

# replacing windows? **KNOWLEDGE IS POWER!**



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**R**eplacement windows can make a major difference in the appearance, comfort, energy costs and resale value of your home. But not all replacement windows are the same. In order to maximize your home improvement budget, it's important to question and understand some of the basics of quality window construction. This article includes straightforward answers to the most common and important vinyl replacement window questions facing homeowners today.

## **Why should I buy custom replacement windows?**

Custom windows are designed and manufactured for a perfect fit—every time. And that means less air infiltration and a more uniform appearance. Many windows are made on every 1/8" on height and width.

## **What's the difference between vinyl, wood and aluminum windows?**

While there are a variety of materials available to make windows, vinyl is a great choice for many reasons. Vinyl is an excellent insulator. It does not conduct heat or cold like aluminum, which is a major source of lost energy. And in comparison to wood windows, vinyl is less likely to swell and shrink when the temperature and humidity shifts from season to season. Vinyl windows are also virtually maintenance free, unlike wood windows.

## **What's the best way to manufacture windows?**

The most efficient and consistent way to make custom windows is with automated equipment.

...not all  
replacement  
windows are  
the same.

Technologically-driven processes can ensure precision sash and mainframe fit to guarantee full contact weatherstripping and a professional installation that is perfectly

Cross-cut view of sash and frame.



square. And with a tight compression seal, you'll have effective protection against air infiltration, and you'll enjoy greater home comfort.

## **What is fusion welding?**

Most vinyl window manufacturers use 2-point welders to fuse the vinyl components of their windows. We recommend a manufacturer that uses a robotically controlled full Four-Point Welder. This process ensures that each window is welded on all four corners, at the same time. This step absolutely ensures a true square window. And, with that process, the weld at the corner is actually stronger than the window itself, giving you a stronger, better performing window.



All photos courtesy of Sam S. Smucker & Sons, Inc.

Windows tilt in for easy cleaning.

### Are replacement windows secure?

The strength of reinforced load points and the quality of locking systems play a major role in window security. Sash vent latches allow for consistent ventilation, but when needed, they make the sashes unable to be fully opened for exit or entry. The deep jamb-to-jamb interlock holds the sashes together when closed, making forced entry more difficult from the outside. Also, laminated glass provides intruder resistant secure glass packages.

### Are windows Energy Star rated?

Yes. ENERGY STAR qualification is an important consideration when deciding to replace your window. Windows should be ENERGY STAR qualified for all regions of the United States. ENERGY STAR qualification is based on NFRC overall product ratings (see below).

### What is U-Factor?

U-Factor measures the total energy efficiency of windows, including the glass and frame unit. Developed by the National Fenestration Rating Council (NFRC), this rating system was developed to assist homeowners in comparing “apples to apples” when evaluating the total energy efficiency of windows. The lower the U-factor, the better the window’s insulation ability.

### R-Value vs. U-Factor. What’s more important?

R-Value stands for thermal resistance, and is typically measured in the center of the glass only. R-Value does not measure the window unit’s overall efficiency. U-Factor is a more important factor when evaluating energy efficiency, according to the US Department of Energy.

### Is all Low-E glass the same?

No! Low-E stands for “low-emissivity”. There are two major types of low-E glass. Hard-coat Low-E is a tin-based coating applied while the sheet of glass is still soft during the



In 1960 Sam S. Smucker began his one man roofing and spouting business. Today it continues as a family owned company, specializing in exterior remodeling for the residential and light commercial markets. His company expanded it’s services over the years as well as it’s reputation for quality in both materials and workmanship. We offer a full range of remodeling services from replacement windows and doors, to roofing, siding, sunrooms and patio enclosures. We also have a sheet metal fabrication shop and our gutter topper leaf protection systems has helped many of our customers eliminate dangerous gutter cleaning.

In 1993, we opened our Ephrata Showroom, showcasing a wide range of home improvement ideas, all on display in a lived in setting. In June of 2007 we moved our corporate office into a new facility on Strasburg Pike which includes our new Lancaster Showroom. Now with two great showroom locations, you’ll enjoy a comfortable experience when shopping for your home improvement needs. It is Smucker’s commitment to quality for almost 50 years that has garnered the company many awards from manufactures as well as a number one ranking for 10-years in a row by an independent survey of reader’s of Lancaster County Magazine. These awards and high customer satisfaction would not be possible without a dedicated and hardworking staff of 65 employees.

At Sam S. Smucker & Sons, our goal continues to be the leading home improvement employer in Lancaster County, providing an exceptional work environment for our employees. Through a professional and empowered workforce, we will provide outstanding service and quality workmanship to our customers in Lancaster and surrounding counties.

manufacturing process. Soft-coat Low-E is a silver-based coating that is sputter coated, similar to chrome plating the bumper of a car, although a much more complicated process. Both block radiant heat by keeping the heat outside in the summer and keeping it inside during winter. However, that is where the similarities end. The multi-layer, silver-based soft-coat Low-E coating will give better glass clarity, and significant insulation.

