WP403 Waterproofing Concrete Roof - Exposed (Maintenance Trafficable)

Preparation:

1. All surfaces to be waterproofed must be firm, clean, dry, sound and smooth. All grease, oil, wax, curing compounds, loose material, paint and any other contaminants must be removed, masonry surfaces must be pointed flush and surface defects repaired. New concrete must be cured for a minimum of 28 days.

2. External corners to be waterproofed must be bevelled to ensure a smooth transition of membrane from vertical to horizontal surfaces.

Installation:

1. Waterproofing installation shall be in accordance with the applicable provisions of the National Construction Code.

2. Install **TPA Screed** to achieve appropriate falls to waste. Where a bonded screed is required, apply a bond coat using **TPA 401M** or **TPA Lite.**

   TPA Screed is a pre-blended screed mixture for the installation of cementitious screeds and tile beds, suitable for internal and external floor applications.

   TPA 401M is a white, flexible, powdered adhesive for wall and floor applications.

   TPA Lite is a premium grade, white, fibre reinforced, flexible cement based tile adhesive, based on a light weight formulation.

3. Install an appropriate fillet (bond breaker) to all transitions using **WPA FC.**

   WPA FC is a high performance, fast cure, one component polyurethane sealant.

4. Install a puddle flange to all waste pipes ensuring that puddle flanges are recessed into the substrate.

5. Apply **WPA SB** primer to non-porous surfaces such as puddle flange and PVC pipes using the 2 cloth method. (The 2 cloth method is carried out as follows: dampen a clean cloth with an appropriate amount of **WPA SB** primer, wipe evenly over the non-porous substrate utilizing a rubbing action. With a clean dry cloth, immediately remove all primer residues by implementing a buffing action).

   WPA SB is a fast drying, solvent based primer, with exceptional penetrating properties. WPA SB primer is designed to assist in improving adhesion on porous and non-porous substrates.

6. Apply **WPA 460**, **WPA 560** or **WPA 3460** primer to the substrate being waterproofed.

   WPA 460 is a two-part, water-based epoxy primer, used to seal concrete and masonry surfaces.

   WPA 560 is a two-part, water-based epoxy primer, designed as a water and vapour proof coating under waterproofing membranes.

   WPA 3460 is a single component primer based on polyether polyol and modified MDI isocyanate.

7. Apply **WPA 3400** or **WPA 3480** membrane to achieve the required dry film thickness. Ensure that the previous coat has completely dried before applying the subsequent coat(s). NOTE: All penetrations must be waterproofed.
   NOTE: Surface finishes such as render, tiles and paint are highly unlikely to bond to **WPA 3400** or **WPA 3480**. If bonding of surface finishes to the waterproofing membrane is required, this area should be waterproofed with **WPA 230UV**. Where Membrane overlaps, ensure to re-prime the **WPA 230UV** prior to the **WPA 3400** or **WPA 3480**.

   WPA 3400 is a two component, 100% solids, rapid curing, spray applied, hybrid polyurea, elastomeric waterproofing membrane.

   WPA 3480 is a two-component tough, resilient, polyurethane elastomer membrane producing long-life waterproof protection. The system has been formulated as a slow reacting waterproofing elastomer for hand applied applications.

