

(v) Tools, materials and debris shall not be allowed to accumulate in quantities to cause a hazard.

(vi) Work is prohibited on scaffolds covered with snow, ice or other slippery material except as necessary for removal of such material.

(vii) Work on or from scaffolds is prohibited when winds are above 40 miles per hour (64.4 km/hr) unless the employer can establish that employees are protected from the effects of the wind's force and that the scaffold is properly secured against the wind loads imposed on it. Wind screens shall not be used unless the scaffold is designed for them and the scaffold is secured against wind loads imposed on it.

(viii) Scaffolds shall not be erected, used, or moved closer to exposed and energized power lines than as follows:

(a) For all lines of more than 50 kv, minimum clearance between the lines and all parts of the scaffold shall be 10 feet (3.1 m) plus 0.4 inch (1 cm) for each 1 kv over 50 kv, or twice the length of the line insulator, but never less than 10 feet (3.1 m);

(b) For all insulated lines between 300 volts and 50 kv, the minimum clearance between the lines and all parts of the scaffold shall be 10 feet (3.1 m);

(c) For all insulated lines of less than 300 volts, the minimum clearance between the lines and all parts of the scaffold shall be two feet (0.6 m);

(d) For all lines of any voltage which are uninsulated, the minimum clearance between the lines and all parts of the scaffold shall be 10 feet (3.1 m) for lines of 50 kv and less; and for lines more than 50 kv, 10 feet (3.1 m) plus 0.4 inch (1 cm) for each 1 kv over 50 kv, or twice the length of the line insulator, but never less than 10 feet (3.1 m).

(ix) Where material is being hoisted onto or near a scaffold, tag lines or other equivalent measures to control the hoisted load shall be utilized.

(2) *Suspension ropes.* (i) Suspension ropes shall be capable of supporting, without failure, at least six times the intended load applied or transmitted to that rope.

(ii) Suspension ropes supporting manually-powered suspended scaffolds shall be no less than one-fourth of an inch (.63 cm) diameter steel wire rope or equivalent. The minimum grade of wire rope shall be improved plow steel.

(iii) Suspension ropes supporting suspended powered scaffolds shall be no less than five-sixteenths of an inch (.79 cm) diameter wire rope or equivalent. The minimum grade of wire rope shall be improved plow steel.

(iv) Winding rope hoists shall contain at least four wraps of the suspension rope when the scaffold is at the lowest point of travel. In all other situations, the suspension ropes shall either be of such length that the scaffold can be lowered to the level below without the rope end passing through the hoist, or the rope end shall be configured or provided with a means to prevent its end from passing through the hoist.

(v) Ropes terminating at drums shall be attached to the drum by a positive mechanical means.

(vi) Wire suspension ropes shall not be joined together except by eye splicing with shackles, or by coverplates and bolts.

(vii) Swaged attachments or spliced eyes on wire suspension ropes shall be made only by the wire rope manufacturer or by a qualified person. The swaged attachments or spliced eyes made by a qualified person shall be at least equivalent to devices made by the rope manufacturer.

(viii) Wire rope clips shall be installed by a qualified person, retightened after initial loading, and be inspected and kept tight thereafter.

(ix) Suspension ropes shall be protected from exposure to open flames, hot work, corrosive chemicals or other destructive conditions.

(x) Ropes shall be regularly inspected and serviced. The use of repaired wire rope as suspension rope is prohibited, and defective suspension ropes shall not be used.

(3) *Strength.* Each scaffold and scaffold component, except suspension ropes and guardrail systems, shall be capable of supporting, without failure, its own weight and at least four times the maximum intended load applied or transmitted to that component. Scaffold components selected, built and loaded in accordance with Appendix A of this subpart, will be deemed to meet this requirement.

(4) *Loading of scaffolds.* No scaffold shall be loaded in excess of its maximum intended load. The employer shall inform all employees working with scaffolds of the maximum intended load for the scaffold in use.

(5) *Coating of wood platforms.* Wood platform units shall not be covered with opaque coatings. Unit edges may be marked for purposes of identification. Periodic coating with a wood preservative, fire retardant or slip-resistant coating is permitted, so long as the coating does not obscure the top or bottom wood surface.

(6) *Erection and inspection.* Scaffolds shall be erected and used under the supervision of a qualified person in accordance with applicable manufacturers' recommendations. Scaffolds shall be inspected for visible defects prior to each day's use and after any occurrence which could affect a scaffold's structural integrity. Deficiencies shall be corrected before use.

(7) *Platform width.* Scaffold platform units shall be at least 18 inches (46 cm) wide.

(8) *Platforms.* Platforms at all working levels shall be fully planked or decked with platform units between the front uprights and the guardrail supports as follows:

(i) Platform units shall be placed as close as possible to adjacent units. Any space between adjacent units shall be no more than one inch (2.5 cm) except as necessary to fit around uprights when side brackets are used to extend the width of the platform.

(ii) Where full planking or decking cannot be obtained using standard width units, the platform shall be planked or decked as fully as possible; however, the remaining open space between the platform and guardrail supports shall not exceed nine and one half inches (24 cm).

(9) *Positioning the front edge of a scaffold.* The front edge of all scaffold platforms shall

be positioned as close as practical to the structure being worked, but not more than 14 inches (35 cm) from the face of the structure unless a guardrail system meeting the requirements of § 1910.28 is used. When scaffold frames cannot be positioned within this maximum distance, side brackets or other means may be used to extend the platform width to within 14 inches (35 cm) from the face of the structure being worked.

(10) *Protection of employees working below scaffolds.* Toeboards, overhead protection or other equivalent protection shall be provided to prevent tools or material from falling onto employees working below scaffolds.

(11) *Extension of platform units over supports.* Scaffold platform units, unless cleated or otherwise restrained by hooks or equivalent means at both ends, shall extend over their end supports no less than six inches (15 cm) and not more than 18 inches (46 cm). A unit may extend more than 18 inches (46 cm) over the end support when the unit is designed and installed to support employees on the extended area without tipping, or guarded to prevent access to the cantilevered ends.

(12) *Abutment of platforms.* On scaffolds where units are abutted to create a longer platform, each abutted end shall rest on a separate support, butt plate, or equivalent means of support.

(13) *Overlapping of platforms.* On scaffolds where platform units are overlapped to create a longer platform, the overlap shall occur only over supports, and shall not be less than 12 inches (30.5 cm), unless the planks are nailed together or otherwise restrained to prevent movement.

(14) *Intermixing of components.* Scaffold components manufactured by different manufacturers shall not be intermixed unless the component parts fit together without force or modification, and the resulting scaffold meets the requirements of this section.

(15) *Ladders.* All ladders shall be located so as not to adversely affect the stability of the scaffold.

(16) *Access.* An access ladder, or equivalent safe access, shall be provided to scaffold platforms.

(17) *Gasoline-powered hoists.* Gasoline-powered hoists shall not be located on suspension scaffolds.

(18) *Listing of hoists.* Suspension scaffold mechanically-powered hoists and manually-powered hoists shall be of a type tested and listed by a nationally recognized testing laboratory. Refer to § 1910.7 for definition of nationally recognized testing laboratory.

(19) *Power-operated gears and brakes.* All power-operated gears and brakes on suspension scaffold hoists shall be guarded to prevent employee injury.

(20) *Automatic braking devices.* In addition to the normal operating brake, mechanically-powered hoists on suspension scaffolds shall have a braking device which engages automatically when the normal speed of descent of the hoist is exceeded.

(21) *Manually powered hoists.* Manually powered hoists shall require a positive crank force to descend.

(22) *Support surfaces for suspension scaffold support devices.* All suspension