// METHOD STATEMENT · SWIMMING POOLS

Swimming Pool Waterproofing Under Tiles

TERACOO Weather Coat GP cementitious system on concrete pool shells

DOCUMENT	REVISION	ISSUE DATE	SYSTEM
PS-MS-03	Rev 01	04 Nov 2026	TERACOO Weather Coat GP

1. Purpose & scope

This method statement covers waterproofing of reinforced concrete swimming pool shells (floor, walls, steps, benches, balance tank) under tile finishes with the two-component TERACOO Weather Coat GP cementitious coating. It includes penetration and joint detailing and the fill test before tiling.

Where polyurea is specified for the pool instead, follow PS-MS-05.

2. Reference documents

- TERACOO Weather Coat GP TDS (PS-TDS-TWC-01)
- Petroseal PVC Waterstop TDS (for shell construction joints)
- Pool structural drawings, MEP drawings (inlets, outlets, lights, main drains), tile specification

3. Responsibilities

ROLE	RESPONSIBILITY
Project manager	Coordinates the structural, MEP, waterproofing and tiling sequence.
MEP contractor	Installs all fittings with puddle flanges before waterproofing. Pressure-tests pipework.
QA/QC inspector	Signs hold points: substrate, each coat, cure, fill test.
Applicator crew	Prepares substrate and applies the coating to this method statement.

4. Materials

- TERACOO Weather Coat GP (liquid + powder kits)
- Approved polymer repair mortar for blow holes, tie holes and cracks
- Alkali-resistant glass-fibre mesh for corners and joints where specified
- Polyurethane or polysulfide sealant for movement joints (as specified)
- Clean water for pre-wetting. Polythene sheeting for curing.

5. Tools & equipment

- High-pressure washer or grit blaster
- Forced-action mixer / drill with paddle (max 500 rpm)
- Weighing scale for 1 : 2 mixing by weight
- Stiff brushes, trowels, or spray equipment
- Pull-off adhesion tester (for substrate check)
- Water level gauge / marked staff for fill test

6. Health, safety & environment

- PPE: gloves, safety glasses, dust mask when mixing powder, safety boots.
- Safe ladders or stairs into the shell. Barriers around the open pool edge.
- Temporary lighting in the shell: low-voltage or battery only. No 230 V tools standing in water.
- Rinse cementitious splashes from skin and eyes immediately with clean water.

7. Conditions before starting

- Pool shell cast and cured at least 28 days (TERACOO itself can go on 24-hour-old concrete, but the shell should have finished early shrinkage first).
- Structural water-retention test of the bare shell done where the structural specification requires it.
- All fittings (inlets, outlets, main drains, lights, skimmers) installed with puddle flanges and pipework pressure-tested.
- Construction joints contain waterstops. Movement joints formed as designed.
- Shaded work area. No application in direct midday sun or rain.

8. Substrate preparation

1. Remove laitance, form oil and curing compound by high-pressure washing or grit blasting.
2. Cut out and fill tie holes, blow holes and honeycombing with polymer repair mortar.
3. Rake out and fill cracks. Route out live cracks and treat as joints.
4. Form 25–50 mm coves at floor-to-wall and step junctions with repair mortar.
5. Check concrete pull-off strength. It must exceed 145 psi (≈ 1.0 MPa).

9. Detailing

1. Around every fitting, cut a 20 × 20 mm chase around the flange and fill with repair mortar or sealant as specified, so the coating seals onto a sound edge.
2. Embed reinforcing fabric in the first coat at coves, corners and around fittings where specified.
3. Movement joints: keep them free of coating. Seal them with the specified joint sealant system.

10. Mixing

1. Shake the liquid component well. Pour it into a clean container.
2. Add the powder slowly while mixing with a forced-action mixer (max 500 rpm), at 1 part liquid to 2 parts powder by weight.
3. Mix until smooth and lump-free. Mix only what can be used within one hour. Never add water or re-temper.

11. Application

1. Pre-wet the substrate to saturated surface-dry (damp, no standing water).
2. Apply the first coat with a stiff brush, working it into the surface. Consumption 1.5 – 2.0 kg/m² per mm of coating thickness.
3. After the first coat has cured, apply the second coat at right angles to the first.
4. Pay particular attention to coves, steps, fittings and wall tops. Carry the coating over the coping bed / overflow channel.

12. Curing and fill test

1. Cover with polythene sheeting and keep moist for at least 3 days.
2. After the wet-cure period (at least 3 days), fill the pool with clean water to the operating level.
3. Hold for the test period stated in the project specification (commonly 7 days). Record the water level daily against a fixed mark, with an evaporation pan alongside.
4. Inspect the outside of the shell and plant rooms for damp. Drain, repair and re-test if the loss exceeds evaporation.

13. Tiling

1. Drain the pool and allow the surface to dry as required by the tile adhesive manufacturer.
2. Use a polymer-modified tile adhesive and grout suitable for submerged use and compatible with cementitious coatings (polymer-modified, class C2 or better).

3. Do not drill or fix through the coating after waterproofing. Any later fixing needs a sealed detail approved by Petroseal.

14. Inspection & test plan (hold points)

#	STAGE	CHECK	ACCEPTANCE	RECORD
01	Shell	Cure age, structural test, fittings, joints	Fittings flanged, pipework tested	Checklist
02	Substrate	Prep, repairs, coves, pull-off	Clean, sound, pull-off > 145 psi	Pull-off test record
03	Coat 1	Coverage, fabric at details	Full coverage at 1.5 – 2.0 kg/m² per mm	Daily log, kits used
04	Coat 2	Direction, coverage	Right angles to coat 1, no pinholes	Daily log
05	Curing	Polythene, moisture	≥ 3 days moist cure	Log
06	Fill test	Daily level vs evaporation	No loss beyond evaporation, no damp outside	Signed fill test report

15. Common defects to avoid

- Coating over laitance or form oil, so it debonds under tiles
- Unsealed fittings, the most common pool leak point
- Re-tempered mix or batches used past one hour
- Single coat only, or thin coats at coves and steps
- Skipping the fill test and tiling straight away
- Coating applied across movement joints instead of a sealant joint

16. Handover records

- Substrate pull-off test results
- Kit batch numbers and quantity used per area (to check coverage)
- Photo record of fittings detailing and each coat
- Signed fill test report

PREPARED BY	CHECKED BY (QA/QC)	APPROVED BY (CONSULTANT)
Name / signature / date	Name / signature / date	Name / signature / date

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