

FLOATING STRUCTURES REGULATIONS

INTRODUCTION

STATEMENT OF PURPOSE AND INTENT

It is the purpose of this Regulation to promote the public's health, safety and welfare through the regulation of floating structures and their appurtenances. These regulations recognize that waterborne structures, by their very nature confront different environmental factors than do structures located on land. Furthermore, it is recognized that waterborne structures have distinctive design requirements such that strict adherence or application of the land-oriented Specialty Codes is not always appropriate and that modifications or exceptions should be made in appropriate circumstances in the application of those codes.

This interpretation is to coincide with the use of Appendix II-C of the Uniform Fire Code and NFPA Standard No. 303

Floating structures moved into the Fire District shall comply with this interpretation as for new construction.

DEFINITIONS

Addition: An increase in the floor area or height of a structure or building.

Alteration: Any change or modification of existing construction.

Berth: Mooring of a boat along side a bulkhead, pier or between piles (see also slip).

Boathouse: A covered floating structure used primarily for the wet or dry storage of a boat.

Combo: A boathouse-floating home combination.

Dry Hydrant: A permanently installed suction pipe that extends from the water supply to a point above ground to make static suction water supply more accessible to Fire District pumpers.

Fire Apparatus Access Roads: Roads providing the driving surface for fire department vehicles responding to an emergency, extending from a public right of way to a point nearest a moorage or marine gangway or pier.

Floating Home (Houseboat): A floating structure used primarily as a dwelling unit.

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Floating Structure: A structure supported by a flotation system and held in place by piling and mooring devices, including but not limited to boathouses, floating homes, marinas, and walkways.

Gangway: A variable slope structure intended to provide pedestrian access between a fixed pier or shore and a floating structure.

Houseboat: See floating home.

Marina: Floating structure(s) used primarily for the service, and/or repair, sale or moorage of vessels in berths, but may include other occupancies.

Moorage: A site used for the mooring of one or more floating structures or vessels and included the piling, mooring connectors, piers, ramps, gangways, walkways, and the land area used in conjunction therewith.

Moored or Mooring: The attachment of a boat or floating structure in one location temporarily or permanently to piles, walkways, gangways, piers or other structures.

Mooring Site: A site within a moorage designed or used for the mooring of a boat, boathouse, floating home, floating structure or other vessel.

New Construction: A new building or structure or and addition to an existing building or structure.

Pier: A nonfloating fixed platform extending out over the water from shore to which gangways are usually attached.

Ramp: A fixed sloped structure providing pedestrian access between portions of a moorage which are at different elevations.

Repair: The reconstruction or renewal of any part of an existing structure for the purpose of its maintenance.

Slip: At a boat yard or marina, a boat mooring that is directly accessible from land, arranged to permit access to each boat from a fixed or floating pier.
(See also Berth)

Specialty Codes: A code of regulations adopted under ORS 447.020(2), 455.020(2), 479.730(1) or 480.535 commonly referred to as the Structural Specialty Code, Mechanical Specialty Code, Plumbing Specialty Code and the Electrical Specialty Code.

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Tender House: A nonhabitable, floating accessory building.

Transient Tie-Up: A floating structure used exclusively for the open moorage of pleasure boats on a short term, maximum 72 hour stay.

Vessel: is every description of watercraft, other than seaplane on the water, used or capable of being used as means of transportation. Included in this definition shall be non-transportation vessels such as houseboats and boathouses.

Walk: A fixed portion of a floating home structure providing access to and around a floating home.

Walkway: a covered or open floating structure used for ingress or egress to a mooring site. There are three types:

- 1 **Fingergfloat:** A finger like floating structure, usually attached perpendicular to a main walkway, which physically defines a berth and provides direct pedestrian access to and from a berthed boat or floating home.
- 2 **Main Walkway:** A floating structure to which several fingerfloats are attached, thereby providing direct pedestrian access between the berths and marginal walkways or shore.
- 3 **Marginal Walkway:** A floating structure which provides pedestrian access between two or more main walkways and shore.

GENERAL

Floating structures and moorages shall comply with these specific interpretations as well as applicable Specialty Codes, and all other applicable regulations of the City, County, State, and Federal governments.

