

**Table 11.11: PRDP Tapping requirements**

ITEMS	PRDP TAPPING REQUIREMENTS
<b>2. SHAFTS</b>	<ul style="list-style-type: none"> <li>i. LPG distribution inside any building shall be through dedicated shafts.</li> <li>ii. LPG shafts for non-highrise buildings shall be 1 hour fire resistance rated shafts.</li> <li>iii. LPG shafts for highrise buildings shall be 2 hour fire resistance rated shafts.</li> <li>iv. Such shafts for LPG either masonry, steel, concrete or tested and approved fire rated particle board.</li> <li>v. Any pipe penetration on the walls and shafts shall be suitably fire stopped to maintain the fire resistance of the walls.</li> <li>vi. Any duct dedicated for gas shall be naturally ventilated to open air.</li> </ul>
<b>3. PIPE-IN-PIPE ARRANGEMENT</b>	<ul style="list-style-type: none"> <li>i. Pipe-in-Pipe (Containment) piping arrangement shall be provided where LPG piping is passing through basements, studio apartments, show kitchens where kitchen is open to living or public spaces and confined spaces and shall be naturally ventilated to open air at least from one side.</li> <li>ii. Such Pipe-in-Pipe arrangements shall be with approved CPVC or steel piping complete with LPG leak detectors monitored by central LPG Control panel.</li> <li>iii. Where LPG piping needs drops from ceiling in the open space of a room, such as in school and research laboratories, shall be provided with steel support columns and steel pipe-in-pipe arrangement complete with leak detectors monitored by central LPG Control panel.</li> </ul>
<b>4. ELECTRICAL EQUIPMENT AND WIRING</b>	<ul style="list-style-type: none"> <li>i. Electrical equipment and wiring shall be approved for the purpose and shall comply with NFPA 70.</li> <li>ii. Wiring for LPG leak detection system, supervision and remote operations shall be MICC or 2 hour fire rated 3(4)x1.5 mm cable and earthing could also apply in addition depending on the Gas Detection Control Panel cable.</li> </ul>
<b>5. LPG LEAK DETECTION AND ALARM SYSTEM</b>	<p><b><u>STAGE 2: APARTMENT/RETAIL UNIT KITCHEN GAS DETECTION SYSTEM</u></b></p> <ul style="list-style-type: none"> <li>i. Kitchen type LPG detectors shall be approved by Civil Defence. See <b>Section 6</b>.</li> <li>ii. LPG leak detectors, Standalone, Kitchen type, shall be installed for Kitchens, LPG consuming appliances, as per manufacturer's instructions.</li> <li>iii. LPG-leak detector shall be provided, not more than 30 cm from finished floor level and 1.5 m from the cooking and other LPG consuming appliance.</li> <li>iv. The remote emergency shut-off Switch shall be at least 1.5 m away from the appliances and at the kitchen exit door(s). It shall be clearly marked and placed at a suitable height for easy access during emergencies.</li> <li>v. Emergency Shut-off solenoid valve shall be located in the local PRDP and shall be directly controlled by gas detector.</li> <li>vi. Please refer to <b>Figure 11.4</b>.</li> </ul>
<b>6. SAFETY PROVISIONS</b>	<ul style="list-style-type: none"> <li>i. Any pipe penetration on the walls shall be suitably fire stopped to maintain the fire resistance of the walls.</li> <li>ii. The LPG installation shall be provided with at least one approved portable B:C rating dry chemical fire extinguisher having a minimum capacity of 9kg.</li> </ul>