

▶ Description



TamSeal 10F is a two-component acrylic modified cementitious coating that requires only on-site mixing to form the ideal product to waterproof and resurface concrete, masonry and most other construction materials. TamSeal 10F provides an effective barrier to waterborne salts and atmospheric gases. It also provides a hardwearing, seamless, waterproof membrane for roofs and concrete protection.

▶ Key Benefits

- WRc & PUB Singapore approved
- Singapore Housing & Development Board (HDB) approved
- Singapore Environment Council approved for Green Label mark
- A 1mm coating provides an anti-carbonation cover equivalent to over 80mm of concrete
- Waterproof – resists up to 15 bar (150m head) of positive pressure. Resists up to 3 bar (30m head) of negative pressure.
- Excellent adhesion, bonds to porous and non-porous surfaces.
- Flexible
- Non-toxic – ideal for potable water uses
- Light trafficable
- Breathable – whilst repelling water, allows substrate to breathe.
- High resistance to carbon dioxide and chloride ion diffusion

- Unlike conventional coatings, which require the concrete to cure for 7 - 28 days, TamSeal 10F can be applied to 24 hour-old concrete thereby giving immediate protection.
- Can be spray applied using a hopper gun

▶ Typical Applications

- To reface concrete surfaces
- Waterproof lining
- For coating seawater channels
- Sealing and coating tie bar holes
- Bathroom, wet areas and planter boxes
- As a waterproof coating for specific roofs (protected)
- For fixing tiles in water retaining structures
- Protection against carbonation and chloride attacks
- Waterproof membrane for swimming pools

▶ Technical Data

TamSeal 10F		
	Component A	Component B
Form	Powder	Liquid
Colour	Grey	White
Mix ratio (by weight)	1.0	0.64
Density	1.45 (mixed)	
Toxicity	Non-Toxic	
Cured Properties		
Adhesion to concrete	> 0.40N/mm ²	
Resistance to water pressure (2mm coating)	15 bar positive (no leakage) 3 bar negative (no leakage)	
Elongation ASTM D412:98	> 150%	
Tensile strength ASTM D412:98	> 1.5N/mm ²	
Shore A hardness	50	
Crack bridging ASTM C836:95	No cracks at 2mm width	

Effect of Water Pressure

TamSeal 10F resists water pressure up to 15 bars (150 meter head). The degree of resistance of TamSeal 10F to water under pressure depends on the coating thickness.

Pressure	Application Rate
3 bar negative	2.0kg/m ²
15 bar negative	2.0kg/m ²

Chemical Resistance

TamSeal 10F has good chemical resistance to gasoline, diesel, oil, Sodium Hydroxide, Calcium Chloride, de-icing salts and treated sewage.

All technical data stated herein is based on tests carried out under laboratory conditions

▶ Application Guidelines

- All surfaces must be thoroughly cleaned and free from laitance, loose material, dust, dirt, oil, grease, general grime, all contaminants, etc.
- All non-structural and structural cracks should be properly repaired or treated.
- Any holes or indentations should be filled with TamCrete 40 mortar or TamCrete GP.
- All renders, coatings, and tiling should be removed back to the structure to be waterproofed. Brick pointing should be made flush.
- All old repairs should be inspected and repaired where necessary. Any loose friable concrete or brickwork should be cut out and properly repaired.
- Newly laid concrete can be coated after 24 hours or as soon as it can be walked on.
- Leaking construction joints or cracks should be treated with TamPur 130 or TamPur 150 before coating.
- Apply 45° fillets to all internal angles, using TamCrete Plug or TamCrete PolyPlug or if time permits, sand and cement.

Mixing

TamSeal 10F consists of two components – 1.0 parts powder (Part A) to 0.64 part liquid (Part B). Mix using clean containers and a slow speed paddle mixer until the material is homogenous. Keep mixed throughout application. **Do not add water.** Mix only the amount that can be applied in 30-40 minutes (dependent on temperature and ventilation). Mixing the same ratio by weight as above can be used for smaller quantities.

Surface Application

- Dampen (not wet) all surfaces before applying the first coat of TamSeal 10F.
- Particular attention should be made at expansion joints and over movement cracks.

New Expansion Joints: TamSeal 10F should be taken well into the rebate before the expansion media is applied. **Old Expansion Joints:** The joints should be inspected and repaired. Mask over media with de-bonding tape. Apply one coat of TamSeal 10F over the joint to 100mm either side. Reinforce by thoroughly wetting-in 30gm glass fibre mat or plasterers polyurethane scrim whilst the TamSeal 10F remains wet and uncured. Allow to dry. **Movement Cracks:** follow guidelines for Old Expansion Joints.

Application of the main coating system:

- Apply the first coat of TamSeal 10F using a brush, roller or trowel at a coverage rate of 1.0kg per m², making sure that it is evenly coated.
- Apply the second coat at right angles to the first coat to ensure proper coverage at a coverage rate of 1.0kg per m².
- Allow the TamSeal 10F coating to completely dry before light foot traffic. For heavier usage protect with a floor screed.
- Water bearing structures can be filled with water 24 hours after the TamSeal 10F has cured.
- Do not apply to bitumen.
- The total application should not exceed 4mm thick otherwise splitting or cracking may occur.

▶ Packaging

TamSeal 10F is supplied in 41 kg set.

Part A (Powder) = 25 kg **Part B** (Liquid) = 16 kg

▶ Storage

TamSeal 10F should be stored at room temperature (min 10°C and max 38°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of up to 12 months can be expected.

▶ Health & Safety

TamSeal 10F should only be used as directed. We always recommend that the Health & Safety data sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Health & Safety data sheet is available upon request from your local TAM International representative.