



TOWN OF BRIGHTON
Office of the Fire Marshal
 2300 Elmwood Avenue
 Rochester, New York 14618
 (585) 784-5220 Office
 (585) 784-5207 Fax

Medical Gas Operational Permit

In accordance with the Code of the Town of Brighton and the New York State Fire Prevention and Building Code, an Compressed gases operational permit is required to store, handle or use at normal temperatures at pressures more than (504) Five Hundred and Four cubic feet of flammable compressed gas.

Make Checks Payable – Town of Brighton

Medical Gas Operational Permit - \$75.00

Applicant & Property Information	Business Name						
	Address			Suite	City	State	Zip Code
	Telephone		Work Telephone		Email Address		
	Property Owner or Mailing Address if different from above						
	Name or DBA						
	Address			Suite	City	State	Zip Code
Telephone		Work Telephone					
Primary Contact	Name						
	Address			City	State	Zip Code	
	Telephone		Mobile Telephone		Work Telephone		
Secondary Contact	Name						
	Address			City	State	Zip Code	
	Telephone		Mobile Telephone		Work Telephone		

The undersigned represents that this application for a permit as described herein will be in accordance with all ordinances of the Town of Brighton and the Fire and Building Code of New York State and that any plans or specifications submitted with this application are the plans or specifications relating to this permit and no other.

Applicant Signature			Applicant Name (Print)			Application Date
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Permit Number	Issue Date	Expiration Date	Fee Paid	Check #	Receipt Number	Evacuation Plan Received



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Medical Gas Systems Requirements

The intent of this guideline is to provide the information necessary to ensure that the design and installation of compressed gas containers, cylinders, tanks, and systems will comply with the applicable provisions of the 2010 Fire Code of New York State (FCNYS) Chapter 30.

Scope

To provide basic information regarding Medical Gas Systems using oxygen and/or nitrous oxide compressed gases. Installations shall be in accordance with the requirements of the Fire Code of New York State Chapters 27 and 30, the Building Code, and the Plumbing Code. Additional detailed information may be found in these references.

Definitions

MEDICAL GAS SYSTEM: A system consisting of a central supply (cylinders), control equipment, and piping extending to station outlets.

General

Office of the Fire Marshal is the Administrative Authority with the responsibility to issue Fire Code Operational Permits, plan check, inspect and approve the construction and installation of Medical Gas Systems (including all piping and equipment). They require plans to be submitted for all new installations or modification of existing systems.

Office of the Fire Marshal must verify that construction and installation requirements have been met and sign off new or modified existing systems prior to operation.

Operation of a Medical Gas System with 504 cubic feet or more of either oxygen or nitrogen requires a Fire Code Permit. Prior to issuance, a complete permit submittal and approval is required as well as construction and installation approval by both the Fire Department and Building and Safety Office of the Fire Marshal.

Supply cylinders may be located inside when in an approved cabinet or 1 hour fire resistive room meeting the requirements for construction found in the Fire Code of New York State Chapter 30, Section 3006 and Building Code of New York State, including a self-closing door, ventilation and fire sprinklers.

All Medical Gas Systems shall be supplied from at least two sources – primary and reserve, e.g., two tank manifolds and two cylinders, however two supply lines are not required.

Areas where medical gases are stored shall be dedicated to such use without other storage or uses.

All piping, fittings, valves and equipment shall be designed for the use and installed as required by the Plumbing Code of New York State.

Equipment and piping shall be protected from physical damage. In areas where piping in walls may be subject to future damage (picture hanging etc.), the piping shall be installed within an additional piping sleeve or conduit.

Signs/Labels

Doors to supply rooms and cabinets shall have a sign indicating "No Smoking-Oxygen/Nitrous Oxide".

Compressed gas cylinders shall be identified by nationally recognized standards.

Each valve, manifold and all piping shall be labeled identifying the contents with the following colors:

- a) Oxygen: Green background with white letters.
- b) Nitrous Oxide: Blue background with white letters.

