

**G12-8** (8" x 18" x 12")

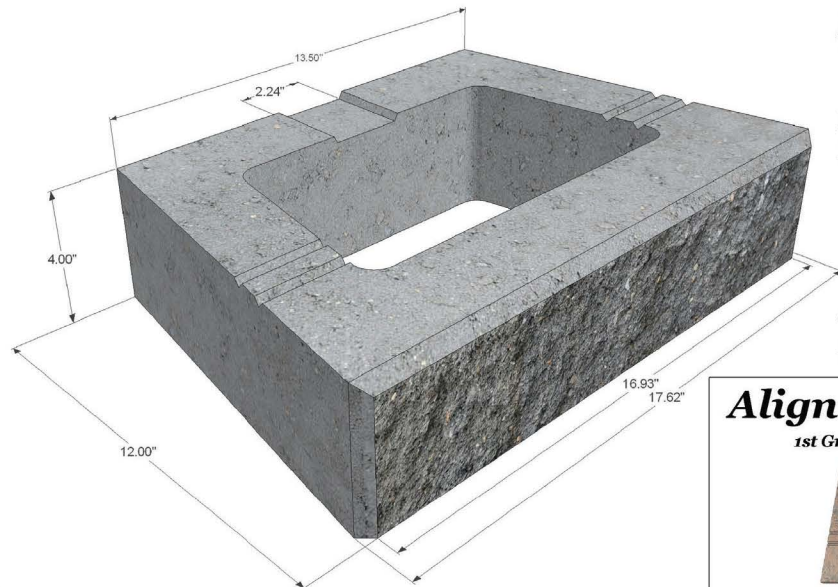
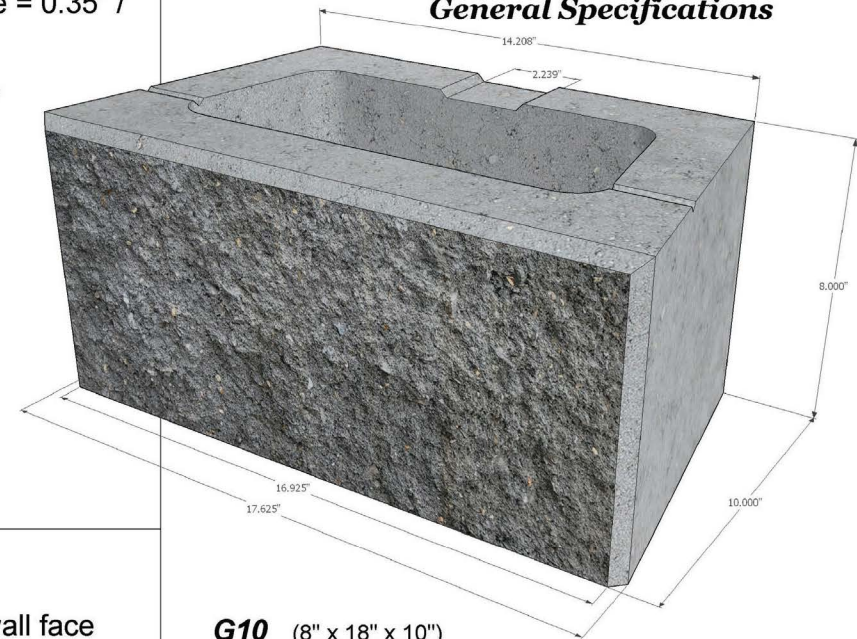
1. Each block = 1 sq ft wall face  
- wall: 100' L x 5' H (500 sq ft) = 500 blocks
2. Each core = 0.31 cubic ft of core fill
3. Setback (batter)  
- Bevel top of split face = 0.35" / course or 2.5°  
- First Groove = 1"  
- Second Groove = 2"
4. Radius = 4.5'
5. Weight = 72 lbs



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**General Specifications**



**G12-4** (4" x 18" x 12")

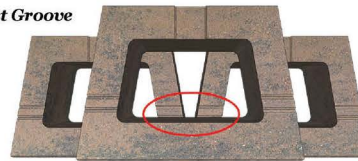
1. Each block = 1/2 sq ft wall face  
- wall: 100' L x 5' H (500 sq ft) = 1000 blocks
2. Each core = 0.16 cubic ft of core fill
3. Setback (batter)  
- Bevel top of split face = 0.35" / course or 5°  
- First Groove = 1"  
- Second Groove = 2"
4. Radius = 4.5'
5. Weight = 36 lbs

**G10** (8" x 18" x 10")

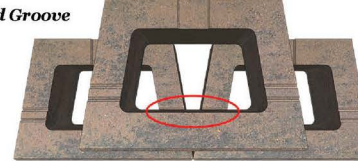
1. Each block = 1 sq ft wall face  
- wall: 100' L x 5' H (500 sq ft) = 500 blocks
2. Each core = 0.3 cubic ft of core fill
3. Setback (batter)  
- Bevel top of split face = 0.35" / course or 2.5°  
- First Groove = 1"
4. Radius = 4.5'
5. Weight = 55 lbs

**Alignment**

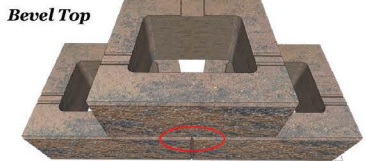
1st Groove

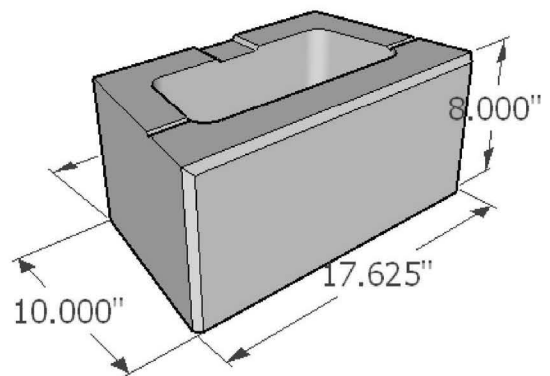
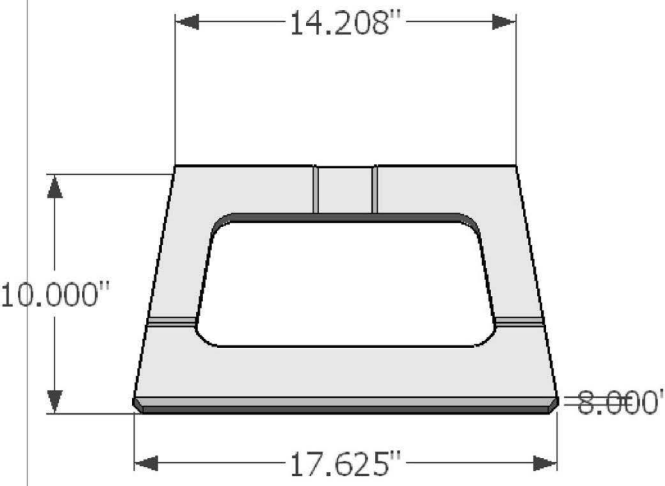


2nd Groove

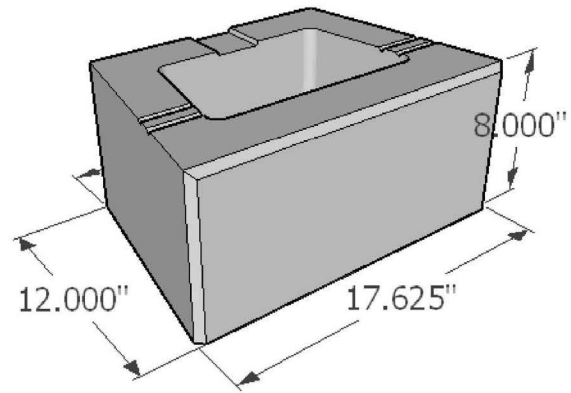
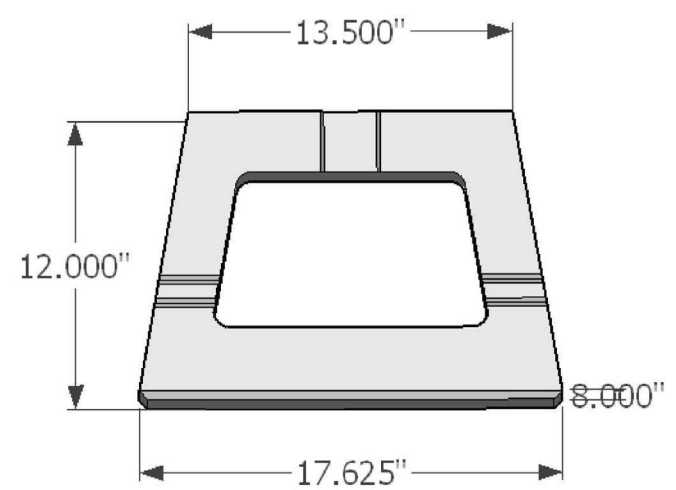


Bevel Top

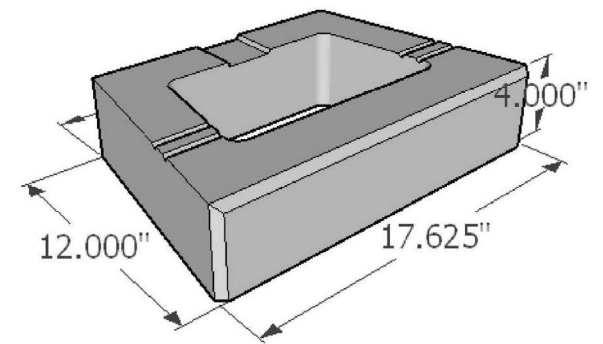
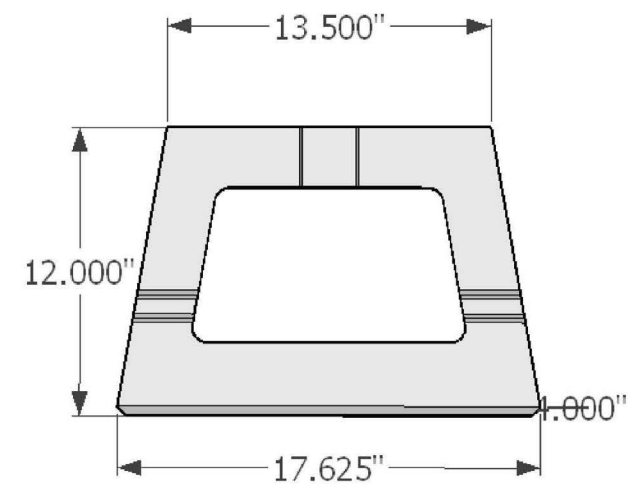




**G10 - 8"h x 17.625"w x 10"d**



**G12:8 - 8"h x 17.625"w x 12"d**



**G12:4 - 4"h x 17.625"w x 12"d**



# REINFORCED RETAINING WALL

**NOTE:** The following is an example of a typical GeoStone installation. Not all walls require the same techniques. GeoStone recommends consulting with an Authorized GeoStone representative or professional installer before undertaking such a project. Check with your local municipality before starting any construction project for applicable regulations and permits that may be required.



Begin by digging a two foot wide trench. Excavate all loose soils and native rock until hard original ground is reached. The footing will be supporting the entire weight of the wall.



The footing depth will vary based on the the height of the wall. Rule of thumb is 1 inch of embedded block per vertical foot of wall height is required. Place four to six inches of crushed rock (#78 or #8910) in the footing and level for the wall foundation.



As preparation of the footing continues, remove all large rocks and use a vibrating plate tamp to achieve proper compaction. Get footing as smooth, level, and compacted as possible.



Run a string line for straight walls. This will help in the alignment of the first course. Use a cement trowel to smooth out base prior to setting first block.



When laying the first course, level the block front to back and side to side with a two foot carpenter's level. *It is very important that the first course be placed on a compacted footing and leveled before preceding.*



It is always a good idea to shoot grades from time to time to ensure your wall is maintaining the correct level.



Align and batter each course prior to core filling with rock. Batter means setting each course back 1/4 - 1/2 inch behind the course below as seen in the picture above. On straight walls, use a string line. In curves, visually align the wall to achieve the desired appearance.



It is recommended that the cores of the block be filled with a #67 or #78 stone no less frequently than every three courses. This same stone is recommended for the backfill as well.



