



STUDY MATERIAL
FOR THE EXAMINATION FOR
CERTIFICATE OF FITNESS
FOR

**Portable Outdoor
Natural Gas Fired Heaters
in Sidewalk Cafes**

G-93

(Revision Date: October 2, 2007)

INSIDE THIS BOOKLET YOU WILL FIND THE FOLLOWING:

- **NOTICE OF EXAMINATION (NOE)**
- **STUDY MATERIAL & Technical Policy and Procedure Notice (TPPN) # 2/07 “The Installation of Outdoor Natural Gas Fired Heaters in Unenclosed Sidewalk Cafes” Issued by New York City Department of Buildings.**

NOTICE OF EXAMINATION FOR

Title: Examination for the Certificate of Fitness for Supervision of Portable Outdoor Natural Gas Fired Heaters in Sidewalk Cafes (G-93).

Date of Test: Written tests are conducted Monday through Friday (except legal holidays) 9:00 AM to 2:30 PM.

QUALIFICATION REQUIREMENTS

1. Applicants must be at least 18 years of age.
2. Applicants must have a reasonable understanding of the English language.
3. Applicants must present a letter of recommendation from his/her employer. The letter must be on official letterhead and must state the applicant's full name, character, physical condition, experience, and address of premises where applicant will be employed.
4. Applicants must present two (2) forms of satisfactory identification i.e., driver's license and passport picture ID.

APPLICATION INFORMATION

Application Fees: \$25.00 for originals and \$15.00 for renewals. The fee may be paid in cash, money order, or personal check payable to New York City Fire Department. The \$25.00 fee must be payable by all applicants prior to taking the Certificate of Fitness test.

Application forms are available at the Public Certification Unit, 9 MetroTech Center, 1st floor, Brooklyn, NY 11201.

TEST INFORMATION

Test: The test will be of the written, multiple choice type. A passing score of at least 70% is required in order to secure a Certificate of Fitness. Call (718) 999-1986 for additional information and forms.

ABOUT THE STUDY MATERIAL

The study material will help you prepare for the written examination for the Certificate of Fitness (G-93) for the supervision of portable natural gas fired heaters used outdoors in sidewalk cafes, using flexible gas hoses.

This study material **does not** contain all the information you need to know to work with natural gas and supervise natural gas heaters. It is your responsibility to become familiar with all applicable rules and regulations of the City of New York, even if they are not covered in this study material.

ABOUT THE TEST

You must pass a multiple choice test to qualify for the Certificate of Fitness. A score of 70% correct is required in order to pass the multiple choice test. All questions on the multiple choice test have four answer options. Only one answer option is correct for each question. If you do not answer a question, or if you mark more than one option, your answer will be scored as incorrect. Read each question carefully before marking your answer. There is no penalty for guessing on the multiple choice test.

Sample Questions

- 1. The first President of the United States was:**
 - (A) Bill Clinton.
 - (B) Abraham Lincoln.
 - (C) George Washington.
 - (D) Ronald Reagan.

The correct answer is “C”. You would press “C” on your touch-screen monitor.

- 2. The capital of New York State is:**
 - (A) Albany.
 - (B) Washington D.C.
 - (C) New York City.
 - (D) Buffalo.

The correct answer is “A”. You would press “A” on your touch-screen monitor.

INTRODUCTION

Outdoor natural gas fired heaters are gaining popularity with food service operators as an effective method of extending the outdoor dining season. A sidewalk café with added warmth can be operational earlier in spring and later into the autumn by providing additional heat to an area that would otherwise be unpleasantly cold. An outdoor heater can also warm the sidewalk café in a cool summer night to help keep customers comfortable and relaxed.

Similar construction and operation principles are integrated in heaters produced by different manufactures. The most wide-spread model is the one that incorporates a gas-fired burner located beneath a dome-shaped reflector. These heaters are available in permanent pole-mount, freestanding pole-mount and suspended unit configurations.

Portable heaters shall be connected and disconnected to the natural gas supply, with flexible hose connectors, only by employees holding the Certificate of Fitness (G-93). Such equipment shall obtain an annually renewable Fire Department permit, and is subject to an annual inspection by a Fire Department representative for the permit renewal application.

