

(Effective March 15, 2024)

WAC 51-51-4504 Section R4504—Alterations.

R4504.1 General. Alterations to existing buildings shall comply with the provisions of this code for new construction, except as permitted by this section.

R4504.2 Newly constructed elements. Newly constructed elements, components, and systems shall comply with the requirements of this code.

EXCEPTION: Added openable windows are not required to comply with the light and ventilation requirements of Section R303.

R4504.3 Nonconformities. The work shall not increase the extent of noncompliance or create nonconformity to those requirements that did not previously exist.

R4504.4 Structural. Altered structural elements and systems shall comply with Section R102.7.1 and the structural provisions of this chapter. New elements shall meet all of the requirements of this code for new construction. Structural elements that are uncovered during the course of the alteration and that are found to be unsafe shall be repaired in accordance with Section R102.7.1.

R4504.4.1 Decreased structural capacity. Where an alteration causes a decrease in capacity in any structural component, that structural component shall be shown to comply or shall be altered to comply with the applicable provisions of Chapters 3, 4, 5, 6, and 8.

R4504.4.2 Increased structural loads. Where an alteration causes an increase in loads as described in this section, the existing structural components that support the increased load, including the foundation, shall be shown to comply or shall be altered to comply with the applicable provisions of Chapters 3, 4, 5, 6, and 8. Existing structural components that do not provide support for the increased loads shall not be required to comply with this section.

R4504.4.2.1 Dead load increase. Dead load shall be considered to be increased for purposes of this section when the weight of materials used for the alteration exceeds the weight of the materials replaced, or when new materials or elements are added.

EXCEPTIONS:

1. Buildings in which the increase in dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m²) or less over an existing single layer of roof covering.
2. Installation of rooftop-mounted photovoltaic (PV) panel systems weighing 4 pounds per square foot or less over an existing single layer of roof covering.

R4504.4.2.2 Live load increase. An increase in live load shall be determined based on Table R301.5.

R4504.4.2.3 Snow load increase. Snow load shall be considered to be increased for purposes of this section when alteration of the roof configuration creates new areas that accumulate drifted snow.

R4504.4.2.4 Wind load increase. Wind load shall be considered to be increased for purposes of this section when the surface area of any exterior elevation subject to wind pressure is increased by more than 5 percent.

R4504.4.2.5 Seismic load increase. Seismic load shall be considered to be increased for purposes of this section in existing buildings assigned to Seismic Design Category C, D₀, D₁, or D₂ where new materials replace lighter weight materials in one of the following conditions:

1. Concrete tile or tile roof covering of similar weight is installed on more than 50 percent of the total roof area.
2. Brick veneer or cladding of similar weight is installed on walls above the second story.

R4504.5 Ventilation. Reconfigured spaces intended for occupancy and spaces converted to habitable or occupiable space in any work area shall be provided with ventilation in accordance with Section R303.

R4504.6 Ceiling height. Where a habitable attic or habitable space in a basement is created in an existing building, ceiling height shall not be less than 6 foot 8 inches (2032 mm). Bathrooms, toilet rooms, and laundry rooms shall have a ceiling height of not less than 6 feet 4 inches (1931 mm).

EXCEPTIONS:

1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 6 feet 8 inches (2134 mm).
2. At beams, girders, ducts, or other obstructions, the ceiling height shall be not less than 6 feet 4 inches (1931 mm) from the finished floor.

R4504.7 Stairways, handrails, and guards. Stairs, handrails, and guards shall comply with this section.

R4504.7.1 Stairway illumination. Stairways within the work area shall be provided with illumination in accordance with Section R303.6.

R4504.7.2 Stair width. Existing stairs not otherwise being altered or modified shall be permitted to maintain their current clear width at, above and below existing handrails.

R4504.7.3 Stair headroom. Headroom height on existing stairs being altered or modified shall not be reduced below the existing stairway finished headroom. Existing stairs not otherwise being altered shall be permitted to maintain the current finished headroom.

R4504.7.4 Stair landing. Landings serving existing stairs being altered or modified shall not be reduced below the existing stairway landing depth and width. Existing stairs not otherwise being altered shall be permitted to maintain the current landing depth and width.

R4504.7.5 Stair treads and risers. An existing stairway shall not be required to comply with Section R311.7.5 where the existing space and construction does not allow a reduction in pitch or slope. Where risers are added to an existing stair, the tread and riser dimensions of the added risers shall match the existing stair.

R4504.7.6 Handrails and guards. Where a stair or any portion of a stair is reconstructed, a handrail and guard, where required, shall be provided in accordance with Section R311 and R312.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 23-02-058, 23-12-104, and 23-20-024, § 51-51-4504, filed 1/3/23, 6/7/23, and 9/25/23, effective 3/15/24.]