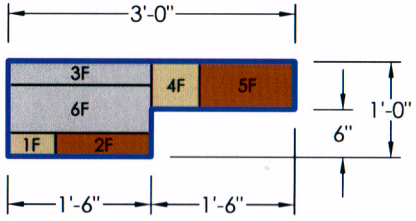
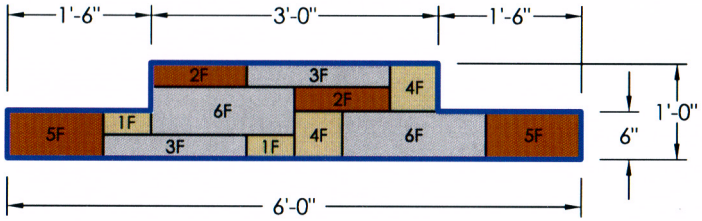
WALL PATTERNS - RETAINING

Belvedere Collection blocks are provided in six sizes. This gives you the flexibility to arrange the blocks in various configurations and create a custom look for your project. Here are some sample patterns to help you get started. These base patterns can be fit together in multiple ways to make walls of varying heights and lengths. Try these patterns and feel free to experiment with your own.

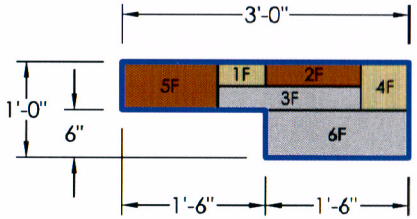
Notation: The blocks labels used below make reference to the block numbering shown on pages 4 and 5, with F and B indicating the front (longer side) and back (short side) of the block respectively. For example, 4F would indicate the front face of block 4, being the 6" wide by 6" high block shown on page 4.



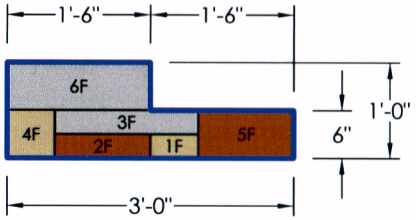
12" Top Left End



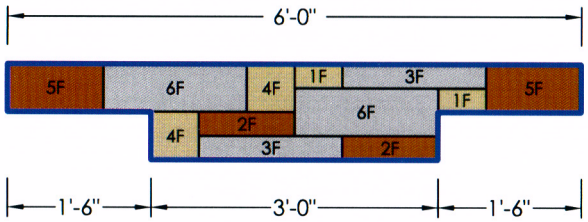
12" Pattern



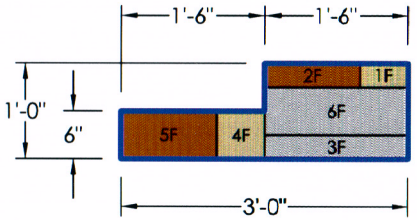
12" Top Right End



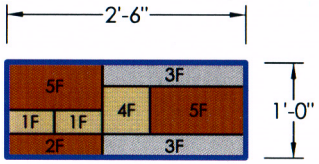
12" Bottom Left End



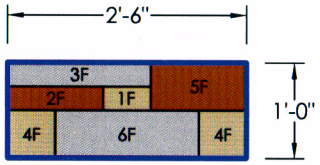
12" Pattern - Upside Down



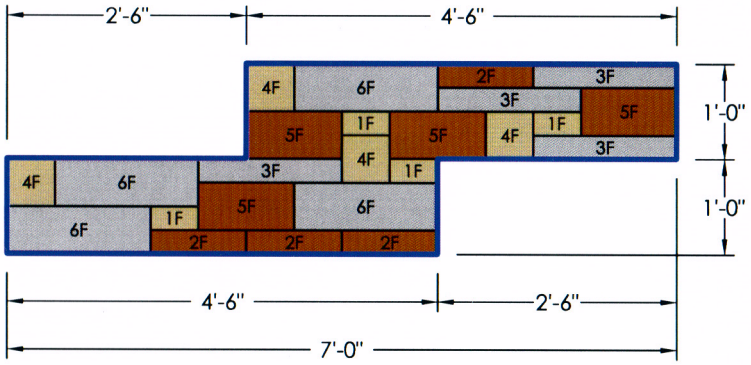
12" Bottom Right End



Corner Filler Pattern 1



Corner Filler Pattern 2

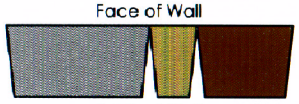


24" Pattern

NOTE: These patterns are NOT required and are presented for reference only. They are most useful for long, straight sections of retaining walls.

NOTE: Retaining walls are typically constructed with the front face of the block exposed. The v-shaped notches which appear on the back of wall between adjacent blocks must be filled with drainstone.

Block Orientation (Top View)

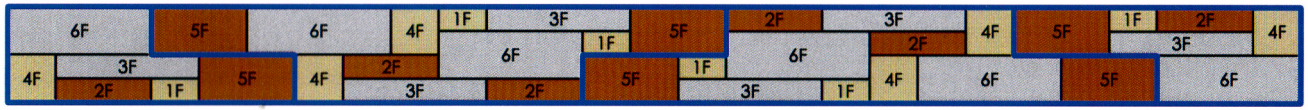


WALL PATTERNS - RETAINING (CONTINUED)

This page shows wall layouts created from combining different sample patterns. These are examples only and are presented as aides for construction. You are welcome to adjust block placement as desired and not required to follow these layouts.

