It is possible to build back better, says local architect

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Architect Joyce Owens with Brad Nickel on Sanibel Island, in front of one of her houses under construction — and still standing. COURTESY PHOTO

“Paradise isn’t lost,” says Joyce Owens.

“We can always rebuild paradise. We can build it back better and stronger.”

The Fort Myers modernist architect, principal of Architect Joyce Owens LLC, recently went to Sanibel Island by boat to check on how her clients’ houses fared during Hurricane Ian. She visited five of them, and all were standing.

Accompanying her in her first trip was her builder, Brad Nickel of Benchmark Construction, and on her second, AccuWeather reporter Jillian Angeline, who shot two segments on her that are posted online. The segments have received a lot of national traffic.

Ms. Owens, whose motto is “Rebuilding Stronger Smarter,” claims it’s possible to build a house on the beach that will withstand a Category 5 hurricane.

She was not surprised to discover her clients’ homes were still standing and had withstood the high Category 4 hurricane, while other buildings around them were flattened and destroyed.

“It was horrible on Sanibel,” she says. “It was like a nuclear bomb was dropped. But every one of our houses is standing. They all withstood Ian.”

She does this by building for the environment and designing structures that not only meet current codes but exceed them.

Houses on the beach must all be designed so the ground level is open, used for recreation or storage of non-valuable things. The owners live on the second and third levels, so they're at least 15 to 17 feet above sea level.

"The ground floor is 'sacrificial,'" she explains.

If storm surge does flood the ground floor of the structure, it won't harm the building or the owner's belongings.

Her designs are different because the structural walls on sturdier foundations are built perpendicular to the Gulf, so the structure won't be compromised when water floods the lowest level of the house.

"The foundations are stronger than normal," she says. "Typical stilt houses are built with their pilings driven into the earth but are long enough to cantilever out of the ground so the house can be constructed on top of these pilings. But our houses don't have that, we put our pilings under the ground, and we connect them together with poured concrete beams, all below the ground. That's what creates a more solid foundation.

"And from there, we build up. Think of these deep pilings as tree roots. The roots are down in the ground and holding the house firmly in place. One hundred percent of my houses were designed like that, with guidance from our structural engineers at Select Structural."

The roofs are also stronger.

"We strap our roofs down; they're strapped to the walls.

"Metal roofs are apparently the best hurricane-proof roofs you can have," Ms. Owens says, adding that standing seam metal roofs are best for withstanding high winds.

Her houses are designed with windows that are "equal or above what is required by code. They're not just hurricane resistant, but impact resistant. That doesn't mean they won't break or won't leak, but they are less likely to, and will minimize damage.

"You're trying to avoid the high wind coming into the building, because that's what lifts your roof off," she explains. "Allowing the wind inside changes the pressure."

Ms. Owens recently received the Florida American Institute of Architects Gold Medal of Honor. Not only is it the highest award the organization bestows, but Owens was the first woman to receive it.

In January, Ms. Owens will talk to construction and design professionals at The Andy Ask Building Science Seminar at the Hilton Naples, explaining how to build stronger and smarter in Southwest Florida.

Her office Instagram account, @ajo_flrss, contains information about how to build resiliently for the future.

“We’re putting information out there,” she says. “It’s our new education campaign. Florida: Rebuilding Stronger, Smarter.”

Her buildings are not only functional, but beautifully designed. Owens was the recipient of the Florida AIA Medal of Honor for Design in 2020.

We need to rethink how they build in Southwest Florida and in similar climates and locales in anticipation of future weather disasters, she says.

She knows that some criticize people for building on beaches and coastal areas, or for even considering rebuilding after a hurricane.

“It is absolutely not foolish to live on the beach or in Southwest Florida,” she declares. “But pay attention to our climate. We live in a very harsh climate. Just design the buildings so they’re stronger and smarter.

“And it’s not just the hurricanes we have to deal with,” she adds. “We have to deal with incredible heat and intense humidity. I always look to the past, to historic buildings, to understand how we’re supposed to live in this climate, and I learn from them.

“We have to build our houses to appreciate not only our amazing weather, but the days in-between that can be pretty brutal: the heat, the rains, the hurricanes.

“If you build smarter,” Ms. Owens says, “It will withstand anything. It’s like Stonehenge. These houses will be here for a millennium.” ¦