## WAC 51-52-0306 Section 306—Access and service space.

306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access such equipment or appliances, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33 percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

- 1. The side railing shall extend above the parapet or roof edge not less than 42 inches (106,7 mm).
- 2. Ladders shall have rung spacing not to exceed 12 inches (305 mm) on center. The uppermost rung shall be a maximum of 24 inches below the upper edge of the roof hatch, roof or parapet, as applicable.
- 3. Ladders shall have a toe spacing not less than 7 inches (178 mm) deep.
  - 4. There shall be a minimum of 18 inches (457 mm) between rails.
- 5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a 300-pound (136.1 kg) load.
- 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds (488.2  $\rm kg/m^2$ ) per square foot. Landing dimensions shall be not less than 18 inches and not less than the width of the ladder served. A guardrail shall be provided on all open sides of the landing.
- 7. Climbing clearances. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be a minimum of 30 inches measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed.
- 8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches by 30 inches centered in front of the ladder.
- 9. Ladders shall be protected against corrosion by approved means.
  - 10. Access to ladders shall be provided at all times.

Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

EXCEPTION: This section shall not apply to Group R-3 occupancies.

**306.6 Appliances above ceilings.** Appliances that are located above the ceiling shall have ready access for inspection, service and repair without removing permanent construction. Appliances shall be provided with access to panel or removable ceiling tile with minimum nominal dimensions of 24 inches by 24 inches (609 mm  $\times$  609 mm).

The appliance is not required to be removable or replaceable through the access panel or removable ceiling tile. The appliance may be removed or replaced by removing the ceiling or wall assemblies adjacent to the appliance as long as they are not permanent construction.

EXCEPTIONS:

1. This section shall not apply to replacement appliances installed in existing compartments and alcoves where the working space clearances are in accordance with the equipment or appliance manufacturer's installation instructions.

2. A smaller access panel or removable ceiling tile shall be permitted when allowed by the equipment or appliance manufacturer's installation instructions.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 20-03-041, § 51-52-0306, filed 1/8/20, effective 7/1/20; WSR 16-01-148, § 51-52-0306, filed 12/21/15, effective 7/1/16. Statutory Authority: RCW 19.27.031, 19.27.074 and chapters 19.27 and 34.05 RCW. WSR 13-04-053, § 51-52-0306, filed 2/1/13, effective 7/1/13. Statutory Authority: RCW 19.27.190, 19.27.074, 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 10-03-099, § 51-52-0306, filed 1/20/10, effective 7/1/10.]

## (Effective March 15, 2024)

## WAC 51-52-0306 Section 306—Access and service space.

306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access such equipment or appliances, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33 percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

- 1. The side railing shall extend above the parapet or roof edge not less than 42 inches (1067 mm).
- 2. Ladders shall have rung spacing not to exceed 12 inches (305 mm) on center. The uppermost rung shall be a maximum of 24 inches below the upper edge of the roof hatch, roof or parapet, as applicable.
- 3. Ladders shall have a toe spacing not less than 7 inches (178 mm) deep.
  - 4. There shall be a minimum of 18 inches (457 mm) between rails.
- 5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a 300-pound (136.1 kg) load.
- 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds (488.2  $\rm kg/m^2$ ) per square foot. Landing dimensions shall be not less than 18 inches and not less than the width of the ladder served. A guardrail shall be provided on all open sides of the landing.
- 7. Climbing clearances. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be a minimum of 30 inches measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches shall be provided on both sides of the ladder measured from the

midpoint of and parallel with the rungs except where cages or wells are installed.

- 8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches by 30 inches centered in front of the ladder.
- 9. Ladders shall be protected against corrosion by approved means.
  - 10. Access to ladders shall be provided at all times.

Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

EXCEPTION: This section shall not apply to Group R-3 occupancies.

**306.6 Appliances above ceilings.** Appliances that are located above ceilings shall have access for inspection, service and repair without removing permanent construction. Appliances that are located above a ceiling shall be provided with access to the working space(s) by an opening not smaller than 22 inches by 22 inches (559 mm by 559 mm). All enclosure doors or hinged panels shall be capable of opening a minimum of 90 degrees.

The appliance is not required to be removable or replaceable through the enclosure door, hinged panel, removable lay-in ceiling tile, or other removable covers. The appliance may be removed or replaced by removing the ceiling or wall assemblies adjacent to the appliance as long as they are not permanent construction.

EXCEPTIONS:

- 1. This section shall not apply to replacement appliances installed in existing compartments and alcoves where the working space clearances are in accordance with the appliance manufacturer's installation instructions.
- 2. A smaller enclosure door, hinged panel, removable lay-in ceiling tile, or other removable covers shall be permitted when allowed by the appliance manufacturer's installation instructions and electrical access is not required.

[Statutory Authority: RCW 19.27.031 and 19.27.074. WSR 23-02-055, 23-12-106, and 23-20-025, § 51-52-0306, filed 1/3/23, 6/7/23, and 9/25/23, effective 3/15/24; WSR 20-03-041, § 51-52-0306, filed 1/8/20, effective 7/1/20; WSR 16-01-148, § 51-52-0306, filed 12/21/15, effective 7/1/16. Statutory Authority: RCW 19.27.031, 19.27.074 and chapters 19.27 and 34.05 RCW. WSR 13-04-053, § 51-52-0306, filed 2/1/13, effective 7/1/13. Statutory Authority: RCW 19.27.190, 19.27.074, 19.27.031 and chapters 19.27 and 34.05 RCW. WSR 10-03-099, § 51-52-0306, filed 1/20/10, effective 7/1/10.]