



Kent
Smoke and Fire Curtains

PRODUCT CATALOGUE



 **TechnoShade[®]**



ABOUT US



Kent Smoke Seal Curtains
Sengkang Hospital



Kent Fire Curtains
Jeddah Hospital



Kent Smoke Curtains
Dubai University

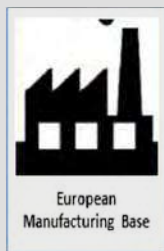
Kent Smoke and Fire Curtains is a British-owned company, having its manufacturing plant in the heart of the Middle East; in Dubai, UAE. Kent is the sole fire and smoke curtain manufacturer in the GCC, providing fire safety solutions with punctually produced, high-quality products across the globe. We specialise in the production of Automatic Fire Curtains, Automatic Smoke Curtains and Draft Curtains under both UL and BS EN standards.

With a facility spreading across 3,780m², highly-advanced technology, as well as an agile, experienced team, Kent is armed to cater to the growing demands for active and passive design fire solutions in the dynamic, constantly evolving construction landscape in the GCC and internationally. Kent has the ability to provide bespoke solutions in line with modern-day architectural designs.

Our mission is to ensure our clients receive the product manufactured to the highest quality, along with certification of the highest level. We are concerned for the safety of our clients, which we feel a responsibility for, and we commit to offering high-quality life safety systems, and aim at honoring our commitments by ensuring our systems meet the highest international quality standards.

Kent's automatic smoke and fire curtains have been tested in accordance with BS, BS EN and UL standards and are covered by CERTIFIRE third-party accreditations together with the UL follow-up service. Kent management systems are registered and certified by ISO 9001:2015. In addition, the products are certified by Dubai Civil Defense, Kuwait Civil Defense, Qatar Civil Defense, and Hong Kong FSD.

WHY CHOOSE KENT?



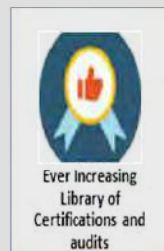
European
Manufacturing Base



Exceptional Lead
Times



Competitive Pricing



Ever Increasing
Library of
Certifications and
audits



In Depth Technical
and Design
Assistance



Exceptional After
Sales Services

Since conception, Kent has endeavoured to provide bespoke solutions to its clients, along with exceptional after-sales services. Kent, within short lead times, stands to offer curtains at par in terms of quality with other competitors globally. Besides, its partners' vision to have a strong network and set-up within the GCC region forms the crux of why should you choose Kent Smoke and Fire Curtains.

All our systems manufactured in the facility are produced and tested in accordance with all relevant standards. Our Automatic Smoke Curtains and Fire Curtains have been tested at Exova Warrington and UL Labs, and have been tested in accordance with BS EN standards and UL norms.

Recognizing the need for a manufacturing unit of smoke and fire curtain systems in the GCC region, the minds behind Kent Smoke and Fire Curtains identified the growing need for fire safety products in the region from their experience in the industry and initiated the idea to set up a world-class, modern facility in the GCC, amidst a technologically advanced architectural landscape.



Intertek

Quality is Our Priority

Our team is helmed by people with over 30 years of experience within the industry in designing, manufacturing and installation of Automatic Smoke and Fire Curtains.

ADVANTAGES:

- Faster lead times.
- Low custom duties, transportation costs, and low lifetime running & maintenance cost.
- In-depth technical and design assistance, exceptional after-sales services.
- Kent provides various accessories including:
 - Gravity fail-safe descent
 - Individual override operations
 - Audio/Visual alarms
 - Emergency retract buttons
 - Smart BMS Modules
 - Obstruction sensors and others as per the site requirement with best of R&D.

“ SAFEGUARD PEOPLE AND PROPERTY WITH SMART FIRE SOLUTIONS ”

CNC FABRICATION



AUTOMATIC CUTTING AND STITCHING



IN HOUSE TEST AND R&D



CERTIFICATIONS AND APPROVALS



CE CERTIFIED AND APPROVED



NATIONAL FIRE PROTECTION ASSOCIATION CERTIFIED



WARRINGTONFIRE TESTED AND CERTIFIED



BUILDING RESEARCH ESTABLISHMENT-THIRD PARTY ACCREDITATION



CERTIFIRE THIRD PARTY ACCREDITATION



UL FOLLOW UP AND ONLINE LISTING



UL LAB TESTED, CLASSIFIED



HONG KONG FIRE SAFETY DEPARTMENT APPROVAL



DUBAI CIVIL DEFENCE APPROVAL



KUWAIT CIVIL DEFENCE APPROVAL



QATAR CIVIL DEFENCE APPROVAL



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KENT AUTOMATIC FIRE CURTAIN



CUTSHEET



DESCRIPTION

Kent Automatic Fire Curtains are life safety systems that are designed to arrest the spread of fire in a building. The assembly comprises a fire resistant fiber-glass fabric wound around a roller which is encased in a compact head box that is typically installed above the ceiling to be virtually invisible until activated. The Fire Curtains create a barrier to fire, remaining virtually invisible when the curtains are stored in its retracted position within the compact head-box. The curtain descends at a controlled speed upon receipt of signal from a fire alarm and provides resistance for upto 180 minutes

SYSTEM TESTED IN ACCORDANCE WITH

- BS EN 1634-1:2014 (Fire Resistance)
- BS EN 1634-3:2014 (Smoke Control Test)
- UL 10D
- UL 1784
- Fabric Tested to BS 476 Pt 6 & Pt 7. Class 0
- BS 5234-2:1992 Method of Test as set out within BS 8524-1:2013 Double Severe Duty Impact Test
- System tested in Single & Multiple Barrel Orientation

COMPLIANCE

- CERTIFIRE- Third Party Accreditation
- System compliant with 13501-1:2007 + A1 2009
- BS EN Oversize Certification upon Request
- UL Oversize Certification upon Request
- Dubai Civil Defence Approved
- Kuwait Civil Defence Approved

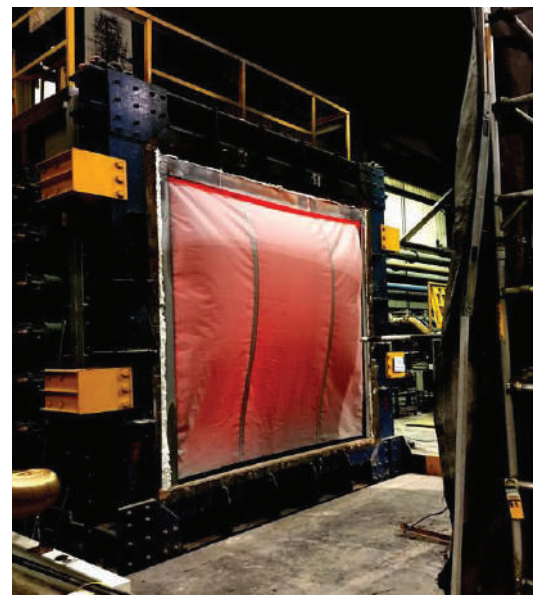
FIRE INTEGRITY (E)

- 60 minutes for VG 455
- 120 minutes for VWG 520 (BS EN ONLY)
- 180 minutes for VWG 690

RADIATION PROTECTION (W)

- Upto 85 minutes < 15kW/m² - VWG 690 Fabric

PRODUCT DESIGNATION	
MODEL NO	STANDARD
AFC01S-455	UL
AFC01M-455	UL
AFC03S-690	UL
AFC03M-690	UL
AFC01S-455	UL
AFC01M-455	UL
AFC03S-690	UL
AFC03M-690	UL
AFC02S	BS EN
AFC02M	BS EN
AFC03S	BS EN
AFC03M	BS EN



Single Barrel



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KENT AUTOMATIC FIRE CURTAIN



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Smoke and Fire Curtains

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FIRE CURTAIN BOXES

CURTAIN DROP	SINGLE ROLLER BOX - TYPE 1			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	190mm	163mm	155mm
3m TO 7m	210mm	210mm	183mm	175mm
7m TO 12m	280mm	280mm	253mm	245mm

CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 2			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	350mm	163mm	155mm
3m TO 7m	210mm	390mm	183mm	175mm
7m TO 12m	280mm	500mm	253mm	245mm

CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 3			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	320mm	190mm	160mm	153mm
3m TO 7m	370mm	210mm	185mm	178mm
7m TO 12m	480mm	280mm	240mm	233mm

CURTAIN DROP	SINGLE ROLLER BOX - TYPE 1			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	210mm	163mm	138mm
3m TO 7m	210mm	230mm	183mm	158mm
7m TO 12m	280mm	300mm	253mm	228mm

CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 2			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	370mm	163mm	138mm
3m TO 7m	210mm	410mm	183mm	158mm
7m TO 12m	280mm	520mm	253mm	228mm

CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 3			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	320mm	210mm	160mm	136mm
3m TO 7m	370mm	230mm	185mm	161mm
7m TO 12m	480mm	300mm	240mm	216mm

KENT AUTOMATIC SMOKE CURTAIN



CUTSHEET



Pink - DFC

DESCRIPTION

Kent Automatic Smoke Curtains assist the management of smoke in a building, channelling the movement of smoke to smoke extraction points in the building or creating reservoirs to slow down the spreading of smoke.

The curtains remain virtually invisible in their retracted position within the compact head-box.

When signalled by a local detector or fire alarm system, the curtain descends to the operational level using the gravity fail safe system.

