

33.218 Community Design Standards

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General

33.218.010 Purpose

Historic resource review ensures that development conserves and enhances the values of a site or area, and promote the conservation, enhancement, and continued vitality of special historic areas of the City.

The Community Design Standards provide an alternative process to historic resource review for some proposals. Where a proposal is eligible to use this chapter, the applicant may choose to go through the discretionary review process set out in Chapter 33.846, Historic Resource Reviews, or to meet the objective standards of this chapter. If the applicant chooses to meet the objective standards of this chapter, no discretionary review process is required.

The purpose of these standards is to:

- A. Ensure that new development enhances the character and livability of Portland's historic neighborhoods;
- B. Ensure that increased density in established neighborhoods makes a positive contribution to the area's character;
- C. Ensure the historic integrity of conservation landmarks and the compatibility of new development in conservation districts;
- D. Enhance the character and environment for pedestrians in historic areas;
- E. Offer developers the opportunity to comply with specific objective standards as a more timely, cost effective, and more certain alternative to the historic resource review process.

33.218.015 Procedure

- A. Generally.** This chapter provides an alternative to the historic resource review process for some proposals. Where a proposal is eligible to use this chapter, the applicant may choose to go through either the discretionary review process set out in Chapter 33.846, Historic Resource Reviews, or to meet the objective standards of this chapter. If the proposal meets the standards of this chapter, no historic resource review is required. The standards determining which proposals are eligible to use this chapter are in Chapter 33.445, Historic Resource Overlay Zone.

The standards of this chapter do not apply to proposals reviewed through the discretionary design review processes set out in Chapter 33.846, Historic Resource Reviews. Where a proposal is for an alteration or addition to existing development, the standards of this chapter apply only to the portion being altered or added.

- B. Adjustments.** Adjustments to these standards are prohibited.
- C. Permit application requirements.** The following information must be submitted as part of an application for a building or development permit:
1. Site plan and elevations. The site plan and elevations must include enough detail to document compliance with the standards of this chapter. The site plan and elevations must be drawn at a scale of 1/8 inch = 1 foot or larger.
 2. Vicinity plan. For proposals in the Southwest Community Plan area, shown on Map 825-4, and in conservation districts, a vicinity plan, drawn at a scale of 1 inch = 30 feet or larger, must show the following:
 - a. The footprint of the proposed development;
 - b. The lot lines of the site;
 - c. The footprints and front yard setbacks of all buildings on lots that abut each side of the site and are on the same street.

Standards

33.218.100 Standards for Primary and Attached Accessory Structures in Single-Dwelling Zones

The standards of this section apply to development of new primary and attached accessory structures in single-dwelling zones.

- A. Landscaping.** Landscaping must be provided between structures and the street, as follows:
1. Foundation landscaping. All street-facing elevations must have landscaping along their foundation. The landscaped area may be along the outer edge of a porch instead of the foundation. This landscaping requirement does not apply to portions of the building facade that provide access for pedestrians or vehicles to the building. The foundation landscaping must meet the following standards:
 - a. The landscaped area must be at least 3 feet wide;

- b. There must be at least one three-gallon shrub for every 3 lineal feet of foundation; and
 - c. Ground cover plants must fully cover the remainder of the landscaped area; and
 2. Front yard trees. There must be at least one tree in front of each residential structure. On corner lots, there must be one tree for each 30 feet of frontage on the side street.
- B. Front setbacks in the Southwest Community Plan area and conservation districts.** In the Southwest Community Plan area, shown on Map 825-4, and in conservation districts, the setback for primary buildings is based on the setbacks of primary buildings on the lots that abut each side of the site and are on the same street. The primary structure may be no closer to the front lot line than the adjacent primary structure that is closest to the front lot line. The primary structure may be no further from the front lot line than the adjacent primary structure that is farthest from the front lot line. In any case, the structure may not be set back from the front lot line more than 25 feet.
- C. Large building elevations divided into smaller areas.** The front elevation of large structures must be divided into smaller areas or planes. When the front elevation of a structure is more than 500 square feet in area, the elevation must be divided into distinct planes of 500 square feet or less. For the purpose of this standard, areas of wall that are entirely separated from other wall areas by a projection, such as the porch or a roof over a porch, are also individual building wall planes. This division can be done by:
 1. A porch, a dormer that is at least 4 feet wide, or a balcony that is at least 2 feet deep and is accessible from an interior room;
 2. A bay window that extends at least 2 feet; or
 3. Recessing a section of the facade by at least 2 feet; the recessed section must be at least 6 feet long.
- D. Roofs.**
 1. Primary structures must have a roof that is either:
 - a. Sloped, with a pitch that is no flatter than 6/12 and no steeper than 12/12; or
 - b. No steeper than and no flatter than the pitch of the roofs of the primary structures on the lots that abut either side of the site and front onto the same street.
 2. Flat roofs are allowed when the space on top of the roof is no more than 150 square feet and accessible from an interior room, or as specified in subparagraph D.1.b, above.
- E. Main entrance.** Cottage clusters are exempt from this standard.
 1. Location of main entrance. The main entrance of each primary structure must face the street. On corner lots the main entrance may face either of the streets or be oriented to the corner. For single dwelling, duplex, and triplex buildings that have more than one main entrance only one entrance must meet this requirement.

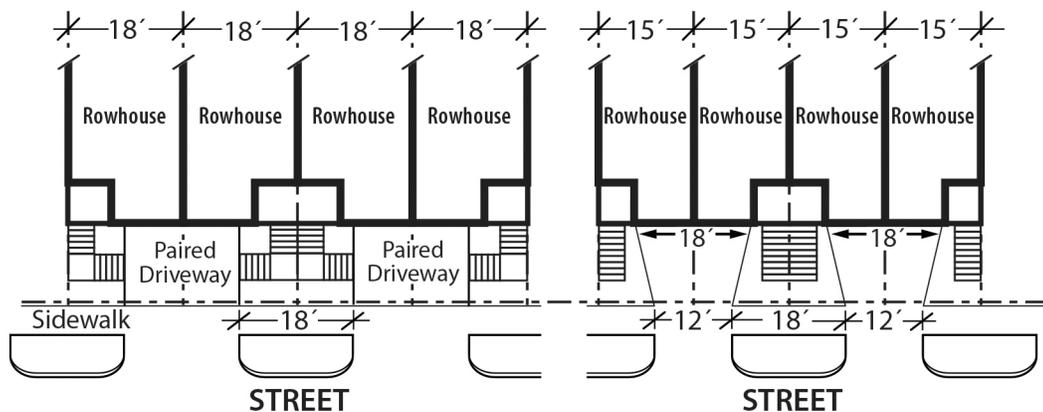
2. Front porch at main entrance. There must be a front porch at all main entrances that face a street. If the porch projects out from the building, it must have a roof. If the roof of a required porch is developed as a deck or balcony, it may be flat. If the main entrance is to a single dwelling, the covered area provided by the porch must be at least 48 square feet and a minimum of 8 feet wide. If the main entrance is to more than one dwelling unit, the covered area provided by the porch must be at least 63 square feet and a minimum of 9 feet wide.
3. Covered balcony. For attached houses, a covered balcony on the same facade as the main entrance may be provided instead of a front porch. The covered portion of the balcony must be at least 48 square feet and a minimum of 8 feet wide. The floor of the covered balcony must be no more than 15 feet above grade, and must be accessible from the interior living space of the house.
4. Ornamental columns. If the front porch or covered balcony at a main entrance provides columns as corner supports, the columns must be ornamental columns that meet one of the following standards. Wrought iron style porch supports do not meet this standard:
 - a. Large columns that are divided visually into clear areas of top, center, and bottom. Large rectilinear columns are at least 8" x 8", large rounded columns have a diameter of at least 8 inches; or
 - b. Groupings of 2, 3, or 4 small columns that are divided visually into clear areas of top, center, and bottom. Small rectilinear columns are at least 4" x 4", small rounded columns have a diameter of at least 4 inches.
5. Openings between porch floor and ground. Openings of more than 1 foot between the porch floor and the ground must be covered with a solid material or lattice.

F. Vehicle areas.

1. Alleys. If the site is served by an alley, access for motor vehicles must be from the alley, not from a street frontage.
2. Parking areas in the front setback. Parking areas may not be located in the front setback.
3. Vehicle areas between the porch and the street. Vehicle areas may not be located between the building's porch or porches and an adjacent street.
4. Attached garages. When parking is provided in a garage attached to the primary structure, and garage doors face a street, the following standards must be met:
 - a. The garage must not be more than 40 percent of the length of the street-facing facade or 12 feet long, whichever is greater;
 - b. The front of the garage can be no closer to the front lot line than the front facade of the house;
 - c. Garage doors may be no more than 75 square feet in area; and
 - d. There may be no more than two individual garage doors.

