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Project Spotlight:

Cloister Beach Tower (Boca Raton, FL) – Structural Conditions Assessment – Concrete Rehabilitation

We are proud of our continued involvement in the structural rehabilitation of Cloister Beach Tower in scenic Boca Raton, Florida.

Our scope of work includes the structural engineering services for the construction documents for repairs on the Tower portion of Cloister Beach Towers. As a part of the deliverable, ES conducted multiple phases of structural conditions assessments to determine the extent of repairs needed to pass the Milestone Inspection to ensure the building's continued use and adherence to life safety.

Our Latest Projects:

- **Orangewood Ln** – Residential Renovation
- **Long Lake Drive** – Residential Renovation
- **Rothrock** – New Residential Construction
- **South Palm Residence** – Condominium Structural Investigation
- **Crescent View Drive South** – Reroof Project Investigation
- **7 La Costa Way** – Residential Renovation
- **Vista Del Lago** – Fire Assessment



Devastation Unleashed: Hurricane Beryl's \$28 Billion+ Toll and the Critical Need for Structural Inspections

Hurricane Beryl left devastating destruction through the Caribbean as a Category 4 hurricane, and through the Yucatan Peninsula, before finally making landfall in the US in Texas as a Category 1 storm on July 8. There have been a reported 21 deaths from the storm; 11 in the Caribbean and 10 in the US. With sustained winds reaching 130 mph, the hurricane caused extensive structural damage. The storm's torrential rains, storm surge, and high winds led to widespread damage estimated at \$28 - \$32 billion in damage and economic loss. Coastal cities and towns were particularly hard hit, with power outages affecting over 2.6 million residents and disrupting daily life for days to weeks across all affected areas. The extensive repair and rebuilding efforts continue as communities work to recover from the devastating impact of Hurricane Beryl.

In the aftermath, the importance of having a structural engineer inspect buildings becomes evident. These professionals can assess damage, identify vulnerabilities, and recommend repairs to reinforce structures against future storms, helping mitigate long-term damage and ensuring safer, more resilient buildings.

Image Source: USA Today (Arthur Daniel, REUTERS)

News & Resources:

Newly Released ASCE 2024 Condition Assessment Guidelines:

The ASCE 7-22 guideline, adopted by the 2024 IBC, introduces several notable changes from the ASCE 7-16. Key updates include:

- **Tornado Loads:** A new chapter specifically addresses tornado loads, requiring Risk Category III and IV structures in tornado-prone regions to be designed for the greater of tornado or wind loads.
- **Seismic Changes:** Significant updates to seismic design provisions in Chapters 11-23, marking a departure from previous practices.
- **Wind and Snow Loads:** Major revisions in wind load calculations and new provisions for snow and ice loads have been included.
- **Foundation Elements:** Adjustments to the requirements for grade beams and deep foundation elements, emphasizing ductility and overstrength design for earthquake resilience.
- **Risk Categories:** Changes to the assignment of risk categories for various structures, including new considerations for photovoltaic systems and public utilities.

Engineered Excellence: Celebrating Professional Engineers' Day on August 7th

On August 7th, we recognize Professional Engineers' Day, commemorating the expertise and innovation engineers bring to every project. Engineers harness knowledge and creativity to solve complex challenges, shaping the landscapes of tomorrow with precision and vision. Join us in honoring their contributions to infrastructure, technology, and society's advancement worldwide!