



**DIVISION OF PLANNING AND PERMITTING
FREDERICK COUNTY, MARYLAND**

Department of Permits and Inspections

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Private Fire Hydrants - Acceptance Testing Guidelines

When is testing of private hydrants required?

All installed private hydrants shall undergo acceptance testing. Test results demonstrating compliance shall be provided to the Frederick County Chief Plumbing Inspector before or during inspection of onsite private utilities.

Subsequent testing of private hydrants is not the purview of this Department, and any related questions shall be directed to the Frederick County Fire Marshal's Office. Public hydrants will continue to be regulated by the Frederick County Department of Water and Sewer Utilities.

Who is responsible for testing private hydrants?

Testing shall be conducted by the private hydrant's installer or a Maryland-certified fire protection or plumbing engineer. The testing personnel shall be determined by the property owner or designated representative, and the property owner shall be responsible for covering all associated costs. The property owner or designated representative is responsible for maintaining records of acceptance testing results and furnishing them to the authority having jurisdiction upon request.

How must private hydrants be tested and documented?

The test shall be performed in accordance with *2019 NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants, Chapter 4* and results recorded on the attached Frederick County Fire Hydrant Test Report for submission to the inspector. Test results may be submitted in-person or electronically uploaded to the utility permit via the Frederick County permit portal located at <https://planningandpermitting.frederickcountymd.gov/>.

What are the requirements for an acceptable private hydrant?

Minimum private hydrant requirements include (but are not limited to) the following: *2018 NFPA 1, Fire Code, Section 18.4*; *2019 NFPA 24, Standard for the Installation of Private Fire Service Mains and their Appurtenances*; *2017 NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*; and *2019 NFPA 291, Recommended Practice for Fire Flow Testing and Marking*

of Hydrants. Note that fire flow requirements are found in *2018 NFPA 1 Table 18.4.5.2.1 Minimum Required Fire Flow and Flow Duration for Buildings.*

Private hydrants subject to vehicular damage shall be protected by bollards or similar. Affixed reflectors and proximity flags shall be provided as required by 2018 NFPA 1 Section 18.5.10, and private hydrants located on public streets shall be painted red or some other color to distinguish them from public hydrants in accordance with 2019 NFPA 291 Section 5.2.5.2. See 2019 NFPA 24 Section 7.3 for requirements regarding the surface under hydrants, small stones about the drain, the dimensional location of the hose outlet, etc.

These references have been provided as a helpful starting point for the private hydrant requirements. For the complete requirements, the above codes are required.

Why are private hydrants required to be tested?

According to 2019 NFPA 24 Chapter 24, “a private fire service main and its appurtenances installed in accordance with this standard shall be properly inspected, tested, and maintained in accordance with NFPA 25 to provide at the least the same level of performance and protection as designed.”

For subsequent hydrant testing, 2017 NFPA 25 Section 4.6.4 requires: “Test results shall be compared with those of the original acceptance test (if available) and with the most recent test results. When a component or subsystem is adjusted, repaired, reconditioned, or replaced, it shall be tested in accordance with the original acceptance test required for that subsystem or the requirements where specified by the standard.”

Both sections signify the importance of a compliant design and installation for future hydrant testing including those under private ownership.