

GRAVEL FINISH CONSTRUCTION



Construction details:

- 1. Excavate existing ground to a level to allow for the following construction.
- 2. Install a Geotextile membrane onto the prepared substrate formation. A Geogrid may be required under certain applications to improve ground stability, dependent on existing ground conditions.
- 3. Install a free draining well compacted Type 3 sub-base layer (Refer to Table 1 below for sub-base advice). A permeable open-graded (reduced-fines) Sustainable Drainage System (SuDS) sub-base layer such as Type 3 is recommended to meet the drainage requirements.
- 4. Install a non-woven geotextile (NW8) on top of the sub-base layer.
- 5. Install a 30mm thick bedding layer of 2-6mm angular aggregate or grit sand (in certain applications) and screed to uniform thickness.
- 6. Lay the pavers starting in one corner of the project area. Begin installing the pre-assembled Gridforce pavers by placing them with the lugs/receivers facing forward, in the direction of laying. Pavers can be cut to fit around kerbing or curves using a handsaw or stihl saw.
- 7. Installation of car parking marker inserts is best carried out prior to filling the cells.
- 8. Fill the cells with hard angular aggregate, nominal size 10mm. Aggregate up to 20mm could be used in certain circumstances, but the use of rounded pea gravel or low permeable aggregates such as standard limestone or sandstone is not recommended. The cells can either be filled to level or overfilled, dependant on the application.
- 9. For all installations, It is recommended that a minimum gap of 5cm is left between the edge of the grid and any firm perimeter on all applications to allow for expansion. Please enquire for advice if further expansion joints may be necessary on certain large application projects.



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Table 1: CBR Table -CBR% = California Bearing Ratio: an indicative measurement of substrate soil strength.

The table below indicates typical sub-base thickness required dependant on the substrate CBR value and traffic loadings.

Application / Load	CBR % Strength of Substrate Soil	Type 3 Sub-base Thickness (mm)
Fire Truck and Occasional HGV Access	> 6 = 4 < 6 = 2 < 4 = 1 < 2	150 175 250 380
Light Vehicle Access and Car Parking	> 6 = 4 < 6 = 2 < 4 = 1 < 2	100 150 200 300

The calculations above are for guidance only and consideration must be given to the volume of traffic and loadings imposed on the system

When designed in accordance with the recommendations, Gridforce pavers comply with DIN 4102- Approval emergency access routes, DIN 1072 – Approval for 20 tonne axle load, driveways, road extensions and BS8300:2009 – "Design of buildings and their approaches to meet the needs of disabled peopled" – Code of Practice (ISBN 9780 580 57419) & Building Regulations Document 'M' Section 6.