding building over Water mains & sewers
- Client's responsibility to confirm if in a listed building or conservation area prior to submitting for approvals.
- For Additional information see www.cafdesigns.co.uk
- All down takings and demolition works to be carried out in accordance with BS 6187:2011 and the Health and Safety at Work Act 1974.
- All works to Building (Scotland) Act 2004 and Building (Scotland) Regulations 2021
- Where the land is sloping at the proposed works or surrounding area, then it is the clients responsibility to provide a survey i.e. topographical survey to provide accurate gradients.
- Where under floor heating to be installed, client to provide details of heating to be installed so engineer can check additional floor loading.
- Existing water service pipes cannot be built over and must be re-directed around any structure by a SNIPEF registered plumber. If the water service was to enter this property at a new location, a new stop tap will be required at that location.
- If in Doubt Ask



Drawing to be read in conjunction with Drawing 057-23.001 - 003 Drawing for Planning & building warrant purposes.



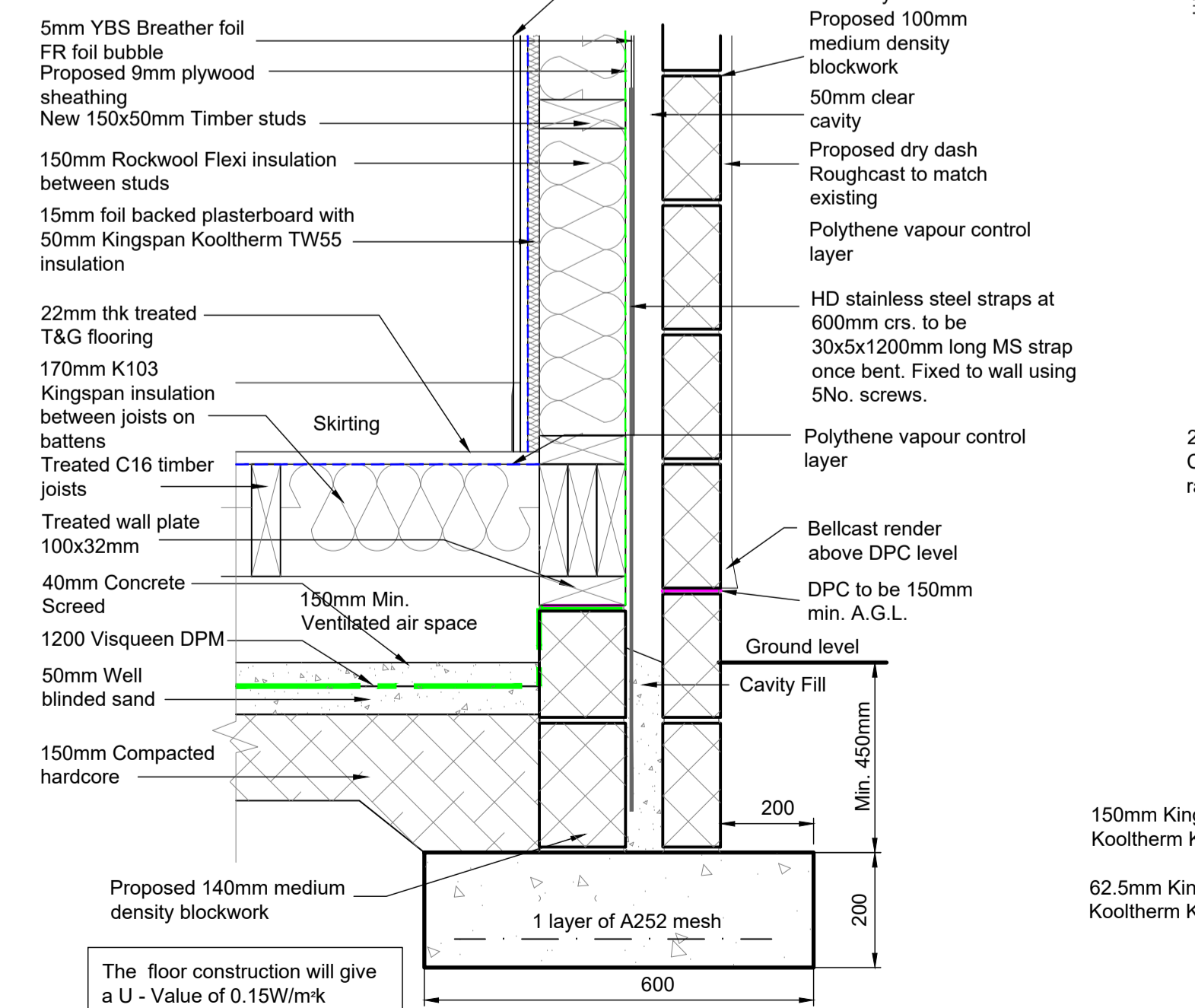
When installing downlighters ensure that the airtightness of the ceiling is maintained and that the manufacturers min. recommended air gap is maintained around and above the fittings to avoid heat from the lamp causing a potential fire



