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OUTSIDE CURVES

CALCULATE THE RADIUS

When building an outside radius 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.

Here is a rule of thumb used to calculate the approximate radius of the top course: add $\frac{1}{4}$ 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.

Example: The setback of Highland Stone® is $1\frac{1}{8}$ ". The wall is 8 courses high. The radius of the base course is 6 feet.

$1\frac{1}{8}" + \frac{1}{4}" = 1\frac{3}{8}" \times 8 \text{ courses} = 11"$. $6' - 11" = \underline{5'11"} =$ calculated radius of the top course.

BASE COURSE

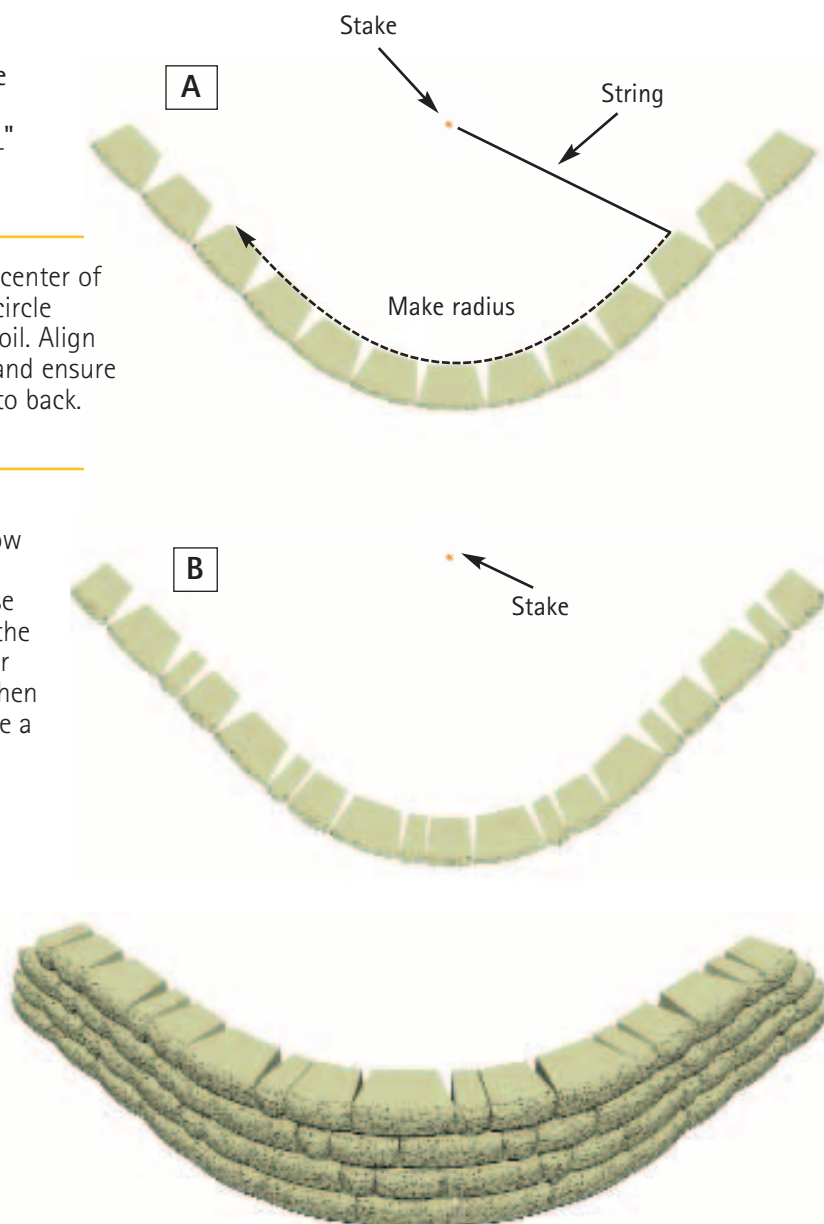
- A** Drive a stake into the ground at the desired center of the curve. Attach a string and rotate it in a circle around the stake to mark the radius in the soil. Align the back of the block with the radius curve and ensure level placement from side to side and front to back.

ADDITIONAL COURSES

- B** 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 when installing Diamond® and Diamond Pro.™ Once a split unit is cut to size, glue in place with a concrete adhesive.



Curving lines add grace and style to any project using Highland Stone.® See page 24 for information about capping a curve.



