Specification Notes

The appointed contractor is responsible for correct dimensional layout and setting out. All sizes to be DOUBT

PREPARATION OF SITE ole material including turf, vegetable matter, wood, roots and topsoil to be removed from the ground to be covered by the building, and the ground immediately adjoining the building, to a depth of t least that which will prevent later growth that could damage the building. Solum to be treated to prevent vegetable growth and reduce the evaporation of moisture from the Rawlok m10 loose bolts @ 600mm centers, with vertical DPC. ground to the inner surface of any part of a dwelling that it could damage. lum to be brought to an even surface and any up filling should be of hard, inert material. Solum not to be lower than the highest level of the adjoining ground. At sloping around where this is not possible the solum should be laid to fall to an outlet in the under building above the lowest level of the

adjoining ground to prevent any water build up below the building. Any part of the under building that is in

contact with the ground, such as on sloping ground, should be tanked.

Client/Main Contractor to ensure all conditions attached to the Planning approval are met.

All surface soil & vegetable matter to be removed from the area of all buildings in full compliance with After demolition, the existing remaining building must be left in a safe and watertight condition in full

All buildings and the entire site shall be securely fenced off to protect the general public in full compliance with Regulation 13 of the Building Standards and in accordance with the Planning Supervisors' Safety Plan.

All building shall be kept free of mud and dust in full compliance with Regulation 14 of the Building Standards and in accordance with the Planning Supervisors' Safety Plan.

A building site where there are unfinished or partially completed works must be kept safe and secure in full bliance with Regulation 15 of the Building Standards and in accordance with the Planning Supervisors'

If significant unsuspected contamination is found then all works shall cease until appropriate investigation to determine the nature, extent and potential impacts of the contamination has been undertaken and a Remediation Method Statement (agreed with the Local Authority Contamination Section) has been

Care to be taken during demolition works to ensure no structural damage occurs to surrounding buildings Should any damage occur, all works on site to cease until a Structural Engineer has inspected site and Contractor to ensure that durina demolitions, the pavement and public are to be protected by

Perimeter of all site with red chain dotted line to be fenced off with temporary steel 'Heras' fencing. 2400mm high Fencing to remain until construction of site is completed

Where hoarding extends to, a minimum of 1No Bulkhead light to be fitted, Min 1No to each lane Existing electrical, water & gas supplies on site to be disconnected and removed from site prior to Chain dotted line denotes line of 2400mm high x1200mm 22mm thick safety hoarding boards extending

Existing building shown with red dashed line to be demolished on site (1) Every building shown winned dashed line to be definished on such a way that all service connections to the building are properly closed off and any neighbouring building is left stable and watertight. (2) When demolition work has been completed and, where no further work is to commence immediate the person who carried out that work shall ensure that the site is (a) immediately araded and cleared: or

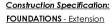
provided with such fences, protective barriers or hoardings as will prevent access thereto











Refer to structural engineers drawings for size of strip foundations with A393 bottom & top mest reinforcement having 50mm minimum cover. Where trenches are to be exposed for any length of time prior to pouring, 50mm GEN 1 blinding is to be provided. Foundations to be a minimum depth of 450mm to top of foundations below ground level. Take foundations below any buried services, with underside of new foundations at least as deep as underside of adjacent existing foundations. Where existing foundations are exposed they must be temporarily protected until work is complete. All soft spots found must be filled with Gen 1 (C8/10) concrete with no section greater than 0.7mx0.7m² to be dug out at any one time.

The mortar used below ground level is to be a 1/3 mix to BS 5628-3 : 2005. Timber kit to sit on 150mm dense concrete blockwork. The outer leaf is to be kept two courses down to allow for fixing of anchor straps. Straps to be 30x3x1000mm long stainless steel fixed to studs with a minimum of 6No 64x4mm RPH nails, face nailed Blockwork compressive strength: 7N/mm² (10N/m² below ground level), Density: 2050kg/m³ in always return vapour control layers into door and window reveals, head and sills accordance with BS 6073. All blockwork to be constructed in accordance with BS 5628 Part 3, BS 8000 Part 3 and BS EN 771-3. Blockwork cavity ties to be vertical twist stainless steel to BS 1243 at 900mm horizontal

CONCRETE GROUND FLOOR CONSTRUCTION - Extension ominal 20mm floor finish throughout (to client specifications), on **150mm insitu concrete slab C30** on 150mm Kingspan TF70 rigid insulation, on 1200 gauge membrane on 50mm minimum sand blinding on minimum 150mm consolidated hardcore. 50mm Kingspan TF70 rigid insulation to perimeter of screed, vertically placed gaginst the inner depth of the 65mm self leveling screed. (All concrete laid in accordance with BS 8110 and BS EN 1992-2, Eurocode 2:Design of Concrete structures).

