Lot Coverage, Height, Yard, and Garage Standards for Homes in Single Family Zones

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Seattle has three zones in which single family homes are the predominant type of development: SF 9600, SF 7200 and SF 5000. The abbreviation “SF” stands for Single Family, and the numbers following the abbreviation indicates the minimum lot area generally needed to build a home in that zone. Other than the differing lot size requirements, Land Use Code standards that regulate the size and location of buildings are the same for all single-family zones. Development in Residential Small Lot (RSL) zones is subject to different standards and is beyond the scope of this Tip.

New buildings and modifications to existing homes must conform to the lot coverage, height and yard standards described in the Land Use Code. Some examples of, and exceptions to, the requirements are presented here; however, you should also review the sections of the code that might apply to your project before preparing plans for a permit application. Code references are included in this Tip for convenience.

In addition to reading this pamphlet and the Land Use Code, you are welcome to discuss your project in person at the SDCI Applicant Services Center, located on the 20th floor of Seattle Municipal Tower, 700 Fifth Ave. Phone: (206) 684-8850.

LOT COVERAGE

Homes (principal structures) and associated structures (accessory structures) may cover 35 percent of the lot on lots 5,000 square feet or greater in area. On lots less than 5,000 square feet in area, these structures may cover 1,000 square feet plus 15 percent of the lot (23.44.010C). When calculating lot coverage, it is important to note that distinct portions or areas of a lot that have dimensions less than 10 feet will be excluded when calculating the overall lot area for the purpose of determining lot coverage.

This calculation is made on the footprint of all structures on the entire lot. Balconies, bay windows, and architectural projections must be included in calculating the footprint even though they do not actually touch the ground. However, the first 36 inches of eaves and gutters are exempted from this calculation.

Accessory structures and permitted portions of principal structures may cover no more than 40 percent of the required rear yard (23.44.016E).

Lot Coverage Exceptions (23.44.010D)

If any of your lot lines abut a dedicated alley, you may add half the area of the alley to your total lot area, up to a maximum of 10 percent of your lot area, when computing lot coverage.

Certain structures are not counted in lot coverage. These include:

- Pedestrian access bridges that are 5 feet wide or less (uncovered and unenclosed).
- Barrier-free access ramps or other access for the disabled or elderly meeting Washington State Building Code Chapter 11.
- Decks or parts of decks which are not over 36 inches above the existing grade.
- Freestanding structures such as fences, bulkheads and freestanding walls, but not arbors.
- Underground structures or the underground portion of a structure.
The first 36 inches of eaves and gutters projecting from principal or accessory structures.

- Solar collectors meeting the provisions of 23.44.046 and swimming pools meeting the provisions of 23.44.044.

**Permit Application Requirements for Lot Coverage Calculations**

As described in Tip 103, *Site Plan Requirements* and Tip 103A, *Site Plan Guidelines*, you must calculate the lot coverage of existing and proposed development on your lot and show it on the site plan that you are required to submit with your application. If you are not sure of the requirements, ask a Permit Specialist in the Applicant Services Center for help.

**HEIGHT**

The base height of homes (principal structures) is 30 feet above average grade (23.44.012).

On lots 30 feet or less in width, the base height is limited to 25 feet (detailed measurement techniques are found in Chapter 23.86 of the Land Use Code and in Director’s Rule 9-2011).

**Pitched Roofs**

The ridge of a pitched roof on a principal structure may extend up to 5 feet above the base height limit as long as the pitch of the roof is at least 4 to 12 (see Fig. A).

No portion of a roof with only one sloping plane may extend beyond the base height limit (commonly known as "shed roof" design).

**Exemptions for Rooftop Features**

Under certain conditions, radio and television antennas and flagpoles are exempt from height limits.

Open rails and planters may extend no higher than the ridge of a pitched roof or four feet above a flat roof. Projections that accommodate windows, such as dormers, clerestories, skylights and greenhouses, may extend no higher than the ridge of a pitched roof or four feet above a flat roof provided that they are also limited to 30 percent of the area of the roof and meet separation and setback standards discussed in 23.44.012C.

