



# VERSA-Grid<sup>®</sup>

## Soil Reinforcement for Segmental Retaining Walls

When the weight of retaining wall units alone is not enough to retain soil loads, VERSA-Grid provides the additional soil reinforcement necessary for structural wall stability. Properly designed, VERSA-Grid reinforced walls may be economically constructed to heights exceeding 40 feet.

VERSA-Grid is engineered for durability and long life. It's composed of high molecular weight, high tenacity, multifilament polyester yarns woven into a stable network placed under tension. It's also inert to biological degradation and is resistant to naturally encountered chemicals, alkalis, and acids.

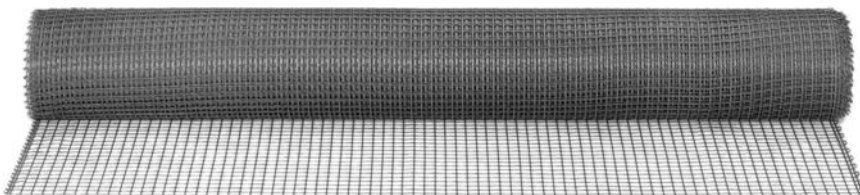
VERSA-Grid is lightweight and easy to install. It's flexible, with virtually no memory, so it lays flat after being unrolled. In addition, VERSA-Grid comes in convenient roll widths of 6 and 12 feet with lengths of 150 and 300 feet to suit any project.

### Features

- No memory, lays flat
- High tenacity woven yarn, polyester fibers
- Wide range of grid strengths
- Convenient roll widths

### Benefits

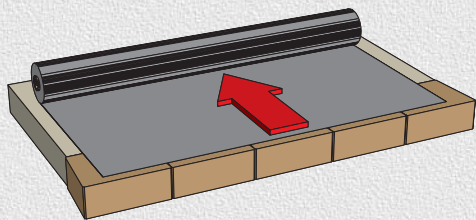
- Quick and simple to install
- High strength to build tall walls
- Resists chemicals and inert to biological degradation
- Efficient designs, contractor friendly



### IMPORTANT

*Any soil-reinforced wall must be specified by a qualified engineer. Based on site and soil conditions, soil reinforcement strength, length, and vertical spacing will vary for every project. Use this product only in accordance with final, stamped, professionally engineered construction drawings. VERSA-Grid technical literature, design strengths, and engineering assistance is available from VERSA-LOK<sup>®</sup> (800) 770-4525.*





## IMPORTANT

*VERSA-Grid® must be unrolled and installed perpendicular to the retaining wall face. Failure to install in this direction may result in structurally unsafe wall conditions. If unsure about any wall construction procedures, please contact your local VERSA-LOK® representative or call us toll free at (800) 770-4525.*

## VERSA-Grid Soil Reinforcement Installation Instructions

Before proceeding, please obtain a copy of the VERSA-LOK Standard or Mosaic *Design & Installation Guidelines* and, if installing curves or corners, a copy of the VERSA-LOK *Technical Bulletin #3 – Curves and Corners*. Thoroughly review all design and construction fundamentals and begin wall construction according to the guidelines illustrated in these documents. Use the following instructions when it is time for placement of soil reinforcement.

Prepare to install VERSA-Grid by placing VERSA-LOK units, backfilling, and compacting up to the height of the first (lowest) soil reinforcement layer specified on final, professionally engineered construction drawings (*Figure 1*).

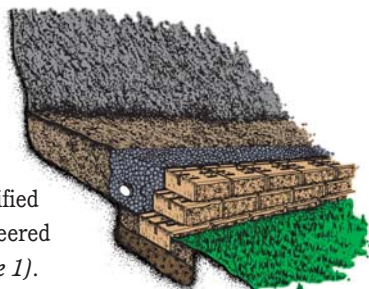


Figure 1

Lay VERSA-Grid on top of the compacted backfill and VERSA-LOK units by unrolling it **perpendicular** to the wall. Keep the grid one inch behind the front face of the wall so that it completely covers the holes and slots in the VERSA-LOK units (*Figure 2*). Cut to specified length using a scissors or knife.

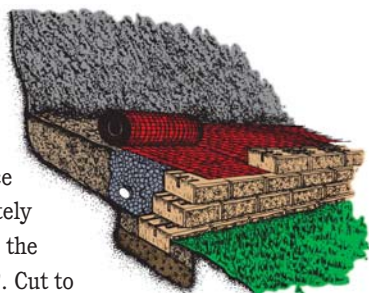


Figure 2

Placing soil reinforcement behind curves and corners requires special layout and overlapping procedures. Never overlap soil reinforcement layers directly on top of each other. Slick surfaces of the grid will not hold in place properly when placed directly next to each other. Always provide at least three inches of soil fill between overlapping grid layers. See illustrations in VERSA-LOK *Technical Bulletin #3* for correct placement of VERSA-Grid in curves or corners.

Correctly position the next course of VERSA-LOK units on top of the grid. Insert VERSA-TUFF® Pins and drive them through the grid into the receiving slots of the adjacent lower course units. Use an extra pin and a mallet to make sure that the pins are firmly seated in the lower course units.

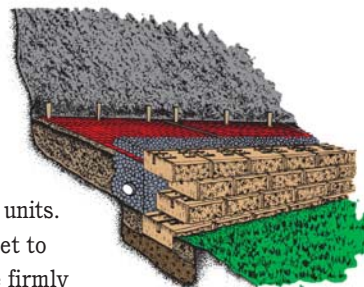


Figure 3

Place drainage aggregate against back of units and on top of VERSA-Grid. Remove slack by pulling the grid backward from the wall face and anchoring at back edge (*Figure 3*). Beginning at the drainage aggregate, place and compact soil backfill. Keep grid taut and avoid wrinkles (*Figure 4*).

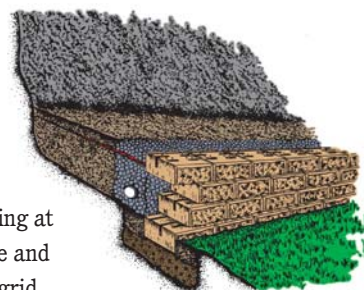


Figure 4

Place at least a six inch layer of soil backfill before using any rubber-tired or tracked equipment on top of the VERSA-Grid area. Prevent fill movement and grid damage by driving equipment slowly and turning gradually. Use only hand-operated compaction equipment within three feet of the wall face to avoid excessive equipment loads and possible movement of wall units.

Continue placing additional courses, drainage material, compacted soil backfill, and VERSA-Grid according to final construction drawings. Do not stack more than three courses without backfilling. At wall top, place and compact a 12 inch layer of impervious fill over the drainage aggregate, install cap units, and complete final grading.



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