



ENVIRO SHIELD

HYDROSTATIC BARRIER & MOISTURE TOLERANT PRIMER



PRIMERS

DESCRIPTION

Enviro Shield is a two-part, water-based epoxy that acts as a hydrostatic barrier and primer coating. Enviro Shield can be used in applications requiring a hydrostatic barrier against water ingress from the negative side. In addition, Enviro Shield can also be used as a moisture tolerant primer under a range of EnviroSystems membranes and UV stable topcoats. It is suitable for commercial, industrial, and residential applications.

FEATURES & BENEFITS

- Bonds to damp and green concrete
- Resistant to a wide range of chemicals
- High solids content
- Easy to apply
- Negative side barrier
- Rising damp control
- Low VOC content
- Water based

PRODUCT INFORMATION

Packaging	Available in 4L & 20L kits [Grey]. Kits ratio is 1:1 (A:B).
Shelf Life	Enviro Shield 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 Conditions	Enviro HP1200 shall be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +7 °C and +20 °C.

COVERAGE RATE

Type	Litres /m ²	m ² /20L kit	WFT per Coat	Number of Coats	Finished DFT (all coats)
Primer diluted, 20% water	0.32	72	320 µm	1	140 µm
Primer undiluted	0.32	60	320 µm	1	160 µm
Positive	0.32	60	320 µm	1	160 µm
Negative, up to 3m head	0.66	30	320 µm	2	320 µm
Negative, 3-25m head	1.0	20	320 µm	3	480 µm

NOTE: WFT = Wet Film Thickness. DFT = Dry Film Thickness.
WFT Gauges are available from EnviroSystems upon request.
Coverage dependent on weather and substrate conditions.

AREAS OF USE

Negative side pressure up to 25m head:

- Treatment and mitigation of rising damp
- Below grade basements & car parks
- Barrier coat for water tank membranes
- Tunnels & Lift wells
- Retaining walls

Negative side pressure up to 3m head:

- Efflorescence control
- Treatment and mitigation of rising damp

Positive side pressure:

- Barrier coat under subsequent membranes
- Window reveals

Primer:

- Self-priming barrier coat
- Internal and External Wet Areas
- Retaining Walls
- Enviro Shield can also be used to promote adhesion when a premium priming solution is required.

CURING TIME

Temperature (at 50%RH)	Handle- hrs	Min. Overcoat - hrs.	Max. Overcoat - hrs.	Full cure - days
10°C	48	24	72	7 days
15°C	24	24	48	7 days
25°C	12	12	24	7 days

Variations in temperature and humidity can affect the cure rate of the coating. The above chart should be used as a guide only to determine the approximate rate of cure. Other factors can also influence the cure rate such as substrate temperature, enclosed environments, and wind conditions.



DIRECTIONS FOR USE

SUBSTRATE PREPARATION

Surfaces must be clean, dry and free from contamination such as dust, laitance, grease, coatings and curing compounds. Remove all sharp edges including screws, nails and concrete/mortar projections. Large holes and pits should be filled with Enviro Mortar 45. A cementitious skim coat may also be required to provide an even profile. Some substrate preparations may initially require mechanical grinding to provide an adequate and clean surface profile.

Enviro Shield is suitable for use over the following substrates:

- New Concrete - Cured for min. 28 days and under 6% moisture (gravimetric method)
- Concrete blockwork- Cure for min. 28 days
- Renders and Screeds - Cured for min. 7 days under 6% moisture (gravimetric method)
- Compressed Fibre Cement (min. 15mm)
- Plasterboard walls - Wet area grade only (min. 10mm)
- Masonry & Stone surfaces

NOTE: substrate moisture content measured using gravimetric testing. As measured using Tramex CME 4 Moisture Meter.

MIXING

Add Enviro Shield Part B (grey liquid hardener) to the Enviro Shield Part A (base Thoroughly mix with a mechanical mixer at low speed (less than 400 RPM) prior to application. Mix for 5 minutes or until uniform. Allow to stand 5 minutes after mixing and then mix again for a minute. When using Enviro Shield as a primer, for increased penetration into porous materials such as blockwork, the first coat may be diluted up to 20% with water. See table below for Mixing Rates.