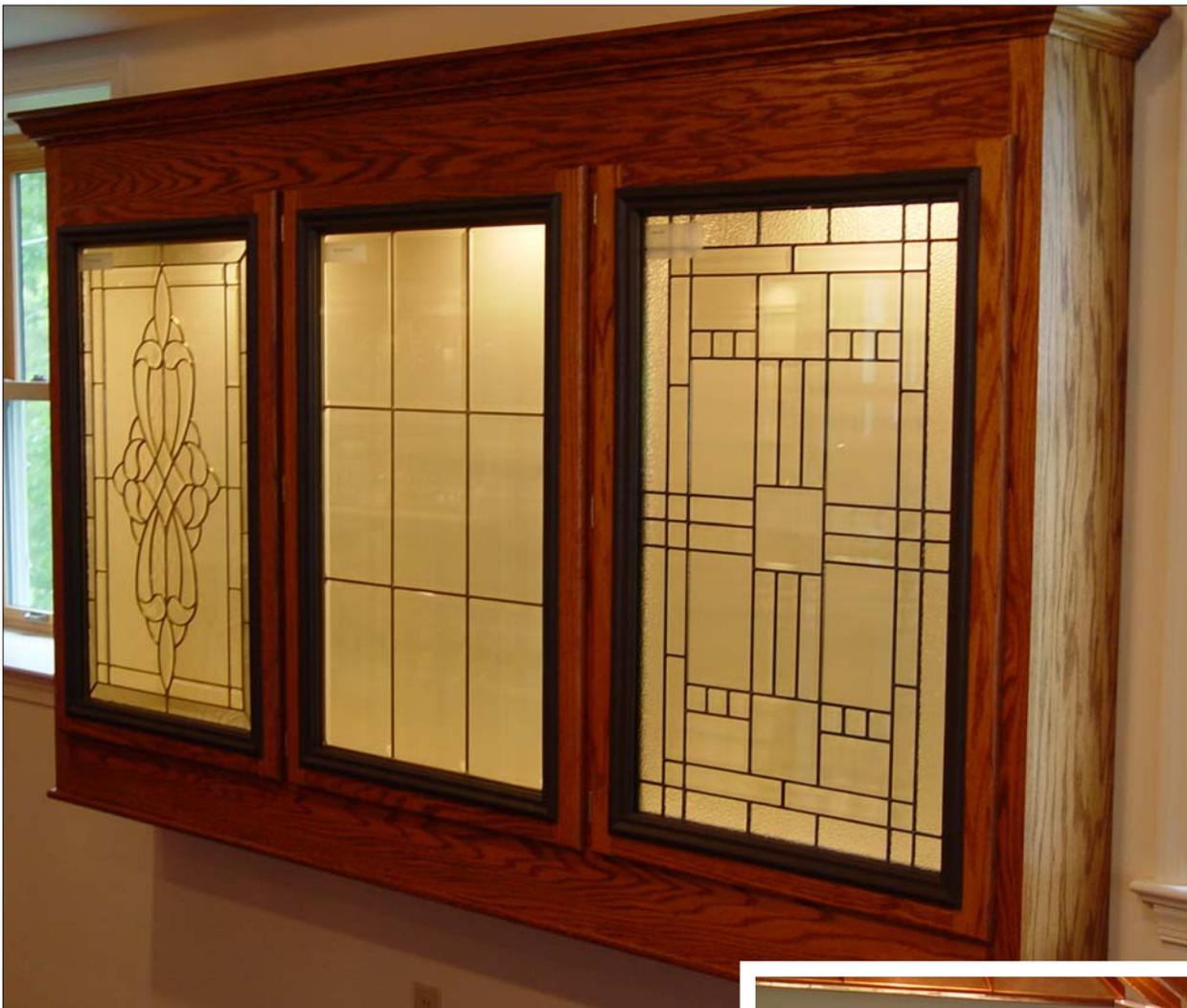
### Are all spacer systems the same?

No! When considering an insulated

glass unit, the spacer is one of the most important parts of the entire glass system. The spacer bar separates the sheets of glass, which creates the all-important “dead air space” between the panes. Make sure the spacer is made with warm edge technology.

### Why use exotic gases in the glass, and are they safe?

Argon and Krypton gas are used to add energy-efficient properties inside the airspace, between the panes of window glass. Because these gases



Many decorative glass options.

Angle bay window with copper roof.



are heavier than air, they provide greater resistance to heat and cold conduction through a glass unit. These gases exist naturally in the air we breathe and are safe to use within insulated gas units.

**Is there a window glass that can reduce fading in my carpets and drapes?**

Prolonged exposure to UV rays can definitely affect your fine furnishings. Some glass systems can provide protection against sun damage, however, it is important to remember that UV rays are not all bad. Humans, animals and plants need a certain amount of UV light to thrive. A quality glass system provides the perfect balance of UV levels.

**Is it possible to eliminate condensation on my windows?**

The moisture present in all home environments makes window

condensation virtually impossible to eliminate. You can greatly reduce condensation however by increasing indoor ventilation and controlling indoor humidity.

**Is it impossible to have my new windows installed in the wintertime?**

Custom-made windows can be installed twelve months out of the year. Our custom-fit windows eliminate time-consuming changes to the exterior and interior of your home that are often necessary with



Exciting displays of windows and doors in Lancaster and Ephrata showrooms.



“stock” sized windows. They can be installed quickly, in most cases, with minimum fuss and “down time” for you and your home. You will start experiencing the thermal performance benefits immediately. A professional contractor will typically install your new windows one room at a time, in order to minimize your home’s exposure to the elements.

**What warranty information should I consider when buying replacement windows?**

You should always review the warranty when considering replacing your windows. Be sure to take note of the warranty on the glass, as well as the working components of the windows. We recommend a warranty that is fully transferable should you sell your home.

The most important consideration to remember..... while it is not rocket science, it is essential that the contractor you hire offers a quality window. A cheap window will prove to be an expensive decision.

If you have further questions, please contact us at either of our Lancaster County locations or visit us on the web [www.sssmucker.com](http://www.sssmucker.com).

R&A

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*The Name to Know Around Your Home*