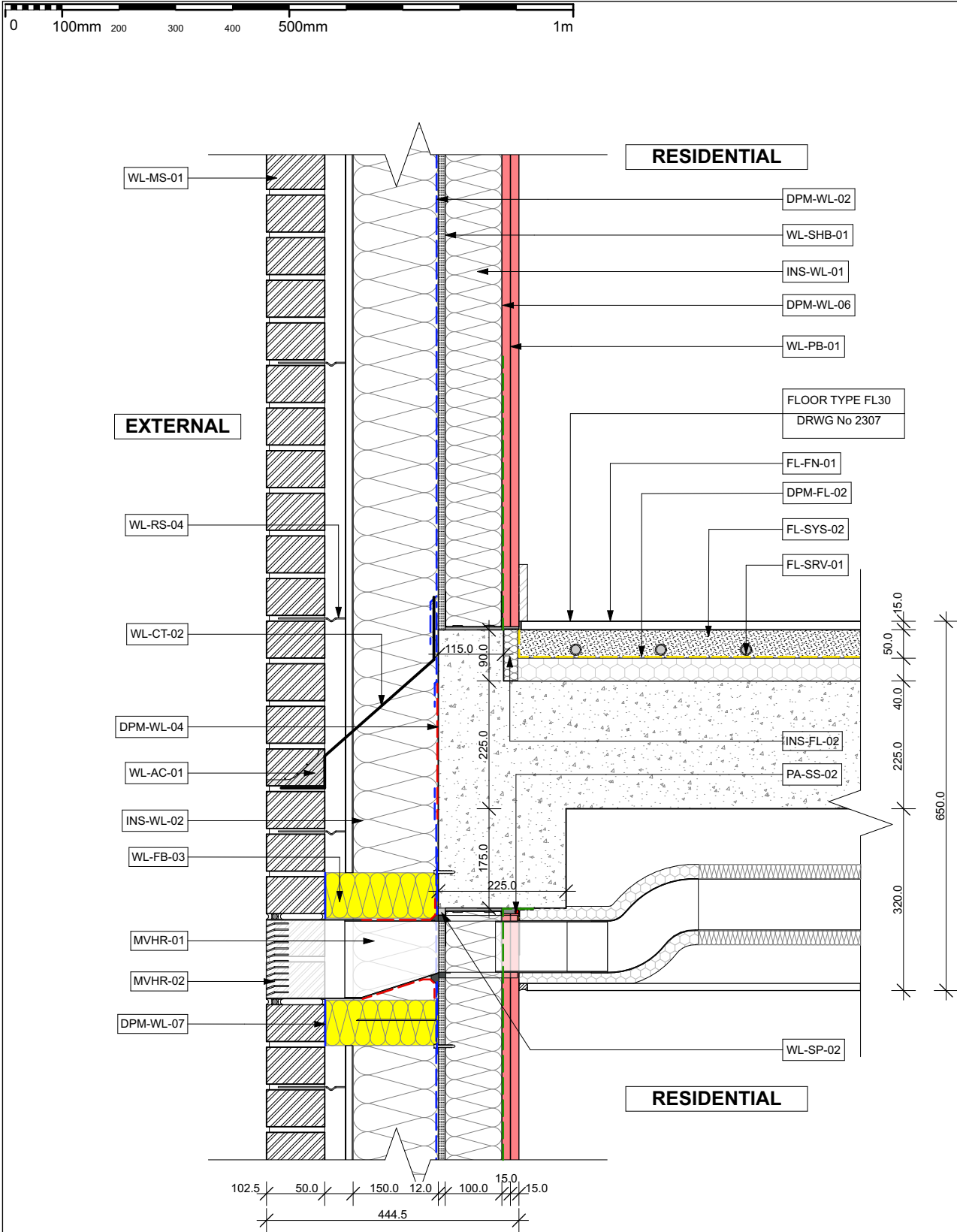




2161
Town Houses External Wall Vent Detail

DPM	
DPM-FL-02	Visqueen Vapour Barrier / separating layer min. thickness 0.12mm (500 gauge). Lapped & taped as per manufacturers recommendations or as per product details & instructions. To be installed as separating layer between insulation & floor screed. Visqueen A2 Vapour Barrier: Achieves a reaction to fire classification of A2 - s1, d0 according to BS EN 13501-1:2018.
