within top 1-3

ft (25 mm)

(50 mm) of con-

How-to sheet #140



Adding Stability to Posts/Pillars

Techniques for building taller posts/pillars or building in poor soil.



BUILDING TALLER POSTS/PILLARS

For projects where a taller post/pillar is desired or needed, it may be necessary to provide additional stability under the post/pillar. Foundation widths and depths will vary from project to project. The 4 options below show how this can be achieved.

Adding Strength with a Concrete Pile and Sonotube Option 1:

You will need:

8 in. sonotube (200 mm), cut to desired length Posthole digger

Ready mix concrete

Rebar (as required based on application)



The soil beneath the foundation pad must be a good quality compactable material. If soft soils are encountered, you will need to remove and replace them with additional base rock. A good foundation will ensure a stable post/pillar for years to come.







Determine the location of the post/pillar and lay the first course of block to establish where to dig the foundation pad.



Step 2: Foundation*

Mark the location of the post/pillar with a shovel, remove the blocks and dig a 24 in. (600 mm) square, 4 in. (100 mm) deep hole. Using a post hole digger, dig a hole for the sonotube approximately 3 ft (1.0 m) deep with a 8 in. (200 mm) diamater to accomodate for a 8 in. (200 mm) sonotube in the center of the foundation pad.



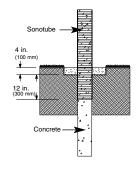
Step 2: Sonotube

Mark and horizontally cut the sonotube so that the tube will extend up within the top 3 courses of the post/pillar. Install bracing (if necessary) on the sonotube 12 in. (300 mm) from the bottom. Next place the sonotube in the post hole and install vertical bracing to hold the sonotube in a level upright position.



Step 3: **Concrete Pile**

Pour the concrete mixture into the top of the sonotube until both the sonotube and the posthole are filled. Make sure the sonotube is level and plumb. (Rebar can be added while concrete is wet, as required based on application). Allow concrete to set a minimum of 4 hours before proceeding. Once the concrete is set, remove the vertical and horizontal bracing on the sonotube.









Block



Adding Stability to Posts/Pillars

Techniques when building taller posts/pillars or building in poor soil.

Step 4: Foundation

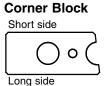
Fill around the sonotube with 4 in. (100 mm) of base rock to build the post/pillar foundation. Use a hand tamper to compact. Level foundation pad from front to back and side to side, making adjustments where needed. A level foundation pad will ensure a level and plumb post/pillar.





Step 5: Base Course

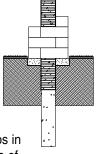
Install the first course with 4 Corner Blocks with the long sides facing out. Square up the blocks, tamp into place and level.





Step 6: Continue Building

Continue stacking courses, alternating between the patterns to offset the seams from the course below until the desired height is achieved. Do not stack the blocks up in stacked bond (seams should not create a straight line the full height of the post/pillar).





Step 7: Finish

Finish the post/pillar with two Post Caps. Secure the Wall Caps in place with a bead of masonry adhesive along the outside edge of the top course of Corner Blocks and then set the Post Caps in place.



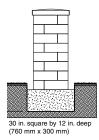
BUILDING POSTS/PILLARS IN SOFT SOILS OR ADDING ADDITIONAL STABILITY

Use one of these three additional options when building in soft soil conditions. If building with posts/pillars and panels, interlock the panels into the posts/pillars for additional stability. See How-to sheet #230.

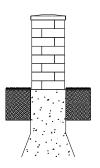
The information shown here is for use with the Allan Block Courtyard products only.



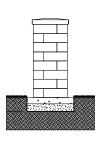
Increase Base Depth and Width Option 2:



Install Concrete Pile with Bell Option 3:



Install Concrete
Footing Below Post/Pillar
Option 4:



ADDING STABILITY



Secure the blocks together with masonry adhesive to add strength to the post/pillar

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