



RESIDENTIAL

DRAWING NOTE - ACO Threshold Slot Drain Substructure:

"ACO Threshold Drain to be bedded & supported on a stable substructure using traditional construction techniques to ensure durability and long-term performance. The following installation method applies:

Excavation & Base Preparation:
Excavate to required depth, ensuring a minimum 100mm compacted Type 1 MOT base below the drain. Ensure a slight fall in sub-base to promote drainage efficiency.

Bedding & Fixing:
Drain to be set on a 20-30mm thick bed of sharp sand and cement mortar mix (4:1 ratio) to ensure a firm & even foundation. Alternatively, bind sand may be used where minor movement accommodation is needed. Ensure the drain sits flush with adjacent paving and threshold, allowing a seamless transition.

Side Support & Stability:
Surround drain with C20/25 concrete haunching (min. 100mm thickness each side) to secure its position & prevent lateral movement. Compact & smooth haunching to provide lateral stability while allowing for adequate drainage flow.

Paving & Finishing:
External paving to be laid with a minimum 2-degree fall towards the ACO Threshold Drain to direct surface water. Maintain a 3-5mm expansion joint between paving & drain edge using a flexible sealant to allow for thermal movement.

Drain Connection & Testing:
Connect to 110mm @ drainage outlet or soakaway system as per site drainage design.

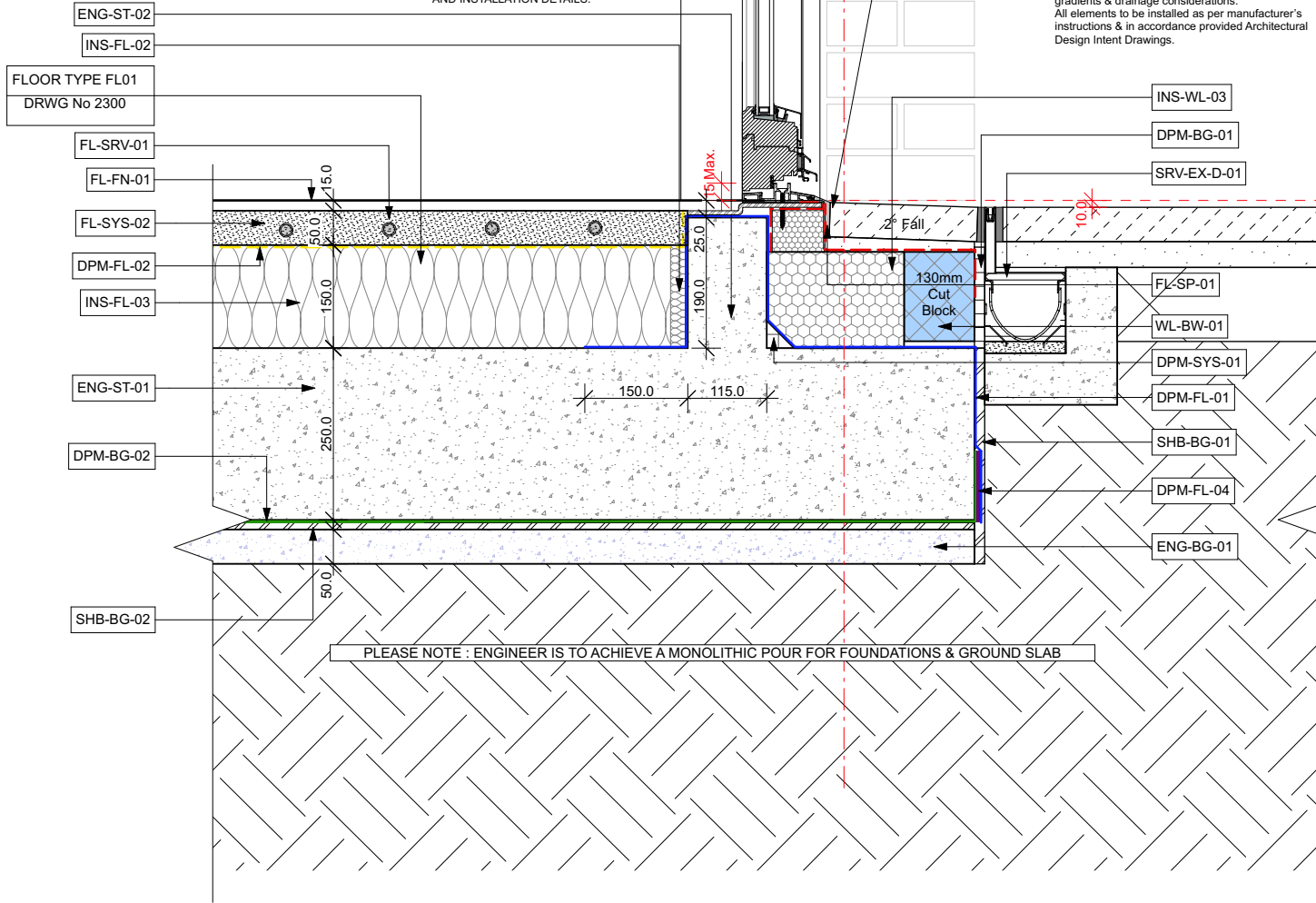
Check for level accuracy and water flow efficiency before final surfacing works.
All works must comply with BS 7533-8:2003 (Paving Design & Drainage), BS EN 1433:2002 (Drainage Channel Load Classification), & Approved Document C (Moisture Resistance).

