

Filling in the voids

Volume #12

Designing for Florida Weather



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It's no surprise that Florida is in the prime path of many Atlantic hurricanes. Whether they are projected to head into the Gulf of Mexico or up the US eastern seaboard, Florida finds itself frequently in the forecast cone of uncertainty. With that in mind, it's not surprising that Florida architects design homes near the coast with extra features to handle harsh conditions, and that is especially true for higher end residences.

In 2015 we had the pleasure of working with R Miller Architecture on a project in St. Augustine, Florida very near the famous lighthouse. Both Robert and Dave Miller have been personal friends and professional colleagues in the Orlando area for as long as I can remember. The Millers, working with contractor Patrick Wilson of W Builders LLC, designed and constructed a 3,000 square foot residence in a rather low lying area of Anastasia Island. Being fully aware of the flood potential R Miller based their design around an elevated first floor of prestressed hollow core concrete plank, including the garage floor.

Jump forward to early October 2016 and the approach of Hurricane Mathew wherein Flagler and St. Johns counties bore among the worst storm effects in the state. Sections of State Road A1A were completely washed away in Flagler by the storm surge. About a month later, in November, I visited with Mr. Miller and Dave at their Maitland office and they were excited to tell me how pleased they were with how the house performed in the storm.

The photos on the left were taken as soon as the island was reopened to residents. Dave said: *"As you can see... there was no damage to any area of the house. The second photo shows the height of the storm surge in that area of Anastasia Island (mulch line along the house). Based on the 10'-4" finish floor elevation (above sea level), I would estimate the surge to have been at 8'-10", within 18" of the floor. The flood vents performed as designed and allowed the flow of storm surge into the crawl space below the hollow core deck and back out again."* Of particular notice to them was the contrast to the flooded garage of at least one neighbor allowing seawater to take its toll on a number of expensive items stored inside.

This was an excellent project at every stage and from every angle demonstrating how a design and construction partnership should function. We hope to do another project (or 10!) with the Millers soon.

