

We reserve the right to improve our products and make changes in the specifications and design without notice. The information contained herein has been compiled by KEY-STONE and to the the best of our knowledge, accurately represents the KEYSTONE product use in the applications which are illustrated. Final determination of the suitability for the use contemplated and its manner of use are the sole responsibility of the user.



© 2004 KEYSTONE RETAINING WALL SYSTEMS, INC.
A Contech Company
4444 West 78th Street • Minneapolis, MN 55435 U.S.A.
(952) 897-1040 • (952) 897-3858 fax
www.keystonewalls.com • M0402

Imagine the Possibilities



Where Excellence is the Standard

For almost two decades, Keystone Retaining Wall Systems has set the bar for excellence, innovation, and technology within the industry. Keystone represents the worldwide standard in soil retention, erosion control, and landscape systems. As the industry leader, Keystone has always been a product of the energy, passion, and focus of the people that promote it. Keystone works with the best network of manufacturers, product developers, engineers, and sales professionals in the business. They ensure that Keystone products and services offer the best site solutions for residential, commercial, recreational, industrial, and governmental applications.

Uniquely Keystone

Offering a broad family of products, Keystone has the right solution to meet the most challenging structural and landscape sites.

- ► The original Keystone Standard unit provides the most stable construction platform in the industry for taller gravity walls.
- ► Keystone Compac units offer the best mix of cost effectiveness, aesthetics and performance.
- Keystone Country Manor was developed for projects where aesthetic considerations are paramount.
- ► Keystone Century Wall provides the aesthetic multi-size units while providing the same structural integrity as Compac Units.





Every great invention is the result of finding a solution to a problem or need!

Keystone's Family of Products

KEYSTONE STANDARD UNIT - SERIES | & ||

The Keystone Standard is an American original and remains the industry leader. Its height-to-depth ratio delivers a structurally sound, engineered wall system with superior construction stability, durability, and strength. This product is the preferred choice for tall walls and critical structures.



*Size:

- Series I 8"h x 18"w x 21 ¹/₂"d (200 x 450 x 550 mm)
- Series II 8"h x 18"w x 18"d (200 x 450 x 450 mm)

Exposed Face Area:

- 1 sq. ft. 8" x 18"
- *Weight:
 - 105 lbs. (50 kg)
- *Note: Unit colors, dimensions, weight, and availability may vary by manufacturer.



KEYSTONE COMPAC UNIT - SERIES | & ||

The Keystone Compac is the perfect choice when the deep embedment length of the Keystone Standard unit is not required. An installer's favorite, its lighter weight and shorter tail design make it easy to handle.



- *Size:
 - 8"h x 18"w x 12"d (200 x 450 x 300 mm)

Exposed Face Area:

- 1 sq. ft. 8" x 18"
- *Weight:
- 85 lbs. (39 kg)



Keystone's Family of Products

KEYSTONE CENTURY WALLTM

Designed specifically for taller wall structures, Keystone Century Wall blends the distinctive look and character of natural stone with the structural integrity that lets you build with confidence.



*Large unit 8"h x 12"d x 18"w (200 x 300 x 450mm) 93 lbs. (42 kg)



*Medium unit 8"h x 12"d x 11"w (200 x 300 x 280mm) 58 lbs. (26 kg)



*Small unit 8"h x 12"d x 7"w (200 x 300 x 180mm) 37 lbs. (17 kg)



*90° Corner unit Available in left and right (left shown) 8"h x 12"d x 16"w (200 x 300 x 400mm) 78 lbs. (35 kg)

*Note: Unit colors, dimensions, weight, and availability may vary by manufacturer.



KEYSTONE COUNTRY MANOR®

Random and rugged, yet blended with color and character, these high strength concrete modules appear as natural stone, but have the latest built-in technology of the Keystone pin assured connection.



*6"h x 10"d x 16"/14"w (150 x 250 x 400/350mm) 60 lbs. (27 kg)



*6"h x 10"d x 12"/10"w (150 x 250 x 300/250mm) 40 lbs. (18 kg)



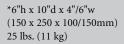
*6"h x 10"d x 12"/12"w (150 x 250 x 300/300mm) 45 lbs. (20 kg) (Two smooth ends for vertical stack capability)



*6"h x 10"d x 8"/10"w (150 x 250 x 200/250mm) 45 lbs. (20 kg)



*6"h x 10"d x 6"/8"w (150 x 250 x 150/200mm) 35 lbs. (16 kg)







Note: The number of units in the Keystone Country Manor system vary by manufacturer. Contact your local representative for further details.

Keystone's Family of Products

KEYSTONE KEYSYSTEM ITM

The KeySystem I is specifically designed for use in the highway and heavy construction industries using the patented Keystone modular concrete units and inextensible steel reinforcement to develop a durable, aesthetically appealing, and cost effective reinforced soil retaining wall structure.





*Size:

• 8"h x 18"w x 12"d (200 x 450 x 300 mm)

Exposed Face Area:

• 1 sq. ft. - 8" x 18"

*Weight:

• 85 lbs. (39 kg)

*Note: Unit colors, dimensions, weight, and availability may vary by manufacturer.



KEYSTONE FIBERGLASS PINS

The Keystone patented system features high strength, pultruded fiberglass pins that provide a true shear connector, geogrid proof positive holder, and an alignment device all in one piece.



