Scaffolding:

What OSHA Really Looks For

BY JUSTIN BREITHAUPT, JR.

ALL TOO OFTEN, A VISIT FROM OSHA REVEALS DEFICIENCIES, NOT ONLY IN THE SCAFFOLDING, but also in the knowledge of the masonry foreman or business owner. If you're the guy paying the fine, you should have the knowledge to prevent it. Learning ahead of time is always much, much cheaper.

OSHA issues related to scaffolding are the great majority of all OSHA citations that mason contractors receive. This article will teach you where to quickly get the information you need, and what OSHA looks for. We'll discuss how the regulations apply to conventional frames and crank-up scaffolding.

The GCs are getting tougher than OSHA

EVERYONE WANTS a safe workplace. It helps with workers' comp rates, too, but it can get complicated when the GC's safety people are forcing you to meet regulations that actually are tougher than OSHA's. And, sometimes, these safety consultants are not aware that different regulations exist for different types of scaffolding.

Before working for a new GC, have a talk with his safety people to find out how their regulations differ from OSHA's. Sometimes complying with them requires extra expense, or they restrict your men enough to lower your production figures. Find out *before* bid time.

For example, many GCs are requiring mason contractors to keep the wall in front of the masons at least 38 inches high, to eliminate the fall hazard. This would require twice as many board hops on frames,

