

# Enviro Hydrostatic 1

FLEXIBLE CEMENTITIOUS WATERPROOFING MEMBRANE

**Enviro Hydrostatic 1** is a flexible polymer modified cementitious membrane based on advanced cross-linking polymer technology. The addition of water to the Hydrostatic 1 powder forms a high-quality, liquid membrane system. Hydrostatic 1 should be applied over concrete, masonry and natural stone substrates, for positive or negative pressure. The cured film provides a watertight membrane that is permeable to vapour diffusion and offers excellent freeze-thaw durability, as well as outstanding adhesion properties.

### FEATURES AND BENEFITS

- Flexible
- Low VOC content
- Bonds to damp surfaces, no primer required
- Single part, just add potable water
- Suitable for immersion and underground applications

#### **APPLICATION SOLUTIONS**

Enviro Hydrostatic 1 is suitable for commercial, industrial and residential applications in areas such as:

- Basement walls
- Cellar walls
- Fish ponds
- Water features

#### **PRODUCT INFORMATION**

- Resistant to positive pressure to 60m head
- Resistant to negative pressure to 15m head
- Resistant to salts and carbonation
- Cementitious

Swimming pools

Lift pits

Excellent vertical hold-up

Potable water containment

**Packaging:** Enviro Hydrostatic 1 is supplied in a 15kg bag ready for use. There are 64 x 15kg bags of Enviro Hydrostatic 1 per pallet. **Shelf life:** Enviro Hydrostatic 1 can be stored in its original sealed packaging for 12 months from the date of production when stored in a dry cool place.



# 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. All surfaces must be free of dust, oils, and surface contaminants. This may require steam cleaning or high-pressure water blasting. Enviro Hydrostatic 1 is suitable for use over the following substrates:

- New concrete cured for min. 28 days
- Fibre cement non-coated walls (min. 6mm)

- Compressed fibre cement (15mm)
- Natural stone including sandstone

Renders - (cured for min. 7 days)

NOTE: Do not apply Enviro Hydrostatic 1 to any concrete that has received concrete curing compounds. For further information on substrate preparation or for project specific advice, please consult Envirosystems.

#### PRIMING

No priming is required for Hydrostatic 1. Before application, make sure surfaces are thoroughly wetted but not dripping wet. This assists with the workability of the product and prevents the product drying to quickly over porous surfaces.

NOTE: For project specific advice, please consult Envirosystems. customerservice@envirosystems.com.au

#### **MIXING**

One 15kg bag of Enviro Hydrostatic 1 should be mixed with 3.7L - 4.0L of water. If mixing smaller quantities use the ratio 240ml - 270ml of water per kg of powder.

Step 1. Add 2/3 of the required water to a clean pail.

Step 2. Slowly add the powder to the water while using an electric stirrer with a paddle attachment, and mix at medium speed (approx. 400rpm) until the mixture is lump free.

Step 3. Add the balance of the required water and continue to stir until a homogeneous product is formed.

Step 4. Allow the product to settle for a few minutes before lightly re-stirring. The product will then be ready to use.

#### APPLICATION

Hydrostatic 1 can be applied using a soft or stiff fibre bristle brush, medium nap roller or spray applied. Spray equipment must be suitable for products with aggregate up to 600 micron.

Application of the first coat (in particular for negative pressure applications) is best performed using a stiff fibre bristle brush to aid penetration into surface pores.

Brush liberally and do not extend as per paint, brushing in one direction to leave a uniform coat so the surface cannot be seen. Subsequent coats can be applied by roller/spray and must be applied perpendicular (90°) to the previous coat.

Application by brush or roller must be undertaken with the maximum attention to uniformly covering the whole surface.

