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Intelligent building solutions that last.

# Millenia Wall Solutions

Build Intelligently



Millenia Wall Solutions provides a wide array of colors and choices never before available.

# Revolutionize Your Business

## Save Time & Money



Millenia Wall Solutions' patented Structural Cell Technology™ (SCT™) replaces heavy retaining wall units with a lightweight alternative using advanced polymeric resins for efficiency, strength and durability. Once the units are set in place and connected, you simply fill them with crushed stone. The structural cell, secured to the rigid frame, is designed to enhance the fill material strength.

Millenia's retaining wall units weigh just 5.5 pounds, greatly reducing installation and transportation costs.

Your customers demand beautiful, long lasting, low maintenance products and with Millenia you can meet their every need. Millenia's faces have been meticulously created to capture the color, texture and detail of natural stone. Millenia's structural walls are built for life and manufactured with the environment in mind.



SC100 | LedgeStone

“Millenia Wall Solutions is reinventing the way walls are built. When you take hold of one of these units you'll realize it's a whole new game. **Twice the wall production with half the crew...** now that's amazing!”

Paul Forsberg

President, Millenia Wall Solutions, founded Keystone Retaining Wall Systems in 1986, creating a new industry: SRW retaining walls. Paul continues to pioneer new and innovative solutions for the segmental retaining wall industry.

To learn more about Paul's story visit: [milleniawalls.com/paul](http://milleniawalls.com/paul)

Our innovative products are made from 100% recycled pre-consumer material preferred by the Green Building Industry.



AshlarStone



ChiseledStone



LedgeStone



SandStone

## Select Yours Today

### EW50 Series

- 6 x 12 x 9 Inches (1/2 Sq. Ft.)

- 2.5 Pounds

- 0% Absorption

- Weather Resistant

- Perferred by Green Building Industry



Made from 100% Pre-consumer Recycled Material



2 Inch Top Cap

### SC100 Series

- 8 x 18 x 12 Inches (1 Sq. Ft.)

- 5.5 Pounds

- 0% Absorption

- Weather Resistant

- Perferred by Green Building Industry



Made from 100% Pre-consumer Recycled Material



3 Inch Top Cap

Accessories: Half Units, Side Caps and 90° Corners



U.S. Green Building Council Member

## Make an Environmentally Responsible Choice

### Our Commitment



Today's consumers are increasingly aware of environmental concerns and are searching for earth-friendly products and solutions.

Millenia's commitment to the environment provides an ecological benefit for a healthy and cleaner planet. Our innovative products are made from recycled polymeric resins, a sustainable material preferred by the Green Building Industry.

Replacing concrete SRW units with modular polymer units results in a staggering 65% reduction in green house gas emissions and 55% reduction on overall environmental impact over the life cycle of the product.

For Millenia's guidance for LEED™ credits or competing Life Cycle Assessment visit: [Milleniawalls.com](http://Milleniawalls.com).

(Information source: Life Cycle Assessment (LCA) of Polymer vs. Concrete using SimaPro Version 7.1 Software tool.)



SC100 | ChiseledStone

The most significant breakthrough in 20 years for the retaining wall industry: Millenia Wall Solutions.

## Structural Cell Technology



**Soft Edge™**

Contoured edges to prevent damage to reinforcing geogrids. Industry 1<sup>st</sup>

**Confinement Cell™**

Patented technology that achieves performance at a fraction of the weight. Industry 1<sup>st</sup>

**Smart Lock™**

Provides unit-to-unit connection, forming a fully interconnected wall. Industry 1<sup>st</sup>

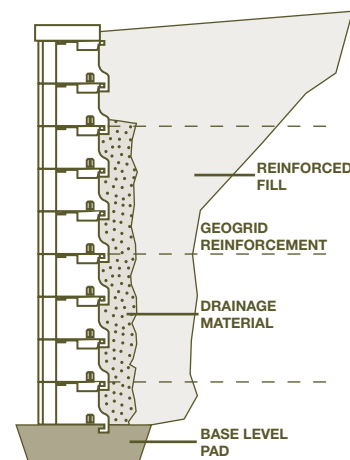
**Face**

Infinite profiles and colors through patented imaging technology. Industry 1<sup>st</sup>

**Beveled Edges**

Ensures consistent spacing allowing serpentine curved walls. Industry 1<sup>st</sup>

