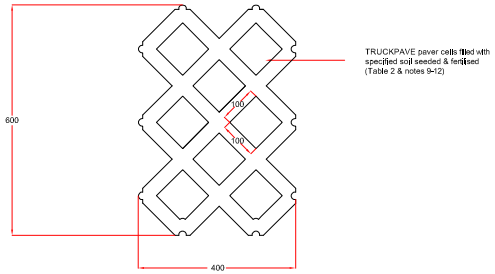
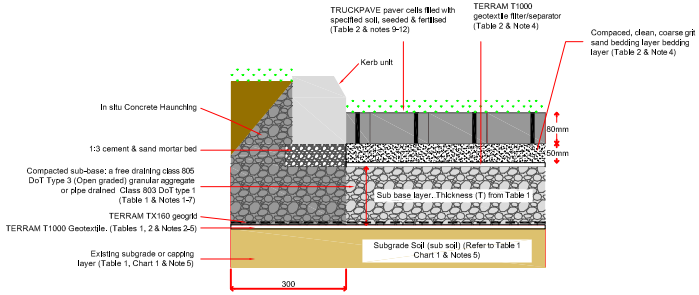


① **TRUCKPAVE : Grass Surface Paving Grid**
Scale : N.T.S.



② **TRUCKPAVE: Grass Surface : Typical Construction Profile**
Scale : N.T.S.

This field guide is provided as an aid to assessing the mechanical stabilisation requirements in commonly encountered site conditions.Fiberweb Geosynthetics ltd accepts no responsibility for any loss or damage resulting from the use of this guide.

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. Fiberweb Geosynthetics ltd 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.

DESIGN NOTES:

Note 1: A free-draining Class 805 DoT Type 3 (opengraded) reduced fines sub-base is preferred,especially where a SUDS (Sustainable Urban Drainage System) is proposed. A low permeability Class 803 DoT Type 1 may be considered, but an adequate and functioning drainage system MUST be installed within this sub-base variation. To prevent collapse of the construction profile edges when trafficked, the sub-base profile must extend beyond the edge-line of the pavement layer by a minimum equivalent length (mm) to that of the specified sub-base thickness (mm) (T).
Specific advice on the use of TRUCKPAVE pavers on steep slopes, drainage suitability and Sustainable Urban Drainage Systems (SUDS) applications, can be obtained from TERRAM. TRUCKPAVE pavers are intended for use in low-speed traffic applications only.
Note 2: If a TERRAM TX160 geogrid layer is omitted from the specification, the total granular sub-base (GSB) layer thickness (T) must be increased by minimum 50%. The use of alternative geogrids will influence the required sub-base layer thickness according to manufacturer's recommendations.
Note 3: Use of TERRAM TX160 geogrid. If construction traffic axle loads will be greater than 60kN (approx 6t), minimum sub-base thickness over TERRAM TX160 geogrid shall be 150mm. Maximum sub-base particle size should match minimum sub-base thickness but must not exceed 75mm diameter. For sub-base thicknesses of around 100mm, a minimum 37.5mm particle size should be adopted to allow effective installation of a TERRAM TX160 grid.
Note 4: Where the preferred DoT Type 3 (opengraded) sub-base is specified, the TERRAM T1000 geotextile separator MUST ALWAYS be installed over the sub-base to avoid the 50mm sand bedding layer leaching away. The sand bedding must be clean, coarse-grained sand free from silts & clays: It must NOT be soft building sand or silver sand.
Note 5: Specific advice on soil CBR% strength, ground conditions, capping-layers & construction over weak ground with a CBR less than 1% is available from TERRAM. N.B. CBR% = California Bearing Ratio, a measurement of subgrade soil strength.
Note 6: Where a low-permeability DoT Type1 sub-base is specified, sub-surface drainage MUST be provided, typically consisting: 100mm diameter perforatedpipe drains leading to a suitable outfall or soakaway and laid at minimum gradient 1:100, pipes bedded on clean gravel in trench backfilled with DoT Type 'A' drainage aggregate. Drainage trenches must interface cleanly with the bedding layer profile and be covered or fully wrapped with a TERRAM T1000 geotextile filter. Drains installed down centre or one edge of areas up to maximum 5m wide. Larger areas may require additional main and lateral drains at 5m - 10m centres. Drainage design to be determined by the specifier based on known site criteria.
Note 7: Drainage outfall detail for a Sustainable Urban Drainage System (SUDS) application employing DoT Type 3 (open graded) reduced-fines sub-base will vary according to each site, but generally allows for water attenuation within the construction profile and/or infiltration to the subgrade by omitting extensive trench & pipe systems within the sub-base layer. The type of SUDS design (attenuation or infiltration) will depend upon the underlying ground conditions and not all sites are suitable for infiltration. Weak and low-permeability cohesive sub-grades are generally unsuitable for infiltration SUDS.
Note 8: The use of edge restraints is required. These, heavy-duty concrete, steel or plastic kerbs, timber edging or railway sleepers, must be strong and firmly fixed.
Note 9 : The paver fill material should be good quality, free-draining friable top-soil suitable for grass growth and with no contaminants or oversized debris. Amenity grass seed mixture should contain hard wearing, low fertility and/ or drought tolerant species with option of a low percentage of clover content if acceptable.
Note 10: Maximum advised gradient for traffic applications: 8% (1:12.5).
Note 11: TRUCKPAVE pavers comply with BS8300:2009 - Design of buildings and their approaches to meet the needs of disabled people - Code of Practice. (ISBN 978 0 580 57419) & Building Regulations Document 'M' section 6.
Specific advice on the use of TRUCKPAVE pavers on steep slopes, drainage suitability and Sustainable Urban Drainage Systems (SUDS) applications, can be obtained from TERRAM. TRUCKPAVE pavers are intended for use in low-speed traffic applications only.