KEYSTONE UNIVERSAL CAP

A Keystone wall is not complete without the "capping touch"!



KEYSTONE LANDSCAPE UNITS

Along with the structural pinned systems, Keystone also offers a wide variety of landscape products used by contractors and homeowners for smaller wall applications. All landscape units are connected by a lipped connection and are recommended for lower wall heights. The landscape units shown below are a few of the units available. Contact your local Keystone representative or check out the web site at www.keystonewalls.com for availability in your market.









Endless Applications



GOVERNMENTAL

Keystone walls routinely provide site solutions in government projects.



INDUSTRIAL

Keystone stands up to the extreme heavy-loading conditions and high-traffic areas of industrial sites. Keystone also offers excellent design benefits for construction in areas of high seismic activity.

RECREATIONAL

Keystone provides superior durability with the ultimate in aesthetics for any recreational application.





COMMERCIAL

Keystone is a key player in land management and commercial expansion, creating buildable land for new construction or redevelopment.



PUBLIC WORKS

In schools, city offices, courthouses, libraries, police and fire stations, public pools, playgrounds, city parks, and more, Keystone products offer what city planners look for in site solutions – versatility, durability, and cost-savings.

RESIDENTIAL

Keystone offers a wide variety of residential landscape products to add to the property value of any home.



The Many Faces of Keystone



SCULPTURED ROCK FACE

Creates a natural stone look with rich texture and warm shadows.

ANTIQUED FACE

Creates the appearance of classic, hand-crafted stone.



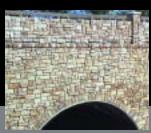
STRAIGHT FACE

Creates a refined design with simple clean lines for a classic look.



CREATIVE FACES

- Colors
- Patterns
- Veneering
- Texture Combinations



11

Limitless Buildability



CURVES

Keystone products make it easy to construct a variety of serpentine curves. Convex and concave curves will add gentle grace and beauty to any installation.



STEPS

Keystone products offer tremendous design flexibility and make an attractive option for residential step design. Steps and stairs can be customized to fit a variety of applications.



TERRACES

Keystone products can also be used to create terraces or tiered walls.



CREATIVE OPTIONS

As a distinctive detail to any retaining wall, Keystone Retaining Walls allow for creative options in color or texture geometries in the wall. Keystone's versatility can fulfill any designer's creativity!





FREE-STANDING



WATER



PLANTABLE



The Technical Side

The two most common retaining wall structures built today are simple gravity walls and larger composite reinforced soil wall structures. Keystone offers products and specific design methodology for both structure types conforming to local building codes and national standards.

GRAVITY WALLS

One of the most basic types of retaining walls, the gravity wall, relies on its mass and cross-sectional geometry to resist the earth pressure that is exerting force to move the structure in a lateral direction.



REINFORCED SOIL WALLS

For taller or more critical walls, Keystone units are combined with soil reinforcement options (such as extensible geogrids, geotextiles, inextensible tie-back anchors, or galvanized steel ladder reinforcing) to create larger composite structures.



GEOGRID REINFORCEMENT

Since the early 1980's, geogrids have proven successful in providing durable soil reinforcement for the retaining wall industry.

Today, proper design methodology incorporates the laboratory tested connection strength of concrete units and geogrid in all reinforced retaining wall systems.

SYSTEM DIFFERENTIATION

The product design features of the structural units differentiate Keystone from all of the competitors. Keystone structural products are specifically designed and engineered for optimum efficiency with all system components. The interaction of these system components is critical to wall performance and defines Keystone as a true "wall system".

SYSTEM COMPONENTS

The components that make up a segmental retaining wall include: concrete facing units, geogrid reinforcement, drainage material, and fiberglass pins.



SYSTEM PERFORMANCE

When you have a critical retaining wall application, demand the proven performance of a Keystone Retaining Wall System. Keystone's system components support soil compaction efforts, unit installation, and

the drainage fill that is necessary for the construction and performance of soil reinforced walls.



The interaction of these system components defines Keystone as a true "wall system".

Simply Beautiful







Keystone - At Your Service!

Since introducing its first concrete segmental retaining wall products to the marketplace, Keystone has been a leader in providing site solutions in erosion control and soil retention methods. Our focus is to provide customers with solutions to successfully complete their project with our products.

RESEARCH AND DEVELOPMENT:

Keystone is dedicated to the development of site improvement products. We strive to stay on the cutting edge of industry trends and technology in order to offer the highest quality and state-of-the-art products available on the market.

SALES:

Keystone's sales support extends worldwide. We offer product, installation, and design seminars to architects, contractors, engineers, and homeowners alike. Our sales associates are retaining wall specialists who are available to provide customers with the training and education needed to make working with Keystone products simple, efficient, and rewarding.

MARKETING:

Keystone's marketing department provides full collateral support for our complete product line. These marketing efforts ensure that our customers always have the Keystone product information they need to make their job easier. Keystone marketing materials and tools are created with our customers in mind – a web site, design and installation manuals, brochures, idea guides, and more.

ENGINEERING:

Keystone offers complete engineering and design services including: Preliminary design and estimating, Technical assistance during construction, Specialty details, Test data (shear tests, connection tests, and water tests), and KeyWall® design software support.

www.keystonewalls.com

 $|7\rangle$