

BREEDONOnecoat Parking IS A COMBINED BINDER AND SURFACE COURSE SINGLE LAYER SUITABLE FOR MOST CAR PARKING AREAS.

APPLICATIONS

- Driveways
- Car parks and connecting link roads
- Roundabouts

OVERVIEW

Traditional construction of parking areas has involved at least two bituminous layers, laid separately onto one another. BREEDONOnecoat Parking is a combined binder and surface course single layer applied directly onto well compacted sub-base, or onto existing surfaces. Suitable for most car parking areas, this innovative approach offers substantial reductions in construction times and costs. Disruption to users is reduced and there are added health and safety benefits as risk is lowered through less time on site.

TECHNICAL DATA

BREEDONOnecoat Parking is a 10mm Stone Mastic Asphalt type proprietary surfacing utilising a modified binder in order to improve workability and compactability, whilst also significantly improving durability when compared against the traditional two layer installation. The single layer of BREEDONOnecoat Parking retains heat for extended periods, helping to achieve sufficient compaction and lowering in situ air voids which can lead to water ingress and a major contributor to poor performance.



A single layer application also reduces the risk of delamination and potholing by eliminating the possibility of trapping moisture and/or detritus which may occur with a two course treatment. For demarcation or aesthetic purposes, BREEDONOnecoat Parking can also be supplied as a coloured product.

BREEDONOnecoat Parking installed at a range of layer thicknesses from 50 to 100mm achieved the following key characteristics:

Test Method	Result
Air Void Content (BS EN 12697-6 and BS EN 12697-8)	4.0%
Resistance to permanent deformation (BS EN 12697-22 in air at 60°C)	Mean wheel track slope of 0.1mm/1000 cycles
Indirect Tensile Stiffness Modulus (BS EN 12697-26: Annex C)	2617 MPa

The information confirms BREEDONOnecoat Parking as a compactable, strong, durable, rut resistant material. As it is a Stone Mastic Asphalt type surfacing, it is also offers superior performance against fretting and raveling, which often occur in parking areas.

CONSTRUCTION

Breedon Onecoat is available in one size, 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)
10	50 - 100	40	≥0.8

New constructions require good quality, non-plastic, well compacted sub-base (e.g. Type 1). Installation should be carried out in accordance with the general requirements of BS 594987, using as large a tandem roller as possible for the site. Pedestrian single-drum rollers and wacker plates should only be used in areas of restricted access, and to remove any marks left by the lead roller. The material shall be substantially compacted before reaching 110°C.

BENEFITS

- Time and cost saving single course application.
- Suitable for high volume car parking areas.
- Less disruption to users.
- Reduced health and safety risks.
- Layer thickness range of 50 to 100mm offers a solution when levels are problematic and can remove the need for regulating.
- Less risk of delamination and pot holing compared to a two layer installation.
- Improved workability and compactability.
- Single layer improves heat retention, increasing the compaction period, helping to lower in situ air voids and achieve impermeability.
- High strength, durability, fretting, raveling and rut-resisting properties.
- Good rate of spread.
- Smooth, uniform finish.
- Minimal maintenance required.
- Area can be opened to traffic once the centre of the layer has reached ≤40°C.
- Available as a coloured product.

MAINTENANCE AND REPAIR

BREEDON Onecoat Parking is not subject to any specialised routine maintenance processes, although the following procedures should be followed:

- Wherever possible, vehicles shall be moving when the wheels are turned and shall be parked in different positions.
- Any heavy vehicles, trailers, caravans and ladders with small footprints parked on the material should use wooden boards to disperse the loading.
- Fuel spillages should be removed immediately (sand, sorbents such as cat litter, oil absorbent pads and spill kits can be useful for this task).
- Any loose aggregate particles should be brushed and removed from the surface to prevent abrasion.

Major repairs

If possible, any damaged areas are to be removed by planing to the appropriate depth to provide a minimum length of 15m for paver resurfacing. Alternatively, the section to be replaced can be removed and re-laid by hand. The sections will be resurfaced using material to the same specification.

Minor repairs

- Minor repairs can be carried out by cutting out the damaged section and replacing it with a material of suitable specification.
- 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 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 until the centre of the layer has reached $\leq 40^{\circ}\text{C}$, 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

BREEDON Onecoat Parking can be laid all year round due to its improved workability (depending on climatic conditions), and may be installed by Breedon or experienced Contractors.



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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