ALL FINAL INSTALLATION DETAILS AS PER SERVICE ENGINEER'S DETAILS IN LINE WITH MANUFACTURER'S RECOMMEND GUIDELINES AND INSTALLATION DETAILS.

EXTERNAL

RED DIMS
BEST PRACTICE GUIDELINES

DRAWING NOTE : External G.F Door Threshold
External floor finishes to be dressed into wall reveal & abut against the door threshold jamb detail to ensure a seamless & weather-resistant junction. An ACO slot drain is to be installed adjacent to the threshold to facilitate surface water drainage. The final floor finish paver must have a min. 2-degree pitch to direct water runoff towards the slot drain, preventing water ingress at the threshold.
All works must comply with the following regulations and guidance: Approved Document K (Protection from Falling, Collision, & Impact) – Ensuring safe transitions at thresholds. Approved Document M (Access to & Use of Buildings) – Ensuring level access and compliance with threshold requirements for accessibility. Approved Document C (Site Preparation and Resistance to Contaminants & Moisture) – Detailing damp-proofing and water management to prevent ingress. BS 8300-1:2018 (Inclusive Design of the Built Environment) – Guidance on accessible & step-free thresholds. BS 7533-8:2003 (Pavements Constructed with Clay, Natural Stone, or Concrete) – Setting requirements for paved surfaces, including gradients & drainage considerations.
All elements to be installed as per manufacturer's instructions & in accordance provided Architectural Design Intent Drawings.



