

C.5 FOUNDATION TO WALL CONNECTION

The structural connection between the foundation and the wall is an important factor in the overall performance of the PolySteel wall system. This connection is generally achieved with the installation of rebar dowels into the footing bridging the joint between the wall and foundation at specified locations. However, no dowels are required if:

- ✓ The unbalanced backfill height does not exceed 4 feet.
- ✓ The interior floor slab is installed prior to backfilling.
- ✓ Temporary bracing is installed in accordance with the Prescriptive Method.
- ✓ Local seismic and/or wind conditions allow it.

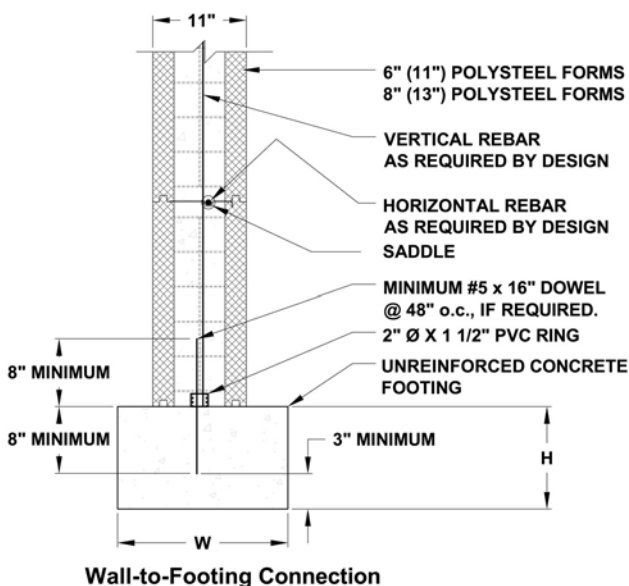
Note: It is our recommendation that dowels be installed in the footing whenever possible, as indicated below.

C.5.1 RECOMMENDED MINIMUM PRACTICE.

As shown in Figure 3.1 below, the minimum amount of rebar required to connect the footing to the wall in the footing is a 16" dowel of #5 (5/8" diameter) rebar imbedded 8" into the footing and extending 8" above the footing in every corner and at intervals of no more than 4 feet. There should be at least 3" of concrete coverage between the soil and the bottom of the dowel. In order to achieve this level of coverage, you may be required to extend the depth of the footing to a minimum of 11".

Figure 3.1 FOUNDATION TO WALL CONNECTION

Unreinforced Footing



Reinforced Footing



C.5 FOUNDATION TO WALL CONNECTION (continued)

C.5.2 HIGHER PERFORMANCE WALLS.

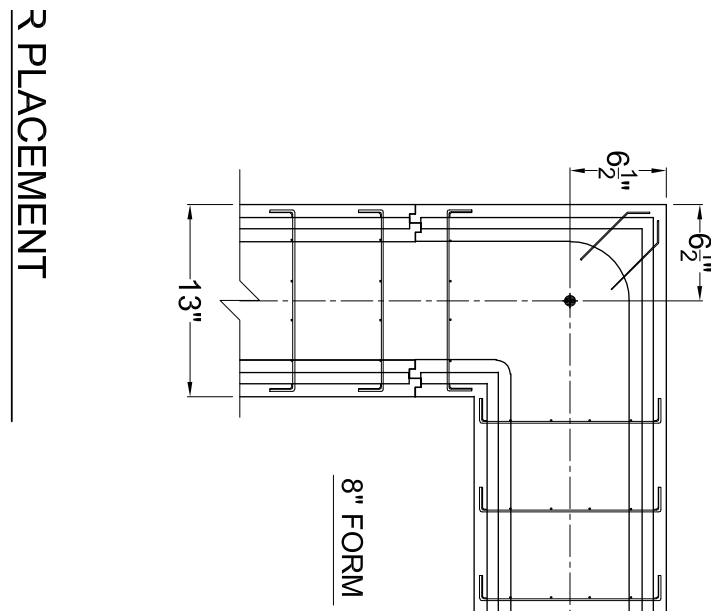
Additional rebar in the footing may be required to connect the wall to the foundation where seismic forces are extreme, severe lateral loads exist from soil or hydrostatic pressure, and/or wind loads in excess of 130 miles per hour will be placed on the wall. In these instances, a professional engineer should be consulted.

C.5.3 REBAR PLACEMENT.

Install batter boards around the perimeter of the footing and extend string lines that clearly mark the outside perimeter of the PolySteel wall to be installed. When pouring the footings, place connecting vertical rebar dowels at each corner of the wall and at recommended intervals. For the 6" Form (PS•4600), measure in 5-1/2" from each marked corner of the wall to locate the dowel in the center of the vertical core of the form. For the PS•4800, measure in 6-1/2", as illustrated below. If the rebar is not placed when pouring the footing, it may be installed afterwards by drilling holes in the footing at the proper intervals and securing the rebar in place with an approved epoxy and in accordance with local codes and/or engineering design.

CAUTION: Be sure to mark door openings so that your dowels will not be placed within these open spaces.

Figure 3.2 CORNER REBAR PLACEMENT



Note: If the vertical reinforcement required in the walls is the same as that required for the foundation to wall connection, you should match the footing dowels to where the vertical wall dowels will go to speed your overall installation. See the discussion of vertical reinforcement below.