

STERLING™ INSTALLATION INSTRUCTIONS - ESTIMATING MATERIALS

The Sterling™ wall system is a versatile solution for every landscape. Installation is simple with an easy to locate pin system. Create a battered retaining wall with pin placement receiving channel. The design of this block can also be split to make a two-sided unit for a freestanding wall system, steps and column units. The straight split texture blends well with surrounding landscape.

1. HOW MANY WALL UNITS ARE NEEDED?

Determine the square footage of the total wall, including buried base course. Wall square footage (SF) = length (L) x height (H).

Formal Face: $SF \times 1.39 = \text{_____} \# \text{ units}$
x .67 Retaining (using of each size)

2. HOW MANY CAP UNITS WILL I NEED?

Convert wall length (L) to inches: $L \times 12 = \text{_____} \text{ L in inches (LI)}$. Cap factor (CF) = cap front inches + cap back inches ÷ 2. (Additional caps will be needed for elevation changes and curves, factor 10%.)

$LI \div CF = \text{_____} \text{ caps.}$

3. HOW MUCH GEOSYNTHETIC REINFORCEMENT STRUCTURAL BACKFILL DO I NEED?

Choose the appropriate estimating chart based on your project conditions. For curved walls add 10%.
See page(s) XXX for charts.

STERLING™ INSTALLATION INSTRUCTIONS CONSTRUCTION GUIDE

BEFORE BEGINNING BASE COURSE, SEE BASIC INSTALLATION FOR RETAINING WALL CONSTRUCTION GUIDE SECTION FOR BASE PREP AND LEVELING PAD INSTRUCTIONS

BASE COURSE

- This is the most important step in the installation process.
- Begin laying block at the lowest elevation of the wall, whenever possible.
- Place first block and level, front to back and side to side; lay subsequent blocks in the same manner.
- Use string along back edge of the block to check for proper alignment. *See Diagram 1.*
- Place the blocks side by side, flush against each other, and make sure the blocks are in full contact with the leveling pad. Level front to back and side to side. *See Diagram 2.*
- If the wall is on an incline, don't slope the blocks. Step them up so they remain consistently level.
- Place soil in front of the base course and compact. Base course should be buried. Continue to fill and compact after each course is laid.
- Clean any debris off the top of the blocks.

CONSTRUCTION OF NEXT COURSE AND PIN PLACEMENT

- For a battered wall, place the next course of blocks and align the pin hole with the battered channel of the block on the course below. *See Diagram 3.*
- For a cantilever wall, place the next course of blocks and align with the cantilever channel of the block on the below course. *See Diagram 4.*
- Insert pins into the pin core of the block, allowing the pin to drop down into the desired channel of the block below.
- Maintain running bond with the course below.
- Place 12 inches (minimum) of drainage aggregate behind the wall units and fill voids between the wall units. Place backfill soil and compact. Only lightweight hand operated compaction equipment is allowed within 3 feet from the back of the wall.
- Clean any debris off the top of the blocks before placement of the next course.
- On curves, use partial units to stay on bond if needed. A circular saw with a masonry blade is recommended for cutting partial units. Use safety glasses and other protective equipment when cutting.

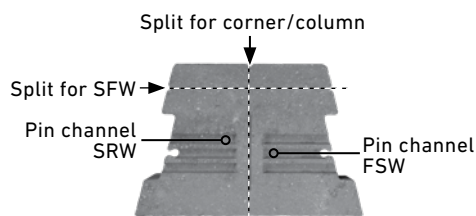


Diagram 1 - Base Course and String Line

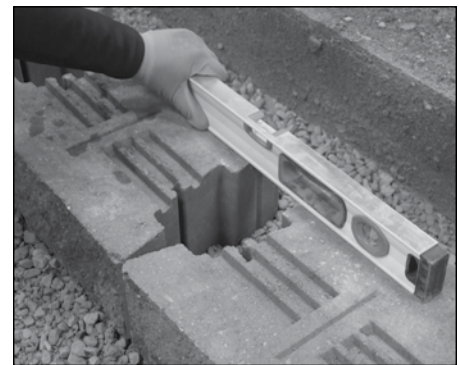


Diagram 2 - Level Each Course

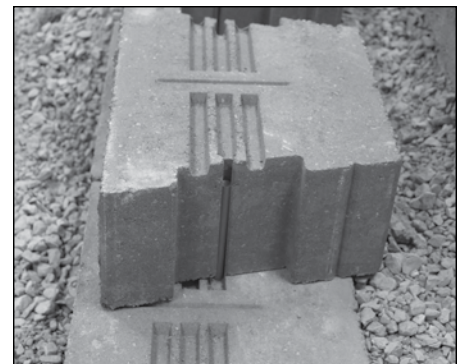


Diagram 3 - Pin Placement (Battered Channel)

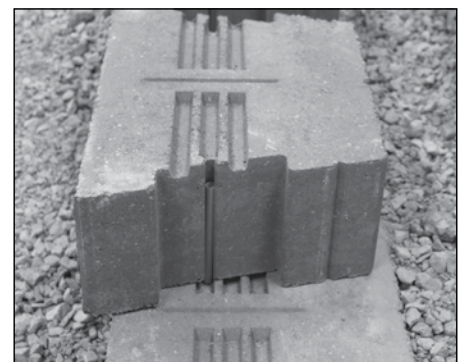


Diagram 4 - Pin Placement (Cantilever Channel)

DRAINAGE DESIGN (PER DESIGN)

- Each project is unique. The grades on the site will determine at what level to install the drainpipe. Place the drainpipe (4-inch perforated piping) so water drains down and away from the wall into a storm drain, or daylight just above grade.
- Fill in the area behind the blocks with clean drainage aggregate, at least 1 foot from the back of the wall. You may need to place and backfill several courses to achieve the proper drainage level. *See Diagram 5.*
- The outlet pipes should be spaced not more than every 50 feet and at low points of the wall. In order for the drainage aggregate to function properly, it must keep clear of regular soil fill.

REINFORCED BACKFILL PLACEMENT AND COMPACTION (PER PLAN)

- Place reinforced backfill in 6 to 8 inch loose lifts and compact to the densities specified on the approved wall construction plans.
- Only hand operated compaction equipment is allowed within 3 feet from the back of the wall.
- If the compaction equipment is too small to achieve the required compaction, thinner lifts should be used.
- Install each subsequent course in a similar manner. Repeat procedure to the extent of the wall height. *See Diagram 6.*

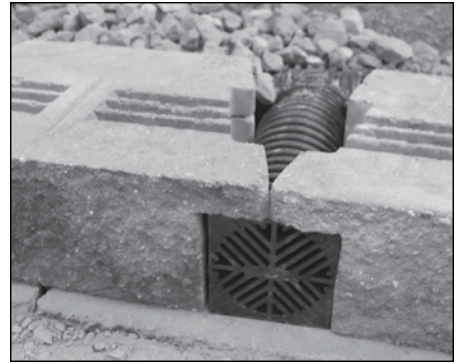


Diagram 5 - Drain Pipe Placement



Diagram 6 - Backfill and Fill Voids