Layout Cards for Glass Block

Layout Cards were created to assist in the exact layout and design of your glass block shower wall. Since layout may already be determined, the cards do not come standard in the installation kit.

Layout Card Procedures

#1
Lay out the cards in the order that match your Shower design. Tabs used to connect the layout cards together have two available locking points that represent either a 1/8" or 1/4" joint between blocks. Use the 1/8" position for Stack and Grout construction. The 1/4" joints are used when constructing with mortar. Proceed by snapping all layout cards together.

#2
Square up layout cards to the stud wall. Make sure to adjust layout cards away from the stud wall to accommodate mud float, wall board and any tile, if you are planning to run tile behind the glass block. Once you are satisfied with the positioning, trace the interior and exterior of layout cards for a reference and remove cards.
Insta-Curb Component Instructions

Insta-Curb components are extruded hollow vinyl units identical in length to individual glass blocks. Designed to create a curb “core”, these units eliminate the need for laminated plywood layers or specially-cut 2x4’s. Insta-Curb components are cut to the appropriate height and are thin enough that the completed (tiled) curb is the same thickness as the Premiere series glass block for an ideal finish detail. Using the clips provided, these components assemble easily to mimic the exact Pittsburgh Corning glass block shower layout, including shapes for the Hedron, Tridron and Arque specialty blocks.

#1

Center the Insta-Curb components in the traced outline of layout of cards per shower wall configuration, connecting the components together using the clips provided. Where 8” blocks are to be placed, use two 4” components with a 1/4” clip between them. Clips come in 1/4” and 1/8” sizes – use the following to determine usage.

For mortar builds use:
   1/4” clips for all components.

For Stack and Grout builds use:
   1/8” clips where straight block components join other straight block components, Tridron or Hedron components. 1/4” clips are needed where Arque block components join any other component (including other Arques).

#2

Adjust the first component out from the stud wall to accommodate the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wallboard</td>
<td>Estimated 1/2”</td>
</tr>
<tr>
<td>Tile/Marble</td>
<td>Estimated 3/8”</td>
</tr>
<tr>
<td>Shim Space</td>
<td>Allow 1/4” (Allows for joint between block and tiled wall)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1-1/8”</strong></td>
</tr>
</tbody>
</table>
#3
Curb components must lay out centered in the related glass block outline. When satisfied with their placement, fasten components to flooring through the center hole with the 6” screws provided. Components can be glued to the floor if you have chosen a component height of more than 5” or if attaching to concrete floors. When gluing to a floor, it is recommended to fasten a 2 1/4” screw at the center of the curb component cells sticking up halfway to imbed into mud pack/mortar as seen in step #6.

#4
Thresholds that are positioned between two glass block walls are typically constructed with 2x4” studs. This will allow you to adjust the shower layout by increasing or decreasing the width of the entry/threshold into the shower area. Simply square up the two shower walls with the desired entry width and cut 2x4” studs to fit.

#5
Insta-Curb components are commonly cut to 4 1/2” tall (equaling three layers of 2x4’s). Nail the first 2x4” stud into place and then nail the following studs to the first until they net the same height as the Insta-Curb components.

#6
Curb components are stabilized by filling the hollow cells with mortar or mud pack used to construct remainder of pan shape. Pack each component completely with mortar (Available at tile or home improvement stores).
#7
Proper mud pan construction requires a pre-slope under the waterproofing liner to promote better drainage of water. This is accomplished with mud pack material (mortar) or manufactured pre-slope products.

#8
Several products are available to act as a waterproofing membrane/liner. Run material over the pre-slope as well as over the top of curb components to the exterior of pan layout.

#9
Final mud pack slope can now be applied to shape interior of the pan. 1/4" per foot slope is a minimum requirement for proper water drainage.
**#10**

Widening of curb to final thickness can now occur. Apply Masons Mortar to curb width, then trim back enough to accommodate finishing surface. Concrete board can be attached to curb components by simply screwing board into curb component clips. Never screw through waterproof membrane due to possible water penetration.

