

ADOPTED: 10/12/2017 BY BOARD

REVIEWED:

Marion County Fire Code Application Guide Supplement for Jefferson Fire District

Jefferson Fire District should be notified by Marion County Planning

- A. When Marion County receives application for any of the following:
1. New home exceeds 3600 square feet (including garage and patio/porch covers).
 2. Existing structure being converted into a dwelling exceeding 3600 square feet.
 3. An addition to a dwelling that results in the dwelling in excess of 3600 square feet.
- B. OR the driveway meets one of the following criteria regardless of size:
1. The driveway may exceed 10% grade and is longer than 50 feet.
 2. The driveway will have a culvert.
 3. The driveway will have a bridge.
 4. Any driveway longer than 150 feet regardless of grade.

Jefferson Fire District shall request an acceptable water supply or “Uniform Alternative Construction Standards”, as outlined in OAR 918-480-0125, if the dwelling is over 3600 square feet and/or the driveway access to the dwelling could cause a delay in response. If a property owner wants to install an acceptable firefighting water supply the volume of the water supply shall be calculated using the following guideline.

1. Using the formula in NFPA 1142 determine the minimum water supply in gallons.
2. Subtract from the minimum water supply in gallons the amount of water carried by the first due engine and tender. If the number is less than 4000 gallons the minimum storage capacity shall be 4000 gallons.
3. Nothing in the NFPA 1142 standard is intended to prevent the use of systems, methods, or devices that meet or exceed on site firefighting water supply.
4. All connections to access the water supply are approved by the Fire District

NFPA 1142 calculation formula

Calculation for structures without exposure

$$WS = VS \div OHC \times CC$$

Calculation for structures with exposures. NFPA 1142 (3.3.8) defines an exposure as “A structure within 50 ft of another building and 100 ft² or larger in area.”

$$WS = VS \div OHC \times CC \times 1.5$$

WS = minimum water supply in gallons

VS = total volume of the structure in cubic feet

OHC = Occupancy hazard classification number. This number can be found in chapter 5 of NFPA 1142

CC = construction classification number. This number can be found in chapter 6 of NFPA 1142