



Enviro Flex FC

Engineered Polyurethane Joint Sealant & Adhesive



DESCRIPTION

Enviro Flex FC is a fast curing, high performance, multi-purpose, neutral cure, elastomeric polyurethane joint sealant and adhesive, which when cured, forms a waterproof seal.

FEATURES

- 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 flexible
- Stable - No shrinkage
- Bonds and Seals at the same time
- Short cut-off string
- Adhesion to a wide range of substrates
- Replaces rivets and mechanical fasteners
- Non-sag consistency - Good thixotropy
- Allows equalised stress transfer due to permanent elasticity
- Vibration and sound dampening properties
- 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 FC 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 FC 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
- Prisons, schools and public amenities

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-sage Properties	Good
Shore A (23°C at 50% R.H.)	35 - 45
Density (23°C at 50% R.H.)	1.33 ± 0.02g/cc
Tack free time (23°C T 50% R.H.)	45 - 75 mins
Elastic Modulus at 100%	≥0.8 N/mm ²
Tensile Strength (N/mm ²) (ISO 37 DIN53504)	≥1.8 N/mm ²
Elongation	≥450%
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.

Enviro Flex FC 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 FC 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

PRIMING

Enviro Flex FC achieves excellent adhesion to suitably prepared substrates without the use of primers. However, for critical applications adhesion may be improved with the use of an approved primer. Contact EnviroSystems for recommendations on approved primers.

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

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APPLICATION

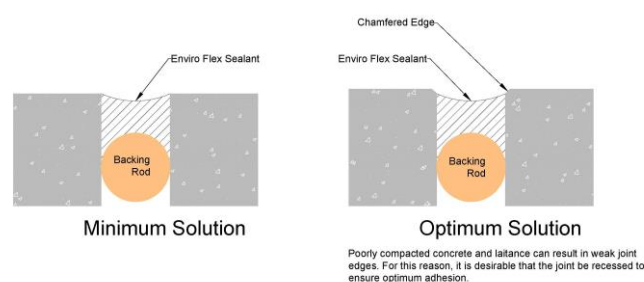
Enviro Flex FC is to be applied using an appropriate caulking/sausage gun. Pierce through the protective membrane in the front threaded section, screw on the plastic nozzle and cut it at an angle according to the desired bead thickness and profile.

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 FC 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 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 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 ADHESIVE PURPOSES

Apply in spots or bead on the prepared surfaces then firmly press the parts which have to be bonded together.

NOTE: Allow each coat to sufficiently dry before proceeding to the next coat. Thicker coats will take longer to dry. Enviro Flex Pro may be painted. However some coatings may crack if movement occurs, preliminary tests recommended.

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

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COVERAGE

The coverage of Enviro Flex FC 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)
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PACKAGING & COLOURS

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

CURE

Tack free time for Enviro Flex FC is 45 - 75 mins.
Cure through time for Enviro Flex FC is 2.0 - 3.0mm per day.

CLEANING

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

This does not affect the performance of the product. Enviro Flex FC 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 FC 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

We're here to help you!

It is a good idea to keep a journal of your 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.

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environmentally responsible technology

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