4. Water Proof Coating





# 4.02 XPERT Seal X1 Elastomeric Cementitious (Waterproof Coating)

## PRODUCT DESCRIPTION

XPERT Seal X1 waterproof coating is a two-component waterproof system, consisting of a cementitious powder and a specially formulated acrylic polymer solution. When XPERT Seal X1 powder mixed with XPERT Seal X1 solution to a lump-free consistency it provides a waterproof coating that is easily applied by brush or roller to concrete and masonry above and below ground level.

## **USES**

- Tanking of basements
- · Water reservoirs
- Tunnels
- · Swimming pools
- · Lift pits
- Concrete pipes
- · Fish ponds, tanks etc.
- · Shower walls and floors prior to tiling

# **FEATURES AND BENIFITS**

- · Resists positive water pressure.
- Labor saving-simple & rapid application
- Water vapor permeable
- · Allows substrate to dry out
- · Can be applied to damp substrates
- Can be applied by brush or spray
- · Bonds with concrete and masonry, becoming an integral part of the substrate thereby overcoming hydrostatic pressure
- · Non-toxic, suitable for contact with potable water
- Solvent-free

## **PACKAGING**

XPERT Seal X1 is available in 16 kg double pack, 11kg XPERT Seal X1 powder and a pack of 5kg/Lit bottle solution.

# **APPLICATION PROCEDURE**

Surfaces to be treated must be completely clean, structurally sound and mechanically keyed. All surface coatings, defective renders, foreign matter, formwork treatments and other contaminants that may affect the bond adversely should be removed.

## **MIXING**

XPERT Seal X1 is supplied in pre measured units and should be mixed on site utilizing clean containers.

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 at 200C. Do not re-temper the mix.

#### **TECHNICAL DATA**

XPERT Seal X1 meets or exceeds the requirements of:

CATEGORY	PARAMETER S
Pot life at 20°C	1 hour
Pot life at 40°C	30 minutes
Wet density	1800 kg/m <sup>3</sup>
Compressive strength (28 days)	55.0 N/mm <sup>2</sup>
Tensile strength (28 days)	3.7 N/mm <sup>2</sup>
Flexural strength (28 days)	7.6 N/mm <sup>2</sup>
Adhesive strength (28 days)	2.5 N/mm <sup>2</sup>
Water vapor permeability	86 -120
Maximum particle size	0.8 mm
Resistance to negative pressure	4 bar

Colors: XPERT Seal X1 is available in grey & white.

#### **CLEANING**

Mixing and application equipment should be cleaned immediately with clean water.

## **APPLICATION**

Always apply to a pre-dampened surface using a stiff-fibred brush. High suction substrates will require more dampening than dense substrates.

First Coat: Apply a first coat of XPERT Seal X1 at a minimum rate of 1.5 kg.m2. This coat should be brushed well into the surface. Care should be taken not to spread the material too thinly. Finish in one direction only for a neat appearance. If the brush begins to drag during application, dampen the surface again. Allow at least an overnight cure before applying a second coat. Apply the second coat when the first coat is sound enough to receive it without damage.

Second Coat: Apply the second coat at a minimum rate of 1kg/m2. This can be applied by brush, broom or spray. If their condensation on the wall, remove the excess moisture with a sponge. If the wall is too dry, dampen it with a sponge or fog-spray. The second coat may be a different color to aid proper coverage, for example, white on grey. If the second coat is to be the final finish, it may be textured with a brush or sponge floated to give a uniform surface if plaster or render is to be applied then finish the XPERT Seal X1 with horizontal brush strikes to give more grip. In most situations, the plaster or render can be applied the next day. If plastering is likely to be delayed for some time, the XPERT Seal X1 should be sand dashed immediately after application to aid adhesion. Never use a gypsum-based plaster or low permeable paint to cover XPERT Seal X1 in a tanking application.

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.

## COVERAGE

Coverage is influenced by the roughness of substrate. The following may be used as a guide.

- 1st Coat 8.0-10.0 m2/16kg pack
- 2nd Coat 10.0 m2/pack

On rough surfaces, the quantities required may increase by up to 50%.

# **STORAGE**

All materials should be stored under cover, clear of the ground and stacked not more than 6 bags high. Protect the materials from all sources of moisture and

# SHELF LIFE

Rotate stock in order not to exceed the shelf life of 12 months.