Pursuant to the NYC Zoning Resolution and §2-55 of Title 6 of the Rules of the City of New York, “Physical Criteria for Unenclosed Sidewalk Cafes”, the portable natural gas heaters must be removed daily when the unenclosed sidewalk café ceases operation.

NATURAL GAS

Natural gas is a gaseous fossil fuel consisting primarily of methane but includes significant quantities of ethane, butane, propane, carbon dioxide, nitrogen, helium and hydrogen sulfide. Nitrogen, helium, carbon dioxide and trace amounts of hydrogen sulfide, water and odorants are also be present in trace amounts.

Natural gas is often informally referred to as simply “**gas**”, especially when compared to other energy sources such as petroleum product. Before natural gas can be used as a fuel it must undergo extensive processing to remove almost all materials other than methane.

Processed natural gas is tasteless and odorless. However, before gas is distributed to end-users, it is odorized by adding small amounts of odorants (mixtures of t-butyl mercaptan, isopropyl mercaptan, tetrahydrothiophene, dimethyl sulfide and other sulfur compounds), to assist in leak detection. Breathing natural gas in trace amounts is harmless, however, natural gas is a simple asphyxiant and can kill if it displaces air to the point where the oxygen content will not support life.

Natural gas is a flammable gas. It can be hazardous to life and property by explosion. Natural gas is lighter than air, and tends to escape into the atmosphere. However, when natural gas is confined, such as within a building or other enclosed space, gas concentrations can reach explosive mixtures and, if ignited, result in blasts that could level and destroy buildings. Methane has a lower explosive limit of 5% in air, and an upper explosive limit of 15%.

<p>ANY NATURAL GAS LEAK SHALL BE REGARDED AS A SERIOUS HAZARD THAT REQUIRES IMMEDIATE RESPONSE!</p>

GENERAL SAFETY REGULATIONS

All natural gas heaters and the natural gas heater components used in connection with such heaters, shall be approved for use in New York City. The Certificate of Fitness holder must take special care when connecting and disconnecting the hoses to the heaters. The heaters, valves, hoses, and related equipment should be inspected for physical damage. Special care should be taken to identify any defects that may cause a leak. Defective gas components, including but not limited to tubing, fittings valves, strainers and filters, shall be replaced. Defective components shall not be repaired. An adequate supply of spare parts and materials must be available on the premises for replacement. Any defective components that are discovered must be replaced before the heating equipment may be connected or used again.

The certificate of fitness holder shall periodically conduct a visual inspection of all natural gas fired heaters that are in use. Such inspections shall be conducted as frequently as needed to ensure the safe operation of the heaters. All natural gas fired heaters that are connected for use but not in use, including the outdoor gas service line shut-off valve, shall be inspected at least once every work day. The certificate of fitness holder shall ensure that all such appliances, hoses and equipment are in a safe condition and proper working order and are otherwise installed, maintained and operated safely and in compliance with the requirements of the heater manufacturer, the Department of Buildings Technical Policy and Procedure Notice (TPPN), and the Department of Buildings Material and Equipment Acceptance (MEA) resolutions issued for the heaters.

No connections of natural gas to the heaters, testing and/or equipment replacement shall be performed at times when the occupancy is open for business or when customers are present. All portable natural gas equipment set up operations shall be completed before the cafe opens to the public.

Natural gas heaters shall be operated with all panels, covers and guards in place. Any part or component removed for cleaning or maintenance must be properly re-installed before using the heater.

Heaters shall be visually inspected daily, both before and during use. It is recommended that at least annually a qualified service technician or a licensed plumber conduct a safety inspection of the natural gas heaters. Certain operational conditions such as being near the ocean, dusty areas, high humidity areas, high wind condition areas, and heavy use of the heaters, may require more frequent cleaning or maintenance. It is imperative that the control compartment, burner system, and circulating air passages of the heater be kept clean. The manufacturer or qualified service personnel can provide additional information.

