



MESA[®] PLATEAU[™]
RETAINING WALL SYSTEM

A Better Solution for Low-Height Walls ...➤



The structural integrity and reliability of the Mesa Systems are available in an improved solution developed specifically for low-height retaining wall applications. Introducing the Mesa Plateau[™] System from Tensar International Corporation – the latest segmental retaining wall (SRW) solution to feature the new Tensar[®] LH800 Geogrid reinforcement.



Tensar[®]
INTERNATIONAL

Easier Installation – Economical Alternative ❖❖❖

The Mesa® Plateau™ Retaining Wall System offers a superior and cost-effective solution for your low-height retaining wall needs. Developed with the residential and commercial markets in mind, Plateau Units are easy to handle and may be used for wall heights up to 10 ft.

Whether you're increasing usable land or improving property value, the Mesa Plateau System can solve any grade change requirement from landscape garden walls to larger structural walls. Creating stairs, 90-degree corners or convex and concave curves are also easy, and units can even be color customized to fit your site's aesthetic requirements.

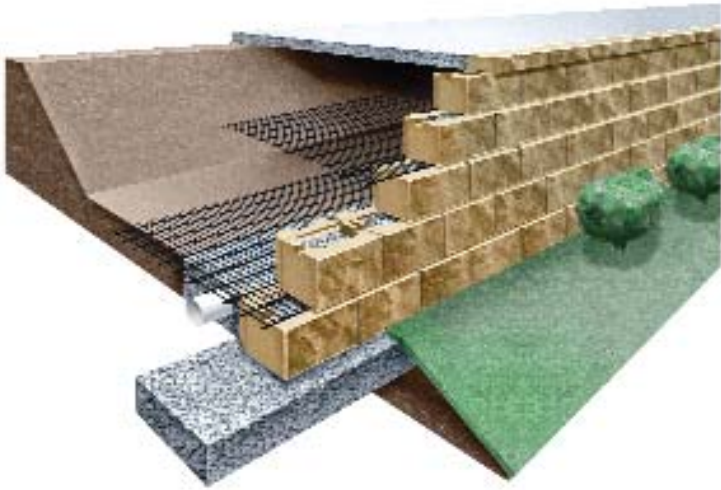
The system succeeds through the use of high-strength concrete units that feature a unique lug design. These units combine with aggregate fill and interlock with patented Tensar® LH800 Geogrid reinforcement. LH800 Geogrid is rolled out parallel to the wall face, and the Plateau Unit's lug creates a built-in setback and eliminates the need for pins, clips or mortar. All of this combined, can help save a significant amount of time and money in installation costs and labor.

So if you're looking for a solution that provides increased structural stability, easier installation and more design options on your next low-height retaining wall project, look no further than the Mesa Plateau Retaining Wall System.



Improved Components – Same Structural Stability

The Mesa Plateau System may install differently from other Mesa Retaining Walls, but that's where the difference ends. Like every Mesa System, Plateau Walls feature single-source, integrated components including high performance concrete units and durable, non-corrosive Tensar Geogrids: all from a single source of supply and demand. An integrated system, every component of a Plateau Wall has been specifically designed and detailed to work together for optimum efficiency and performance.



Plateau System Features and Benefits

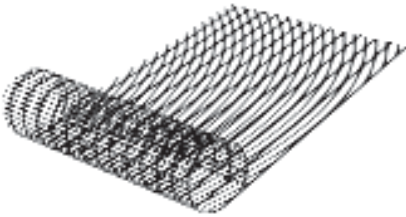
- Single-source solution ensuring consistent product quality and performance
- Flexible system perfect for creating 90-degree corners, stairs and curves
- Units available in a vast selection of colors and textures (based on local availability)
- Tensar LH800 Geogrid reinforcement designed specifically for low-height walls

Plateau Installation Procedures

The following steps provide a general guideline for installing the Mesa Plateau Retaining Wall System with LH800 Geogrid. These steps will help you through standard construction from start to finish. If you are installing a Plateau Wall on a specific project and require more detailed information, please contact your local Mesa Systems representative or refer to the job's installation instructions and drawings within the contract bid documents.

Step 1: **Preconstruction Preparation**

Prior to construction, it is important to make yourself familiar with the components of the Mesa Plateau System as well as the tools needed to construct a standard Plateau Wall.



