Fibrejoint

Asphaltic Plug Joint

Product Description

The Fibrejoint system is a hot-applied, polymer-modified asphalt binder with specific aggregates used in conjunction with backer rod and a steel deflection plate in prepared expansion joint block outs. The Fibrejoint material conforms to testing components of ASTM D6297 standard specification for asphaltic plug joints.

Basic Uses

Fibrejoint is used for expansion joints on bridge fixed ends and expansion connections.

Features and Benefits

- Provides a quiet, smooth riding surface.
- Accommodates limited joint movement due to thermal expansion and contraction, and vibratory movements.
- Resistant to water intrusion and broad range of salts, bases and organic materials.
- Easy to install.

Physical Properties*

Property	Test Method	Value
Color		Black
Mastic Resilience	ASTM D5329 Sec 10	46%
Asphalt Compatibility	ASTM D5329 Sec 12	Pass – no adhesion failure et al
Bond	ASTM D5329 Sec B	Pass 100% Extension
Tensile Adhesion	ASTM D5329 Sec 14	>700
Ductility @ 77 °F	ASTM D113	67 cm
Flow @ 140 °F	ASTM D5329 Sec 7	0 mm
Softening Point	ASTM D36	97 °C
Cone Penetration @ -18 °C	ASTM D5329 Sec 6	17 dmm
Cone Penetration @ 25 °C	ASTM D5329 Sec 6	50 dmm
Specific Gravity		1.8 – 2.0

** The values shown are based on system testing under laboratory conditions. Different field application conditions or lab equipment configurations may result in system value variances.*

Packaging

- 50 pound box
- Consumption Rate: 1 cf approximately 36 lbs Fibrejoint and 102 to 108 lbs aggregate

Health and Safety

See SDS for complete safety precautions prior to use. Use HSE-approved personal protective equipment (PPE), including safety glasses, gloves and confined space equipment/procedures if applicable. Avoid skin contact; do not ingest. For professional use only.

Installation

The Fibrejoint system installation shall be centered over the existing expansion joint gap to the recommended width of 10” (25 cm). Variations in the width of the joint will be determined by the site engineer and the manufacture.

Joint Width (inches)	Joint Thickness (inches)	Max. Horizontal Movement (inches)	Max. Vertical Movement (inches)
29.5	4.0	+/- 0.8	+/- 0.6
29.5	3.0-4.0	+/- 0.8	+/- 0.6
29.5	2.0-3.0	+/- 0.8	+/- 0.6
20.0	4.0	+/- 0.8	+/- 0.6
20.0	3.0-4.0	+/- 0.8	+/- 0.6
20.0	2.0-3.0	+/- 0.5	+/- 0.6
12.0	4.0	+/- 0.8	+/- 0.6
12.0	3.0-4.0	+/- 0.2	+/- 0.6
12.0	2.0-3.0	+/- 0.2	+/- 0.6

Site Preparation

Remove all material between the joint block out, including the wearing surface and riser bars. Damaged concrete on the joint table must be removed. The previous expansion joint system must be removed to a depth which will allow the Fibrejoint system to be installed, normally 2” (5 cm) minimum.

All removed materials and residual repair materials will be recovered and disposed of away from the site according to the client’s specifications. All Federal, State and OSHA safety requirements must be followed during installation.

Application

Application of the Fibrejoint system shall be by factory trained and certified installation professionals.

The area is cleaned and dried and the backer rod is installed. A coating of the Fibrejoint binder is applied to form a waterproof seal.

The deflection plate, steel plate minimum ¼” thick by 8” wide, is centered over the joint. Then, the Fibrejoint binder and aggregates are mixed on site and applied until level with the deck surface. A final tack coat of binder is applied with a crushed toping stone to provide a tack free surface and compacted to ensure the joint is free of voids.

Depending on the depth of the repair, Fibrejoint will be ready for traffic return in approximately 2 hours.

New Construction

In new works or when re-surfacing during maintenance scheme, it is necessary to temporarily cover the deck expansion gap to prevent ingress of materials into the expansion gap. Any such coverings should be easily removed when the trench is excavated for the joint.

Temporary saw-cuts into the newly laid surface above the deck expansion gap may be considered necessary to prevent unacceptable cracking of the surfacing before the joint is installed.

As a general rule, this is not required when the joint is installed immediately after the surfacing has been laid. However, if appreciable deck movement is predicated after surfacing and before joint installation, then saw cutting should be carried out by the general/prime contractor after the surfacing has cooled sufficiently.

All removed materials and residual repair materials will be recovered and disposed of away from the site according to the client’s specifications. All Federal, State and OSHA safety requirements must be followed during installation.

Limitations/ Shelf Life

Two (2) years when stored in a dry place in original, closed packaging. Optimal storage temperature: 60 to 70 °F (15 to 20 °C).

Warranty

FPT Infrastructure warrants its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, FPT Infrastructure makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to FPT Infrastructure Products. FPT Infrastructure’s sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of FPT Infrastructure Products proven to be defective, and FPT Infrastructure shall not be liable for any loss or damage.

Please refer to our website at fptinfrastructure.com for the most up-to-date Product Data Sheets.

NOTE: All FPT Infrastructure Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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