C.2 CONSTRUCTION OVERVIEW

This Manual provides you with specific details to guide you in the construction of your PolySteel project. To help keep your work in perspective, the following overview should help you understand the 10 basic steps in the construction process that will apply to most every project you may have. Keep it simple, pay attention, and set a consistent standard, and you will be successful each and every time you choose to build with PolySteel.

1. **Footings and Slabs.** Install a standard, level, footing or slab with rebar placed at the intervals required by your building design. Mark the perimeter of the wall with string or chalk lines to guide the placement of forms.

2. **Placing Forms.** Start with the corners and work towards the center of the wall. Set forms on the footing or slab by applying a bead of foam adhesive, such as Foam2Foam, to the bottom of the form. You may also set the first course in wet concrete ("wet set"). Each subsequent course of forms can be placed in a running or stack bond and rebar should be placed as required.

3. **Window and Door Openings.** Window and door openings are formed with pre-constructed frames, or "bucks", to the rough opening dimensions required using VBuck® or properly prepared lumber. PolySteel Forms are cut to fit to any shape and size of opening.

4. **Bracing.** Proper bracing will ensure straight walls. Corner bracing should be placed as soon as possible. Window and door openings should be braced and uninterrupted sections of wall should have bracing every 6 to 10 feet.

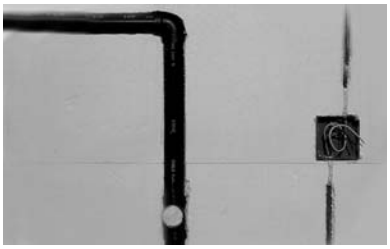
5. **Steel Reinforcement.** Proper reinforcement of PolySteel walls is achieved by placing vertical and horizontal rebar as required by the design of the structure. From the foundation/ wall connection to window lintels and intermediate walls, it is imperative that reinforcement is properly placed and secured before placing concrete.

C.2 CONSTRUCTION OVERVIEW (continued)

6. **Concrete Placement.** After the walls are checked for plumb and straight, and the job site is properly prepared, concrete is placed in the walls with a pump. The proper concrete mix, slump, placement equipment, and crew are essential to your success.

7. **Finishing the Wall.** The top of the wall is leveled off (screeded) and anchor bolts are placed to secure the top plate. In high wind areas, hurricane straps are placed directly into the concrete.

8. **Install Floor and Roof Systems.** For intermediate floors, the rim joist (ledger) is anchored to the PolySteel wall with a Simpson ICF Hanger system, or anchor bolts, and joist hangers are attached in typical fashion. Roof trusses are installed to the top plate or straps as you would in any other type of construction.



9. **Install Utilities**. Electrical and plumbing lines fit easily, and in accordance with code requirements, by simply cutting a channel into the foam with a hot knife and placing the wiring, conduit or piping into the wall. Larger plumbing lines may be required to be set in place prior to placing concrete.

10. **Interior and Exterior Finishes.** Drywall, and even cabinets, can be screwed directly to the steel attachment studs in the PolySteel forms. On the outside, stucco, siding, brick, stone, or any other finish can be secured to the attachment studs and backed by the moisture and vapor barrier created by PolySteel wall, achieving any design, look, and finish imaginable.

As you go through this manual, it may help to keep these basic steps in mind, and how they relate to the "ARC of Success" in each and every aspect of your PolySteel project.