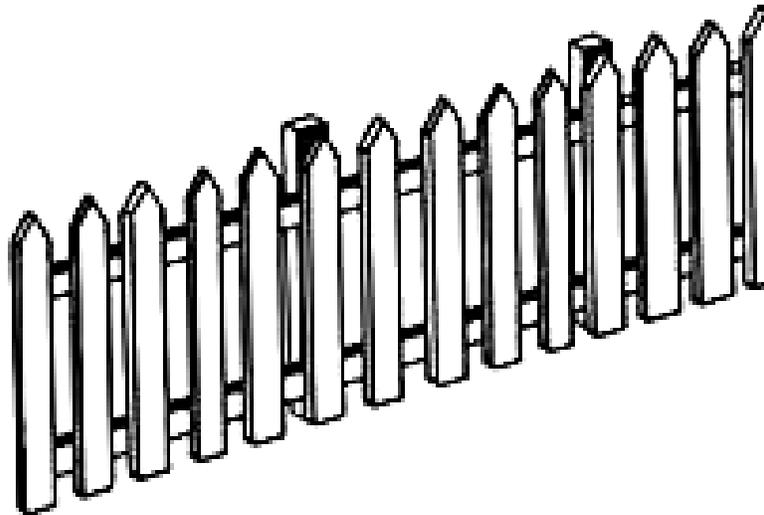


Typical Details For Fences Over 6 Feet And Up To 10 Feet Tall

**YOU CAN USE TO PERMIT AND BUILD YOUR FENCE
(Valid for 2018, check for annual updates)**



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Name:	Permit No:
Address:	

The use of this typical fence detail package in lieu of submitted drawings applies to fences that are a maximum of ten feet in height. Fences must be constructed in strict conformance with the details contained herein. An approved copy of this fence detail package must be on the job site and available to the inspector during the inspection process. **This guide is intended to help provide typical information needed for constructing a fence; however, you will need to have at least some understanding of typical construction practices in order to complete the project.**

Accessibility Information: This information can be made available in alternative formats such as large print or audio tape. To request alternative formats, please call 503-526-2493 or email cddmail@BeavertonOregon.gov.

INTRODUCTION

These plans and details are provided to assist you in obtaining a building permit for constructing a fence up to ten feet in height. **Before proceeding, always check with the City Planning Division for land use, zoning, traffic vision clearance or other regulations that may affect your project.**

When Do I Need A Permit For A Fence?

A building permit is required for all fences that serve as a barrier around a swimming pool and fences that are over seven feet tall. Exception: a building permit is required for open chain link or woven wire fences over eight feet tall.

How Do I Use The Plans To Get A Permit?

The first step is to submit a site plan of sufficient detail to the City Planning Division for approval. The site plan shows an outline of your property (property lines), the house, and outline of where you will be locating the fence. The site plan will need to be drawn to a scale (usually a scale of 1/8th, 1/4th or 1/10th of an inch equal to one foot or similar is acceptable). Once you have an approval form from the Planning Division, fill out a building permit application, complete the information required on page 5, and submit three sets of these plans (along with your approved site plan). After the plans are reviewed and approved, a permit to construct your fence will be issued.

Building permit applications are available online at:

<http://www.BeavertonOregon.gov/index.aspx?nid=440>

How Big And At What Spacing Do The Footings, Posts, And Rails Need To Be?

The detail in these plans will help you determine how big the footings, post, and deck rails need to be and how far apart they can be spaced (See Table 1 and Figure 1).

General Notes

1. All post shall be grade #2 Douglas-Fir, Hem-Fir or better that has been be pressure treated (to resist insect and dry rot) in accordance with American Wood-Preservers' Association Standards (Category). Fence rail lumber shall be grade #2 Douglas-Fir, Hem-Fir or better that has been be pressure treated (to resist insect and dry rot) in accordance with American Wood-Preservers' Association Standards. The pressure-treatment category identified below will be identified on the lumber. The level of treatment depends on the use as follows:
 - a. Fence railings must be treated to a Category UC3B.
 - b. Posts and other woods located on, in, or in contact with the ground must be a Category UC4B.
2. The level of preservative treatment is noted on the tags fixed to the ends of the wood members. **Remember, any time you make a cut, treat the cut end of the wood with a paint-on preservative. Cut ends expose the inner untreated wood to potential moisture and insect damage.**
3. **Fence boards can be of any material and configuration (i.e., solid, 'good neighbor', picket, lattice, etc...).**
4. All nails shall be "common" or "box" galvanized. It is recommended that "common" nails be used. They have a thicker shank and are stronger than "box" nails.

