



## Technical Data Sheet (TDS)

# **SURFACE**

**HYDRO™ SurfaceSE** is a one-component eco-cementitious polymer surface render/membrane. Once mixed with water, it provides a high-performance flexible render and key coat bonding bridge for application to NON-POROUS substrates.

### Uses

To provide a cementitious key coat bonding bridge on Permanent Formwork as in PVC type walls; REDIWALL, DINCEL, etc. as well as any non-porous surface such as metal Colorbond. An excellent base for application of render, paints, tiles and stonework or as a cost effective way to protect your surfaces for years to come

### Advantages

- Provides a base coating suitable for substrates subject to Thermal Movements.
- Environmentally friendly and suitable for application on poorly ventilated areas.
- Acts as an anti-fracture membrane between the substrate and other finishing coats.
- Does not require scuffing or sandblasting.
- **HYDRO™ Surface** products are also produced with "Green Binder" 85% reduced CO2 (compared to equivalent cement) = **HYDRO™SurfaceSE**.

### Application Instructions

Surface preparation: The surface to be coated must be sound, clean and free from all traces of paint, dust, grease, efflorescence, loose particles, gypsum, plaster and mould-release compounds. Holes, voids etc should be filled and prepared for over-coating prior to the application (HYDRO™ – RCN repair grout).

Apply HYDRO™-Surface by Sprayer (Wagner Pro 1030) Texture, Foam or 10 NAP roller or broom/brush spreading a homogeneous and continuous coating of around 1-2 mm per uptake. For large areas, HYDRO™-Surface can also be sprayed. On fissures, concrete joints, corners and cracks, once repaired, apply a first coat of HYDRO™-Surface @ 1.2-1.6 kg/m<sup>2</sup> and while the product is still fresh, place a mesh 50-200mm if needed. Depending on the environment, the drying time between two HYDRO™ Surface layers is 30-60 minutes. On very dense surfaces such as steel or PVC the drying time can be much longer. Always test first on a sample surface.

### Mixing

A 20kg bag of HYDRO™-SurfaceSE requires only 4-5 litres of water depending on application temperature and substrate conditions. Pour the required amount of water into a clean container, slowly add HYDRO™-Surface mixing by slow speed electric drill (400-600rpm) fitted with disc mixer for about 3-5 minutes until achieving lump-free and homogeneous mix. Allow resting for 2-3 minutes to fully wet out the powder, and then mix again briefly, but do not add more water. Do not mix product that cannot be applied within 20-30 minutes.



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### Curing

The curing time for putting into service is a minimum of 3 days depending on the environment; to maximise the performance a 7-day curing time would be advisable; at 20C and 50% relative humidity.

### Loading

Do not glue any heavy tiles, stones, cladding etc. to the surface exceeding 20kg/m<sup>2</sup>. Any glue needs proper application (do not spot glue) use fasteners embedded into the substrate.

### Cleaning

All tools must be cleaned with water after use. Once it cures HYDRO™-Surface can only be removed by mechanical means.

### Storage

Twelve months in its original unopened packaging, in a dry and covered place protected from humidity, frost and direct sunlight, at a temperature above 5C.

### Important cautions

Do not add cement, admixtures, sand or any other compound. In case of doubts please contact the technical service of **HYDRO™-Surface**

### Safety and Health

**HYDRO™-Surface** is an abrasive cementitious compound. Protective rubber gloves and goggles must be used during application. In case of eye contact, rinse thoroughly with clean water, but do not rub. In case of skin contact, wash affected areas with soap and water. If irritation continues, seek medical attention. Please observe the standards for handling cement products as per Australian work-safe rules.

### Product characteristics

Drying time between coats at 20C/50% humidity - 6hrs; curing time - 3 days / water immersion - 7 days.  
Mechanical load – covering with gravel, renders, plasters, tiles - 24 hrs.

Crack bridging >1 mm; Adhesion @ 28 days – concrete 3+ MPa – steel 3+ MPa – PVC up to 1.6+ MPa

Consumption: 1.5-2.5 kg/m<sup>2</sup>, 8-12m<sup>2</sup>/20kg bag.

