REQUIREMENTS FOR ENCLOSURE INTEGRITY DOOR FAN TESTING

1. The protected area to be tested must be enclosed with wall partitions which extend slab to slab. In zones where this is not possible, additional sealing provisions must be made or special test procedure must be utilized and approved.

2. A doorway must be provided--55 to 96 inches high by 28 to 48 inches wide. This opening will house the door fan frame. Larger openings may be reduced by using Styrofoam panels, etc., but materials must be obtained in advance of the test. This doorway cannot be used as a passage while testing is in progress.

3. An electrical plug for the fan must be provided, normally 110V/60HZ, other voltages with special equipment.

4. The room should be completely sealed, i.e., doors and walls, etc. ready for an emergency discharge.

5. As-built mechanical drawings of the area should be studied to thoroughly understand the air movement within and outside the room.

6. The installer of the alarm and suppression system, or person responsible and familiar with system to be present to place room in "alarm condition" during actual test. Care must be taken to prevent the accidental discharge or transmission of alarm signal to central monitoring station.

7. For at least a ten-minute period of time during each test, all air handling units must be cut off, dampers closed and doors left closed.

8. Where applicable, positive and negative pressures of no more than 12 tp 20 pa will be applied to the room.

9. Temporary masking of ductwork, air grills, louvered light fixtures, wall penetrations and door frames, etc., may have to be done to create rooms tight enough to perform initial test or to prove where the leak problems are occurring.

10. The rooms must be tight enough to create at least a 12 to 20 pa pressure in order to predict accurate results.

11. Once the total leakage in the room is determined, it may be necessary to pressurize or depressurize the room while using smoke pencils to ascertain direction and possible location of leakage areas.

12. After reports are generated and corrective action is taken, it may be necessary to retest the room to ascertain that all leaks have been sealed.

13. These final readings can serve as a benchmark for future leak checking of the room during bi-annual service of the system.
14. For additional information refer to our "*Sealing of Rooms for Containment of Fire Suppression Agents*" bulletin.

Fire Safety Technology
P.O. Box 1063
Severna Park, MD 21146 U.S.A.
Phone 800-685-8303, 410-647-8303
FAX 410-647-7066
e-mail: mail@firesafetytech.com
www.firesafetytech.com