SYSTEM TESTED IN ACCORDANCE WITH

- BS EN 12101-1 Annex B (Reliability, Response time & Material Durability)
- BS EN 12101-1 Annex C (Air Leakage)
- BS EN 12101-1 Annex D (Fire Resistance Test)
- UL 10D, UL 1784 (with Side Guides)
- Fabric Tested to BS 476 Pt 6 & Pt 7, Class 0
- BS 5234-2:1992 Method of Test as set out within BS 8524-1:2013 Severe Duty Impact Test (with Side Guides)
- System tested in single & Multiple Barrel Orientation
- Tested to ASTM E 84 & UL 723 for VG455 Fabric

COMPLIANCE

- CERTIFIRE- Third Party Accreditation
- CE Labelled D120
- 13501-1:2007 + A1 2009 (Fabric Only)
- 13501-4:2016 (Complete System)
- UL Listed & Classified
- Dubai Civil Defence Approved
- Kuwait Civil Defence Approved
- Hong kong Fire safety approval

FIRE INTEGRITY (E)

- 120 minutes at 600°C time-temperature curve (BS EN 12101-1 Annex D)
- 60 minutes at 1000°C time-temperature curve (BS EN 12101-1 Annex D)
- 60 minutes when tested in accordance with UL 10D

PRODUCT DESIGNATION	
MODEL NO	STANDARD
ASC01S-455	UL
ASC01M-455	UL
ASC03S-690	UL
ASC03M-690	UL
ASC01S-455S	UL
ASC01M-455S	UL
ASC03S-690S	UL
ASC03M-690S	UL
ASC01D	BS EN
ASC01DH	BS EN



Carluccio's - DFC



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KENT AUTOMATIC SMOKE CURTAIN

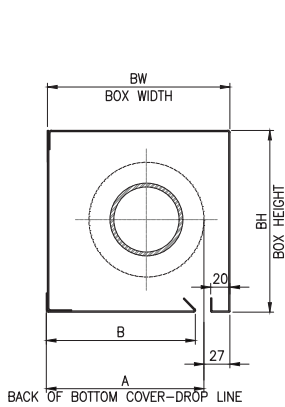


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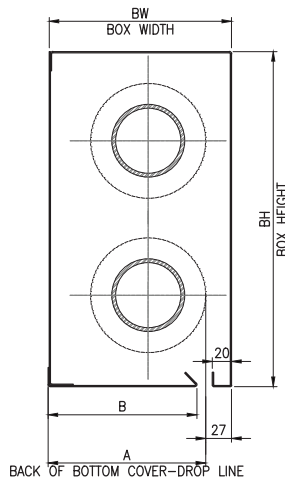
Smoke and Fire Curtains

CUTSHEET

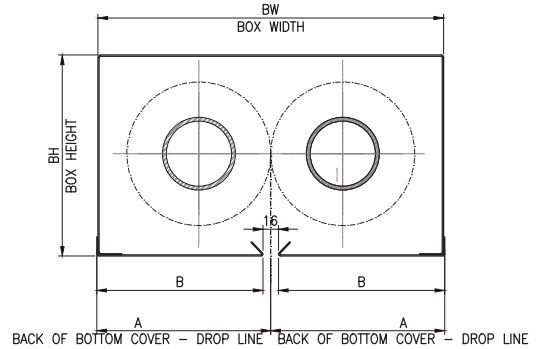
SMOKE CURTAIN BOXES



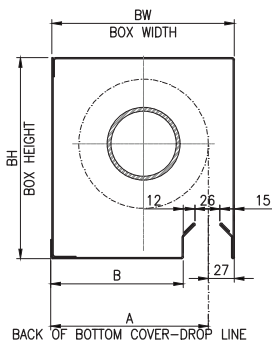
CURTAIN DROP	SINGLE ROLLER BOX - TYPE 1			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	190mm	163mm	155mm
3m TO 7m	210mm	210mm	183mm	175mm
7m TO 12m	280mm	280mm	253mm	245mm



CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 2			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	350mm	163mm	155mm
3m TO 7m	210mm	390mm	183mm	175mm
7m TO 12m	280mm	500mm	253mm	245mm

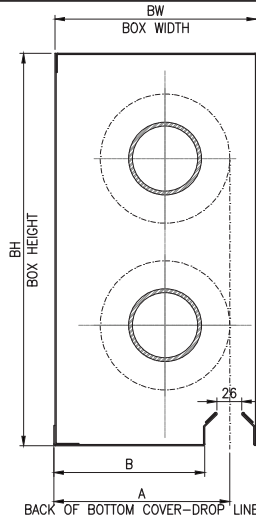


CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 3			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	320mm	190mm	160mm	153mm
3m TO 7m	370mm	210mm	185mm	178mm
7m TO 12m	480mm	280mm	240mm	233mm



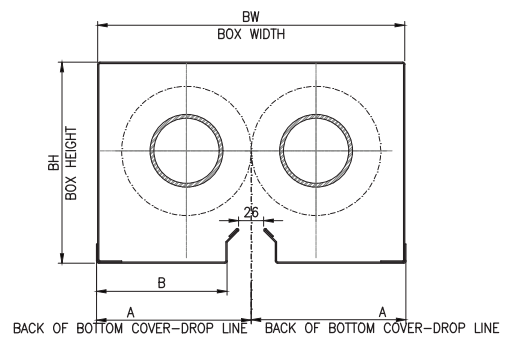
CURTAIN DROP	SINGLE ROLLER BOX - TYPE 1			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	210mm	163mm	136mm
3m TO 7m	210mm	230mm	183mm	158mm
7m TO 12m	280mm	300mm	253mm	228mm

CURTAIN DROP	SMOKE CURTAINS WITHOUT GUIDES			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 1.5m	160mm	180mm	133mm	108mm



CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 2			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	190mm	370mm	163mm	138mm
3m TO 7m	210mm	410mm	183mm	158mm
7m TO 12m	280mm	520mm	253mm	228mm

CURTAIN DROP	SMOKE CURTAINS WITHOUT GUIDES			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 1.5m	160mm	320mm	133mm	108mm

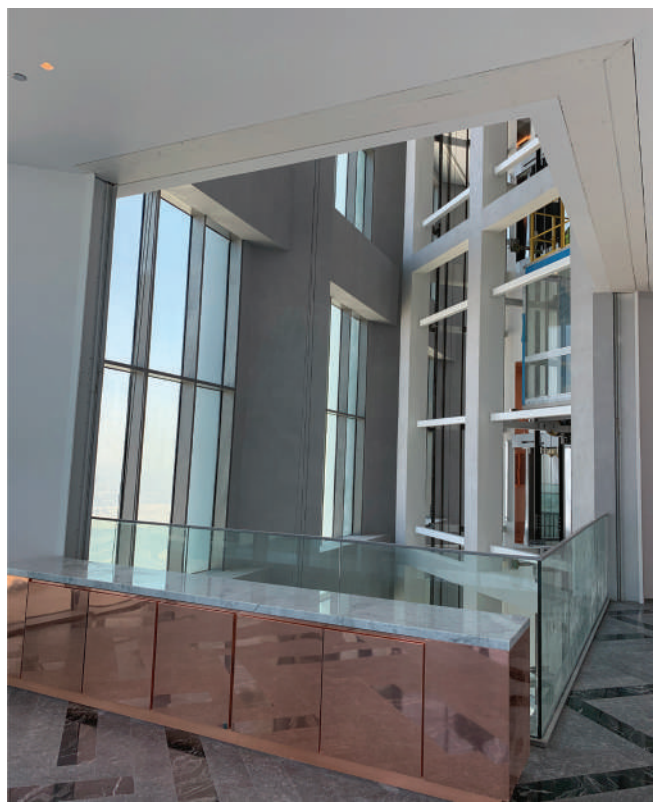


CURTAIN DROP	MULTIPLE ROLLER BOX - TYPE 3			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 3m	320mm	210mm	160mm	136mm
3m TO 7m	370mm	230mm	185mm	161mm
7m TO 12m	480mm	300mm	240mm	216mm

CURTAIN DROP	SMOKE CURTAINS WITHOUT GUIDES			
	WIDTH(BW)	HEIGHT(BH)	A	B
UPTO 1.5m	280mm	180mm	140mm	116mm

KENT AUTOMATIC ACCORDION CURTAIN

CUTSHEET



Accordion Curtain - Retracted

DESCRIPTION

Kent Automatic Accordion Curtains are life safety systems that are designed to arrest the spread of fire in a building. The assembly comprises a fire resistant fiberglass fabric stacked inside the headbox that is typically installed above the ceiling to be virtually invisible until activated. The curtain descends at a controlled speed upon receipt of signal from a fire alarm and provides resistance for up to 240 minutes.

PRODUCT ADVANTAGES

- Lightweight & Compact - Reduced headroom requirement compared to a rolling fire shutter.
- State of Art Technology - Manufactured with intricacy using advanced machinery.
- Flexible Design Solution - Meeting Bespoke requirements.
- Improved Aesthetics & Mechanics - Negates the requirement for corner support columns and in some cases, side guides.
- Kent Gravity Fail Safe System - Guaranteed deployment of the curtains at a controlled descent rate using our gravity fail safe system. Applies under any scenario such as mains power failure and damage to control systems.

