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 service (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.