5. Driveways. Driveways for attached houses must meet the following. See Figures 218-1 and 218-2 for examples of driveways that meet the standard.
 - a. Driveways may be paired so that there is a single curb-cut providing access to two attached houses. The maximum width allowed for the paired driveway is 18 feet; and
 - b. There must be at least 18 feet between single or paired driveways. Distance between driveways is measured along the front property line.
- G. Foundation material.** Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than 3 feet above the finished grade level adjacent to the foundation wall.
- H. Exterior finish materials.** The standards of this subsection must be met on all building facades.
 1. Plain concrete block, plain concrete, corrugated metal, plywood, composite materials manufactured from wood or other products, and sheet pressboard may not be used as exterior finish material.
 2. Composite boards manufactured from wood or other products, such as hardboard or hardplank, may be used when the board product is less than 6 inches wide.
 3. Where wood products are used for siding, the siding must be shingles, or horizontal siding, not shakes.
 4. Where horizontal siding is used, it must be shiplap or clapboard siding composed of boards with a reveal of 6 inches or less, or vinyl or aluminum siding that is in a clapboard or shiplap pattern where the boards in the pattern are 6 inches or less in width.
 5. Siding material may not cover required window and door trim.

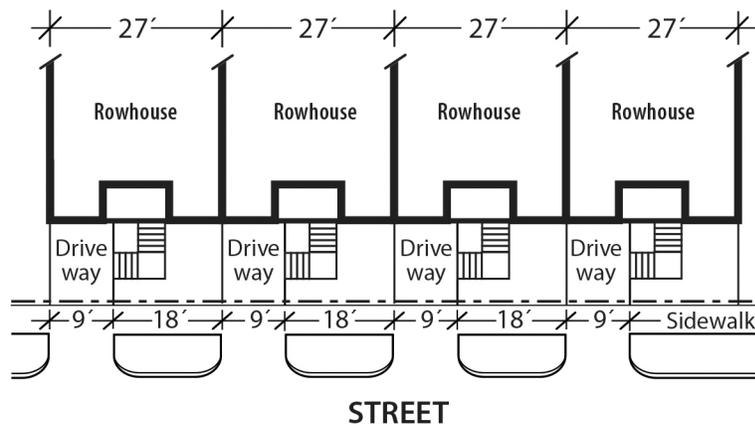
Figure 218-1
Paired Driveways for Attached Houses



- I. Architectural features.** Each primary structure must have one of the following features on the front street-facing elevation:

1. Roof dormer placed a minimum of 3 feet from all the side building walls;
 2. A porch roof with a gable end facing the street. The roof eaves of the porch must be the same height as the roof eaves of the building. The pitch of the porch roof must be between 6/12 and 12/12; or
 3. A gable end facing the front lot line with one of the following in the gable area above the eave line:
 - a. A window; or
 - b. A trimmed vent. The trim must match the trim on the windows and the vent must be at least 4 square feet in area.
- J. Windows.** At least 15 percent of the area of a street-facing facade must be windows. All street-facing windows must meet the following. Windows in rooms with a finished floor height 4 feet or more below grade are exempt from this standard:
1. Each window must be square or vertical—at least as tall as it is wide; or
 2. A horizontal window opening may be created when:
 - a. Two or more vertical windows are grouped together to provide a horizontal opening, and they are either all the same size, or no more than two sizes are used. Where two sizes of windows are used in a group, the smaller window size must be on the outer edges of the grouping. The windows on the outer edges of the grouping must be vertical; the center window or windows may be vertical, square, or horizontal; or
 - b. There is a band of individual lites across the top of the horizontal window. These small lites must be vertical and cover at least 20 percent of the total height of the window.

Figure 218-2
Single Driveways for Attached Houses



- K. Trim.** Trim must mark all building roof lines, porches, windows, and doors on all elevations. The trim must be at least 3-1/2 inches wide. Buildings with an exterior material of stucco or masonry are exempt from this standard.

- L. Exterior stairs and fire escapes.** Exterior stairs, other than those leading to a main entrance, must be at least 40 feet from all streets. Fire escapes must be at least 40 feet from all streets.
- M. Roof eaves.** Roof eaves must project from the building wall at least 12 inches on all elevations.
- N. Rooftop solar energy systems.**
 - 1. Rooftop solar energy systems must meet the following requirements:
 - a. On a flat roof. The solar energy system must be mounted flush or on racks, with the system or rack extending no more than 5 feet above the top of the highest point of the roof, not including the parapet. Solar energy systems must also be screened from the street by:
 - (1) An existing parapet along the street-facing facade that is as tall as the tallest part of the solar energy system; or
 - (2) Setting the solar energy system back from the street-facing roof edges. For each foot of height that the portion of the system projects above the parapet, or roofline when there is no parapet, the system must be set back 4 feet.
 - b. On a pitched roof. The plane of the system must be parallel with the roof surface, with the system no more than 12 inches from the surface of the roof at any point, and set back 3 feet from the roof edge and ridgeline.
 - 2. Photovoltaic roofing shingles or tiles may be directly applied to the roof surface.
 - 3. Photovoltaic glazing may be integrated into windows or skylights.
- O. Water cisterns.** Above-ground cisterns for rainwater or greywater collection meet the following:
 - 1. Cisterns with a capacity of more than 80 gallons, or racks of cisterns with a total capacity of more than 80 gallons, may not be attached to the front facade of the primary structure; and
 - 2. Cisterns must either:
 - a. Match the color of the adjacent building wall, the color of the trim, or the color of the rain gutter; or
 - b. Be screened by development, plantings, or fences so they are not visible from the street.
- P. Additional standards for historic resources.** The following standards are additional requirements for conservation districts and conservation landmarks.
 - 1. Skylights. Skylights may not be on street-facing elevations. On all other elevations, the glass, plastic, or other transparent material must be parallel to the slope of the roof.

2. Ornamental columns. Corners of the porch roof on street-facing elevations must be supported with ornamental columns that meet one of the following standards. Wrought iron style porch supports do not meet this standard:
 - a. Large columns that are divided visually into clear areas of top, center, and bottom. Large rectilinear columns are at least 8" x 8", large rounded columns have a diameter of at least 8 inches; or
 - b. Groupings of 2, 3, or 4 small columns that are divided visually into clear areas of top, center, and bottom. Small rectilinear columns are at least 4" x 4", small rounded columns have a diameter of at least 4 inches.
3. Albina Community Plan area. The standards of this paragraph apply in the Albina Community Plan area, shown on Map 825-1:
 - a. Floor level delineation. Each primary residential structure must reflect, on its street-facing elevations, all floor levels in the building, including the attic. The different floor levels must be delineated through the use of porch roofs, changes in materials or texture of materials, location of pediment and roof lines, overhangs and setbacks.
 - b. Ground floor. The ground floor of a primary structure that is entirely above grade must be at least 2 feet above grade. Developments must meet the standards of Chapter 11, Accessibility, of the Oregon Structural Specialty Code.
4. Vertical building proportions in Eliot. In the Eliot Conservation District, the front facade of each primary structure must have vertical proportions. New development must meet one of the following standards:
 - a. It must be higher than it is wide; or
 - b. Where the size of the building requires horizontal proportions, the street-facing elevations must be divided into visually distinct areas with vertical proportions. This is accomplished through setbacks, use of vertical elements such as columns or multi-story bay windows, changes in materials or other architectural devices.
5. Historic setback pattern in Piedmont. In the Piedmont Conservation District, the front facades of primary structures must be set back exactly 25 feet from the front property line. On corner lots, this standard can be met on either frontage.
6. Woodlawn street pattern. Buildings may not be in the vacated portions of the angled street pattern in the Woodlawn Conservation District.
7. Rooftop solar energy systems.
 - a. Rooftop solar energy systems must not increase the footprint of the structure, must not increase the peak height of the roof, and the system must be parallel to the slope of the roof;
 - b. Solar energy systems may not be installed on a conservation landmark.
8. Photovoltaic glazing, roofing shingles, or tiles may not be installed on a conservation landmark.

9. Cisterns. Cisterns for rainwater or greywater collection may not be located closer to the street than the primary street-facing building facade and they must be screened by development, plantings, or fences so they are not visible from the street.

