

Cementitious Baseplate Grouting JHA

Worked instructional example

Work and worksite

A small crew will mix and place nonshrink cementitious grout beneath an installed steel baseplate on a ground-level foundation. The supported member remains stabilized under the erection plan. This fictional learning example records planned controls; it supplies no actual inspections or work authorization.

- The connection design and product specification provide the grout, preparation and load-release requirements.
- Forms, clearances and access can be prepared without disturbing the member's temporary support.
- This excludes epoxy grout, pumped masonry grout, pressure injection and release of structural bracing.

Questions before work

- What keeps the member stable while the grout is placed and cures?
- Which preparation and mix instructions apply to this product?
- Who can release loading or remove temporary support after cure?

Task Hazard Control

1 Confirm support and the grout release

Hazard: Disturbing support or changing a connection can cause movement of the supported member.

Control: Foreperson confirms the erection support remains effective and identifies the grouting limits. No bolts, shims or bracing are altered without the required design release.

Verification: Compare the actual support and baseplate condition with the current erection and grouting instructions.

Reasoning: Grout placement does not authorize changing structural support.

2 Prepare the base and containment

Hazard: Loose debris, sharp edges and dusty preparation can injure the crew or obstruct the pour.

Control: Use the specified preparation method with assessed dust controls. Install forms and route access so workers can place grout without reaching into a pinch zone.

Verification: Lead checks the prepared surface and form stability before materials are mixed.

Reasoning: Preparation must preserve the supported member's stability.

3 Inspect the mixer and stage bags

Hazard: Moving mixer parts, heavy bags and cement dust can cause injury.

Control: Use guarded equipment in suitable condition, handle bags with assistance or equipment and stage them near the feed point without blocking access. Follow the applicable silica-control assessment and product handling instructions.

Verification: Operator checks guards and controls; lead checks the feed route and dust-control arrangements.

Reasoning: Bag handling and dry charging differ from wet placement.

Complete the work and hand over

4 Mix the specified batch

Hazard: Cement splash can burn skin and eyes; reaching into moving equipment can cause entanglement.

Control: Charge and mix in the product sequence with selected cement protection. Keep hands and tools outside moving parts and stop and secure energy before clearing the mixer.

Verification: Operator confirms water and batch settings against instructions and checks splash containment.

Reasoning: The product controls the mix; the JHA does not invent a ratio.

5 Place grout without disturbing support

Hazard: Wet grout can contact skin; rushed placement can force workers into awkward or trapped positions.

Control: Place from the planned access using suitable containers and tools. Maintain support and containment, prevent contact and hold the work if form leakage or member movement appears.

Verification: Lead monitors forms and member condition while the crew places grout.

Reasoning: A clear access method reduces both cement contact and structural interference.

6 Clean and maintain the cure restriction

Hazard: Wet residues can cause slips and burns; early loading can compromise the planned support.

Control: Clean by the specified wet method, collect residues and mark the cure restriction. Keep load and support decisions with the designated authority and communicate them at handover.

Verification: Foreperson checks cleanup and records the required loading release and responsible authority.

Reasoning: A filled baseplate is not evidence that strength criteria have been met.

Pause and reassess

- Support moves or anyone proposes adjusting bolts, shims or braces.
- Product, preparation or mix method changes.
- Leakage, dust-control failure or an unclear loading release occurs.

Improve the controls

Needs improvement: Be careful around the equipment.

More useful: Use guarded equipment in suitable condition, handle bags with assistance or equipment and stage them near the feed point without blocking access. Follow the applicable silica-control assessment and product handling instructions.

Needs improvement: Check the area before starting.

More useful: Foreperson confirms the erection support remains effective and identifies the grouting limits. No bolts, shims or bracing are altered without the required design release.

Decisions that change the analysis

May the crew remove bracing when the grout appears hard?

No. Appearance alone is not the specified strength or connection release. Use the project's documented cure, testing and support-release criteria with the designated authority.

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

- Mixer guarding and shutdown, cement protection and applicable silica instruction.
- Recognizing the support and load-release boundary.

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 General concrete construction requirements

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

OSHA 1926.1153 Respirable crystalline silica

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.1153>

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.