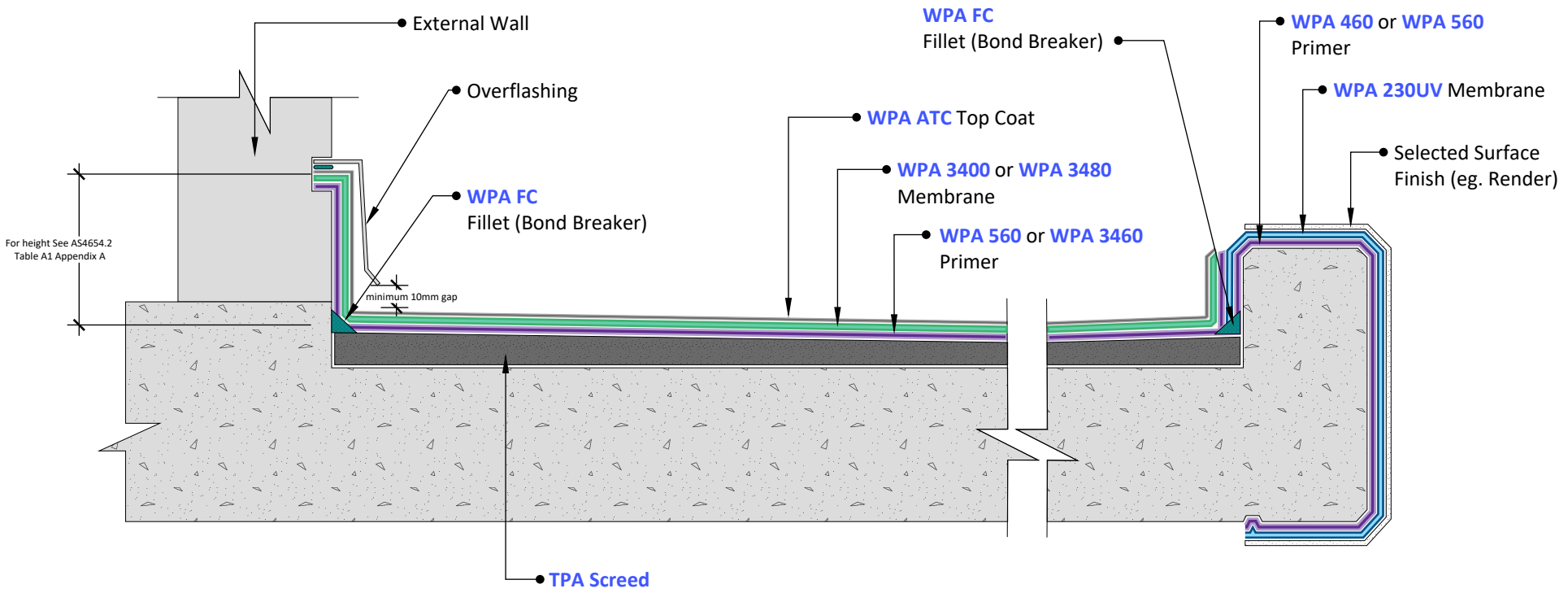
   WPA 230UV is an elastomeric, fibre reinforced, water-based polyurethane membrane system designed for exposed or under tile applications.

8. Apply **WPA ATC** top coat to achieve the required dry film thickness. Ensure that the previous coat has completely dried before applying the subsequent coat(s).

   WPA ATC is an economic, aliphatic, single component, liquid applied, moisture cured, polyurethane coating, and offers protection from degradation of the waterproofing membrane due to UV exposure.

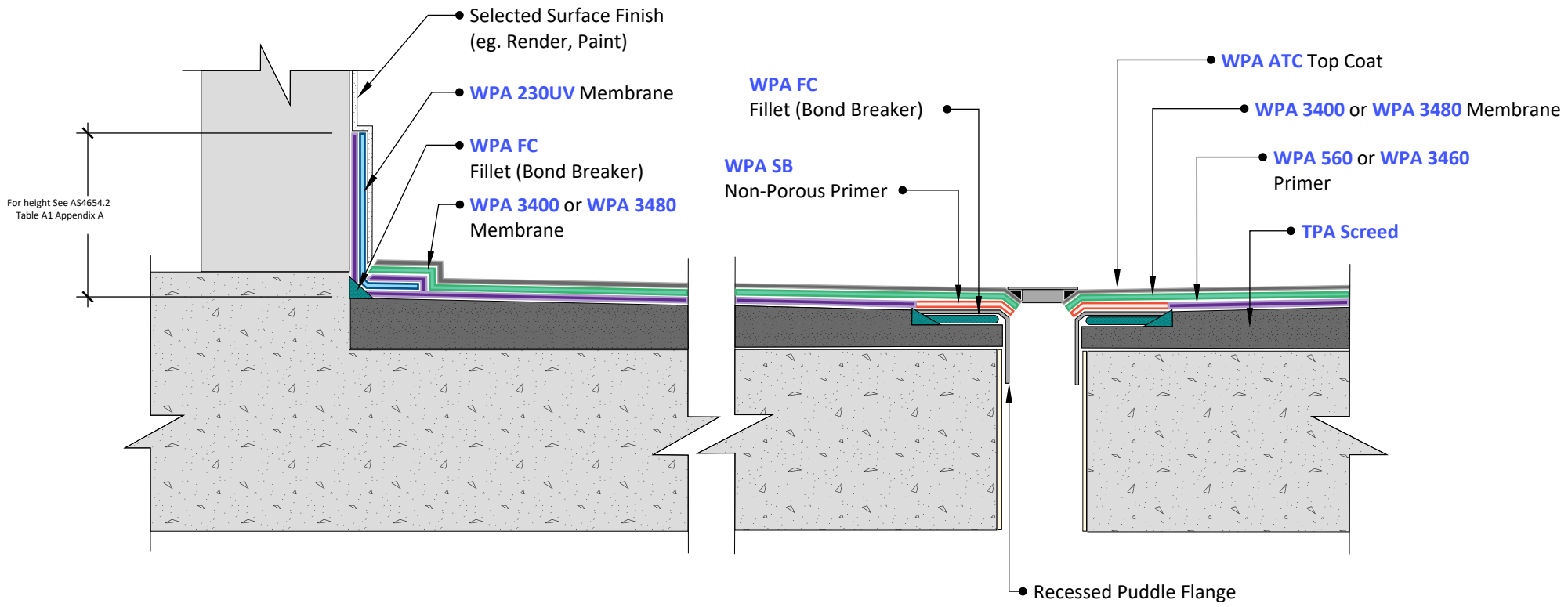
9. Completely encapsulate parapet walls with primer and membrane. OPTIONAL: Cover membrane on parapet walls with metal capping, ensuring that capping is fixed on vertical surfaces only.

