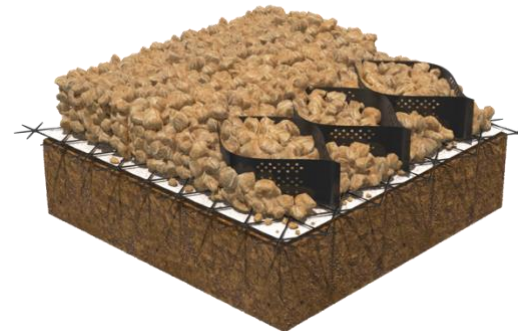


## Cellular Confinement System

## Technical Data Sheet

Techcell GC is a stabilising geocellular confinement system available in a range of heights to achieve the thickness of stabilised layer required.



### Manufacture

Techcell is manufactured by welding together HDPE strips at intervals, creating a network of cells that can be expanded on site. When these cells are infilled with appropriate materials, a new composite entity is created from the cell soil interactions - creating a flexible 3D cellular mattress or slab.



### Applications

- Tree root protection
- Retaining wall
- Slope stability
- Load support
- Channel protection

### Techcell Range

Techcell number represents mm depth – for cell properties see below.

Techcell 75 • Techcell 100 • Techcell 150 • Techcell 200

MATERIAL PROPERTIES		UNIT	TECHCELL GEOCELL
Polymer Density	(ASTM D1505)	g/cm <sup>3</sup>	0.935-0.965
Environmental Cracking Stress Resistance	(ASTM D1693)	Hrs	≥5000
Carbon Black Content	(ASTM D1603)	%	2.0
Nominal Sheet Thickness (Post Texturing)	(ASTM D5199)	mm	1.52
Material	Blend of virgin polythene and additives		
Texture	Polythene strip consists of a multiple rhomboidal indentations over the entire strip area on both sides of the strip. The indentations have a surface density of 22 ton 32 cm <sup>2</sup>		
Perforations	Polythene strip is perforated in horizontal rows with holes of a maximum of 10mm in diameter. Cell perforation area is less than 12% of cell surface area.		

CELL PROPERTIES		UNIT		TECHCELL GEOCELL		
Weld Spacing (+/-3%)		mm		356		
Cell Depth (+/-3%)		mm		75, 100, 150, 200		
Expanded Cell Dimensions (+/-3%)		WIDTH	mm	259		
		LENGTH	mm	224		
Expanded Cell Area (+/-3%)		cm2		289		
Nominal Expanded Section Dimension (+/-3%)		WIDTH	m	2.59		
		LENGTH	m	6.50		
Nominal Expanded Section Area (+/-3%)		m2		16.82		
SEAM PROPERTIES						
Cell depth		(mm)	75	100	150	200
Seam Peel Strength (US ACE Technical Report, GL-86-19)		N	1065	1450	2130	2840

The standard configuration of a Techcell panel is 6.5m x 2.59m (nominal) when expanded. The standard Techcell panel is specified by the depth and effective cell diameter. Techcell has excellent chemical resistance to a wide range of chemicals normally found in the ground. We will be pleased to advise on specific substances.



## Additional Information

1. Root Barrier Store is a trading name of PBA Solutions (Landscape) Ltd.
2. Root Barrier Store reserves the right to alter product specifications without prior notice and in line with TCS Geotechnics data specifications.
3. It is the responsibility of all users to satisfy themselves that the above data is current.
4. The above figures are average values obtained from testing to current EN ISO standards
5. Root Barrier Store cannot accept responsibility for the performance of these products as the conditions of use are beyond our control.
6. Installation details are available on request.

Root Barrier Store reserves the right to change the properties listed on this data sheet without prior notice and in line with TCS Geotechnics Ltd data changes as part of its continued improvement process.

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