

## STRUCTURAL WALL | KEYSTONE STANDARD® III TRI-PLANE

# **STANDARD**<sup>®</sup>**III**

The structural unit that set the original bar has raised it. The Keystone Standard III unit's improved design, combines with sound engineering, to create a commercial retaining wall solution that provides unrivaled structural stability and efficiencies. From backyard landscaping to large, load-bearing reinforced structures, the Keystone Standard unit's face styles, colors and design possibilities make it a favorite of architects, engineers and contractors worldwide.





Tri-plane

**Unit Dimensions:** 8"h x 18"w x 18 - 21"d (203mm x 457mm x 457 - 533mm)

**Unit Weights:** 82 - 93 lbs (37 - 42 kg)

Units/sq.ft.: 1 Pin Specifications: ½" x 5¼" Fiberglass Alignment Pins (13mm x 133mm)

# **FEATURES & BENEFITS**

## Maximum Versatility and Performance

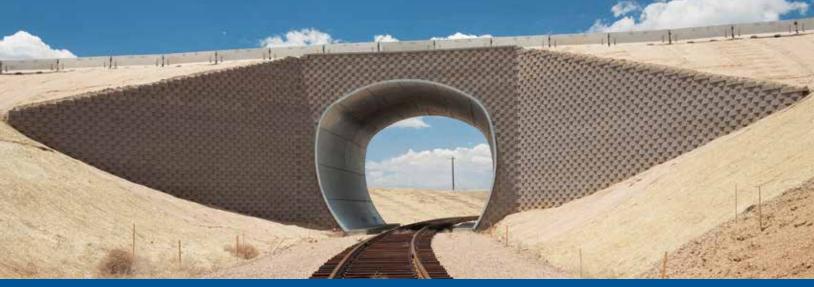
- Height-to-depth ratio delivers superior construction stability, durability, and strength.
- Higher unit-to-unit shear resistance.
- Open cores allow for gravel interlock across block interfaces.
- Near vertical or battered installation options.

## Ease of Installation

- Trapezoidal shaped sides offer ease in constructing radii.
- Tail design shape makes for easier handling in the field.
- Triangular shaped pin connection hole allows for installer-friendly construction adjustments.
- The Standard III design results in decreased unit weight.

## Aesthetics

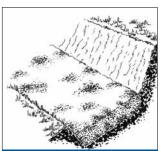
- Variety of colors complement any landscape.
- Natural stone texture appearance.
- Capping and corner units available.



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## INSTALLATION INSTRUCTIONS



STEP 1



STEP 2



Prepare the Base Leveling Pad.

Excavate the base trench to the designed width and depth. Start the leveling pad at the lowest elevation along the wall alignment. Step up in 8" (200mm) increments with the base as required at elevation change in the foundation. Level the prepared base with maximum 6" (150mm) lifts of well-compacted granular fill (gravel, road base, or ½" to ¾" [10 - 20mm] crushed stone). Compact to 95% Standard Proctor or greater. Do not use PEA GRAVEL or SAND for leveling pad.

### Install the Base Course.

Place the first course of Keystone units end to end (with face of wall corners touching) on the prepared base. The receiving pin holes should face upward, as shown. Make sure each unit is level. Leveling the first course is critical for accurate and acceptable results. Keystone recommends minimum embedment depth for below grade placement of Keystone units on a ratio of 1" (25mm) below grade for each 8" (200mm) of wall height above grade or one unit, whichever is greater.

### Insert the Fiberglass Pins.

Place the straight fiberglass pins into the holes of each Keystone unit as required. Once placed, the pins create an automatic setback for the additional courses. Place fiberglass connecting pins in the front holes for near vertical (½" or [3mm]) setback and in the rear pin holes for 1½" (29mm) setback per course.



STEP 4





### Install Fill & Compaction.

Provide 1/2" - 3/4" (10 - 20mm) clean crushed stone drainage fill behind the units to a minimum distance behind the tail of 6" (150mm). Fill all open spaces between units and open cavities/cores with the same drainage material. Proceed to place backfill in maximum 6 - 8" (150 - 200mm) layers and compact to 95% Standard Proctor with the appropriate compaction equipment.

#### Install Additional Courses.

Place the next course of Keystone units over the fiberglass pins, fitting the pins into the triangular shaped receiving hole in the units above. Push the units toward the face of the wall until they make full contact with the pins. Continue backfilling and building to desired top elevation.

#### Capping the Wall.

Complete your wall with the appropriate Keystone capping units. With units dry and clean, use exterior construction grade adhesive on the top surface of the last course before applying cap units. Backfill and compact to finish grade.

Note: If drain tile is required for your project, consult an engineer or visit www.keystonewalls.com/resources for more information.



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