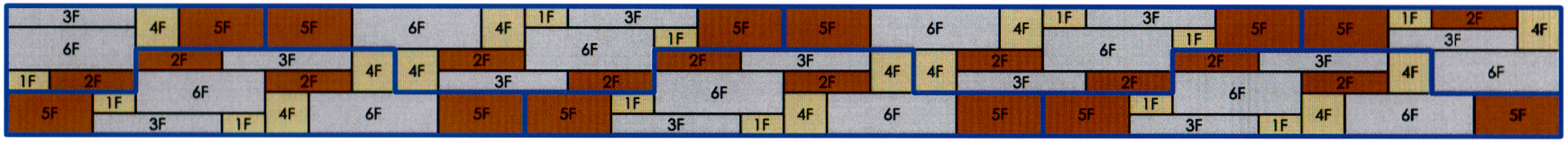
Notation: The blocks labels used below make reference to the block numbering shown on pages 4 and 5, with F and B indicating the front (longer side) and back (short side) of the block respectively. For example, 4F would indicate the front face of block 4, being the 6" wide by 6" high block shown on page 4.

12" High Wall



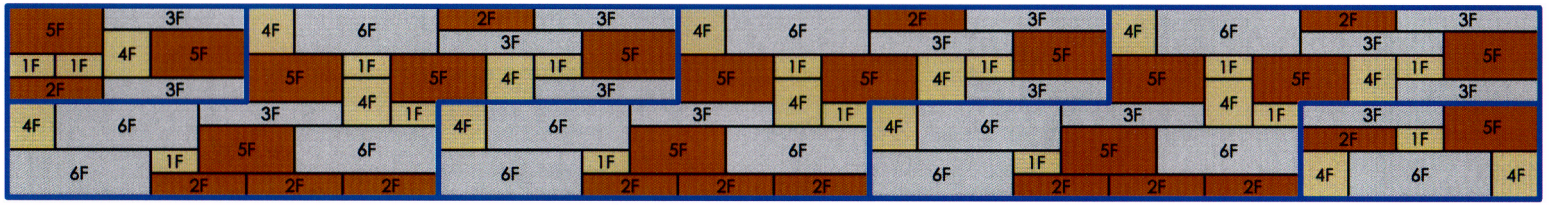
12" High x 13'-6" Wall Section Shown = 13.5 sft (1/2 Wall Pallet)

18" High Wall



18" High x 18'-0" Wall Section Shown = 27.0 sft (1 Wall Pallet)