For positive side sealing, use the Enviro Joint Band detailing tape as the bond breaker for wall/floor and wall/wall junctions and general movement joints. Install by brushing a liberal coat of Enviro Hydrostatic 1 laying the Enviro Joint Band, rubber strip face down, into the wet coat. Brush over the top with more Enviro Hydrostatic 1 to cover and hold in place. It is important that Enviro Joint Band is bedded into a wet coat of membrane. Ensure product mix does not skin/dry before embedding Enviro Joint Band.

For negative side sealing at junctions, Enviro Joint Band can be used on wall/wall and general movement joints; Enviro Plug can be used to create a fillet at base wall/floor junctions. A grinder should be used to chase into wall/floor to a minimum depth of 20mm. Increase to 40mm for heavier flows. Mix Enviro Plug as directed and create a fillet at the junction. Enviro Hydrostatic 1 can be applied as soon as Enviro Plug has hardened and will not be disturbed by overcoating.

NOTE: Protect Hydrostatic 1 from rain for at least 24 – 48 hours after application. Application in direct sunlight or in strong winds can affect workability of the product. Temperature, humidity and surface porosity can affect drying times. Before contact with drinking water rinse membrane surface thoroughly to remove surface residues and contaminants.

For further information regarding application of Enviro Hydrostatic 1 or for project specific advice please consult Envirosystems.

# **OVERCOATING**

Enviro Hydrostatic 1 can be re-coated with itself between 1 and 3 hours depending on conditions including good air flow, 50% relative humidity and a temperature of 23°C.

Overcoating, including topping and tiling applications, can be carried out after a minimum period of 48 hours, again depending on conditions. If there is uncertainty about the conditions, allow to cure for a longer period.

An undiluted coat of Enviro Prime WB is recommended as a bonding agent over Enviro Hydrostatic 1 when screeds and renders are being directly applied over the membrane.

# Product Data

# **PHYSICAL PROPERTIES**

PROPERTY			
Adhesion to Concrete	>1.1MPa		
Elongation	85%		
Water Vapour Diffusion	1.5 (SD value)		
Water Pressure (Positive)	60m head		
Water Pressure (Negative)	15m head		
Pot Life	60 minutes		
Re-coat Time	1 - 3 hours		
Tiling and Topping Time	Min. 48 hours		
Cure Time for Exposure to Negative Water Pressure	7 days		
Cure Time for Immersion	10 days		

## **COVERAGE RATE**

ТҮРЕ	WFT/COAT	NUMBER OF COATS	FINISHED DFT (ALL COATS)
General Positive Side Waterproofing	1.0mm	2	1.5mm
Immersed and Precautionary Negative Side Waterproofing	1.35mm	2	2mm
Preventing Ingress of Water Under Pressure on the Negative Side:	1.15mm	3	2.5mm

NOTE: WFT = Wet Film Thickness. DFT = Dry Film Thickness. WFT Gauges are available from Envirosystems upon request. Maximum WFT per coat is 1.5mm.

The coverage of Enviro Hydrostatic 1 will depend upon the type of substrate and its condition.

General positive side waterproofing: 1.5mm Dry Film Thickness - 10.5m<sup>2</sup> per bag mixed

Immersed and precautionary negative side waterproofing: 2.0mm Dry Film Thickness - 8m<sup>2</sup> per bag mixed

Preventing ingress of water under pressure on the negative side: 2.5mm Dry Film Thickness - 6.4m<sup>2</sup> per bag mixed

#### CLEANING

For easy removal of Enviro Hydrostatic 1 from tools and surfaces immediately clean with water before it has cured. Once dried the product will need to be removed by mechanical means.



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#### HEALTH & SAFETY ADVICE

Enviro Hydrostatic 1 is considered a hazardous dust according to Safe Work Australia criteria. Always ensure good ventilation when applying. Wash off splashes of the material with clean water and wear an appropriate dust mask, gloves and eye protection. If irritation is experienced seek medical advice. Refer to the Safety Data Sheet for full safety and handling procedures.

NOTE: Safety Data Sheets are available upon request.

#### 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 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.

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

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.