

REDUCED DIG INSTALLATION GUIDANCE

For Grass & Gravel Surfaces



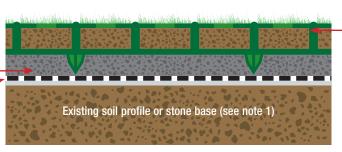


The 'Reduced Dig' method of installation for BODPAVE 40 is suitable for pedestrian and light vehicle applications where firm ground conditions already exist. It is particularly advantageous where there are budgetary limitations, restrictions on excavation due to SSSI conservation and archeological issues or TPO's (tree preservation orders).

Bedding Layer

50mm thick layer of 4-15mm diameter, angular gravel or crushed aggregate.

Optional TERRAM TX160 geogrid layer and TERRAM T1000 geotextile (See note 2)



BODPAVE 40

40mm deep open-celled plastic pavers. Filled with 60:40 sand/soil or sand/compost rootzone blend. Then seeded and fertilised.

or

Filled with selected gravel/angular aggregate (4-15mm dia.).

Site Suitability

- Where existing ground conditions are firm (ie: CBR > 7%) and free draining or where a suitable hardcore/stone base already exists.
- · Where trafficking is irregular or occasional
- Where loads will not exceed that of cars and light vans

Benefits of Reduced Dig

- Minimal site preparation or variation to existing levels
- Reduced installation time and costs
- Reduced import of materials and disposal of debris
- Rapid establishment and usage of site after installation
- Compliant with current guidance for Sustainable Urban Drainage Systems (SUDS)
- Suitable for grass or gravel surfaces

Applications

- Light vehicle parking and access routes
- Pedestrian access & Cycle routes
- Tree root protection
- Golf buggy paths and Tow paths
- Caravan and Leisure site access routes
- Wheelchair and disabled access (DDA compliant)
- Light aircraft parking and taxiways

Paving Grid Specification

DESCRIPTION	DATA
Product	BODPAVE 40
Material	Rigid 100% recycled polyethylene
Colour	Black & Green
Paver dimensions	500mm x 500mm x 40mm
Paver size laid	500mm x 500mm (4 grids per m²)
Nominal cell size	60mm Octagonal
Cell wall thickness	2.7mm - 3.2mm
Weight	1.2kg/paver - (4.80kg/m²)
Load bearing capacity	150 tonnes/m² (Crush resistance)
Central base support	25mm long pegs on underside (4 per paver)
Open cell %	Top 95% / Base 75%
Connection type	Spike and loop edge connection
Chemical resistance	Excellent
UV resistance	High
Toxicity	Non Toxic

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Reduced Dig Installation Guidance

SDI / B40PRD17 Issue 5

Gravel & Grass Surfaces

Installation Methods

After confirming that the ground conditions are suitable for this type of 'reduced dig' application, the following method of installation should be followed.

A. For Grassed Surfaces

- 1. Cut the grass very close to the surface or where specified remove the turf/ topsoil to a depth of <100mm according to local levels. Dispose of all debris. Level the formation layer, lightly consolidate & install drains as specified.
- 2. Install edge retention as specified: Either tanalised timber boards, concrete, steel or plastic kerbs as appropriate.
- Place a layer of TERRAM TX160 geogrid on the formation layer and ensure it is flat to the surface by pinning as required. Note: An optional TERRAM T1000 geotextile can be placed onto the formation prior to the TERRAM TX160 geogrid installation, to prevent migration/contamination (see Note 2).
- 4. Place a 50mm thick bedding layer of 4 -15mm diameter angular gravel /aggregate evenly over the geogrid. The geogrid must not be allowed to become exposed above the gravel/aggregate layer.
- 5. With the 2 sets of edge loop connectors facing in directions of laying, place the BODPAVE 40 firmly onto the screeded bedding layer so that the ground spikes are pressed fully into the bedding and the base of the paver cells sit flat on the surface. Connect adjacent pavers together by slotting the edge cell connectors down into the edge loops (LOOPS ALWAYS LEAD). Progress over the area in rows. Use protective gloves to avoid abrasions.

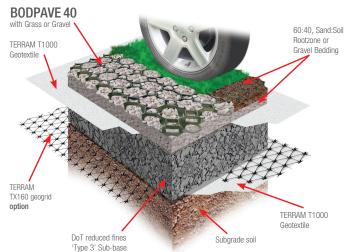
- 6. Pavers can be offset by 1 cell increments or cut to fit around obstructions & curves using a hand or power saw.
- Fill pavers with the specified propriety rootzone to finished levels of 5-7mm below the top of the cells after settlement. A light vibrating plate compactor may be used to consolidate the pavers and settle rootzone fill. Do not overfill the cells. Additional settlement of the rootzone may occur where an open graded bedding is used, & further topping-up may be required.
- 8. Rootzone fill must be a free-draining, structurally sound propriety blend of sand:soil or sand:compost such as used in sports/golf construction & normally identified as a 60:40 or 70:30 ratio blend. The use of site-won materials or in-situ self-blending is NOT recommended without taking further advice.
- Carry out a normal seeding, fertilising & watering programme. A very light top dressing may be applied to just cover the seed and to provide adequate germination conditions. Do not overfill the paver cells. Thin-cut or Washed Turf may be rolled into the surface as an alternative if required.
- 10. The surface may be trafficked immediately, but it is preferable to allow grass to fully establish prior to use.

B. For retained Gravel Surfaces

After confirming that the ground conditions are suitable for this type of 'reduced dig' application, the following method of installation should be followed.

- 1. Follow steps 1-6 above. Note: An optional geotextile fabric layer TERRAM T1000 geotextile can be placed onto the formation prior to the TERRAM TX160 geogrid installation (Step 3), to prevent migration/contamination
- 2. Fill the pavers with the specified angular gravel or aggregate. Preferably a clean, evenly graded angular material with a range of 4 - 15mm diameter. Rounded 'pea gravel' is not recommended.
- 3. Consolidate the surface using a light vibrating plate compactor if required.
- 4. Refill any localised low areas with aggregate and repeat consolidation until satisfied with final compacted finish.
- 5. The surface can be trafficked immediately.

Typical profile



Not all layers will apply to every application and drainage may be required. Please refer to design guidance documents.

Note 1: Determination of the requirement for placement of an imported sub-base for the application, and the required thickness of that sub-base material shall be determined by the strength and condition of the existing soils, the extent of allowable excavation and also in consideration of the traffic loadings to be applied. Standard sub-base design thicknesses for access routes may then apply. Certain

ground conditions may require placement of a drainage system within the design. Note 2: Geogrid and geotextile may not be required where the construction is to be placed onto an existing stone base. Further advice from TERRAM is available on request.

Specific advise on the use of BODPAVE 40 on steep slopes, drainage suitability and Sustainable Urban Drainage Systems (SuDS) applications, can be obtained from TERRAM.

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