# Stoebich Flexible Smoke Curtains

### **Automatic smoke curtains**

- · Stoebich Smoke Curtain GX
- · Stoebich Smoke Curtain S
- · Stoebich Smoke Curtain H / HC
- · Stoebich Smoke Curtain P
- · Stoebich Smoke Curtain X
- · Stoebich Smoke Curtain C
- · Stoebich Smoke Curtain M

### **Draft curtains**

· Stoebich Draft Curtain

### **Automatic smoke tight curtains**

· Stoebich Smoke Curtain T

### **Control units**

- · RZ 8
- · RZ 7









### **Page Overview**

**Stoebich Smoke Curtain GX** 

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Stoebich Smoke Curtain S

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**Stoebich Smoke Curtain H / HC** 

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**Stoebich Smoke Curtain C** 

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**Stoebich Draft Curtain** 

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**Stoebich Smoke Curtain T** 

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### UL 864:

Standard for Control Units and Accessories for Fire Alarm Systems

### UL 1784:

Standard for Air Leakage Tests of Door Assemblies and Other Opening Protectives

### **ASTM E84:**

Standard Test Method for Surface Burning Characteristics of Building Materials

### Temperature/time classifications

European class		Temp.(°F)	Time (minutes)
D 30		1,100	30
D 60		1,100	60
	D 90	1,100	90
	D 120	1,100	120
	DA	1,100	>120 achieved time

European class	Temp.(°F)	Time (minutes)
DH 30	2,000	30
DH 60	2,000	60
DH 90	2,000	90
DH 120	2,000	120
DHA	2,000	>120 achieved time

### Additional performance features due to more than

### 35 years of experience by Stoebich

Global innovation leader

More than **140** patents worldwide

More than 300 smoke and fire tests

Awards, e.g. Award of Architectural Product Innovation, TOP Innovator 2015 in Germany

Large variety of control units

More than 1,500 projects have been successfully completed

More than 10,000 installations worldwide

ISO 9001 - certification since 1996

High level of expertise in our industry

Development and production of all fabrics all completed in-house

Development and production of all textile systems all completed in-house

Development and production of all control units all completed in-house

### Honours and innovation awards









### **Issues & protection targets**



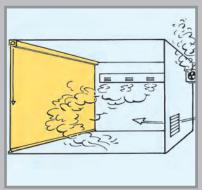
Safe escape routes due to adapted smoke protection classifications according to leakages, temperature loads and time classifications.



Extinction of the fire becomes easier since its origin can be detected due to the **smoke compartments** that avoid a spread of smoke to the whole space.



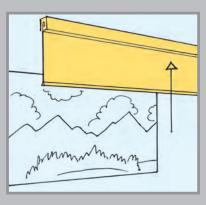
Smoke curtains can increase the effectiveness of smoke control / evacuate systems, e.g. the higher the smoke layer, the smaller the openings for exhaust air, as well as for the fresh air intake openings.



Smoke curtains serve to separate rooms from the mechanical smoke exhaust. Therefore, the rating and the linked investment for exhaust fans can be reduced.



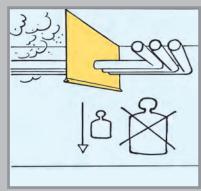
A controlled flow of the smoke can be achieved by smoke curtains, even with cross streams which may have a negative influence on the entrainment of the smoke especially in high rooms.



Invisible smoke curtains comply with the highest architectural demands for design, and does not restrict the view.



The **Stoebich Smoke Curtain X** system
provides for a large
number of persons to
pass through, in the case
of buildings having unfavorable structure when
the escape routes have
to be combined with
smoke curtains.



Fixed smoke curtains are **extremely light weight**, on average 0.2 pounds per square foot and offer easy sealing of continuing pipes, ducts or cable trays.



Combination of smoke curtains and escape routes with an **egress door**, to provide an escape for a large number of persons.



Smoke protection for **elevators** to prevent the spread of smoke in case of a fire.

## An overview of the most important benefits and safety aspects of Stoebich flexible smoke curtains

Test standard UL 1784, UL 864, ASTM E84

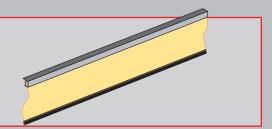
### **Proven integrity**

### Stoebich Smoke Curtain P

offers smoke curtains with a width up to 160' in one piece - therefore

0%

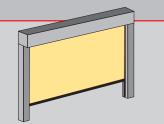
leakage within the overlapping area.



### Unprecedented protection within the boundary area

Special side guides with steel rods guarantee for a positive fitting in the boundary area for the complete height - therefore

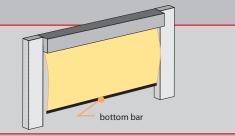
0 % leakage in the boundary area even in the case of a pressure load.



### Minimized leakage caused by deflection

### Stoebich Smoke Curtain P

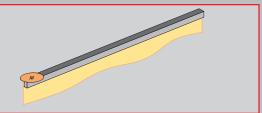
offers a remarkably lower deflection due to the high weight of the bottom bar.



### Demand for space + number of drive units

### Stoebich Smoke Curtain P

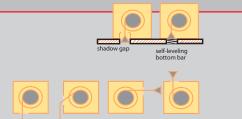
with corresponding control unit and large drive capacity - independent from the drop length and the system width up to 160'.



### Closing of ceiling and closing direction

### Stoebich Smoke Curtain P

offers an optical more significant design e.g. by the self-leveling bottom bar. The system offers various closing directions and adjusts to your protection concept.