After core filling the block, use a rod to drive down into the cores to assure a thorough core fill. Backfill should be level to top course of block.



Compacting the backfill is very important. This provides additional resistance to pressures exerted on the wall and prevents settlement. Repeat this process after each backfill.



Sweep all rock and gravel from the tops of the blocks before laying down next course or geogrids. Any variance in height caused by rocks between courses will cause unsightly gaps. Backfill area should encompass entire proposed grid length area.



Next lay out the geogrids. Their length will depend on the wall height. Rule of thumb is no less than 75% of wall height (no shorter than 4') and no less frequent than every 2 vertical feet.



After laying out the grids, place another course of block down on top of the grids, align, then core fill and backfill. It is important that the grids be stretched tight prior to placing rock fill.



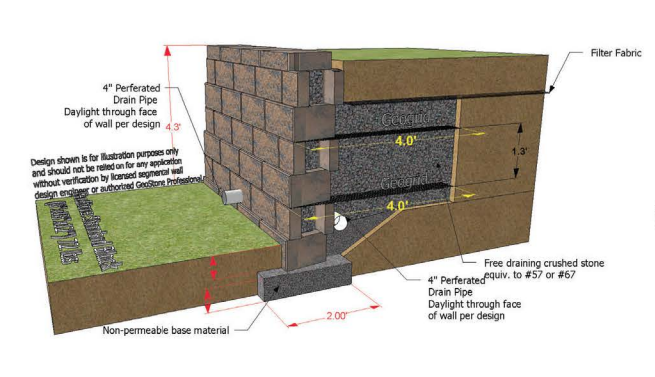
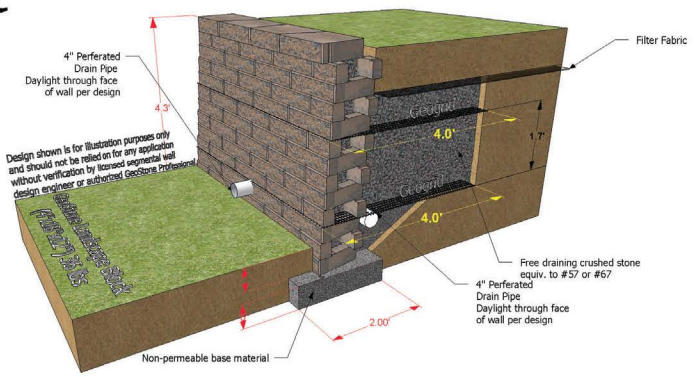
This process is repeated until the desired wall height is reached. The final course is the cap block glued down with outdoor construction adhesive.



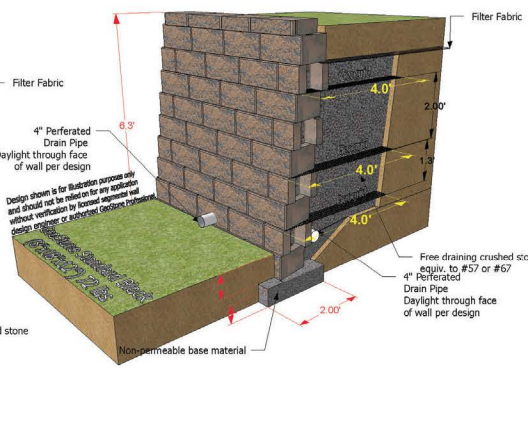
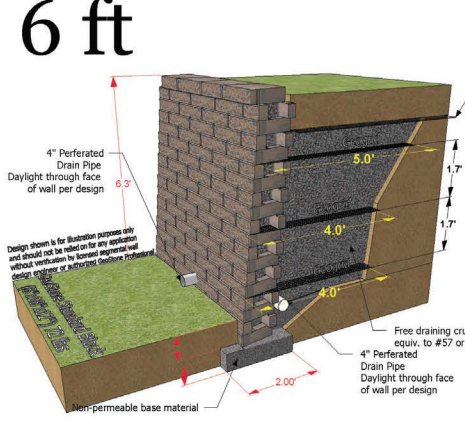
**GEOSTONE**  
**RETAINING WALL SYSTEMS**  
 P.O. BOX 325 - WESTOVER, AL 35185 • 205-678-9969  
 WWW.GEOSTONE.COM

# 4 ft

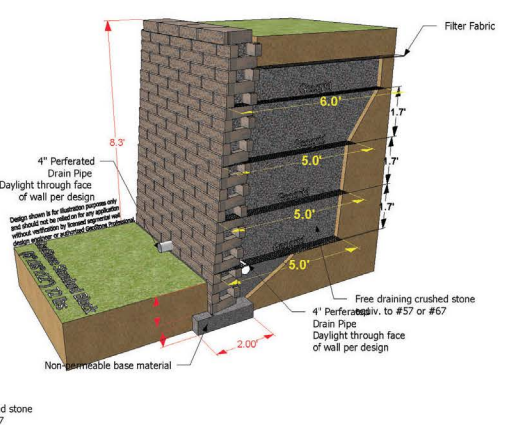
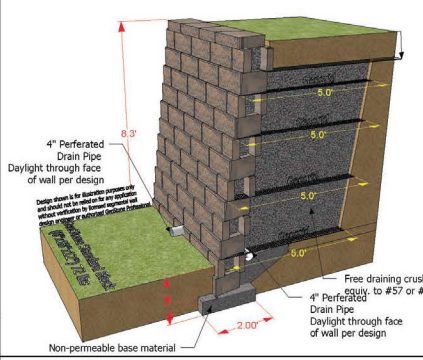
Note: Walls shown here are designed with all-rock backfill. Site soils can be used in the reinforced zone under the right circumstances using the correct installation procedures. Please check with your wall designer or professional modular wall installer prior to using site soils.



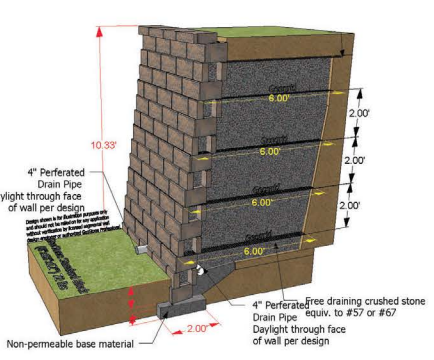
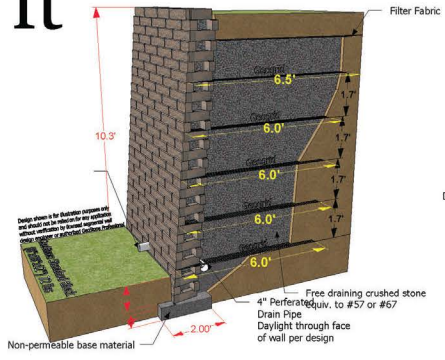
# 6 ft



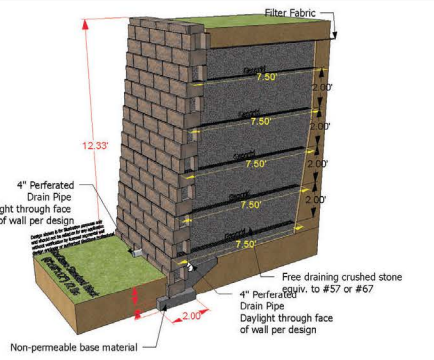
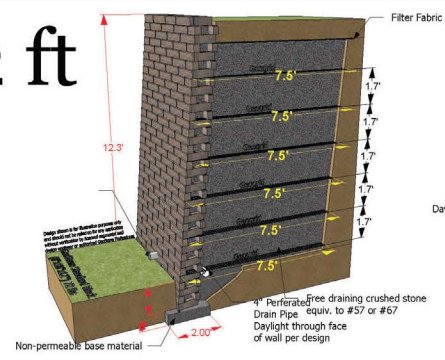
# 8 ft



# 10 ft



# 12 ft



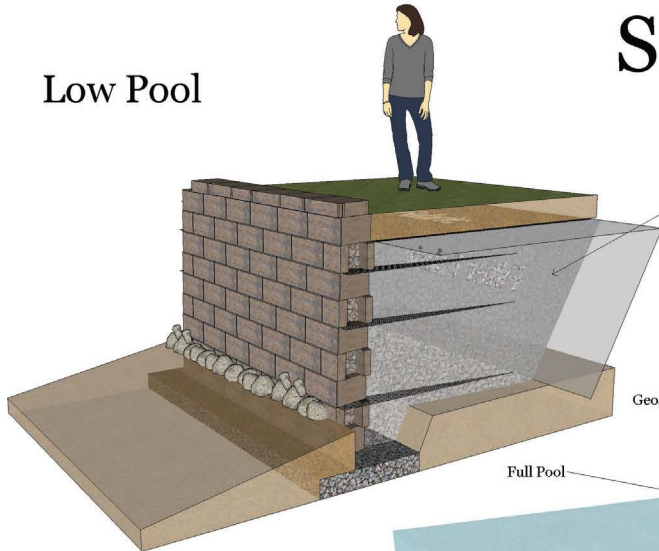
**DESCRIPTION**

The walls in this drawing are for illustration purposes only and were designed according to industry standards and procedures. Certain factors such as drainage, soils, surcharge, etc. will effect the overall design of the wall. It is recommended that all drawings be verified by a professional engineer before applying to actual situations.

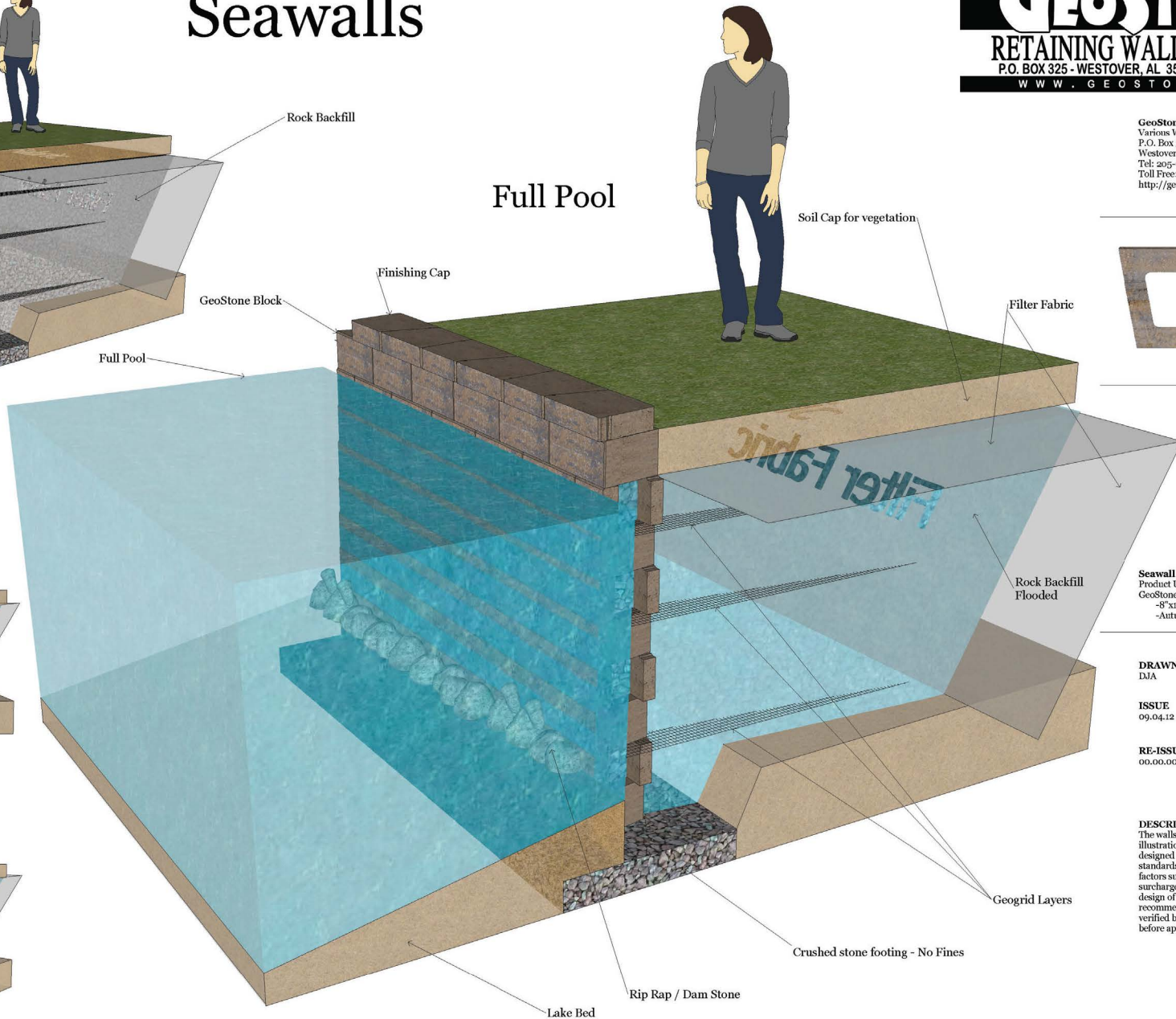
# Seawalls



Low Pool



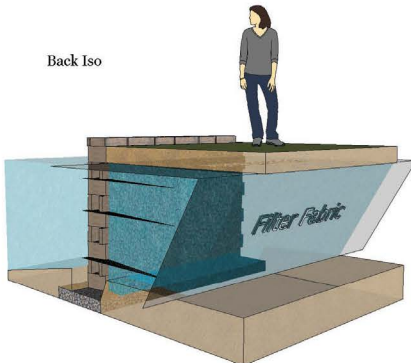
Full Pool



Side View



Back Iso



GeoStone Retaining Walls  
 Various Wall Profile  
 P.O. Box 325  
 Westover, AL 35185  
 Tel: 205-678-9969  
 Toll Free: 877-GEO-9900  
 http://geostone.com



