



## Installation Method

1. Place paver units with (open voids upwards) 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 male and female connectors, progressing over the area in rows. Start with the leading edges being the female connection points, then lay over male connection edges and walk them into place until there is a positive click and each paver is level with the next. Use protective gloves to avoid abrasions.

3. Pavers can be cut using a hand or power saw to fit around obstructions and curves (PPE must be worn). 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. We recommend gravel/aggregate size in the range of 5-20mm

5. 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.

The recommended bedding layer of no more than 25mm of 5-20mm angular aggregate (BS EN 13242)

**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 EP40 and EP50 on slopes can be obtained from Groundtrax Systems Ltd

**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)
Fire engine and occasional HGV access	≥ 6	100	GeoTrax GX30/30
	= 4 < 6	120	GeoTrax GX30/30
	= 2 < 4	190	GeoTrax GX30/30
	= 1 < 2	380	GeoTrax GX30/30
Light vehicle access and overflow car parking	≥ 6	100	GeoTrax GX20/20*
	= 4 < 6	100	GeoTrax GX20/20*
	= 2 < 4	135	GeoTrax GX20/20*
	= 1 < 2	260	GeoTrax GX20/20*

Subject to Ground Conditions\*

**Chart 1: Field guidance for estimating sub-grade strengths**

Consistency	Indicator			Strength	
	Tactile (feel)	Visual (observation)	Mechanical (test) SPT	CBR %	CU kN/m <sup>2</sup>
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

**NOTE:**

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



For more information, contact us today or visit our website:

[www.groundtrax.com](http://www.groundtrax.com)

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