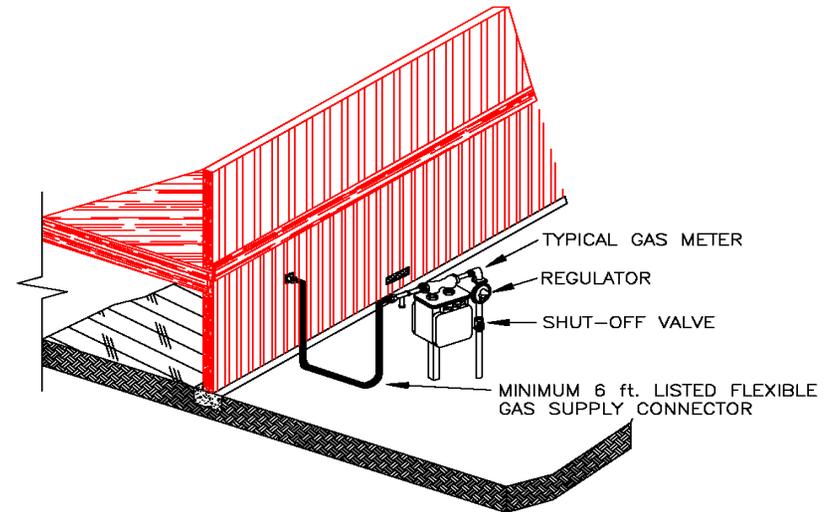


Chapter 8 Mechanical Connections

8-1 General

Gas Supply

- Gas supply requirements not specifically covered in this code must be in accordance with the Oregon Residential Specialty Code, Chapter 24.
- The gas supply to the manufactured dwelling must be made with a 6 foot flexible gas connector.



NOTE: PENETRATIONS THROUGH CONCRETE FOUNDATIONS OR SKIRTING SHALL HAVE A CONDUIT SLEEVE AND THE PENETRATION SHALL BE SEALED.

NOTE: GAS SUPPLY REQUIREMENTS NOT SPECIFICALLY SHOW HERE SHALL BE ACCORDING TO THE OREGON RESIDENTIAL SPECIALTY CODE, CHAPTER 24.

Figure 8-1.1 Typical Gas Supply Connection

8-2 Gas Supply Crossover Connections

- Multisection manufactured dwelling gas supply piping crossovers and fittings must be listed for exterior use and must be the same size as the main unit pipe.
- Gas supply piping crossover connections must be connected at the marriage line.
- Tools may not be used to connect or remove the flexible connector quick-disconnect. If a quick-disconnect is not used, an approved shutoff valve is required at each crossover point upstream of the connection.

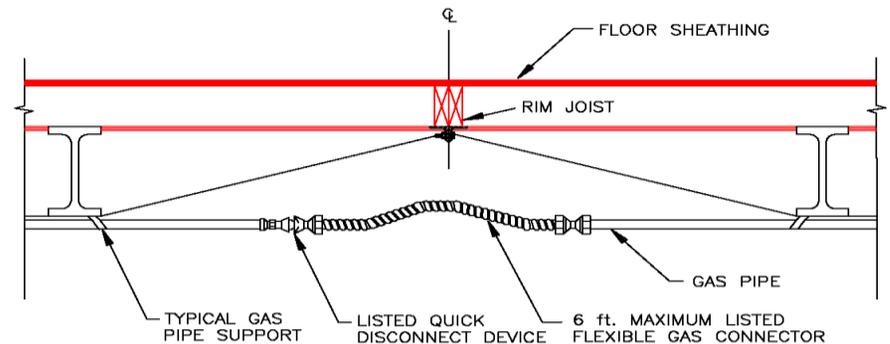


Figure 8-2.1 Typical Gas Supply Crossover Connection

8-3 Gas Supply Testing

Testing

Gas tests are required to be done in accordance with the following, based upon the Oregon Residential Specialty Code, Chapter 24.

- Appliances and equipment designed for operating pressures of less than the test pressure or is not to be included in the test must be either disconnected or isolated from the gas supply piping system. Individual appliance shutoff valves may be closed to isolate an appliance.
- Test pressure must be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period.
- Gas piping systems under 14 inches water column pressure, must be tested at a pressure of not less than 10 PSI.
- Test pressure must be held for not less than 15 minutes with no drop in pressure.

Test Failures

Upon failure of the test, check all applicable connections, repair any leaks, and repeat the test. If test continues to fail, notify factory authorized service personnel immediately and report failures. The site's gas supply must remain off until all leaks have been repaired.

Connection Procedures

Gas burning—appliance vents must be inspected to ensure that they have been connected to the appliance and that roof jacks are installed and have not come loose during transit.

