

belvedere

retaining wall installation guide



Congratulations on purchasing one of the finest retaining wall systems available. Easy to install, Belvedere retaining walls were created with the do-it-yourself landscaper in mind. This wall system produces an attractive wall with natural looking stone texture surfaces on all sides.

Step-by-Step Installation

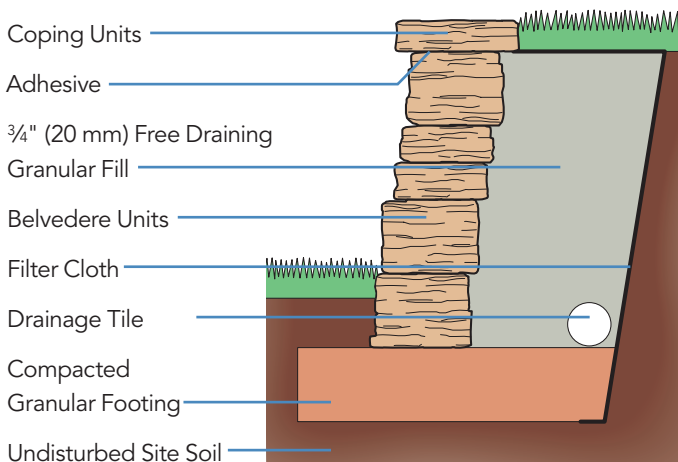
The directions in this guide are for the installation of a typical barkman Belvedere retaining wall measuring 2' in height and under. Use the wall diagrams shown here when you plan your design. Ask your dealer or contractor for further information.

Equipment Needed

- Standard carpenter's level, gloves, knee pads, trowel, rake, shovels, wheelbarrow, broom, 2 to 3 lb. hammer, chisel and safety glasses
- Wooden stakes or metal pegs
- Hand tamper
- Concrete saw with a diamond blade (available at rental stores)

construction details

Retaining Wall Cross Section



Retaining Wall Block Orientation (Top View)

Face of Wall



Back of Wall

Freestanding Wall Cross Section

Coping Units

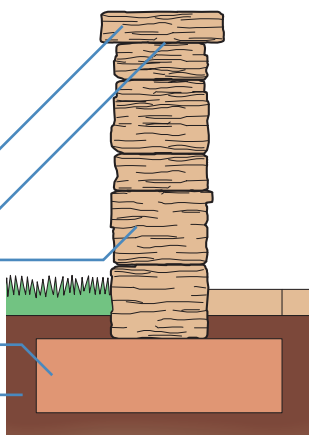
Adhesive

Belvedere Units

Compacted

Granular Footing

Undisturbed Site Soil



Freestanding Wall

Block Orientation (Top View)

Face of Wall



Face of Wall

Due to block orientation, coverage is reduced to approximately 25 sq. ft./pallet in Freestanding Walls.

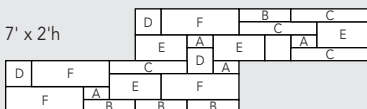
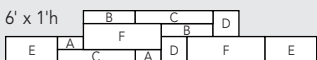
estimating

Units Needed

$\frac{\text{length (in feet)} \times \text{height (in feet)}}{27 \text{ (for retaining wall) or } 25 \text{ (for freestanding wall)}}$	=	number of pallets
$\frac{\text{length (in feet)}}{22}$	=	number of coping pallets

First, determine the length and height of your wall (keep in mind coping is an additional 2¼" h). Then, to determine the number of pallets required for a solid wall, multiply the length of the wall by the height of the wall. Next, divide by 27 (for a retaining wall) or 25 for a freestanding wall. Each pallet contains 72 units in 6 various sizes (12 each) (see below) that will create a 27 sq. ft. retaining wall face or a 25 sq. ft. freestanding wall face. For coping, divide entire length of wall by 22. Each coping pallet contains 72 units in 5 various sizes that measures 22 linear ft.

Pattern Layouts (Retaining Wall)



A 6"(4)" x 9" x 3" h

B 12"(10)" x 9" x 3" h

C 18"(16)" x 9" x 3" h

D 6"(4)" x 9" x 6" h

E 12"(10)" x 9" x 6" h

F 18"(16)" x 9" x 6" h

12" h Wall

18" h Wall

24" h Wall

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Caution: Before any digging, always consult your local utility companies for the location and depth of pipes, cables and conduits. 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 is recommended when sawing or grinding operations are in progress.

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1

Plan

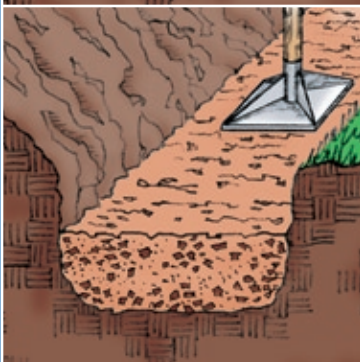
Mark a line on the ground where the front of the wall will be. Measure lengths and heights of each section and use these to calculate (using the estimating formula) the number and type of stones required. Important: Before digging, contact utilities to determine if it is safe to excavate.



2

Excavate

Remove soil to create a trench 8" deep and 16" wide. Shape slope to allow for 6" of drainage material behind the wall.



3

Prepare Base

Place filter cloth under the base and up to the exposed face of the excavation. Compact base soil and ensure native soil is stable. Fill trench with well-graded $\frac{3}{4}$ " down granular fill and compact to a depth of 2" below ground level.



4

First Course

Position a level string line to mark the location of the first course. Place the first course of units on the prepared base, ensuring each unit is level front to back and side to side. Remember that the bottom row should be approximately 2" below grade.



5

Stack Units

When stacking Belvedere units be sure to install as many sizes as possible in each wall section. Random sizes create a natural looking wall. Offset joints to avoid vertical lines as often as possible.



6

Backfill

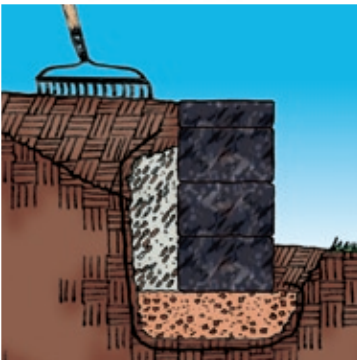
Fill behind the wall with $\frac{3}{4}$ " free draining rock. Note: It is recommended to separate draining rock from fill with filter cloth. Place soil in front of the wall to ensure that the base course is completely buried. Stack more units and backfill until the desired height is achieved.



7

Secure Coping

On the last course of wall units place a line of adhesive on the top surface. Place the Coping unit on top and apply pressure to secure.



8

Finish Grading

After backfilling to about 6" below the top of the wall, pull the filter cloth towards wall. Backfill the remaining area with top soil. Remember to slope the soil above and below the wall to ensure water will flow away, and not accumulate near the wall. Finish off by pulling the filter cloth towards the wall and place 6" of soil on top.

Note: If you want to use adhesive on all units – first assemble wall without adhesive to ensure all pieces fit together as intended – then disassemble and rebuild, gluing each unit.