**Seawall Wall Profile**  
 Product Used:  
 GeoStone Standard Block  
 -8'x18'x12" - 72 lbs  
 -AutumnBlend Color shown

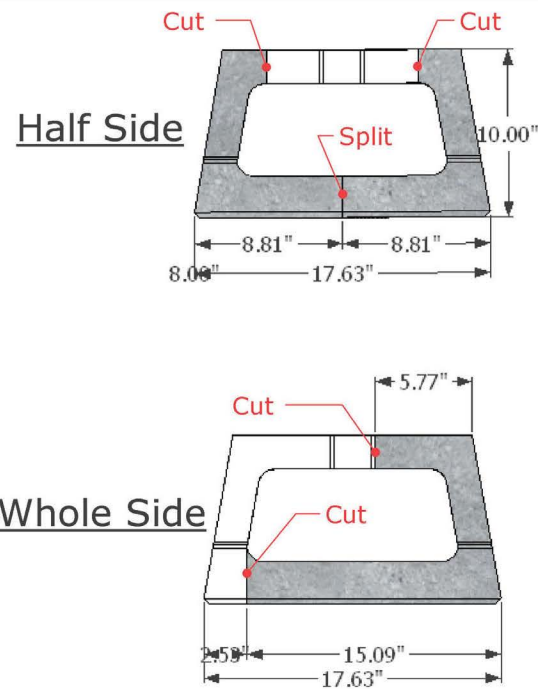
**DRAWN BY**  
 DJA

**ISSUE**  
 09.04.12

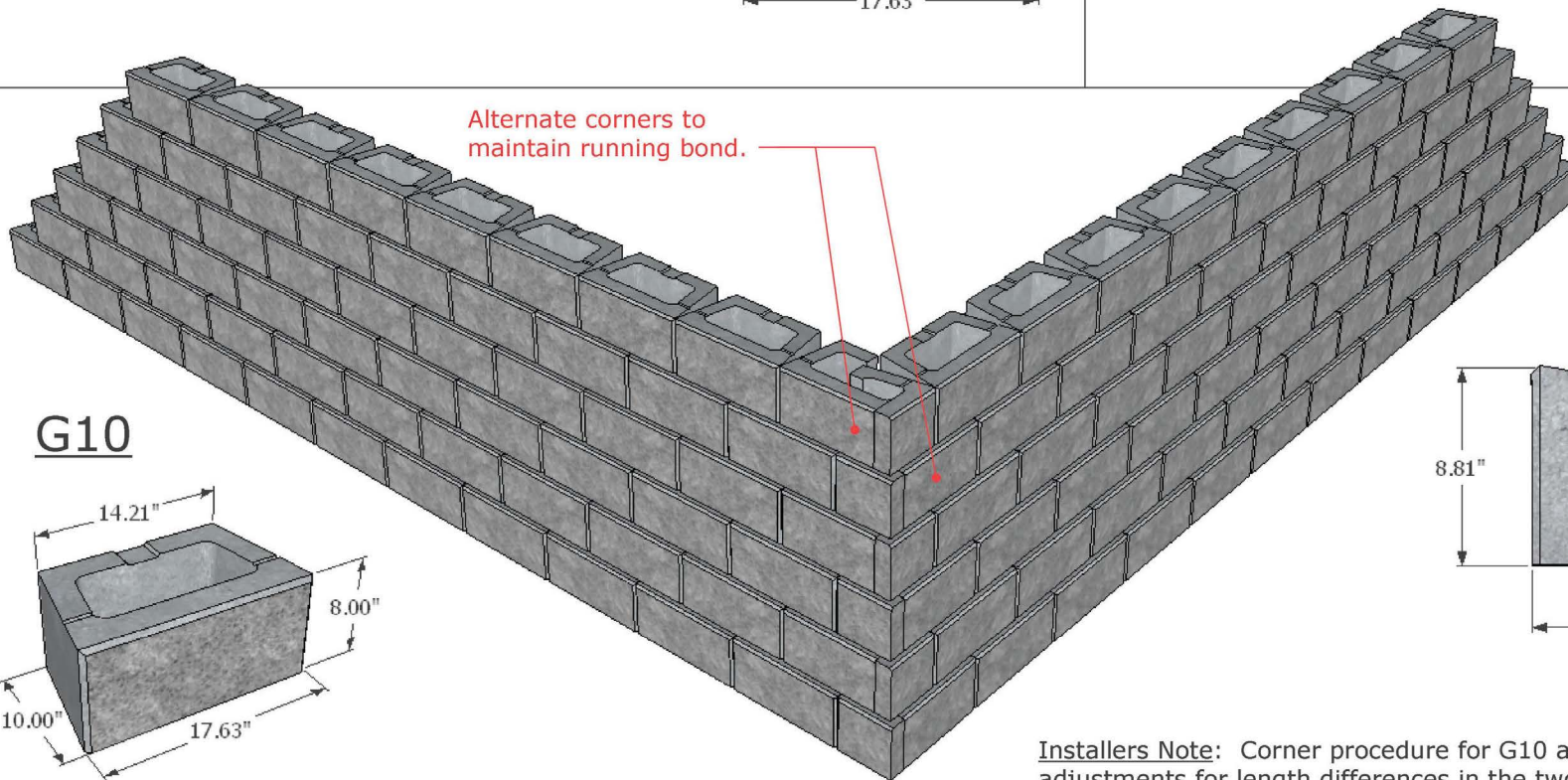
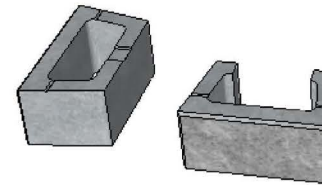
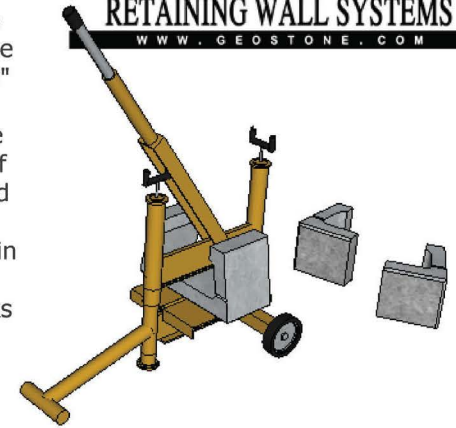
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**DESCRIPTION**  
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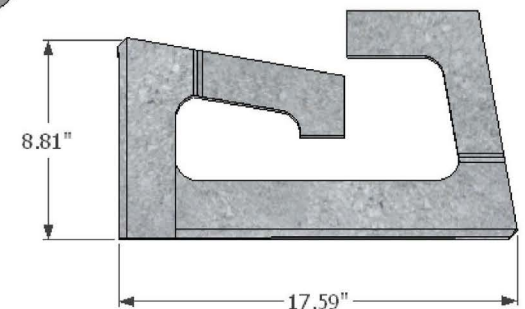
The GeoStone system utilizes a procedure called "**HALF-WHOLE**" for a corner instead of a corner block. This insures there will always be enough corners for a project and the corners will ALWAYS be from the same run. These are two things that are constantly an issue with traditional corner block. This procedure also creates an interlocking corner, adding power and stability to an otherwise weak point in the wall. Each corner requires 1.5 block per course/corner. Cuts will be made with a diamond blade rescue or table saw prior to making the split on the "half side". Precise measurements and cuts are important for alignment and to minimize waste.



A paver splitter is best for getting the rough texture on the "half side" to match the face of the block. Cutting the back portion off allows the 8" block to be "fed" into the splitter sideways and on the face. There will be two "half sides". One side will be used in the first course of the corner, the 2nd will be used in the next course. This procedure requires 1.5 blocks per corner.



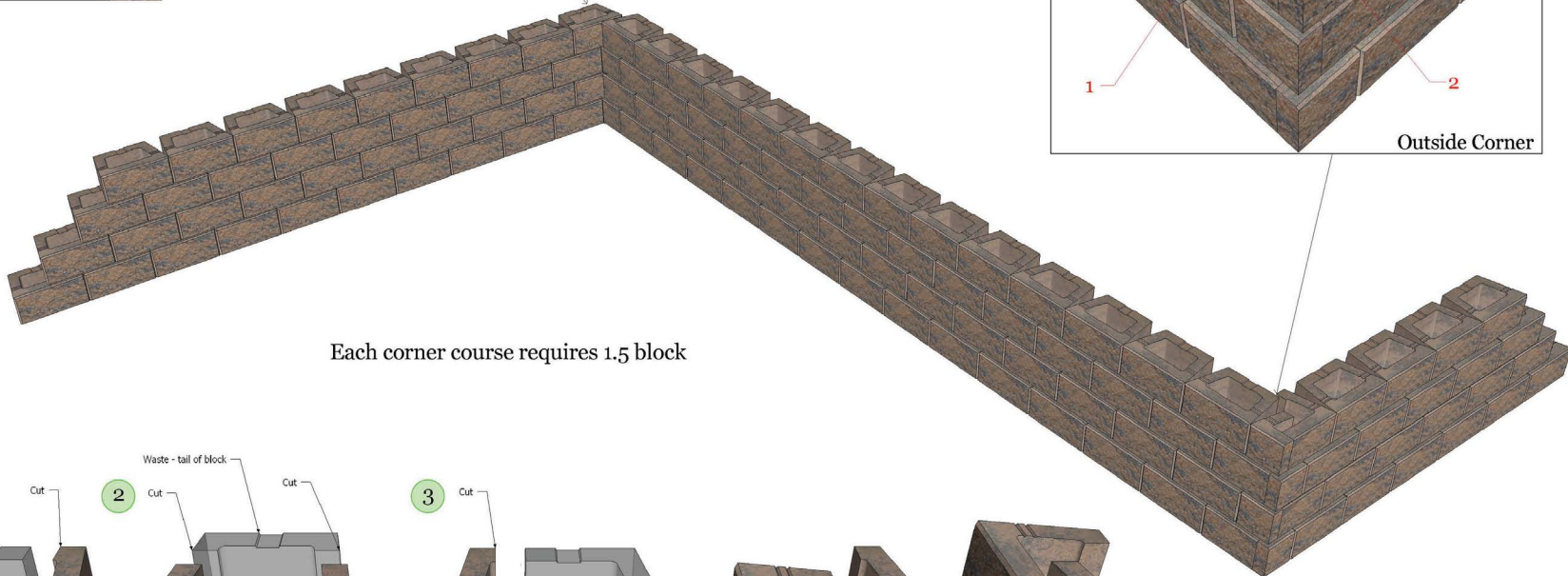
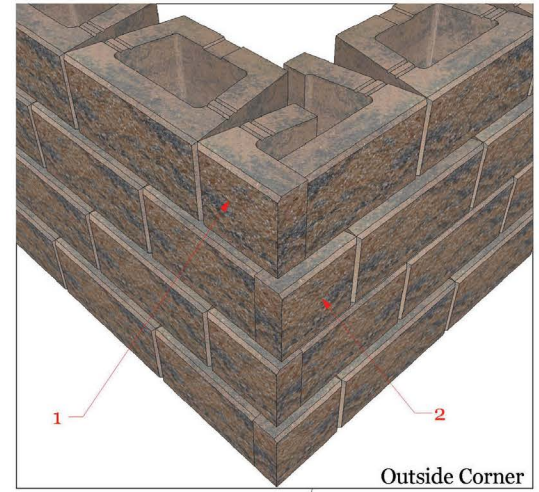
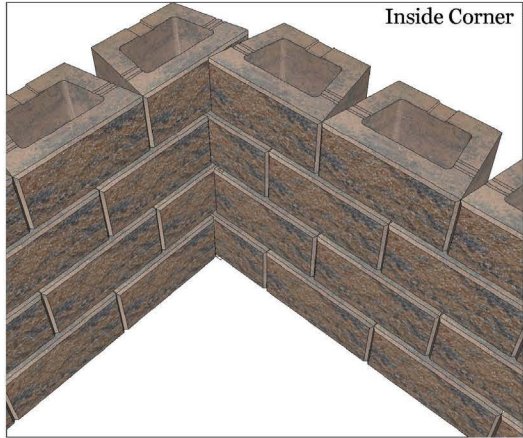
Finished Corner  
Top View



**Installers Note:** Corner procedure for G10 and G12-8 is similar. Make adjustments for length differences in the two lines and cut/split accordingly.

