



RD 9011A  
SWA  
08/01/2019

**Simple. Smart.**



## XLT Radiant Ovens Fire Suppression Installation (R-102)



Read This Manual Before Using This Appliance.

Electronic copies of the Fire Suppression Installation Manual, Installation & Operation Manual, Parts & Service Manual, Architectural Drawings, & a list of International Authorized Distributors are available at: [www.xltovens.com](http://www.xltovens.com)

For use with the following XLT Radiant Oven Versions:

Standard (S)    A  
World (W)      A



XLT Ovens  
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US: 888-443-2751    FAX: 316-943-2769    INTL: 316-943-2751    WEB: [www.xltovens.com](http://www.xltovens.com)

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**CAUTION**

This appliance is for professional use by qualified personnel. This appliance must be installed by qualified persons in accordance with the regulations in force. This appliance must be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room in which it is installed. This appliance needs an unobstructed flow of fresh air for satisfactory operation & must be installed in a suitably ventilated room in accordance with current regulations. This appliance should be serviced by qualified personnel at least every 12 months or sooner if heavy use is expected.

This document is intended for use by general contractors, architects, sub-contractors and store owners to provide information during the planning & pre-installation phases of installing XLT Radiant Ovens. Please refer to the XLT Installation & Operation Manual for instructions on the assembly and utility hook-up phase of the project.

The process of getting a facility configured to owners' expectations can be difficult and frustrating, or it can be accomplished smoothly and on time. The information presented here can help move the "D" and "C" portions of the image below towards "on time" and "under budget". XLT has designed a piping system integrated into the radiant ovens. This allows for quick and consistent nozzle placement and contains the correct number of nozzles needed.

The end goal is to obtain an occupancy permit from the Authority Having Jurisdiction (AHJ). A thorough understanding of the prevailing local codes can expedite this process and prevent unexpected surprises. Proper planning and execution will allow the successful installation of new ovens and hood in an existing store overnight with NO downtime.

The purpose of building codes is to provide minimum standards for the protection of life, limb, property, environment, the safety and welfare of the consumer, general public, and the owners and occupants of structures regulated by codes. Building codes are constantly changing and they can vary by state, county, city, town, and/or borough. While some states like California, Florida, Massachusetts, Michigan, and New York have their own set of building codes, most states have adopted the International Code Council (ICC) series of codes. Always check with your local building code department in order to learn which codes are being used and how they will affect you and your construction project. You may want to start by contacting your local inspection department, office of planning and zoning, and/or department of permits.

The information presented in this document has been proven to satisfy the latest code requirements.

The information contained in this document should be distributed and read by all parties involved in procuring and installing this equipment prior to any work being performed.


To ensure a smooth installation, all equipment shipped to the final location should be placed together so no components are lost. A factory designed piping system for the expellant may sometimes arrive with the oven and will need to be installed with oven.

It is also advisable that a schedule be developed by the general contractor to ensure all activities are completed in the proper sequence and performed by the proper personnel.

XLT will assist in the coordination of disseminating information and scheduling the delivery of equipment. Please contact XLT or your distributor for additional assistance.

XLT wants you to be totally satisfied with every aspect of owning & using your radiant oven. Your feedback, both positive & negative, is very important to us as it helps us understand how to improve our products & our company. Our goal is to provide you, our customer, with equipment that we can be proud to build & you can be proud to own.

To receive technical support for the radiant oven you purchased, XLT has qualified personnel that can provide assistance on any type of XLT equipment problem you may experience. Technical support is available 24/7/365 or visit [www.xltovens.com](http://www.xltovens.com).



**WARNING** Installation of Fire Suppression Systems should only be performed by a qualified Fire Suppression professional, who has read and understands these instructions and is familiar with proper safety precautions. Read this manual thoroughly before installing or servicing this equipment.

XLT reserves the right to make changes in design and specifications, and/or make additions to or improvements to its product without imposing any obligations upon itself to install them in products previously manufactured.

