

SoCalGas[®]
GAS METER ROOM REQUIREMENTS

Scope:

Meter Rooms are defined as any closed space intended to contain gas meters. Builders must notify SoCalGas[®] of their intent to create a gas meter room during their project's architectural design phase.

All meter rooms must comply with local codes and ordinances **AND** the following SoCalGas requirements.

This document reflects the most recent updates to the SoCalGas Gas Meter Room Requirements Gas Standard and is only **valid until December 31st of 2015**.

Requirements:

- 1.1. Location Requirements
 - 1.1.1. Meter Rooms with an above-grade location and at least one wall with an access door to the outside are strongly preferred.
 - 1.1.2. Meter Rooms in basements, lower levels or elevated levels in interior locations without direct access to the outside are only considered when no other acceptable location is available.
- 1.2. Electrical Requirements
 - 1.2.1. All electrical equipment, lighting fixtures and switches shall meet the requirements of NFPA Volume 70 for Class I Division 2 Group D locations.
 - 1.2.2. The Gas Meter Room shall be provided with lighting that as a minimum meets the illumination requirements of the current edition of the California Building Code.
 - 1.2.3. The Gas Meter Room light switch shall be located outside of the room adjacent to the entry door with switch function identification.
 - 1.2.4. No electrical receptacles are permitted inside a Gas Meter Room.
 - 1.2.5. Any electrical power requirements for **SoCalGas** measurement and/or communications equipment will be specified on a project-specific basis by **SoCalGas representatives** as determined by the **Measurement Regulation and Control Group in Gas Engineering**.
- 1.3. Ventilation Requirements
 - 1.3.1. A mechanical ventilation system meeting the requirements of **SoCalGas**, California Building Code, California Mechanical Code and all applicable local codes and ordinances shall be provided with a minimum capacity of at least six air exchanges per hour.

- 1.3.2. The quantity and location of both the air inlet vents and the air exhaust fans shall be configured and located such that a complete or full exchange of air occurs within the room with each exchange.
- 1.3.3. Knowledge of proper operation of the mechanical ventilation system shall occur at all times. This can be accomplished with either:
 - 1.3.3.1. Installation of a real-time continuous monitoring system with output to an on-site manned Building Control Room (or to an off-site manned monitoring Control Center).
 - 1.3.3.2. Installation of a back-up redundant exhaust fan system that activates upon failure of the primary fan system and sends an output alarm to a manned Building Control Room (or to an off-site manned monitoring Control Center).
- 1.3.4. The **Customers/Builder** must submit calculations and documentation that are approved (stamped and signed) by a **California licensed professional engineer** demonstrating that the ventilation system for the Gas Meter Room satisfies all requirements within this document as well as all applicable codes, standards and ordinances.
- 1.4. Security/Access Requirements
 - 1.4.1. Entry doors shall be locked and provided with a lockbox located near the door containing a door key or they shall be secured with a double lock arrangement that allows access to the room by **company personnel** as well as the **customer**.
 - 1.4.2. In accordance with SoCalGas Rule 25 (Company's right of ingress to and egress from customer's premises) the **customer** shall provide **SoCalGas personnel** with access to the Gas Meter Room at all times including emergency response, meter reading, system testing, inspection and maintenance.
- 1.5. Signage Requirements
 - 1.5.1. The access door(s) shall be identified with signs identifying: "Gas Meter Room"; "Contains Flammable Gas" and "No Smoking Permitted".
 - 1.5.2. Additional "No Smoking" signs shall be posted on at least two interior walls of the Gas Meter Room.
- 1.6. Construction Requirements
 - 1.6.1. An outside shut off valve shall be installed in the service line in a location accessible at all times for emergency shut down.
 - 1.6.2. Only gas-related facilities are allowed in the Gas Meter Room. Other facilities, equipment or materials are prohibited and the room shall not be used for storage purposes at any time.

- 1.6.3. All interior surfaces, joints and openings (penetrations) shall be sealed gas-tight to prevent gas from leaking into the building using a non-hardening silicone based compound. Doors that do not open to the outside shall seal gas-tight when closed.
 - 1.6.4. Floor drains are not permitted in a Gas Meter Room.
 - 1.6.5. All interior walls, ceilings, floors and doors shall be fire rated for a minimum of two hours or as specified in the California Building Code for Group H Division 1 occupancies.
 - 1.6.6. Gas Meter Room minimum dimensions will be specified by **SoCalGas representatives** to allow sufficient working space for construction and maintenance. The room height shall be a minimum of 7.5 feet and a maximum of 10 feet.
 - 1.6.7. Where three-tiered meter manifolds are installed, the **customer** will provide work platforms specified by **SoCalGas representatives**.
 - 1.6.8. Any facilities/conduits/openings (penetrations) required for measurement and/or communications equipment will be specified on a project specific basis by **SoCalGas representatives** as determined by the **Measurement Regulation and Control Group of Gas Engineering**.
- 1.7. Automated Meter Data Collector Unit (DCU) Utility Closet

A separate DCU Utility Closet shall be constructed directly adjacent (with a common or shared wall) to the Gas Meter Room.