OUTSIDE CURVES WITH REINFORCEMENT

FIRST COURSE WITH REINFORCEMENT

Most retaining walls are designed assuming 100% coverage of the reinforcement. When building an outside curve, the block edges of the reinforcement will have gaps so that the back edges don't overlap. In order to ensure 100% coverage, additional lengths of reinforcement are used to fill those gaps on the next course of blocks. Don't overlap the grid on one course to avoid slippage.

Cut reinforcement to the lengths specified in the wall plan. Lay sections of the reinforcement within 2 inches of the face of the wall with the strength direction perpendicular to the wall face. Avoid overlapping the reinforcement by separating each section. Place the next course of blocks, marking the backs of blocks to identify unreinforced areas. This step is important because when this course is back-filled, it's impossible to locate the unreinforced areas.

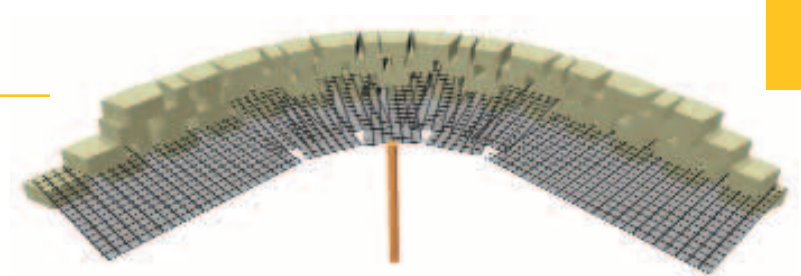
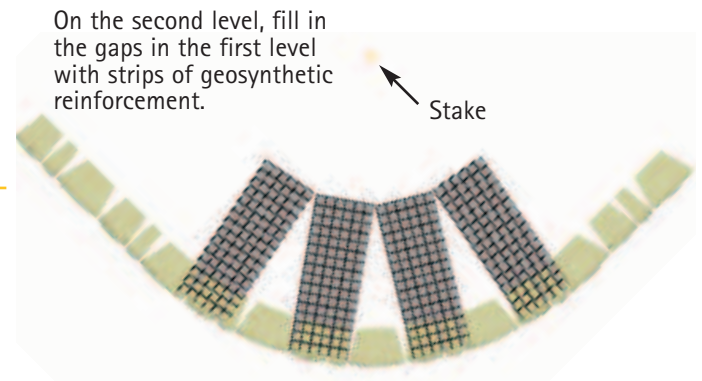
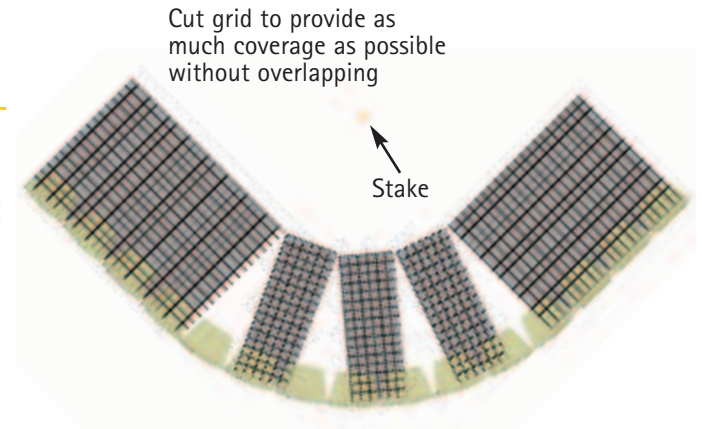
NEXT COURSE

Place the next course of blocks, marking the backs of blocks to identify unreinforced areas. This step is important because when this course is backfilled, it's impossible to locate the unreinforced areas. Use the marked blocks as a guide, placing subsequent sections of reinforcement to overlap the gaps left on the previous course. This will ensure total reinforcement coverage. Repeat this procedure throughout the construction of the radius curve when reinforcement is required.

MINIMUM OUTSIDE RADIUS

| | | |
|------------------------------|-------|--------|
| Diamond® Beveled Face | | 2 feet |
| Diamond® Straight Face | | 4 feet |
| Diamond Pro® | | 4 feet |
| Diamond Pro® Stone Cut™ Face | | |
| (using all units) | | 4 feet |
| Highland Stone® | | |
| (using all units) | | 4 feet |

Highland Stone® units shown



From this viewpoint, it is possible to see the complete grid coverage between the two layers of grid.



Turn an open patio into a cozy corner with curved Highland Stone® walls. Wall curves are repeated in the steps.