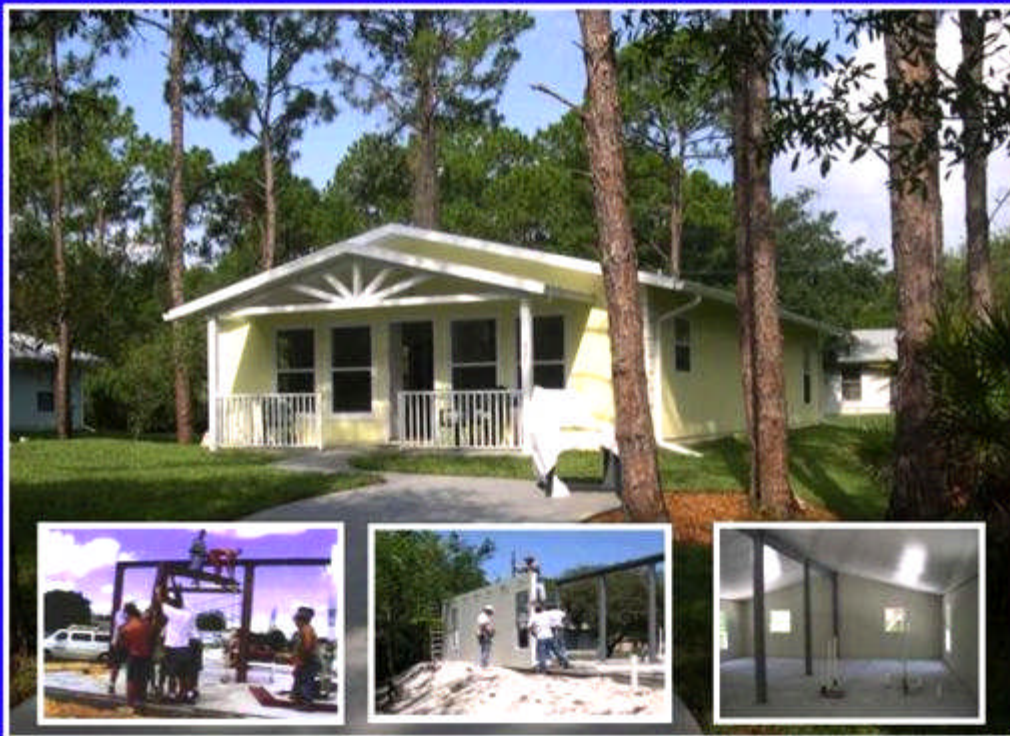


Damage Prevention -- Advice from an Expert



Non-Traditional Coastal Construction Practices

Developed by Dennis A. Quan

Dennis A. Quan

Non-Traditional Coastal Construction Practices - Dennis A. Quan currently works as Benefit Cost Analyst/Engineer with James Lee Witt Associates, the emergency preparedness and management experts of Global Options Group. His past positions include Emergency Manager with the State of Florida, Division of Emergency Management and Hazard Mitigation Engineer/officer with FEMA. That experience has prompted Mr. Quan to complete a thought-provoking report about the strength and endurance of structures during natural disasters.

Titled Non-Traditional Coastal Construction Practices, this study is based on Mr. Quan's more than thirty-five years of experience as a disaster scientist/consultant. But it really zeroes in on more recent natural disasters — Hurricanes Dennis, Katrina and Rita.

Mr. Quan says that the natural disasters of 2004 and 2005 created “widespread destruction of residential and commercial buildings” and a necessity for rebuilding. He suggests that we not rebuild in the same old way. Instead, we could use this as an opportunity to begin building differently and replacing what was lost with private and public structures that have the ability to weather future destructive events.

Higher-Hurricane Building Code Standards

In a special section discussing building codes, Mr. Quan writes, “After major events such as Hurricanes Andrew, Camille, Charley, Frances, Hugo, Ivan, some areas were able to enact more-stringent building-code standards. In an ideal world, at the minimum, hurricane standards should be based on the American Society of Civil Engineer’s (ASCE) 7-1998 standards.”

Unfortunately, building codes often meet only minimum standards and fall short of the ASCE recommendations, yet that is preferable to no codes.

But here’s the good news! We don’t have to stick with inadequate standards.

“Building codes may not and do not restrict people from building stronger,” Mr. Quan states.

Alternative Construction Styles

According to Mr. Quan, his “report provides information for homeowners, business owners and local officials to make informed decisions about building practices, specifically targeting improvements and/or performance enhancing characteristics for areas subject to severe flooding and hurricane-strength wind forces in coastal environments.”

For that purpose, he reviews several construction techniques, including their benefits and limitations.