For installation into new concrete, establish if the threaded rod will be positioned into the concrete base at time of pour, or if they will be installed after curing with drop-in anchors (as shown in illustration). Use drop-in anchors or epoxy for any installation into existing concrete as per manufacturer specifications.

ByBlock require at least one rod per ByBlock, one in each corner, and one at each end of a wall assembly.

When preparing for threaded rod placement, there are three key measurements:
3-7/8", 7-3/4", 15-1/2"
Ensure the threaded rods are properly measured and positioned into the concrete footer.

From the starting point of the wall, measure 3-7/8” from the end, and 3-7/8” in from the edge. This will be the location of your first rod. Subsequent rods are positioned every 15-1/2” until you reach the end of your wall assembly. Each ByBlock must have at least one rod passing through for proper post-tensioning.

ByBlock assemble the same as any other brick/block building material – in alternating courses.

Using Standard ByBlock: BBK-011, begin stacking in the corner (if applicable) and continue to stack ByBlock toward the ends of the wall assembly in both directions. To expedite the stacking process, pre-cut half ByBlocks before you begin stacking your wall.

There are no adhesives or fillers required when building with ByBlock. Feel free to stack as quickly as you like, so long as you are practicing safe handling methods.

Continue to stack Standard ByBlock until there is one course remaining to be placed. The top course will be placed using Flat ByBlock.
Flat ByBlock: BBK-012 are the same in size and dimension as Standard ByBlock. However, they lack the 'pin' located on the top. This flat surface ensures that post-tension pressure is evenly applied across the top of the wall assembly.

Complete the ByBlock stacking with Flat ByBlock on the top course.

After you have completed stacking the ByBlock, place your pre-drilled top plate over the threaded rods; firmly resting on the Flat ByBlock surface.

When cutting and pre-drilling your top plate, do not measure the rod position at the top of your wall assembly. The top plate hole positions should be identical to the rod position in the concrete base. Duplicating these measurements will maintain proper vertical alignment of the rods.

In order to achieve a flat top plate after post-tensioning, drill a larger diameter hole on top just enough to recess your washer and nut.

Place washer and nut onto each threaded rod and position onto top plate. Once each rod has a washer and nut, begin applying tension using a through-bolt socket. Using a through-bolt socket will enable you to continue tensioning the nut without having to cut the threaded rod as you make progress. After the tension is consistent, cut back the excess threaded rod and using a standard torque wrench, ensure a minimum of 30 ft lbs of tension has been applied to each rod. Using a level and/or tape measure, check the overall height is consistent from footer to top plate. Using any readily available cutting tool, remove any remaining threaded rod to a level just below the top-most surface of the top plate.
After you have levelled the top plate and the threaded rods have been cut back, you can apply your wall covering as per manufacturer specifications. ByBlock is not intended to be exposed to weather and the elements. If there is an outdoor application where ByBlock is intended to be exposed for display purposes, a UV coating must be applied to the surface of the ByBlocks.

Flashing is to be applied as per standard practices.

Approx: 12' x 8' wall assembly with 4'8" adjacent wall

Approx: 25' x 4' wall assembly