

PRODUCT DESCRIPTION

Fulaflex 570FC PU is a one-component moisture-curing fast-cure polyurethane adhesive/sealant specifically developed for application to concrete and masonry. It has fast curing properties that develop into a strong, durable and weather resistant adhesive/sealant and exhibits excellent adhesion to a wide range of substrates. Fulaflex 570FC PU is low in VOC (<60g/L) and satisfies the requirements for the Green Building Council of Australia (GBCA).

Fulaflex 570FC PU meets the requirements of:
- ISO 11600/F/25HM

BENEFITS

- Easy application, simple clean up - minimal mess
- Excellent adhesion to many surfaces
- Excellent resistance to aging/weathering - suitable for interior and external use
- Paintable once cured
- Fast Curing
- Low VOC - ca. 58g/L
- No shrinkage
- Bonding and sealing in one
- Non-sag
- Permanently elastic
- Excellent vibration and dampening properties



AREAS OF APPLICATION

- Sealing floor joints in concrete floors.
- Bonding and sealing fibre-cement panels
- Sealing roof and gutter joints.
- Pick resistant sealant for use in public areas, shops, schools, prisons, etc.
- Sealing pipe and duct penetrations in walls and floors
- Joints around windows, door frames and walls
- Lap joints secured with fasteners.

COMPATIBLE SUBSTRATES

Concrete	Cement Sheet
Ceramic	Masonry
Polyurethane	Plasterboard
Polystyrene	Steel
Aluminum(uncoated)	Timber
Plastic and coated metals (Pre-Test)	Glass (not suitable) for external glazing

PERFORMANCE DATA

Property	Data
Specific Gravity	ca. 1.33
Sag	0mm (25mm x 12mm joint)
Tooling Time	ca. 40 minutes @ 23 °C & 50% RH
Skinning Time	ca. 50 min, 23 °C, 50% RH
Cure Rate	4 mm/day, generally
Hardness (Shore A)	35-45
Max Elongation	ca. 800%
Modulus - 50%	ca. 0.60MPa
Modulus - 100%	ca. 0.70MPa
Modulus - Max	ca. 2.23MPa

COVERAGE (600ml sausage)

Joint Width mm	Joint Depth mm	Yield (linear metres)
6 (min)	6	16.7
10	10	6
12	12	4.2
18	12	2.7
24	12	2.1
30 (max)	15	1.5

SURFACE PREPARATION

All surfaces must be clean, dry, sound and free of dust, oil, old sealant or other contamination. Lightly contaminated surfaces should be wiped with Isopropyl Alcohol (IPA) using the 2-rag wipe method. Apply IPA to a clean lintfree cloth and wipe onto the surface to be cleaned to solubilize and remove the majority of the contaminant. A clean dry cloth should then be applied to remove remaining contamination and dry the surface. Ensure wet cleaner is not allowed to dry on surface. For more heavily contaminated surfaces or where the IPA does not remove the contaminant, a generic wax and grease remover should be applied using the same 2- rag wipe method. Once this has been completed the surface should be given a final clean with IPA using the 2-rag wipe method to ensure the surface is adequately prepared. Adhesion to metals and some surface finishes can be further improved by light abrasion prior to cleaning with IPA using the 2 rag-wipe method. Manufacturers of plastics should be consulted about suitable cleaning solvents. Adhesion to plastics should be pre-tested. Mask either side of joint to produce a neat finish. Use a suitable sized foam backing rod or polyethylene bond breaker tape to prevent three-sided joint contact impeding the free and even deformation of the sealant in a cyclic joint. Open-cell polyurethane foam is recommended. Use a size 25% wider than the joint width that will compress when inserted into the joint.

PRIMING – For difficult substrates

In conditions where a primer is necessary prior to application of Fulaflex 570FC PU, HB Fuller recommends the application of TEC Multipurpose Primer on approved substrates. Apply primer as detailed on the TEC Multipurpose primer datasheet, allowing time to cure, before applying Fulaflex 570FC PU as per guidelines. All surfaces should be cleaned prior to the application of TEC Multipurpose Primer.

PRODUCT APPLICATION

Insert the sausage into the applicator gun and make a small incision at the extrusion end of the sausage. Fit the barrel end and nozzle, with the nozzle cut to deliver the appropriate bead size and shape.