# GeoStone 8"x18"x12" Corner Detail

-Procedure for using smaller "paver" splitter & Concrete Saw

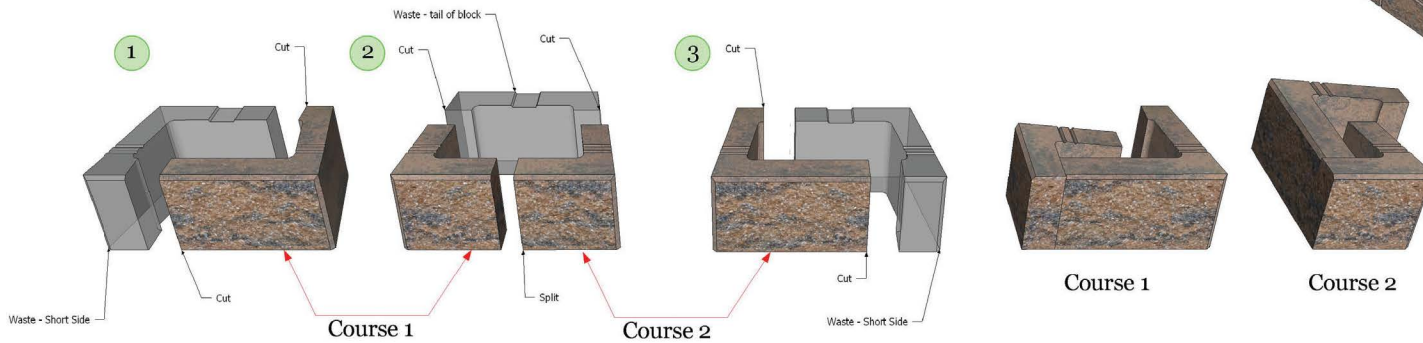


Each corner course requires 1.5 block



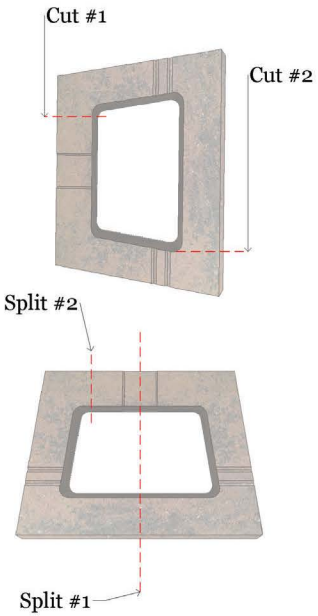
SCAN ME

Scan for YouTube video on how to make "Half-Whole" Corner

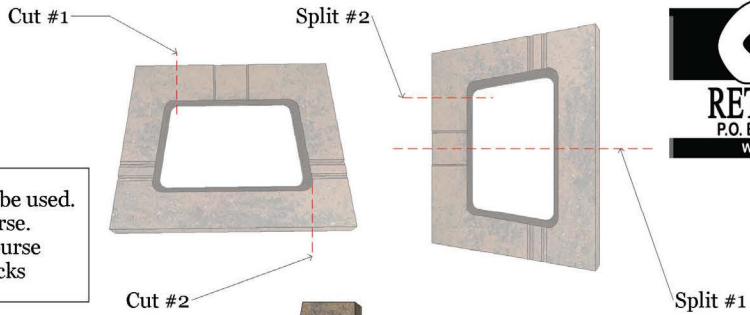


# Corners

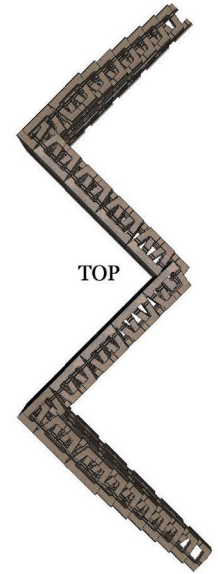
## 1st COURSE



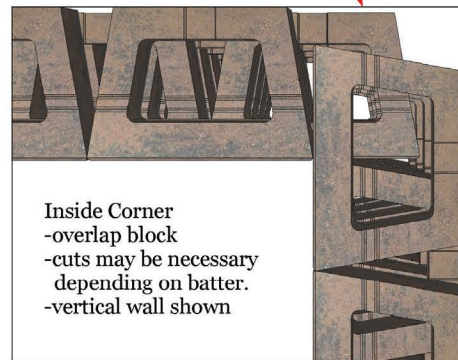
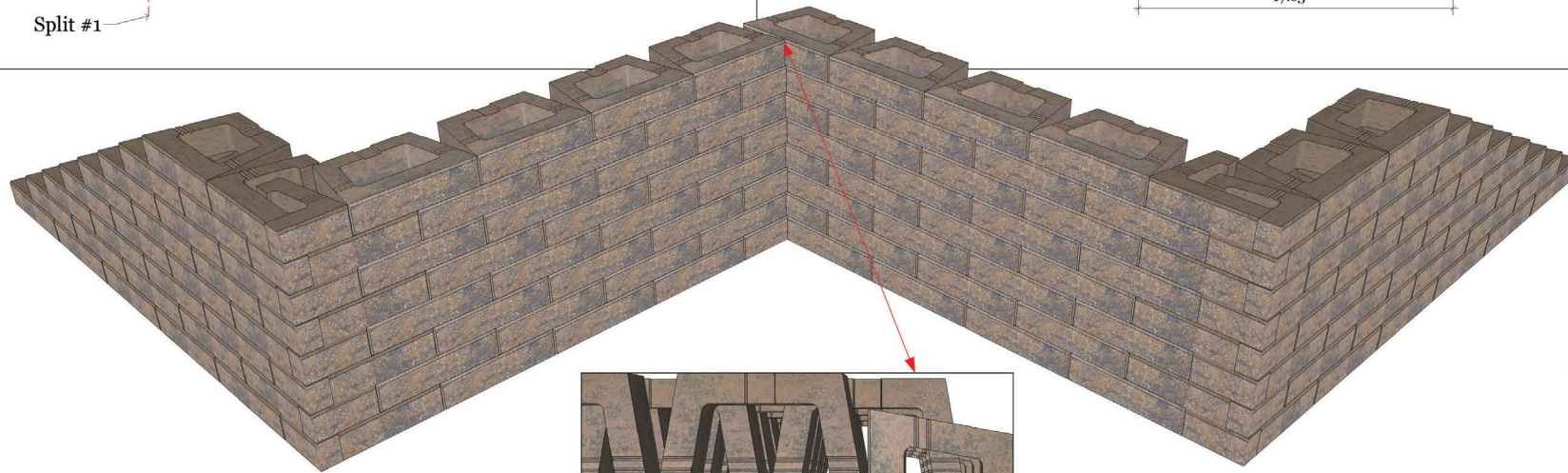
Both sides of split block can be used.  
 Left split side - 1st course.  
 Right split side - 2nd course  
 Each Corner = 1.5 blocks



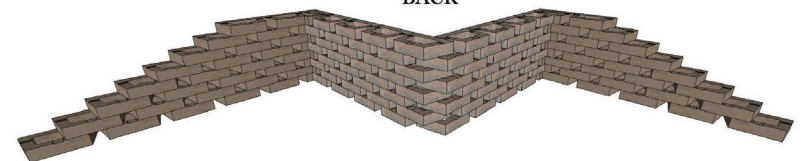
## 2nd COURSE



SIDE



BACK

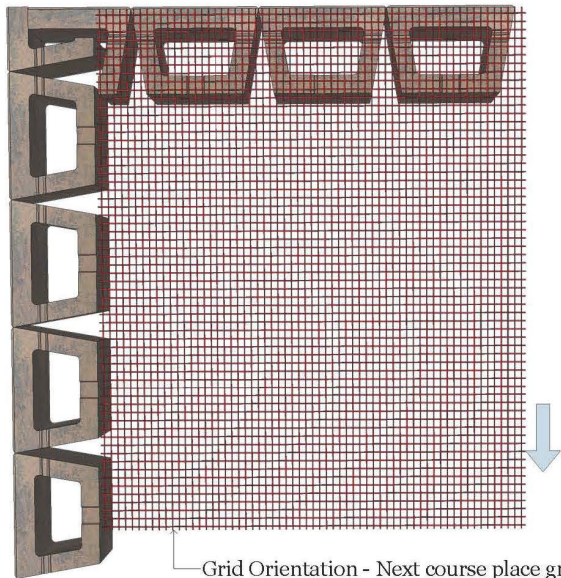
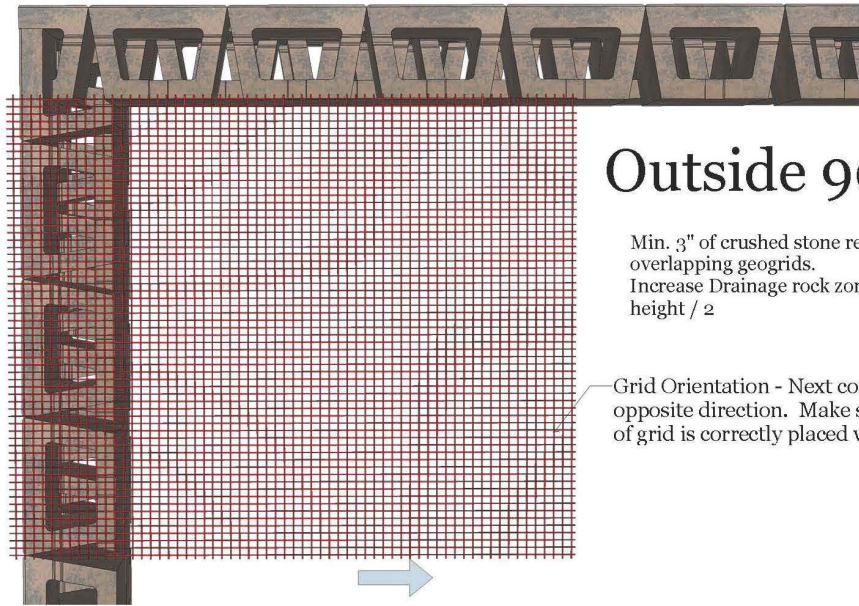




