

Deckshield Rapide Membrane

Deckshield Rapide Membrane is a 2-component, medium viscosity, urethane-modified, pre-formulated 100% solids membrane based on acrylic monomers.

Uses

Used as a waterproofing membrane in Deckshield Rapide car park deck systems and as part of joint sealing system – for joints with low dynamic movement capability. Suitable for internal and external decks and outdoor applications exposed to heavy mechanical loads and rapid temperature variations.

Environment & Health

Follow the appropriate Occupational Health and Safety guidelines applicable to the location where the application is undertaken. For more information, please refer to the safety datasheets for the individual components. Safety Data Sheet must be read and understood before use.

Features & Benefits

- Highly flexible with excellent crack-bridging characteristics even at extremely low temperatures (-20 °C and below)
- Easy to apply using a roller or a squeegee
- Fast and safe curing even at low temperatures

Packaging

The product is supplied in full units.

Deckshield Rapide Membrane	25 kg	25 ltr
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Standard Coverage

Refer to Technical Data Sheet or System Specification.

Curing Times (at 20 °C)

Min Overcoating	1 hour
Max Overcoating	< 6 hours
Foot Traffic	1 hour
Vehicular Traffic	2-3 hours
Full Chemical Cure	2-3 days
* Do not cover or wash within the first 2 hours of curing.	

Technical Information

VOC Content	26 g/L Complies with Green Building Council of Australia Green Star Design & As Built V1.2-13.1.1B Green Star Interiors V1.2-12.1.1B
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Characteristics (Liquid State)

Viscosity, 25°C (EN DIN 53019)	~150-250 mPa·s (1000 / s-1 shear rate)
Density, 23°C (ISO 1183)	~1.2 kg/l
Curing Time, 20°C (ISO 1183)	~60 min
Overcoat Time +20°C (ISO 1183)	< 6 hours
Flash Point (ISO 1516)	+ 11.5°C

Characteristics (Cured State)

Shore A Hardness (EN ISO 868)	71
Shore D Hardness (EN ISO 868)	18
Tensile Strength at +25°C (EN ISO 527)	9.25 MPa
Tensile Strength at -20°C (EN ISO 527)	20.9 MPa
Elongation at Fracture at +25°C (EN ISO 527)	493%
Elongation at Fracture at -20°C (EN ISO 527)	337%
Modulus of Elasticity at +25°C (EN ISO 527)	49.6 N/mm ²
Modulus of Elasticity at -20°C (EN ISO 527)	146 N/mm ²

Application Temperature

Ambient temperature range	0°C - +30°C
Substrate temperature range	0°C - +30°C
Ambient relative humidity	<95%

In abovementioned temperatures resin flow is optimized for best application effect and assumed material consumptions can be maintained.

During application and initial curing of product, substrate temperature needs to be at least 3 °C higher than dew point temperature.

In closed rooms a forced ventilation with at least 7-fold air exchange per hour is recommended.

Do not apply material in direct sunlight as it may prevent proper curing and cause inter-coat adhesion problems.

To assess possibility of application outside of these conditions or application temperatures below 0 °C, please consult our Technical Department.

Storage

Time	12 Months in Unopened Packs. If longer than 12 Months consult Flowcrete.
Temperature	Storage temperature between 15°C and 20°C.
Protection	Should be stored inside and protected from frost, weather, moisture, direct sunlight and contamination ingress.

Application / Pot Life

Ready-mixed product should be used within 15 minutes at a temperature of 20°C. At higher temperatures (or if left in bucket) the application time is shorter.

Decant mixed product into smaller quantities if applying small/detailed areas.

Surface Preparation

Product must be applied only on substrates prepared and primed in accordance with System Specification or System Technical Data Sheet.

Mixing

Prior to use, Deckshield Rapide Membrane must be carefully stirred to achieve an uniform distribution of paraffin contained in the product.

Add the required amount of Flowfast Catalyst Peroxan BPPLvr based on guideline in table below - to the resin and mix with slow speed drill and helical spinner, taking care not to entrain air. Additional filler should be mixed in after proper incorporation of Flowfast Catalyst Peroxan BPPLvr.

Catalyst Addition Rates

Guidelines for Flowfast Catalyst Peroxan BPPLvr Addition to Deckshield Rapide Membrane		
Temperature	Weight % Catalyst	Gram Catalyst per 25kg
+30°C	1.0%	250g
+20°C	1.5%	350g
+10°C	3.0%	600g
0°C	4.0%	1000g
<0°C	4.0%	1000g

Remark: The optimal product temperature is +15 °C – +20 °C.
 At temperatures below 0 °C, Flowfast 404 Accelerator should also be added.
 For further information contact our Technical Department.

Application Method

Please refer to appropriate Flowfast Technical Data Sheet as per required specification.

After the Flowfast Catalyst Peroxan BPPLvr has been stirred in the product is poured onto the substrate in stripes and distributed using a trowel or squeegee, exceeding the minimum application layer thickness of 1 mm to allow a continuous, unbroken resin film, which ensures full through cure. For more information refer to System Specification/Application Manual.

If Deckshield Rapide Membrane is applied on primer not scattered with quartz sand, it must be applied within 6 hours from primer initial curing to prevent inter-coat adhesion problems. When applying subsequent layers (e.g. Flowfast 215 Flexible Binder), do not exceed 6 hour overcoat time of Membrane.

Cleaning

Tools and equipment can be cleaned with Flowfast 405 Cleaner or Solvents (MEK/Acetone) immediately after application, cured remains can be removed only by mechanical means. Please refer to SDS when using solvents.

Additional Notes

1. The product has reached full chemical cure after 2-3 days at 20°C.
2. The applied colours may differ from the examples shown.
3. Tremco CPG Australia Pty Ltd [Tremco CPG] assumes no responsibility for the application of incorrect colour.
4. It is the applicators responsibility to verify accuracy of colour prior to application. Tremco CPG does not bear any responsibility or accept claims for incorrect colour after application of material.
5. Do not cover or wash within the first 2 hours of curing at 20°C.
6. This system should be installed at 3°C above the dew point.
7. Please ensure application temperature and RH limits are followed.
8. Wind or strong airflow may cause quick curing and drying of the system.
9. Ensure wind or strong airflow is eliminated during application, however adequate safety ventilation should still be followed.
10. Whilst the product is low in VOC (<140 g/L complying with Green Building Council of Australia Green Star Design & As Built V1.2-13.1.1B Green Star Interiors V1.2-12.1.1B) this product will emit a discernible odour during application.
11. In closed rooms a forced ventilation with at least 7-fold air exchange per hour is recommended. To provide for outside these conditions, please contact our Technical Service.
12. Direct heat during application of the system can cause flash curing and potential delamination. Ensure you do not apply this system to substrates with temperatures exceeding 30°C.
13. A permanent hot water loading can result in a white discoloration of the Flowfast 319 Flexible Seal sealer. Hot water causes thermal tensions, that can lead to crackle cracks. Therefore, where Flowfast 319 Flexible Seal is used in areas of hot water loading, always gather waste or flowing water (particularly hot water) into channels and convey it into a proper drainage system. Provide for enough gullies.
14. Tremco CPG warrants all goods to be free from defects and will replace materials proven to be defective but makes no warranty as to appearance of colour. The information and recommendations herein are believed by Tremco CPG to be accurate and reliable.