Dilution Rate	4L Kit	20L Kit
5%	200ml	1L
10%	400ml	2L
20%	800ml	4L

APPLICATION

Enviro Shield can be applied using brush, roller or airless & conventional spray. Only mix sufficient material for use within the pot-life of 1 hour, as mixed material will not be suitable for use beyond this period. Apply sufficient coats of Enviro Shield to achieve the appropriate minimum Dry Film Thickness (DFT). Please see Coverage Rate Table for details.

Precautions: In enclosed spaces such as tanks, basements, lift wells, where there is poor air flow and damp conditions, or where the relative humidity is greater than 85%, forced ventilation such as fans are recommended while the product is drying. Do not apply if the temperature of the air or substrate is below 10°C.

IMPORTANT: Allow each coat to sufficiently dry before proceeding to the next coat. Please see Coverage rate section for further details. Minimum application requirements set forth by the NCC and relevant Australian Standards should be followed when applying EnviroSystems products. General Maintenance Procedures and a regular inspection and maintenance plan must be adopted from the date of commissioning to identify and rectify localised point damage.

NOTE: In hot weather, avoid extremes and work in the morning or evening once substrate has cooled. Shade the work area, and keep product stored in cool conditions out of direct sunlight.

In cold weather, keep all products stored out of the cold, especially products not intended to be frozen. Warming materials to around 30 °C can help but products may react to the substrate temperature rapidly when applied. Use heated tents around work areas.

In high humidity and wet weather, do not apply when rain is imminent, check the forecasts. Use tents or protection to cover areas to be worked on. Use fans or driers and ventilation to remove moisture and lower humidity, do not directly blow onto product.

RECOAT

Enviro Shield can be recoated after allowing it to dry for at least 12 hours (temp 25°C and 50% R.H.) and up to 3 days (temp 10°C and 50% R.H.). If temperatures are lower and humidity is higher, the recoat window will be affected.

OVERCOATING

When priming, it may be prudent to broadcast Aggregate/Extender into the "wet" primer to enhance holdup of the subsequent applied topping. If curing in ideal conditions, 23°C and 50% RH, over coating can be undertaken after 8 hrs. If curing in damp, rainy or cold conditions, and with poor airflow, an extra curing time is recommended.

COMPATIBLE MEMBRANES

Enviro Shield is not suitable for use in areas subject to UV exposure unless over coated. Enviro Shield can be over coated with the following approved membranes and UV stable top coats:

- Enviro 700X, 700X SL & 700X RW
- Enviro 200P Ultra
- Enviro 500 EXT
- Enviro Clad
- HP Sprayed Elastomer Series

The over coating window (time from application) will ultimately depend on the prevailing environmental conditions. The maximum recommended overcoat window is 72 hours.

CLEANING

Enviro Shield should be removed from all tools and equipment, as soon as possible with water. Cured material can only be removed mechanically. Observe all OH&S and SDS information pertaining to safe usage and handling of solvents.

HEALTH & SAFETY ADVICE

Cured Enviro Shield films are environmentally friendly. Always provide adequate ventilation and wear appropriate Personal Protection Equipment (PPE) during use. If swallowed, DO NOT induce vomiting, have plenty of water or milk. If in eyes, flush with water for 15 minutes. Seek immediate medical advice. Wash off splashes of material on the skin with clean water and soap. If irritation occurs seek medical advice. Refer to the Safety Data Sheet for full safety and handling procedures.

KEEP OUT OF REACH OF CHILDREN

WE ARE HERE TO HELP YOU

It is a good idea to keep a journal of your waterproofing job, whether big or small.

- Take pictures at all stages of your work, including preparation
- Record the quantity and description of products used with corresponding batch numbers
- Record dates and times of when you applied products, from start to finish
- All relevant SDS

Please do not hesitate to contact us for any questions you may have on **1300 WATERPROOF** (928 377) or via email at:

customerservice@envirosystems.com.au.

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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