

HillRag



Case Study: Repairing Historic Wooden Windows

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The wooden windows in our 110-year-old Capitol Hill home were a mess: air leakage, improper closing, broken and frayed sash cords, poor or non-existent weather stripping, loose paint and glazing, damaged glass and sashes, rotting sills and jambs, and missing or mismatched hardware. At least we had storm windows, installed in the late 1970s by a previous owner.

After getting several estimates, we hired Mozer Works Inc. of Takoma Park, a company dedicated exclusively to the restoration of old windows and doors with extensive experience Capitol Hill.

Our project involved removing all 13 double-hung windows and sending them to Mozer's workshop. Mozer can do either "partial" or "full" restorations. We opted for the partial restoration, which doesn't involve total paint stripping. Using wooden dowels and epoxy, they stabilized the loose mortise-and-tenon joinery of our sashes. They sanded the sash stiles, rails, and grills. If needed, Mozer can repair heavily damaged sashes with old-growth wood from other discarded sashes, thus maintaining the integrity of the sash composition.

At our house, Mozer used a concealed zinc weather stripping system to eliminate drafts both at the perimeter and at the midrails where double-hung windows meet. After priming the window sashes they cleaned and re-glazed the glass as needed so each pane was tightly set to keep out air and water. They also removed the old paint layers on the window jambs. Wood sashes need to be able to expand and contract, and years of paint and caulk had eliminated that ability in our house.

Mozer "re-sized" the windows, sealing their openings and the exposed jambs with boiled linseed oil as protection against moisture. Finally, they checked the weight pockets for leakage and inspected the storm windows for a good seal to guarantee that the restored windows and storms would act in tandem at a high level of energy efficiency. As the final step Mozer and his staff returned and re-hung the sashes with new cords, checked the weights for proper balance, and installed new hardware.

The project took about six weeks. Mozer and his staff used drop cloths and heavy vinyl

plastic to seal off areas to minimize lead, dust, and debris. While the sashes were in the shop being restored, we kept our house sealed up with the existing storm windows. The company typically “weatherizes” window openings to keep them waterproofed and airtight while sashes are restored, and plywood can be used if there are security issues. We are delighted with our smoothly working, beautiful looking, weather-tight windows. They are functional, energy efficient, and preserve the historic integrity of the house. Our wooden windows have been given a second life and should last another hundred years.

Jeff Fletcher is a board member of the Capitol Hill Restoration Society.

