

## Prudence and Prevention Pay Off to Keep Roofs On in a Hurricane

The kids, the cat, the dog, the photo albums...these things easily make the packing list when faced with a need to skip town quickly to escape an oncoming hurricane. But our roofs get left behind. Wouldn't it be nice to drive away knowing you've done your best to prevent your roof and everything below it from becoming fodder for these ravenous storms?

Eight major hurricanes plowed their paths through the state of Florida as they bombarded the U.S. during the past two record-breaking Atlantic hurricane seasons. Yet, ninety-nine percent of the 60 million square feet of FiberTite® roofing membrane covering facilities situated in the direct paths of these storms survived – virtually unscathed.

Was it luck that gave FiberTite the performance edge? Maybe a little – but not the kind of a beginner. We've been doing our homework since 1979 when we first invented the FiberTite Roofing System. In fact, we engineered and installed some of our first roofs in the state of Florida. Since then, Florida has become our virtual learning laboratory. Its onslaught of naturally occurring extreme weather events, including hurricanes, tornadoes, blistering heat and intense UV rays, has given us the chance to measure FiberTite's performance.

Twenty-seven years in Mother Nature's laboratory have shown us that even the best of roofing systems depend on a multitude of factors to maintain optimum performance and provide optimum protection in the face of a hurricane's catastrophic winds.

### The Roof's Performance Is Linked to the Integrity of the Whole Facility

As the fifth wall of any structure, the roof's capacity to perform under the duress of a hurricane depends on the design and capacity of the structure it protects. A breach in the exterior envelope – the doors, the windows and the walls in severe instances – is a major catalyst for the initial breach in the roofing system. If wind enters the facility, high atmospheric pressure can form on the inside of the building and will push upward through the interior walls and ceilings in an attempt to equalize with the low atmospheric pressure forming on the exterior of the building as the wind swirls around it. The greater the wind strength, the greater the imbalance between these two atmospheric zones can become.

### Installation Is Critical to Performance Success

Roofing systems can reach optimal performance only if the contractors that install it are skilled professionals that receive thorough training by the manufacturer of the roofing system. All contractors working in regions prone to severe weather events should demonstrate technical expertise in managing and mitigating the risks associated with weather in their region.

### Structural Decking Is a Factor Often Overlooked

A roof that blows off during a windstorm is typically first pushed loose by pressure coming from inside the building. The permeability of decking materials can compound the stress on the roofing membrane system as internal pressure in the facility builds. If wind enters the building through a breach, it intensifies this high internal pressure and causes a rush of air to move upward. The quickest means for its exit into the interior envelope of the roofing system is through gaps along the deck and wall interface. As high pressured air rushes through these cavities, it pushes on the membrane and magnifies the negative forces above it that are trying to pull it loose.



### Keep the Perimeters Intact and the Rest of the Roof Will Follow Suit

In a hurricane the greatest interaction between high pressure and low pressure occurs at the corners and along the external edges of a structure. A sound fastening system, particularly in the corners and along the roof's edge, that is tailored to match the theoretical pressures that a roof may be exposed to is fundamental to the roof's overall performance. Additional wind resistance can be achieved by sealing the interfaces of the deck and the walls.

### Regular Roof Inspections and Maintenance Are Compulsory to Ensuring Enduring Performance

Roof inspections are recommended twice annually, once in the spring and once in the fall. Add an inspection before a significant storm event (if there's warning and time) and after it passes to evaluate roof damages and any compromises to the integrity of the system possibly caused by the storm. Year-round regular maintenance is also required to ensure a roof's ultimate performance. The following steps should be taken as preventative maintenance prior to a storm:

1. Clear the roof and the grounds around the facility of objects and debris that could be launched by wind and cause punctures or tears to the roof;
2. Ensure all HVAC equipment and other rooftop units are secured with hurricane straps. Latch all panels and doors tightly;

3. Ensure drainage systems are functioning and free flowing. Clear all debris on the roof to prevent it from washing into the drain and hindering water flow or causing a clog;
4. Inspect the roof system for loose metal edging, copings or areas of detachment, particularly at the roof's perimeter;
5. Secure the building's windows and doors.

### Product Choice Matters – The FiberTite Difference

History is the best reference for projecting the future performance of any roofing system. FiberTite's inimitable track record extends far beyond the recent Florida storms and rests on our steadfast membrane formula – even 27 years in Florida's extreme weather laboratory have not persuaded us to change it.

We start with our proprietary knit design, creating a very dense polyester fabric made with the highest strength yarn to give FiberTite exceptional strength resistance to puncture and tear. A unique adhesive coat saturates and encapsulates these yarns and promotes a molecular bond between the base fabric and the coating. This adhesive coat also inhibits wicking and provides a foundation for maximum peel resistance and seam strength. The membrane's Elvaloy® based compound on the face coat provides

unmatched resistance to chemicals and offers the finest long-term flexibility in any climate. The back coat formulation is similar to and miscible with the face coat and ensures superior welding properties to maximize seam strength.

With an awesome product comes awesome responsibility. We've embraced our work as students. When you buy a FiberTite Intelligent Roofing System by Seaman Corporation, you not only get the very best roofing membrane, you get the technical expertise we've developed over the lifespan of our product. We can tailor a roofing system that has been technically proven to withstand the diverse weather, variable environmental stresses and distinct design requirements of any building. Buying FiberTite also means you get our commitment. We take every measure to ensure our product lives up to its performance legacy.

For more information, call us at 1-800-927-8578.

*Jerry Beall, FiberTite Product Manager, contributed technical expertise to this article based on his 30 year career in the roofing industry and a special interest in the storm performance of roofing products.*

FiberTite News is a publication by Seaman Corporation, written and edited by Kim Seaman, kseaman@seamancorp.com.

## FiberTite® Team Changes and New Players

Congratulations to **Nick Kesslering** on a promotion from FiberTite's Northeast Regional Sales Manager to the position of National Sales Manager.

**Tom Ghidotti** has been promoted from the position of Direct Sales for the Western Region to District Manager for this region.

**Jerry Beall** is now filling a new role as FiberTite's Product Manager.

FiberTite Welcomes **Glen Flohr** as the new Technical Services Manager and **Ron Champney** as the Northeast Technical Services Representative.

FiberTite also welcomes two new Western States Manufacturer's Representatives. **Brent and Karen Clark** of

Brent Clark & Associates will represent FiberTite in Utah, Idaho and northeast Nevada. **Tony Valdez** and his son, **T.J. Valdez**, of Twenty-One Tech Company will cover the states of Arizona and New Mexico.

The FiberTite team extends a heartfelt thank you to **Jim Stone** for 18 years of dedicated participation and enthusiastic leadership on the FiberTite Team. Most recently for FiberTite, Jim pioneered the western region acting as the Western Regional Sales Manager since 2001. Jim has returned to his home state of South Carolina where he will continue representing FiberTite with **Jim and Lauren Holland** of Holland & Associates, independent manufacturer's representatives and longtime friends of FiberTite.

For more information, visit:  
<http://www.fibertite.com/representatives.html>

Why FiberTite? Visit [www.fibertite.com](http://www.fibertite.com) for information on FiberTite Roofing Systems and TPO, how they compare to competitive systems, including EPDM, BUR, Modified Bitumen, PVC and TPO.

www.fibertite.com  
 800-927-8578  
 1000 Venture Blvd. Wooster, OH 44691