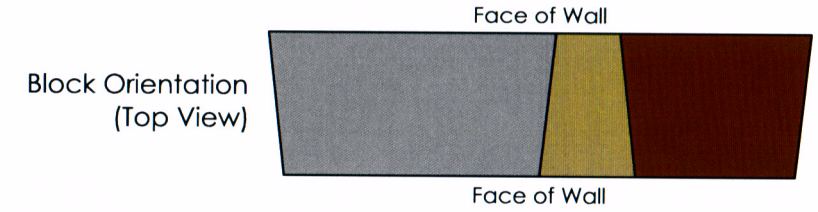
24" High Wall

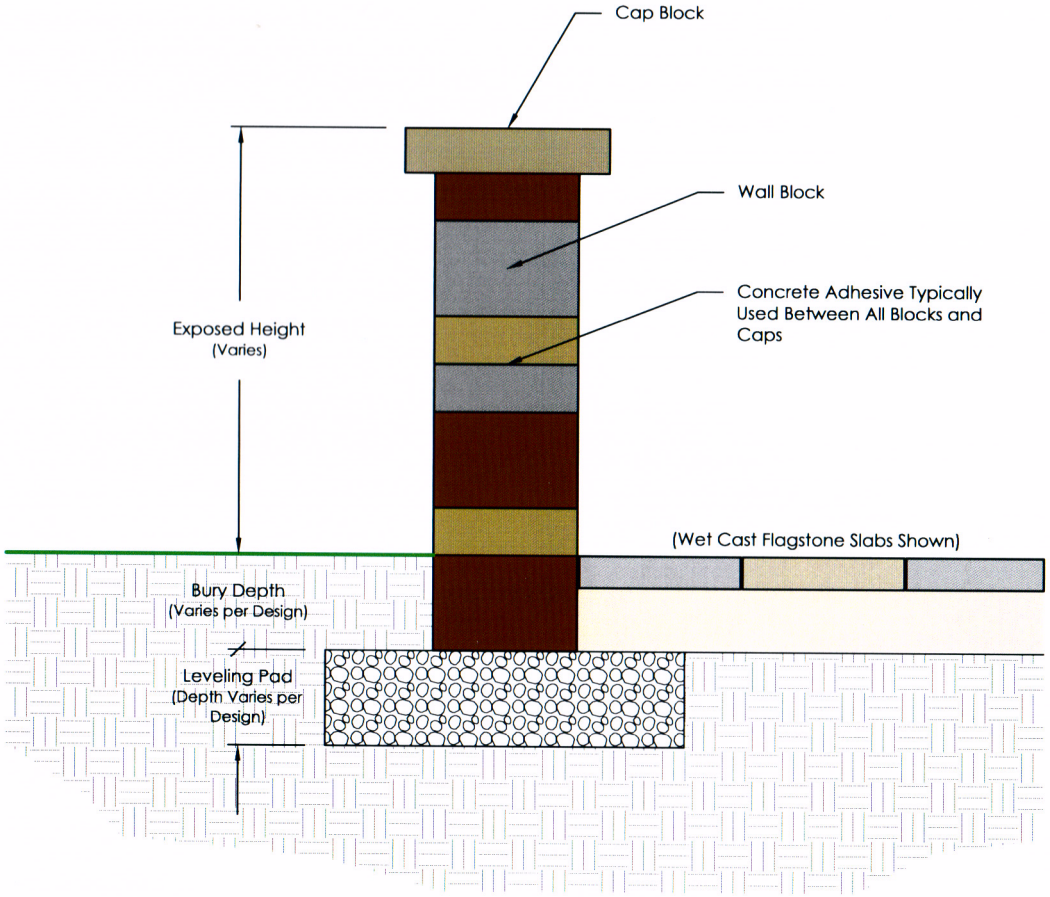


24" High x 16'-0" Wall Section Shown = 32.0 sft (Approx. 1.2 Wall Pallets)

TYPICAL FREESTANDING WALL CONSTRUCTION DETAILS

This page shows typical construction details for Belvedere freestanding walls. These drawings are representative of major components required in wall construction. Belvedere freestanding walls are intended to be low walls (24" or lower) used in a garden or patio setting. Taller walls, walls intended to act as railings or barriers, walls constructed in other settings, or walls subject to applied loads will require project specific engineering.





Belvedere Freestanding Installation Notes

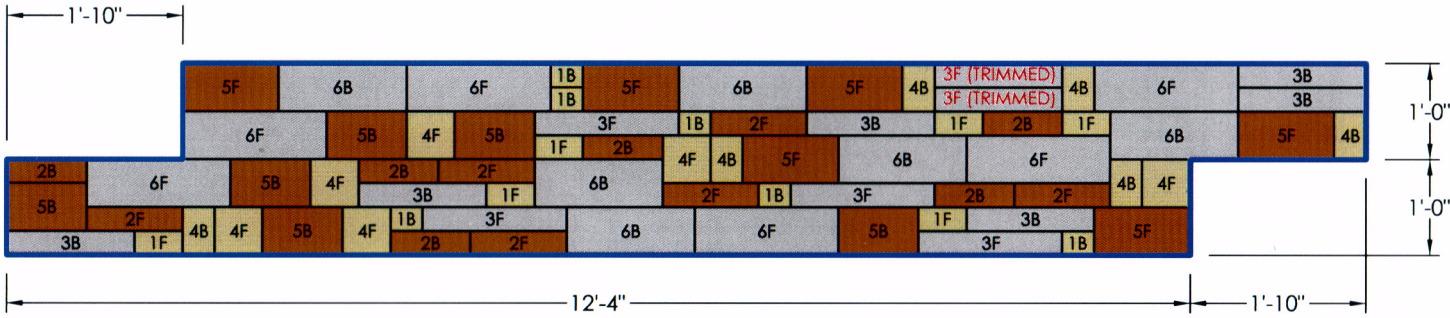
1. Leveling pad excavation should be to the depth shown in the engineered plans for the wall, but at least 6" (150 mm) below the elevation of the bottom block in the wall.
2. Leveling pad excavation should be a minimum of 21" (530 mm) wide, which will provide 6" (150 mm) on both sides of the bottom block.
3. Existing foundation soil (native soil below wall) should be compacted to a minimum of 95% of standard proctor before leveling pad material is introduced. Foundation soil should be firm, dry and free of debris, stones, roots, etc. Consult a soils engineer if soil stability is in doubt.
4. Place crushed stone or well-graded road gravel leveling pad material as specified in the wall design. Compact using a vibrator plate compactor.
5. Walls shall have the bottom course buried to the depth shown on the engineered design. Typically, walls are buried 4" to 6" (100 mm to 150 mm).
6. Place the bottom course of wall blocks. Take care to level the blocks both parallel and perpendicular to the wall. Adjacent blocks should be placed so the tapers on the sides are going opposite directions to provide a uniform wall face with no gaps on either side of the wall.
7. Place successive units to the desired wall height.
8. Typically, concrete adhesive is used between all blocks and the coping layer to help provide additional stability of the blocks.
9. To increase the stability of freestanding walls, it is recommended that pillars be used at free ends, and/or curves be built into the wall, for additional support.

· This drawing is for reference only.
· Final designs for construction for walls subject to any loading must be prepared by a registered Professional Engineer.
· Block sizes and placement shown are for reference only. Individual Belvedere blocks will vary with installation pattern.

