

WAC 296-56-60209 Fixed ladders. (1) This section applies to all fixed ladders except:

(a) Ladders forming an integral part of railway cars, highway carriers, cargo containers, or other transportation carrier equipment;

(b) Climbing devices such as step bolts or structural members of tanks and towers;

(c) Ladders built into or vertically attached to tubular scaffold framing; and

(d) Ladders used only for firefighting or emergency purposes are exempt from the provisions of subsection (5) of this section. All other requirements of this section apply.

(2) You must meet the following requirements for ladders with defects.

(a) Ladders with broken, split, or missing rungs, steps or rails, broken welds or connections, corrosion or wastage, or other defect which may affect safe use must be removed from service.

(b) Ladder repairs must provide strength at least equivalent to that of the original ladder.

(3) You must meet the following requirements for ladder specifications:

(a) Ladders installed before October 3, 1983, must be capable of withstanding without damage a minimum concentrated load, applied uniformly over a three and one-half inch (8.9 cm) width at the rung center, of two hundred pounds (890 N).

(b) Ladders installed after October 3, 1983, must be capable of withstanding two hundred fifty pounds (1112 N) applied as described in (a) of this subsection. If used by more than one employee simultaneously, the ladder as a unit must be capable of simultaneous additional loading in two hundred fifty pound (1112 N) increments for each additional employee, applied to a corresponding number of rungs. The unit must have a safety factor of four based on ultimate strength, in the designed service.

(c) Ladders installed before October 3, 1983, must have rungs evenly spaced from nine to sixteen and one-half inches (22.9 to 41.9 cm) apart, center to center.

(d) Ladders installed after October 3, 1983, must have rungs evenly spaced twelve inches apart, plus or minus two inches (30.5 cm, plus or minus 5.08 cm), center to center.

(e) Ladders installed before October 3, 1983, must have a width between side rails of at least ten inches (25.4 cm).

(f) Ladders installed after October 3, 1983, must have a width between side rails of at least twelve inches (30.48 cm).

(g) The minimum distance between the rung center line and the nearest permanent object behind the rung must be four inches (10.16 cm), except that in ladders installed after October 3, 1983, the minimum distance must be seven inches (17.78 cm) unless physical limitations make a lesser distance, not less than four and one-half inches (11.43 cm), necessary.

(h) When a ladder passes through an opening or past overhead obstructions, a minimum twenty-four inch (.61 m) clearance must exist between the climbing side and any obstruction. Where this distance is less than thirty inches (0.76 m), a deflection device must be installed for guidance through the opening.

(i) The side rails of ladders must extend at least thirty-six inches (0.91 m) above the top landing surface, unless grab bars or equivalent holds are provided.

(j) Ladders whose pitch exceeds ninety degrees to the horizontal (slanting backward on the climbing side) must not be used.

(4) You must meet the following requirements to protect against falls:

(a) Fixed ladders more than twenty feet (6.1 m) in height must be provided with a cage, well, or ladder safety device.

(b) When a well or cage is used, ladders with length of climb exceeding thirty feet (9.14 m) must comply with the following provisions:

(i) The ladder must consist of multiple sections not exceeding thirty feet (9.14 m) each;

(ii) Each section must be horizontally offset from adjacent sections, except as specified in (b)(iv) of this subsection;

(iii) A landing platform capable of supporting a load of one hundred pounds per square foot (4.79 kPa) and fitted with guardrails complying with WAC 296-56-60123(3) must be provided at least every thirty feet (9.14 m), except as specified in (b)(iv) of this subsection; and

(iv) For ladders installed after October 3, 1983, offset sections and landing platforms are not required if hinged platforms capable of supporting one hundred pounds per square foot (4.79 kPa), and which are kept closed except when opened for passage, are within the cage or well at intervals not exceeding thirty feet (9.14 m).

(c) Ladders equipped with ladder safety devices must have rest platforms:

(i) Capable of supporting a load of one hundred pounds per square foot (4.79 kPa);

(ii) Located at intervals of one hundred fifty feet (45.7 m) or less; and

(iii) Protected by guardrails complying with WAC 296-56-60123(3) on three sides.

(d) Where used, ladder safety devices must:

(i) Be installed and maintained in accordance with the manufacturer's instructions, which must be available for inspection upon request;

(ii) Be repaired only with replacement parts having performance capability at least equal to that of the original parts;

(iii) Have a connection length between carrier centerlines and safety belts of 10 ± 2 inches (25.4 ± 5.08 cm); and

(iv) Be installed in a manner that does not reduce the ladder's structural capacity.

(e) Ladder cages or wells must:

(i) Be of rigid construction that allows unobstructed use but prevents an employee from falling through or dislodging the cage or well by falling against it;

(ii) Have smooth inner surfaces;

(iii) Extend at least thirty-six inches (0.91 m) above landings; and

(iv) Extend to within eight feet (2.44 m) above the ground or base, except that a maximum of twenty feet (6.1 m) is permitted where the cage or well would extend into traffic lanes.

(f) Ladders installed after January 1, 1985, on radio, microwave communications, electrical power and similar towers, poles and structures, including stacks and chimneys, must meet the requirements of this subsection.

(5) You must make sure ladders consisting of individual rungs that are attached to walls, conical manhole sections or river cells are:

- (a) Capable of supporting a load of three hundred fifty pounds (1557 N) without deformation;
- (b) Form a continuous ladder, uniformly spaced vertically from twelve inches to sixteen inches (30.5 to 40.6 cm) apart, with a minimum width of ten inches (25.4 cm), and projecting at least four and one-half inches (11.43 cm) from the wall;
- (c) Constructed that an employee's foot cannot slide off the ends; and
- (d) Be firmly attached and without sharp edges.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 15-24-102, § 296-56-60209, filed 12/1/15, effective 1/5/16. Statutory Authority: RCW 49.17.010, [49.17].040, and [49.17].050. WSR 00-21-103, § 296-56-60209, filed 10/18/00, effective 2/1/01. Statutory Authority: Chapter 49.17 RCW and RCW 49.17.040, [49.17].050 and [49.17].060. WSR 92-22-067 (Order 92-06), § 296-56-60209, filed 10/30/92, effective 12/8/92. Statutory Authority: RCW 49.17.040 and 49.17.050. WSR 86-03-064 (Order 86-02), § 296-56-60209, filed 1/17/86; WSR 85-10-004 (Order 85-09), § 296-56-60209, filed 4/19/85; WSR 85-01-022 (Order 84-24), § 296-56-60209, filed 12/11/84.]