DPM-WL-02	Obex Cortex 0220FR. White Class Breather Membrane with min 100mm laps at joints. (Achieves Class A1 - BS EN 13501-1) To be installed in accordance with manufacturers recommendations or as per product details and instructions.
DPM-WL-04	Visqueen Zedex Non-Combustible Vertical DPC, A2 - s1, d0 fire-rated in accordance with BS EN 13501-1:2018., vertically installed DPM in cavity wall construction against concrete rc upstand Or brick wall, installed with the red face outward. Lap joints to be a min. 100mm, sealed in accordance with manufacturer's recommendations. Ensure compatibility with adjacent materials & continuity with horizontal DPC/cavity trays. Install as per Visqueen technical guidance & Building Regulations.
DPM-WL-06	OBEX Cortex 0230FR Vapour Control Layer membrane (VCL) to be installed between plasterboard lining & SFS). Sheet size : 1200mm wide, 50m long, and 0.18mm thick, fire rating classification of A2-s1,d0 per EN 13501-1 & complies with EN 13984 standards. Secure membrane using the Cortex 0825 Installation Kit, use double-sided and single-sided tapes for proper bonding & sealing. Ensure all joints & penetrations are sealed to maintain continuity of the VCL. Refer to the manufacturer's installation guidelines.
DPM-WL-07	OBEX CORTEX 0160FR Adhesive Backed DPC to be installed in accordance with the manufacturer's instructions to provide non-combustible vapour control & fire resistance. The membrane achieves a B, s3-d0 (EN13501-1) fire classification, is highly UV resistant, watertight and air-tight. Apply DPC to the front face of the FCB extending 25mm to each side.
FL Floor	
FL-FN-01	Typical 15mm Floor finish build-up. All internal floor finishes as per Interior Architect's specifications. Ceramic & Stone Tiles – BS 5385 (Wall and floor tiling) Resilient (Vinyl, Rubber) – BS EN 649 (Wear resistance) Timber Flooring – BS 8201 (Installation of wood-based flooring) Carpet & Textile – BS 5325 (Fitting of carpets)
FL-SRV-01	Mec-Serv Underfloor Heating, Integrated within the floor build-up for efficient heat distribution. Designed & installed per BS EN 1264, CIBSE Guide B, & Part L of UK Building Regulations. System Type: Hydronic (water-based) / Electric underfloor heating (16-20mm PEX/PE-RT/multilayer pipes) or Electric (100-200W/m²). Screed: Sand/cement, anhydrite, or self-levelling. Floor Finishes: Tiles, wood, laminate, carpet (low thermal resistance). Flow Temp (Hydronic): 35°C-55°C.
FL-SYS-02	50-75mm Flowcrete Isocrete Fast K Screed high-performance, rapid-curing cementitious screed reinforced with polypropylene (PP) fibres for enhanced durability & crack resistance. Installed in accordance with Flowcrete's specifications and BS 8204-1 for screeds. Min. compressive strength of 25 N/mm², with drying time dependent on site conditions. Ensure correct substrate preparation, application of primer where required, & curing per manufacturer's recommendations
INS Insulation	
INS-FL-02	30mm Kingspan Kooltherm K103, high-performance rigid thermoset phenolic insulation board used as perimeter trim for floor insulation applications. Installed in accordance with Kingspan's specifications & BS EN 13166 for phenolic insulation. Thermal conductivity (λ = 0.019 W/m·K). Boards to line perimeter edge of RC upstand, tightly butted joints, ensuring continuity with the main floor insulation layer.
INS-WL-01	100mm Rockwool Flexi semi-rigid thermal and acoustic insulation slab as part of overall SFS (Steel Framing System) Thermal Conductivity: 0.037W/mK, R-Value: 2.63m2K/W, Fire Rating : A1(Non-combustible).
