

Enviro HP1200

Spray-applied Hybrid Elastomer Membrane

DESCRIPTION

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

CLASSIFICATION

AS/NZS 4858:2004 – Internal wet area membrane, Class III

AS 4654.1:2012 – External membrane (non-exposed), Class III

Green Star – Compliant, Design and As Built v1.2, Section 13.1.1

AREAS OF USE

SURFACES: New concrete renders and screeds, fibre cement sheet, compressed fibre cement, wet-area plasterboard, wet-area plywood (PAA), and steel.

AREAS: Rooftops, podiums, car parks, stadiums, cut-and-cover tunnels, planter boxes, retaining walls, and wet areas. For potable water storage, use Enviro HP1200 PW.

FEATURES & BENEFITS

- Fast curing
- Solvent-free, low VOC
- Seamless spray application
- Elastomeric with excellent durability
- Excellent abrasion resistance
- Root resistant
- Trafficable

PRODUCT INFORMATION

Packaging	43kg and 434kg Kits
Colour	Green / Grey (Made-To-Order)
Mix Ratio	43kg Kit: 23 : 20 (A : B) by Weight 434kg Kit: 228 : 206 (A : B) by Weight 1 : 1 (A : B) by Volume
Shelf Life	12 months in original sealed containers. Moisture sensitive – once opened and resealed, shelf life may vary.
Storage Conditions	Store in dry conditions, protected from direct sunlight, between 5°C and 35°C.

Compatible Primers	Enviro Prime P2 Enviro Epoxy B Enviro Epoxy B-LV Enviro Shield Enviro Prime 789 Enviro Epoxy B-NS
Compatible Sealants	Enviro Flex PU FL Enviro Flex PU FC
Compatible Coatings	Enviro 900 IC Enviro 950 TC Enviro HP1200 AC

PHYSICAL PROPERTIES

Property	Test Method	Test Result
VOCs	ASTM D3960	4 g/L
Bond Strength	ASTM C794	51.77 N
Tensile Strength	AS 1145.3	8.86 MPa
Elongation	AS 1145.3	450%
Shore A Hardness	AS 1683.15.2	80 ±3
Tear Propagation Resistance	DIN 53515 / ISO 34-1	14 N/mm
Tear Strength (Angle)	AS 1683.12 / ISO	43.7 kN/m
Adhesion to Concrete	DIN 1048	>1.0 MPa
Abrasion Resistance	AS 1683.21	228 mg
Methane Permeance	ASTM D1434	<26.0 cm ³ /m ² ·atm·24 h
Water Vapour Transmission	ASTM E96	1.44 g/m ² /day
Water Absorption	AS 3558.1	Pass
Low-temperature Watertightness	DIN EN 13897	Pass
Cyclic Movement	CSIRO joint test	Pass
Root Resistance	AS 4654.1	Pass
UV-accelerated Weathering	DIN EN 1297	No cracks or crazes (5000 hours)
Heat Ageing	AS 4654.1	Pass
Fire Index	AS/NZS 1530.6:1999	Ignitability 17, Spread of flame 7, Heat evolved 3, Smoke 6



Enviro HP1200

Spray-applied Hybrid Elastomer Membrane



Chemical Resistance	Rating
Hydrochloric Acid (10%)	Great
Petrol	Good
Xylene	Good
Methylated Spirits	Good
Sodium Hydroxide (20%)	Excellent

COVERAGE RATE

Application	kg/m ²	Coats	Finished DFT
External Application	1.6	–	1.5mm
Full Immersion	3.2	–	3.0mm

SUBSTRATE PREPARATION

All defective host substrate must be removed prior to application, including cracked or structurally weakened surfaces and chloride-contaminated or carbonated concrete. A concrete corrosion expert must be consulted on critical projects or structural applications.

Roughen host concrete with aggregate exposed and laitance removed, to a minimum CSP3 profile, by grinding, shot-blasting, scarification, mechanical chipping, or high-pressure water blasting. All surfaces must be free of dust, oil, and contaminants; this may require steam cleaning or high-pressure water blasting. Apply a suitable polyurethane sealant (and allow to skin) to all joints and cracks before application.

