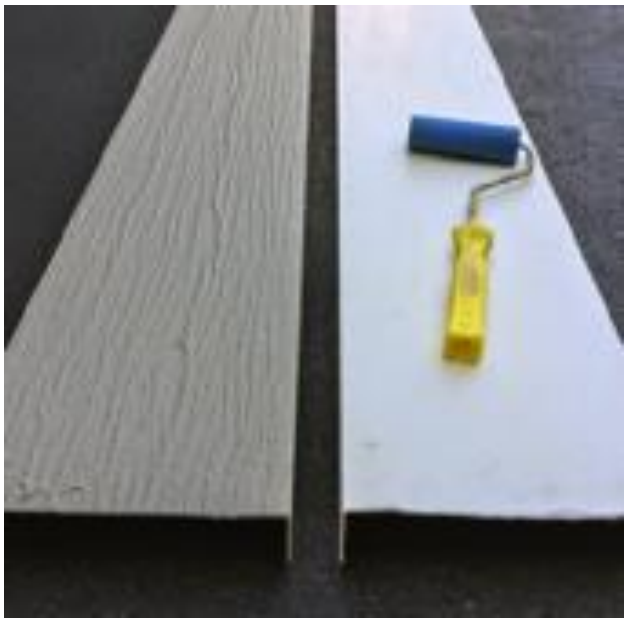
HYDRO™ SURFACE-S/F

Multi-Surface Cementitious Protective Coating Solution with Additional Benefits



SURFACE-S/F

This fast and easy ONE STEP cementitious polymer surface render -membrane has been created to improve surface protection, which adds significant value to your property and products.

As ***SURFACE-S/F*** protective coating solutions have exceptional adhesive properties they provide a very simple user friendly cost effective way to protect your surfaces for years to come.

SURFACE-S/F is the ultimate product for repairs on existing structures and in new construction where a render coating is required on a very smooth substrate such as metal, plastics, PVC etc. Surface can be used as an Easy Bond agent on PVC wall systems to allow maximum adhesion of render products or replace the render.

Surfaces to Apply

SURFACE-S/F provides coating solutions for the Building, Container and Marine Industry. Our product can be applied indoor and outdoor, on roofs, walls, floors.

Due to its multi-surface application possibility, ***SURFACE-S/F*** can be used on concrete, FRC, metal, wood, PVC and many other surfaces. Our product can be applied over rusty but cleaned surface as well. No costly sand blasting required.

Product Description

SURFACE-S/F consists of a blend of cement and polymers. A coating with strong adhesive properties that is very simple to use, cost effective and protecting your surfaces.

Our cement/polymer membrane guarantees long-term protection for your building/product and additional benefits.

Our newly formulated product eliminates the need for complex, time consuming applications and costly maintenance.

Benefits

SURFACE-S/F correct application will reduce cost and time by drying in just 30-60 minutes depending on substrate and ambient conditions, ready for the next coat or work step. Our durable concrete/polymer based membrane has many practical applications and properties:

- ✓ Easy to apply
- ✓ Cost effective
- ✓ Up to 15 years life expectancy,
- ✓ 7 years warranty
  (depending on application area and usage as defined in 'applications')
- ✓ Water Vapor Transmission
- ✓ Anti-slip
  marinas, public walk-ways, parking areas, pool areas, restaurants & bars, hospitals
- ✓ Reflects Heat/Cold
  reduces energy consumption for heating/cooling
- ✓ Minimises mold
  additional building protection
- ✓ Reduces Noise
  on roofs, building site container, walk- and park-ways
- ✓ Hardens existing surface
  additional building protection
- ✓ Ductile up to 15 degrees
- ✓ Wind& hail proof
  reduces maintenance cost

Application and Usage

Our line of protective coating will harden, protect and increase years of life to surfaces such as:

- ✓ Concrete / FRC / Stone / Bricks
- ✓ Metal / Steel / PVC
- ✓ Gypsum Board
- ✓ Wood
- ✓ Walk-, Driveways/ Parking areas.