The DCU Utility Closet shall be constructed to the following requirements

- 1.7.1. This closet shall be the same height as the Gas Meter Room with a minimum width of 6 feet and a minimum depth of 6 feet.
- 1.7.2. All interior walls, ceilings, floors and doors shall be fire rated for a minimum of 2 hours or as specified in the California Building Code for Group H Division 1 occupancies.
- 1.7.3. The DCU Utility Closet shall be provided with lighting that as a minimum meets the illumination requirements of the current edition of the California Building Code.
- 1.7.4. The DCU Utility Closet shall be supplied by a dedicated 15 Amp, 120V single phase circuit (two #10 AWG conductors). The dedicated circuit shall terminate to a fused disconnect switch inside the DCU Utility Closet. The fused disconnect switch shall be lockable with a 3 amp fuse installed. The dedicated circuit shall be tied to the ground system of the Building.
- 1.7.5. The DCU Utility Closet shall include a quad outlet supplied by a dedicated circuit from the Building distribution panel.
- 1.7.6. One 1 ½ inch conduit from the DCU Utility Closet to the outside of the Building shall be provided which meets the following:

- 1.7.6.1. This conduit shall run the most direct path to the outside with a maximum distance of 100 feet.
- 1.7.6.2. Depending on site conditions, antenna(s) and/or related communication devices may be mounted to the building wall or to a roof parapet wall at a minimum height of 15feet but no more than 30 feet above ground level. For this equipment the location where the conduit terminate to the outside of the building will be free from obstructions including the building itself.
- 1.7.7. One 1 ½ inch conduit from the DCU Utility Closet to the Gas Meter Room shall be provided (this conduit shall be sealed after installation of SoCalGas’s conductors).
- 1.7.8. One 1 ½ inch conduit from the DCU Utility Closet to the Building Telecommunications Room shall be provided.
- 1.7.9. The access door to the DCU Utility Closet shall be identified with a sign identifying: "SoCalGas Communication Closet".

The access door shall also include appropriate RF Signage that conforms to IEEE ANSI Standard C95.2 and FCC OET 65, this sign will be provided by SoCalGas (an example of which follows):



- 1.8. Equipment Vent Pipe Requirements
 - 1.8.1. The **customer** shall provide the number and size holes (penetrations) specified by **SoCalGas representatives**, through the exterior wall to the outside to facilitate vent piping for gas regulating and control equipment and for purging during maintenance operations.
 - 1.8.2. For Gas Meter Rooms without a wall with exterior access, the **customer** shall install a separate steel vent pipe for each pressure regulating and control device. Additionally, the Customer shall install one steel vent pipe for purging gas during maintenance operations. Each steel vent pipe shall be at a location specified by the **SoCalGas representative** and shall adhere to the following requirements (approved by the **SoCalGas representative**):

- 1.8.2.1. All vent piping shall be steel material and consist of standard welded or threaded pipe, pipe nipples and fittings that are approved for use by the **SoCalGas representative** (CSST tubing is prohibited for use in vent piping).
- 1.8.2.2. To as great an extent as possible, minimize the length of all vent piping.
- 1.8.2.3. Each vent pipe shall be the same size or larger as the size of each regulator vent (you should never downsize or decrease the size of vent piping).
- 1.8.2.4. The size of vent pipe shall be increased by one nominal pipe diameter for every 25 feet of vent pipe.
- 1.8.2.5. Always provide one vent pipe per regulator vent (you should never combine vent pipes).
- 1.8.2.6. Each vent pipe shall be marked to identify the regulator or device to which it is connected.
- 1.8.2.7. All vent pipes shall be installed so as to avoid liquid traps and shall be routed to the outside of the building to a “safe” location (as defined in the following paragraph). They shall be terminated with a fitting designed to prevent the entry of insects, foreign material or moisture.
- 1.8.2.8. A “safe” location for the terminus of vent piping shall avoid tripping or public hazards and be a minimum of 8 feet from any air intake, fresh air vent or building opening and a minimum of 3 feet from electric meters or any potential source of ignition.

1.9. Builder Owned Piping (House Line)

- 1.9.1. All **customer** installed piping shall be steel material and be constructed in accordance with NFPA 54 and all local codes and ordinances.
- 1.9.2. It must adequately be supported to minimize structural load on the MSA.
- 1.9.3. It shall not interfere in any way with the installation, operation and maintenance of **SoCalGas** equipment.
- 1.9.4. When flexible corrugated stainless steel tubing (CSST) is used, it shall be connected to the MSA outlet with standard threaded pipe fittings and steel pipe or pipe nipples properly supported and approved by SoCalGas.