INS-WL-02	URSA WALLTEC BLACK 32, 150mm semi-rigid glass mineral wool insulation slabs with black glass fibre tissue facing, securely fixed over breather membrane within cavity wall construction. Slabs to be closely butted to prevent gaps and ensure continuous thermal performance. Install in accordance with the manufacturer's guidelines and project-specific requirements. Thermal Conductivity: 0.032 W/m·K, R-Value: 4.65 m²K/W, Density: 32 kg/m³, Fire Classification: Euroclass A1 (non-combustible). Vapour Resistivity: 5 MNs/g·m. Ensure compatibility with adjacent materials and systems. Refer to BBA Certificate No. 20/5832 for installation details.
M+E Mechanical&Electrical items	
MVHR-01	(MVHR), Insulated mechanical ventilation with heat recovery ductwork from the internal ventilation plenum located within the wall cavity, terminating through the external brick façade to serve as either air intake or extract (as indicated on services drawings). The duct shall be a rigid spiral galvanised steel duct, all size specs as per M&E Engineer's info, with continuous foil-faced mineral wool insulation to a min. thickness of 25mm, achieving a combined min. thermal performance of 0.6 W/m2K or better. Duct to be insulated to a min. length of 1000mm from the ceiling line inward, or as required by the SAP/MEP engineer for condensation control. Duct penetration thro. wall cavity to be fully coordinated with cavity trays, DPCs, & fire stopping systems. A weather-sealed and fire-rated external grille or louvre shall be installed flush with or slightly recessed into the brick façade. External termination must be UV & corrosion-resistant & must incorporate insect mesh & a drip edge to shed water. Ducts to be supported with galvanised steel brackets or fire-rated suspension fixings within the wall zone or ceiling void & must not compromise fire compartmentation. Where ducts pass through fire-rated zones or cavity barriers, provide intumescent fire sleeves or collars (e.g. ROCKWOOL Firepro DuctSleeve or equivalent) with a minimum EI 60 rating, tested to EN 1366-3. All ductwork & insulation to be installed in accordance with CIBSE TM13, BESA DW/144, and Approved Documents B and L. Ensure airtightness and vapour resistance is maintained at all duct joints using foil tape and mastic as appropriate. Vapour control must be continuous and robust to prevent condensation risk within cavity zone.
MVHR-02	Air brick material 1.5mm galvanised steel, fire class A1 'no contribution to fire' Metal air duct material 0.8mm galvanised steel, fire class A1 'no contribution to fire'
PA Partitions	
PA-SS-02	10mm Gyproc FireStrip – Install in accordance with British Gypsum specs to maintain fire integrity at board joints. Gyproc FireStrip is a self-adhesive, fire-resistant foam strip designed to enhance the fire performance of partition & shaft wall systems. It should be applied between adjacent Gyproc CoreBoard panels or other fire-rated boards to ensure a continuous fire seal. Ensure all installations comply with BS 8212 (Code of practice for dry lining and partitioning using gypsum plasterboard) & relevant Building Regulations Approved Document B (Fire Safety) & BS EN 1366-1 and BS 476 Part 22 fire performance requirements.
WL Walls	
WL-AC-01	Rytons A1 Fire-rated Metal Rytweep, Fire-rated Cavity Weep Hole Duct, Electroplated ZL5 zinc & fire-rated colour powder coating to (A2-s1, d0) to be Class A2 or better to BS EN 13501-1:2007+A1:2009.
WL-CT-02	Visqueen Zedex Non-Combustible DPC as a cavity tray in cavity wall construction, fire classification A1 to BS EN 13501-1: 2018 & BS EN ISO 1716. Install with red face outward, ensuring a min. 100mm lap at joints, sealed per manufacturer's guidance. Position tray with appropriate slope to direct moisture outward. Integrate with adjacent DPCs, weep vents, & cavity insulation to maintain a continuous damp-proofing system. Installation to comply with BS 8215:1991, Approved Document C, and manufacturer's recommendations.
