

Crane Suspended Concrete Bucket Placement JHA

Worked instructional example

Work and worksite

A building concrete crew will place fresh concrete into a released ground-level footing form using a crane-suspended discharge bucket. Workers control discharge from designated positions beside the form. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- Crane, rigging, bucket weight and receiving-form capacity are addressed in the lift and placement plans.
- The area has separated loading and discharge positions with protected reinforcing projections and safe footing access.
- This excludes pump hoses, elevated placement, riding the bucket and entry beneath a raised bucket.

Questions before work

- How are filled weight, bucket suspension and load route established?
- What controls prevent unintended gate opening?
- Where can the gate operator stand clear of the suspended bucket?

Task Hazard Control

1 Release the receiving footing

Hazard: An unsupported form or unsafe footing edge can fail as concrete is deposited.

Control: Foreperson confirms form and reinforcement release, safe access and protected projections. Match the placement sequence to receiving capacity and keep unrelated workers outside the discharge zone.

Verification: Foreperson compares the planned sequence with the current form release.

Reasoning: The crane plan does not release the form for loading.

2 Inspect and fill the bucket

Hazard: A defective gate or overload can spill concrete or exceed lifting capacity.

Control: Inspect suspension and gate controls, including the positive means preventing accidental dumping. Load within the bucket rating and lift plan using the actual filled weight; keep workers clear of truck and bucket pinch points.

Verification: Operator and rigger check bucket identification, gate closure and load basis.

Reasoning: Concrete volume is not a substitute for total lifted weight.

3 Move the suspended bucket

Hazard: A swinging bucket or falling concrete can strike workers.

Control: Use qualified lift roles and agreed signals; clear the travel path and keep workers out from under the bucket. Control orientation by the planned method from a safe position, without wrapping a line around the body.

Verification: Lift lead verifies clearance before movement and monitors the route.

Reasoning: A nearby guide still needs separation from the moving load.

Complete the work and hand over

4 Position for discharge

Hazard: The gate operator can be trapped between the bucket and form.

Control: Bring the bucket to the planned position and maintain a stable operating relationship. Operate the gate from outside pinch and fall paths using the specified mechanism; do not push the suspended bucket by hand to force alignment.

Verification: Gate operator and crane operator confirm the stop/discharge signal before opening.

Reasoning: Discharge creates a new interface between hoisting and placement.

5 Place and close the gate

Hazard: Concrete surge or leaking discharge can overwhelm the receiving area or strike workers.

Control: Discharge in the planned increments while monitoring forms and access. Stop for form movement or loss of control; close and secure the gate before moving the bucket back through the route.

Verification: Foreperson monitors form response and gate operator confirms closure.

Reasoning: Gate closure must precede the return lift.

6 Land and secure the bucket

Hazard: A raised or unstable bucket can move during cleaning and maintenance.

Control: Land on its designated stable support, remove the hoisting exposure and secure gate and hazardous energy before servicing. Manage wet-concrete residue and hand over any equipment defects.

Verification: Operator confirms the landed safe state before cleanup personnel approach.

Reasoning: A suspended bucket is not a cleaning platform.

Pause and reassess

- Gate restraint fails or leakage cannot be controlled.
- Form movement, load-weight uncertainty or lifting clearance changes.
- A worker enters the load path or communication is lost.

Improve the controls

Needs improvement: Work carefully and wear PPE.

More useful: Use qualified lift roles and agreed signals; clear the travel path and keep workers out from under the bucket. Control orientation by the planned method from a safe position, without wrapping a line around the body.

Needs improvement: Check that everything is ready.

More useful: Foreperson confirms form and reinforcement release, safe access and protected projections. Match the placement sequence to receiving capacity and keep unrelated workers outside the discharge zone.

Decisions that change the analysis

Can workers ride the bucket to reach the form?

No. Provide separate suitable access. Bucket transport is a material-lifting task; this example excludes personnel transport and working beneath the raised bucket.

What must the crew record for actual use?

Identify the actual equipment and work boundaries, responsible people, applicable criteria, inspection findings and open actions. Resolve changes with affected crews and obtain required project authorization before work.

Training needs

- Applicable crane operator, signal-person and qualified-rigger roles for this lift.
- Bucket gate operation, footing access and wet-cement contact instruction.

Confirm applicable qualifications and actual training evidence for the people assigned. Related toolbox talks support discussion; they do not establish competence.

References and adaptation

OSHA 1926.702 Concrete equipment and tools

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.702>

OSHA 1926.701 Concrete construction

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.701>

OSHA 1926.21 Safety training and education

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.21>

References reviewed October 9, 2026. Use actual equipment and product instructions, project design and site requirements. This instructional example supplies no actual inspection results, signatures or work approval.