



newline[®]
HARDSCAPES
A DIVISION OF YORK BUILDING PRODUCTS

Installation Guide

Napa[®] & Sonoma[™] Walls





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Installation Guide

PREPARE THE LEVELING PAD

Excavate for the leveling pad. The trench should be a minimum of 20 inches wide and should be 6 inches deeper than the block. The height of the wall will determine the number of units to bury. As a rule of thumb, you will bury 1" of block for every 8" of exposed wall height. Create a leveling pad of compacted base material that extends a minimum of 6 inches in front of and 6 inches behind the wall units. This pad should also be at least 6 inches deep after compaction.

BASE COURSE

Once the pad is compact and level, begin placing the units. It is recommended to use only the large units for your base course, as they are easier to level than using several smaller units. Center the units on the pad. The ends of the units should be in contact. The base course must be buried below grade and should be included when calculating total wall height.

BUILDING THE WALL

Units can be placed in any order to form an aesthetically pleasing layout. The simplest is one that incorporates large, medium and small units. The units should be installed so the ends are in complete contact with each other. Remember to keep the wall on bond by placing units in a staggered relationship to the course beneath. Repeat this process to complete the wall. Note, during this process to install the proper reinforcement grid in applications where needed.

For best results, use a filter fabric, which should be placed directly behind the wall extending from the bottom of the base course to the middle of the top course. This will minimize material coming through the rough-hewn face texture of these products. We recommend a non-woven, 4- to 6-ounce fabric.

Glue the top two courses and caps in place with a concrete adhesive.

OUTSIDE CURVES: CALCULATING A RADIUS

When building an outside curve, begin by calculating the radius of the top course. This will be the smallest radius in the wall and must not be less than the minimum radius for the block system used.

To calculate the approximate radius of the top course: Add 1/4 inch to the setback of the block used. Multiply that amount by the number of courses in the finished wall. Then subtract the result from the radius of the base course. This number equals the calculated radius of the top course.

Radius Base Course. Drive a stake into the ground at the desired center of the curve. Attach a string and rotate it in a circle around the stake to mark the radius in the soil. Align the back of the block with the curve and ensure level placement from side to side and front to back.

Radius Additional Courses. On each course, the lip of each block must be in contact with the back of the units below to ensure structural stability. The setback of the block will cause the radius of each course to gradually decrease and eventually affect the running bond of the wall. To maintain proper running bond, use partial units as needed. Once a block is cut to size, glue it in place with a concrete adhesive.

INSIDE CURVES: CALCULATING A RADIUS

Check the wall plan to determine the radius of the base course. This will be the smallest radius in the wall and must not be less than the minimum for the block system used.

Radius Base Course. Drive a stake into the ground at the desired center of the curve. Attach a string and rotate it in a circle around the stake to mark the radius in the soil. Align the back of the block with the curve and ensure level placement from side to side and front to back.

Radius Additional Courses. On each course, the lip of each block must be in contact with the back of the units below to ensure structural stability. The setback of the block will cause the radius of each course to gradually increase and eventually affect the running bond of the wall. To maintain proper running bond, use partial units as needed. Once a block unit is cut to size, glue in place with a concrete adhesive.

Most retaining walls are designed assuming 100% coverage of the reinforcement. When building an inside curve, the back edges of the reinforcement will fan out, producing slight gaps. In order to ensure 100% coverage, additional lengths of reinforcement are used to fill those gaps on the next course of blocks. To prevent slippage, don't overlap the grid on any given course.

OUTSIDE 90-DEGREE CORNERS

Base Course. To build an outside 90° corner, begin by splitting a large block in half. Place this block with both split faces outward at the corner. Remove the rear lip so that the block lies flat. Then lay the rest of the base course working from the corner block out.

Additional Courses. Begin the 2nd course with the other half of the large block. Place the 2nd and 3rd blocks on either side of the corner block. Once the corner block is in position, glue it in place with concrete adhesive. Continue to alternate the corner block orientation with each course and always use concrete adhesive.