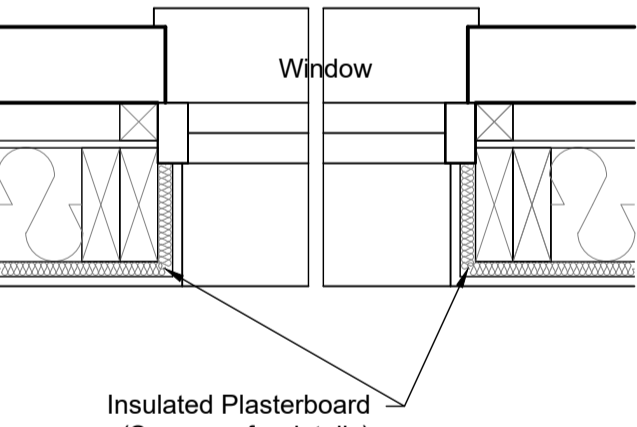
High Level ventilation to Mono Pitch Roof F-F SCALE 1:10

PROPOSED FIRE HOOD DETAIL SCALE 1:5

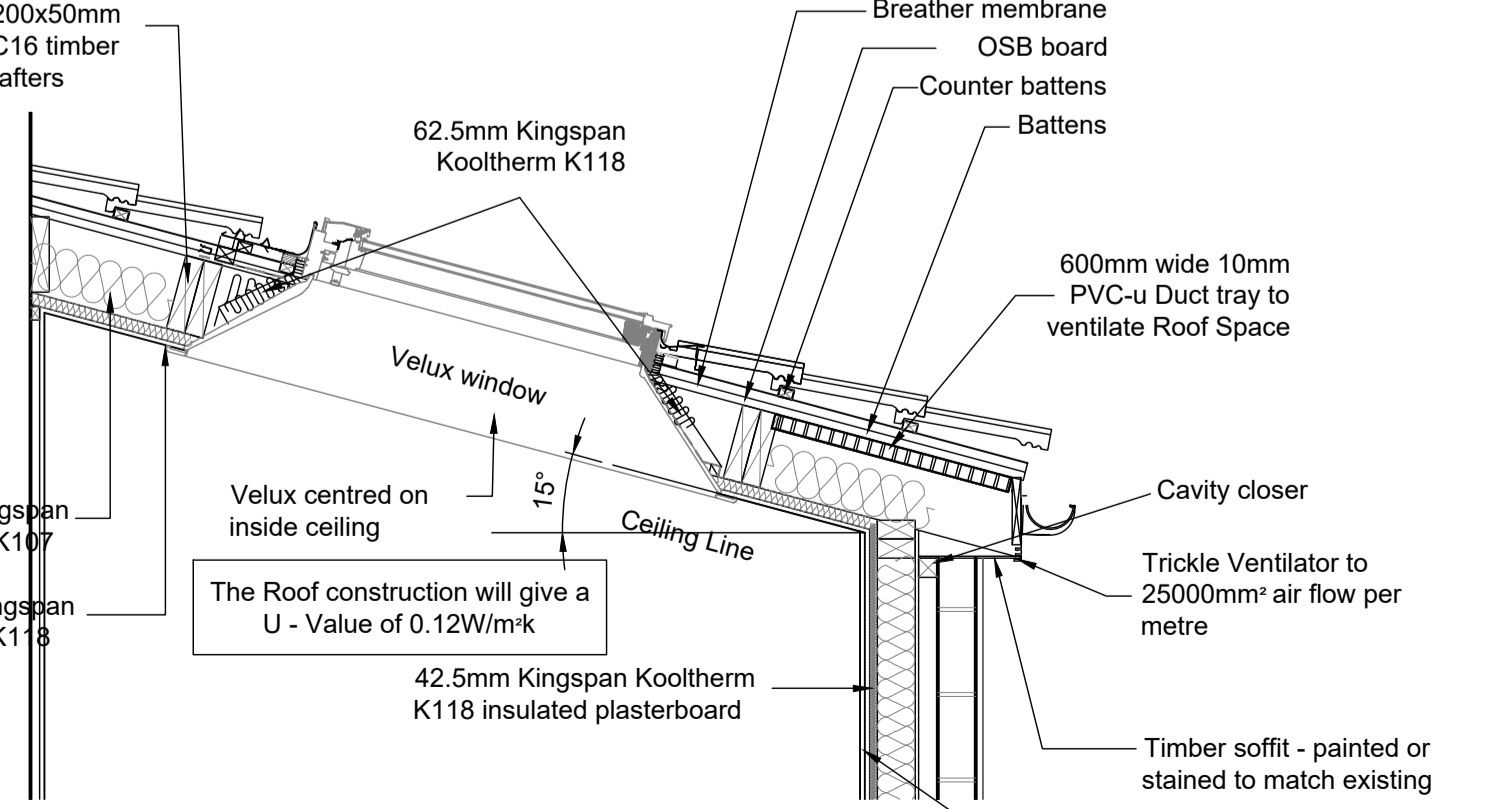
The wall construction will give a U - Value of 0.17W/m²K



PROPOSED WALL & FOUNDATION DETAIL D-D SCALE 1:10



PROPOSED WINDOW JAMB DETAILS SCALE 1:10



PROPOSED ROOF DETAIL E-E SCALE 1:20

General Roof Construction

- General roof construction** - U-value of 0.11W/m²K
- Tiles to be Redland Regent or similar approved and match existing colour and be capable of 15° approx. with 100mm headlap and be through-coloured no granular
 - Fixed on treated timber battens with
 - 50x38mm treated timber counter battens
 - OSB to be 18mm exterior grade plywood, nailed to every truss at no less than 200mm centres using 3mmØx50mm galvanised round nails, joints to be staggered.
 - Covered with roof membrane
 - 400mm Rockwool R18 insulation cross layered
 - Form junction to existing wall with cavity trays
 - Roof Pitch Min. 15° degrees
 - 200mm timber soffit match existing
 - Proprietary fixing straps / roof anchors to manufacturer's written recommendations.
 - Roof to be ventilated at soffit using continuous 25x47mm Eaves soffit ventilator system capable of 25000mm² air space per metre & at ridge level using Redland proprietary ventilation systems.

Timber frame wall Construction

- Proposed Wall Construction** - U-value of 0.17W/m²K
- Outer Leaf**
- 20mm dry dash roughcast and low level facing brickwork to match existing
 - 100mm medium density blockwork
 - 50mm clear cavity
- Inner Leaf - Timber frame construction**
- 5mm YBS Breather Foil FR Foil Bubble
 - 10mm WBP plywood
 - 100mm medium density blockwork wall below
 - 100x50mm C16 treated timber studs at 600mm centres with double head binders and sole plate.
 - 90mm Kingspan K112 insulation between studs
 - 42.5mm Kingspan Kooltherm K118 insulated plasterboard
 - Timber frame construction to be tied to existing wall construction by Hilti HB Bolts @ 400cns
 - DPC to all walls 150mm above ground level and lapped with 1200 Visqueen DPM within floor construction.