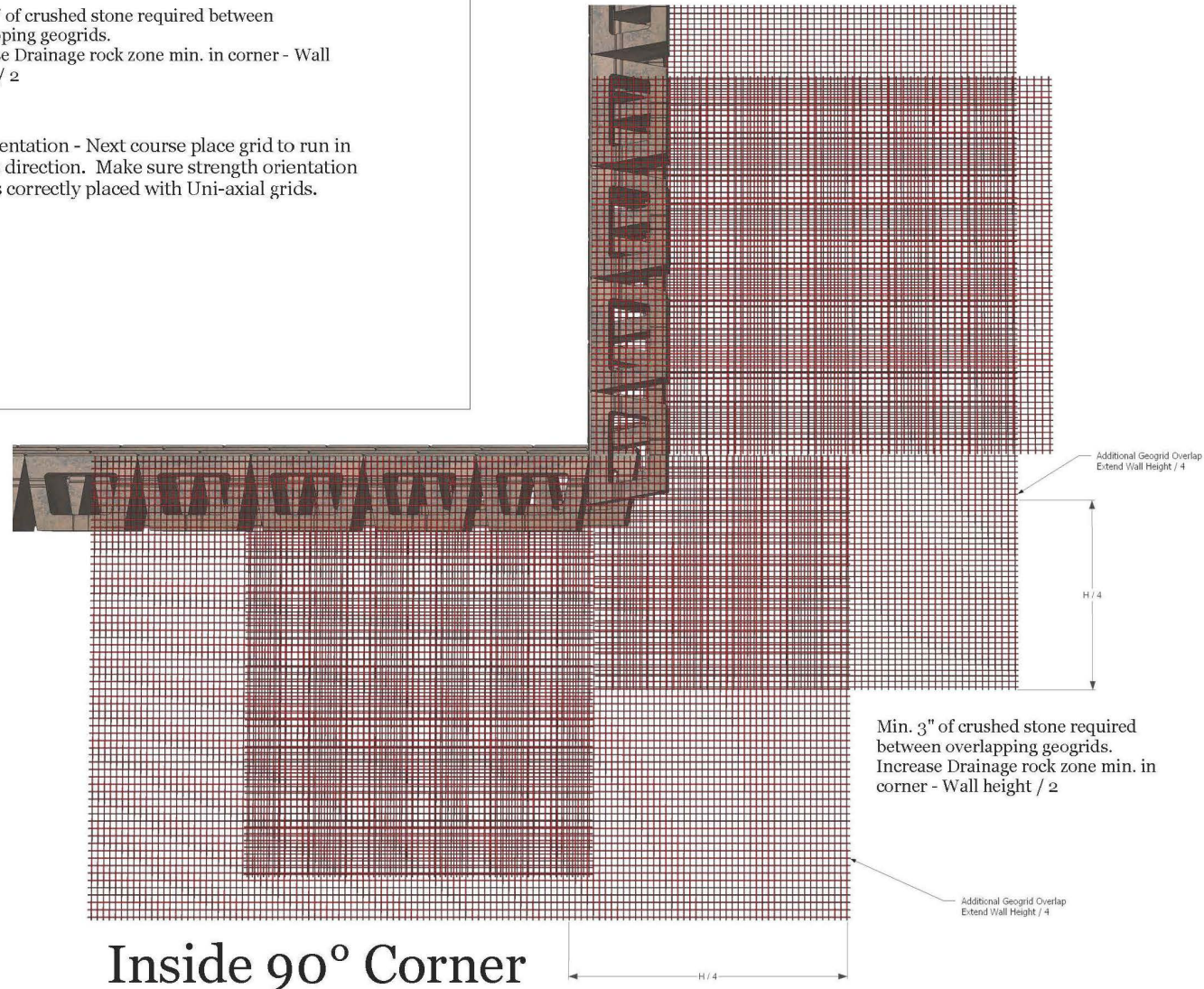
## Outside 90° Corner

Min. 3" of crushed stone required between overlapping geogrids.  
 Increase Drainage rock zone min. in corner - Wall height / 2

Grid Orientation - Next course place grid to run in opposite direction. Make sure strength orientation of grid is correctly placed with Uni-axial grids.



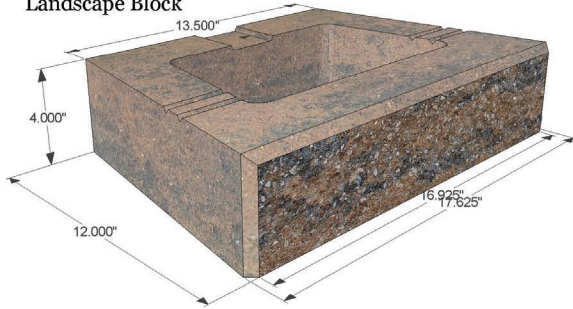
Grid Orientation - Next course place grid to run in opposite direction. Make sure strength orientation of grid is correctly placed with Uni-axial grids.



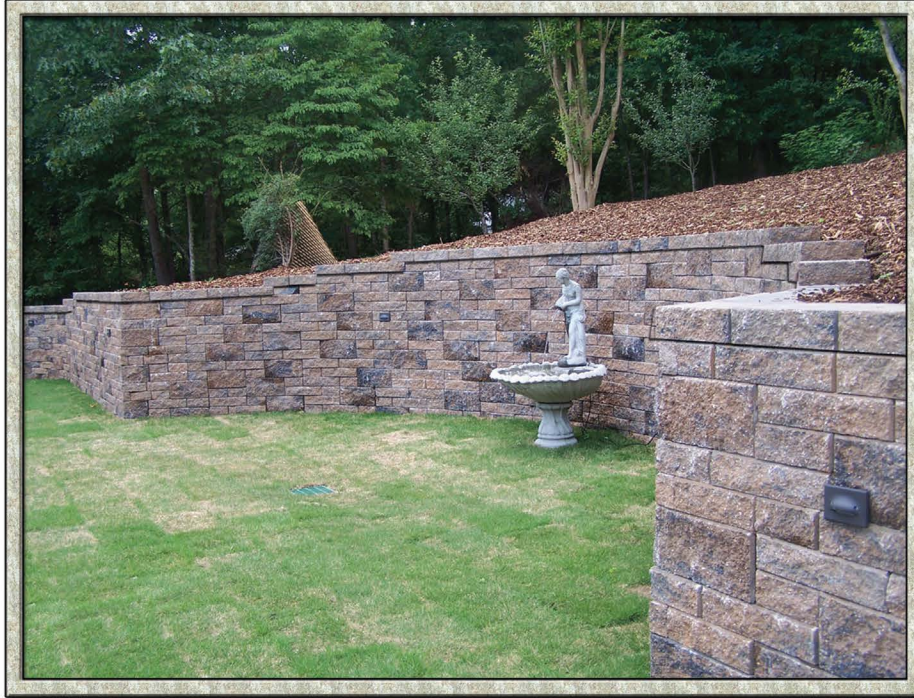
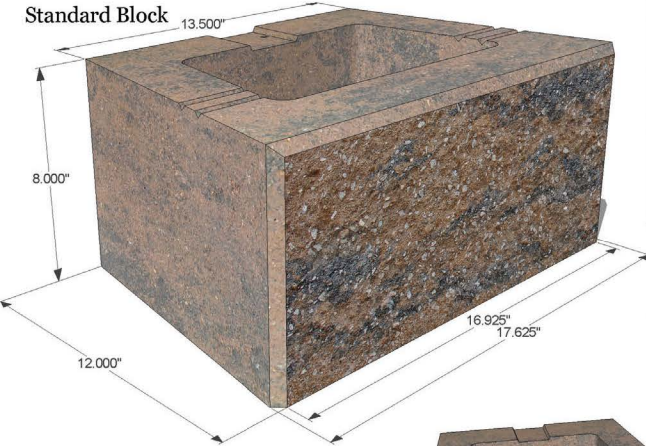
## Inside 90° Corner

# Ashlar Pattern

Landscape Block



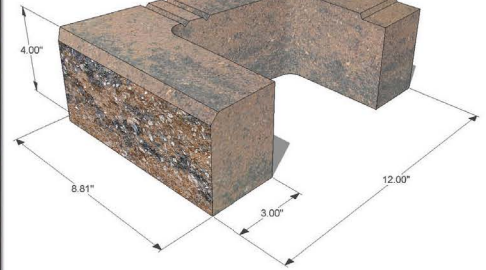
Standard Block



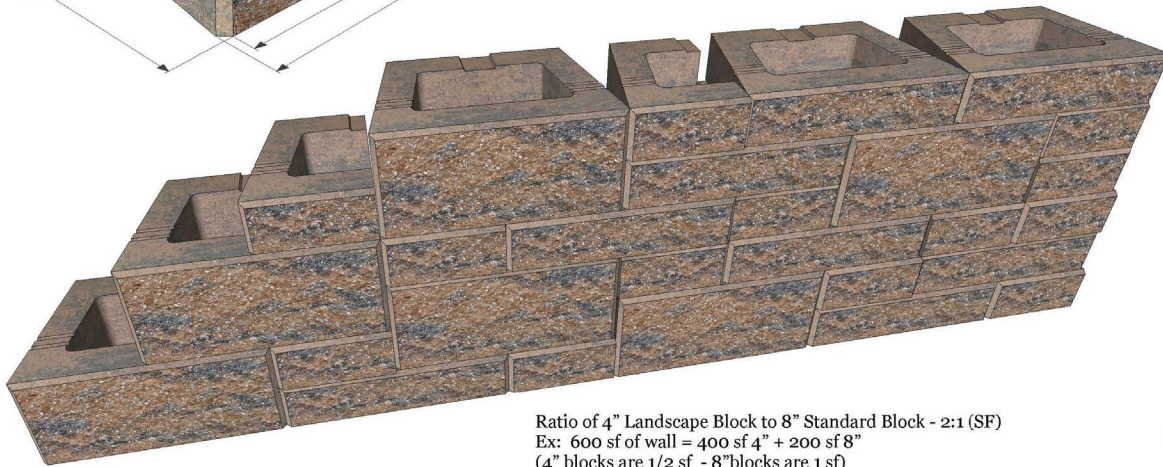
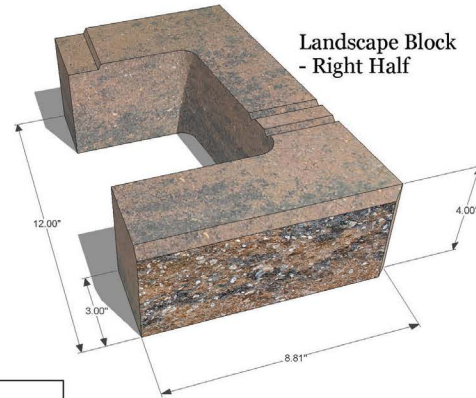
The GeoStone Retaining Wall System's open core design allows for maximum flexibility in all sorts of applications. The latest testament to this is a multiple piece pattern procedure. By cutting the 4" block in half, a random configuration can be created that utilizes both the 8" & 4" blocks. This configuration will break the horizontal lines in the wall. This is a very simple technique that can add so much to the look of your project.



Landscape Block - Left Half



Landscape Block - Right Half

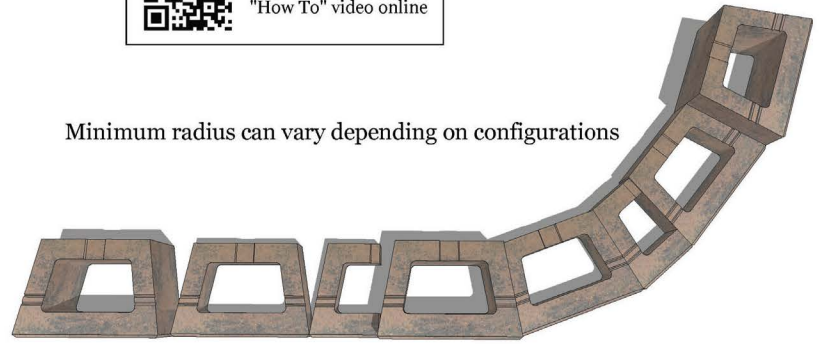


Ratio of 4" Landscape Block to 8" Standard Block - 2:1 (SF)  
 Ex: 600 sf of wall = 400 sf 4" + 200 sf 8"  
 (4" blocks are 1/2 sf - 8" blocks are 1 sf)



Want to know more?  
 Scan me to go to the  
 "How To" video online

Minimum radius can vary depending on configurations



GeoStone Retaining Walls  
 Various Wall Profile  
 P.O. Box 325  
 Westover, AL 35185  
 Tel: 205-678-9969  
 Toll Free: 877-GEO-9900  
 http://geostone.com