Existing floating structures moved to the Fire District shall comply with these interpretation as though they were new construction.

MAINTENANCE

All floating structures and supporting structural systems, electrical, plumbing and mechanical installations and devices shall be maintained in good serviceable condition.

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FIRE SAFETY

Fire Safety shall be in accordance with the Uniform Fire Code Appendix II-C

FLOATING HOMES

For the purpose of this interpretation, floating homes and combos that contain a toilet shall be considered one and the same.

A. SEPARATION REQUIRED BETWEEN FLOATING HOMES

1. The separation existing at the time of the adoption of this regulation between one floating home and another is approved.

2. Floating homes may be relocated within a moorage provided the distance between units is not diminished.

3. Floating homes of new or existing construction moved from one moorage to another shall be spaced a minimum of 8 feet apart between the nearest exterior walls and 4 feet apart at the nearest roof projections, or be provided with the alternative protection system as required below.

B. ALTERNATE PROTECTION SYSTEMS TO MINIMUM SEPARATION BETWEEN ADJACENT HOUSEBOATS

1. When the wall to wall separation is less than 8 feet but more than 4 feet, or the roof to roof separation is less than 4 feet but more than 2 feet, the structure being moved or added to shall be equipped throughout with a complete automatic sprinkler system installed in compliance with NFPA 13 or all of the following:

a. Walls shall be constructed as 1 hour fire resistive and all openings shall be protected by a fire assembly with a minimum of 3/4 hour fire protection rating.

b. An approved fire alarm system that shall consist of not less than an approved and listed system type smoke-detector installed within the structure in a manner approved by the manufacturer and the Fire Chief. When activated, such detectors shall initiate an alarm which is audible both inside the structure and outside the structure. All systems shall be tested and approved by the Fire Chief.

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Battery systems will not be approved and batteries may only be used for back-up power supply.

2. When the wall to wall separation is less than 4 feet or the roof separation is less than 2 foot, the structure being moved or added to, shall be equipped throughout with a complete automatic sprinkler system in compliance with NFPA STANDARD 13.

C MISCELLANEOUS SEPARATIONS

Floating structures with side decks or walkways, shall have at least two foot separation between other floating structures, decks, or walkways.

D. OCCUPANCY SEPARATION

A covered boatwell, in a floating home, enclosed on more than two sides shall be separated from the habitable space by a wall having 5/8 inch thick type 'X' gypsum board (Water resistance or similar material) on the boatwell side.

GANGWAYS, RAMPS, WALKWAYS AND WALKS

A. Gangways, ramps and walkways shall be illuminated by lights designed, constructed and maintained to provide a minimum average of 1 foot candle of light per square foot at the walking surface.

EXCEPTION: Recreational boat launching and transient tie up facilities.

B. Gangways and ramps shall have a maximum slope of 1 vertical to 2.5 horizontal and shall have a non-slip walking surface or surface cleats securely fastened in place with a maximum spacing center to center of 1 foot 6 inches.

C. Gangways shall have a minimum, unobstructed width of 5 feet when a single gangway is required and 4 feet when more than one gangway is required and shall be provided with guardrails and handrails as required by the building code. Intermediate landings shall not be required for gangways.

EXCEPTION: Gangways serving an occupant load less than 10 and gangways serving recreational boat launching and transient tie up facilities need not be more than 4 feet in width.

D. Walkways shall have a minimum, unobstructed width of 6 feet, except for fingerwalkways, which may be 3 feet in width. Cleats, bull rails, mooring connectors, utility stands and the like may project into the required width of main and marginal walkways.

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E. A 2 foot wide walk shall be provided on all sides of a floating home.

MOORAGE EXITS

Two exit gangways are required whenever any one of the following conditions apply:

1. The marginal walkway exceeds 250 feet.
2. Total distance from the nearest point of apparatus setup (usually at the head of a gangway) to the most remote portion of the moorage exceeds 800 feet.

EXCEPTION: Moorages used for the moorage of pleasure boats without covers (open moorage configuration) and having not more than two floating homes or occupied vessels (for owner and caretaker, for instance) need have only one exit gangway.

