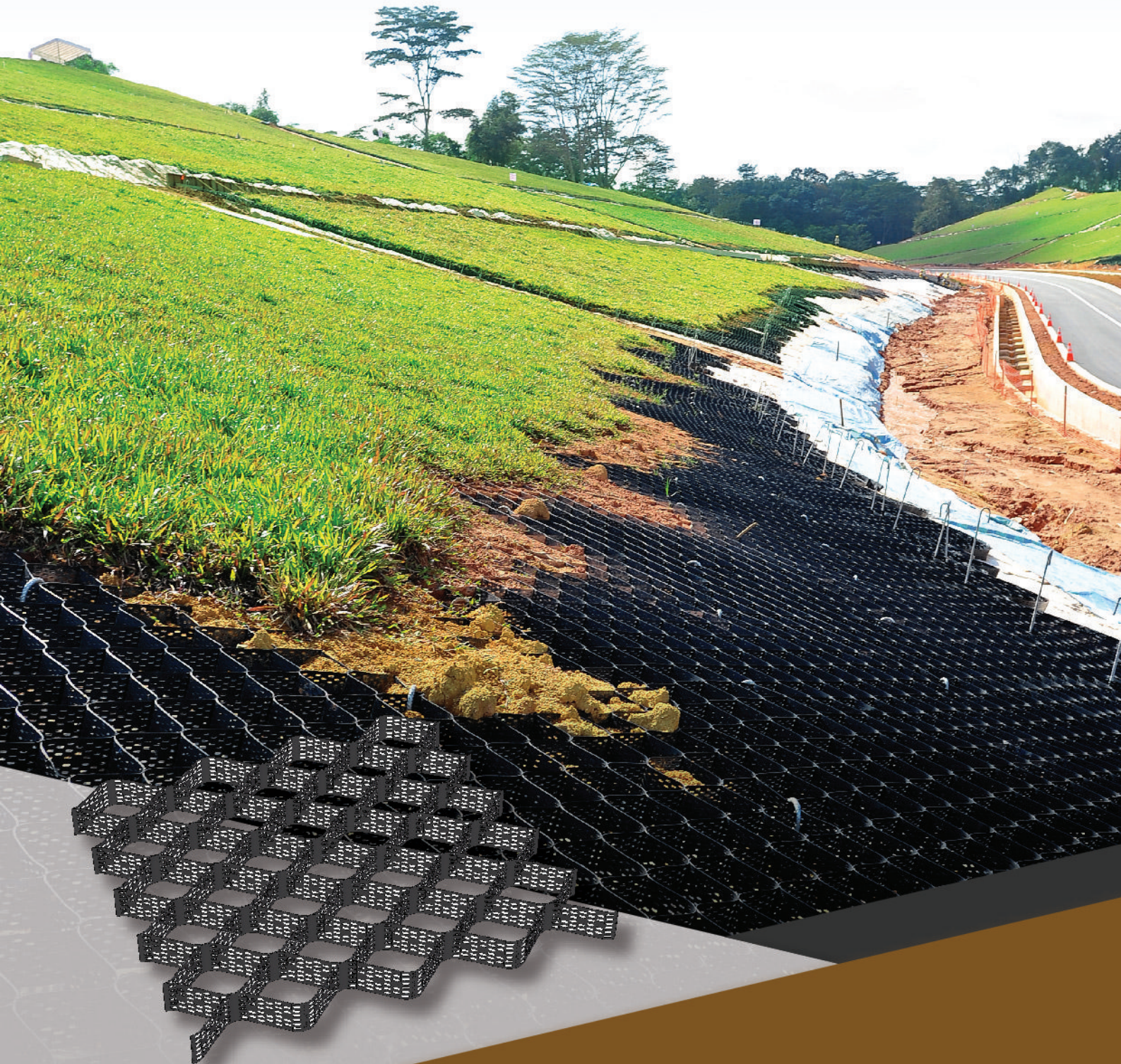




Quality Create The Future



# Z' Web

## Cellular Confinement System

# Z' Web

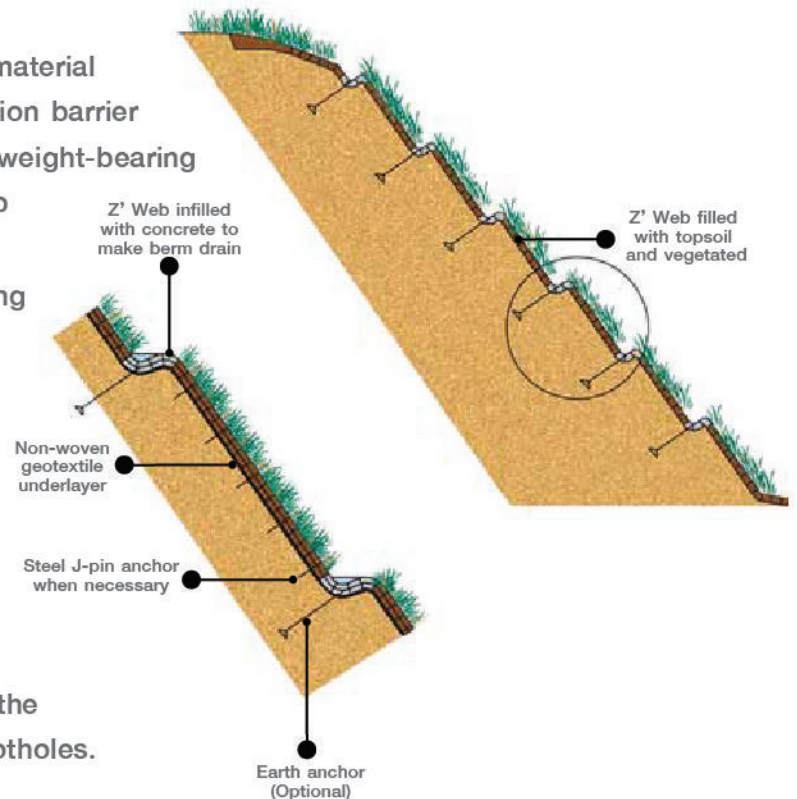
Z' Web offers architects and developers a comprehensive solution for long-term slope and channel protection and stabilization.

Z' Web is a cellular confinement system comprising a matrix of expandable and flexible thermoplastic strips that are ultrasonically bonded to form a strong, dimensionally stable and inert honeycombed network of cells.

When filled with top-soil, granular gravel/sand material or concrete, it creates a three dimensional erosion barrier and structural bridge that uniformly distributes weight-bearing loads, enhances drainage and prevents build-up of hydrostatic pressure.

Z' Web effectively controls erosion by preventing movement of infill material within the individual cells and provides stability by acting as a counterweight on sloped areas. The structural and shear strength is enhanced when installed in layers.

Z' Web forms an integrated structural mass that resists lateral pressure and movement. It uniformly distributes weight-bearing loads thereby preventing infill from being forced into the substrate below resulting in deformation and potholes.

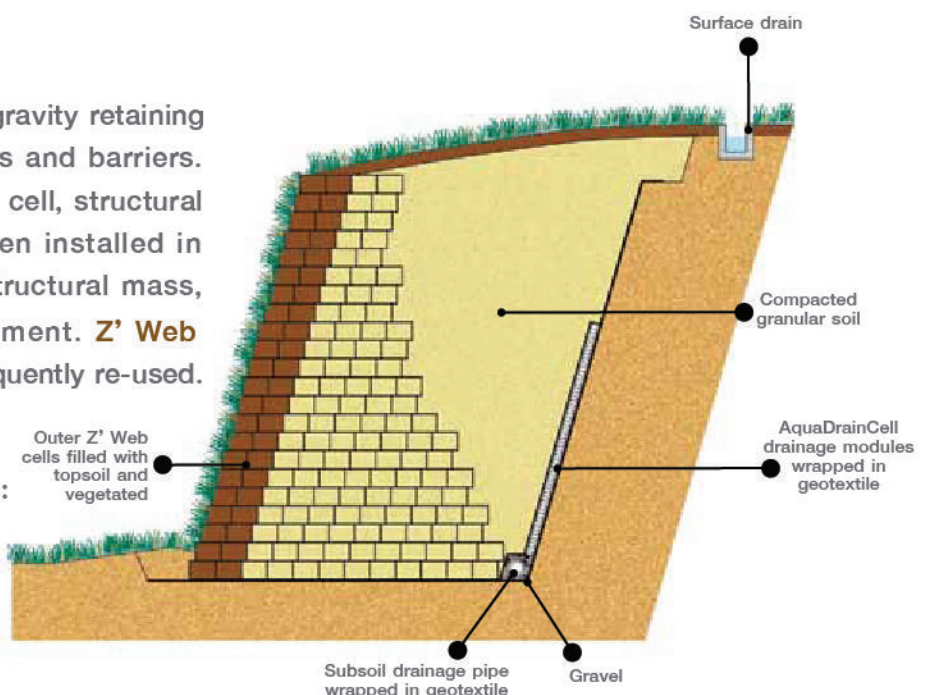


## Earth Retention

Z' Web can be used to retain infill in gravity retaining and free standing walls, embankments and barriers. By confining infill material within each cell, structural and shear strength is enhanced. When installed in layers, Z' Web forms an integrated structural mass, resisting lateral pressure and movement. Z' Web is easily dismantled and may be subsequently re-used.

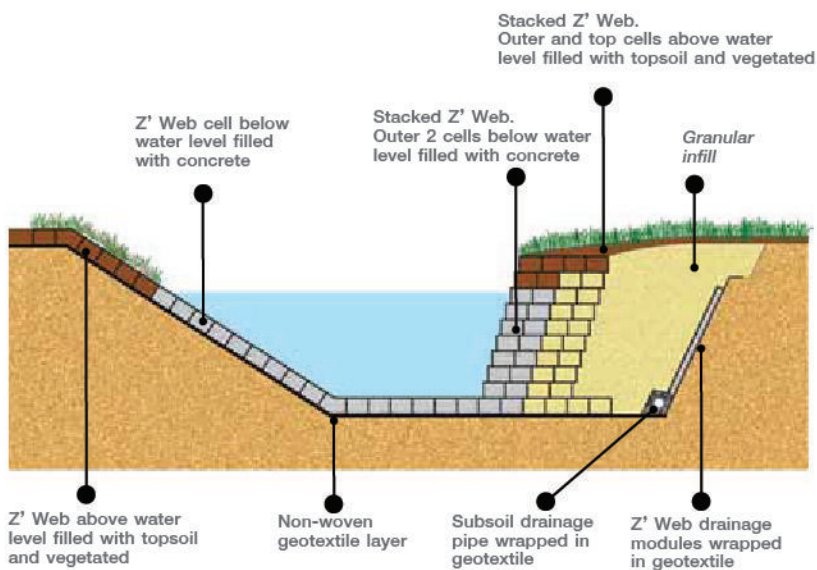
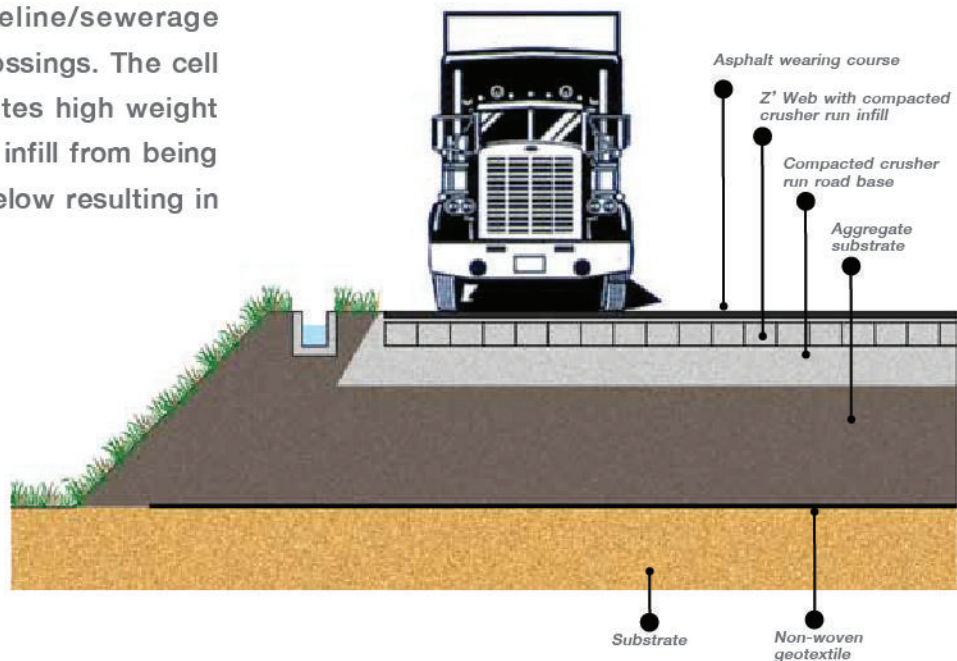
Infill materials recommended include:

- top soil for establishing vegetation
- granular material (gravel/sand)
- concrete



## Load Support

**Z' Web** can be used in the construction of driveways, maintenance roads, parking lots, cart paths, walkways, pipeline/sewerage supports and in channel crossings. The cell structure uniformly distributes high weight bearing loads and prevents infill from being forced into the substrate below resulting in deformation and potholes.



## Channel Protection

**Z' Web** can be used for channel and shoreline protection and on scour aprons, boat ramps and spillways. **Z' Web** avoids the need to install costly load support structures.

Infill materials, subject to site conditions, include:

- top soil for low to moderate and intermittent flow conditions
- granular materials including gravel and concrete for channels subject to severe hydraulic and mechanical stresses.

## Advantages

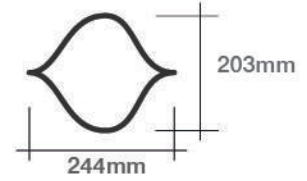
- Cost effective long-term slope and channel protection and stabilization
- Conforms to most terrain profiles
- Easily transported and handled on-site
- Quickly dismantled for re-use

## Application

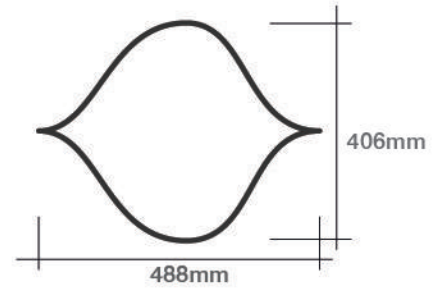
- Slope protection
- Earth retention
- Load support
- Channel protection

## Technical Specification

	Standard Cell	Large Cell
<b>Cell Dimension</b>	203 mm x 244 mm	406 mm x 488 mm
<b>Cell Heights</b>	50mm 75 mm 100 mm 150 mm 200 mm	50 mm 75 mm 100 mm 150 mm 200 mm
<b>Thickness</b>	1.2 mm	1.2 mm
<b>Tensile Strength</b>	( Long. ) 18.4MPa ( Trans. ) 19.5MPa	18.4MPa 19.5MPa
<b>Seam Weld Strength</b>	( 50 mm ) 560N ( 75 mm ) 950N ( 100 m ) 1400N ( 150 mm ) 1820N ( 200 mm ) 2210N	560N 950N 1400N 1820N 2210N
<b>Size Per Panel</b>	$\approx 15.0m^2$	$\approx 30.0m^2$
<b>Weight Per Panel</b>	( 50 mm ) 12.3kg ( 75 mm ) 18.5kg ( 100 m ) 24.7kg (150 mm ) 37.0kg ( 200 mm ) 49.3kg	12.3kg 18.5kg 24.7kg 37.0kg 49.3kg
<b>Long Term Seam Hang Strength*</b>	>30 days	>30 days
<b>Environmental Stress</b>		
<b>Crack Resistance</b>	>3000 hours	>3000 hours
<b>Service Temperature</b>	-20 °C to 120 °C	
<b>Biological / Chemical Resistance</b>	Unaffected by moulds and algae Good resistance to alkali and bitumen	



Standard Cell  
2.44m x 6.1m



Large Cell  
2.44m x 12.2m

\*100mm seam width supporting 72.5kgf load at ambient temperature according to ASTM E41.

