

**PLUMBING SHOP  
PLUMBER//SR. PLUMBER  
Ref. Code: P-P-10**

INSTALLATION OF GAS SERVICES INCLUDING PIPING, VALVES, AND EQUIPMENT		
Activity	Hazard Identification	Required Precautions
1. Driving to and from work site.	1. Motor vehicle accident; striking pedestrians, bicyclists, or individuals wearing rollerblades.	1. Wear prescription lenses, if required, and seatbelt. Verify that all equipment on vehicle is secured properly. Stay alert for pedestrians, bicyclists, and individuals wearing rollerblades.
2. Using stepladder.	2. Ladder collapsing; slipping/falling from ladder.	2. Inspect ladder before use. Use ladder of proper height. Make sure ladder is properly assembled and locked and standing on level ground. Do not exceed weight limit for ladder. Do not stand on top of ladder or on top rung. Have coworker hold ladder.
3. Using power tools including drills and saws.	3a. Electric shock; electrocution.	3a. Keep power cord away from work area. Plug tools into GFCI-protected outlet. Do not use drill if work area is wet. Before drilling into a wall, survey area for power lines, water lines, air conditioning ducts and other safety hazards.
	3b. Tripping over or cutting power cord.	3b. Keep power cord away from work area.
	3c. Injury from flying bits of material, including metal chips; chips embedded in eye.	3c. Wear safety glasses, and optionally a dust mask, gloves, long-sleeve shirt and/or coveralls.
	3d. Burning self on hot blade.	3d. Do not touch blade after cutting. Wear gloves.
	3e. Saw or drill bit catching; drill bit breaking; severe lacerations; dismemberment.	3e. Keep tools in good condition. Inspect tools before use. Make sure you have a good center of gravity and are properly balanced. Hold tools securely with two hands to maintain control.
	3f. Loss of hearing.	3f. Wear ear plugs.

4. Using hand tools.	4. Cuts, pinches, smashes, punctures, severing of fingers.	4. Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
5. Storing/transporting compressed gas.	5a. Explosion of compressed gas.	5a. Do not allow cylinder valves or regulator assemblies to come into contact with grease, oil, or lubricants.
	5b. Rupture of cylinder if valve breaks off.	5b. Always install protective valve cover. Always secure cylinder to a stand or a wall.
6. Using oxygen and LP gas.	6a. Regulator diaphragm rupturing when torch is turned on.	6a. Turn regulator adjusting screw counterclockwise to disengage plunger before turning on cylinder.
	6b. Acetylene explosion.	6b. Stand acetylene tank vertically before using.
	6c. Torch explosion.	6c. Install spark arrestors on torch and regulators.
	6d. Burning self.	6d. Wear gloves, overalls, and leather chaps. Always burn away from yourself.
	6e. Starting a fire.	6e. Always keep fire extinguisher nearby and have a person stand by as a firewatch. Must have a burning permit.
	6f. Burns from metal dripping on self.	6f. Do not reach to burn; always work level with torch.
	6g. Inhalation of fumes.	6g. Work in a well-ventilated area. Use exhaust fans and tubes for ventilation.
	6h. Flash burn to eyes.	6h. Wear burning goggles to protect eyes.
	6i. Buildup of acetylene from leaks.	6i. Check hose and connections for leaks and damage before using.
7. Lifting heavy weight.	7. Back strain; overexertion.	7. Know your weight-lifting capacity and get help if needed. Lift using leg muscles. Keep back straight. Use mechanical lifting equipment.