



**COUNTY OF PRINCE WILLIAM**  
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DEPARTMENT OF  
PUBLIC WORKS  
Division of  
Building Development

**BUILDING OFFICIAL INTERPRETATION 2003-09**  
**November 16, 2006**

**CODE/EDITION:** VIRGINIA UNIFORM STATEWIDE BUILDING CODE/2003

**SECTION(S):** National Fire Protection Association 13R-99  
Installation of Sprinkler Systems in Residential Occupancies  
Up to Four Stories in Height

**QUESTION:**

1. Can a wet pipe sprinkler system be installed in an unheated attic space?
2. If the wet pipe sprinkler system is installed in the attic space directly above a heated room and the insulation is "tented" over the sprinkler system, does it meet the intent of the code?

**ANSWER:**

1. **No.** NFPA 13R, 1-6.1 states, "A wet pipe system shall be used when all piping is installed in areas not subject to freezing." An unheated attic space is subject to freezing.

The NFPA 13R, 1-6.2 provides for other sprinkler systems to be installed in unheated areas. It states, "Provision shall be made to protect piping from freezing in unheated areas by use of one of the following:

- (a) Antifreeze System
- (b) Dry Pipe System
- (c) Preaction Systems
- (d) Listed standard dry pendent, dry upright, or dry sidewall sprinklers extended from heated areas.

2. The intent of the NFPA 13R is to ensure that wet pipe sprinkler systems do not freeze after installation. If the permit holder or Owner develops a method of installing insulation that can be easily maintained to ensure that the wet pipe sprinkler system will not freeze in an unheated attic space, the Building Official can consider a request for a Code Modification in accordance with the Virginia Uniform Statewide Building Code.

  
Eric M. Mays, P.E., C.B.O.  
Building Official