# Stairs



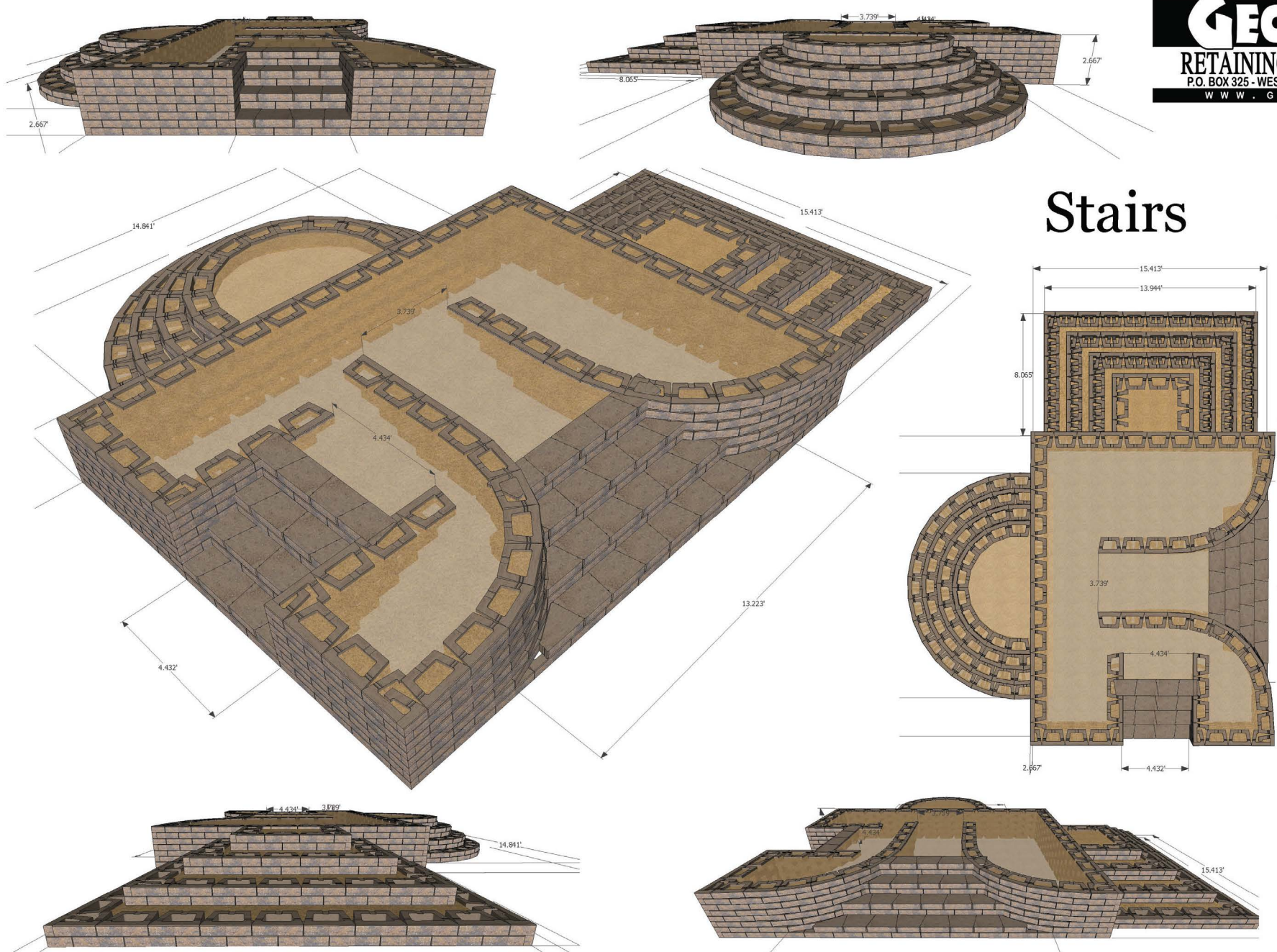
**Various Stair Applications**  
 Product Used:  
 GeoStone Landscape Block  
 -4"x18"x12" - 36 lbs  
 -AutumnBlend Color shown

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 DJA

**ISSUE**  
 09.04.12

**RE-ISSUE**  
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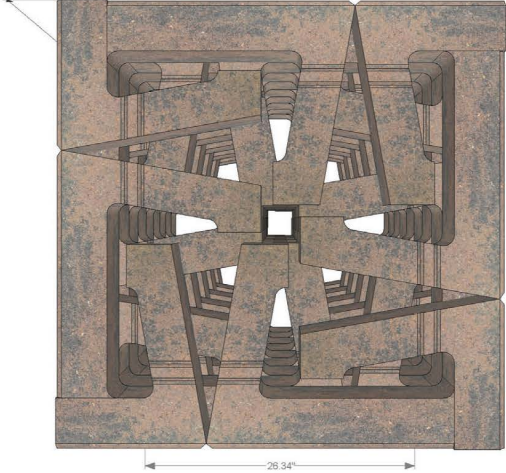
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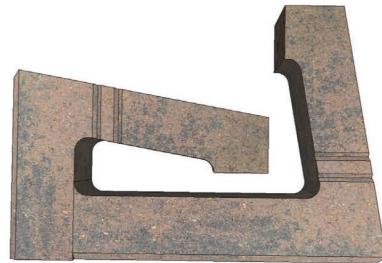
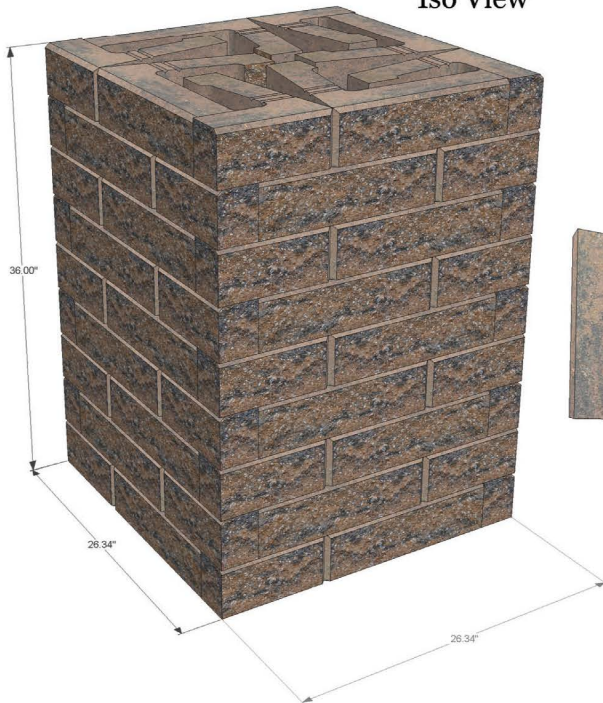
## GeoStone Column

- Half / Whole Outside Corner 4x
- 6 GeoStone blocks per course

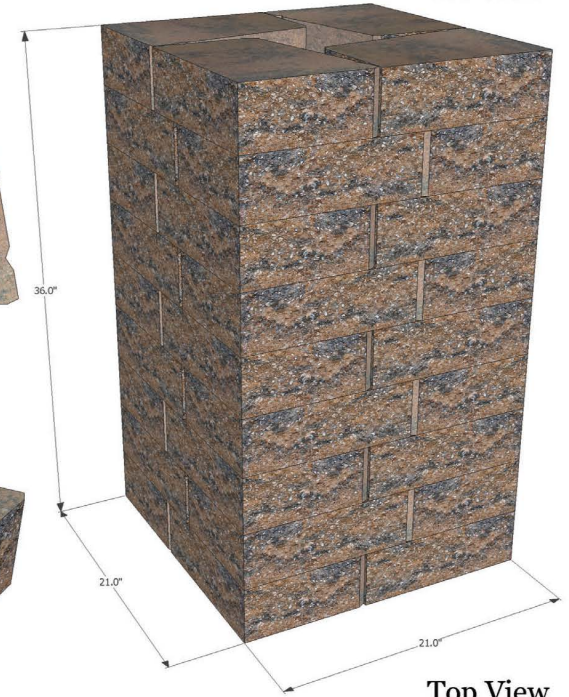
Top View



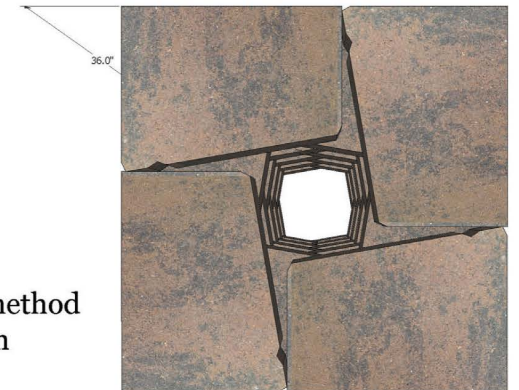
Iso View



Iso View



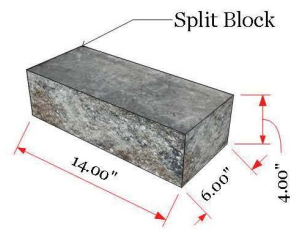
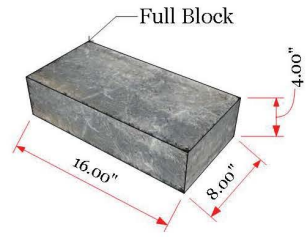
Top View



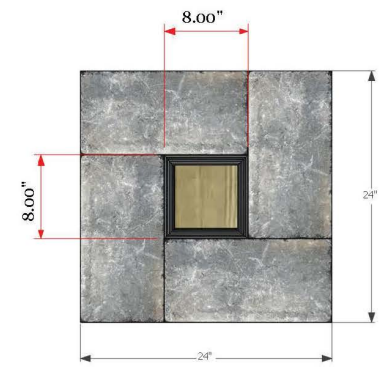
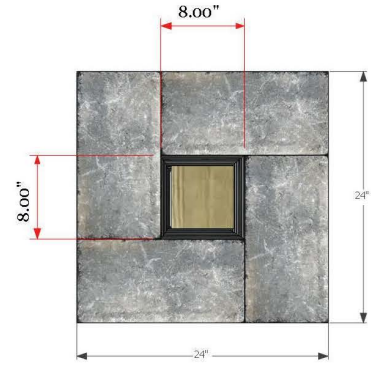
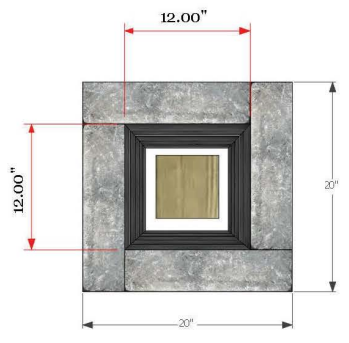
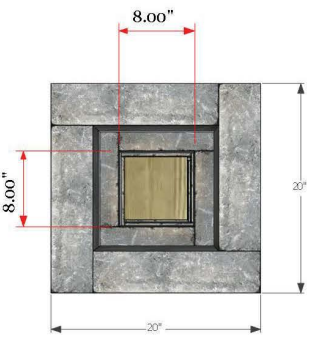
## Cap Column

- Split Universal Cap in Half
- 2 Cap blocks per course
- Usually most cost effective method
- Only works with caps split on front and back.

