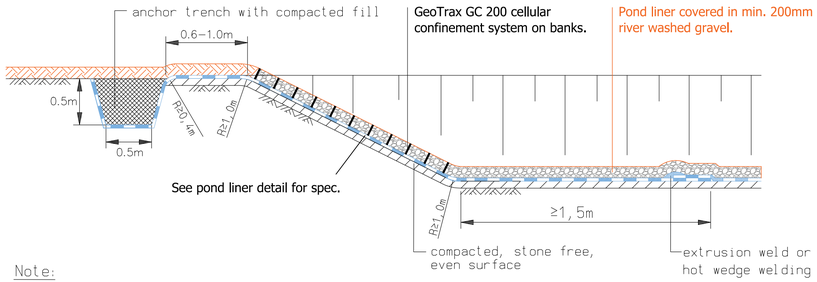
Pond Anchor Trench Detail

NB.Only used in areas where bank is formed in Cut

200mm of river washed gravel on the bed and banks on a protective fleece liner with two layers of butyl with welded joints at 90degs to one another.



Note:

The direction of the overlap between slope liner and base liner generally depends on the construction process.

Liner Detail for Pond

Pond to be lined with two layers of Wrekin GS/HD1.0/5.10X100 Impermeable Geomembrane liner as standard detail drawings with under and over protection of Wrekin GTSNW40 SNW40 Needle punched Non Woven Geotextile Protection fleece.
All to be topped with minimum 200mm of river washed gravel.

GEOMEMBRANES SPECIFICATIONS



SMOOTH HIGH DENSITY POLYETHYLENE IMPERMEABLE GEOMEMBRANE

PROPERTIES	TEST METHOD	UNIT	0.75	1.0	1.5	2.0	2.5	3.0
Surface			Smooth both sides					
Thickness (min. ave)	ASTM D 5199	mm	0.75	1.0	1.5	2.0	2.5	3.0
		Lowest individual of 10 values	-10%	-10%	-10%	-10%	-10%	-10%
Density (max)	ASTM D 1505	g/cm³	0.94	0.94	0.94	0.94	0.94	0.94
Tensile properties (min. ave) Yield strength	ASTM 6693 type IV	kN/m	12	17	25	33	42	48
Tensile properties (min. ave) Break strength	ASTM 6693 type IV	kN/m	24	30	45	59	75	85
Tensile properties (min. ave) Yield elongation	ASTM 6693 type IV	%	12	12	12	12	12	12
Tensile properties (min. ave) Break elongation	ASTM 6693 type IV	%	750	750	750	750	750	750
Tear resistance (min. ave)	ASTM D 1004	N	100	130	190	280	340	390
Puncture resistance (min. ave)	ASTM D 4833	N	300	350	550	700	850	1000
Stress crack resistance	ASTM D 5397	hour	300	300	300	300	300	300
Carbon black content	ASTM D 4218 ASTM D 6370	%	2-3	2-3	2-3	2-3	2-3	2-3
Carbon black dispersion	ASTM D 5596	Category	min. 9 in categories 1 and 2 and max. 1 in category 3					
Oxidative induction time (OIT) (min. ave) standard OIT	ASTM D 3895	min.	100	100	100	100	100	100
Oven ageing at 85°C standard OIT (min. ave) % retained after 90 days	ASTM D 5721 ASTM D 3895	%	55	55	55	55	55	55
STANDARD ROLL DIMENSIONS								
Roll length		m	100	100	150	120	100	85
Roll width		m	5.1 or 8.4					
Roll area		m²	510	1020 or 1600	765 or 1200	612 or 960	510 or 800	434 or 680

050123

WREKIN MAKE EVERY DAY BETTER

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1. Wrekin Products Ltd is continually seeking to improve our products and therefore reserves the right to alter product specifications without prior notice.
2. It is the responsibility of all users to satisfy themselves the above data is current.
3. Installation details are available on request.

WREKIN

MultiTrack SNW 40 UV

Superior Nonwoven Geotextile, 4000N, 300g/m² - 5.25m x 100m ro
roll sizes available)



PRODUCT NAME	DESCRIPTION
MultiTrack SNW 40 UV	Superior Nonwoven Geotextile, 4000N, 300g/m² - 5.25m x 100m roll (other roll sizes available)

SPECIFICATION

General information

Stock code	GTSNW/40UV
Range	MultiTrack
Third party certified	CE UKCA
Roll sizes	5.25m x 100m
Geotextile product range	MultiTrack

Geotextile properties

Tensile strength (MD)	EN ISO 10319	22kN/m
Tensile strength (CMD)	EN ISO 10319	22kN/m
Elongation at max load (MD)	EN ISO 10319	50%
Elongation at max load (CMD)	EN ISO 10319	55%
Dynamic perforation resistance	EN ISO 13433	12mm
CBR puncture resistance	EN ISO 12236	4000N
Dynamic cone drop	EN ISO 13433	12mm
Water permeability	EN ISO 11058	60L/m².s
Characteristic opening size	EN ISO 12956	90µm
Thickness under 2kPa	EN ISO 9863-1	2.4mm
Weight	EN ISO 9864	300g/m²

NOTES

Oil retention (l/10m²): >6

Roll sizes:

- 2.62m x 100m
- 5.25m x 100m

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WREKIN CIVIL ENGINEERING INNOVATION

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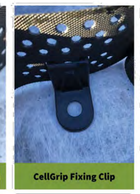
GROUNDTRAX