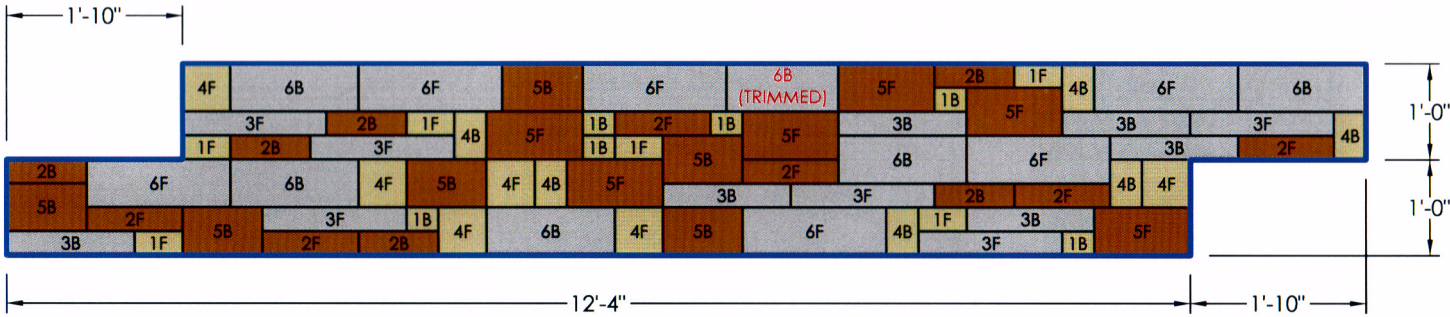
WALL PATTERNS - FREESTANDING

Belvedere Collection blocks are finished on front and back faces and tapered on both sides. When the blocks are installed with alternating front face and back faces of the blocks on the same side of the wall, the blocks fit tight together providing a continuous freestanding wall which has face textures on both sides. This page shows some sample patterns which can be fit together to make walls of varying heights and lengths. These are examples only and are presented as aides for construction. You are welcome to adjust block placement as desired and not required to follow these layouts.

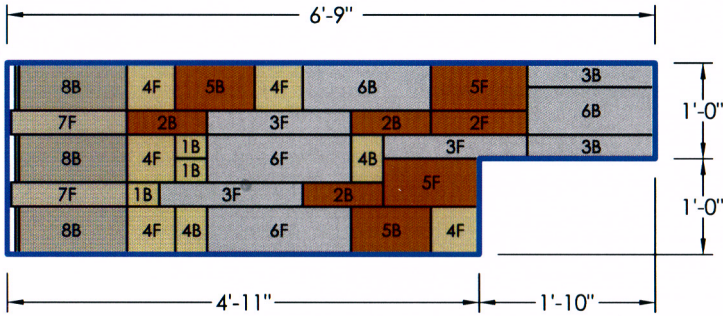
Notation: The blocks labels used below make reference to the block numbering shown on pages 4 and 5, with F and B indicating the front (longer side) and back (short side) of the block respectively. For example, 4F would indicate the front face of block 4, being the 6" wide by 6" high block shown on page 4.



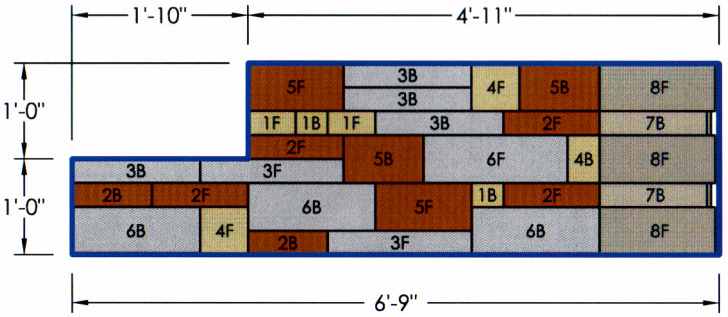
24" Pattern A
Wall Section Shown = 24.67 sft
(1 Wall Pallet)
Note: 2" must be trimmed from (2) 3" blocks to make this pattern



24" Pattern B
Wall Section Shown = 24.67 sft
(1 Wall Pallet)
Note: 2" must be trimmed from (1) 6" block to make this pattern



24" High Vertical End - Left
Wall Section Shown = 11.67 sft (Approx. 1/2 Wall Pallet)
Note: Vertical End jogs in and out approximately 1" between blocks

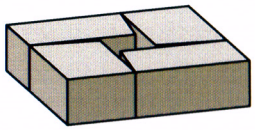


24" High Vertical End - Right
Wall Section Shown = 11.67 sft (Approx. 1/2 Wall Pallet)
Note: Vertical End jogs in and out approximately 1" between blocks

NOTE: These patterns are NOT required and are presented for reference only. They are most useful for long, straight sections of freestanding walls. Blocks can also be fit together on-site with select blocks trimmed as necessary to complete your wall.

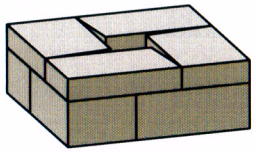
PILLAR CONSTRUCTION DETAILS

This page shows typical construction details for Belvedere pillars. Pillars make nice ends to freestanding walls, formal stair openings, stand-alone monuments, and other areas to enhance your Belvedere project. The basic steps of pillar construction are shown here. Feel free to expand on these ideas and bring your own creativity into creating a custom project.



