



Amerex Corporation

FIRE SUPPRESSION DOESN'T GET ANY EASIER THAN THIS

ZONE
by 
DEFENSE
FIRE SUPPRESSION

"ZONE DEFENSE BY AMEREX" RESTAURANT F

GENERAL:

The Zone Defense Restaurant Fire Suppression System is a pre-engineered, wet chemical, stored-pressure type with a fixed nozzle agent distribution network manufactured by Amerex Corporation. The system is listed by Underwriter's Laboratories, Inc., ULC and tested to UL Standard 300. The system shall be designed, installed and maintained in accordance with: Amerex Part No. 16640 "Design, Installation and Maintenance Manual", N.F.P.A. 96, N.F.P.A. 17A, local codes and ordinances by an Authorized Amerex Zone Defense Systems Distributor using factory trained personnel. The Zone Defense system is fully self-contained and does not require electrical power or connection to either domestic water supply or fire sprinkler supply lines.

AGENT:

The system agent is Amerex KP liquid fire suppressant, a potassium acetate based solution that suppresses cooking grease fires through both saponification and cooling. The agent has a pH of 9 or less and does not harm stainless steel surfaces.

ZD AGENT CYLINDER:

The ZD agent cylinder is a mild steel DOT 4BW 240-specification cylinder, tested to 480 PSI (3309 kPa). The agent cylinder assembly is fully factory charged with Amerex KP liquid agent and pressurized to 240 PSI (1655 kPa).

DETECTION:

The detection network uses a pneumatic linear detection device listed by UL for 435 deg. F as a "quick response" device. The detection device incorporates thermal responsive tubing that is pressurized to 70 psi and runs continuously throughout the length of the hood. No cables, conduit, corner pulleys, "S" hooks or fusible links shall be allowed in the Zone Defense detection system.

PNEUMATIC RELEASE MODULE (PRM):

The PRM offers superior detection by using a linear pneumatic detection system. The PRM detection system consists of the PRM, thermal responsive tubing and end of line fitting. The tubing is pressurized through a small "accumulator" inside the enclosure, routed throughout the hazard area, and has a UL listed fixed temperature of 435°F. When exposed to a fire condition, the tubing

ruptures, relieving all of the pressure in the tubing and accumulator thus firing the system using a nitrogen cylinder. The PRM comes complete with enclosure, accumulator, end of line fitting, and connector for up to two remote mechanical manual pull stations, one SPDT micro switch, and "knock-outs". It is capable of firing up to 10 ZD 375 cylinder assemblies and actuating up to two gas valves. The tubing is sold separately and is cut to length.

ACTUATION CYLINDER:

The actuation cylinder is filled with 10 cu. in. of nitrogen and has an integral pressure gauge that allows easy field verification of pressure. This cylinder shall be capable of being refilled in the field by an Authorized Amerex Zone Defense Systems Distributor and shall not require periodic hydrostatic testing.

AGENT CYLINDER BRACKET:

The agent cylinder bracket is steel, painted red, with a factory-supplied discharge hose and distribution block with pipe outlet.

DISCHARGE NOZZLES:

Discharge nozzles are made of chrome-plated brass, and shall consist of a one piece tip/body, strainer and blow off cap.

AGENT DISCHARGE PIPING:

Agent discharge piping for the Zone Defense system shall consist of nozzles placed no further apart than 20 inches the entire length of the hood creating an overlapping nozzle spray pattern which permits movement of the protected appliances such as fryers, woks, ranges and charbroilers, without altering the Zone Defense discharge nozzle locations.

MANUAL PULL STATIONS:

The manual pull stations are a "dual action" type. Both a ring pin and lever must be pulled in order to discharge the system manually.

MECHANICAL GAS VALVES - ¾ TO 2 INCH SIZES:

A mechanical gas valve, specifically listed by UL for use with the Amerex Zone Defense system, shall be installed for automatic shut off of gas whenever gas appliances are used. The valve has a "pull to close" design requiring a pull force to trip a latch that holds the valve in the open position. The cover of the gas valve has a visual indicator showing the valve's state of readiness. The Amerex mechanical

FIRE SUPPRESSION SYSTEM SPECIFICATIONS

gas valve body is made of brass and is UL Listed for both natural gas and propane. Existing mechanical valves, if operating, may be used according to the listed Zone Defense Design, Installation, Maintenance and Recharge Manual.

