

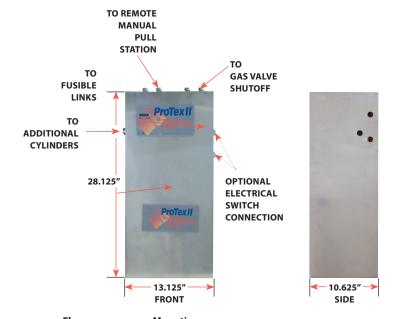


# **Engineer and Architect Specifications**

#### **Features**

- · UL and ULC Approved
- Complies with NFPA Standard 17A and 96
- Meets the requirements of the Building Officials and Code Administrators
- Approved by the City of New York Material and Equipment Acceptance Division.





| Model<br>No. | Α       | В         | c     | D     | Flow<br>Point<br>Capacity | Weight   | Mounting<br>Bracket<br>Used |
|--------------|---------|-----------|-------|-------|---------------------------|----------|-----------------------------|
| L1600        | 8.00    | 17.75     | 23.5  | 15.44 | 5                         | 34 lbs.  | MB15                        |
| L3000        | 8.00    | 25.06     | 30.81 | 22.75 | 10                        | 53 lbs.  | MB15                        |
| L4600        | 10.00   | 25.06     | 30.81 | 22.75 | 15                        | 83 lbs.  | MB15                        |
| L6000        | 10.00   | 35.81     | 41.56 | 33.50 | 20                        | 108 lbs. | MB1                         |
| All dime     | ensions | are in in | ches  |       |                           |          |                             |

## General

The ProTex II® Restaurant Fire Suppression System is a pre-engineered solution to appliance and ventilating hood and duct grease fires. The system is designed to maximize hazard protection, reliability, and installation efficiency. Automatic or manual system activation releases a throttle discharge of potassium carbonate solution on the protected area in the form of fine droplets to suppress the fire and help prevent reignition after the discharge is complete.

### **System Operation**

The ProTex II® Restaurant Kitchen Fire Suppression System has been designed for protecting kitchen hood, plenum, exhaust duct, grease filters, and cooking appliances (such as fryers, griddles, rangetops, upright broilers, charbroilers and woks) from grease fires. The versatile state-of-the-art wet chemical distribution technique, combined with dual, independent activation capability — automatic fusible link or manual release — provides efficient, reliable protection the moment a fire is detected. Once initiated, the pressurized wet chemical extinguishing agent cylinder discharges a potassium carbonate solution through a pre-engineered piping network and out the discharge nozzles. The wet chemical discharge pattern is maintained for a duration of time to ensure suppression and inhibit reignition. Expanded capability provides remote manual actuation, gas equipment shutdown, and electrical system shutdown. This optional equipment will enhance the basic system functions and be applicable when designing custom configurations to suit a particular customer's needs and/or comply with local codes.

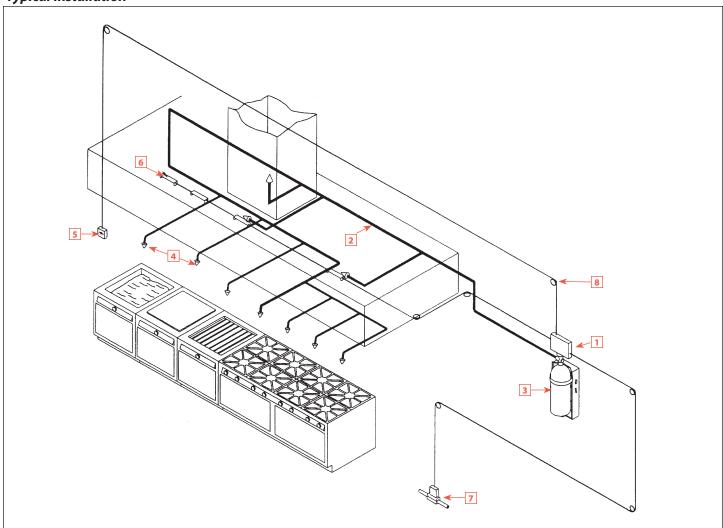
#### Suggested Architect's Specifications

The fire suppression system should be of the stored pressure, wet chemical pre-engineered fixed nozzle type manufactured by ProTex. A 16-gram CO2 cartridge is designed in compliance with Military Specification "MIL-C-6O1G," and shall be used as the pneumatic releasing device for the system. The cartridge shall be an integral part of the mechanical control head. The wet chemical cylinder shall be DOT-rated for stored pressure of 225 psig, and a pressure gauge shall be provided on the cylinder valve assembly for visual inspection. The system shall be capable of automatic and manual actuation. Automatic actuation shall be provided by an appropriate number of fusible link detectors mounted in series on a stainless steel cable input line to the mechanical control head. Manual actuation is provided by a remote mechanical pull station with a dedicated cable line to the mechanical control head.

The system shall have been tested to the ULStandard for Fire Extinguishing Systems for Protection of Restaurant Cooking Area, UL300, and Listed by Underwriters Laboratories, Inc. It shall be installed in accordance with the National Fire Protection Association Standard No. 17A Wet Chemical Extinguisher Systems, and No. 96 Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment, and comply with all local and/or state codes and standards.

Refer to ProTex II® System Technical Manual, Part# PMAN2, for detailed installation and maintenance instructions.

### **Typical Installation**



- 1. Mechanical Control Head– Integral design requires no separate release pressure cylinder; separate stainless steel cable activation lines for automatic fusible link and optional remote mechanical pull station provide an added measure of safety; an easily accessible manual release mechanism which provides an option to the automatic fusible link and, depending on local codes, can be used in place of a remote manual pull station; unique fool proof technique for achieving necessary input stainless steel cable tension.
- 2. Piping Unbalanced piping network simplifies application design and installation; no separate piping to connect system pressure cylinders to extinguishing agent container. Schedule 40 stainless, chrome-plated and black pipe can be used.
- 3. Cylinders (DOT 4B-225 Rated) Contain Protex Potassium Carbonate Solution stored at 225 psig; pressure gauge for visual maintenance checks; 1.6, 3.0, 4.6, and 6.0 gallon sizes provide 5, 10, 15, and 20 flow point coverage respectively, offering a broad range of application coverage.
- 4. Nozzles Can be fixed or fitted with a swivel adaptor allowing the nozzle to be rotated approximately 30° in all directions.

- 5. Remote Mechanical Pull Station Simple operating instructions with a double action release avoids careless system discharge; a 150' stainless steel cable line with  $\frac{1}{6}$ " cable and 40 corner pulleys maximum; a dedicated stainless steel cable line to the mechanical control head provides a true back-up in the event fusible links are fouled.
- 6. Fusible Link Equipment– Accommodates both series and terminal placement to minimize inventory and simplify ordering; all necessary components included for efficient assembly and installation. Fusible links rated for maximum ambient temperature must be ordered separately. Maximum limitations of 20 fusible links on a 150' stainless steel cable line with 40 corner pulleys provide substantial hazard coverage.
- 7. Gas Valve– Complies with requirements pertaining to the shut-off of fuel as described by NFPA 17A; after regular maintenance/service check can be reset at mechanical control head for convenience of service technician; a 100' stainless steel cable line with 30 corner pulleys maximum provides mounting flexibility.
- **8.** Corner Pulleys and Accessories Designed to ensure reliable system function, as tested by Underwriters Laboratories.