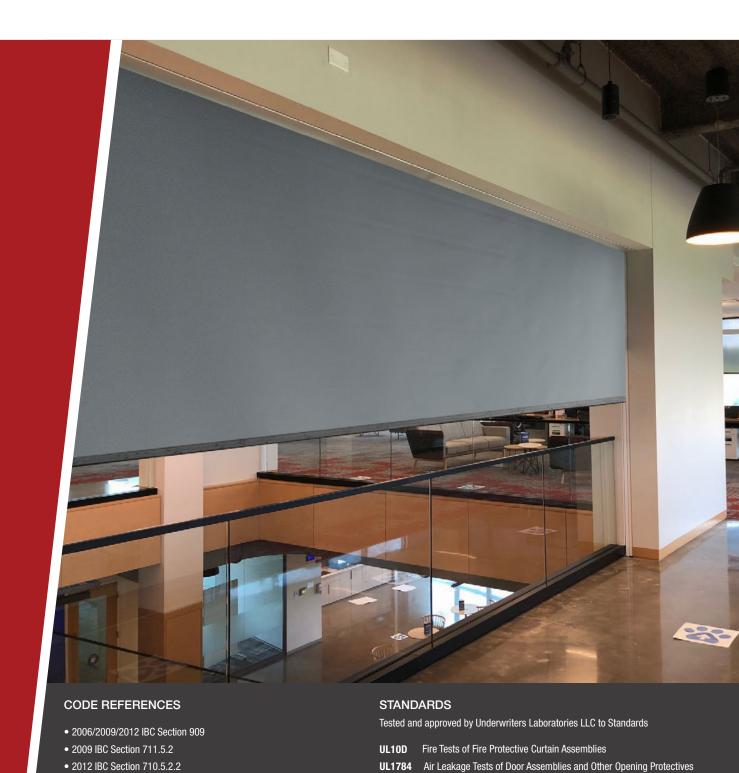


FIRE PROTECTIVE SMOKE CURTAIN FC/SC

FIRE CURTAIN WITH UP TO 3-HOUR FIRE RESISTANCE FC60/SC60 FC180/SC180



• NFPA 105 Installation of Smoke Control Door Assemblies

• NFPA 252 Standard Methods of Fire Tests of Door Assemblies

Control Units and Accessories for Fire Alarm Systems

Test for Surface Burning Characteristics of Building Materials

UL864

UL723:

FIRE PROTECTIVE SMOKE CURTAIN FC/SC

Manufactured to the highest standards, fire curtains FC/SC are discreet in design and robust and reliable in fire scenarios. All the Deployable Fire Protective Curtains are UL recognized and labeled.



KEY SPECIFICATIONS

Headbox 1/32" galvanized mild steel with 1/16" end caps

Rollers 3" coated mild steel tube

Motors 24V DC

Bottom Bar 3/4" x 3/4" - 3/4" x 1 5/8" mild steel

Side Guides 100 x 50 rolled steel

THE SYSTEM INCLUDES:

Headbox and fabric

The system comprises **a glass fiber fabric** wound around a steel tube that incorporates a 24V permanent magnet roller. The roller assembly is encased in a galvanized steel **headbox**, which can be fixed directly to the building's structure.

Bottom bar

A standard **bottom bar** consisting of twin steel angles is used to ensure the curtain deploys under gravity in a controlled manner (Gravity Fail-Safe).

Side guides

The Fire curtains can be supplied with or without side guides (SC60/SC180).

RAL colors

The headbox, side guides, and bottom bar can be powder coated in any RAL color as an optional extra or can be supplied in stainless steel.

Egress door

Model FC/SC180 curtains are also available with an egress door, with full UL approval. The FC/SC180 utilizes a split bottom bar, and partial fastening between the fabric overlaps to allow safe egress through the curtain when the curtain is deployed.

FEATURES

- Multiple control options
- Provision of fire compartments and refuges
- Excellent replacement for fire doors
- Provision of a protected means of escape
- 3 hrs integrity and 2 hrs radiation

FIRE PROTECTIVE SMOKE CURTAIN



FIRE CURTAIN FC60 / SC60

Fire Curtain with 60-minute fire integrity incorporating an X32k fabric, the FC60/SC60 is the ideal solution for smaller projects.

Material

Woven glass fiber, coated on each side with a micronized aluminum polymer

Fire Integrity

Rated at 1800°F for up-to **60 minutes** of Integrity and 60 minutes of Radiation to EN 1634-1.

Applications

Elevator shaft, wall openings, and fire compartmentalization



FIRE CURTAINS FC180 / SC180

180-minute fire integrity curtain incorporating a C41000WK fabric, the FC180/SC180 is the highest performing fire curtain in the product range.

Material

Stainless steel wire reinforced woven fiber fabric coated on each side with silver polyurethane

Fire Integrity

Rated at 1800°F for up to **180 minutes** Integrity and 60 minutes radiation to EN 1634-1. Increased resistance to the irradiance of heat (W).

Applications

Elevator lobbies, atrium separation, exit stairway, sprinklered exit stairway

HEADBOX SIZES

The size of the curtain roller housing (headbox), depends on the curtain drop and width. The table below gives details of the full range of headbox sizes for the fire protective curtains.