ELECTRICAL GAS VALVE:

If an electrically operated gas valve is required, it must be UL Listed for use with the Amerex Zone Defense system. The use of a UL listed manual reset relay is mandatory to prevent unmonitored

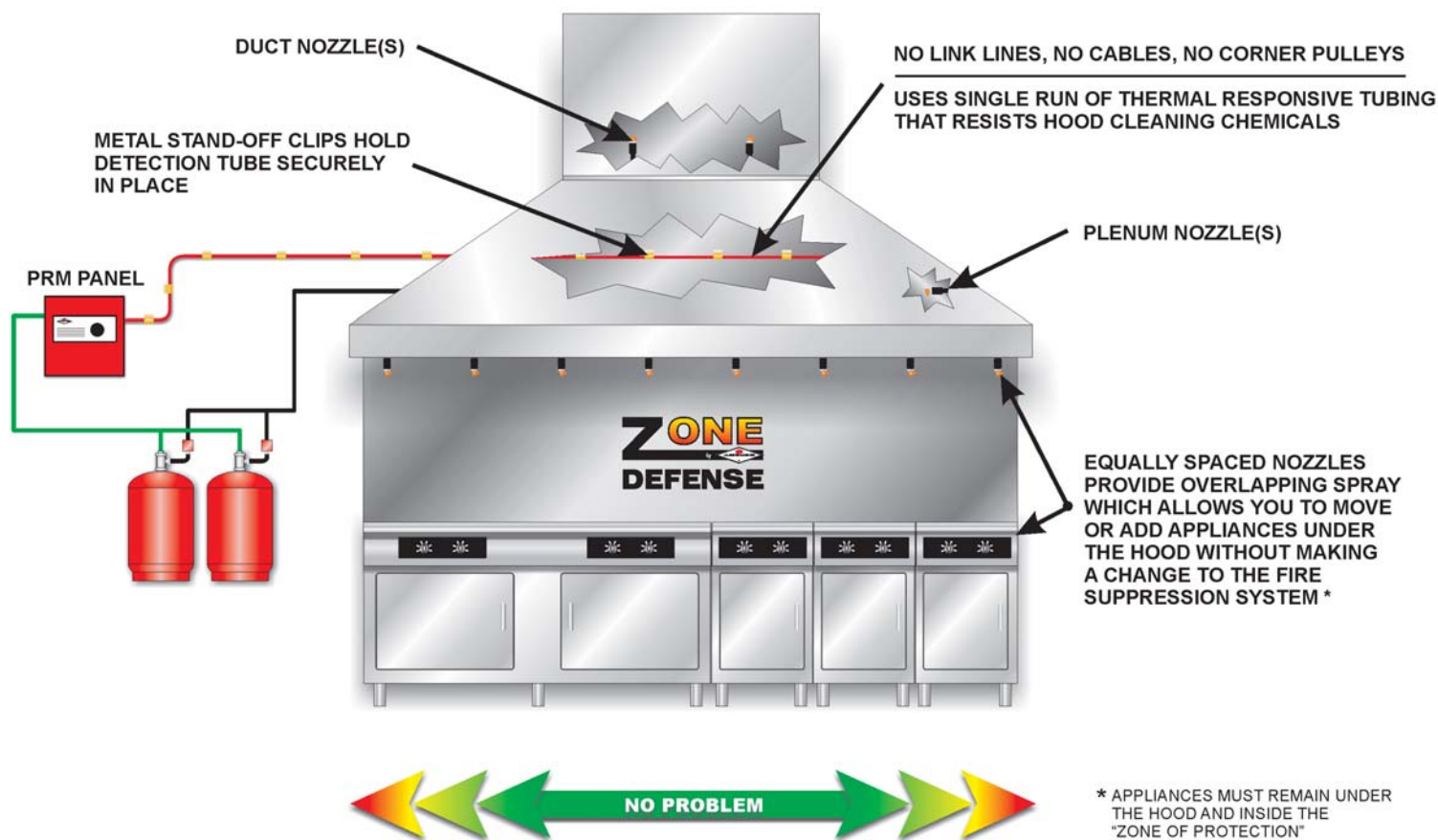
gas flow due to power outage. A micro switch mounted in the PRM is used to control the closing of the gas valve at the moment of system actuation.

ELECTRIC MICRO SWITCH:

UL listed electric micro switches are provided to accomplish system output functions. The switches are "stackable" inside the PRM without requiring extra mounting hardware. From 1 to 4 sets of dry form "C" contacts are available.

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SELF-CONTAINED SYSTEM NO WATER SUPPLY NEEDED



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