## Design Charts



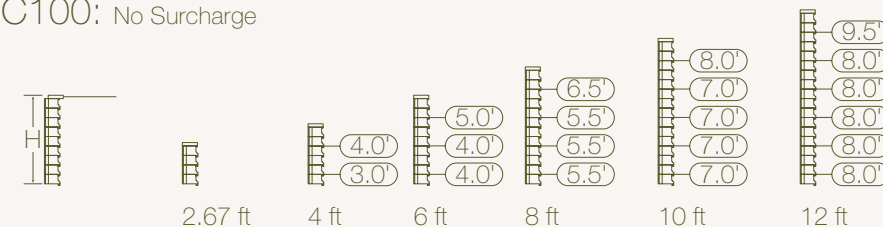
Reinforced Wall Near Vertical

The design charts to the right are based on a sandy clay type of backfill soil (angle of internal friction = 30°).

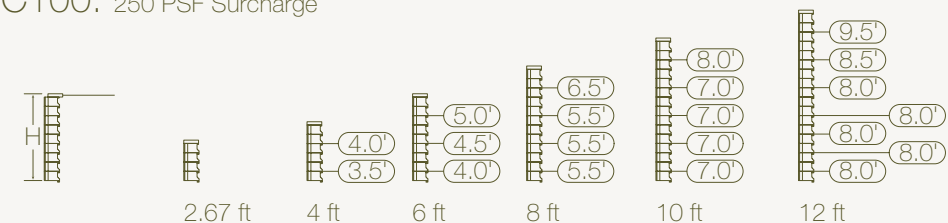
Lengths indicated in the are required reinforcement length as measured from the face of the unit. Elevation placement is shown as the unit count from the base.

The design charts are for preliminary use only, final designs should be reviewed by a qualified engineer.

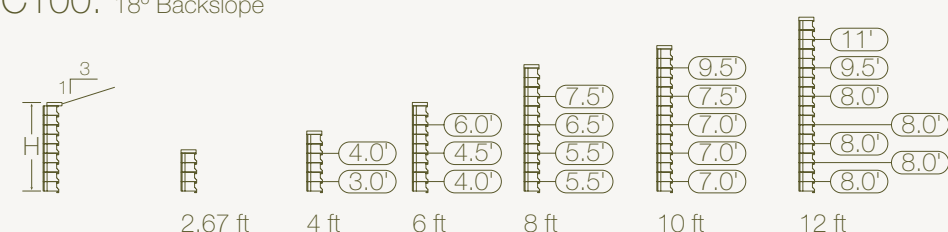
SC100: No Surcharge



SC100: 250 PSF Surcharge



SC100: 18° Backslope



Gravity Walls: Maximum Unreinforced Wall Height

EW50 Series:

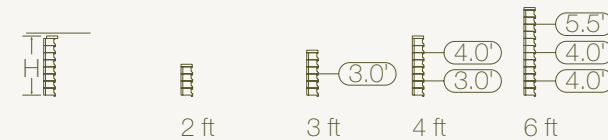
MAXIMUM HEIGHT	1.2° Near Vertical		6.0° +/- BATTER	
	Level	3H:1V	Level	3H:1V
Sand / Gravel Phi=34°	2'-0" (0.61m)	1'-6" (0.61m)	2'-0" (0.61m)	2'-0" (0.61m)
Silty Sand Phi=30°	2'-0" (0.61m)	1'-6" (0.46m)	3'-0" (0.61m)	2'-0" (0.61m)
Silty / Lean Clay Phi=26°	1'-6" (0.46m)	1'-6" (0.46m)	2'-0" (0.61m)	1'-5" (0.46m)

SC100 Series:

MAXIMUM HEIGHT	1° Near Vertical		4.5° +/- BATTER	
	Level	3H:1V	Level	3H:1V
Sand / Gravel Phi=34°	3'-0" (0.9m)	2'-8" (0.8m)	3'-0" (0.9m)	2'-8" (0.8m)
Silty Sand Phi=30°	3'-0" (0.9m)	2'-8" (0.8m)	3'-0" (0.9m)	2'-8" (0.8m)
Silty / Lean Clay Phi=26°	2'-8" (0.8m)	2'-0" (0.61m)	2'-8" (0.8m)	2'-0" (0.61m)

Gravity walls are for low-height, non-critical applications. No surcharge loads are used in the design charts.

EW50: No Surcharge



EW50: 18 Backslope

