

1. Safety & Preparations

- When working on upper windows or wall systems, always use safe access equipment: ladders, scaffolding, fall protection systems if needed.
- If the system has motorized or electrically actuated parts, switch off/lock out power before working.
- Use gloves, eye protection, and stable footing.
- Avoid doing maintenance when surfaces are extremely hot or cold, or in direct sunlight.
- Keep a maintenance log (date, what was done, observations) for warranty and service reference.

2. Inspection Schedule & Key Focus Areas

Interval	Components to Inspect	What to Look For / Action Items
Quarterly / Semiannual	Exterior surfaces, glass, drainage paths, flashings	Dirt accumulation, salt deposits (especially in coastal areas), blocked drainage, foreign debris
Annually	Hardware, gasketing/seals, fasteners, structural joints, moving interface guides	Smooth operation, tight hardware, seal effectiveness, absence of sagging or binding
Every few years / as needed	Refinish coatings, gas-strut mechanisms, interior wood finishes	Protective coating wear, corrosion spots, fatigue in struts or motors
After severe weather / external events	Glass, frames, flashing, joints, drainage	Check for damage, deformation, seal failure, debris intrusion

When inspecting, pay attention to:

- Scratches, chips, or wear in painted/coated surfaces
- Localized corrosion or rust, especially at edges, corners, or seams
- Loose or missing screws or fasteners

- Sealant joints between frame and substrate
- Degraded or rigid gaskets or weather seals
- Misalignment, binding, or roughness in moving panels
- Blocked drainage, weep holes, or flashings
- Structural shifts or deflection in large panels

3. Cleaning and Surface Care

Glass / Glazing Surfaces

- Before cleaning, rinse surfaces with clean water to remove grit or debris that could scratch.
- Use a **mild, non-abrasive soap + water** solution and soft cloth, sponge, or soft brush.
- Rinse thoroughly and dry with a lint-free cloth or squeegee.
- Avoid scrapers, razor blades, stiff brushes, or aggressive chemicals.
- Do not clean in direct sunlight or when glass surface is hot.
- For stubborn spots (paint drips, adhesives), soften with soapy water and gently lift with a plastic scraper.

Frames, Cladding & Exposed Surfaces

- Begin by brushing or blowing away loose debris, dust, and dirt in corners, joints, and profiles.
- Using the same mild soap + water mix, wash exterior and interior frame faces, profiles, and trim.
- Rinse thoroughly to remove residue; dry as needed.
- Avoid power washing near joints or gaskets, especially at high pressure.
- For metal surfaces, periodic waxing (e.g., a clear, non-abrasive wax) may help to protect finish in harsh environments (test in inconspicuous locations).

- In coastal or salty climates, rinse with fresh water more frequently to remove salt deposits.

4. Hardware, Mechanisms & Moving Interfaces

- All hinges, pivot points, tracks, guide channels, rollers, and linkage joints should be inspected annually (or more often in aggressive climates).
- Clean dirt and grit from these mechanisms before lubricating.
- Use a light, non-sticky lubricant (e.g. dry silicone spray or light machine oil) on moving metal-to-metal pivots, bearings, and sliding surfaces. Avoid over-lubrication, which can attract dust/debris.
- For gas-strut or assisted lift systems, check their performance (smoothness, fade, drift). If any sagging or gradual closing occurs, the struts may require replacement or servicing.
- Tighten or replace loose or worn fasteners – screws, bolts, pivots, catches.
- For systems with motors or actuators, follow the manufacturer’s guidelines for servicing, cycle testing, and replacement intervals.

5. Seals, Gaskets & Joint Sealants

- Inspect all weather seals, gaskets, compression seals, glazing gasket profiles for signs of wear, brittleness, or compression set. Replace if compromised.
- Use a “paper test” (place thin paper in the sealing interface, close, and ensure uniform grip) to check for consistent compression.
- In multi-panel systems, check interface seals and panel-to-panel gasket performance.
- Inspect sealant joints (between window frame and surrounding structure). If gaps, cracks, or failure are visible, remove failed sealant, clean joint, and reapply compatible silicone or elastomeric sealant.
- Ensure glazing beads remain secure; re-seat or re-fasten as needed.

6. Touch-Ups, Refinishing & Replacement Parts

- Small chips or scratches in painted or coated surfaces should be touched up quickly using manufacturer-approved touch-up kits or coatings to prevent corrosion or substrate damage.
- For broader coating degradation or corrosion, consult Gravity for refinishing or recoating via approved methods.
- If gas-struts or motorized actuators begin to lose efficacy, replacing them before further strain occurs is advisable.
- Fogging or condensation between glass panes indicates seal failure—replacement of glazing units may be required.
- Use precise product or serial numbers when ordering replacement parts (hardware, gaskets, struts, glass) to ensure compatibility.

7. Environmental & Special Conditions

- In coastal or saline environments, increase cleaning frequency (e.g. quarterly or even monthly) to remove salt deposits.
- After storms, wind events, or debris impact, immediately inspect glass, frames, seals, and flashings.
- Avoid planting landscaping, sprinklers, or irrigation systems too close to frame surfaces to prevent water or chemical spray.
- During construction or nearby work, protect glass and finishes with clean, non-abrasive coverings to prevent overspray, dust embedding, or scratch damage.
- In freeze-thaw (if applicable in your region), ensure drainage is unobstructed so melting water doesn't get trapped, freeze, and damage components.

8. When Professional Service is Necessary

- If panels bind, sag, or no longer operate smoothly after cleaning, lubrication, and adjustment.
- If major corrosion, warping, or structural damage appears in panels or frame.
- When motorized systems malfunction, lose sensitivity, or fail.

- If seals fail, glazing fogs, or water infiltration occurs.
- For full refinishing, overhauls, or warranty-related maintenance.
- Contact Gravity Windows & Doors or their authorized service partners for parts, inspection, or advanced repair.