5. **New pressure treatment methods use chemicals that will prematurely corrode standard fasteners and hardware when in contact with pressure treated lumber; and as a result, fastener and hardware requirements have changed. Note the following:**
 - a. **All screws and nails shall be hot-dipped galvanized or stainless steel.**
 - b. **All hardware (fence rail hangers, gate hardware, etc.) shall be galvanized with 1.85 oz/sf of zinc (G-185 coating) or shall be stainless steel. Look for products such as "Zmax" from Simpson Strong-Tie or "Triple Zinc" from USP.**
6. Concrete used for footings must have a minimum compressive strength of 3,000 psi.
7. Fences constructed according to this handout are not designed to support any other structure or retain any earth or rock.
8. Fence designs that deviate from the conditions of this handout will require a specific plan submission and may require engineering.
9. Inspections are required as follows:
 - a. A footing (post hole), framing and a final inspection are required on all fences. To determine the fence is located correctly, property pins must be located and visible at the time of inspection. If the property pins cannot be found, then they must be located and marked by a registered professional Land Surveyor.
 - b. Footing inspections are required prior to the placement of concrete.
 - c. Framing and final inspections may be combined if all portions of the fence framing and mechanical attachments are completed
 - d. It is the responsibility of the permit holder or the permit holder's representative to notify the city when stages of construction are reached that require an inspection.
10. The sizing for footings, posts and rails are only to be used as indicated in Table 1.
11. If the fence is located adjacent to the top of a retaining wall, the fence must be set back a distance equal to the depth of the fence footing or the retaining wall must be designed (engineered) to support the loads imposed by the fence.
12. These details cannot be used for fences on ground that slopes (perpendicular to the fence) greater than 2 horizontal for every 1 vertical.

Getting Started

To effectively use the information contained in this document, you will need to do the following:

- 1) **Before proceeding, submit a site plan for approval from the City Planning Division for land use, zoning (setbacks) and public utility easement restrictions or other regulations that may affect your project.** You may also want to check to see if your subdivision has any restrictions such as Covenants, Conditions and Restrictions (CC&R's). These regulations are not enforced by the City, but may be enforced by the homeowners associations.

- 2) The City has 'Vision Clearance' requirements on corner lots abutting streets and in front yards adjacent to driveways. This is to maintain safety for pedestrians and vehicles. Check with the City Planning Division for requirements.
- 3) The City Planning Division regulates how tall a fence can be in the front yard of the property. Check with the City Planning Division for requirements.
- 4) Determine where your property lines are located and what setbacks are required from the property line to the edge of the fence. Typically fences can be built on the property lines. A fence can straddle the property line; however, you must have permission from the adjoining property owner. The City does not control or grant permission to build a fence on an adjoining property.
- 5) Determine if you have any public easements on your property and whether or not the fence can be constructed over the easement, if applicable.
- 6) Determine how tall you want your fence. **Note:** The drawings contained in this document may show a typical solid fence with vertical fence boards; however, any type or configuration of fence board can be used. See Figure 1.

POST, RAILS, AND FOOTING SIZES

Posts shall be minimum 4x4 for fences of 6 to 8 feet in height, and minimum 4x6 for fences over 8 feet to 10 feet in height. There shall be a minimum of 3 equally spaced horizontal 2x6 fence rails for fences of 6 to 8 feet, and 4 equally spaced horizontal 2x6 fence rails for fences of 8 to 10 feet in height. The rails shall be placed with the 6-inch dimension vertical. See Table 1.

Table 1 provides you with the information to determine how big the footings, posts, and rails need to be. The size will depend on the height of the fence. The fence cannot place a load on a retaining wall, or be located next to a slope greater than 2v:1h. If the fence posts are to be placed where there is fill material (non-native soil), the post footing(s) must be the depth required by Table 1, plus the depth of the fill (i.e., if there is one foot of fill material and the footing is required to be six feet deep, the total footing depth must be a minimum of seven feet deep).