The standard headbox for use with curtain widths up to 18'



For use with curtains up to 147' and limited installation height for headbox



The standard headbox for use with curtain widths up to 147'

LII LIEADDOV OIZEO	TYPE A	
UL HEADBOX SIZES FC60/SC60	SINGLE ROLLER HEADBOX	
1 000/3000	18' - 0 1/2"	
CURTAIN DROP	WIDTH (IN)	HEIGHT (IN)
UP TO 4'-11"	0' - 5 7/8"	0'-5 7/8"
4'-11" - 9'-10 1/8"	0' - 7 1/8"	0' - 7 1/8"
9'-10 1/8" - 19'-8 1/4"	0' - 8 1/4"	0' - 8 1/4"
19'-8 1/4" - 39'-4 1/2"	0' - 9"	0' - 9"

	TYF	PEYAPE A
UL HEADBOX SIZE: FC180/SC180	SIN SIN EGRÆLE	OBLIEBANDBADOB (
FC160/5C160	18'-1	(081 / 20"1/2"
CURTAIN DROP	WIDTH (IN)	HEIGHT (IN)
UP TO 4'-11"	0' - 5 7/8"	0'-5 7/8"
4'-11" - 9'-10 1/8"	0' - 7 1/8"	0' - 7 1/8"
9'-10 1/8" - 19'-8 1/4"	0' - 8 1/4"	0' - 8 1/4"
19'-8 1/4" - 29'-3 3/4"	0' - 9"	0' - 9"
29'-3 3/4" - 39'-4 1/2"	0' - 9 7/8"	0' - 9 7/8"

LII LIEADDOV OIZEO	TYPE B (DH)	
UL HEADBOX SIZES FC60/SC60	DOUBLE ROLLER HEADBOX	
1 000/3000	(MAX. WID	TH 147' - 7 5/8")
CURTAIN DROP	WIDTH (IN)	HEIGHT (IN)
UP TO 4'-11"	0' - 9 7/8"	0'-5 7/8"
4'-11" - 8'-2 3/8"	1'-0 1/4"	0' - 7 1/8"
8'-2 3/8" - 19'-8 1/4"	1' - 1 3/4"	0' - 8 1/4"
19'-8 1/4" - 29'-3 3/4"	1' - 3 3/8"	0' - 9"

	TYPE	PEE (BD(HD)H)
UL HEADBOX SIZES FC180/SC180	DOMENIELECRO	DEFERENCATION
1 0 180/30 180	(M (AX AXVI ID VIII)	HT1+4174-77-57/851/18")
CURTAIN DROP	WIDTH (IN)	HEIGHT (IN)
UP TO 4'-11"	0' - 9 7/8"	0'-5 7/8"
4'-11" - 8'-2 3/8"	1'-0 1/4"	0' - 7 1/8"
8'-2 3/8" - 19'-8 1/4"	1' - 1 3/4"	0' - 8 1/4"
19'-8 1/4" - 29'-3 3/4"	1' - 3 3/8"	0' - 9"
29'-3 3/4" - 39'-4 1/2"	1' - 5 3/4"	0' - 9 7/8"

LIL LIEADDOV 017F0	TYPE C (DV)	
UL HEADBOX SIZES FC60/SC60	DOUBLE ROLLER HEADBOX	
1 000/3000	(MAX. WIDTH 147' - 7 5/8")	
CURTAIN DROP	WIDTH (IN)	HEIGHT (IN)
UP TO 8'-2 3/8"	0' - 7 1/8"	1'-0 1/4"
8'-2 3/8" - 19'-8 1/4"	0' - 8 1/4"	1' - 1 3/4"
19'-8 1/4" - 29'-3 3/4"	0'-9"	1' - 3 3/8"

LII LIEADDOV OIZEO	TYPE	Æ (CD(LC) V)
UL HEADBOX SIZES FC180/SC180	DOWNBLECK	DEFEREMENTATION
1 0100/30100	(MAXAXVIVDVIII	HT#474-77-5/851/8")
CURTAIN DROP	WIDTH (IN)	HEIGHT (IN)
UP TO 8'-2 3/8"	0' - 7 1/8"	1'-0 1/4"
8'-2 3/8" - 19'-8 1/4"	0' - 8 1/4"	1' - 1 3/4"
19'-8 1/4" - 29'-3 3/4"	0' - 9"	1' - 3 3/8"
29'-3 3/4" - 39'-4 1/2"	0' - 9 7/8"	1' - 5 3/4"

LII LIEADDOV 017E0	TYPE C (DV)	
UL HEADBOX SIZES FC180ES	SINGLE ROLLER HEADBOX	
FUIOUES	(MAX. WIDTH	1 147' - 7 5/8")
CURTAIN DROP	WIDTH (IN)	HEIGHT (IN)
UP TO 8'-2 3/8"	0' - 7 1/8"	1' - 2 1/4"
8'-2 3/8" - 19'-8 1/4"	0' - 8 1/4"	1' - 1 3/4"
19'-8 1/4" - 29'-3 3/4"	0' - 9"	1' - 5 3/8"
29'-3 3/4" - 39'-4 1/2"	0' - 9 7/8"	1' - 7 5/8"

FIRE PROTECTIVE SMOKE CURTAIN FC

Control systems for BLE require minimal maintenance and are designed to be robust and simple while also providing advanced features such as retract buttons, obstruction sensors, and audio/visual warnings.

CONTROL SYSTEMS

A UL Standard Group Control Panel (GCP) is used in conjunction with UL Standard Motor Control Circuits (MCC) to operate up to 5NO 24V permanent magnet motors.

In normal conditions, the GCP provides a 24V supply to the motors, and the curtains are held in the headbox. When a fire alarm is activated, the power is removed from the motors, releasing the curtains to deploy under gravity in a controlled manner (Gravity Fail-Safe).

When the fire alarm system is reset, the GCP reinstates the 24v supply to the motors, and the curtains retract to their normal position in the headbox. Current limiting circuitry detects when the curtain has fully retracted, and the supply voltage to the motor is stepped down to a holding voltage.

