

Hydrophilic Impact-Resistant Windows— Windows That Do Windows

WHAT IT IS: Hydrophilic impact-resistant windows consist of impact-resistant glass surrounded by a heavy-duty frame, which is securely fastened to the interior window header and frame. Their construction and anchoring keep high winds and debris from harming the home's interior. They are also coated in a special glaze that causes water to run off them more smoothly than traditional windows, preventing water spots and the collection of debris.



WHY IT'S A PATH FAVORITE:

- **Maintenance & Durability:** Because they are essentially self-cleaning and won't shatter in hurricanes or tornados, Hydrophilic Impact-Resistant Windows require less upkeep and replacement than tradiitiional windows.
- **Energy Efficiency:** Low-e coatings ensure that these windows reduce heat loss in the winter, while keeping a home cooler in the summer.
- **Universal Design:** A special coating on the glass repels water so that these windows don't streak as easily and therefore don't need to be cleaned as often.
- **Safety & Disaster Resistance:** Special laminates on the glass make these windows stronger than traditional ones, allowing them to withstand the impact of debris kicked up by high windstorms.

INITIAL COST:

Hydrophilic impact-resistant windows cost about 3.5 times as much as traditional windows. Most of that additional cost is due to the impact resistance.

OPERATIONAL COST:

None.

U.S. CODE ACCEPTANCE:

Impact-resistant glazing or other window impact protection methods are required by building codes of some areas prone to hurricanes and tornadoes, such as coastal Florida and Texas.

The International Energy Conservation Code (IECC) includes state-by-state provisions for the energy efficiency of windows. Requirements are outlined by the *Efficient Windows Collaborative*.

INSTALLATION:

Installation is similar to that of traditional windows, although the glazing, size, thickness and frame composition of the window will change the weight, which may affect other aspects of home construction.

WARRANTY:

Warranty varies by window manufacturer. Manufacturers commonly offer 10-year limited warranties, although limited lifetime warranties are not unheard of.

BENEFITS FOR HOMEOWNERS:

- Hydrophilic impact-resistant windows are virtually self-cleaning, and improve the safety and durability of a home, which is especially important in regions of the country prone to tornados and hurricanes.
- With low-e glazing, these windows are more energy efficient than their traditional counterparts, with the potential to save homeowners slightly over one hundred dollars a year in utility costs.