TABLE 1
FENCE POST, FOOTING SIZE AND DEPTH
(All posts are spaced a maximum of 8'-0" o.c.)

Posts must be embedded to within twelve inches of the bottom of the footing.

1.) If you have a fence height that is:	Then 2.) you need this many/size fence rails:	And 3.) the post must have a minimum nominal size of dimension of (w x d):	And 4.) the footings supporting the posts will need a minimum depth (feet) and diameter (inches) of:
Over 6 feet to 8 feet high	(3) 2x6	4x4	4'-0" deep x12" diameter Or 3'-9" deep x16" diameter Or 3'-6" deep x18" diameter
Over 8 feet to 10 feet high	(4) 2x6	4x6 (the six-inch dimension must be perpendicular to the fence face)	5'-0" deep x12" diameter Or 4'-9" deep x16" diameter Or 4'-6" deep x18" diameter

Required Information

After determining the, sizes for the footings, posts, and rails from the table, mark the information in the space provided below:

- a) Height of Fence: _____
- b) Footing Size: _____ deep x _____ diameter.
- c) Post Size: _____ x _____.
- d) Rail Size: _____ x _____, spaced _____ apart.

FOOTINGS

All post footings shall bear in solid ground. Bearing conditions shall be verified in the field by the City during the footing inspection, prior to placement of concrete. **Do not construct footings over utility lines. Call 811 for utility locates before you dig.**

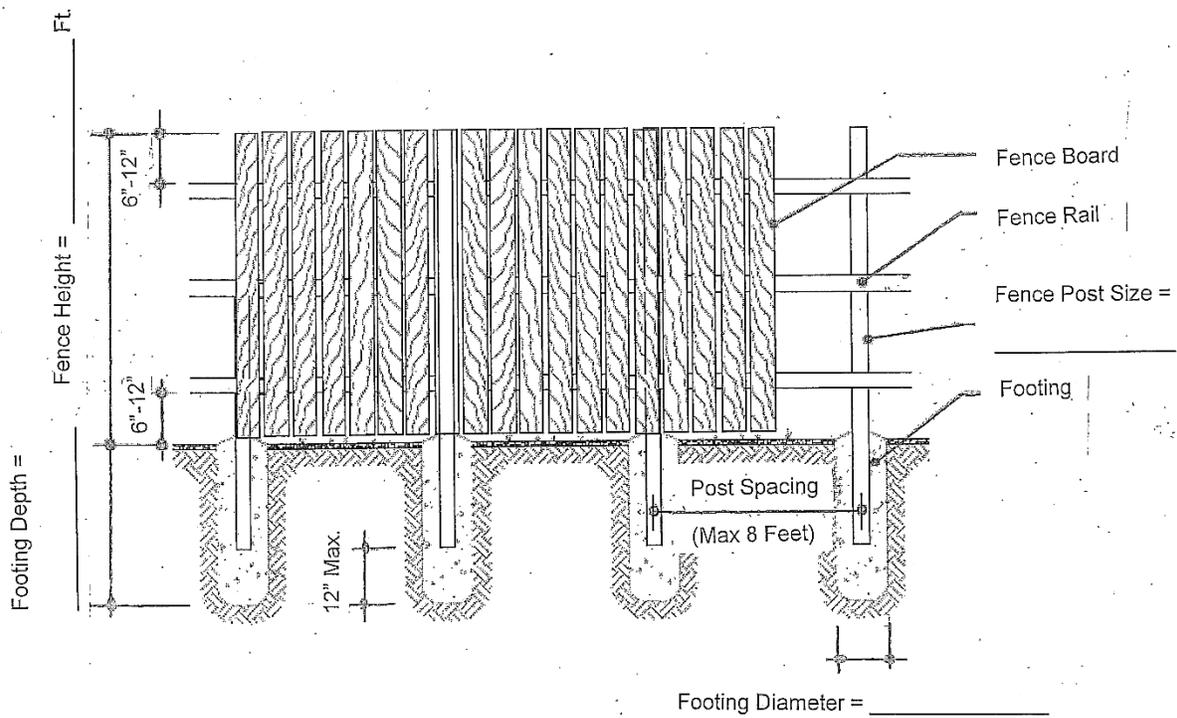


Figure 1