33.218.110 Standards for Primary and Attached Accessory Structures in RM1, RM2, and RMP Zones

The standards of this section apply to development of new primary and attached accessory structures in the RM1, RM2, and RMP zones. The addition of an attached accessory structure to a primary structure on a site where all the uses are residential, is subject to Section 33.218.130, Standards for Exterior Alteration of Residential Structures in Single-Dwelling, RM1, RM2, and RMP Zones.

The standards of this section can also apply to development of new structures in the RM3, RM4, RX, C and E zones on sites where all the uses are residential. In this case, the applicant can choose to meet all the standards in this section or all the standards in Section 33.218.140, Standards for all Structures in the RM3, RM4, RX, C and E Zones.

A. Landscaping. Landscaping must be provided between structures and the street, as follows:

1. Foundation landscaping. All street-facing elevations must have landscaping along their foundation. The landscaped area may be along the outer edge of a porch instead of the foundation. This landscaping requirement does not apply to portions of the building facade that provide access for pedestrians or vehicles to the building. The foundation landscaping must meet the following standards:
 - a. The landscaped area must be at least 3 feet wide;
 - b. There must be at least one three-gallon shrub for every 3 lineal feet of foundation; and
 - c. Ground cover plants must fully cover the remainder of the landscaped area.
2. Front yard trees. There must be at least one tree in front of each residential structure. On corner lots, there must be one tree for each 30 feet of frontage on the side street.

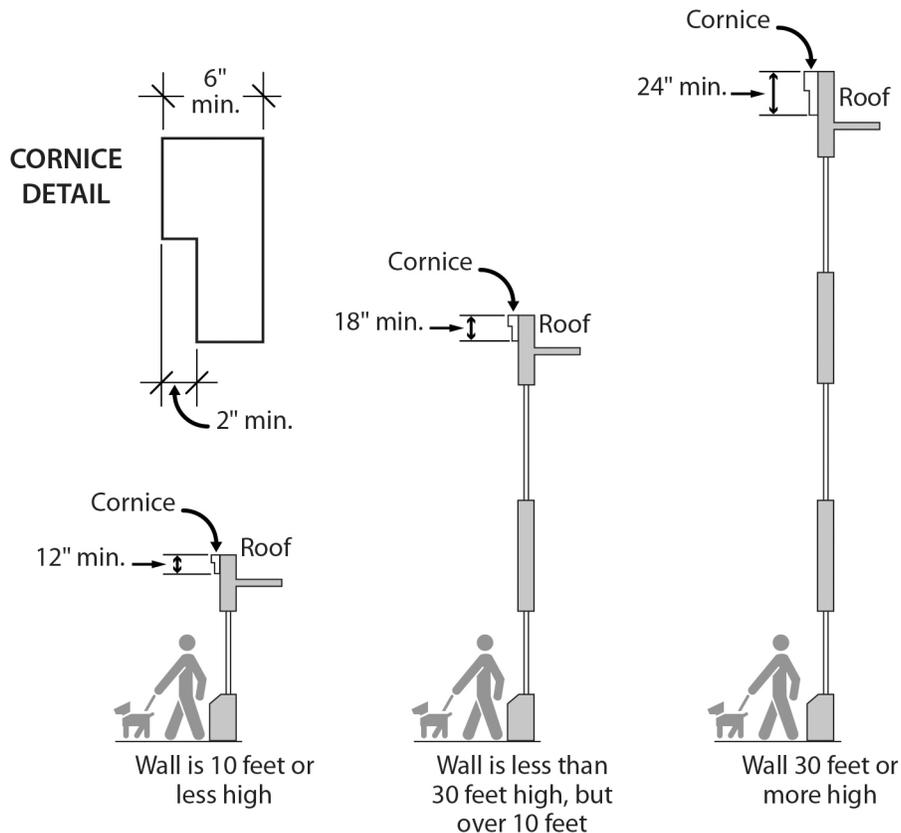
B. Building setback. Primary buildings must not be set back from the front lot line more than 25 feet.

C. Residential buffer. Where a site zoned RM2, RM3, RM4, RX, or E abuts or is across a street from an RF through RM1 or RMP zone, the following is required. Proposals in the Hollywood, Kenton, and Sandy plan districts are exempt from this standard:

1. On sites that abut an RF through RM1 or RMP zone the following must be met:
 - a. In the portion of the site within 25 feet of the lower density residential zone, the building height limits are those of the adjacent residential zone; and
 - b. A 10 foot deep area landscaped to at least the L3 standard must be provided along any lot line that abuts the lower density residential zone.
2. On sites across the street from an RF through RM1 or RMP zone the following must be met:

- a. On the portion of the site within 15 feet of the intervening street, the height limits are those of the lower density residential zone across the street; and
 - b. If the site is across a local service street from an RF through RM1 or RMP zone, a 5-foot deep area landscaped to at least the L2 standard must be provided along the property line across the local service street from the lower density residential zone. Vehicle access is not allowed through the landscaped area unless the site has frontage only on that local service street. Pedestrian and bicycle access is allowed, but may not be more than 6 feet wide.
- D. Building height.** Except as provided in Subsection C, above, structures in the RM3, RM4, RX, and E zones may be up to 55 feet in height.
- E. Large building elevations divided into smaller areas.** The front elevation of large structures must be divided into smaller areas or planes. When the front elevation of a structure is more than 750 square feet in area, the elevation must be divided into distinct planes of 500 square feet or less. For the purpose of this standard, areas of wall that are entirely separated from other wall areas by a projection, such as the porch or a roof over a porch, are also individual building wall planes. This division can be done by:
1. A porch, a dormer that is at least 4 feet wide, or a balcony that is at least 2 feet deep and is accessible from an interior room;
 2. A bay window that extends at least 2 feet; or
 3. Recessing a section of the facade by at least 2 feet; the recessed section must be at least 6 feet long.
- F. Roofs.** Primary structures must have either:
1. A sloped roof with a pitch that is no flatter than 6/12 and no steeper than 12/12; or
 2. A roof with a pitch of less than 6/12 if either:
 - a. The space on top of the roof is used as a deck or balcony that is no more than 150 square feet in area and is accessible from an interior room; or
 - b. A cornice that meets the following:
 - (1) There must be two parts to the cornice. The top part of the cornice must project at least 6 inches from the face of the building and be at least 2 inches further from the face of the building than the bottom part of the cornice. See Figure 218-3; and
 - (2) The height of the cornice is based on the height of the building as follows:
 - Buildings 10 feet or less in height must have a cornice at least 12 inches high.
 - Buildings greater than 10 feet and less than 30 feet in height must have a cornice at least 18 inches high.
 - Buildings 30 feet or greater in height must have a cornice at least 24 inches high.

Figure 218-3
Two-Part Cornice



G. Main entrance.

1. Location of main entrance. The main entrance of each primary structure must face the street lot line. The following are exceptions to this standard:
 - a. On corner lots the main entrance may face either of the streets or be oriented to the corner.
 - b. For buildings that have more than one main entrance, only one entrance must meet this requirement.
 - c. Entrances that face a shared landscaped courtyard, landscaped to at least the L1 General Landscaping standard, are exempt from this requirement.
2. Front porch at main entrance. There must be a front porch at all main entrances that face the street. If the porch projects out from the building it must have a roof. If the roof of a required porch is developed as a deck or balcony it may be flat. If the main entrance is to a single dwelling, the covered area provided by the porch must be at least 6 feet wide and 4 feet deep. If the main entrance is to more than one dwelling unit, the covered area provided by the porch must be at least 9 feet wide and 7 feet deep.

3. Covered balcony. Attached houses have the option of providing a covered balcony on the same facade as the main entrance instead of a front porch. The covered area provided by the balcony must be at least 48 square feet, a minimum of 8 feet wide and no more than 15 feet above grade. The covered balcony must be accessible from the interior living space of the house.
4. Ornamental columns. If the front porch or covered balcony at a main entrance provides columns as corner supports, the columns must be ornamental columns that meet one of the following standards. Wrought iron style porch supports do not meet this standard:
 - a. Large columns that are divided visually into clear areas of top, center, and bottom. Large rectilinear columns are at least 8" x 8", large rounded columns have a diameter of at least 8 inches; or
 - b. Groupings of 2, 3, or 4 small columns that are divided visually into clear areas of top, center, and bottom. Small rectilinear columns are at least 4" x 4", small rounded columns have a diameter of at least 4 inches.
5. Openings between porch floor and ground. Opening of more than 1 foot between the porch floor and the ground must be covered with a solid material or lattice.