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**#11**

Shower pan is now ready for the installation of glass block. It is best to install block before tile since the tile can more easily be cut to fit any inconsistencies at block/tile joint. The Thinset mortar used to adhere tile can be varied in depth to meet block thickness. If you choose to install tile prior to installation of glass block, then use the layout cards as a guide to flush the tile up to for correct layout.
Tools Needed:
• Screw Driver/Gun
• Razor Knife
• Rubber Mallet
• Level
• Caulk Gun
• Rubber Float
• Bucket
• Sponge
• Caulk-rite Tool
• Cheese Cloth
• Rubber Gloves

Included in Kit:
• Glass Block
• Vinyl Stack Spacing System
• Silicone
• Anchors and Screws
• Grout
• How-to video and written instructions
• Maintenance Kit for Glass & Grout
• Plastic Shims
**Glass Block Assembly:**

**#1**
Cut approximately $\frac{1}{2}$" off the tip of a few tubes of silicone to prepare for assembly. Begin by running two beads of silicone on top of the curb to receive the first horizontal spacer, then set spacer into position. Always attach parts immediately following the application of silicone to avoid poor adhesion. If silicone starts to skin over, simply scrape off the bulk of the silicone and re-apply a fresh bead.

**#2**
Apply silicone to the top of the horizontal spacer to receive first glass block units. The first glass block will need a flat spacer applied to its vertical edge that meets the framed wall. Apply silicone to flat spacer and press onto block. Apply two large globules of silicone roughly 1" in diameter to flat spacer on exposed (framed wall) side. This will act as a shimming agent as well as an attachment to the framed wall.
**#3**

Set bottom of the first block to siliconed horizontal spacer with the flat-spacer side to the framed wall with an 1/8” gap between the block and framed wall. (Leave a larger gap if framed wall leans out of plumb toward glass block, anticipating the gap to diminish the higher the glass block wall is assembled). Affix vinyl stack vertical spacers to glass block edges with silicone and set the blocks repeatedly on the horizontal spacer to its end. Make sure throughout the assembly process that the block/spacer/silicone combinations are pressed together firmly to promote uniform joints and a plumb/level build.

**#4**

**First Row Only!** If your shower design includes custom shaped block such as 90 degree, 45 degree or radius blocks, it is imperative to note the following: The horizontal spacers used with these blocks were designed as two similar halves that need to be snapped together for all areas except under the bottom row. Use only one of the halves here, since that is what will align in height with the adjoining straight vinyl stack spacer. Remove the barbed tabs from this half-spacer, as they are not needed for the bottom row. Apply silicone between the half spacer and under side of block and compress together.

**#5**

Adhere the corresponding angled block’s “vertical spacer” to the angled block. In the case of 45 and 90 degree blocks, you will use a flat spacer between the straight block and the angled block. Place the angled block on top of the curb. Any adjustments need to be made soon after silicone is applied to provide proper layout and adhesion.
Repeat this process until the 1st horizontal row is completed. Use a level to insure glass block is straight, plumb and level. Use shims under the first row if necessary to adjust. Leave shims in until glass block wall is completed. Remove only after grout is applied and cured.

#6
Second Row: Prepare a horizontal spacer for the top of the first row by inserting a wall anchor at one end. The aid of a hammer may be needed. Run two beads of silicone on top of the last assembled row of glass block. Immediately set prepared horizontal spacer, screwing the anchor to the framed wall. Repeat the process of block assembly the same as the first row. When the row is complete, re-check for straight edge, level, and plumb. Adjustments can be made by hand or with the aid of a rubber mallet making sure to tap the edges of the glass block, not the center. You will need to shim up a 2" x 4" stud from ceiling to curb at the end of the glass block wall to act as a temporary plumb point for your wall to follow. Continue building other rows, making sure to screw anchors at every other horizontal row until the wall is completely assembled.
#7
Check one final time for straight edge, level, and plumb. Use the soft rubber mallet to help aid in final alignment. Once satisfied with final alignment, let the silicone dry over night.