SYSTEM TESTED IN ACCORDANCE WITH

- UL Listed and classified under the UL follow up third party accreditation service
- UL 10D
- Method of Test NFPA 252
- Compliance with NFPA 80
- Classified to UL 10D for a period of 240 minutes (690 Fabric)
- Classified to UL 10D for a period of 60 minutes (455 Fabric)
- Tested to ASTM E84 & UL 723 for VG455 Fabric
- BS EN 1634-1:2014+A1:2018 for a period of 120 minutes (520 Fabric)
- Fabric Tested in accordance with BS 476 Pt 6 & Pt 7 and achieved Class 0
- Fabric Impact Tested in accordance with BS 5234-2:1992
- Closed type Accordion in compliance with UL 1784 - Air Leakage Test



Accordion Curtain - Deployed

PRODUCT DESIGNATION	
MODEL NO	STANDARD
AFC01-455 Accordion	UL
ASC01-455 Accordion	UL
AFC03-690 Accordion	UL
ASC03-690 Accordion	UL
ASC01-455 Accordion	UL
ASC03-690 Accordion	UL
AFC02 Accordion	BS EN



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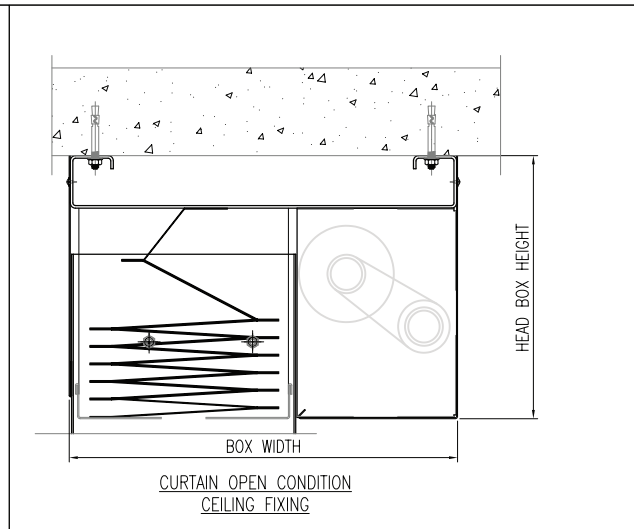
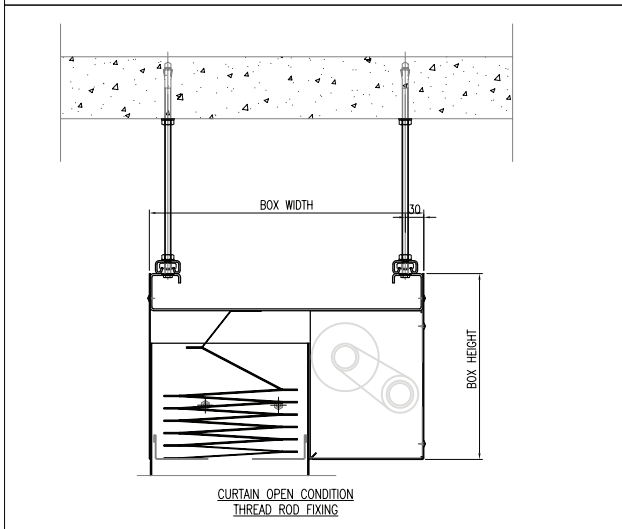
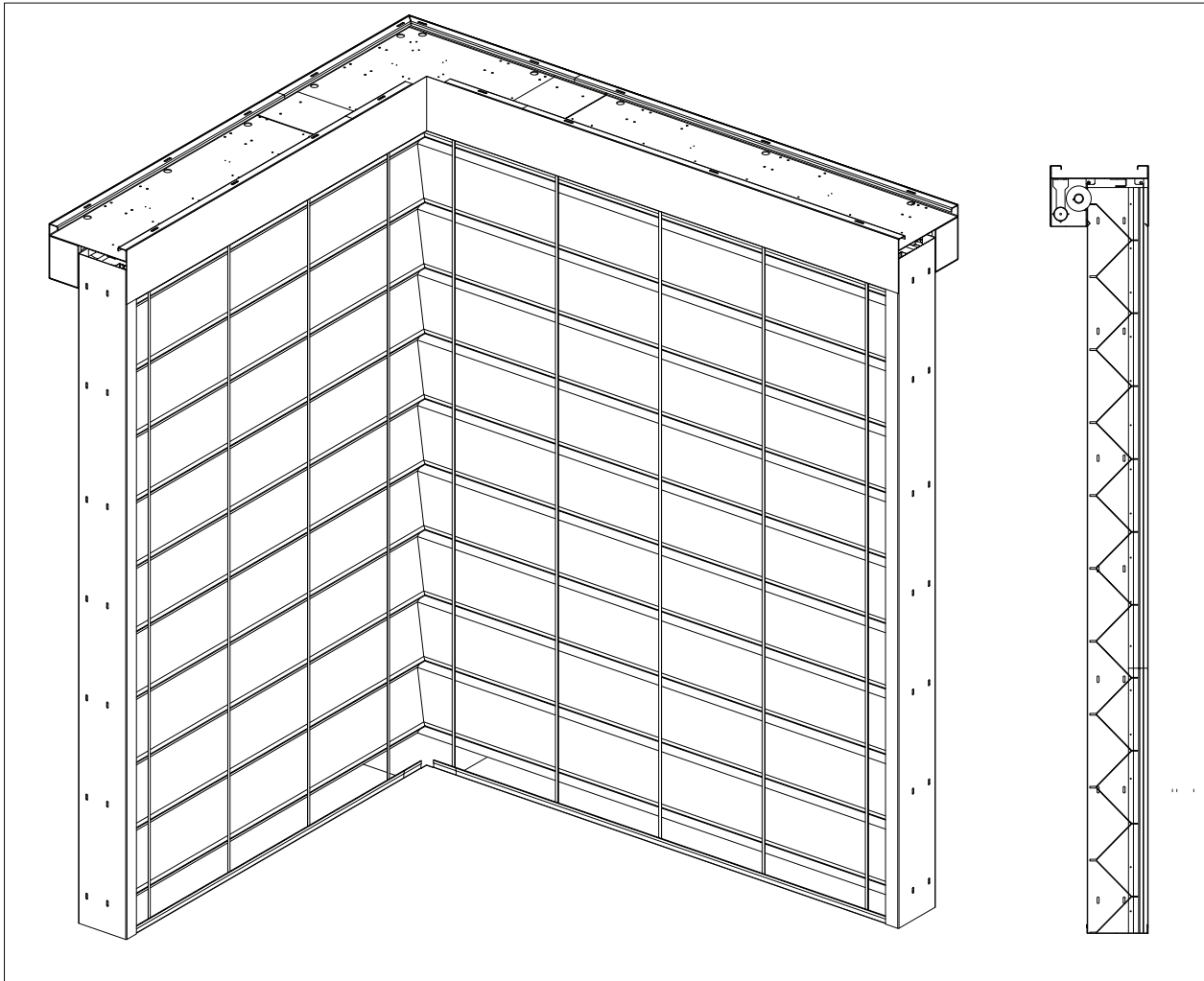
KENT AUTOMATIC ACCORDION CURTAIN



Kent

Smoke and Fire Curtains

CUTSHEET





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Smoke and Fire Curtains

KENT AUTOMATIC EGRESS CURTAIN

CUTSHEET

DESCRIPTION

Kent Automatic Egress Curtains provide cross corridor fire separation without inhibiting the passage of occupants evacuating the building by utilizing an egress door that allows people to pass without retracting the curtain. It is used as a secondary means of escape.

Kent Egress curtains are used in elevator lobbies, cross corridors, staircase, and emergency exits. The curtain descends at a controlled speed upon receipt of a signal from a fire alarm using Kent's Guaranteed Gravity Fail-Safe System.

SYSTEM TESTED IN ACCORDANCE WITH

- Classified to UL 10D for a period of 180 minutes (690 Fabric)
- Classified to UL 10D for a period of 60 minutes (455 Fabric)
- UL 1784
- ASTM - E84 - VG 455 Fabric - Test Method for surface Burning characteristics of Building Material
- Fabric Impact Tested in accordance with BS 5234-2:1992
- BS 476 Pt 6 (fire propagation) & Pt 7 (surface spread of flame)
- Achieved class 0

COMPLIANCE

- NFPA 80 Compliance
- NFPA 101 Compliance
- NFPA 105 Compliance



Egress Curtain Assembly



Egress allows safe passage

PRODUCT DESIGNATION	
MODEL NO	STANDARD
AFC01S-455E	UL
AFC01M-455E	UL
AFC03S-690E	UL
AFC03M-690E	UL
ASC01S-455E	UL
ASC01M-455E	UL
ASC03S-690E	UL
ASC03M-690E	UL