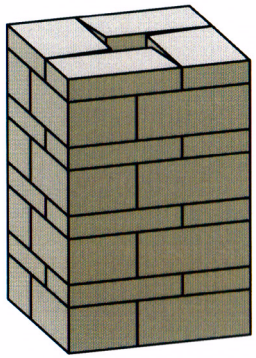
Step 1

Place (4) 3" or 6" high corner blocks with the taper facing into the center of the pillar.



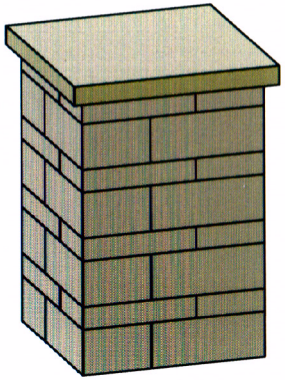
Step 2

Place the second row of (4) of the corner blocks with the taper facing into the center of the pillar. Typically if the first row is built with 6" corner blocks, the second row is built with 3" corner blocks.



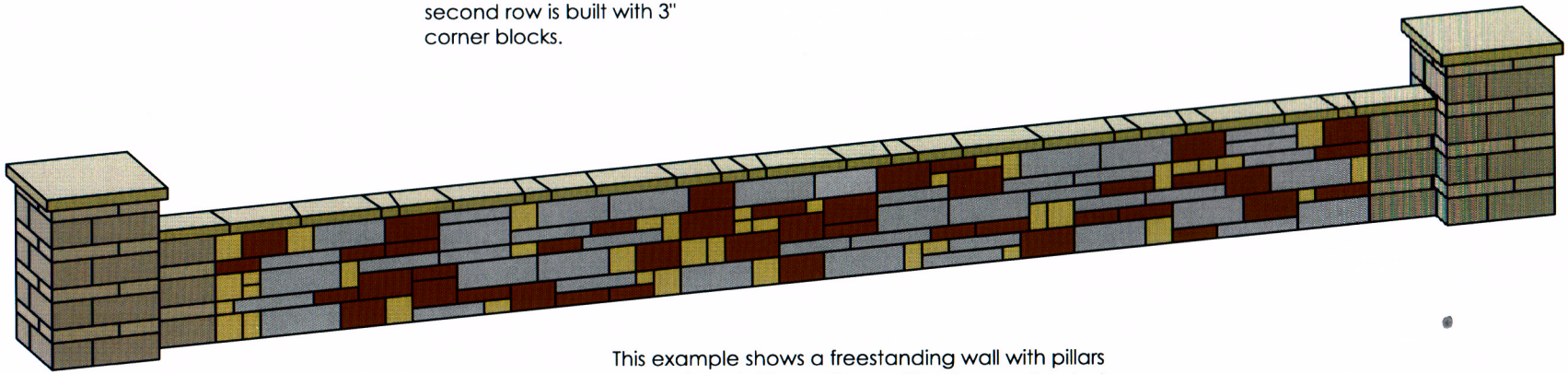
Step 3

Continue with subsequent rows to the desired pillar height. One pallet of corner blocks will make a 24" x 24" x 36" high column.



Step 4

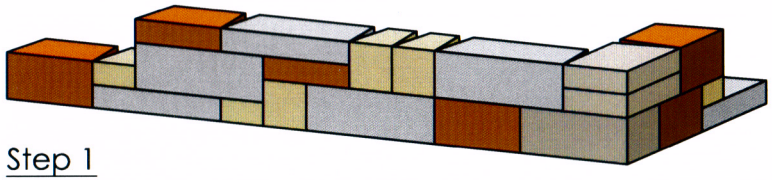
Place a column cap to finish the pillar. The column cap can be cored as needed for installation of a light.



This example shows a freestanding wall with pillars on each end. The wall can either be constructed flush with the pillars, or blocks trimmed to interlock the end of the wall with the pillar.

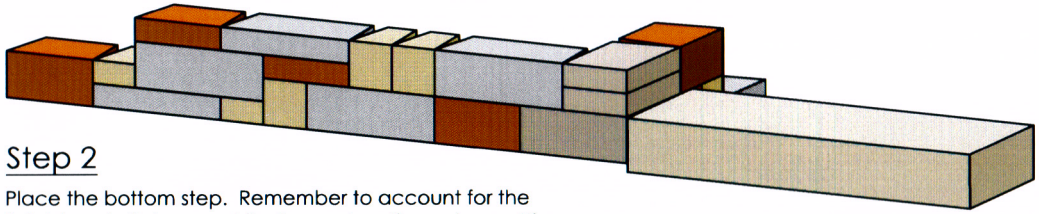
INSIDE STEPS

This page shows typical construction details for making stair openings into a wall using Belvedere blocks and Rosetta dimensional steps. Stairs are a focal point in any project and need to be constructed properly. With some advance planning, installation can be easy and look great.



