



WINDOW UPFITS

Window Upcycling with Non-Invasive Retrofit Technology



Windows and their frames have very low thermal resistance which leads to increased cooling and heating loads and uncomfortable interior spaces. Cold windows can also cause condensation on the inside of the window, which can damage the surrounding frames and walls.

We are the North American provider of the **INOVUES Insulating Glass Retrofit system (IGR)**. This non-invasive technology helps significantly improve the thermal and acoustic performance of existing windows.

IGR'S FEATURES INCLUDE:

Non-invasive installation, eliminating the need to remove, replace, drill, or alter existing window components

Transforms single- or double-pane glazing to double- or triple-pane

Compatible with mechanical or structural glazing systems, fixed or operable windows, and unitized or stick-built curtainwalls

Virtually unlimited glass performance and color options, including:

- Sound insulating safety glass
- Dynamic glazing
- Transparent photovoltaic
- R-10 vacuum insulated glass

LEARN MORE

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Benefits of Window Upfits

Improved Energy Efficiency:

By transforming existing single-glazed steel framed windows into low-E coated, double-glazed windows, window retrofits can help double or even triple the insulating value of the glass, and roughly double the energy performance of the entire assembly. Upfits can help reduce heating and cooling loads and potentially generate up to 40-percent energy savings.

Enhanced Occupant Comfort:

By adding another layer of glass with a thermal performance coating and creating an insulating air cavity in the window assembly, the IGR system helps deliver a more consistent and comfortable interior temperature and reduces the transmission of exterior noise.

Sustainable Upfit:

Our solution helps eliminate waste by reusing existing frames and glazing, minimizing material use by approximately 70 percent when compared to window replacement. This helps achieve significant embodied carbon savings while avoiding the costs and risks associated with demolition, abatement, and material disposal.

Reduced Costs:

Our solution offers comparable performance at approximately 30 percent of the cost of traditional window replacements.



CASE STUDY University of Minnesota

The University of Minnesota had many buildings with single-glazed windows that were causing energy loss and occupant discomfort. They wanted a sustainable solution that would keep more heat in their buildings during the cold winters and advance their decarbonization goals.

Using our IGR retrofit system, we were able to triple the insulation of the outdated windows. The project improved performance by 19-degrees, which we confirmed via thermal imaging, and, by sustainably upcycling the windows, it generated zero waste.