



FINISHING

wall is not complete without the perfect finishing touch. The flexibility of the Keystone units create a variety of wall finishing options. The most common wall finish is to cap the wall with a Keystone cap. Cap options vary by region so check with your local Keystone producer for availability in your area. Keystone units can also be capped with a variety of decorative precast concrete products, or even CIP concrete copings. This section outlines the construction techniques and details for these various options.

Tools and materials that will be required:

- 12 inch and 48 inch levels
- Tape measure
- · Personal protective equipment
- Keystone caps
- Landscape finishing material
- Keystone KapSeal™ concrete adhesive

Cap Units: Standard & Compac

A Keystone retaining wall is not complete without the "capping touch." The two primary wall units, the Standard and Compac units, both have open voids, making them an aesthetically undesirable finish for the top of the wall. Keystone offers a selection of cap designs, available in various combinations of facial finish and degrees of angled sides*. The following information will clearly explain the uses of these units and show a variety of finishing techniques. You may also opt to finish your wall with a precast decorative concrete finishing option, see your local manufacturer for details.

CAPPING UNITS

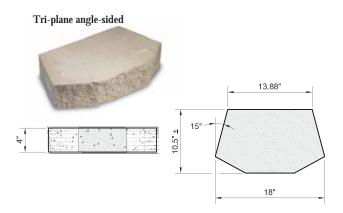
Universal Cap - finished on both front and back

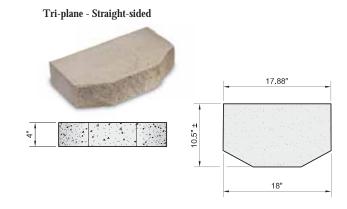
10.5"

12"
17.88"

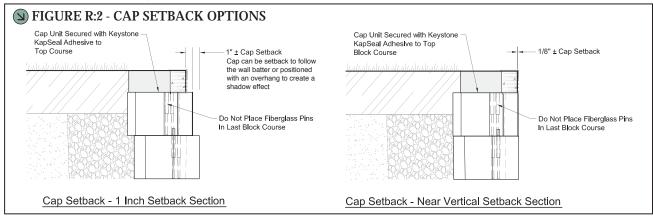
18"

Straight-face straight-sided





NOTE: UNIT WEIGHTS, DIMENSIONS AND AVAILABILITY VARY BY MANUFACTURER. PLEASE CONTACT YOUR LOCAL REPRESENTATIVE

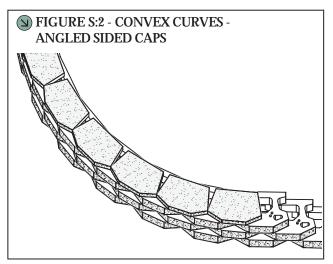


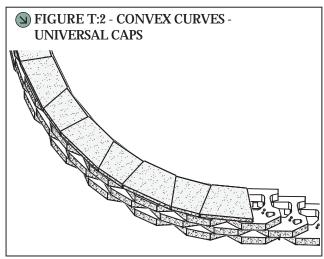
^{8&}quot; capping option not shown. Capping options and product designs vary by manufacturer. Contact your local manufacturer for availability. Capping is not required to guarantee structural stability, capping improves the aesthetics of the finished wall.

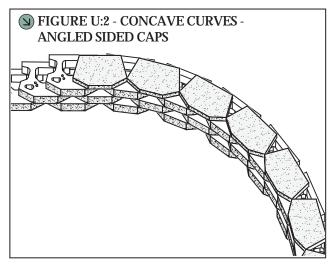
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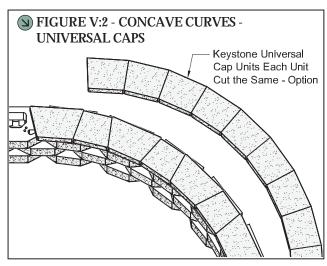
Like other Keystone units, all cap units can be used interchangeably. Depending on the wall contour, some cap units will work more effectively than others (i.e. angled side units for concave curves). In any given installation, if binding occurs between units, the units can be modified to fit using a concrete saw, chisel or other device. Make sure to wear proper PPE equipment when splitting or cutting.

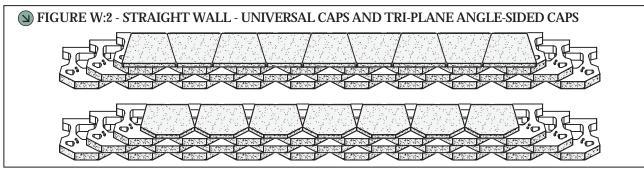
Installation of the cap units is a simple one step operation. Sweep the lower units clean and make sure the units are dry; use a construction adhesive (ex. Keystone KapSeal TM) on the top surface of the last course before applying cap units (see Figure I:1 on page 19 for installation instructions). The following illustrations demonstrate common uses of the Keystone cap units.











