

## Setting Forms

### Straight Walls

PERFORM WALL™ panels may be laid horizontally, vertically or in combination without affecting the design. Larger sections may be fabricated on site (10' x 25'). Window and door openings may be cut out prior to the placement of the section, then these large sections can be set in place and will be ready for rebar and grouting as soon as they are plumb and level.



PERFORM WALL™ panels in their vertical position. By trimming the inside edges of the panels to the correct angle, a curved wall can be created which is, in effect, a polygon with 15" long sides. The inscribed radius depends upon the angle the panels' flanges are cut. For radii exceeding approximately 7 ft., the wall will appear round and very little rasping should be required on the outside to smooth the curve. Smaller radius curves may require more rasping on the outside.

To create a nice even edge, the cut should be made along a wooden straight edge fixed to the panels at the proper distance in from the edge of the panels. The inside edge may require a little rasping to make a perfect fit.



### Curved Walls

The PERFORM WALL™ Panel System enables construction in a wide range of architectural styles. Walls, windows and doorways can be virtually any shape according to the architectural style desired. Curved walls can be created using 15" wide

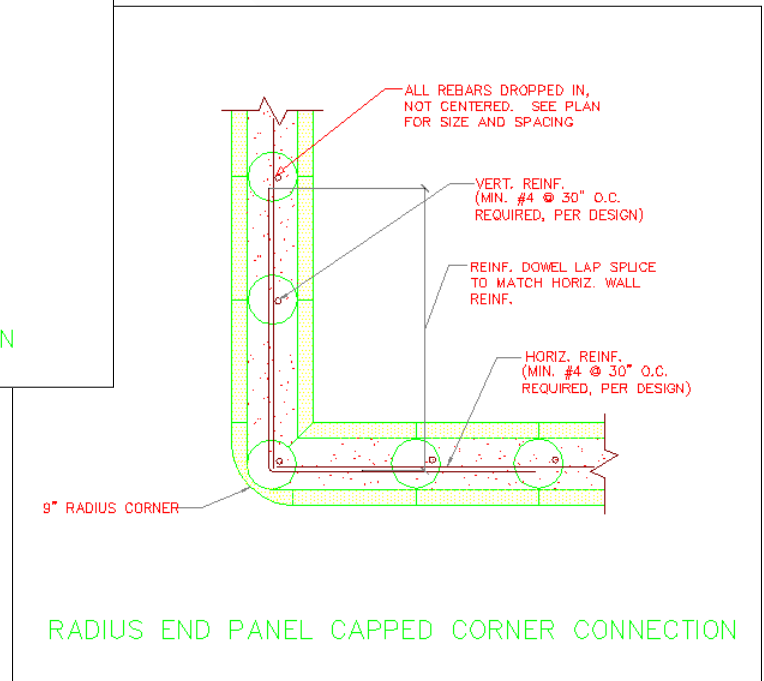
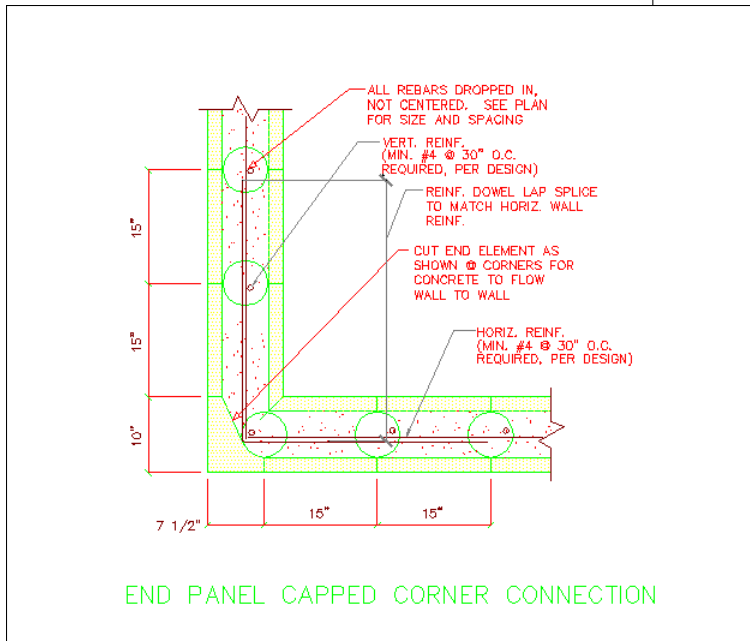
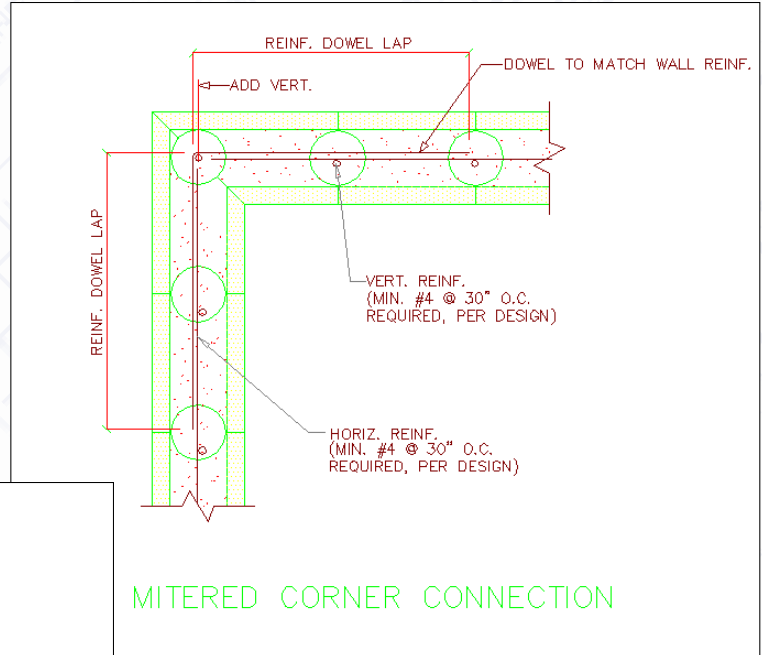
(See Appendix 'A' for method, tables and formula for curved walls).



