



FULAFLEX 650FC

Description

Fulaflex 650FC is a high performance, 1-part hybrid moisture curing construction sealant and adhesive, which cures to form a seal that is tough, elastic and weatherproof. Fulaflex 650FC is a mid-high modulus product, which can be used in trafficable areas such as concrete saw cuts in commercial buildings and in many bonding applications.

Benefits

- Isocyanate and solvent free
- Non-hazardous according to GHS classification
- Permanently flexible in temperatures ranging from -40°C to +100°C with short periods to 120°C
- No shrinking, no bubbling
- Excellent primer-less adhesion to many substrates
- No sagging
- High mechanical/dynamic stress resistance – Shock/Impact resistant
- Neutral adhesive – Does not attack bonded surfaces
- Vibration and sound-dampening properties
- Shore A Hardness ~55. Suitable as an anti-pick sealant/adhesive in correctional facilities
- High bond strength - suited to Professional and DIY, construction, marine and automotive environments
- Excellent weathering resistance – Good colour stability and weather resistance
- Over-paintable wet-on-wet with many waterbased or solventbased paints (pre-testing recommended)

- Resistant to water, dilute alkalis, cleaning agents, lime water and mould

Uses

- Sealing expansion and control joints in floors, pavement, roadways, walls, roofs, wall and floor penetrations, cladding and brickwork
- Elastic bonding of metals, engineered plastics, wood and ceramic surfaces
- In applications where a level of chemical resistance is required
- In seals where acoustic properties are required
- Assembly of insulated and composite panels
- Vibration-proof bonding of metal components
- Multiple high performance bonding and sealing applications in transport – trains, buses, special purpose vehicles, caravans, 4 wheel drive trailers etc

Compatible Substrates

Concrete	GRP
Cement sheeting	Steel
Masonry	Plastics (pre-test)
Plasterboard	Galvanized Steel
Coated & other metals (pre-test)	Anodized Aluminium
ABS	Aluminium
Timber	Glass
Acrylic Sheet	Polystyrene

Our Focus is Clear. Perfecting Adhesives.

IMPORTANT: Information, specifications, procedures and recommendations provided ("information") are based on our experience and we believe this to be accurate. No representation, guarantee or warranty is made as to the accuracy or completeness of the information or that use of the product will avoid losses or damages or give desired results. It is purchaser's sole responsibility to test and determine the suitability of any product for the intended use. Tests should be repeated if materials or conditions change in any way. No employee, distributor or agent has any right to change these facts and offer a guarantee of performance.

NOTE TO USER: by ordering/receiving product you accept the H.B. Fuller General Terms and Conditions of Sale applicable in the region. Please request a copy if you have not received these. These Terms and Conditions contain disclaimers of implied warranties (including but not limited to disclaiming warranties of fitness for a particular purpose) and limits of liability. All other terms are rejected. In any event, the total aggregate liability of H.B. Fuller for any claim or series of related claims however arising, in contract, tort (including negligence), breach of statutory duty, misrepresentation, strict liability or otherwise, is limited to replacement of affected products or refund of the purchase price for affected products. H.B. Fuller shall not be liable for loss of profit, loss of margin, loss of contract, loss of business, loss of goodwill or any indirect or consequential losses arising out of or in connection with product supply.

Nothing in any term shall operate to exclude or limit H.B. Fuller's liability for fraud, gross negligence or for death or personal injury caused by negligence or for breach of any mandatory implied terms.

Australia
Tel: +61 1800 423 855
customer.service@hbfuller.com
China & Hong Kong
Tel: +86 20 82068291
cs.china@hbfuller.com
Indonesia
Tel: +62-21-5307232/33

Korea
Tel: +82 2 786 8296
cskorea@hbfuller.com
Malaysia
Tel: +603 3345 5200
New Zealand
Tel: +64 800 555 072
customer.service@hbfuller.com

Philippines
Tel: +63 2 5194073
Taiwan
Tel: +886 2 26033385
Thailand
Tel: +66 2 3757442
Vietnam
Tel: +84 8 22225588





Performance Data

Property	Data
Specific Gravity	ca. 1.45
Sag	Nil
Shrinkage	0%
Skin Time	ca. 40-50 mins @ 23°C
Cure Rate	ca. 4 mm/day @ 23°C
Full Cure	After 7 days @ 23°C
Storage Life	12 months unopened
Durometer Hardness	Shore A ca. 55
Modulus 100% (ISO 37)	ca. 1.2MPa
Tensile Strength (ISO 37)	ca. 2.0MPa
Elongation (ISO 37)	ca. 300%
Service Temperature	-40°C to 100°C
Movement Capability	± 15%

Coverage

Approximate meters per liter of Fulaflex 650FC sealant as per table.

