2024 IRC

SECTION R325

LIGHT, VENTILATION AND HEATING

R325.1 Habitable rooms. *Habitable space* shall be provided natural light and natural ventilation in accordance with Sections R325.1.1 through R325.31.2.

R325.1.1 Natural light. Habitable rooms shall have an aggregate area of glazed openings not less than 8 percent of the floor area of such rooms. Required glazed openings shall face directly onto a street, alley or *public way*, or a *yard* or *court* located on the same *lot* as the *building*.

Exceptions:

- 1. Required glazed openings shall be permitted to face into a roofed porch, deck or patio adjacent to a street, alley, *public way*, *yard* or *court*, where there the longer side of the roofed area is not less than 65 percent unobstructed and the ceiling height is not less than 7 feet (2134 mm).
- 2. Required glazed openings shall be permitted to face into a sunroom adjacent to a street, alley, public way, yard or court.
 - Glazed openings are not required where artificial light is provided that is capable of producing an average illumination of 6 footcandles (65 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.
- 4. Eave projections shall not be considered as obstructing the clear open space of a yard or court.

R325.1.2 Natural ventilation. Habitable rooms shall have an aggregate area openable to the outdoors not less than 4 percent of the floor area of such rooms. Openings shall be through windows, skylights, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants.

Exceptions:

- Natural ventilation shall not be required in habitable rooms other than kitchens where a
 whole house mechanical ventilation system or a mechanical ventilation system capable
 of producing 0.35 air changes per hour in the habitable rooms is installed in accordance
 with Section M1505.
- Natural ventilation shall not be required in kitchens where a local exhaust system is installed in accordance with Section M1505.

- 3. Required *ventilation* openings shall be permitted to open into a thermally isolated sunroom or roofed porch, deck, or patio where not less than 40 percent of the roofed area perimeter is open to the outdoor air.
 - 4. Required ventilation openings shall be permitted to open into a thermally isolated sunroom provided there is an openable area between the adjoining room and the sunroom of not less than one tenth of the floor area of the interior room and not less than 20 square feet (1.9 m2). The minimum openable area of the sunroom to outdoor air shall be based on the total floor area of the adjoining room and the sunroom.

R325.1.32 Adjoining rooms. For the purpose of determining light and ventilation requirements, any rooms shall be considered to be a portion of an adjoining room where not less than one-half of the area of the common wall is open and unobstructed and provides an opening of not less than one-tenth of the floor area of the interior room and not less than 25 square feet (2.3 m²).

Exception: Openings required for light shall be permitted to open into a sunroom with thermal isolation or a patio cover, provided that there is an openable area between the adjoining room and the sunroom or patio cover of not less than one-tenth of the floor area of the interior room but not less than 20 square feet (2 m²).

R325.2 Bathrooms.

<u>This section is not adopted.</u> Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate *glazing area* in windows of not less than 3 square feet (0.3 m²), one-half of which shall be openable.

Exception: The glazed areas shall not be required where artificial light and a *local exhaust* system are provided. The minimum *local exhaust* rates shall be determined in accordance with <u>Section M1505</u>. Exhaust air from the space shall be exhausted directly to the outdoors.

R325.3 Mechanical ventilation.

<u>Dwelling units</u> shall be equipped with local exhaust and <u>whole-house ventilation systems</u> designed and installed as specified in Section M1505.

Exception: Additions with less than 500 square feet (46 m²) of conditioned floor area are exempt from the requirements in this code for whole-house ventilation systems.

Buildings and dwelling units complying with Section N1102.5.1 shall be provided with mechanical ventilation in accordance with Section M1505, or with other approved means of ventilation.

R325.4 Opening location.

Outdoor intake and exhaust openings shall be located in accordance with <u>Sections R325.4.1</u> and R325.4.2.

R325.4.1 Intake openings.

Mechanical and gravity outdoor air intake openings shall be located not less than 10 feet (3048 mm) from any hazardous or noxious contaminant, such as vents, chimneys, plumbing vents, streets, alleys, parking lots and loading docks.

For the purpose of this section, the exhaust from dwelling unit toilet rooms, bathrooms and *kitchens* shall not be considered as hazardous or noxious.

Exceptions:

- 1. The 10-foot (3048 mm) separation is not required where the intake opening is located 3 feet (914 mm) or greater below the contaminant source.
- 2. Vents and chimneys serving fuel-burning *appliances* shall be terminated in accordance with the applicable provisions of <u>Chapters 18</u> and <u>24</u>.
- 3. Clothes dryer exhaust ducts shall be terminated in accordance with Section M1502.3.

R325.4.2 Exhaust openings.

<u>Exhaust openings shall terminate in accordance with Section M1504.3.</u> Exhaust air shall not be directed onto walkways. <u>All exhaust ducts shall terminate outside the building. Terminal</u> elements shall have at least the equivalent net free area of the duct work.