If any malfunctions or defects of the natural gas heating equipment are discovered during hours when the establishment is open to public, the heater shall be promptly shutdown and the natural gas supply valve attached to the heaters shall be closed. The cause of such malfunction and defect, other than a gas leak which should be immediately investigated, shall be investigated only after the occupancy is closed for business and when no customers are present.

The Certificate of Fitness holder should not attempt to perform any repairs to the heaters. This equipment is very sensitive and shall be serviced and/or repaired by a representative of the manufacturer or an authorized professional in accordance with the manufacturer's instructions.

Portable heaters shall be installed in a heavy, tip-proof base to ensure safe operation and stability. Heaters shall always be placed and used on firm, level and stable incombustible surfaces. Heaters shall never be moved while in operation, and shall not be operated in the rain, high-wind or dusty conditions.

LOCATION OF PORTABLE NATURAL GAS HEATERS

Clearance distances shall be maintained around the portable natural gas heaters as specified by the **M.E.A. resolutions issued for such heater**. When the clearance requirements are not specified in the heaters M.E.A. resolutions, the most stringent requirement from the Department of Buildings TPPN 2/07, and the manufacturers' instructions shall apply.

For example, the manufacturer's brochure shows for the "Sunglow" heaters the "Top Clearance" as 18 inches (see Dimensional Schematic Drawing presented on the next page). The clearances required by TPPN # 2/07 and by the M.E.A. resolution are 24" from the top of the reflector and 24" from sides of the reflector. Therefore, the "Top Clearance" shall be 24". M.E.A. required clearances are shown in the following Table. Such clearance requirement applies to distances to chairs, tables, awnings and other combustible materials.

Heaters shall not be placed within a minimum of 4 feet **from** or **under** an awning, as required by the TPPN # 2/07.

Certain items or materials when stored under the heater head or placed too close to the heater head can be subject to radiant heat and could be damaged or ignited. Care must be taken to avoid this condition.

Children and adults should be alerted to the hazards of high surface temperatures of the main burner and reflector and should be instructed to stay away from these areas. Children should be carefully supervised when near the heaters. Children should not be allowed to push, climb on, or swing on the heaters. This could cause property damage, serious injury, or even death.

Combustible or flammable materials, including decorations, should not be hung from the heaters or placed near the heaters while in operation.

