



Where Excellence is the Standard

KEYSTONE[®]
Country Manor

EXPERIENCE "OLD WORLD CHARM" WITH KEYSTONE COUNTRY MANOR[®]!

Keystone Country Manor is the most beautiful retaining wall system available and the **ONLY** antiqued system finished on three sides to allow free-standing, parapet walls to be built. The three-sided finish greatly reduces cutting for 90° corners and step applications. Tall structural walls can be built utilizing the fiberglass pin design in conjunction with reinforcement. Perfect for large residential walls.



Large Unit

6" h x 16" / 14" w x 10" d
65 lbs



Medium Unit

6" h x 12" / 10" w x 10" d
46 lbs



Small Unit

6" h x 6" / 4" w x 10" d
22 lbs

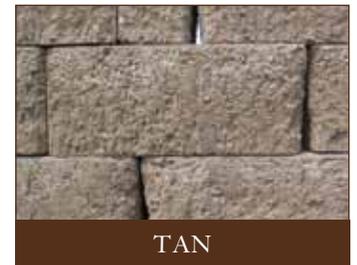
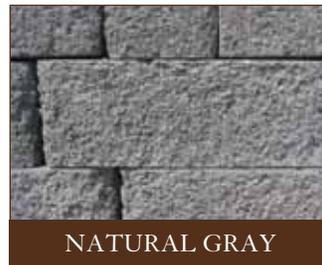


Universal Cap Unit
(two sides textured)

3" h x 13.5" / 7.5" w x 12" d
30 lbs



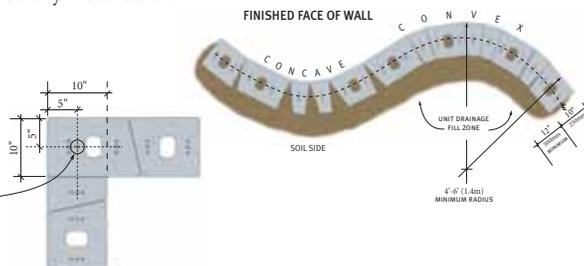
Shouldered Pin
1-2 pins required per unit



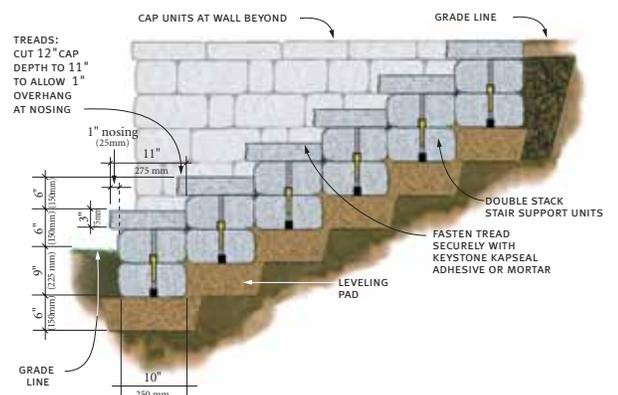
CORNERS AND CURVES

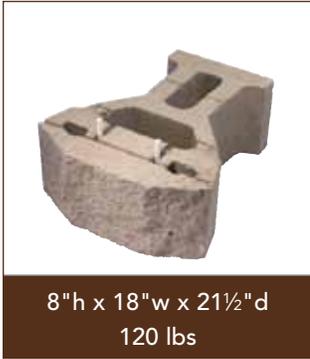
With Keystone Country Manor, corners and curves are a natural part of your creative design. All Country Manor units are capable of being used in 90° corners due to having one end square and three sides textured. The Country Manor design also makes it easy to construct a variety of serpentine curves. Convex and concave curves will add gentle grace, beauty and strength to any installation.

The large unit has an extra pin position for connection to the next course above in a 90° corner which runs in a perpendicular orientation.



STEP DESIGNS





Keystone Standard Unit

The Standard Unit remains the industry leader. Its height-to-depth ratio delivers a structurally sound, engineered wall system with superior construction stability, durability and strength. The standard is the choice for tall walls and critical structures. With reinforcement, Keystone Standard walls can be built in excess of 50 feet tall.*

**WITH PROPER ENGINEERING*



Keystone Compac II Unit

The improved geometry of the Compac II allows for easier installation and increased connection strength with geogrid reinforcement. This unit allows for various positive connections with reinforcement to build walls in excess of 50 feet tall.* Its lighter weight and shorter tail design make it easy to handle.

**WITH PROPER ENGINEERING*



Keystone Mini Unit

The Keystone Mini is easy to handle and easy to install. It makes for an attractive wall on its own or as an accent when integrated with the Standard or Compac units. The proportion and scale of the Mini units blend well with brick and ledge stone typically found in residential construction. The unit is also used for a high cap module to complete most wall installations.



Keystone Capping Options

A Keystone Retaining Wall is not complete without the "capping touch!" Caps are available in 4" and 8" high units with choices of face styles and the option of angled or straight sides.

