



# Installation Guideline: Strata Geogrid MSE Wall

3904 Virginia Ave • Cincinnati, Ohio 45227 • Phone (513) 271-6000 • Fax (513) 271-4420

## INSTALLATION PROCEDURES

The following construction procedures assume that all design and engineering issues have been addressed. These procedures are general installation guidelines for Stratagrid soil reinforcement in conjunction with a segmental retaining wall.

1) Excavate the base trench, prepare foundation and install base leveling pad as required by the engineering design/segmental wall manufacturer.

a) FOR CUT WALLS:

During initial excavation be sure to excavate the required geogrid embedment length (reinforced soil zone). The geogrid embedment length is typically measured back from the front face of the retaining wall units. Following excavation for the leveling pad and the reinforced soil zone, foundation soil shall be examined to assure the actual foundation soil strength meets or exceeds the assumed design bearing strength. Soils not meeting the required strength shall be removed and replaced as directed by the site engineer. Unless otherwise specified, a minimum 6" thick layer of compacted granular material shall be used for the leveling pad. The granular base shall be compacted to provide a firm, level bearing pad on which to place the first course of concrete units. Follow the manufacturer's recommendations for unit placement, including installation of alignment devices and/or unit placement to engage concrete lips or ridges.

2) Continue the installation process until you have reached the elevation/location requiring Stratagrid. This elevation, along with the elevation of any additional geogrid layers, will be specified in the engineering design for the wall. Compacted backfill shall be level with the top of the segmental wall unit prior to Stratagrid placement. Make sure to place and compact the backfill material as specified in the engineering design. Using proper compaction equipment, compact soils to a minimum 95% Standard Proctor density in 6 to 8 inch minimum lifts. If required, aggregate fill shall be placed within the wall unit cores and directly behind the wall units as directed by the wall manufacturer and prior to placement of the Stratagrid. Remove all debris from the top of the segmental wall units prior to placement of the Stratagrid.

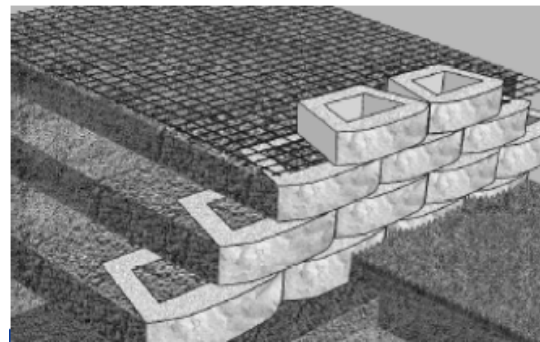
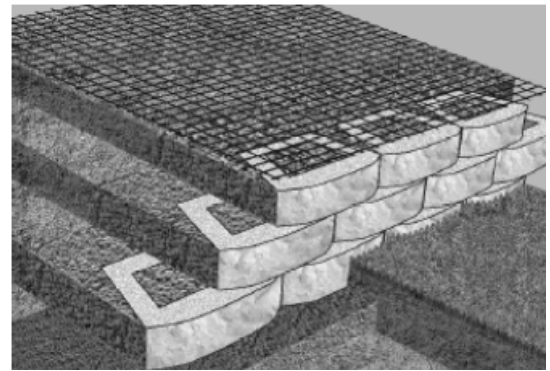
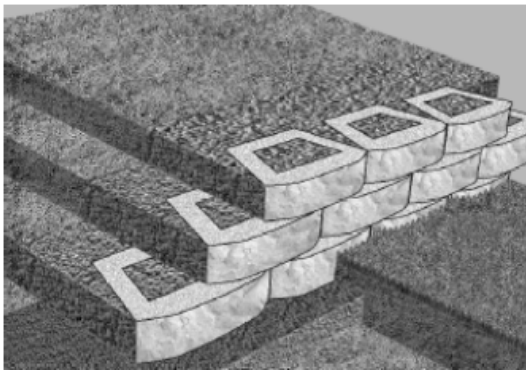
3) Before unrolling the Stratagrid, verify required length and placement location. The design strength direction is in the roll direction and shall be placed perpendicular to the wall face. Stratagrid shall be placed on the segmental wall unit as directed by the segmental retaining wall manufacturer. Typically, the geogrid is placed within 1" of the front face of the retaining wall unit. Alignment and/or geogrid connection devices shall be installed as directed by the segmental wall manufacturer. Stratagrid must lay flat on the segmental wall unit and on the compacted backfill soils behind the wall face. Where required,

