

## DESCRIPTION



TamSeal 800L (previously known as TamSeal 10GM) is a high performance, elastomeric liquid membrane formulated on a styrenebutadine co-polymer, specifically designed for spray application (thixotropically modified), waterproofing a range of vertical and horizontal surfaces in below grade, buried or composite applications. TamSeal 800L demonstrates durable and elastomeric characteristics long term, providing a seamless waterproof coating on tunnel, basement, D-wall, pile wall substrates prior to other compatible overlays, finishes and toppings, particularly shotcrete composite lining systems. Once cured, TamSeal 800L withstands ponding and permanent immersion.

## KEY BENEFITS

- › Water-based, thixotropic crème consistency.
- › Can be used as barrier to gases, water, and moisture.
- › Double bonding for shotcrete construction and other sandwich methods.
- › Elastomeric and flexible.
- › Resistant to fungi and algae growth.
- › Tough and durable.
- › Sprayable through suitable airless spray units.

## TYPICAL APPLICATIONS

- › Shotcrete construction for double-bonded performance.
- › Underground structures, tunnels, shafts.
- › Gas barrier.
- › Substrates include concrete, FC sheet, plasterboard, timber, blockwork, bricks, and treated metals.
- › Used in conjunction with TamSeal 2000 HDPE Upward Bonded sheet or TamSeal 2200 PVC Sheet membrane systems. Hybrid systems for sheet/spray applications.
- › Suitable for 100 year design life applications.

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## TECHNICAL DATA

TamSeal 800L	
Appearance	Viscous thixotropic liquid
Colour	Terracotta (STD) / Light Grey
Density	1.30 kg/litre
Shore A Hardness (ASTM D2240-97)	> 50
Elongation BS EN ISO 527-1	≥ 700%
Adhesion to concrete EN ISO 4624 (50 mm dolly) / EN 1542	> 1.1MPa
Water Vapour Transmission (ASTM E96)	<0.17g/m <sup>2</sup> /24 hours
Crack Bridging BS EN 1062-7 Method A	Class A5 > 5 mm
Watertightness EN12390-8 adaptation for inclusion spray applied membrane (appendix C) based on EN 14891, part A7, for concrete mix design.	Zero penetration of water. (5 Bar / 72 hours)
Watertightness EN 1928 (3 Bar for 24 h)	Waterproof
Chemical resistance EN 14414	Pass
Resistance to Leaching EN 14415	Pass
Elastic recovery > 95% @ 100% Elongation	Pass
Movement Cyclic Test (CSIRO AS 4654-1)	Pass
Water, Detergent, Heat ageing. (AS4858 Appendix A)	Pass
UV Resistance Tensile Strength / Elongation at Break	1.80 MPa Pass 408%
Abrasion resistance: Non-trafficable (AS1580.403.2) (AS4654.1 par.2.3)	Meets requirement
Reaction to Fire EN ISO 11925-2:2010	Pass

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

Meets testing criteria for EN ISO, BTA and ITA Spray Membranes.

## Spray Applied Modified Polymeric Waterproofing Membrane

### APPLICATION GUIDELINES

TamSeal 800L is to be installed according to strict instructions and/or as directed by Normet. The method statement is available upon request. All application documentation and the SDS should be available, and all appropriate measures for personal safety and containment should be implemented. Please refer to the product Safety Data Sheet (SDS).

#### Surface Preparation

All substrates must be structurally sound, dry, thoroughly clean and free of oil, grease, curing membranes, loose particulate, and sharp protrusions.

Substrates and blinding layers should be dimensionally stable enough to withstand the weight of subsequent concrete overlays and/or other loads without deformation.

For double-bonded sprayed linings applications in tunnels, > 0.5MPa adhesion is acceptable. (see. ITA, BS EN/ISO Guide) Shotcrete profiles should have a regulated maximum aggregate size of <6mm. Surface profile is important for consumption rates, reduced shadows, holidays and prolonged curing times. Trials should be undertaken to ensure consumption rates are predictable. For shotcrete walls, off-gun finishes should be tight without deep gaps, holes, or voids > 5 mm. TamCrete Maxshot can be applied to give an excellent off-gun finish before membrane application. No standing water is acceptable.

