

Storm Sellers:

Hurricane-Resistant Building Package Speeds Construction, Attracts Homebuyers

Builder's Experience

EASE OF INSTALLATION	EASY
DIFFICULT	
SPEED OF CONSTRUCTION	FASTER
SLOWER	
COST EFFECTIVENESS	EXCELLENT
POOR	
RETURN ON INVESTMENT	DEFERRED
IMMEDIATE	
COMPETITIVE EDGE	
NONE	SIGNIFICANT
LOW	HIGH
HOMEOwner INTEREST	

Challenges: Educating consumers.
Would he do it again? Yes

PATH Attributes:

- Energy Efficiency
- Quality and Durability
- Safety and Disaster Mitigation

Builder Tips: "If you want to sell homes on strength, be prepared to educate your prospects. Walk them through the details."

Builder:
 Mike Romig, President
 Tarpon Coast Development
 Osprey, Florida

Builder Type:
 Small Production Builder

The Technology:
 Storm-Resistant Construction with Precast Concrete Foundation and Wall Panels and High Wind- and Impact-Resistant Asphalt Roofing Shingles

The Project:
 A \$240,000 2,200-square-foot home in Gulf Cove, Florida. The homebuyers lived next to the lot and wanted to upgrade to a more storm-resistant structure.

"It's a fairly typical pattern. When the people who are interested in strength and safety see our homes, they usually say 'Yes, that's the home for us.'"

– Mike Romig

ROMIG'S STORY

"The homebuyer approached us in early May, shortly after we had cleared the lot in their neighborhood," says Mike Romig, president of Tarpon Coast Development. "We had put up several signs that talk about the strength and durability of our homes, as well as the energy efficiency. The buyers like the area and didn't want to leave, but they did want a better home."

"They had been looking for a couple months, and within a week, they decided to buy this one. It's a fairly typical pattern. When the people who are interested in strength and safety see our homes, they usually say 'Yes, that's the home for us.'"

SELLING WHAT THEY CAN'T SEE

"People do think about safety a little bit more around here," Romig says. "This whole



While this home may look like others in Gulf Cove, it's a veritable fortress. Tarpon Coast Development sold it on its storm-resistant construction features.

area near Port Charlotte went through a lot with Hurricane Charley in 2004."

"Still, it's been a bit of an uphill battle to get the public to understand what we are doing. Our goal is to give people affordable homes that are safe. However, the typical homebuyer in our price range is just looking at the appearance and floorplan of the model. Sometimes it is difficult to get homebuyers to understand that what we are building looks the same as Joe Builder's home down the street, but it's so technologically advanced, it doesn't even compare."

"We are looking into radio now, but most of our advertising is through print ads and our Web site, which we just started a few months ago and are still developing. It's already become a pretty good tool for us, describing who we are and why our



Builder Mike Romig brings 30 years of experience in shipbuilding and the concrete industry to homebuilding. Along with Janet Romig and entrepreneur Wendell Hughes, he founded Tarpon Coast Development in 2001. Romig's goal: build strong, durable homes at an affordable price.

Why he uses storm-resistant construction:

"We did extensive research and eventually arrived at this particular combination of technologies. We felt it gave us the strongest system, and was the fastest to erect. That reflects on the bottom line."

homes are better. However, for practically every buyer we meet, I take the time to go through the way the house is built and why we do it that way.”

CARVING A NICHE FOR EXCELLENCE

“Our goal is to exceed the most stringent Florida code for barrier islands and the Florida Keys. We are building in a 130-mph-wind zone, but our construction goes beyond the requirements of the 150-mph-wind zones.”

Starting with this home and another we are building in Gulf Cove, every home Tarpon Coast Development builds will be designated as Fortified... for Safer Living, a program operated by the Institute for Business and Home Safety (IBHS) to specify construction, design, and landscaping guidelines to increase a home’s resistance to natural disaster.

“That’s an important designation, not just because it assures people that our homes are everything we say they are, but there’s also a financial benefit to the homebuyer,” Romig says. “In Florida, you get an insurance discount if it’s a Fortified Home. Those discounts can range up to 70 percent for wind insurance. IBHS is also putting together a program with additional breaks on mortgages.”

With R-16 insulation on exterior walls, R-30 roof insulation, and double pane, low-e glass throughout their homes, Tarpon Coast has also earned ENERGY STAR and FPL BuildSmart Certifications.

“Besides hurricane-resistance, these quality methods also translate into a tighter, more energy efficient home,” says Romig.

A HOLISTIC APPROACH

“We use a building system. It’s nothing that another builder couldn’t do, but it’s a combination of approaches that, when taken together, create an incredibly strong structure.”