As an adhesive:

Apply product to one surface to be bonded in a neat uniform size bead (triangle shape preferable). Before product skins, mate with other surface. When bonding a sheet or panel to a large, flat surface, apply 10mm triangular beads every 30-40cm along the entire length. Press into position and brace until set. Temporary or mechanical fixing may be required depending upon substrates. Bond will develop dependent upon thickness of adhesive, and ambient conditions. Higher humidity and warmer temperatures will hasten bond development. Minimum adhesive depth for bonding application is 1-2mm.

As a sealant:

Gun Fulaflex 570FC PU by pressing the trigger to continuously fill the joint – while ensuring that air does not get trapped in the sealant/joint. After filling an appropriate length of joint, smooth the sealant with a spatula or trowel, pressing the sealant into the joint to form the required finish while ensuring the sealant fills the joint

and is complete contact with the substrates. The application tool should contact the entire surface that is required to be tooled. Good joint design in the construction industry necessitates a joint width equal to 4 times the anticipated movement of building components. The theoretically derived 2:1 movement factor is based on thermal movement alone and doesn't allow for variances found at the job site and therefore should not be used. The 4:1 design factor accommodates both thermal movement and wide variations in tolerances of construction materials, fabrication and erection often found in the field. This will also accommodate joints installed narrower than originally designed. In standard expansion joints, the joint should be minimum 6mm width. For joints between 6mm and 12mm width, the depth of the sealant should be the same as the width. For joints between 12-24mm width, the depth should be 12mm. For joints 24-30mm width, the depth should be half the width.

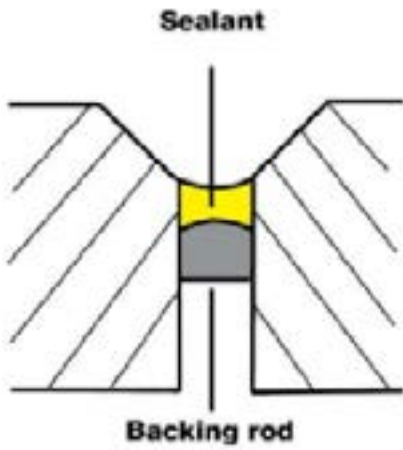
JOINT CONFIGURATIONS – Depth vs width

Joint Width mm	Joint Depth mm
6 to 12 mm	Same as width
12 to 24 mm	12 mm
24 to 30 mm	Half width

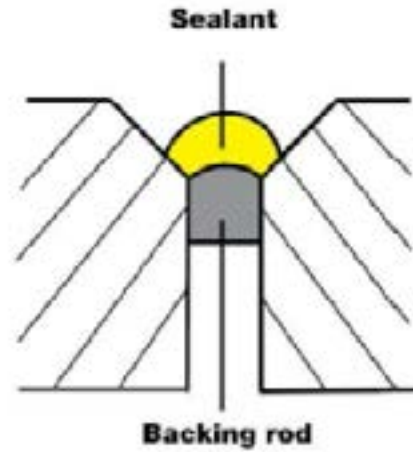
PRIMING – For difficult substrates

Long term resistance to fresh water, seawater, limewater, mild caustic solutions and cleaning agents. Short term resistance to Petrol, grease and mineral oil. Not resistant to organic acids, concentrated mineral acids or solvents. This information is offered for general guidance only. Advice on specific applications will be given on request.

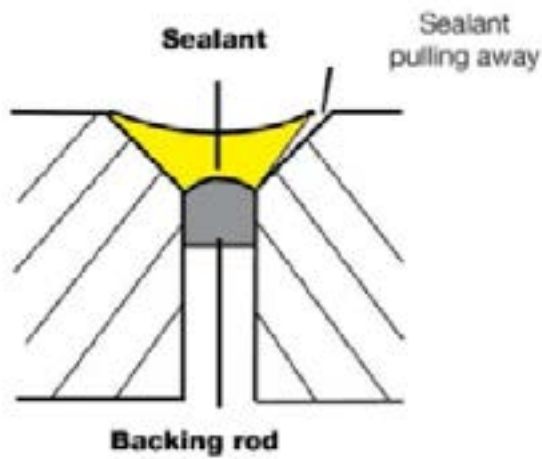
CORRECT AND INCORRECT JOINT DESIGNS



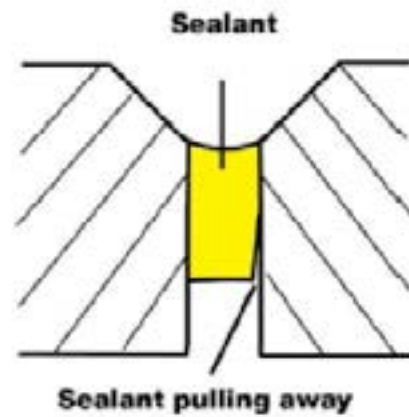
Correct
Sealant applied on backing rod using correct sealant dimensions



