



Window Restoration – Info and Procedure

April 10, 2022

Window Restoration

Below you will find info on options for restoration to the existing historic windows. Included below are classifications of repair which would largely determine per opening cost. Level of repair can be somewhat unknown until paint is stripped and the restoration process begins, but the budget numbers should provide an accurate range for each opening.

Level of Repair

Anticipated level of repair for each window would fall into the categories below. Please see the table of window openings for info specific to each opening:

Class I: Small repairs, which are usually performed as part of a building's annual maintenance program. This may include paint removal, re-glazing, weather-stripping, caulking, and repainting.

Class II: Shows a small degree of physical deterioration but can be repaired in place by patching, waterproofing, consolidating, or re-gluing existing material.

Class III: Localized deterioration in specific areas that can be removed and replaced without requiring a full feature replacement. Shop restoration.

Class IV: Damaged beyond repair, including a completely rotted window sill, warping or a combination of Class III repairs. This class would involve replacement.



Window Sash Restoration Process – Class I and II Repairs

Class I repairs are performed on site with the windows remaining in place. The most common items that are tackled are selective removal of compromised areas of glazing compound, and selective re-glazing of these areas. Through this process, only certain areas receive new glazing compound. Sashes are selectively scraped and/or sanded to remove loose and flaking paint and re-painted.

Any damaged ropes would be replaced as part of the restoration and missing hardware replaced.

Window Sash Restoration Process – Class III Repairs

Class III repairs and restoration are the most common work that we perform. Through this process, the windows would be removed with temporary panels set in place. Windows are steamed to remove the glazing to be able to re-glaze the glass into a new bed of glazing compound. Once the glass is removed, the exteriors are heat stripped to get all loose paint and take any wood down to bare wood that need either epoxy or a “dutchman” repair. Dutchmen work entails patching in new wood where rot is extensive. In some cases, entire components of the frame will need to be replaced, with matching profiles. Glass is re-set and re-glazed and then re-painted.

Any damaged ropes would be replaced as part of the restoration and missing hardware replaced. This overall process should result in a minimum 50 year repair to the windows, as long as paint is maintained. We utilize top of the line paint on all window restoration to also ensure painting maintenance is kept to a minimum.

Hazardous Materials

Every sash that we work on must be tested for asbestos, as this is occasionally found in the glazing compound. If present, this has a significant impact on the cost of restoration.

Painting of Windows

As part of the window restoration process, our crew would handle the painting of the windows sashes themselves. Painting of the window jambs and outer trim etc. would be above and beyond, but is also seen as a critical component of the process. We strongly recommend contracting with a local painter well-versed in painting on historic structures. The preferred method is to have painters follow after our crew, once windows are installed.

Leaded Windows

Dealing with leaded windows is a specialty trade. You have two units on the front of the house. For these windows, we would recommend engaging an expert such as Denver Art Glass on the proper and necessary repair.



Price Ranges:

Specific pricing for each category can vary depending on existing conditions, decisions on weatherstripping and hardware etc., and level of finish. In addition, the final finish (paint vs. stain) plays a big role in price. The prices below represent painted finishes.

Class I and II Repair:	\$ 200 – 400 per opening
Class III Restoration:	\$ 1,600 – 2,300 per opening
Window Replacement:	\$ 1,600 – 2,100 per opening
Wood Storm Windows: (Fabricate and install)	\$ 650-900 per opening
Mobilization Charge:	TBD*

** Full project costs would need to be calculated if and when specific number of sashes being restored is defined. Mobilization charge will capture costs associated with mobilizing to site to complete the work as well as temporary panels etc.*

We realize that window restoration is a very costly endeavor. There's no question that initial costs can be lower with window replacement. However, with lifespans of replacement windows as short as 10 years, we strongly believe the best value over time is in proper restoration from a budget perspective. In terms of quality of windows holding up over time, there is simply no comparing to historic windows.

Numerous studies have been done proving that a properly restored and weather-stripped historic window plus a storm window unit provides comparable energy efficiency to a modern assembly. In addition, properly functioning double-hung window units can allow you to get convection air flow to lower energy demands for cooling your home in the summer.