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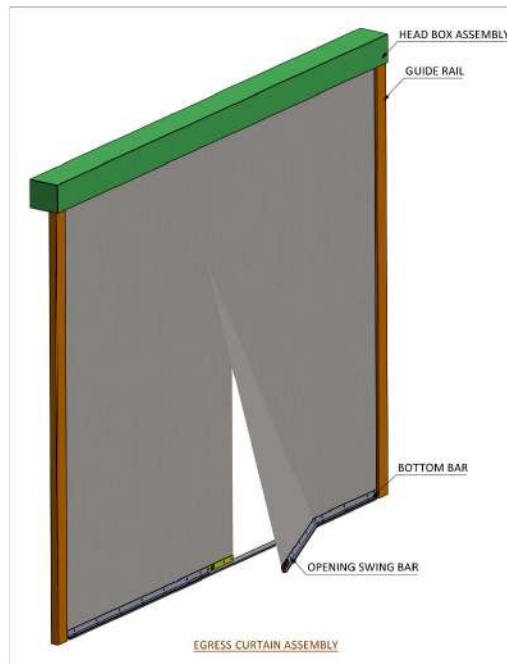
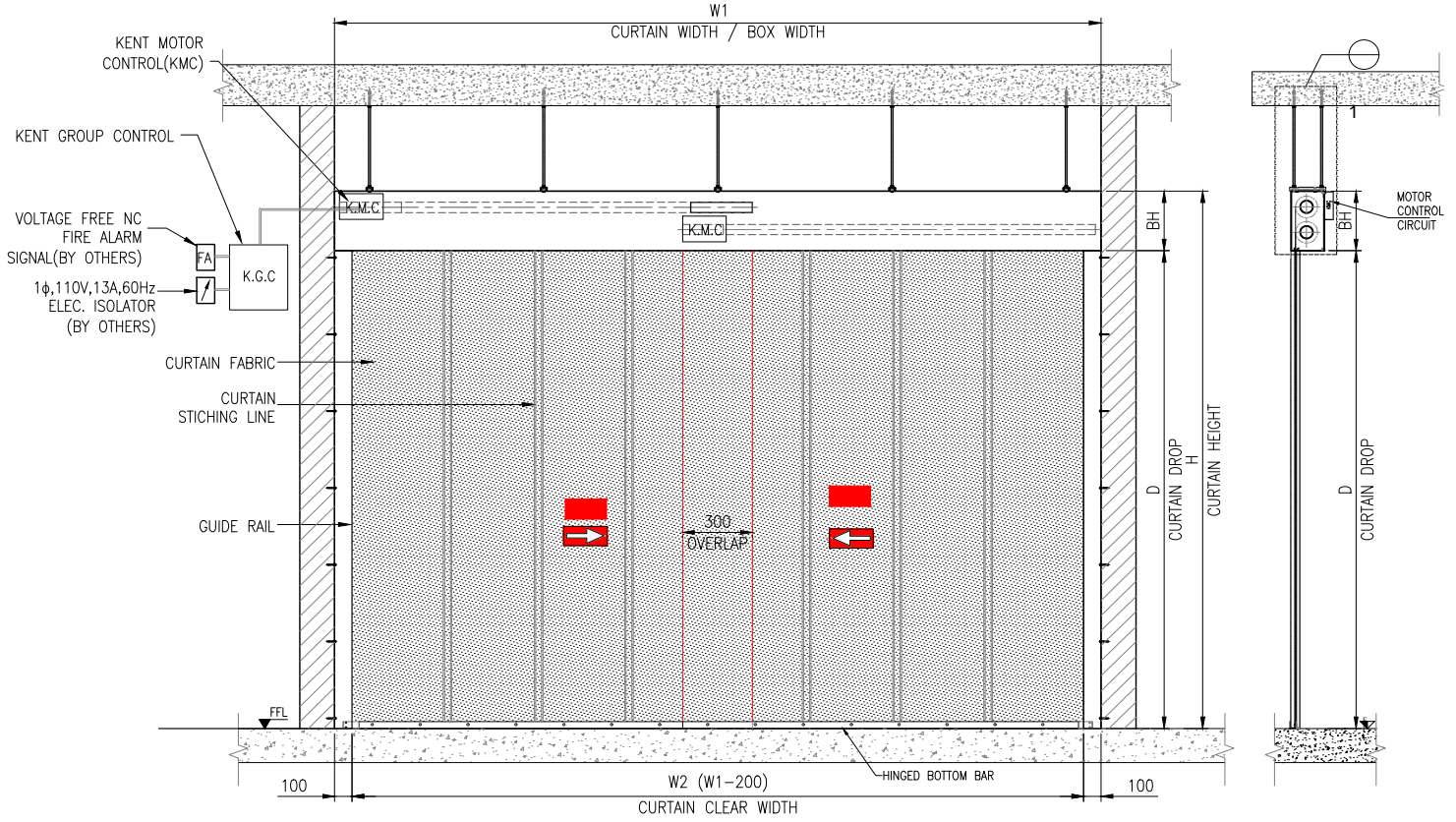
KENT AUTOMATIC FIRE CURTAIN - EGRESS



Kent

Smoke and Fire Curtains

CUTSHEET





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KENT AUTOMATIC HORIZONTAL CURTAIN



CUTSHEET



DESCRIPTION

The Kent Automatic Horizontal Curtain is a fire rated assembly designed to function as a horizontally deploying opening protective. The system is activated upon receipt of a signal from the:

- General Fire Alarm
- Smoke Detection System
- BMS Module

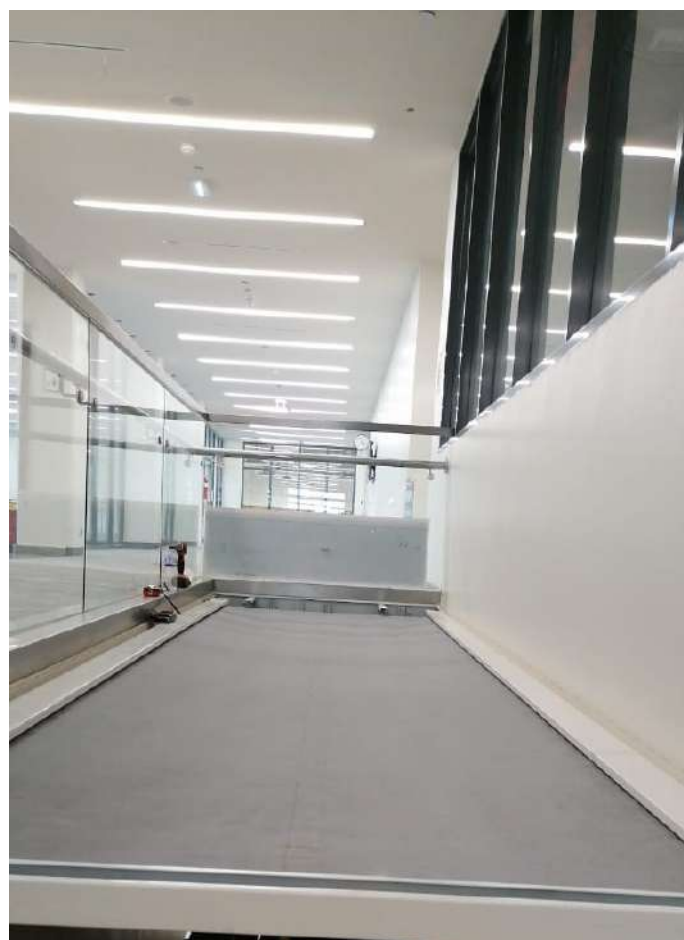
The system is driven by a 24V DC motor arrangement or 230V AC motor subject to size. If a 230V motor is selected it should be connected to an independent UPS system in case of power failure.

PRODUCT ADVANTAGES

- Lightweight & Compact: Reduced headroom requirement.
- Flexible Design Solution: Meeting Bespoke requirements.
- Improved Aesthetics
- Mounting Options: Above the slab or Under the slab.

SYSTEM TESTED IN ACCORDANCE WITH

- System tested in accordance with BS EN 1634 Part 1 for up to 240 minutes.
- System tested in accordance with UL 10D for 180 minutes
- Compliance with NFPA 80
- Method of Test NFPA 252
- Fabric: VWG690
- Stitch Load Test: Fabric tested to 500Pa of Pressure.
- Fabric Impact Test: Fabric tested in accordance with BS 5234-2 to double severe duty



Horizontal Fire Curtain

PRODUCT DESIGNATION

MODEL NO	STANDARD
ASC01-455 Horizontal	UL
ASC03-690 Horizontal	UL
AFC01-455 Horizontal	UL
AFC03-690 Horizontal	UL
AFC03 Horizontal	BS EN



