

**SUPERVISORY AIR SUPPLY FOR NFPA 14 DRY STANDPIPE SYSTEMS**

**PART 1 – GENERAL**

* 1. Related Requirements

1. UNDERWRITERS LABORATORIES (UL)
2. Air Compressor: UL 1450, *Motor-Operated Air Compressors, Vacuum Pumps, and Painting Equipment, SUPPLEMENT SC – FIRE SPRINKLER AIR COMPRESSORS*
3. Pressure Supervisory Switch: UL 753, *Alarm Accessories for Automatic Water-Supply Control Valves for Fire Protection Service*
4. FACTORY MUTUAL APPROVALS (FM)
5. Pressure Supervisory Switch: FM 3545, *Examination Standard for Temperature Limit and Supervisory Switches*
6. NATIONAL FIRE PROTECTION ASSOSIATION (NFPA)
7. NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*
8. NFPA 72, *National Fire Alarm and Signaling Code*

**PART 2 – PRODUCTS**

* 1. Supervisory Air Supply for Dry Standpipe Systems

1. Provide a Supervisory Air Supply System designed to monitor pipe integrity in dry standpipe systems per NFPA 14 2024 edition. The selected Supervisory Air Supply System shall be suitable for installation on dry standpipe systems and must meet the following:
2. The air supply must be from a source available at all times and have a capacity capable of restoring normal air pressure in the system within 30 minutes.
3. The air supply must have a low/high supervisory pressure switch that provides localized audible and visual alerts when the pressure within the standpipe system is out of range.
4. The system must include all components required for a fully functional installation, including but not limited to:  
   * + 1. Air compressor UL listed for fire protection (UL1450, *SUPPLEMENT SC)*
       2. UL listed digital pressure switch for compressor control (on/off)
       3. UL listed and FM approved supervisory pressure switch
       4. Audible and visual low/high supervisory pressure alerts
       5. Electrical contacts to provide signaling to fire alarm panel
       6. Power disconnect switch
       7. Metal enclosure with lockable cabinet door
       8. Air outlet connection (½" FNPT)
       9. Pressure gauge(s)
       10. Pressure relief valve(s)
       11. Check valve(s)
       12. Air filtration
       13. Optional desiccant dryer and automatic cabinet heater for installation in unconditioned environments.

**PART 3 – EXECUTION**

* 1. Installation

1. Install per manufacturer’s instructions. Coordinate with the fire protection system design to ensure compatibility with the supervisory air supply source and maintain required characteristics. System volume capacities and supervisory signal initiating must be verified during submittals for each protected zone.

*All installation and service work shall be designed, installed, inspected, tested, and maintained in accordance with all applicable codes, referenced standards, drawings, documents, the manufacturer's instructions, and the provisions of this specification.*

1. NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*
2. NFPA 72, *National Fire Alarm and Signaling Code*
3. NFPA 25, *Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems*

*General Air Products shall provide technical support during design, installation and throughout the entire life of the Supervisory Air Supply System.*

