

DCIW/CIEC Safety Institute

District Council of Iron Workers / California Ironworker Employers Council

August 7, 2018

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Marley Hart, Executive Officer
Occupational Safety & Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, California 95833

AUG 08 2018

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

Dear Ms. Hart,

This is a Petition to the Occupational Safety and Health Standards Board to amend 8 CCR section 7110 as shown in the attached document. We request that the Standards Board expedite review of this matter and move forward with rulemaking.


The procedures called for in the proposed amendments have been thoroughly tested through years of experience, are supported by an extensive track record of worker hours demonstrating their safety, and do not require vetting in an advisory committee process.

After extensive discussion with the Division of Occupational Safety and Health (DOSH), DOSH issued on April 21, 2017 a compliance advice letter (also attached) stating that DOSH would allow the use of procedures very similar to those called for in the proposed amendments, subject to certain conditions. However, many employers in steel erection and reinforcing steel construction are reluctant to rely on the DOSH letter without rulemaking to affirm that the procedures are fully in compliance with the law.

In addition, the general nature and partially overlapping applicability of existing provisions in Title 8 regulations other than section 1710 make it difficult to discern in some circumstances which requirements apply and what procedures are fully compliant at the worksites of concern to the Ironworkers and the Western Steel Council. The proposed amendments will provide the clarity needed to allow for full understanding of how to comply with section 7110 and other applicable regulations while assuring robust worker safety and promoting the orderly progression of work at affected construction projects.

Please feel free to contact either of us if you or your staff have any questions.

Sincerely,


Don Zampa
President
District Council of Iron Workers


Greg McClelland
Executive Director
Western Steel Council

Proposed Amendment to 1710(I)

(b) Definitions.

“Access opening” means any floor opening necessary to allow access to an incomplete level via ladders, stairs, scaffolds or other temporary means of access.

“Cone and bar barricade” or “(CBB)” means the structure described in subsection (I)(8) to prevent employees from moving too close to an access opening to be safe from stepping into it or falling through it.

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(I) Temporary Flooring - Skeleton Steel Construction in Multistory Buildings.

(1) The derrick or erection floor shall be solidly planked or decked except for access openings. ~~Planking or and decking shall be of equivalent sufficient strength, shall be of proper thickness to carry the working load and shall, at a minimum have strength equivalent to “structural plank” as defined under “lumber” in section 1504. Planking shall be not less than 2 inches thick full size undressed, and shall be laid tight. Both planking and decking shall be secured as soon as practicable.~~

(2) On buildings or structures not adaptable to temporary floors, and where scaffolds or approved fall protection is not used, safety nets shall be installed and maintained whenever the potential fall distance exceeds two stories or 30 feet, whichever is less.

(3) The exposed edges of all temporary planked and metal decked floors at the periphery of the building, or at interior openings, such as stairways and elevator shafts shall be protected by a single 3/8-inch minimum diameter wire rope of 13,500 pounds minimum breaking strength located between 42 and 45 inches above design finish floor height, unless a fall protection system is being used and that system is engineered by a registered, California State Structural Engineer. ~~Other~~ Guardrail protection may also be used if equal fall protection is provided.

Note: If the periphery fall protection is intended to be used as a catenary

line, it shall meet the provisions of Section ~~1710(m)(4)~~ 1670.

(4) Midrail Protection.

(A) Midrail protection shall be installed:

(i) as soon as the metal decking installation is complete has been installed and the floor is ready for turnover to and acceptance of custody by the controlling contractor; and

(ii) Shall be installed prior to the decked area being used by trades other than the steel erector or decking crew.

(B) The deck shall be deemed complete when the erector has established that the entire decking process for a specific elevation or floor is finished and has been inspected by the inspector of record or other inspecting agent.

(5) Installation of Metal Decking.

(A) Except as provided in Section 1710(n), metal decking shall be laid tightly and immediately secured upon placement as soon as practicable to prevent accidental movement or displacement.

(B) During initial placement, metal decking panels shall be placed to ensure full support by structural members.

(C) Framed metal deck openings shall have structural members turned down to allow continuous deck installation except where not allowed by structural design constraints or constructability.

(6) A metal decking holes and or openings shall not be cut until immediately prior to being permanently filled with installation of the equipment or structure for which the hole or opening is needed or intended to fulfill its specific use and which meets the strength requirements of Section 1632(b) of these orders, or the hole or opening shall be immediately covered.

(7) Where skeleton steel is being erected, a tightly planked and substantial floor shall be maintained within two stories or 30 feet, whichever is less, below and directly under that portion of each tier of beams on which any work is being performed. Ladder access points shall be staggered to ensure compliance with this requirement.