Revision History Table		
Revision	Comments	Date
A	New Release	08/01/2019

Why do I need a fire suppression system?

More than half of all reported restaurant fires each year are linked to cooking. Fire suppression systems that are compliant to UL 300 can reduce your risk of liability and reduce your insurance rates.

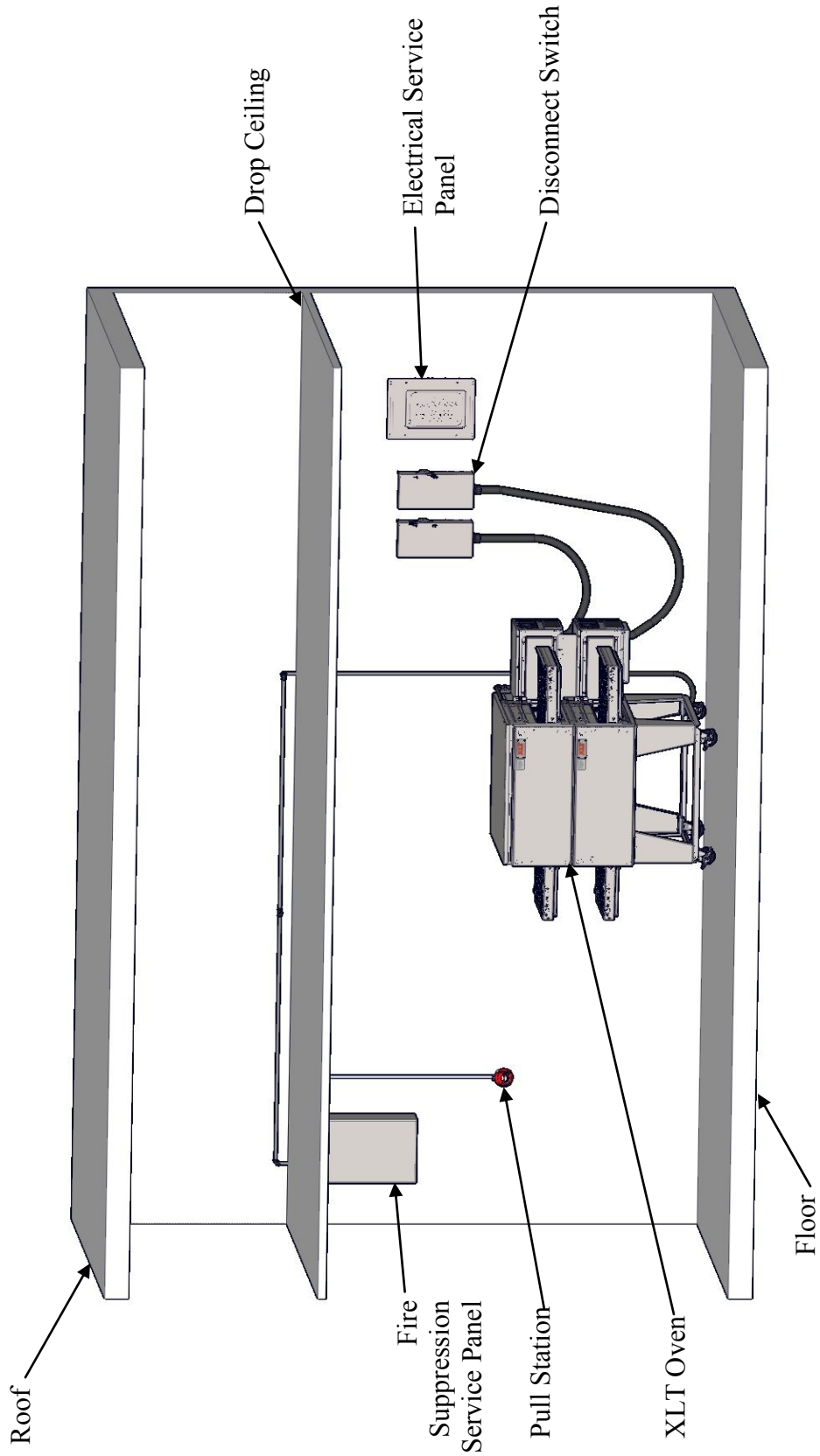
When restaurants were using animal fats, the older dry chemical systems were UL 300 compliant, since then restaurants switched to vegetable oils for healthier products to serve customers. This means that the dry chemical system is no longer UL 300 compliant, thus restaurants need to change to a wet chemical system to put out the fire and to reduce the heat of the appliance. Overall this reduces the chances of re-ignition.