H. Vehicle areas

1. Alleys. If the site is served by an alley, access for motor vehicles must be from the alley, not from a street frontage.
2. Vehicle areas between the building and the street. There are no vehicle areas allowed between the building and the street. If a site has two street lot lines, this standard must be met on both frontages. If a site has more than two street lot lines, this standard must be met on two frontages.

An exception is allowed for single dwelling developments. Each dwelling unit in a single dwelling development is allowed one 9 foot wide driveway.
3. Parking areas in the front setback. Parking areas may not be located in the front setback.
4. Attached garages. When parking is provided in a garage attached to the primary structure and garage doors face a street the following standards must be met:
 - a. The garage must not be more than 40 percent of the length of the building frontage or 12 feet long, whichever is greater;
 - b. The front of the garage can be no closer to front lot line than the front facade of the house;
 - c. Garage doors that are part of the street-facing elevations of a primary structure may be no more than 75 square feet in area; and
 - d. There may be no more than one garage door per 16 feet of building frontage.

5. Driveways. Driveways for attached houses must meet the following. See Figures 218-1 and 218-2 for examples of driveways that meet the standard.
 - a. Driveways may be paired so that there is a single curb-cut providing access to two attached houses. The maximum width allowed for the paired driveway is 18 feet; and
 - b. There must be at least 18 feet between single or paired driveways. Distance between driveways is measured along the front property line.
- I. **Foundation material.** Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than 3 feet above the finished grade level adjacent to the foundation wall.
- J. **Exterior finish materials.** The standards of this subsection must be met on all building facades.
 1. Plain concrete block, plain concrete, corrugated metal, plywood, composite materials manufactured from wood or other products, and sheet pressboard may not be used as exterior finish material except as secondary finishes if they cover no more than 10 percent of each facade.
 2. Composite boards manufactured from wood or other products, such as hardboard or hard plank, may be used when the board product is less than 6 inches wide.
 3. Where wood products are used for siding, the siding must be shingles, or horizontal siding, not shakes.
 4. Where horizontal siding is used, it must be shiplap or clapboard siding composed of boards with a reveal of 6 inches or less, or vinyl or aluminum siding which is in a clapboard or shiplap pattern where the boards in the pattern are 6 inches or less in width.
 5. Siding material may not cover required window and door trim.
- K. **Windows.** Street-facing windows must meet the following. Windows in rooms with a finished floor height 4 feet or more below grade are exempt from this standard:
 1. Each window must be square or vertical;
 2. A horizontal window opening may be created when:
 - a. Two or more vertical windows are grouped together to provide a horizontal opening, and they are either all the same size, or no more than two sizes are used. Where two sizes of windows are used in a group, the smaller window size must be on the outer edges of the grouping. The windows on the outer edges of the grouping must be vertical; the center window or windows may be vertical, square, or horizontal; or
 - b. There is a band of individual lites across the top of the horizontal window. These small lites must be vertical and cover at least 20 percent of the total height of the window.

3. St. Johns plan district. In the St. Johns plan district, at least 15 percent of the street facing facade must be windows. Windows used to meet this standard must allow views from the building to the street. Glass block does not meet this standard. Windows in garage doors do not count toward meeting this standard, but windows in garage walls do count toward meeting this standard. Development on flag lots or on lots that slope up or down from the street with an average slope of 20 percent or more is exempt from this standard.
- L. **Trim.** Trim must mark all building roof lines, porches, windows and doors on all elevations. The trim must be at least 3-1/2 inches wide. Buildings with an exterior material of stucco or masonry are exempt from this standard.
- M. **Roof-mounted equipment.** All roof-mounted equipment, including satellite dishes and other communication equipment, must be screened in one of the following ways. Solar energy systems are subject to Subsection N below, and exempt from this standard:
 1. A parapet as tall as the tallest part of the equipment;
 2. A screen around the equipment that is as tall as the tallest part of the equipment;
 3. The equipment is set back from the street-facing perimeters of the building 4 feet for each foot of height of the equipment; or
 4. If the equipment is a satellite dish or other communication equipment, it is added to the facade of a penthouse that contains mechanical equipment, is no higher than the top of the penthouse, is flush mounted, and is painted to match the facade of the penthouse.
- N. **Rooftop solar energy systems.**
 1. Rooftop solar energy systems must meet the following requirements:
 - a. On a flat roof. The solar energy system must be mounted flush or on racks, with the system or rack extending no more than 5 feet above the top of the highest point of the roof, not including the parapet. Solar energy systems must also be screened from the street by:
 - (1) An existing parapet along the street-facing facade that is as tall as the tallest part of the solar energy system; or
 - (2) Setting the solar energy system back from the street-facing roof edges. For each foot of height that the portion of the system projects above the parapet, or roofline when there is no parapet, the system must be set back 4 feet.
 - b. On a pitched roof. The plane of the system must be parallel with the roof surface, with the system no more than 12 inches from the surface of the roof at any point, and set back 3 feet from the roof edge and ridgeline.
 2. Photovoltaic roofing shingles or tiles may be directly applied to the roof surface.
 3. Photovoltaic glazing may be integrated into windows or skylights.

- O. Exterior stairs and fire escapes.** Exterior stairs, other than those leading to a main entrance, must be at least 40 feet from all streets. Fire escapes must be at least 40 feet from all streets.
- P. Roof eaves.** Roof eaves must project from the building wall at least 12 inches on all elevations. Buildings that take advantage of the cornice option are exempt from this standard.
- Q. Water cisterns.** Above-ground cisterns for rainwater or greywater collection must meet the following:

 - 1. Cisterns with a capacity of more than 80 gallons, or racks of cisterns with a total capacity of more than 80 gallons, may not be attached to the front facade of the primary structure; and
 - 2. Cisterns must either:
 - a. Match the color of the adjacent building wall, the color of the trim, or the color of the rain gutter; or
 - b. Be screened by development, plantings, or fences so they are not visible from the street.
- R. Additional standards for historic resources.** The following standards are additional requirements for conservation districts and conservation landmarks.

 - 1. Skylights. Skylights may not be on street-facing elevations. On all other elevations, the glass, plastic, or other transparent material must be parallel to the slope of the roof.
 - 2. Ornamental columns. Corners of the porch roof on street-facing elevations must be supported with ornamental columns that meet one of the following standards. Wrought iron style porch supports do not meet this standard:
 - a. Large columns that are divided visually into clear areas of top, center, and bottom. Large rectilinear columns are at least 8" x 8", large rounded columns have a diameter of at least 8 inches; or
 - b. Groupings of 2, 3, or 4 small columns that are divided visually into clear areas of top, center, and bottom. Small rectilinear columns are at least 4" x 4", small rounded columns have a diameter of at least 4 inches.
 - 3. Roof dormers and gable areas in the Albina and Outer Southeast Community Plan areas. In the Albina and Outer Southeast Community Plan areas, shown on Maps 825-1 and 825-2, each residential structure must have one of the following for every 40 feet of length along the street-facing elevations. Buildings with flat roofs are exempt from this standard:
 - a. A street-facing roof dormer placed at least 3 feet from all side building walls; or
 - b. A gable end facing the front lot line with either of the following in the gable area above the eave line:

- (1) A window; or
 - (2) A trimmed vent. The trim must match the trim on the windows and the vent must be at least 4 square feet in area.
4. Albina Community Plan area. The standards of this paragraph apply in the Albina Community Plan area, shown on Map 825-1:
 - a. Floor level delineation. Each primary residential structure must reflect, on its street-facing elevations, all floor levels in the building, including the attic. The different floor levels must be delineated through the use of porch roofs, changes in materials or texture of materials, location of pediment and roof lines, overhangs and setbacks.
 - b. Ground floor. The ground floor of a primary structure that is entirely above grade must be at least 2 feet above grade. Developments must meet the standards of Chapter 11, Accessibility, of the Oregon Structural Specialty Code.
5. Stone or cast stone foundations in Kenton and Mississippi. In the Kenton and Mississippi Avenue Conservation Districts, stone or cast stone must be used as a foundation material on street-facing elevations. The stone, cast stone, or cast in place stone must be the material used between the finished building grade and the ground floor.
6. Vertical building proportions in Eliot. In the Eliot Conservation District, the front facade of each primary structure must have vertical proportions. New development must meet one of the following standards:
 - a. It must be higher than it is wide; or
 - b. Where the size of the building requires horizontal proportions, the street-facing elevations must be divided into visually distinct areas with vertical proportions. This is accomplished through setbacks, use of vertical elements such as columns or multi-story bay windows, changes in materials or other architectural devices.
7. Woodlawn street pattern. Buildings may not be in the vacated portions of the angled street pattern in the Woodlawn Conservation District.
8. Rooftop solar energy systems.
 - a. Rooftop solar energy systems must not increase the footprint of the structure, must not increase the peak height of the roof, and the system must be parallel to the slope of the roof;
 - b. Solar energy systems may not be installed on a conservation landmark.
9. Cisterns. Cisterns for rainwater or greywater collection may not be located closer to the street than the primary street facing building facade and they must be screened by development, fences, or plantings so they are not visible from the street.
10. Photovoltaic glazing, roofing shingles, or tiles may not be installed on a conservation landmark.