Thermal Performance: 0.12W/m²k HORIZONTAL TIMBER CLAD EXTERNAL WALL CONSTRUCTION - Extension

22mm horizontal larch cladding nailed (with Stainless Steel nails) on 50x38mm treated timber battens (forming 50mm ventilated cavity) at 600mm centers on Protect TF200 Thermo membrane on 9mm OSB Board. OSB sheeting fixed to 145x45mm C16 reg and treated timber kit at 600mm centers incorporating double top and bottom rails. Inner leaf to incorporate 140mm Knauf FrameTherm Roll 35 between studs (to BS EN ISO 13501-1) 40mm Kingspan K12 insulating board, and to be finished with Protect VC foil (all joints to be taped), and then 25x38 battens fixed to the timber frame behind the insulation to create a 25mm service void finished with 1 layer 12.7mm plasterboard with all joints taped, filled and staggered ready for dwelling. 50x50mm ww treated fire stops/cavity barriers, within cavity between cladding and OSB, are to also to be provided by the property owner for safe cleaning of the high level glazing. be incorporated vertically around all openings, wallheads, first floor level, corners and gable at maximum 000mm centers vertically. **Tenmat FF 102/50 ventilated cavity barrier** to be incorporated horizontally ove all openings and first floor level to allow ventilation of cavity in normal conditions. Metal rodent stop mesh fixed to vertical battens at top and bottom, minimum 25mm air gap to be maintained at top and All windows to be finished with RBB Aluminium FBS 25 preformed aluminium sills. Sills finish to clients choice, in accordance with BS 8110 and BS EN 1992-2, Eurocode 2:Design of Concrete structures)

* In all 'wet' rooms, plasterboard to be replaced with moisture resistant plasterboard.

Thermal Performance: 0.17W/m²K

PROPOSED WALL LINING - Extension ting wall linings to be removed and walls brushed clean. Existing walls to be inspected and made good

if required and lined **treated softwood timber battens** (size to be determined on site, min. 25mm) to be strapped to existing walls forming a min. **25mm service**. Finished with **1 layer 12.7mm plasterboard** with all

* In all 'wet' rooms, plasterboard to be replaced with moisture resistant plasterboard.

MONO PITCHED METAL ROOF CONSTRUCTION - Extension Roc f finish to be **Euroclad Colorcoat HPS200 Ultra Metal Roofina** (or eaual and approved) on **50x50mm** treated timber purlins on Datlex Rootshield breathable roofing membrane underlay (to BS 5250 code of practice for the control of condensation in buildings) over 150x22mm www treated sarking boards (min 3mm gap between each board), fixed to proprietary timber gangnailed roof rafters at 400mm centres. (The installation of Daltex Roofshield must be strictly in accordance with the relevant requirements of BS 5534, the suppliers instructions and requirements of BRE Certificate 072/00.) Rafters to be fixed to timber frame with proprietary clips. Lateral restraint straps to be incorporated at high and low level spanning at least 3No. rafter members and securely fixed into frame. Straps to comply with BS 5268 Part 3 2006 Appendix B. Fix straps to rafters with not less than 4 no.50x8 gauge sherardised screws evenly spaced, locate at least one screw 150mm off bottom end of strap, 100mmx25mm longitudual roof bracing where indicated on sections. Roof rofters to be designed and manufactured in accordance with BS 5268 Part 3 2006 by specialist manufacturer. Bracing to be in accordance with BS 5268 and manufacturers requirements. Insulation to coombs to be 200mm Knauf Earthwool Loft Roll 40 between rafters with Protect VC Foil fixed across the inner face of the rafters (all joints to be taped), 70mm Kingspan K12 (or Quinn therm QI-Kraft) insulation board and then 25x38mm battens fixed back to the timber rafters (behind insulation) to create a service void. Finish to ceiling to be 12.7mm plasterboard having all joints taped, filled and staggered ready

* In all 'wet' rooms, plasterboard to be replaced with moisture resistant plasterboard. Thermal Performance: 0.12W/mk²

NON-LOAD BEARING INTERNAL PARTITION CONSTRUCTION - Type A 95x50mm treated softwood timber studs, min. 60mm acoustic insulation (min. 10kg/m³ density) to be

