



# Enviro Flex S.A.F.E

## Structural, Acoustic, Fire & Environmental Rated Polyurethane Joint Sealant



### DESCRIPTION

Enviro Flex S.A.F.E is a uniquely formulated, high performance, elastomeric polyurethane intumescent fire rated, structural & acoustic joint sealant, which when cured, forms a waterproof, fire and acoustic seal.

### FEATURES

- Fire tested (rated up to 4hrs) AS1530.4
- Acoustic Rated
- UV stable
- Long term durability
- Australian Made
- Excellent organic chemical resistance
- Very low VOC content
- Low dirt pick up
- Non-staining
- Permanently flexible
- Stable - No shrinkage
- Short cut-off string
- Adhesion to a wide range of substrates
- No Mixing Required
- Non-sag consistency - Good thixotropy
- Allows equalised stress transfer due to permanent elasticity
- Excellent resistance to ageing, weathering - suitable for indoor and outdoor use
- Over-paintable with many water/solvent-based paints (preliminary tests recommended)
- High pick resistance

### TYPICAL USES

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

- Precast & Tilt Up Panels
- Plasterboard (Fire & Acoustic Rated)
- Fibre Cement Board (Fire & Acoustic Rated)
- Brick Work
- In-situ Concrete Floors & Walls
- Block Work
- Renders
- Service Penetration Sealing
- Expansion & Construction Joints

### PHYSICAL PROPERTIES

Appearance	Thixotropic paste
Colour	Grey
Curing Mechanism	Moisture curing
Curing through volume (23°C at 50% R.H.)	2.0 - 3.0mm per day
Non-sag Properties	Excellent
Shore A (23°C at 50% R.H.)	49
Density (23°C at 50% R.H.)	1.40kg/L
Skin Time (23°C T 50% R.H.)	2hrs (approx.)
Tensile Strength (N/mm <sup>2</sup> ) (ISO 37 DIN53504)	2.35MPa
Elongation	≥560%
Application Temperature	5°C to 40°C
Temperature Resistance (short term up to 120mins)	-40°C to +90°C



## SUBSTRATE PREPARATION

Surfaces must be clean and free from all contamination such as dust, laitance, grease coatings curing compounds and any other foreign matter. Remove all sharp edges including screws, nails and concrete/mortar projections. Drainage and falls must be provided for as per the relevant Australian Standard.

**NOTE:** Do not apply Enviro Flex S.A.F.E 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.

**NOTE:** 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

Enviro Flex S.A.F.E achieves excellent adhesion to suitably prepared porous substrates without the use of primers. However, for critical applications adhesion may be improved with the use of an approved primer such as Enviro Prime SB, Enviro Prime 789 or Enviro Shield. Refer to the individual priming product data sheets for further information or contact EnviroSystems for recommendations.

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

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## APPLICATION

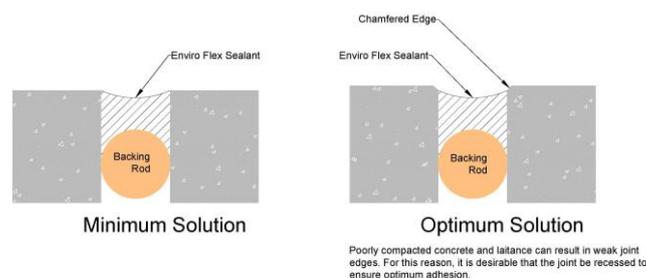
Enviro Flex S.A.F.E is to be applied using an appropriate caulking/sausage gun. Pierce through the protective film in the front threaded section, screw on the plastic nozzle and cut it at an angle according to the desired bead thickness and profile.

Fit the cartridge into a manual or pneumatic air operated gun (provided with telescopic piston) and extrude the adhesive/sealant carefully preventing air entrapment.

Once opened, packs should be used up within a relatively short time. Apply Enviro Flex S.A.F.E firmly into the joint, ensuring complete contact with all sides. Smooth the joint surface using a scraper coated with soapy water. Joint geometry should be 1:1 (W:D) for joints <10mm and 2:1 (W:D) for any joint between 10mm-40mm. 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 the sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore for correct joint caulking, a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth. Poorly compacted concrete and laitance can result in weak joint edges. For this reason, it is desirable that the joint be recessed to ensure optimum adhesion. Refer to below image.



Apply appropriate primer to joint sides and observe the waiting time to avoid that any trapped solvent can form bubbles in the uncured sealant due to rising temperatures.

Firmly extrude sealant and apply in the joint making sure that it is in full contact with the sides of the joint and with the backing rod at the bottom. Keep the nozzle in the sealant, continue on with a steady flow preceding the nozzle to avoid air entrapment.

Avoid overlapping of sealant to eliminate entrapment of air. Sealant should be tooled to a smooth finish ensuring a full contact to the sides and back up material into the joint, this will also contribute in breaking the air bubbles which may be 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.

For further information regarding application of Enviro Flex S.A.F.E or for project specific advice please consult EnviroSystems.

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## COVERAGE

The coverage of Enviro Flex S.A.F.E 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.

<b>600ml Sausage</b>	6 lineal metres (10mm x 10mm)
	3 lineal metres (20mm x 10mm)

## PACKAGING & COLOURS

Enviro Flex S.A.F.E is supplied in a 600ml sausage, 20 sausages per carton.

## CURE

Tack free time for Enviro Flex S.A.F.E is approximately 6 hours. Cure through time for Enviro Flex S.A.F.E is 2.0 - 3.0mm per day.

## CLEANING

Enviro Flex S.A.F.E 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 S.A.F.E can be stored in its original sealed containers for 12 months in controlled environments. During storage a skin of Enviro Flex S.A.F.E may form which is easily removed.

This does not affect the performance of the product. Enviro Flex S.A.F.E 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 S.A.F.E 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 vapours, 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.

Waterproofing 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)

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## STATEMENT OF RESPONSIBILITY

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