



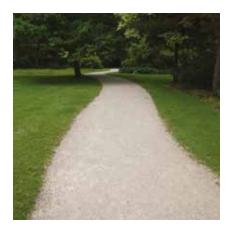
# GOLDEN AMBER GRAVEL

www.breedongroup.com

# BREEDON GOLDEN AMBER GRAVEL

#### ROBUST PERFORMANCE WITH A SOFT NATURAL GOLDEN FINISH, ENHANCING SOME OF BRITAIN'S MOST PRESTIGIOUS PROJECTS.

Breedon Golden Amber Gravel provides exceptional performance, durability and versatility with a soft, natural appearance which compliments both modern day and historical projects, from cottages to castles, traditional or contemporary.













#### **APPLICATIONS**

- Footpaths
- Private driveways
- Car parks
- Cycleways
- Bridleways
- Golf courses
- Canal towpaths
- Parks, leisure and recreational
- Colleges
- Historical

#### LAYING INSTRUCTIONS

The approximate coverage is 8m<sup>2</sup> per tonne. It is recommended that Breedon Golden Amber Gravel (Breedon Gravel) is laid at a finished compacted thickness of 50mm. Please note that Breedon self binding gravel is not free draining and requires a cross fall or camber to shed water from its surface into adequate drainage.

Breedon Gravel is a natural material quarried from selected limestone and graded approximately 12mm (1/2") to fines; the fines content being naturally occurring marl which acts as the self setting agent when the material is watered and rolled to fullest compaction in the manner described below.

Breedon Gravel must be laid onto a compacted quarried MOT Type 1 sub base to clause 803. The depth of which should be of sufficient strength and stability to carry the proposed traffic (we suggest a minimum of 150mm if the ground is good) and also the area concerned should be porous enough to ensure that water is not held directly in or immediately below the Breedon Gravel. If a weed suppressant membrane is required, this must be installed underneath the Type 1 sub base and not in between the sub base and Breedon Gravel.

The Type 1 sub base should be laid and rolled using a roller of suitable weight, i.e. minimum 1.5 tonnes for footways and similar works, and minimum 2.5 tonnes for car parks etc. By using a heavier roller, this helps achieve maximum compaction with fewer passes, however on smaller areas a pedestrian roller may be used although it is vital that the surface is rolled sufficiently to achieve fullest compaction prior to water rolling, this may take a few more passes over the area. The sub base should be laid with cross falls or cambers prior to the application of the Breedon Golden Amber surface course.

The Breedon Golden Amber gravel should be spread onto the prepared foundation using a flat board or the back of a rake. Do not use the prongs of a rake as this may pull the coarse components of the gravel up to the surface. Spread the material out to a depth of approximately 75mm in order to achieve a finished compacted thickness of 50mm.

The surface must then be rolled using a roller of similar type to that used for compacting the foundation with the vibratory action of the roller switched on and the area should be continually rolled until fullest compaction is achieved. It is imperative that Breedon Gravel is laid to a cross fall or camber in order to shed surface water - it must NOT be laid flat. To give some indication, an adequate fall would be 1 in 55 to 1 in 60 for a pathway and a minimum of 1 in 40 for larger areas such as car parks, courtyards etc. The same gradient should apply when installing the Type 1 sub base. Please ensure that adequate drainage is installed in proportion to the surface area being laid. If rainfall is not dispelled rapidly this can lead to an ingress of surface water which will prevent the hardening and binding process of the Breedon Golden Amber Gravel. After this initial laying to cambers and falls it is probable that occasional coarse areas will be evident where segregation of the Breedon gravel may have occurred. At this point, fines can be sieved from the main heap of material and scattered onto these coarse areas before being re-rolled.

Once a uniform appearance has been achieved the second stage can be undertaken. This is the water rolling of Breedon gravel for which the vibratory action of the roller must be switched off.

By using a water roller, water is automatically sprayed onto the drum of the roller. The fundamental aim is to have a film of water covering the whole Breedon Gravel surface but in most instances the water tank on the roller may be insufficient for dispelling enough water onto the drum and additional water will be required, particularly in dry warm weather. If any Breedon gravel is sticking to the drum of the roller, this indicates that there is insufficient water being applied and to rectify this, it is advisable that a hose is directed onto the drum of the roller as the

material is rolled so that the drum is saturated and there is a flood of water where the drum meets the surface. Never direct a hose directly onto the Breedon Golden Amber gravel itself as this will wash out the necessary fines which are required for the material to bind. The object of water rolling this material is to float sufficient fines to the top surface of the gravel to obtain a well-bonded finish.

If there are any lines or grooves in the gravel left by the weight of the roller, a soft wide broom can be used to gently pass over the surface whilst still wet - this will remove any lines and leave a perfect surface finish.

