



Requirements of a Smoke Control/Evacuation System Certification Report

Prepared by:

- 1 Registered Mechanical Engineer, Florida P.E., who is thoroughly knowledgeable in the operation, testing, and maintenance of the smoke-control systems
(or)
- 2 Florida Licensed Mechanical Contractor who is thoroughly knowledgeable in the operation, testing, and maintenance of the smoke-control systems

Codes and Standards:

- 1 NFPA 101 – Florida Fire Prevention Code – Section 9.3 Smoke Control
- 2 NFPA 92A – Smoke Control Systems Utilizing Barriers and Pressure Differences
- 3 NFPA 92B - Standard for Smoke Management Systems in Malls, Atria and Large Spaces
- 4 Florida Building Code – Section 909 - Smoke Control Systems

Frequency:

- 1 Dedicated systems shall be tested at least semiannually.
- 2 Nondedicated systems shall be tested at least annually.

Report Must Include:

- 1 Narrative description of type system in place.
- 2 List of all equipment and components utilized by the system (ie: fans, dampers, controls, etc) List shall include individual identification, description, function and location of each component.
- 3 Detailed Sequence of Operations as designed.
- 4 Control diagrams showing all devices in the system and identifying their location and functions.
- 5 Description of the testing procedures used on each typical piece of equipment.
- 6 Inspection results for each component tested.
- 7 Status of smoke barrier integrity. Verify that all doors in barriers self-close and latch and that all penetrations have been fire stopped/sealed.
- 8 Test and Balance Report for all fans and equipment utilized by the smoke control system. Provide original design CFM and Measured CFM for review and comparison. Provide measured differentials at all barriers and compare to design criteria. Test and Balance report shall include door pull measurements for all egress doors under pressurization and/or evacuation modes.
- 9 List all deficiencies found on initial inspection and testing.
- 10 Describe all corrective actions performed to restore system to its designed and accepted condition.
- 11 Descriptive Maintenance Program required for each device, component or piece of equipment associated with the smoke control system.
- 12 Test results of all interface components with the fire alarm system. Operation of the correct output for each given input shall be verified.
- 13 Test results for testing the system under standby power.
- 14 Final System Certification stating that all components of the Life Safety System have been tested for proper operation and performance as originally design and installed, and are certified as operational without deficiencies.