Test Reports

Tests have been conducted by official and notified bodies, based on Australian test standards.

Test Results

Our cement/polymer membrane provides long-term protection. The results demonstrate why ***SURFACE-S/F*** is the choice for a strong coating solutions.

Content & Colors

SURFACE-S/F can be colored during the mixing process or after the application is dry. A corresponding Know-how must be present. A shiny or glossy finish can also be achieved by using a final concrete sealer. Do not use Oxide to colour mix. Consult Flux Design Australia Pty Ltd before application.

General Application

Our product can be applied manually or mechanically. Manually use a roller, brush or broom. For larger surfaces, utilize a texture sprayer along with a compressor. Surfaces can be textured with a texture rollers, sponge and application techniques.

Mix with an electric drill at 400-600 rpm for 3-5 minutes to achieve a homogeneous and lump free mix. We recommend using two layers whereas the first one could be a thinner one. Total thickness should be between 3mm – 5mm. If required, a concrete sealer can be used after the ***SURFACE-S/F*** application is dry. Thoroughly mix the product before use according to the mixing instructions. We recommend remixing the product every 3 - 5 min for e.g. 20 seconds to prevent material settings in the pail. Mixing with H2O to product is 0.25-0.30:1. A 20kg bag has a coverage of approx. 12-15sqm (one coat); depending on the surface conditions or needs. Always test the product on your substrate of choice before final application. Any adhesion of 3rd party products (stones, cladding, etc.) directly to **SURFACE-S/F** needs to be covered fully by adhesive and should not exceed 20kg or has to be mechanically anchored to the substrate.

Drying Time

Pot life 20-30 minutes. The drying time between two ***SURFACE –S/F*** layers is 30 – 60 minutes depending on the environment. On very dense surfaces such as steel and PVC the drying time can be much longer. Allow 7 days drying on PVC before final coating/render. Always try first on a sample surface. Curing is normally achieved in 24-72 hours. depending on conditions. When using ***SURFACE-S/F*** *as a bond agent please observe a 7 days drying time to maximize the performance and observe the manufacture's recommendation.*

Surface Preparation

- ✓ Ensure that the surface is clean, rinsed and dry prior to applying ***SURFACE-S/F***.
- ✓ The surface must be free of debris, curing compound, sealer, dust, dirt, grease, damaged paint and other contaminants prior to applying membrane.
- ✓ If required, utilize a pressure washer to clean the surface. Repair damaged e.g. concrete area such cracks and holes if necessary with an adequate repair material.
- ✓ Surface must be dry when applying ***SURFACE-S/F***.
- ✓ Joints between e.g. wood should be sealed with a corresponding flexible sealer. (**only** acrylic sealers)
- ✓ ***SURFACE-S/F*** can be applied over rusty surfaces when surface is cleaned properly and loose rust is removed and sanded down. Remove any loose items before using the material. This can be achieved by pressure washing or mechanically with a grinder.

Movement joints

All expansion and movement joints should be sealed with a corresponding flexible acrylic joint sealant prior to applying ***SURFACE-S/F.***

Cracks

All shrinkage and non-moving structural cracks having a width equal to or less than 1 mm will be bridged by applying ***SURFACE-S/F*** directly over the crack.

Safety Precautions

SURFACE-S/F Avoid contact with skin and eyes and avoid breathing vapor or spray mist. Wear eye protection and protective gloves when mixing and using. Precautions similar to the usage of cement should be observed.

First Aid

If poisoning occurs, contact a doctor or the Poisons Information Centre. If swallowed, do not induce vomiting. Give a glass of water. If a skin contact occurs, wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and consult a doctor.

