



## STRUCTURAL WALL | KEYSTONE COUNTRY MANOR®



Keystone Country Manor offers the appearance of rustic, hand-laid stone walls with the strength and ease of installation provided by Keystone's proven pin connection system. With three finished sides on each unit, Country Manor offers almost endless design possibilities.



### 3-Piece Wall System



Large



Medium



Small



Cap Unit

#### Unit Dimensions & Weights:

**Large:** 6" h x 16" / 14" w x 10" d; 60 - 65 lbs  
(152mm x 406/355mm x 254mm; 27 - 29 kg)

**Medium:** 6" h x 12" / 10" w x 10" d; 47 - 51 lbs  
(152mm x 305/254mm x 254mm; 21 - 23 kg)

**Small:** 6" h x 6" / 4" w x 10" d; 21 - 24 lbs  
(152mm x 152/101mm x 254mm; 10 - 11 kg)

**Cap Unit:** 3" h x 12" / 10" w x 11" d; 27 - 30 lbs  
(76mm x 305/254mm x 279mm; 12 - 14 kg)

**Units/sq.ft.:** 2.9 (average)

#### Pin Specifications:

½" x 3¾" Shouldered Pins (13 x 95mm)



## FEATURES & BENEFITS

#### Perfect for:

- Gravity retaining walls up to 3'h (0.9m)\*.
- Parapet walls, pilasters, columns and stairs.
- Outdoor living designs: fireplaces, fire pits, kitchens, benches and more...

\* Higher heights can be reached with proper engineering and the use of geosynthetic reinforcement.

#### Unique Finish:

- Offers the Old World appeal of rustic, hand-laid stone.
- All units feature two different face dimensions simplifying the creation of random patterns.
- Install as an exposed end unit or a 90° corner, each unit has the flexibility to be used in multiple positions within a project.

#### Color & Shape

- Produced in colors that enhance its natural stone appearance.
- Each unit has both a 90° angle and a tapered (angled) side, allowing the units to be used in 90° corners, tight fitting straight line walls, and radii at curves.

**Note:** Unit color, dimensions, weight & availability varies by manufacturer.



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INSTALLATION INSTRUCTIONS



1. Prepare Base Leveling Pad

Remove all surface vegetation and debris. Do not use this material as backfill. After selecting the location and length of the wall, excavate the base trench to the designed width and depth (min. 20" w x 12" d) [500mm x 300mm]. Start the leveling pad at the lowest elevation along wall alignment. Step up in 6" (150mm) increments with the base as required at elevation changes in the foundation. Level the prepared base with 6" (150mm) of well-compacted granular fill (gravel, road base, or 1/2" to 3/4" [10 - 20 mm] crushed stone). Compact to 95% Standard Proctor or greater. Do not use PEA GRAVEL or SAND for leveling pad.



4. Install Fill & Compaction

Once the pins have been installed, provide 1/2" - 3/4" (10 - 20mm) crushed stone drainage fill behind the units to a minimum depth of 12" (300mm). Fill open spaces between units and open cavities/cores with the same drainage material. Proceed to place backfill in maximum 6" (150mm) layers (lifts) and compact to 95% Standard Proctor with the appropriate compaction equipment. Do not use heavy ride-on compaction equipment within 3' (1m) from back of wall. Do not use jumping or ramming type compaction.



2. Install the Base Course

Place the first course of units end to end (with front corners touching) on the prepared base. The long groove (receiving channel) on the unit should be placed down and the three pin holes should face up, as shown. Make sure each unit is level - side to side and front to back. Leveling the first course is critical for accurate and acceptable results. For alignment of straight walls, use a string line aligned on the unit pin holes for accuracy. Minimum embedment of base course is 6" below grade.



5. Install Additional Courses

Place the next course of units over the fiberglass pins, fitting the pins into the long receiving channel recess of the units above (Note: Some removal of debris in the pin holes and channel may be necessary prior to placement). Push the units toward the face of the wall until they make full contact with the pins. If pins do not connect with channel but align in open core of upper unit, place drainage fill in core to provide unit interlock with pin. For near vertical alignment, center the unit above over the center placed pins below.



3. Insert Fiberglass Pins

Place the shouldered fiberglass pins into the holes of the Units (note: place one pin only per each grouping of three holes). Place pins in the middle hole for near vertical alignment or the holes nearest the embankment for a 9.5° +/- setback per course. According to wall requirements and design, the front pin hole (towards the face of the wall) can be used randomly to allow a forward projection of a specific unit for accent and variation in the wall appearance.



6. Capping the Wall

Continue all steps until ready to place the wall cap. Clean off the last course in preparation for the cap or coping to finalize the wall. With units dry and clean, use construction adhesive to secure the caps to the units. Install the Country Manor 3" (75mm) capping unit, architectural precast concrete or cut stone as a coping element. Cap may be flush or overhanging as required by aesthetics and design.



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