

C.14 UTILITY PENETRATIONS

The installation of utilities (electrical lines, plumbing, etc.) in your PolySteel walls is discussed in detail in section C.20 of this Manual, however, you must provide access for these utilities into the structure before placing concrete. This is certainly easier than drilling holes in the concrete at a later time.

1. Determine the number and location of all penetrations required. Make a checklist of all utilities anticipated (electrical, gas, plumbing, telephone, cable TV, etc.) and any outlets required (dryer vents, exhaust fans, etc.) to help make sure all required penetrations are identified.
2. Create a "sleeve" by selecting a PVC or steel pipe with a large enough diameter to fit all of the utilities that need to pass through the opening, and cut a piece long enough to pass through the entire thickness of the wall. It is better to make the opening too big, rather than too small.
3. Press the end of the sleeve into the foam and cut a hole into the wall using the imprint as a guide. Slide the sleeve through the opening and make a matching imprint on the other side of the wall at the same height. Cut and remove the foam.
4. Glue the sleeve in place with a foam adhesive. For large openings located in areas where concrete consolidation below the sleeve is a concern, glue the sleeve in place during the concrete pour, after placing concrete below the opening.
5. If the opening is located in an area that required the removal of a form tie, brace the opening before the placement of concrete by placing a scrap piece of lumber across both sides of the opening and screwing them to the nearest intact attachment studs on either side (See Bracing Cut Forms)
6. If you have plumbing lines that are larger than 2-1/2" O.D. that must be installed in the PolySteel wall, cut out the foam required to inset the plumbing line flush with the wall surface, and brace the opening with plywood screwed to the attachment strips on both sides of the line. If the line is large enough to displace more than 2" of concrete in the wall, make sure that there is sufficient rebar in the section to provide the strength required for the wall.

Figure 3.17 PENETRATION THROUGH WALL