Restaurant owners make many decisions per day that impact their bottom line and fire suppression is one of them. Installing or upgrading a system can be expensive, but here are four (4) reasons to make the investment:

1. Protect people and property
2. Protect your revenue stream
3. Protect your insurance premiums
4. Protection from litigation

The worst time to find out if a restaurant needs fire suppression is after inspectors are doing their inspection. Consulting the inspection agency prior to ordering any equipment will save many headaches. Also, if the ovens require fire suppression this too can be ordered with the ovens as an accessory.

XLT has a fire suppression piping system designed so not to affect the standard operation and maintenance of the ovens. These sub systems include the nozzles, caps. The rest of the system and charging of the system must be done by a certified Fire Suppression technician.



The Engineers at XLT have designed the fire suppression system for XLT radiant ovens to meet ICC and NFPA codes. Field installations can be more expensive, less effective, and can interfere with daily operations and maintenance.

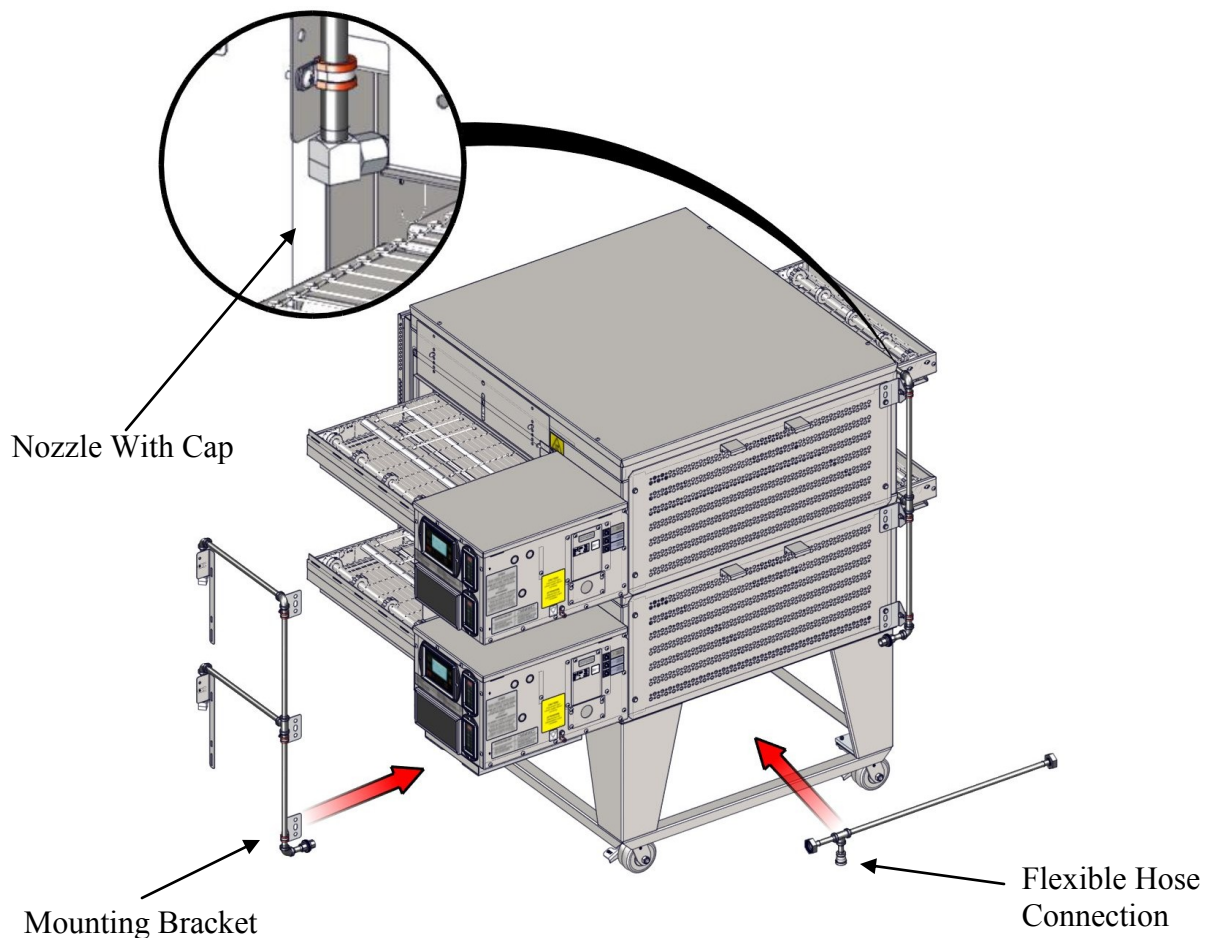
A fire suppression system consists of four (4) main components:

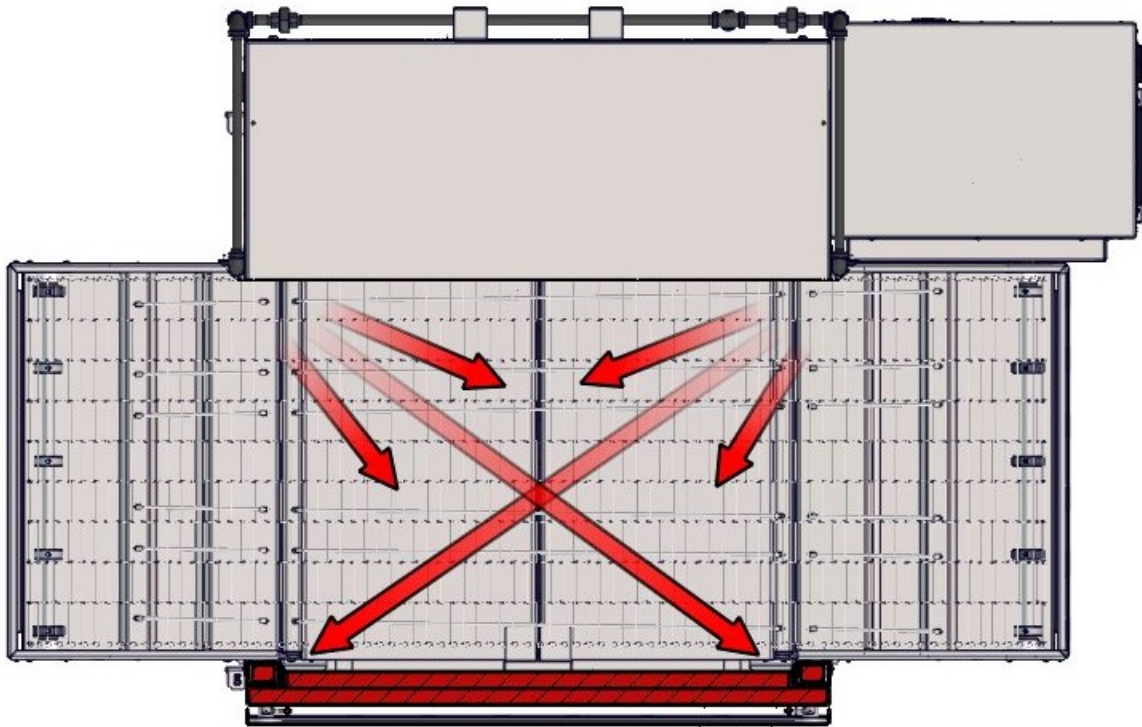
- Manual Pull Station
- Regulated Release Assembly (Main cabinet that houses the tank and valve)
- Oven Piping & Nozzles for agent distribution lines
- Mechanical Detection System

All of these components need to be interconnected. The Manual Pull Station and Mechanical Detection system are mechanically connected to the Regulated Release Assembly using wire rope cables. The piping system must connect the agent storage tank to the nozzles in the oven.

