

# Enviro Flex Pro

## Engineered Polyurethane Joint Sealant



### DESCRIPTION

Enviro Flex Pro is a high performance, multi-purpose, neutral cure, elastomeric polyurethane joint sealant, which when cured, forms a waterproof seal.

### FEATURES

- Certified according to BS 6920-1:2000— Suitability for use in contact with water for human consumption
- Excellent adhesion
- Rapid skinning and fast cure
- UV stable
- Long term durability
- Excellent bi-axial flexibility
- Excellent organic chemical resistance
- Very low VOC content
- Low dirt pick up
- Non-staining
- Paintable after cure
- Permanently elastic over a wide range of temperatures
- Non-sag consistency
- Non-sticky / no dirt pick up
- Short cut-off string
- Easy to gun, can be easily smoothed and levelled out
- Good adhesion on all typical construction materials
- Good resistance to ageing, weathering & immersion in cleansing agents, sea water, lime water and dilute caustic solutions.
- Over-paintable with many water and solvent based paints (preliminary test recommended)

### TYPICAL USES

Enviro Flex Pro can be used for sealing joints less than 50mm in concrete panels, fibre cement sheets, block and brickwork, around window and door frames. Enviro Flex Pro is suitable for commercial and residential, internal and external applications.

- Internal & External Wet Areas
- Basements, walls & floors
- Plant rooms
- Planter boxes
- Bathrooms
- Podiums
- Balconies
- Retaining Walls

### PHYSICAL PROPERTIES

Appearance	Thixotropic paste
Colour	Grey
Curing Mechanism	Moisture curing
Curing through volume (23°C at 50% R.H.)	2.0mm per day
Non-sage Properties	Good
Shore A (23°C at 50% R.H.)	25
Density (23°C at 50% R.H.)	1.33 ± 0.02g/cc
Tack free time (23°C T 50% R.H.)	120 - 140 mins
Elastic Modulus at 100%	≥0.4 N/mm <sup>2</sup>
Tensile Strength (N/mm <sup>2</sup> ) (ISO 37 DIN53504)	≥1.5 N/mm <sup>2</sup>
Elongation	≥700%
Application Temperature	5°C to 40°C
Temperature Resistance (short term up to 120mins)	-40°C to -90°C
Movement Accommodation Factor (MAF)	25% of total movement capacity



## SUBSTRATE PREPARATION

Surfaces must be clean, dry, and free of water, oil, grease or rust and of sound quality. Remove all loose particles or residues with a jet of compressed air, sandpaper or hard brush, metal and other non-porous surfaces must be free of any coatings and wiped clean with solvent.

Pre-cast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free. Drainage and falls must be provided for as per the relevant Australia Standard. Enviro Flex Pro is suitable for use over the following substrates:

- Concrete - Cured for min. 28 days
- Renders - Cured for min. 7 days
- Timber
- Masonry Substrates - Brick, blocks, etc.
- Fibre cement sheets
- Aluminium

**NOTE:** Do not apply Enviro Flex Pro to any concrete that has received concrete artificial curing compounds or aluminium that may have been treated. Do not apply sealant where there is high humidity or when rain is anticipated within 2 hours of application. Not suitable for contact with bitumen or bituminous products. Test oil based paints prior to application for suitability

Some substrate preparations may initially require mechanical grinding in order to provide an adequate surface profile and to promote optimum adhesion for the membrane system.

For further information on substrate preparation or for project specific advice, please consult EnviroSystems.

[customerservice@envirosystems.com.au](mailto:customerservice@envirosystems.com.au)

## PRIMING

Generally Enviro Flex Pro achieves excellent adhesion to suitably prepared substrates without the use of primers, however, varieties of brick, natural stone, paints, coatings and other treatments of surfaces often presents a difficult surface to adhere to. Due to the number of unpredictable natures of these substrates, a preliminary test is recommended. If necessary, apply a coating of primer on the joint walls.

**NOTE:** For further information on applications that may not require priming, recommendations on approved primers, or for project specific advice please consult EnviroSystems.

