

Approved Glass Face Scratch Restoration JHA

Worked instructional example

Work and worksite

A trained restoration technician treats one superficial face scratch on an intact, uncoated annealed pane used as nonstructural glazing in a sound fixed ground-level window. The owner and glass specialist have accepted repair suitability and optical limits. The specified abrasive and polishing system removes a controlled surface layer; it does not restore cracked or structurally damaged glass. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- Partial repair coverage: localized face abrasion and polishing on an approved pane; no edge finishing, chipped or cracked glass, coated face, laminated or overhead glazing, structural-glass repair or unresolved safety-glazing acceptance.
- The pane construction and damage are identified, both sides are protected and the actual supplier procedure, tool manual and exposure controls are available.
- A trained specialist may reject the pane or process if repair depth, temperature control, optical quality or glass suitability cannot be established.

Questions before work

- Who accepts this exact pane and scratch for surface removal rather than replacement?
- How will the technician control abrasive dust, tool reaction and local thermal stress?
- What optical and glass-condition limits stop further abrasion and determine acceptance?

Task Hazard Control

1 Accept glass identity and repair limits

Hazard: Surface removal on unsuitable glass can damage a coating or weaken an already damaged pane.

Control: Confirm pane construction, uncoated working face, intact edges and damage classification with the responsible specialist. Record the approved process and optical acceptance limits; exclude unknown, cracked or structurally damaged glazing.

Verification: Technician records specialist release and damage location before selecting an abrasive.

Reasoning: A cosmetic scratch must not be used to dismiss a crack or approve unassessed glass removal.

2 Protect the work area and inspect the tool

Hazard: A rotating pad, electrical defect or uncontrolled dust can expose occupants and the technician.

Control: Close both work faces and protect adjacent finishes. Inspect the specified polisher, pads, electrical supply and cords, then implement the task exposure assessment, eye protection and dust controls before operating.

Verification: Lead verifies tool compatibility, safe supply, ventilation and the closed area before the test treatment.

Reasoning: Glass dust requires an actual exposure assessment; its presence alone does not establish a crystalline-silica composition.

3 Begin controlled face abrasion

Hazard: Concentrated heat or an angled pad can crack glass, gouge the face or pull the tool.

Control: Use the supplier's approved abrasive, speed and movement for this damage class. Keep the pad correctly aligned and moving, monitor temperature using the supplier-approved infrared method and tool feedback, and stop for new cracking, excessive heat or uncontrolled reaction.

Verification: Technician checks the early treated area and temperature-control method before enlarging the repair.

Reasoning: A stationary hot spot or uneven pressure can change the pane faster than its appearance suggests.

Complete the work and hand over

4 Refine the accepted repair area

Hazard: Repeated local grinding can produce optical distortion or unnecessary glass removal.

Control: Refine only within the accepted process limits, using the specified pad sequence and feathering method. Stop and isolate the tool before pad maintenance; reassess if the defect persists beyond the approved removal or optical boundary.

Verification: Technician records intermediate condition and any decision to stop rather than chase the scratch.

Reasoning: Continuing until a mark disappears is not an acceptable substitute for a defined repair limit.

5 Polish and inspect from multiple positions

Hazard: Residual haze or tool marks may be concealed by wet compound or one viewing angle.

Control: Use the compatible polishing stage without changing the accepted glass-removal method. Clean as instructed, inspect from the agreed viewing positions and lighting, and check edges and the treated face for new damage or distortion.

Verification: Specialist compares the dry cleaned pane with the recorded optical and glass-condition criteria.

Reasoning: A glossy surface seen from one angle does not establish acceptable optical quality.

6 Clean up and record the repair outcome

Hazard: Residual abrasive and an overstated repair claim can expose the next user.

Control: Isolate the tool and collect dust, compound and protection by the assessed cleanup method. Record pane identity, treated area, acceptance or replacement recommendation and restrictions before returning access to the owner.

Verification: Lead verifies clean surroundings and the documented specialist disposition of the treated pane.

Reasoning: Cosmetic acceptance supplies no evidence of restored strength or a new safety-glazing certification.

Pause and reassess

- Pause for unknown glass or coating, edge damage, cracking or unapproved repair depth.
- Stop for rising local temperature, uncontrolled tool pull, ineffective dust control or unacceptable optical change.
- Glass replacement is a separate decision when the pane cannot meet the recorded repair criteria.

Improve the controls

Needs improvement: Work carefully and wear PPE.

More useful: Use the supplier's approved abrasive, speed and movement for this damage class. Keep the pad correctly aligned and moving, monitor temperature using the supplier-approved infrared method and tool feedback, and stop for new cracking, excessive heat or uncontrolled reaction.

Needs improvement: Check that everything is ready.

More useful: Confirm pane construction, uncoated working face, intact edges and damage classification with the responsible specialist. Record the approved process and optical acceptance limits; exclude unknown, cracked or structurally damaged glazing.

Decisions that change the analysis

Does this repair re-certify the glass?

No. This is bounded cosmetic face restoration after suitability review. It cannot restore strength, remove structural damage or establish a safety-glazing certification; unresolved glass condition leads to specialist disposition or replacement.

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

- Demonstrate supplier-approved face restoration, pad maintenance and recognition of thermal stress and optical distortion.
- Train technicians to identify unsuitable glass and to follow the actual exposure assessment, cleanup and specialist acceptance limits.

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

References and adaptation

GlassRenu Restoration preparation and thermal-stress guidance

<https://glassrenu.com/learning-center/reference-handbook/before-you-begin/>

GlassRenu Glass-on-glass scratch restoration process; obtain repair suitability approval

<https://glassrenu.com/learning-center/reference-handbook/damage-specification-sheets/glass-on-glass/>

OSHA 1926.300 Hand and power tools

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

OSHA 1926.102 Eye and face protection

<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.102>

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.