

Closer Look

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In Constructing for Hurricane Resistance, Collaboration is Key

Impact-resistant technologies on display at the 11th Glass+Metal Symposium

For many of the attendees of the Glass+Metal Symposium, glassmetalsymposium.com, held Oct. 4 in Fort Lauderdale, Florida, hurricane safety is a matter of professional understanding, as well as personal experience. The event, originally scheduled for Sept. 21, had to be pushed due to Hurricane Irma's landfall in Florida three weeks prior. At the beginning of his presentation, the first speaker, Jeff Rigot, sales representative, [Viracon](http://viracon.com), viracon.com, asked for a show of hands for those in the audience still without power. Before the end of the event, Ray Crawford, co-founder of the Symposium and president, [Crawford-Tracey Corp.](http://crawfordtracey.com), crawfordtracey.com, announced the formation of Hurricane Nate, which has since made landfall twice in the United States.

Taking place as it did in a record-setting hurricane season, the educational event's focus on hurricane-resistant technologies appeared more relevant than ever. Started in 2012, this was the 11th installment of the educational series, organized in association with the Fort Lauderdale chapter of the American Institute of Architects, aia.org, for Florida architects and area professionals who design and construct the building envelope. Attendance of the event was more than double the first symposium, with 100 attendees. "We're reaching people we wouldn't reach otherwise, including key suppliers," says Shawn Donovan, [Donovan and Associates](http://donovanassociates.com), donovanassociates.com, the symposium's event coordinator.

Fitting the theme of the event, "Façade Trends + Technologies," the lineup of presentations by industry professionals showcased some of the newest building envelope technology, including glass technology presentations by [Viracon](http://viracon.com) and [View](http://viewglass.com), viewglass.com. Given the setting, almost all speakers connected their products and topics to the unique problem of balancing occupant comfort and aesthetic innovation with the impact-resistance required by the Florida Building Code.

Florida Building Code

After the massive destruction caused by Hurricane Andrew in 1992, the Florida Building Code was developed specifically for the regions of Florida most vulnerable to hurricane landfall. The new regulations required that products for the building envelope be tested by a third-party for missile impact, which simulates windborne debris of a hurricane, and cyclic wind pressure loading, which simulates high velocity hurricane winds.

The FBC requires that manufacturers submit their products for testing in order to receive a product approval, a compliance document that demonstrates that systems will meet statewide standards. Miami-Dade County issues its own product approvals, which focus specifically on the High-Velocity Hurricane Zone, defined as Miami-Dade and Broward Counties. Certification in Miami-Dade County requires a Notice of Acceptance, though Florida Product Approvals are also valid if prepared with the correct certifications.

Based on the experiences of symposium attendees who were also Florida residents, impact glazing appears to have made a difference in wind-borne damage for areas with more stringent requirements. "The infrastructure is so much better than it was 12 years ago," says Crawford, comparing the effects of Irma to those of Hurricane Wilma, which passed through the region in 2005. His assessment was echoed by Frank Messa, owner, Enviralum Industries, enviralum.com. "This was a storm that hurt fence-builders and gardeners" in the Miami-Dade area, says Messa.

Navigating requirements

Though code-compliance represents a significant challenge for the design community, the technical advances on display at the symposium suggest that glass and glazing systems are keeping pace with safety and performance requirements. "Glass today is infinitely more complex than when I started," says Viracon's Rigot.

In the face of extreme weather and complex standards, industry experts during the conference underscored that there is no "one size fits all" solution. Rather, speakers advised that solutions were to be found with early and ongoing communication with material manufacturers.

Crawford's solution for navigating product approvals and code-compliance was similar: talk to the manufacturers and contractors to ensure compliance and understanding. He stressed the importance of reading product approvals in their entirety, and consulting providers to clarify questions. For questions of code, he felt it was vital to go to the source. "It's very important to coordinate with trades. Get a building envelope consultant involved," he says. "It's the best way to follow through."³

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