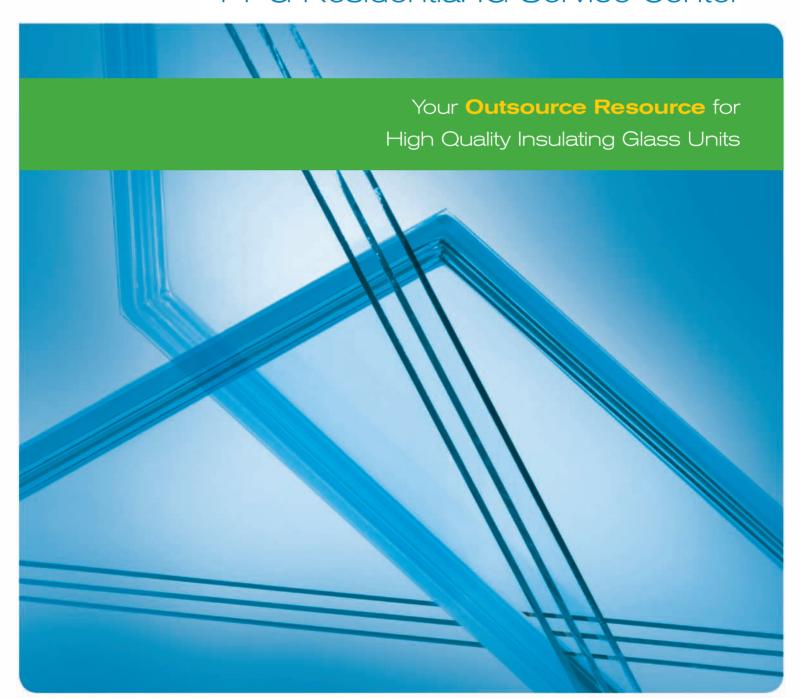


PPG Residential IG Service Center



Take Profits In

The PPG Residential IG Service Center in Carlisle, Pennsylvania, is a full-service fabrication facility designed to supplement your manufacturing capabilities or help your plant increase profitability by enabling you to cost-effectively outsource the production of ...

- 1. Standard and custom-sized patio-door IG units
- 2. Custom IG units, including double- or triple-glazed units
- 3. High-volume project IG unit fabrication
- 4. Patio-door IG units and IG units with special shapes, sizes and configurations

Flexibility to Fit Your Needs

Quick-Ship and Custom-Sized Patio-Door IG Units

The PPG Residential IG Service Center has the experience and equipment to fulfill the needs of any window and door manufacturer. We have patio-door IG units in stock sizes up to 46"x 76" that are ready to ship and the ability to produce and ship patio-door IG units in previously ordered custom sizes.

Volume Production of Custom, High-Quality IG Units

PPG offers choice and quality in IG unit fabrication. Whether you need standard IG units or special shapes and sizes, PPG offers a full array of configurations to fulfill your customized demands in small quantities or large-project volume.

Low-E and Self-Cleaning Glasses

When you order custom IG units through PPG, you can select from the industry's broadest range of advanced low-e and

solar control, low-e glasses. Products such as *Solarban*® 70XL and *Solarban* 60 glasses are favored by homeowners and residential architects for their ability to brighten interior spaces while lowering energy bills, two attributes that have made these products popular for commercial buildings as well.

In heating-dominated climates, passive low-e glasses including *Sungate*® 600, *Sungate* 500 and *Sungate* 400 glasses capture and retain solar heat, enabling window and door manufacturers to produce residential IG units that deliver value and energy performance in any climate.

For even more options, each of PPG's low-e glass products can be combined in double- or triple-glazed IG units with conventional clear glass, tinted glass or *Sunclean*® self-cleaning glass by PPG.

Industry-Leading Spacer Technology

To further enhance energy performance, the PPG Residential IG Service Center manufactures IG units with the *Intercept* Spacer System, a proven favorite among homeowners for its durability, insulating strength and clear sight lines. The *Intercept* Spacer System features a patented U-shaped design that allows the spacer, not the sealant, to flex in response to temperature changes, dramatically reducing the chances for seal failure.

Window makers seeking ENERGY STAR® performance can specify IG units with the *Intercept* ULTRA Spacer System, which is made with stainless steel spacers to provide heightened levels of performance.

Double- and Triple-IG Configurations

In addition to making standard IG units, PPG's Carlisle facility is the first U.S. plant to incorporate GED Integrated Solutions' Automated Tri-Lite Assembly System (ATLAS) for triple-pane IG units.

A project initially sponsored by the U.S. Department of Energy, the ATLAS production line enables window manufacturers to meet the growing demand for triple-pane IG units via outsourcing, affordably and without reconfiguring their existing production lines.