33.218.120 Standards for Detached Accessory Structures in Single-Dwelling, RM1, RM2, and RMP Zones.

The standards of this section are applicable to development of new detached accessory structures in single-dwelling, RM1, RM2, and RMP zones.

- A. Foundation material.** Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than 3 feet above the finished grade level adjacent to the foundation wall.
- B. Exterior finish materials.** The standards of this subsection must be met on all building facades.
 - 1. Plain concrete block, plain concrete, corrugated metal, plywood, composite materials manufactured from wood or other products, and sheet pressboard may not be used as exterior finish material.
 - 2. Composite boards manufactured from wood or other products, such as hardboard or hardplank, may be used when the board product is less than 6 inches wide.
 - 3. Where wood products are used for siding, the siding must be shingles, or horizontal siding, not shakes.
 - 4. Where horizontal siding is used, it must be shiplap or clapboard siding composed of boards with a reveal 6 inches or less, or vinyl or aluminum siding that is in a clapboard or shiplap pattern where the boards in the pattern are 6 inches or less in width.
 - 5. Siding material may not cover required window and door trim.
 - 6. Compatible exterior finish materials. Exterior material type, size and placement on detached accessory structures must be the same as or visually match that of the primary structure. However, if the exterior finishes and materials on the primary structure do not meet the standards above then any material that meets the standards above may be used.
- C. Roof pitch.** Where the accessory structure is more than 15 feet high, the roof pitch must be the same as the predominant roof slope of the primary structure.
- D. Compatible trim.** Trim on the accessory structure must be the same in type, size, and location as the trim that is used in the primary structure.
- E. Compatible windows.** Street-facing windows must meet the following. Windows in rooms with a finished floor height 4 feet or more below grade are exempt from this standard:
 - 1. Match those in the primary structure in proportion (relationship of width to height) and orientation (horizontal or vertical);
 - 2. Be square or vertical—at least as tall as they are wide; or
 - 3. A horizontal window opening may be created when:
 - a. Two or more vertical windows are grouped together to provide a horizontal opening, and they are either all the same size, or no more than two sizes are used. Where two sizes of windows are used in a group, the smaller window size

must be on the outer edges of the grouping. The windows on the outer edges of the grouping must be vertical; the center window or windows may be vertical, square, or horizontal; or

- b. There is a band of individual lites across the top of the horizontal window. These small lites must be vertical and cover at least 20 percent of the total height of the window.
- F. Compatible roof eaves.** Eaves must project from the building walls the same distance as the eaves on the primary structure.
- G. Additional standards for large accessory structures.**
1. Where these standards apply. The standards of this subsection apply to detached, accessory structures that:
 - a. Are more than 10 feet in height and at least one foot wide;
 - b. Have a street-facing elevation more than 6 feet wide; or
 - c. Have a street-facing elevation with more than 100 square feet in total surface area.
 2. Setback. Large accessory structures must be set back at least 60 feet from the front lot line; and
 3. Height. Large accessory structures must be no more than 25 feet in height.
- H. Solar energy systems.**
1. Solar energy systems on detached accessory buildings are subject to the same standards as would apply to new primary and attached accessory structures. See applicable solar standards in Sections 33.218.100 and .110.
 2. Ground or pole mounted solar panels systems are subject to the following standards:
 - a. The tallest part of the system may not exceed 8 feet in height;
 - b. The system may not be located closer to the street than the primary street-facing building facade.
- I. Water cisterns.** Above-ground cisterns for rainwater or greywater collection must meet the following:
1. Cisterns with a capacity of more than 80 gallons, or racks of cisterns with a total capacity of more than 80 gallons, may not be attached to the front facade of the primary structure; and
 2. Cisterns must either:
 - a. Match the color of the adjacent building wall, the color of the trim, or the color of the rain gutter; or
 - b. Be screened by development, plantings, or fences or they are not visible from the street.

- J. Additional standards for historic resources.** The following standards are additional requirements for conservation districts and conservation landmarks.
1. Roof dormers. Where the structure is more than 20 feet in height, it must have a roof dormer. The dormer must be placed a minimum of 3 feet from the side building walls.
 2. Columns and supporting pillars. Columns and supporting pillars on street-facing elevations must meet one of the following standards. Wrought iron style supports do not meet this standard:
 - a. Large columns that are divided visually into clear areas of top, center, and bottom. Large rectilinear columns are at least 8" x 8", large rounded columns have a diameter of at least 8 inches.
 - b. Groupings of 2, 3 or 4 small columns that are divided visually into clear areas of top, center, and bottom. Small rectilinear columns are at least 4" x 4", small rounded columns have a diameter of at least 4 inches.
 3. Woodlawn street pattern. No portion of a building may be located in the vacated portions of the angled street pattern in the Woodlawn Conservation District.
 4. Cisterns. Cisterns for rainwater or greywater collection must be screened by development, fences, or plantings so they are not visible from the street.
 5. Photovoltaic glazing, roofing shingles, or tiles may not be installed on a conservation landmark.

33.218.130 Standards for Exterior Alteration of Residential Structures in Single-Dwelling, RM1, RM2, and RMP Zones

The standards of this section apply to exterior alterations of primary structures and both attached and detached accessory structures in residential zones. These standards apply to proposals where there will be only residential uses on the site.

The standards of this section can also apply to exterior alterations in the RM3, RM4, RX, C and E zones on sites where all the uses are residential. In this case, the applicant can choose to meet all the standards in this section or all the standards in Section 33.218.140, Standards for all Structures in the RM3, RM4, RX, C and E Zones.

- A. Foundation material.** Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than 3 feet above the finished grade level adjacent to the foundation wall.
- B. Exterior finish materials.** The standards of this subsection must be met on all building facades. The exterior finish materials on the portion of the building being altered or added must visually match the appearance of those on the existing building. However, if the existing exterior finish materials do not meet the following standards, then they must be replaced on the portion being altered or added with materials that meet the following standards.
1. Plain concrete block, plain concrete, corrugated metal, plywood, composite materials manufactured from wood or other products, and sheet pressboard may not be used as exterior finish material.

2. Composite boards manufactured from wood or other products, such as hardboard or hardplank, may be used when the board product is less than 6 inches wide.
 3. Where wood products are used for siding, the siding must be shingles, or horizontal siding, not shakes.
 4. Where horizontal siding is used, it must be shiplap or clapboard siding composed of boards with a reveal of 6 inches or less, or vinyl or aluminum siding that is in a clapboard or shiplap pattern where the boards in the pattern are 6 inches or less in width.
 5. Siding material may not cover required window and door trim.
- C. Compatible trim.** Trim on edges of elements in the remodeled area must be the same in type, size, and location as the trim used on the rest of the structure.
- D. Compatible windows.** Street-facing windows must meet one of the following standards. Windows in rooms with a finished floor height 4 feet or more below grade are exempt from these standards:
1. Match those in the primary structure in proportion (relationship of width to height) and orientation (horizontal or vertical); or
 2. Be square or vertical—at least as tall as they are wide.
 3. A horizontal window opening may be created when:
 - a. Two or more vertical windows are grouped together to provide a horizontal opening, and they are either all the same size, or no more than two sizes are used. Where two sizes of windows are used in a group, the smaller window size must be on the outer edges of the grouping. The windows on the outer edges of the grouping must be vertical; the center window or windows may be vertical, square, or horizontal; or
 - b. There is a band of individual lites across the top of the horizontal window. These small lites must be vertical and cover no more than one-third of the total height of the window.
- E. Rooftop solar energy systems.**
1. Rooftop solar energy systems must meet the following requirements:
 - a. On a flat roof. The solar energy system must be mounted flush or on racks, with the system or rack extending no more than 5 feet above the top of the highest point of the roof, not including the parapet. Solar energy systems must also be screened from the street by:
 - (1) An existing parapet along the street-facing facade that is as tall as the tallest part of the solar energy system; or
 - (2) Setting the solar energy system back from the street-facing roof edges. For each foot of height that the portion of the system projects above the parapet, or roofline when there is no parapet, the system must be set back 4 feet.

