

NFPA 13, Standard for the Installation of Sprinkler Systems Motion Seq # 13-1: Roland Asp, National Fire Sprinkler Association

Motion Seq#	
13-1	
	7.1.5 Air Venting. A single air vent with a connection conforming to 8.16.6 shall be provided on each wet pipe system utilizing metallic pipe. (See A.8.16.6.)
	7.1.5.1 Venting from multiple points on each system shall not be required.
	8.16.6* Air Venting. The vent required by 7.1.5 shall be located near a high point in the system to allow air to be removed from that portion of the system by one of the following methods:
	(1) Manual valve, minimum ½ in. size
	(2) Automatic air vent
	(3) Other approved means
	A.8.16.6 A manual or automatic air venting valve can be a reasonable approach on wet pipe sprinkler systems to reduce corrosion activity. The purpose of the air venting valve is to exhaust as much trapped air as possible from a single location every time the system is filled. The objective of venting is to reduce the amount of oxygen trapped in the system that will fuel corrosion and microbial activity. It is neither the intent nor practical to exhaust all trapped air from a single location on a wet pipe sprinkler system; however, more than one vent can be used on a system at the designer's discretion. Interconnection of branch line piping for venting purposes is not necessary. An inspector's test valve can serve this purpose.
	The air venting valve should be located where it will be most effective. System piping layout will guide the designer in choosing an effective location for venting. In order to effectively accomplish venting, it is necessary to choose a location where the greatest volume of trapped air is vented during the first fill and each subsequent drain and fill event. The vent connection to the system should be located off the top of horizontal piping at a high point in the system; however, the vent connection can also be effectively located off the side of a riser or riser nipple at a high point in the system.
	Manual air venting valves should be accessible. The manual air venting valve should be located at an accessible point and preferably not over 7 ft (2 m) above the floor. Automatic air valves are not required to comply with the accessibility requirement of manual air venting valves; however, it is recommended the designer locate automatic air vents over areas without ceilings, above a lay-in ceiling, or above an access panel.
	Each wet pipe sprinkler system should be vented every time the system is filled.