

# DOUBLE SIDED CAST STONE WALL INSTALLATION GUIDE

## GENERAL INSTALLATION GUIDELINES:

Recommended maximum height: 4 courses (24") exposed not including cap. Install all courses of Double Sided Cast Stone Wall block with a gap of 1" separating the back of the blocks of the opposing walls.

High strength concrete adhesive is required between every course and the cap. EP Henry recommends the use of Techniseal Structure Bond Adhesive. The 10" and 6" units will allow construction of radius walls with virtually no cuts.

## CALCULATE MATERIAL NEEDED

Double Sided Cast Stone Wall™ is sold by the square foot. Calculate the total square feet of Double Sided Cast Stone Wall™ needed by multiplying the length times the exposed height for one side of the wall.

Double Sided Cast Stone Wall™ has its own Footer Block which is sold by the piece. Calculate the number of units needed by dividing the length of the wall in feet by 1.30 (decimal equivalent of 15 5/8").

## PREPARE THE FOOTING

Dig a trench 24" wide and 10" below finished grade. Make sure the soil at the bottom of the trench is well compacted to prevent settling. In heavy or clay soils for best results, wrap the footer trench in a "U" shape configuration with geotextile. This will preserve the stone base over time and keep it from migrating into the clay soil. Using a vibratory plate compactor, install 6" of dense graded aggregate (modified stone) or clean #57 stone in two 3" lifts making sure the surface of the last lift is smooth and level.

Tip: If using dense graded aggregate or modified stone: add a 1" layer of concrete sand or stone screenings on top of the footing as a leveling agent for the footer course.

## INSTALLING THE FOOTER COURSE BLOCK

Install the Double Sided Cast Stone Wall™ Footer Block™ by placing the units tightly together on the prepared base.

Align the units so the long dimension of the Double Sided Cast Stone Wall Footer Block™ runs parallel to the length of the footer trench. Level the units from front-to-back and side-to-side using a dead blow hammer and level. Radius construction will require the base course block to be spread apart (the gap should not exceed 4") and/or to be cut and trimmed accordingly using a diamond blade saw.

## INSTALLING DOUBLE SIDED CAST STONE WALL

Install the first course of Double Sided Cast Stone Wall™ block with the face of the unit overhanging the footer block while maintaining a gap of 1" separating the back of the blocks of the opposing walls. The face of the block on top of the course of Double Sided Cast Stone Wall Footer Block™ will overhang the footer block by about 1". Check to make sure all units are level front-to-back, side-to-side and wall-to-wall. Install courses whenever possible so that each block spans the two units below it in a running bond pattern. Avoid having a vertical line extend more than two courses of block. Install additional courses starting at the corner and working toward the other end. Do not start at both corners and try to meet in the middle. Install the faces of the blocks flush to avoid gaps and to keep the continuity of the stone face on both sides of the wall. It is necessary to bond all the courses of block, the footer block, and the cap together. To achieve structural stability, beads of high strength, flexible concrete adhesive must be run between each course staying 1"– 2" behind the face of the block. EP Henry recommends the use of Techniseal Structure Bond Adhesive.



BLOCK ALIGNMENT

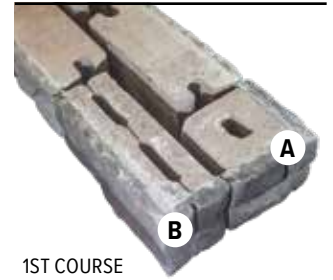
CAUTION: DRY SAWING OR GRINDING OF CONCRETE PRODUCTS MAY RESULT IN THE RELEASE OF RESPIRABLE CRYSTALLINE QUARTZ. PROLONGED EXPOSURE TO RESPIRABLE CRYSTALLINE QUARTZ MAY CAUSE DELAYED (CHRONIC) LUNG INJURY (SILICOSIS). THE USE OF A NIOSH-APPROVED RESPIRATOR AND TIGHT-FITTING GOGGLES ARE RECOMMENDED WHEN SAWING OR GRINDING OPERATIONS ARE IN PROGRESS.

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## TERMINATING THE WALL

Double Sided Cast Stone Wall™ corners are manufactured in two unit sizes—8”x8” (A) and 16”x6” (B)— to readily terminate the wall. At the termination point of the wall place the long and short corner units back-to-back as opposing pairs to create the end of the wall. (See photo at right.) Alternate the position of the corner units on each successive course to maintain a running bond pattern. When terminating the wall make sure that the corner units overlap the two corner blocks beneath them maintaining a running bond.

## WALL TERMINATION COURSES



1ST COURSE



2ND COURSE



3RD COURSE

## BUILDING 90° CORNERS

To build 90° corners install a Double Sided Cast Stone Wall™ “A” corner unit at the spot where one wall will terminate and the return wall begins. Work off of the “A” Corner unit using the 16” stretcher units. For each successive course of block alternate the position of the “A” Corner unit (see below). It is recommended to start construction at the corner and work out from that point. This insures virtually no cut pieces at the corner which means better structural stability and a cleaner overall appearance. Use a high-strength flexible concrete adhesive on all Double Sided Cast Stone Wall™ units when constructing the 90° corner.

## CAPPING THE WALL

After laying the last course of wall block, install the wall cap units using a high strength, flexible concrete adhesive applied to both sides of the wall. The cap units should be installed following the contour of the wall and with a uniform overhang on both sides. If needed, use a shim to eliminate any minor variations in height between the wall caps. The EP Henry Double Sided Cast Stone Wall™ cap options can be installed by alternating the units front-to-back to cap a straight wall or by marrying the angles of the cap to conform to the wall’s radius. Cutting the cap units may be necessary depending on the radius. All of the cap options have available finished end units for terminating the wall.

NOTE: DOUBLE SIDED CAST STONE WALL™ MAY ALSO BE TERMINATED BY BUILDING A COLUMN AT THE END OF THE WALL USING SINGLE SIDED CAST STONE WALL™ CORNER UNITS WITH THE COLUMN CAP.



BUILDING 90° CORNERS

## DOUBLE SIDED CAST STONE WALL CALCULATOR

WALL LENGTH		1'4"	2'8"	4'0"	5'4"	6'8"	8'0"	9'8"	10'8"	12'	13'4"	14'8"	16'	17'4"	18'8"	20'	21'4"	22'8"	24'	
		HEIGHTS BELOW ARE IN SQUARE FEET (SQ. FT.)																		
WALL HEIGHT	6" = 1 course	.66	1.3	2	2.7	3.3	4	4.7	5.3	6	6.7	7.3	8	8.7	9.3	10	10.7	11.3	12	
	1' = 2 courses	1.3	2.6	4	5.4	6.6	8	9.4	10.6	12	13.4	14.6	16	17.4	18.6	20	21.4	22.6	24	
	1'6" = 3 courses	2	3.9	6	8.1	9.9	12	14.1	15.9	18	20.1	21.9	24	26.1	27.9	30	32.1	33.9	36	
	2' = 4 courses	2.7	5.9	8	10.8	13.2	16	18.8	21.2	24	26.8	29.2	32	34.8	37.2	40	42.8	45.2	48	

To calculate the number of 16” stretcher units needed for both sides of the wall, using the chart above, multiply the square footage required by 3. For a wall 1'6” high and 16’ long, you would need 72 stretchers (1.5 x 16 = 24 sf; 24 sf x 3 = 72 Double Sided Cast Stone Wall Stretchers needed)