**Oregon State Fire Marshal Toledo Fire Dept.** Fire Marshal in Albany. service to inform and educate our Oregon Department of Forestry Yachats RFPD Siletz RFPD Seal Rock RFPD North Lincoln Co. Fire Dist. #1 Newport Fire Dept. Depoe Bay RFPD Central Oregon Coast RFPD encouraged to contact the Oregon State agency service areas, you proposed project is outside one of these County are listed below. Where a these requirements. who may be able to assist with meeting one of the following fire code officials customers and stakeholders. If you Local fire agencies within Lincoln have further questions, please contact This guide has been provided as a are

prior to any combustible construction or storage of combustible materials on the site. Where there are practical difficulties in strictly complying with these regulations, the local fire code official is allowed to consider alternate fire protection such as the installation of automatic fire sprinkler systems. Readers are encouraged to contact their local fire code official (designated on the back of this brochure) for the jurisdiction in which they reside, who retains final authority to determine compliance.



Effective Date: December 8, 2005

Refer to Chapter 5, Sections 501, 503, & 508 of the 2010 Edition of the Oregon Fire Code.

# Fire Apparatus Access Roads

Guidelines for Application of the Oregon Fire Code within Lincoln County

Examples of fire apparatus access roads include fire lanes, public streets, private streets, parking lots, access roadways, and private driveways. These roads provide access from fire stations to buildings and premises including private residences.

Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building. When buildings are completely protected with an approved automatic fire sprinkler system, the requirements for fire apparatus access may be modified as approved by the fire code official.

not be construed to either create or

practices that are in conformance with the Oregon Fire Code. This guide should good faith guidance to developers, contractors, business owners, and the public on what are considered as best

The purpose of this guide is to provide

replace Oregon Fire Code provisions.

The Oregon Fire Code requires that fire



apparatus access roads and an approved water supply for firefighting purposes be provided for all buildings, including

individual dwellings and groups of dwellings,

## Width & Vertical Clearance

Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants) and an unobstructed vertical clearance of not less than 13 feet 6 inches.

The fire code official is allowed to modify these requirements for special or unique circumstances where approved alternative means of fire protection are provided.

### **Turning Radius**

The inside turning radius and outside turning radius shall be not less than 28 feet and 48 feet respectively, as measured from the same center point. Alternate radius shall be approved by the local fire code official.

## Dead-Ends Roads

Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround.

Refer to OFC Appendix D for other examples.



### Turnouts

When any fire apparatus access road exceeds 400 feet in length, turnouts 10 feet wide and 40 feet long shall be provided in addition to the required road width and shall be placed no more than 400 feet apart, unless otherwise approved by the fire code official.

#### Grades

Fire apparatus access roadway grades shall not exceed 10 percent unless approved by the fire code official. The maximum grade at any point along the roadway shall not exceed that approved by the fire code official. Intersections and turnarounds shall be essentially level (maximum 5 percent slope) with the exception of crowning for water runoff.

## Surface & Load Capacities

Fire apparatus access roads shall be constructed with an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 75,000 pounds live load (gross vehicle weight).

Bridges

at the expense of the property owner(s) the to the fire code official after construction is bridge serves bridge for structural stability and soundness registered design professional inspect the property (ies). The fire code official may at any time, for due cause, ask that a use(s) the bridge for access to their be the responsibility of the party (ies) that completed. Maintenance of the bridge shall give, in writing, final approval of the bridge The registered design professional shall program for approval by the building official inspection and structural observation bridge is to be built. The registered design building official of the jurisdiction where the construction of the bridge if required by the building permit shall be obtained for the American Association of State Highway and constructed in accordance with the State of professional shall prepare Specification for Highway Bridges. A Oregon Department of Transportation and registered Private bridges shall be designed by a Transportation Officials Standards Standard design professional a specia and



Buildings more than 30 feet in height shall have fire apparatus access roads constructed for use by aerial apparatus with an unobstructed driving surface width of not less than 26 feet. The road must be parallel to at least one side and not less than 15 feet or more than 30 feet from the nearest side of the building.

## Gates securing fire apparatus roads shal comply with all of the following:

- Minimum unobstructed width where gates are installed shall be not less than 20 feet.
- Where more than one gate is installed, each individual gate shall not be less than 10-feet wide.
- Where a fire apparatus access road has been approved by the fire code official to be less than 20 feet wide, the width of gates shall be as required by the fire code official, but not less than 12-feet wide.
- Gates shall be set back a minimum of 30 feet from the intersecting roadway.
- Gates shall be of the swinging or sliding type
- Manual operation shall be capable by one person.
- Electric gates shall be equipped with a means for operation by fire district personnel.
- Locking devices shall be approved

Refer to OFC Appendix D for other examples.



### Signage

Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background.



## **Multiple Access Roads**

Developments of one and two-family dwellings where the number of dwelling units exceeds 30; multiple-family residential projects having more than 100 dwelling units or where vehicle congestion; and adverse terrain conditions or other factors that could limit access as determined by the fire code official shall be provided with not less than two separate and approved fire apparatus access roads.

# Firefighting Water Supplies

Due to the nature of determining fire flows and protection water supplies, please contact the local fire code official for special assistance and other possible requirements that may apply.

The minimum water supplies and fire flows shall be as specified herein and may be modified when approved by the fire code official, based upon fire service features that may be provided as part of the project under consideration. In all cases, the adequacy and reliability of water supply systems shall be as determined and approved by the fire code

Areas With Adequate and Reliable Water Supply System official

### Commercial Buildings and Dwellings Larger Than 3,600 sq ft

As required by the OFC, but not less than 1,500 gallons per minute of fire flow.

# Dwellings Smaller Than 3,600 sq ft

As required by the OFC, but not less than 1,000 gallons per minute of fire flow.

## Areas Without Adequate and Reliable Water Supply System

Required fire flow for rural and suburban areas in which adequate and reliable water supply systems do not exist may be calculated in accordance with National Fire Protection Association Standard 1142 (2001 Edition), when approved by the fire code official.

# Other Fire Service Features

- Key Boxes (OFC 506) A key box for building access may be required. Please contact the fire code official for an order form and instructions regarding installation and placement.
- Address Signs (OFC 505) Address signs for buildings may be required. Please contact the fire code official for instructions regarding installation and placement.

# **Automatic Fire Sprinklers**

Automatic fire sprinklers protect site built and manufactured homes 24 hours a day, 7 days a week. Automatic sprinklers only extinguish fires near the location of a sprinkler head. They cost about \$2 per square foot in new construction and about \$2.50 for retrofitting into existing homes. If interconnected with the house's domestic water system, the costs of maintenance can be very low.



We encourage homeowners to install these essential fire and life safety systems in their homes. They can save your life and the lives of your family.

#### Gates