Panel to corner post

Head binder to wall panel-

installed between studs, both sides to be finished with finished with 1 layer 12.7mm plasterboard (min. 10kg/m³ density) with all joints taped, filled and staggered ready for decoration

* In all 'wet' rooms, plasterboard to be replaced with moisture resistant plasterboard. ROBUST WALL CONSTRUCTION:

All wall constructions within accessible sanitary facilities to be be lined with min. 18mm OSB behind moisture plasterboard, installed in accordance with technical standard 3.12.3

ON SITE NAILING Wall Framing- 100mm x 4mm ring shank Ground floor sole plate to header joist-3No to each joist end

6No 64 4m @ 200mm ctrs Gable restraint strap to dwangs-Double Doors Stud to stud (internal sheated wall to external wall)- 200mm ctrs All structural timber to be grade C16 unless noted otherwise. All roof trusses to be in timber grade TR26. All

timber to be preservative treated with double vacuum process with organic solvent in accordance with the requirements of the British Wood Preservative Association. Timber frame construction materials and workmanship to be in accordance with BS 5268 and current TRADA recommendations. Studs should as far as possible line through with floor joist and roof trusses above THERMAL BRIDGING:

300mm staggered ctrs

300mm staggered ctrs face nailed

ction to be in such a way that there are no substantial thermal bridges or gaps where the layers of insulation occur within building elements, at the junction between building elements and at the edges of enlarged heating and hot water system. Radiators to be fitted with thermostatic valves building elements where openings in the structure are formed.

Cavity barrier formed within roof voids at max 10m centres. Barrier formed with 1 layer of 12.5mm plasterboard either side of rafter and cut / fitted tightly to underside of roof sarking, plasterboard coombs, plasterboard ceiling. All joints to be sealed with intumescent sealant to form airtight seal.

NEW WALLS TIED TO EXISTING:

All leadwork used to be Code '5' lead to BS EN 12588 Leadwork raggled into walls with a minimum 150mm checked confirmed prior to manufacturing/construction process begins. DO NOT SCALE OFF DRAWINGS, IF upstand and fixed in place with proprietary fixing clips to BS6915 at max 450mm centres. Lead sealant to be applied to raggles. Lead valleys to be minimum 125mm wide. Code '5' secret gutters dressed under tiles

> New concrete block tied to existing masonry with Simpson Strong-Tie C2KS Crocodile galvanised wall starter kit, 6no M6x50mm stainless steel coach screws to secure kit to existing. Timber kit bolted to wall using

21NO. layers of 12.5mm plasterboard to be staggered to 25x38 treated softwood battens around existing and new structure to provide 30min fire resistance.

INSULATION TO PIPES & WARM AIR DUCTS: I new/affected pipes and warm air ducts to be suitably insulated in accordance technical standard 6.4.1

& 'Domestic Building Compliance Guide for Scotland'. ateral restraint straps to be incorporated at high and low level spanning at least 3No. truss/rafter member and securely fixed to timber frame. Straps to comply with BS 5268 Part 3 2006 Appendix B. Fix straps to rafters with not less than 4 no.50x8 gauge sherardised screws evenly spaced, locate at least one screw

To be 'Visqueen 2000' or similar to be incorporated under wallplates and outer walls minimum 150mm above finished ground level. DPCs around inside faces of cills, lintels, and all openings to be pitch free Xtra

50mm off bottom end of strap. 100mmx25mm longitudual roof bracing where indicated on sections.

cings/skirting are to be in good quality softwood, free from knots, shakes and other defects suitable for a paint finish. Facinas 16x75 beaded on both edges. Skirtings 16x145 beaded on top edge. Skirting blocks 5x95. Painted finishes to be one undercoat and two gloss, to clients choice. All plasterboard finishes to be finished with two coats of emulsion to clients choice. Floor finish to clients choice. Doors to be paint grade/self finished to clients choice. Cupboard/shelving to be clear varnished MDF unless otherwise specified. Internal window cills and apron lining to be painted MDF unless otherwise specified. Fascias, soffits and bargeboards to be painted with one undercoat and two gloss or two coast of external quality per choice.

