

## FORM PLACEMENT, *continued*

the entire wall out of alignment. Any gap in the formwork of 1" or less can be easily filled with Foam2Foam, or a similar approved adhesive, without risk of a breach.

Forms that have been cut to fit have potentially been weakened (depending on the distance between ties) and should be braced by placing a piece of plywood, OSB, or similar material, across the cut and screwing it to the steel attachment studs on either side of the cut to reinforce it.

The second, and all subsequent courses, should be stacked and placed in a running bond (i.e., with staggered joints). This is easily achieved by alternating the left and right corner forms, which have the required adjustment in their design.

Apply a 1/4" bead of foam adhesive to the inside tongue of the form below to secure the forms together, or you can use a metal clip, known as the "Carolina Clipper" on the end of each form to achieve the same result. Connecting the forms together improves the wall's stability, and helps minimize the bracing required.

As you stack additional courses, be sure that the markings for the attachment studs line up so that there is a visible and continuous line that runs the entire height of the wall to provide for the easy attachment of wall coverings and finishes.

Once two courses of forms are in place, the remainder of the wall should repeat this alternating pattern. The third course should be the same as the first, and the fourth course the same as the second, and so on to the top of the wall.

After the third course of PolySteel Forms is in place, and unless additional rebar is required by design, a horizontal band of reinforcing steel should be placed at 48" and below all window openings. See Rebar Placement below for the proper method of placement and attachment of this reinforcement.

## WINDOW, DOOR & OTHER OPENINGS

PolySteel can easily be cut to accommodate any size or shape of window or door desired. To form the rough openings for windows and doors, "bucks" (rough opening forming frames) should be built in advance to allow them to be placed into the wall at the same time the forms are being placed.

We recommend using VBuck® for forming these block outs for doors and windows. VBuck is a vinyl forming material designed specifically for PolySteel and other ICF's and is a self-squaring, stay-in-place buck system that eliminates a significant amount of labor and waste and significantly improves the look of your project and the ease of installing your doors and windows.

If you choose to use lumber to form your openings, it may be required to be pressure treated or covered with a felt material to prevent direct contact with the concrete. You must also use lag screws, ring shank nails, or anchor bolts to secure the buck back to the concrete.

Window and door bucks should be constructed to the rough opening dimensions required for the windows and doors, measuring from the inside face of the buck material used. Be sure to consult the manufacturer's specifications for the dimensions required. Place the bucks around the perimeter of the job site so that they are readily available for installation at the proper location.

All bucks require internal bracing to support the weight and movement of the concrete. VBuck utilizes a triangular steel brace (the VBrace), that comes in various sizes and which is secured on both sides of each corner with screws in pre-drilled holes. These braces also help ensure that the buck is square. For larger openings, additional vertical and/or horizontal bracing may be required.

Wood bucks require the same type of bracing, which can be constructed with an internal angled piece of lumber, or an external diagonal piece of 2" X 4"