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## Arizona Department of Forestry and Fire Management



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### FIRE FLOW-REQUIREMENTS – FIRE HYDRANT PLACEMENT

**NOTE: A temporary fire line must meet all system fire flow requirements. Temporary fire approval is limited to a period not to exceed 90 days without extension.**

The following is provided as **INFORMATION ONLY** and is specific to the requirements of the Arizona State Fire Code (IFC-2012 edition). A project may also have to meet additional requirements as adopted under a locally amended Fire Code. This information is provided only as a guideline. Specific projects are required to submit for a formal review to receive a Permit.

#### **Residential -**

The minimum required fire flow for one and two-family dwellings is 1,000-gallons per minute for 1 hour, at a minimum residual pressure of 20 psi, measured at the fire hydrant or other device closest to the property. This flow may be reduced for structures equipped with automatic fire sprinklers. Residential structures more than 3,600 square feet may be required to meet the provisions as outlined below.

#### **All Other Buildings –**

The minimum required fire flow for all other buildings is provided by the International Fire Code, 2012 edition. A minimum fire flow of 1,500 gallons per minute with a residual pressure of 20 psi is required for all buildings in this category. Fire flow requirements increase with the square foot and type of building construction. Fire flow requirements for structures may be reduced by installation of automatic fire sprinklers.

The required minimum storage capacity must maintain the required fire flow for a period of not less than 2 hours.

#### **Fire Hydrant Placement –**

The minimum number of fire hydrants to meet fire flow requirements is **one**. Additional hydrants may be necessary to meet minimum building fire flow requirements.

The maximum spacing between fire hydrants is 500 feet.

Local jurisdiction adopted Fire Code requirements may require additional hydrants depending on conditions such as dead-end streets, large building complexes. High-hazard uses may require additional hydrant installations to meet fire flow requirements.

Where there is **NO** public water supply, provisions of the National Fire Protection Association Standard 1142 “Water Supplies for Urban and Rural Fire Protection” are applied to meet minimum fire flow requirements. Where adopted by a local jurisdiction the International Wildland Interface Code may be applied to meet minimum fire flow requirements in areas **identified as being in the Wildland Interface**.

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