

2.3.19. Gas leak Detection Control Panel

2.3.19.1. Gas leak detection Control Panel shall be listed with Civil Defence as per test standards required by Section 6.

2.3.20. Pipe Sleeves (For Pipe-in-Pipe/Containment)

2.3.20.1. Pipe sleeves shall be listed with Civil Defence as per test standards required by Section 4.

2.3.21. Over Pressure protection device

- **2.3.21.1.** An over pressure protection device (OPD) is a device to protect the down stream installation and shut off the gas flow if the outlet pressure exceeds the set limit. The setting of the over pressure protecting device shall not be more than 30% of maximum operating pressure.
- **2.3.21.2.** The over pressure protection device shall be designed to achieve the following.
 - a. Ensure reliable and continuous supply of LPG.
 - b. Protecting downstream system against over pressure
 - c. Protecting against failure of regulating devices.

2.3.22. Bypass Valve

2.3.22.1. Bypass valve for solenoid valves are generally not allowed. However, in case design includes by-pass for the Emergency Shut-off Valve (Solenoid valve), either a physical disconnection with plugged valves to be provided, or single valve lockable type in normally locked position shall be provided. Isolation valves should be provided upstream and downstream the solenoid valve to allow replacing without supply interruption.