DPM		
DPM-BG-01	20mm Visqueen Protect&Drain. Protective drainage layer. Part of Visqueen waterproofing system. 20mm Visqueen Protect&Drain. Protective drainage layer. Part of Visqueen waterproofing system., high-density polyethylene (HDPE) PM20 20mm high capacity dimpled drainage membrane to be applied to outer face of below ground foundations / RC walls.	
DPM-BG-02	JUTA GP1 DPM is to be applied beneath the slab. At the perimeter the footing is to be cast monolithically with the slab and TitanTank membrane is to be installed over the toe and to be terminated within the cavity tray at a minimum height of 150mm above external ground level. GP1 is specifically designed and manufactured to perform as a Methane, Carbon Dioxide, Radon, Ground Gas, air & moisture protection system. GP1 can be used on any site where carbon dioxide, methane, bulk ground gas and/or radon is present up to and including BS8485:2015 + A1 2019 Characteristic situation (CS) 6. The barrier is sufficiently resistant to the ingress of harmful gases into a building.	
DPM-FL-01	GP TITANTANK is a waterproofing gas and hydrocarbon resistant – Self Adhesive Membrane. GP TITANTANK is used for the Gas/VOC/Hydrocarbon/ waterproofing of underground structures where harmful ground gases and contaminants are anticipated, or as a self-adhesive accessory to the GP TITANTECH membrane system. It is a high performance, hydrocarbon barrier, manufactured from a unique HDPE resin. The primary membrane has excellent chemical resistance and is ideal for use on sites affected by hydrocarbon and VOC contamination. It will also effectively prevent the ingress of a number of other harmful gases.	
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-FL-04	JUTA GP TITAN TAPE is an extruded butyl tape designed for joining JUTA Gas Barriers. The GP TITAN TAPE is double-sided, with release film on both sides to assist with ease of installation. GP TITAN TAPE is designed to prevent the passage of water, water vapour, air and gas, for use in building construction with damp proof membranes, vapour control layers and ground gas barriers.	
DPM-SYS-01	Sundolitt XPS300 insulation angle fillets, high-compressive strength (300 kPa) extruded polystyrene insulation used for forming angle fillets in waterproofing applications. Installed in accordance with BS EN 13164 and manufacturer's guidelines. Securely bonded to substrate, ensuring continuous support for membrane installation. Ensure compatibility with adjacent waterproofing, damp-proofing, and structural elements. Fire rating: XPS insulation Euroclass E under BS EN 13501-1.	
ENG Structural Engineer		
ENG-BG-01	50mm sand binding layer – Well-compacted, fine-grade sand layer installed beneath ground-bearing slabs to provide a smooth, stable surface & protect damp-proof membranes (DPM) from puncture. Installed in accordance with BS 8204-1 and BS 7533-4. Ensure uniform compaction to prevent differential settlement and maintain required slab tolerances. Refer to Engineer's drawings, details and specifications for all detailed information.	
ENG-ST-01	In-situ RC Slab Systems. / Ss_20_05_15_70_A: RC pad & Strip Foundation Systems. "Reinforced concrete (RC) slab & foundation constructed to structural Engineer's design & specifications. Concrete to be designed & placed in accordance with BS EN 1992-1-1 (Eurocode 2) & BS 8500. Min. concrete strength class C25/30 unless otherwise specified. Reinforcement to BS 4449 and BS 8666, with appropriate cover & spacers as per structural drawings. Slab to be cast on well-compacted sub-base with DPM & insulation as required. Foundation type (pad, strip, raft, or pile-supported) to be as per engineer's design, ensuring compliance with ground conditions & loading requirements. All works to comply with Building Regulations Approved Document A. "Refer to Engineer's drawings, details and specifications for all detailed information, relevant slab depths & SSLs.	
ENG-ST-02	Reinforced Concrete (RC) Upstand to structural engineer's design & specifications. Concrete to be in accordance with BS EN 1992-1-1 (Eurocode 2) and BS 8500, with min. strength class as specified by the engineer. Reinforcement to BS 4449 & BS 8666, ensuring correct cover & spacing. Formwork and finish to comply with architectural requirements. Upstand to be cast monolithically with the slab or doweled for structural integrity. Ensure coordination with waterproofing, insulation, & finishes as required. All works to conform to Building Regulations Approved Doc. A.". Refer to Engineer's drawings, details & specs for all detailed information, relevant thickness & height.	
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-SP-01	Apply Sikaflex®-11 FC polyurethane sealant to seal the joint between the aperture door frame and external floor paver. Insert a suitable backing rod if the joint depth exceeds recommended limits. Ensure all surfaces are clean, dry, & free from dust, grease, or loose material before application. Sikaflex®-11 FC provides high-strength adhesion, excellent weather & UV resistance, flexibility for movement, & is suitable for heavy-duty external use. Allow to fully cure as per manufacturer's guidelines before exposure to foot traffic or further finishing	
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 Isorecrete 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	
SRV-EX-D-01	ACO Threshold Slot Drain to be used at door threshold in accordance with manufacturer's guidelines, system comprises a 60mm wide extruded PVC channel with a Heelguard™ grating, available in silver or black aluminium, CorTen steel, or stainless steel. Ensure drain is set flush with the finished floor level to comply with Approved Document-M for step-free access. Connect the drain to a suitable drainage system via a Ø110mm pipe, to prevent water ingress at the entrance (As per service Engineers Detail). Min. 2-degree fall on external paving towards the drain for effective surface water runoff, in line with Approved Document C. Installation must also comply with BS 7533-8:2003 & BS EN 1433:2002. ACO Threshold Drain is CE marked and fully certified to load class A 15 (BS EN 1433:2002), suitable for pedestrian traffic.	
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-FL-03	Celotex XR4150 (XR4000 Series) 150mm thick rigid PIR insulation board (floor build-up applications). Install in accordance with BS EN 13165, ensure boards are tightly butted with minimal gaps to prevent thermal bridging. Fix using appropriate mechanical or adhesive methods as per manufacturer's guidelines. Thermal conductivity (λ = 0.022 W/m·K) Ensure compatibility with vapour control layers, breather membranes, & damp-proofing systems.	
INS-WL-03	Concrete Upstand (Structure), within foundation wall cavity at G.F Levels, to be lined with 200mm Kingspan Greenguard XPS / GG300 Insulation below DPC, to extend to underside of first cavity tray. max 300mm above FFL.	
SHB Protection Board		
SHB-BG-01	Premcrete Protection Board 300 bituminous, (Application Type : Vertical Membrane Protection) polyester-reinforced protection board to be installed in accordance with the manufacturer's instructions and BS 8102:2022 – Protection of Below Ground Structures against water ingress. Ensure full coverage over waterproofing membranes to prevent mechanical damage and comply with Part C (Site Preparation & Resistance to Contaminants and Moisture) of the Building Regulations. For project-specific applications, refer to Premcrete technical guidance and structural waterproofing best practices.	
SHB-BG-02	Premcrete Protection Board 600 bituminous, (Application Type : Horizontal Membrane Protection) polyester-reinforced protection board to be installed in accordance with the manufacturer's instructions and BS 8102:2022 – Protection of Below Ground Structures Against Water Ingress. Ensure full coverage over waterproofing membranes to prevent mechanical damage & comply with Part C (Site Preparation & Resistance to Contaminants and Moisture) of the Building Regs. For project-specific applications, refer to Premcrete technical guidance & structural waterproofing best practices.	
WL Walls		
WL-BW-01	100mm Class B engineering blockwork, 7.3N/m² medium dense concrete, high-strength, low-permeability blockwork for below-ground applications. Compliant with BS EN 771-1 and BS 5628 for durability & structural performance. Lay in designation (I) mortar (minimum M12 strength) with fully filled joints to enhance water resistance. Mortar to match blockwork colour for a consistent finish. Suitable for retaining walls, foundations, and damp-proofing applications. Ensure compatibility with waterproofing or tanking systems as required & in accordance with Structural Engineer's specs.	

