

Hydraulic Self Climbing Form Advancement JHA

Worked instructional example

Work and worksite

A trained crew will advance one commissioned hydraulic self-climbing wall-form and platform unit to the next casting stage of a building core. The actual system manual and project design govern anchor readiness, support transfers, loads and crew positions. The example ends at stable handover before another pour. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- An identified system unit is already erected and commissioned. The responsible formwork lead obtains the actual anchor, concrete-strength and advancement-release requirements for this stage; availability of hydraulic power is not a release.
- The specific manual and current design establish allowable conditions, component arrangement, support and locking transitions, operating roles, access and emergency recovery. Changes require the responsible designer or manufacturer's applicable direction before movement.
- Links to concrete formwork erection 238110-01 and elevated formwork 238110-03 are partial. Initial assembly, crane-jumped or flying forms, vertical slipforming, reinforcement, concrete placement and system dismantling require separate analyses.

Questions before work

- Which actual strength and anchor records release this identified unit and casting stage for advancement?
- How is the prescribed load path maintained at every support transfer, and who verifies each hold point?
- Where may each crew member stand during movement, and how will an interrupted climb be secured?

Task Hazard Control

1 Establish the stagespecific advancement release

Hazard: Immature concrete, an incorrect anchor or an unreviewed unit change can leave the climbing assembly without a reliable support path.

Control: System lead identifies the unit and obtains the current advancement method, commissioned configuration and actual anchor and strength-release records. Resolve drawing revisions, modifications and missing findings with the responsible system authority before releasing any support.

Verification: Lead matches the unit, casting stage and required release evidence to the current method.

Reasoning: The last successful climb cannot establish the readiness of new concrete or anchors.

2 Prepare platforms access and exclusion areas

Hazard: Loose loads, obstructed access or people beside a moving assembly can cause falls, crush injuries or falling objects.

Control: Crew arranges platform loads and attached items within the specific advancement limits and secures loose equipment. Establish the prescribed occupied positions, protected access, affected-area exclusions, stop communication and recovery arrangements; prevent interference from nearby lifting or placing work.

Verification: System lead checks crew positions, load arrangement, boundaries and access against the movement plan.

Reasoning: A system can be ready mechanically while its work area remains unready for movement.

3 Verify the climbing system before operation

Hazard: A damaged hose, incomplete engagement or unapproved hydraulic adjustment can produce unexpected movement or loss of support.

Control: Assigned trained personnel complete the selected system's pre-operation checks, including prescribed form clearance, support components, engagement indications and hydraulic equipment. Isolate defects for authorized correction. Retain the existing prescribed supports until the manual's transition prerequisites are verified; do not substitute pressure readings for engagement checks.

Verification: Authorized operator and system lead confirm the specified pre-operation hold point and unresolved defects.

Reasoning: Hydraulic function alone does not prove that the designed support arrangement is engaged.

Complete the work and hand over

4 Advance through the prescribed support transfers

Hazard: A mistimed release, uneven response or worker entering a transfer zone can destabilize the unit or trap a person.

Control: Operator follows the selected system's exact advancement and hold-point procedure with the assigned observers and crew positions. Confirm each required engagement before its permitted release. Stop for abnormal response, lost communication or conditions outside the method; secure the interrupted unit using its prescribed procedure.

Verification: Assigned observer reports each system-specific transfer check to the operator and lead.

Reasoning: Support remains accountable through the move rather than being assumed from upward travel.

5 Establish stable support at the new stage

Hazard: Apparent arrival can conceal an incomplete bearing, lock or connection that cannot sustain the next work configuration.

Control: Crew completes the specific landing, engagement and locking actions from the current manual and design. Keep movement restrictions in place while the authorized lead verifies the required stable condition. Do not resume platform loading or form preparation until the applicable system handover is completed.

Verification: Lead records the required support and locking findings at the final advancement hold point.

Reasoning: Reaching the intended elevation is separate from achieving the released support condition.

6 Hand over the unit and remaining restrictions

Hazard: Unreported damage or assumed pour readiness can transfer an incomplete support condition to the next shift.

Control: Record actual advancement findings, defects and any recovery actions. Restore access only within the accepted system arrangement and communicate platform load and adjacent-work restrictions. Assign remaining form preparation and pre-pour checks separately; maintain any hold on another unit or stage affected by the move.

Verification: System lead confirms the receiving lead understands open actions and the boundaries of the handover.

Reasoning: An advancement record supports the next decision without pretending to authorize another pour.

Pause and reassess

- The required concrete-strength, anchor or system-release evidence is missing, inconsistent or superseded.
- Engagement indications, support behavior or hydraulic response differ from the selected procedure, or communication is lost.
- Platform loads, wind conditions, occupied positions, protection or neighboring work no longer meet the advancement method.

Improve the controls

Needs improvement: It climbed yesterday; use the same settings.

More useful: Identify today's unit, stage, actual anchor and strength evidence, and selected-system limits before the lead releases movement.

Needs improvement: The unit is at the next level, so start forming.

More useful: System lead verifies the prescribed final support and locking condition and hands over recorded restrictions before the next operation.

Decisions that change the analysis

Can the flying slab form relocation example govern this climb?

No. Flying tables change support through rollers and a crane pickup. This unit advances on its engineered wall-anchor and hydraulic climbing arrangement. Its actual manual and design must establish each engagement, release and interrupted-movement procedure; a crane form sequence cannot supply those criteria.

What must the crew record for actual use?

Record the unit and stage identity, commissioned configuration, manual and drawing revisions, concrete-strength and anchor-release basis, permitted conditions and loads, assigned operator and hold-point roles, actual transfer and final-support findings, defects and unresolved actions. Record who receives the unit and which later work remains separately held.

Training needs

- Selected-system instruction on support engagement, operating limits, stop communication and manufacturer-directed recovery; demonstrate assigned roles before movement.
- Instruction on changing platform access, edge protection, exclusion and rescue arrangements, including recognition of damaged anchors or displaced supports.

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

References and adaptation

Doka SKE plus automatic climbing system overview and document access

<https://www.doka.com/en/system-groups/doka-climbing-systems/automatic-climbing-formwork/automatic-climbing-formwork-ske-plus/index>

OSHA 1926.703 Cast-in-place concrete and formwork

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

OSHA 1926.501 Fall protection duties

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.501>

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.