

WAC 296-155-53414 Cranes/equipment with a rated hoisting/lifting capacity of 2,000 pounds or less. For all cranes/equipment with a maximum manufacturer-rated hoisting/lifting capacity of 2,000 pounds or less:

(1) This part and the following sections apply: WAC 296-155-52900 Scope; WAC 296-155-52902 Definitions; WAC 296-155-53302 Signal person qualifications; WAC 296-155-53306 Rigger qualifications; WAC 296-155-53400 (34), (36), (37), (42), (44), (45), (58), and (66), General requirements; WAC 296-155-53401, aside from (4)(c)(ii), (4)(e), and (5)(g), Duties of assigned personnel; WAC 296-155-53402 Assembly, disassembly, or reconfiguration; WAC 296-155-53404 Rope; WAC 296-155-53405 Inspections; WAC 296-155-53406 Signals; WAC 296-155-53408 Power line safety; WAC 296-155-53700(7), Mobile cranes—General; WAC 296-155-53715(5), Mobile cranes—Operations; WAC 296-155-539 Tower cranes; WAC 296-155-542 Overhead/bridge and gantry cranes; WAC 296-155-543 Derricks.

(2) Prior to utilizing a crane/equipment inside of or on a multi-level building, the following must be reviewed and acknowledged as acceptable by a RPE:

(a) The engineering of the structural support of the crane/equipment;

(b) The methods to prevent the crane/equipment from inadvertently moving while hoisting a load; and

(c) The equipment base, structural supports, and connection points provide adequate support with applied torsional and overturning moments, and horizontal and vertical forces.

(3) Components and configuration. The employer must ensure that:

(a) The selection of components and the configuration of the crane/equipment which affects the capacity or safe operation of the crane/equipment, complies with either the:

(i) Manufacturer instructions, recommendations, limitations, and specifications. When these documents and information are unavailable, a RPE familiar with the type of crane/equipment involved must approve, in writing, the selection and configuration of components; or

(ii) Approved modifications that meet the requirements of WAC 296-155-53400 (57) and (58).

(b) Manufacturer prohibitions. The employer must comply with applicable manufacturer prohibitions.

(4) Operation - Procedures.

(a) The employer must comply with all manufacturer procedures applicable to the operational functions of the crane/equipment, including its use with attachments.

(b) Where the manufacturer procedures are unavailable, the employer must:

(i) Develop and ensure compliance with all procedures necessary for the safe operation of the crane/equipment and attachments.

(ii) Ensure that procedures for the operational controls are developed by a qualified person.

(iii) Ensure that procedures related to the capacity of the crane/equipment are developed and approved by a RPE.

(c) Accessibility. The employer must ensure that:

(i) The load chart must be available to the operator at the control station.

(ii) Procedures applicable to the operation of the crane/equipment, recommended operating speeds, special hazard warnings, instruc-

tions and operator's manual, are readily available for use by the operator.

(iii) Where rated capacities are available at the control station only in electronic form and failure occurs that makes the rated capacities inaccessible, the operator must immediately cease operations or follow safe shut-down procedures until the rated capacities (in electronic or other form) are available.

(5) Safety devices and operational aids.

(a) The employer must ensure that safety devices and operational aids that are part of the original equipment are maintained in accordance with manufacturer procedures. The employer must immediately cease operations or follow safe shut-down procedures in the event safety devices or operational aids fail. A qualified person must evaluate and determine if an alternative plan is an option, if the equipment manufacturer and chapter 296-155 WAC, Part L, both allows.

(b) Anti two-blocking. The employer must ensure that cranes covered by this section manufactured after the effective date of this standard must have either an anti two-block device that meets the requirements of WAC 296-155-53412 (4)(e), or is designed so that, in the event of a two-block situation, no damage or load failure will occur (for example, by using a power unit that stalls in response to a two-block situation).

(6) Operator qualifications.

(a) Prior to being allowed to operate the crane/equipment, the employer must train each operator on the safe operation of the type of crane/equipment the operator will be using.

(b) The operator must be evaluated in accordance with WAC 296-155-53300(3), prior to operating a crane/equipment. The employer must document the evaluation, and it must specify each crane/equipment type for which the operator meets the requirements of this section.

