



Replacement Window Materials



What you need to know about each type of material that can be used for your windows.

Deciding to improve certain aspects of a home is always good, though certain improvement choices are "flashy" and more obvious, and some that are not. Upgrading old plumbing, or doing work to reinforce a foundation is a good choice, but no one is going to notice it immediately, making it a bit harder to convey the actual property value of the home.

But deciding to get new replacement windows is one of those decisions that always presents immediate gains for the property value, the appearance of a house, the comfort of a home, and even the energy efficiency. It's one of the reasons why new windows is always a safe choice to make when you want to do something that everyone will notice, appreciate and see why your property's value has gone up.

But this is only the case if it's a real improvement! If you're getting new windows in place of existing ones, you should start thinking about what kind of replacement window materials you want to use. This choice can have a significant impact on the lifespan and maintenance that windows require, and here's why.

It's More Than Just Glass

While the biggest, most visible aspect of a window is the glass, which allows you to look out but also admits sunlight into the home, it is just one half of the equation. The other half is the replacement window materials that make up the frame and hold the glass. This structure is a crucial component you have to remember because, in one sense, the windows of your home are acting as "lids" on the openings in your home.

St. Louis and the state of Missouri get the "full force" of four seasons throughout the year. That means there are hot summers, but there are also cold winters, where snow is sitting on the ground and on the rooftops of homes. Because of this, most homes in St. Louis benefit from some kind of centralized HVAC system, with a furnace that keeps the house warm in the winter and an air conditioner that keeps things cool in the summer.

Home insulation plays a critical role in the maintenance of ideal indoor temperatures. A lining in the walls of a home contributes dramatically to just how much people pay on heating and cooling bills during the year. Insulation in a solid wall provides the ultimate layer of protection, repelling the air outside, and keeping the heated or chilled air inside from leaking out. The better the insulation lining a home has, the lower bills people will have for their energy use because the HVAC system doesn't have to work so hard, or so long.

Even though you have good wall insulation, your old windows could be counteracting the other energy efficient measures you're taking. A window is, unavoidably, a hole cut into that layer of insulation in a home. So that means air from outdoors and air from inside is naturally trying to move through windows as a conduit. You can have fantastic insulation lining your home, but if you have poorly maintained windows, you're losing those energy savings to these "holes" in your home's armor.

On the other hand, if you get a window correctly installed, with proper sealant and quality replacement window materials, you won't see a rise in your bills. But it's all a matter of what choices you make.

Wood Frames

For some, particularly for historical preservation reasons, wood is still a viable choice as a replacement window material. In most new, 21st century homes, this is no longer a popular

choice, and there are reasons for that. The first reason is its vulnerability. While wood is a plentiful building resource, it is far from the most robust building material. Unlike vinyl windows or fiberglass windows, wood frames are made from an organic material, and thus they will naturally erode. The exposure to the elements of rain, snow, heat, cold, sunlight and other factors all mean that the deterioration of a wood frame is not just likely, it's inevitable.

Wood is also vulnerable to insects. Termites, carpenter ants, and other colony insects regularly choose wood as a site to make their homes. Once this happens, the structural integrity of wood rapidly diminishes. Even without insect interference wood needs to be carefully maintained with stains and sealants and it will still not approach the same level of energy efficiency as modern materials.

Vinyl Windows

One of the most popular modern replacement window materials is vinyl, which is now used in many windows around the country. Vinyl is a synthetic material, but it is both durable and flexible, which makes it an excellent replacement for wood, and even metals like aluminium, which have also been used in window frames. It's now one of the most common materials for window frames and one of the biggest reasons for that popularity is cost. Regular vinyl provides a significant "performance boost" at relatively small costs.

However, that's not to say that it's the ultimate answer, especially when compared to other alternatives like premium vinyl or fiberglass window frames. Given enough time, vinyl can warp, shift, change in shape, and even chip. On average, however, getting vinyl windows means that you can enjoy between 20-40 years of reliable operation, so you won't have to worry about these for a very long time!

Premium Vinyl

On the other hand, you can go a "step up," and get premium vinyl windows like those offered by Simonton. These have all the basic advantages of normal vinyl windows, although, as you may have guessed from the "premium" label, they're also more expensive. However, the synthetic nature of the vinyl means that it's still relatively low maintenance, and, unlike wood, is entirely resistant to insect damage.

The big difference lies in that premium vinyl windows build on the existing advantages of vinyl. The frames are fusion welded, meaning that the angles where different portions of the frame meet are airtight because they're not just screwed together. It's important to note that the vinyl material doesn't take well to paint, unlike wood, so if this is something that's important to you, consider looking into color options for your frame, as premium vinyl window options may have a few different colors available besides the standard white.

Fiberglass Windows

Fiberglass is a relative newcomer to the world of windows, but it brings with it a lot of impressive new perks that put it firmly at the top. But that also means, of course, if you want these perks, you'll be paying more than you would for vinyl windows. But if you're interested in getting premium windows, then Beechworth fiberglass windows is something you might want to look into.

Fiberglass windows, like premium vinyl windows, can come in a few different colors if that's

what you're looking for. The one great advantage of specialty color fiberglass windows is that in the event of an accident, or some impact that may cause chipping, because the entire frame is made of that color, the damage isn't as apparent as when paint chips off a wood frame. Another advantage that fiberglass has over premium vinyl is that it *can* be painted if this is something that you really want to do.

Fiberglass windows also have the benefit of being fabricated with textures. So if you want something that has the appearance of wood, but without wood's vulnerabilities, that's one of the options you can get with fiberglass. And Beechworth windows give you fiberglass on the outside for durability and then beauty of wood on the inside for a real premium appearance!

Perhaps the biggest perk of fiberglass is that it has reduced chances of a problem known as "seal failure." Basic physics teaches us that when things heat up, they expand slightly in size. This response happens with all materials, including glass and vinyl. However, because the glass panes of a window are made from a different material than vinyl, the rate of expansion when these two materials heat up is different. Over time, the differing expansion rates may eventually erode the airtight seals between the two materials. Fiberglass, however, being made *with* glass, means that the window and the frame expand at the same rate, significantly reducing the loss of the airtight seal!

It's Not Just the Parts, It's the People

Please remember after reading all this that the inherent advantages and disadvantages of any replacement window materials can even depend on the people who install the windows. As with so many other elements of a home, such as the HVAC system, the best components in the world are not going to live up to their potential if they are not correctly installed with the distinct characteristics of the home kept in mind.

If you're interested in new replacement window materials, such as premium vinyl windows or fiberglass windows, get the right people for the job. Contact Banner Construction for a free estimate, and let us see what your home needs and make the right recommendation. At the end of the project, you won't just enjoy lower energy bills, but you'll also have a better-looking home that's worth more too!