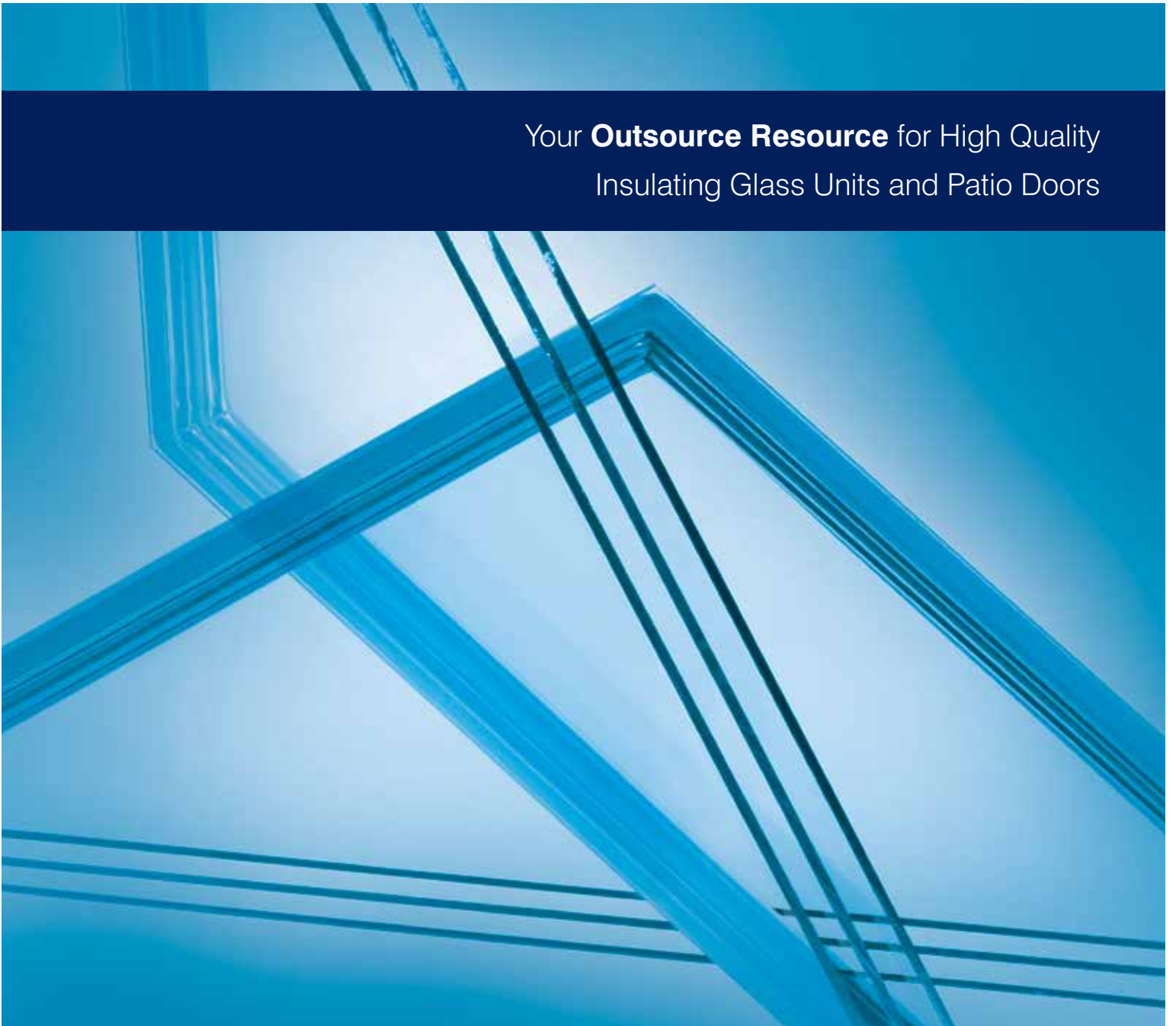




Vitro Architectural Glass Residential IG Service Center

Your **Outsource Resource** for High Quality
Insulating Glass Units and Patio Doors





Vitro Architectural Glass Proven Customer Service

Fast, Convenient Delivery Options

The Vitro Glass Residential 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 with 2.5 to 5.0 millimeter glass and previously ordered custom-sized IG units.

For added convenience, the Vitro Glass Residential 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 by Vitro Glass meet IGCC® and IGMA® certification standards.



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 Vitro Glass 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 warranty obligations, 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

Send Work Out ...

Take Profits In

The Vitro Glass 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 fabrication 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 units

Flexibility to Fit Your Needs

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

The Vitro Glass 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, along with the ability to produce and ship patio-door IG units in previously ordered custom sizes.

