

Kemseal

Polymer Modified Cementitious Waterproof Slurry for Concrete and Masonry

Description	Kemseal is two-components thixotropic cementitious polymer-modified structural waterproof slurry for concrete and masonry Kemseal has a unique blend of selected organic and inorganic compounds which combines to form a free-flowing waterproof coating that possesses excellent waterproofing properties, outstanding adhesion to concrete and masonry, and excellent durability The material can be manufactured based on sulfate-resistant cement Type V The material complies with ASTM C 190, C 580 Kemseal is approved by the National Organization for Potable Water & Sanitary Drainage for drinking water and sewerage applications
Where to use	• Waterproofing of concrete, block, brick, stone, and another masonry interior and exterior above or below grade. • For waterproofing of water reservoirs, tunnels, swimming pools, basements, and cellars. • As a waterproof back plastering for limestone panels
Advantages	• Easy to use, pre-packed in a convenient and easy-to-handle pack • Easy to apply by brush, trowel, or spray application, normally in two coats with minimum surface preparation, and can be applied to damp surfaces • Non-toxic when cured and is certified for use in contact with potable water • Excellent over-coating properties with other specialty membranes in the PROKEM range to provide further protection and aesthetic quality • Excellent adhesion to the porous and non-porous concrete masonry substrate, as it penetrates deep into pores, bonds tenaciously, and becomes part of the surface • Good abrasion resistance • Corrosion inhibits and accelerates the re-passivation of steel and provides a dense highly alkaline protective coating with high resistance to diffusion of carbon dioxide gas • Breathable • Prevent build-up of water vapor but seals the surface against water penetration • Durable, Last as long as the concrete
Properties	
Pot life at 23 °C	30 - 40 minutes
Bond Strength	1.1 - 1.2 N/mm ²
Compressive strength	31 - 32 N/mm ²
Flexural strength	11 -12 N/ mm ²
Water Permeability	2 - 3 Bar
Tensile Strength	19 - 20 N/ mm ²
Surface Preparation	• Surfaces to be coated with Kemseal must be clean and sound, free of dust loose particles, grease, oil, curing compounds, mold oils, primers from previous membrane systems, or bitumen • Bitumen or primers should be removed by shot blasting or mechanical means • Spalled concrete should be repaired by cutting out to sound concrete and patching with Kemrepair range

Mixing	• Kemseal is supplied in premeasured units • Slowly add the Kemseal (20 Kg) powder to the Kemseal liquid (5 Kg) in a suitable mixing container and mix to a lump-free smooth consistency • Do not add water or rework a stiffened mix by adding water • Leave to stand for 10 minutes and re-mix. Using a drill paddle specially designed to entrap as little air as possible
Application	• Dampen surface immediately ahead of application • Do not apply Kemseal as a thin paint coat, lay it on the wall and level it out • If the wall becomes dry or material starts to pull during the application, dampen the wall again • Do not thin out the material. • Leave to cure for 2 – 3 days at 21 °C and R.H. 80 % before contact with water • In hot weather; protect from drying out too quickly using polyethylene sheets or mist water spray
Theoretical coverage	Approximately 1.0 - 1.25 Kg/m ² / layer depending upon the porosity of the surface. 2 coats are required
Packaging	• Kemseal powder 20 Kg sacks • Kemseal liquid 5 Kg pails. Supplied in (White & Grey)
Shelf life & Storage	Kemseal has a shelf life of 1 year if kept in original packs in a dry condition
Precautions	• Care should be taken when curing in hot, sunny, or windy conditions • Do not apply when the temperature is 5 °C or due to fall below 5 °C within 24 hours • Pot life at 20 °C approx. 30 - 40 minutes
Health and Safety	• Use goggles, gloves, and a breathing mask when applying • Apply forced ventilation in confined spaces • Remove splashes from the skin with hand cleaner or soap and water • Eye splashes are to be washed with plenty of water • If ingested seek medical advice
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble-free durable structures. PROKEM designs tailor-made products should there be a critical application that requires specific properties rather than our main range, then and for our customer's satisfaction, PROKEM reserves the right to change the properties of its products. All orders are accepted subject to our current terms of sale & delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request. PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products