

Course Name:

Wind Load Calculations (7 hours)

Course Description:

This course summarizes the design parameters of the various design tools permitted in the Florida Building Code. Several examples of outcomes using the various design tools are included as well as an activity working through the simplified provisions found in the code.

Course Topics and Timeline

The course is designed to be completed in 7 Continuing Education Hours (50 minute/hour, 350 minutes total). The following is a guide for allotting time to cover the materials and can be altered as needed:

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| • Wind characteristics | 30 minutes |
| • Review FBC/ASCE 7 wind load provisions | 30 minutes |
| • Structure Characteristics | 30 minutes |
| • ASCE 7 Wind analysis examples | 40 minutes |
| • Group Activity: ASCE 7 Method 1 & 2 | 130 minutes |
| • Commercial wind analysis software demo | 50 minutes |
| • Latest findings | 10 minutes |
| • Wind driven rain/Other discussion | 10 minutes |
| • Demonstration of Software | 10 minutes |
| • Questions/Answer | 10 minutes |

Course Objective

Participants should have a basic understanding of engineering analysis. As a result of this course, participants should be able to:

- Identify appropriate design tools given a set of site and design considerations.
- Understand how the basic design pressures are determined with an example using the analytical design procedures provided in Method 2 of ASCE 7-98
- Utilize some of the other performance/prescriptive methods in the FBC given a set of site and design conditions.
- Understand the variations in design (performance and prescriptive) pressures given the use of appropriate design tools.
- Understand the usage of engineering software for wind load analysis.
- Understand the usage and interpretation of product approval data.

Evaluation Method:

Students will be required to take pre- and post-tests and participate in an individual and/or group instructional activity relating to the course objectives. Students will be offered opportunity to provide oral and written questions and comments to facilitate course and instructional improvement