

Spray Applied Modified Polymeric Waterproofing Membrane.

## DESCRIPTION

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

## KEY BENEFITS

- › Water-based, thixotropic crème consistency
- › Can be used as a barrier to gases, water, and moisture
- › Double bonding for sprayed concrete 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

- › Sprayed concrete 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



## TECHNICAL DATA

TamSeal 800L	
Appearance	Viscous thixotropic liquid
Colour	Terracotta (STD)/ Light Grey
Density	1.30 kg/L
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	> 1.1 MPa
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
Movement Cyclic Test (CSIRO AS 4654-1)	Pass
Water, Detergent, Heat aging. (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

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.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents, or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.

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## APPLICATION GUIDELINES

TamSeal 800L is to be installed to strict instruction and or as directed by Normet. Method statement available upon request. All documentation for application and SDS should be available and all appropriate measures for personal safety and containment put in place. 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 to withstand the weight of subsequent overlays of concrete and or other loads without deformation.

For double-bonded sprayed linings applications in tunnels > 0.5 MPa adhesion is acceptable. (see. ITA, BS EN/ISO Guide) Sprayed concrete profiles should have a regulated max aggregate size of < 6 mm. Surface profile is an important factor for consumption rates, reduced shadows, holidays and prolonged curing times. Trials should be undertaken to ensure consumption rates are predictable. For sprayed concrete walls, off gun finishes should be tight without deep gaps, holes, or voids > 5 mm. TamCrete Maxshot can be applied for excellent off gun finish prior to 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 prior to 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.

Pressure washing of the substrate with water is recommended for most applications 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 of suitable capacity to apply 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.

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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, a 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 > 4 - 12 hours after the previous coat is tack free and resist finger pressure without rupture. Allowing longer times between coats (> 12 – 24 h) can benefit the overall efficiency of curing.

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



Drawings, Specification, Installation Guides and QA Documentation available upon request.

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## CONSUMPTION RATES

TamSeal 800L consumption rates will vary depending on the target DFT (Dry Film Thickness) and the 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 specified warranty period. Sprayed concrete construction double bonded systems are typically > 3 mm system thickness.

The sprayed concrete profile will be the major factor in consumption rates as well as overall QA efficiencies. Contact Normet for full application instructions, including all QA checks required per ITA standards for double-bonded sprayed concrete linings.

## CLEANING

Thoroughly clean all tools and equipment with water after use.

## PACKAGING

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



## LIMITATIONS

- › Do not use on substrates with live water ingress or ponding, glistening water, or when inclement weather is due.
- › Only Normet licenced 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.

## STORAGE

TamSeal 800L should be stored at between 10 - 30°C, kept dry and out of direct sunlight. When these conditions are met, and remain unopened, then 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.