2004: ANOTHER INDUSTRY TURNING POINT

While the immediate effect of the exceptional 2004 hurricane season was a surge in volume for the entire industry, Madden believes its long-term effect may be even more significant, because it gave him the opportunity to investigate and partner with a promising new product.

The new product, the patent-pending Hurricane Net, was inspired by the wind tarp that cover the loads of large dump trucks to prevent debris from being blown off as the truck travels at high speeds all day long. Madden believed the same principle might be effective in hurricane protection.

“What it does is it reduces the volume of air striking the product you’re protecting to acceptable levels, whether it’s a boat, an outdoor sign, or bushes, or an entire house and secures it from movement and impact” says Madden.

Madden is co-developing the product with engineer Frank Bennardo P.E., to identify the most advantageous mesh size for the application, when Hurricane Jeanne came along and provided them the opportunity for a field test.

“Just before Jeanne arrived we had a fabricator send us a set of nets,” Madden says. “And we rushed them up to Hutchinson Island, where my brother agreed to put them on his home.”

The experiment required some quick thinking, he adds.

“We didn’t have a clear set of instructions on how to put this up, so we attached it using several different methods. We started about 7 at night, and we finished at 2 in the morning. Then Jeanne came through with 130 mile-per-hour winds.” That gave us a rare opportunity to create an efficient and cost-effective fastening system.

Before the storm had finished traversing the state, Madden made his way back onto the island to assess the results.

“I grabbed a Jet-Ski while the storm was still going through Tampa and I skied across the Intracoastal so I was the first on the island,” he recalls. “It was like walking into a ghost town.”

Camera in hand, Madden sought out his brother’s house and was delighted to see it had survived with virtually no damage—one of only three on the island to do so.

“The velocity of wind was reduced so much that nothing was broken,” he said. “The only thing we hadn’t covered was the front screened porch, and that screening was the only thing that was blown away.”

Convinced by his firsthand experience, Madden is now working with Bennardo to finish the engineering and test the product to impact standards.

“We plan on introducing a product that can either replace or enhance existing storm panels, or it can be used to protect everything—the shingles or tiles, the boat, everything,” Madden says. “We found we could wrap the entire home so that we don’t lose roof tiles, roof trusses or susceptible walls and cladding. Furthermore, we don’t compromise windows or any other opening while maintaining egress, light in the home and fresh air.”

Eventually, Madden envisions selling the tested and approved net in 10-foot-wide strips in retail stores, where homeowners could order it by the foot.

“That is the next generation of hurricane protection,” he says. “It’s very affordable, it’s extremely user-friendly. It can be thrown into a duffel bag and tossed up into the attic for storage. It’s impervious to salt, bugs, or moisture.

Of course, Madden notes, “everything is going to have to be tested and approved and we’re completing that process now, but I think the best test is what happened to us on Hutchinson Island.”

The Hurricane Net is not the only important change on the horizon for Madden Mfg. For example, the company is now approved to fabricate accordion-style shutters, which Madden says is “generally the next step for the consumer. That’s why we expanded into that market, because we felt we had to maintain and support our existing customer base.”

Madden is optimistic about the ongoing evolution of his company, predicting continued growth for the foreseeable future.

“Five years down the road I see our business at the very least doubling,” he says. What’s more, he is also optimistic about the future of the industry as a whole—provided the industry continues to do a good job of policing itself.

“Obviously we’re in an up cycle,” he says. “I see a number of positive trends, especially with the International Hurricane Protection Association (IHPA). Within the IHPA we have an ethics committee, and we address issues that concern our members, which I happen to believe is very important.”

For example, he notes, “One of the biggest concerns I have is window film being perceived as hurricane protection. That is a concern that the IHPA has addressed over the past three years, but you can still see ads in the newspapers claiming that UV film adds hurricane protection.”

He also strongly advocates an increased emphasis on training for installers.

“When failures do occur, it is generally the fasteners that fail, which means they were not installed properly,” he says. “All of us need to pay a little more attention to the training of the installers, and emphasize the fact that each fastener plays a key part in that storm panel assembly.”

All in all, Madden concludes, the business has changed a lot from the days when he drove all night to deliver products himself.

“I see a number of positive trends,” he concludes. “We’ve gone from a very thick, heavy product to a very user-friendly product. Service has changed; technology has changed. And we are constantly developing new and more consumer-friendly products. I’m very optimistic about the future of our company—and the industry as a whole.”