Cold Roof Sloping roof insulation

- Sloping roof - U-value of 0.12W/m²K
- 62.5mm Kingspan Kooltherm K118 insulated plasterboard
- 150mm Kingspan Kooltherm K107
- 50mm Airspace
- 200x50mm C16 Rafters @ 400cns

- New Window**- U-value of 1.0W/m²K
- New windows to be UPVC to match existing 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 call to match existing, laid on DPC. Window to be supplied treated and primed for final decoration on site, complete with locking handle. Strap & line ingoes with Gyproc insulated plasterboard. 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 BS2134:2007
 - Standard D4.13.5 (2013) and product standard and component performance to BS7412:2007 for PVCu Units
 - New window / finish to be confirmed by client

- Exterior Door**- U-value of 1.0W/m²K
- New rear door to be UPVC colour 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 finish 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.
 - Fixing of a doorset should be in accordance with recommendations given in section 8 of BS8213-4: 2007

- Velux Window**- U-value of 1.3W/m²K
- 2No. Velux windows - 780x980mm. Client to confirm if to be used manually or electrically operated
- Draught sealing / stripping**
- Windows, Doors, Ceiling Hatchets 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 hatchets to be fitted with external quality weather seals and draught stripping.

- Smoke Detector** :-
- All smoke alarms and heat alarms in a dwelling should be interconnected so that detection of a fire in any alarm, operates the alarm signal in all of Smoke alarms and heat alarms should be interconnected in accordance with BS5839: Part 6: 2019.
 - Smoke alarms and heat alarms should be mains operated and permanently wired to a circuit which should take the form of either:
 - An independent circuit at the main distribution board, in which case no other electrical equipment should be connected to this circuit (other than a dedicated monitoring device installed to indicate failure of the mains supply to the alarms), or
 - A separately electrically protected regularly used local lighting circuit.
 - 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 and conform to BS EN 14604: 2005
 - Heat Alarm to conform to BS 5446:Part 2:2003
 - Heat detector to be hard wired, interlinked and to be noted on electrical certificate

- Carbon Monoxide Detector** :-
- To be installed in any room where a new combustible appliance is fitted to comply with Building (Scotland) Regulations 2013 3.20.2 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

- Gas** :-
- 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 the fues 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 and 7033
 - All works to alter / extend existing internal gas supplies to be carried out by a Gas Safe Registered Installer
 - Gas Fired appliances located 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 to connect to existing heating system and have thermostatic valves (TRVs). (Contractor to inspect existing boiler to make sure it can supply new radiators)
 - Client to confirm radiator positions to contractor.

- Gas Boilers**:-
- Existing Boiler located on first floor

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

- Internal Doors**:-
- New timber doors to give a clear opening of 800mm to comply with Building (Scotland) Regulations 2013 Part 4.2.4

- Internal Door Ironmongery**
- Ironmongery to be confirmed by client

- General**
- All walls and plasterboard ceiling to be painted 1No. coat Primer and 2No. coats Vinyl emulsion all to be finished in colour specified by client.
 - All work to be carried out as per manufacturers written specifications.
 - All sizes to be checked and anomalies to be flagged before commencement of work or purchasing materials

- Future Stairlift Provision**
- Future stairlift provision to be made on banister side of stairwell with activity space of 700x400mm at base as shown on proposed plan. Use Stannah 'Sofia' type of similar approved

- Air Infiltration** :-
- Air infiltration limitation to comply with BRE Report 262

