

THE SAND PALACE OF MEXICO BEACH

116 N 36th Street, Mexico Beach FL 32456

Completed: 2017

Project Cost: \$400,000

Owner: Private Ownership - Russell King, Dr. Lebron Lackey

Architect: Charles A. Gaskin

STRUCTURAL FORESIGHT GUARDS AGAINST THE WORST

When homebuilders decided to construct their beachside house in the popular destination town of Mexico Beach, they focused on designing a building that would last for generations and survive major hurricanes. Sand Palace's robust structure—built to specifications that greatly exceed local codes—supports three stories, four bedrooms, and 4½ baths. When Hurricane Michael blasted through the Florida coast in late 2018, the Category 4 hurricane laid waste to everything in its path, destroying almost every home in Mexico Beach. Sand Palace made national headlines as the single house in the neighborhood still standing unscathed after Hurricane Michael. The concrete-enforced structure played a central role in the vacation home's ability to weather the storm, while sustaining minimal damage.

01. Pre-cast concrete base.

The building's base consists of 12-inch square precast, pre-stressed concrete piles. Precast concrete beams extend upwards from the base. The beams support both exterior and interior walls for fortification from coastal surge.

02. Long-lasting ICF Structure.

Each of the building's 6-inch-thick concrete exterior walls were created from Insulated Concrete Forms (ICF), a continuous insulation system laced with vertical and horizontal steel rebar. This method allows siding to be anchored directly to the core of the structure, increasing the integrity overall.

03. Affordable Sustainability

Constructing a home re-enforced to this extent proved to be marginally more expensive than comparable buildings; with a payback of less than 4 years with energy savings. The superior materials used for construction afforded the homeowners reduced insurance cost, a quieter structure, faster construction, and lower energy bills.



BUILD WITH STRENGTH