



Land Use Planning Division
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FIRE DISTRICT REVIEW
Fire Flow Requirements

TO THE APPLICANT

Multnomah County Code Chapter Section 29.003 requires a fire official review of proposed building plans for new structures and substantial additions to existing structures, including dwellings and accessory structures. The review is for either determining that adequate water amount and pressure (fire flow) is available at the building site or the building permit applicant will use an approved alternative to meeting the fire flow requirement. Take this form to the Fire District that serves the property, along with the building plans of the development. After the fire official reviews the plans for meeting the fire flow standards and signs this form, then include the form with your building permit application. See the code standards and the alternative credits on the pages following the fire official signature blocks.

Address of Site: _____

Tax Roll Description: _____

Description of Proposed Use: _____

If Residential Use, Total Number of Units: _____

Applicant Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip Code: _____

FIRE FLOW REVIEW

The fire official will sign the appropriate initials and signature lines confirming which of the standards in either parts A, B or C below are met. Fire flow requirements may be modified only upon approval by both the fire chief and the building official. This form is to stay with all building plans through the permit review process.

- A.** The structure is exempt from the fire flow standards in MCC Chapter 29 because:
- The structure is an “exempt farm structure” which qualifies as a farm building that is exempt from building permit requirements by meeting the requirements of ORS 455.315(2).
 - The structure or portion of the structure is a residential garage and attic.
 - The structure is an addition to an existing house that adds 50 percent or less floor area to an existing house.

 Signature of fire official verifying compliance of this standard

OR

- B.** New houses of less than 3,600 square feet in floor area and additions to an existing house of more than 50 % of floor area are required to meet **1** of the following **3** alternate methods of fire prevention or suppression:

1. There is 500 gallons per minute of fire-flow available from public water lines.

 Signature of fire official verifying compliance of this standard

OR

2. The fire protection service provider has available for use a water tanker truck of at least 3,000 gallon capacity and at least 2 of the following are a condition of permit approval (clearly shown on the site plan and building plans):

- A monitored alarm will be installed. _____ Fire official initials
- Class A or non-combustible roof materials will be installed. _____ Fire official initials
- Defensible space of 30 feet around the house (100 feet on slopes of 20% or greater).
_____ Fire official initials
- Fire official recognition of other particular circumstances that warrant alternative credit, due to attributes of site, building materials, or fire detection or suppression features not listed. This must be in conjunction with a monitored alarm installation. _____ Fire official initials
Fire official's description of feature: _____

Signature of fire official verifying compliance of this standard

OR

3. A sprinklering fire suppression system will be installed and at least 1 of the following are an additional condition of approval (clearly shown on the site plan or building plans):

- A monitored alarm will be installed. _____ Fire official initials
- Class A or non-combustible roof materials will be installed. _____ Fire official initials
- Defensible space of 30 feet around the house (100 feet on slopes of 20% or greater).
_____ Fire official initials
- Fire official recognition of other particular circumstances that warrant alternative credit, due to attributes of site, building materials, or fire detection or suppression features not listed. This must be in conjunction with a monitored alarm installation. _____ Fire official initials
Fire official's description of feature: _____

- Fire protection provider has a tanker truck of at least 3,000 gallon capacity.
_____ Fire official initials

Signature of fire official verifying compliance of this standard

OR

C. All new houses of 3,600 square feet or more in floor area, all additions of 3,600 square feet or more to existing houses, and all other non-residential structures not exempted above are required to meet the fire flow requirements of Division II, Appendix Chapter 9, to the Uniform Building Code. For houses that will most often require the installation of a water sprinklering system. All structural features required to meet the standards of Division II shall be a condition of approval and be shown clearly on all building plans.

Signature of fire official verifying compliance of this standard

BUILDING CODE FIRE FLOW STANDARDS

MULTNOMAH COUNTY CODE § 29.003 ADOPTION OF STATE BUILDING CODE BY REFERENCE.

