



Boston Fire Department
Fire Prevention Division
1010 Massachusetts Avenue – 4th Floor
Boston, MA 02118

AIR PRESSURIZED DRY STAND PIPE SUMMARY

Air pressurized alarm system for dry standpipe systems during construction or demolition operations.

Purpose: To help ensure required fire department standpipes are maintained during building construction and demolition.

When: Proposed implementation August 2015. Currently being used as best practice in some high rise projects.

Where: Buildings greater than 70 feet above grade, new or existing undergoing construction or demolition.

What is required: Air pressurized alarm system required in permanent or temporary standpipes.

Installation permit:

- Standpipe system to be applied for by the installing licensed sprinkler contractor with design by a MA registered (PE).
- Electrical permit required and fire alarm permit required if monitored off site.

Specifications: Design to provide a maximum pressure of 25 psi in the standpipe. Minimum pressure determined by the MA registered PE.

- System automatically activates alarm when pressure drops below the supervisory pressure.
- When system alarm activates notification to be made to onsite 24 hr. security or to a 24 hr. monitoring company. Onsite amber beacon and bell or horn to activate.
- When alarm activates investigation of entire standpipe to be performed. System operation to be restored immediately (unless authorized by Fire Department). Site fire prevention program manager to maintain / restore system.

Components:

- Air compressor to maintain system pressure in standpipe system.
- Alarm pressure switches used to control equipment and activate local audible alarm bell / horn and amber beacon located at system control equipment.
- Air pressurized alarm system to be connected to dedicated power supply.
- Check valves to be installed to prevent water from entering air compressor.
- Fire depart connection 2 ½ inch.
- System drainage provision.
- Manual air release connection provided to empty the system air pressure.

- Signage (white on red weather resistant) to be provided at all connections and valves labeling dry standpipe system and indicating manual air release.
- Valves to be protected from vandalism.

Documents:

- At time of application plans to be submitted identifying standpipes cross connections, Fire Dept. connections, valves , air release connections, pressure settings, alarm system information, equipment cut sheets(for air pressurization system), procedure for pressurizing and depressurizing .

Out of Service:

- When standpipe to be placed out of services (for addition of new section or other planned event) the fire prevention program manager will maintain a record log of such impairments. If the system is not returned into service and alarm reactivated within 4 hrs. work at the site shall cease, unless otherwise approved by the Fire Dept.
- Planned out of service, site fire prevention program manager to notify Fire Dept. through Fire Alarm Division-617-343-2880 at least 24 hrs. prior to any removal of the standpipe system from service.
- Unplanned out of service, site fire prevention program manager to immediately notifying Fire Dept. through Fire Alarm Division- 617-343-2880.
- Ensure that fire watch is maintained while standpipe system is out of service.
- Repair the standpipe system and return it to service, a.s.a.p.
- No hot work until system is restored to service and alarm reactivated.