The fire suppression system can be activated either manually by pulling on the “PULL” handle, or automatically whenever the temperature rises high enough to melt and separate a detector fusible link in the hood. When the fusible link separates, or the pull station handle is pulled, operation of the regulated release assembly occurs, which pressurizes the agent storage tank and releases the agent contained in the tank to discharge through nozzles mounted in the oven.

## EXPLODED VIEW OF OVEN FIRE SUPPRESSION PIPING





**TRANSPARENT VIEW OF FIRE SUPPRESSION PIPING  
(Arrows Represent Fire Expellant Direction)**


## RESPONSIBLE PARTIES FOR INSTALLATION

### CERTIFIED FIRE SUPPRESSION INSTALLER

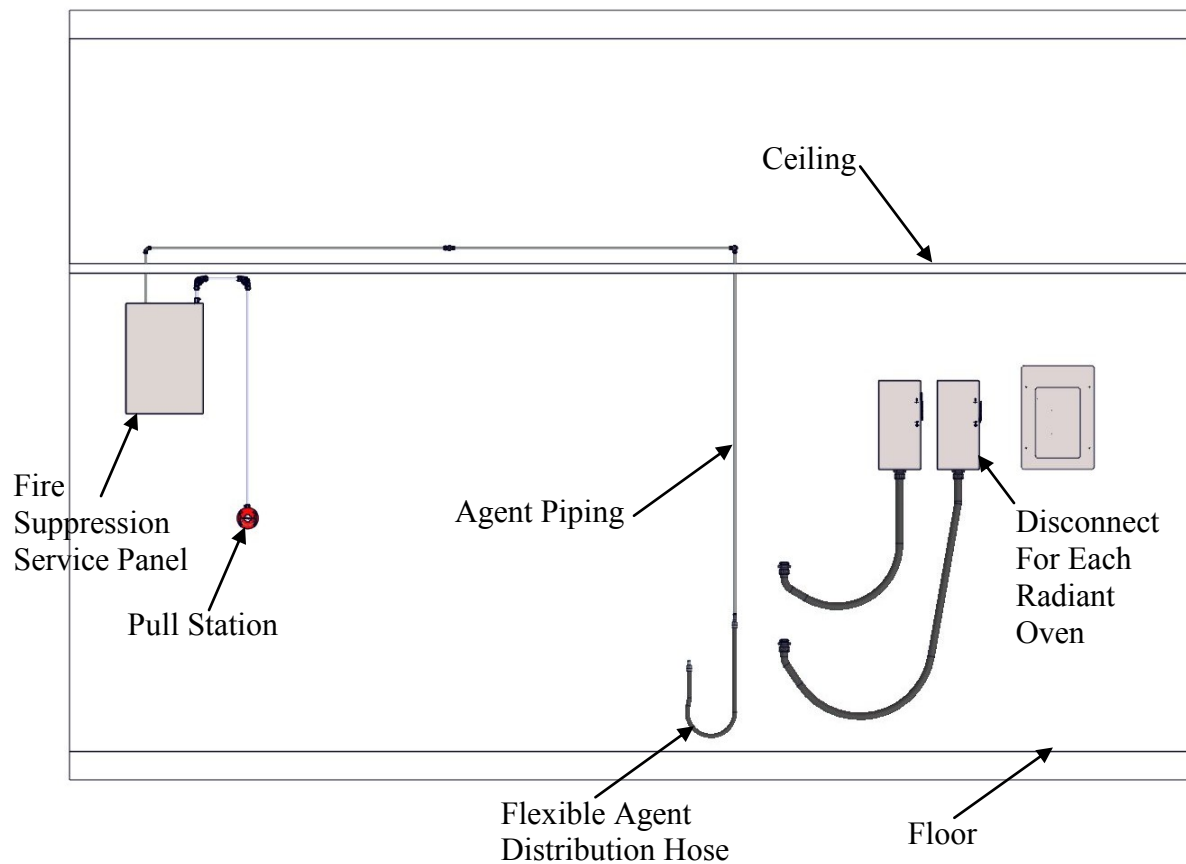
- Manual pull station
- Regulated release assembly
- Flexible agent distribution hose
- Piping on wall to agent tank
- Wire to exhaust fan through contactor


