

# **Clark County Department of Building & Fire Prevention**

4701 West Russell Road • Las Vegas NV 89118 (702) 455-3000 • Fax (702) 221-0630

Division:	Fire Prevention	<b>Code Interpretation</b>	FP-CI-045
Subject:	Electrical Power for Air Compressors connected to Dry-Pipe Sprinkler Systems	<b>Effective Date:</b>	10/14/2014
Code:	2013 NFPA 13 Section 7.2.6.3.1	Revised Date:	NEW

### A. CODE REQUIREMENT

NFPA 13 Section 7.2.6.3.1 requires that the compressed air supply attached to a dry-pipe sprinkler system is required to be available at all times. There are no specific requirements for how to accomplish this criterion for constant availability. With respect to electrical power, there is no discussion in the code about whether the electrical power requires back-up power, whether a back-up compressor is required, whether the compressor must be provided with a dedicated power circuit, whether disconnect switches are permitted, or whether the power cord is required to be hard-wired. There is a specific question as to whether an air compressor that is plugged into an electrical outlet complies with NFPA 13 Section 7.2.6.3.1.

#### B. INTERPRETATION

For the purposes of air compressors attached to dry-pipe sprinkler systems, air compressors shall be permitted to be plugged into an electrical outlet, and still be deemed to comply with NFPA 13 Section 7.2.6.3.1.

**Exception:** For dry-pipe systems in areas refrigerated to less than 40°F, an air compressor specifically listed for fire service and permanently wired to electrical supply is required.

#### C. RATIONALE

The code does not specify how to wire the power for air compressors. The code also does not require a specific listing for air compressors used with dry-pipe sprinkler systems. The loss of an air compressor is not critical, as the sprinkler system can still service the space as a wet-pipe sprinkler system (except for refrigerated areas). Further, the loss of an air compressor will be noted in activation of a low-air pressure switch and activation of the flow pressure switch when water is admitted into the sprinkler system, allowing for the system to be maintained prior to a fire event.

## **Revision History:**

POLICY #	TITLE	<b>Effective Date</b>	Revised	Reviewed
FP-CI-045	Electrical Power for Air Compressors connected to Dry-Pipe Sprinkler Systems	10/14/2014	NEW	

Prepared by:	Concurred by:	
Stephen J DiGiovanni, Fire Protection Engineer	Kurt Gottschalk, Deputy Fire Marshal	
Stephen J Diolovanni, The Flotection Engineer	Kult Gottschark, Deputy File Marshar	
Concurred by:	Concurred by:	
Donna Starkes, Deputy Fire Marshal	Julia Staples, Deputy Fire Marshal	
Concurred by:	Approved by:	
Girard Page, Senior Deputy Chief	Ronald L. Lynn, Director/Building & Fire Official	