- WAC 296-880-30030 Scaffolds. This section applies to suspended and supported scaffolds under the scope of chapter 296-874 WAC, Scaffolds.
- (1) The employer must protect each employee on a scaffold from falling ten feet or more to a lower level, by providing either:
  - (a) A personal fall arrest system; or
  - (b) Guardrails.
- (2) The employer must ensure personal fall arrest systems are attached by a lanyard to one of the following:
  - (a) Vertical lifeline;
  - (b) Horizontal lifeline; or
  - (c) Appropriate structural member of the scaffold.

**Note:** Specifications for these personal fall arrest systems can be found in WAC 296-880-40020.

Note: Specifications for guardrail systems used with scaffolds can be found in subsection (8) of this section.

**Note:** Specifications for vertical lifelines can be found in subsection (9) of this section.

**Note:** Specifications for horizontal lifelines can be found in subsection (10) of this section.

- (3) Provide fall protection for persons erecting or dismantling supported scaffolds.
- (a) The employer must have a competent person determine the feasibility of providing fall protection for persons erecting or dismantling supported scaffolds.
- (b) The employer must provide fall protection if the installation and use of fall protection is:
  - (i) Feasible; and
  - (ii) Does not create a greater hazard.
- (4) The employer must ensure employees erecting the scaffold install the guardrail system, if required, before the scaffold is used by any other employees.
- (5) Provide fall protection if a scaffold is too far from the work face. The employer must provide a guardrail system along the front edge of the platform, or have employees use a personal fall arrest system, if the distance from the front edge of the platform to the work face is greater than:
- (a) Eighteen inches (46 cm) for scaffolds used for plastering and lathing operations;
  - (b) Fourteen inches (36 cm) for all other scaffolds.
- (6) Provide specific types of fall protection for specific types of scaffolds.
- (a) The employer must use a personal fall arrest system to protect employees on the following scaffolds:
  - (i) Boatswain's chair;
  - (ii) Catenary scaffold;
  - (iii) Float scaffold;
  - (iv) Ladder jack scaffold;
  - (v) Needle beam scaffold.
- (b) The employer must use a personal fall arrest system and a guardrail system to protect employees on:
  - (i) Single-point adjustable suspension scaffolds; and
  - (ii) Two-point adjustable suspension scaffolds.
- (7) The employer must protect employees working on a self-contained adjustable scaffold that has the platform:
- (a) Supported by the frame structure, using a guardrail system with a minimum two-hundred pound top rail capacity;
  - (b) Suspended by ropes, using:
- (i) A guardrail system with a minimum two-hundred pound top rail capacity; and

- (ii) A personal fall arrest system.
- (8) The employer must protect employees on walkways located within a scaffold by using a guardrail system that meets all of the following:
  - (a) Has a minimum two-hundred pound top rail capacity;
- (b) Is installed within nine and one-half inches (24.1 cm) of the walkway; and
  - (c) Is installed along at least one side of the walkway.
- (9) Ensure vertical lifelines used with personal fall arrest systems meet these requirements:
- (a) The employer must make sure vertical lifelines are all of the following:
  - (i) Fastened to a fixed, safe point of anchorage;
  - (ii) Independent of the scaffold; and
  - (iii) Protected from sharp edges and abrasion.

Note:

- Safe points of anchorage include structural members of buildings, but do not include:
- 1. Standpipes, vents, or other piping systems;
- 2. Electrical conduit;
- 3. Outrigger beams; and
- 4. Counterweights.
- (b) The employer must ensure vertical lifelines, independent support lines, and suspension ropes are not attached to any of the following:
  - (i) Each other;
  - (ii) The same point of anchorage; or
  - (iii) The same point on the scaffold.
- (c) The employer must ensure vertical lifelines, independent support lines, and suspension ropes do not use the same point of anchorage.
- (d) The employer must ensure independent support lines and suspension ropes are not attached to a personal fall arrest system.
- (e) The employer must ensure vertical lifelines are not used with single-point or two-point adjustable suspension scaffolds that have overhead components such as overhead protection or additional platform levels.
- (10) Ensure horizontal lifelines used with personal fall arrest systems meet these requirements:
- (a) The employer must equip single-point or two-point adjustable suspension scaffolds that use horizontal lifelines or structural members of the scaffold for fall protection with both of the following:
- (i) Additional independent support lines that are equal in number and equivalent in strength to the suspension ropes; and
- (ii) Automatic locking devices capable of stopping the scaffold from falling if one or both of the suspension ropes fail.
- (b) The employer must make sure horizontal lifelines are secured to either:
  - (i) Two or more structural members of the scaffold; or
- (ii) Looped around both the suspension ropes and independent support lines above the hoist and brake attached to the end of the scaffold.
- (c) The employer must ensure independent support lines and suspension ropes are not:
  - (i) Attached to each other or the same point on the scaffold;
  - (ii) Attached to or use the same point of anchorage.
- (d) The employer must ensure independent support lines and suspension ropes are not attached to either:
  - (i) A personal fall arrest system; or

