



SHOP RESTORATION FOR SASH & MILLWORK

Chosen Wood Window Maintenance offers full-service window restoration. In an effort to offer a broader range of affordable and quality window restoration options to more customers, Chosen Wood Window Maintenance offers exclusive shop restoration options.

We realize that for some projects, it may be cost effective for sash and millwork restoration to be handled by a facility that specializes in efficient shop restoration and for on-site restoration to be handled by one's own workforce or by another contractor. Our process yields a quality and uniform product that conforms to the customer's specific needs.

We can take on projects of various sizes, residential to large commercial; for general contractors, owner representatives, building owners and more. We are capable of historic restoration, retrofits, updates, replication, and more.

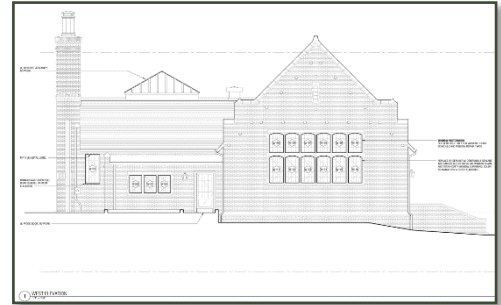
Some projects governed by a general contractor will have process steps that differ from a project governed by a private owner or project representative. In addition, working with us in shop only restoration can help keep costs lower by keeping the restoration process in our controlled shop in Oregon, providing a quick turnaround time for restoration, handling of hazardous materials, and more.

We do not perform piece work, but rather we restore all 'like sash' with the same restoration steps to achieve an efficient, dependable and uniform finished product. When reading this, keep in mind that the restoration process is customizable. We can tailor our off-site and on-site scope to best suit the project. The following pages demonstrate a general process for achieving shop only restoration on your project from Chosen.

THE BID

WE PROVIDE A TAILORED BID FOR YOUR PROJECT, INCLUDING:

- ▶ A bid to project specifications and drawings for shop window restoration. This also may include options for sash/millwork removal, cataloging, and transport.
- ▶ Options/alternates. CWWM uses trusted material/method substitution requests that are equal or better in value and quality.
- ▶ Pricing for replicated sash and millwork.
- ▶ Upon acceptance, you will receive access to our restoration submittal templates (for on-site restoration). Shop restoration submittals will be completed according to project specs.



INFORMATION WE NEED PRIOR TO BID SUBMISSION:

- ▶ Sash type breakdown with sash count.
- ▶ Millwork requested for onsite restoration (sill, parting bead, stops, etc.)
- ▶ Requested restoration requirements.
- ▶ Timeline for shop restoration.
- ▶ Onsite requirements for our puller. *On larger projects, CWWM requires a representative to be onsite to inspect the specifications of the project, as well as pull and catalog the sash before transport to shop.
- ▶ Are restoration consumables (epoxy, caulking, sash cord, hazardous material transportation bags, silicone spray) wanted for on-site restoration?
- ▶ Are hazardous materials (lead or asbestos) present?
- ▶ If CWWM is the sole contractor, we need to know submittal requirements (i.e. SHPO Requirements).

