

High Performance Spray Applied Waterproofing Membrane

DESCRIPTION



TamSeal 800 is a high performance, single component EVA polymer, flexible waterproofing membrane. Its typical use is for the waterproofing of sprayed concrete lining applications, where TamSeal 800 is spray applied using a dry rotor pump and sprayed by hand or robotic manipulator. TamSeal 800 provides a tough, durable, seamless, waterproofing membrane for many structures including tunnels, shafts, caverns and below grade box structures.

KEY BENEFITS

- > Fast and easy application particularly for complex underground geometries
- > Waterproof: zero penetration beyond membrane when tested in accordance with BS EN 12390-8:2000
- > TamSeal 800 is safe, non-toxic and should be considered like any other cementitious construction materials
- > Excellent adhesion, bond to concrete and steel of 1.5MPa or greater when tested in accordance with BS EN ISO 4624:2003
- > Two colour application system to attain full coverage, high quality, controlled consumption during spraying.
- > When sandwiched between layers of concrete, the double bond enhances the waterproofing performance by effectively limiting water-paths at the interface.
- > Tough and flexible, suitable for the overspraying with steel fibre sprayed concrete.
- > Fast initial curing time, tack free in 2 to 3 hours
- > Fast complete curing time, can be over-coated with concrete after 24 hours
- > Exhibits excellent crack bridging capabilities when tested in accordance with BS EN 1062-7: 2004, with capacity proportional to thickness and 150% elongation when tested against ASTM D412-06a

- > TamSeal 800 is non-ignitable: Class E when fire tested against BS EN ISO 11925-2, single-flame source test.
- > Unlike conventional coatings, which require the concrete to cure for 7 – 28 days, TamSeal 800 can be applied to 24 hour old concrete.
- > Can be connected to other waterproofing materials, such as PVC sheet membranes with a standardised joint detail

TYPICAL APPLICATIONS

TamSeal 800 can be applied to a multitude of substrates and works most efficiently between two layers of structural concrete lining, in such situations as:

- > Sprayed concrete tunnel and shaft linings
- > Diaphragm wall and contiguous pile boxes
- > Underground basements
- > Sprayed concrete caverns
- > Protecting concrete against aggressive water ingress in mines and excavations
- > Water retaining structures

TECHNICAL DATA

TamSeal 800	
Form	Powder
Colour	Light Grey or Orange
Bulk density g/cm ³	0.63 ±0.03
Application Thickness	2 mm upwards
Bond Strength to Concrete	1.5 MPa
Bond Strength to Steel	2 MPa
Shore A hardness (fully cured)	90 ±5
Elongation	150%
Consumption	1.0 kg/m ² /mm

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

Chemical Resistance and Durability

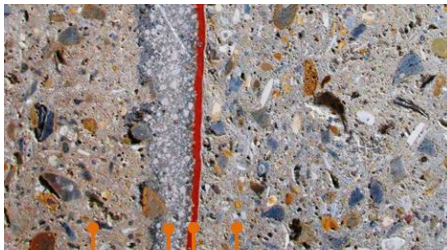
When encapsulated between layers of concrete lining TamSeal 800 can be expected to maintain performance throughout the service life of the structure.

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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.

APPLICATION GUIDELINES

- > All surfaces must be thoroughly cleaned and free from laitance, loose material, dust, dirt, oil, grease and all contaminants.
- > TamSeal 800 should be applied onto a pre-dampened (not wet) surface.
- > If applying directly onto a porous surface, it is important to initially soak the surface with water and allow run off or adequate evaporation to leave substrate damp prior to application of TamSeal 800.
- > If the receiving surface is rough, it is advisable to apply a 20 mm layer of regulating material such as TamCrete Topshot to maximise the quality and efficiency of the membrane application.
- > TamSeal 800 cannot be applied onto substrates with active water ingress.
- > If active water ingress is visible, a number of measures to control water ingress are outlined in the Normet Method Statement, available on request. Such measures include, localised and systematic drainage using pipes and fleeces, and isolated pre-treatment with water stopping injection techniques. Please contact your local Normet representative for advice on suitable solutions.



Secondary sprayed or cast concrete lining
 TamSeal 800 – 1st coat orange, 2nd coat grey
 Regulating layer such as TamCrete TopShot
 Primary sprayed concrete lining

- > In order to enhance the quality control process, TamSeal 800 can be applied in two layers. Apply the 1st coat using the orange version of the TamSeal 800, followed by a 2nd coat of the grey version TamSeal 800. Colour variations can also be applied in the opposite order.
 - > TamSeal 800 is recommend being over sprayed when it reaches the following shore A hardness values.

Shore A	Next layer	Age*
5 - 10	2 nd TamSeal 800 membrane layer	2 - 3 hours
30 - 45	Plain or polymer reinforced sprayed concrete	20 - 24 hours
≥ 50	Steel fibre reinforced sprayed concrete	1 - 2 days

*approximate values based on 20°C with 65% rH.

APPLICATION EQUIPMENT

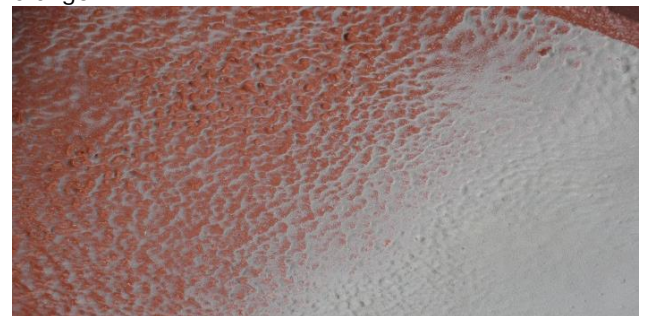
- > Tamseal 800 can be applied by hand spray equipment. For larger applications such as large diameter tunnels, robotic spraying equipment typically used for sprayed concrete applications can also be used. TamSeal 800 is best pumped using the Normet Meyco Piccola dry rotor machine. The electric powered version is recommended for consistent flow, aiding nozzleman control.



- > For further technical information, please contact your local Normet Representative.

PACKAGING

TamSeal 800 is supplied in 15 kg bag and 400 kg bulk bags. Packaging size may vary subject to local regulations and requirements. The standard colours are light grey and orange.



STORAGE

TamSeal 800 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 one year can be expected.

HEALTH & SAFETY

TamSeal 800 should only be used as directed. We always recommend that the Safety Data Sheet (SDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety data sheet is available upon request from your local Normet representative.

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