GEOTRAX GC 75/100/150/200

CELLULAR CONFINEMENT SYSTEM


GeoTrax Steel Pins


GeoTrax Plastic Pin Caps


CellGrip Fixing Clip


Install with Electric Drill

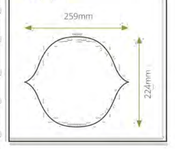

Finished Fixing

Panel Size (expanded)	2.71m x 7.41m (20.08m²)	
Cell Depth Options	75mm 100mm 150mm 200mm	
Colour	Black	
Cell Size	224mm x 259mm	
Material	1.6mm HDPE	
Cell Wall	Perforated and Textured	
Seam Weld Strength	75mm deep cells	900N
	100mm deep cells	1200N
	150mm deep	1800N
	200mm deep	2400N
Tensile Strength	Longitudinal	18.4 MPa
	Transverse	19.5 MPa
Stress Crack Resistance	>3000 hours	
Panel Weight	75mm	18.0 Kg
	100mm deep	24.5 kg
	150mm deep	36.0 kg
	200mm deep	48.5 kg

Accessories Available:

GeoTrax GT Geotextile
GeoTrax GX GeoGrid
GeoTrax Steel Pins
CellGrip & Terra-Lock Fixings

Cell Size:



ENVIRONMENTAL MANAGEMENT SYSTEM ISO 14001

For more information, contact us today or visit our website:
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GEOTRAX GC®
INSTALLATION GUIDE



GeoTrax GC® Installation Guidence

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

1. Prepare the Surface

- Remove the surface vegetation using appropriate hand held tools or herbicide (see Note 1).
- Remove any surface rocks, debris and organic material.
- Create a level surface by filling any hollows with clean angular stone or sharp sand.
- Do not level off high spots or compact the soil through rolling.

2. Lay out the TRP4000™ Non-Woven Geotextile

- Lay out the TRP4000™ over the prepared area, overlaying the edges of the required area by 300mm.
- Overlap any joins by 300mm minimum or more, depending on soil structure (see Note 2).

3. Lay out the Geotrax GC® TRP Cellular Confinement System

- Lay out the collapsed Geotrax GC® TRP on-top of the TRP4000™.
- Place one of the supplied steel re-bar pins into the centre cell at the end of the panel and secure into the ground.
- Pull out the Geotrax GC® TRP to its full 7.41m length and secure its length with another pin.
- Now measure its width to 2.71m and secure in each of the corners with the pins.
- Use 10 pins per panel to create a panel measuring 7.41m x 2.71m.
- This will produce a cell size of 259mm x 224mm which is the required cell aperture. Each cell must be fully extended and under tension.
- Connect adjacent panels together at each cell.

4. Infill the Clean Angular Stone

- The infill material must be a clean angular stone, Type 4/20mm or Type 20/40mm (see Note 4).
- Do not use M.O.T type 1 or crushed stone with fines for tree root protection.
- Infill the Geotrax GC® TRP cells with the clean angular stone, working towards the tree and using the infilled panels as a platform.
- Minimum 25mm overfill of clean angular stone when used in conjunction with a hard surface.
- No compaction is required of the infill. Do not use a whacker plate or other means of compaction.
- Encourage settlement of the stone with the use of a light roller or with 2-3 passes of the construction plant used for installation.
- If the clean angular stone is being used as the final surface; regular maintenance will be required to ensure a minimum overfill of 50mm.

5. Edge Restraints

- Excavations for kerbs and edgings should be avoided within the RPAs.
- Where edging is required for footpath and light structures, a peg and treated timber board edging is acceptable.
- Other options include wooden sleepers, kerb edging constructed on-top of the Geotrax GC® TRP system, plastic and metal edging etc.

6. Surface Options

- All surfaces in Root Protection Areas must be porous. Surfaces can include porous block paving, porous asphalt, loose gravel, grass and gravel retention systems (e.g CellPave), resin bound gravel, concrete and astro turf.

NOTES

1. Herbicide: According to BS5837:2012 "The use of herbicides in the vicinity of existing trees should be appropriate for the type of vegetation to be killed, and all instructions, warnings and other relevant information from the manufacturers should be strictly observed and followed. Care should be taken to avoid any damaging effects upon existing plants and trees to be retained, species to be introduced, and existing sensitive habitats, particularly those associated with aquatic or drainage features."

2. Geotextile: We recommend the installation of a TRP4000™ under the Geotrax GC® TRP, or under the sub-base, if installed. The overlapping between adjacent rolls of Geotextile should be: CBR > 3%: 300mm minimum, CBR between 1% and 3%: 500mm minimum. CBR ≤ 1%: 750mm minimum.

3. Connectors: Number of connectors per panel = 29

4. Granular Fill: Open graded sub-base, clean angular stone Type 4/20 or Type 20/40. Please refer to BS7533-13:2009

The information contained herein is, to the best of our knowledge, accurate in all material respects. However, since the circumstances and conditions in which such information and the products mentioned herein can be used may vary and are beyond our control, no representation or warranty, express or implied, of any nature whatsoever is or will be made and no responsibility or liability is or will be accepted by us, any of our affiliates or our or their respective directors, officers, employees or agents in relation to the accuracy or completeness or use of the information contained herein or of any such products and any such liability is hereby expressly excluded to the maximum extent permitted by law.

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Date	Revisions

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Job Title

Proposed Commercial Development
Decoy Farm, Spalding Road
Crowland, Lincolnshire
PE6 0LU

Drawing Title

Construction Details
Sheet 2

FOR APPROVAL

NOTES:
All dimensions must be checked on site and not scaled from this drawing.

Date	Scale	Drawn
OCT. 2025	NTS	IAC/TRS

Drg.No.	Rev.
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