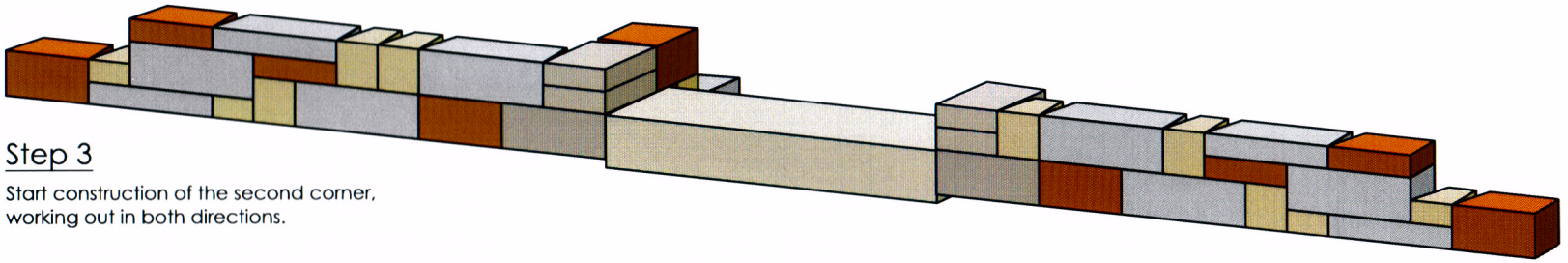
Step 1

Start construction of the first corner, working out in both directions.



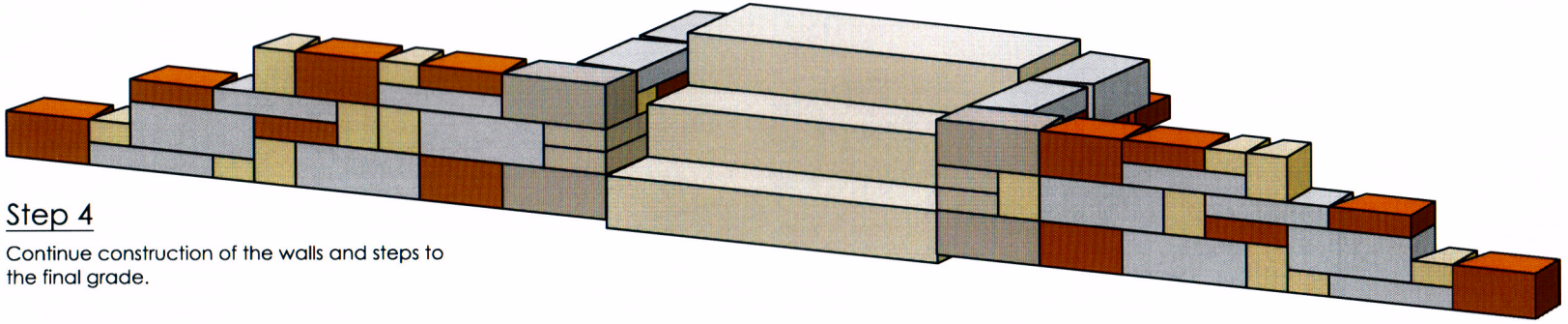
Step 2

Place the bottom step. Remember to account for the total rise of all steps and final cap elevations when setting the grade for the bottom step. Also remember to place the steps at a 1% - 2% grade to allow surface water drainage and avoid ponding on the steps.



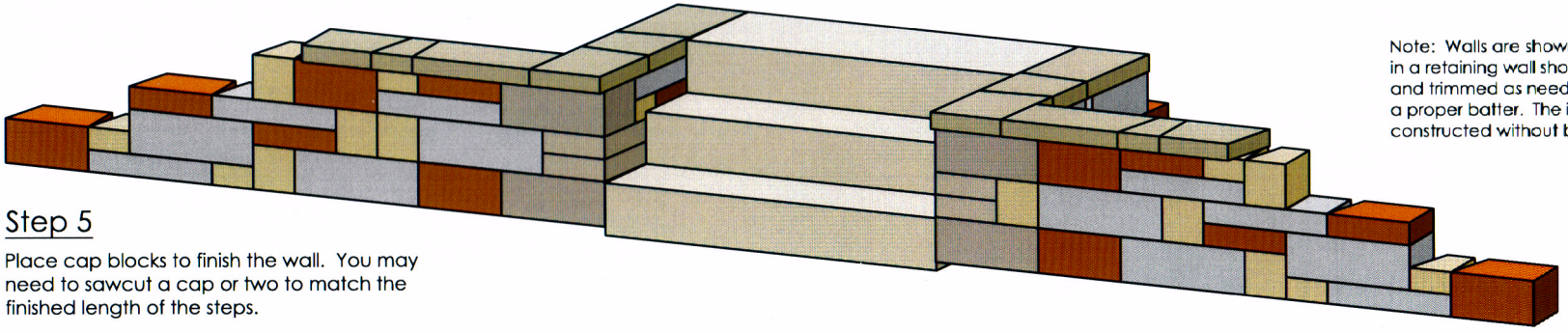
Step 3

Start construction of the second corner, working out in both directions.



Step 4

Continue construction of the walls and steps to the final grade.