- b. On a pitched roof. The plane of the system must be parallel with the roof surface, with the system no more than 12 inches from the surface of the roof at any point, and set back 3 feet from the roof edge and ridgeline.
 2. Photovoltaic roofing shingles or tiles may be directly applied to the roof surface.
 3. Photovoltaic glazing may be integrated into windows or skylights.
- F. Water cisterns.** Above-ground cisterns for rainwater or greywater collection meet the following:
 1. Cisterns with a capacity of more than 80 gallons, or racks of cisterns with a total capacity of more than 80 gallons, may not be attached to the front facade of the primary structure; and
 2. Cisterns must either:
 - a. Match the color of the adjacent building wall, the color of the trim, or the color of the rain gutter; or
 - b. Be screened by development, plantings, or fences so they are not visible from the street.
- G. Additional standards for historic resources.** The following standards are additional requirements for conservation districts and conservation landmarks.
 1. Building features to be retained. The following building features on street-facing elevations must be retained. Building features that are not original to the building are exempt from this standard:
 - a. Doors;
 - b. Windows;
 - c. Porches;
 - d. Balconies;
 - e. Bay windows; and
 - f. Dormers.
 2. Porch enclosures. No portion of the front porch may be enclosed.
 3. Columns and supporting pillars. Columns and supporting pillars on street-facing elevations must meet one of the following standards. Wrought iron style supports do not meet this standard:
 - a. Large columns that are divided visually into clear areas of top, center, and bottom. Large rectilinear columns are at least 8" x 8", large rounded columns have a diameter of at least 8 inches.
 - b. Groupings of 2, 3 or 4 small columns that are divided visually into clear areas of top, center, and bottom. Small rectilinear columns are at least 4" x 4", small rounded columns have a diameter of at least 4 inches.

4. Historic setback pattern in Piedmont. In the Piedmont Conservation District, the front facades of primary structures in single-dwelling zones must be set back exactly 25 feet from the front property line.
5. Woodlawn street pattern. No portion of a building may be located in the vacated portions of the angled street pattern in the Woodlawn Conservation District.
6. Rooftop solar energy systems.
 - a. Rooftop solar energy systems in conservation districts must not increase the footprint of the structure, must not increase the peak height of the roof, and the system must be parallel to the slope of the roof;
 - b. Solar energy systems may not be installed on a conservation landmark.
7. Cisterns. Cisterns for rainwater or greywater collection may not be located closer to the street than the primary street-facing building facade and they must be screened by development, plantings, or fences so they are not visible from the street.
8. Photovoltaic glazing, roofing shingles, or tiles may not be installed on a conservation landmark.

33.218.140 Standards for All Structures in the RM3, RM4, RX, C, CI, and E Zones

The standards of this section apply to development of all structures in RM3, RM4, RX, C, CI, and E zones. These standards also apply to exterior alterations in these zones.

Applicants for development of new structures on sites where the uses are all residential can choose to meet all the standards of this section or all the standards of Section 33.218.110. Applicants for exterior alterations on sites where the uses are all residential can choose to meet all the standards of this section or all the standards of Section 33.218.130.

- A. Building placement and the street.** Landscaping, an arcade, or a hard-surfaced expansion of the pedestrian path must be provided between a structure and the street. All street-facing elevations must meet one of the following options.

Structures built to the street lot line are exempt from the requirements of this subsection. Where there is more than one street lot line, only those frontages where the structure is built to the street lot line are exempt from the requirements of this subsection.

1. Foundation landscaping option. All street-facing elevations must have landscaping along their foundation. This landscaping requirement does not apply to portions of the building facade that provide access for pedestrians or vehicles to the building. The foundation landscaping must meet the following standards:
 - a. The landscaped area must be at least 3 feet wide;
 - b. There must be at least one three-gallon shrub for every 3 lineal feet of foundation; and
 - c. Ground cover plants must fully cover the remainder of the landscaped area.
2. Arcade option. All street-facing elevations must have an arcade that meets the following requirements:

- a. The arcade must be at least 6 feet deep between the front elevation and the parallel building wall;
 - b. The arcade must consist of openings that are at least 6 feet wide and that run the full length of the street facing elevation;
 - c. The arcade elevation facing a street must be at least 14 feet in height and at least 25 percent solid, but no more than 50 percent solid; and
 - d. The arcade must be open to the air on three sides; none of the arcade's street facing or end openings may be blocked with walls, glass, lattice, glass block or any other material.
3. Hard-surface sidewalk extension option. The area between the building and the street lot line must be hard-surfaced for use by pedestrians as an extension of the sidewalk:
- a. The building walls may be set back no more than 10 feet from the street lot line; and
 - b. For each 100 square feet of hard-surface area between the building and the street lot line at least one of the following amenities must be provided. Structures built within 2 feet of the street lot line are exempt from the requirements of this subparagraph:
 - (1) A bench or other seating;
 - (2) A tree;
 - (3) A landscape planter;
 - (4) A drinking fountain; or
 - (5) A kiosk.
 - c. Bicycle parking may be located in the area between a building and a street lot line.

B. Improvements between buildings and pedestrian oriented streets.

1. Where the ground floor of a building is in commercial or residential uses, and the building has frontage on a transit street or City Walkway, or is in a Pedestrian District, the following standards must be met. Proposals required to meet this standard are exempt from the requirements of Subsection 33.218.140.A, Building Placement and the Street:
 - a. A building wall that faces a transit street or City Walkway, or is in a Pedestrian District, must meet the base zone maximum street setback along 100 percent of the street lot line. Where no maximum street setback is specific in the base zone, the maximum street setback is 10 feet. Where the site has two frontages that are on a transit street or City Walkway, or is in a Pedestrian District, this standard must be met on both frontages. Where there are more than two such frontages, this standard must be met on any two frontages;

- b. The area between the building and an adjacent transit street, City Walkway, or street in a Pedestrian District, must be hard-surfaced for use by pedestrians as an extension of the sidewalk. Where the ground floor is in residential use, the area adjacent to the dwelling unit may be landscaped to an L1 standard of Chapter 33.248, Landscaping and Screening; and
 - c. For each 100 square feet of hard-surface area between the building and the street lot line at least one of the following amenities must be provided. Structures built within 2 feet of the street lot line are exempt from the requirements of this subparagraph.
 - (1) A bench or other seating;
 - (2) A tree;
 - (3) A landscape planter;
 - (4) A drinking fountain; or
 - (5) A kiosk.
 - d. Bicycle parking may be located in the area between a building and a street lot line when the area is hard-surfaced.
- C. Reinforce the corner.** On sites within a Pedestrian District or with at least two frontages on the corner where two City Walkways meet:
- 1. The primary structures must be within 10 feet of both street lot lines. Where a site has more than one corner, this requirement must be met on only one corner;
 - 2. At least one of the street-facing walls must be at least 40 feet long;
 - 3. The highest point of the building's street-facing elevations must be within 25 feet of the corner;
 - 4. A main entrance must be on a street-facing wall and either at the corner, or within 25 feet of the corner; and
 - 5. There is no parking within 40 feet of the corner.
- D. Residential buffer.** Where a site zoned RM3, RM4, RX, CI, or E abuts or is across a street from an RF through RM1 zone, the following is required. Proposals in the Hollywood, Kenton, and Sandy Boulevard plan districts are exempt from this standard:
- 1. On sites that abut an RF through RM1 zone the following must be met:
 - a. In the portion of the site within 25 feet of the lower density residential zone, the building height limits are those of the adjacent residential zone; and
 - b. A 10-foot deep area landscaped to at least the L3 standard must be provided along any lot line that abuts the lower density residential zone.

2. On sites across the street from an RF through RM1 zone the following must be met:
 - a. On the portion of the site within 15 feet of the intervening street, the height limits are those of the lower density residential zone across the street; and
 - b. If the site is across a local service street from an RF through RM1 zone, a 5-foot deep area landscaped to at least the L2 standard must be provided along the property line across the local service street from the lower density residential zone. Vehicle access is not allowed through the landscaped area unless the site has frontage only on that local service street. Pedestrian and bicycle access is allowed, but may not be more than 6 feet wide.

E. Building height.

1. Maximum height in RM3, RM4, RX, CI, C, and E zones.
 - a. Generally. Structures in the RM3, RM4, RX, CI, C, and E zones may be up to 55 feet in height where allowed by the base zone;
 - b. Where a site zoned RM3, RM4, RX or E abuts or is across a street from an RF through R2 zone, the maximum height is reduced as specified in Subsection D, above;
 - c. New and replacement antennas are exempt from this standard if the antennas are located on an existing monopole, and the antennas do not project above the height of the monopole.
2. Minimum height. In C and E zones, primary buildings must be at least 16 feet in height.