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## Types of Corners

Corners can be made in two ways. (1) two standard panels may be cut at a 45 degree angle and joined together at the corner creating a path for the grout to flow from one wall to the other. (2) the end panel is positioned vertically at the corner and notched out at 15" intervals to create a path for the grout to flow from one wall to the other.



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### Dry Stacking

If dry-stacked, panels are usually held plumb and level by walers (used as stiffeners) or supports until the grout has been poured.



### Glue

If using gun foam for bonding, proceed along the joint between the PERFORM WALL™ panel and the foundation and inject a small squirt about every 6 to 8 inches. This is not a caulking procedure but a gluing one, so not a lot of foam adhesive is required. When the walls are poured, grout will fill the cells and, in essence, cement the panels together. If some of the foam adhesive expands out into the cells, it can be knocked off, but care should be taken not to let it fall down into the wall. The same gluing procedure is followed whether the panels are stacked vertically or horizontally.



### Installation of the First Row

As previously mentioned, PERFORM WALL™ panels can be installed either vertically or horizontally or in combination. If placed horizontally the first row is installed directly on to the footing, stem wall or slab, whichever the case may be. Before starting to set the first row, check the foundation to ensure that it is square and level.

After setting the PERFORM WALL™ panels on the first corner, continue around the building. If a wall is not an even increment of 15", compensation can be made at the corner by trimming a panel to the desired length and then in future courses always adding the trimmed panel above the previous ones. This will ensure a continuous vertical grout cell. Installation, alignment and plumbing of the end panels for corners can be left to the last and they can be either stapled or glued once all the reinforcement is in place. As mentioned earlier, corners may be constructed either by using end panels or by cutting a mitered corner from standard panels.

If the first row is set upon the top of the stem wall and electrical conduit is to be installed within the cells, this is the time to start the electrical installation. The electrician can, at this point, cut and set outlet boxes, attach conduit and install any horizontal runs. When setting the electrical boxes, the openings should be cut as tightly as possible and the boxes set in place with foam glue.



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### Installation of Additional Rows

Installation of additional layers of panels is performed in the same pattern as the first horizontal layer – start with a corner and then complete the rest of the layer.

#### **MAKE SURE THE GROUT CELLS**

**LINE UP.** Work around the building one layer at a time. Install the PERFORM WALL™ panels, level, plumb and glue the joint between layers.

When installing each layer, work from the same side of the wall all the way up. Remember that PERFORM WALL™ panels are like any other material in that the thickness may vary slightly. Try to keep one side of the wall flush (usually the inside) and let any differences show on the other side. This reduces the amount of rasping needed to achieve a smooth finish on both sides of the wall.

### Leveling and Plumbing Panels

When leveling and plumbing PERFORM WALL™ panels, one method is to use wood shims. The shims are placed on one side or the other of the wall to level PERFORM WALL™ panels or to raise them as needed. When placing the wood shims, gently tip the PERFORM WALL™ panels up and put the shim in place. Do not drive the shim into the joint as done in working with other materials, this will only crush the panel as opposed to raising it. These shims should remain in place until the foam glue has dried completely, then they may be cut off or pulled out. Bracing before grouting should occur at all times to ensure wall stability against high winds after the crew has left and on weekends.

