

# VersiWeb®

Cellular Confinement System



## Enhancing Our Environment

VersiWeb® enhances our environment by stabilizing and protecting infill from erosion caused by water, wind and weight bearing loads.



# VersiWeb®

**VersiWeb®** geosynthetic cellular confinement system is a matrix of lightweight, expandable and flexible thermoplastic strips that are ultrasonically bonded to form a strong, dimensionally stable and inert honeycomb structure. The thermoplastic strips do not have perforations to ensure optimum strength of each cell.

When filled with granular materials, the system creates a three dimensional erosion barrier and structural bridge that uniformly distributes weight-bearing loads. The cellular nature of **VersiWeb®** enhances drainage and prevents build-up of hydrostatic pressure.

## Applications

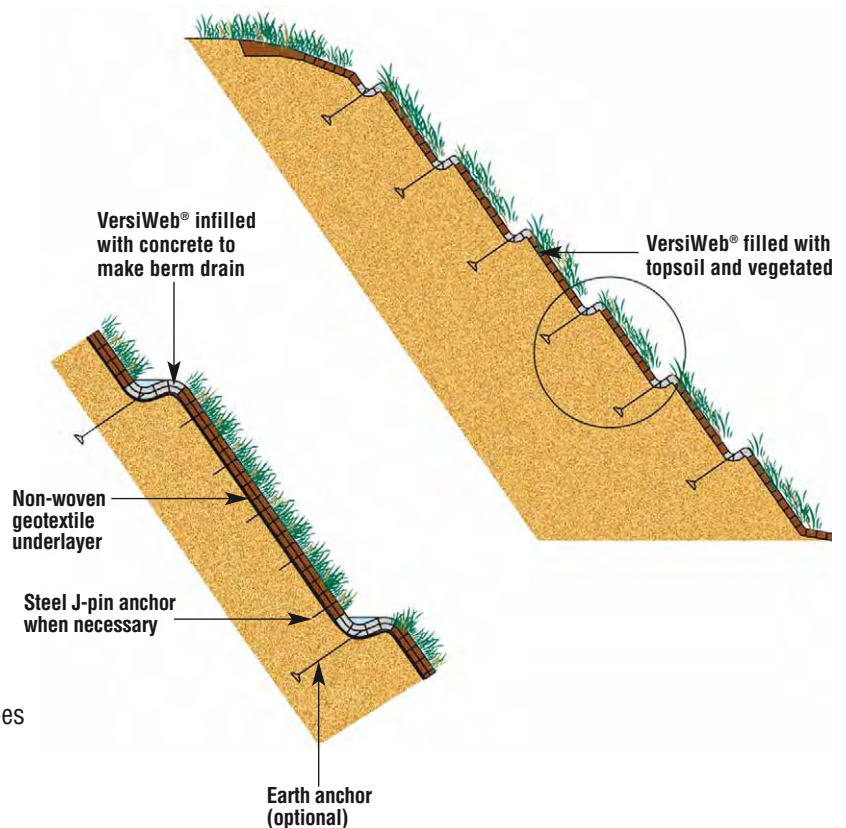
- Slope protection
- Earth retention
- Load support
- Channel protection

## Slope Protection

**VersiWeb®** effectively controls erosion as the cells prevent movement of the infill. The confined infill also acts as a counterweight on sloped areas and provides stability.

Infill materials recommended include:

- top soil for established vegetation
- granular infill for steep non-vegetative slopes
- concrete for hard and durable situations

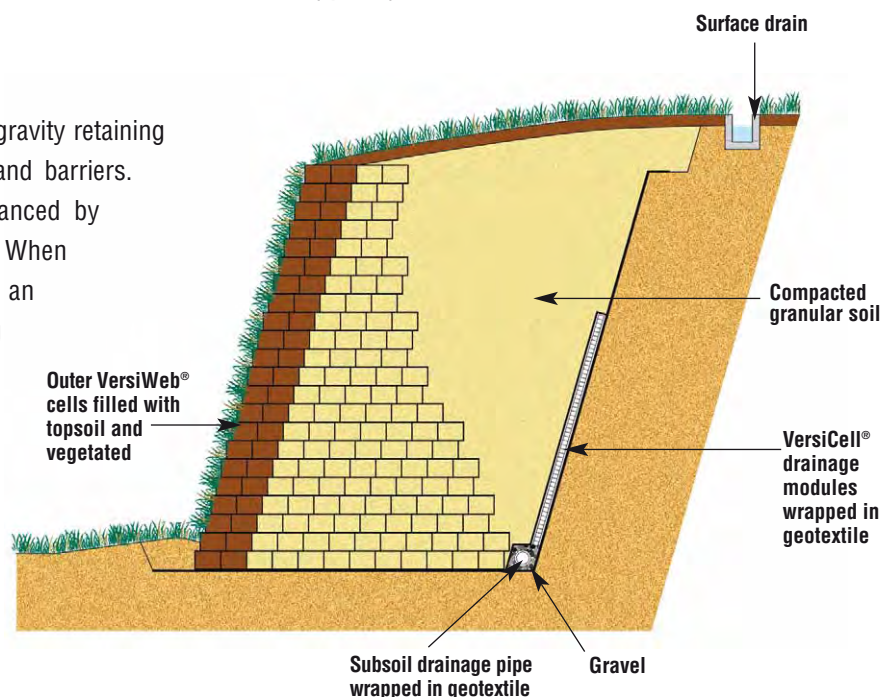


## Earth Retention

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

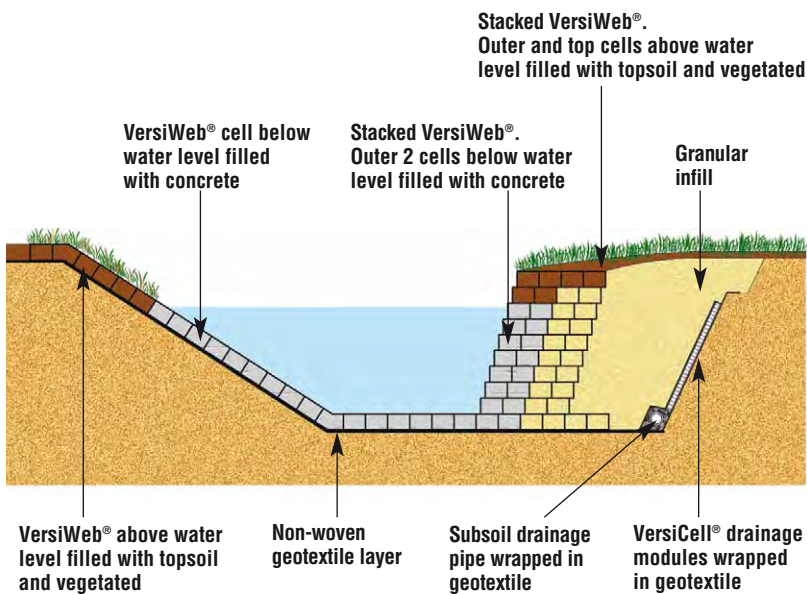
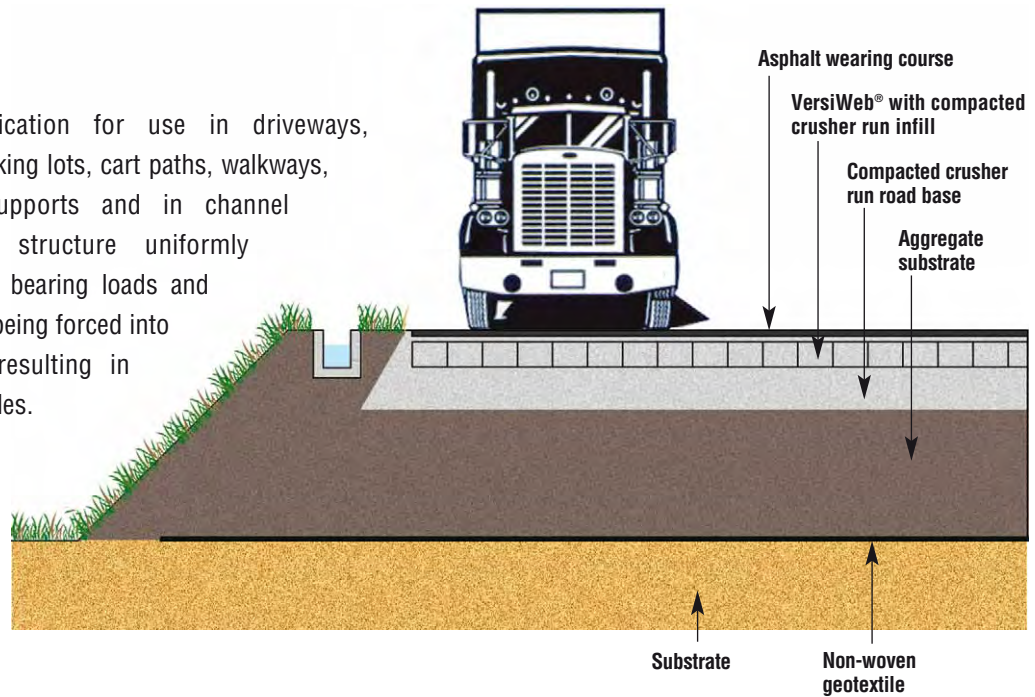
Infill materials recommended include:

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



## Load Support

**VersiWeb®** has application for use in 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 the infill from being forced into the substrate below resulting in deformations and potholes.