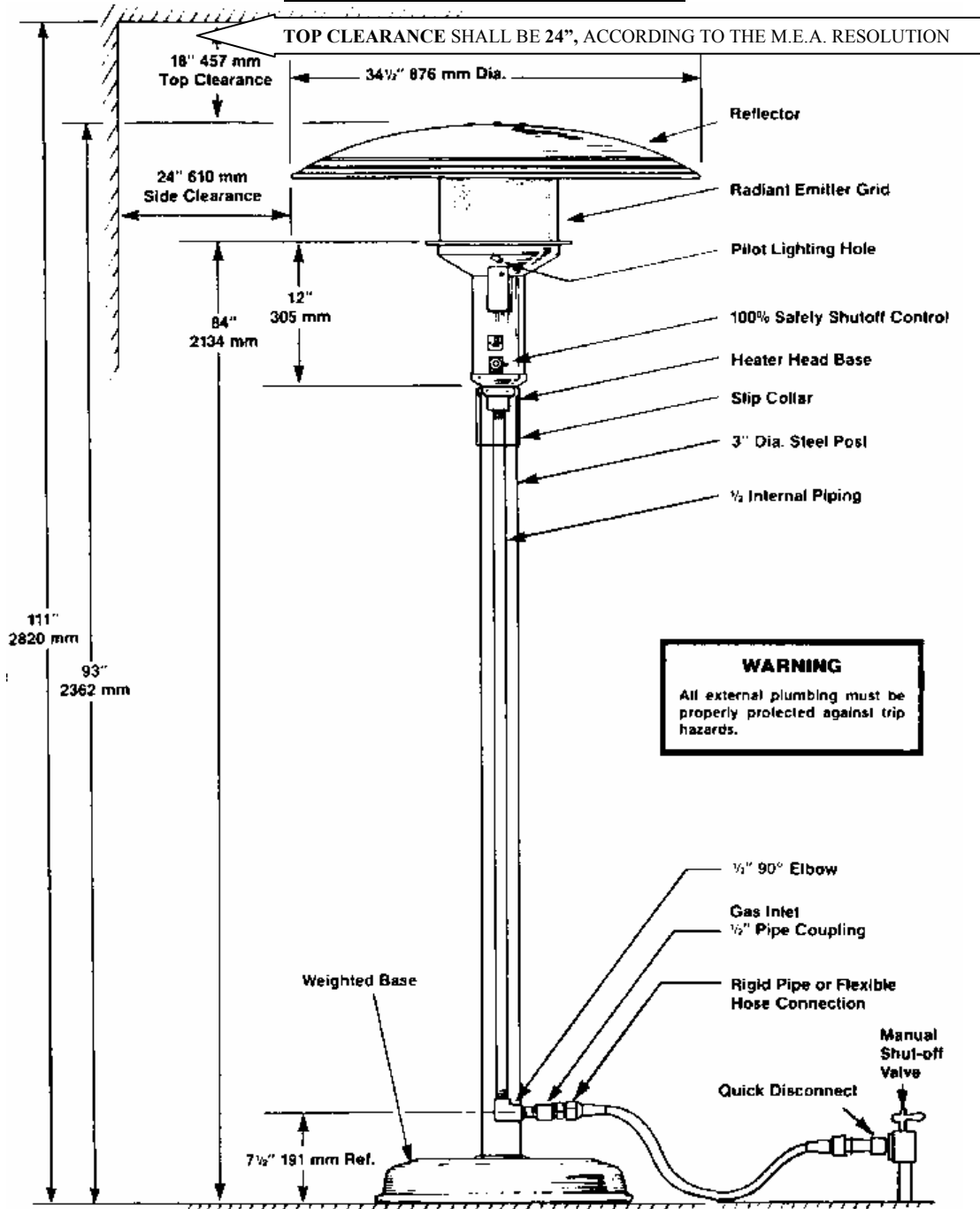
When more than one heater is used in an area to provide an overlap in heating patterns, the multiple heaters shall be located at distances as specified by the MEA resolutions, TPPN 2/07 and the manufacturer's instructions.



Table with required clearances specified in the M.E.A. resolutions

Heater - Model	MEA Resolution	Side Clearance (inches)	Ceiling Clearance (inches)	Clearance Below (inches)
SunGlow - A242	211-94-E Vol. II	24	24	48
Patio Comfort-NPC05-SS	565-06-E	27	24	80
Patio Comfort-NPC05-AB	565-06-E	27	24	80

DIMENSIONAL SCHEMATIC DRAWING
WITH REQUIRED CLEARANCE DISTANCES
(from the manufacturer's brochure)



FLEXIBLE NATURAL GAS HOSE CONNECTIONS

The type and installation of flexible gas hose connectors must comply with the requirements of the National Fuel Gas Code, Fuel Gas Code of New York State and of TPPN 2/2007. Such requirements include, but are not limited to the following:

- Flexible hose connectors shall be MEA approved, and such connections shall be made in accordance with the terms and conditions of the MEA approval and manufacturers' recommendations.
- Flexible hoses shall be of minimum practical length, but in no event to exceed eight (8) feet.
- Flexible hose connections must be visible and entirely within the same space as the heater being served.
- Flexible hose connectors shall be protected against physical and thermal damage.
- Flexible hoses shall not be a tripping hazard and must be protected by bridging in compliance with Local Law 58 of 1987 and Reference Standard RS 4-6 of the NYC Building Code, to allow accessibility and to protect the hose from damage.
- An accessible shut-off valve must be provided in the rigid piping immediately upstream from each flexible hose connector.
- Outside connection points shall comply with ANSI Z-21.90 "Standard for Gas Outlets", and shall be in lockable receptacles, made of corrosion-resistant metallic materials, suitable for outdoor use. Receptacles shall be recessed and locked closed when not in use.
- Only persons holding of a Fire Department Certificate of Fitness (G-93) shall connect and disconnect the natural gas supply to the outdoor natural gas heaters.

