

## TRUCKPAVE40 & TRUCKPAVE80 Heavy Load-Bearing Paver

## INSTALLATION GUIDE

TruckPave pavers should be installed onto a well-prepared, free-draining, firm and relativelylevel stone sub-base (a reduced-fines Type 3 for example). As an option a suitable geogrid at the base of this layer will allow a reduction in the sub-base depth. The sub-base is overlaid with a geotextile separator followed by 20mm of coarse sand as a bedding layer for the pavers.

Once laid, the paver cells can be filled with a free-draining stone (e.g. 10mm gravel) or a good, clean, friable top soil and grass seed at 30/40 g/m2. The cells should not be overfilled so remove excess topsoil or stone from the surface. The topsoil settlement that will occur within the paver cells is desirable as this will allow grass growth without direct impact from traffic.

Perimeter pavers should be restrained using pinned timber sleepers or precast kerbs. The pavers can be cut with a hand saw or power cutter for fitting around obstructions. The whole area should be compacted with either a plate vibrator or a small roller.

For large Truckpave installations with full edge restraint to all sides, it may be advisable to allow for expansion due to fluctuations in temperature. An expansion gap of 10-15mm per square metre should be arranged in every direction.









# TRUCKPAVE40 & TRUCKPAVE80

HEAVY LOAD-BEARING PAVER

## DESIGN GUIDE

TRUCKPAVE is installed in such a wide range of applications that it is impossible for us to produce an installation guide for every type of sub-base. As such, this design guide is intended to help specify the required depth of sub-base hardcore for a number of different existing surfaces.

The tables included in this guide are for guidance purposes only and expert advice should be sought to confirm the sub-grade strength and the specific build-up requirements for your project.

- If the GeoGrid is not used on the installation, the thickness of the MoT sub-base should be increased by 50% as shown in brackets.
- In order to offset the potential effect of lateral load from HGV use, it is highly recommended to line the perimeter of the pavers with appropriate
  kerbs.
- TruckPave is designed to be installed on a surface which is sloping by no more than 5%. It can be used on steeper surfaces, please contact us for details.
- To help protect the edges of the TruckPave installation, we recommend that the sub-base area should extend beyond the perimeter of the pavers, keeping a consistent depth across the entirety.
  - Aggregate used to fill the pavers should ideally be a mix of 5mm to 10mm angular gravels with very low fines/dust content.
  - Following this guide will help to preserve the longevity and integrity of the system.

| Application/Load                                | CBR (%) Strength of Subgrade Soil | MoT Sub-base<br>Thickness (mm)                   | GeoGrid                              |
|---|-----------------------------------|--|--------------------------------------|
| Fire Truck &<br>HGV Access                      | 6<br>=4 < 6<br>=2 < 4<br>=1 < 2   | 100 (150)<br>120 (180)<br>190 (285)<br>380 (570) | GSM160<br>GSM160<br>GSM160<br>GSM160 |
| Light Vehicle<br>Access &<br>Overspill Car Park | 6<br>=4 < 6<br>=2 < 4<br>=1 < 2   | 100 (150)<br>100 (150)<br>135 (210)<br>260 (390) | GSM160<br>GSM160<br>GSM160<br>GSM160 |

### Table 1: Typical Sub-base Thickness

#### Table 2: Guidance on Estimation of Sub-grade Strenth

|             | Indicator  |   |            | Product  |           |
|-------------|--|---|------------|----------|-----------|
| Consistency | Tactile  | Visual                                    | Mechanical | CBR      | CU        |
|             | (Feel)   | (Observation)                             | SPT        | %        | kN/sqm    |
| Very Soft   | Sample squeezes<br>through fingers                   | Man standing will sink<br>>75mm           | <2         | <1       | <25       |
| Soft        | Easily moulded by finger pressure                    | Man walking sinks<br>50-70mm              | 2-4        | Around 1 | Around 25 |
| Medium      | Moulded by moderate<br>finger pressure               | Man walking sinks<br>25mm                 | 4-8        | 1-2      | 25-40     |
| Firm        | Moulded by strong finger pressure                    | Utility truck ruts 10-<br>25mm            | 8-15       | 2-4      | 40-75     |
| Stiff       | Cannot be moulded<br>but can be indented by<br>thumb | Loading construction vehicle ruts by 25mm | 15-30      | 4-6      | 75-100    |

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