

BREEDONFlex SAMI (STRESS ALLEVIATING MEMBRANE INTERLAYER) IS A DENSE, POLYMER MODIFIED, WATERPROOF INTERLAYER, DESIGNED TO INHIBIT CRACKING ON PAVEMENTS BY DISSIPATING MOVEMENTS AND STRESSES.

BREEDONFlex SAMI can be incorporated into new pavements, or installed on surfaces requiring treatment. When laid onto distressed substrates between polymer modified bond coats, underneath binder or regulating courses, BREEDONFlex SAMI can replace expensive and time consuming specialist grid systems. Pavements utilising SAMIs have significantly extended pavement lives, negating the need for costly maintenance.



APPLICATIONS

- Overlaying concrete and Cement Bound Granular Materials (CBGMs)
- Bridge decks
- Sites requiring high fatigue and deformation resistance (e.g. heavily trafficked sites and roundabouts)
- Cracked and crazed pavements

TECHNICAL DATA

BREEDONFlex SAMI is manufactured using specially selected fine aggregates and heavily modified polymer modified binder (PMB). The highly flexible elastomeric PMB not only absorbs trafficking and tensile stresses preventing crack propagation to the surface, but accommodates small movements in the substrate, and also improves resistance to permanent deformation and fatigue, demonstrated at very heavily trafficked sites.

CONSTRUCTION

Installation of BREEDONFlex SAMI is completed using conventional paving equipment and the nominal and minimum compacted layer thicknesses are as follows:

Nominal Layer Thickness (mm)	Minimum Thickness at Any Point (mm)
20 - 25	15

Prior to overlaying concrete or CBGMs, any loose or broken material must be removed, joints 'made good' and sealed. Wherever possible, tanker applied bond coats should be used both beneath (on the receiving substrate) and above BREEDONFlex SAMI. The bond coat shall be allowed to fully 'break' (i.e. turn from brown to black). Installation should be carried out in accordance with the general requirements of BS 594987, with a tandem roller with a minimum deadweight of 6 tonnes used as the lead roller. Smaller machines should only be used in areas of restricted access. The product must be sufficiently compacted (a minimum of six roller passes) before the temperature of the material reaches 120°C.

BENEFITS

- Outstanding fatigue resisting properties.
- Reduced whole life costing (WLC).
- Extends pavement life.
- Saves on long-term repair and maintenance.
- Substantially reduces the risk of reflective cracking.
- Absorbs movement, inhibiting crack formation.
- May eliminate the need for expensive

- and time consuming specialist grid systems.
- Installed using conventional paving equipment.
- Can improve pavement resistance to permanent deformation and fatigue.
- Creates a waterproof barrier, preventing water ingress.
- Joint construction is less problematic than standard asphalts, ensuring consistency.
- Can be recycled in the same way as standard bituminous materials.

MAINTENANCE AND REPAIR

Although BREEDONFlex SAMI will significantly delay the onset of reflective cracking from concrete, cracking will inevitably occur on the surface of the bituminous layers. When this does eventually happen, the damaged areas can be removed by planing to the appropriate depth (i.e. concrete surface) to provide a minimum length of 15m for paver resurfacing. The planed area can be resurfaced, again utilising BREEDONFlex SAMI above the concrete substrate and overlaying using materials to the same specification as the adjoining areas (preferably BREEDONFlex, which will further inhibit crack propagation). Wherever possible, bond coats shall be used between layers.

WHY CHOOSE BREEDON PROPRIETARY MATERIALS?

The Proprietary Materials offered by Breedon are extensively designed and rigorously tested to exceed the performances of traditionally used asphalts in specific applications. Our Proprietary Materials often include additives to achieve these high levels of operation.

PRECAUTIONS AND LIMITATIONS

Asphalt remains relatively soft for up to one year after laying; until it has time to oxidise and harden (i.e. elasticity is reduced). It is recommended that the surface is not trafficked for at least 4 hours following installation, when it is most susceptible to damage. When trafficked by vehicles, it is recommended that vehicles are moving when the wheels are turned. If a vehicle is stationary when the wheels are turned (particularly with modern power steering), the asphalt can be displaced and marked by stresses applied at that particular point.

It is also recommended that (wherever possible) vehicles are parked in different positions to avoid marking the asphalt, and heavy vehicles, trailers, plant, machinery and ladders with

small footprints are parked on wooden boards to disperse the loading. Fuel spillages should also be contained and cleaned up as soon as possible as these will compromise durability. Recommended procedure for removing diesel spillages is as follows:

- Stem the leak.
- If necessary, contain the spillage by deploying booms around the source and block any drains.
- Apply absorbent granules (e.g. cat litter) or sand to the spillage area.
- Sweep up the absorbent granules and dispose of in accordance with environmental regulations.
- Scrub the surface using a mild detergent. Any effluent resulting from the clean-up activity must not be washed into surface water drains because it is an offence under the Water Resources Act 1991.

QUANTITY REQUIRED

As a guide, please refer to the Material Calculator on our website (www.breedongroup.com).

AVAILABILITY

BREEDONFlex SAMI can be laid all year round (depending on climatic conditions), and may be installed by, or under license from, Breedon.

TO DISCUSS YOUR PROJECT REQUIREMENTS, AND FOR MORE INFORMATION ABOUT OUR PRODUCTS CONTACT:

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The information given in this technical datasheet is based on our current knowledge and is intended to provide general notes on our products and their uses. Breedon Group plc endeavours to ensure that the information given is accurate but accept no liability for its use or its suitability for a particular application because of the product being used by the third party without our supervision.

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