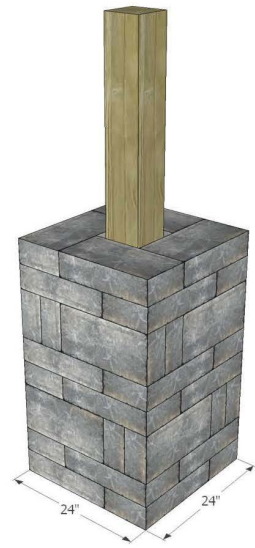
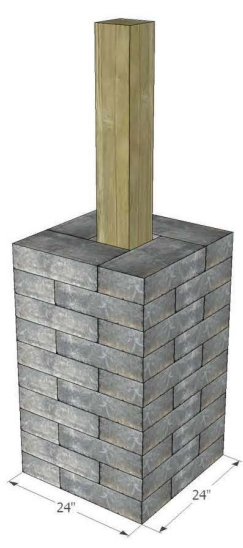
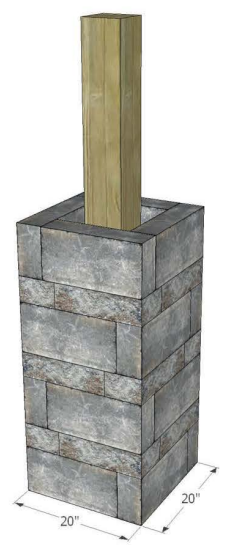
# Rumble Wall Columns



Bottom View



Isometric View



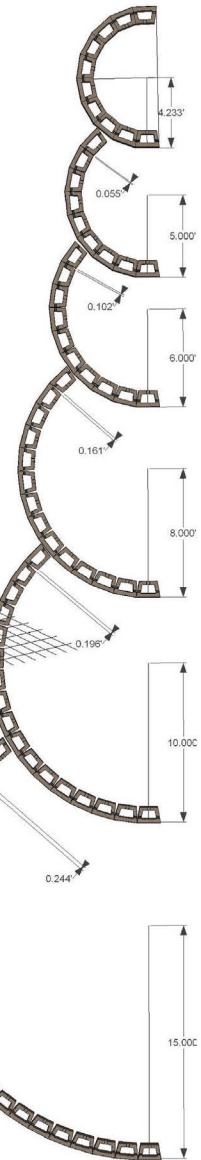
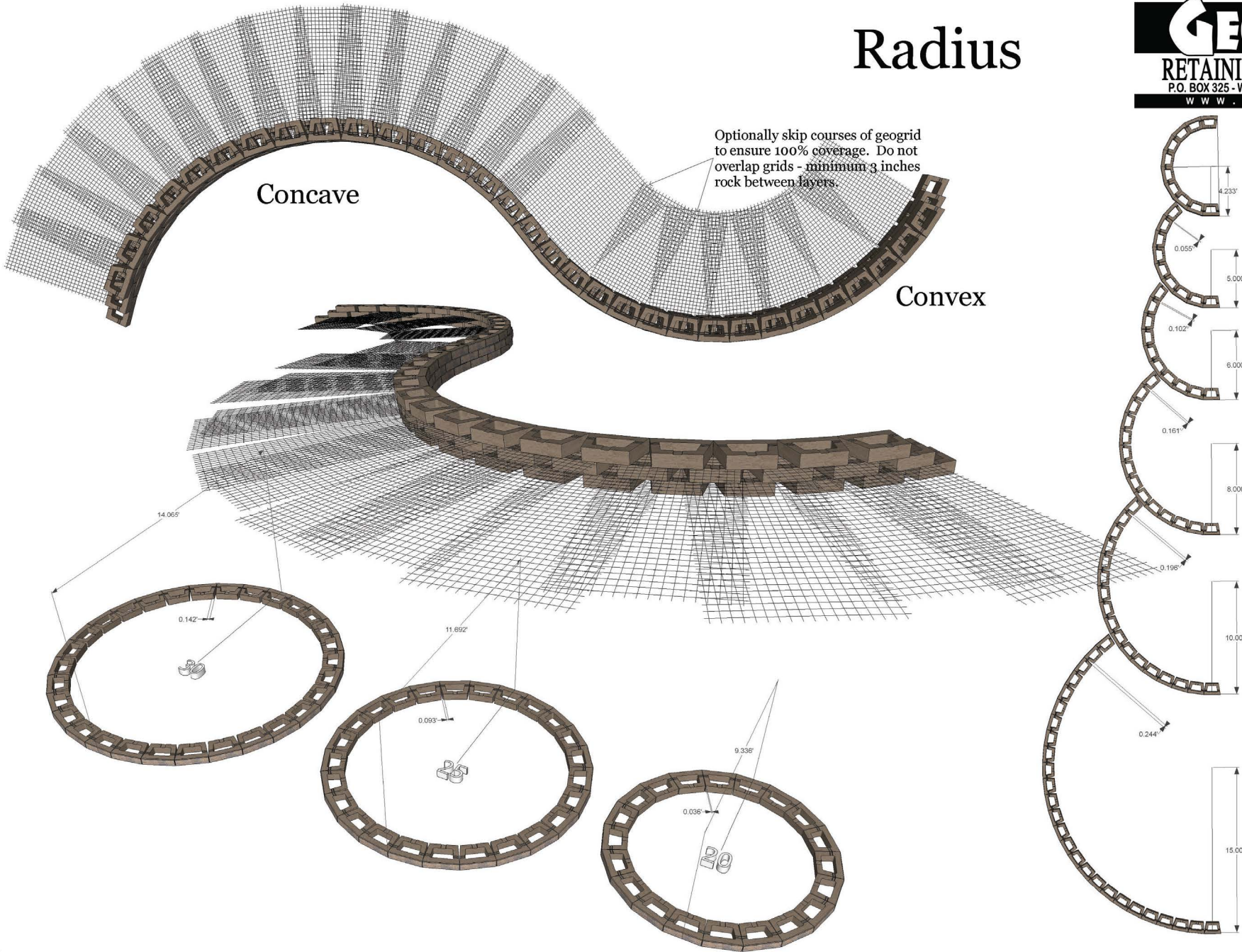
# Radius



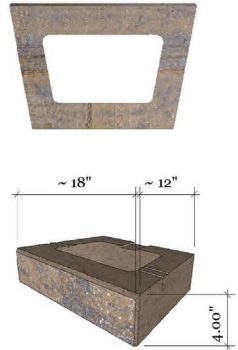
Concave

Convex

Optionally skip courses of geogrid to ensure 100% coverage. Do not overlap grids - minimum 3 inches rock between layers.



GeoStone Retaining Walls  
 Various Wall Profile  
 P.O. Box 325  
 Westover, AL 35185  
 Tel: 205-678-9969  
 Toll Free: 877-GEO-9900  
 http://geostone.com



**Various Radius Applications**  
 Product Used:  
 GeoStone Landscape Block  
 -4"x18"x12" - 36 lbs  
 -AutumnBlend Color shown

**DRAWN BY**  
 DJA

**ISSUE**  
 07/06/2015

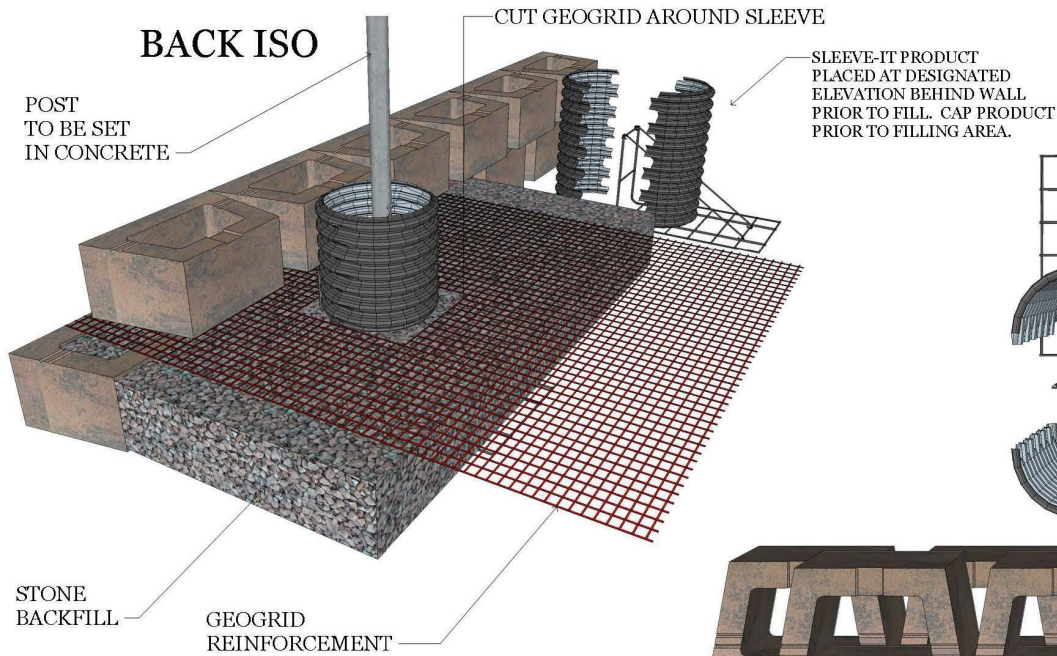
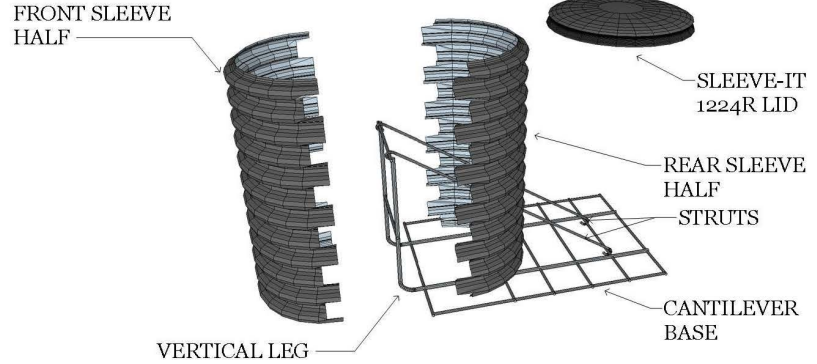
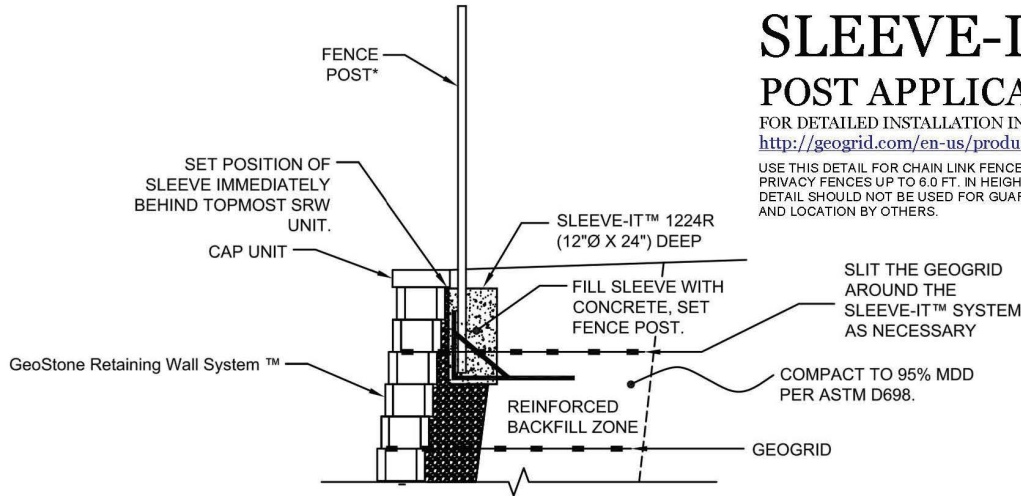
**RE-ISSUE**  
 00.00.00 (0)

**DESCRIPTION**  
 The walls in this drawing are for illustration purposes only and were designed according to industry standards and procedures. Certain factors such as drainage, soils, surcharge, etc. will effect the overall design of the wall. It is recommended that all drawings be verified by a professional engineer before applying to actual situations.