Grouting:
**Directions must be followed to detail.** Mix dry grout with clean water till thoroughly mixed. Approximately 10-cups grout To 3 cups water (Grout should be mixed to a toothpaste-like consistency.)

- Let grout sit for 10 minutes.
- Re-Mix grout till smooth.

#8
Apply grout with a rubber float by pushing grout into all joints except perimeter joint. The perimeter joint will need to be caulked with the silicone provided after the grout has cured. Make sure to push grout in using multiple angles to assure joints are FULLY packed. Be careful not to move the glass blocks while grouting, as the wall will still be a bit flexible prior to grout cure. Movement may cause grout to separate or squeeze out.

#9
Wipe down the glass block wall using a tile/grout sponge and a clean bucket of water. Always wipe down the wall in a diagonal direction. This will help prevent grout from being wiped out of joints. Make sure to rinse the sponge frequently, as it will quickly fill up with excess grout. Fully wring water from sponge prior to wiping the wall.
Wipe down should recur in multiple directions until all grout is removed from the block surface, and the joints are smooth.

Let the glass block wall set for 15 minutes and wipe down again with a clean bucket of water.

**IMPORTANT!!!!**
This is a fast cure grout and should be applied and completely wiped down within 1 hour. The grout will cure very rapidly after this time period.

The Grout will be fully cured within 3 hours. At this point you can begin polishing glass blocks by wiping down with cheesecloth, soft rag or towel.

**#10**
Silicone now needs to be applied at all perimeters of the glass block wall adjoining surfaces. This is mandatory for a correct seal. Apply glass block silicone fully to fill voids.

Use the caulk-rite tool or your finger to take off any excess silicone and smooth out to satisfaction.
**Sealers:**

**Glass Sealer:**
After thoroughly cleaning the glass surface, simply apply Aquapel sealer by first squeezing tabs on applicator until the glass vial breaks to release sealer. Let it soak into cotton applicator and begin wiping onto all glass surfaces of the shower interior excluding grout joints. After 15 minutes, remove excess with a clean dry cloth. One applicator will cover roughly 20 square feet.

**Grout Sealer:**
Apply grout surface sealer by adjusting flow at tip of applicator bottle and brushing over all grout joints. Wipe off any excess soon with a clean, dry cloth to keep this product from adhering to the glass surface. It is recommended to apply a second coat of sealer to assure full coverage.

Glass and grout surface sealers can be applied within 24 hours of build completion.

**Maintenance Tip**
A majority of your maintenance issues go down the drain when you use soft soap over bar soap. Hardeners used in the manufacturing of bar soap coagulate on shower interiors, making them difficult to clean.

Please feel free to forward any comments and share your success and photos with us.

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Helpful Hints

When constructing shaped walls using Arque, Hedron or Tridron blocks, the wall will tend to lean out of plumb. Since it is crucial the wall finish plumb before the grouting process begins, adjust the wall using either the plastic shims provided between horizontal rows, or duct tape wrapped from the framed wall around the block wall and vertical 2x4" stud brace.

It is recommended to complete silicone adhesion part of build at one time. If this is not possible, be sure to set horizontal spacers to top of last completed row, pressing down on spacers to fully flatten silicone beads beneath. Otherwise, the joint spacing will finish uneven and visually undesirable.

The grout provided cures fast and exceptionally strong. Mix only an amount at one time that you expect to use in 1 hour. Clean blocks well within 2 hours of application or excess grout will be difficult to remove. Final grout residue can be removed with a clean rag, or use a 50/50 mixture of water and white vinegar for areas of accumulation.

The products supplied with this kit are extensively tested for compatibility. SGB only approves the components included with this kit. Any substitution voids all warranties expressed, written or implied, and may cause discoloration and greatly reduce product performance.

Notes: