

Frameless Glass Door Installation JHA

Worked instructional example

Work and worksite

A glazing crew will fit a factory-fabricated tempered-glass interior door leaf to a released opening using the specified patch fittings or hinges and controlled support. The opening is closed to occupants during installation. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- The approved hardware system matches door thickness, weight, factory cutouts and supporting structure.
- Temporary leaf support remains until the complete suspension and retention checks are finished.
- Glass cutting or drilling, shower enclosures, automatic operators and fitting to an unreleased supporting panel are excluded.

Questions before work

- Do the leaf, factory cutouts and hardware match the approved system?
- What supports the door while fittings are assembled?
- How are swing, pinch and occupant access controlled during testing?

Task Hazard Control

1 Release the opening and hardware

Hazard: Wrong fittings or inadequate support can cause a heavy door to detach.

Control: Glazing lead checks leaf schedule, hardware compatibility, supporting structure and released opening. Establish a closed work zone and refer mismatched cutouts or supports before lifting.

Verification: Installer compares actual components with the approved hardware instructions.

Reasoning: A frameless appearance does not remove the need for a defined support system.

2 Inspect and stage the leaf

Hazard: Edge damage or unstable glass can cause breakage and cuts.

Control: Inspect factory glass condition and identification and place on protected stable supports. Remove damaged or unidentified glass from the installation sequence; use assessed cut-resistant hand, arm, eye and foot protection.

Verification: Handling lead checks edges and staging restraint before movement.

Reasoning: Tempered glass edge damage can affect the whole leaf.

3 Support the leaf in position

Hazard: A tilting door can crush fingers or fall before hardware is complete.

Control: Use the planned handling and temporary support method sized for the leaf. Keep workers outside the tip and pinch paths and protect glass edges from hard contact; do not balance the leaf with an improvised foot stop.

Verification: Handling lead verifies support before fitters approach.

Reasoning: The installation is not yet supported by its final hinges.

Complete the work and hand over

4 Assemble fittings and retention

Hazard: Uneven clamping or missing gaskets can damage glass or allow slippage.

Control: Fit the specified gaskets, fasteners and hardware in the instructed sequence and tighten to the actual system criteria. Do not modify tempered glass or substitute unapproved fitting parts.

Verification: Installer records checks against the hardware instructions before removing temporary support.

Reasoning: The glass/hardware interface is part of the door's load path.

5 Test controlled movement

Hazard: A freely swinging leaf can strike workers or trap hands.

Control: Clear the swing area and test from controlled positions only after support and retention are verified. Check required stops, clearances and closer settings; hold occupant access for unsafe movement or interference.

Verification: Glazing lead observes the full swing and safe stop function.

Reasoning: A door that hangs securely can still create a moving pinch hazard.

6 Release the door for use

Hazard: Unfinished retention, debris or uncommunicated restrictions can expose occupants.

Control: Complete the designated installation check, collect sharp waste and mark any unresolved restrictions. Transfer hardware settings and maintenance instructions to the responsible building contact.

Verification: Lead records the actual handover and remaining actions.

Reasoning: Use release follows installation and movement checks, not appearance.

Pause and reassess

- Glass damage or hardware/cutout mismatch.
- Temporary support or specified fitting criteria cannot be met.
- Uncontrolled swing, interference or occupant entry into the work zone.

Improve the controls

Needs improvement: Work carefully and wear PPE.

More useful: Use the planned handling and temporary support method sized for the leaf. Keep workers outside the tip and pinch paths and protect glass edges from hard contact; do not balance the leaf with an improvised foot stop.

Needs improvement: Check that everything is ready.

More useful: Glazing lead checks leaf schedule, hardware compatibility, supporting structure and released opening. Establish a closed work zone and refer mismatched cutouts or supports before lifting.

Decisions that change the analysis

May the installer enlarge a factory cutout in tempered glass?

No. Stop and obtain the correct factory-fabricated leaf and hardware arrangement. This example provides no on-site cutting or drilling procedure for tempered glass.

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

- Actual door-hardware installation, temporary support and retention verification.
- Glass edge protection, team handling and controlled door-swing testing.

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

References and adaptation

Pilkington Glass types and fabrication glossary

<https://www.pilkington.com/en/gbl/knowledge-hub-selection/architectural-and-technical-glass-knowledge-hub/glossary>

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.