

DEPARTMENT OF INDUSTRIAL RELATIONS  
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

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Juliann Sum, Chief

Date: July 25, 2018

To: Jesus J. Garza  
Principal Architect  
Parsons  
6100 Bandera Road, Ste 800  
San Antonio, TX 78238  
[Jesus.Garza@parsons.com](mailto:Jesus.Garza@parsons.com)

Re: Fixed ladder requirements

Mr. Garza,

I write to you in response to your email inquiry dated April 26, 2018 for a clarification of California Code of Regulations title 8 section 3277(j). Specifically, your inquiry references the application of sections 3277(j)(1) (A) and (B) in an industrial setting for which you raise the following question and concern.

**Question:**

What is the maximum height that a fixed ladder may be installed without a landing when using a ladder safety system in lieu of a ladder cage?

**Response:**

Pursuant to title 8 section 3277(j)(1)(A), landing platforms are required at each 20 feet of height or fraction thereof for any ladder greater than 20 feet in height that is not equipped with a ladder cage or well. Therefore, the maximum height for a fixed ladder that is not equipped with a cage or well is 20 feet. Ladders equipped with cages or wells must have landing platforms at each 30 feet of height or fraction thereof pursuant to section 3277(j)(1)(B). Therefore, the maximum height for a fixed ladder equipped with a cage or well is 30 feet.

Ladder safety systems are only permitted by title 8 regulations for use on ladders to access towers, water tanks, and chimneys pursuant to sections 3277(g)(2) and (m). Unless the fixed ladder in question meets any of the exceptions included under section 3277(g)(2), a cage or well would be required if the ladder is greater than 20 feet in height.

§3277. Fixed Ladders.

\* \* \* \* \*

(g) Cages or Wells.

\* \* \* \* \*

(2) Dimensions and Maximum Length. Cages or wells conforming to the dimensions shown in Figs. 1, 10, and 11 shall be provided on ladders of more than 20 feet to a maximum unbroken length of 30 feet.

Exceptions:

1. Fixed ladders on fire hose drying towers are not required to have a cage, well, offset platform, or ladder safety device if they do not exceed 30 feet in length and provided their use is restricted to trained fire fighters or others equally trained in ladder use.
2. Fixed ladders on outdoor advertising structures covered by Article 11.
3. Ladders equipped with ladder safety systems as provided under subsection (m).

\* \* \* \* \*

(m) Ladder Safety Systems. Ladder safety systems may be used on tower, water tank, and chimney ladders over 20 feet in unbroken length in lieu of cage protection. No landing platform shall be required in these cases. All ladder safety systems shall meet the design requirements of the ladders which they serve [See subsection (c)].

Based on the information in your email, the ladders in question are to be standard fixed ladders installed in/on industrial buildings. As such, ladder safety systems may not be used in lieu of cage or well protection. Additionally, since these ladders would not meet any of the exceptions under section 3277(j)(1), landings would be required at each 20 feet of height for ladders without cages or wells or at each 30 feet of height for ladders that are equipped with cages or wells.

§3277. Fixed Ladders.

\* \* \* \* \*

(j) Landing Platforms.

(1) When ladders are used to ascend to heights exceeding 20 feet, landing platforms shall be provided as follows:

(A) Where no cage, well, or ladder safety system is provided, landing platforms shall be provided for each 20 feet of height or fraction thereof.

(B) Where a cage or well is provided and no ladder safety system is provided, landing platforms shall be provided for each 30 feet of height or fraction thereof.

(C) Each ladder section shall be offset from adjacent ladder sections at each landing.

(D) Where installation conditions (even for a short, unbroken length) require that adjacent sections be offset, landing platforms shall be provided at each offset [See Subsection (m)].

Exceptions to subsection (j)(1):

1. Ladders used primarily in construction operations, fire escape ladders, and ladders equipped with treads.
2. Ladders on high-voltage transmission towers, chimneys, smoke stack ladders, water tower ladders and similar fixed ladders on permanent installations which are used either infrequently or for emergency only, provided the employee who uses the ladder is supplied with and wears approved personal fall protection equipment, which can be utilized if a rest period is required.
3. Ladders in underground mines as covered by the Mine Safety Orders.

### **Concern:**

The requirements of title 8 sections 3277(j)(1)(A) and (B) are confusing in that section (A) allows fixed ladders up to 30 feet in height if you have a fall arrest system and section (B) reads as though you must have a cage and not a ladder safety system for ladders that are 30 feet in height.

### **Response:**

Section 3277(j)(1)(A) applies to situations in which no cage, well, or ladder safety system is in place for a fixed ladder. A landing platform at a maximum of each 20 feet of ladder height is required in this situation. Section 3277(j)(1)(B) applies to situations in which a ladder cage or well is present and no ladder safety system is provided. In this case, the maximum intervals for the required landing platforms would be 30 feet of ladder height.

Cal/OSHA agrees that the requirements of sections 3277(j)(1) (A) and (B) are not clear as no maximum platform height interval is specified for fixed ladders equipped only with a ladder safety system. The application of this, however, would be limited to fixed ladders that fall under the exceptions for cages or wells such as those for fire hose

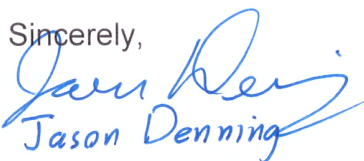
drying towers and advertising structures pursuant to section 3277(g)(2). Any fixed ladders that do not meet the exceptions within 3277(g)(2) would require ladder cages or wells for heights greater than 20 feet.

The Occupational Safety and Health Standards Board (OSHSB) has recently proposed amendments to title 8 section 3277 as part of the adoption of the federal OSHA Walking Working Surface standard that will potentially clarify this issue. If you are interested in viewing this proposal, you may access the information from the OSHSB website at the internet link below. As this rulemaking is only proposed, the current title 8 requirements of section 3277 as described in this letter remain in effect.

<https://www.dir.ca.gov/OSHSB/Walking-Working-Surfaces-HORCHER.html>

Thank you for your interest in occupational safety and health. Please feel free to contact me if you have any further questions.

Sincerely,

 for Eric Berg  
Jason Denning

Eric Berg  
Deputy Chief  
Research and Standards

Cc: Jason Denning, Yancy Yap  
File: 3277