In the event of a mains power failure, the 2NO 12v 7Ah backup batteries supplied with the GCP can maintain full control of the system for up to 4 hours. If a fire alarm signal is activated during a mains power failure, curtains will deploy in a controlled manner as normal.



CONTROL OPTIONS

- Two-stage Descent
- Delayed Descent
- Audio-Visual Alert
- Obstruction Sensors
- Connection to Building Management System (BMS)

GCP OPTIONS

LED status Indicators

Displays the status of the mains supply, battery charge, alarm and any fault in the CPU on the Standard GCP. The Multi-Function GCP has extra LEDs that display if a delay timer or override function is active.

Manual override

Facility to temporarily raise all the curtains connected to the GCP after deployment, for emergency egress

Two stage descent

Programmable timer delay that deploys the curtain in two stages to allow egress before full deployment of the curtain

Delayed descent

Programmable timer delay of up to 90 seconds after the fire alarm signal is activated before full deployment of the curtain

Delayed ascent

Programmable timer delay of up to 90 seconds after the fire alarm signal is reset before retraction of the curtain

GCP interlinking

Enables multiple GCP's to be connected to ensure synchronization of curtain descent and retraction

Heat or Smoke detector

Can be used in place of, or in combination with, the main fire alarm signal (Requires a manual reset button).

AV facility

An Audio-Visual Unit that activates to warn that the curtains are descending. Sounder beacons can also be used.

BMS connection

The GCP can be linked to a Building Management System to show the status of mains power, battery charge, alarm, timer delays, and manual override.

Curtain released signal

Signal to the BMS to confirm that the curtain has been released

	UL GCP Features	_
Feature	GCP FEATURES	UL GCP
Controls up to 5 motors	S	Yes
2x 12V 7Ah Backup Ba	tteries	Yes
Test Key Switch		Yes
LED Status Indicators		Yes
Manual Override (Requires Push Button)		Yes
Two Stage Descent (Requires Brake Motor)		Yes
Delayed Descent		Yes
Delayed Ascent		Yes
GCP Interlinking		Yes
Heat or Smoke Detector (with Manual Reset)		Option
AV Connection Facility	,	Option
Building Management	System (BMS) Facility	Option

GCP SPECIFICATIONS		
Power Input	• 120V ac 60Hz • 230V ac 50Hz	
Alarm Input	Normally closed (Open on fire alarm activation) Configured to be fail safe	
Finish	Appliance white painted mild steel enclosure, with hinged door	
	15" x 13" x 4" (H x W x D)	

MCC OPTIONS



Controlled curtain descent

Ascent run timer

Current controlled ascent

Individual Override Interface Back electromotive force (EMF) of the curtain motor ensures the controlled gravity fail-safe deployment of the curtains.

For more extended curtain drops, the run timer can be set to 90 seconds instead of the standard 45 to ensure the curtain retracts fully into the headbox.

When the curtain has fully retracted, the motor voltage is reduced. No limit switches are required.

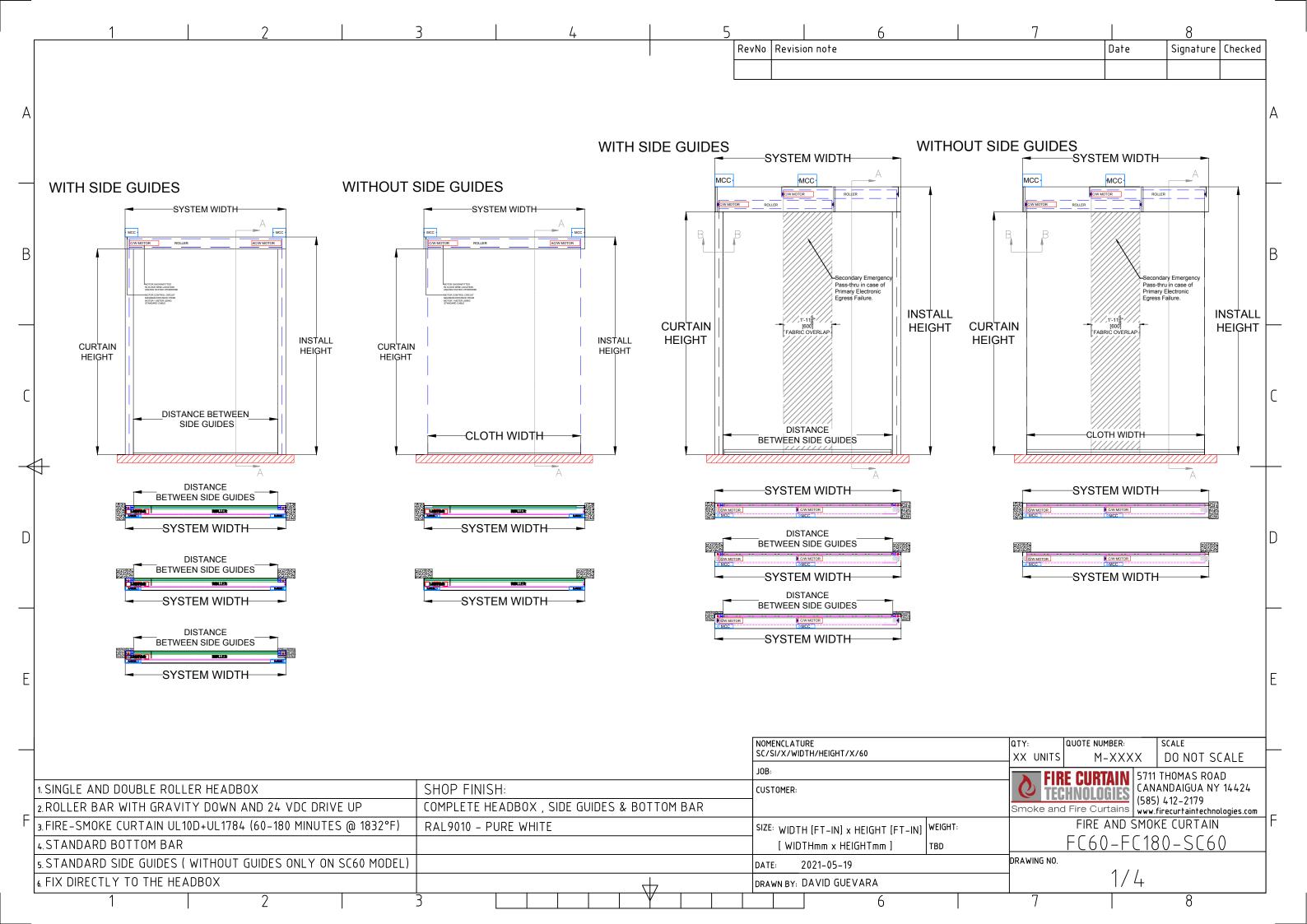
Manual override for an individual curtain on a GCP loop that contains multiple curtains. The period of time the curtain remains raised after the IOI is activated can be controlled from 0 -90 seconds.