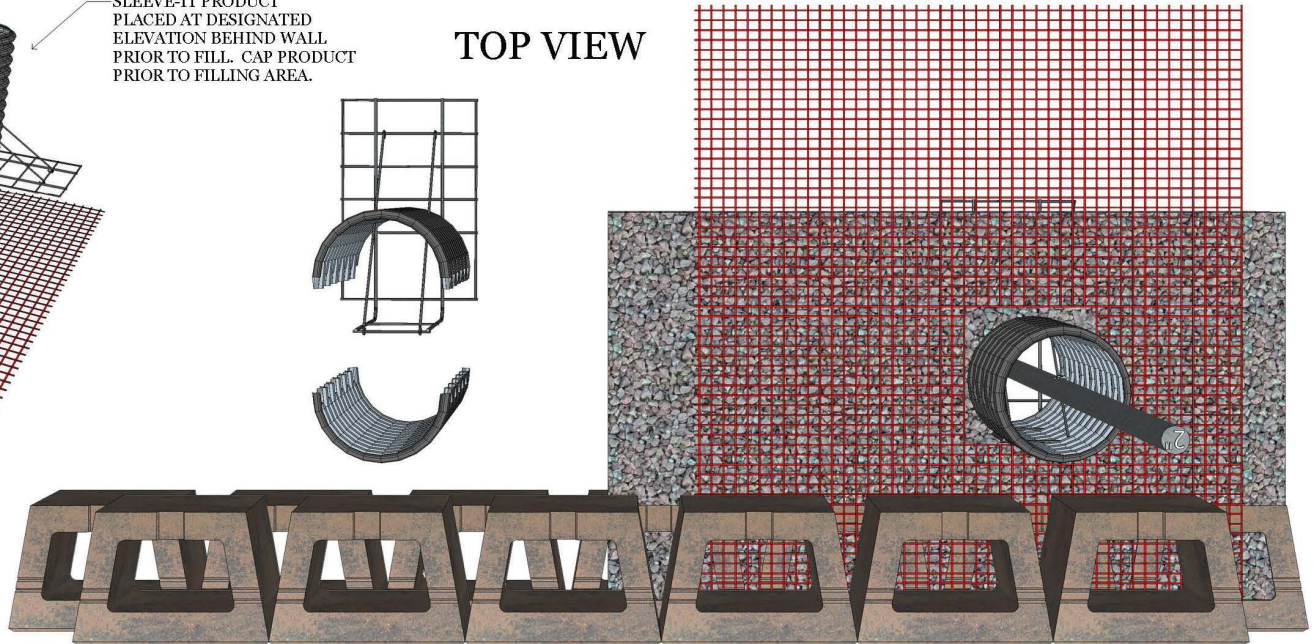
# SLEEVE-IT™ POST APPLICATION

FOR DETAILED INSTALLATION INSTRUCTIONS PLEASE VISIT:  
<http://geogrid.com/en-us/products/sleeve-it-system/>

USE THIS DETAIL FOR CHAIN LINK FENCES UP TO 8.0 FT. IN HEIGHT,  
 PRIVACY FENCES UP TO 6.0 FT. IN HEIGHT WITH MAX. 4"x4" POSTS. THIS  
 DETAIL SHOULD NOT BE USED FOR GUARD RAIL POSTS FENCE DESIGN  
 AND LOCATION BY OTHERS.



## TOP VIEW



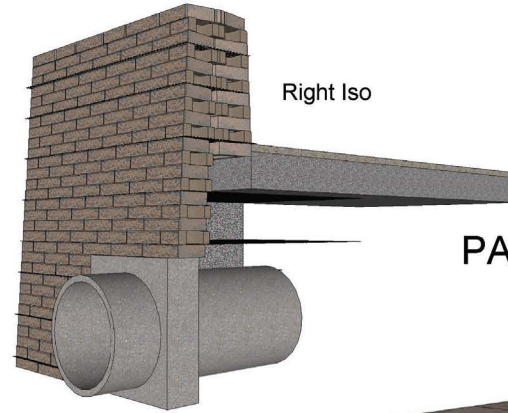
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**DESCRIPTION**

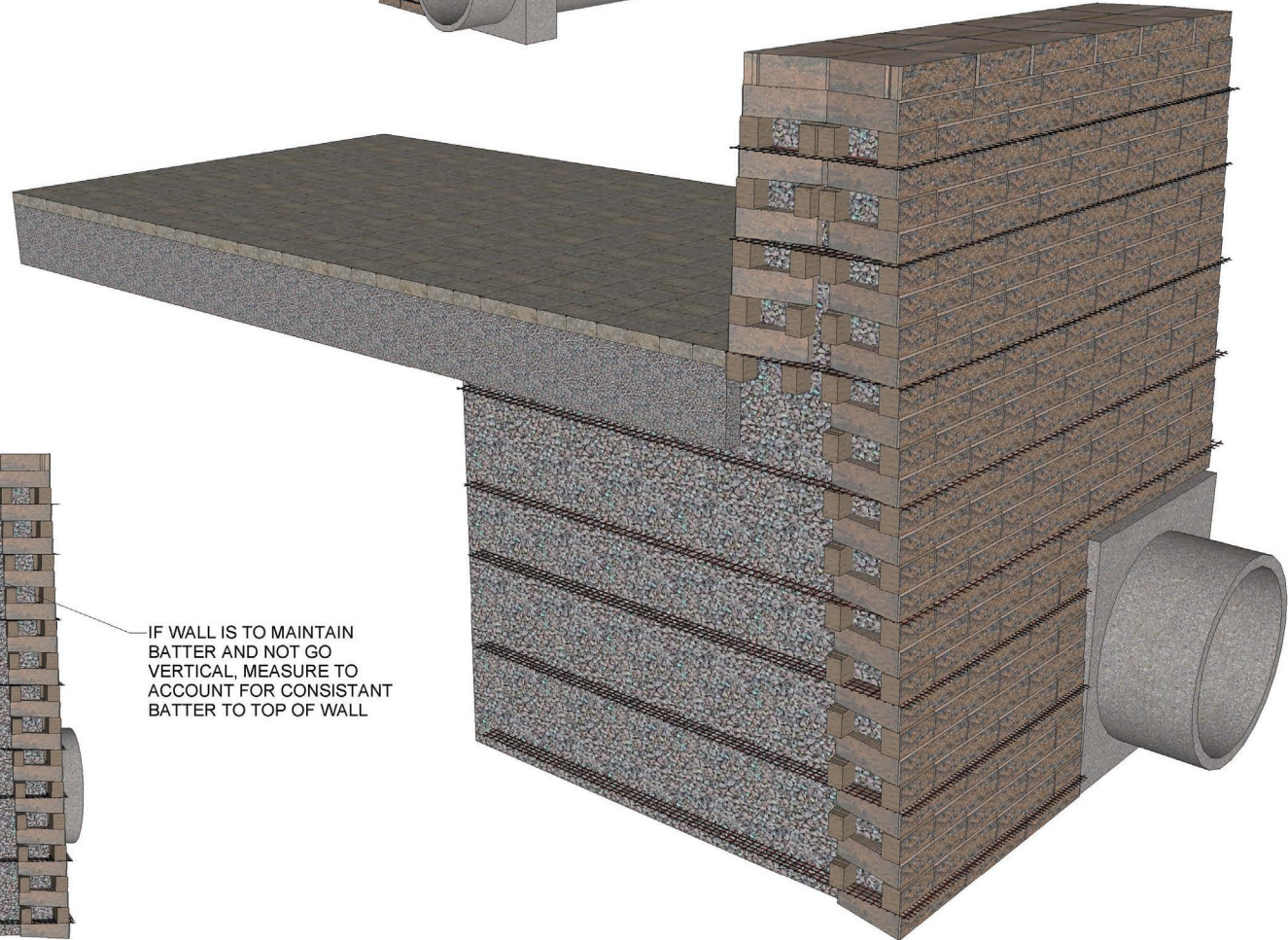
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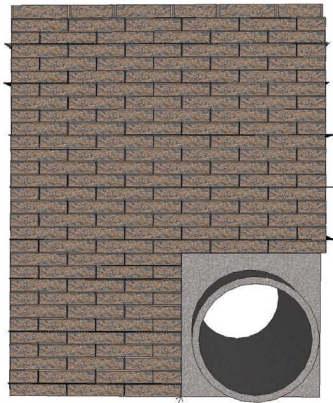
**PARAPET / CULVERT APPLICATION**



Left Iso

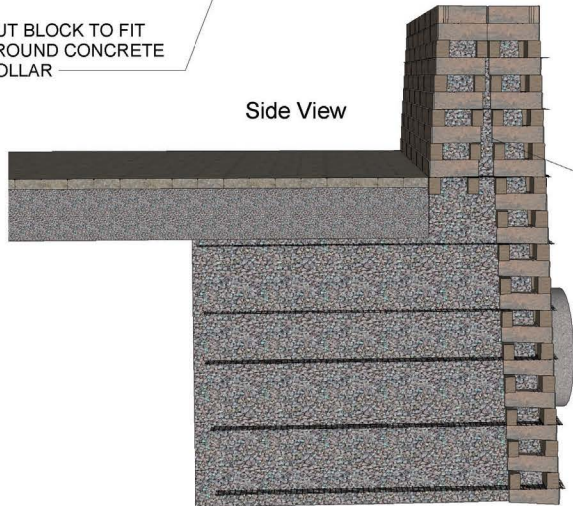


Front View



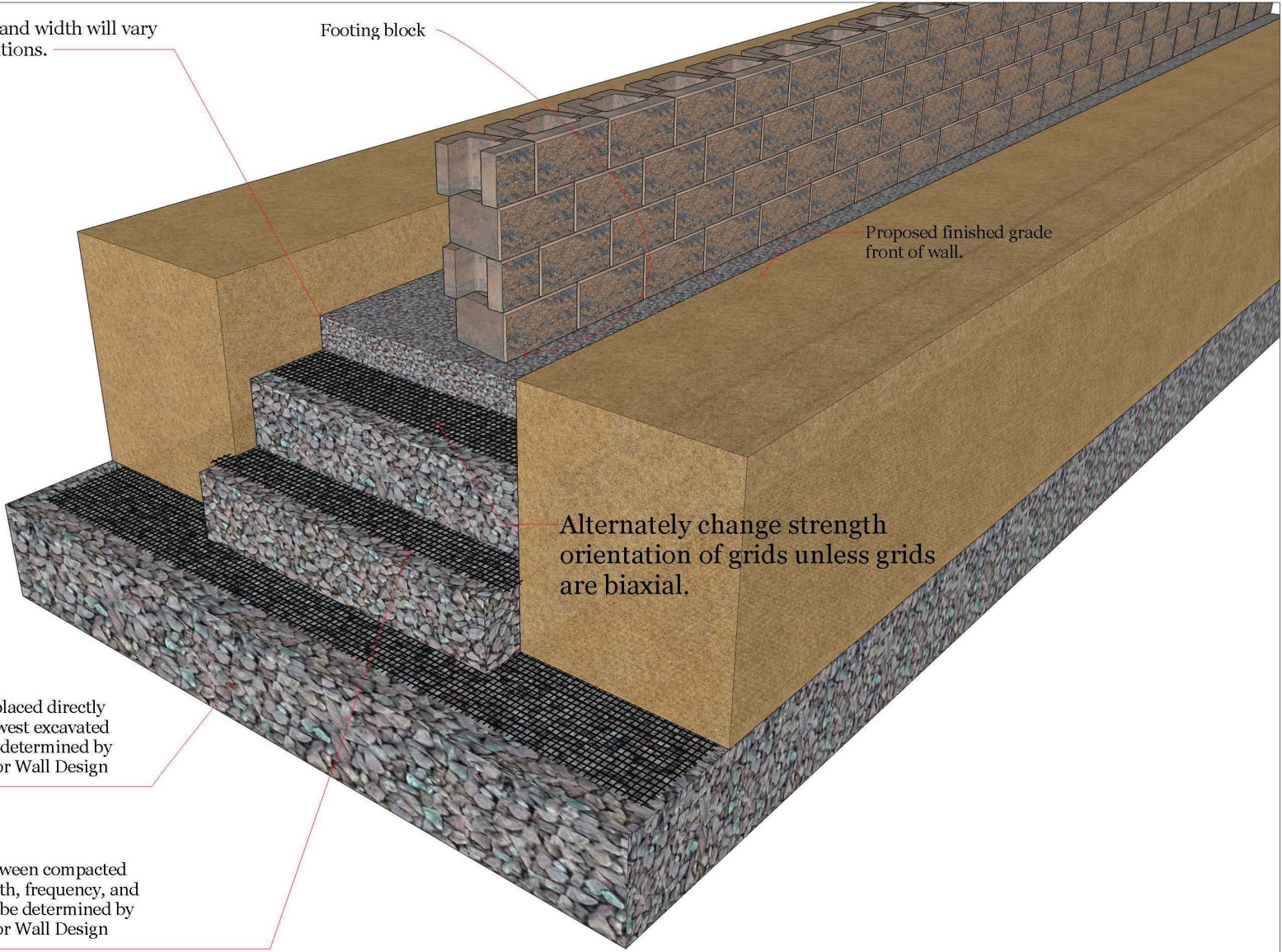
CUT BLOCK TO FIT AROUND CONCRETE COLLAR

Side View





# RAFT FOOTING



Raft footing depth and width will vary based on soil conditions.

Footing block

Proposed finished grade front of wall.

Alternately change strength orientation of grids unless grids are biaxial.

Larger Rock to be placed directly unstable soils at lowest excavated point. Depth to be determined by Geotechnical and/or Wall Design Engineer.

Sandwich grids between compacted rock layers. Strength, frequency, and length of grids will be determined by Geotechnical and/or Wall Design Engineer.

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 DJA

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 09.04.12

RE-ISSUE  
 00.00.00 (0)

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