

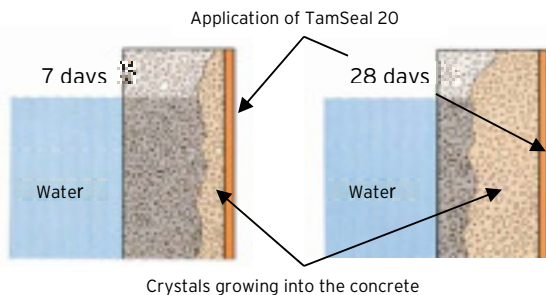
DESCRIPTION



TamSeal 20 is a surface applied material which waterproofs and provides in-depth concrete protection. It consists of grey or white Portland cement, specially treated quartz sand and a compound of active chemicals. TamSeal 20 is supplied in powder form and needs only to be mixed with water prior to application.

KEY BENEFITS

When TamSeal 20 is applied to a concrete surface, the active chemicals combine with the free lime and moisture present in the capillary track to form insoluble crystalline complexes. These crystals block the capillaries and minor shrinkage cracks in the concrete to prevent any further water ingress (even under pressure). However, the layer will still allow the passage of water vapour through the structure (i.e. the concrete will still be able to “breathe”). In addition to waterproofing the structure, TamSeal 20 protects concrete against seawater, wastewater, aggressive ground water and certain chemical solutions. TamSeal 20 is potable water certified and therefore is suitable for the treatment of water storage tanks and reservoirs.



TYPICAL APPLICATIONS

- > Basement retaining walls
- > Concrete slabs (floor / roof / balcony)
- > Construction joints
- > Water retaining structures
- > Swimming pools
- > Sewage treatment plants
- > Channels
- > Potable water tanks

TECHNICAL DATA

TamSeal 20	
Potable water approved	Yes
Withstand water pressure	> 12 bar @ 28 days
Colour	Cement grey
Bulk density	1.25
Initial Setting time @20°C	60 minutes
Tensile Adhesion BS EN 1015-12	0.70 MPa
Water permeability (BTD/TP/02/2002)	8.50×10^{-13}
Water penetration DIN 1048: Part 5: 1991	< 10 mm
Fire Testing - Non- Combustibility BS 476-4	Non-combustible

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

APPLICATION GUIDELINES

Surface Preparation

All concrete to be treated with TamSeal 20 must be clean and have an “open” capillary system. Remove laitance, dirt, grease etc. by means of high pressure water jetting, wet sandblasting or wire brushing.

Faulty concrete in the form of cracks, honeycombing, etc. must be chased out, coated with TamSeal 20 and filled flush with TamCrete 46.

Surfaces must be carefully pre-watered prior to the TamSeal 20 application. Dampen (no free standing water) the concrete surface with clean water prior to application.

Note: TamSeal 20 is not a decorative material.

Mixing

Pour water into a clean suitable mixing vessel, then gradually add the TamSeal 20 powder into the water while mixing with a low speed paddle mixer until a consistency of thick oil paint is obtained.

For application as a slurry coat, TamSeal 20 requires approximately 9 - 10 litres of water per 25 kg bag of material.

Only mix suitable quantities that can be applied within 20 minutes and stir mixture frequently. If the mixture starts to set, do not remix with additional liquid, simply re-stir to restore workability.

Mixing Ratio: use 5 parts TamSeal 20 to 2 parts water by volume.

Application Method

Slurry Consistency - Apply one or two coats (according to specification) of TamSeal 20 using a masonry brush or appropriate power spray equipment. When two coats are specified, apply the second coat whilst the first coat is still "green".

Dry Powder Consistency (for horizontal surfaces only) - The specified amount of TamSeal 20 is distributed in powder form through a sieve and trowelled into the freshly placed concrete once this has reached initial set (when you walk on the concrete you leave an imprint of approx 10mm).

Post Treatment - Once the TamSeal 20 treatment has reached initial set, moist cure with a fine fog spray of water 2 - 3 times per day for three days. In hot or windy conditions it should be cured more frequently. During the curing period the TamSeal 20 treatment must be protected from rainfall, frost and water puddles.

Coverage

Concrete Surfaces to be Backfilled:
1st Coat: 0.75 kg/m² ; 2nd Coat: 1 kg/m².

Brush or spray applied.

Water Retaining Structures, Internal Concrete Wall Surfaces: Two coats of TamSeal 20 at 0.75 kg/m². Brush or spray applied.

Concrete Slabs

Hardened Concrete: Apply TamSeal 20 at 1.00 kg/m² in one slurry coat.

Fresh concrete: Apply TamSeal 20 at 1.0 kg/m² trowel apply to concrete when it has reached initial set.

Construction Joints: Apply TamSeal 20 at 1.5 kg/m² in slurry form immediately prior to placing the next lift/bay of concrete.

Blinding Concrete: Apply TamSeal 20 at 1.2 kg/m² in a slurry consistency immediately prior to placing the overlay concrete slab.

Cleaning

Thoroughly clean all tools and equipment with water after use.

Limitations

Do not apply TamSeal 20 at temperatures below +5°C. TamSeal 20 cannot be used as an additive to concrete or plaster.

PACKAGING

TamSeal 20 is supplied in 5 kg and 20 kg pails and 20kg bags. Packaging size may vary subject to local regulations and requirements.

STORAGE

TamSeal 20 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 six months can be expected.

HEALTH & SAFETY

TamSeal 20 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 Health & Safety data sheet is available upon request from your local Normet representative.