Note: Where a planked floor is not practical, subsection (1)(2) of this section applies.

(A) When gathering and stacking temporary floor planks, the planks shall be removed successively, working toward the last panel of the temporary floor so that the work is always done from the planked floor.

(B) When gathering and stacking temporary floor planks from the last panel, the employees assigned to such work shall be protected by an approved personal fall protection system attached to a catenary line or other substantial anchorage.

(8) A cone and bar barricade (CBB) may be utilized to protect workers from approaching to within unsafe distances from access openings when all of the following conditions apply:

(A) A solidly planked or decked erection floor is not practical during steel erection activities, including, but not limited to:

(i) Hoisting;

(ii) Connecting;

(iii) Welding;

(iv) Bolting;

(v) Rigging structural steel, steel joists and metal buildings;

(vi) Installing decking, siding, miscellaneous metals, ornamental iron, or similar materials;

(vii) Conducting inspections; or

(viii) Moving from point-to-point to perform these activities.

(B) At all times while the CBB is present, entry onto the work on the floor is kept under the exclusive control of the steel erector(s) and no other trades are allowed onto the floor.

(C) The CBB is maintained around all access opening borders and erected not less than six (6) feet or more than ten (10) feet from every access opening border.

(D) The CBB consists of vertical, bright green warning/support cones, with a minimum height of 28", stating with black lettering on both sides: **"DANGER ACCESS OPENING."**

(E) The warning/support cones are firmly connected to each other by solid plastic rod, or a similarly rigid and substantial connecting medium.

Note: The purpose of the CBB is not to create a physically impenetrable barrier, but to provide a substantial and unmistakable visual warning, coupled with physical resistance, to indicate that entry into a hazardous area will occur if the barrier is breached.

(F) The employer provides and documents training, by a qualified person working on a floor or working level where a CBB has been established, on the requirements of subsections (A) through (E) above.

DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH
Research and Standards Occupational Safety Unit
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April 21, 2017

Steve Rank
Executive Director of Safety & Health
Ironworkers International
1750 New York Avenue NW
Washington, D.C. 20006

RE: Cone-and-bar barricade around floor openings

Dear Mr. Rank,

This letter is provided in response to your request that Cal/OSHA acknowledge that the cone-and-bar barricade designed and built by the District Council of Iron Workers (Ironworkers) and the Western Steel Council (WSC) can be used to warn employees about the presence of floor openings at locations where steel erection work is taking place. At such locations, the California Code of Regulations, title 8, section 1635(c)(2), requires that the floor area adjacent to a floor opening be barricaded or the floor opening be covered when not attended by steel erection personnel.


The cone-and-bar barricade observed by Cal/OSHA staff consisted of high-visibility, 27-inch high cones with attached barricade bars placed 6 or more feet away from the perimeter of a floor opening. This barricade may be placed as described to warn employees about the presence of floor openings at locations where steel erection work is taking place, assuming that all applicable regulations are met, including but not limited to the following:

1. The cone-and-bar barricade system is used only where work is in progress that requires floor openings to be uncovered. (8 CCR §1635(c))
2. The floor or working level where such work is in progress is under the exclusive control of the steel erection employer and all entrances to the working level are barricaded to prohibit entry of unauthorized personnel. (8 CCR §1635(c)(1))
3. Steel erection workers entering the area enclosed by the cone-and-bar barricade for any reason use required personal fall protection. (8 CCR §1710(m)(2))
4. The floor openings below the work where the cone-and-bar barricade is placed are covered to ensure compliance with overhead protection and fall protection requirements. (8 CCR §1635(a)(1))
5. Floor openings not required to be entered using the cone-and-bar barricade are decked over or covered, labeled, and secured as required by section 1632(b). (8 CCR §1635(c))

6. The erection floor is fully decked except for access openings to allow performance of steel erection activities. (8 CCR §1635(b)(1), §1710(l)(1))
7. After work requiring floor access openings to be uncovered is completed, and prior to allowing other trades in the work area, guarding and covers for floor openings meeting the provisions of section 1632(b) are installed. (8 CCR §1635(c)(7))
8. Employees using the cone-and-bar barricade are trained on its use and limitations. (8 CCR §1710(q), §3203)

I hope this information is helpful to you. Please feel free to contact me if you have any questions.

Sincerely,



Eric Berg, Deputy Chief
Research and Standards

cc: Donald A. Zampa
Juliann Sun
Nathan Schmidt
Debra Lee