Step 5

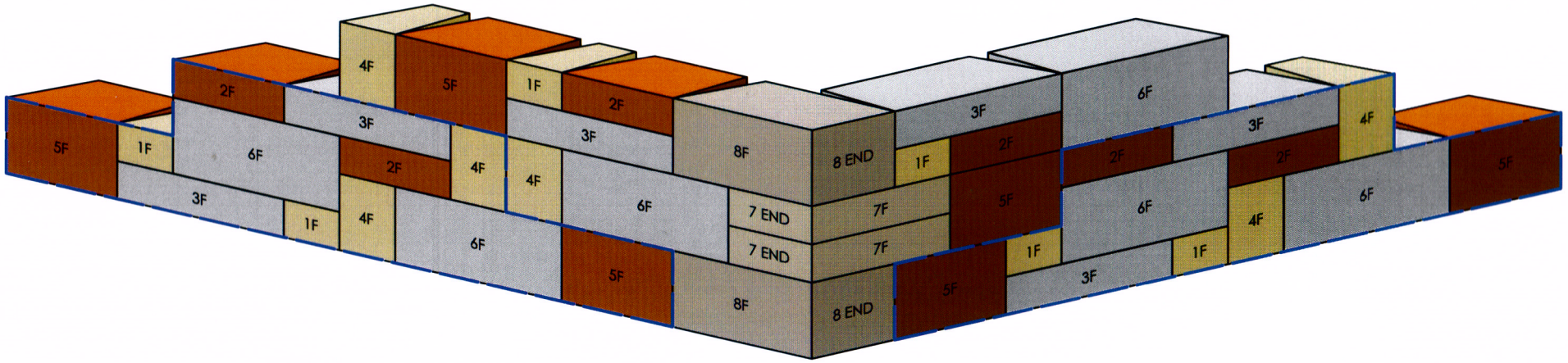
Place cap blocks to finish the wall. You may need to sawcut a cap or two to match the finished length of the steps.

Note: Walls are shown without batter for clarity. Blocks in a retaining wall should be adjusted slightly in place and trimmed as needed to allow wall construction with a proper batter. The inside wingwalls are typically constructed without batter to match the steps.

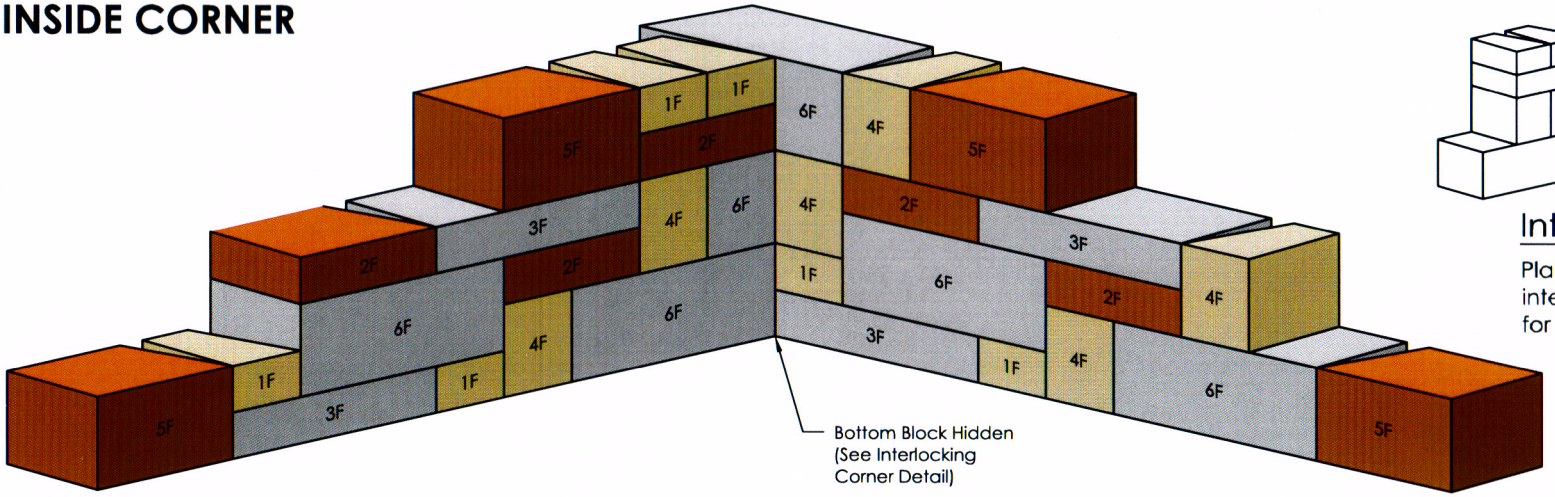
CORNER DETAILS

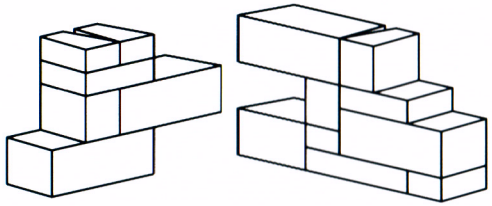
This page shows typical construction details for making 90° corners with Belvedere blocks. Some basic concepts are shown here. Plan to take some time to properly work corners into the larger retaining and freestanding wall patterns.