### BY OTHER

- Wire and contactor

 XLT will supply nozzles and piping for ovens

#### NOTE



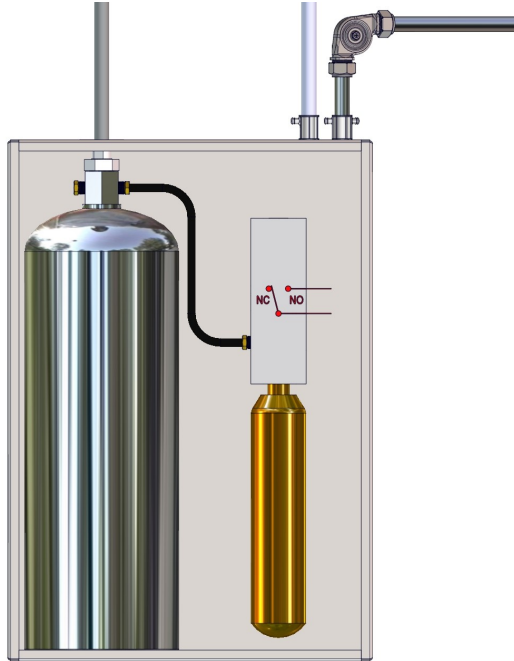
 The wiring and wiring connections must be made by a licensed electrician.

#### NOTE




After locations identified for all components on wall, the installation can begin.

- Mount the regulated release assembly as required for the store location



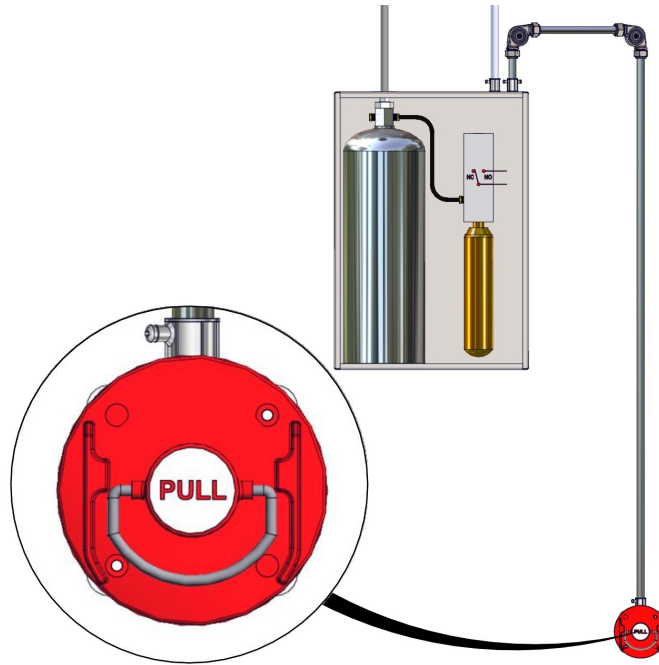
- Select a rigid surface within all maximum distance limitation for the manual pull station, fusible link detection, and agent distribution piping (Maximum length of cable should be 150 feet and a maximum supply line length of 40 feet)
  - Remove cover
  - Secure box to wall
- Install detection and agent distribution lines in accordance with ANSUL manual R-102 Restaurant Fire Suppression System