Joint Width mm	Joint Depth mm	Yield (300ml cartridge (Linear metres))	Yield (600ml sausage (Linear metres))
6 (min)	6	8.4	16.7
10	10	3.0	6.0
12	12	2.1	4.2
18	12	1.4	2.7
24	12	1	2.1
30	15	0.7	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 lint-

free 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.

Joint Design

A good joint design is imperative if a sound, durable seal is to be achieved. In general, joints should be designed to be at least 4 times as wide as the anticipated movement. Joint width and depth should not be less than 6 mm and depth should never exceed width.

Joint Width.	Recommended Joint Depth.
< 12 mm	Depth = Width
10 mm - 30 mm (max)	10 mm - 15 mm

Our Focus is Clear. Perfecting Adhesives.

IMPORTANT: Information, specifications, procedures and recommendations provided ("information") are based on our experience and we believe this to be accurate. No representation, guarantee or warranty is made as to the accuracy or completeness of the information or that use of the product will avoid losses or damages or give desired results. It is purchaser's sole responsibility to test and determine the suitability of any product for the intended use. Tests should be repeated if materials or conditions change in any way. No employee, distributor or agent has any right to change these facts and offer a guarantee of performance.

NOTE TO USER: by ordering/receiving product you accept the H.B. Fuller General Terms and Conditions of Sale applicable in the region. Please request a copy if you have not received these. These Terms and Conditions contain disclaimers of implied warranties (including but not limited to disclaiming warranties of fitness for a particular purpose) and limits of liability. All other terms are rejected. In any event, the total aggregate liability of H.B. Fuller for any claim or series of related claims however arising, in contract, tort (including negligence), breach of statutory duty, misrepresentation, strict liability or otherwise, is limited to replacement of affected products or refund of the purchase price for affected products. H.B. Fuller shall not be liable for loss of profit, loss of margin, loss of contract, loss of business, loss of goodwill or any indirect or consequential losses arising out of or in connection with product supply.

Nothing in any term shall operate to exclude or limit H.B. Fuller's liability for fraud, gross negligence or for death or personal injury caused by negligence or for breach of any mandatory implied terms.

Australia
Tel: +61 1800 423 855
customer.service@hbfuller.com
China & Hong Kong
Tel: +86 20 82068291
cs.china@hbfuller.com
Indonesia
Tel: +62-21-5307232/33

Korea
Tel: +82 2 786 8296
cskorea@hbfuller.com
Malaysia
Tel: +603 3345 5200
New Zealand
Tel: +64 800 555 072
customer.service@hbfuller.com

Philippines
Tel: +63 2 5194073
Taiwan
Tel: +886 2 26033385
Thailand
Tel: +66 2 3757442
Vietnam
Tel: +84 8 2225588



Product Application

Cut tip off cartridge or end of sausage. Angle cut nozzle to desired size. Screw nozzle onto cartridge or set in sausage barrel gun. Apply sealant in a steady, continuous flow by pushing the sealant ahead of the nozzle so that it completely fills the joint and is in contact with both sides. Immediately after application, tool the sealant using a spatula. The use of water / soap solutions is not recommended. Avoid contact with alcohol or other solvent cleaners during cure. Remember to remove the masking tape before the sealant skins.

Painting

Flexible, acrylic-based emulsion coatings are best over Fulaflex 650FC, although pre-testing is always recommended to assess compatibility. Less flexible interior coatings are likely to crack due to their inflexibility. Oil based coatings and coatings containing a solvent are likely to remain tacky for an extended period when used over Fulaflex 650FC.

Chemical Resistance

Fulaflex 650FC provides good resistance to water, dilute alkalis, many cleaning agents, lime water and is mould resistant. Some oils can cause change in appearance of the sealant (e.g. fading or expansion), although the mechanical performance of the sealant doesn't significantly change. Substrates exposed to chemicals must have adequate resistance to the chemicals involved.

Clean Up

Best results are obtained by masking prior to sealing to avoid the necessity for clean up. If sealant is applied to areas where it is unwanted, clean up using white spirits or another solvent cleaning solution that does not leave a residue. Cured product can only be removed mechanically.

Limitations

- Avoid exposure to high levels of chlorine
- Avoid contact with alcohol and other solvent cleaners during cure phase
- Pre-testing is required on marble or other highly porous stone - finish may be affected
- Solvent-based coatings may remain tacky
- Do not use on bituminous surfaces
- Do not use on materials that bleed oil and plasticisers or solvents, as this will affect adhesion (e.g. most rubbers)
- Not a fire rated or glazing sealant. Not suitable for glazing with glass, acrylic or polycarbonate sheets
- Not suitable for use in roofing lap joint applications where the sealant is feathered down to zero application weight – for such applications consider the use of silicone.
- Not suitable for swimming pools or hot tubs

Safety Information

This product is not considered hazardous under the classification of GHS WHS Version 8. Further safety information is available on the product SDS. Avoid contact with skin and eyes. Store in a dry place below 30°C. Keep out of reach of children. An MSDS is available from the H.B. Fuller representative in your

Our Focus is Clear. Perfecting Adhesives.