The figures are for guidance only and may vary depending on porosity, substrate conditions preliminary test on-site to ascertain the total exactly under jobsite conditions. **All HYDRO™ cementitious products have been reduced in Chromium VI content.**

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We guarantee that our product has no defective materials and is manufactured and sold subject to its standard conditions for supply of goods and services. A twelve-month warranty is given on the product shelf life. The use of our products is beyond our control. GreenTech Cement cannot accept and is not responsible for any loss or damage arising directly or indirectly from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it. The information contained herein is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of the product for a particular application.

### SURFACE Coating Solutions - Product Information Sheet

Description:	<ul style="list-style-type: none"> <li>• <b>SURFACE</b> is a specially blended cement/polymer based, designed to be applied over concrete, metal, wood, stone and other surfaces.</li> <li>• <b>SURFACE</b> protective coating is ecological, economical anti slip, reflects heat, wind and hail proof, U.V. resistant, resists mold and can be colored differently.</li> <li>• Storage: in dry conditions, do not allow to freeze.</li> </ul>
Surface Preparation:	<ul style="list-style-type: none"> <li>• Ensure that the surface is clean, rinsed and dry prior to applying SURFACE.</li> <li>• The surface must be free of debris, dust, dirt, grease, rust, damaged paint and other contaminants prior to applying membrane.</li> <li>• If required, utilize a pressure washer or grinder to clean the surface.</li> <li>• <b>SURFACE</b> 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.</li> </ul>
Mixing:	<ul style="list-style-type: none"> <li>• 4-5 liter (SE) H<sub>2</sub>O should give a uniform mix for usage with a roller or Sprayer. Mix with an electrical drill at 400-600 rpm.</li> <li>• Gradually add powder (20 kg bag) while blending until desired consistency is achieved.</li> <li>• Mix materials with a drill thoroughly for 3-5 minutes.</li> <li>• Pot Life: 20 - 30 minutes             <ul style="list-style-type: none"> <li>• 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.</li> </ul> </li> </ul>
Application:	<ul style="list-style-type: none"> <li>• Can be applied mechanically or manually.             <ul style="list-style-type: none"> <li>• Mechanical application with an appropriate texture sprayer such as a Wagner Pro 1030.</li> <li>• Manually with a e.g. roller, brush, broom.</li> </ul> </li> <li>• For optimum performance, <b>SURFACE-SE</b> should be applied between 3mm and 5mm.</li> <li>• This product should be applied between 10o C and 30o C. <b>DO NOT APPLY IN RAINY CONDITIONS.</b></li> <li>• Once dry, the product can be sealed with (colored/clear) cement protective sealer, if needed or painted with <b>HYDRO™TDC</b> coatings.</li> </ul>

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Technical Data	Test Standards	Specs @ 23°C (73°F) and 50% relative humidity
Physical state per kit		Powder bag and liquid container
Powder bag	Add mix to the water	20.kg
H2O	Depending on application and usage	4-5 ltr SurfaceSE
Color (powder)	Can change due to the nature of cement	GREY-Green
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		Approx. 1.2 mm
Density		1.4-1.6 kg/m <sup>2</sup>
PH		10-11
Application temperature range		Between 10° C to 30° C
Thickness per lift		Approx. 1.5-2.5 mm
Working time		20 – 30 min
Curing		24-72 hrs depending on conditions
Approximate coverage per Kit (surface dependent (rough or smooth))		Up to 10-15 m <sup>2</sup> ; depending on surface conditions and intended use (1 coat)

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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	3+ MPa,
Adhesion to metal (cold rolled steel) after 28 days curing	AS/NZS 1580.408.5:1994	3+ MPa,
Adhesion to wood after 14 days curing Australian Standards on Hardwood Adhesion on PVC 28 days	AS/NZS 1580.408.5:1994	Up to 1.5 MPa BEFORE WOOD breaks  Up to 2MPa, does not bond to rubber products

### 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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