System Components:

- Mesa Plateau Units
- Tensar LH800 Geogrid
- Mesa Corner and Cap Units (when required)

Suggested Installation Tools:

- Dead blow hammer
- 2-ft. – 4-ft. level
- Utility knife for cutting geogrid
- Masonry string and chalk line
- Shovels
- Compaction equipment
- Rubber mallet

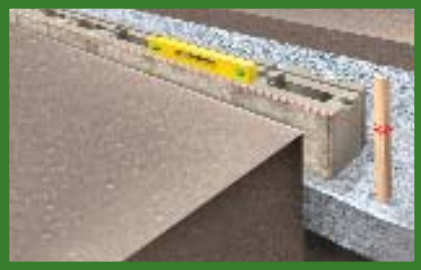
Step 2: **Prepare Wall Foundation**

The overall wall appearance will rely on a well prepared and level foundation. Start the leveling pad at the lowest wall elevation. Level the prepared base with 6" of well-compacted granular fill (gravel, road base or $\frac{3}{4}$ " minus [13 to 20 mm] crushed stone).

The leveling pad is typically 12" wider than the Mesa Plateau Unit, 6" in front and behind the block. To change elevation, steps in the leveling pad are required. The pad can be overbuilt and then carefully trimmed down to meet the proper elevation.



Step 3: Install the Base Course



Once the leveling pad is in place, begin by making a wall line using string where the units will rest. Place the first course of blocks tightly together with the sides touching and the textured face outward. Extra care should be taken to make sure the first course is align and level. This will help ensure a better looking and longer lasting retaining wall.

Step 4: Unit and Geogrid Placement



Prior to placing additional courses, drainage stone (clean gravel, AASHTO 57 Type) must be installed 12" (min.) behind the block as well as in the core of each block. Pea gravel should not be used for drainage fill material. This initial lift should also incorporate a drainage system, such

as perforated pipe with intermittent wall outlets. Once the stone is in place, the top of the block should be brushed off to clean any obstructions prior to placing the next course. Failure to do so can result in problems with seating and leveling of the subsequent courses. Place the second course on top of the base course and fill the cores.



If the design dictates the need for geogrid at a particular elevation, install grid with the front aperture resting in front of the stone-filled core of the block. Once the grid is in place, install the next course so that the cores fit over the two side-by-side lugs and align the wall. Check for level. If the unit is out of level, use geogrid ribs to shim the block to level.

Note: It is important that the roll of LH800 Geogrid be installed parallel with the face (see roll direction below).



Step 5:

Place and Compact Backfill

Behind the drainage fill, use backfill material that meets project specifications. When placing backfill over geogrid, place fill so that it minimizes any slack in the grid. To help with this, place fill in a direction away from, or parallel to, the wall face.

Loose lifts of backfill should not exceed 6" where hand compaction equipment is used or 10" where heavy compaction equipment is used. Thicknesses may vary depending on the approved project-specific soil types. Compact fill to 95% Standard Proctor per ASTM D-698 or as required by the contract documents.

Note: Only hand-operated compaction equipment should be used within 3 ft. of the tail of the Mesa Units. Heavy equipment in this area can dislocate the LH800 Geogrid and Mesa Plateau Units.

Step 6:

Install Additional Courses

Place the next course, fitting the lugs inside the block's open core on the previous course. Push the unit forward to make contact with the lugs. Check vertical joint alignment frequently as the units may slide from side-to-side. Build up and continue to maintain level on each course by checking front-to-back and side-to-side. If needed, shim when required. Continue to repeat steps 4 through 6 until final elevation is reached.

Step 7:

Place Cap Units (when required)

When Cap Units are used to finish the top of a wall, the final course of Plateau Units should be placed with the lugs facing down. The lugs will sit into the core of the block below and provide a level top course for the Cap Units to be placed on.

Once you clean the top course, use an approved, exterior concrete adhesive to secure the Cap Units to the units below. Cap Units may be placed so that a nominal 1" overhang is achieved or they are flush with the face of the wall.

Shimming

It is important that the courses of the Mesa Plateau Units are level front-to-back and side-to-side. To achieve this, in the front-to-back plane, it may be necessary to grind the blocks or use shims between some of the courses to correct.

For additional installation information, please contact your local Mesa representative at 800-TENSAR-1 or e-mail a Tensar technical representative at info@tensarcorp.com.

Mesa Plateau Components



Plateau Units:
8" h x 18" w x 11" d nom./75 lbs.



Tensar LH800 Geogrid Rolls:
4 ft. x 30 ft./11 lbs.
6 ft. x 50 ft./27.5 lbs.



Cap Units (where required)
4" h x 18" w x 11" d nom./40 lbs.



For more information on the Mesa Plateau System please call 800-TENSAR-1, e-mail info@tensarcorp.com or visit www.tensar-international.com.



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