F. Main entrance.

1. Location of main entrance. The main entrance of the primary structure must face the street lot line. Where there is more than one street lot line, the entrance may face either of them or the corner. For residential developments there are the following exceptions:
 - a. For buildings that have more than one main entrance only one entrance must meet this requirement.
 - b. Entrances that face a shared landscaped courtyard, landscaped to at least the L1 General Landscaping standard, are exempt from this requirement.
2. Front porch at main entrances to residential. There must be a front porch at the main entrance to residential portions of a development, if the main entrance faces a street. If the porch projects out from the building it must have a roof. If the roof of a required porch is developed as a deck or balcony it may be flat. If the main entrance is to a single dwelling unit, the covered area provided by the porch must be at least 6 feet wide and 4 feet deep. If the main entrance is to more than one dwelling unit, the covered area provided by the porch must be at least 9 feet wide and 7 feet deep.

G. Vehicle areas.

1. Access to vehicle areas and adjacent residential zones. Access to vehicle areas must be at least 20 feet from any adjacent residential zone.
2. Parking lot coverage. No more than 50 percent of the site may be used for vehicle areas.
3. Vehicle area screening. Where vehicle areas are across a local service street from an RM2, RM3, RM4, or RX zone, there must be a 6 foot wide landscaped area along the street lot line that meets the L3 standard of Chapter 33.248, Landscaping and Screening. Vehicle areas across a local service street from an RF through RM1 zone are subject to the standards of Subsection D., Residential Buffer, above.

H. Foundation material. Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than 3 feet above the finished grade level adjacent to the foundation wall. This subsection does not apply to sites in the EX zone within the St. Johns plan district.

I. Exterior finish materials.

1. The standards of this paragraph must be met on all building facades.
 - a. Plain concrete block, plain concrete, corrugated metal, plywood, composite materials manufactured from wood or other products, sheet pressboard, and horizontal shiplap or clapboard siding may not be used except as secondary finishes if they cover no more than 10 percent of each facade.
 - b. Exception for sites in the EX zone within the St. Johns plan district. Plain concrete block, plain concrete, and corrugated metal are permitted as exterior finish materials in the EX zone in the St. Johns plan district.
2. Compatible exterior finish materials. Where there is an exterior alteration to an existing building, the exterior finish materials on the portion of the building being altered or added must visually match the appearance of those on the existing building. However, if the exterior finish materials on the existing building do not meet the standards of Paragraph I.1, any material that meets the standards of Paragraph I.1 may be used.

J. Roof-mounted equipment. All roof-mounted equipment, including satellite dishes and other communication equipment, must be screened in one of the following ways. Solar energy systems are subject to paragraph K below, and exempt from this standard:

1. A parapet as tall as the tallest part of the equipment;
2. A screen around the equipment that is as tall as the tallest part of the equipment;
3. The equipment is set back from the street-facing perimeters of the building 4 feet for each foot of height of the equipment; or
4. If the equipment is a satellite dish or other communication equipment, it is added to the facade of a penthouse that contains mechanical equipment, is no higher than the

top of the penthouse, is flush mounted, and is painted to match the facade of the penthouse.

K. Rooftop solar energy systems.

1. Rooftop solar energy systems must meet the following requirements:
 - a. On a flat roof. The solar energy system must be mounted flush or on racks, with the system or rack extending no more than 5 feet above the top of the highest point of the roof, not including the parapet. Solar energy systems must also be screened from the street by:
 - (1) An existing parapet along the street-facing facade that is as tall as the tallest part of the solar energy system; or
 - (2) Setting the solar energy system back from the street-facing roof edges. For each foot of height that the portion of the system projects above the parapet, or roofline when there is no parapet, the system must be set back 4 feet.
 - b. On a pitched roof. The plane of the system must be parallel with the roof surface, with the system no more than 12 inches from the surface of the roof at any point, and set back 3 feet from the roof edge and ridgeline.
2. Photovoltaic roofing shingles or tiles may be directly applied to the roof surface.
3. Photovoltaic glazing may be integrated into windows or skylights.
4. Ground pole mounted solar energy systems are subject to the following additional standard: On sites that abut an RF through R2 zone, the system must be set back one foot for every one foot of height, from the lot line abutting the RF through R2 zone.

L. Water cisterns. Above-ground cisterns for rainwater or greywater collection meet the following:

1. Cisterns with a capacity of more than 80 gallons, or racks of cisterns with a total capacity of more than 80 gallons, may not be attached to the front facade of the primary structure; and
2. Cisterns must either
 - a. Match the color of the adjacent building wall, the color of the trim, or the color of the rain gutter; or
 - b. Be screened by development, plantings, or fences so they are not visible from the street.

M. Ground floor windows. Street-facing elevations must meet the standards of 33.130.230.B, Ground floor windows. As an alternative to providing ground floor windows, proposals in E zones may provide public art if the following conditions are met:

1. The area of the ground level wall that is covered by the art must be equal to the area of window that would have been required;

2. The artist and the specific work or works of art must be approved by the Portland Regional Arts and Cultural Council; and
 3. The art must be composed of permanent materials permanently affixed to the building. Acceptable permanent materials include metal, glass, stone and fired ceramics.
- N. Distinct ground floor.** This standard applies to buildings that have any floor area in non-residential uses. The ground level of the primary structure must be visually distinct from upper stories. This separation may be provided by:
1. A cornice above the ground level;
 2. An arcade;
 3. Changes in material or texture; or
 4. A row of clerestory windows on the building's street facing elevation.
- O. Roofs. Buildings must have either:**
1. A sloped roof with a pitch no flatter than 6/12; or
 2. A roof with a pitch of less than 6/12 and a cornice that meets the following:
 - a. There must be two parts to the cornice. The top part of the cornice must project at least 6 inches from the face of the building and be at least 2 inches further from the face of the building than the bottom part of the cornice. See Figure 218-3; and
 - b. The height of the cornice is based on the height of the building as follows:
 - (1) Buildings 10 feet or less in height must have a cornice at least 12 inches high.
 - (2) Buildings greater than 10 feet and less than 30 feet in height must have a cornice at least 18 inches high.
 - (3) Buildings 30 feet or greater in height must have a cornice at least 24 inches high.
- P. Base of buildings.** Buildings must have a base on all street-facing elevations. The base must be at least 2 feet above grade and be distinguished from the rest of the building by a different color or material.
- Q. Additional standards for historic resources.** The following standards are additional requirements for conservation districts and conservation landmarks.
1. Zero setbacks. For structures where none of the floor area is in residential use, no setback is permitted from the street lot line. Sites that have more than one street lot line must meet this standard along two street lot lines.

2. Exterior siding.
 - a. Where wood products are used for siding, the siding must be shingles, or horizontal siding, not shakes.
 - b. Where horizontal siding is used, it must be shiplap or clapboard siding composed of wooden boards with a reveal of 3 to 6 inches, or vinyl or aluminum siding that is in a clapboard or shiplap pattern where the boards in the pattern are 6 inches or less in width.
 - c. The siding material may not cover the window and door trim.
3. Building features to be retained. In RH zones the following building features on street-facing elevations must be retained. Building features that are not original to the building are exempt from this standard:
 - a. Entrances;
 - b. Front porches;
 - c. Balconies;
 - d. Bay windows; and
 - e. Dormers.
4. Ground level glass. All glass in ground level street-facing windows and doors must be clear or ornamental stained glass. Restrooms may have reflective or opaque glass.
5. Clerestory windows. There must be clerestory windows above all windows and doors on the ground floor of street-facing elevations of buildings or parts of buildings with commercial uses.
6. Parapets. Flat roofs must be surrounded by a parapet at least 18 inches in height.
7. Arched windows in Russell Street. In the Russell Street Conservation District, all top floor windows on street-facing elevations must have an arch at the top of their window framing.
8. Red brick in Russell Street. In the Russell Street Conservation District, street-facing elevations must be red brick or a combination of block (basalt or cast stone) and red brick. Up to 20 percent of the facade may be stone or precast concrete.
9. Cast stone in Kenton. In the Kenton Conservation District new buildings in commercial/mixed use zones must have cast stone on their street facing elevations. At least 50 percent of the total exterior wall surface of these elevations must be cast stone.
10. Wood facades in Woodlawn. In the Woodlawn Conservation District, commercial buildings and commercial portions of mixed use buildings must have wood as their exterior finish material on their street facing elevations.
11. Facade height in Russell Street, Woodlawn, and Piedmont. In the Russell Street, Woodlawn and Piedmont Conservation Districts, the street-facing elevations of commercial and mixed use buildings must be at least 20 feet in height.