Volume Production of Custom, High-Quality IG Units

Vitro Glass offers choice and quality in IG unit fabrication, including a full array of configurations to fulfill your customized demands in small quantities or large-project volume.

High Performance Low-E Glasses

When you order custom IG units through Vitro Glass, you can select from the industry's broadest range of advanced solar control low-e glasses. Products such as *Solarban*®

70XL, *Solarban 60*, *Solarban 67* and *Solarban 90* 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 such as *Sungate*® 400 and *Sungate* 460 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, our low-e glasses can be combined in double- or triple-glazed IG units with conventional clear glass, tinted glass or *Starphire Ultra-Clear*™ glass by Vitro Glass.

Industry-Leading Spacer Technology

To further enhance energy performance, the Vitro Glass 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-shape 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 low-e glass and 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, Vitro Glass's Carlisle facility is the first U.S. plant to incorporate GED

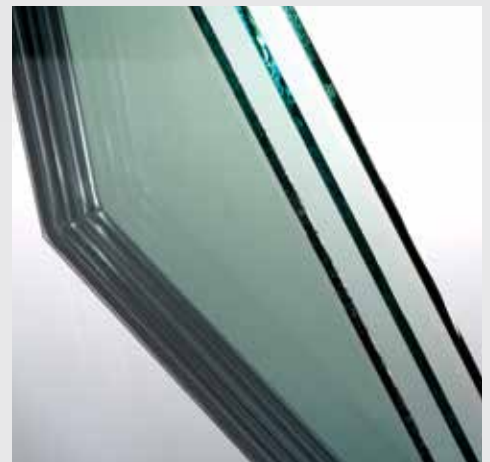
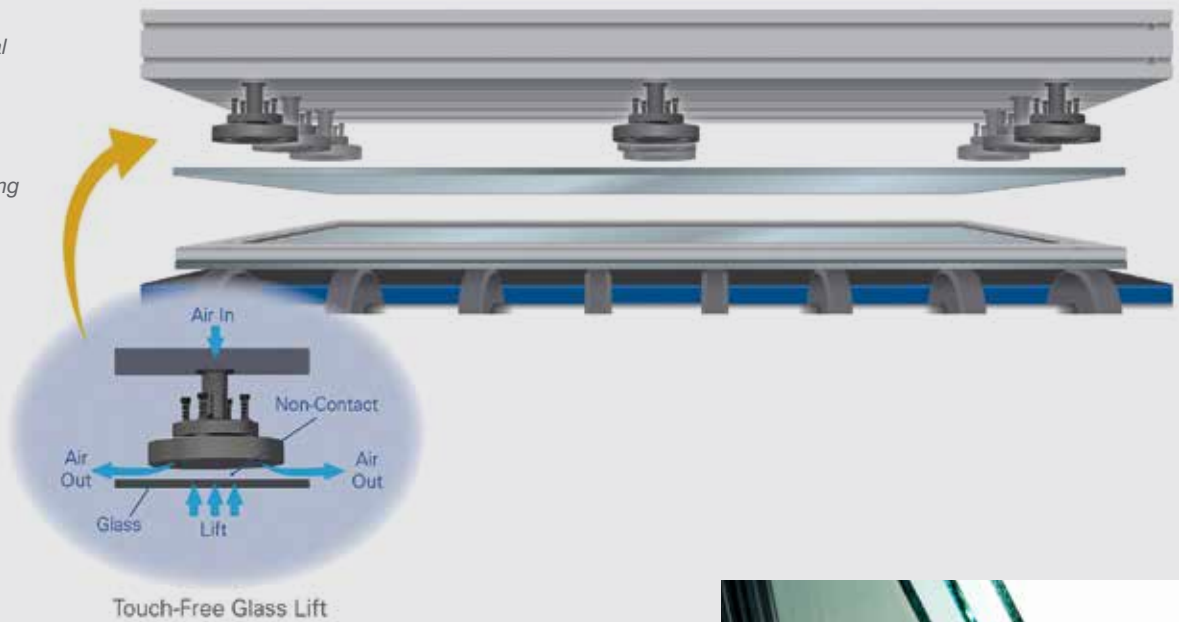
Integrated Solutions' Automated Tri-Lite Assembly System (ATLAS) for triple-pane IG units.

A technology 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.