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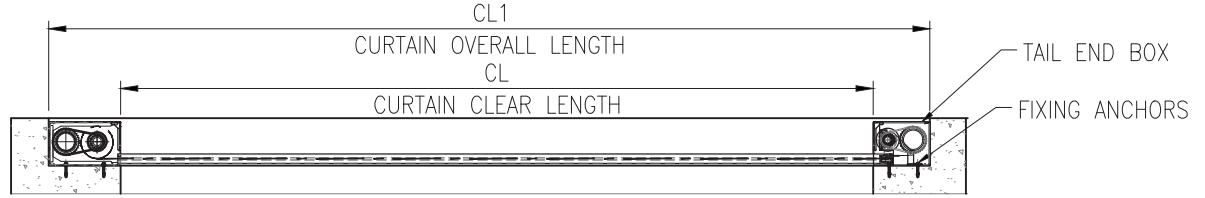
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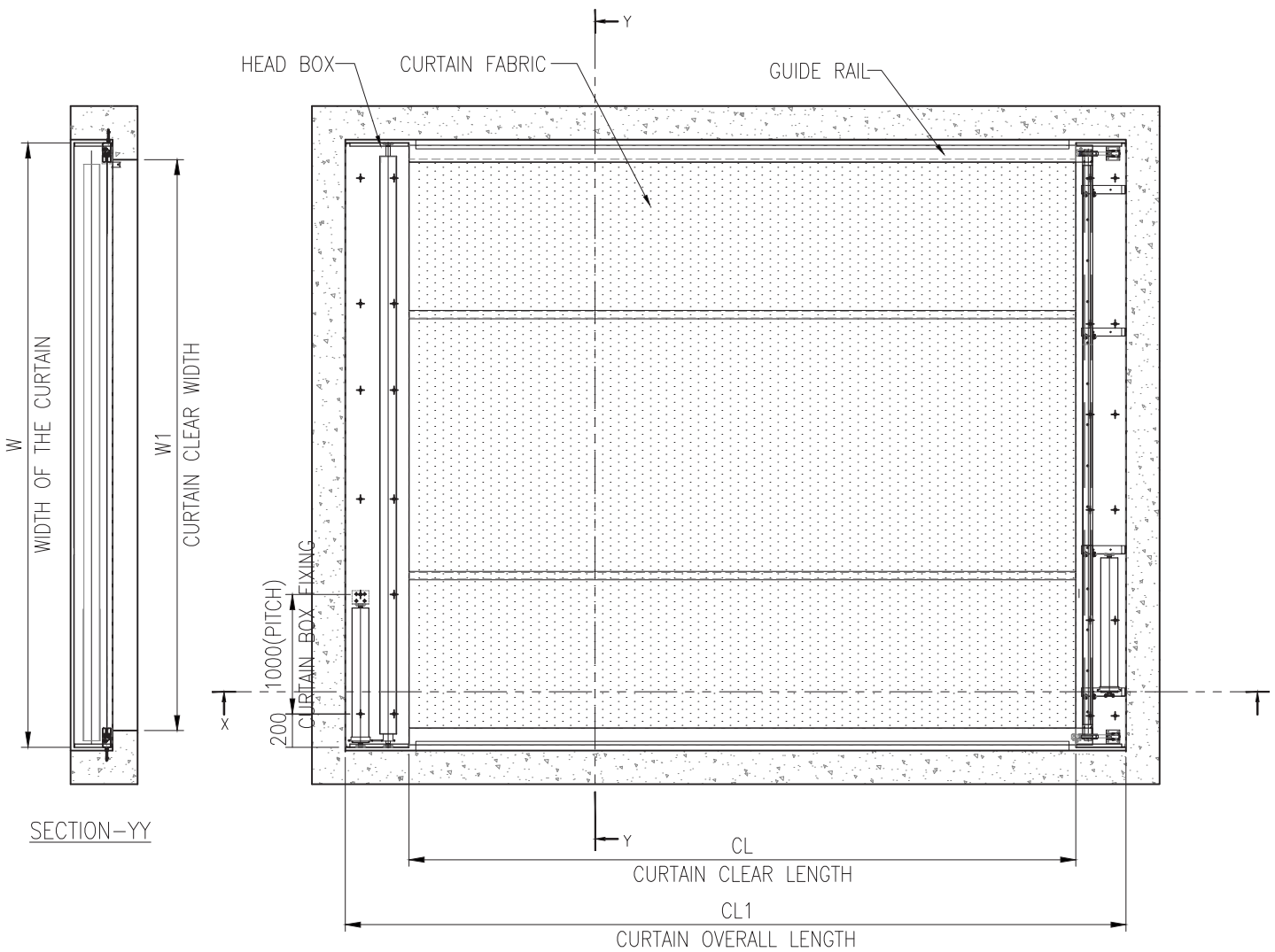
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KENT AUTOMATIC FIRE CURTAIN - HORIZONTAL

CUTSHEET



SECTION-XX



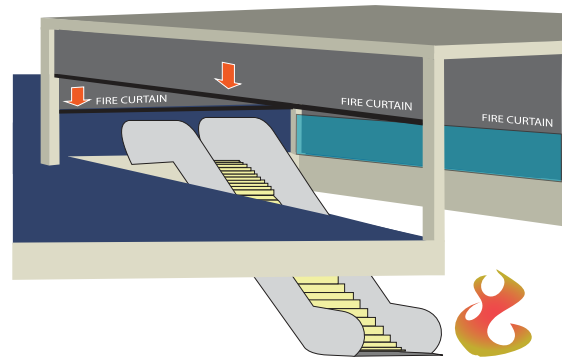
SECTION-YY

CURTAIN PLAN

APPLICATIONS

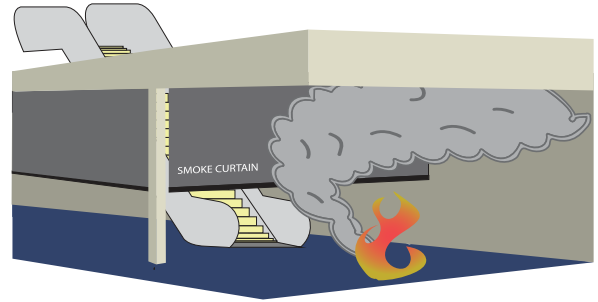
1. VOID EDGE SEPARATION

Escalators and stairs create gaps between floors. These gaps are critical points that need to be sealed off in the event of a fire to stop the spread of fire and smoke from lower to upper levels. By deploying on the upper level, fire curtains create a physical barrier against fire.



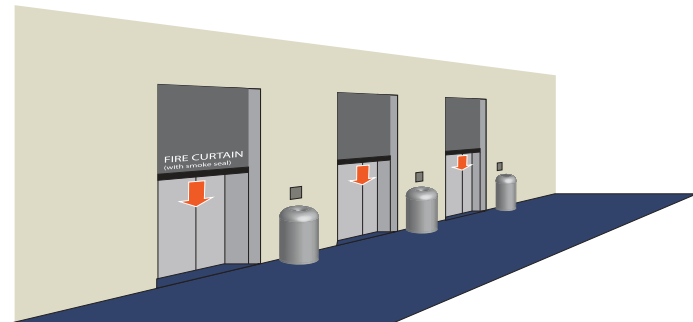
2. SMOKE RESERVOIRS

Escalators and stairs create gaps between floor compartments that need to be sealed off in the event of a fire to stop the spread of fire from lower to upper levels.



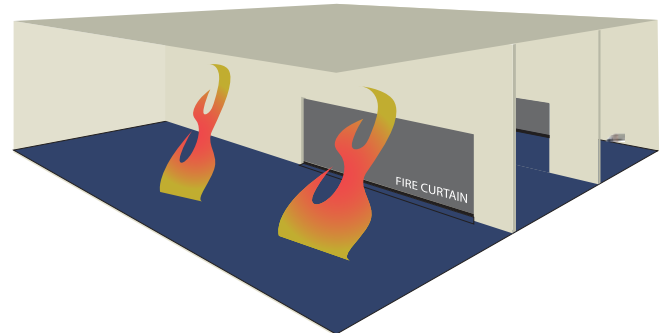
3. LIFT LOBBY & ELEVATOR SEPARATION

Elevator shafts are easy conduits for the spread of fire and smoke which can engulf an entire building in minutes. Elevator doors might be fire rated but cannot create a seal against the passage of smoke. Fire curtains with a smoke seal replace smoke stop lobbies in front of the elevator doors. While virtually invisible when retracted above the elevator frame, they create a seal that greatly reduces smoke leakage through elevator shafts and elevator doors.



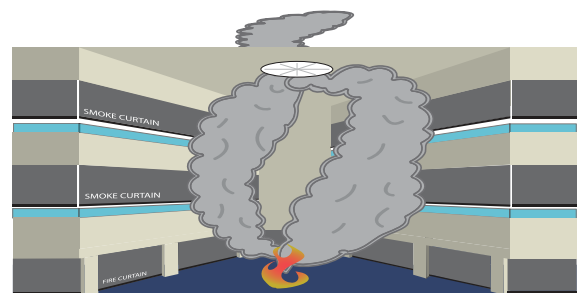
4. FIRE COMPARTMENTALIZATION

To prevent spread of fire from one zone to another, fire curtains are a vital element of a fire compartmentalization strategy. On deployment, they create a physical barrier against the spread of fire and control the spread of fire through a building.



5. FIRE & SMOKE STRATEGY

Kent Automatic Fire and Smoke Curtains are indispensable to a successful building fire strategy. Atria create large open spaces that can be quickly engulfed in fire and smoke as it spreads from lower to upper levels. Spread of fire can be limited by fire curtains and smoke curtains can channel smoke to chimneys or extraction fans.



SINGLE ROLLER ASSEMBLY



1. HEADBOX

The steel headbox houses the roller, fabric and motor within the casing creating a small compact package that remains virtually invisible above the ceiling.

2. ROLLER AND TUBULAR MOTOR

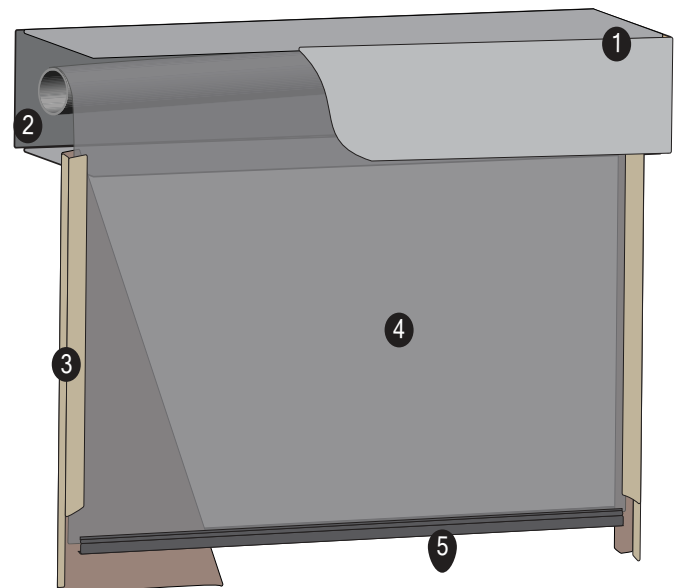
A tubular motor drives a steel roller tube to retract and deploy the fabric from normal position in the headbox to its operational position.