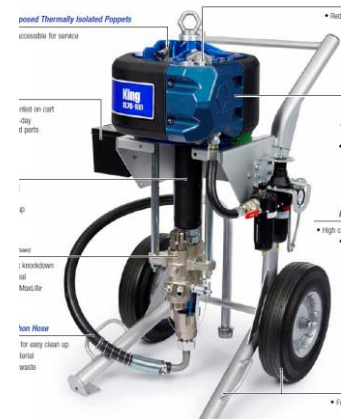
Water ingress from leaks needs to be injected and/or redirected under suitable drainage layers. Drainage fleece must be covered by continuous cementitious layers before membrane application.

#### Application

TamSeal 800L must be mechanically mixed for 3 - 5 minutes to ensure the thixotropic nature of the membrane is flowable for ease of pumping and spraying. Avoid entraining too much air during the mixing process.

For most applications, pressure washing the substrate with water is recommended to remove loose particulates and contamination. Standing or running water cannot be directly overlaid. Allow a minimum of 3 hours prior to commencement of spray application to avoid prolonged inter-coat and final curing times.

Airless spray units should be suitable for applying heavier paint products, like texture sprayers and up to 70:1 pumps. Tip sizes would typically be between 423-429 depending on output preferences, capacity and experience.



Spray passes should cover multiple angles to avoid shadow holes and other holidays in the coating. Operator experience is important to adjust to the ever-changing conditions underground. Bottom-up, 45-degree-angle spray is an important angle to target, in conjunction with perpendicular, up, down, side, and side sprays per coat.

Intercoat should typically be between > 12 and 24 hours after the previous coat is tack-free and resists finger pressure without rupture. Allowing longer times between coats (> 12 - 24 h) can benefit the overall curing efficiency.

Drying time will vary depending on the application thickness, humidity, temperature, and air movement over the surface. Optimal curing times will have air movement between 1 - 5 meters per second.

Subsequent shotcrete inner linings can be applied within 2 - 3 days or Shore A hardness of > 40 for most applications, > 50 for metal fibre reinforced Shotcrete.



Drawings, specifications, installation guides and QA documentation are available upon request.

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### Consumption Rates

TamSeal 800L consumption rates will vary depending on target DFT (Dry Film Thickness) and substrate profile.

Target DFT	Target total kg/m <sup>2</sup>
3.0 mm	6 kg

The target thickness is specific to the application conditions and the specified warranty period. Shotcrete construction double-bonded systems are typically >3mm system thickness.

Shotcrete profile will be the major factor in consumption rates and overall QA efficiencies.

Contact Normet for full application instructions, including all QA checks required per ITA standards for double-bonded shotcrete linings.

### Cleaning

Thoroughly clean all tools and equipment with water after use.

### Limitations

- › Do not use on substrates with live water ingress or ponding, glistening water, or when inclement weather is due.
- › Only Normet licensed applicators to apply.
- › Do not use where substrate surface temperature is below 10°C or above 35°C.
- › TamSeal 800L is not designed to be left exposed or subjected to regular foot traffic.
- › Not designed as a sealant for movement, control, or structural joints.
- › Do not apply solvent-based adhesives over the cured membrane.

### PACKAGING

TamSeal 800L is packaged in 25 kg pails and 1000 L IBCs for large project applications.



### STORAGE

TamSeal 800L should be stored between 10 - 30°C, kept dry, and out of direct sunlight. When these conditions are met and the container remains unopened, a shelf life of 12 months can be expected.

### HEALTH AND SAFETY

TamSeal 800L should only be used as directed. We recommend that the Safety Data Sheet (SDS) be carefully read prior to application or handling of the material. PPE should be strictly adhered to for your personal protection with special consideration to eye, respiratory and skin protection.