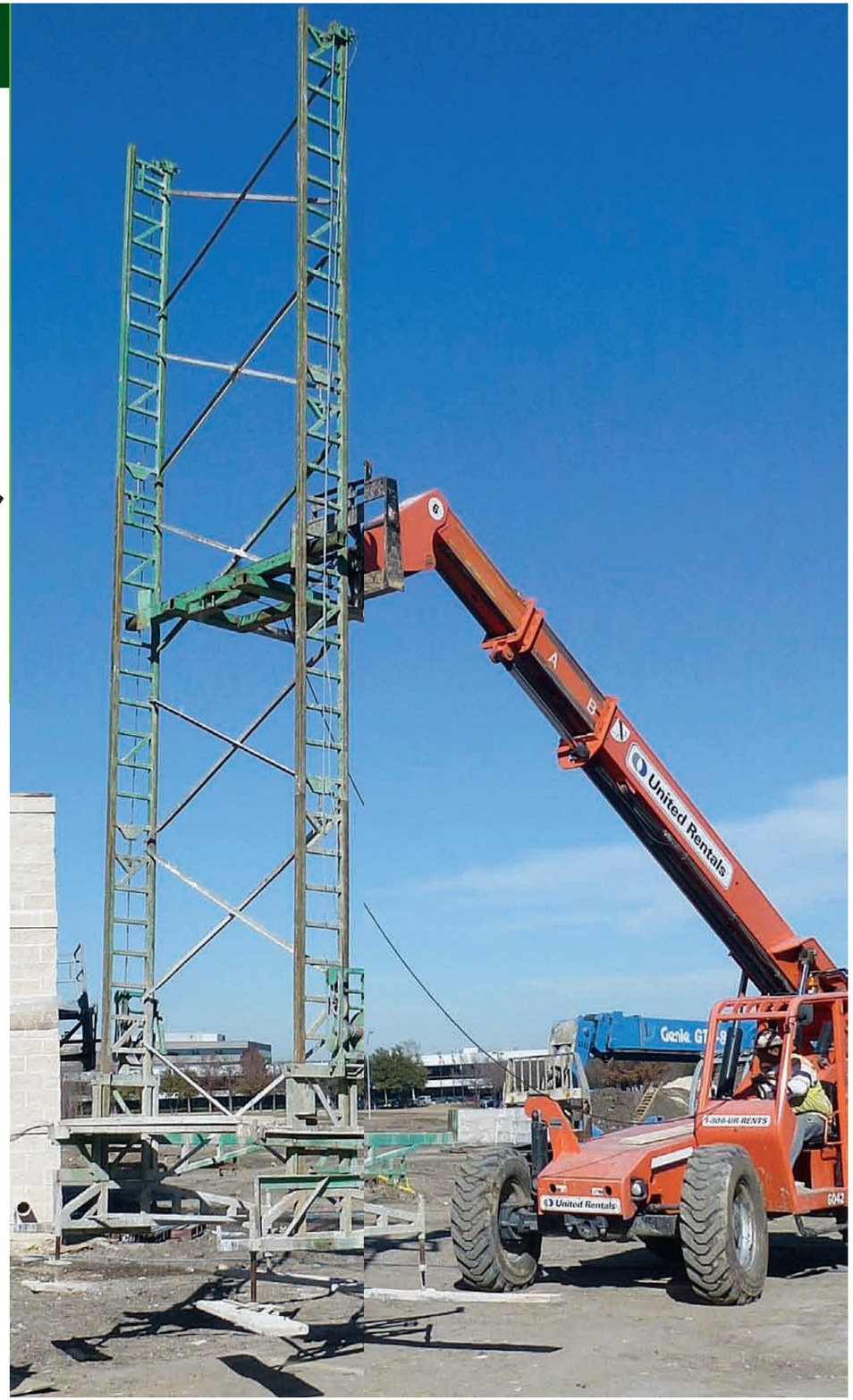

Photo 6: A distinct advantage of crank-up type scaffolding is moving the towers from wall to wall intact. You eliminate the time, labor, and hazards of tear down and re-building frame scaffolding.

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adding thousands in labor. However, crank-up style scaffolding works this way automatically.

How to find the regulations

THE BEST WAY to be prepared for that visit from OSHA, or your GC's safety man, is to educate yourself *now,* before any citations are written, or before the GC stops work to correct problems. The internet has a wealth of information to get you started:

- The **Mason Contractors Association of America** has an extensive online safety library at www.masoncontractors.org. For members, there are downloadable documents as well as safety videos. This resource alone is well worth the investment in membership.
- **The Scaffold and Access Industry Association** has free guides at www.saiaonline.org/FreeTips.
- **Independent scaffold trainers.** Ask around in your area for the names of knowledgeable scaffold trainers. Take a day off to attend a basic training class, and if you feel like the trainer really knows his stuff, put his

number in your cell phone. He will be an invaluable resource for answers to tough questions.

- **The manufacturer of your scaffolding.** The manufacturer should know every applicable OSHA and American National Standards Institute standard for the scaffolding you own, and should be able to tell you how to meet those standards. Non-Stop provides 24/7/365 tech support for safety questions.

Guardrails are installed on the ground and stay in place as the wall is built. No one ever leaves the "safety zone" on adjustable scaffolding.

- **Bookmark this link:** www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10916. As you read it, realize there are *general* standards that apply to all scaffolds (for instance, the use of guardrails), and then specific standards that apply only to different types of scaffolding, such as suspended scaffolds.

Photo 3: Guardrails, end rails, and safe access are always in place on crank-up style scaffolding. The towers are legal to climb.

Photo 4: Providing safe access to conventional scaffolding can be tricky. This extension ladder only provides access to the first level. Clamp-on ladders might be better here.

Take a few seconds and scan your scaffold as you drive up on the job. Missing safety components are sometimes easier to spot from a distance.

What OSHA is looking for: FUSES

WHENEVER YOU DRIVE UP to your job, take 10 seconds to think like a compliance officer. If you can spot a problem from the street, so can he. The top 5 things they look for are Falls, Unsafe access, Struck by falling objects, Electrocution, and Scaffold collapse – FUSES.

Fall protection

LOOK FOR GUARDRAILS at 10 feet, end rails, a maximum gap of 14 inches from the platform to the work surface, no gaps more than one inch between planks (except to fit around uprights), and proper six- to 12-inch plank laps. On frames, every work level must be properly decked. Proper planking is much easier on crank-up type scaffolding. Since there is only one work platform to assemble, it climbs the tower intact, and is never removed and re-planked as you go up the wall (see Photo 3).

Unsafe access

YOU MUST PROVIDE access to *all* working levels of a scaffold. That's easy with an attachable ladder or stair tower, but be careful with extension ladders. They only

provide access to *one* level (see Photo 4). Only erectors are allowed to climb frames that don't meet the Integral Climbing Ladder Standard 1926.451(e)

(6). All Non-Stop and other elevating towers currently produced meet this standard and are legal to climb. Safe access is built in.

