

Seattle Permits

— part of a multi-departmental City of Seattle series on getting a permit

Construction in Wildland-Urban Interface Areas

November 2, 2023

This Tip provides an overview of the Seattle Wildland-Urban Interface Code (SWUIC). SWUIC is a new code that will be adopted by the City of Seattle in early 2024. The code regulates construction near wildland areas to protect life and property from wildland fires and prevent structure fires from spreading to wildlands. This code applies to construction within wildland and wildland-urban interface and intermix areas in Seattle.

The Washington Department of Natural Resources created a map for the state of Washington showing the different Wildland-Urban Interface (WUI) areas. Wildland areas are vegetated areas without any structures or human development. Wildland-urban intermix areas are areas where structures intermingle with wildlands. Wildland-urban interface areas are areas where human development meets wildlands.

When you propose construction within one of these areas, the Seattle Wildland-Urban Interface Code requires ignition-resistant construction at the exterior of buildings. Ignition-resistant construction is construction with building materials that are less likely to catch fire and burn. The code includes requirements for roof coverings, exterior walls and projections, glazing, decks and other appendages, and ventilation openings. New buildings, other than small accessory structures, also require defensible space around the building. Defensible space is an area where trees and vegetation have been pruned, spaced out, removed, or replaced with fire-resistant vegetation. Defensible space helps slow down a wildfire and allows space for firefighting.

Determining if the Seattle Wildland-Urban Interface Code Applies to Your Project

Enter your address into our [Wildland Urban Interface Map](#) to determine if your site is within a mapped wildland or wildland-urban interface or intermix area. If your proposed construction is within an area mapped WUI interface or WUI intermix, you will need to comply with the Seattle Wildland-Urban Interface Code.

If your proposed construction is within an area mapped wildland, you will need to complete an additional step to determine your wildland-urban interface designation and whether the Seattle Wildland-Urban Interface Code applies to your project.

Determining if SWUIC Applies to Construction in Wildland Areas

If your proposed construction is within a mapped wildland area, you must look at the 40-acre area around your site for the following to determine if the SWUIC applies:

- If the area contains more than 50 percent vegetation, the designation will be WUI intermix and the SWUIC applies to your proposed construction.
- If the area contains less than 50 percent vegetation, look to see if there are any highly vegetated areas (areas with more than 75 percent vegetation) within 1.5 miles of your site. If there are, the designation will be WUI Interface and the SWUIC applies to your proposed construction. If not, the SWUIC does not apply.

See SWUIC Section 302 for more details and a worksheet to help you with this determination. If you are unsure of the vegetation densities, you may assume a WUI intermix designation. Wildland-Urban Interface Code requirements for WUI intermix and WUI interface areas are the same.

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Code Requirements

If your proposed construction is within a mapped WUI interface or intermix area, or within a mapped wildland area that is determined to be WUI interface or intermix, your project needs to comply with this code. If the mapped area covers only part of your site, these requirements apply to the structures or portion of structures that are within the mapped area.

The Seattle Wildland Urban-Interface Code requirements for ignition resistant construction (Chapter 5) and defensible space (Chapter 6) are summarized in this Tip.

Note: Some additional code requirements for emergency vehicle access (Chapter 4) may apply. To read the code visit our [Wildland-Urban Interface Code](#) website.

This Tip describes the easiest way to comply with the code, but there are other ways to comply. You can show that your site was mapped incorrectly, and the code does not apply. You can choose to provide more defensible space (if you have enough space on your site) so that you can build with less ignition resistant construction. You can show that your building is near an area of light fuel and that the code allows you to build with less ignition resistant construction. If you would like to comply using one of these more complex code paths, we recommend hiring a design professional to assist you with your project. Note that defensible space requirements, when they apply, will never be less than what is described in this tip.

Ignition Resistant Construction

The SWUIC requires ignition resistant construction for all new work. Alterations to existing buildings should comply with these requirements where new work occurs. See SWUIC sections 501.4 through 501.8 for more information on the ignition resistant construction requirements described here.

■ Roof Covering

Roof assemblies (roofing materials down to, and including the plywood sheathing) shall have a Class A rating. Where roof valley flashing is provided, the code has minimum thickness and material requirements for the flashing and underlayment.

■ Exterior Walls and Projections

Exterior walls and projections other than eaves (such as awnings, covered porches, and carports) must be constructed with any of the following materials:

- One hour fire-resistance rated construction on the exterior side
- Noncombustible material

- Heavy timber construction
- Fire-retardant treated wood on the exterior side
- Ignition-resistant material

■ Decks and Appendages

Decks, porches, balconies, and exterior stair structures must be constructed with any of the following materials:

- One hour fire-resistance rated assembly
- Ignition-resistant material
- Exterior fire-retardant treated wood
- Noncombustible material
- Heavy timber construction
 - Posts must be 6x6 minimum
 - Beams must be 6x8 minimum
 - Joists must be 4x8 minimum and spaced no greater than 24 inches on center

Walking surfaces of decks, porches, balconies, and exterior stairs must be constructed with any of the following materials:

- Ignition-resistant material
- Exterior fire-retardant treated wood
- Noncombustible material
- Where the structure is heavy timber construction, the decking must be:
 - Two-inch nominal lumber
 - Five-fourths-inch hardwood (such as teak, mahogany, or other approved hardwood)
- Material that complies with specific performance requirements when the exterior wall covering is ignition-resistant or noncombustible

Decks with less than 48 inches of clearance from finished grade to deck joists must be enclosed using materials allowed for decks or with metal screen material with openings no greater than ¼ inch maximum. The enclosure prevents embers from coming in underneath the deck and prevents items that can burn from being stored under the deck.

