

Suspended Slab Concrete Placement JHA

Worked instructional example

Work and worksite

A placing crew will pump concrete into one released cast-in-place suspended building slab on an erected shored form deck. The formwork and placement plans control the pour sequence, temporary loading, protected work routes and support monitoring. Pump setup and later finishing have separate analyses. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- Current formwork and placing documents establish permitted construction loads, pour distribution and progression; no crew member may infer capacity from the deck's appearance.
- The pre-pour review, assigned shoring inspections and communication with the pump operator must be established for the actual bay and the area below.
- This is partial coverage of elevated concrete placement, limited to a shored suspended slab. Concrete buckets, post-tensioning, pump setup, form erection, powered finishing and stripping are excluded.

Questions before work

- Who releases the current bay and verifies the concrete distribution and temporary loading limits?
- How will assigned observers inspect shoring before, during and immediately after the pour without entering a hazardous area?
- Who can stop the pump and deliveries when the form system, access or pour progression changes?

Task Hazard Control

1 Confirm the bay and pour release

Hazard: An unreleased deck or changed pour sequence can impose loads the temporary structure cannot carry.

Control: Placing and formwork leads compare current drawings, pre-pour findings and specified loads with the actual bay. Resolve open actions before accepting concrete; identify who controls pour progression and who can stop flow.

Verification: Both leads confirm the bay release and record unresolved loading or support questions.

Reasoning: Placement loads a temporary structural system as well as the concrete area.

2 Establish protected placing positions

Hazard: Workers can fall at edges or openings, or overload the deck by staging hose and supplies together.

Control: Set the specified crew routes and hose support arrangements without removing form restraint. Protect edges and openings and distribute staging within the released limits; close affected areas below and preserve evacuation routes.

Verification: Access lead and formwork lead check routes, protection and staged loads before delivery.

Reasoning: The working arrangement can change loads before the first concrete arrives.

3 Verify support monitoring and pump coordination

Hazard: A warning sign can be missed or flow can continue after a stop request.

Control: Assign the required shoring checks immediately before, during and immediately after placement. Observers use planned safe positions and report settlement, movement or loss of contact. Test the agreed communication and stop signal with the pump operator before flow.

Verification: Formwork lead checks the inspection assignments; placing lead confirms the communication test.

Reasoning: A named observer needs a safe viewing position and a usable way to interrupt the pour.

Complete the work and hand over

4 Place within the released progression

Hazard: Concrete piled ahead of the pour front can cause local overload; hose movement can strike or unbalance workers.

Control: Operator and placing lead follow the actual controlled sequence and distribution limits. Keep hose handlers on protected routes and other workers outside hose movement. Maintain the flow-stop response; pause for unexpected movement or blockage and use the separate pump procedure rather than attempting a pressure-side repair.

Verification: Placing lead watches distribution while assigned observers report actual support findings.

Reasoning: Control depends on where the concrete accumulates, not just total volume delivered.

5 Consolidate and manage worker exposure

Hazard: Congested bars and wet concrete can cause trips, tool damage, splash and chemical burns.

Control: Use the specified consolidation method and maintained electrical tools with cords routed out of traffic and standing water. Maintain designated footing and protect skin and eyes with suitable equipment; remove contamination promptly using the provided washing arrangements.

Verification: Crew lead checks footing, tool condition and workers' ability to reach clean washing supplies.

Reasoning: Working longer in contaminated clothing can increase injury even without immediate pain.

6 Close the pour and transfer restrictions

Hazard: Later crews can remove support or add loads before the slab can sustain them.

Control: Complete the immediate post-placement shoring check and record actual findings. Hand the bay to finishing and curing roles with support, access and loading restrictions intact; keep subsequent material staging and support removal under separate release decisions.

Verification: Formwork and placing leads record findings and brief the receiving crew on remaining restrictions.

Reasoning: A completed pour is not a strength test or a stripping authorization.

Pause and reassess

- The bay release, pour distribution or intended construction loading changes.
- An observer reports settlement, support movement, contact loss or another unexplained change in the form system.
- A pump stop signal fails, safe placing access is lost or an opening becomes unprotected.

Improve the controls

Needs improvement: Pour evenly and keep an eye on things.

More useful: Placing lead follows the released progression and distribution limits; assigned observers inspect the shoring before, during and immediately after placement and can stop flow.

Needs improvement: The concrete is in, so the next crew can use the slab.

More useful: Leads hand over actual support findings and maintain access, loading and strength-based removal restrictions after placement.

Decisions that change the analysis

Can the slab-on-grade concrete-pouring example be reused unchanged?

No. It explicitly excludes suspended slabs. This scope adds the temporary formwork load path, controlled concrete distribution and assigned shoring observations; a pump-interface briefing alone does not release an elevated deck.

What must the crew record for actual use?

Record the bay and drawing revisions, pre-pour release and open actions, load and sequence limits, hose and crew routes, observation and stop-signal roles, actual pre/during/post support findings and the finishing/curing handover restrictions.

Training needs

- Brief placing workers and pump communication roles on the actual elevated pour sequence, permissible loading and prompt stop signal.
- Train assigned formwork observers and workers to recognize support movement and preserve opening protection, safe routes and wet-concrete exposure controls.

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 1926.703 Formwork and shoring inspections

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.703>

OSHA 1926.701 Concrete construction loads

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

OSHA Preventing Skin Problems from Working with Portland Cement

<https://www.osha.gov/sites/default/files/publications/OSHA-3351-portland-cement.pdf>

References reviewed October 9, 2026. Use actual equipment and product instructions, project design and site requirements. This original draft supplies no fabricated inspection, signature or approval.