When two exit gangways are required, they shall be at opposite ends so as to avoid the possibility of any fire cutting off exit or access to both exit gangways. Any exceptions shall be approved by the Fire Chief.

MOORAGE IDENTIFICATION.

IDENTIFICATION - All moorages shall be provided with identification as follows:

- a. All moorages shall be identifiable by name and address from the street or road on which they front at or near the point of emergency vehicle access.
- b. The head of the gangway providing access to the moorage shall be obviously identifiable from the point of emergency vehicle access road, from the shore end of the access road; or the facility shall be signed as required to provide such identification.
- c. The location and identification of all floating structures shall be obvious from the head of the gangway or a sign shall be provided indicating the layout of the moorage canal, the walkway and structure identification method.
- d. The walkway and structure identification shall be logical and obvious.
- e. Moorage identification work shall be approved by the Fire Chief.

FIRE PROTECTION STANDPIPE

FIRE PROTECTION STANDPIPE - The following described fire protection standpipe system shall be required at all moorages within two years of the effective date of this interpretation. An agreement shall be established within 6 months of the effective date of this interpretation for such an installation to be completed within a reasonable amount of time. The amount of time to be approved by the Fire Chief.

Moorages having any portion of a floating structure more than 250 feet from the point of fire apparatus set up, shall have a dry standpipe system designed and installed in accordance with the Uniform Fire Code and the following:

a. Have a water supply that complies with any one of the following:

(1) Municipal water providing 1000 GPM at 20 psi operating pressure. A fire hydrant within 600 feet from the closest point of fire department access to a moorage site exit ramp.

(2) The Columbia River or associated bodies of water with pump or pumps capable of providing 250 GPM at 100 psi to any single outlet on the standpipe system. Pumps are to be powered with natural gas, or electric and be listed by Underwriters Laboratory.

(3) A permanent dry hydrant system within 500' from the closest point of Fire Department access to a moorage site exit ramp. Site location approved by Fire Chief.

b. Have a fire department connection to standby pipe system located within 150 feet of fire apparatus set up.

c. Have a fire department connection at other locations within standpipe system. This will depend on moorage layout and Fire Chief.

d. Have pipe sized to provide 250 gallons per minute at 100 psi pressure to any single outlet with a maximum input pressure of 150

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psi.

e. System shall be installed so it will have adequate drain valves installed to ensure complete drainage.

f. Have gate valve outlets made of noncorroding metal, 2-1/2 inch I.D. with National Standard Threads spaced a distance apart as follows:

(1) For moorages having marine service stations, floating homes, or other type of structures or vessels having permanent living quarters, valves are to be every 100 feet and within 50 feet of the end of walkways.

(2) For moorages serving only boathouses, valves are to be every 150 feet and within 75 feet of the end of the walkways.

(3) For moorages having only open moorage of pleasure boats, standpipes shall only be required along the marginal walkway with valves required only at intersecting main walkways, or not less than every 200 feet and 100 feet from the end of marginal walkways not having intersecting main walkways.

g. All fire protection standpipe systems shall be installed and approved by the Fire Chief.

h. Standpipe systems shall be tested in accordance with Uniform Fire Code Appendix III.C(88). The Fire Chief shall be notified at least 24 hours in advance of all tests and tests shall be done in their presence or the presence of their representative. An annual service test may be requested by the Fire Chief to assure the continuity of the system upon the signing of a waiver of liability.

FIRE APPARATUS ACCESS ROADS

Access to moorages shall be by fire apparatus access roads having all-weather driving surfaces capable of supporting a 25 ton load. Such roads shall be a minimum 20 feet wide with not less than 13 feet-6 inches overhead clearance. Access shall be provided from the nearest public way to the head of the gangway. Fire apparatus turnarounds shall be required on any fire access road having a dead end

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exceeding 150 feet.

ELECTRICAL

All electrical work shall be designed and installed in accordance with the State of Oregon Electrical Specialty Safety Code, Title 26 and this chapter. Permits and inspections are required for all work.

A. Transformer pads shall not be located closer than 8 feet to combustible surfaces and 2 feet to noncombustible surfaces.

B. Overhead power drops shall be installed and maintained a minimum of 12 feet above walking surfaces and/or the ordinary high water line.