■ Exterior Glazing

Windows, glazing in doors, and skylights must be tempered glass, multilayered glazed panels, glass block, or 20-minute fire rated.

■ Vents

Ventilation openings shall not exceed 144 square inches each and shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed ¼ inch. The location of ventilation openings is limited:

- Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas.
- Gable end and dormer vents shall be located no less than 10 feet from lot lines.
- Underfloor ventilation openings shall be located as close to grade as possible.

Defensible Space

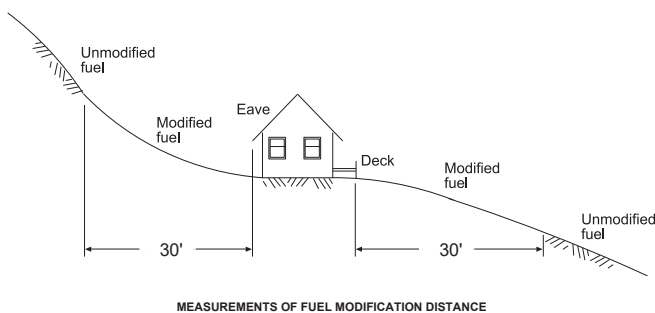
Is defensible space required for my project?

New buildings and structures require defensible space. New accessory structures up to 200 square feet and additions and alterations to existing buildings or structures are exempt from the defensible space requirements.

What is defensible space?

Defensible space is an area where trees and vegetation have been pruned, spaced out, removed, or replaced with fire-resistive vegetation to slow the speed and intensity of an advancing wildfire and to create an access area for firefighting.

Trees, vegetation, bark, and stored items such as firewood and propane are fuel for a wildfire. To create a defensible space, you will need to reduce the amount of fuel in areas adjacent to structures. The required size of the defensible space is 30 feet minimum, measured out in all directions from the edges of your structure, including projections such as eaves and decks. If any of your lot lines are less than 30 feet away from the edges of your structure, your defensible space will stop at the lot line.



Some vegetation is allowed within the defensible space. Within 5 feet of the structure, nothing flammable should be planted or placed. This includes trees, brush, tall grass, leaves, firewood piles, bark mulch, and other flammable materials. Well maintained low-flammable plants may be placed in this area, including groundcovers, vines, sod grasses, bulbs, and annual and perennial herbaceous plants. Within the rest of the defensible space, additional plant types are allowed when they are well spaced, pruned, and green. Plant types allowed include broadleaf evergreen and deciduous shrubs and small and medium deciduous trees.

Trees are allowed within the defensible space when a 10-foot horizontal distance is provided between crowns of adjacent trees and between crowns of trees to structures, overhead power lines, areas with a lot of fuel, and chimney outlets.

See SWUIC sections 603 and 604 for more information on the defensible space requirements described here. For additional guidance on plant selection and spacing, see the Washington State Department of Natural Resources website on defensible space: dnr.wa.gov/firewise.

When defensible space requirements result in tree or vegetation removal that is not permitted by other codes, such as the Environmentally Critical Areas Code or the Tree Ordinance, please consult with SDCI staff to determine a compliance path. Sign up for a construction pre-submittal conference. Identify on your application that you would like to discuss SWUIC concerns.

Maintenance of Defensible Space

People who own, lease, control, operate, or maintain buildings or structures that require defensible space are responsible for maintaining the defensible space. Maintenance includes modifying or removing non-fire-resistive vegetation and keeping leaves and needles removed from building roofs. Trees should be pruned regularly to remove dead branches and maintain the required clearances.

Construction Permit Submittal Requirements

If your proposed construction is within a WUI intermix or interface area, or within a wildland area that is determined to be WUI interface or intermix, include the following information in your plan set:

- Note that the project will comply with the Seattle Wildland-Urban Interface Code and include the code edition.

- Include notes and details to show how the new and altered structures will comply with the ignition-resistant construction requirements described above.
- If your project requires defensible space:
 - Show the defensible space, including dimensions, on your site plan.
 - Show the existing and proposed trees and vegetation within the defensible space, including the mature crown size for trees.
 - Describe how you will reduce the amount of fuel within the defensible space, if that's necessary to meet the code.
 - Describe how you will maintain the defensible space.

If your proposed construction is within a wildland area and you want to show that the SWUIC does not apply, submit vegetation density calculations for us to review.

Subject-to-Field-Inspection Permits

A subject-to-field-inspection permit is a construction permit for small projects that meet certain criteria. We issue these permits within a few days. Examples of common projects that qualify for this type of permit include constructing a detached garage, remodeling a portion of your house, constructing a small single-story addition to your house, and constructing a new deck. If your proposed construction is within a wildland or wildland urban interface or intermix area and it is a small project, it may qualify for a subject-to-field-inspection permit. See Tip 316, *Subject-to-Field-Inspection Permits*, to confirm.

The following types of projects will not qualify for a subject-to-field-inspection permit:

- If your project requires defensible space, such as constructing a new detached garage that is greater than 200 square feet
- If your project is within a wildland area and you want to show that the SWUIC does not apply

If your project is issued as a subject-to-field-inspection permit, a building inspector will check compliance with SWUIC requirements in the field. Your building inspector may request changes during construction of your project. You are responsible for complying with all code requirements. Many of the code requirements are described in the [STFI Checklist - Wildland-Urban Interface Code](#).

Questions?

For further information, contact the Building Code coaching group through the [Applicant Services Center](#).

Access to Information

Links to electronic versions of SDCI Tips, Director's Rules, and the Seattle Municipal Code are available on our website at www.seattle.gov/sdci.