Optima COATINGS

DATA SHEET

JOINT SEALANTS, GROUTING & BONDING

Duraflow 600 PS

Optima CoatingsDuraflow 600 PS is an epoxy modified cementitious mortar that can be used as an economical epoxy patching and surfacing compound that exhibits excellent bond strength to concrete and other masonry surfaces. It is ideally suited for patching spalled concrete and masonry wall surfacing to accept subsequent topcoats. Duraflow 600 PS repairs damaged concrete, fills large cracks, and can be used as a coving and sloping material for floor-wall transitions.

Colours: Grey

PRODUCT USES

- Epoxy modification improves chemical resistance for wastewater environment
- Low odour
- Excellent film strength, abrasion, and impact resistance
- Structural filling of holes and cavities in concrete.
- Usually self-priming when using on concrete or masonry substrates
- Is castable, making it suitable for restoring pump foundations
- Easily topcoated to provide additional chemical resistance or appearance
- Also used as a primer without aggregate
- Equipment where chemical and acid spillage occurs

ADVANTAGES

- High tensileand compressive strength.
- High resistance to loads and chemical attack.
- Non-shrink and tolerant of damp surfaces.
- Excellent patching and skimming characteristics.
- Rapid installation and strength gain.
- Excellent adhesion to steel and concrete.
- Excellent resistance to the following common corrosive chemicals:
    - Dilute and concentrated alkalis
    - Most dilute acids
    - Oil and petrol
    - Ammonia
    - Formaldehyde
    - Saline solutions
    - Mineral oil, vegetable and animal fats

COVERAGE

Optima Coatings Duraflow 600 PS is suitable for application thicknesses in a range of up to 25mm in vertical and horizontal applications. Usually applied in vertical applications at 6mm – 12mm thicknesses. However for greater thicknesses in the 25mm to 50mm range contact Optima Coatings for assistance. If a primer is required apply only Part A and B Duraflow 600 PS at 3-4m2 per litre in one coat.

SURFACE PREPARATION

- The quality of surface preparation has a direct effect on the performance and durability of Duraflow 600 PS.
- Concrete surfaces should be sound, dimensionally stable, clean, and free from laitance, paint, oil, grease, mould, release agents and residual curing compounds.Use Optima Degreaser to degrease surfaces or if required other adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
- Surfaces must be clean and dry.

- Concrete shall be designed, placed, cured, and prepared as per the relevant ISO specification. Abrade to remove all laitance, loose concrete, etc. and to create surface profile inaccordance with the appropriate ISO specification.A rough surface is preferable.
- If formwork is used, wrap inpolythene to ensure a clean release.

APPLICATION

- Mixing:Do not split packs or alter the ratio of resin components in any way. Mix the base component with a slow speed drill and paddle at under 300 RPM for 1 minute to ensure disbursement of material. Add the contents of the reactor container to the base component in a suitable mixing vessel and mix for 2 minutes ensuring a flowing, pourable lump free consistency is achieved. (You can use this two part mix as a primer at a spreading rate of 3-4m2 per litre in a single coat application.)
- Mixing: Add the dry aggregate/cement mixture of Part C and continue mixing until a flowing, pourable lump free consistency is achieved. Apply product at a thickness of 6mm -12mm. If a greater thickness is required from 25mm – 50mm then contact Optima Coatings for further information.
- Don't mix for too long as this can entrain air.
- Application of product:Allow to stand free for 2-3 minutes, beforeapplying product.
  Please note that job site conditions may require modifications to these guidelines to achieve the desired results.
- Duraflow 600 PS may be applied using conventional concrete placement and finishing tools. Mixingshould be done by a horizontal blade mortar mixer or JB blender
- Condition Material Surface Ambient Humidity
- Minimum 10°C 10°C10°C 0%
- Maximum 32°C 52°C 43°C 80%
- This product simply requires the substrate temperature to be above the dew point. Special application techniques may be required above or below normal application conditions. Note: When conditions such as excessive wind and high ambient temperatures exist, cover the area with polyethylene sheeting.

CLEANING

- Clean all equipment immediately after use with Optima Brush Thinners for epoxy products.
- Any excess cured material will have to be mechanically removed.

SAFETY PRECAUTIONS

- As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs.
- Treat splashes to eyes and skin immediately.
- If accidentally ingested, seek medical attention.
- Reseal containers after use.
- Use in well ventilated areas and avoid inhalation.

TECHNICAL DATA

Pack size	12 litrekits
Number of Components	3
Colour	Grey
Product Consistency	Flowable Liquid
Volume Solids	100%
Theoretical Coverage	1m²per 12 litre kit at a 12mm thickness
Pot life/working time	
At 25°C –	45 - 60 min
At 40°C –	15 - 30 min
Flexural Strength @25°C	7 days – 80 N/mm2
Tensile Strength @25°C	7 days – 27 N/mm2
Density	2110 kg/m3
Application Temperature	10°C - 32°C
Curing Schedule @ a Surface Temp of 24°C	
Set Time	12 Hours
Light Traffic	24 Hours
Heavy Traffic	48 Hours
Final Cure	28 Days

These times are based on an application thickness of 12mm at 24°C. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. Duringhigh humidity conditions, it is recommended that the application be done while temperatures are increasing.When using Duraflow 600 PS as an underlayment for epoxy, epoxy-novolac, or polyurethane coatings, it will be necessary to allowtheDuraflow 600 PS to cure a minimum of 24 hours for every 50mm of thickness. The maximum recoat time without surfacepreparation is 7 days. Always take precautions to prohibit the

surface from becoming contaminated prior to application oftopcoating; it will be necessary to detergent wash and abrasive blast or sand the surface if it has been contaminated.

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.

Updated: March 2013 (this supercedes all previous publications)