8-5 Under-Floor Ducts

- Under-floor heat and air conditioning ducts must:
 - Be listed to UL 181.
 - Have a minimum of R-8 insulation
 - Installed with a minimum of bends and excess length so as not to restrict airflow.
 - Be supported and connected according to the duct and appliance manufacturer's instructions.
 - Not be crushed, dented, or compressed.
 - Have all tears, holes, and penetrations sealed with approved foil tape or other approved duct sealer.
- Where extensions, splices or sharp turns (when the inside radius is less than the inside diameter of the duct) are used, they must be made with minimum 28 gage sheet metal extensions, elbows, tees, wyes, or collars secured with proper mechanical fasteners with each seam and joint sealed with foil tape or other approved duct sealer. The insulation and vapor retarder required must be installed on all sheet metal extensions, elbows, tees, wyes, and collars.
- The inner liner must be secured to the extension, elbow, tee, wye, or collar with proper mechanical fasteners and installed so the insulation and vapor retarder extends up into the floor insulation and bottom board. Ducts may not have stress at the connection points.
- The outer liner, insulation, and vapor retarder must be secured to the extension, elbow or collar with stainless steel worm drive clamps or nylon straps. Stainless steel worm drive clamps, nylon straps, and all duct vapor retarder joints must be sealed with approved foil tape or other approved duct sealer.

- Adequate clearances must be maintained under the manufactured dwelling for the under-floor heat and air conditioning ducts. Ducts must be elevated above the ground, footing, or slab a minimum of 1 in. with masonry or pressure treated blocks or straps.

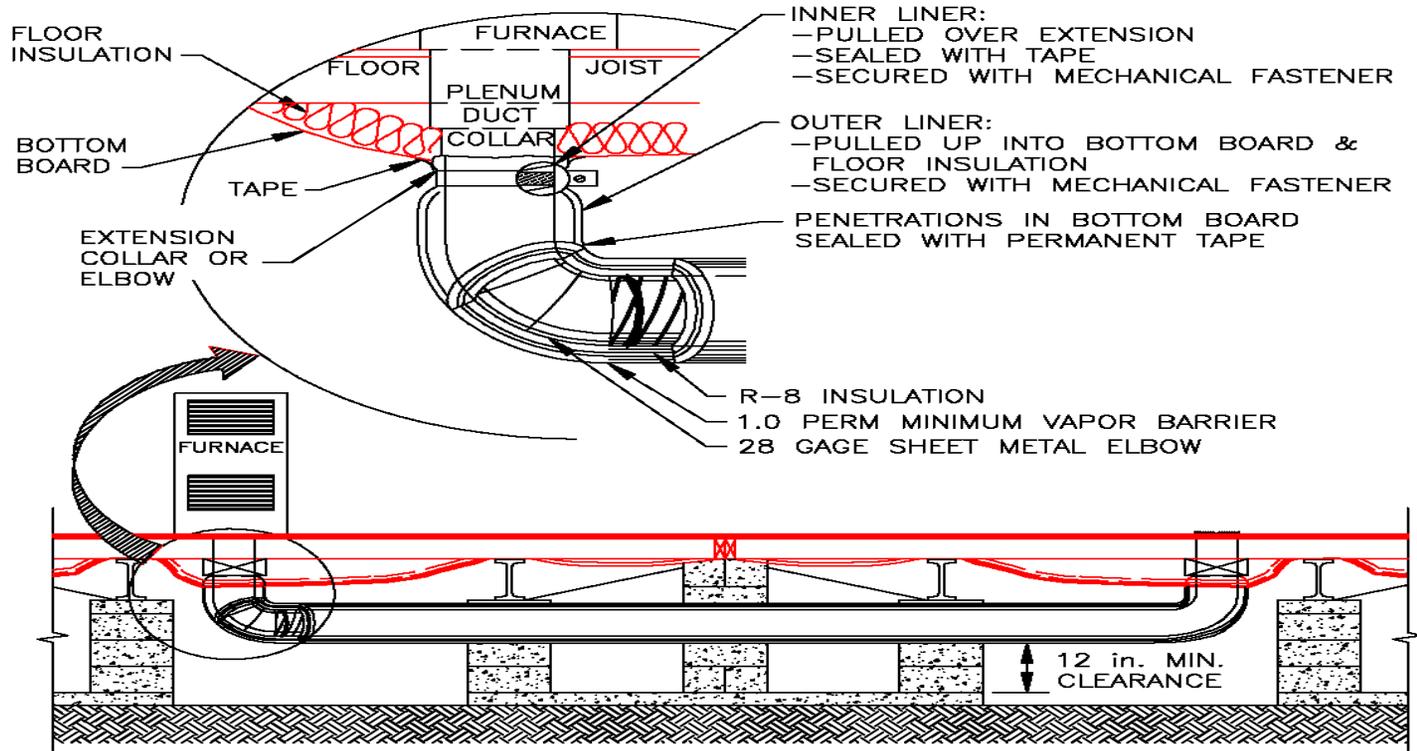


Figure 8-5 Typical Under-Floor Duct Crossover Connection

END