

# BodPave™85

## 'REDUCED DIG' INSTALLATION GUIDE

### Gravel & Grassed Surfaces



The Boddingtons 'Reduced Dig' method of installation for BodPave™85 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 archeological issues or Tree Preservation Zones.

#### 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 LID/NPDES applications for water management
- Suitable for grass or gravel surfaces

#### APPLICATIONS

- Light vehicle parking and access routes
- Pedestrian access & Bicycle routes
- Tree root protection
- Golf cart paths
- RV and Leisure site access routes
- Wheelchair and handicap access
- Light aircraft parking and taxiways

#### SITE SUITABILITY

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



#### Paving Grid Specification

DESCRIPTION	DATA
<b>Product</b>	BodPave™85
<b>Material</b>	100% recycled polyethylene
<b>Colour options</b>	Black, Green & Natural
<b>Paver dimensions</b>	19.7" x 19.7" x 1.97" + 1.37" ground spike
<b>Installed Paver size</b>	19.7" x 19.7" (4 grids per 1.2yd <sup>2</sup> )
<b>Nominal internal cell size</b>	Castellated 2.6" Plaque & 1.8" Round Shaped
<b>Structure Type</b>	Rigid-walled, flexible semi-closed cell combination
<b>Cell wall thickness</b>	0.1" – 0.2"
<b>Weight (Nominal)</b>	3.4lbs/paver
<b>Load bearing capacity (filled)</b>	< 367 tons/yd <sup>2</sup> *
<b>Crush Resistance (unfilled)</b>	< 275 tons *
<b>Basal support &amp; Anti-Shear</b>	Integral 1.35" long Cross & T section ground spikes (18 per paver)
<b>Open cell %</b>	Top 92% / Base 75%
<b>Connection type</b>	Overlapping Edge Loop & Cell connection
<b>Interlock Mechanism</b>	Integral self locking Snap-Fit Clips
<b>Chemical resistance</b>	Excellent
<b>UV resistance</b>	High
<b>Toxicity</b>	Non Toxic

\*Research carried out by Sheffield University UK Department of Mechanical Engineering. (Rennison/Allen March 2009)

# BodPave™85

## INSTALLATION METHODS

After confirming that the ground conditions are suitably firm and free-draining for this type of 'reduced dig' application, one of the following methods 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 < 4" 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 curbs as appropriate.
3. Place a layer of Tensar TriAx™ TX160 geogrid on the formation layer and ensure it is flat to the surface by pinning as required. Note: An optional geotextile fabric layer (BGT100) can be placed onto the formation prior to the Tensar TriAx™ TX160 geogrid installation, to prevent migration/contamination (**see Note 2**).
4. Place a 1.35" - 2" thick bedding layer of 0.4" - 0.8" 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®85 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)**. Pavers are locked in place by the integral snap-fit clips. 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. The use of cut-pieces which do not have integral snap-fit connectors should be avoided wherever possible.
7. Fill pavers with the specified propriety rootzone to finished levels of 0.2" below the top of the cells after settlement. A light whacker plate 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.
9. 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.

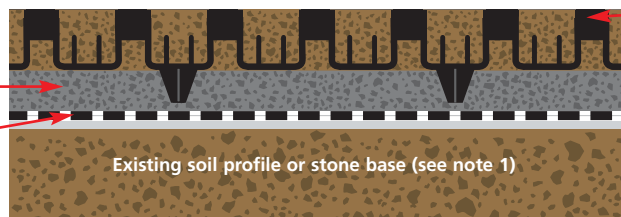
### B. FOR RETAINED GRAVEL SURFACES

After confirming that the ground conditions are suitably firm and free-draining 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 (BGT100) can be placed onto the formation prior to the Tensar TriAx™ TX160 geogrid installation (Step 3), to prevent migration/contamination (**see Note 2**).
2. Fill the pavers with the specified angular gravel or aggregate. Preferably a clean, evenly graded angular material with a range of 0.2" - 0.8" diameter. Rounded 'pea gravel' is not recommended.
3. Consolidate the surface using a light vibratory whacker plate 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.

**Bedding Layer**  
1.35" - 2" thick layer of 0.4" - 0.8" diameter, angular gravel or crushed aggregate.

Optional Tensar TriAx™ TX160 geogrid layer and BGT100 geotextile (See note 2)



**BodPave™85**  
2" 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 (0.2" - 0.8" dia.)

**Note 1:** Determination of 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 in consideration of the proposed traffic loadings. Standard Bodpave™85 Access Route design may apply. Certain ground conditions may require placement of a drainage system within the design.

**Note 2:** Specific site criteria will determine if Tensar TriAx™ TX160 geogrid &/or BGT100 Geotextile are required.

**Note 3:** Maximum advised gradient for traffic applications: 12% (1:8) 7°. Bodpave™85 has specific pegging points if required for steep slope applications. Pegging is not necessary for standard access route applications.

For BodPave®85 product specification please refer to the Design documents for use in Grassed & Gravel Surfaces.

Specific advice on the use of BodPave®85 on steep slopes, drainage suitability and NPDES/LID applications, can be obtained from Boddingtons Inc.

*Please note that the information above is given as a guide only. All sizes and weights are nominal figures and may vary to what is published. Boddingtons cannot be liable for damage caused by incorrect installation of this product. Final determination of the suitability of any information or material for the use contemplated and the manner of its use is the sole responsibility of the user and the user must assume all risk and responsibility in connection therewith.*

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