

VERSA-Grid[®]

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, walls reinforced with VERSA-Grid may be economically constructed to heights of 50 feet or more.

VERSA-Grid is available in multiple strengths:

VERSA-Grid 3.0, VERSA-Grid 5.0, VERSA-Grid 8.0:

Three strengths of geogrid for taller walls or walls requiring more soil reinforcement. Available in 6' x 150' rolls.

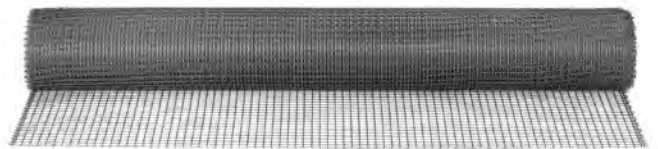
VERSA-Grid 1.5:

For use only on walls up to 6 feet tall. Available in 4' x 50' rolls.

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 grid placed under tension. VERSA-Grid is inert to biological degradation and resistant to naturally occurring 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.

- No memory, lays flat
- High-tenacity, woven polyester fibers
- Resists chemicals and biological degradation
- Multiple grid strengths for construction versatility



IMPORTANT

Based on site and soil conditions, VERSA-Grid strength, length and vertical spacing will vary for every project. A VERSA-Grid-reinforced wall should be designed by a qualified engineer. Check local building codes. 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 at (800) 770-4525, or visit www.versa-lok.com.

IMPORTANT

VERSA-Grid 3.0, 5.0 and 8.0 must be unrolled and installed perpendicular to the retaining wall face. Failure to install geogrid 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 VERSA-LOK's Engineering Department at (800) 770-4525.

VERSA-Grid Soil Reinforcement Installation Instructions

Before proceeding, obtain a copy of the VERSA-LOK Standard, Mosaic or Square Foot 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. Then follow these instructions for placing soil reinforcement:

1. 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)

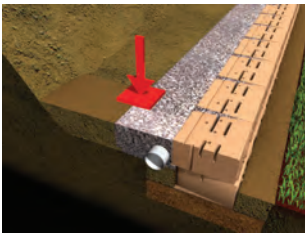


Figure 1

2. Lay VERSA-Grid on top of the compacted backfill and VERSA-LOK units by unrolling it perpendicular to the wall. Keep the grid 1 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.

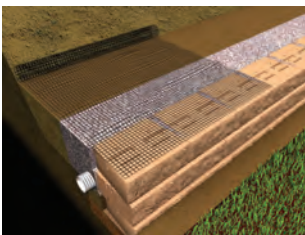


Figure 2

3. Placing soil reinforcement behind curves and corners requires special layout and overlapping procedures. Never directly overlap geogrid layers without soil in between layers; always provide at least 3 inches of soil fill between overlapping geogrid layers. Slick surfaces of the grid will not hold in place properly when placed directly on top of each other. See illustrations in VERSA-LOK Technical Bulletin #3 for correct placement of VERSA-Grid in curves or corners.

4. 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 the pins are firmly seated in the lower-course units.

5. 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).

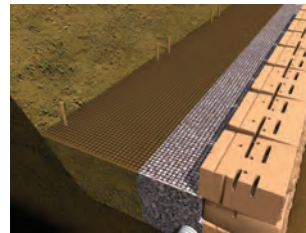


Figure 3

6. Beginning at the drainage aggregate, place and compact soil backfill. Keep grid taut and avoid wrinkles (Figure 4).



Figure 4

7. Place a minimum 6-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 3 feet of the wall face to avoid excessive equipment loads and possible movement of wall units.

8. 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.

Products shown may be covered by one or more of the following:
U.S. Patent D319,885, U.S. Patent D321,060, U.S. Patent D341,215, U.S. Patent D346,667, U.S. Patent D378,702, U.S. Patent D391,376, U.S. Patent D430,680, U.S. Patent D435,302, U.S. Patent D439,678, U.S. Patent D452,332, U.S. Patent D458,387, U.S. Patent 6,488,448, U.S. Patent 6,960,048, U.S. Patent D537,533, U.S. Patent D552,258, U.S. Patent 7,229,235, U.S. Patent 7,244,079 and other U.S. patents pending; Canadian Industrial Design Registration No. 63929, No. 71472, No. 73910, No. 73911, No. 73912, No. 77816, No. 79058, No. 82288, and No. 89084. I.C.B.O. No. 4625

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