

Enviro HP1200

SPRAY APPLIED HYBRID ELASTOMER MEMBRANE

Enviro HP1200 is a two component, spray applied, solvent free, flexible, 100% solids hybrid polyurethane waterproofing membrane suitable for commercial, industrial and infrastructure applications. Enviro HP1200 is uniquely formulated to provide high elasticity, tensile and tear strength while also possessing excellent abrasion resistance.

ENVIRO HP1200 SERIES

- ④ Enviro HP1200PW – potable water version
- ④ Enviro HP1200AC – UV stable version.

FEATURES AND BENEFITS

- ④ Fast curing
- ④ Solvent free
- ④ Seamless application
- ④ Excellent durability
- ④ Elastomeric
- ④ Low VOC
- ④ Excellent abrasion resistance
- ④ Trafficable

APPLICATION SOLUTIONS

- ④ Roof tops
- ④ Podiums
- ④ Car parks
- ④ Stadiums
- ④ Cut and cover tunnels
- ④ Planter boxes
- ④ Retaining walls
- ④ Potable water storage (HP1200PW)
- ④ Swimming pools (HP1200AC)
- ④ Wet areas

CLASSIFICATIONS

HP1200: AS/NZS 4858:2004 Class III Approved
 AS4654.1:2012 Non Exposed Class III Approved
 Green Star Compliant – Design and As Built v1.2, Section 13.11

PRODUCT INFORMATION

Packaging: Available in 43kg kits.

Colour: HP1200 Green, HP1200PW Beige/Off white. HP1200AC Made to order.

Mix ratio: 23:20 (A:B by weight).

Shelf life: Enviro HP1200 can be stored in its original sealed containers for 12 months. Once opened and resealed for later use, the shelf life could vary depending on storage conditions. Always check product quality before using after prolonged periods of storage.

Storage: Enviro HP1200 should be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5°C and +35°C.



WATERPROOFING



Directions for Use

SUBSTRATE PREPARATION

All defective host substrate must be removed prior to application. Defective material includes cracked or structurally weakened surfaces and chloride contaminated and carbonated concrete. A concrete corrosion expert must be consulted for critical projects or structural applications. Host concrete must be roughened and aggregate exposed to ensure good bond. Removal of laitance is important to ensuring good bond. Shot-blasting, scarification, mechanical chipping or high-pressure water blasting may be used to achieve a recommended minimum CSP3 surface finish.

All surfaces must be free of dust, oils, and surface contaminants. This may require steam cleaning or high-pressure water blasting.

Apply a suitable polyurethane sealant (and allow to skin), to all joints, cracks etc. prior to the application of Enviro HP1200. Enviro HP1200 is suitable for use over the following substrates:

- ④ New concrete - cured for min. 28 days
under 4.5% moisture (gravimetric method)
- ④ Fibre cement sheets - walls (min. 6mm)
- ④ Renders and screeds - cured for min. 7 days
under 4.5% moisture (gravimetric method)
- ④ Compressed fibre cement (min. 15mm)
- ④ Plasterboard walls - wet area grade only (min. 10mm)
- ④ Plywood (PAA) - wet area grade only
- ④ Steel

NOTE: Mechanical abrasion of the substrate is recommended for pedestrian traffic applications. Substrate moisture content measured using gravimetric testing. As measured using Tramex CME 4 Moisture Meter.

PRIMING

Substrate condition and other requirements will dictate primer selection. Apply Enviro Epoxy B-LV or Enviro Prime P2 to suitably prepared substrate by brush, roller or squeegee as per individual products recommendations. Allow primer to fully cure before proceeding with the application of Enviro HP1200. Refer to selected primer product data sheets for further application details.

BOND BREAKING

Apply Enviro Flex FL or Enviro Flex FC to form smooth, 15mm flexible cove to all internal corners, penetrations and joints, and 15mm for external applications. Allow the sealant to skin prior to application of Enviro HP1200.

MIXING

Mixing by way of 1:1 mix ratio (by volume) in heated plural component spray equipment such as Graco E-10 or EXP-2.

