SMOKE GUARD® *system*

Model 600

Elevator Smoke Curtain

ICC Evaluation Service Report ESR-1136

System Description. The Smoke Guard system **Model 600 (M600) creates** a code-compliant smoke- and draft-control assembly when paired with common fire-rated elevator doors. The Smoke Guard DuraNet™ screen assembly consists of a reinforced translucent material connected to flexible magnetic strips. The magnetic strips adhere to ferrous metal elevator door jamb as the system deploys creating a tight seal. The **M600** uses standard building power.

Dimensions

- Housing lengths: variable 55" - 110"
- Housing height: 9"
- Housing depth: 10 1/2" (plus return)
- Return depths: 1" and 2" standard, 1/2" - 4" (in 1/4" increments)

Standards

- UL 1784 "Standard for Air Leakage Tests of Door Assemblies and Other Opening Protectives" without an artificial bottom seal, listed by Intertek
- UL 864 "Standard for Control Units and Accessories for Fire Alarm Systems", listed by Intertek

Complies with:

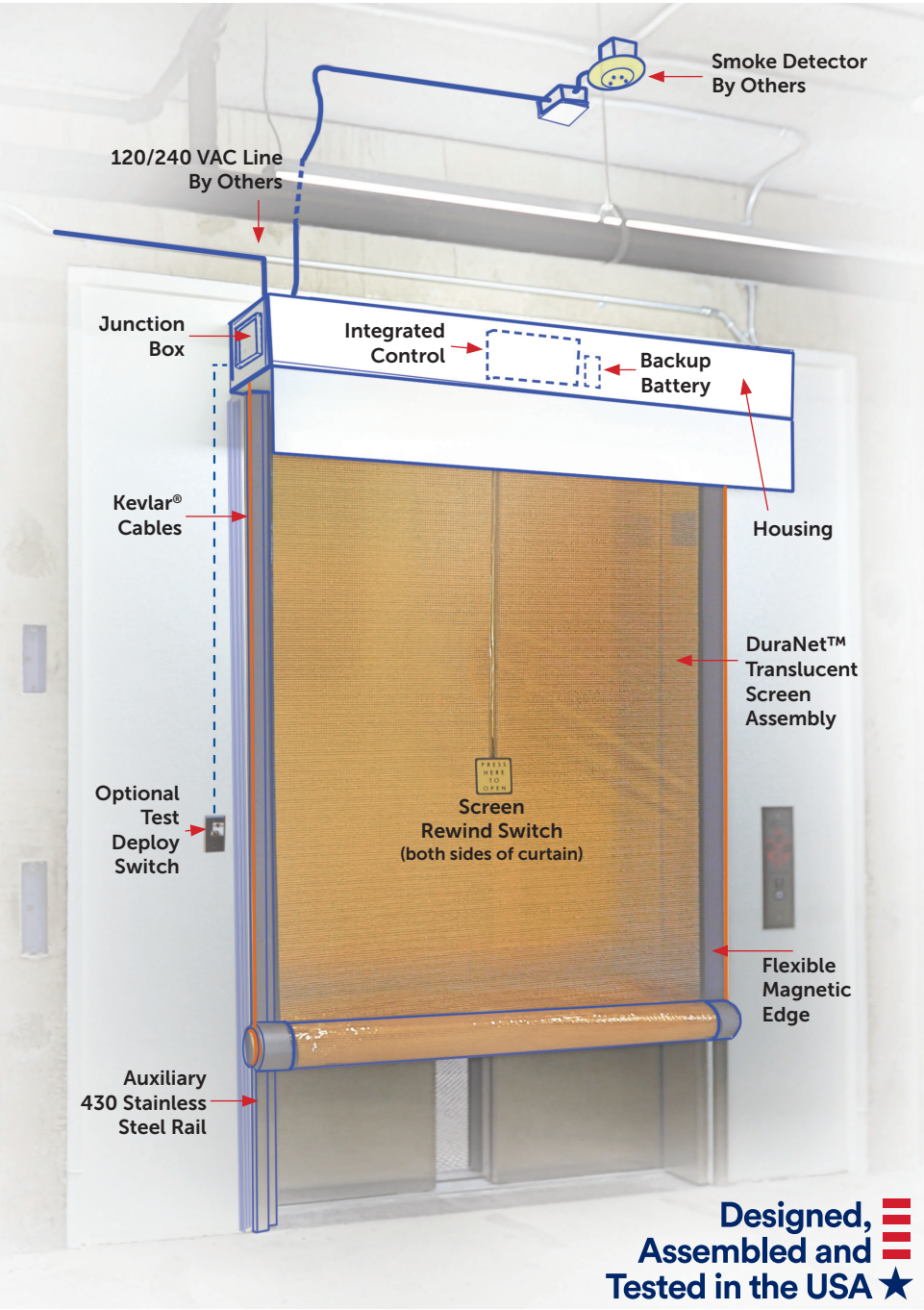
- ICC-ES Report AC77
- 2012 IBC Section 713.14.1
- 2015 IBC Section 3006.2
- 2018 IBC Section 3006.2
- 2021 IBC Section 3006.2
- 2024 IBC Section 3006.2
- NFPA 105 "Standard for Smoke Door Assemblies and Other Opening Protectives"
- ASME A 17.1/CSA B44

Codes and Standards. The **M600** works in conjunction with the fire-rated elevator doors to exceed the NFPA and IBC requirements for a smoke- and draft-control assembly. This enables the elevator to open directly onto the corridor, eliminating the need for additional doors at the elevator constructed lobby space.

Designed, Assembled, and Tested in the USA

SMOKE GUARD® *system*

Model 600 Elevator Smoke Curtain



System Operation. The Smoke Guard system will deploy when the smoke detector in front of the elevator opening goes into alarm. The system is not designed to deploy on general alarm. If an elevator occupant were to encounter a deployed **M600**, a screen rewind switch located on both sides of the screen allows for egress. If AC power is lost, the Smoke Guard system **M600** operates on a fail safe basis, triggering screen deployment. A deployment delay is built into the system to avoid nuisance deploys on brief power outage. As power is restored, the screen will automatically rewind into the housing.

Battery Backup. The **M600** unit operates on standard 120/240 VAC building power. In addition, M600 has a battery backup system.

External Indicators. External indicators display if a fault is detected. System warnings include partial curtain deployment and blinking LED status indicator lights on the housing frame to aid building maintenance personnel in easily diagnosing system faults.

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

Installation. All Smoke Guard units are installed by factory recognized personnel. There is minimal preparation work. Installation requires a clear, plumb, unobstructed wall surface above the hoistway door, 120/240 VAC power and a smoke detector.

Releasing Device. Contained within the unit housing the **M600** control is tested in accordance with the UL 864 standard by Intertek Laboratories.

System Monitoring. The unit control monitors several system functions including presence of AC power, battery backup condition, system deploy status, and the continuity of all system circuits. The **M600** is a dedicated smoke control device compatible with FSCS controls.

Smoke Guard and Your Project

- ☐ ***Check for clearance/obstructions issues on, above, and surrounding the elevator opening (sprinklers, call buttons, HVAC, etc.)***
- ☐ ***Field verify elevator opening measurements prior to ordering systems***
- ☐ ***Available 120/240 VAC circuit with 2 amp capacity per unit***
- ☐ ***Fire alarm system has local auxiliary contacts available***
- ☐ ***No auxiliary rails if elevator door frame***