

Fulaflex® 650FC Sealant

PRODUCT DESCRIPTION

Fulaflex® 650FC Sealant is a high-performance, fast-curing hybrid polymer adhesive/sealant designed as a non-hazardous alternative to traditional polyurethane sealants. Free from isocyanates and solvents, this one-part, moisture-curing product forms a tough, elastic, and weatherproof seal with excellent UV stability and chemical resistance.

Engineered for demanding construction and industrial applications, Fulaflex® 650FC combines high modulus strength with flexibility, making it ideal for bonding and sealing where differential movement and mechanical stresses are expected.



FEATURES & BENEFITS

- Solvent-free and isocyanate-free formulation
- Non-hazardous under GHS classification
- Permanently flexible with $\pm 25\%$ joint movement capacity
- Excellent adhesion to a wide range of substrates without priming
- Strong bond strength with resistance to vibration, impact, and dynamic stresses
- Excellent resistance to UV, weathering, and yellowing
- Paintable (pre-testing recommended for compatibility)
- Resistant to shrinkage, bubbling, and sagging (up to 30 mm joints)
- Mould resistant and suitable for use in AS3740-2021 waterproofing applications
- Shore A hardness ~ 55 – suitable for anti-pick sealant applications in correctional facilities

APPLICATIONS

Fulaflex® 650FC is recommended for:

- Expansion and control joints in floors, pavements, walls, roofs, and roadways
- Sealing wall and floor penetrations
- Bonding and sealing façades and cladding systems
- Adhesive/sealant applications in caravans, buses, and special vehicles
- Bonding panel stiffeners and channels
- Elastic bonding of metals, engineered plastics, timber, and ceramics
- Applications requiring chemical resistance or UV stability

SPECIFICATION

| Product Code | Description |
|--------------|-----------------------------------|
| 114810 | Fulaflex 650FC Sealant 600ml Grey |

TECHNICAL SPECIFICATIONS

STANDARDS COMPLIANCE

- ASTM C920 Type S, Grade NS, Class 25, Use T1, A, G, O (painted metal)
- ISO 11600 Type F, Class 25, Subclass HM
- ASTM C719 – $\pm 25\%$ movement capability (primed)
- ASTM C794 (adhesion in peel) – PASS
- ASTM C793 (weathering) – Excellent UV and weathering resistance
- ASTM C510 (staining/colour change) – PASS
- Meets AS3740-2021 (Waterproofing of Domestic Wet Areas)

SHELF LIFE & STORAGE

- Shelf life: 12 months in unopened packaging
- Store in a cool, dry place below 30 °C
- Protect from moisture and direct sunlight

SAFETY INFORMATION

- Not classified as hazardous under GHS WHS (Australia)
- Avoid contact with skin and eyes
- Store below 30 °C in a dry, ventilated location
- Keep out of reach of children

TECHNICAL SPECIFICATIONS

TYPICAL PERFORMANCE DATA

| Property | Test Method | Result |
|---------------------|-------------|---------------------------------------|
| Specific Gravity | - | ~1.45 |
| Sag | - | Nil |
| Shrinkage | - | 0% |
| Skinning Time | - | 40–50 mins @ 23°C |
| Cure Rate | - | ~4 mm/day @ 23°C |
| Full Cure | - | 7 days @ 23°C |
| Storage Life | - | 12 months (unopened) |
| Hardness (Shore A) | ISO 868 | ~55 |
| Modulus (100%) | ISO 37 | ~1.2 MPa |
| Tensile Strength | ISO 37 | ~2.0 MPa |
| Elongation | ISO 37 | ~300% |
| Service Temperature | - | -40 °C to +100 °C (short term 120 °C) |
| Movement Capability | ASTM C719 | ±25% |

COVERAGE (600 ML 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 |

COVERAGE VARIES DEPENDING ON JOINT CONFIGURATION AND APPLICATION METHOD.

COMPATIBLE SUBSTRATES

- Concrete, brickwork, and masonry
- Fibre cement sheeting
- Plasterboard and particleboard
- Timber
- Aluminium (incl. anodised, pre-test powder-coated finishes)
- Steel and stainless steel
- Zinc/galvanised steel
- Ceramic
- Polystyrene
- ABS and acrylic sheet
- Glass
- Engineered plastics (pre-test required)

SURFACE PREPARATION

- Substrates must be clean, dry, and free of dust, grease, loose materials, and old sealants.
- Lightly contaminated surfaces: clean with Isopropyl Alcohol (IPA) using the 2-rag wipe method.
- Heavily contaminated surfaces: clean with wax/grease remover, followed by IPA.
- Abrade metals lightly before cleaning to improve adhesion.
- Use appropriate backer rod or bond breaker tape to prevent three-sided adhesion.

APPLICATION INSTRUCTIONS

1. Cut cartridge tip or sausage end, fit nozzle, and cut to required bead size.
2. Apply sealant in a steady, continuous flow, ensuring full joint contact.
3. Tool immediately with a spatula for smooth finish and substrate contact.
4. Apply between +5 °C and +35 °C.
5. Remove masking tape before skin formation.

CHEMICAL RESISTANCE

- Resistant to: salt water, chlorinated water, alkalis, acids, lime water, many cleaning agents, petrol, petroleum products
- Mould resistant
- Some oils may cause colour or surface appearance changes but do not affect mechanical performance
- Not suitable for permanent immersion in salt or chlorinated water

PAINTING

- Paintable wet-on-wet with many water- or solvent-based coatings.
- Flexible acrylic coatings are recommended for long-term compatibility.
- Solvent-based and oil-based coatings may remain tacky – pre-testing required.