IMPORTANT: Information, specifications, procedures and recommendations provided ("information") are based on our experience and we believe this to be accurate. No representation, guarantee or warranty is made as to the accuracy or completeness of the information or that use of the product will avoid losses or damages or give desired results. It is purchaser's sole responsibility to test and determine the suitability of any product for the intended use. Tests should be repeated if materials or conditions change in any way. No employee, distributor or agent has any right to change these facts and offer a guarantee of performance.

NOTE TO USER: by ordering/receiving product you accept the H.B. Fuller General Terms and Conditions of Sale applicable in the region. Please request a copy if you have not received these. These Terms and Conditions contain disclaimers of implied warranties (including but not limited to disclaiming warranties of fitness for a particular purpose) and limits of liability. All other terms are rejected. In any event, the total aggregate liability of H.B. Fuller for any claim or series of related claims however arising, in contract, tort (including negligence), breach of statutory duty, misrepresentation, strict liability or otherwise, is limited to replacement of affected products or refund of the purchase price for affected products. H.B. Fuller shall not be liable for loss of profit, loss of margin, loss of contract, loss of business, loss of goodwill or any indirect or consequential losses arising out of or in connection with product supply.

Nothing in any term shall operate to exclude or limit H.B. Fuller's liability for fraud, gross negligence or for death or personal injury caused by negligence or for breach of any mandatory implied terms.

Australia
Tel: +61 1800 423 855
customer.service@hbfuller.com
China & Hong Kong
Tel: +86 20 82068291
cs.china@hbfuller.com
Indonesia
Tel: +62-21-5307232/33

Korea
Tel: +82 2 786 8296
cskorea@hbfuller.com
Malaysia
Tel: +603 3345 5200
New Zealand
Tel: +64 800 555 072
customer.service@hbfuller.com

Philippines
Tel: +63 2 5194073
Taiwan
Tel: +886 2 26033385
Thailand
Tel: +66 2 3757442
Vietnam
Tel: +84 8 2225588



state, HB Fuller Australia customer service, or downloadable from the HB Fuller web site, www.hbfuller.com.au.

Disclaimer

This technical data sheet summarises at the date of issue to the best technical knowledge of HB Fuller Australia. Since HB Fuller Australia cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this technical data sheet in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for the products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Version 9
TDS Date: 15/03/2023

Our Focus is Clear. Perfecting Adhesives.

IMPORTANT: Information, specifications, procedures and recommendations provided ("information") are based on our experience and we believe this to be accurate. No representation, guarantee or warranty is made as to the accuracy or completeness of the information or that use of the product will avoid losses or damages or give desired results. It is purchaser's sole responsibility to test and determine the suitability of any product for the intended use. Tests should be repeated if materials or conditions change in any way. No employee, distributor or agent has any right to change these facts and offer a guarantee of performance.

NOTE TO USER: by ordering/receiving product you accept the **H.B. Fuller General Terms and Conditions of Sale** applicable in the region. Please request a copy if you have not received these. These Terms and Conditions contain disclaimers of implied warranties (including but not limited to disclaiming warranties of fitness for a particular purpose) and limits of liability. All other terms are rejected. In any event, the total aggregate liability of H.B. Fuller for any claim or series of related claims however arising, in contract, tort (including negligence), breach of statutory duty, misrepresentation, strict liability or otherwise, is limited to replacement of affected products or refund of the purchase price for affected products. H.B. Fuller shall not be liable for loss of profit, loss of margin, loss of contract, loss of business, loss of goodwill or any indirect or consequential losses arising out of or in connection with product supply.

Nothing in any term shall operate to exclude or limit H.B. Fuller's liability for fraud, gross negligence or for death or personal injury caused by negligence or for breach of any mandatory implied terms.

Australia
Tel: +61 1800 423 855
customer.service@hbfuller.com
China & Hong Kong
Tel: +86 20 82068291
cs.china@hbfuller.com
Indonesia
Tel: +62-21-5307232/33

Korea
Tel: +82 2 786 8296
cskorea@hbfuller.com
Malaysia
Tel: +603 3345 5200
New Zealand
Tel: +64 800 555 072
customer.service@hbfuller.com

Philippines
Tel: +63 2 5194073
Taiwan
Tel: +886 2 26033385
Thailand
Tel: +66 2 3757442
Vietnam
Tel: +84 8 22225588