



4.07 XPERT SEAL FLEX - 500

High Flexible Two-Part Waterproof Cementitious Membrane

PRODUCT DESCRIPTION

XPERT SEAL FLEX - 500 is a two-part High flexible water proofing & protective coating, composed of best quality Portland cement, properly selected & graded aggregate, additives & acrylic emulsion polymer as a binder.

XPERT SEAL FLEX - 500 provides an effective barrier to waterborne salts and atmospheric gases. Fluid applied, XPERT SEAL FLEX - 500 provides a hard wearing, seamless, waterproof membrane for roofs and foundation protection.

XPERT SEAL FLEX - 500 react chemically after mixing to form a hardened flexible film, which bonds tenaciously to most concrete or masonry substrates. XPERT SEAL FLEX - 500 prevents instruction of water, yet allow entrapped moisture to be released.

USES

- Cast in place and precast concrete.
- Brick, block, stucco, unglazed terracotta.
- Porous stone, masonry substrates.
- Exterior or Interior
- Above or below grade applications.
- All types of structures (industrial, commercial & residential areas).
- Reface & even variations concrete surfaces.
- Waste water treatment plants.
- Protect exposed steel rebars from corrosion.
- As a waterproof coating for roofs.
- Portable water tanks.
- Basements, terraces, balconies and roof gardens.

FEATURES AND BENEFITS

- XPERT SEAL FLEX - 500 is highly resistant to standing water of wind driven rain and is intended for use on vertical and horizontal surfaces.

- Waterproof, allows water vapour to escape from the structure.
- Highly resistant to the effect so long-term weathering.
- Durable in all climatic conditions
- XPERT SEAL FLEX - 500 can be applied on 24 hours old concrete there by giving immediate protection.

PACKAGING

XPERT SEAL FLEX - 500 is available 40kg Kit (Powder 20kg + Liquid 20 Lit), 20kg Kit, (Powder 10kg + Liquid 10 Lit).

SHELF LIFE: 12 months if stored properly in original unopened packaging.

STORAGE: Store in a dry and cool place below 35°C. Protect from direct sunlight.

TECHNICAL PROPERTIES

CATEGORY	PARAMETERS
Pot life at 20°C	45 Minutes
Density	1.35 Kg / ltr
Adhesion	2 to 3 N/mm ² (ASTM D
Modulus of elasticity	19000 N/mm ² Approx.
Co-efficient of Thermal Expansion	13.10-6 Approx.
Hardness Shore A	>83 (ASTM S 2240-91)
Flexural Strength	190 N/mm ² (According to EN 196-1) 28 days
Tensile Strength	4 N/mm ² (According to DIN 53455) 114 days
Elongation at break	450 % (ASTM D 412-92) 28 days store in dry and cool place below 35°C.

Consumption / Coverage: 1.1Kg - 2.2Kg/m².



INSTRUCITON FOR USE

Surface preparation: As with all coating systems, surface preparation is of prime importance. Remove all grease, oil, dust, residual curing compound, mould release agent or other contaminant that could impair adhesion. Laitance should preferably be removed by light sweep blasting or hydro-jetting. Mechanical wire brushing may be appropriate for small areas. Spalled concrete should be cut back to sound concrete and made good with a suitable cementitious repair mortar such as **XPERT REPAIR MORTAR**. Conventional concrete curing compounds should be removed before application. The exception to this is when **XPERT CURE W2** has been used. Roofing tiles should be firmly bedded and grouted before application.

Chloride Ion diffusivity

XPERT SEAL FLEX - 500 provides an effective barrier to waterborne salts such as chlorides and sulphates. independent assessment has shown that even after 12 months constant immersion the chloride ion diffusion co-efficient could not be measured for XPERT SEAL FLEX - 500.

Chemical resistance

XPERT SEAL FLEX - 500 has outstanding wear and weather resistance and good resistance to sodium hydroxide, calcium chloride, de-icing salts. XPERT SEAL FLEX - 500 coated surfaces exhibit good resistance to mild acids.

Anti-carbonation coating

XPERT SEAL FLEX - 500 is an extremely effective barrier to atmospheric acidic gases which cause carbonation in concrete structures. XPERT SEAL FLEX - 500 at an applied rate of 1.8 kg/m² gives an equivalent air layer thickness for carbon dioxide diffusion (R) of 92 m. The accepted minimum value for R is 50 m.

MIXING: XPERT SEAL FLEX - 500 - 500 is supplied in premeasured units and should be mixed on site utilising clean containers. Slowly add the powder to the liquid and mix, using a slow speed drill fitted with a suitable paddle. MIX AND USE. Do not mix more material than can be used in 45 minutes. NOTE: Although XPERT SEAL FLEX - 500 - 500 is supplied in premeasured packs, part packs can be used by mixing 3 volumes of powder to 1 volume of liquid. Mix thoroughly and keep mixed during application. DO NOT RE-TEMPER WITH WATER.

Power Mixing: Blend the powder into the mixing liquid. Use a suitable mixing paddle in a slow speed drill (400-600rpm). Let the mix stand for 10 minutes to allow full saturation to take place.

Hand Mixing: Add the liquid to the powder whilst stirring with a trowel or paddle.

Consistency: The material should be mixed to a thick, creamy, lump-free consistency that will just support the weight of the stiff brush. Mixed material must be used within 45 minutes. Do not re-temper the mix.

APPLICATION

Do not apply to dry concrete

Saturate concrete surfaces with clean water whilst still visibly damp, but free of standing water, apply, using a short, stiff bristle brush or roller. Trowel application can be undertaken as necessary. For heavy 6-10 mm depressions, honeycombs etc. use less gauging liquid and mix to the desired consistency. Where more than one coat is found necessary to achieve the desired thickness, apply the second or subsequent coats after the previous coat has dried. It is recommended, for general resurfacing, that each coat should be a minimum of 1 mm thick. Spray application is recommended for large areas, details of suitable equipment can be provided by XPERT's Technical Service Dept. Notes Where subsequent tiling works are to be carried out on vertical



surfaces, contact the local XPERT representative for advice.

Curing: Fog-spray all application with clean water after the initial set has taken place for as long as practicable. In cold, humid or unventilated areas, it may be necessary to leave the application for a longer curing period or to introduce forced air movement.

WARRANTY

This product is warranted to be free of defects in material and workmanship, and conform to XPERT Construction Chemicals ("XPERT") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose.

Satisfactory results depend upon many factors beyond XPERT's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product.

- XPERT shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product.
- XPERT's sole responsibility shall be to replace that portion of the product, which proves to be defective.
- Any warranty claim must be made within six (6) months from the date of the claimed breach.
- This limited warranty applies only if the product was properly installed

and used according to all instructions.

- This limited warranty applies only if the was properly stored prior to use.