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 8m² 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 a free draining product 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 selfsetting 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.

Prior to use it is recommended that the moisture content of the Breedon Gravel is checked, particularly in prolonged dry conditions or where material has been stocked for a period before use. When squeezed by hand the material should have enough moisture within it that it should stick together. If the material is dry, we advise that a hose with a fine mist setting is sprayed over the Breedon Gravel and the heap is turned over sufficiently to replenish lost moisture to achieve the necessary consistency.

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 will segregate the

material. 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

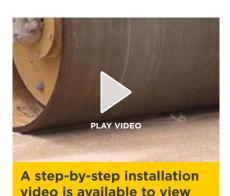
using a roller of similar type to that used for compacting the foundation with the vibratory action of the roller switched on and the area should be continually rolled until fullest compaction is achieved. It is imperative that Breedon Gravel is laid to a cross fall or camber in order to shed surface water - it must NOT be laid flat. To give some indication, an adequate fall would be 1 in 55 for a pathway with a width of 1 metre approximately and a minimum of 1 in 40 for much wider walkways, courtyards and car parks 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 is insufficient for dispelling enough water onto the drum and additional water will be required. This is almost always the case in dry warm weather. If the Breedon Gravel is sticking to the roller, this indicates that there is insufficient water being applied. To rectify this, it is advisable that a hose is directed onto the drum of the roller as the material is rolled, saturating the drum. There should be a flood of water pushing forward as the drum rolls 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 enough fines to the top surface of the gravel to obtain a well-bonded finish.



on our website



It is imperative that sufficient water is added to the material during the water rolling process. Failure to float the fines to the Breedon Golden Amber Gravel surface will result in the re-softening of the material, leading to an unbound finish. Approximately five gallons of water for each tonne of laid material is required to adequately float the marl fines to the Breedon Gravel surface, which will allow the product to bind and harden. As a visual guide when enough water has been applied, the area should have a similar appearance of freshly laid concrete, giving a shiny, glassy finish over the whole surface. Once this has been achieved the binding process can begin.



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 uniform surface finish.

If laying large expanses of Breedon Golden Amber Gravel, it is important that the whole laying process is completed per section. Newly laid areas can be "butted up" next to previously laid material provided that a neat edge is used. When floating the fines up to the surface in the adjoining sections simply pull a soft broom across the surface as previously advised.

It is important that the area should then be allowed to dry out fully



before being opened up to general use. The length of time to allow is dependent on weather conditions, but this can take up to a period of 2 weeks or more. We would also advise that during the drying process that the area is not used. 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. This will reduce the risk of ruts occurring caused by the action of flowing storm water.

On completion, the Breedon Golden Amber Gravel surface will be very smooth and uniform. Over time, with weathering and trafficking the surface will scarify, giving a light dressing of chippings over the area, whilst maintaining a bound, 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.