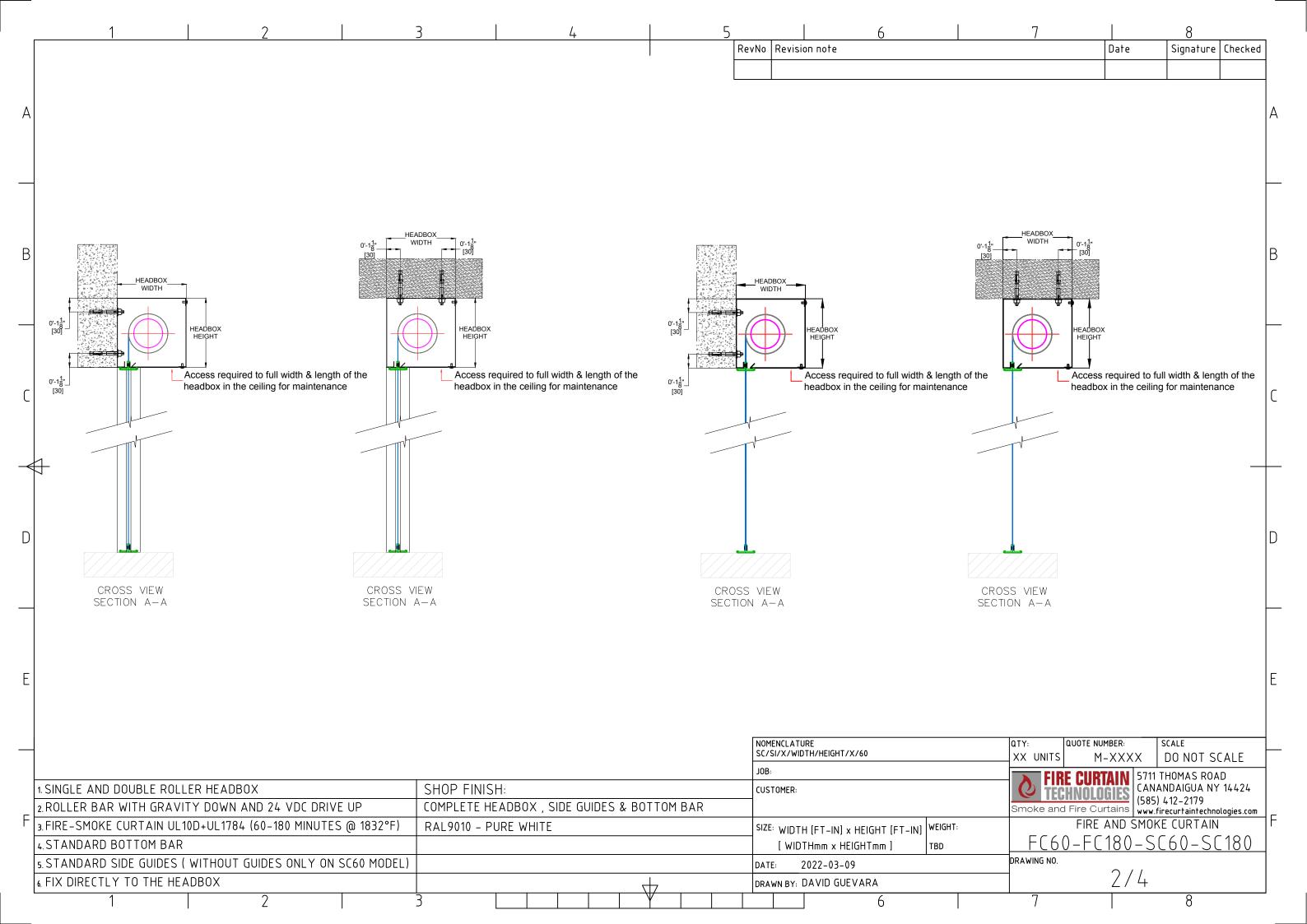
MCC Features

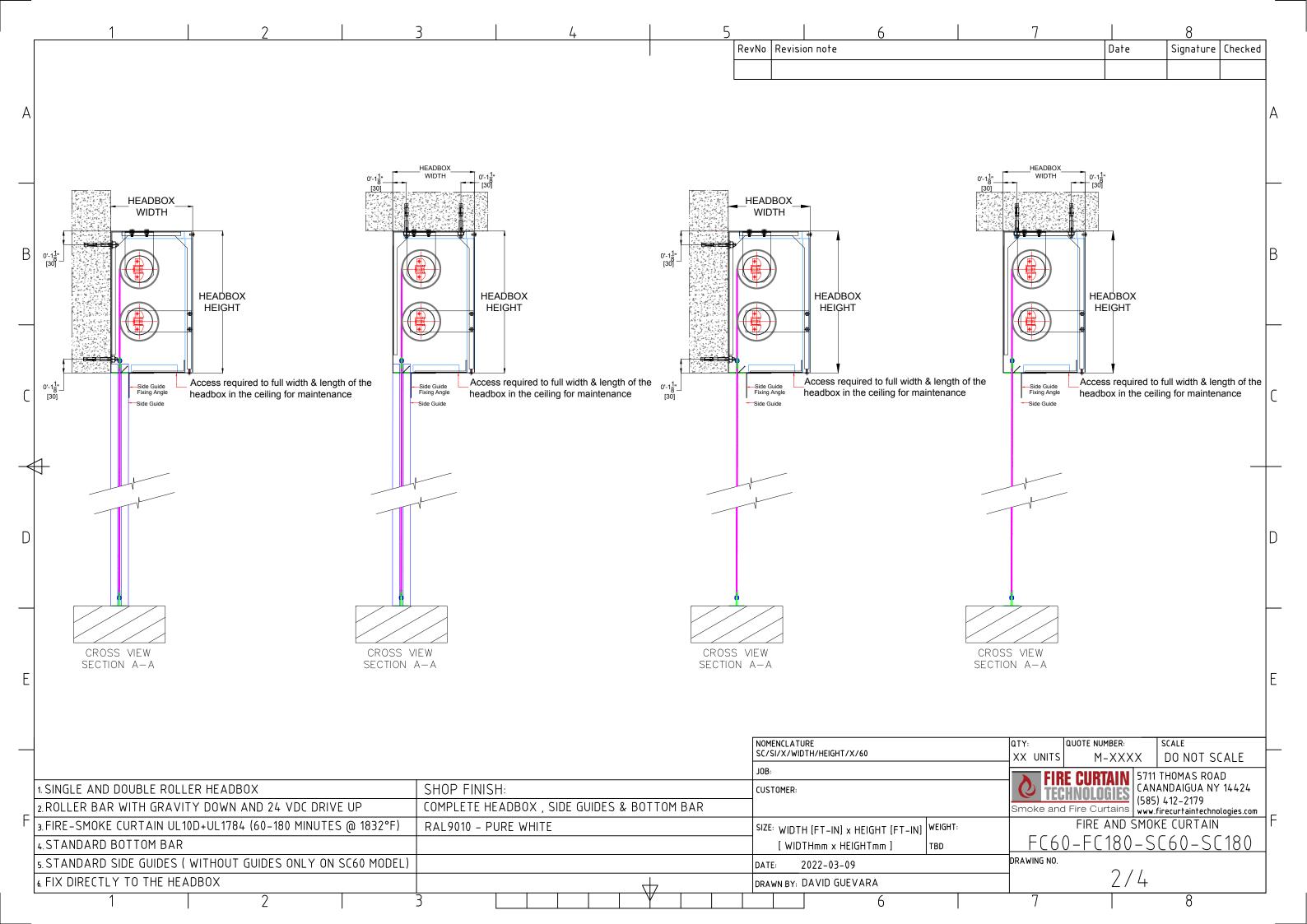
MCC FEATURES Controlled Curtain Descent 45 or 90 Second Ascent Run Timer Current Controlled Ascent (No Limit Switches) Two Stage Descent Facility (requires Brake Motor) Individual Override Interface (IOI) (requires Push Button) Yes

