



Jackson Hole Fire/EMS Operations Manual

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Title: Dry Hydrant Design
Division: 12
Article: 7
Revised: 09/03/2025
Pages: 2

PURPOSE

The following standards are provided to establish the minimum acceptable design criteria and materials for dry hydrants. These are minimum standards and are to be used as a basis for design. Dry hydrants have varying designs and are not suitable for all locations. Each design requires individual review and site-specific approval by the Fire Department before installation.

SECTION I - HYDRANT SPECIFICATIONS

1. Dry hydrant plans require Fire Department approval.
2. All dry hydrants shall be capable of providing a year-round water supply of not less than 500 gallons per minute (gpm) for not less than 2 hours. Dry hydrants that do not flow at a minimum of 500gpm for 2 hours may not be accepted or approved by the Fire Department.
3. Dry hydrants constructed of PVC pipe shall be not less than Schedule 80 PVC.
4. Dry hydrants constructed of steel pipe shall be not less than Schedule 40 pipe.
5. Pipe shall be not less than 6-inch diameter.
6. All exposed and underground metal surfaces must be protected (galvanized finish or a protective coating) to prevent rust and deterioration.
7. Regardless of the type of construction, the outlet shall consist of a brass or pyrolite 4 1/2-inch fitting, with National Standard Thread (NST). Outlets shall be capped to prevent the introduction of foreign materials into the pipe.
8. Dry hydrant connection fitting must be between 36 and 48 inches above the finished grade. Risers shall be painted red.
9. Risers constructed of PVC shall be braced to prevent deflection. Bracing shall consist of concrete blocking, rigid guy poles, or other suitable rigid means. Guy wires shall not be considered adequate bracing.
10. The underground base of the riser shall be installed below the frost level. The riser, including the underground portion, shall not exceed 12 feet of rise.
11. Horizontal runs of pipe shall not exceed 50 feet and shall be buried below frost level.

12. Upon installation, flow tests must be performed by the owner/installer. Documentation of the tests is to be submitted to the Fire Department.
13. It shall be the responsibility of the owner to ensure proper maintenance of the hydrant. The owner shall pump the hydrant annually to ensure maximum flow.
14. Fire hydrant systems shall comply with the current International Fire Code (IFC) and NFPA 25.