NATURAL GAS MAIN LINE

- All gas piping shall be installed, maintained and repaired only by New York City Licensed Plumbers.
- The natural gas main distribution system supplying natural gas to the heaters shall have a manual shut-off valve for both emergency use and locking out the system when not in use.
- An emergency automatic gas shut-off valve, activated by either a low pressure sensor or an emergency switch, shall be installed on the main gas line. The low pressure sensor shall be connected to an audible and visible alarm utilizing a bell or horn and a flashing device.
- The natural gas emergency switch and shut-off valves shall be identified by durable signs.

PREPARING THE PORTABLE NATURAL GAS HEATERS FOR DAILY USE

Natural gas connections of the hose between the heater and the wall or other approved gas supply connection valve shall be checked daily for gas leaks prior to operation of the heating equipment.

The Fire Department recommends the use of a portable combustible gas leak detector that should be readily available on the premises. In the absence of such portable combustible gas leak detector, natural gas connections must be checked daily using a soap and water solution. After verifying that the connections are secure, a soap and water mixture shall be brushed on each connection. The connection should be checked to see if any air bubbles are present. If no air bubbles are visible there should be no leak. However, if bubbles are present there may be a problem with the connection. The suspected hose connector should be disconnected, inspected and cleaned. If no defects are apparent, the hose may be reconnected and the leak test repeated. If bubbles continue to be visible after the retest, this indicates that there is a defect with the gas connection. The hose connector shall be disconnected from the heater, and the defective hose connection or other defective component replaced prior to using the equipment.

A lighted flame (for example, a match or a propane torch) should never be used when checking a connection for a natural gas leak.

RECOMMENDED CLEANING AND MAINTENANCE OF PORTABLE NATURAL GAS HEATERS

Heaters are manufactured from weather resistant materials and only require minimum cleaning and maintenance. Cleaning must be performed when the heaters are shut down and cool to the touch. Heaters will be safe to operate and last longer if they are cleaned and maintained properly. It is very important that the air required for the combustion process is not blocked from entering the burner. Orifices, burner vents, and other openings must be kept free of dirt and insect webs.

Flammable or corrosive cleaning agents shall be never used for cleaning or maintenance purposes. Emitter grid or burner area shall never be cleaned using any flammable, combustible or corrosive cleaning products, including any flammable/combustible/corrosive spray products.

The burner ports must also be kept clear so that the burner burns uniformly and the flow of gas is not restricted. If a heater is not performing adequately, it will be necessary to check the burner and burner vents.

In a salt air or ocean environment, corrosion and rust occurs at a far greater rate than in non-ocean areas. Under these conditions, more frequently inspections may be required to examine for corrosion and components that require replacement.

RECORD KEEPING

At least one copy of the manufacturer's operating and maintenance instructions for the portable natural gas fired heaters, and the Materials and Equipment Acceptance resolutions issued by the Department of Buildings for the heaters and the hose connectors used should be readily available on the premises.

A record of all daily inspections performed of the portable natural gas heaters, including any action taken, should be documented by the Certificate of Fitness holder in a bound log book kept on the premise.

The log book, permits, and Certificates of Fitness must be made available to any Fire Department representative upon request.

GENERAL INSPECTION CHECKLIST

The certificate of fitness holder is required to make regular inspections and patrols of the assigned area of responsibility. These inspections will vary depending on the location. However, the following general guidelines will apply for all locations:

- The entire premise must be checked daily for potential fire ignition sources. Any potential ignition source that is discovered must be corrected or removed immediately. For example, frayed electrical wires and defective electronic components must be removed from the premises, replaced or properly repaired.
- Rubbish and other combustible waste shall not to be allowed to accumulate indoors. This is a fire hazard. It may be easily ignited by a stray spark. All rubbish and other combustible waste shall be promptly removed from the premises.

