Window Repair and Restoration Basics

By Preservation Pennsylvania

The good news is that older windows can be repaired! Traditional windows are made from individual parts, which are pieced together to make the window. Each piece of the window can be individually repaired or even replaced. If the glass is broken, you can replace it. If the bottom rail or sill is rotted, you can repair or replace them. All is not lost! Just because the condition of a window is poor does not mean that it needs to be replaced.

Sometimes it is overwhelming to look at your windows and imagine tackling the project of fixing them. It seems easier to just call someone who will come and replace them with new ones. While that may be easier, in most cases, it’s not better.

Start by looking at your windows and determining what condition they are really in. Use a notebook or spreadsheet to help you. Go window by window, part by part. Let your inner critic shine and note what’s wrong with each window. Take pictures as you go. You may be surprised to find that your windows are not all in horrible condition like the one that first caught your attention. The location of a window on the building often makes a big difference in its condition. Those on the south and west sides of the building, which face the harshest sun, tend to suffer more from peeling paint and dried-out glazing putty, while windows on the north and east sides tend to have more problems with rot from moisture getting trapped in the joints or sitting on flat surfaces.

Talk to a qualified professional who can tell you what needs to be done to address the problems you identified. If you want, they can also give you an estimate to do the work. In the hands of a qualified contractor, repairing your windows can
be just as easy as replacing them. There are a number of things that your contractor can do for you. If the glazing is failing, they can reglaze your windows for you (or you can do it yourself). If elements of the window are deteriorated or failing, they can perform Dutchman or epoxy repairs, or they can replace the individual part – be it a muntin, rail, sill or whole sash – for you.

Preservation work is labor intensive as opposed to materials intensive. This means that the money you spend to repair your windows is paying for skilled labor, rather than buying new materials that are having an impact on the environment.

**Restoration**

For the most part, routine maintenance and occasional repairs will be sufficient to keep your windows in good condition. However, from time to time (probably every 50-100 years), the layers of paint and grime build up to a point where they are no longer stable, or major repairs are needed. When your windows require restoration, your contractor will do the following:

**Disassemble window unit and remove window sash.** They’ll remove the stop that holds the window sash in, and then disconnect the sash cord and weights that allow the window to move up and down. They’ll put a temporary window (or board) in the window opening and take the sash with them back to their shop.

**Remove existing paint and putty.** In their workshop, they’ll remove the existing paint and glazing putty. Most professionals seem to prefer using steam because it makes relatively quick work of the paint removal without negatively impacting the window sash. Other methods, such as heat or chemical paint strippers, may be acceptable as well.
Conduct repairs. Once the paint and glazing compound have been removed, they’ll take the glass out. Then they’ll conduct any necessary repairs, such as gluing and re-pegging joints, replacing broken muntins or damaged rails, or replacing broken glass. In the hands of a qualified carpenter or contractor, any historic window can be fixed.

Apply oil-based primer with a brush. After the repairs have been made and the sash has been sanded, they will prepare the wood for primer. This involves the application of a combination of linseed oil and turpentine, often several layers. Once the surface is ready, they’ll apply one coat of oil-based primer with a brush and allow it to dry.

Replace the glass and paint. When the primer has dried, they will create a bed of glazing putty to set the glass in, and then install glazing points to hold the glass in place. The window will then be sealed with additional glazing putty. Once the putty has cured, they will prime it using oil-based primer, and then apply two coats of high-quality paint.

Reinstall the windows. Before reinstalling the windows, the contractor will make any necessary repairs or modifications to the window frame. They can repair or replace rotted sills or pieces of the frame or trim. They will make sure your pulleys and other hardware are working properly. In addition to prepping, priming and painting the frame, they can add weather stripping, if so desired.
They will then reinstall the window sash, replacing the cords (sometimes with chain upon request) and adjusting the weights, as needed. Some contractors even apply wax to make the windows easier to open and close. If you would like to be able to clean the outside of your window easily, ask your contractor to reinstall the stop using a screw in a threaded barrel so that you can easily remove the stop and swing the sash in for cleaning.

Once the restoration is complete, your windows will be as good as new...or better! All lead paint will have been removed, eliminating that problem completely. You'll have windows that were made to fit your home, from materials that are durable and have no environmental impact.