

INSTALLATION DETAILS FOR DRIVEGRID PERMEABLE DRIVEWAY SYSTEM

System includes:

11.97sqm Drivegrid
13.5sqm Geotextile
Bulk Bag of chosen Aggregate

- Golden Blend Angular 6-10mm
- Multi Flint Spar Angular 8-11mm
- Sea Washed Angular 6-10mm

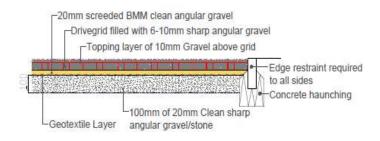


Health and Safety Information

Safe working practices should be employed at all times during the construction process and all necessary Personal Protective Equipment (PPE) should be worn.

Pavement Design

For most domestic applications a sub-base of minimum 100mm should prove to be sufficient. However the paving design must be based upon the prevalent ground conditions, type and frequency of anticipated loads.



Typical section through a driveway constructed in accordance with Marshalls Register Installation Procedures

D03 Scale 1:20 @ A3

Excavation

To allow the new grid to be installed correctly, a certain amount of excavation may be required. The depth of this excavation will depend upon the thickness of the required sub-base plus the laying course, Geotextile and Drivegrid thickness. An extremely important factor to consider when working out the depth of excavation is that the finished surface level of the paving, when being laid up to an existing structure, must be a minimum of 150mm below the DPC to prevent any problems with rising damp permeating into the property.

Edge Restraints

Edge restraints should be sufficiently robust to resist the lateral displacement from imposed loadings placed upon the grid and are installed prior to the installation of the sub-base. The restraint must provide a consistent vertical face to a level below the laying course material.

Sub-base

A permeable sub base must be laid with a 20mm and 6mm washed graded angular aggregate

A sub-base of 100-150mm depth of 20mm clean angular aggregate is required for Drivegrid. Unlike traditional pavement construction, the open-graded materials should not be fully compacted to eliminate any voids, as this will compromise the performance of the system.

Due to the nature of the sub-layer, care should be taken during the construction process to prevent dirt and detritus contaminating the sub-base and compromising the permeability of the system.

80gsm Geotextile to be laid at this stage to inhibit weed growth from the sub-grade material.

Laying course

The final target thickness for the laying course should be 20mm depth of 6-10mm clean angular aggregate.

Tolerances for laying course material are +15mm/-20mm. However, due to the nature of the open-graded material, a reduction in the ability to reduce the thickness of the laying course due to compaction would be experienced when compared to a sand laying course. Therefore, it is important to ensure the initial placing and screeding of the open-graded laying course is as accurate as possible.

It may prove advantageous to trial a small area of open-graded material to ascertain the characteristics of the material under compaction to ensure accurate levels are achieved. Should any disturbance of the screeded laying course material occur prior to the placement of the blocks, the affected area should be re-screeded to ensure consistency between the affected area and the surrounding laying course. When screeding rails are removed on completion of the installation of the laying course, the affected area should be filled and re-screeded with corresponding laying course material and manually compacted. Care should be taken not to disturb adjacent prepared laying course material.



Construction

To connect adjoining panels simply click and compress. Each 330x330 square can be separated from the panel if required.

Install the Drivegrid 5mm from the pre-installed edge restraint to allow for expansion and then back fill the grid with the chosen gravel or chippings.

A 10-20mm layer of angular gravel or chippings (6-10mm) must be spread on top of the finished Drivegrid cell height.

1 tonne of gravel will cover approximately 15sqm depending on the density of the material used.

Cutting can be performed by Power Saw or Angle Grinder making sure all relevant PPE is utilised.

Further Information

For further technical advice, or when confronted by unusual problems or circumstances, please contact Marshalls Technical Advisory Services on 0370 411 2233, or by email on advisory.services@marshalls.co.uk