



### Impact-Resistant Windows and Doors



# STORMARMOR<sup>™</sup> impact-resistant package

### Repels in the harshest conditions

Once a home's windows are breached, internal pressure can build up, blowing off the roof and leveling the entire structure. StormArmor is designed to protect your home from the devastation caused by severe storms. Our StormArmor impact-resistant package helps keep wind, debris, and most water out of your home without the need for secondary shutters or plywood.

StormArmor-enhanced products are tested for use in hurricane-prone states—including most regions in Florida where stringent codes require high levels of performance. These products have passed tests at an AAMA-certified testing lab, standing up to rigid requirements for impact-resistance. After being struck at speeds in excess of 35 mph, the weather barrier remained in place with no breaches. With StormArmor, you get high-performance protection that doesn't sacrifice style. We back our windows with a warranty that provides 10 years of protection on most parts, frame material, and insulated glass panels. Refer to our written warranty for details.

#### IMPACT-RESISTANT PRODUCT ENHANCEMENTS



Laminated glass draws strength from a poly material sandwiched between two panes of glass. It's clear so it doesn't impede your view, but it adds power to the glass.



LoĒ<sup>3</sup>-366 glass is standard on StormArmor-enhanced products. It provides year-round comfort by delivering an ideal balance of solar control and clarity.



**Preserve film** is kept on your windows throughout the installation, distribution, and manufacturing processes to provide protection from dust, debris, and scratches.



**LoĒ<sup>3</sup>-340** glass is optional on StormArmor-enhanced products. It greatly reduces solar heat gain and controls glare without the use of a room-darkening tint.









Welded multi-chamber mainframe design

> Metal reinforcement in sash

> > \_ Dual-pane laminated glass

3 ¼″ frame depth

True-sloping

# Higher Standards Through Rigorous Testing

Following stringent protocol



### Nothing is left to chance

Our state-of-the art facilities, one-of-a-kind quality management program, and robust in-house test walls help ensure we meet and often exceed industry standards. In fact, our test wall in Pennsylvania is one of the most extensive in the industry, allowing us to conduct comprehensive tests where we can rapidly analyze and refine our products.

#### **IMPACT-RESISTANT TESTING**

To perform in areas where the basic wind speed reaches up to 140 mph, our impact-resistant windows and doors require even more stringent testing than our other vinyl and aluminum products. Every StormArmor-enhanced product exceeds the standards set forth in the ASTM E1996 test method. To comply with ASTM E1996, three samples must pass the testing procedures.

#### ASTM E1996 impact-resistant testing includes:

- Firing an eight-foot, nine-pound 2x4 from a cannon into the window
- Positive and negative pressure cycling at 20-100% of the product's design pressure
- 9,000 pressure cycles (4,500 positive and 4,500 negative)

#### **ADDITIONAL TESTING**

Our engineering team also conducts several additional tests that go beyond what's required for American Architectural Manufacturers Association (AAMA) and National Fenestration Rating Council (NFRC) certifications, including sealant, vinyl impact, cold-weather performance, and more. The result is a superior product that you'll enjoy for years to come.







STRUCTURAL INTEGRITY



FORCED ENTRY RESISTANCE

DEGLAZING

CORNER WELD STRENGTH

AIR INFILTRATION

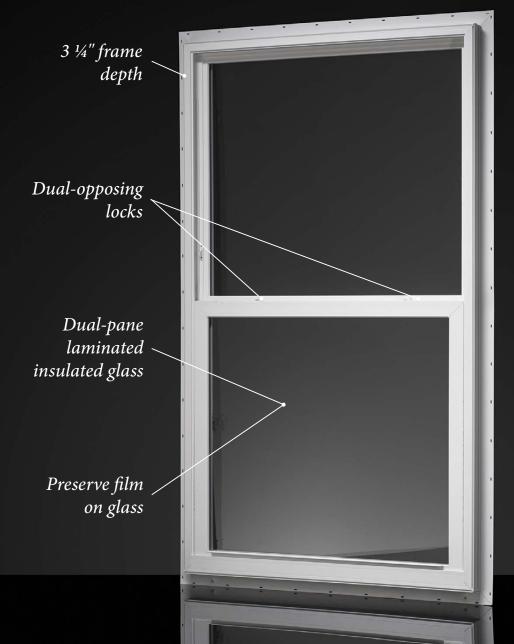
WATER PENETRATION







# 1620 Vinyl Single-Hung Window



The stylish and efficient 1620 window features beveled sash, insulated dual-pane glass, heavy-duty weatherstripping, and is the first window in our 1600 Series to offer operating archtop configurations. The 1620 is DP-50 rated, making it the ideal single-hung window for new construction and replacement projects in any location, especially in storm-prone regions.