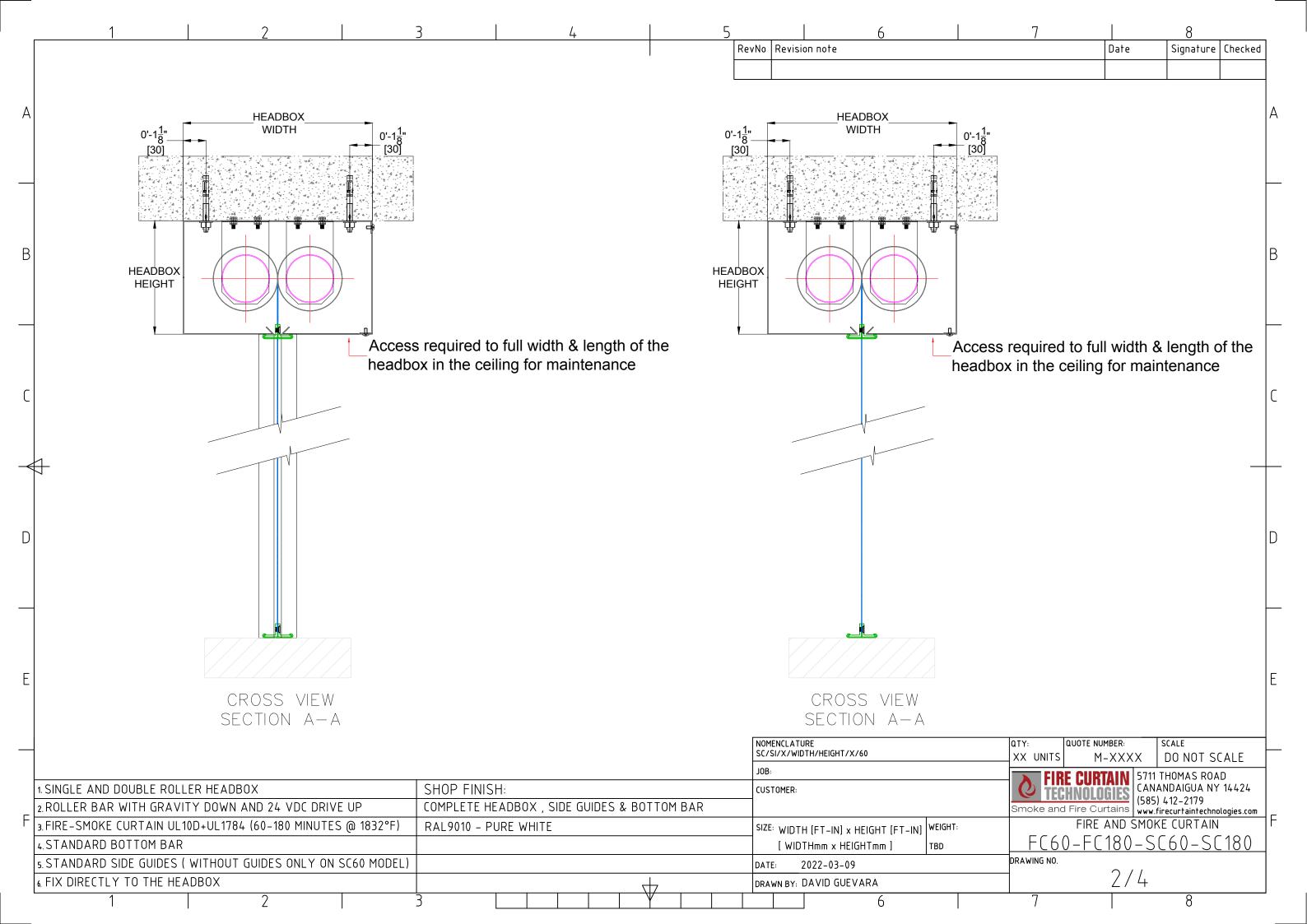
MCC SPECIFICATION

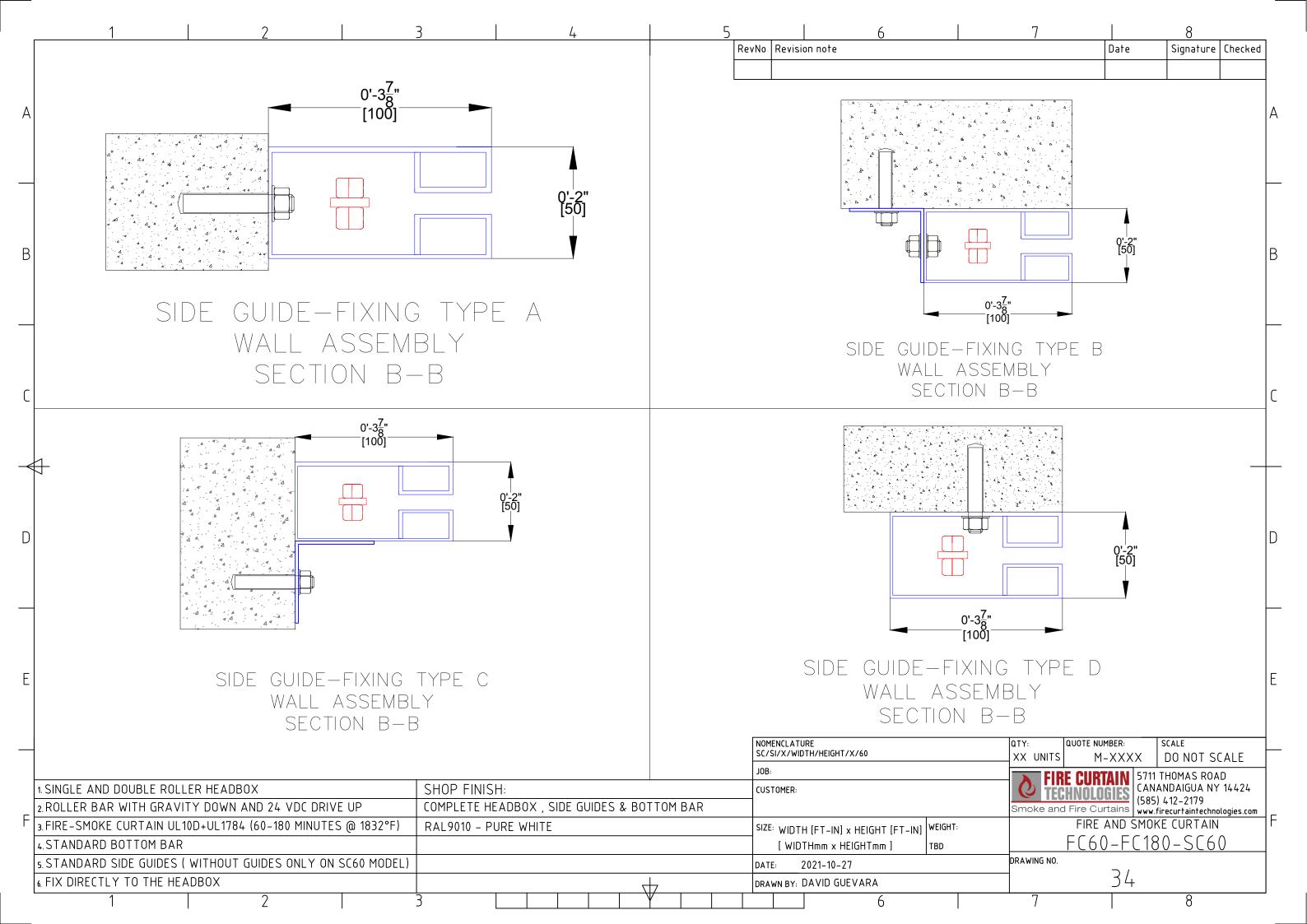
MCC SPECIFICATIONS		
Input Voltage	27Vac / 24Vdc	
Output Voltage	24Vdc	
Finish	White painted mild steel enclosure with screwed cover $5" \times 10" \times 2" (H \times W \times D)$	

