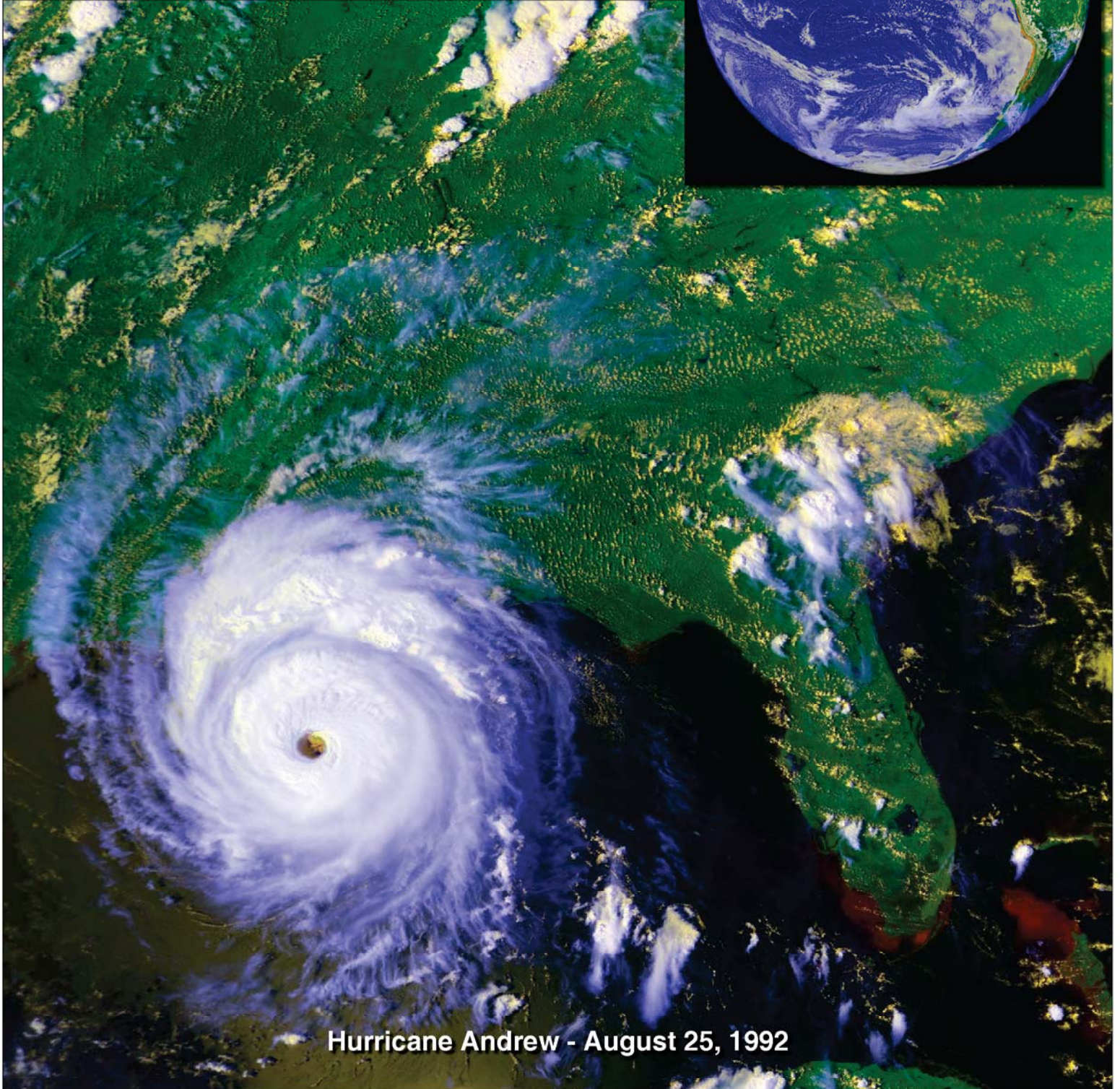




**THERMAL
WINDOWS, INC.**

Hurricane and Impact Products



Hurricane Andrew - August 25, 1992

Hurricanes are a Serious Threat to Coastal Residents

75 million Americans live within 50 miles of a hurricane zone

In the last twenty years, the United States has experienced four hurricanes of Category 4 or higher:

- Hugo (1989)
- Andrew (1992)
- Charley (2004)
- Katrina (2005)



Most injuries during a hurricane are cuts caused by flying glass and debris



Photos of Hurricane Wilma aftermath. Courtesy NBC-6, Ft. Lauderdale, FL



As coastal populations increase, so does the threat of injuries, deaths and damage to property during hurricanes and violent storms. A major cause of damage and injuries is the penetration of the building envelope by wind-borne debris, driven by powerful winds, rain and pressure

Advanced Window Technology Can Reduce the Dangers and Damage

In response to these hazards, Thermal Windows, Inc. has developed systems to prevent critical failure of the building envelope. Using laminated glass in combination with advanced glazing techniques and frame designs, our impact-rated windows and doors are key components in hurricane-resistant construction and remodeling.

How laminated glass helps in hurricane conditions

If an opening is created by a broken window, high-velocity wind can enter the building. Pressure inside the building may then increase to levels that may lift the roof and push the walls outward.