# 1630 Vinyl Single-Slider Window

The DP-50 rated 1630 vinyl single-slider offers superior styling and handcrafted quality with two- and three-lite configurations available for both new construction and replacement projects in storm-prone coastal areas. Featuring beveled exterior edges and an integral pull rail, the 1630's slim profile offers a large viewing area with clean, continuous lines and an unobstructed outlook.

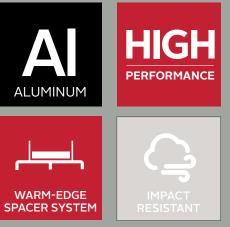


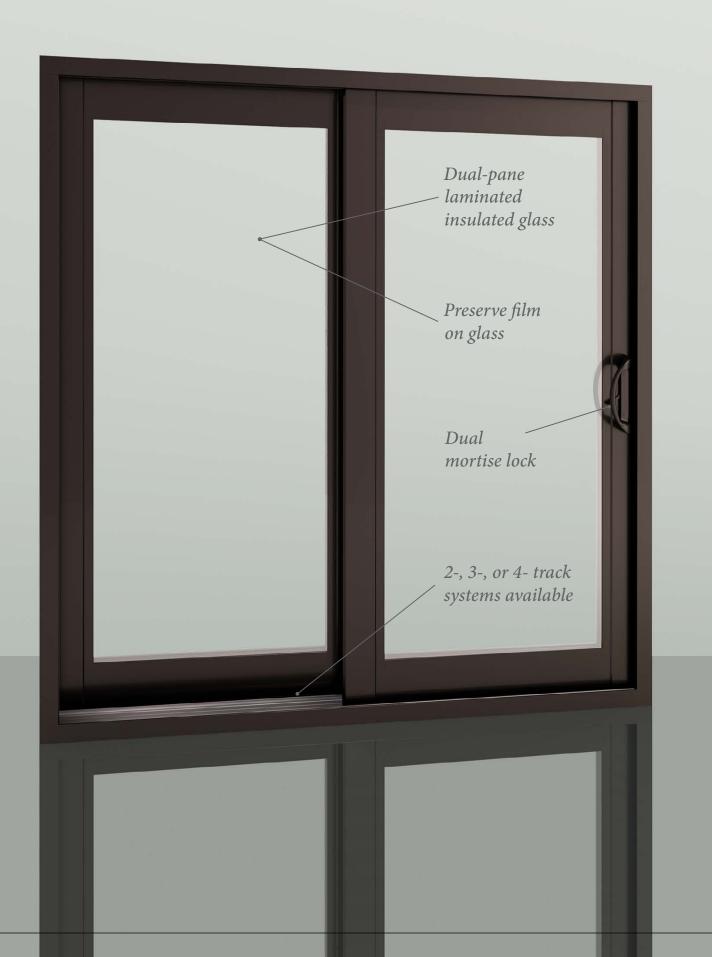


## 100 Series Aluminum Sliding Glass Doors



Featuring an advanced roller system that results in smooth operation, the 100 Series sliding glass door allows homeowners to effortlessly blend interior and exterior spaces in both new construction and replacement applications. With an optional extended sill leg, this one-of-a-kind door meets DP-55 requirements.



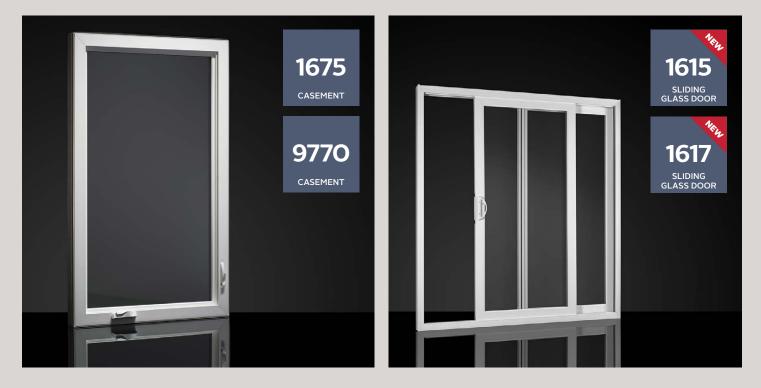




## Additional Impact-Resistant Products



Casement and Sliding Glass Door Complement the 1600 Series Single-Hung and Single-Slider



Our entire collection of impact-resistant products provides a breadth of options for any coastal project. With the flexibility to select from single-hungs, single-sliders, casements, fixed picture windows, and sliding glass doors crafted for remodel/replacement and new construction applications, homeowners are able to customize their home to be uniquely theirs.

#### Aluminum Single-Hung and Single-Slider Windows Complement 100 Series Door