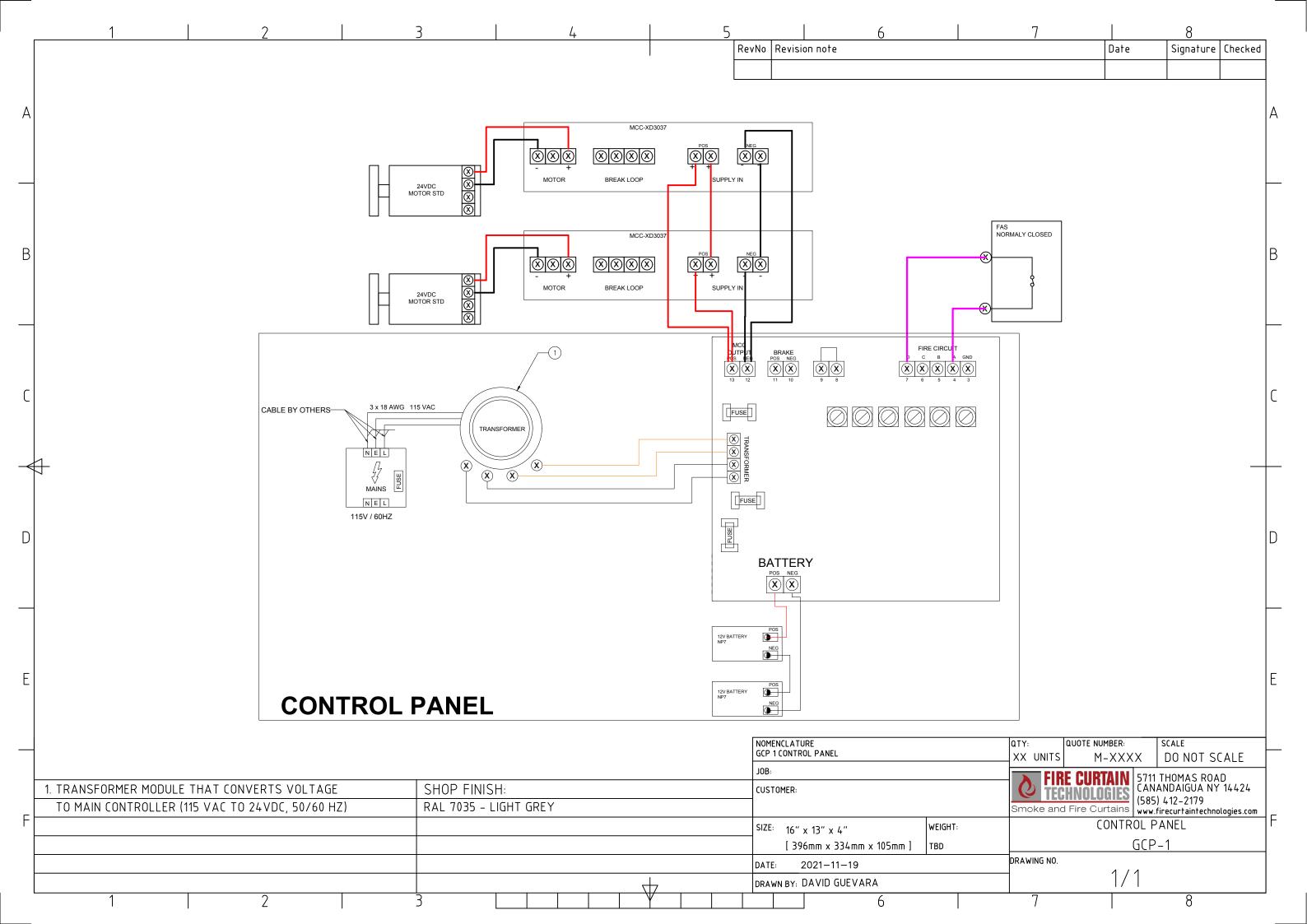












UL Product iQ®



GSSN.R26410 - Fire-protective Curtains Fire-protective Curtains

BLE SMOKE & FIRE CURTAINS LTD

R26410

UNIT 3
HOLBROOK COMMERCE PARK
HOLBROOK RISE
SHEFFIELD, S20 3FJ United Kingdom

Fire-protective curtain, Model SC60, 1 hr fire rating.

Model SC60-G, 1 hr fire rating.

Model SC60-GM, 1 hr fire rating.

Model AC180 (SC180A/AC1), 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

Model SC180-G, 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

Model SC180-GM, 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

Model FC60, 1 hr fire rating.

Model FC60-M, 1 hr fire rating.

Model FC180, 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

Model FC180-M and FC180-ME, 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry, can also be used in combination with "E" suffix for egress option.

With the exception of Model AC180 (SC180A/AC1), all other above Models may be used with suffix "R" - ResQ-WindowTM Vision Panel)

The products below have been additionally investigated to ANSI/UL 1784

Fire-protective curtain, Model SC60GS, 1 hr fire rating.

Model SC60-GSM, 1 hr fire rating.

