

TamSeal 10F



Description:

TamSeal 10F is a two-component, acrylic modified cementitious coating. It is the ideal product to waterproof and re-surface concrete / masonry and can be formed on site using simple mixing methods. TamSeal 10F creates an effective barrier against waterborne salts and atmospheric gases and provides a hardwearing, seamless, waterproof membrane for roofs and concrete protection.

Key Benefits:

- Potable water certified
- 2mm 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.
- > 100% elongation
- 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
- Environmentally friendly, water based product. No solvents and no VOC's.

Typical Applications:

- Waterproof lining
- Coating seawater channels
- Bathroom and wet areas
- Waterproof coating for roofs
- Fixing tiles in water retaining structures
- Protection against carbonation and chloride attacks
- Application in marine areas

Technical Data

TamSeal 10F	Component A	Component B
Form	Powder	Liquid
Colour	Grey/White	Milky White
Density	-	1.03
Bulk Density	1.40	-
Mixing Ratio (A+B)	2.5 to 1 by weight	
Application Temperature	Not less than +4°C	
Density	1.8 (mixed)	
Toxicity	Non-Toxic	

Cured Properties

Adhesion to concrete	> 1.1N/mm ²
Resistance to water pressure (2mm coating) Taywood Test	15 bar positive (no leakage) 3 bar negative (no leakage)
Elongation ASTM D2370	> 100%
Tensile strength reinforced ASTM D2370	11N/mm ²
Tensile strength unreinforced ASTM D2370	> 1.6N/mm ²
Water Permeability Coefficient K m/s	5.84 x 10 ⁻¹³
Diffusion Coefficient for Oxygen DO ₂ (cm ² s ⁻¹)	2.89 x 10 ⁻⁵
Diffusion Coefficient for carbon dioxide DCO ₂ (cm ² s ⁻¹)	9.12 x 10 ⁻⁶
Oxygen Diffusion	R=32

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



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▶ Application Guidelines:

- All surfaces must be thoroughly cleaned and free from laitance, loose material, dust, dirt, oil, grease, general grime, all contaminants, mould oil, etc.
- When there is evidence of fungus or mould growth, a suitable fungicide should be used prior to application.
- All non-structural cracks above 1mm wide should be filled.
- All structural cracks should be properly repaired or treated.
- Any holes or indentations should be filled with suitable filler (e.g. TamCrete 46) prior to application of TamSeal 10F.
- Brick pointing should be made flush.
- All renders, coatings, and tiling should be removed back to the structure to be waterproofed.
- Any loose pointing should be raked out and repointed flush with the surface of the bricks or block work.
- Any loose friable concrete or brickwork should be cut out and properly repaired.
- All old repairs should be inspected and repaired where necessary.
- Newly laid concrete should be smooth and not a tamped down finish.
- 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 and sealed with a suitable Tam injection resin 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 part A powder and part B liquid. Pour the part B into a clean suitable mixing vessel ie. bucket, then gradually add the Part A into the Part B while mixing with a low speed paddle mixer until a smooth lump free mixture is obtained. Only mix a suitable amount that can be applied in 10 – 30 minutes and stir mixture frequently. Do not remix with additional liquid. Clean all equipment and tools immediately after use with clean water.

Brush application: use 2.5 Part A to 1 Part B by weight Mixing the same ratio by weight as above can be used for smaller quantities.

▶ Surface Application:

Dampen (no free standing water) all surfaces with clean water prior to application. Particular attention should be made at expansion joints and over movement cracks. The total application should not exceed 3mm thick, otherwise splitting or cracking may occur. Do not apply over bitumen or other surface coatings.

New Expansion Joints: TamSeal 10F should be applied into the rebate below the level of the expansion media (i.e. Mastic).

Old Expansion Joints / Moving Cracks: These should be inspected and repaired prior to application. Mask over the media (mastic / crack) with de-bonding tape. One coat of TamSeal 10F should now be applied over the joint / crack to at least 100mm on either side. Reinforcing mesh should be embedded into the first coat while it is still wet. Second coat should be applied only after the first coat is touch dry.

▶ Application of the main coating system:

Apply the first coat of TamSeal 10F using a brush, roller or trowel at a coverage rate of 1.8kg per m² making sure it is evenly coated. Do not paint-on but spread on 1mm thick. Once touch dry, additional coatings (as required) can be applied. Apply the second coat at right angles to the first coat to ensure proper coverage at a coverage rate of 1.8kg per m². Allow the TamSeal 10F coating to dry completely before subjecting to light foot traffic. For heavier usage protect with a floor screed. Water bearing structures can be filled with water after 72 hours.

Until it has reached its initial curing stage (approximately 72 hours), TamSeal 10F requires protection from the weather elements together with necessary space for it to breath.

▶ Cleaning:

Thoroughly clean all tools and equipment with water after use.

▶ Yield:

1kg = 0.55 litres

▶ 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.

