



# FIRE-X-TROL®

## WET PIPE SPRINKLER SYSTEM EXPANSION CHAMBER INSTALLATION & OPERATION INSTRUCTIONS

Models FPT-1(C) through FPT-210V(C)



**NOTE:** Inspect for shipping damage and notify freight carrier or store where purchased immediately if damage is present. To avoid risk of personal injury and property damage, if the product appears to be malfunctioning or shows signs of corrosion, call a qualified professional immediately. Current copies of the Product manual can be viewed at [www.amtrol.com](http://www.amtrol.com). Use proper safety equipment when installing.



**THIS IS THE SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL INJURY AND OTHER HAZARDS. OBEY ALL SAFETY MESSAGES THAT FOLLOW THIS SYMBOL TO REDUCE THE RISK OF PERSONAL INJURY AS WELL AS PROPERTY DAMAGE.**

**WARNING** READ CAREFULLY THE PRODUCT INSTALLATION & OPERATION INSTRUCTIONS. FAILURE TO FOLLOW THE INSTRUCTIONS AND WARNINGS IN THE MANUAL MAY RESULT IN SERIOUS OR FATAL INJURY AND/OR PROPERTY DAMAGE, AND WILL VOID THE PRODUCT WARRANTY. THIS PRODUCT MUST BE INSTALLED BY A QUALIFIED PROFESSIONAL. FOLLOW ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS, IN THE ABSENCE OF SUCH CODES, FOLLOW THE CURRENT EDITIONS OF THE NATIONAL PLUMBING CODE AND NATIONAL ELECTRIC CODE, AS APPLICABLE.

**WARNING** Excessive pressure can cause tank to explode. Exercise care when filling a tank with air so the pressure does not exceed that required or does not exceed the working pressure of the tank as stamped on the nameplate. Failure to follow these instructions will result in serious personal injury or death and property damage.

**CALIFORNIA PROPOSITION 65 WARNING!** This product contains a chemical known by the State of California to cause cancer and to cause birth defects or other reproductive harm. (California Installer/Contractor - California law requires that this notice be given to consumer/end user of this product.) For more information: [www.amtrol.com/prop65.html](http://www.amtrol.com/prop65.html)

**WARNING** This Product, like most Products under pressure, may over time corrode, weaken and burst or explode, causing serious or fatal injury, leaking or flooding and/or property damage. To minimize risk, a licensed professional must install and periodically inspect and service the Product. A drip pan connected to an adequate drain must be installed if leaking or flooding could cause property damage. Do not locate in an area where leakage of the tank or connections could cause property damage to the area adjacent to the appliance or to lower floors of the structure.

**WARNING** EXPLOSION OR RUPTURE HAZARD A relief valve must be installed to prevent pressure in excess of local code requirement or maximum working pressure designated in the Product Manual, whichever is less. Do not expose Product to freezing temperatures or temperatures in excess of 200° F.

**WARNING** Do not adjust the pre-charge or re-pressure this Product except for any adjustments required at the time of initial installation, especially if Product is corroded, damaged or with diminished integrity. Adjustments to pre-charge must be done at ambient temperature only. Failure to properly size the Product or follow these instructions may result in excessive strain on the system and lead to Product failure, serious or fatal personal injury, leakage and/or property damage.

**PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY  
IMPORTANT GENERAL SAFETY INFORMATION -  
ADDITIONAL SPECIFIC SAFETY ALERTS APPEAR IN THE FOLLOWING INSTRUCTIONS.**

**⚠ WARNING** **EXPLOSION HAZARD.** Failure to follow instructions in the accompanying product manual can cause rupture or explosion, possibly causing serious or fatal injury, leaking or flooding and/or property damage.

**Location of the FIRE-X-TROL®**

1. The FIRE-X-TROL should be installed on the water supply line to the unheated area at a point between the backflow preventer and fill cup connection (Figure 1).
2. Once the FIRE-X-TROL is installed, check the system for any leakage. Make repairs if necessary.

**Installation**

**⚠ WARNING** **THIS PRODUCT MUST BE INSTALLED BY A QUALIFIED PROFESSIONAL.**

1. Visually inspect FIRE-X-TROL for any damage.
2. Hydraulic system pressure must be at zero.
3. Attach nitrogen or dry air (-50°F/-46°C dew point or lower) supply to expansion chamber charging valve.

