A wall is not complete without the perfect finishing touch. The flexibility of the Keystone units creates 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 (305mm) and 48 inch (1.2m) levels
- Tape measure
- Personal protective equipment
- Keystone caps
- Landscape finishing material
- Exterior grade concrete adhesive
Cap Units: Introduction

A Keystone retaining wall is not complete until it is finished with the right cap. 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

Straight-face: Straight-sided

Tri-plane: Angle-sided

Tri-plane: Straight-sided

NOTE:

*8” (203mm) capping option not shown. Capping options, weights, dimensions 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.
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 on the top surface of the last course before applying cap units. See Figure A:10 (p. 19) for installation instructions. The following illustrations demonstrate common uses of the Keystone cap units.
Capping: Installation

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. As the wall 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 side of the wall units at the stepping of a wall, 4 inch (102mm) 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 A:3 (p. 14). The caps should be attached using a bonding material. Use a flexible epoxy-based adhesive designed to bond concrete or masonry. Refer to manufacturer’s instructions for complete details. Apply the adhesive to areas where the units make contact. See Figure A:10 (p. 19) for installation instructions.

FIGURE D:7 - STRAIGHT WALL WITH DOUBLE-STACKED CAP STEP

Keystone 3 Plane Face Cap Unit with Angled Sides
Double Stacked at Block Step

FIGURE D:8 - RANDOM STEPS WITH SPLIT DOUBLE-STACKED UNIVERSAL CAPS

Keystone Universal Cap Unit
Double Stacked at Block Step

STRAIGHT-SIDED CAPPING OPTION
KEYSTONE COMPAC®
At times a concrete coping is required for the top of wall finish. 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.

NOTE:
1. Maintain 2" (51mm) minimum 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 concrete coping (3"[76mm] min.) (cross section C only).

FIGURE D:9 - PARTIAL CAST IN PLACE CONCRETE COPING

NOTE:
1. Maintain 2" (51mm) minimum 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 concrete coping (3"[76mm] min.) (cross section C only).

FIGURE D:10 - PARTIAL CAST IN PLACE TOP CONCRETE COPING DETAIL