adjacent sections of Stratagrid must always abut each other at the face of the wall. Stratagrid shall not overlap on top of the segmental wall unit. Stratagrid cannot be spliced to achieve required embedment length. One continuous section of Stratagrid must be used to achieve the specified length. Adjacent sections of Stratagrid shall be placed in a manner to assure the horizontal coverage shown on the plans is provided. Place the next course of segmental wall units. Pull geogrid taut to remove slack and wrinkles prior to placement of backfill. A pitchfork works well for this task. Staking may be required to keep geogrid taut and free from wrinkles during backfill placement. After completing the backfill process, the tension stakes may be removed for reuse. Place and properly compact backfill soils over the Stratagrid as directed by the wall design.

4) Some wall designs may specify more than one type of Stratagrid and more than one length for the geogrid layers. It is critical to confirm this information before proceeding. If multiple types and/or lengths will be used, precutting and marking each geogrid piece (for example with colored spray paint) will make identification easier and reduce the chance of misplacement.

5) Repeat installation steps as necessary.

6) At the end of each days operation, slope the last level of backfill away from the wall to direct runoff from rainwater away from the wall face. In addition, do not allow surface runoff from adjacent areas to enter the wall construction site.



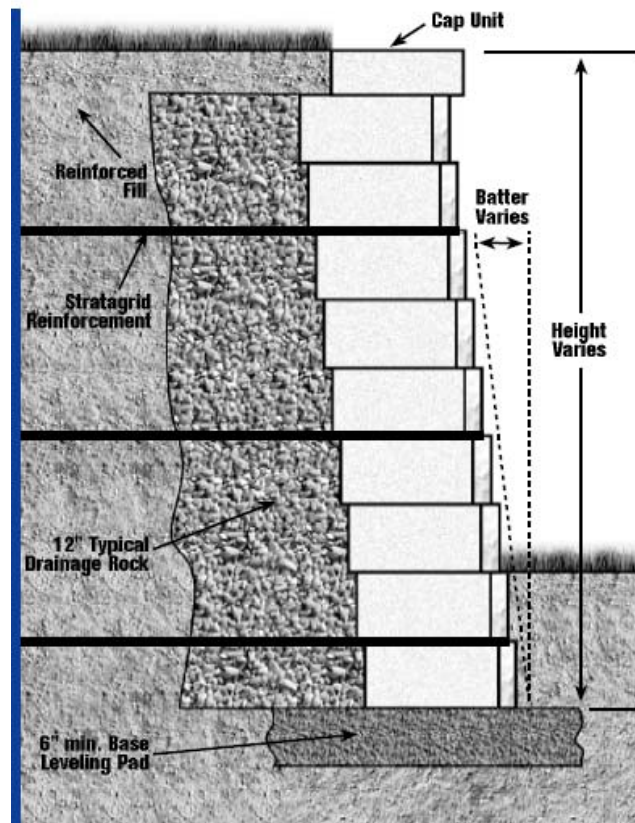
US Fabrics, Inc provides this information only as an accommodation to our customers. No warranty or other representation regarding suitability of the application procedures is made since each installation has specific requirements that may not be considered in this generalized procedure. The above information is to the best of our knowledge accurate, but is not intended to be considered as a guarantee. Any implied warranty for a particular use or purpose is excluded. 10/09/2007

## RESTRICTIONS

- 1) Use only small, walk-behind compaction equipment for compacting of any fill within a 3 foot zone from the wall face.
- 2) Do not allow any tracked construction equipment to travel directly on Stratagrid material.
- 3) For necessary travel on the geogrid, use only lightweight rubber tired equipment operated at a slow speed (less than 10 mph); do not allow abrupt braking or sharp turning.
- 4) Do not leave heavy equipment parked adjacent to the top of the wall at any time.
- 5) Do not stockpile any construction materials adjacent to the top of the wall.

## VERIFICATION

- 1) Check construction plans and horizontal alignments of wall and segmental units.
- 2) Check batter and setback of segmental units.
- 3) Confirm specifications for Stratagrid geogrid, segmental units, drainage stone and reinforced backfill.
- 4) Confirm elevations of footing and top of wall.
- 5) Confirm elevations of Stratagrid layers.



US Fabrics, Inc provides this information only as an accommodation to our customers. No warranty or other representation regarding suitability of the application procedures is made since each installation has specific requirements that may not be considered in this generalized procedure. The above information is to the best of our knowledge accurate, but is not intended to be considered as a guarantee. Any implied warranty for a particular use or purpose is excluded. 10/09/2007