- Step 5. Apply lubricant recommended by pipe manufacturer to end of pipe. Do not apply lubricant to gasket or the groove unless otherwise specifically recommended by the manufacturer.
- Step 6. Insert pipe into fitting until mark on pipe is even with fitting.

**Note:** This depth of insertion is required to properly allow for thermal expansion and contraction. During joint assembly, the previously installed length of pipe should be held so that the existing joints are not pushed together or pulled apart. DO NOT USE METAL STRAPS, CHAINS (OR THE LIKE) FOR ASSEMBLY.

## 2.7 Material

2.7.1 Location. PVC piping shall be installed only outside the foundation of any building or structure or parts thereof. It shall be buried in the ground for its entire length except vertical piping may be extended above grade per Section 2.4.4. It shall not be installed within or under any building or structure or mobile home or commercial coach or parts thereof. The term "building or structure or parts thereof" shall include structures such as porches and steps, whether roofed or not, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways and

similar structures or appurtenances. [UPC 604.0]

- 2.8 Installation, Testing, and Identification
- **2.8.1 Deflection**. Elastomeric gasketed pipe may be deflected in accordance with the manufacturer's recommendations provided that it shall not be permanently staked or blocked to maintain this deflection. [UPC 609.0]
- **2.8.2 Maximum Working Pressure**. Maximum working pressure shall be as follows (see chart on following page).
- 2.8.3 Saddles. PVC pressure pipe saddles are limited to underground use outside the building. The branch of the saddle shall be a minimum of two pipe sizes smaller than the main. Saddles shall be installed as required by their listings.
- **2.8.4 Thrust Blocking**. In lines with rubber gasketed joints, thrust blocks shall be installed at all:
  - (a) Changes in direction, as at tees and bends
  - (b) Changes in size, as at reducers
  - (c) Stops, as at dead ends
  - (d) Valves, where thrusts may be expected.

Thrust block sizes shall be based on the maximum line pressure, pipe size and kind of soil. Refer to Table 2 for thrust at fittings for a pressure of 100 psi (689 kPa).

TABLE 1 MINIMUM CURE TIME, IN HOURS\* TEST PRESSURE FOR PIPE

	Sizes 1/2" to 1-1/4" (12.7 mm) (32 mm)		Sizes 1-1/2" to 3" (38 mm) (76 mm)		Sizes 3-1/2" to 8" (89 mm) (203 mm)	
Temperature Range During Cure Period	Up to 180 psi (1240.2 kPa)	Above 180 to 370 psi (1240.2 to 2549.3 kPa)	Up to 180 psi (1240.2 kPa)	Above 180 to 315 psi (1240.2 to 2170.4 kPa)	Up to 180 psi (1240.2 kPa)	Above 180 to 315 psi (1240.2 to 2170.4 kPa)
60°F-100°F (16°C-38°C)	1 hr	6 hr	2 hr	12 hr	6 hr	24 hr
40°F-60°F (4°C-16°C)	2 hr	12 hr	4 hr	24 hr	12 hr	48 hr
10°F-40°F (-12°C+4°C)	8 hr	48 hr	16 hr	96 hr	48 hr	8 days

<sup>\*</sup>If gaps or loose fits are encountered in the system, double these cure times.