Shutoff valve labels shall indicate "(Type Gas) Shutoff Valve for (Location or Zone)", or "(Type Gas) Main Shutoff Valve".

All piping shall have labels indicating contents with lettering at least 3/8" high and a direction of flow arrow. This includes piping in walls and above drop ceilings. Piping labels shall be at the following locations:

- a) Each valve.
- b) Both sides of each floor, wall or ceiling penetration.
- c) Each change of direction.
- d) Every 20 feet or fraction thereof.

All cylinders shall be secured to prevent falling and those not in use shall have the protective cap in place.

NFPA 704 M Labeling is required for the Medical Gas Room on the outside door.

A record of as-built plans and valve identification shall remain on the site at all times.

Cylinder Storage Requirements

§F3006.2.1 One-hour exterior rooms. A 1-hour exterior room shall be a room or enclosure separated from the remainder of the building by fire barriers with a fire-resistance rating of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be self-closing smoke-and draft-control assemblies having a fire protection rating of not less than 1 hour. Rooms shall have at least one exterior wall that is provided with at least two vents. Each vent shall not be less than 36 square inches (0.023 m²) in area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with at least one automatic sprinkler to provide container cooling in case of fire.

§F3006.2.2 One-hour interior room. When an exterior wall cannot be provided for the room, automatic sprinklers shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a 1-hour-rated shaft enclosure from the room to the exterior. Approved mechanical ventilation shall comply with the *Mechanical Code of New York State* and be provided at a minimum rate of 1 cubic foot per minute per square foot [0.00508 m³/(s • m²)] of the area of the room.

§F3006.2.3 Gas cabinets. Gas cabinets shall be constructed in accordance with §F2703.8.6 and the following:

1. The average velocity of ventilation at the face of access ports or windows shall not be less than 200 feet per minute (61 m/s) with a minimum of 150 feet per minute (46 m/s) at any point of the access port or window.
2. Connected to an exhaust system.
3. Internally sprinklered.

Fire Code Operational Permit Equipments

Office of the Fire Marshal - Compressed Gas Fire Code Permit Application

Current permit fee.

Material Safety Data Sheet (MSDS) for each medical gas.

Maximum cylinder size and total amounts of each gas.

Copies of a scaled floor plan indicating:

- 1) All rooms, walls and doors including adjacent units within the building.
- 2) Exterior exit pathways away from the building.
- 3) Location of the gas supply.
- 4) Location of each station outlet.
- 5) A description of the supply cabinet or room with details describing the provided requirements.

Inspection / Testing

All new and modified existing installations require inspection and testing during the rough and final stages. No portion of the system shall be concealed prior to the rough inspection and test. Tests shall be conducted as required in the Plumbing Code.

The rough test shall be performed before attachment of system components, but after installation of the station outlets and inlets, with test caps in place. Each section of piping shall be subjected to a test pressure of 150 psi with USP grade (medical quality) nitrogen or argon gas. This pressure shall be maintained until each joint has been examined for leakage by means of soapy water. The source valve shall be closed during the test. Any leaks shall be located, repaired, and retested.

The final test shall be performed with the system completely assembled and all components installed. The system shall be subjected to a 24-hour standing pressure test at 20% above the normal operation line pressure with USP grade (medical quality) nitrogen or argon gas. The source valve and all outlets shall be closed and the test gas shall be disconnected. The piping system shall remain leak-free for 24 hours. The only allowable pressure changes during the 24 hour test period shall be those caused by variations in the ambient temperature around the piping system. Any leaks shall be located, repaired, and retested.

Office of the Fire Marshal shall be notified prior to the rough inspection and test as well as the final inspection and test.

System Certification

Owner or Agent is required to obtain a system certification from an independent third party of their choice. The Plumbing Code identifies the requirements of the certification test which checks for leaks, cross connection, labeling and functional operation of all system components.

Owner or Agent is required to obtain a system certification report from the third party prior to acceptance of the system.