



NATIONAL  
**TORNADO**  
SUMMIT  
& *DISASTER SYMPOSIUM*

**FEBRUARY 26 - 28, 2018**  
COX CONVENTION CENTER  
OKLAHOMA CITY

## EF Scale Subcommittee

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# EF Scale—What is Staying the Same?

- Use of DIs and DoDs to estimate wind speeds
- Investigator uses subjective judgement to select DIs/DoDs and estimate the wind speed within a range
- EF Scale wind speeds

# EF Scale—What is New?

- Follows the formatting requirements of ASCE consensus based standards
- Defines scope, applicability, and limitations
- Defines resistance levels, which are tied to the wind speed estimates
- Assigns variances to wind speeds
- Establishes procedure for methodology

# EF Scale—What is New?

- Several new DIs are possible:
  - Center-pivot irrigation systems
  - Grain bins and silos
  - Rail cars
  - Fire stations
  - Jersey barriers
  - Churches
  - Vehicles and trucks
  - Farm machinery

# EF Scale—What is Changing?

- Shift toward construction, as opposed to occupancy
- DIs will now have descriptions for normal, above normal, and below normal resistances
- More DoDs and descriptions
- DoDs include destruction in 25% increments
- Some DIs of similar construction combined
- Improved tree DI
- Wind speeds rounded to the nearest 5 mph to demonstrate uncertainty
- Updates to some DoD wind speeds based on recent research
- Spread in wind speed values increases with increasing wind speeds

# EF Scale—What is Changing?

- DI2 (FR12, one- and two-family residences) will be split into sub-DIs:
  - Wood-frame
  - Single wall
  - Steel-frame
  - Double-wall masonry
  - Concreted block stucco
  - Insulated concrete form

# EF Scale—What is Expanding?

- More photos to provide guidance
- Commentary to provide background and explanations

# Where are we in the process?

- Many new parts have been drafted; a few have been balloted at the SC level
- A few new DIs have been drafted
- Many existing DIs have been drafted