



MESA[®] ADOBE[™]
RETAINING WALL UNITS

For exclusive use with LH800 Geogrid

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 Adobe[™] System from Tensar International Corporation – the latest segmental retaining wall (SRW) solution to feature the new Tensar[®] LH800 Geogrid reinforcement.



Tensar[®]
INTERNATIONAL

Enhance the Value of Your Property ❖❖❖

The Mesa® Adobe™ Retaining Wall System will enhance the overall value of your property and cost less to maintain than other types of walls. Mesa Adobe Units offer a natural, textured stone appearance and are constructed with high-compression concrete that resists cracking and insect infestation. Other benefits of the Adobe Units include a tight fit and a maintenance-free, environmentally-friendly system that doesn't require painting or chemical treatment.

Create More Than Just A Wall

Enhance the beauty of your property with simple, do-it-yourself projects. Mesa Adobe Units are lightweight and have unique, recessed "hand-holds" that make them easy to carry. Walls can be built up to 3 ft high without geogrid (up to 10 ft with geogrid reinforcement) and do not require mortar for construction. Unlike treated lumber and railroad ties, the Adobe Units will not rot, split or warp, providing you with an attractive wall for years to come.

Do it yourself or have a Mesa Retaining Wall representative refer you to an installer in your area. The investment will be well worth it and you will enjoy the beauty and functionality long after your project is complete. Here are a few ideas on how Adobe Units can help improve your property:

- Garden walls and borders
- Patio and lawn edging
- Sidewalks and driveway edging
- Raised patios



Improved Components – Same Structural Stability

The Mesa Adobe System may install differently from other Mesa Retaining Walls, but that's where the difference ends. Like every Mesa System, Adobe 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 an Adobe Wall has been specifically designed and detailed to work together for optimum efficiency and performance.



Adobe System Features and Benefits

- The Adobe Unit features patented “hand holds” for pinch-free installation
- 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

Adobe Installation Procedures

The following steps provide a general guideline for installing the Mesa Adobe Retaining Wall System with LH800 Geogrid. These steps will help you through standard construction from start to finish. If you are installing an Adobe 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 Adobe System as well as the tools needed to construct a standard Adobe Wall.



System Components:

- Mesa Adobe Units
- Tensar LH800 Geogrid

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

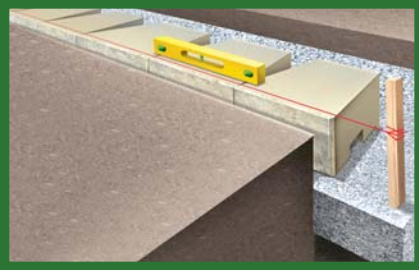
Step 2: **Prepare Wall Foundation**

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 3" – 4" 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 Adobe 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



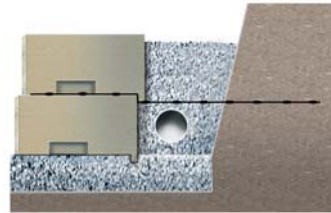
Once the leveling pad is in place, begin by making a wall line using string where the units will rest. Place the first course of blocks tightly together with the sides touching and the textured face outward. Extra care should be taken to make sure the first course is align and level. This will help ensure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

Step 4: Unit and Geogrid Placement



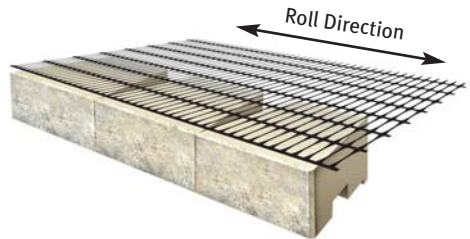
Prior to placing additional courses, drainage stone (clean gravel, AASHTO 57 Type) must be installed 12" (min.) behind the block. Pea gravel should not be used for drainage fill material. This initial lift should also incorporate a drainage system, such as perforated pipe with intermittent wall

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 first course of blocks.



If the design dictates the need for geogrid at a particular elevation, install grid with the front aperture 2" behind the front face of the wall. Once the grid is in place, install the next course so that the rear lip engages the block below and align the wall. Check for level. If the unit is not 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 units. Heavy equipment in this area can dislocate the LH800 Geogrid and Mesa Adobe Units.

Step 6: Install Additional Courses

Place the next course, pushing the unit forward to make contact with the rear lip. 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.

Shimming

It is important that the courses of the Mesa Adobe 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 Systems representative at 800-TENSAR-1 or e-mail a Tensar technical representative at info@tensarcorp.com.

**Guide for Estimating Number of
Mesa Adobe Units Required**

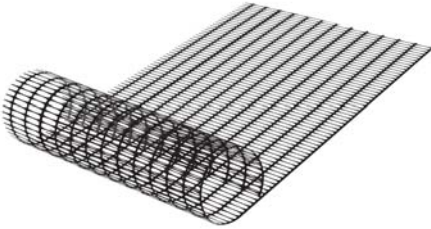
Wall Height (in.)	No. of Courses	Wall Length Measured at Wall Face (ft)					
		5	10	20	30	40	50
12	2	8	16	32	46	62	76
24	4	16	32	64	92	124	152
36*	6	24	48	96	138	186	228
48*	8	32	64	128	184	248	304
60*	10	40	80	160	230	310	380
72*	12	48	96	192	276	372	456

* Walls constructed to 3 ft or higher may require geogrid reinforcement. Contact a professional engineer to perform final design to meet all local codes and regulations. Visit www.tensar-international.com for details on geogrid reinforcement.

Mesa Adobe Components



Adobe Units:
6" h x 16" w x 12" d (nominal)/60 lbs.



Tensor LH800 Geogrid Rolls:
4' h x 30' w/11 lbs.
6' h x 50' w/27.5 lbs.



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



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