

# Durashield 820

Optima Coatings Durashield 820 is a highly elastic, crack bridging and UV stable waterproofing and protective coating. It is a blend of cement, graded silica sands and a synthetic polymer dispersion supplied in an easy to mix 24 Kg kit.

**Colours:** Concrete Grey

#### PRODUCT USES

- Under tile waterproofing on balconies, bathrooms and shower cubicles
- Parapet walls, flower boxes, water features and ponds
- Waterproofing and corrosion protection of: beams and columns, concrete ceilings and walls, bridges, silos and concrete towers.
- Most civil structures.
- Farm dams and reservoirs.

#### ADVANTAGES

- Crack bridging capability up to 2mm
- High flexibility and long term durability
- Resistant to carbonation and ingress of chloride ions
- Protects reinforced concrete against corrosion
- 100% waterproof but permeable to water vapour
- Excellent adhesion to most substrates
- Weather and UV stable
- Safe for food contact and for use in potable water storage vessels

#### COVERAGE AND FINISHES

- 1.5 - 2kg/m<sup>2</sup>/mm film thickness. Applied in a 2 coat application. Resulting in a dry film thickness of 2mm for two coats.
- 1 x 24 kg kit will cover approximately 12-16m<sup>2</sup> in one coat and 6-8m<sup>2</sup> in the specified two coat 2mm thick application.

#### SURFACE PREPARATION

- A clean and sound structure is required, remove all oil stains and surface contaminants.
- It may be necessary to high pressure clean with water and detergent at 120 Bar and then rinse.
- The substrate must be dampened prior to application, leave no standing water. Do not dampen between coats, remove any condensation water with a clean cloth.
- No additional priming is required on sound cement based substrates.

## APPLICATION

- Pour most of the liquid component into a suitable sized mixing container.
- Slowly add all of the powder whilst stirring with an electric paddle mixer.
- Mix until a homogeneous slurry is obtained. The balance of the liquid can then be added to adjust the consistency of the final product.
- To obtain a more fluid consistency add water to a maximum of 1L per mix.
- Allow to stand for approximately 5 minutes before applying.
- Apply with a painter's block brush or a mohair roller.
- Apply 2 coats of Optima Coatings Durashield 820, waiting for the first coat to set-up before applying the second. A normal drying period of between 1 to 2 hours is suitable. It may be left for longer periods provided that no contamination of the first coat happens.
- Each coat should be applied at a rate of 1,5 Kg/m<sup>2</sup> minimum.
- Apply the first coat in a vertical motion and the second horizontally in order to effectively eliminate the possibility of pinholes.
- The total thickness of the coating should not exceed 2mm DFT.
- Durashield 820 must be used within 45 – 60 minutes of preparation.
- When coating substrates that show evidence of micro-cracking or which are likely to be subjected to dimensional changes, it is advisable to reinforce the first coat of Durashield 820 with a product soaked open cell scrim cloth, then apply the second coat as above.
- High traffic areas should be protected against abrasion.
- Durashield 820 is suitable for over-tiling, but a prime coat of a bonding liquid is recommended prior to tiling.
- Substrate temperature range for application should be between 5°C and 35°C.

## CLEANING

- Clean tools with water immediately after use.

## IMPORTANT

- Water tanks and ponds should be thoroughly rinsed after the 7 day curing period before filling.

## SAFETY PRECAUTIONS

- Contains flammable solvents.
- Optima Coatings Durashield 820 powder is irritating to the eyes, respiratory system and skin. Avoid inhalation of dust and wear suitable respiratory protective equipment. The product is not classified as dangerous. Durashield 820 when mixed becomes highly alkaline therefore suitable protective measures in terms of gloves, clothing and eye protection must be worn. For both components and mixed material avoid contact with skin and eyes. Wash affected areas with copious amounts of water after contact. Consult our MSDS for complete health and safety information.
- Keep away from children.
- Not for internal consumption or inhalation.

## TECHNICAL DATA

Pack sizes	24 kg Kit
Coverage	1,5 – 2 Kg/m <sup>2</sup> /mm film thickness, DFT of 1mm per coat. 2 Coats required
Curing time	Touch dry in 30 – 45 minutes at 25°C, full cure in 7 days
Colour	Concrete grey
Toxicity	Non-toxic when mixed and fully cured
Tensile Adhesion (EN 14891:2007)	1,68 MPa pull off strength
Hydrostatic Positive Pressure Result (EN 14891:2007)	No water penetration at 1,5 Bar
Water pressure resistance	Negative : 1,2 Bar
Shelf life	12 months from date of manufacture when stored under dry conditions

Technical details above are provided in good faith. We are an ISO 9001: 2008 registered company and our products are manufactured to the highest standards using raw materials of superior quality. Consequently we believe in the quality of our products and will willingly replace any product in the unlikely event of a quality related performance failure. Whilst we are confident in guaranteeing the quality of our products, we cannot however accept any liability for performance failure due to the incorrect application of our products. Correct application is critical to the successful performance of our products and as this process falls outside of our control we are unable to cover the application under our product performance warranty. Where there are doubts, it is recommended that the user conduct their own suitability tests before use. To retain sheen and colour consistency of your paint, always make sure that the batch numbers are the same on all paint containers that you purchase.

DISTRIBUTED BY: OPTIMA COATINGS (PTY) LTD

Updated: March 2014 (this supercedes all previous publications)