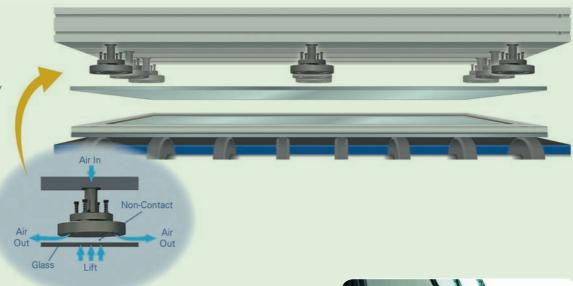
With its advanced technology, the ATLAS system enables PPG to produce triple-pane, highly insulating IG units at a rate that is significantly faster than most conventional IG production lines. In addition, because the ATLAS system is fully automated, it eliminates many of the quality control problems associated with manual production on traditional triple-IG fabrication lines.

Special Shapes, Sizes and Coatings

The PPG Residential IG Service Center can customize IG units to fulfill virtually any special request, including many irregular shapes, sizes and configurations. Special requests are welcome. Just ask.

ATLAS LINE

The PPG Residential IG Service Center operates the industry's first ATLAS line. It can produce triple-pane, highly insulating IG units at a rate that is significantly faster than most conventional IG production lines

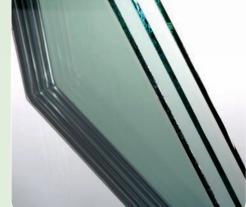


Touch-Free Glass Lift

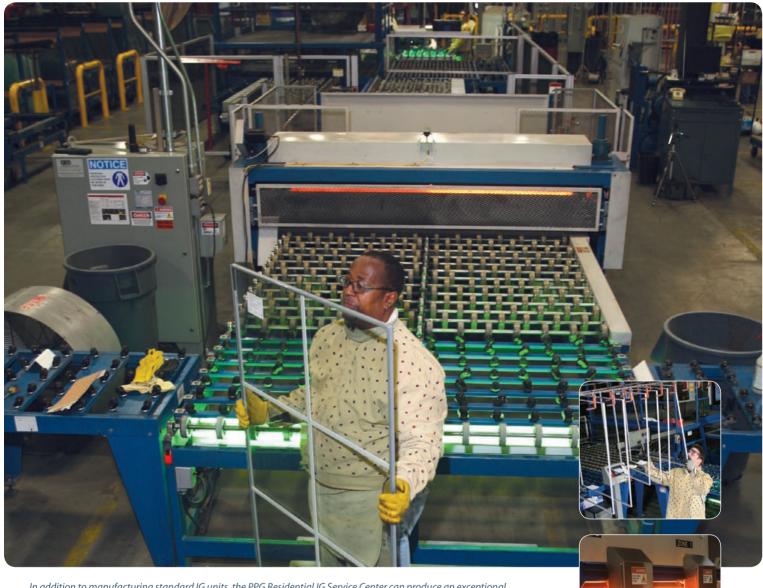








DIFFERENT TYPES OF GLASSES MADE AT PPG RESIDENTIAL IG SERVICE CENTER



In addition to manufacturing standard IG units, the PPG Residential IG Service Center can produce an exceptional variety of specialty and custom glass products including shapes and triple-glazed units. These products can be made with tempered glass, low-e glass and can incorporate Intercept Spacer technology or flexible spacers.

Why PPG?

Because experience counts. PPG has been making glass since 1883 and producing finished IG units for commercial and residential window manufacturers for more than 40 years. During that time, PPG has gained a reputation for pioneering leadership in the development of energy-saving low-e glasses for homes and commercial buildings, such as *Solarban* solar control, low-e glasses and *Sungate* passive, low-e glasses. In addition, PPG is the only glass manufacturer in North America to have its entire collection of architectural and residential glasses *Cradle to Cradle Certified*^{CM}.





PPG Proven Customer Service

Fast, Convenient Delivery Options

The PPG Residential IG Service Center specializes in quick turn-around and special orders. We ship in-stock patio doors sizes of 28" x 76", 34" x 76" and 46" x 76"; custom IG units made with 2.5 to 5.0 millimeter glass and previously ordered custom-sized IG units.

For added convenience, the PPG Residential IG Service Center is one of the few industry service centers that can combine orders for float glass and IG units, or ship IG units to your door in less-than-truckload (LTL) quantities.

Industry Certifications

Double-glazed and triple-glazed IG units fabricated with *Intercept** spacers by PPG meet IGCC* and IGMA* certification.



Why Outsource?

Window manufacturers invest heavily in their fabrication capabilities to increase quality and profitability, or to manage labor, maintenance and other costs. Nevertheless, many are increasingly outsourcing all or part of their production to save space, save money or to manage excess demand.

Whether your shop is busy or slow, the PPG Residential IG Service Center gives you the flexibility to adjust to market conditions. During down times, our facility enables you to eliminate partial shifts, reduce capital expenditures and manage inventory through expedited delivery. When it's busy, your operation can take advantage of the following benefits:

- Expanded IG and patio-door IG production capacity
- Reduced inventory costs and tracking
- Maximized manufacturing space
- Lower shipping costs
- Less complex manufacturing requirements

PPG Residential IG Service Center

For more information or to arrange a tour of the PPG Residential IG Service Center, call 1-888-PPG-GLAS or visit www.ppgglass.com/igsc.





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