All required Fire Department permits and Certificates of Fitness must be obtained prior to operation of the heaters, and copies of the permit and Certificates of Fitness shall be conspicuously posted on the premises. Every Certificate of Fitness holder shall additionally have the certificate in his or her possession while performing such supervisory duties. The operation of such heaters with no permit or an expired permit is unlawful.

All fire extinguishers must be conspicuously located. Signs must be conspicuously posted indicating the locations of the extinguishers. Signs describing how to use the fire extinguishing devices must also be posted. The certificate of fitness holder must make sure that the extinguishers are inspected at the designated time intervals. The fire extinguishers must be recharged after each time they are used, or as required for the type of extinguisher provided.

FIRE EXTINGUISHERS

TPPN 2/07 requires that at least one portable fire extinguisher of a minimum 2-A rating for every 2,500 square feet of floor area of fraction thereof shall be provided within 10 feet of the entrance to the café.

The certificate of fitness holder must know how and when to operate all fire extinguishers installed at the premise. The classes of fires and the appropriate extinguishers are described below.

Class A Fires Class A fires occur when ordinary combustible materials are ignited. For example, wood and paper fires are class A fires. Water type extinguishers should be used to extinguish these fires because they cool the fire while quenching the flame.

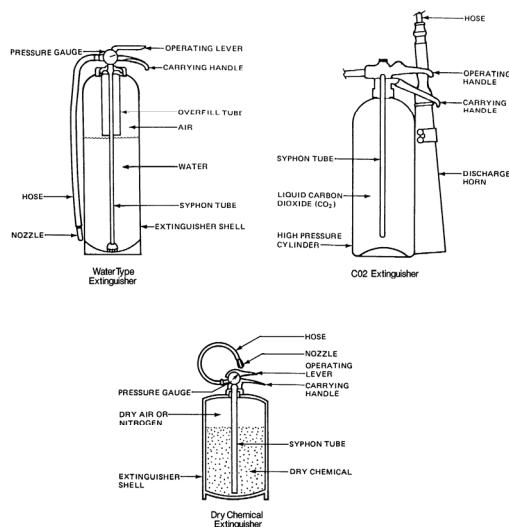
Class B Fires Class B fires occur when flammable liquids, gases or greases are ignited. These fires must be extinguished by smothering the flame. The flame may be smothered using carbon dioxide, dry chemical or foam extinguishers. Water type extinguishers will not effectively extinguish class B fires.

Class C Fires Class C fires occur when electrical equipment catches fire. These fires must be fought with fire extinguishers that do not conduct electricity. Carbon dioxide and dry chemical extinguishers must be used to extinguish electrical fires. Foam and water type extinguishers must not be used to extinguish electrical fires.

Class D fires Class D fires are caused by ignitable metals, such as magnesium, titanium, and metallic sodium, or metals that are combustible under certain conditions, such as calcium, zinc, and aluminum. Generally, water should not be used to extinguish these fires.

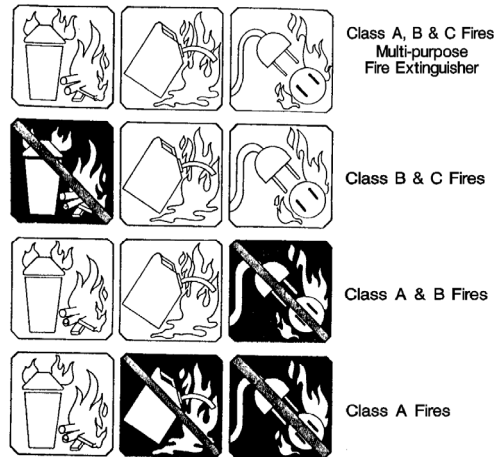
A multi-purpose dry chemical fire extinguisher may be used to extinguish Class A, B, or C fires.

Examples of Water type, CO₂ and Dry Chemical extinguishers are shown below.



Fire Extinguishers

Symbols may also be painted on the extinguisher. The symbols indicate what kind of fires the extinguisher may be used on. Examples of these symbols are shown below.