Chimneys may extend four feet above the ridge of a pitched roof or above a flat roof. Additional exemptions can be found in 23.44.012C.

**Documenting Compliance with Height Limits**

All projects must demonstrate compliance with applicable height limits for each structure on the site. Height limits may vary depending on the location on the property, and the use of the structure. The following information should be incorporated into the plan set for each structure proposed:

- **Average Grade** – project plans need to document average grade and how it was determined. There are several options for calculating average grade, please refer to Director’s Rule 9-2011 for a complete description of the method for determining average grade.

- **Average Grade for Projects in a Shoreline Zone**
  - For projects located in a shoreline zone, please refer to Land Use Code Section 23.60.952 for information about how to determine average grade for a site.

- **Site Plan Documentation** – Applicants will choose a method for determining average grade. The site plan needs to reflect all midpoint elevation grade points, exterior wall lengths and the related calculations that are required to fully document the average grade elevation being used for height measurement purposes, based on Director’s Rule 9-2011 or Land Use Code section 23.60.952. A stamped topographic survey, prepared by a licensed surveyor, may be required if grade will be disturbed for construction of the project and when any exterior wall of the new structure, in the area where grade is being disturbed, is within two feet of the allowed height limit as measured above existing grade.
A survey may also be required if the grade information provided by an applicant is not consistent with general site contours that are reflected in city GIS systems.

Site plan documentation should also identify the following elevation points depending on roof design:

- Roof ridge elevations or topmost elevation of a sloping roof with a shed or butterfly roof
- Top of flat roof elevations
- Top of parapet or guardrail elevations
- Top most elevation of any feature extending above the base height limit utilizing a height exemption, such as not limited to roof planters, clerestories, etc.
- Freestanding structures such as fences, bulkheads, freestanding walls but not arbors.

**Elevation View Documentation** – Each building elevation drawing should incorporate the following elevation information:

- **Existing grade elevations** at the “midpoints” used in calculating the average grade.
- **The average grade elevation** and a line depicting where this average grade lies in relation to the height of the structure.
- **Elevations for each floor level**.
- **Top plate elevations**. For structures with a pitched roof, which qualifies for a height exception, the base height limit for the structure will be measured from the average grade elevation to the top plate elevation of the walls. All portions of roof above the height limit must qualify for the pitched roof exceptions described in the code for the zone or in the measurements section of the code.

- **Top of roof elevations**. For structures that are not utilizing a pitched roof exception, the elevation of the highest element of the roof must be documented and must be within the base height limit for the structure plus exception for the roof.

**Sample Calculation, Figures B and C**

Formula 2: Average grade calculations, least rectangle

\[
\frac{(A \times a) + (B \times b) + (C \times c) + (D \times d)}{a + b + c + d}
\]

Example:

\[
\frac{(106 \times 72) + (107.7 \times 60) + (106.6 \times 72) + (103 \times 60)}{72 + 60 + 72 + 60} = \frac{(7632) + (6462) + (7675.2) + (6180)}{264} = \text{Average grade} = 105.87
\]
- **Top of roof features.** For portions of structures that qualify for another type of height exception (such as, but not limited to, clerestories, solar collectors, open guardrails or planters), the elevation of the highest element of the feature must be documented and must be within the allowable height limit plus exception for the feature.

- **Overall height dimension lines.** Show dimension lines from the average grade line, to the top plate, to the top of roof and top of highest roof features.

- Exceptions to these height documentation requirements may be allowed in consultation with the plan reviewer responsible for the zoning compliance and shall be based on the specifics of each project.

**YARDS (Land Use Code section 23.44.014)**

**Required Front Yard:** 20 feet or the average of the front yards of the single family residence on either side of your lot, whichever is less.

**Required Rear Yard:** 25 feet, or 20 percent of lot depth (minimum of 10 feet) whichever is less.

**Required Side Yard:** 5 feet. 10 feet for street facing side yard of a reversed corner lot.

The Land Use Code requires that certain portions of your lot be set aside for front, rear and side yards. In general, no portion of your house may extend into these required yards. You may place accessory structures such as garages, sheds, decks, porches or arbors in these areas only if certain criteria are met. Exceptions from standard yard requirements are described in the following sections. Of course, you may provide more than the required minimum yard. Yards are measured from the property line in toward your structure. Property lines are not always obvious. Do not rely on physical features such as fences and sidewalks to indicate property lines. They may be on your neighbor’s property or in the street right-of-way.

