

'Weathervaning' and other tricks to secure construction sites in hurricanes



Construction cranes are sometimes left to spin loose in hurricanes, according to experts



By Trevor Fraser – Staff Writer, Orlando Business Journal Oct 9, 2024

If Peter Dyga, president and CEO of Associated Builders and Contractors, could tell the public one thing about commercial construction sites during hurricanes, it would be this: When you see one of those enormous tower cranes spin in the high winds, don't freak out.

"It's designed to do that," Dyga said.

It's called "weathervaning," where builders unlock the top of the crane so wind will push it in the direction of least resistance.

"By weathervaning it, you allow the machine to do exactly what it does 365 days a year on a job site anyway: turning," Dyga said. "It would be much more dangerous if it were locked down."

Bill Finfrock, founder of <u>Apopka-based construction company Finfrock</u>, said he weather vanes his cranes if he can't lie them down. "Any crane you can boom down, you go ahead and lay the boom on the ground.



Bill Finfrock, president of Apopka-based Finfrock

Dyga said the preferred practice would be to take the cranes down, but that is often more than a day of work and requires specialized work crews, of which there may not be enough skilled workers to get all the cranes down in time.

"It typically takes more time than you have by the time you know where [a hurricane] is going to land," Dyga said. "Even if you did have time, you probably wouldn't have enough people to bring them all down if you wanted to."

Dyga and Finfrock also both emphasized that half-built structures, precarious as they might appear to the untrained eye, are unlikely to become threats. "From a structures perspective, you've got to make sure whatever structure you're building has enough vertical stability to take big wind loads," Finfrock said.

Florida building codes require such stability at each stage of the construction process, so nothing is ever erected that is waiting on stabilizing measures, said Dyga.

"We build to one of the strongest codes in the world," he said. "[A building] doesn't just become that sturdy when the keys are turned over. Whether you're two stories up, 10 stories up or 20 stories, it is built to stand."

The more likely dangers on a construction site are smaller: tools and materials that can become projectiles if not properly secured.

Finfrock, who said he has between six and 12 active sites in Central Florida, said securing a site can be time-consuming. "It all depends on where you are in the project. If it's early in a project, it might just be get the site cleaned up, lock the gate and move on. If you've got an open building that wind can blow through and you've got a lot of materials in there, it can be lengthy process."

Finfrock said his company has been preparing for Hurricane Milton for days. "We're basically done for the week. We've done this so many times, it's almost [automatic]. You've just got to do a check of each site as to what exactly you're dealing with — and we've dealt with every situation before."

Dyga said most Florida contractors operate with their own hurricane plans that often plan out farther than public warnings. "When this was just a glimmer in meteorologists' eyes, [general contractors] probably already were rescheduling their supplies."

Builders also carry what's known as builder's risk insurance on work sites. "Typically, it covers acts of God, which is what these would be," Finfrock said.

Dyga said his organization helps educate new commercial construction companies on how to prepare for hurricanes, and there is one message that is both unpopular and unavoidably true.

"No building, regardless of how strong, is completely impervious to the forces Mother Nature can throw at us. When we get hit by these big storms, there's going to be destruction."