STAKE OUT THE WALL
- Have a surveyor stake out the wall’s placement. Verify the locations with the project supervisor.

EXCAVATION
- Excavate for the leveling pad to the lines and grades shown on the approved plans and excavate enough soil behind the wall for the geosynthetic reinforcement material, if needed. The trench for the leveling pad should be at least 12 inches wider than the block you are installing and 6 inches deeper than the height of the block. See Diagram 1.

LEVELING PAD
- An aggregate leveling pad is made of compactable base material of 3⁄4-inch minus (with fines).
- The pad must extend at least 6 inches in front of and behind the first course of block and be at least 6 inches deep after compaction.
- If the planned grade along the wall front will change elevation, the leveling pad may be stepped up in 6-inch increments to match the grade change. Start at the lowest level and work upward whenever possible.
- Compact the aggregate and make sure it’s level front to back and side to side. Mist lightly with water before compaction. See Diagram 2.

BASE COURSE
- This is the most important step in the installation process. Bury the base course of block.
- Begin laying block at the lowest elevation of the wall. Remove the rear lip of the block by hitting from the back so that it will lie flat on the leveling pad.
- Place the first block level, front to back and side to side; lay subsequent blocks in the same manner.
- Place the blocks side by side, flush against each other, and make sure they are in full contact with the leveling pad.
- If the wall is on an incline, don’t slope the blocks; step them up so they remain consistently level. (See page 11 for more information.)
- Use string line along the back edge of block to check for proper alignment.
- For multiple-piece products, use the largest unit, 18 inches wide, for the base course.

CONSTRUCTION OF SUBSEQUENT COURSES
- Clean any debris off the top of the blocks.
- You can install these products using any combination of blocks.
- Place the second course of blocks on top of the base course. Maintain running bond. Pull each block forward as far as possible to ensure the correct setback. See Diagram 3.
- For best results, use a filter fabric, which should be placed directly behind the wall extending from the bottom of the base course to the middle of the top course. This will minimize material coming through the rough-hewn face texture of these products. We recommend a non-woven, 4- to 6-ounce fabric. See Diagram 4.
- Backfill with drainage aggregate directly behind the block, adding 6 inches at a time followed by proper compaction.
- Add soil fill behind the aggregate. Compact before the next course is laid.
- Don’t drive heavy equipment near the wall. Self-propelled compaction equipment should not be used within 4 feet of the wall.
- You may need partial units to stay on bond. A circular saw with a masonry blade is recommended for cutting partial units. Use safety glasses and other protective equipment when cutting.
- Keep the wall bond by placing units in a staggered relationship to the course beneath.
CAPPING
• Always start capping from the lowest elevation. If the wall elevation changes, caps can be stacked where the wall steps up.
• Laying caps at the elevation change and work back toward the previous step up. Cut caps with a diamond-blade saw to fit, as needed.
• Carefully glue with a high-strength concrete adhesive.

DRAINAGE DESIGN
• Each project is unique. The grades on your site will determine at what level to install the drainpipe.
• Place the drainpipe as low as possible behind the wall so water drains down and away from the wall into a storm drain or to an area lower than the wall. See Diagram 5.
• Fill in the area behind the blocks with drainage aggregate, at least 12 inches from the wall.
• You may need to place and backfill several courses to achieve the proper drainage level.
• Cover the drainpipe with a geotextile sock which acts as a filter. The drainpipe outlets 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.

COMPACTION
• Place the backfill soil behind the drainage aggregate and compact with a hand-operated compactor.
• Make sure the aggregate is level with or slightly below the top of the base course.
• Place soil in front of the base course and compact. The base course should be buried.
• Continue to fill and compact. See Diagram 7.

REINFORCEMENT (IF REQUIRED)
• Geosynthetic reinforcement is recommended for walls taller than gravity height situated in poor soils, supporting a driveway, etc. Consult a qualified engineer for design assistance.
• Check the wall construction plan for which courses will need reinforcement.
• Clean any debris off the top layer of blocks.
• Measure and cut the reinforcement to the design length in the plans.
• The reinforcement has a design strength direction, which must be laid perpendicular to the wall.
• Place the front edge of the material on the top course, 1 inch from the face of the block.
• Apply the next course of blocks to secure it in place.
• To keep it from wrinkling, pull the reinforcement taut and pin the back edge in place with stakes or staples.
• Add drainage aggregate behind the blocks, then add the soil and compact it. See Diagrams 6 and 7.
• Place the front edge of the reinforcement on top of the block, making sure it’s within 1 inch of the face of the block. Correct placement ensures that you maximize the connection strength and keep the batter consistent.
• A minimum of 6 inches of backfill is required prior to operating vehicles on the reinforcement. Avoid sudden turning or braking. See Diagram 7.

FINISH GRADE AND SURFACE DRAINAGE
• Protect the wall with a finished grade at the top and bottom.
• To ensure proper water drainage away from the wall, use 6 inches of soil with low permeability. This will minimize water seeping into the soil and drainage aggregate behind the wall.

SITE CLEANING AND RESTORATION
• Brush off the wall and pick up any debris left from the construction process.
• Notify the job superintendent in writing of the project’s completion and that it is ready for final inspection and acceptance.
• Planting vegetation in front and on top of the wall will help reduce the chance of erosion.
• Following these best practices for construction will ensure the successful installation of Anchor® products.