R325.5 Outside opening protection.

Air exhaust and intake openings that terminate outdoors shall be protected with corrosion-resistant screens, louvers or grilles having an opening size of not less than $^{1}/_{4}$ inch (6 mm) and a maximum opening size of $^{1}/_{2}$ inch (13 mm), in any dimension. Openings shall be protected against local weather conditions. Outdoor air exhaust and intake openings shall meet the provisions for exterior wall opening protectives in accordance with this code.

R325.6 Interior stairway illumination.

Interior *stairways* shall be provided with an artificial light source to illuminate the landings and treads. *Stairway* illumination shall receive primary power from the *building* wiring. The light

source shall be capable of illuminating treads and landings to levels of not less than 1 footcandle (11 lux) as measured at the center of treads and landings. There shall be a wall switch at each floor level to control the light source where the *stairway* has six or more *risers*.

Exception: A switch is not required where remote, central or automatic control of lighting is provided.

R325.7 Exterior stairway illumination.

Exterior *stairways* shall be provided with an artificial light source located at the top landing of the *stairway*. <u>Stairway</u> illumination shall receive primary power from the <u>building</u> wiring. Exterior *stairways* providing access to a <u>basement</u> from the outdoor <u>grade</u> level shall be provided with an artificial light source located at the bottom landing of the <u>stairway</u>.

R325.8 Required glazed openings. Required glazed openings shall open directly onto a street or public alley, or a yard or court located on the same lot as the building.

Exceptions:

- 1. Required glazed openings that face into a roofed porch where the porch abuts a street, yard or court are permitted where the longer side of the porch is not less than 65 percent unobstructed and the ceiling height is not less than 7 feet (2134 mm).
- 2. Eave projections shall not be considered as obstructing the clear open space of a *yard* or *court*.
- 3. Required glazed openings that face into the area under a deck, balcony, bay or floor cantilever are permitted where an unobstructed pathway of not less than 36 inches (914 mm) in height, 36 inches (914 mm) in width, and no greater than 60 inches (1524 mm) in length is provided and opens to a yard or court. The pathway shall be measured from the exterior face of the glazed opening, or if the glazed opening is in a window well, at the window well wall furthest from the exterior face of the glazed opening.

R325.8.1 Sunroom additions. Required glazed openings shall be permitted to open into sunroom additions or patio covers that abut a street, yard or court if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening, and the ceiling height of the sunroom is not less than 7 feet (2134 mm).

R325.98 Required heating.

Where the winter design temperature in <u>Table R301.2</u> is below 60°F (16°C), every *dwelling unit* shall be provided with heating facilities capable of maintaining a room temperature of not less than 68°F (20°C) at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in habitable rooms at the design temperature. The installation of one or more portable space heaters shall not be used to achieve compliance with this section.

Exception: Unheated recreational *tents* or *yurts* not exceeding 500 square feet (46 m2) provided it is not occupied as a permanent *dwelling*.

R325.9.1 Definitions.

For the purposes of this section only, the following definitions apply.

<u>DESIGNATED AREAS</u> are those areas designated by a county to be an urban growth area in chapter 36.70A RCW and those areas designated by the US Environmental Protection Agency as being in nonattainment for particulate matter.

<u>SUBSTANTIALLY REMODELED</u> means any *alteration* or restoration of a *building* exceeding 60 percent of the appraised value of such *building* within a 12-month period. For the purpose of this section, the appraised value is the estimated cost to replace the *building* and *structure* in kind, based on current replacement costs.

R325.9.2 Primary heating source. Primary heating sources in all new and substantially remodeled buildings in designated areas shall not be dependent upon wood stoves.

R325.9.3 Solid fuel burning devices.

No new or used *solid fuel burning device* shall be installed in new or *existing buildings* unless such device is US Environmental Protection Agency certified or exempt from certification by the United States Environmental Protection Agency and conforms with RCW 70A.15.1005, 70A.15.3500,70A.15.3510, and 70A.15.3530.

Exceptions:

- 1. Wood cook stoves.
- 2. Antique wood heaters manufactured prior to 1940.

M1504.3 Exhaust openings

Air exhaust openings shall terminate as follows:

- 1. Not less than 3 feet (914mm) from property lines.
- 2. Not less than 3 feet (914mm) from gravity air intake openings, operable windows and doors except where the exhaust openings is located not less than 1 foot (305mm) above the gravity air intake opening, operable window s and doors.
- 3. Not less than 10 feet (3048mm) from mechanical air intake openings except where either of the following apply:
 - 3.1 The exhaust opening is located not less than 3 feet (914mm) above the air intake opening.
 - 3.2 The exhaust opening is part of a factory-built intake/exhaust combination termination fitting installed in accordance with the fan manufacturer's instructions, and the exhaust air is drawn from a living space.
- 4. In accordance with Sections R30325.5.24.2 and R30325.65.