Keystone Fiberglass Pins



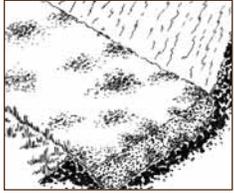
High strength, pultruded fiberglass pins that provide a true shear connector, geogrid proof positive holder.

*Please Note: All units are available in Natural Gray or Tan

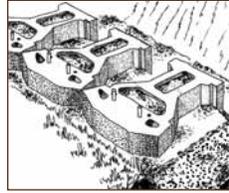


COMPAC/STANDARD INSTALLATION

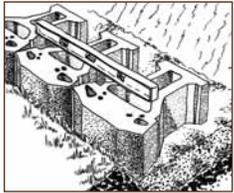
The Keystone Retaining Wall System was developed with simplicity of construction in mind. These step-by-step instructions will guide you through the basic process from start to finish. If more detailed information is required to meet your specific site situation, consult your local Keystone representative.



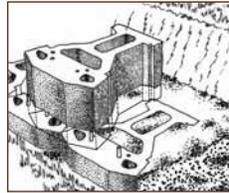
Step 1. Prepare the Base Leveling Pad. Start the leveling pad at the lowest elevation of the wall. Level the prepared base with 6" of well-compacted granular fill (gravel, road base, or 1/2" to 3/4" [13 - 20 mm] crushed stone). The base trench should be wide enough to allow for the Keystone unit and drainage zone.



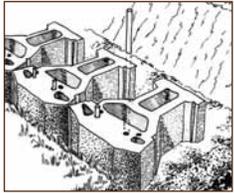
Step 4. Install and Compact Backfill. Fill in all voids — in and between Keystone units — using 1/2" to 3/4" (13 - 20 mm) crushed stone or clean, well-draining granular fill. Place drain zone behind the units as required to achieve total 2 ft. (0.6 m) depth of drainage zone from unit face. Peagravel should not be used. Sweep off any pebbles or debris so the next Keystone units rest evenly upon the layer below.



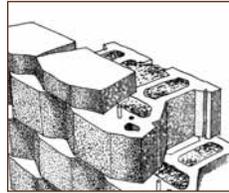
Step 2. Install the Base Course. Place the first course of Keystone units side by side (with sides touching) on the prepared base, with the paired pin holes facing up. Make sure each unit is level — side to side and front to back. The first course is critical for accurate and acceptable results.



Step 5. Install Additional Course. Place the next course of Keystone units over the fiberglass pins, fitting the pins into the kidney-shaped recesses. Center the unit over the two underlying units as shown. Visually sight down in the kidney-shaped recess for pin positioning. Pull the Keystone unit toward the face of the wall until it makes full contact with both pins. For each remaining course, repeat Steps 3-6.



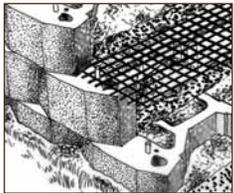
Step 3. Insert the Interlocking Fiberglass Pins. Place the reinforced fiberglass pins into the paired holes (2) of each Keystone unit. (Pins of adjoining units should be 12" [305 mm] on center.) Once placed, the pins create an automatic setback for the additional courses.



Step 6. Install Keystone Caps. Complete your wall with Keystone Caps. In areas of high public usage, apply Keystone KapSeal™ (a construction adhesive for masonry units) on the top surface of the last course before applying cap units. Place the Keystone Cap unit over the pins on the underlying unit. Pull the Cap unit forward to the automatic setback position.

GEOGRID INSTALLATION

For taller or more critical walls that require use of geogrid, continue with the following installation process after Step 4.



Step 7A. Excavate Reinforced Soil Area. Remove existing soils in the reinforced soil area to the maximum embedment length of the geogrid design. Provide a generally level soil condition behind the wall units for the placement of each geogrid layer.

Step 7B. Cut Geogrid.

Cut sections from geogrid roll to the specified length (embedment depth). Geogrid roll direction is from the wall toward the embankment. Check manufacturer's criteria for biaxial or uniaxial geogrids. In most cases correct orientation is to roll the geogrid perpendicular to the wall face.

Step 7C. Install Geogrid.

Hook geogrid over the Keystone fiberglass pins to ensure a positive mechanical connection between the unit and geogrid.

Step 7D. Secure Geogrid.

Pull the pinned geogrid taut to eliminate loose folds. Stake or secure back edge of geogrid before and during backfill and compaction. Remove stakes, if desired, once backfill is placed. Place additional sections of geogrid, abutting each other, for continuous coverage at each layer.

Step 7E. Install Next Course of Keystone Units.

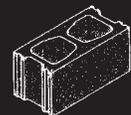
Step 7F. Place Compacted Backfill Over Geogrid in 8" Lifts.

Provide a minimum of 6" (150mm) reinforced fill coverage prior to driving equipment over the geogrid with tired equipment. Avoid driving or turning vehicles directly on geogrid to avoid excessive damage.

Distributed by:



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