Enviro 700X

LOW ODOUR, HIGH PERFORMING, POLYURETHANE WATERPROOFING MEMBRANE

Enviro 700X is an Australian made, single component, class III, low odour, moisture curing polyurethane elastomer waterproofing system. Enviro 700X, once applied, forms a seamless, durable and flexible membrane, which protects structures from water penetration.

ENVIRO HP700X

SERIES

- Enviro 700X VG – Vertical Grade
- Enviro 700X SL – Self Levelling

FEATURES AND BENEFITS

- High performance system
- Single component liquid
- Seamless and durable
- Stays flexible at low temperatures
- Chemically resistant
- Low VOC
- Low odour

APPLICATION SOLUTIONS

Most common substrates include:

- Concrete
- Block
- Render
- Timber
- Fibre cement sheeting
- Cross laminated timber
- Glass reinforced concrete
- Steel

Most common areas of use:

- Wet areas, including bathrooms
- Podiums
- Basements
- Walls and floors
- Retaining walls
- Plant rooms
- Balconies

CLASSIFICATIONS

AS/NZS 4858:2004 Class III Approved
AS 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 drums.
Colour: Grey.

Shelf life: Enviro 700X can be stored in its original sealed containers for 6 months in controlled environments. During storage, a skin of Enviro 700X may form which is easily removed. This does not affect the performance of the product. Enviro 700X is sensitive to airborne moisture. It is preferable to use all contents of container after opening.
Storage: Enviro 700X should be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5°C and +35°C.

WATERPROOFING

AUSTRALIAN MADE

POLYMER GROUP LTD
SOLUTIONS FOR EXTREME ENVIRONMENTS

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 dry, free of dust, oils, and surface contaminants.

Enviro 700X 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)
- Plywood (PAA) - wet area grade only

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

PRIMING

NOTE: Substrate condition and other requirements will dictate primer selection. Ensure that the relevant data sheet is read in conjunction with the application.

Enviro Prime P2, Enviro Epoxy B, Enviro Epoxy B-LV, and Enviro Shield are all compatible primers for Enviro 700X.

On damp masonry surfaces with humidity contents of up to 6%, Enviro Shield, Enviro Epoxy B, and Enviro Epoxy B-LV can be used.

BOND BREAKING

Apply Enviro Flex FC or Enviro Flex FL to form a smooth, flexible cove to all internal corners, penetrations and joints. Allow the sealant to skin prior to application of Enviro 700X. Alternatively, install Enviro Joint Band to wall/floor joints and corners, where greater movement is anticipated, or a premium solution is required. For internal application, the cove must be at least 12mm x 12mm and for external applications, 15mm x 15mm.

MIXING

Enviro 700X should be thoroughly mixed with a mechanical mixer at low speed (less than 200 RPM) prior to application.

APPLICATION

Enviro 700X is to be applied using brush, roller or squeegee and is generally applied to the required Dry Film Thickness (DFT) in 2 coats. Product is to be applied at substrate temperature no less than +5°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 Envirosystems products. Product is suitable for use over particle board.

NOTE: In hot weather, avoid extreme temperatures and work in the morning or evening once substrate has cooled. Shade the working area, and keep product stored in cool conditions and out of the direct sun. In cold weather, keep all products stored out of the cold. 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 very low humidity, a very light mist of water will speed up curing time. 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.

OVERCOATING

Direct tiling: If tiling directly to Enviro 700X, after achieving the required dry film thickness, it is recommended that and additional thin coat of Enviro 700X be applied and broadcast with aggregate at a rate 0.5kg/m^2 or more to promote adhesion. Typically, the optimum tiling window is 24 - 72hrs.

Screed/mortar bed: Care should be taken to prevent any damage to the membrane during screed/mortar bed placement. It is the responsibility of the screed/mortar bed installer to determine the design, strength, thickness etc. of screed/mortar bed. Typically, the optimum screed placement window is 24 - 72hrs.

Below ground: Areas such as retaining walls, basement walls and planter boxes should be installed as per normal recommendations and allowed to dry for a minimum of 24 hrs. Once dry, it is recommended that the membrane be protected before soil placement with corflute and filtered drainage cell (“dimple” drainage or coreflute sheets are not suitable for horizontal applications). Where possible, it is recommended that drainage cell and aggregate be placed to allow water to freely drain.

Exposed UV areas: For external use where a non-yellowing aesthetic finish is required, it is recommended to use a suitable UV topcoat such as Enviro 950TC. For light pedestrian traffic (maintenance) the UV topcoat can be broadcasted with aggregate for a textured slip reducing finish.

Pedestrian traffic: Maintenance Traffic (Pedestrian): For internal areas that are not exposed to UV such as plant rooms floors, Enviro 700X can be applied and broadcast with aggregate (to required slip resistance) when light maintenance traffic is expected.

Soft and hard landscape: When Enviro 700X is installed to areas being covered with hard landscaping materials such as ballast, rocks, stone, etc. it is recommended that filtered drainage cell (“dimple” drainage or coreflute sheets are not suitable for horizontal applications) be placed over the cured Enviro 700X prior to hard landscape placement.

Product Data

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	RESULTS
Volatile Organic Compounds (VOCs)	ASTM D3960	66g/L
Elongation	AS1145.3	1350%
Tensile Strength	AS1145.3	3.5MPa
Water Vapor Transmission (WVT)	ASTM E96	7.33(g/m²/24 hours)
Shore A Hardness	AS1683.15.2	70±5
Slip Resistance	Wet Pendulum AS4856:2013	P5 (700X with 16/30 Agg)
Heat Ageing	AS4858 Table A1	Pass
Water Absorption	AS3558.1	<1.3%
Cyclic Movement	CSIRO Joint Test	Pass
External Membrane (nonexposed)	AS4654.1:2012	Class III
Internal Wet Area Membrane	AS4858:2004	Class III

COVERAGE RATE

TYPE	LITRES/m² FOR EACH COAT	m²/15L PAIL FOR EACH COAT	WFT/COAT	NUMBER OF COATS	FINISHED DFT (ALL COATS)
Internal Floor Application	0.84	18	0.8mm	2	1.5mm
Internal Wall Application	0.56	26.5	0.6mm	2	1.0mm
External Application	0.84	18	0.8mm	2	1.5mm

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

CURING TIME

TEMPERATURE	MINIMUM OVERCOATING TIME	MAXIMUM OVERCOATING TIME	FULL CURE
10°C @ 50% RH	48 hours	72 hours*	7 days
15°C @ 50% RH	24 hours	72 hours*	7 days
25°C @ 50% RH	12 hours	72 hours*	7 days

** If the recoat time of 72 hours has been exceeded, the product must be cleaned and primed with either Enviro Prime P2 or Enviro Shield. Please refer to the product data sheets for futher information.*

CLEANING

Enviro 700X should be removed from all tools and equipment prior to curing with Enviro Thinners No.1. Observe all OH&S and Safety Data Sheet information pertaining to safe usage and handling of solvents. Cured material can 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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HEALTH & SAFETY ADVICE

When using Enviro 700X always provides adequate ventilation and wear appropriate personal protection equipment (PPE) during use. Avoid contact with skin. Avoid breathing vapours. Wear protective eyewear. If inhalation effects occur, move to fresh air. If discomfort persists, any breathing difficulties occur or if swallowed, seek medical attention. Refer to Safety Data Sheet for full details.

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.