Symbols Painted on Fire Extinguishers

A symbol with a shaded background and a slash indicates that the extinguisher must not be used for that type of fire. The certificate of fitness holder must understand these symbols and must make sure that the fire extinguishers are kept in good working order at all times. Generally, operation instructions are clearly painted on the side of the fire extinguisher. They clearly describe how to use the extinguisher in case of an emergency. An example of these instructions is shown below.



Operation Instructions for a Fire Extinguisher

PLANNING FOR EMERGENCIES

Every outdoor café should have an emergency response plan detailing procedures that must be followed during an emergency, fire, natural gas leak or other urgent situation. The plan shall include methods for fast and safe evacuation of the premise. The certificate of fitness holder must know and understand his or her responsibilities as they are outlined in the premise's emergency response plan. **These responsibilities may include shutting off gas supplies, notifying the Fire Department, assisting in the safe evacuation of the place, and extinguishing fires.**

The certificate of fitness holder must know the locations and how to operate all fire extinguishing devices and control devices installed at the facility. He or she must also know the locations of each fire alarm station on the premises, if applicable, and how to operate them.

The Fire Department strongly recommends that every employee of the establishment be familiar with the emergency response plan, and know the location & how to operate the safety devices, such as the natural gas shut-off valves. Training sessions should be conducted periodically and all employees should be knowledgeable of the safety procedures that must be followed during an emergency.

The Fire Department must be contacted directly by phone in case of an emergency, dialing **911**. It is suggested to have the Fire Department Borough Communication Office phone numbers posted near the telephones most likely to be used in case of an emergency. These phone numbers are:

Manhattan	(212) 999-2222
Bronx	(212) 999-3333
Brooklyn	(718) 999-4444
Queens	(718) 999-5555
Staten Island	(718) 999-6666

BIBLIOGRAPHY:

- New York City Department of Buildings Technical Policy and Procedure Notice (TPPN) # 2/07 entitled “The Installation of Outdoor Natural Gas Fired Heaters in Unenclosed Sidewalk Cafes”, revised September 6, 2007.
- The installation of gas burning equipment shall conform to the applicable requirements of Article 5 of Subchapter 14, RS 14-2 and RS 14-6 of Chapter 1 of Title 27 of the New York City Administrative Code.
- The installation of gas piping shall comply with Subchapter 16 and Section §P115 of RS 16 of Chapter 1 of Title 27 of the New York City Administrative Code.
- The unit heaters shall be accepted for use in New York City in accordance with Sections 27-131 and 27-135 of the New York City Building Code. The conditions, terms and limitations outlined in the Material Equipment Acceptance resolutions issued by the NYC Department of Buildings for each particular type of appliance shall be complied with.
- Sidewalk cafes shall comply with the applicable provisions of Chapter 4 of Article I of the New York City Zoning Resolution; and Chapter 35 of Title 3, and Chapter 2 of Title 6 of the Rules of the City of New York.
- American National Standards Institute (ANSI) Z223.1 and National Fire Protection Association (NFPA) Standard 54 “National Fuel Gas Code”.
- New York City Electrical Code.
- Materials and Equipment Acceptance Resolutions (MEA) issued by the Department of Buildings for natural gas heaters and hose connectors and the manufacturers’ manuals, specifications and instructions for such heaters and the hose connectors.

Technical Policy and Procedure Notice # 2/07
“The Installation of Outdoor Natural Gas Fired Heaters in
Unenclosed Sidewalk Cafes”

(Revised: September 6, 2007)

NOTE: Document available at New York City Department of Buildings web site:

<http://www.nyc.gov/html/dob/downloads/pdf/tppn0207.pdf>



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ISSUANCE # 671 (Revised)

**TECHNICAL POLICY AND PROCEDURE
NOTICE #2/07**

TO: Distribution

FROM: Fatma M. Amer, P.E.
Deputy Commissioner & Chief Code Engineer

DATE: September 6, 2007

SUBJECT: **The Installation of Outdoor Natural Gas Fired Heaters in Unenclosed Sidewalk Cafes**

PURPOSE: To address the installation of outdoor gas fired heating devices by the owners and/or operators of sidewalk cafes throughout the five boroughs of New York City. Such unenclosed sidewalk cafes must be licensed by the Department of Consumer Affairs.

