

OSHA Q&A

Fully Planked and Decked Scaffold

Question: When may the space between scaffold planks or between scaffold planks and uprights exceed one inch in width?

Answer: The relevant standard, 29 CFR §1926.451(b)(1)(i), states:

Each platform unit (e.g., scaffold plank, fabricated plank, fabricated deck, or fabricated platform) shall be installed so that the space between adjacent units and the space between the platform and the uprights is no more than 1 inch (2.5 cm) wide, **except where the employer can demonstrate that a wider space is necessary (for example, to fit around uprights when side brackets are used to extend the width of the platform).** (Emphasis added).

In addition, 29 CFR §1926.451(b)(1)(ii) states:

Where the employer makes the demonstration provided for in paragraph (b)(1)(i) of this section, the **platform shall be planked or decked as fully as possible** and the remaining open space between the platform and the uprights shall not exceed 9 ½ inches (24.1 cm). (Emphasis added).

The standard requires that the space between the scaffold planks or between scaffold planks and uprights be no more than one inch wide unless the employer can demonstrate that a wider space is necessary. However, the platform must still be planked or decked as fully as possible. As explained in the rule and preamble, one situation where the exception would apply is when the platform must fit

around uprights when side brackets are used to extend the width of the platform. As further clarification, the preamble to the final rule, at 61 FR 46039, explains why the exception was added:

In order to comply with the existing rule, some employers have modified the last plank (notched slanted, or cut it to size). This can lead to a significant reduction in plank strength, and possibly cause tipping of the plank (sideways) if eccentrically loaded. Therefore, to deal with this problem, proposed and final rule paragraph (b)(1) have modified the corresponding requirement of the existing standard by requiring the span between uprights to be planked or decked as fully as possible, but allowing up to 9 ½ inches between the planking or decking and the guardrail supports. As explained above, 9 ½ inches is the maximum allowable open space.

The exception to the one inch limitation in width was added to prevent employers from modifying the planks used to construct the platform because such modification could cause a tipping hazard. Therefore, platforms should be constructed in such a way that they are planked as fully as possible without modifying any of the planks. In other words, the space between scaffold planks or between scaffold planks and uprights must be as narrow as possible and may only exceed one inch in width if the space cannot be reduced without

modifying any of the planks used to construct the platform. In no circumstances, however, may the width between scaffold planks or between scaffold planks and uprights exceed 9 ½ inches. If the employer can demonstrate that complying with the one inch limitation in width would require modifying any of the planks used to construct the platform, the exception would apply.

If you need additional information, please contact us by fax at: U.S. Department of Labor, OSHA, Directorate of Construction, Office of Construction Standards and Guidance, fax # 202-693-1689. You can also contact us by mail at the above office, Room N3468, 200 Constitution Avenue, N.W., Washington, D.C. 20210, although there will be a delay in our receiving correspondence by mail.



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MONTHLY TOOLBOX TALK

STAYING ON THE SAFE SIDE OF CRANE BOOMS AND BUCKETS

When you're busy doing your job down on the ground, it's easy to forget what's going on over-head. But as a competent construction worker you must know what's going on around you-including up above. In an accident involving a crane boom, the victim is not likely to have a chance to learn from. The rule of thumb for working around cranes is simple: stay out from under crane booms, buckets or suspended loads. This applies whether you are working, walking through or just standing around. And if you're going to be anywhere near a crane operation, you must wear a hard hat.

Using a crane requires planning: Cranes must be positioned so that the boom or bucket won't be swung over workers. It may be necessary to have workers leave the area during the operation or schedule the operation for a time when workers aren't around. On a busy job site, the swing area should be roped off or barricaded and clearly marked with warning signs. A traffic controller should be posted on crowded sites.

Beware of falling material or concrete! A chunk of half hard material from a concrete operation is the most common spill from a bucket and the most frequent cause of crane accidents. A hard hat is poor protection from falling concrete. Stay well in the clear, both when the bucket is landing and when it is lifting away.

You take pride in doing your job quickly and efficiently. Because crane booms are usually so far away- way up there – it's tempting to trust in luck in order to get your work done. Resist the temptation. You're much too valuable to take a chance with your life.

In order to avoid accidents on the job site, not only is it necessary for the workers to be alert and safety conscious, it is also important for crane operators to follow proper safety procedures. The most important procedures are the hand signals. The following are the most commonly used hand signals for directing crane lifting operations. Some special operations may require adaptations of these basic signals. When using hand signals be sure the operator can see you and that both of you understand all the signals. You and the operator are in charge of an important operation.

Co-workers' lives depend on your skills. A wrong signal could cause a serious injury or possible death. **THINK SAFETY!**

HOIST – Extend the right arm straight out and raise the forearm to vertical, forefinger pointing up, and then move hand in small horizontal circle.

LOWER – Extend the right arm downward, forefinger pointing down, then move hand in small horizontal circle.

RAISE BOOM- Extend right arm straight out, fingers closed and thumb pointing upward.

LOWER BOOM- Extend right arm straight out, fingers closed and thumb pointing downward.

SWING- Extend right arm away from body, point with finger in direction of swing of boom.

STOP- Right arm extended down with wrist bent and palm down and open.

EMERGENCY STOP- Right arm extended, palm down, then move hand rapidly right and left.

TRAVEL- (both tracks, crawler cranes only) Use both fists in front of body, making a circular motion about each other to indicate the direction of travel – forward or backward.

DOG EVERYTHING- Clasp hands in front of the body.

RAISE BOOM & LOWER LOAD- Extend arm with thumb pointing up, then flex fingers in and out as long as load movement is desired.

LOWER BOOM & RAISE LOAD- Extend right arm with thumb pointing down, then flex fingers in and out as long as load movement is desired.

As for the rest of us on the job, once again, remember – stay alert when working near any crane operation. Avoid working under a moving load –stay clear of the counter balance – and always remember that the crane operator's vision may be obscured; be on guard for your own safety.

SAFETY REMINDER: Keep all parts of a crane, fall lines, hook, block, and load a minimum of 15 feet from all electrical lines.