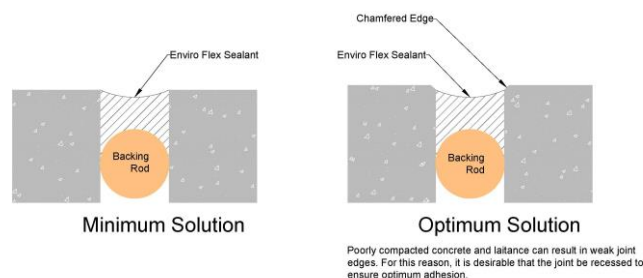
[customerservice@envirosystems.com.au](mailto:customerservice@envirosystems.com.au)

## APPLICATION

Enviro Flex Pro is to be applied using an appropriate caulking/sausage gun. Apply Enviro Flex Pro firmly into the joint, ensuring complete contact with all sides of the joint. Smooth the joint surface using a scraper coated with soapy water. Joint geometry should be 2:1(W:D). In all joints a bond breaker should be used, to allow maximum performance of the sealant.

## FOR SEALING PURPOSES

In order to guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint. For correct joint making, a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth. Refer to the below image.



Concrete and laitance can result in weak joint edges. For this reason it is desirable that the joint be recessed to ensure optimum adhesion. If using a solvent based primer, ensure primer is completely dry before Enviro Flex Pro application to prevent solvent entrapment.

For best performance, sealant should be gunned into the joint when the joint slot is at mid-point of its designed expansion and contraction. Firmly extrude sealant into the joint making sure that it is in full contact with the sides and with the backing rod at the bottom.

Keep the nozzle in the sealant, continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air. For successful sealing of joints, it is essential that the following guidelines on joint configuration are observed.

For Joints up to 12mm wide, width to depth ratio	1:1
--	-----

For Joints over 12mm wide, width to depth ratio	2:1
---	-----

Sealant should be tooled to a smooth finish ensuring full contact to the sides and back into the joint. This will also contribute in breaking the air bubbles which may have formed inside the sealant.

Masking tape should be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape whilst the sealant is still soft. Enviro Flex Pro may be painted. However some coatings may crack if movement occurs, preliminary tests recommended.

**NOTE:** Allow each coat to sufficiently dry before proceeding to the next coat. Thicker coats will take longer to dry.

For further information regarding application of Enviro Flex Pro or for project specific advice please consult EnviroSystems.

[customerservice@envirosystems.com.au](mailto:customerservice@envirosystems.com.au)



## COVERAGE

The coverage of Enviro Flex Pro will depend on the type of substrate and its condition. When prepared and primed in accordance with the instructions above, the following coverage rates should be expected.

**600ml Sausage**      6 lineal metres (10mm x 10mm)

## PACKAGING & COLOURS

Enviro Flex Pro is supplied in a 600ml sausage, 20 sausages per carton.

## CURE

Tack free time for Enviro Flex Pro is 120 - 140 mins.  
Cure through time for Enviro Flex Pro is 2.0mm per day.

## CLEANING

Enviro Flex Pro should be removed from all tools and equipment, prior to hardening with Enviro Thinners No.1. Observe all OH&S and MSDS information pertaining to the safe usage and handling of solvents. Cured material can only be removed mechanically.

## SHELF LIFE

Enviro Flex Pro can be stored in its original sealed containers for 12 months in controlled environments. During storage a skin of Enviro Flex Pro may form which is easily removed. This does not affect the performance of the product. Enviro Flex Pro is sensitive to airborne moisture. It is preferable to use all contents of container after opening. Always check product quality before using after prolonged periods of storage. If unsure please contact EnviroSystems for advice.

## HEALTH & SAFETY ADVICE

Enviro Flex Pro contents are flammable. Keep away from naked flame. In the event of fire extinguish with foam or CO. Always provide adequate ventilation and wear appropriate Personal Protection Equipment (PPE) during use.

Avoid breathing vapors, and contact with skin. If swallowed, DO NOT induce vomiting, give a glass of water and seek immediate medical advice. If contact with skin, wash off splashes of material with clean water and soap. If irritation occurs seek immediate medical advice. Refer to the Safety Data Sheet for full safety and handling procedures.

**NOTE:** Safety Data Sheets are available upon request by emailing [customerservice@envirosystems.com.au](mailto:customerservice@envirosystems.com.au)

## We're 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

Please do not hesitate to contact us for any questions you may have.

EnviroSystems Technologies Pty Ltd

**Address** 295 Princes Highway, St Peters NSW 2044  
Sydney, Australia  
**Phone** +61 2 8595 8699  
**Fax** +61 2 8595 8660  
**Email** [customerservice@envirosystems.com.au](mailto:customerservice@envirosystems.com.au)  
**Web** [www.envirosystems.com.au](http://www.envirosystems.com.au)

**ISSUE** 3

**DATE** August 2017



### 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 Technologies either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not EnviroSystems Technologies are responsible for carrying out procedures appropriate to a specific application.