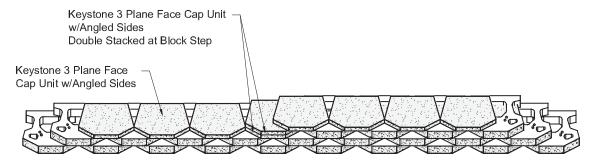
The information contained herein has been compiled by Keystone® Retaining Wall Systems, Inc. and to the best of our knowledge, accurately represents the Keystone product use in the applications which are illustrated. Final determination of the suitability for the use contemplated and its manner of use are the sole responsibility of the user. Structural design and analysis shall be performed by a qualified engineer.

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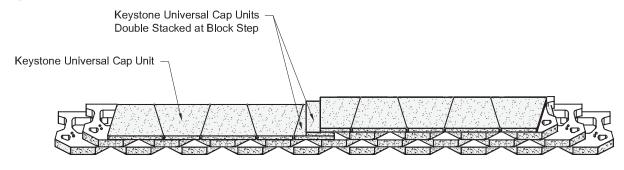
Capping: Standard & Compac

The size of each Keystone unit makes this system very adaptable to grade changes. The top of a Keystone wall can be constructed with level top of wall grade or up to 1:1 unit step downs from the top of the wall. These grade changes may occur along the length of a wall or at its points of origin. As cap units step up and down grades, an additional installation procedure is required to firmly fix some cap units in position. To prevent showing the unit voids at the stepping of a wall (Standard or Compac), 4 inch cap units can be double stacked or one 8 inch cap unit may be placed at each step down or step up location (see Figure C:1 on page 14). Each additional cap unit is offset 9 inches (23cm) to maintain the running bond wall pattern. The caps should be attached using a bonding material. Keystone KapSeal™ adhesive is designed for this use with a special formulation to withstand temperature and moisture extremes. If this material is unavailable, other flexible epoxy based adhesives designed to bond concrete or masonry may be used. Refer to manufacturer's instructions for complete details. Apply the adhesive to areas where the units make contact (see Figure I:1 on page 19 for installation instructions).

■ FIGURE X:2 - STRAIGHT WALL WITH DOUBLE-STACKED CAP STEP



SAME STACKED UNIVERSAL CAPS ■ FIGURE Y:2 - RANDOM STEPS WITH SPLIT DOUBLE-STACKED UNIVERSAL CAPS



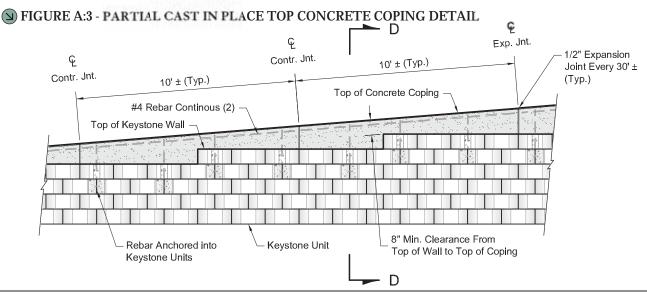


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If Keystone cap units are not a desired top of wall treatment, or if concrete coping is required in the project plans, the following details are for a typical CIP coping option. These two concrete coping options are installed with proper form work and add an alternate aesthetically pleasing look to the top of the wall that can follow profile grades with the steps.

S FIGURE Z:2 - PARTIAL CAST IN PLACE CONCRETE COPING Ę Exp. Jnt. 1/2" Expansion Contr. Jnt. Ę Joint Every 30' ± 10' ± (Typ.) (Typ.) Contr. Jnt. 10' ± (Typ.) Top of Concrete Coping #4 Rebar Continous (3) 1. Maintain 2" minimum Top of Keystone Wall cover on all rebar 2. Full expansion joints shall be placed every 3rd joint and at all wall radius and bend points. 3. Ensure that all top of wall steps are completely covered by overhang of 9" Min. / 21" Max. Clearance concrete coping (3" min.) Keystone Unit Rebar Anchored into From Top of Wall to Top of Coping (cross section C only) Keystone Units CROSS-SECTION C-C CROSS-SECTION D-D #4 Rebar Continous (2) 44 Rebar Continous (2) 1/2" Chamfer 8" Min. Low Permeable Soil x 1/2" Chamfer 9" Min./21" Max. #4 Rebar (Typ.) #4 Rebar @ 3 o.c. (Typ.) 4 Rebar Continous Grout or Concrete Rebar into 4 Rebar @ 3' o.c. (Typ.) Upper 2 · Courses Grout or Concrete Rebar into Keystone Unit Upper 2 - Courses Keystone Unit



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