10. Install over-flashing to cover membrane termination along walls. Leave a minimum 10mm gap from finished floor level.



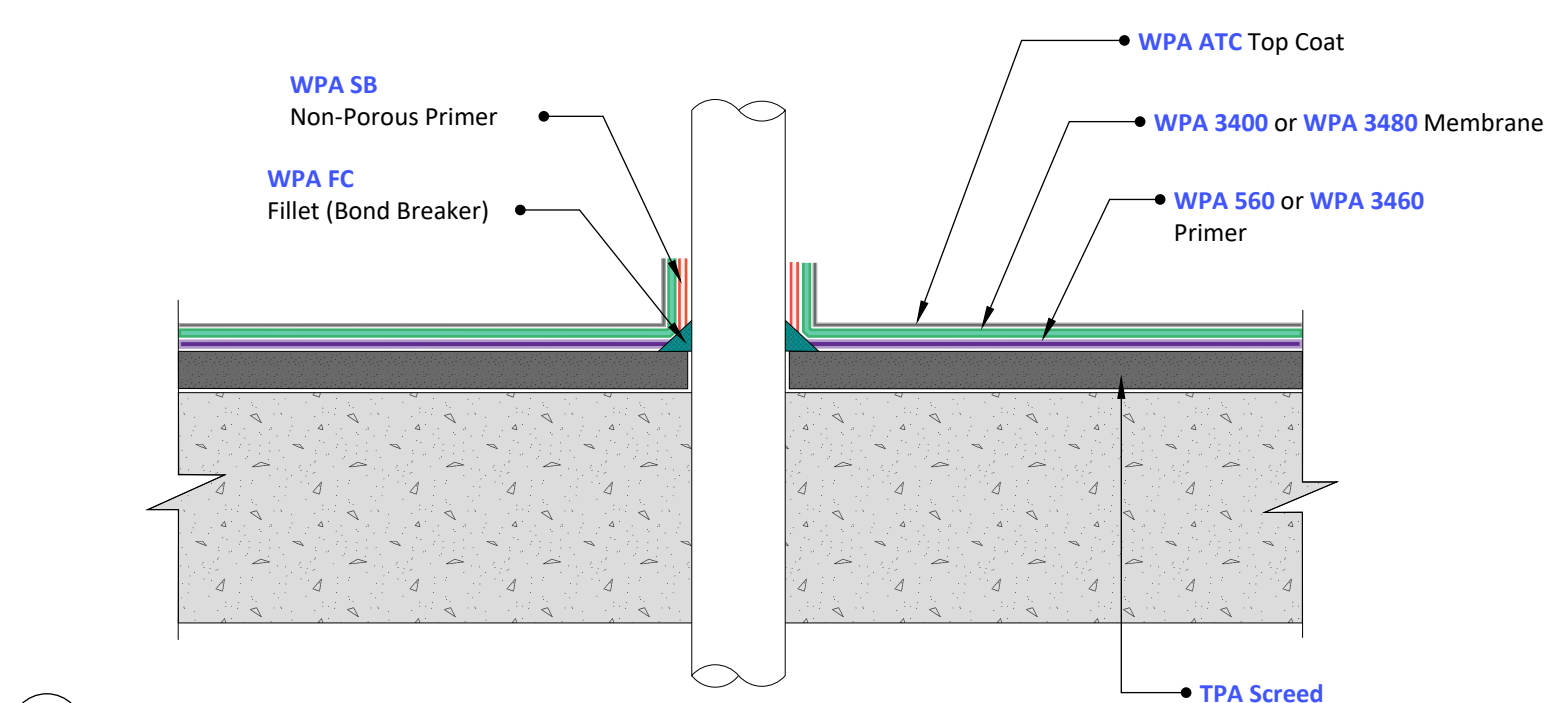
1 Floor/Wall Junction
Scale: NTS

2 Hob
Scale: NTS



3 Floor/Wall Junction
Scale: NTS

4 Waterproofing at Waste
Scale: NTS



5 Pipe Penetration
Scale: NTS

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