Struck by falling objects

YOU MUST CONTAIN falling objects. That means using toe boards, screens *or* barricading the area around the scaffold at ground level. Non-Stop makes an overhead protection system for falling object protection. A good rule of thumb: Never work under or over another craft.

KEEP YOUR SCAFFOLDING and forklifts at least 10 feet away from power lines, and farther if they are carrying more than 50,000 volts – check with the power company.

Photo 1: Short mud sills reduce shovel work and insure that they won't be re-used for scaffold planks.

Electrocution

KEEP YOUR SCAFFOLDING and forklifts at least 10 feet away from power lines, and farther if they are carrying more than 50,000 volts – check with the power company. Another overlooked trouble area is extension cords. If you can see any single conductor, even if it's not bare, replace it. This occurs where the jacket separates from the plug or the receptacle, exposing black, white or green wires. This is an automatic citation.

Scaffold collapse

PLANKS MUST BE LAID PROPERLY and have the required six- to 12-inch overhang and overlap. X-braces must be in place. You must use base plates on concrete, and leveling jacks and mud sills on dirt. Beware of muddy scaffold boards. That's usually a sign it was once used for a mud sill, and you can be cited for that. It's better to use a short mud sill, or pad, that can never be used for a scaffold plank (see Photo 1).

Be sure to use tags to indicate the state of the scaffold. Frame scaffolding must be tied in, when the base to height ratio exceeds 4:1. This is calculated differently for crank-up scaffolds. The 4:1 ratio is measured to the work platform, not the top of the tower. An untied tower can be higher than the 4:1, since there is no load above the platform. Consult the individual manufacturer for the maximum free-standing height.

Do it right, every time

WHEN MOVING FRAME SCAFFOLDING from one wall to the next, you must tear it down in a safe manner, and re-erect it in a safe manner, every time you move it. Missing one component can cost you. As one man said, "It's like a thousand-question test, and if you miss one, you fail."

Alternatives exist. Using tower type crank-up scaffolding, your guardrails are installed once, on the one level, and travel up and down with you. It's picked up with a forklift

Be sure to use tags to indicate the state of the scaffold.

and moved to the next wall intact (see Photo 6). All the safety rails stay in place. This feature eliminates all dismantle and re-erection labor in your job, saving you thousands.

Terry Watts, the owner of True Bond Masonry in Shreveport, La., uses both types of scaffolding: "When the safety inspectors see our Non-Stop, they just keep walking. When we set it up, everything's like it's supposed to be. It's saved us thousands in fines. It's our frames we really have to be careful about. You miss one little brace or have your ladder in the wrong spot, and you're sunk."

Chad Bentley, head of a medium-sized family masonry business in Cullman, Ala., recently switched over to Non-Stop Standard-Duty scaffolding. He describes his experience, "OSHA came through here and wrote up all my competitors on frames. They came to my job, took one look at the scaffolding, and left. Everything was right." **IMAS**

Good to Know

- Crank-up type scaffolding falls under the ANSI A10.8 (2011) Scaffold Standard, Section 24, which is enforced by OSHA as if it were in the OSHA regulations. You can get a copy at www.nonstopscaffolding.com, or call 800-845-0845 to speak to tech support for more information.
- A wallet-sized checklist covering the high points in this article is available free from Non-Stop. Use the "Contact Us" link at www.nonstop-scaffolding.com, or call 800-845-0845 with your address.
- If you are an adjustable scaffold user being visited by a safety inspector, call us immediately at 800-845-0845, and we will assist with any questions he may have. Sometimes inspectors are not aware of the specific standards for adjustable masonry scaffolding.

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Special thanks to Dave Glabe of DH Glabe and Associates Engineering in Westminster, Colo., whose firm focuses on the engineering of specialty items such as scaffolding, shoring, formwork, falsework, rigging, construction plans, demolition plans, structural analysis, fall protection devices and other various temporary structures. www.glabe.com