



GOOCHLAND COUNTY DEPARTMENT OF FIRE-RESCUE OFFICE OF THE FIRE MARSHAL

Dry Horizontal Standpipes- Design Standard

Purpose:

To provide a suitable alternative to meet section 503.1.1 of the 2009 edition of the International Fire Code as referenced by the Virginia Statewide Fire Prevention Code as it relates to the 150' hand line hose lay requirement.

Referenced Code Section:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45,720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Details:

1. The location and details of the Dry Horizontal Standpipe (DHS) must be submitted in writing and approved by the County of Goochland Fire Marshal's Office prior to installation.
2. All piping shall be installed according to Building Code and NFPA standards with threaded fittings (NST).
3. The minimum inside pipe diameter shall be four (4) inches.
4. The installation must be hydrostatically tested at 200 PSI for two (2) hours.
5. An automatic drain shall be located at the low point in the line and shall drain to daylight or storm sewer.
6. Proper restraint/thrust blocking must be used to prevent damage during use.
7. All hose connections shall be a minimum of 30 inches and a maximum of 42 inches from the finished grade.
8. A fire hydrant must be located near the FDC, no more than 7' from the curb and the hydrant must be properly oriented and the steamer and 2 ½' connections must be National Standard Threads. The FDC must be located as close as possible to the fire hydrant, but not in the utilities easement.
9. A typical fire department connection (FDC) with two (2) female swivel 2.5" National Standard Threads and caps shall be located at an approved location. A permanent sign must be attached to the FDC with red letters at least 1" high on a white background that states "Dry Horizontal Standpipe FDC - Not connected to fire sprinklers or interior standpipes" and an arrow with "Discharge" pointing to the discharge location. The building address must also be posted on the connection.



FDC Siamese Example

10. The Discharge end of the system must be located in an approved location and equipped with two (2) 2.5" independently gated standpipe discharges with 2.5" National Standard Thread male hose connections and caps. A permanent sign must be attached to the discharge end of the system with red letters at least 1" high on a white background that states, "Dry Horizontal Standpipe - Not connected to fire sprinklers or interior standpipes" and an arrow with the letters "FDC" pointing to the FDC location the building address must also be posted on the connection.



Discharge Example

11. Both the FDC and Discharge shall be located and oriented in a manner to be easily accessible for fire department use. They shall not be obstructed by any means.

FDC Sign Example



Discharge Sign Example