REFERENCES: *The installation of gas burning equipment shall comply with the applicable requirements of Article 5 of Subchapter 14, RS 14-2 and RS 14-6 of Chapter 1 of Title 27 of the Administration Code. The installation of gas piping shall comply with Subchapter 16 and Section §P115 of RS 16 of Chapter 1 of Title 27 of the Administration Code. The unit heaters shall be accepted for use in NYC in accordance with Section 27-131 and Section 27-135 of the Building Code.*

In addition to the code provisions above, sidewalk cafes shall also comply with applicable provisions of Chapter 4 of Article I of the NYC Zoning Resolution and Chapter 35 of the Rules of the Fire Department.

EFFECTIVE: Immediately

SPECIFICS: All applications for the installation of Natural Gas Fired Outdoor Heaters shall be filed by a New York State Registered Architect or New York State Professional Engineer on behalf of the owners and/or operators of the sidewalk cafes. Such installations are filed with this department as Alteration Type II with a separate PL work type in accordance with Directive 14 of 1975. A New York City Licensed Master Plumber shall obtain a plumbing permit and perform all of the plumbing work in accordance with the provisions of Subchapter 16 and RS 16 of the Building Code. All work shall also comply with all of the following requirements:

1. Outdoor gas heaters must be of commercial grade with MEA approval.
2. The units and related piping shall be installed in accordance with the terms and conditions of the MEA approval and the manufacturers' recommendations.
3. Clearances shall be maintained around the units as recommended by the manufacturer and in no event shall such clearances be less than two feet. No heater shall be placed under or within 4 feet of an awning.
4. Plans of the café submitted with Alteration Type II shall, at a minimum, indicate the following:
 - The approved boundaries of the sidewalk cafe showing all exit door(s) to or from the restaurant,
 - Details of gas piping and connections,
 - Location of heaters and clearances from other objects as recommended by the manufacturer, and
 - Location of gas shut off valve and alarms.
5. Copy of the department's accepted plans shall be maintained on the premises and made available upon request by the department or the Fire Department.
6. Where flexible hose connectors are used to connect unit heaters to gas outlets, such flexible hoses shall be MEA approved. Such connection shall be made in accordance with the terms and conditions of the MEA approval and the manufacturers' recommendations. The maximum length of the flexible hoses shall be in compliance with the manufacturers' recommendations and in no event shall such length exceed 8 feet.
7. Hoses shall not be a tripping hazard and must be protected by bridging in compliance with LL58 of 1987 and RS 4-6 of the Building Code, both to allow accessibility and protect the hose from damage.
8. Outside connection points shall comply with ANSI Z-21.90, Standards for Gas Outlets, and shall be in lockable receptacles, made of corrosion-

resistant metallic material, suitable for outdoor use. Receptacles shall be recessed and locked closed when not in use.

9. All gas piping shall be installed only by NYC licensed plumbers and the distribution system shall have a manual shut off valve for both emergency use and locking out the system when not in use.
10. An emergency automatic gas shut off valve, activated by either a low pressure sensor or an emergency switch, shall be installed on the main gas line. The low pressure sensor shall be connected to an alarm that utilizes a bell or horn with a flashing device.
11. The emergency switch shall be identified by a sign posted in plain sight next to it.
12. At least one portable fire extinguishing device of a minimum 2-A rating for every 2,500 square feet of floor area or fraction thereof shall be provided within 10 feet of the entrance to the café.
13. Only designated employees who hold a FDNY Certificate of Fitness shall connect or disconnect the outdoor heaters.
14. All devices shall have wireless electric ignition devices. Open flame, match start and electrical hard-wired systems are not permitted.
15. The owners and/or operators of such outdoor heaters shall obtain a Fire Department open flame permit prior to the operation of the equipment. Such equipment shall be subject to annual inspection by the Fire Department.
16. Unit heaters using LPG (Propane) shall be prohibited.

/Gas Fired Heaters