- (ii) The same point on the scaffold as a personal fall arrest system.
- (e) The employer must ensure, if a horizontal lifeline is used where it may become a vertical lifeline, that the device used to connect a lanyard to the horizontal lifeline is capable of locking in both directions on the lifeline.
- (11) The employer must ensure independent support lines and suspension ropes are not:
  - (a) Attached to each other or the same point on the scaffold;
  - (b) Attached to or use the same point of anchorage.
- (12) The employer must ensure independent support lines and suspension ropes are not attached to either:
  - (a) A personal fall arrest system; or
- (b) The same point on the scaffold as a personal fall arrest system.
- (13) The employer must ensure, if a horizontal lifeline is used where it may become a vertical lifeline, that the device used to connect a lanyard to the horizontal lifeline is capable of locking in both directions on the lifeline.
- (14) The employer must ensure guardrails, if required, are installed along all open sides and ends of platforms.

**EXEMPTION:** For employees doing overhand bricklaying operations from a supported scaffold, a guardrail is not required on the side next to the wall.

- (15) The employer must ensure the height of the top rail, top edge, or the equivalent member, of supported scaffolds is:
- (a) At least thirty-six inches (0.9 m) and not more than forty-five inches (1.2 m) above the platform surface for scaffolds manufactured or first placed in service before January 1, 2000;
- (b) At least thirty-eight inches (0.97 m) and not more than forty-five inches (1.2 m) above the platform surface for scaffolds manufactured or first placed in service after January 1, 2000;
- (c) The employer must ensure the height of the top rail, top edge, or the equivalent member, of suspended scaffolds that require guardrails and personal fall arrest systems, is at least thirty-six inches  $(0.9\ \text{m})$  and not more than forty-five inches  $(1.2\ \text{m})$  above the platform surface.

**EXEMPTION:** When conditions warrant, the height of the top edge of the top rail may be greater than forty-five inches if the guardrail meets all other criteria of this section.

- (16) The employer must make sure the top edge of the top rail does not drop below the required height when the minimum load, shown in Table 2, Minimum Top Rail and Midrail Strength Requirements, is used.
- (17) The employer must make sure each top rail and midrail, or equivalent member, of a guardrail system is able to withstand, without failure, the force shown in Table 1, Minimum Top Rail and Midrail Strength Requirements, when the force is applied as follows:
- (a) To the top rail in a downward or horizontal direction at any point along its top edge;
- (b) To the midrail in a downward or horizontal direction at any point.

Note: Midrail includes screens, mesh, intermediate vertical members, solid panels, and equivalent structural members of the guardrail system.

## Table 1 Minimum Top Rail and Midrail Strength Requirements

Type of Scaffold	Top Rail Capacity	Midrail Capacity
Single-point adjustable suspension scaffolds	100 pounds (445 N)	75 pounds (333 N)
Two-point adjustable suspension scaffolds		
All other scaffolds	200 pounds (890 N)	150 pounds (666 N)
Walkways within a scaffold		

- (18) The employer must install midrails, screens, mesh, intermediate vertical members, solid panels, or equivalent structural members as follows:
- (a) Midrails at a height approximately midway between the top edge of the quardrail system and the platform surface;
  - (b) Screens and mesh:
- (i) From the top edge of the guardrail system to the scaffold platform; and
  - (ii) Along the entire opening between the supports.
- (c) Intermediate members, such as balusters or additional rails, not more than nineteen inches (48 cm) apart.
- (19) The employer must make sure steel or plastic banding is not used as a top rail or midrail.
- (20) The employer must have a competent person inspect manila rope and plastic or other synthetic rope that is used as a top rail or midrail as frequently as necessary to make sure it continues to meet the strength requirements for a top rail or midrail.

Note:

Crossbraces may be used as a top rail or midrail in a guardrail system if they meet the following requirements:

1. The crossing point of the two braces is between:

a. 20" and 30" above the work platform when used as a midrail.

b. 38" and 48" above the work platform when used as a top rail.

2. The end points at each upright are not more than 48" apart.

Additional requirements for scaffolds can be found in chapter 296-874 WAC, Scaffolds.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060, and chapter 49.17 RCW. WSR 20-12-091, § 296-880-30030, filed 6/2/20, effective 10/1/20.