CONTRACTOR(S), SUB-CONTRACTORS AND MANUFACTURERS TO ENSURE THAT ALL MATERIALS AND COMPONENTS ARE SUITABLE FOR THEIR INTENDED PURPOSE AND LOCATION; DESIGNED, MANUFACTURED AND INSTALLED IN ACCORDANCE WITH ALL RELEVANT CURRENT BRITISH STANDARDS, CODES OF PRACTICE, AND MANUFACTURER'S SPECIFICATIONS.

WHERE AN ITEM IS COVERED BY DRAWINGS TO DIFFERENT SCALES THE LARGER SCALE DRAWING IS TO BE WORKED TO.

DO NOT SCALE DRAWING. FIGURED DIMENSION ONLY TO BE WORKED TO.

ALL DETAILS SUBJECT TO FIRE ENGINEER'S ADVICE, LABC & BUILDING REGULATIONS

TARGET U-VALUES

EXTERNAL WALLS: 0.15 w/m2K
SEMI-EXPOSED WALLS: 0.20 w/m2K
PARTY WALLS: 0.00 w/m2K
GROUND FLOOR: 0.12 w/m2K
EXPOSED UPPER FLOOR: 0.13 w/m2K
ROOFS: 0.12 w/m2K
WINDOWS: 1.1 w/m2K / 0.32G value
DOORS: 1.0 w/m2K

CDM REGULATIONS 2015

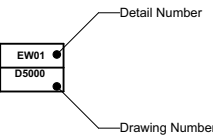
ACCESS STRATEGY, DESIGN AND INSTALLATION TO BE TO THE COMPLETE SATISFACTION OF THE PRINCIPAL DESIGNER.

Fire consultant to advise on integrity of construction and any additional fire safety measures required.

All cavity closers to specialist subcontractor design and specification.

Ensure fire stopping is provided around all external openings and penetrations.

REFERENCING



Example: Drg no. Z06600-AQP-C-ZZ-DE-A-5000 Rev C01

NOTES:
SSL Levels & Floor Build-ups in Abeyance - to be adjusted to suit Structural Amendments.

COORDINATION
Refer to M&E consultants drawings for specification, location and number of services. To be read in conjunction with Service Engineer's drawings. Main Contractor to seek installation advice from supplier before construction starts.

Refer to Structural Engineer's setting out for columns and shear walls.

2123
Town House External Threshold - Residential

DIMENSION AT ORIGINAL SHEET SIZE	Revision P01	Dr'n AD	Ch'kd LU	Date 25/02/2026		PRELIMINARY Drawing Town House External Threshold - Residential	Project Tangmere Project Number 25.055	Scale 1:10 @ A3	2-4 Hoxton Square, The Lux Building, London N1 6NU
Contractors must check all dimensions on site. Only figured dimensions are to be worked from. Discrepancies must be reported to the Architect before proceeding. © This drawing is Copyright						TAN-AQP-TH-GF-DR-AR-2123	Client Formation Design & Build	Drawn by AD	t: 0207 613 2244 w: www.aqp.co.uk e: london@aqp.co.uk
						Revision P01			

