

Enviro Flex FC

FLEXIBLE FAST CURE POLYURETHANE SEALANT AND ADHESIVE

Enviro Flex FC is a one-component fast curing high performance elastomeric joint sealant and adhesive based on moisture cured polyurethane technology for internal and external applications.

FEATURES AND BENEFITS

- Excellent adhesion
- Rapid skin and curing
- UV stable
- Long term durability
- Excellent bi-axial flexibility
- Chemical resistance
- Very low VOC content
- Low dirt pick up
- Non-staining
- Paintable after cure
- No shrinkage
- Non-sag
- Vibration and sound dampening properties
- Suitable for indoor and outdoor use

APPLICATION SOLUTIONS

Enviro Flex FC can be used as an elastic adhesive to bond most construction materials, skirting boards, stone and masonry. 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 and external wet areas
- Basements, walls and floors
- Plant rooms
- Planter boxes
- Bathrooms
- Podiums
- Balconies
- Retaining Walls
- Prisons, schools and public amenities

PRODUCT INFORMATION

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

Shelf life: Enviro Flex FC can be stored in its original sealed containers for 12 months in controlled environments. 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 a sausage after opening. Always check product quality before using after prolonged periods of storage. If unsure, please contact Enviro systems for advice.



SEALANTS



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 .

All surfaces must be free of dust, oils, and surface contaminants. This may require steam cleaning or high-pressure water blasting.

Enviro Flex FC is suitable for use over the following substrates:

- ② Concrete - cured for min. 28 days
- ② Renders - cured for min. 7 days
- ② Timber
- ② Masonry substrates - brick, blocks, etc.
- ② Fibre cement sheets
- ② 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.

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

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.

APPLICATION

Enviro Flex FC is to be applied using an appropriate caulking/sausage gun. Cut one end of the sausage, place the plastic nozzle on the cut end and insert the sausage into a manual or electric gun. The plastic nozzle should be cut at an angle to achieve the desired bead thickness and profile.

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

Once opened, sausages 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. The optimum width W to depth D ratio for joint sealing depends on the dimensions of the joint. Minimum joint width and depth is 6 mm. For joints widths up to 12mm, use a W:D ratio of 1:1. For joints widths greater than 12mm, use a W:D ratio of 2:1. Install a backing rod or backing tape in the joint prior to the sealant application to ensure the right depth and only 2 faces of adhesion.

For bonding purposes

Apply a bead or small blobs on the surface of the items. Assemble parts together and clamp firmly to hold until cured. Remove excess product immediately. Ensure that air and moisture can flow between beads and blobs to achieve optimum and fast curing.

For sealing purposes

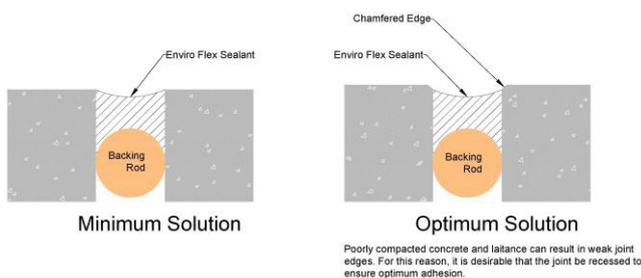
In order to guarantee free movement of the sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore for correct joint caulking, An open cell polyurethane foam or a closed cell polyethylene foam backing rod it to be placed at the proper depth. Poorly compacted 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.

If needed and recommended, 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.

Masking tape should be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape before the sealant surface forms a skin.



Product Data

PHYSICAL PROPERTIES

PROPERTY	
Appearance	Thixotropic paste
Colour	Grey
Curing Mechanism	Moisture curing
Curing Through Volume	2.0 - 3.0mm/day @ 23°C @ 50%RH
Shore A	40 - 50
Density	1.35 ±0.02g/cc
Tack Free Time	20 - 30 mins
Elastic Modulus	≥0.5N/mm ² @ 100%
Tensile Strength	≥2.6N/mm ² ISO 37 DIN53504
Elongation	≥700%
Application Temperature	5°C - 40°C
Temperature Resistance	-40°C to 90°C (up to 120 min)

CHEMICAL RESISTANCE

Good resistance to water, weak acids, weak alkalis, sewerage, mineral oils, vegetable oils, fats, fuels. (Not resistant to organic solvents, paint thinner, strong acids, strong alkalis).

COVERAGE

The coverage of Enviro Flex FC will depend on the type of substrate, the substrate conditions and the size of the cove. When prepared and primed in accordance with the instructions above, the following coverage rates should be expected:

Internal application cove: 8 linear metres (12mm x 12mm cove) per 600mL sausage

External application cove: 5.3 linear metres (15mm x 15mm cove) per 600mL sausage

JOINT COVERAGE

JOINT WIDTH mm	JOINT DEPTH mm	LITRE/LINEAL METRE	METRES COVERAGE*
6	6	0.036	16.7
8	8	0.064	9.4
10	10	0.100	6
12	12	0.140	4.2
14	7	0.098	6.3
16	8	0.128	4.7
18	9	0.162	3.7
20	10	0.200	3
22	11	0.242	2.5
24	12	0.288	2.1
26	13	0.338	1.8
28	14	0.392	1.5
30	15	0.450	1.3
40	20	0.800	0.8

*coverage per 600ml sausage

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 Safety Data Sheet information pertaining to the safe usage and handling of solvents. Cured material can only be removed mechanically.

CURE

Tack free time for Enviro Flex FC is 20 - 30 mins.

Cure through time for Enviro Flex FC is 2.0 - 3.0mm per day.



Contact Enviro systems

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PHONE

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HEALTH & SAFETY ADVICE

Enviro Flex FC contents are flammable. Keep away from naked flame. In the event of fire, extinguish with foam or CO₂. 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.

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 application.

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.