

WP-1 "Grey"

Waterbourne UV Stable Elastometric
Trafficable Waterproofing Membrane

Product Data Sheet



DESCRIPTION

WP-1 Trafficable "The Grey One" is a waterborne elastomeric waterproofing membrane with outstanding long-term UV stability.

WP-1 Trafficable is an effective anti-carbonation membrane for concrete as it exceeds the "Klopper Criterion" requirements of $S_d < 4m$ and $R > 50m$.

FEATURES & BENEFITS

- Seamless waterproofing system – liquid applied with no joints or laps, not allowing ingress of water or contaminants
- Elastomeric, even after weathering
- Anti-carbonation protection of concrete
- Tough - High tensile strength & hardness
- Allows substrate to breathe
- Fungal and algal resistant
- Extended life and clean appearance in high humidity environments
- Suitable for metal and steel roofing
- Fire and flame resistive
- Chemical attack resistive
- Excellent resistance to dirt pick up
- Very high adhesive strength. No primer required on most surfaces
- High build – bridges fine cracks
- Resistive to impact and light traffic damage
- Weatherproof & light-fast
- Reflective properties aid in reducing internal temperatures by up to 20°C. Aids in reduction of CO2 emissions.
- Energy & cost efficient
- Low VOC

SUITABLE FOR

- Concrete structures
- Concrete roof areas
- Internal Walls
- External walls – concrete, concrete block, brick and other masonry surfaces
- Metal & Steel Roofing

COVERAGE

12L bucket of WP-1 Trafficable will cover approximately 19m² after two (2) coats.

DRYING

1st coat minimum 4 hours at 25°C.
2nd coat minimum 24 hours at 25°C.

SHELF LIFE

In unopened original packaging for up to 12 months when stored in a cool, dry environment off the floor.

SUBSTRATE PREPARATION

- All substrates must be clean, dry, free from dust, wax, oil, grease, curing compounds, paints (inc overspray), coatings and all contaminants which may cause adhesion failure.
- If necessary, appropriate repairs should be carried out to substrate before application. Substrates showing signs of fungal or algal growth should be treated with a biocidal wash and allowed to dry.
- If substrate is cementitious, it must be cured for minimum 28 days & primed with a thinned coat of **WP-1 Trafficable** (a mix of 2 parts **WP-1 Trafficable** to 1 part of clean fresh water is recommended).
- All cracks greater than a hairline are required to be filled with ACT **MS-PU** prior to application.
- All expansion or construction joints are to be cleaned to accommodate a backing rod combined with ACT **MS-PU**.
- Prior to application of first coat, thoroughly stir **WP-1 Trafficable** & apply using roller, brush or airless spray.
- Embed **WP-1 Bandage** to the surface as required prior to the first coat drying.
- Once the first coat is dry, apply second coat of **WP-1 Trafficable** ensuring **WP-1 Bandage** is completely covered by membrane.

DRYING

Allow 1st coat to cure for minimum **4 hours** at 25°C.

2nd coat will require **24 hours** to cure.

Cooler temperatures will prolong curing times.

Ensure there is airflow in area to assist.

CLEAN UP

WP-1 Trafficable can be removed from the surface using a damp cloth while the product is wet. Tools and equipment can be scrubbed clean with warm water prior to drying.

SAFETY DIRECTIONS

ACT Australia supports best practice in material handling. Appropriate gloves, dust masks, safety glasses and protective clothing should be worn. If product comes in contact with skin, wash off with soapy water. Avoid inhaling dust by wearing appropriate dust mask. If swallowed, drink plenty of drinkable water and seek medical advice. In case of contact with the eyes, rinse with clean water or eye wash solution and seek medical advice.

LIMITATIONS

- Do not apply if the temperature is below 10°C or relative humidity is above 85% or if rain is imminent.
- Do not allow ponding to occur between coats or before system is fully cured (normally 7 days after application of final coat). Water should be swept off or mopped during curing period to avoid damage.

