

National Advisory Committee on Windstorm Impact Reduction (NACWIR) Member



Forrest J. Masters, PhD., P.E.
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Dr. Masters has broad-ranging expertise in measurement and the physical simulation of wind hazards and their interaction with the built environment. He is a Professor of Civil and Coastal Engineering at the University of Florida, and serves as the Associate Dean for Research and Facilities in the Herbert Wertheim College of Engineering. Dr. Masters is a registered P.E. in the State of Florida. He earned his PhD in civil (structural) engineering from the University of Florida.

Dr. Masters is one of a very small number of academic researchers in the international wind engineering community focusing on field and full-scale research. He has conducted field experiments in hurricanes and other extreme wind events to study wind characteristics, wind-driven rain and structural loading. He has also conducted laboratory experiments, where full-scale building systems are subjected to realistic simulations of fluctuating wind load and rain conditions to evaluate their performance. His findings appear in wind engineering, building science, meteorological, arboricultural and psychosocial literature.

He is the Principal Investigator on a \$3.6M cooperative agreement with NSF to create one of seven national experimental facilities to study infrastructure performance in natural hazards. His facility supports research for mitigating the impacts of extreme wind and rain events on civil infrastructure and provides users with access to a diverse suite of wind engineering experimental resources, including an atmospheric boundary layer wind tunnel and specialized testing devices, which can replicate damaging effects from tornadoes, thunderstorms, and hurricanes.

Dr. Masters has published well over 100 papers in peer-reviewed journals and conference proceedings and holds a patent on an experimental device to simulate dynamic wind velocities and pressures. He serves on the Executive Committee of the American Society of Civil Engineers' Infrastructure Resilience Division, the Board of the Federal Alliance for Safe Homes, and formerly, the Florida Commission on Hurricane Loss Projection Methodology.

Dr. Masters has been invited internationally to speak at more than 100 conferences, covering a broad range of topics including: water intrusion research and recommendations for water management; changes to building codes and standards following hurricanes; wind and wind-driven rain effects on low-rise structures, residential roof covering investigations of wind resistance of asphalt shingles; wind, storm surge and wave effects on coastal buildings; and measurement of tropical cyclone surface winds at landfall. He was honored with the Outstanding Achievement Award in Mitigation at the National Hurricane Conference, and received the Junior International Association for Wind Engineering Award, which recognizes significant and original research contributions to research by an individual under the age of 40.