

Miami Herald
Posted on Sun, Sep. 11, 2005

CONDOS

Rain finds way into high-rises

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Susan Pierres couldn't believe it: The water was gushing in around her patio doors and windows of her high-rise Miami condo on Biscayne Bay like "Niagara Falls" during Hurricane Katrina.

"We just had an amazing amount of water," she says.

Her mother, who also owns a condo in the Palm Bay Yacht Club, had the same problem: storm water that flooded her carpets.

They aren't alone. From Miami Beach to Kendall, condo owners, who thought they were high above any flooding, found their units drenched in water. To their shock, they found themselves ripping up ruined wood floors, throwing away sopping carpet and calling insurance adjustors.

Others had the same problem during last year's four hurricanes. The Florida Building Commission is now examining how to improve building codes to avoid future water damage, says Dave Olmstead, a member of the commission's Hurricane Research Advisory Committee.

So far, he says, "our studies show about 70 percent [of the damage is due to] improper installation. That's a problem everywhere, especially with the building boom."

A lack of maintenance is another factor, says Olmstead, who is also public affairs and code compliance specialist for window-maker PGT Industries.

"The problems," he adds, "weren't visible until after a storm."

ANDREW'S DAMAGE

In 1992, Hurricane Andrew, which blew out 1.5 million windows and caused catastrophic damage, forced the state to focus on wind damage. Since then, Floridians have learned that building code improvements since Andrew don't always protect against rain damage, Olmstead says.

The Florida Building Commission is scheduled to enact new rules, to take effect

next July, that would require new windows and doors to better control water coming in during a storm, he says. Those rules would cover the entire state, including Miami-Dade and Broward, which already have the toughest codes in the nation but don't have these water-control provisions.

High-rises are especially vulnerable to hurricane rain: The higher a unit, the fiercer the winds. And those winds drive in the rain, says **Mark Baker, president of Miami-based IBA Consultants** and a glass specialist on mid- to high-rise buildings.

Expect even more damage, he adds, if you have a corner unit in a high-rise.

"Your wind-driven rain is powerful," says Steve Sabac, president of Boynton Beach's Suncoast Glass Protection, which retrofits commercial buildings' windows for hurricane-force winds.

The winds are powerful enough to force rain through the edges of windows and underneath patio doors, he says.

Indeed, wind-driven rain is an extremely difficult thing to protect against, says custom builder Harry Hollub.

Even the most up-to-date windows and patio doors cannot protect your home from some rain seepage during a strong hurricane -- although they will do much better than the older windows, agrees Jeff Williams, senior brand manager of Wisconsin-based Weather Shield Windows and Doors, which manufactures wind-resistant LifeGuard windows.

MOTHER NATURE

"You're dealing with Mother Nature," he says. "As much as we would like to say we have to control it," there's still the reality that 145-mile-per-hour winds can pretty much drive rain in around windows and through cracks in stucco.

Still, faulty window and patio door installation can add to damage.

Even the most expensive hurricane-proof windows will leak if they were put in incorrectly, says Sabac's father, Ron, a Boca Raton inspector and past president of local chapters of the Florida Association of Building Inspectors and American Society of Home Inspectors.

"If the installer had problems, you can have continuous problems," he says.

Don't think money buys good work, Sabac adds.

The windows in a 22,000-square-foot mansion had to be done three times before

they were installed properly, he says.

"The windows were the Cadillacs of the industry but they would have leaked because the workers didn't follow the directions correctly [in installing them]," he says.

Faulty window installation contributed to water damage statewide during last year's hurricane season, says Olmstead of the state hurricane advisory committee.

"There's not enough supervision and qualified labor," adds glass specialist Baker.

Olmstead recommends that condo buildings buying new windows have a sample window installed, and then tested to make sure it doesn't leak, before additional windows are installed.

CONDOS VULNERABLE

Condo units can also be vulnerable to window and patio door leaks if the windows aren't caulked properly, he says.

Condo boards hire companies to waterproof their buildings, which includes caulking and painting. But if the job isn't done properly, the waterproofing doesn't protect the older buildings, home inspector Sabac says.

Hurricane-force winds are especially cruel to older buildings, especially those that have not been well maintained. Wind-forced rain can go through cracks in stucco and old caulking, Sabac adds.

Some caulking manufacturers guarantee their materials for 25 years. But the blistering Florida sun can take years off the effectiveness of these products, he says.

He strongly recommends more expensive oil-based caulking -- it holds up much better in South Florida than the cheaper water-based materials.

Sabac says it's important for associations seeking waterproofing to hire reputable companies with well-trained workers.

The waterproofing should include:

- Total pressure cleaning of the building.
- Complete caulking, using oil-based materials.

- Applying a primer to the building that is compatible with the caulking.
- Using a rubber-like elastic type of paint, also called Elastomeric, that will further protect the building against leaks.

"The primer seals the existing paint. It becomes a bonding agent and the new paint doesn't flake over," says Sabac.

Finally, he recommends that those condos that suffered water damage after Katrina consider hiring structural engineers to find the cause of the leaks.

The engineer will be able to check original records and see if the windows were installed properly, Sabac says.

In Miami, Pierres' condo association hired an engineer to look at their building.

Pierres' neighbor, Ed Marcinczyk, suspects their windows and sliding glass doors were installed incorrectly: He found screws missing and improperly installed seals in his patio doors.

"We're going to try to do as best as we can -- it's a problem for any development up and down along the coast," he says.