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UL 2573

**Outline of Investigation for Automatic Air Release, Air/Vacuum and
Combination Air Valves for Fire Protection Service**

Issue Number: 2

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Summary of Topics

This second issue of the Outline of Investigation for Automatic Air Release and Air/Vacuum Valves for Fire Protection Service, Subject 2573, includes requirements for combination air valves for dry standpipe systems such as those referenced in NFPA 502, Standard for Road Tunnels, Bridges, and other Limited Access Highways.

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INTRODUCTION

1 Scope

1.1 These requirements cover automatic air release (vents), air/vacuum valves and combination air valves intended for fire protection service.

1.2 Automatic air release valves for use in wet pipe automatic sprinkler systems are intended for installation in a sprinkler branch line when it is desired to evacuate air from portions of the sprinkler piping system.

1.3 Automatic air release valves for use with fire pumps are intended for installation on the fire pump to vent entrapped air.

1.4 Automatic air/vacuum valves equipped with throttling devices are intended for use with vertical turbine pumps. These valves are intended to release large volumes of air in a controlled manner upon pump start-up to reduce air related surges and admit air after shutdown, to minimize the development of vacuum conditions within the pump.

1.5 Combination air valves equipped with throttling devices are intended for use in dry standpipe and similar applications where the (1) release of large volumes of air in a controlled manner is needed, (2) continuous release of air within the system is needed while the system is pressurized and (3) admission of air into the system is needed to minimize the development of vacuum conditions when the system is shutdown.

1.6 Requirements for installation of sprinkler systems are included in the Standard for the Installation of Sprinkler Systems, NFPA 13. Requirements for installation of devices on fire pumps are included in the Standard for the Installation of Stationary Pumps for Fire Protection, NFPA 20. Requirements for the installation of dry standpipe systems are included in standards such as the Standards for the Installation of Standpipe and Hose Systems, NFPA 14 and Road Tunnels, Bridges, and other Limited Access Highways, NFPA 502.

2 Units of Measurement

2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.