- Services** :-
- All services (i.e. pipework, ductwork etc.) to have appropriate fire dampers at points of openings through separating walls & floors to comply with Building (Scotland) Regulations 2013 Parts 2.2.4 & 2.2.5
 - All services passing through foundations to comply with Building (Scotland) Regulations 2013 Part 1.1.1 and meet the BS8004:1986 Foundation regulation.
 - Any service penetrations through a separating wall or floor must be sealed with intumescent mastic.
 - Insulation to heating pipes to BS 5422:2009
 - Ducting and pipework running between joists to be wrapped in acoustic material

- Insulation of hot water pipes** :-
- 19mm wall for 22mm pipes; 25mm wall for 15mm pipes and 9mm wall for radiator supply pipes.

- Fire Protection** :-
- End wall nearest neighbouring land (less than 500mm from boundary) to have Medium fire resistance protection to conform to Building (Scotland) Regulations 2013 Part 2.6.1.
 - To achieve medium fire resistance on the side walls all sockets, switches to have galvanised steel back boxes with Quetherm's intumescent and acoustic putty pads with up to 2 hour fire rating.

Suspended Timber Floor Notes

- Floor Construction** :- U-value of 0.15W/m²K
- Constructed from 22mm treated T&G moisture resistant chipboard flooring
 - Polythene vapour control layer
 - 170x50mm treated timber joists @ 400cns
 - Treated timber 100x32mm wall plate with Honeycombed dwarf wall
 - P/A = 0.76
 - 170mm Kingspan K103 insulation on battens
 - 150mm min. Ventilated air space between base of joists and solum

- 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 BS EN 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 18th Edition IEE Regulations.
 - 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 Ant & socket points to be positioned Min. 400mm A.F.F.L. and 150mm above any worktop
 - Where sockets 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.
 - Client to confirm socket and lighting positions before commencement of works
 - All light fittings to be low energy type including lamps to comply with Building (Scotland) Regulations 2013 D6.5.1

- Timber**
- 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 1998
 - Contractor to supply truss design certificate upon completion of works

- Leadwork**
- All Leadwork to be in accordance with 'Leadsheet Association Recommendations' and to BS6915:2001

- Windows - Safety Glazing** :-
- All glazing to conform to BS6262:Part 4-5 2018 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 inside in accordance with BS8213 Part 1.
 - All apartments to have a min. glazed area of 1/15th of the floor area to comply with Building (Scotland) Regulations 2013 Part 3.16.1
 - Window controls must be positioned not more than 1.5m above F.F.L.
 - New windows to conform to BS6399 Part 1 1998 for pedestrian barrier protection to comply with Building (Scotland) Regulations 2013 D4.3.4
 - New toilet / bathroom windows to have frosted / obscure glazing
 - 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

- Natural Ventilation**
- Ventilation will comply with Building (Scotland) Regulations 2013 Parts 3.14 & conform to the BRE Digest or the table to this specification.
 - The rooms will be ventilated to min. 1/30th of the floor area it serves by trickle ventilators above all windows & patio doors.
 - Natural Ventilation to comply with CIBSE Guide A:1986, Design Data, Section A4, Air Infiltration and natural ventilation.
 - Windows & doors to have permanent ventilators built into head of frames to comply with 3.14.2
 - Apartments to have ventilators capable of 12000mm²
 - All other rooms to have ventilators capable of 10000mm²
 - Toilets to have trickle ventilator to rooms with GMEVs could be formed by "undercutting" the room door to achieve an air space of at least 8,000mm². This air space should be clear of any actual or notional floor coverings.

- Mechanical Ventilation**:-
- Mechanical Ventilation to be carried out in accordance with the BS5720: 1979 or CIBSE Guide B: 1996, Section B2 and Natural Ventilation to be confirmed by CIBSE Guide A:1986, Design Data, Section A4, Air Infiltration and natural ventilation.
 - Isolation switches should be fitted with mechanical extraction
 - Provide the mechanical / natural ventilation to the following rooms from Ventaxia or similar approved :-
 - En-Suite & Toilet - Mechanical extraction capable of 15litres/sec min.4000mm²
 - To conserve power the extractor fans should have a specific fan power rating of 0.5 W/l/s

- Fans**
- 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.