Mechanical abrasion is recommended for pedestrian traffic applications.

Enviro HP1200 is suitable for use over:

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

NOTE: Substrate moisture content measured using gravimetric testing, as measured using a Tramex CME 4 Moisture Meter.

Priming: Substrate condition will dictate primer selection. Apply a compatible primer by brush, roller, or squeegee as per the primer data sheet

and allow it to fully cure before application.

Bond breaking / fillets: Apply Enviro Flex PU FL or Enviro Flex PU FC to form a smooth, flexible cove to all internal corners, penetrations, and joints – 12mm for internal and 15mm for external applications.

APPLICATION

Mixing: Mixed at a 1:1 ratio by volume in heated plural-component spray equipment such as Graco E-10 or EXP-2. Mix Part B thoroughly with a mechanical power mixer before pouring into the machine.

Application: Spray using plural-component dispensing equipment. Pre-heat component drums to at least 25°C before dispensing into the machine. Apply at substrate temperatures between 0°C and 35°C. Follow the minimum requirements of the NCC and relevant Australian Standards.

Spray Setting	Value
Equipment Pressure	2000 psi minimum
Spray Gun	#02
Hose Temperature	Part A 60°C / Part B 60°C
System Temperature	Part A 60°C / Part B 60°C

Substrate Temp.	Light Foot Traffic	Min. Overcoat	Max. Overcoat	Full Cure
10°C	10 minutes	10 minutes	3 hours	7 days
25°C	10 minutes	10 minutes	3 hours	7 days
35°C	10 minutes	10 minutes	2 hours	5 days

Overcoating: If the overcoat window is exceeded, prime the cured Enviro HP1200 with Enviro Prime P2 before overcoating. Enviro HP1200 can be overcoated with Enviro 900 IC, Enviro 950 TC or Enviro HP1200 AC – see the relevant data sheets.

For applications or situations not covered above, contact Enviro systems technical support.

CLEANING

Cured material is difficult to remove chemically. Minimise spillages and clean up immediately with Enviro Thinner No. 1. Observe all safety information and the SDS relating to the safe use and handling of solvents.

LIMITATIONS

- Do not apply in rain or if wet weather is imminent.
- Do not apply to damp or contaminated surfaces or directly over



WATERPROOFING

Enviro HP1200

Spray-applied Hybrid Elastomer Membrane

protective coatings.

- Not for use as an exposed or UV-stable coating – overcoat with Enviro 950 TC or Enviro HP1200 AC where UV exposed.
- Use with adequate ventilation.

HEALTH & SAFETY ADVICE

When using Enviro HP1200, always provide adequate ventilation and wear appropriate personal protective equipment (PPE), including respiratory protection during spraying. Avoid contact with skin and avoid breathing vapours or spray mist. Wear protective eyewear. If inhalation effects occur, remove to fresh air. If discomfort persists, any breathing difficulties occur or if swallowed, seek medical attention. Refer to the Safety Data Sheet for full safety and handling procedures.

KEEP OUT OF REACH OF CHILDREN

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 or 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.

NOTE: Field service where provided does not constitute supervisory responsibility. Suggestions made by EnviroSystems, either verbally or in writing may be followed, modified, or rejected by the owner, engineer, or contractor since they, and not EnviroSystems, are responsible for carrying out procedures appropriate to a specific project.

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

CONTACT ENVIROSYSTEMS

General Enquiries

info@envirosystems.com.au | 1300 WATERPROOF (1300 928 377)

New South Wales – Head Office

Ground Floor, 295 Princes Hwy, St Peters NSW 2044 |
nswsales@envirosystems.com.au

Queensland

Unit 3, 28 Burnside Rd, Yatala QLD 4207 | qldsales@envirosystems.com.au

Victoria

49 Wood St, Thomastown VIC 3074 | vicsales@envirosystems.com.au

Western Australia

78 Discovery Dr, Bibra Lake WA 6163 | wasales@envirosystems.com.au