OUTSIDE CORNER



INSIDE CORNER





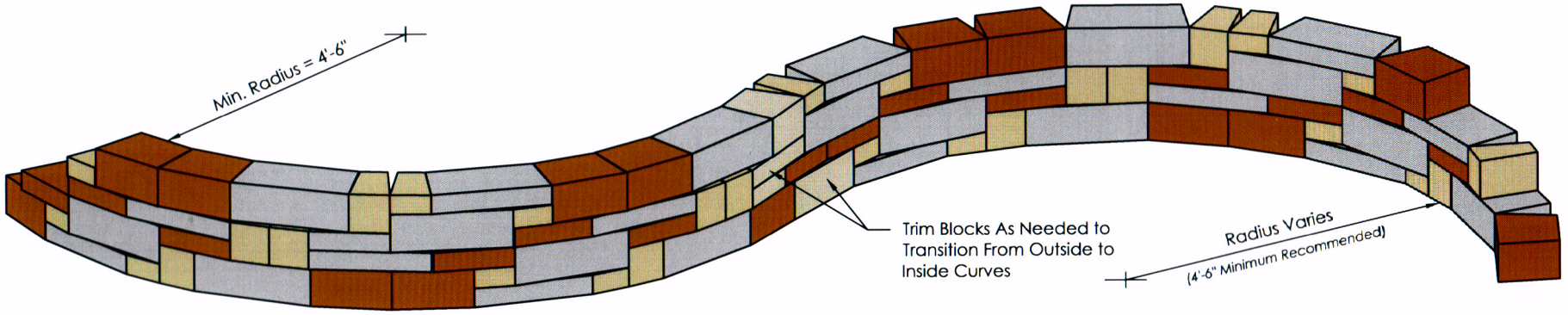
Interlocking Corner

Place blocks in an overlapping, interlocking pattern at corner for added wall stability.

Note: Walls are shown without batter for clarity. Blocks in a retaining wall should be adjusted slightly in place and trimmed as needed to allow wall construction with a proper batter.

CURVED WALLS

This page shows typical construction details for making curved retaining walls with Belvedere blocks. The taper on the sides of the blocks allow for construction of a wide range of curves in both retaining and freestanding walls.



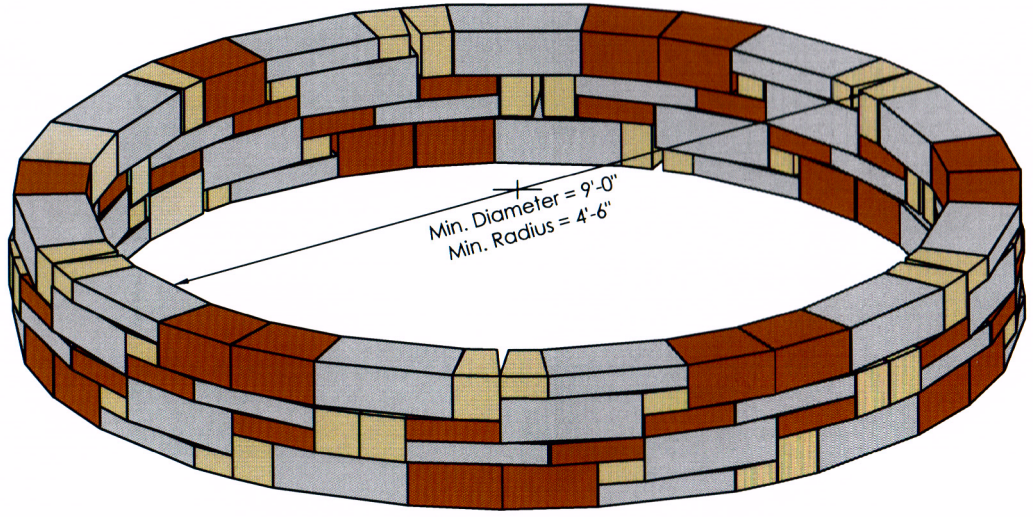
OUTSIDE CURVE **INSIDE CURVE**

Notes:

1. These details show curved retaining walls.
2. Minimum radius curves are shown which can be constructed without sawcutting a significant number of blocks. Larger radius curves can be created by leaving a larger gap between blocks on the back side of the wall. The gaps must be filled with drainstone.
3. When retaining walls are constructed with a batter, the radius on outside curves becomes smaller with each course due to the block setback. For proper construction, the radius of the bottom course must be larger than the minimum radius so upper courses will have sufficient room for construction.
4. When retaining walls are constructed with a batter, the radius on inside curves becomes larger with each course due to the block setback.

Curved Freestanding Walls:

Curved freestanding walls can also be built. Typically, the blocks have to be field adjusted to make the desired curve. Front and back faces will alternate and blocks trimmed as needed to provide a tight fit between blocks with no gaps on either side of the freestanding wall.



PLANTER / TREE RING

Note: Walls are shown without batter for clarity. Blocks in a retaining wall should be adjusted slightly in place and trimmed as needed to allow wall construction with a proper batter.