WINDOWS & DOORS:

o be high performance AluClad windows & doors with U-Value no greater than 1.4W/m2K. An openable window or rooflight, that provides natural ventilation to meet standard 3.14, should have controls for opening, positioned at least 350 mm from any internal corner, projecting wall or similar obstruction and at a height of:

nsulation. Gaps on and around recessed downlighters to first floor ceiling to be sealed with caulk or fire not more than 1.7 m above floor level, where access to controls is unobstructed; or proof expanding foam to limit air infiltration in accordance with BS 9250:2007 • not more than 1.5 m above floor level, where access to controls is limited by a fixed obstruction of not more than 900 mm high which projects not more than 600 mm in front of the position of the controls, such as a kitchen base unit. Where obstruction is greater, a remote means of opening, in an unobstructed location, should be provided; or • not more than 1.2 m above floor level, in an unobstructed location, within an enhanced apartment (see clause 3.11.2) or within accessible sanitary accommodation (see clause 3.12.3) not provided with with Domestic Building Services Compliance Guide for Scotland.

LAMINATED GLAZING (Secure by Design):

Any door with glazing and every pane of glass within 850mm of any door handle, and all keyless lock windows to have one pane of glass (of the double glazing) to be laminated as per BS EN 356:2000 class LOW LEVEL GLAZING:

be designed to resist human impact as set out in BS 6262: Part 4: 2018. BS FN 1991-1 and the associated PD 6688-1-1, where all, or part, of a pane is within 800 mm of floor level or part of a door leaf within 300 mm of a door leaf and within 1.5 m of

The details shown contain measures designed to reduce air infiltration. Ways of preventing air infiltration nould be considered at every penetration of this barrier. Particular care on site should be paid to: • joints between structural components e.g. wall to floors joints around components and opening within walls
 service penetrations plumbing, electrical and ventilation.

• close any vertical ducts at the top and bottom where they meet the air barrier (e.g. boxing round soil

Insulated and sealed loft hatches to be fitted

• use joist hangers to support floor joists

• seal any service penetrations through the air barrier ropriate sealant or gap filler for the size of gap and degree of movement anticipated. MASONRY CONSTRUCTION ensure continuous ribbons of adhesive are used to fix to dry lining at perimeters of external walls, openings, and services on external walls. The importance of correct sealing of dry lining on dabs needs to be stressed, as this is a key area of infiltration and can seriously affect the overall ventilation rate

• seal under skirting boards where dry lining is used, or on suspended floors TIMBER FRAME • ensure DPC's are turned up behind sole plates and lap with vapour control layers; alternatively seal with mastic or a gasket between the DPC and sole plate • place bead of mastic on timber floor deck before positioning wall panels (timber ground floors and intermediate floors)

 ensure sheet' vapour control layers are properly lapped at junctions, and/or, cut vapour control layers tight to electrical outlets and seal at piped service penetrations, (with tape or • ensure all breather control membranes overlap each other and are stapled in place.

All Protect VC Foil (to walls, hangers & coombs), Protect BarriAir (to ceiling) & Protect FCM750 (to intermediate floor junction) membranes to be taped at all joints and together with Protect tape. Membranes to provide a continuous sealed membrane around the entire house to minimise air leakage. No services to penetrate this layer, unless unavoidable (i.e. mechanical extract vent, drainage etc). All windows and doors are to be sealed with Pro Clima Contega SL sealing tape (tape installed onto unit prior to installation), once unit is installed within frame sealing tape is to be joined to Protect VF Foil to minimise air leakage. All openings to have 25mm Kingspan (or Quintherm equivalent) to reveals and ingoes to

Doors to be high performance AluClad with mortice latch/lock (5lever) and Yale Lock. Main entrance door to have a minimum 800mm clear opening. All glazing to be as the window specification. Doors to be fitted with draught proof strips and to achieve U-Value of 1.4W/m2K

Windows at high level require to be cleaned safely in compliance with Clause 4.8.3. Ladder hooks to be decoration. Protect FCM750 Intermediate floor junction membrane to be installed at all floor junctions and to be taped to Protect VC foil at hanger or wall above, to maintain a continuous membrane around the Gable to be cleaned by use of water fed pole system by competent well trained individual

No overhead cables or obstructions present on site.

Hazard: Fall from height - Pole fed system to be used at ground level - Risk is low. Hazard: Adverse weather conditions - System not to be used in high wind or adverse conditions - Risk is low A full assessment has been carried out for the pole cleaning system and deemed **low risk** for persons

Rooflight window U-values to be adjusted in accordance with aujdance given in BRE 443. Adjustment as

 No adjustment to U-value 60° to 70° - +0.2 W/m²K for double glazing, +0.1 W/m²K for triple glazing 40° to 60° - +0.3 W/m²K for double glazing, +0.2 W/m²K for triple glazing 20° to 40° - +0.4 W/m²K for double glazing, +0.2 W/m²K for triple glazing

0° to 20° - +0.5 W/m²K for double glazing, +0.3 W/m²K for triple glazing Taking into consideration BRE 443 all rooflight windows are to have an adjusted U-value of 1.4W/m²K.

