



Installation Method

- 1. Place paver units with spikes downward onto the prepared well consolidated bedding layer. Edging boards or kerbs can be used where required, according to existing soil conditions.
- 2. Connect the pavers using the ground spikes and loops, progressing over the area in rows. Use protective gloves to avoid abrasions.
- 3. Pavers can be cut using a hand or power saw to fit around obstructions and curves. Cut pieces which are less than half the original size should be avoided where possible.
- 4. Fill the pavers to the top of the cells with the specified angular decorative aggregate. If required, use a light vibrating plate to consolidate the aggregate into the cells. Top up cells with aggregate as necessary. Fully rounded 'pea gravel' is not recommended.
- 5. If the area is to be used as horse paddock, it is preferable to cover the area with a 50-100mm thick layer of fine sand/mulch.
- 6. The surface may be trafficked immediately.

Note 1: If the geogrid layer is omitted, then the total sub-base layer thickness (T) must be increased by 50%.

Note 2: A 'DoT Type 1' sub-base may be used, provided that an adequate drainage system is installed (refer to note 4).

Alternatively a porous/open-graded (reduced fines) sub-base layer may be specified, e.g as part of a Sustainable Urban Drainage System (SUDS) application. If a 'reduced fines' sub-base layer is specified, this must be covered with either a geotextile filter membrane and/or a suitable clean gravel blinding layer, to avoid fine particles entering the sub-base layer. Do not use sand for the paver bedding layer.

Note 3: Specific advice on ground conditions, CBR% and construction over ground with a CBR less than 1% is available from Groundtrax Systems Ltd. CBR% = California Bearing Ratio, a measurement of subgrade soil strength.

Note 4: Typical drainage details; 100mm diameter perforated pipe drain laid at minimum gradient 1:100, bedded on gravel in trench backfilled with 'DoT Type A' drainage aggregate, covered or wrapped with GeoTrax TS1000 geotextile fabric and leading to a suitable outfall or soakaway. Drains placed down centre or one edge of access routes up to 5m wide. Wider areas may require additional drains at 5m - 10m centres. Drainage design to be determined by the specifier based on specific conditions on site. Specific advice on Drainage and Sustainable Urban Drainage Systems (SUDS) is available from Groundtrax Systems Ltd.

Note 5: Maximum advised gradient for traffic applications is 12% (1:8) 7°. Pegging may be required. Specific advice for the use of CellPave™ 40 on slopes can be obtained from Groundtrax Systems Ltd.

Note 7: CellPave $^{\text{TM}}$ 40 complies with BS8300:2001 - "Design of buildings and their approaches to meet the needs of disabled people" - Code of Practice. (ISBN 0580384381)

Table 1: Typical Sub-base Thickness (T) Requirements - refer to construction profile

Application / Load	CBR (%) strength of subgrade soil (see Chart 1)	(T) DoT sub-base thickness (mm) (see Note 2)	Geogrid (see Note 1)	
	≥ 6	100	GeoTrax GX30/30T	
Fire engine and occasional	= 4 < 6	= 4 < 6 120		
HGV access	= 2 < 4	190	GeoTrax GX30/30T	
	= 1 < 2	380	GeoTrax GX30/30T	
	≥ 6	100	GeoTrax GX30/30T	
Light vehicle access and overflow car parking	= 4 < 6	100	GeoTrax GX30/30T	
	= 2 < 4	135	GeoTrax GX30/30T	
	= 1 < 2	260	GeoTrax GX30/30T	

Table 2: Paving Grid Specification

Product CellPave™ 40

Material Rigid 100% recycled polyethylene

Colour Black

Paver Dimensions 500mm x 500mm x 40mm

Paver Size 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

Bedding Layer 30mm thick of 5-20mm angular aggregate (BS EN 13242)

Paver fill To top of pavers using 5-20mm crushed aggregate (BS EN 13242)

Sub-Base Type DoT Type 3 or a modified porous sub-base (Table 1 & Note 2). DoT Type 1 with drains

Base Reinforcement E'Grid 30/30 geogrid (Table 1 & Note 1) - Specifications available on request.

Chart 1: Field guidance for estimating sub-grade strengths

	Indicator			Strength	
Consistancy	Tactile	Visual	Mechanical	CBR	CU
	(feel)	(observation)	(test) SPT	%	kN/m²
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	25-40
Firm	Moulded by strong finger pressure	Unloaded construction vehicle ruts 10-25mm	8-15	2-4	40-75
Stiff	Cannot be moulded but can be indented with thumb	Loaded construction vehicle ruts by 25mm	15-30	4-6	75-150



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NOTE:

This field guide is provided as

an aid to assessing the

mechanical stabilisation

Groundtrax Systems Ltd

requirements in commonly

encountered site conditions.

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