INSIDE 90-DEGREE CORNERS

Base Course. To create an inside 90° corner, begin by placing a block at the corner. Then lay a second block perpendicular to the first and continue laying out the rest of the base course working from the corner out. Remove the rear lip so the block lies flat. Make sure to construct the base course according to standard site prep and installation procedures described earlier.

Additional Courses. On the second course, place all blocks on bond along one side of the corner. Once the second course of one wall is established, begin the second course of the adjacent wall. Block placement in the corner should alternate direction with each succeeding course.

ENDING A WALL

Split a large unit into pieces-- sized as needed. Do not use pieces smaller than 6 inches wide. If needed, cut the second-to-last piece and make the last piece the appropriate size. Smaller pieces should be glued into place with a concrete adhesive. After splitting the end piece, use a hammer and chisel to create a rounded appearance to match the manufactured split blocks.

BUILDING COLUMNS

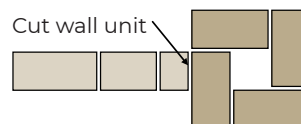
END-OF-WALL COLUMNS:

To construct columns at the end of a wall, cut 1 column unit in half for the 2nd, 4th and additional even-numbered courses.

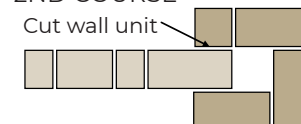
Stack column units in a rotating pattern for each course, staggering the bond. One column unit half is used every two courses.

Glue each course of units with a concrete adhesive.

1ST COURSE



2ND COURSE



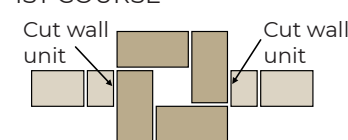
THROUGH-WALL COLUMNS:

On the first course, use full column units to start the column. Then split the wall units to fit.

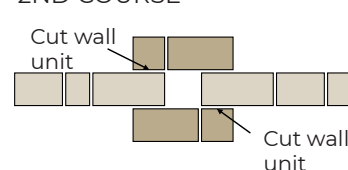
On the second course, split two column units in half to fill in the corners. Continue construction by alternating courses.

Glue all column courses with a concrete adhesive.

1ST COURSE



2ND COURSE



GETTING ACQUAINTED WITH NAPA® AND SONOMA™ WALL SYSTEMS

Napa and Sonoma wall systems are double-sided, so they can be used in both retaining and freestanding applications. The two systems are identical, except the Napa system has a tumbled, softened appearance. Given this, all installation instructions in this guide apply equally to both systems. All dimensions and weights are identical across both products.

Each system consists of three 3-inch high units (small, medium and large), and three 6-inch high units (small, medium and large). In addition, both systems have a 3-inch and 6-inch corner/column unit and a standard cap.

Napa Wall System:



6" Large Unit



6" Medium Unit



6" Small Unit



6" Column Unit



3" Cap Unit



3" Large Unit



3" Medium Unit



3" Small Unit

Sonoma Wall System:



6" Large Unit



6" Medium Unit



6" Small Unit



6" Column Unit



3" Cap Unit



3" Large Unit



3" Medium Unit



3" Small Unit

6" HIGH UNITS			
Dimensions	sf/pallet	total pcs	wt./pal
3-Piece	26	60	2712
Small Unit 6x9x6		20	
Medium Unit 6x9x11		20	
Large Unit 6x9x17		20	

3" HIGH UNITS			
Dimensions	sf/pallet	total pcs	wt./pal
3-Piece	26	120	2712
Small Unit 3x9x6		40	
Medium Unit 3x9x11		40	
Large Unit 3x9x17		40	

COLUMN UNITS*

Dimensions	total pcs	wt./pallet
6" High Unit: 6x17x8	48	3708

* Makes a 25x25x72 column.

3" CAP UNIT

Dimensions	lf/pallet	total pcs	wt./pallet
3x11 1/2x15	45 lf	36	1489