

Masonry Tuckpointing JHA

Worked instructional example

Work and worksite

A restoration crew will remove selected mortar joints from a sound ground-level exterior brick wall with a shrouded grinder and dust extraction, then repoint them with specified mortar. This fictional learning example records planned controls; it supplies no actual inspections or work authorization.

- The investigation releases the wall condition, joint depth and hazardous-material status.
- The actual tuckpointing silica method and exposure requirements are established by the employer.
- This excludes structural wall stabilization, lead or asbestos abatement, elevated access and whole-wall demolition.

Questions before work

- What confirms the wall and coatings are suitable for this repair?
- Which tuckpointing dust-control pathway applies to this tool?
- What joint limits protect the masonry while allowing repair?

Task Hazard Control

1 Release the repair limits

Hazard: An unstable wall or unknown coating can expose workers to collapse or hazardous dust.

Control: Foreperson obtains the condition and material investigation, identifies permitted joints and holds work for unknown hazards or movement.

Verification: Match wall condition and joint marks with the repair release.

Reasoning: A cosmetic repair description does not establish material safety.

2 Separate the work area

Hazard: Dust and fragments can expose occupants or passersby.

Control: Control the work boundary, neighboring occupancy and access. Arrange waste collection and keep the crew's exit clear.

Verification: Lead confirms both worker and public separation before tool setup.

Reasoning: The wall may border a route used by people outside the crew.

3 Set up the grinder and extraction

Hazard: A damaged wheel or inadequate extraction can cause impact injury or silica exposure.

Control: Use compatible wheel, guard, shroud and dust collector maintained to the selected tuckpointing method. Under Table 1, provide its specified dust collection and respiratory protection; use the employer's applicable respiratory-protection program. Do not treat extraction alone as the complete Table 1 method.

Verification: Operator checks the tool and airflow indicators; silica competent person checks implementation.

Reasoning: Tuckpointing has its own task-specific silica decision.

Complete the work and hand over

4 Remove the released mortar

Hazard: Kickback, flying fragments, noise and dust can injure the operator.

Control: Work from a stable position within the released joint limits, keep the shroud effective and use assessed eye, hearing and other protection. Stop for lost extraction or masonry damage.

Verification: Operator monitors control performance and the joint condition as removal proceeds.

Reasoning: Removing mortar must not become uncontrolled brick cutting.

5 Mix and place replacement mortar

Hazard: Cement contact and awkward hand work can cause burns or strain.

Control: Use the specified mixing and placement method with cement protection, workable tool positions and controlled batch handling. Keep extraction equipment safe while wet work begins.

Verification: Lead checks mixing protection and the prepared joints before placement.

Reasoning: The wet phase creates different exposures from grinding.

6 Collect dust and protect the repair

Hazard: Dry dust or unprotected repair material can expose the next worker.

Control: Use suitable HEPA or wet cleanup consistent with the exposure plan, contain waste and identify cure and access restrictions. Avoid uncontrolled dry sweeping.

Verification: Foreperson checks residue, repaired joints and handover conditions.

Reasoning: The dust control must extend through cleanup.

Pause and reassess

- Wall movement or unknown coating appears.
- Extraction fails or dust escapes the planned boundary.
- Tool, joint depth or repair method changes.

Improve the controls

Needs improvement: Be careful around the equipment.

More useful: Use compatible wheel, guard, shroud and dust collector maintained to the specified tuckpointing method. Establish required respiratory protection under the employer's program where applicable.

Needs improvement: Check the area before starting.

More useful: Foreperson obtains the condition and material investigation, identifies permitted joints and holds work for unknown hazards or movement.

Decisions that change the analysis

Which respirator decision applies to mortar-removal grinding?

Table 1 row xi specifies a shroud and dust collection with at least 25 cfm per inch of wheel diameter, a filter at least 99 percent efficient, and a cyclonic pre-separator or filter-cleaning mechanism. It requires minimum APF 10 for up to four hours per shift and APF 25 above four hours. Fully implement that method or use the standard's alternative exposure pathway. Required respirators need the applicable respiratory-protection program.

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

- Tuckpointing tool and extraction instruction under the applicable silica plan.
- Required respirator training and fit testing where the employer's assessment requires a respirator.

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 1926.1153 Respirable crystalline silica

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

OSHA 1926.300 Hand and power tools

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.300>

OSHA 1910.1200 Hazard communication

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1200>

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.