

Masonry Grout Pumping JHA

Worked instructional example

Work and worksite

A masonry crew will pump specified cementitious grout into released reinforced CMU cells using a small grout pump and hose from protected access. This fictional learning example records planned controls; it supplies no actual inspections or work authorization.

- Wall stability, cell preparation and placement sequence are released under the masonry plan.
- Pump, hose, restraint and blockage methods must match the actual equipment and grout.
- This excludes concrete slab pumping, mortar mixing and unsupported wall construction.

Questions before work

- Who releases wall stability and the grout lift sequence?
- Which hose connections and restraints does the pump require?
- How will a blockage be depressurized without exposing the crew?

Task Hazard Control

1 Accept the wall for grouting

Hazard: Placement load or an unstable wall can cause collapse.

Control: Masonry supervisor confirms wall support, limited-access arrangements and the released grout sequence. Hold pumping for unresolved wall or access conditions.

Verification: Compare the wall and intended lift with the current masonry plan.

Reasoning: A standing wall is not automatically ready for grout pressure and loading.

2 Position the pump and route the hose

Hazard: Equipment movement or a crossing hose can strike or trip workers.

Control: Place the pump on suitable support, separate deliveries and route the hose with protected access. Provide safe receiving access without changing wall braces.

Verification: Lead walks the pump, hose and receiving route before setup.

Reasoning: Hose routing must serve both placement and escape.

3 Inspect pump connections and guards

Hazard: A failed coupling, exposed mechanism or incompatible hose can cause injury.

Control: Operator checks equipment, pressure rating, guards, couplings and required restraints against the model instructions. Remove defective components from service.

Verification: Record the pre-use checks and resolve defects before charging.

Reasoning: A connected hose is not evidence of a suitable pressure system.

Complete the work and hand over

4 Pump the released cells

Hazard: Hose movement, cement splash or excessive placement can injure workers or destabilize the wall.

Control: Use the specified pump and wall placement sequence with coordinated start and stop signals. Maintain cement protection and wall boundaries; stop for hose movement, leaks or unexpected wall response.

Verification: Pump operator and placement lead maintain communication and monitor the hose and wall.

Reasoning: The receiver and operator must share the same stop decision.

5 Manage a blockage or cleanout

Hazard: Stored pressure can eject grout or whip a hose when opened.

Control: Stop and use the manufacturer's pressure-release and blockage procedure. Verify the required safe state before opening a connection; do not introduce compressed air unless a specifically assessed approved procedure requires it.

Verification: Authorized operator confirms pressure release and clearing-area control.

Reasoning: Turning off the motor may leave a loaded line.

6 Clean and hand over

Hazard: Cement residue, loose hoses or altered braces can expose later crews.

Control: Collect washout by the site method, clean without uncontrolled dust and restore clear access. Leave wall support in place and communicate grout and access status.

Verification: Supervisor checks residue, hoses and wall support at handover.

Reasoning: Cleanout must not compromise wall stability.

Pause and reassess

- Wall release or placement sequence is unclear.
- Pressure response, connections or hose behavior changes.
- Communication fails, a blockage appears or wall support is disturbed.

Improve the controls

Needs improvement: Be careful around the equipment.

More useful: Operator checks equipment, pressure rating, guards, couplings and required restraints against the model instructions. Remove defective components from service.

Needs improvement: Check the area before starting.

More useful: Masonry supervisor confirms wall support, limited-access arrangements and the released grout sequence. Hold pumping for unresolved wall or access conditions.

Decisions that change the analysis

Does a masonry wall example cover grout pumping?

No. That example includes mortar mixing and laying CMU but excludes grout pumping. Pump setup, pressurized hose handling and blockage release are the new tasks here.

What must be recorded before this example is used on a job?

Replace the scenario with the actual work, identify additional hazards with the crew, and record the applicable instructions, responsible people, inspection findings, unresolved actions and required authorization. A planned verification is not an inspection result.

Training needs

- Actual pump operation, pressure release and blockage method.
- Wall support boundaries, cement contact prevention and receiver/operator communication.

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 1926.706 Masonry construction

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.706>

OSHA 1926.702 Concrete equipment and tools

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

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.