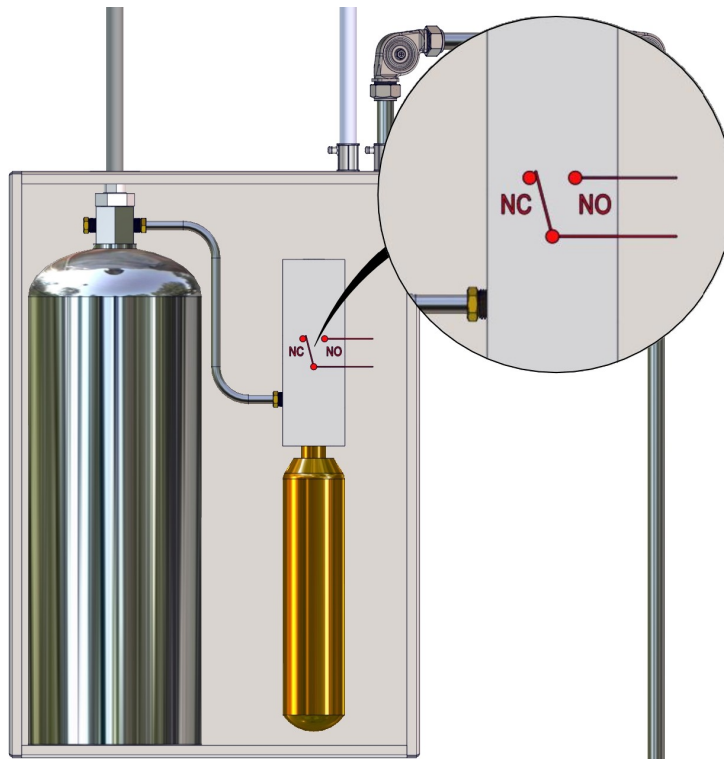
 Make certain the tension lever is in “Up” position

**NOTE**

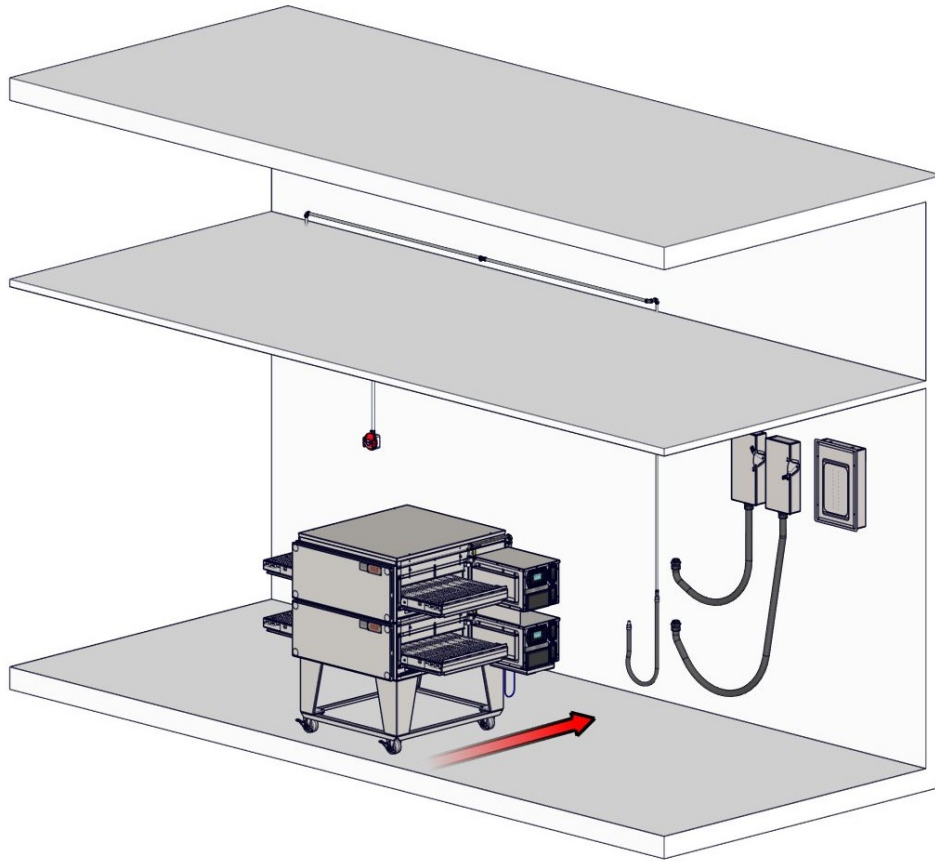
- Install remote pull station
  - Route line to location noted earlier