WL-FB-03	Where the MVHR duct penetrates the external wall cavity between the internal 12mm calcium silicate board & the inner face of the external masonry brickwork, & the duct system is not classified as A1 or A2-s1,d0 fire-rated, the MVHR plenum shall be enclosed using Rockwool OSCB 25 Open State Cavity Barrier, providing a min. of 30 minutes fire integrity (E30) and 30 minutes insulation (I30) in accordance with BS EN 1366-4. The OSCB 25 system comprises a Class A1 non-combustible stone wool core with a reactive intumescent strip, certified to BS EN 13501-1, designed to expand and seal the cavity in the event of fire. The barrier must be installed with a tight friction fit around the duct & fixed as per Rockwool's installation guidance, with all joints sealed using appropriate fire-rated foil tape or sealant. Installation must be coordinated with adjacent façade elements including insulation, cavity trays, and masonry supports to maintain cavity compartmentation & compliance with the building's fire strategy. As an alternative, firestopping at the duct penetration can be avoided by specifying an A1 or A2-s1,d0 rated MVHR duct system, such as the Rytons A1® Fire-rated Metal Ducting Kits, which are made from non-combustible galvanised steel & designed for compliance with current UK high-rise fire safety regs.
WL-MS-01	102.5mm Masonry facing brick laid stretcher bond to cavity walls, min F2/S2 Classification as BS EN 771.(All components in the facade build up including the support system, as defined by Regulation 7, shall be: Class A2 or better to BS EN 13501-1:2007+A1:2009). Refer to Elevations for brick type and colour. Mortars below DPC are exposed to higher saturation & therefore require a higher durability. If there are sulphates in the ground and/or there is ground water present, confirmation by the manufacturer that the brick or block is suitable for use below ground should be provided. Please refer to Brick work schedule for all colour and grade specs related to all masonry facing bricks in perimeter walls.
WL-PB-01	2 x 15mm Gyproc FireLine (15mm) plasterboard, glass fibre reinforced for enhanced fire protection. with taped joints in accordance with manufacturers instructions and 2mm skim coat plaster finish laid over over 500g polythene vapour barrier fixed in accordance with the manufacture's recommendations to 100mm wide SFS cold rolled galvanized steel framing system packed with 100mm Mineral Wool. Moisture resistant boards to be used in areas of high humidity. Reaction to fire A2-s1, d0. Thermal conductivity (W/mK) 0.24, Water vapour permeability (m) 10, Max. continuous temperature exposure (°C) 49 (As part of an Internal Partition wall Systems).
WL-RS-04	ACS 25/15 FrameFix Channel with 4000 Range Ties & 150mm compression sleeves for 150mm mineral wool insulation batts, fixed back to SFS. Secure with stainless steel fixings & 210mm high-thread self-drilling screws (Ref: R-ACS-55/63210S14) for insulation 146mm-175mm thick. Position ties at 450mm horizontal/vertical spacing (225mm around openings) to align with masonry coursing. System to be A1 non-combustible (BS EN 13501-1). Install as per manufacturer's guidelines, Structural Engineer's details, & in compliance with Approved Documents A & B, BS 5268-6.1, BS EN 1996-1-1 (Eurocode 6), and BS 8539.
WL-SHB-01	12.5mm Obex 0270FR Score'N'Snap Cement Board Class A1. Board to board joints sealed in accordance with manufacturers installation instructions, securely fixed at 600mm c/c secured to SFS frame dependant on location. Board ends sealed to concrete with (WL-AC-04) intumescent sealed & backed joints. Class A1 Fire rating to EN 13501-1
WL-SP-02	Everflex AC95 Intumescent Mastic Sealant tol be applied to seal all junctions between 12,5mm non-combustible Obex 0270FR Score'N'Snap Cement Boardd & connecting surfaces. The sealant must be installed in accordance with the manufacturer's instructions to provide a fire-resistant, flexible, & durable seal to be applied to a min. depth of 10mm to ensure an effective fire and smoke barrier, complying with BS EN 1366-4 (Fire resistance tests for linear joint seals)