System Description. The Smoke Guard system Model 2500 | Fire + Smoke (M2500|FS) vertical curtain is a code compliant fire and smoke-rated assembly designed to protect openings as an element of a smoke control system. The M2500|FS consists of a rated textile curtain assembly mounted within a steel housing. The curtain is captured vertically on both sides by curtain loops secured by guide rods. The guide rods are attached by side guides anchored to the side walls. The curtain assembly is equipped with a bottom bar to seal the curtain at the bottom and optional bottom bar safety edge to detect obstructions to the deploying screen. This specialized curtain assembly can be specified with an optional split curtain access for manual egress per ICC AC77. M2500|FS comes in a standard galvanized finish. RAL color options are available.

Codes and Standards. M2500|FS 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 opening protective for counter tops, openings in corridor, and certain applications in atrium construction.

System Operation. The system is deployed upon a signal from the local smoke detection system or from a smoke control panel. System power requirement is 120-volt AC. The unit is also equipped with a 24-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. It anchors to the ceiling 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 walls on either side of the opening and may be surface mounted or embedded for smooth finish walls. 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 side guides, 120v AC power and, should local smoke detection be required, a smoke detector.
Egress. The M2500|FS comes standard with door activation switches that can be mounted on opposite sides of the opening. If the system remains in alarm, and the door 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. The M2500|FS also offers a flexible split screen egress door option for use as a secondary means of manual egress.

Fail Safe Features. This is a gravity fail safe system. The M2500|FS features a fault report to indicate that the system requires a corrective action and the state of curtain deployment. An optional bottom bar sensing edge may be mounted to the curtain to guard against obstructions during deployment.

Listed Releasing Device. The M2500|FS control has been tested in accordance with the UL 864 standard and listed by Intertek Laboratories. It also has a full interface to the fire service interface system (FSCS) as an option for dedicated smoke control.