(7) A qualified signal person that meets the requirements in WAC 296-155-53302 must be provided in each of the following situations:

(a) The point of operation, meaning the load travel or the area near or at load placement, is not in full view of the crane/equipment operator.

(b) When the crane/equipment is traveling, the view in the direction of travel is obstructed.

(c) Due to site specific safety concerns, either the crane/equipment operator or the person handling the load determines that it is necessary.

(8) A qualified rigger is required whenever employees are engaged in hooking, unhooking, or guiding the load, or in the initial connection of a load to a component or structure. This requirement must be met by using either Option (1) or Option (2) from section WAC 296-155-53306 Rigger qualifications.

(9) Keeping clear of the load.

(a) Where available, hoisting routes that minimize the exposure of employees to hoisted loads must be used.

(b) If a load has the potential to swing over an area the public can enter, including the assembly/disassembly work zone, prior to using the crane/equipment in that area the employer must first address the following, when possible and to the extent allowed by applicable jurisdictions:

(i) The sidewalk, road, and public area must be closed in accordance with chapter 296-155, Part E, Signaling and flaggers.

(ii) Any affected public area must be controlled, marked off, and cleared at all public access points prior to moving the load in that direction with the crane/equipment.

(c) When lifting loads over occupied buildings, a plan for minimizing public exposure must be developed and utilized prior to the lifting beginning.

(d) While the operator is not moving a suspended load, no employee is allowed to be within the fall zone, except for employees:

(i) Engaged in hooking, unhooking, or guiding a load;

(ii) Engaged in the initial attachment of the load to a component structure; or

(iii) Operating a concrete hopper or concrete bucket.

(e) When employees are engaged in hooking, unhooking, or guiding the load, or in the initial connection of a load to a component or structure, and are within the fall zone, all of the following criteria must be met:

(i) The materials being hoisted must be rigged to prevent unintentional displacement.

(ii) Hooks must be equipped with self-closing latches or self-locking devices, unless a qualified person determines that it is safer to hoist and place the load without latches (or with the latches removed/tied back or otherwise disabled).

(iii) Routes for the loads are preplanned to ensure that no employee is required to work in the fall zone, except for employees necessary for the hooking or unhooking of the load. "J" hooks are permitted to be used for setting wooden trusses.

(iv) The materials must be rigged by a qualified rigger.

(f) Receiving a load. Only employees needed to receive a load are permitted to be within the fall zone when a load is being landed.

(g) During a tilt-up or tilt-down operation:

(i) Employees are not allowed to be directly under the load.

(ii) Only employees essential to the operation are allowed to be in the fall zone (but not directly under the suspended load), and the employer can demonstrate that it is infeasible for the employee to perform that operation from outside of the fall zone. The permissible operations are:

(A) Physically guiding the load;

(B) Closely monitoring and giving instructions regarding the load's movement; or

(C) Either detaching or initially attaching it to another component or structure (such as, but not limited to, making an initial connection or installing bracing).

(h) Boom free fall is prohibited when an employee is in the fall zone of the boom or load, and load line free fall is prohibited when an employee is directly under the load. See WAC 296-155-53400 (43) through (46).

(10) Permitting special lifting operations only when equipment and procedures required by this part, the crane manufacturer, or a qualified person, are employed. Such operations include, but are not limited to, the following:

(a) Multiple crane lifts;

(b) Multiple load line lifts;

(c) Pick and carry operations;

(d) Cranes/equipment operating on barges;

(e) Utilizing vacuum lifters, close proximity lifting magnets, or material handling grapples.

(11) Hoisting personnel. The employer must ensure that equipment covered by this section is not used to hoist personnel.

(12) Design. The employer must ensure that the crane/equipment is designed by a qualified engineer.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060, and chapter 49.17 RCW. WSR 25-16-089, s 296-155-53414, filed 8/5/25, effective 9/5/25. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-53414, filed 4/19/16, effective 5/20/16. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.440, 49.17.060, and 29 C.F.R. 1926, Subpart CC. WSR 12-01-086, § 296-155-53414, filed 12/20/11, effective 2/1/12.]