

HAWAII ADMINISTRATIVE RULES

TITLE 12

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

SUBTITLE 8

DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

PART 3

CONSTRUCTION STANDARDS

CHAPTER 133.2

STEEL ERECTION

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Historical note: Chapter 12-133.2 is based substantially upon chapter 12-133.1. [Eff 7/10/97; am 12/29/00; R 1/10/03]

§12-133.2-1 Scope. (a) This chapter on steel erection contains the same requirements as the federal standard on steel erection except that it has been amended to include the requirements for:

- (1) Hard hats while on the job site;
- (2) Protective footwear while on the job site;
- (3) Gloves, special protective clothing, respirators, and any other personal protective equipment;
- (4) Personal fall arrest systems to be utilized for all steel erection activities, including connecting, 10 feet or more above the nearest floor level;
- (5) Connectors to receive the same training on fall protection as all other employees, and to wear fall protection, and to use fall protection whenever they are working 10 feet or more above the nearest floor level;
- (6) Structure specific steel erection plans, drawings, approvals, certifications, and authorizations to be maintained at the site until all steel erection activity is completed; and
- (7) Training certifications.

(b) HIOSH will not apply the component requirements of 29 CFR Subpart R to the following two situations:

- (1) To components used in steel erection projects where the building permit was obtained before the final rule was published (January 18, 2001); and
- (2) To components used in steel erection projects in which the steel erection work has begun before September 16, 2001.

(c) This chapter sets forth requirements to protect employees from the hazards associated with steel erection activities involved in the construction, alteration, and/or repair of single and multi-story buildings, bridges, and other structures where steel erection occurs. The requirements of this chapter apply to employers engaged in steel erection unless otherwise specified. This chapter does not cover electrical transmission towers, communication and broadcast towers, or tanks.

Note to subsection (c): Examples of structures where steel erection may occur include but are not limited to the following: Single and multi-story buildings; systems-engineered metal buildings; lift slab/tilt-up structures; energy exploration structures; energy production, transfer and storage structures and facilities; auditoriums; malls; amphitheatres; stadiums; power plants; mills; chemical process structures; bridges; trestles; overpasses; underpasses; viaducts; aqueducts; aerospace facilities and structures; radar and communication structures; light towers; signage; billboards; scoreboards; conveyor systems; conveyor supports and related framing; stairways; stair towers; fire escapes; draft curtains; fire containment structures; monorails; aerialways; catwalks; curtain walls; window walls; store fronts; elevator fronts; entrances; skylights; metal roofs; industrial structures; hi-bay structures; rail, marine and other transportation structures; sound barriers; water process and water containment structures; air and cable supported structures; space frames; geodesic domes; canopies; racks and rack support structures and frames; platforms; walkways; balconies; atriums; penthouses; car dumpers; stackers/reclaimers; cranes and craneways; bins; hoppers; ovens; furnaces; stacks; amusement park structures and rides; and artistic and monumental structures.

- (1) Steel erection activities include hoisting, laying out, placing, connecting, welding, burning, guying, bracing, bolting, plumbing and rigging structural steel, steel joists and metal buildings; installing metal decking, curtain walls, window walls, siding systems, miscellaneous metals, ornamental iron and similar materials; and moving point-to-point while performing these activities.
- (2) The following activities are covered by this chapter when they occur during and are a part of steel erection activities: rigging, hoisting, laying out, placing, connecting, guying, bracing, dismantling, burning, welding, bolting, grinding, sealing, caulking, and all related activities for construction, alteration and/or repair of materials and assemblies such as structural steel; ferrous metals and alloys; non-ferrous metals and alloys; glass; plastics and synthetic composite materials; structural metal framing and related bracing and assemblies; anchoring devices; structural cabling; cable stays; permanent and temporary bents and towers; falsework for temporary supports of permanent steel members; stone and other non-precast concrete architectural materials mounted on steel frames; safety systems for steel erection; steel and metal joists; metal decking and raceway systems and accessories; metal roofing and accessories; metal siding; bridge flooring; cold formed steel framing; elevator beams;

grillage; shelf racks; multi-purpose supports; crane rails and accessories; miscellaneous, architectural and ornamental metals and metal work; ladders; railings; handrails; fences and gates; gratings; trench covers; floor plates; castings; sheet metal fabrications; metal panels and panel wall systems; louvers; column covers; enclosures and pockets; stairs; perforated metals; ornamental iron work; expansion control including bridge expansion joint assemblies; slide bearings; hydraulic structures; fascias; soffit panels; penthouse enclosures; skylights; joint fillers; gaskets; sealants and seals; doors; windows; hardware; detention/security equipment and doors, windows and hardware; conveying systems; building specialties; building equipment; machinery and plant equipment, furnishings and special construction.

- (d) The duties of controlling contractors under this chapter include, but are not limited to, the duties specified in sections 12-133.2-4, 12-133.2-7(b)(2), 12-133.2-11(b), and 12-133.2-12(e). [Eff 1/10/03] (Auth: HRS §396-4) (Imp: HRS §396-4)