- Drainage**-
- New drainage required to :-
 - Toilet & En-Suite Toilets:-
 - WC - 100mmØ PVC Waste pipe
 - WHB - 40mmØ PVC Waste pipe
 - Shower - 50mmØ PVC Waste pipe

- Wash-Hand Basins** -
- 32mm dia UPVC un-vented branch pipe (with anti-siphonic 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-siphonic waste traps) @ gradient of 1:20 (1:20min - 1:11max), up to maximum length of 3.0 metres.]

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

- W.C.**
- 100mm dia UPVC un-vented branch pipe (with anti-siphonic 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 one W.C. is connected.

- Air Admittance valves to be installed in accordance with BS EN 12380:2002 or certified body, AAV to be above the highest overspill level, ben vented and accessible
- Water efficiency fittings should be provided to all WC's and WHB's within a dwelling to comply with standard 3.27.1 & 3.27.2
- Dual Flush WC systems should have an average flush volume of not more than 4.5 litres. Single flush WC systems 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 minute.
- 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 thick pre-stressed lintel over.
- All new drainage as indicated internally is to be installed in heat resistant UPVC by Marley or equally approved.
- All internal wastes to be installed to manufacturers instructions and recommendations trapped and connected separately to S.V.P.
- All new underground drains to be 110mmØ UPvc pipes and laid on 10mm granular material 1:80 gradient
- 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 100mm layers, to 400mm above the pipe crown.
- 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.

- Wet Areas**:-
- All wet areas - Shower, Whb's, Sink etc. to be tiled to prevent water infiltration to plasterboard. Tiles to be confirmed by client.

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

- Solum Construction**
- Base to be 150mm thick hardcore,
 - 50mm well blinded sand
 - 1200 Visqueen 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 scarification with an overall thickness of 200mm plus the foundation thickness of 200mm. Alternatively 4No. 200mm 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**
- DPC's also to be provided at all construction joints, under all wall panels, 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 walls, 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 (ii) mortar brickwork to be 'Fire 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 c/s.
 - 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 c/s fixed to timber framing, lower brickwork course and roof. The holding down straps 30x2.5mm to be attached to the stud by 6No. 3.3x65mm 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 3 courses above 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 with a minimum density of 10kg/m² 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
 - Toilet Robust internal wall 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 of 18mm plywood to tell side c/w 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.

- 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**
- General Extension
 - Robeslee Type C lintel with 150mm end bearing to both sides
 - 2No. 200x50mm timber lintels on cripple stud formation
- Door Slipping**
- 2No. 200x50mm timber lintels on cripple stud formation

- Cavity Barriers** :-
- Cavity barriers to be 30mins fire resistance 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, 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. 500mm 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. Cavity weep vents to be installed above cavity trays to enable moisture to be taken externally
 - Front intake of air to be every horizontal 2m. Proposed front intake air brick vents c/w proprietary clay cavity liner (225x75mm), DPC and cavity tray

Rev	Description	Date
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Client and Project Address
Mr & Mrs Downie
73 Caledonian Avenue
Bellshill ML4 3BZ

Drawing Title
Proposed Side Extension
Proposed Sections, Details
& Notes

CAF

CALDER DESIGNS

53 CALDERGLEN AVENUE
 THE ELMS BLANTYRE
 SOUTH LANARKSHIRE G72 9UP

TEL. +44(0)1698 825660 Mob. +44(0)774 780 3435
 E-MAIL. craig@cafdesigns.co.uk www.cafdesigns.co.uk

PLANNING		
Drawn by	CAD Location	
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Scale	Date	Paper Size
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Drawing no. 057-23.002