**⚠ WARNING** **Pre-charge with nitrogen or dry air (-50°F/-46°C dew point or lower) only.**

**⚠ WARNING** **Do not use Oxygen - Explosion Hazard.**

4. Pre-charge to 2 psig (0.14 bar) below system static pressure at tank location.

**⚠ WARNING** **Never pre-charge below 25% of the system maximum rated pressure.**

5. Remove charging hose. Carefully test charging valve for leakage.
6. Replace plastic cap.

**⚠ WARNING** **Protect against freezing temperatures. Can cause damage and/or product failure.**

**⚠ WARNING** **Isolate expansion chamber during system hydro test.**

**Operating Instructions**

1. The FIRE-X-TROL is installed in the supply line between the backflow preventer and the fill cup connection. Its sealed-in air pre-charge chamber prevents water from entering it until the system pressure exceeds the pre-charge pressure. The FIRE-X-TROL is precharged to 25 psig (1.7 bar).
2. As the water/antifreeze solution temperature rises, expanded system fluid enters the FIRE-X-TROL's non-corrosive reservoir. The pre-charge air chamber absorbs the pressure increase, keeping system pressure below maximum system rating.
3. As the water/antifreeze temperature decreases, pressure in the air chamber forces system fluid back into the system.
4. In antifreeze systems, this sequence allows the system antifreeze percentage to stay constant. Additional supply of water/antifreeze is not needed to replace fluid that would have escaped through a relief valve.

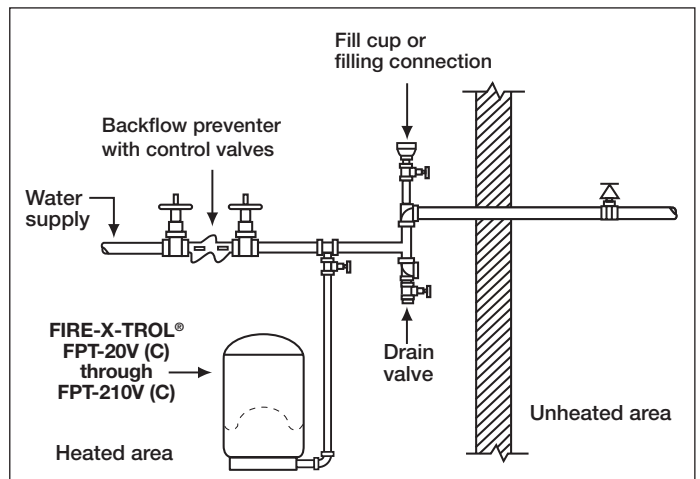
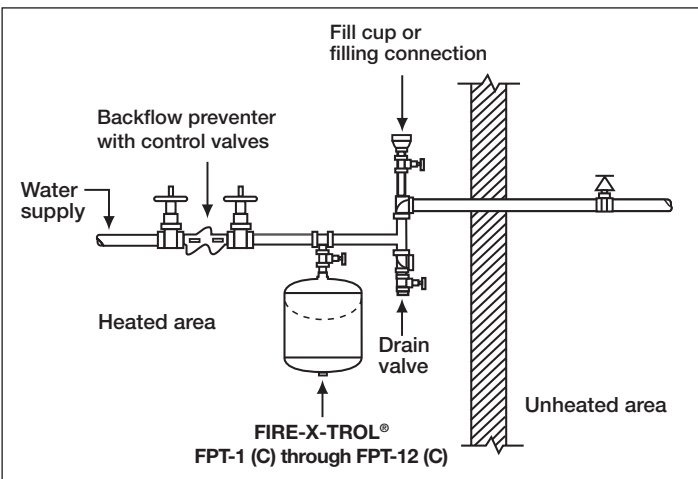
**Maintenance**

1. Sprinkler system must be maintained and inspected per NFPA 25.

**Warranty**

Fire-X-Trol Models: One (1) Year Limited Warranty  
Visit [www.amtrol.com](http://www.amtrol.com) for complete warranty details.

**Figure 1**



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