

Flying forms—Struck-by hazards

Explain dangers

Flying forms are popular because they can save time and, in some cases, are safer than using built-in-place methods.

Although there are some advantages to using flying forms, there are also some disadvantages. Flying forms have some significant hazards associated with them that can lead to serious injury if proper precautions aren't taken.

Being hit or struck by falling material or moving forms is one of the main hazards associated with flying forms. These types of struck-by hazards can cause serious injuries.

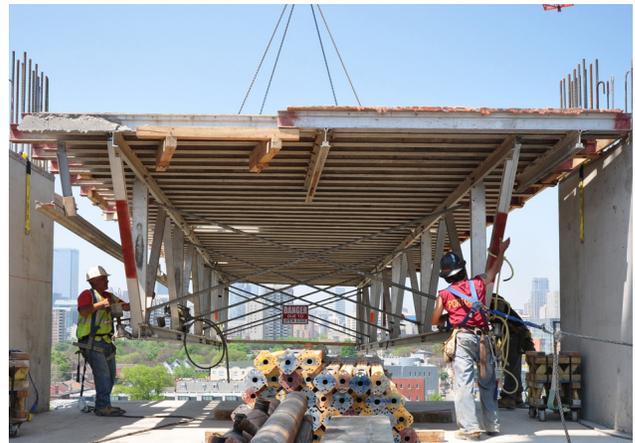
Flying forms are very heavy moving objects. If one hits you, it can cause cuts, broken bones, contusions, or amputations.

Here are some scenarios that can lead to a form, or something on the form, hitting a worker.

- A worker is positioned between an incoming form and a column or wall.
- The form is improperly or inadequately braced or supported.
- A form that is not properly secured can roll off the edge and strike workers below.
- Loose material or equipment on a flying form can fall and strike workers below.

Identify controls

- Flying forms must be designed by a professional engineer and constructed, hoisted, moved, and set according to the instructions of the designer or manufacturer. Always follow these instructions.
- Put danger signs and barriers in place before moving any forms so that all workers and the public are aware of what is happening and are protected. Dangerous areas include the work area below the flying form, the floor area from where the form is pushed out, and the top floor area where the form will be received.
- Make sure all flying forms are free of loose material.
- Ensure that the landing area is free of debris so you and other workers don't slip and fall.



- Ensure that each guardrail has a toeboard, in addition to the other required components, to prevent material from falling off the work surface.
- Replace guardrails and shoring immediately after the flying form is flown out.
- If guardrails have been removed, workers must wear a personal fall protection system attached to an individual anchor that is independent of the flying form.
- During the stripping process, if the flying form has been lowered and left on rollers, make sure it is secured to the structure to prevent it from rolling off.
- Be aware of your surroundings and never place yourself between the formwork and column or wall.
- Hoisting and moving forms safely requires clear and reliable communication. Hand signals along with direct radio or cell phone communication between the signaller and the crane operator should be used.

Demonstrate

If the situation allows, take the crew to an area where flying forms are being placed so everyone can observe the process.

The manufacturer's instructions should be available on site. Show your crew the location.

Show them the components of a guardrail system, focusing on the toeboard and its purpose.