It is important that the area should then be allowed to dry out before being opened up to general use, the length of time to allow is dependant on weather conditions, but this can take up to 2 weeks or more. *Please note that materials should never be laid in frozen conditions.* 

Because Breedon gravel depends entirely on its own binding properties for its stability, it is not practical to lay Breedon gravel on steep slopes where the angle of fall is steeper than a 1 in 15 gradient. Long continuous fall over sloping ground can be minimised by the formation of deep steps to reduce the risk of ruts occurring through the action of flowing storm water.

On completion, the appearance of Breedon Golden Amber gravel is a very smooth and uniform finish but over time with weathering and trafficking the surface will scarify, giving a light dressing of chippings on the surface whilst maintaining a solid base. Should a lasting smooth appearance be required, the loose chippings can be swept from the surface using a soft broom. However, the surface will naturally scarify with use, therefore the sweeping process would need to be repeated when necessary.

> Please visit our section on Maintenance (page 4) for more information. Individual requirements can be discussed in detail with our sales team.

#### **BREEDON GOLDEN AMBER GRAVEL MAINTENANCE PLAN**

Breedon Golden Amber Gravel is a natural limestone and it is important that occasional maintenance is carried out as required to ensure the performance and looks are maintained.

#### POTHOLES

There are 2 basic reasons why potholes may occur - either due to surface damage or if surface water cannot drain away due to lack of cambers or cross falls.

Repairs should be carried out as soon as a pot hole appears. Cut out a neat square around the pot hole and remove all material in that square down to the Type 1 sub-base. Fill the area with new Breedon Golden Amber gravel and compact using wacker plate or roller in accordance with our laying instructions, then water roll the area to blend in with original surface.

#### **RE-SURFACING**

In the event of resurfacing at a later date, use a rake to scarify the top surface down to an approximate depth of between 35-45mm, whilst taking care to protect the integrity of the type 1 sub-base layer beneath. This may need some effort if the material has been down for a long period of time. Once the surface has been loosened, discard the loose debris then a new layer of Breedon Golden Amber gravel should be laid, rolled and water rolled in accordance with our laying instructions.

#### WEED GROWTH

Should any weed growth occur, spray the area with a water based weedkiller. Never pull the weeds up out of the gravel, this will loosen the bonded surface. Areas constantly shaded or only ever lightly used may be susceptible to moss, for these areas use a water based weedkiller or moss remover and apply this to the affected area when dry (and no rain expected for a few days) using either a watering can with a rose, a sprayer, a roller or a soft brush. This should take a few days to start working, then use a light rake to loosen the moss and sweep away, however take care not to put too much pressure on the surface and loosen up the Breedon gravel itself.

#### DRAINAGE

Always ensure that drains and gullies are kept free of debris to allow free draining of any surface water.

#### WINTER MAINTENANCE

For best results, ensure that the autumn leaves are removed from the surface by using a blower or a vacuum. Alternatively a very soft broom can be used to gently sweep off the surface leaves. Never use a coarse hard brush.

#### SURFACE APPEARANCE

Breedon Golden Amber gravel scarifies with use to leave a dressing of surface chippings, however as a matter of personal choice, the loose chippings can be swept from the surface using a very soft broom to leave a smoother finish, however this process will need to be repeated as the surface will naturally scarify with use.

#### **HEALTH AND SAFETY**

#### Product

Crushed limestone aggregate.

#### Application

Crushed limestone is used as a basic construction material and as a component in other materials such as concrete, mortar, asphalt and coated roadstone.

#### Precautions

The products are not considered hazardous. Inhalation of any dust should be avoided. Dust masks to BS 2091 Type B, or their equivalent, should be worn in enclosed spaces where handling or further processing is taking place and where adequate ventilation is not provided.

## Physical and chemical characteristics

This limestone consists primarily of calcium and magnesium carbonates.

#### Protective clothing

No protective clothing is required.

#### PH value

The pH value of Breedon limestone is 8.5.

### Transportation, storage and disposal

The carriage of aggregates is not subject to hazardous substance conveyance regulations and vehicle labelling is not required. Aggregates are inert but should be disposed of in accordance with local legal requirements.

This brochure is provided for general guidance only and may contain information which could be inappropriate under particular conditions of application use. In keeping with our policy of continual product development, Breedon Southern Limited reserve the right to alter any specification shown. All information is correct at time of print. Liability in respect of any statement conditions, warranties and representations made on behalf of the company are limited to the standard conditions of sale which are available on request.

#### TO DISCUSS YOUR INDIVIDUAL REQUIREMENTS PLEASE CONTACT:

# TEL: 01332 694001

specialaggs@breedongroup.com www.breedon-special-aggregates.co.uk Breedon Special Aggregates, Breedon Quarry, Breedon-on-the-Hill, Derby, DE73 8AP.