

Ready to
improve your
construction



ForCell

Cellular Confinement System



ForCell is 3D geosynthetic material which has honeycomb shape cells composed of PE welded perforated strips allows drainage between neighbour cells.



Fields of Application

Soil Reinforcement

Cellular Confinement System provides superior ground reinforcement under roads, railways, runways, access roads, military passageways, pavements and walkways. It provides significant savings in filling cost by reducing the thickness of the foundation to be used.

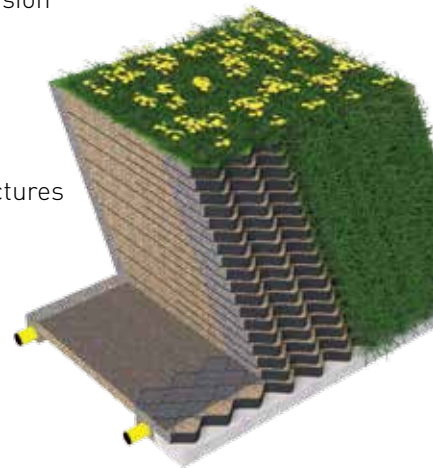
- Stabilized Drainage Layer
- Permanent and Temporary Transportation Routes
- Poor Ground Reinforcement
- Sports and Playgrounds
- Military Crossing Roads
- Road and Railway Foundations
- Controlled Filling Applications
- Embedded Building Foundations
- Parking lots
- Bicycle and Pedestrian roads



Retaining Walls

Green walls can be manufactured by filling the cells inside with vegetative soil and stabilized material. GeoArme ForCell walls are retaining walls, which can be manufactured with geogrid reinforcements and GeoCell facing unit. Geogrid reinforced earth walls show excellent performance against earthquakes, unlike conventional reinforced concrete walls.

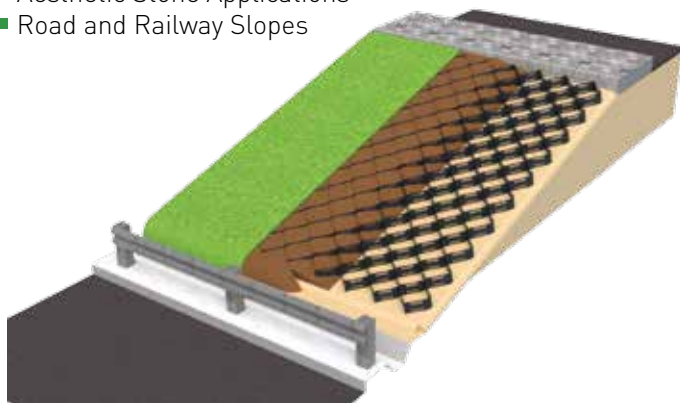
- Steep Slopes
- Road and Railway Expansion
- Embankments
- Sound Barriers
- Sports Fields Expansion
- Green Retaining Walls
- Open Canal Walls
- Coastal Protection Structures
- Culvert Walls



Erosion Control

Erosion Control Products are used to prevent surface erosion that may be caused by wind and water before planting on slope surfaces..

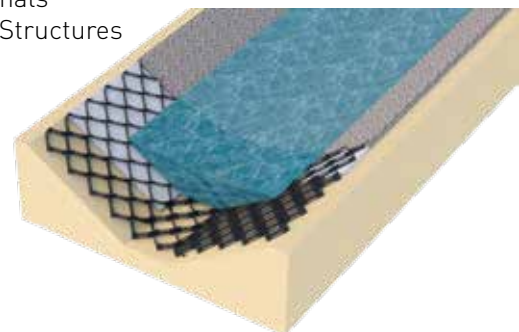
- Cut and Fill Slope Surfaces
- Ditches and Pits
- Coastal Protection Structures
- Culvert / Tunnel Outlets
- Waste Storage Areas
- Landscape Applications
- Aesthetic Stone Applications
- Road and Railway Slopes



Hydraulic Structures

Cellular Confinement System offers economical and safe solutions in hydraulic structures such as open canal, streams, ponds, and dams. The cellular filling system, which can be filled with soil, gravel and concrete, is protected against the destructive effects of water.

- Flood Canals
- Streams slope
- Ditch and Drainage Pits
- Coastal Protection Structures
- Culvert Outlets
- Dam Surface and Spillways
- Protection of Bridge abutment
- Transmission Canals
- Water Retention Structures





Application

ForCells are used for three different purposes as erosion control products on slopes, as protection concrete formwork in canals, dams and as load bearing component on green roofs. They are fixed to the ground with iron or polymer rods on slopes with a properly-prepared surface. The materials are fixed to the ground with the anchor ditches formed.

ForCell panels are combined by using materials such as locked plastic strips and staples. If there are any materials

such as geomembranes in the area of application that might be damaged by the anchor rods under the geocell, it can be applied by using ropes and fixation parts between the anchor trenches on top and heel. It is generally applied on top of non-woven or knitted geotextiles to prevent the soil from being drained from the bottom.

Advantages

- It adapts to the surface with its flexible structure.
- It can be filled with different materials such as vegetable soil, gravel, concrete etc.
- Thanks to the raw materials used and the production technology, it is long lasting.
- It prevents erosion with the terracing effect that slows down the flow of water over slope.
- It creates infrastructure for landscaping in the weak planting areas such as rock etc.
- It also has aesthetic appearance because it provides opportunities for greening.

Packaging And Storage

ForCell Erosion Control Products are shipped on pallets. The materials must be stored on smooth surface in an enclosed area.

The stored products must be kept away from direct sunlight, heat and combustible sources.

Products

Small Cells	Medium Cells	Large Cells
330/75	440/75	660/75
330/100	440/100	660/100
330/150	440/150	660/150
330/200	440/200	660/200
330/300	440/300	660/300

Weld distance can be adjusted 250mm-880mm

Properties	T	B	E	
330	250 cm ²	250 cm ²	250 cm ²	Cell Area
440	455 cm ²	455 cm ²	455 cm ²	Cell Area
660	1000 cm ²	1000 cm ²	1000 cm ²	Cell Area
Thickness (mm)	1.5±0.1	1.4±0.1	1.3±0.1	
Strip Tensile Strength (kN/m)	21	18	16	EN ISO 10319
Perforated Strip Tensile Strength (kN/m)	12.6	10.8	9.6	EN ISO 10319
Shear Strength at Joint (Perforated) (kN/m)	12.6	10.8	9.6	EN ISO 13426-1 (A)
Peel Strength at Joint (kN/m)	9	7	6	EN ISO 13426-1 (B)

Thickness can be adjusted 1,3mm-2,5mm

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**ForCell Cellular
Confinement System,
are durable, resistant to
seismic and dynamic
loads and reliable.**



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