Retaining Soil with Courtyard

Basic Steps for Building a Courtyard Wall Panel to Retain Soil

Using the AB Courtyard Collection, wall panels can be built to retain two courses of soil when needed. Follow the simple steps below.

**Step 1: Layout**
Determine the location of the wall panel and lay the first course of block to determine the shape of the wall and to establish where to dig the trench. AB Dublin, AB York or both blocks together can be used for the base course. See How-to sheet #130 when building with curves and See How-to sheet #180 if corners will be needed.

**Step 2: Build Foundation**
Mark the location of the wall with a shovel, remove the blocks, sod and other surface materials. Dig a level trench 8 in. deep and 12 in. wide (200 mm x 300 mm). On sloped sites, "step up" the base when it gets more than 6 in. (150 mm) deep, see page 2 for more information.

**Step 3: Fill**
Place 6 in. (150 mm) of base rock in the trench and compact using a hand tamper. See page 2 for information on proper base rock materials.

*NOTE:
The soil beneath the foundation pad must be a good quality compactable material. If soft soils are encountered, they will need to be removed and replaced with additional base rock. A good foundation will ensure a stable wall for years to come.

**Step 4: Level**
Level the base rock. We recommend using a 2x4 and a level to ensure the entire base is level. Make any adjustments as needed by adding or removing base rock.

**Step 5: Build**
Place 3-5 blocks in the trench, with the raised rings facing up, leveling each block as you go. The raised rings on the top of the blocks lock the courses together. Using base rock, fill the block openings. Sweep the top of the blocks and install 3-5 blocks of the 2nd course. Installing the first two courses at the same time will ensure that the blocks line up properly.

**Step 6: Build Next Section**
Install the next section of the base course, leveling each block as you go. Fill all the block openings for the first and second course with base rock, then sweep the top of the blocks clean. Install the next section of the second course of blocks, offsetting the block seams from the course below then install base rock in the block openings. Use these steps, continue building the first and second course in sections for the length of the wall. See the Helpful Tips on the product about block placement at allanblock.com.

For a complete library of AB Courtyard Collection How-to sheets visit allanblock.com
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Step 7: Wall Caps
Finish the wall with Wall Caps. On straight sections alternate the direction of the Wall Cap. On curved walls, place the short side of the caps on the inside of the curve. Secure the Wall Caps in place with a bead of masonry adhesive along both sides of the raised rings and along the side of each Wall Cap. Completing the entire AB Courtyard wall prior to backfilling the retained soil is recommended.

Step 8: Backfilling and Compaction
With the AB Courtyard wall finished and Wall Caps glued in place, backfill 6 in. (150 mm) of soil behind the block up to the top of the first course. Use a hand tamper to carefully compact soil thoroughly. Install another 6 in. (150 mm) of soil up to the top of the second course, again use a hand tamper to compact soil in place.

AB Courtyard can be built taller than two courses, but only a maximum height of two block courses can be used to retain soil. For added stability options, see How-To Sheet #150 or to retain soil taller than shown here, see our Retaining Walls Installation guide for walls up to 6 ft. (1.8 m) tall using our retaining wall products at allanblock.com.

Stepping Up the Base Course

Building Step-Ups into the Slope
This can be easily done, by extending the base trench into the slope far enough to bury one block for each step up that is needed. Then continue with Step 3 and fill trench with base rock and compact to create a solid foundation.

Base Rock Materials with Building On Soil
Using the proper materials to create the base foundation for the panels and post/pillars is important when building on soil. We recommend using a compactible base rock material that is gravel in varying sizes of angular or smooth aggregates similar to the wall rock used in retaining walls or a road/paver base type material.