

Protecting Our Global Community of Customers

# **Windstorm Protection Guidelines**

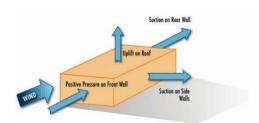
## Highly Protected Risk (HPR) Asset Protection "starts on the roof"

#### **Overview**

The roof is a building's most critical and yet most vulnerable asset. Roofs serve the purpose of completing the building envelope along with the walls and floor; however, roofs carry the bulk of the load of a building's weatherproofing purpose. As critical as its foundation, a building's roof supports critical exterior loads, utilities, protection systems and equipment while serving to protect its assets from the elements. When the wind begins to blow, all elements of the roof must perform uniformly including equipment that is installed on the roof. Indeed, the foundation of any building's asset protection begins with the roof.



Strong, damaging winds can strike anytime.



Wind forces create complicated load patterns on buildings.



Roof failure has catastrophic consequences

## **Purpose**

Tokio Marine America (TMA) HPR Property Loss Control windstorm guidelines are intended to draw attention to best practices for roof design, re-roofing, securement of equipment, preparedness and response for windstorm events and routine maintenance. The damage resulting from a windstorm has the potential to severely interrupt business for extended periods of time due to significant damage to equipment, stock and utilities.

To best protect the assets located within your facility, begin with a windstorm risk engineering assessment. Then, take the necessary steps during new construction, re-roofing and on a retrofit basis to ensure your investments are well protected when nature strikes. From a risk assessment standpoint, a building's roof is a single point failure mode potential. Utilizing the approach outlined in the referenced technical resources introduced in this guideline will equip the user to build a firm foundation for critical asset protection and business continuity.

## **Windstorm Protection Guidelines**

#### Windstorm Risk Engineering Strategy

Tokio Marine America (TMA) HPR Property Loss Control recommends following Factory Mutual (FM) datasheets for best protection against Natural Hazards. These windstorm guidelines adhere to the technical advice detailed in the referenced documents. When considering new construction, major renovations, roof replacement or updating your risk management plan, follow the TMA HPR Loss Control "WIND" advice as a best practice.

- Wherever your facility is located, all new important structures should be designed to meet applicable standards
- Investigate all existing important structures for conformance to appropriate standards
- Necessary retrofit upgrades should be strategically considered following the advice of your Account Team
- Decide in advance to meet these guidelines by inclusion in corporate design specifications



TMA HPR Loss Control Plan Review services are available to assist with your project

#### **Technical Resources Available**

- <u>Hurricane Preparedness</u> Guidelines to assist with preparing for a severe windstorm event and formalizing pre-storm & post-storm procedures.
- Roof Design and Protection Technical resource for new construction, re-roofing existing buildings and retrofitting roof securement for best protection.
- <u>Rooftop Equipment Securement Guidelines</u> Facility maintenance technical resource to addressing roof top equipment securement.
- <u>Rooftop PV Systems Windstorm Guidelines</u> Technical resource addressing the unique windstorm protection challenges of PV Systems located on roofs.

Contact your TMA HPR Loss Control representative for copies of these resources and site-specific assistance to prepare your facility for a severe windstorm event.



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