External doors/doors between dwellings and conservatories/doors between dwellings and garages/doors to flats or maisone the should be designed and installed to resist forced entry by

1) by meeting the recommendations for physical security in Section 2 of Secured by Design' (ACPO, 2009);

2) by use of doorsets and windows which are tested and certified by a *notified body* as meeting a ndard for security such as BS PAS 24: 2007 for doorsets or BS 7950: 1997 for windows 3) by use of doorsets and windows manufactured to meet recognized product standards and defined omponent performance as follows BS 7412: 2007, for PVCu units;

 BS 644: 2009, for timber window units: BS 4873: 2009, for aluminium alloy units

 BS 6510: 2005, for steel-framed units Any glazing in or adjacent to a door leaf which could be accessed by the breaking of glass should be laminated or of similarly robust material. Vulnerable windows should be constructed to resist attempts to force frames and, if openable. ironmongery. Windows which can be opened should befitted with either: a keved locking system that uses a removable key; or

• a keyless locking system, together with glazing which incorporates laminated glass or a similarly robust glazing material.

If single swing the doorset should be fitted with at least one and a half pairs of hinges meeting the recommendations of BS EN 1935; 2002 for hinge grade 11 or above. Hinges fitted to an outward-opening door should be of a type that does not permit the hinge pin to be removed unless the door is open. Otherwise, hinge bolts should be fitted to ensure the door leaf will remain secure when closed. All new windows and external doors to have egress window hinges and DPC on vertical jambs

A doorset should include a single-point locking device to BS 3621: 2007 (for keyed egress) or to BS 8621: 2007 (for keyless egress) or a multipoint locking system. A deadlocking facility should be provided. Any lock cylinder should be in accordance with BS EN 1303: 2005, grade 5 key security and grade 2 attack esistance as a minimum. To limit unauthorised access, a communal entrance door fitted with an access control system (see clause 4.63) should be self-closing and self-locking, with keyless operation of any lock from within the common area. To accommodate access control systems, a doorset may incorporate electronic or magnetic remote release and a means of access which includes keyless electronic solutions

(keypad, proximity swipe, etc). removal of the door, an anti-lift device should be fitted. Shoot bolts, if used, should locate into the head of

A doorset with more than one door leaf should include a means of securing any secondary leaf at head and foot to allow the primary leaf to be securely locked.

Installation and fixing of doors and windows
To ensure a robust installation, fixing of a doorset or window should be in accordance with: the recommendations given in section 8 of BS 8213-4; 2007; or • manufacturer's written instructions where these meet or exceed the recommendation within this British

EXTENSION HEATING SYSTEM: Existing Heating system to be checked by suitably qualified engineer to ensure it has capacity to supply

HOT WATER UNDERFLOOR HEATING CONTROLS:

any high water temperature heat supply; and

similar.

System temperature controls The controls described below should be fitted to ensure safe system operating temperatures a. separate flow temperature high limit thermostat should be used for warm water systems connected to

b. mixed systems containing both radiators and underfloor heating, connected to a common high water temperature supply operating at more than 60 °C should be provided with a separate means of reducing the water temperature to the underfloor heating system.

Minimum recommendations for room temperature, time and boiler controls are: Controls for underfloor heating

Means to achieve Thermostats for each room (adjacent rooms with similar functions may Room temperature control share [1]] Weather compensating controller
Automatic setback of room temperature during unoccupied periods/at

. Bathrooms or en-suites which share a heating circuit with an adjacent bedroom provide heat only when the bedroom thermostat is activated. In such cases, the bathroom or ensuite areas should be fitted with an Heat pumps hot water systems

Unit controls Heat pump unit controls should include: a. control of water temperature for the distribution system; b. control of water pumps (integral or otherwise); c. defrost control of external airside heat exchanger (for air to water units); d. control of outdoor fan operation (for air to water units);

f. protection for high water temperature . protection for external air flow failure (on air to water units).

Controls which are not integral to the unit should include: room thermostat to regulate the space temperature and interlocked with the heat pump unit operation; timer to optimise operation of the heat pump.

