HURRICANE MICHAEL AT A GLANCE: Considerations for Property Insurers

INSIGHTS FROM THE IBHS POST-EVENT INVESTIGATION

Building Codes and Age of Construction
- Resilience was successfully demonstrated across all levels of home values.
- Newer construction performed better than older construction. Updated building codes are effective in minimizing damage.
- FORTIFIED construction performed well in the hardest-hit area of Mexico Beach. The Habitat Strong™ homes in Panama City also performed very well. These structures incurred far less damage than many of the surrounding structures at wind speeds near the local design level.

Doors and Windows
- Sliding doors were damaged most frequently, followed by glass double-entry doors.
- Double and single-car garage doors were damaged at nearly the same frequency.
- Unprotected windows were damaged in winds exceeding 110 mph and breached above 130 mph.
- Protected windows were damaged or breached in winds exceeding 150 mph.
- Across all wind speeds, damage to protected windows was less frequent (2%) than damage to unprotected windows (8%).

Other Building Elements
- Vinyl siding and fiber-cement boards were damaged most frequently.
- Stucco was damaged least frequently.
- Almost 2/3 of all awnings observed were damaged or destroyed.

Roofs
- Loss of roof cover occurred across the entire impacted area.
- Metal roofs were damaged less frequently than asphalt shingle roofs.
- Soffit and fascia damage generally occurred at wind gusts of 110 mph or greater.
- Roof decking damage generally occurred at wind gusts greater than 130 mph.
- Roof structural damage generally occurred where the gust wind speed was 140 mph or greater.
- Hip roofs performed the best overall, compared to gable and gable-hip roofs, consistent with historical research.
- Total collapse generally occurred only where the peak wind gusts were 150 mph or greater.

Asphalt Shingles
- 3-tab shingle roofs: 96% were damaged.
- Architectural shingles: 81% were damaged.
- Every home investigated in Lynn Haven, Panama City, and Port St. Joe with 3-tab shingles experienced damage to these shingles.
- Damage to 3-tab shingles often included diagonal or vertical (“racking”) loss patterns along the end of shingle strips, consistent with the unsealing of shingle tabs.
- Evidence of water intrusion was visible for many residences with roof cover damage.
- Newer roof coverings appeared to perform better than older roof coverings.