APPLICATION

Enviro HP1200 must be sprayed using plural component dispensing equipment such as Graco E-10 or EXP-2. Drums of components should be pre-heated to at least 25°C prior to mixing or dispensing. Mix part B thoroughly with a mechanical power mixer before pouring into the spraying machine. Product is to be applied at temperatures no less than 0°C or no more than 35°C. Please see Coverage Rate table for further details. Minimum application requirements set forth by the NCC and relevant Australian Standards should be followed when applying Enviro systems products.

Equipment pressure: 2000psi minimum

Spray gun: #02 Spray chamber

Hose temperature: Part A 60°C, Part B 60°C

System temperature: Part A 60°C, Part B 60°C

OVERCOATING

HP1200 can be overcoated up to 3 hours after its application. If this time is exceeded, primer over cured. Prime over cured Enviro HP1200 with Enviro Prime P2 or Enviro Epoxy B-LV prior to overcoating. Enviro HP1200 is an integral component of the Enviro Trafficable Systems and can be overcoated with Enviro 900 and Enviro 950 TC. Please see respective product data sheets for further information.

CLEANING

Cured Enviro HP1200 is difficult to remove chemically. Spillages should be minimized and cleaned up immediately to limit damage. Observe all OH&S and Safety Data Sheet information pertaining to safe usage and handling of solvents.

LIMITATIONS

Product must not be applied in rain or if wet weather is imminent. Do not apply to damp or contaminated surfaces or directly over protective coatings. Product must not be used as a or UV stable coating. Use with adequate ventilation.

Product Data

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	RESULTS		
		HP1200	HP1200AC	HP1200PW
Volatile Organic Compounds (VOCs)	ASTM D3960	4g/L		
Bond Strength	ASTM C794	51.77N		
Tensile Strength	AS1145.3	8.86MPa	16MPa	15.7MPa
Elongation	AS1145.3	450%	475%	>370%
Shore A Hardness	AS1683.15.2	80 ±3	90 ±3	80 ±3
Tear Propagation Resistance	DIN53515/ISO34-1	14N/mm		12N/mm
Tear Strength (angle)	AS1683.12/ISO	43.7kN/m	71kN/m	
Adhesion to Concrete	DIN 1048	>1.0MPa		>1.0MPa
Abrasion Resistance	AS1683.21	228mg		228mg
Crack Bridging	ZTV-SIB90	2		
Dynamic Crack Bridging	ZTV-SIB	0.2mm		
Methane Permeance	ASTM D1434	<26.0cm ³ /m ² *Atm*24hrs		
Water Vapor Transmission (WVT)	ASTM E96	1.44g/m ² /day		2g/m ² /day
Water Absorption	AS3558.1	Pass		
Low Temperature Water Tightness	DIN EN 13897.2005.02	Pass		
External Membrane (nonexposed)	AS4654.1:2012	Class III		
Internal Wet Area Membrane	AS4858:2004	Class III		
Cyclic Movement	CSIRO Joint Test	Pass		
Root Resistance	AS 4654.1	Pass		
UV Accelerated Weathering Test	DIN EN 1297	No cracks or crazes (5000 hours)		
Heat Ageing	AS4654.1	Pass		

FIRE INDEX FOR HP1200

TEST METHOD	IGNITABILITY	SPREAD OF FLAME	HEAT INVOLVED	SMOKE DEVELOPED
AS/NZS 1530.3:1999	17	7	3	6

CHEMICAL TESTING FOR HP1200 AND HP1200 PW

MATERIAL	RESISTANCE	MATERIAL	RESISTANCE
Hydrochloric Acid (10%)	Great	Methylated Spirits	Good
Petrol	Good	Sodium Hydroxide (20%)	Excellent
Xylene	Good		

COVERAGE RATES

Recommendations for external applications: 1.5mm Dry Film Thickness 1.6kg/m²

Recommendations for full immersion applications (HP1200PW ONLY): 3mm Dry Film Thickness 3.2kg/m²

CURING TIME

Full cure can be achieved in 5 - 7 days. Curing rate is dependent on ambient and substrate temperatures and relative humidity. Generally, as the temperature increases, the curing time decreases.



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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this publication is based on the present state of our best knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use of application and no warranty as to accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

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NOTE: All products manufactured by Enviro systems comply with the description and properties indicated in the technical data sheet that was current at the date of manufacture.