The basic yard requirements for single family zones are illustrated on Fig. D.

Additional requirements or exceptions may apply to a yard that borders an alley, is a corner lot, has an irregular shape, is a through lot (a lot with two street frontages opposite of each other), or is on a sloping lot that is greater than 35 percent. Please check the Land Use Code or ask an Applicant Services Center staff member for help if you have one of these conditions on your lot.
Exceptions to Standard Yard Requirements

Additions to the principal structure in front, side and rear yards (when the structure is already built into that yard): If an existing structure is already “nonconforming” with respect to a required yard, and the nonconforming wall is at least 60 percent of the total width of the respective facade, then the existing wall line may be extended according to Sec. 23.44.014D4.

Additional conditions apply to front and rear yards. The portion of an existing structure that is non-conforming with respect to front or rear yard setbacks can be increased, to a limited extent, in order to accommodate a habitable basement or attic, per Sec. 23.42.112A1.

Projections into front yard on lots 30 feet or less: On lots 30 feet or less in width, portions of the front façade that begin 8 feet or more above finished grade may project 4 feet into the required front yard. A minimum 5-foot front yard must be provided (see Fig. E).

The chart on page 7 illustrates other possible exceptions that may be applicable to your lot. Please check the designated section of the Land Use Code for details.

Additional Information for Yard Requirements And Exceptions

In addition to the specific references described in the preceding table on page 7, there may be additional requirements that are applicable to your project. Sections 23.44.016, 23.44.044 and 23.44.048 describe development standards for structures that are permitted as accessories to your home, such as garages, swimming pools and solar collectors.

Measurement techniques are presented in Sections 23.86.008 and 23.86.010 and definitions of technical zoning terms are found in Chapter 23.84A.

In addition, you should consult the Seattle Residential Code and Seattle Building Code, which also regulates construction close to the property line.

The Seattle Building Code (SBC) and the Seattle Residential Code (SRC) both regulate the construction of buildings near property lines to prevent the spread of fire. SBC Sections 602.1 and 704 and SRC Section R302 regulate the construction of walls, projections from exterior walls and openings in walls near property lines.

Permit Application Requirements for Yard Calculations

Your basic site plan will give the SDCI staff most of the information it needs to check your plans for compliance with yard requirements. Provide front yard information (graphically show the dimensions on your plans) of adjacent properties if you are averaging to determine your required front yard. If your lot is sloping, you may need to provide additional topographic information.

If you wish to take advantage of exceptions to yard requirements that require an agreement or easement, you must bring the agreement or easement with you.

Garages (23.44.016F)

Garage entrances on corner lots may be located on only one street front. Garage width standards will be measured based on the width of the facade facing the same street as the garage entrance.

The size and location of garages are regulated to
reduce their visual impact. The combined width of garage entrances on a street-facing façade may not be more than 50 percent of the structure width or 10 feet, whichever is greater (see Fig. F). This standard does not apply to detached garages located behind the principal home or garages that face alleys.

Garages may not project beyond the front of a home. Specifically, no attached garage wall may be closer to the street lot line than 80 percent of the street-level façade that is not a garage (see Fig G). If the entire street-level façade is garage, no portion of the garage may be closer to the street lot line than 80 percent of the façade of the story above the street-level façade.

The façade of a building is measured from the outside of the exterior wall and does not include eaves. Where the façade includes a covered porch or deck, the façade will be measured from exterior of the covered porch or deck.

Limited exemptions to the garage entrance standards are allowed for sites with irregular lot shape, topography, or structure configuration and are listed in 23.44.016 F3.

