SMOKE GUARD[®] system

Model 2100 Egress

Vertical Opening Protective



ES ICC Evaluation Service Report ESR-1136 *

System Description. The Smoke Guard system Model 2100 Egress opening protective (M2100E) is a code compliant curtain assembly that is designed to protect openings. The M2100 Egress consists of a high performance fabric curtain assembly (specifiable as smoke only or fire + smoke-rated) mounted within a steel housing. The curtain is captured vertically by a side guide assembly on both sides of the curtain. The curtain is equipped with a bottom bar to seal the curtain at the floors. M2100 Egress comes in a standard galvanized finish. RAL color options are available or may be field painted to spec.

Dimensions

- Openings: ≤ 10' wide by ≤ 10' tall*
- Housing height: 6 3/8"
- Housing depth: 6 ¹/₄"
- * Minimum height for DuraNet+ screen material is 7' 8" tall

Standards

- NFPA 105 "Installation of Smoke Control Door Assemblies"
- NFPA 80 "Standards for Fire Doors and Other Opening Protectives"
- NFPA 252 "Standard Methods of Fire Tests of Door Assemblies" (20 minute) listed by Intertek
- UL 10B "Fire Tests of Door Assemblies" (20 minute without hose stream) listed by Intertek
- UL 10C "Positive Pressure Fire Tests of Door Assemblies" (20 minute without hose stream) listed by Intertek
- UL 10D "Fire Tests for Fire Protective Curtains" (2 hours) listed by Intertek
- UL 864 "Control Units for Fire Protective Signaling Systems" listed by Intertek
- UL 1784 "Air Leakage Tests of Door Assemblies" listed by Intertek

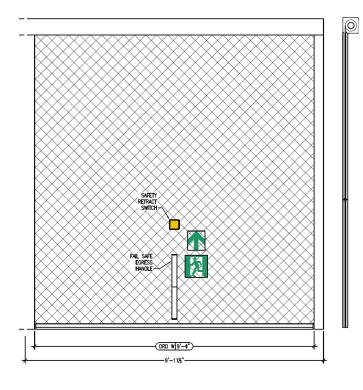
Code References

- 2009/2012/2015/2018/2021 IBC Section 909
- 2009/2012/2015 IBC Section 716.5.3
- 2018/2021 IBC Section 716.2.2.1

* ESR - final report from Intertek pending publication

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Codes and Standards. M2100 Egress fulfills IBC requirements to provide an opening protective, where these assemblies are permitted as passive barriers used in conjunction with smoke control systems. This fire + smoke-rated curtain system can serve as an opening protective for counter tops, openings in fire-rated corridors, and applications in atrium construction.



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System Operation. The system is deployed on an alarm signal from the local smoke detector or from a fire control panel. System power requirement is 120/240-volt AC. The unit is also equipped with a 12-volt DC battery back-up system that is maintained by the electronic controls. When required, the system can also be connected to building standby power. The controls include a universal power supply that can be adapted to foreign electrical current requirements.

Installation. The system is typically mounted above the ceiling, anchoring above or on to a header assembly supported from the deck above. It may also be mounted to a wall. The side guides are secured to the wall on either side of the opening and may be surface mounted or embedded for smooth finish walls. All Smoke Guard system units are 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 side guides, 120/240v AC power and, should local smoke detection be required, a smoke detector.

Smoke Guard and Your Project

Check for clearance/obstructions issues on, above, and surrounding the opening (sprinklers, HVAC, etc.)

Field verify opening measurements prior to ordering systems

Available 120/240 VAC circuit with 7/3.5 amp capacity per controller

Fire alarm system has normally open auxiliary contacts available

Confirm suitable backing for housing and guides

Fail Safe Features. The M2100 Egress is a gravity fail safe system with manual egress via curtain lift strap. The M2100 Egress control monitors system status and features a fault report to indicate that the system requires a corrective action.

Releasing Device. The M2100 Egress control has been tested in accordance with the UL 864 standard and listed by Intertek Labs.

Screen Options. Upgrades such as an on-screen curtain retraction switch and bottom bar obstruction sensor may be added to system when configuring. Consult your local SG rep.

FSCS Option. The interface for Firefighter Smoke Control Station (FSCS) provides high priority inputs to remotely OPEN and CLOSE curtain. FSCS functionality also monitors system status.

Curtain Activation Switch. The curtain activation switch may be mounted on opposite sides of the opening. If the system remains in alarm, and the curtain activation switch is engaged, the system will retract to allow passage and then redeploy after a brief pause. When the alarm clears the curtain automatically retracts to the ready position.