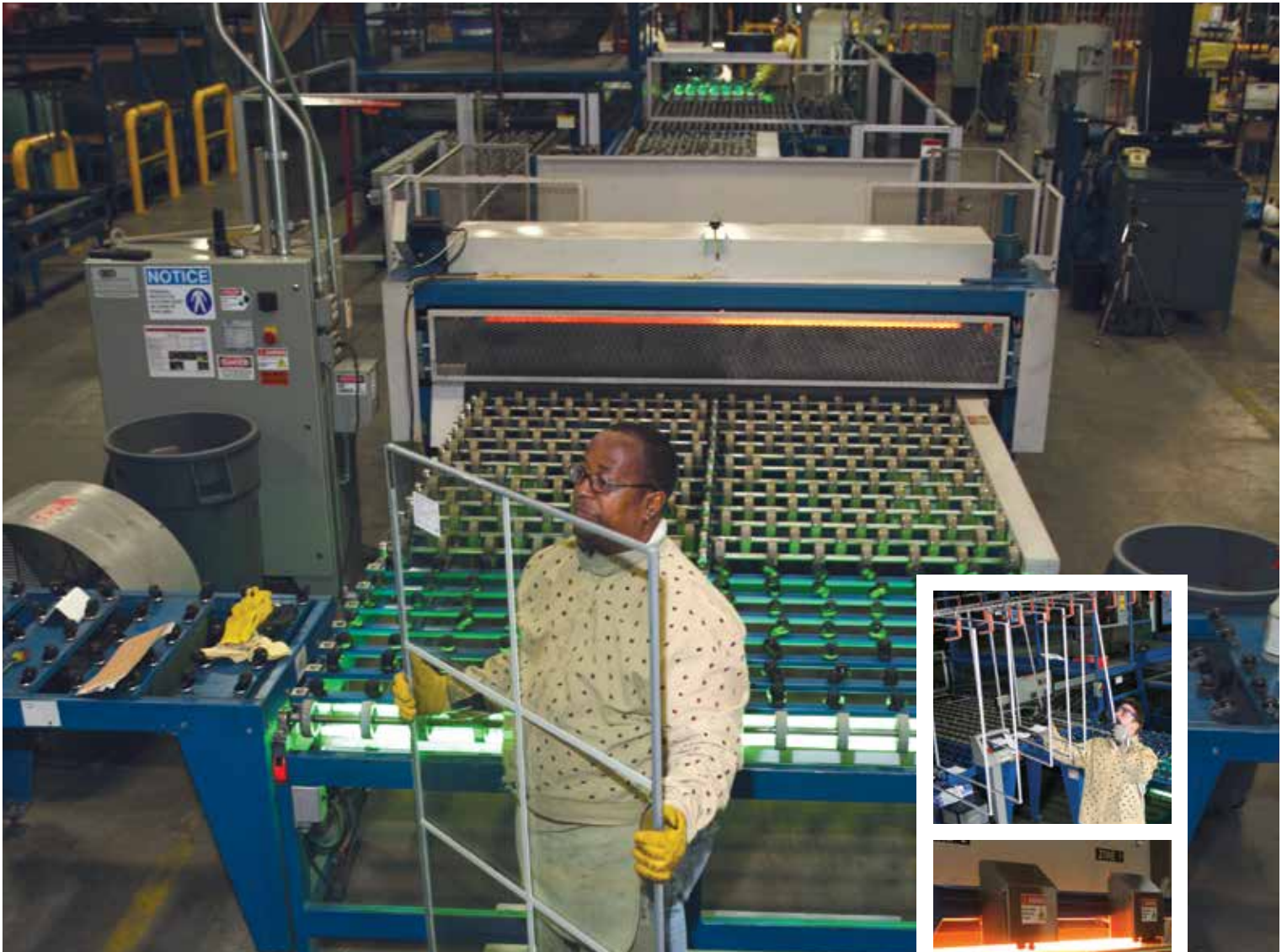
With its advanced technology, the ATLAS system enables Vitro Glass to produce triple-pane, highly insulating IG units at a rate that is significantly faster than most conventional IG production lines. In addition, because the ATLAS system is fully automated, it eliminates many of the quality control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

ATLAS LINE

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



DIFFERENT TYPES OF VITRO ARCHITECTURAL GLASS RESIDENTIAL IG SERVICE CENTER



The Vitro Glass Residential IG Service Center can produce standard and triple-glazed IG units with tempered and low-e glass and incorporate Intercept spacer technology or flexible spacers.

Why Vitro Glass?

Because experience counts. Vitro Glass (formerly PPG glass) 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, Vitro Glass 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 2008, PPG became the first glass manufacturer in the U.S. to have its entire collection of architectural glass products *Cradle to Cradle Certified*,™ and remains the only company of its kind in the world to have its products continuously certified to that standard.



Vitro Architectural Glass Residential IG Service Center

For more information or to arrange a tour of the Vitro Glass Residential IG Service Center, call 1-888-774-4527 or visit www.vitrowindowglass.com.



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