

SMOKE GUARD® system

Model 900

M900 PHYSICAL PROPERTIES

air leakage

TEST STANDARD: UL 1784 and IBC 2003 §715.3.3; IBC 2006 §715.4.3.1

TEST PARAMETERS: max. allowable is 3 cfm/sf @ 0.1 inch wg @ 72° F and 400° F

TEST RESULTS ACHIEVED: air leakage less than 1 cfm/sf opening at 72 degrees F and less than .8 cfm/sf opening at 400 degrees F

fire resistance

TEST STANDARD: UL 10C

TEST PARAMETERS: 20 minute fire resistance under positive pressure with no flaming

TEST RESULTS ACHIEVED: M900 met the requirements for a 20 minute rating without the hose stream

opening force

TEST STANDARD: 2003 IBC §1008.1.2; 2006 IBC §1008.1.2

TEST PARAMETERS: force < 30 lbs.

TEST RESULTS ACHIEVED: < 15 lbs. applied at the edge of screen material

flammability standards

TEST STANDARD: ASTM E 84

TEST PARAMETERS:

flame spread < 25

smoke generation < 50

TEST RESULTS ACHIEVED: M900 curtain exceeds Class A building product standards

flame spread index = 0

smoke generated = 25

System Description. The Smoke Guard system Model 900 (M900) is a code compliant fire-resistance-rated system that is also rated as a smoke and draft control assembly for use away from the elevator opening. The system is designed to protect fire rated enclosed elevator lobbies as well as elevator lobbies serving as areas of refuge. The screen material is a fire rated acrylic coated silica cloth. Flexible magnets along the vertical edges of the screen create a magnetic seal along auxiliary rails mounted adjacent to the opening. The magnets are covered with an intumescent strip. Bimetallic strips attached along the flexible intumescent magnet strip bend to grip the auxiliary rails when exposed to heat in excess of 1000 degrees Fahrenheit.

Codes and Standards. The M900 works in conjunction with IBC requirements allowing the construction of fire and smoke rated enclosed elevator lobbies and elevator lobbies that serve as areas of refuge.

System Operation. The system is deployed when a local smoke detection system goes into alarm. A threshold built into the screen creates a seal at the floor. If an object is detected in its path, the screen will not fully deploy until the object is removed. Screen mounted rewind switches on both sides of the screen allow mechanically rewound egress through the opening. If smoke is still being detected, the screen will redeploy after a brief delay. Once the smoke detector is cleared the unit will automatically rewind into the housing. The M900 is powered by standard 120v AC power and is also equipped with battery back-up in the event of power loss. If manual egress is required, the screen can be pushed away from the auxiliary rails with no more than 15 pounds of pressure applied to either side of the screen.

Unit Dimensions. The M900 is available in one size screen width to protect openings up to 7 feet 2 inches wide. Maximum height of the opening can be up to 9 feet 10 inches. Consult smokeguard.com or your local Smoke Guard distributor for detailed information on this product.

Installation. All Smoke Guard system units are to be installed by factory recognized installation personnel. Preparation work required by others is outlined in the product specification. Installation requires clear, plumb, unobstructed wall surfaces for mounting the housing and auxiliary rails, 120v AC power and a UL 268 conforming smoke detector.

Smoke Guard systems meet or exceed the requirements of:

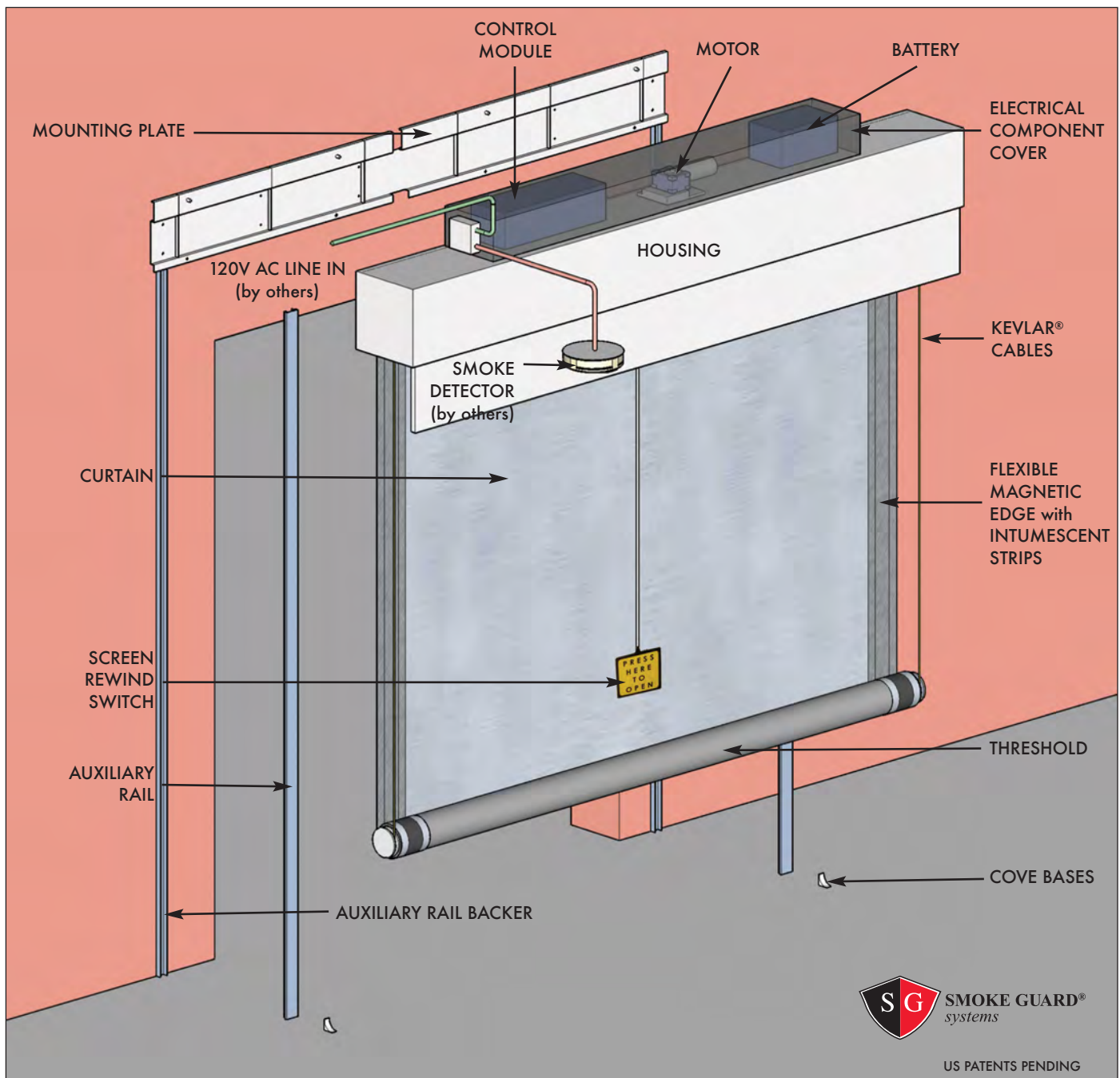
- UL 1784 "Air Leakage Tests of Door Assemblies"
- UL 864 "Control Units for Fire Protective Signaling Systems" (pending)
- ICC Evaluation Service Report ESR-1136 (pending)
- 2000 International Building Code Section 714.2.3
- 2003 International Building Code Section 715.3.3
- 2006 International Building Code Section 715.4.3
- NFPA 105 "Installation of Smoke Control Door Assemblies"



SMOKE GUARD®
systems

800.574.0330

WWW.SMOKEGUARD.COM



SMOKE GUARD® system
Model 900

Listed Releasing Device. The M900 control module has been tested in accordance with the UL 864 standard.

System Monitoring. The system controls monitor a number of functions such as the presence of AC power, the backup battery condition, the system's deploy status, and the continuity of all system circuits.

Battery Backup. The M900 operates on standard building AC power. It has a battery backup system that can power the unit. Unit can be connected to standby power.

External Indicators. External indicators will display if a fault is detected including a partial curtain deployment.

Object Sensing. If the curtain senses an object in its path the system will redeploy after the obstruction is removed.