Correct
Alternative method of installation preserves ability of sealant to expand and contract



Wrong
Sealant applied onto chamfered edge where concrete may be weak



Wrong
Sealant extends too deep into joint leading to tearing away from sides or splitting

PAINTING

FULAFLEX 570FC PU may be painted with most water based paints and other paint systems including waterproof membranes, once a firm skin has developed. However, test if unsure, especially when industrial grade coatings are used, to ensure that:

- The coating bonds to Fulaflex 570FC PU satisfactorily
- The coating does not affect the curing of Fulaflex 570FC PU (E.G. allows moisture to reach the sealant surface if applied over a non-porous surface where the sealant is painted prior to full cure)
- That Fulaflex 570FC PU does not affect the cure of the coating (e.g. result in a sticky surface). Some solvent based coatings may remain sticky for extended periods of time.
- The coating does not craze after application over Fulaflex 570FC PU

Most coating systems are incapable of achieving similar rates of flexibility as Fulaflex 570FC PU. As such, surface coatings may crack as a result of cyclic joint movement. HB Fuller recommend the use of a premium quality acrylic emulsion paint over Fulaflex 570FC PU.

CURING

The rate of cure depends on the air temperature and humidity, the cross sectional area of the bead of sealant and the surface area of sealant exposed to the air. At 23°C and 50% relative humidity cure rate is 4mm / 24 hours. In general, low humidity and/or low temperature will result in longer cure times. Thicker sections of sealant will have longer cure times. A small surface area in relation to the volume of sealant will also extend the cure time.

SHELF LIFE

12 months unopened packaging in a cool and dry storage area at temperatures between +5C and +25C.

CLEAN UP

Best results are obtained by masking prior to sealing to avoid the necessity for clean up. However, if sealant is applied to areas where it is unwanted, clean up uncured sealant using toluene*, xylene*, methyl ethyl ketone*, acetone* or mineral turpentine* and a cloth. Take precautions to avoid staining substrates when using solvents. Cured sealant should be removed by abrasion or trimmed with a sharp knife. Do not undercut seal.

SAFETY INFORMATION

This product is classified Hazardous according the Globally Harmonised System of Classification and labelling of Chemicals (GHS), including Work, Health and Safety regulations, Australia. Avoid contact with skin and eyes. Store in a dry place below 30°C. Keep out of reach of children. A MSDS is available from the H.B. Fuller representative in your state, HB Fuller Australia customer service, or downloadable from the HB Fuller web site, www.hbfuller.com.au. For Poisons Information Centre phone 13 11 26.

LIMITATIONS

- Not for use in water retaining structures unless used in conjunction with waterproofing membrane.
- Fulaflex 550 PU LM Sealant should not be applied to frost-bearing surfaces or if temperature will fall below zero degrees Celsius.
- When painted with oxidative drying paints disturbances in the drying of the paint may occur.
- Because of the diversity of paints available it is recommended to complete a compatibility test before application.
- Do not attempt to finish/tool the sealant in a joint using the chemicals described in the clean-up section, as they will irreversibly affect the sealant. Only use these chemicals to clean up uncured sealant from tools and equipment.
- Not for use in joints contaminated with oil, grease, wax, dust, corrosion, tar, asphalt, loose aggregate, frost, dampness, formrelease agents or other such coatings impregnations.
- Not for exposure to harsh chemicals – Fulaflex 550 PU LM does have some level of chemical resistance, pre-testing for contact with chemicals is recommended
- Not suitable for glazing with glass, acrylic or Polycarbonate sheets. Refer other comments with regard to glass in substrates and surface preparation sections.
- Not for use on Marble or other highly porous stone without pre-testing for staining.
- Not recommended for use on bituminous surfaces or on materials that bleed oils, plasticisers or solvents, as this will affect adhesion.
- Open cell backing rod is recommended. Always take care when handling closed cell polyethylene backer rod during installation, so as not to pierce the rod.
- The presence of other curing sealant technologies in the vicinity (such as some silicones and MS Polymers), or exposure to alcohol during curing may prevent FULAFLEX 550 PU LM from curing.