## Channel Protection

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

Infill materials, subject to site conditions, include:

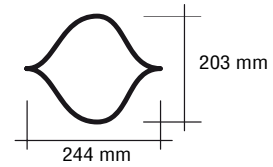
- top soil for low to moderate and intermittent flow conditions
- granular materials including gravel and concrete for channels subject to severe hydraulic and mechanical stresses.

## Advantages

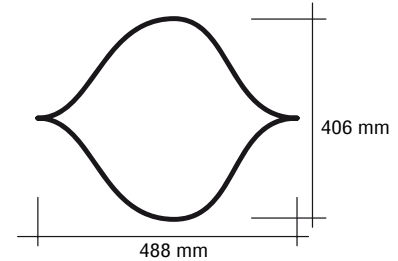
- Provides cost effective, long-term slope and channel protection and stabilization
- Ease in transportation and on site handling due to collapsible cells
- Rapid and simple installation conforms to most terrain profiles
- Ultrasonic welding of cell joints ensures maximum strength
- Easily dismantled and subsequently re-used
- Withstands high weight bearing loads
- Resistant to biological attack and a wide range of soil borne chemicals

# Specifications

	Standard Cell	Large Cell
<b>Cell Dimension:</b>	203 mm x 244 mm	406 mm x 488 mm
<b>Cell Heights:</b>	50 mm 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.) 18.4 MPa (Trans.) 19.5 MPa	18.4 MPa 19.5 MPa
<b>Seam Weld Strength:</b>	50 mm 560 N 75 mm 950 N 100 mm 1400 N 150 mm 1820 N 200 mm 2210 N	560 N 950 N 1400 N 1820 N 2210 N
<b>Size Per Panel:</b>	approx. 15.0 m <sup>2</sup> (2.44 m x 6.1 m)	approx. 30.0 m <sup>2</sup> (2.44 m x 12.2 m)
<b>Weight Per Panel:</b>	50 mm 12.3 kg 75 mm 18.5 kg 100 mm 24.7 kg 150 mm 37.0 kg 200 mm 49.3 kg	12.3 kg 18.5 kg 24.7 kg 37.0 kg 49.3 kg
<b>Long Term Seam Hang Strength*:</b>	>30 days	>30 days
<b>Environmental Stress Crack Resistance:</b>	>3000 hours	>3000 hours
<b>Biological/Chemical Resistance:</b>	Unaffected by moulds and algae and good resistance to oils, acids, alkalis and bitumen	
<b>Service Temperature:</b>	-20° C to 120° C	

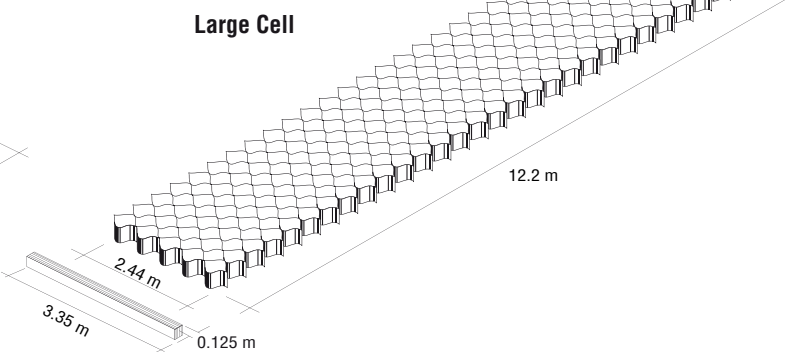
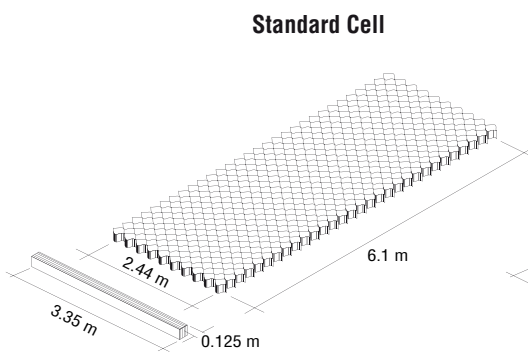


**Standard Cell**  
2.44 m x 6.1 m



**Large Cell**  
2.44 m x 12.2 m

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



**Note:** The information provided in this brochure is based on current knowledge and experience and does not infer any legally binding assurance or warranty, expressed or implied. Intending purchasers should verify whether any changes to specifications or applications or otherwise have been made since this literature was issued. **VersiWeb®** is manufactured using specified recycled plastics under detailed quality control standards and procedures. Factors including raw materials & manufacturing processes may impact slightly on performance. Whilst **VersiWeb®** is designed for its intended use, the design calculations shall be the responsibility of the Specifier and/or User.

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