

# **BREEDONCititex**

TECHNICAL DATASHEET - ASPHALT

# BREEDONCITIEX IS A 'TRUE' GERMAN STONE MASTIC ASPHALT, DESIGNED TO PROVIDE AN IMPERMEABLE, DURABLE, DEFORMATION RESISTANT SURFACE COURSE, WHILST RETAINING SUFFICIENT TEXTURE FOR SKIDDING RESISTANCE.

It is available using paving grade (40/60 Pen) or polymer modified binders, which can be selected for the particular application. In addition, a vairety of different polished stone value (PSV) aggregates can be supplied, as required.

### APPLICATIONS

- Major routes
- Urban areas
- High stress regions (e.g. roundabouts and junctions)
- Car parks
- Problematic areas (e.g. drive-throughs)

#### **TECHNICAL DATA**

BREEDONCititex was created as a more robust alternative to Stone Mastic Asphalts and Thin Surface Course Systems used in the U.K. The binder content and gradings are comparable with German specifications (although different sized aggregates are used), with low air voids and excellent deformation resistance. A dense grading provides significant aggregate interlock, providing exceptional resistance to fretting and raveling. The high binder contents enable the material to be worked and compacted more easily than conventional Stone Mastic Asphalts, and joint formation is also less problematic.

## CONSTRUCTION

BREEDONCititex is available in three sizes, and the nominal and minimum compacted layer thicknesses and typical initial macrotexture depths are as follows:



Largest Nominal Aggregate Size (mm)	Nominal Layer Thickness (mm)	Minimum Thickness at Any Point (mm)	Typical Initial Texture Depth (mm)
6	25 - 40	20	0.5 - 0.9
10	30 - 50	25	0.8 - 1.2
14	40 - 50	35	1.1 – 1.5

Wherever possible, tanker applied bond coats should be used beneath BREEDONCititex and 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, using

a tandem roller with a minimum deadweight of 6 tonnes (preferably a 10 tonne deadweight roller) as the lead roller. Smaller machines should only be used in areas of restricted access, and to remove any marks left by the lead roller.

### BENEFITS

- Exceptional durability.
- Superior deformation, fretting and raveling resistance.
- Smooth, consistent surface ensuring outstanding ride quality.
- Good surface textures.
- Very good climate
- (water and ageing) resistance.Very low traffic noise.
- Easier to work and compact than 'standard' Stone Mastic Asphalts.
- Joint construction less problematic than with alternative materials.

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- Polymer modified version supplied to suit end use application.
- Polymer modified option can be trafficked sooner than conventional bituminous materials.
- Polymer modified variant has a high softening point, reducing the risk of damage.

#### MAINTENANCE AND REPAIR

BREEDONCititex is not subject to any specialised routine maintenance processes, and should be maintained in accordance with the Design Manual for Roads and Bridges HD 31/94 "Maintenance of Bituminous Roads".

# Motorways, trunk roads and other major repairs

Any damaged areas are to be removed by planing to the appropriate depth to provide a minimum length of 15m for paver resurfacing. The planed area will be resurfaced using material to the same specification, in accordance with Breedon's Installation Procedures.

#### **Minor repairs**

- Minor repairs can be carried out by cutting out the damaged section and replacing it with a material of suitable specification.
- A K1-40 (C40 B 4) or K1-60 (C60 B 4) tack coat, or an acceptable proprietary bond coat, will be used on the receiving substrate.
- Wherever possible, a diamond patch reinstatement shall be used, extending a minimum of 0.25m beyond the damaged section.
- Joints must be saw cut vertical, cleaned and painted with a thick uniform coating of hot bitumen, hot elastomeric polymer modified bituminous binder, or cold applied thixotropic bituminous compound prior to laying.

#### WHY CHOOSE BREEDON PROPRIETARY MATERIALS?

The Proprietary Materials offered by Breedon are extensively designed and rigorously tested to exceed the performances of traditionally used bituminous materials in specific applications. Our Proprietary Materials often include specialised additives to achieve 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 2 hours (PMB version) or 4 hours (40/60 Pen option) following installation, when it is most susceptible to damage. When trafficked by vehicles, it is recommended that they are moving when the wheels are turned. If a vehicle is stationary when tyres 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 as 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

BREEDONCititex 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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