

CITY OF NEW YORK
DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of the Material and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, F.A.I.A., Commissioner
MEA119-05-E Report of Material and Equipment
Acceptance Division

Manufacturer - Chemetron Fire Systems, 4801 Southwick Drive, 3rd Floor,
Matteson, IL 60443.

Trade Name(s) - Chemetron Fire Systems

Product - Low Pressure Carbon Dioxide Extinguishing System Units.

Pertinent Code Section(s) - Reference Standard RS-17 and Subchapter 17.

Prescribed Test(s) - NFPA12, ANSI/ASHRAE Standard 15.

Laboratory - FM Approvals.

Test Reports - 3016208, Class 5420, issued September 20, 2004; 3016260, Class
5420, issued February 18, 2005.

Description - Low Pressure Carbon Dioxide Extinguishing System Units for total
flooding protection against Class A surface burning, Class B flammable
liquid and Class C hazards occurring within an enclosure and for local
application protection against Class B flammable liquid fires occurring
within unenclosed special hazards.

42 Inch Diameter Storage Units:

Models 10481062, 10481063, 10481064, 10481074, 10481075, 10481076; 1-1/4 Ton
Storage Units. Models 10481066, 10481067, 10481068, 10481078, 10481079,
10481080; 2 Ton Storage Units. Models 10481070, 10481071, 10481072, 10481082,
10481083, 10481084; 2-3/4 Ton Storage Units. These units contain refrigeration
condensing units to maintain a constant storage temperature of 0°F and pressure of
approximately 300 psi. A description of these units is contained in the Operation and
Maintenance manual for 1-1/4, 2 and 2-3/4 Ton Storage Units, Issued June 1998.

54 Inch Diameter Storage Units:

Models 10481086, 10481087, 10481089, 10481090, 10481092, 10481093, 10481095, 10481096; 4 Ton Storage Units. Models 10481098, 10481099, 10481101, 10481102, 10481104, 10481105, 10481107, 10481108; 6 Ton Storage Units. Models 10481110, 10481111, 10481113, 10481114, 10481116, 10481117, 10481119, 10481120; 8 Ton Storage Units. Models 10481122, 10481123, 10481125, 10481126, 10481128, 10481129, 10481131, 10481132; 10 Ton Storage Units. These units contain refrigeration condensing units to maintain a constant storage temperature of 0°F and pressure of approximately 300 psi. A description of these units is contained in the Operation and Maintenance manual for 4, 6, 8 and 10 Ton Storage Units (p/n 30000038), Issued June 15, 1998 and revised February 3, 2005.

78 Inch Diameter Storage Units:

Models 10481342, 10481343, 10481344, 10481347, 10481348, 10481349; 13 Ton Storage Units. Models 10481352, 10481353, 10481354, 10481357, 10481358, 10481359; 17 Ton Storage Units. Models 10481362, 10481363, 10481364, 10481367, 10481368, 10481369; 24 Ton Storage Units. Models 10481372, 10481373, 10481374, 10481377, 10481378, 10481379; 31 Ton Storage Units. Models 10481765, 10481766, 10481767, 10481768, 10481769; 45 Ton Storage Units. These units contain refrigeration condensing units to maintain a constant storage temperature of 0°F and pressure of approximately 300 psi. A description of these units is contained in the Operation and Maintenance manual for 13, 17, 24, 31 and 45 Ton Storage Units (p/n 30000055), Issued March 15, 2001.

The installation limitation for all size units and accessory components are contained in the following manuals:

Low Pressure CO₂ Mechanical Installation Specifications Plate H-75 (p/n 30000025), Issued February 15, 1965 and revised July 25, 2002.

Low Pressure Carbon Dioxide Supervisory Control Arrangement Installation and Operation Manual (p/n 30000065), Issued March 1989 and Revised April 16, 2004.

Micro 1-EV Control Panel Installation and Operation Manual, Low Pressure (p/n 70000231), Issued December 1, 1989 and Revised October 15, 1997.

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections letter dated June 17, 2005, F.P. Index No. 0505016A.

Recommendations - That the above units be accepted on condition that:

1. All uses, locations and installations shall comply with all applicable requirements of New York City codes, rules, and regulations. Further, the installation shall be in accordance with Reference Standard 17-3 (except Section 10), and all Factory Mutual requirements (Project 3016260 and 3016208).
2. Building Department approved plans shall be filed with Fire Department for each engineered low-pressure carbon dioxide system installation. Such plans shall also indicate the configuration of all piping network and nozzle orifices for installation and the type and size of hazard.
3. Copy of carbon dioxide storage vessel ASME data sheet shall be submitted as part of the each carbon dioxide fire suppression installation.
4. All carbon dioxide systems pressure relief valves shall discharge outside the building at a safe location, which will not result in the accumulation of life threatening concentrations of carbon dioxide.
5. These low pressure carbon dioxide units when installed outdoors shall be protected from severe weather conditions and adequate safeguards and enclosures shall be provided to prevent any mechanical or other damage.
6. Refrigeration systems on storage tanks are designed to meet ASHRAE 2001 requirements and shall comply with any other New York City Refrigerant Code requirements.
7. All devices used for the control, detection and releasing functions shall be MEA approved and compatible to use with the low-pressure carbon dioxide systems.
8. All components shall be FM approved and suitable for use in engineered low pressure carbon dioxide fire suppression systems as per NFPA 12 (Carbon Dioxide Extinguishing Systems).
9. FM and manufacturer's installation, maintenance procedures and limitations shall be complied with.

All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided in Section 27-131 of the Building Code.

Final Acceptance

July 29, 2005

Examined by

Gerald [Signature]