SECTION 080350 - CONSERVATION TREATMENT FOR WOOD WINDOWS	
PART 1 - GENERAL	
1.1	GENERAL REQUIREMENTS
A.	Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.
1.2	DESCRIPTION OF WORK
A.	General: Provide all labor, materials, equipment, and services required to complete wood window restoration as specified herein, and required by existing conditions and authorities having jurisdiction.
B.	Wood window restoration may include, but is not limited to, the following: <ol style="list-style-type: none"> 1. Restore damaged and inoperable wood window sash while maintaining current profiles. 2. Restore existing and provide new window balance hardware or applicable operating hardware at all operable sash to accommodate use. 3. Replace all broken and unsound sash cord. Replace all sash cords on sash removed for repair. 4. Restore existing window hardware and provide new in kind window hardware where existing hardware is missing or is too damaged or deteriorated to be restorable. Clean, polish and lubricate all mechanisms. Coat metals subject to tarnish with Lacquer or other protective barrier. 5. Restore all window trim disturbed for work of this Section to sound condition and existing or repaired appearance. 6. Paint and finish all wood elements as necessary to match original finishes. 7. Glue or replace cracked, broken or missing glass. 8. Remove all deteriorated putty and replace with new. 9. Consolidate and repair deteriorated wood sills, framing members and sash rails and stiles. 10. Replace all broken or deteriorated parting strips. 11. Reinstall repaired window sash. 12. Clean all glass for project completion. 13. Provide maintenance instruction and schedules at close-out.
C.	Intent: It is the specific intent of this Section that repairs will maximize the retention of historic fabric while making the windows use their resistant for long-term use and

NOTICE: If no specs, drawings, or window schedule exist, we have a Microsoft Excel 'Restoration Sheet' that provides inputs on the information we need in order to price your project.

THE CONTRACT

Upon agreement and approval of restoration specs and methods for your project, we will then initiate a contract.

GENERAL CONTRACTOR:

General contractor sends a contract for CWWM to sign with all included addendums. Contract should state CWWM's specific relationship to the scope and discuss substitution requests in materials and processes, if any.

SELF-CONTRACTING:

CWWM will create a contract for the customer. The contract will include shop restoration schedule, activity sequence, restoration materials, and contract terms.

PAYMENT TERMS (FOR PROJECTS WHERE CWWM IS THE SOLE CONTRACTOR):

- ▶ 50% down payment.
- ▶ 100% when shop restoration is complete

SUBMITTALS:

CWWM submits required submittals in accordance with contract terms. CWWM can get submittals for customer required needs. A sequence of activities is always created for the project. Chosen Wood Window Maintenance (CWWM) submits documents and communicates through *Microsoft SharePoint* for best communication throughout the process.

SEQUENCE OF ACTIVITIES:

A SEQUENCE OF ACTIVITIES IS CUSTOM MADE FOR YOUR PROJECT

This document includes the process tasks used to get your sash from beginning to end for the scope of shop restoration. The document also contains the materials and products used with connected links to product information including MSDS sheets.

CATALOGGING / PULLING / MATERIAL TRANSPORTATION



Sash and millwork must be cataloged and marked so components of the window can be reinstalled in the same opening for best fit and for any historic significance. Sash and millwork must be marked with a short letter and combination code that will correspond with the matching code on the elevation drawing or frame. This code will later be stamped onto the sash and millwork. If CWWM is to handle sash/millwork cataloging, removal, and transport, we will arrange for our foreman to arrive to perform the work.

3RD PARTY TRANSPORT

If a customer is cataloging and pulling windows, CWWM will assist in the transport of materials by providing techniques/requirements of transport. CWWM may also assist in providing crate services for transport service providers.

3rd party transport can be arranged to transfer sash and millwork between the site and our restoration shop. An appropriately sized 3rd party transportation crate can be arranged to arrive on site for a specified amount of time to be loaded with material for transport. The crate will also be arranged to arrive back on site with the finished product for the desired amount of time for unload.



**Insurance coverage is provided to protect all materials while in transport and during restoration.*

SHOP RESTORATION ACTIVITIES

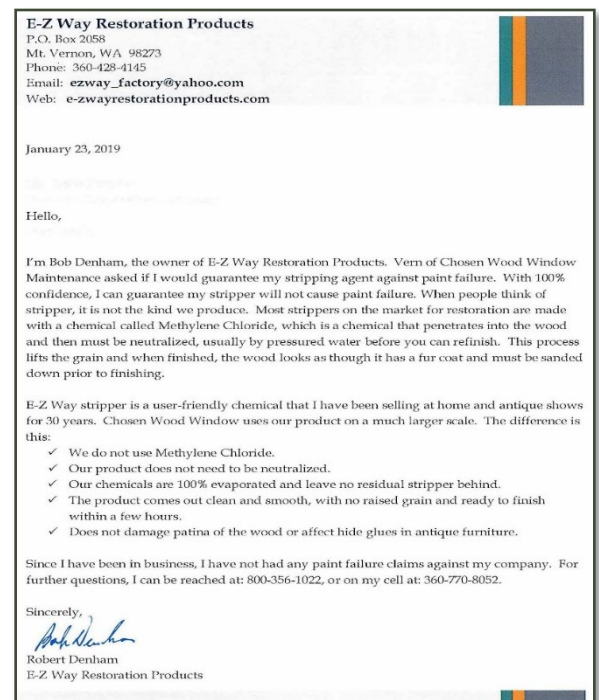
CWWM provides updates with restoration pictures and tracking that can be used for the submittal process. We provide photographs per certain restoration stages:

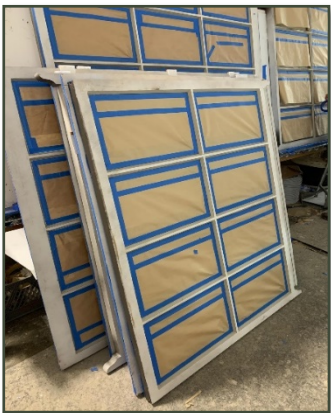
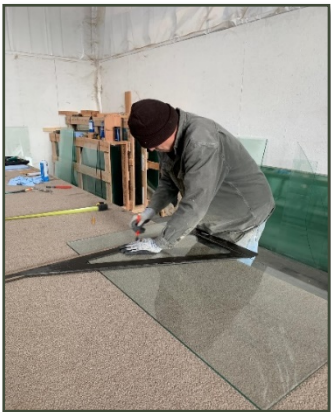
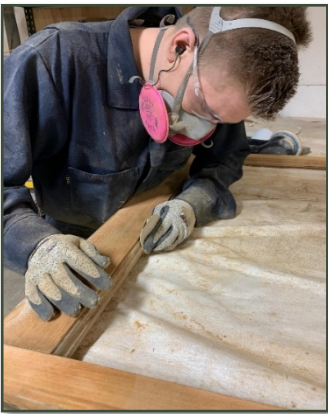
- ▶ Pulling sash/millwork, cataloging, transporting (if applicable)
- ▶ Stripping old paint, removing existing glazing
- ▶ Wood/sash repair, sash/millwork reproduction (if applicable)
- ▶ Glazing
- ▶ Complete and ready for Transport

For more sizable projects we may require the customer representative to meet at the CWWM production shop to sign off on any work before shipping to the site.

SAMPLE SHOP RESTORATION PROCESS:

1. Light pressure wash to remove all dirt.
2. Stamp the number on the 1 ¾ bottom right side of sash.
3. Chemical strip the paint from sash down to bare wood (no-neutralization required).
4. Remove glass and save for re-use.
5. Hand sand muntin bars interior and exterior, and power sand the flats.
 - ▶ Repair broken millwork or rotted wood. dutchman repair and Arbitron.
 - ▶ Fill in weathered wood grain.
 - ▶ Sand to flush
6. Kerf for weather-stripping.
7. Prime sash, add missing panels of glass, and mask.
8. Paint finish coats of paint interior and exterior.
9. Remove masking, clean glass, and add weather-stripping.
10. Re-Putty all missing putty areas (must cure before painting).
11. Load racks with finished sash and transport back to jobsite.





SHIPPING MATERIALS BACK TO SITE

Restored materials are arranged with the customer to be shipped back to the site.



WARRANTY/CONTRACT CLOSEOUT

Final transportation documents and notice of completion will be submitted.

CWWM requires final payment upon sign off of shop restoration scope. CWWM shop warranty applies to the materials failure only and not window operation or on-site construction operations.