

[Safety article update for Doka website]

Working with Formwork: Are you Safe?

In tough everyday construction site situations, everyone should be aware of the safety precautions needed for formwork that will ensure a safe jobsite. Worksite safety is the responsibility of all involved – from the engineer to the contractor to equipment suppliers and, of course, the workers themselves. The safer the work environment, the fewer accidents, or even better none at all, with the added benefit of increased productivity at the worksite.

According to Michael Schaeffer, Vice President of Sales, North & South America at Doka, there are basic safety concerns to consider when using formwork; these include access, protected work areas, easy, safe setup, and tie-off points.

Safety in Formwork

“Proper access is a really important component of formwork use at a worksite,” Schaeffer explained. “Workers must be able to get to the workplace using safe horizontal and vertical access routes.” Stair towers, such as Doka’s DokaScaff Stair Tower, allow safe access to various points on the formwork for either tight areas or two-way traffic.

At construction sites, falls are one of the top killers in the industry every year and therefore, fall protection is a major safety concern. With formwork, it is necessary to have steady, protected work areas for the crew.

“The platforms that support the crew where they will be working must quickly and easily lock in place and have secure guardrails to protect workers from falls,” said Schaeffer. Using Doka’s Folding Platform K will provide this security. It is preassembled and onsite will simply fold up, fly into position and then lock into place. Another method of protection is Doka’s Perimeter Handrail Clamp S, which provides protection against fall hazards on building edges and formwork.

When setting-up and dismantling a formwork structure, follow instructions carefully to ensure safety. Ties, installed properly, will hold the formwork firmly in place as the concrete is poured. The formwork must be properly supported before removal of the ties and the formwork is removed from the set concrete.

Doka’s Frami Xlife handset wall forms ~~use~~has integral safety tie-off handle points designed into every panel ~~per that meet~~ OSHA requirements. Professional design and ~~support~~training for the correct use onsite are always recommended to ensure a safe working environment.

“One of the common mistakes ~~that contractors make~~made at a worksite is not following the engineering drawings for assembling and setting up the formwork,” said Schaeffer. “And not following set-up instructions letter-by-letter can lead to accidents.” Trying to cut corners to save set-up time could result in unsafe working conditions and unnecessary downtime.

Importance of Safety

For a construction worker, “feeling” safe is as important as actually being safe. It is important for productivity and peace-of-mind that a worker has a feeling of security as they move about the formwork structure. A worker will perform his duties much more productively if they are comfortable with the structure under their feet.

“If you are working on top of something that feels rickety, you don’t feel as confident and that can result in a loss of productivity,” Schaeffer explained. “You want your formwork structure to be outfitted with equipment that meets OSHA requirements for fall protection.”

Always remember that safety precautions include good guardrails and toe boards, and good, solid anchorages where workers can tie-off using their own personal fall arrest systems. A worker also needs a safe, easy way to climb from one area to the next, so it is important to have proper ladders installed for easy, safe access from Point A to Point B on the formwork.

“Optimum safety means optimum productivity,” Schaeffer noted. “If a worker feels comfortable and safe, he will move easily from one task to the next, getting the work done quicker. A worker is not as productive if he feels hesitant about moving around the formwork.”

Having the formwork pre-assembled at the supplier’s shop can also provide safety advantages. As opposed to the often crowded, cluttered construction site, a shop will have clean, smooth, level areas for building the formwork. This allows the formwork to be more accurately assembled, more solidly built, and be aligned better— important aspects for safe construction and use.

“Pre-assembly at the shop gives the supplier access to all the safety devices necessary for the formwork structure and ensures that they will be properly installed,” said Schaeffer. “You can add in all the “bells-and-whistles,” such as guardrails and trap doors, and make sure that everything is properly aligned and works smoothly.”

Design for Safety

A contractor should expect the formwork supplier to have all necessary safety equipment included in the system design and in the bid. The formwork supplier should list all safety materials that will accompany the formwork structure.

While safety is never a simple matter, if safety equipment features are easy to use then workers will use them. “For most of Doka’s equipment, the only tool needed by a worker in the field is a hammer for safe assembly,” noted Schaeffer.

About DOKA

With innovations and more than 50 years’ experience in formwork engineering, Doka is one of the world’s leading single-source suppliers of complete formwork solutions. Doka has a comprehensive range of products and services with which it can offer economical formwork

solutions in practically all areas of casting concrete construction, ranging from multistory residential buildings and high-rises to complex infrastructure projects, such as bridges, water treatment plants, and power stations. For more information, please visit www.doka.com.
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