Table 1 : Typical Sub-base Thickness (Tx) Requirements - refer to ② Typical Construction Profile

APPLICATION/LOAD	CBR (%) STRENGTH OF SUBGRADE SOIL (see Chart 1)	SUB-BASE MINIMUM THICKNESS (mm) (T) Incl geogrid	(T) mm (see Notes 1-7) excl geogrid	TERRAM TX160 GEOGRID (See Notes 1-3)
Fire trucks, Coaches and occasional HGVaccess	≥ 6 = 4 < 6 = 2 < 4 = 1 < 2	100 120 190 380	150 180 285 570	TX160 TX160 TX160 TX160
Light vehicle access and overspill car parking	≥ 6 = 4 < 6 = 2 < 4 = 1 < 2	100 100 135 260	150 150 200 390	TX160 TX160 TX160 TX160

Table 2 : Paving Grid Specification

Description	Data
Product	**TRUCKPAVE**
Material	100% Recycled mixed polymers
Colour	Grey
Paver dimensions (Plan)	600mm x 400mm
Paver Depth	80mm
Nominal internal cell size	100mm x 100mm
Structure Type	Rigid-walled, open cells
Cell wall thickness	40mm
Weight (Nominal)	9 kg/paver - (37.5kg/m²)
Load bearing capacity (Filled)	<60 tonnes gross vehicle weight <20 tonnes single axle
Crushed resistance (Unfilled)	<1500 tonnes/m² (15,000kN/m²)
Open cell %	50%
Connection Type	Tongue & Groove (TP80)
Chemical resistance	Excellent
UV Resistance	High
Toxicity	Non Toxic

Chart 1: Field guidance for estimating sub-grade strengths

Consistency	Indicator			Strength	
	Tactile (feel)	Visual (observation)	Mechanical (test)	CBR	CU
			SPT	%	kN/sqm
Very Soft	Hand sample squeezes through fingers	Man standing will sink > 75mm	<2	<1	<25
Soft	Easily moulded by finger pressure	Man walking sinks 50 - 70mm	2-4	Around 1	Around 25
Medium	Moulded by moderate finger pressure	Man walking sinks 25mm	4-8	1-2	40-75
Firm	Moulded by strong finger pressure	Utility truck ruts 10 - 25mm	8-15	2-4	40-75
Stiff	Cannot be moulded but can be indented by thumb	Loaded construction vehicle ruts by 25mm	15-30	4-6	75-150

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TRUCKPAVE Heavy-Duty Pourous Pavers
For Grass Surfaces

Design and Specification Guide