

Enviro 500EXT

MODIFIED POLYURETHANE FOR EXTERNAL WATERPROOFING APPLICATIONS

Enviro 500 EXT is a water based single component, modified polyurethane waterproofing membrane for external applications. Enviro 500 EXT exhibits extremely high flexibility, excellent adhesion to substrates, promotes superior adhesion of subsequent tile adhesives and is cure controlled drying for ease of application in hot and windy conditions.

FEATURES AND BENEFITS

- Water based - safe to use and easy clean up
- Low VOC content, non-hazardous
- Strong adhesion with excellent crack bridging capabilities and vertical hold

APPLICATION SOLUTIONS

Walls, floors, decks and roof areas that will be covered with a wearing surface such as tiles or water based decorative coatings.

- External wet areas
- Podiums
- Roof areas
- Decks
- Terraces
- Balconies

CLASSIFICATIONS

AS/NZS 4858:2004 Class III Approved

AS/NZS 4654.1:2012 Non Exposed Class III Approved

Green Star Compliant – Design and As Built v1.2, Section 13.11

PRODUCT INFORMATION

Packaging: Available in 15L pails.

Colour: Santorini Green.

Shelf life: Enviro 500 EXT 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 500 EXT should be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5°C and +30°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 proper 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 clean, dry, free of dust, oils, and surface contaminants. This may require steam cleaning or high-pressure water blasting. Apply Enviro Flex FC or Enviro Flex FL with a minimum sealant width of 15mm (and allow to cure) to all joints, cracks etc. prior to application of Enviro 500 EXT.

Enviro 500 EXT is suitable for use over the following substrates:

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

NOTE: Ensure substrate has been properly prepared in accordance with the relevant Australian standard. It is important to provide adequate drainage and falls with negligible ponding to ensure optimum performance of the membrane.

PRIMING

NOTE: Substrate condition and other requirements will dictate primer selection.

For dry substrates, apply 1 coat of Enviro Prime WB in accordance with the instructions on the product data sheet. For damp substrates, apply Enviro Shield in accordance with the instructions on the product data sheet.

BOND BREAKING

Use suitable and approved sealants such as Enviro Flex FC, to form smooth 15mm angle fillets to all internal corners, penetrations and joints. Allow to cure prior to application of Enviro 500 EXT. Apply Enviro Cloth Tape Black on the skinned sealant before applying Enviro 500EXT.

MIXING

Enviro 500 EXT should be thoroughly mixed with a mechanical mixer at low speed (less than 400 RPM) prior to application.

APPLICATION

Enviro 500 EXT can be applied using brush or roller. Apply two coats or more of Enviro 500 EXT to achieve a minimum Dry Film Thickness (DFT) of 1.0 mm on floors, decks and upturns on walls and penetrations. Care should be taken when walking over newly installed Enviro 500 EXT to ensure the membrane is not damaged. If damage occurs, consult Envirosystems for recommended repair methods. Coat down into drainage outlet openings. Preferably, apply at right angles to the direction of the previous coat. Allow each coat to dry before proceeding to the next coat. To control efflorescence staining on exposed areas, it is recommended that waterproofing is applied directly beneath tiles and above any screed. When tiling over Enviro 500 EXT in any of the external areas listed above, it is recommended to use an approved tile adhesive and installed in accordance with the instructions on the product data sheet.

NOTE: Do not apply any materials during damp or rainy conditions or where there is likelihood of rain. Allow each coat to sufficiently dry before proceeding to the next coat. Thicker coats will take longer to dry. Please see Coverage Rate table for details. Minimum application requirements set forth by the NCC and relevant Australian Standards should be followed when applying Envirosystems products. 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.

OVERCOATING

Direct tiling: Direct Tiling: If adhering directly to Enviro 500 EXT, ensure the membrane is sufficiently dry. Allow a minimum of 24 hours before tiling (see above).

Screed/mortar bed: Allow a minimum of 24 hours before screed application. Care should be taken to prevent any damage to the membrane during screed/mortar bed placement. It is the responsibility of the installer to determine the design, strength, thickness etc. of screed/mortar bed. Allow the mortar bed to cure a minimum of 7 days before waterproofing.

Exposed UV areas: For external use, it is recommended that a suitable UV topcoat such as Enviro 250 NS be applied. For light pedestrian traffic (maintenance) these UV topcoats can be broadcast with aggregate for a textured slip reducing finish or for a topcoat that does not require broadcasting refer to Enviro 250NS. Enviro 250 NS must be applied no longer than 36 hours after applying Enviro 500 EXT.

Product Data

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	RESULTS
Volatile Organic Compounds (VOCs)	SCAQMD Method 304-91	12g/L
Elongation	AS1145.3	1400%
Tensile Strength	AS1145.3	0.93MPa
Water Vapor Transmission (WVT)	ASTM E96	2.52(g/m ² /24 hours)
Bond Strength	ASTM C794	119.0N
Water Absorption	AS3558.1	<2.8%
Heat Ageing	AS4858 Table A1	Pass
Cyclic Movement	CSIRO Joint Test	Pass
External Membrane (nonexposed)	AS4654.1:2012	Class III
Internal Wet Area Membrane	AS4858:2004	Class III
Temperature Resistance	AS4654.1 Clause 2.6	No cracking, crazing, or surface defects

COVERAGE RATE

TYPE	LITRES/m ²	m ² /DRUM	WFT/COAT	NUMBER OF COATS	FINISHED DFT (ALL COATS)
All Applications	1.5	10	0.8mm	2	1.0mm

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

CURING TIME

TEMPERATURE	MINIMUM	MAXIMUM	FULL CURE
10°C @ 50% RH	>24 hours	72 hours*	7 days
23°C @ 50% RH	4 - 6 hours	72 hours*	7 days
30°C @ 50% RH	<3 hours	72 hours*	7 days

* If the recoat time of 72 hours has been exceeded, the product must be cleaned and primed with Enviro Shield. Please refer to the product data sheets for further information.

CLEANING

For easy removal of Enviro 500EXT from tools and surfaces immediately clean with water before it has time to dry. If it has dried attempt physical removal and/or prolonged soaking in detergent and water. Observe all OH&S and Safety Data Sheet information pertaining to safe usage and handling of solvents. Cured material may only be removed mechanically.

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 UV stable coating.



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PHONE

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HEALTH & SAFETY ADVICE

Enviro 500 EXT is non-hazardous according to Safe Work Australia criteria, however, as a precaution, always provide good ventilation when applying. Wash off splashes of material with clean water, wear 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 Enviro systems either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Enviro systems are responsible for carrying out procedures appropriate to a specific

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.