

TUNNEL SEGMENT SEALING MEMBRANE

www.gripset.com

TECHNICAL DATA SHEET

techenquiries@gripset.com



Description

Gripset 773 is a reinforced sealing membrane designed to absorb driving forces between segments in tunnel constructions when using the shield tunnelling method. Gripset 773 is based on a specially designed compound consisting of polymer modified bitumen reinforced with an elastic high strength woven fabric.

Features & Benefits

- * Flexible membrane
- * Ability to absorb high pressures
- * Good rebound properties
- * Quick and easy to apply
- * Ability to be produced to different dimensions to suit tunnel designs
- * Excellent water resistance
- * Resistant to sulphates, ground salts, diluted acids

Application

- * Gripset 773 Tunnel Segment Sealing Membrane protects precast concrete segments in shield tunnelling by preventing concrete segments from driving against each other, reducing the incidence of spalling concrete. The membrane reduces load transmission between segments by absorbing the driving forces, while maintaining the minimum distance between tunnel segments when using the shield tunnelling method.

Surface Preparation

- * Surfaces must be prepared thoroughly before commencing application. All substrates must be structurally solid, supportive and level. Surfaces are to be free of dust, laitance, grease, oil or solvent residues.
- * For thorough surface preparation, refer to Gripset SC (algae and moss remover) and Gripset DG (water based oil degreaser) products.

Application

- * Gripset 773 is applied to surfaces in conjunction with the use of Gripset 51 bitumen rubber adhesive.
- * Stir the adhesive before use and apply to the substrate with a long bristle brush or short nap roller at 1 litre/2m² to all areas where the membrane is to be applied.
- * Allow 4-6 hours for the adhesive to dry, then remove release paper from the rear of the Gripset 773 membrane, and position in place over the adhesive, pressing firmly onto the substrate. Repeat this process for all required pieces of membrane onto the concrete segment.
- * The drying period for the adhesive of concrete is dependent on surface porosity and surrounding temperature. In cool conditions less than 18°C or when humidity is > 65% drying of adhesive may be prolonged. Surface temperature must be > 5°C before applying adhesive.

Packaging & Storage

- * Best stored at room temperature.
- * Avoid cold freezing conditions and off concrete floors.
- * Do not store in direct sunlight.
- * Gripset 773 shelf life is a minimum 12 months when stored correctly
- * Gripset 773 is produced and supplied to customer's requirements:
 - Standard thickness: 4mm
 - Standard width: 100mm
 - Standard length: 400mm-800mm
- * *For other dimensions please contact Gripset Industries.*

Clean Up

- * Adhesive is cleaned from tools and surfaces with water while wet
- * Once dried product needs to be removed mechanically or by solvent

Technical Data

Resistance to heat:	Does not run or drip off at 200°C
Resistance to cold (DIN 52123):	No cracks at -15°C
Slot pressure test (DIN 52123):	Passed
Breaking resistance and Elongation at break (DIN 52123):	Passed
Tear resistance for aged and non aged samples (DIN 53405 and DIN 53508)	Passed

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Notes

It is recommended before commencing the application; that adhesion of products to be used (e.g. primers, membranes, coatings adhesives etc) is tested over a typical area of the prepared surface to ensure satisfactory adhesion. It is the responsibility of the applicator to carry this out and accept the substrate suitability before any application starts. Gripset Industries offers a service for pre testing adhesion to surfaces for large commercial areas or unusual substrates. For further details contact Gripset Industries. Details contained in product data sheets are general. For any situation or items not covered in this data sheet, it is the responsibility of the applicator to check with Gripset Technical Services before commencing the application. A written confirmation will then be issued by Gripset Technical Services

Gripset Industries Pty Ltd

ABN: 41 094 789 929

Telephone: +61 (8) 8124-7300 or 1800 650 435

Email: techenquiries@gripset.com

Website: www.gripset.com

Product Disclaimer

This Product Data Sheet (PDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this PDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Gripset Industries does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.