NEW DOWNLIGHTS: All downlighters to be low energy LED (max 50 watt) recessed downlighters located at a maximum of 1 per 2m². Fire rated downlighters (providing min 30mins fire resistance to BS 476: Part 21 (Fire Rating)) to be installed within any ceiling with a supporting floor above, within any roof where the downlighter will be in close proximity to a PIR insulation and within the ceiling of an attic truss (or any other roof where the roof structure provides support to the floor below).

Astro DL cover infumescent hood to maintain fire resistance and allow for a continuous covering of roof

Wall mounted external light fitting with PIR sensor and photocell to turn off during daylight. Fitting to be rated not more than 100 lamp-watts per light fitting or have an efficacy of at least 45 lumens per circuit-watt. A manual switch to be provided to override operation of automatic controls, in accordance

Energy efficient light fitting. Luminous efficacy to be at least 45 lumens/circuit watt and a total output greater than 400 lamp lumens, in accordance with Domestic Building Services Compliance Guide for

ositions of all lights and plug socket outlets to be agreed on site with client. Electrical installation to be designed, constructed, installed and rested as such to comply with recommendations of BS 7671:2018. current IEE regs and Building Standards 'Scotland'. Smoke detectors to dwellings where no storey is greater than 200m² should be provided with one or more smoke alarms located on each storey with a standby supply to BS EN 14604:2005, inter connected and installed in accordance with current Building Standards 'Scotland'. Electrical work to be certified by a member of SELECT or NEIC only. A minimum of 100% of the fixed light fittings and lamps installed in a dwelling should be low energy type. The fittings may be either • dedicated fittings which will have a separate control gear and will only take fluorescent lamps (pin based lamps); or

fittings including lamps with integrated control gear (bayonet or Edison screw base lamps). e.g. tubular fluorescent and compact fluorescent fittings (CFL's) with luminous efficacy at least 40 lumens/circuit watt.

Outlets and controls of electrical fixtures and systems should be positioned at least 350 mm from any internal corner, projecting wall or similar obstruction and, unless the need for a higher location can be demonstrated, not more than 1.2 m above floor level. This would include fixtures such as sockets, switches, fire alarm call points and timer controls or programmers. Within this height range:

• light switches should be positioned at a height of between 900 mm and 1.1 m above floor level. • standard switched or unswitched socket outlets and outlets for other services such as telephone or on should be positioned at least 400mm above floor level. Above an obstruction, such as a worktop fixtures should be at least 150 mm 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

itions of electrics to be confirmed on site by client and installed in accordance with CM DESIGN ACCESS TO MANUAL CONTROL DRAWING.

MDB with RCD breakers & EPC Certificate and Sustainability Statement above.

FIRE DETECTION ALARM SYSTEM INSTALLATION: In order to provide a fire detection and fire alarm system that should alert occupants to the outbreak of fire a Grade D LD1 system will be installed in all dwellings, comprising of: • at least 1 smoke alarm (Optical) & 1 sounder installed in the principal habitable room at least 1 smoke alarm (Ionisation) & 1 sounder in every circulation space such as hallways and landings • at least 1 smoke alarm (Optical) & 1 sounder in every access room serving an inner room

 at least one heat alarm installed in every kitchen. Optical and Ionisation Smoke alarms to be to BS EN 14604: 2005, Multi Sensor alarms to be to BS 5839-6:2019, Heat alarms to be to BS 5446:Part 2:2003

Smoke alams should be located in circulation spaces: • not more than 7 m from the door to a living room or kitchen; not more than 3 m from every bedroom door; and

A smoke alarm should be sited such that no point in the room is more than 7.5 m from the nearest smoke alam and in the case of a heat alarm, no point in the kitchen should be more than 5.3 m from the nearest

• in circulation spaces more than 7.5 m long, no point within the circulation space should be more than 7.5

All dimensions should be measured horizontally Smoke might not reach a *smoke alarm* where it is located on or close to a wall or other obstruction. Therefore, *smoke alarms* should be ceiling mounted and positioned away from any wall or light fitting. In order to reduce unwanted false alarms, smoke alarms should not be sited directly above heaters, air conditioning ventilators or other ventilators that might draw dust and fine particles into the smoke alarm. Smoke alarms and heat alarms should be ceiling mounted and located such that their sensitive elements

• in the case of a smoke alam, between 25 mm and 600 mm below the ceiling, and at least 300 mm away

• in the case of a heat alarm, between 25 mm and 150 mm below the ceiling. smoke alams 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. The standby supply for *smoke alarms* and heat alarms may take the form of a primary battery, a secondary battery or a capacitor. The capacity of the standby supply should be sufficient to power the *smoke alarms* and heat clarms in the quiescent mode for at least 72 hours whilst giving an audible or visual warning of power supply failure, after which there should remain sufficient capacity to provide a warning for a further 4 minutes or, in the absence of a fire, a fault warning for at least 24 hours.