3. GUIDE RAIL

During deployment, slim steel side guides prevent derailment of the fabric during operation ensuring integrity of the system when faced by positive or negative pressures of a real fire.

4. FABRIC CURTAIN

Woven fiberglass wire reinforced fabric with individual panels stitched and hemmed using stainless steel thread.



SINGLE ROLLER ASSEMBLY

Smaller widths can be spanned by a single roller assembly.

MULTIPLE ROLLER ASSEMBLY



5 STEEL BOTTOM BAR

The Kent profile bottom bar provides weight and stability to the system ensuring a gravity fail safe deployment.

6 OVER-UNDER ROLLER ARRANGEMENT

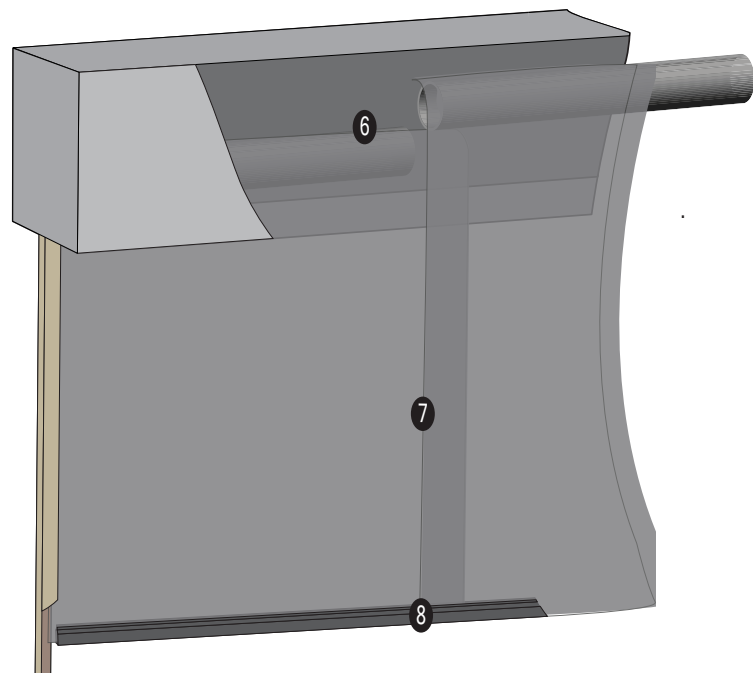
An over-under or side by side arrangement of the barrels (to suit the project requirements) allows multiple rollers to be enclosed in a single compact headbox.

7. FABRIC OVERLAP

Multiple rollers utilize the use of a 500mm overlap arrangement which removes the need for intermediate side guides and minimizes the potential for roller bounce.

8. CONJOINED BOTTOM BAR

A conjoined bottom bar runs the entire width of the curtain.

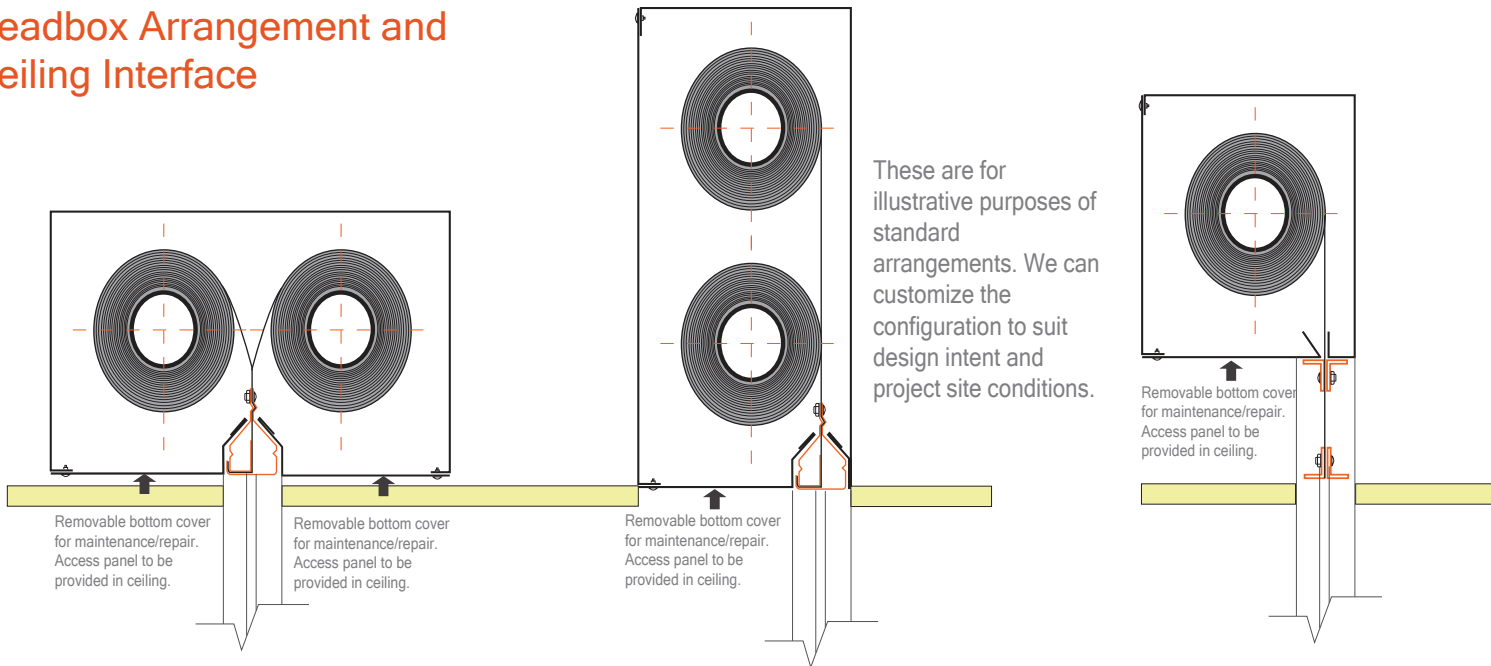


MULTIPLE ROLLER ASSEMBLY

To achieve a virtually unlimited width without the need for intermediate guide rails, multiple rollers are arranged in an 'over-under' (as illustrated) or side by side arrangement and neatly encased within the headbox.

HEADBOX

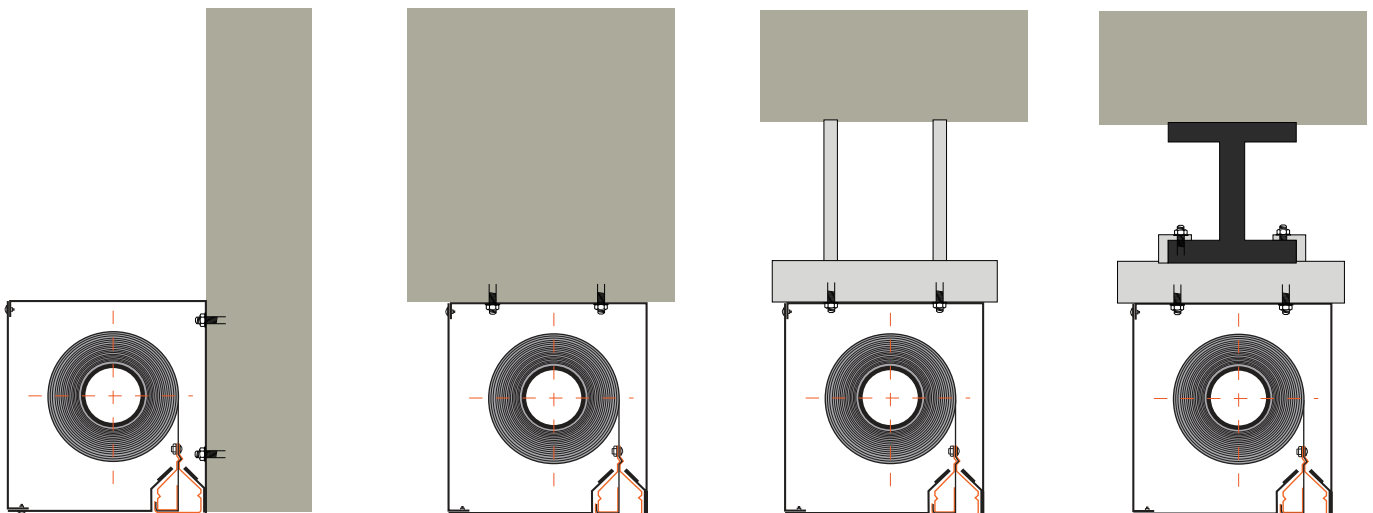
Headbox Arrangement and Ceiling Interface



MULTIPLE ROLLER ASSEMBLIES SHOWING OVER-UNDER AND SIDE BY SIDE ARRANGEMENT WITH BOTTOM BAR FLUSH WITH UNDERSIDE OF HEADBOX

SINGLE ROLLER ASSEMBLY WITH ALTERNATE BOTTOM BAR DROPPED TO CEILING

Headbox Fixing



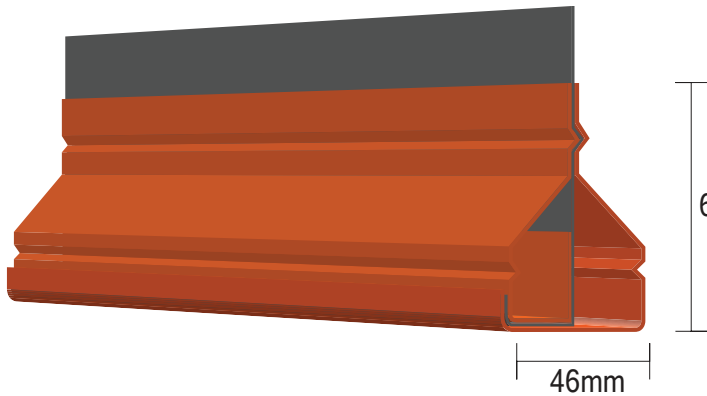
FACE FIXED
Fixed directly to the lintel above an opening.

