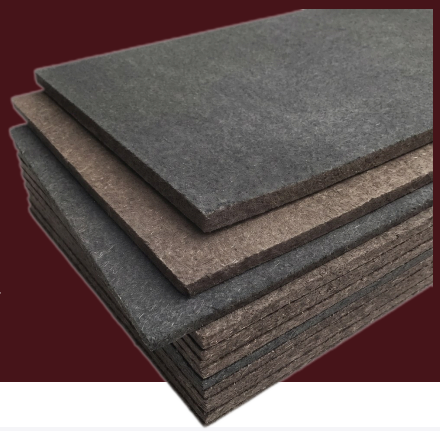
UNIFLEX® FB

BITUMINOUS FIBREBOARD



Product Features

UNIFLEX® FB is a bitumen-impregnated fibreboard joint filler made from sugar cane fibre and bitumen. It is a resilient, compressible board used to form and fill expansion and isolation joints in in-situ concrete, and it meets the compression and recovery requirements of ASTM D1751.

The board is light, easy to cut and handle, does not extrude under compression and has low water absorption. It is supplied in standard sheets and can be cut into strips to suit the slab depth. It can be sealed directly with bitumen-based sealants, or with PU, PS and MS sealants when a bond breaker tape or backer rod separates the sealant from the board.

Advantages

- Meets ASTM D1751 Compression And Recovery
- Low Water Absorption
- Does Not Extrude Under Compression
- Recovers 75 - 80% After 50% Compression
- Light, Easy To Cut And Handle
- Supplied In Sheets Or Cut To Strips

Fields Of Application

- **Heavy Traffic Surfaces:** Concrete roadways, highways, airport runways.
- **Paving & Infrastructure:** Driveways, aprons, walkways, curbs, and gutters.
- **Reinforced Concrete Structures:** Piers, retaining walls, and bridge abutments.
- **Paving Insets & Interfaces:** Drainage channels, manholes, and slab flooring.
- **Internal Finishes & Flatwork:** Interior slabs, concrete flatwork and floor systems.
- **Protection Board:** Over waterproofing membranes during backfilling or concreting.

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Technical Properties

Property	Test Method	Result **25MM THK 35% BITUMEN CONTENT**
Dimension Thickness	ASTM D1751	25 mm
Density	ASTM D1751	330 - 350 kg/m³
Water Absorption	ASTM D1751	15 %
Asphalt Content	ASTM D1751	36 - 37 %
After compressing to 50% of the specimen's thickness:		
Compression	ASTM D1751	2800 - 3200 kPa
Loss in Weight	ASTM D1751	0.1 - 0.2 %
Extrusion	ASTM D1751	0.5 mm
Recovery (10 mins @ 50%)	ASTM D1751	75 - 80 %

All values given are subject to 5-10% tolerance

Physical Properties

Material	:	Bitumen-impregnated fibreboard
Bitumen Content	:	35%
Sheet Size	:	2.44 m x 1.22 m / 2.20 m x 1.22 m
Thickness	:	10, 12, 18 & 25 mm
Strips	:	Cut to width on request
Colour	:	Dark brown
Joint Sealant	:	Bitumen-based; PU, PS or MS over a bond breaker

Limitations

UNIFLEX® FB can be sealed directly with bitumen-based joint sealants such as **UNISEAL® BITUFLEX**. PU, PS and MS sealants must not touch the board, because the mobile bitumen fractions in it can degrade elastomeric sealants. Separate them from the board with **UNIFLEX® PE Bond Breaker Tape** or **UNIFLEX® PE Backer Rod**. Not suitable for joints that are permanently wet or submerged.

This technical data sheet is given in good faith and does not guarantee the application work.
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Installation Procedures

1 Preparation | 2 Application | 3 As Protection Board | 4 Joint Sealing

Installation Procedures

Step 1
PREPARATION

To form an expansion joint in new concrete, brickwork, blockwork or masonry, construct one side of the joint before positioning and fixing **UNIFLEX® FB**. Make sure the contact surface is clean, dry and free of loose debris, dust and grease so the board sits firmly and evenly against it.

Step 2
APPLICATION

A sealing slot can be formed by placing a removable timber former on top of **UNIFLEX® FB**. Alternatively, install **UNIFLEX® FB** to the full depth of the slab and cut it back to the required sealant depth afterwards. The second method is generally used for housing estate roads and heavy-traffic areas that cannot be cleaned and sealed until all adjacent building work has finished.

Step 3
AS PROTECTION BOARD

Where **UNIFLEX® FB** is used as a protection board over a waterproofing coating or membrane, fix it to the membrane with a compatible adhesive, in full surface contact. The board protects the membrane from puncture and mechanical damage during backfilling or concrete placement.

Step 4
JOINT SEALING

Check that **UNIFLEX® FB** fills the joint completely, with no voids, so that it gives continuous, solid support to the sealant. Bitumen-based sealants such as **UNISEAL® BITUFLEX** can be applied directly onto the board. For PU, PS or MS sealants, first place a bond breaker tape or backer rod to separate the sealant from **UNIFLEX® FB**.

Shelf Life & Storage

Store **UNIFLEX® FB** under cover in dry conditions. As with all organic materials, prolonged storage in wet or damp conditions carries a slight risk of spontaneous combustion.

Health & Safety

UNIFLEX® FB presents no health hazard in normal handling and use. Refer to the Safety Data Sheet for further information.

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