DISCLAIMER

Any advice, recommendation, information, assistance or service provided by ACT Australia in relation to its products or their use is given in good faith, however is provided without responsibility or liability.

Customers need to undertake their own assessment to determine the suitability of a product for the particular use intended. As the performance of any product is subject to a wide variety of different surface types as well as environmental and surface-specific conditions, it is essential that a sample of the product be applied to the intended area of use to ensure it is acceptable in appearance and finish and that it performs on the specific surface.



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TECHNICAL DATA

Number of coats:	Refer to Specifications	Curing time:	7 days
Spreading rate per coat:	Refer to Specifications	Colour:	Grey
Wet film per coat:	Refer to Specifications	Thinner:	Water
Recoat (25°C.):	4-6 hours	Shelf Life:	12 months

SPECIFICATIONS

Property	Spreading Rate	WFT	DFT
Waterproofing reinforced trafficable 1st Coat: WP-1 Trafficable Whilst wet embed WP-1 Bandage 2nd Coat: WP-1 Trafficable	1.6m ² / L 1.6m ² / L	625 microns 625 microns	300 microns 40 microns 300 microns Total: 640 microns
Anti-carbonation weatherproof membrane 1st Coat: WP-1 Trafficable 2nd Coat: WP-1 Trafficable	4.8m ² / L 4.8m ² / L	210 microns 210 microns	100 microns 100 microns Total: 200 microns

PERFORMANCE DATA

Property	Test Method	Test Results
VOC	ASTM D-2369	14g/L (Low)
Tensile Strength	ASTM D412	20N or 3.66MPa
Elongation	ASTM D412	140%
Durometer Hardness	ASTM D2240	Durometer "A" Value 78.5
Direct Tension Adhesion Strength	ASTM D4541	2.0N/mm ² or 2.0 MPa
Mandrel Bend Test	AS1580.402 / ISO 1519	Pass-no cracking, faking or peeling observed
Water Vapour Transmission	ASTM E96	35.6g/m ² /24hr
Water Permeability	ASTM E96	1.47 x 10 ⁻⁷ g / Pasm ²
Moisture Vapour Diffusion Coefficient	ASTM E96	4.3 x 10 ⁻⁵ cm ² sec ⁻¹
Moisture Vapour Diffusion Resistance Coefficient		5920
Moisture Vapour Equivalent Air Layer Thickness (Sd)		1.21m
Oxygen Diffusion Coefficient	Taywood in-house test method (as nominated) (Gas Dispersion Test)	2.9 x 10 ⁻⁷ cm ² sec ⁻¹
Carbon Dioxide Diffusion Coefficient		4.9 x 10 ⁻⁷ cm ² sec ⁻¹
Diffusion Resistance Coefficient		305800
Equivalent Air Layer Thickness (R)		64m
Equivalent Thickness of Concrete (Sc)		16cm
<u>Chemical Resistance</u> 10% W/V Sodium Hydroxide 10% W/V Nitric Acid	Taywood in-house test method (as nominated)	1 Hour – Temporary effect / 3 Hours – Temporary effect 1 Hour – No Visible change / 3 Hours – No Visible change
Fire Propagation Surface Spread of Flame	B.S 476: Part 6 B.S 476: Part 7	3.3 Fire Propagation Index Class 1
<u>Resistance to Artificial Weathering</u> 1000 Hours 4000 Hours	AS.NZ 1580.483.2	Satisfactory – no defects Satisfactory – no defects
<u>Biological Resistance</u> Fungal 1 month (accelerated) Algal 6 months (accelerated)	Thor In-house Accelerated Testing	Excellent Film Fungal Protection Excellent Film Algal Protection
Abrasion Resistance	ASTM D1242	0.18mm
<u>Temperature Resistance</u> 5°C 25°C 85°C	ASTM E96	32g / m ² / 24hrs 35g / m ² / 24hrs 41g / m ² / 24hrs