SOFFIT FIXED
Fixed directly to the underside of the soffit slab.

SOFFIT SUSPENDED
Suspended from soffit via unistruts and drop rods

I-BEAM
Clamped to a steel beam

BOTTOM BAR



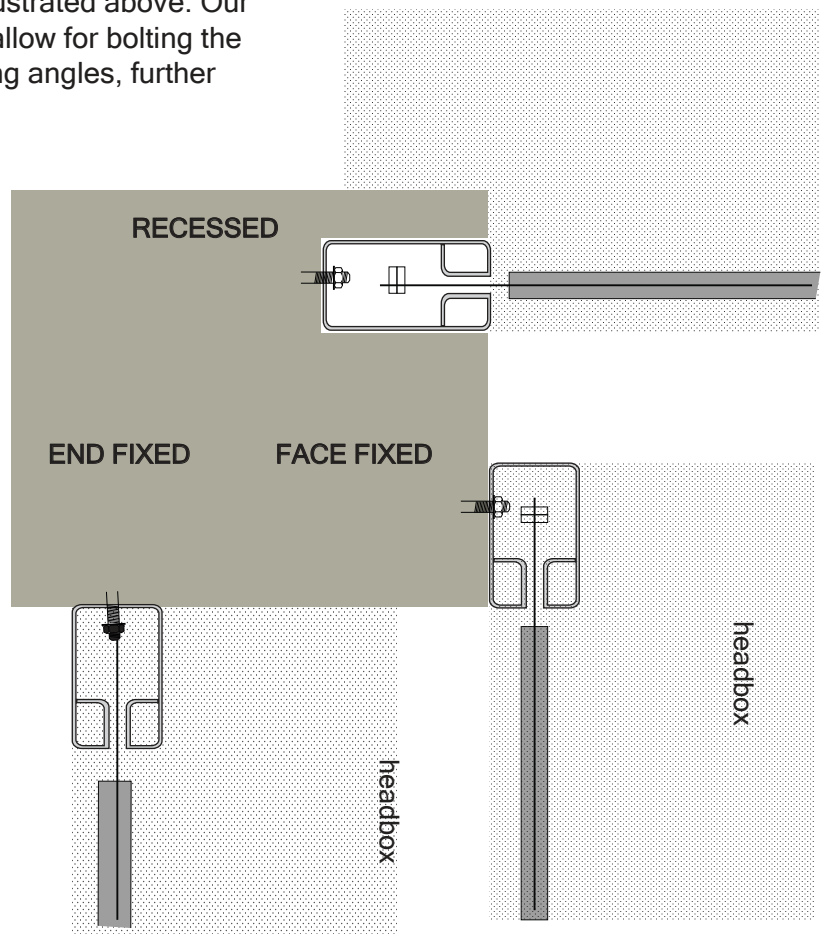
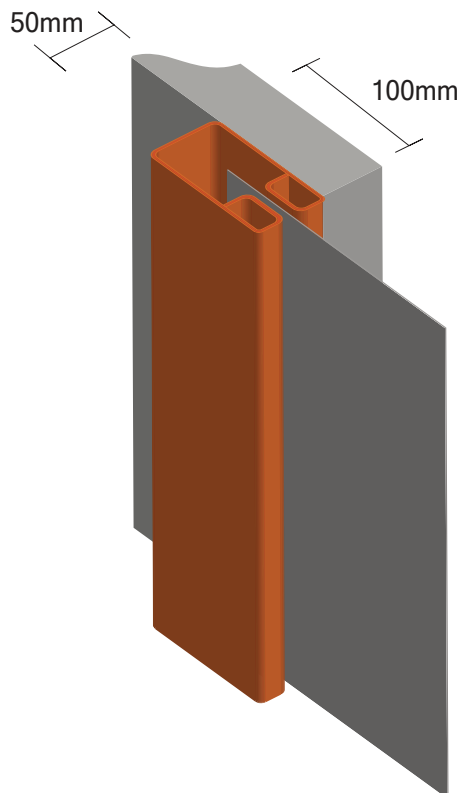
BOTTOM BAR

Our bottom bar profile is designed to provide the necessary weight to draw the curtain down during a gravity safe deployment and to stabilize the curtain during descent. Rolled from galvanized steel, we can powdercoat the bottom bar to match

SIDE GUIDES

Our fire curtain steel side guides can be powdercoated to blend in with the surround wall. In a real fire, these guides help the curtains withstand positive and negative pressures. The stitched fabric inserted into the guide rail is provided with retainer tabs for added strength.

Designed to be slim and as unobtrusive as possible, the side guides can be fixed to the building structure in 3 ways illustrated above. Our side guides are provided with capped holes that allow for bolting the guides to the wall without the need for visible fixing angles, further reducing the guide footprint.



KENT CONTROL SYSTEMS

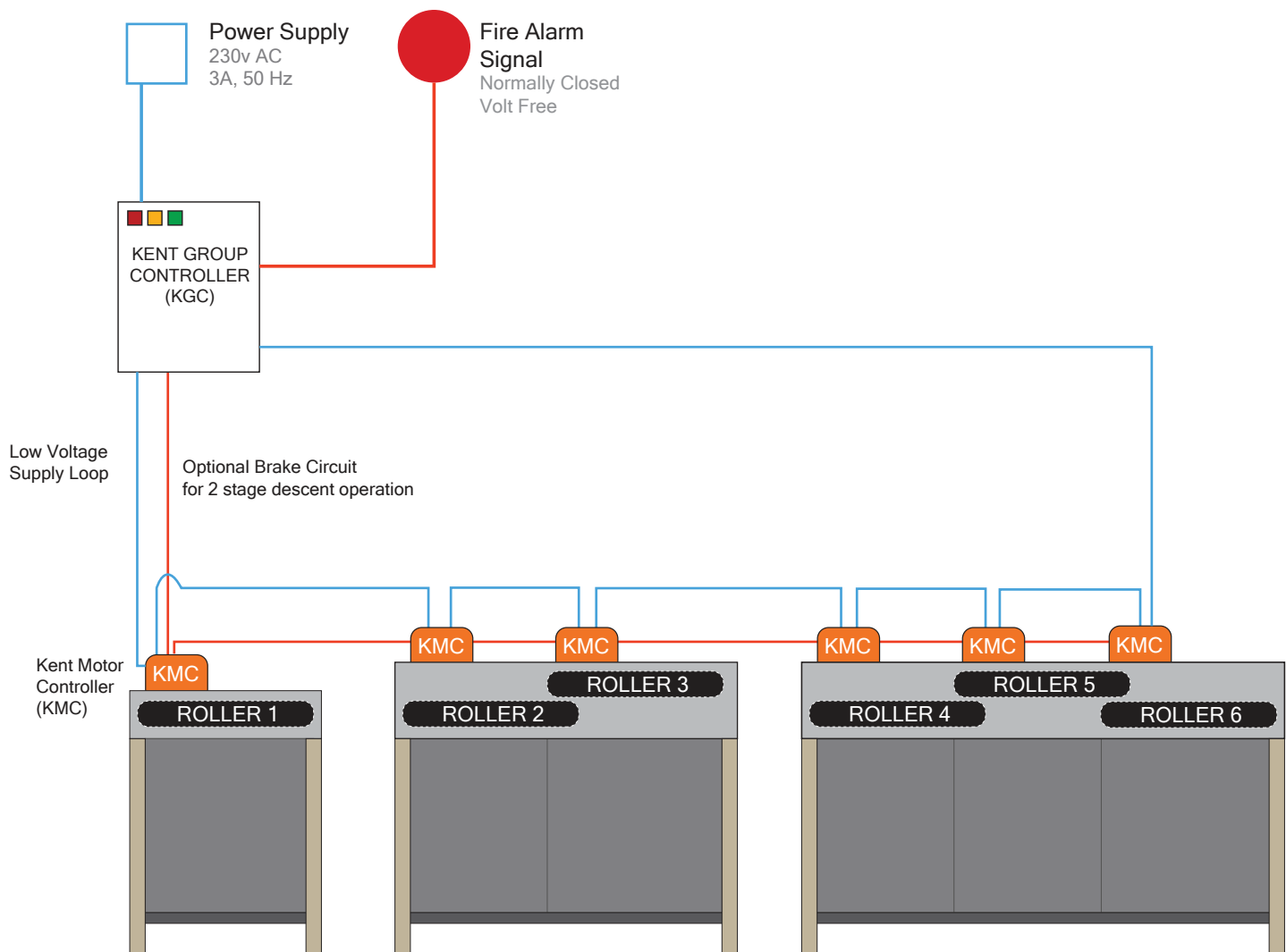
OPERATION IN A FIRE SCENARIO (FIRE ALARM SIGNAL RECEIVED)

The Kent Group Controller (KGC) is powered by a 230v AC, 3 Amp 50 Hz power supply. A pair of normally-closed, volt-free fire alarm contacts supplies the fire alarm signal when commanded by the Building Management System. In its stored position within the headbox, the curtains remains retracted and held in place by a low voltage supply (24v DC) to the curtain motors. Upon receipt of a fire alarm signal, the supply to the motor controller is removed, which releases the curtains. Using Kent's Guaranteed Gravity Fail Safe System, the curtains deploy to the operational position at a controlled rate under the force of gravity. No power source is required for curtain deployment.