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 them. Smoke alarms and heat alarms should be interconnected in accordance with BS 5839-6:2019. system should be installed in accordance with the manufacturers written instructions. This should include a limitation on the number of smoke alarms and heat alarms which may be interconnected.

Decentralised Mechanical Extract Ventilation (d-MEV): reen wood CV2 GIP d-mev fan or eq to be installed in line with Building (Scotland) Regulations Technical andbook Domestic Section 3 by means of a mechanical extract ventilation system comprising: Continuous mechanical extract ventilation achieved using decentralised individual fans in the 'wet' rooms ceiling extracts sited in bathrooms, shower rooms & WC's. Fans continuously run near silent level Installation to be in accordance with the manufacturer's instructions. Note: dMev system has a continual running speeds and boost.

Bathroom/Shower Room - 4L/sec with 8 Litres/sec boost WC - 3L/sec with 6 Litres/sec boost. Kitchen - 6L/sec with 13 Litres/sec boost

Utility Room - 4L/sec with 8 Litres/sec boost ne infiltration rate is to be less than 9m3/hr/m2 @ 50 Pa & greater than 5m3/hr/m2 @ 50 Pa, therefore

kitchens, bathrooms and shower rooms. A mech vent should be designed, installed and commissioned to provide minimum continuous extraction rates as follows: Kitchen to be capable of 30ltr/sec as a cooker hood is installed. Mechanical extract fans in Utility to be capable of 30ltr/sec and in Toilets and Bathrooms to be capable of 15ltr/sec. All mechanical extract fan to be vented to proprietary vent terminals. All extract ductina must be riaid uPVC and fitted with ensation traps where it travels vertically. All windows to be fitted with trickle ventilators providing 10,000mm² ventilation to Bathrooms, Kitchens, Utilities and 12,000mm² to all other rooms, unless noted other

mechanical extract ventilation units will be used, in rooms where there is likely to be high humidity such as

All supply pipes to be in copper piping with proprietary protected preformed insulation to BS5422:2009 ostatic Mixing Valve (anti scald valve) fitted at point of delivery to bath, bidets and shower heads and should not allow water temperature to exceed 48 degrees Celsius in order to prevent scalding. Marley deepflow UPVC gutters with brackets at 600mm centres. 68mm diameter UPVC downpipes with

holderbats at 1800mm centres. All rainwater pipework to be constructed and installed to BS EN 12056-3:

All new drains to be laid and tested to the satisfaction of the local authority. All drains to be a minimum of 450mm below finished ground level. Drains below driveway to be min 900mm below finished ground level. All drains to have a min fall of 1:80. All pipes to be 110mm underground quality UPVC pipes and encased pea-gravel before infilling. Any pipes passing under walls are to be haunched over. Access in drainage to be provided where any changes of direction occurs and at head of runs. Access to be provided on internal drainage where directional changes occur at head of drain and where waste pipe enters stack. New lintel over. -Ensure shower traps are accessible. Bend at foot of vertical stack must have a radius of not less than 200mm or should consist of two of at least 45 degrees. All drainage below concrete floor to be 110mm UPVC pipes. Connect to sanitaryware with appropriate reducers in order to comply with the following: All sanitary pipework to be installed in accordance with BS EN 12056-2:2000 SVP: 110mm diameter UPVC vent pipe, strip foundations Toilet: 110mm diameter UPVC waste pipe, Sinks & Baths: 40mm diameter waste pipe, WHB's & Showers: 30mm diameter waste pipes

drain passes through a wall the wall will require to be provided with a lintel over the drain opening.

Any new SVP installed must terminated at external air at least 0.9m above any window within 3.0m.

