

Supported Masonry Wall Section Rebuilding JHA

Worked instructional example

Work and worksite

A restoration crew will remove and rebuild one damaged ground-level section of load-bearing brick masonry in an unoccupied building bay after the structural survey, engineered shoring, load isolation and removal plan are released. The reconstructed section remains protected for separate cure and structural acceptance. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- Current repair documents define the removal boundary, retained-edge support, replacement units, bond, connections and cure/loading restrictions.
- Temporary supports are independently installed and released; utilities and suspect materials are resolved before disturbance.
- Shoring design, hazardous-material abatement, unsupported demolition, helical crack stitching, cavity-tie repair and shore removal are excluded.

Questions before work

- Which survey and support records release this precise removal boundary?
- How will retained masonry and each removed piece remain controlled during the sequence?
- Who accepts rebuilt bond/connections and authorizes later reloading or support removal?

Task Hazard Control

1 Confirm the supported repair release

Hazard: A hidden load or an unsupported retained edge can produce collapse when damaged units are removed.

Control: Restoration lead checks the structural survey, engineered repair/removal plan, installed support release and utility/material clearance. Confirm the unoccupied boundary and loading isolation; no removal starts from an assumption that a small section carries little load.

Verification: Lead verifies the records apply to this section and current structure.

Reasoning: The example begins after support engineering and installation, not instead of them.

2 Protect supports and the work bay

Hazard: Debris, carts or poor access can strike shores or expose workers beside unstable masonry.

Control: Establish the plan's work and debris boundaries, protected access and manageable waste route. Keep shore bases and braces clear, isolate affected areas on both sides and implement the selected tool and silica controls without disturbing support.

Verification: Lead checks support protection, access and the controlled debris path before tools start.

Reasoning: Ordinary cleanup and material routes must not interfere with the temporary load path.

3 Remove the designated section

Hazard: Uncontrolled prying or cutting can detach retained masonry or release a falling piece.

Control: Follow the released removal order in controlled, supported pieces using specified tools and exposure controls. Keep people outside drop paths, protect retained edges and stop for unexpected movement, binding or concealed connections; do not widen the removal to obtain easier access.

Verification: Removal lead compares progress and retained conditions with the planned hold points.

Reasoning: Small changes to the boundary can change the supported repair's load path.

Complete the work and hand over

4 Prepare the released rebuilding interface

Hazard: Damaged bearings, unsuitable remaining units or missing ties can prevent the repair from connecting correctly.

Control: Have the retained support and interface checked under the repair plan before rebuilding. Identify the specified replacement units, mortar and connections; resolve damaged edges or changed geometry through technical disposition rather than filling the discrepancy with extra mortar.

Verification: Restoration lead records actual interface findings and the rebuilding release.

Reasoning: Replacing visible bricks alone does not restore the designed connection.

5 Rebuild bond and connections

Hazard: Poor bond, omitted reinforcement or wet mortar contact can leave a weak repair and injure workers.

Control: Install the repair's specified units, bond, ties or reinforcement from stable access while maintaining support and load isolation. Control handling and cement contact, verify concealed connections before closure and protect the work under actual product and design curing requirements.

Verification: Lead records unit, bond and concealed connection findings at the required hold points.

Reasoning: The new section must connect to retained work under the repair detail.

6 Hand over without releasing support

Hazard: Early reloading or shore removal can destabilize masonry before its required acceptance.

Control: Collect contained waste, protect the rebuilding and transfer actual records, cure restrictions and open actions. Leave supports and loading isolation in place until the designated structural acceptance and separately planned support-removal/reloading release.

Verification: Receiving lead confirms restrictions and the authority controlling the later release.

Reasoning: A completed face supplies neither strength evidence nor permission to remove shores.

Pause and reassess

- Additional damage, a concealed service or a condition outside the survey is found.
- A shore, retained edge or masonry section moves unexpectedly.
- Replacement bond, cure protection or structural acceptance is unresolved.

Improve the controls

Needs improvement: Work carefully and wear PPE.

More useful: Follow the released removal order in controlled, supported pieces using specified tools and exposure controls. Keep people outside drop paths, protect retained edges and stop for unexpected movement, binding or concealed connections; do not widen the removal to obtain easier access.

Needs improvement: Check that everything is ready.

More useful: Restoration lead checks the structural survey, engineered repair/removal plan, installed support release and utility/material clearance. Confirm the unoccupied boundary and loading isolation; no removal starts from an assumption that a small section carries little load.

Decisions that change the analysis

Can the shores be removed when the rebuilt wall looks complete?

No. Keep the repair's support and load restrictions until the required cure and structural acceptance are documented, then follow the separately released removal/reloading sequence. This example authorizes no occupancy or support removal.

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

- The section-specific supported removal/rebuilding sequence, retained-edge monitoring and authority to stop for changed conditions.
- Applicable tool, silica, hazardous-material awareness, utility-clearance and wet-mortar handling 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 1926.850 Preparatory operations

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.850>

OSHA 1926.706 Masonry construction

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

OSHA 1926.1153 Respirable crystalline silica

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

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.