12. Woodlawn street pattern. Buildings may not be in the vacated portions of the angled street pattern in the Woodlawn Conservation District.
13. Rooftop solar energy systems.
 - a. Rooftop solar energy systems in conservation districts must not increase the footprint of the structure, must not increase the peak height of the roof, and the system must be parallel to the slope of the roof;
 - b. Solar energy systems may not be installed on a conservation landmark.
14. Photovoltaic glazing, roofing shingles, or tiles may not be installed on a conservation landmark.

33.218.150 Standards for I Zones

The standards of this section apply to development of all structures in the I zones. These standards also apply to exterior alterations in these zones.

- A. Building placement and the street.** Landscaping, an arcade, or a hard-surfaced expansion of the pedestrian path must be provided between a structure and the street. All street-facing elevations must meet one of the following options.

Structures built to the street lot line are exempt from the requirements of this subsection. Where there is more than one street lot line, only those frontages where the structure is built to the street lot line are exempt from the requirements of this paragraph.

1. Foundation landscaping option. All street-facing elevations must have landscaping along their foundation. The landscaped area may be along the outer edge of a porch instead of the foundation. This landscaping requirement does not apply to portions of the building facade that provide access for pedestrians or vehicles to the building. The foundation landscaping must meet the following standards:
 - a. The landscaped area must be at least 3 feet wide;
 - b. There must be at least one three-gallon shrub for every 3 lineal feet of foundation; and
 - c. Ground cover plants must fully cover the remainder of the landscaped area.
2. Arcade option. All street-facing elevations must have an arcade that meets the following requirements:
 - a. The arcade must be at least 6 feet deep between the front elevation and the parallel building wall;
 - b. The arcade must consist of openings that are at least 6 feet wide and which run the full length of the street facing elevation;
 - c. The arcade elevation facing a street must be at least 14 feet in height and at least 25 percent solid, but no more than 50 percent solid; and

- d. The arcade must be open to the air on three sides; none of the arcade's street facing or end openings may be blocked with walls, glass, lattice, glass block or any other material.
3. Hard-surface sidewalk extension option. The area between the building and the street lot line must be hard-surfaced for use by pedestrians as an extension of the sidewalk.
 - a. The building walls may be set back no more than 10 feet from the street lot line; and
 - b. For each 100 square feet of hard-surface area between the building and the street lot line at least one of the following amenities must be provided. Structures built within 2 feet of the street lot line are exempt from the requirements of this subparagraph.
 - (1) A bench or other seating;
 - (2) A tree;
 - (3) A landscape planter;
 - (4) A drinking fountain; or
 - (5) A kiosk.
- B. Landscape coverage.** On sites outside conservation districts, at least 15 percent of the total site area must be landscaped. Other required landscaping may count toward this requirement.
- C. Reinforce the corner.** On sites within a Pedestrian District or with at least two frontages on the corner where two City Walkways meet:
 1. The primary structures must be within 10 feet of both street lot lines. Where a site has more than one corner, this requirement must be met on only one corner;
 2. At least one of the street-facing walls must be at least 40 feet long;
 3. The highest point of the building's street-facing elevations must be within 25 feet of the corner;
 4. A main entrance must be on a street-facing wall and either at the corner, or within 25 feet of the corner; and
 5. There is no parking within 40 feet of the corner.
- D. Pedestrian standards.** Buildings that include any non-residential uses and are on a transit street or City Walkway, or within a Pedestrian District must meet the pedestrian standards of the Employment Zones.
- E. Vehicle areas.**
 1. Parking between building and street. There may be only one double-loaded aisle of parking between the building and any street.

2. Parking lot coverage. No more than 50 percent of the site may be used for vehicle areas.
- F. Foundation material.** Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than 3 feet above the finished grade level adjacent to the foundation wall.
- G. Exterior finish materials.** The standards of this subsection must be met on all building facades:
1. Plain concrete block, plain concrete, corrugated metal, plywood, composite materials manufactured from wood or other products, sheet pressboard, and horizontal shiplap or clapboard siding may not be used except as secondary finishes if they cover no more than 10 percent of each facade.
 2. Compatible exterior finish materials. Where there is an exterior alteration to an existing building, the exterior finish materials on the portion of the building being altered or added must visually match the appearance of those on the existing building. However, if the exterior finish materials on the existing building do not meet the standards of Paragraph G.1, any material that meets the standards of Paragraph G.1 may be used.
- H. Roof-mounted equipment.** All roof-mounted equipment, including satellite dishes and other communication equipment, must be screened in one of the following ways. Solar energy systems are subject to Subsection K below, and exempt from standard of this subsection:
1. A parapet as tall as the tallest part of the equipment;
 2. A screen around the equipment that is as tall as the tallest part of the equipment;
 3. The equipment is set back from the street-facing perimeters of the building 4 feet for each foot of height of the equipment; or
 4. If the equipment is a satellite dish or other communication equipment, it is added to the facade of a penthouse that contains mechanical equipment, is no higher than the top of the penthouse, is flush mounted, and is painted to match the facade of the penthouse.
- I. Rooftop solar energy systems.**
1. Rooftop solar energy systems must meet the following requirements:
 - a. On a flat roof. The solar energy system must be mounted flush or on racks, with the system or rack extending no more than 5 feet above the top of the highest point of the roof, not including the parapet. Solar energy systems must also be screened from the street by:
 - (1) An existing parapet along the street-facing facade that is as tall as the tallest part of the solar energy system; or
 - (2) Setting the solar energy system back from the street-facing roof edges. For each foot of height that the portion of the system projects above the

- b. An arcade;
 - c. Changes in material or texture; or
 - d. A row of clerestory windows on the building's street facing elevation.
3. Ground level glass. All glass in ground level street-facing windows and doors must be clear or ornamental stained glass. Restrooms may have reflective or opaque glass.
 4. Clerestory windows. There must be clerestory windows above all windows and doors on the ground floor of street-facing elevations of buildings or parts of buildings with commercial uses.
 5. Parapets. Flat roofs must be surrounded by a parapet at least 18 inches in height.
 6. Arched windows in Russell Street. In the Russell Street Conservation District, all top floor windows on street-facing elevations must have an arch at the top of their window framing.
 7. Red brick in Russell Street. In the Russell Street Conservation District, street-facing elevations must be red brick or a combination of block (basalt or cast stone) and red brick. Up to 20 percent of the facade may be stone or precast concrete.
 8. Facade height in Russell Street. In the Russell Street Conservation District, the street-facing elevations of commercial and mixed use buildings must be at least 20 feet in height.
 9. Rooftop solar energy systems.
 - a. Rooftop solar energy systems in conservation districts must not increase the footprint of the structure, must not increase the peak height of the roof, and the system must be parallel to the slope of the roof;
 - b. Solar energy systems may not be installed on a conservation landmark.
 10. Photovoltaic glazing, roofing shingles, or tiles may not be installed on a conservation landmark.

(Added by Ord. No. 171589, effective 11/1/97. Amended by: Ord. No. 174263, effective 4/15/00; Ord. No. 174325, effective 5/5/00; Ord. No. 175210, effective 1/26/01; Ord. No. 175204, effective 3/1/01; Ord. No. 175837, effective 9/7/01; Ord. Nos. 175965 and 176333, effective 7/1/02; Ord. No. 176469, effective 7/1/02; Ord. No. 177028, effective 12/14/02; Ord. No. 177422, effective 6/7/03; Ord. No. 178172, effective 3/5/04; Ord. No. 178452, effective 7/10/04; Ord. No. 181357, effective 11/9/07; Ord. No. 182429, effective 1/16/09; Ord. No. 183598, effective 4/24/10; Ord. No. 184016, effective 1/2/11; Ord. No. 184842, effective 9/2/11; Ord. No. 185915, effective 5/1/13; Ord. No. 186639, effective 7/11/14; Ord. No. 187216, effective 7/24/15; Ord. No. 188177, effective 5/24/18; Ord. No. 188958, effective 5/24/18; Ord. No. 189137, effective 8/22/18; Ord. No. 189488, effective 12/2/19; Ord. No. 189805, effective 3/1/20; Ord. No. 190477, effective 8/1/21; Ord. No. 190851, effective 6/30/22.)