“First, we start out with precast concrete walls. When the manufacturer pours the walls, the concrete is guaranteed to test a minimum 5,000 pounds per square inch (psi). In comparison, the typical foundation slab is poured using 3,000 to 3,200 psi concrete. The walls themselves have been large-projectile wind tested to 235 mph. Basically, large 2x4s just bounce off them. At 5,000 psi, concrete is impermeable. So once that wall system goes up—even if you don’t put an ounce of paint on it—you still won’t get any water penetration through the walls. It eliminated the whole issue of mold build-up that we had after Charley.”

“To top that incredibly strong wall system, the roof system consists of 5/8th-inch plywood that is both glued and connected with ring-shank nails in the strongest pattern possible. Then the roof itself is strapped to the wall system with hurricane ties to meet the 150-mph wind-zone requirement. Since the wall system is expansion-bolted to the foundation, in the end, you wind up with a single unit.”

“We do either metal roofs or 150-mph code shingles. For this particular home, we are using shingles. The metal roof typically adds between \$10,000 and \$15,000 to the house. Not including the pool and other unique features, this house will cost about \$240,000 with the lot, septic, and water. That’s moderately priced for this region.”

SPEED = PROFIT

“We do take less of a profit per home than a typical builder. Building this way requires additional labor and material. Trusses, doors, garage doors, windows and hurricane shutters, hurricane straps, shingles and secondary water barriers are just some of the areas where we incur additional costs over building to code. Add to that standard features like granite counters, ceramic tile, higher grade appliances, bull nose drywall corners, and low-e double pane windows that are considered upgrades by most other builders, and it does impact our bottom line.”

TECHNOLOGY HIGHLIGHTS

This project included the following PATH-profiled technologies:

- Cross-Linked Polyethylene (PEX) Water Supply Piping
- High Performance Glazing Windows
- High Wind- and Impact-Resistant Asphalt Roofing Shingles
- Plumbing Manifolds
- Precast Concrete Foundation and Wall Panels

"It works for us because we build homes much quicker than a typical builder. The precast concrete walls typically go up in one day with proper coordination with the manufacturer. The manifold PEX plumbing system goes in quickly and virtually never has any installation errors, thereby minimizing time required for plumbing. All of our subcontractors understand the emphasis we put on time and scheduling—they are very helpful in achieving our accelerated construction schedules. From the time we pour the slab, we tell buyers they will be in their home in 90 days, which includes a little slack time for us. In the time it takes most builders to complete one home, we can already be starting work on our fourth."

"We are very focused on not wasting any time in each project. This rapid production rate allows us to realistically plan for growth in the coming years. We built 20 homes this past year, plan on doing 50 homes next year, and approach 100 the year after that. To build strong, safe, comfortable homes at an affordable price, it takes very efficient construction methods."

The Partnership for Advancing Technology in Housing (PATH) brings together builders, manufacturers, researchers, government agencies, and other members of the housing industry. PATH partners work to improve the quality and affordability of new and existing homes. The program is administered by the U.S. Department of Housing and Urban Development's Office of Policy Development and Research.

To learn more about PATH, visit www.pathnet.org.
To learn more about PATH-profiled technologies, visit www.toolbase.org/techinv.



The opinions expressed in this document represent those of the builder and do not necessarily reflect the views of PATH.

AVOIDING WIND DAMAGE

The following recommendations from PATH will help improve any home's ability to resist wind-related damage:

- Build fewer floors. A lower-profile house is inherently less vulnerable.
- Favor a hip roof over a gabled roof, which is inherently more vulnerable to wind damage.
- Avoid building very low and steep-sloped roofs, which generally create increased uplift and lateral wind loads.
- Install roof sheathing with 8d (eight-penny weight) nails spaced no more than six inches on center in roof framing members. Ring shank nails may be added for greater wind resistance.
- Install roof shingles, siding, and other exterior finish materials with adequate fastening to prevent tear-off and water entry. For roof shingles, this may simply involve using six nails per shingle rather than four. Always follow the manufacturer's recommendations.
- Ensure that adequate connections, brackets, anchors, or tie-straps are provided to transmit wind uplift loads adequately to the foundation.
- For homes in severe hurricane regions, protect the home from wind-borne debris with impact-resistant glazing, permanent shutters, or temporary shutters. Plywood panels are less costly but do not meet code in most jurisdictions.

LEARN MORE:

- Hurricane/Coastal Construction: A ToolBase Tech Note
- Tech Set 5: Storm-Resistant Roofing