SURFACE Coating Solutions - Product Information Sheet

Description:	• ***SURFACE*** is a specially blended cement/polymer based, designed to be applied over concrete, metal, wood, stone and other surfaces. • ***SURFACE*** protective coating is ecological, economical anti slip, reflects heat, wind and hail proof, U.V. resistant, resists mold and can be colored differently. • **Storage:** in dry conditions, do not allow to freeze.
Surface Preparation: **Mixing:**	• Ensure that the surface is clean, rinsed and dry prior to applying ***SURFACE.*** • The surface must be free of debris, dust, dirt, grease, rust, damaged paint and other contaminants prior to applying membrane. • If required, utilize a pressure washer or grinder to clean the surface. • ***SURFACE*** can be applied over rust. Remove any loose rust properly prior to applying ***SURFACE***. This can be achieved by pressure washing and or mechanically such as a grinder. • 5.8-6.3 liter H2O should give a uniformed mix for the usage with a roller or Sprayer. Mix with electrical drill at 400-600 rpm. • Gradually add powder (20 kg bag) while blending until desired consistency is achieved. • Mix materials with a drill thoroughly for 3-5 minutes. • Pot Life: 20 - 30 minutes ☛ Note that this standard kit (20 kg mix) is proportioned for manual applications e.g. roller. When applying mechanically (texture sprayer) use approx. 10% less Liquid for best results. This information is to be understood as a guideline and depends on the ambient conditions. Test first on same desired surface before final application.
Application:	• Can be applied mechanically or manually. ☛ Mechanical application with an appropriate texture sprayer such as a Graco GTX2000 model or Wagner Pro. ☛ Manually with a e.g. roller, brush, broom. • For optimum performance, ***SURFACE-S*** should be applied between 3mm and 5mm. • This product should be applied between 10° C and 30° C. ***DO NOT APPLY IN RAINY CONDITIONS.*** • Once dry, the product can be sealed with (colored/clear) cement protective sealer s.a HYDRO HC-TDC, if needed.

SURFACE Coating Solutions - Technical Data Table

Technical Data	Test Standards	Specs @ 23ºC (73ºF) and 50% relative humidity
Physical state per kit		Powder bag
Powder bag H2O	Add mix to the water	20.kg 5.8-6.3 Liter
Color (powder)	Can change due to the nature of cement	GREY
Shelf Life	do not allow to freeze	12 months, store in dry conditions,
ADDITIONAL INFORMATION IS LISTED IN THE SAFETY DATA SHEET		

SURFACE – mixed state		
Max aggregate size with two coats Density		Approx. 3-4 mm Up to 1.65 kg/L (122 lbs/pi^3)
PH Application temperature range		10-11 Between 10º C to 30º C
Thickness per lift Working time		Approx. 0.8-1.5mm 20 – 30 min
Curing Approximate coverage per Kit (surface dependent (rough or smooth)		24-72 hrs depending on conditions Up to 15 m^{2,} depending on surface conditions and intended use (1 coat)

SURFACE Test results		
not ignited in accordance	AS/NZS 1530.3	INDEX VALUES
Testing hardened concrete: Depth of water penetration under pressure	EN 12390-8	No water observed in the concrete
Adhesion to concrete after 28 days curing	AS/NZS 1580.408.5:1994	up to 5.93 MPa,
Adhesion to metal (cold rolled steel) after 28 days curing	AS/NZS 1580.408.5:1994	up to 5.37 MPa
Adhesion to wood after 14 days curing Australian Standards on Hardwood	AS/NZS 1580.408.5:1994	Up to 1 MPa BEFORE WOOD breaks

1MPa = 1N/mm = 10 Bar

All HYDRO™ cenetitious mixed products are produced with “Green Binder”, CO2 reduced by 85% (compared to equivalent cement) and have been reduced in Chromium VI content.

LEGAL DISCLAIMER:

Notice to reader

While the Information provided in this TDS is believed to provide a useful summary of the hazards of this product as it is commonly used, the safety data sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with this product to produce cementitious products or similar. Users should review other relevant material safety data sheets before working with this product or its mixed state.

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