Model SC180-GS, 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

Model SC180-GSM, 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

Model FC60-S, 1 hr fire rating.

Model FC60-SM, 1 hr fire rating.

Model FC180-S, 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

Model FC180-SM and FC180-SME, can also be used in combination with "E" suffix for egress option. 2 hr fire rating when installed in gypsum and 3 hr fire rating when installed in masonry.

All above Models may be used with suffix "R" - ResQ-WindowTM Vision Panel)

The products below have been additionally investigated to UL 723/ASTM E84

	Flame Spread Index	Smoke Developed Index
FC60 Series ⁺	0	0
FC240 Series ⁺	0	0
SC60 Series ⁺	0	0
SC180 Series ⁺	0	0

+ Except models with suffix "R" - ResQ-WindowTM Vision Panel

Tradename and/or Trademark:



Last Updated on 2021-11-19

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RESQ-WINDOW FIRE PROTECTIVE CURTAIN WITH VISION PANEL



CODE REFERENCES

- 2006/2009/2012 IBC Section 909
- 2009 IBC Section 711.5.2
- 2012 IBC Section 710.5.2.2
- NFPA 105 Installation of Smoke Control Door Assemblies
- NFPA 252 Standard Methods of Fire Tests of Door Assemblies

STANDARDS

Tested and approved by Underwriters Laboratories LLC to Standards

UL10D Fire Tests of Fire Protective Curtain Assemblies

UL1784 Air Leakage Tests of Door Assemblies and Other Opening Protectives

UL864 Control Units and Accessories for Fire Alarm Systems

UL723: Test for Surface Burning Characteristics of Building Materials



ResQ-WINDOW

FOR SAFER AND
FASTER EVACUATION,
THE FIRE PROTECTIVE
SMOKE CURTAIN WITH
VISION PANEL

FEATURES

- Multiple control options
- Provision of fire compartments and refuges
- Excellent replacement for fire doors
- Provision of a protected means of escape
- 3 hrs integrity and 2 hrs radiation

CONTROL OPTIONS

- Two-stage Descent
- Delayed Descent
- Audio Visual Alert
- Obstruction Sensors
- Connection to Building Management System (BMS)

Applications: Elevator shaft, elevator lobbies, cross corridors, emergency exits, and any area that requires surveying from rescue services

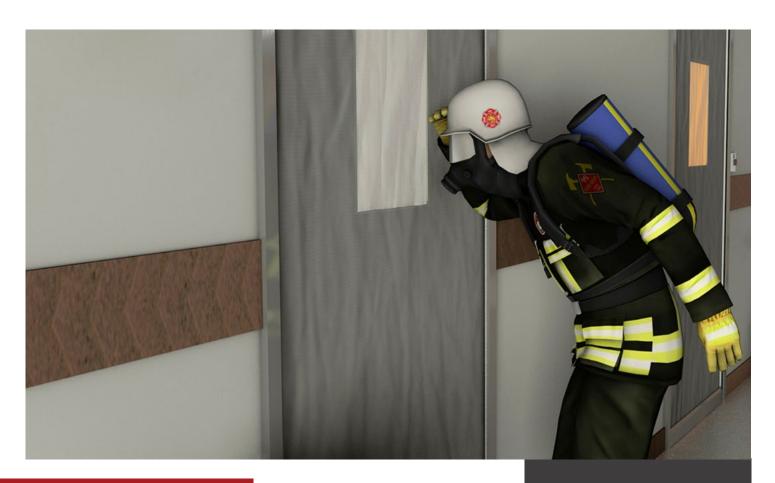
RESQ WINDOW - VISION PANEL FOR FIRE CURTAINS

The industry's first UL certified vision panel that allows building occupants and first responders to see through the fire curtains after deployment for safer and faster evacuation

- Vision panel assists in faster identification and elimination of the source of fire, helping to save lives
- Vision panel allows for safer entry into affected areas of the building and safer evacuation
- High-strength material with no surface-flaming or toxic gas release when exposed to fire
- Install to any standard fire curtain to provide greater levels of safety to your fire safety systems
- Withstands temperatures of up to 1700°F
- Offers a minimum of three hours of fire integrity (E)
- Fully UL certified

FIRE PROTECTIVE SMOKE CURTAIN FC WITH VISION PANEL

Manufactured to the highest standards, fire curtains FC2 are discreet in design and robust and reliable in fire scenarios. All the Deployable Fire Protective Curtains FC are UL recognized and labeled.



KEY SPECIFICATIONS

Headbox 1/32" galvanized mild steel with 1/16" end caps

Rollers 3" coated mild steel tube

Motors 24V DC

Bottom Bar 3/4" x 3/4" - 3/4" x 1 5/8"

mild steel

Side Guides 100 x 50 rolled steel

Vision Panel Silicone-coated fabric size 14" x 11"

THE SYSTEM INCLUDES:

Headbox and fabric

The system comprises a **glass fiber fabric** wound around a steel tube that incorporates a 24V permanent magnet roller. The roller assembly is encased in a galvanized steel **headbox**, which can be fixed directly to the building's structure.

Bottom bar

A standard **bottom bar** consisting of twin steel angles is used to ensure the curtain deploys under gravity in a controlled manner (Gravity Fail-Safe).

Side guides

The Fire curtains can be supplied with or without side guides.

OPTIONS

RAL colors

The headbox, side guides, and bottom bar can be powder coated in any RAL color as an optional extra or can be supplied in stainless steel.

Egress door

Model FC2 curtains are also available with an egress door, with full UL approval. The FC2 utilizes a split bottom bar, and partial fastening between the fabric overlaps to allow safe egress through the curtain when the curtain is deployed.