OPERATION IN CASE OF LOSS OF POWER (NON-FIRE SCENARIO)

In the event of a mains power failure, each KGC is supplied with a battery back-up system providing up to a minimum of 60 minutes of power to the curtain motors. This prevents unintentional deployment of the curtain in a non-emergency situation. Upon exhausting the battery back-up, the curtain will descend safely under gravity.

CURTAIN TESTING



One KGC has the ability to control a maximum of 6 no. x 20 Watt motor. If the number of motor exceeds 6, KGC's can be linked together. This avoids the need for each KGC to be supplied with its own fire alarm signal. This set up also ensures synchronous descent of multiple curtains. Should a 2 stage descent is required, a brake is added to the motor which is energized by an additional brake cable shown in the schematic.

CURTAIN FABRICS

An important component of a fire and smoke curtain system is the fabric. The fabric is designed to withstand heat, smoke, fire, including temperatures upto 1100°C.

When tested in accordance with BS EN 1634-1 using the Kent VWG690 and VWG520 material, the complete assembly achieved an integrity performance of upto 180 minutes and 120 minutes respectively. Both fabrics are woven glass wire reinforced with stainless steel and coated with a fire retardant polyethylene including aluminum pigment on both sides. The finished product is sewn with stainless steel thread at hem and seam locations ensuring a factory produced, code compliant product.

VG455 is a specially formulated light weight fibreglass fabric, coated with aluminum pigmented polyurethane on both sides of the fabric which creates a reflective heat shield and enhances durability and flexibility of the fabric. The range of Kent fabrics are tested to BS 476 Pt 6 (fire propagation) and Pt 7 (surface spread of flame) and achieved a class 0 classification.



VG 455



VWG 520



VWG 690

Properties	VG455	VWG520	VWG690
Integrity Duration	D 120/DH60	120 Minutes	Upto 180 Minutes
BS476 Pt 6&7	Class 0	Class 0	Class 0
Classification EN 13501-1	A2-S1, d0	A2-S1, d0	A2-S1, d0
Thickness	0.41mm	0.50mm	0.60mm
Base Fabric Weight	415gm/m ²	470gm/m ²	640gm/m ²
Coated Fabric Weight	455gm/m ²	520gm/m ²	690gm/m ²
Stainless Steel Wire Reinforced	No	yes	yes
Coated Side	Both Sides		
Coating	Fire Retardant Polyurethane with aluminium pigment		
Thread	Stainless Steel		
Standard Color	Grey		



warringtonfire

bre



certifire



DS/ KMTR/ R2 APR 21

**Kent**
Smoke and Fire Curtains

KENT TUBULAR MOTOR

DATASHEET

DESCRIPTION

The Kent Tubular Motor is a permanent magnet DC electrical motor. When the curtains are retracted, the Kent Motor Controller (KMC) routes a low voltage supply to the motor which keeps it in the retracted position. When the fire alarm signal is triggered, the low voltage supply to the KMC is removed which in turn deploys the curtains to their operational position under the force of gravity.



Kent Tubular Motor- Round



Kent Tubular Motor- Octagonal

Specifications	Unit	KM20	KM40
Motor		KENT - KM20	KENT - KM40
Country of Origin		Germany	Germany
Certification		UL	UL
UL Reference File		E202145	E202145
Nominal Voltage	VDC	24	24
Nominal Current	A	1.2	2.3
Nominal Power	W	18.5	37.7
Nominal Speed	rpm	3100	3600
Motor Insulation	Class	E	E
Motor Protection	IP	54	54
Maximum Torque	Nm	0.33	0.67
Gearbox	Type	Planetary	Planetary
Reduction Ratio		1:100	1:162
Cable Size		3 core 1.0 mm sq	3 core 1.0 mm sq
Housing Dia	mm	64	64
Overall Length (with adaptors for 76 mm dia tube)	mm	380	380
Overall Weight (with adaptors for 76 mm dia tube)	kg	4	4.7
Options	Brake	Additional	Additional

KENT PROJECT REFERENCES

UNITED ARAB EMIRATES



Atlantis, The palm

- Shams Media City
- Wow Hotel
- Australian School
- WTC Souq
- Al Ain Autism Center
- Mall of Emirates
- Al Maktoum Hospital
- Lulu Mall, Al Falah



Midfield Terminal, Abu Dhabi

- Dubai International Airport
- Dubai Mall
- Dubai University
- Dubai Hills Mall
- Dubai Wharf
- The Royal Atlantis
- Magic Planet
- Mashraq Bank



Coca Cola Arena

- Nakheel Mall
- Dubai South Mall
- Yas Arena
- Jotun R&D Center
- YIWU Mall
- Amazon Warehouse
- WTC Souk
- Sky Venture

UNITED KINGDOM



Heathrow Airport, London

- Liberty London
- Ardmore
- Twickenham Stadium



JLP, Oxford Street London

- Whittington Hospital
- Chobham Manor
- Lansdowne



St Thomas Hospital

- Notting Hill
- Belmonte Street
- Chabot Square

KENT PROJECT REFERENCES

SINGAPORE



Changi International Airport

- Zulin Warehouse
- 101 Eunos Commercial
- Tulin Warehouse
Tampines
- Woodlands



Abbvie

- 55 Kim Chuan
- New State Courts
- Vivo City
- ION Mall
- Sunshine Palace



Sengkang Hospital

- SPPG Substation
- American Express
- Orange Valley
- National Cancer Center
- Marina Bay Sands

SAUDI ARABIA



Samir Abbas Hospital

- Al Humaidan, Makkah
- Samir warehouse
- Jeddah Airport
- Arrow Warehouse, Jeddah
- Binzar Logistics Center, Jeddah
- New Medical Skills, Jeddah
- Marriot Hotel, Jeddah



Riyadh Metro

- Senddex Warehouse, Jeddah
- DTVC Building, Dammam
- Al Mawda, Medina
- Tayba Mall, Medina
- VOX Cinema, Jeddah
- Dr. Soliman Fakeeh Hospital, Jeddah



Le Meridien, Riyadh

- Riyadh Airport
- Golden Tower
- Tabayah Mall
- Mekkah Mall
- Soliman Fakeeh Hospital
- Golden Tower Jeddah
- Safea School, Jeddah

KENT PROJECT REFERENCES

INDIA



Google, Hyderabad

- Indira Gandhi Int Airport, Delhi
- Infosys Bangalore
- Oberoi International School, Mumbai
- Ambience Mall



IREO Hyatt, Gurgaon

- Ascot Hotel
- Swiss Air Bangalore
- Ford Technology & Innovation Center, Chennai
- Dell Crystal



Bosch, Bangalore

- IT SEZ Ireo
- TSystems, Pune
- Inorbit Mall, Hyderabad
- DLF Camilia
- Amazon Chennai
- JP Morgan Chase

SOUTH AFRICA



Protea Hotel

- Rapid Fire
- Water and Sanitation Project - Pretoria
- Dunlop - Southern Cross
- GVK Hospital



Dunlop, Southern Cross

- Golf Club - Durban
- Protea Hotel
- MBSA
- Choppies Bronkhorstspuit



Golf Club, Durban

- Mesuli Curvent
- Build Inn
- Andre
- Thekwini Fire

KENT PROJECT REFERENCES

QATAR



Festival City Mall, Doha

- Pottery Barn
- H&M
- Starbucks, Doha



Gold Line Metro, Doha

- Wojooh
- Mango
- PINK
- Sephora

HONGKONG



Galaxy Macau Hong

- Citi Shopping Centre
- 1881 Hullwtt House TST
- Mong Kok Station
- Star Hall, KITEC

OMAN



Hilton Garden, Oman

- Debenhalms- Mall of Muscut
- TCC Building



Omantel, Muscat

- Oman Dry Dock



National Assembly House, Laos

NEW ZEALAND

- Farm Lands
- Euroclass
- Keans Building
- Lanta
- DC Batts
- Sealord
- FDTT

AUSTRALIA

- New Museum
- Currambine Gardens
- 7588 Cecil Ave
- 8332 Riverena Apartmentst
- 7235 South Terrace

TURKEY

- Istanbul Cavahir Shopping Mall
- Malatya Air Base
- Istanbul New Airport
- Ferro Casting



Kent

Smoke and Fire Curtains



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