METHOD OF STATEMENT FOR APPLICATION OF MYPROOF CONCEAL WP TO RC SLAB

1. Purpose

1.1. The purpose of this document is to establish uniform procedures for applying the Myproof Conceal WP waterproofing coating.

1.2. The techniques involved may require modifications to adjust to job-site conditions. Consult your Mychem representative for specific design requirements.

2. Scope

2.1. This document will provide the necessary instruction for the application of Myproof Conceal WP waterproofing coating to qualify for the manufacturer's product warranty.

3. Substrate Condition and Surface Requirements

3.1. Concrete shall be water cured and in place for at least 14 days, preferably for 28 days.

3.2. On new concrete roof slab, if the concrete slab is not cast to fall, a layer of normal cement sand (1:3) screed shall be poured onto the RC slab at a recommended slope ranging from 1%-5% between 25 mm – 50 mm thickness to achieve gradient and cross fall.

3.3. All horizontal surfaces (base and topping) to be waterproofed shall be graded to fall towards discharge outlets before proceeding with application of waterproofing coating. Waterproofing coating shall NOT be applied onto a level surface not graded to fall unless specified otherwise.

3.4. Surface to receive waterproofing coating shall be clean and free of all dirt, dust, oil, grease, wax, tar, mildew, mold, paint, sealer, coating, curing agent, loose particle, laitance and other contamination or foreign matter which may interfere with the adhesion of the waterproofing coating.

3.5. The surface profile to receive waterproofing coating shall fulfill CSP 1 to CSP 3 standard.

3.6. The position and detail of any construction joints shall be to the approval of the E.R. and shall be so arranged as to minimize the possibility of the occurrence of the shrinkage cracks.

3.7. For all the large RC roof slab, it is always recommended to form the expansion joints at the protective screed layers to minimize the movement of the screed which caused the crack lines on the screed surface.

4. Execution

4.1. Surface preparation

4.1.1. Prepare all surfaces to receive waterproofing coating accordance with manufacturer's instruction and recommendations.

4.1.2. Ensure that concrete and masonry surfaces are properly cured, clean and free of dirt, dust, oil, grease, wax, tar, mildew, paint, sealer, coating, curing agent, loose particle, laitance and other irregularities and foreign matters which could be detriment to application and adhesion of the waterproofing coating to the substrate to be waterproofed.

4.1.3. Remove all mortar splatter, fins, rough, protrusions, ridges, penetrations, or sharp projections on the surface of concrete, and all protrusions shall be ground smooth or otherwise made smooth, in additional to the normal surface preparation.

4.1.4. In the event of exposed reinforcing steel, all exposed metal surface shall be clean. Remove oil, paint, rust, scales, or any other foreign matter with wire brush. Clean metal surface may treat and apply appropriate primer recommended by waterproofing manufacturer.

4.1.5. Void, honeycomb, bug holes, rock pocket, surface pitting and spelled surface shall be filled and patched to smooth surface. All treatment to concrete surface shall be carried out with cementitious polymer mortar, approved and accordance with manufacturer's instruction and recommendations.

4.1.6. Surface irregularities, excessive roughness shall be repaired prior to the application of waterproofing coating with cementitious polymer leveling compound, approved and accordance with manufacturer's instruction and recommendation.

4.1.7. Shrinkage cracks, any non-moving hairline cracks (1.6mm) or less shall be treated with a coat of cementitious coating application. Shrinkage cracks on the concrete surface, which are 3mm wide or greater shall be ground out to a minimum 6mm wide x 12mm deep and treated with Mygrout GP accordance with manufacturer's instruction and recommendation.

4.1.8. Structural cracks regardless of wide, which involve of cold joint, construction joint or another moving joint, shall be ground out to a minimum 6mm wide x 12mm deep. All performance filler in joint is to be removed to a depth of 25mm below slab surface. Appropriately sized closed cell joint bickering is to be installed. These joints are to be caulked with sealant, approved and accordance with manufacturer's instruction and recommendation.

4.2. Detail Works

4.2.1. Angle Filler
At all the horizontal and vertical surface junctures, upturns, projections (pipes, sleeves, drains, vents etc.), wherever a vertical surface or protrusion exists (parapet wall or other projection which penetrate up to slab), a 45˚ cement sand angle filler shall be installed to reduce the tension of the waterproofing coating in the transition.

4.2.2. Cement Sand Filler
Mix cement and sand (ratio 1:3) with bonding latex, apply appropriate filler accordance with manufacturer's instruction and recommendation.

4.2.3. Fill void, honeycomb, bug holes, rock pocket, surface pitting and spelled surface with Mygrout GP. All repairs to concrete surface shall be carried out with Mygrout GP accordance with manufacturer's instruction and recommendations.

4.2.4. Repair of surface irregularities, excessive roughness shall be repaired prior to the application of waterproofing coating with Mygrout GP cementitious polymer compound with Mymix 368 latex accordance with manufacturer's instruction and recommendation.

4.2.5. Shrinkage cracks, any non-moving hairline cracks (1.6mm) or less shall be treated with a coat of cementitious coating application. Shrinkage cracks on the concrete surface, which are 3mm wide or greater shall be ground out to a minimum 6mm wide x 12mm deep and treated with Mygrout GP accordance with manufacturer's instruction and recommendation.

4.2.6. Structural cracks regardless of wide, which involve of cold joint, construction joint or another moving joint, shall be ground out to a minimum 6mm wide x 12mm deep. All performance filler in joint is to be removed to a depth of 25mm below slab surface. Appropriately sized closed cell joint bickering is to be installed. These joints are to be caulked with polyurethane sealant accordance with manufacturer's instruction and recommendation.

4.2.7. All projections (pipes, sleeves, drains, vents etc.) may treat with appropriate primer and allow to dry tack-free. Apply an appropriate sealant filler cant with polyurethane sealant accordance with manufacturer's instruction and recommendation.

4.2.8. Allow detail works application to cure accordance with manufacturer's instruction prior to general application of waterproofing coating.

4.3. Application

4.3.1. Preparation and application of the waterproofing coating shall be accordance with manufacturer's directions and instructions.

4.3.2. Myproof Conceal WP waterproofing coating shall be done in two coats application. Myproof Conceal WP shall be applied and installed at the rate not less than1.0kg/m2 and at a minimum two coats application.

4.3.3. Apply by brush or roller the first coat at the rate of 1 kg/m2 and allow the first coat to dry between 3-4 hours (25ºC & 50% RH) before applying the second coat.

4.3.4. Apply the second coat at the rate of 1 kg/m2 in the alternate horizontal and vertical cross direction of the first coat. For most of the site condition, it may need to apply more than two coats to achieve the consumption.

4.4. Curing

4.4.1. The finished waterproofing coating must be protected from damage. The coating should be allowed to cure at least 24 hours before back filling, to maintain and yield optimum strength.

4.5. Protection

4.5.1. Installed approved protection board, as by architect details upon waterproofing coating full cured.

4.6. Clean Up

4.6.1. Clean all adjacent areas to remove any stains or spills with water.

4.6.2. Clean tools or equipment with water before materials cure and harden.