

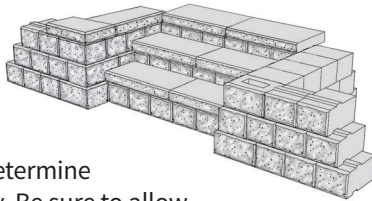
Pisa2® & Roman Pisa® Stairs Installation

STAIRS

Stairs serve a functional purpose and add a beautiful dimension to any landscape design. Building stairs with Pisa2 or Roman Pisa is relatively simple. Most stairs are 48" wide; otherwise lay them out in multiples of 8".

There are two methods for building stairs. They are known as the "cut" method and "fill" method.

With either method, first determine the location of the stairway. Be sure to allow enough space behind the wall, as each stair will step back 12".



It is better to construct the corners and side walls independent of the risers. Start by building corners, as shown in the Corner Section below, on each side of the stairs. To construct the side walls, we recommend using Full Caps to avoid the automatic step-back created by the tongue and groove molded into the Stretcher units. Lay all the courses of block in the side walls vertically with no setback. Be sure to bond the units together with construction-grade adhesive. Backfill with 3/4" stone as you go up, using filter fabric to keep the soil from infiltrating the drainage stone.

CORNERS

Outside Corners: Building outside corners is easy with Pisa2 and Roman Pisa. They are constructed using Full Caps and Right and Left Hand Corner units (Pisa2) and Reversible Corner Units with Roman Pisa. When ordering, be sure to specify the height in order to get the right amount of each type of unit. It is best to start the wall in the corner and build out. Follow these simple steps to construct 90° corners (Fig. 1).

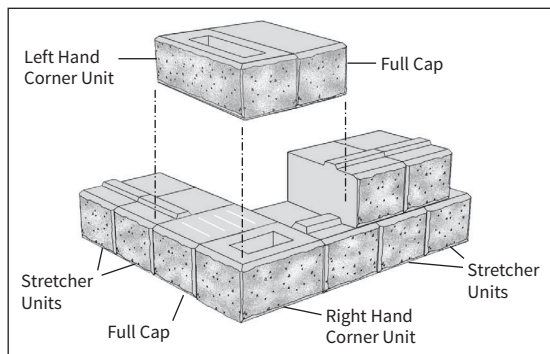


Figure 1

1) As you lay out the location of the wall, mark the position of the corner with a stake and use string lines to indicate the line of the intersecting walls. When digging the trench, allow for additional space at the corner location.

2) Once the gravel base has been placed and compacted to the desired elevation, mark the exact location of the corner. Use a builder's square to ensure an accurate 90° angle, or lay it out using the 3-4-5 triangle method.

3) Carefully position a Right Hand Corner unit (or Reversible Roman Pisa corner) first. Place a Full Cap unit beside it to the left. Using a level, align and plumb the units. Continue the wall on each side using Pisa2 or Roman Pisa Stretcher units.

4) For the second course, select a Left Hand Corner unit (or Reversible Roman Pisa Corner) and position it onto the Right Hand Corner and Full Cap. Next place a Full Cap beside it to the right and continue the second course using Stretcher units.

5) Continue this procedure for each course remembering to alternate the Right and Left Hand Corner units (or Reversible Roman Pisa Corner) every course to maintain the running bond pattern. When the wall reaches the height you desire, use the coping of your choice to finish the corner.

Note: Apply several 3/8" beads of construction-grade adhesive to the top of each corner unit immediately prior to placing the successive corner unit. If your wall has 90° corners on each end, it will be necessary to cut units within the wall to accommodate the wall batter and to maintain the pattern.

Inside Corners: Inside corners are easy to build. Use 2 Full Caps for every course at the intersecting corners, alternating the courses as shown in Fig. 2. Apply construction-grade adhesive to the corner cap units for added strength.

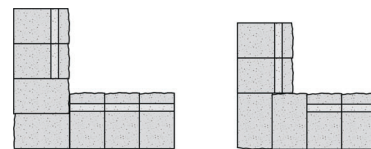


Figure 2

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Stair Construction Using the “Cut” Method

With the “cut” method, a separate gravel base is used under each stair. The risers will consist of a Stretcher, a Full Cap and a coping unit for the tread, although you can have the Full Caps as the tread. Depending on the style you choose, you must then determine the height of the rise. Generally, 6" to 8" is acceptable, although building codes may dictate specific heights.

You can start the stairs at the front of the wall or set them back from the corners. The depth of the excavation will depend on the height required for the risers and style coping unit used. The height of the first riser should measure from the top of the tread to the finished grade. Install and compact a 6" gravel base as the footing. See Fig. 3. Place a row of Pisa Stretchers onto the base and level them. Next, place the second course using Full Caps.

Construct the next riser assembly by placing and compacting another 6" thick gravel footing behind the first course of units. Place another row of Stretchers onto the base, directly behind the Full Caps. Complete the riser with

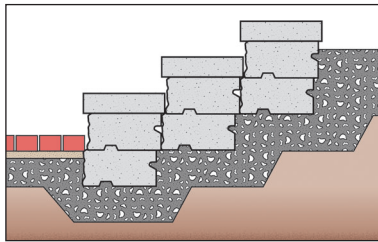


Figure 3

Full Caps as the second course. Install successive risers in the same manner for the number of stairs needed.

Stair Construction Using the “Fill” Method

Although more units are required using the “fill” method, it may prove faster and easier, especially if there are a small number of steps. Simply excavate the entire stairway area straight back then place and compact a 6" thick gravel base as a level foundation. Use multiple courses of wall units to build up the risers for the number of steps you want. Use Full Caps as the last course for each stair and finish the treads as noted below.

Stair Treads

We recommend using stone treads, such as limestone, blue-stone or granite to complement the wall with an attractive seamless look. Secure your coping unit to the wall with an acrylic-based mortar or with construction-grade SRW Adhesive that's been formulated for use with concrete. Simply apply several 3/8" beads to the top surface of the last course of wall units (Fig. 4). It's best to do only 3 or 4 units at a time to prevent the adhesive from skinning over. Follow the directions for use on the label. When setting the coping units, apply firm pressure to secure them in place. Position the treads to provide a 1" overhang. Allow the adhesive to cure at least 24 hours before opening the stairs to traffic.

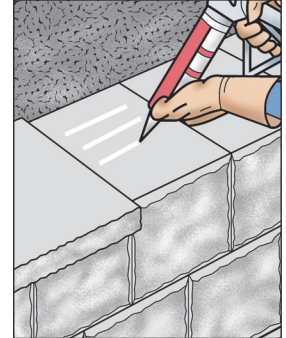


Figure 4

Important! If subjected to deicing chemicals, manufactured coping units must be treated with a non-film forming, penetrating-type sealer such as SRW PSX.

Always wear proper safety equipment when cutting or sawing concrete products.

A white deposit known as efflorescence may appear naturally on any concrete or masonry product. It does not affect the structural integrity and will dissipate over time. Efflorescence is not indicative of a flawed product. For more information, ask for our Efflorescence Advisory.