Laminated glass helps avoid these dangerous internal pressures by keeping wind outside the building.



Impact Resistant Window Systems

Superior, Tested Technology



Windows and doors must pass stringent tests to be certified for impact resistance. As shown above, the glass must withstand the impact of a 2-by-4 beam fired from a testing cannon at 52 ft. per second, not once, but twice. Afterwards, the glass must remain in the frame while subjected to 4500 cycles of positive/negative air pressure.

Thermal Windows, Inc. Hurricane / Impact windows and doors have passed these tests, and are approved for use in hurricane zones.



Series 4100 – Interior



Series 4125 – Interior



Series 4100 – Exterior

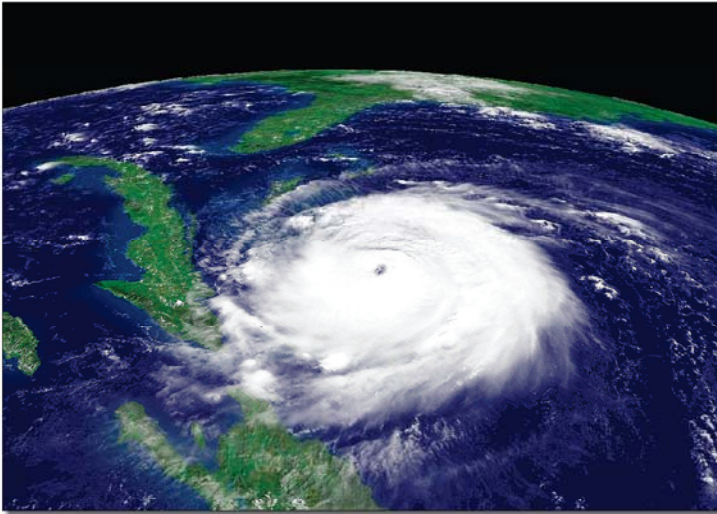


Series 4125 – Exterior



Series 9950 Sliding Glass Door – Interior

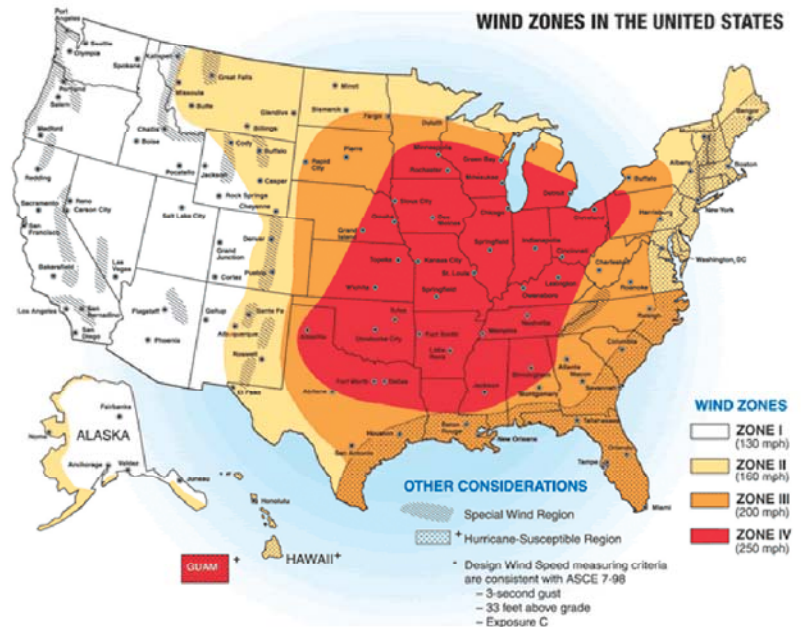
Hurricane and Impact Resistant Windows and Doors Now Required in Many Areas



The destruction caused by Hurricane Andrew in 1992 led to sweeping changes in Florida building codes. Katrina's devastating landfall in 2005 resulted in unprecedented damages and loss of life.

Hurricane resistant glazing is now a requirement in the coastal areas of many states.

Hurricane / Impact windows and doors from Thermal Windows, Inc. are designed, tested and manufactured to meet virtually any of these requirements.



Hurricane / Impact Products

Series	Description	Rating / Test Size	Design Pressure (psf)	Uniform Deflection (psf)	Water Resistance (psf)	Force Protection Qualified (UFC/ATFP)	Frame Depth	Maximum I.G. Thickness
4100H	Single Hung Side Load <i>Large & Small Missile</i>	AW-75 48" x 72"	+100/-120	+120/-150	12	Yes	4"	1" •
4125H	Double Horizontal Slider <i>Large Missile</i>	AW-60 90" x 49"	+80/-100	+120/-150	12	Yes	4"	1"
4150H	Fixed <i>Large & Small Missile</i>	AW-80 49" x 73"	+80/-100	+120/-150	12	Yes	4"	1" •
9950H	Sliding Glass Door <i>Large Missile</i>	C50 85" x 97"	+60/-60	+90/-90	12		4 1/4"	1"
1401H	Terrace Door (Outswing) <i>Large Missile</i>	C50 42" x 96"	+80/-100	+120/-150	12		3 1/4"	1"

• Single Glazed available



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