- Install alarm initiation switch



- Roll radiant ovens into place
  - Connect flexible agent distribution hose from fire suppression system piping to oven.



## SYSTEM VERIFICATION

- Test system with cartridge removed per ANSUL R-102 manual
- Test manual pull station per ANSUL R-102 manual
- Test alarm initiating switch per ANSUL R-102 manual
- Test detectors per ANSUL R-102 manual

## FINAL ASSEMBLY

- Fill ANSUL agent tank and install cartridge per ANSUL R-102 manual
- Load agent bottle
- Complete the oven Start-up checklist with owner signature and return to XLT



by Tyco Fire Suppression & Building Products

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## Bulletin

### Bulletin No. 5653

DATE: April 29, 2010  
 TO: All Authorized ANSUL R-102 System Distributors and OEMS's  
 FROM: Product Management – Restaurant Systems  
 SUBJECT: Non-UL-Listed Fire Protection for Conveyor Pizza Ovens

The UL300 Standard: *Fire Testing of Fire Extinguishing System for Protection of Commercial Cooking Equipment* does not currently address a test protocol for conveyor pizza oven protection. However, in many jurisdictions, the Authority Having Jurisdiction has required fire protection for conveyor pizza ovens. In the past, appliances not addressed in the UL300 test standard have been protected by following listed protection options for other appliances with similar operating characteristics. Generally, these appliances presented a more severe hazard than the appliance in question. In the case of conveyor pizza ovens, chain broiler protection was utilized.

To confirm recommended protection, we recently conducted a conveyor pizza oven fire test following the chain broiler test protocol outlined in UL 300, substituting fatty hamburgers with a grease coated pizza crust, to emulate the cooking process used by conveyor pizza ovens.

Prior recommendations for conveyor pizza ovens larger than the two 1N horizontal nozzle limitations for a chain broiler, suggested using four 1N nozzles, each positioned at the end corners and aimed diagonally across the chain within the oven. Based on the actual fire testing, we now recommend two 245 nozzles per conveyor: one nozzle is positioned at the inlet and one nozzle is positioned at the outlet of the conveyor pizza oven on the same side of the oven and aimed at the opposite corners. Utilizing two 245 nozzles as recommended is suitable protection for conveyors larger than the limitations for a chain broiler but not exceeding 38 in. (96.5 cm) wide x 70 in (177.8 cm) long.

If you should have questions pertaining to this bulletin, please contact your U.S. District Manager or International Area Manager; or call Technical Services as noted below.

Main Telephone Numbers: 1-800-862-6785 or 1-715-735-7415  
 Customer Services: Press 2 • Technical Services: Press 4 • Training Services: Press 6 • Quality Assurance: Press 8  
 Literature Fax Orders: 1-800-543-9822 or 1-715-732-3474

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There are many things that will help with the installation of XLT equipment, and make for a successful installation. The following list outlines the tasks necessary for successful installation of ovens, whether the installation occurs in a new store or for the remodel of an existing store. This list is to be used as a checklist to verify all aspects of XLT equipment is installed properly. If any additional information is required please refer to the Installation & Operation manual. Manuals can be found at [xltovens.com](http://xltovens.com):

### Electrical Requirements:

- Yes No      • Dedicated disconnect for each electric oven
- Yes No      • All circuits are the correct Phase for each piece of equipment

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