12056-1:2000, BS EN 752: 2008 and BS EN 1610:1998.

rate of not more than 6 litres per minute

ACCESSIBLE BATHROOM:

•800x700mm to basing

•800x1100mm to toilet:

800x1200mm to bath

INDOOR DRYING OF WASHING:

all drainage should be constructed and installed in accordance with the recommendations in BS EN

Water efficient fittings to be provided to all toilets and wash hand basins within a dwelling. 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

When installing low volume flush WC's, the pipe diameter, discharge and gradient inter-relationship of the

mbing and associated water installations should be carried out and commissioned by persons who

ndertaken. An approved certifier of construction, who has been assessed to have the professional skill

Omm dia UPVC soil vent pipe drop and access located within 25mm x25mm timber boxing. Access to

Maneuvering Space of 1100x800mm clear of door swing and any obstruction that will allow a person to

A designated space for the drying of washing should be provided in every dwelling , in addition to the external space. The designated space may be either:

The designated space should have a volume of at least 1 m³ and should have no dimension less than 700 mm. The designated space should allow space for at least 1.7 m of clothes line per apartment . The

location of the designated space should not restrict access to any other area or appliance within the dwelling nor obstruct the swing of any door.

capable of allowing a wall mounted appliance which may, for example be fixed over a bath; or
 capable of allowing a ceiling-mounted pulley arrangement; or

• a floor space in the dwelling on which to set out a clothes horse.

drainage system is critical in order that the new and any existing sections of the drain operate as intended

possess sufficient technical knowledge, relevant practical skills and experience for the nature of the work

and relevant experience, can certify compliance of plumbing, heating or drainage installations.

Orains which pass below foundations are to be protected by the provision of reinforcing within the strip oundation which pass over drains extending minimum 900mm beyond each side of drain track. Where a

CCTV survey to be completed before and after construction. All cleaning or clearing of blockages required to be carried out by developer. Survey report to be forwarded t cottish Water on completion of works Prior to works commencing, the line of pipe should be identified, pegged, and protected against other works. Any public pipework requiring to be replaced should be vitreous clay construction, unless otherwise agreed. No inspection chambers below the new

The developer is responsible for ensuring that

condition, any defects to be rectified prior to

the pipework to be built over is in sound

Lintel in Foundation Section Detail Scale: 1:20

	Ground Floor Ventilation (ex. Circulation Spaces)											
Room	Area of Room	Window Opening Area	Trickle Vent. (proposed)	Natural Vent. (required, 7.5%)	Natural Vent. (proposed)	Mechanical Vent.	Notes					
Accessible Bathroom	4.7m²	Min. +30°	D-MEV	N/A	N/A	D-MEV	D-MEV to be ducted between roof rafters and vented at external air.					
Bathroom	6.4m²	Min. +30°	D-MEV	N/A	N/A	D-MEV	D-MEV to be ducted between roof rafters and vented at external air.					
Utility Room	7.6m²	Min. +30°	D-MEV	N/A	N/A	D-MEV	D-MEV to be ducted between roof rafters and					

Ground Floor Natural Light (ex. Circulation Spaces)											
Area of Room	Natural Light (required)	20% of Floor Area	Natural Light (proposed)	Risk of Overheating	Shading (proposed)	Notes					
4.7m²	N/A	0.9m²	N/A	N/A	N/A	N/A					
6.4m²	N/A	1.3m²	N/A	N/A	N/A	N/A					
7.6m²	N/A	1.5m²	N/A	N/A	N/A	N/A					
_	Room 4.7m ² 6.4m ²	Area of Room Natural Light (required) 4.7m² N/A 6.4m² N/A	Area of Room Natural Light (required) 20% of Floor Area 4.7m² N/A 0.9m² 6.4m² N/A 1.3m²	Area of RoomNatural Light (required)20% of Floor AreaNatural Light (proposed)4.7m²N/A0.9m²N/A6.4m²N/A1.3m²N/A	Area of Room Natural Light (required) 20% of Floor Area Natural Light (proposed) Risk of Overheating 4.7m² N/A 0.9m² N/A N/A 6.4m² N/A 1.3m² N/A N/A	Area of RoomNatural Light (required)20% of Floor AreaNatural Light (proposed)Risk of OverheatingShading (proposed)4.7m²N/A0.9m²N/AN/AN/A6.4m²N/A1.3m²N/AN/AN/A					

DO NOT SCALE OFF DRAWINGS.ALL SIZES ARE TO BE CHECKED CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS/ORDERING OF MATERIALS. NO WORK TO COMMENCE BEFORE APPROPRIATE APPROVALS ARE GRANTED CONTRACTORS RESPONSIBILITY TO ENSURE POSSESSION OF APPROVED DRAWINGS

CONTRACTOR/CLIENT TO ENSURE THAT ONLY THE APPROVED BUILDING WARRANT DRAWINGS ARE USED FOR CONSTRUCTION