- (A) Those portions of the state building code constituting the structural specialty code, fire and life safety code, mechanical specialty code, and the one- and two-family dwelling specialty code, are adopted and by this reference incorporated as part of this subchapter. The provisions of this subchapter shall take precedence over the similar provisions of the state specialty codes.
- (B) Except as modified in (C) below, the optional portion of the 1997 Uniform Building Code constituting the Division II-Fire Flow standards in Appendix Chapter 9 are adopted and by reference incorporated as part of this subchapter as the requirements for determining fire flow for buildings constructed under a building permit issued after October 16, 2004, or for those portions of buildings constructed under a building permit issued after October 16, 2004, that are “substantial improvements” to existing buildings. “Substantial improvements” mean the addition of more than 50 percent of the floor area to buildings that existed on October 16, 2004. For one- and two-family dwellings the floor area in “substantial improvements” does not include garages or attic spaces.
 - (1) As provided in Section 910 of Division II – Fire Flow, fire-flow requirements may be modified downward or upward only upon approval by both the building official and the fire chief. The building official shall be the official currently under contract for providing building permit issuance services. The fire chief shall be the current chief, or delegate, of the fire district or city that provides fire services to the property.
 - (2) As referenced in Section 913 of Division II – Fire Flow, standards for fire department access and required fire hydrants shall be the applicable fire codes in the unincorporated area of the county, except as modified by the fire apparatus means of approach standards in § 29.012 and the alternate methods of fire protection in § 29.013.
 - (3) For properties within fire protection service districts that have adopted more stringent fire-flow standards than contained in Division II—Fire Flow, Appendix Chapter 9, of the Uniform Building Code, the more stringent standards shall be utilized. In that circumstance, the fire chief’s authority for administering the fire-flow standard shall be as given in the district’s ordinances.
 - (4) In recognition that Section 910 allows for fire-flow modifications, particularly in rural areas or small communities, section § 29.003(C) below is a less restrictive modification of those fire-flow standards that is appropriate for and shall apply to the unincorporated areas of Multnomah County that are outside of any city limits where a greater fire-flow standard has not been adopted by the local fire protection provider.
- (C) Notwithstanding any other fire-flow requirement in Division II—Fire Flow, Appendix Chapter 9, the fire-flow requirement and exception in subsection 912.1 “One- and Two-family Dwellings” shall be modified to require a minimum 500 gallons per minute for dwellings that are less than 3,600 square feet in floor area (excluding garages and attic spaces) and accessory buildings and garages that are less than 3,000 square feet in floor area (either detached or attached to the dwelling).

The continuous fire-flow standard of 500 gallons per minute at the dwelling may be met by water flow and volume available from public water lines or by other water supply sources in conformance with standards in the 1999, or most current edition, “NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting” manual. If the 500 gallons per minute fire flow standard cannot be met from public water lines or other water supply sources, then the alternative provisions in (C)(1) through (C)(7) below shall be used in combination to meet a credit total that equals or exceeds 100% of the 500 gallons per minute standard.

Summary of methods to meet 100% of the Fire-Flow Requirement of 500 gal. per min.	
I.	500 gallons per minute fire-flow is available from public water lines or other sources in compliance with NFPA 1142 standards [100%]; or
II.	Utilize the tanker truck credit in (C)(1) [50%] and any two of the following alternative credits:

	<ul style="list-style-type: none"> • Monitored alarm in (C)(2) [25%]; • Roof materials in (C)(3) [25%]; • Defensive space in (C)(4) [25%]; • Special approval by the Fire Chief in(C)(5) [25%]; or
III	<p>Use all the following alternative credits:</p> <ul style="list-style-type: none"> • Monitored alarm in (C)(2) [25%]; • Roof materials in (C)(3) [25%]; • Defensive space in (C)(4) [25%]; • Special approval by the Fire Chief in (C)(5) [25%]; or
IV	<p>Utilize the sprinkler system in (C)(6) [75%] and any one of the following alternative credits:</p> <ul style="list-style-type: none"> • Tanker truck credit in (C)(1) [50%]; • Monitored alarm in (C)(2) [25%]; • Roof materials in (C)(3) [25%]; • Defensive space in (C)(4) [25%]; • Special approval by the Fire Chief in(C)(5) [25%].

- (1) An alternative credit of 50% shall be given upon verification by the local fire protection service provider that a water tanker truck of at least 3,000 gallon capacity is available to serve the property;
- (2) Where fire protection services are available, an alternative credit of 25% shall be given for the use of a central station monitored smoke alarm system and the posting of a clearly visible rural address marker where the private driveway or private road intersects with the public road;
- (3) An alternative credit of 25% shall be given for the installation of Class A or non-combustible roofing shingles and the boxing in of all eaves, facias, and soffits with fire resistant materials;
- (4) An alternative credit of 25% shall be given for the creation of “defensible space” against wildfire around the dwelling. On ground slopes of less than 20 percent, “defensible space” is an area 30 feet from the outside walls of a dwelling that is owned by or controlled by the homeowner. On ground slopes of 20 percent or greater, “defensible space” is an area 100 feet from the outside walls of a dwelling that is owned by or controlled by the homeowner. Prior to issuance of the building permit, verification shall be required that within the “defensible space”:
 - (a) Low-hanging branches of existing trees have been pruned and removed within 8 feet of the proposed dwelling; and
 - (b) Low-hanging branches of existing trees have been pruned and removed within 8 feet of the ground as the maturity of the tree and accepted silviculture practices may allow; and
 - (c) Existing trees are spaced with greater than 15 feet between crowns; and
 - (d) All other vegetation is less than 2 feet in height;
- (5) In conjunction with meeting the requirements of (C)(2) above, the Fire Chief of the local fire protection provider may approve an additional credit of 25% when particular circumstances warrant the credit. Such circumstances include, but are not limited to, specific fire prevention, fire containment, or fire suppression attributes of the proposed building site, building materials, or additional fire detection and/or suppression features.
- (6) An alternative credit of 75% shall be given with the installation of a fire sprinkler system in conformance with the standards in the 1999 Edition, or the most current version, of the NFPA 13-D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes (NFPA is the National Fire Protection Association, Inc.).

RETURN THIS FORM TO THE APPLICANT