



Hurricane Ike, Sept. 13, 2008. Image courtesy of National Weather Service

Rolling Doors and Hurricanes

Lessons From Hurricane Ike



By Bray Allen, DBCI

This photo, taken in August 2009, shows the sheet doors still intact, but the building's exterior is completely gone. The 2008 hurricane also stripped off the metal roofing, but the roofing has since been replaced.

Photo by A Door Works, Sulphur, La.



In this case, the building was designed as an enclosed structure. Contrary to popular belief, you should close all doors and windows prior to a storm. It is a common misconception that allowing air to flow through doors or windows left partially open will reduce the pressure or force on the structure.

The Truth About Open Doors

In fact, when you open doors and windows during a storm, it increases the pressure inside the structure. This makes the structure susceptible to updraft. In the event of severe updraft, the roof and walls are likely to explode away from the center of the structure.

I believe this is exactly what happened to our customer during Hurricane Ike. If the owner had known how to properly prepare for the storm, his building might still be fully intact today.

In any event, it is important to know if you are in a high wind area or an HVHZ (High Velocity Hurricane Zone). If you do not know or are unsure, contact your local building inspection office. For more helpful information on storm/wind preparation, consult the many DASMA Technical Data Sheets that specifically address wind issues for our industry's products. ■

Over the past 20 years, many severe hurricanes, including Andrew (1992), Hugo (1989), Katrina (2005), and Ike (2008), have greatly affected our nation. With estimated damages in the tens of billions of dollars, Katrina is still a painful memory for thousands. Hurricane Ike, which struck Galveston, Texas, in September 2008, was the most intense storm of last year's Atlantic hurricane season, claiming 195 deaths.

Although we cannot control natural disasters, we can minimize and in some cases prevent the destruction they bring. By selling products that meet local building codes and by encouraging proper storm preparation, our industry can provide a positive service for our customers and our nation.

A Story From Ike

After Ike, I was contacted by a customer who was elated with the performance of one of our wind-certified rolling sheet doors. They informed me that all of the metal siding and roofing was torn off of their building, but the doors were still hanging in the opening.

In this case, the owner was wise to have purchased wind-certified rolling doors. These products are widely available and are tested to meet specific wind loads, even hurricane-strength winds.

Proper Preparation

The owner said that the building was less than one year old, and the only storm preparation made was to leave the doors partially opened. Some of the damage could have been avoided with proper severe storm preparation and a better understanding of how some structural damage is caused.

Free Resources From DASMA

DASMA (Door and Access Systems Manufacturers Association) has developed many Technical Data Sheets about wind issues and our products. As door professionals, our most important task is to keep people and property as safe as possible.

The following Technical Data Sheets are great references for door installers, homeowners, building owners, maintenance personnel, and building contractors. They are all freely available at www.dasma.com.

- TDS 152 – Garage Doors and Hurricanes
- TDS 153 – Vertically Reinforced Sectional Garage Doors
- TDS 155 – Residential and Commercial Wind Load Guides
- TDS 168 – Wind Loads on Garage Doors - FAQ
- TDS 174 – Post-High Wind Event Door Operation by Building Occupant
- TDS 175 – Post-High Wind Event Door Operation by a Trained Door Systems Technician
- TDS 279 – Rolling Door Operation Under Wind Load Conditions
- TDS 281 – Rolling Door Wind Load Determination - Effective Wind Area
- TDS 282 – Rolling Doors and Hurricanes