**LEGAL DISCLAIMER:** This Tip should not be used as a substitute for codes and regulations. The applicant is responsible for compliance with all code and rule requirements, whether or not described in this Tip.
<table>
<thead>
<tr>
<th>Exception for:</th>
<th>Permitted in:</th>
<th>Features</th>
<th>Code Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-conforming principal structure</td>
<td>Front or rear yard</td>
<td>May be extended in order to accommodate habitable basement or attic</td>
<td>23.42.112A1</td>
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<tr>
<td>Principal structure</td>
<td>Side yard</td>
<td>Zero lot line with side yard easement</td>
<td>23.44.014D3</td>
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<tr>
<td>Detached accessory structure</td>
<td>Side yard</td>
<td>Zero lot line with side yard agreement with neighbor</td>
<td>23.44.014D2</td>
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<td>Uncovered porches no higher than 4 ft</td>
<td>Front, side or rear yards</td>
<td>Various provisions</td>
<td>23.44.014D5</td>
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<tr>
<td>Chimneys, cornices, columns, and eaves</td>
<td>Front, side or rear yards</td>
<td>May project no more than 18 inches</td>
<td>23.44.014D6a</td>
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<td>Bay windows</td>
<td>Front, rear and street side yards</td>
<td>May project no more than 2 feet; limited to 8 feet in width</td>
<td>23.44.014D6b (see also 6d)</td>
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<tr>
<td>Garden windows</td>
<td>Front, side or rear yards</td>
<td>Minimum of 30 inches above floor, 6 feet tall and 8 feet wide</td>
<td>23.44.014D6c (see also 6d)</td>
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<td>Attached, covered and unenclosed decks</td>
<td>Rear yard</td>
<td>Various provisions</td>
<td>23.44.014D7</td>
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<tr>
<td>Garages</td>
<td>Front, side or rear yard</td>
<td>Various provisions</td>
<td>23.44.016D   (see also 016E, 016F)</td>
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<td>Pedestrian access bridges</td>
<td>Front, side or rear yards</td>
<td>5 feet in width, no less than 3 feet to the side lot line</td>
<td>23.44.014D8</td>
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<td>Barrier-free access</td>
<td>Front, rear or side yards</td>
<td>Meeting WA State Building Code C31</td>
<td>23.44.014D9</td>
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<td>Fences, free-standing structures, bulkheads</td>
<td>Front, side or rear yards</td>
<td>6-foot height with additional height with special conditions</td>
<td>23.44.014D10</td>
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<td>Decks</td>
<td>Front, side or rear yards</td>
<td>No higher than 18 inches</td>
<td>23.44.014D11</td>
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<td>Heat pumps</td>
<td>Front, side or rear yards</td>
<td>No closer than 3 feet to any lot line</td>
<td>23.44.014D12</td>
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<td>Solar collectors</td>
<td>Front, side or rear yards</td>
<td>3 feet from side yard, 15 feet from rear yard and 6 feet into front</td>
<td>23.44.014D13 and 23.44.046</td>
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<td>Critical areas</td>
<td>Front and rear yards</td>
<td>25 percent reduction, up to a maximum of 5 feet</td>
<td>23.44.014D15</td>
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<tr>
<td>Arbors</td>
<td>Front, side or rear yards</td>
<td>40 sq. ft coverage with maximum 8 feet height, 50 percent open</td>
<td>23.44.014D16a</td>
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<td>Arbors</td>
<td>Yards abutting a street</td>
<td>30 square feet coverage over pedestrian walkway, 40 square feet coverage with maximum 8 feet height, 50% open</td>
<td>23.44.014D16b</td>
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<td>Critical areas</td>
<td>Front and rear yards</td>
<td>25 percent reduction, up to a maximum of 5 feet</td>
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<td>Arbors</td>
<td>Front, side or rear yards</td>
<td>40 square feet coverage with maximum 8 feet height, 50 percent open</td>
<td>23.44.014D16a</td>
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<tr>
<td>Arbors</td>
<td>Accessory Dwelling Units, Backyard Cottages</td>
<td>30 square feet coverage over pedestrian walkway, 40 square feet coverage with maximum 8 feet height, 50% open</td>
<td>23.44.014D16b and 23.44.041</td>
</tr>
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