How to Do Glass Block Wall Installation

Many people are using glass block wall installations for a variety of reasons in their houses. Whether they’re using this type of construction on an exterior wall to maintain fairly high levels of interior privacy while still having an airy and well lit interior, or they’re using glass blocks to create a pony wall ( a wall that doesn’t reach the ceiling) to divide a room or create a shower stall, the overall process is the same. Keep reading for some fairly simple directions on how to perform this installation.

Tools and Materials You’ll Need

Mastic

Sawtooth trowel

Tape measure

2-4 foot level

Calculator

Glass blocks

Chalk line

Hammer

Two small nails

Carpenter’s square

Calculate How Many Blocks You’ll Need

Glass blocks are very difficult to cut, so most professionals don’t cut them, they install full blocks. In order to

determine how may you need, you need to know how big the blocks you want are. Most are eight inches square. However, there are others that are of differing sizes, so you need to determine which ones you want before you make this calculation. As an example, if you choose a block design that is eight inches square, and you want a wall that is 64 inches long and 72 inches tall, you would need eight blocks per layer and nine layers for a total of 72 blocks (8\*9=72). If you choose blocks of differing sizes, your calculations of how many blocks you’ll need won’t be this easy.

Snap Out Straight lines

Tap a nail in halfway at one corner of the proposed wall. Next, measure one of the directions the wall will span the desired length or height. At the projected end of the wall, tap the other nail in halfway. Use the carpenter’s square to make sure the line between the two nails is perfectly straight and at a 90 degree angle to what is being measured from. As an example, if you plan to make the wall project out from a drywall wall, place one side of the square against the drywall and measure along the perpendicular length of the square the desired distance. Hook the end loop of the chalk line around the nail at the base of the wall (or at one end) and run the line to the other nail. Take a single wrap around the nail, keeping the chalk line relatively taut. Pull up about one or two inches near the center of the chalk line and let the line snap back. Now, repeat this process in the other direction. This will be the “front” edge of the glass block wall installation.

Layout the First Row

Mastic sticks best to a rough surface, so if the wall is the being built on top of a tile or other smooth surface floor, scuff the surface of the floor where the tiles will be set with some rough sandpaper. Use the sawtooth trowel to run out a layer of mastic along the whole length of the projected wall. Also, run out some mastic two block lengths up the side of the wall (if there is a wall being built against. If the glass block wall is free standing, ignore that.). Set the blocks in the mastic, with one edge resting exactly on top of the chalk line. As you lay the next succeeding block in, apply a layer of mastic to it on the side that will butt up against the previous block. You have about ten to fifteen minutes before the mastic starts to set up. Once all of the blocks have been laid out, place the level on top of the blocks, lengthwise. Using the handle of the trowel or hammer, lightly tap the blocks to even them out so that the tops of all of them are at the same exact height as the others.

Continue Up

Extend the mastic layer on the wall (if needed) up one more block in height. It should always be one block higher than the level being worked on until the top of the wall is reached. Apply a layer of mastic to the tops of the first layer and continue the process delineated above. Lay-in the first block, apply mastic to the mating surface of the next block and lay it in against the proceeding block. As succeeding layers are set in, getting the tops of the blocks perfectly level becomes ever more important. From close-up, mistakes won’t be very obvious, but from a few feet back and with light streaming through the blocks, they become glaringly obvious.

<http://commons.wikimedia.org/wiki/File:Glass_block_facing-Greyhound_Bus_Station%28Columbia,_SC%29.jpg>

<http://commons.wikimedia.org/wiki/File:Coloured_glassbrick.jpg>