to the outside. Any surface water runoff from the furnace, air conditioning, or water heater drains must be directed away from under the home or collected by other methods identified in §3285.203.

Subpart G—Ductwork and Plumbing and Fuel Supply Systems

§ 3285.601 Field assembly.

Home manufacturers must provide specific installation instructions for the proper field assembly of manufacturer-supplied and shipped loose ducts, plumbing, and fuel supply system parts that are necessary to join all sections of the home and are designed to be located underneath the home. The installation instructions must be designed in accordance with applicable requirements of part 3280, subparts G and H, of this chapter, as specified in this subpart.

§ 3285.602 Utility connections.

Refer to §3285.904 for considerations for utility system connections.

§ 3285.603 Water supply.

(a) Crossovers. Multi-section homes with plumbing in both sections require water-line crossover connections to join all sections of the home. The crossover design requirements are located in, and must be designed in accordance with, §3280.609 of this chapter.

(b) Maximum supply pressure and reduction. When the local water supply pressure exceeds 80 psi to the manufactured home use is permitted to be used, and it must be installed in accordance with the cable manufacturer installation instructions.

(c) Mandatory shutoff valve. (1) An identified and accessible shutoff valve must be installed between the water supply and the inlet.

(2) The water riser for the shutoff valve connection must be located under the home.

(3) The shutoff valve must be a full-flow gate or ball valve, or equivalent valve.

(d) Freezing protection. Water line crossovers completed during installation must be protected from freezing. The freeze protection design requirements are located in, and must be designed in accordance with, §3280.608 of this chapter.

(1) If subject to freezing temperatures, the water connection must be wrapped with insulation or otherwise protected to prevent freezing.

(2) In areas subject to freezing or subfreezing temperatures, exposed sections of water supply piping, shutoff valves, pressure reducers, and pipes in water heater compartments must be insulated or otherwise protected from freezing.

(3) Use of pipe heating cable. Only pipe heating cable listed for manufactured home use is permitted to be used, and it must be installed in accordance with the cable manufacturer installation instructions.

(e) Testing procedures. (1) The water system must be inspected and tested for leaks after completion at the site. The installation instructions must provide testing requirements that are consistent with §3280.612 of this chapter.

(2) The water heater must be disconnected when using an air-only test.

§ 3285.604 Drainage system.

(a) Crossovers. Multi-section homes with plumbing in more than one section require drainage system crossover connections to join all sections of the home. The crossover design requirements are located in, and must be designed in accordance with, §3280.610 of this chapter.

(b) Assembly and support. If portions of the drainage system were shipped loose because they were necessary to join all sections of the home and designed to be located underneath the home, they must be installed and supported in accordance with §3280.608 of this chapter.

(c) Proper slopes. Drains must be completed in accordance with §3280.610 of this chapter.

(1) Drain lines must not slope less than one-quarter inch per foot, unless otherwise noted on the schematic diagram, as shown in Figure to §3285.604.

(2) A slope of one-eighth inch per foot may be permitted when a clean-out is installed at the upper end of the run.

(d) Testing procedures. The drainage system must be inspected and tested for leaks after completion at the site. The installation instructions must provide testing requirements that are consistent with §3280.612 of this chapter.