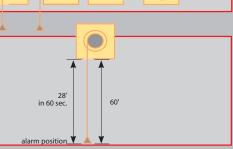


### Reaction time and drop length

**Stoebich Smoke Curtain P** offers closing velocities to achieve a drop length of 28' within 60 seconds (5" per sec.).

Stoebich Smoke Curtain P

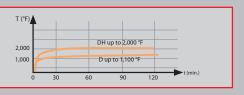
offers drop lengths of up to 60'.



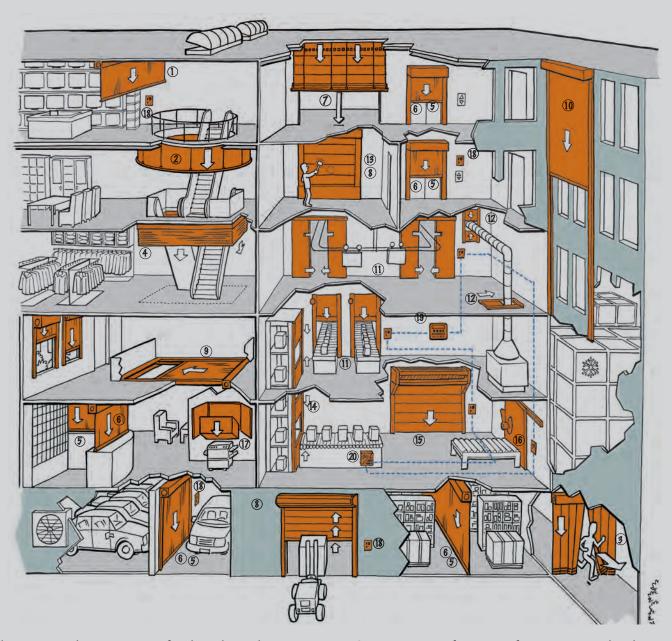
### Temperature classification

### Stoebich Smoke Curtain P

can be supplied in different temperature classifications.



# Stoebich innovative smoke & fire protection



- 1. Smoke extraction by automatic or fixed textile smoke curtain
- 2. Smoke curtain with a curved course
- 3. Automatic textile smoke curtain with the feasibility to pass through
- 4. Creation of areas for smoke conduction or as smoke curtain
- 5. Automatic smoke or smoke tight curtain
- 6. Automatic textile smoke curtain for openings in walls
- 7. Automatic textile fire curtain without side guides
- 8. High speed door with integrated fire curtain
- 9. Automatic horizontal textile smoke curtain for openings in ceilings
- 10. Automatic textile fire curtain for facades, exterior installation

- Conveyor system fire curtain for uninterrupted and interrupted conveyor systems
- 12. Conveyor system closures for pneumatic conveyor systems
- 13. Automatic textile fire curtain with Hose Stream test
- 14. Elevator shaft doors as fire curtains
- 15. Fire protection stacking door
- 16. Isogate fire protection insulation doors and gates
- 17. Fire protection hood for electric devices
- 18. RZ 7, RZ 8, AM-U control units
- 19. CAN BUS cross linked hold open units
- 20. Emergency power back up unit "Powerdrive" 400 480 VAC

### **Attention:**

Textile smoke curtains are not regulated in the Building Code and has to be approved by the local authorities as an alternate solution, means and methods.



### **Stoebich - References North America**

2014 Hershey, Pennsylvania





2012 Historical Sherlock Building, Portland, Oregon



2012 Hyatt Place Hotel, El Segundo, California



2014 Seaholm Power Plant, Austin, Texas



2011 Sargento Foods, Plymouth, Wisconsin





2013 The University of Missouri, Kansas City, Missouri



2013 Pharmaceutical Building, Princeton, New Jersey





2014 New Broad Museum, Los Angeles, California



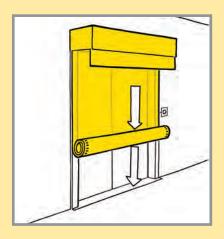
2010 Vancouver Library, Vancouver, Washington





# Stoebich Smoke Curtain GX

### **Automatic smoke curtain for elevator doors**



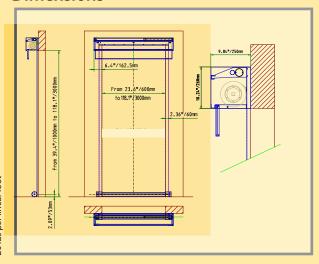




### System description

- $\cdot$  automatic smoke protection with a high temperature classification (up to 650 °F)
- · system width up to 10' and drop length up to 10' (tested)
- · system width up to 12' and drop length up to 12' (technical feasible)
- · system is tested according to UL 1784
- · fabric is tested according to ASTM E84
- · control unit is tested according to UL 864
- · system with ICC-ES AC77 report
- · translucent fabric with magnetic stripes on the edges (closing onto the elevator frame or auxiliary rails)
- · auxiliary rails powder-coated (optional)
- · automatic flap of the housing in case of fire alarm and self-closing flap
- · drive unit with fail-safe technology (closing without auxiliary power)
- · drive unit with 10,000 cycles, system with 200 cycles
- · emergency exit by loosing magnetic stripes from the elevator frame or auxiliary rails
- · re-opening switch (optional)

### **Dimensions**

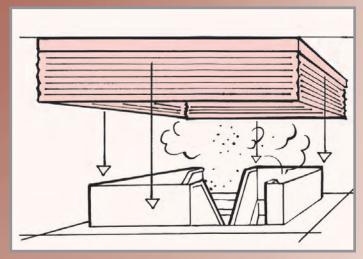




Weight of the system: 20 lbs per linear foot

# Stoebich Smoke Curtain S

### **Automatic sectional smoke curtain (UL 1784)**

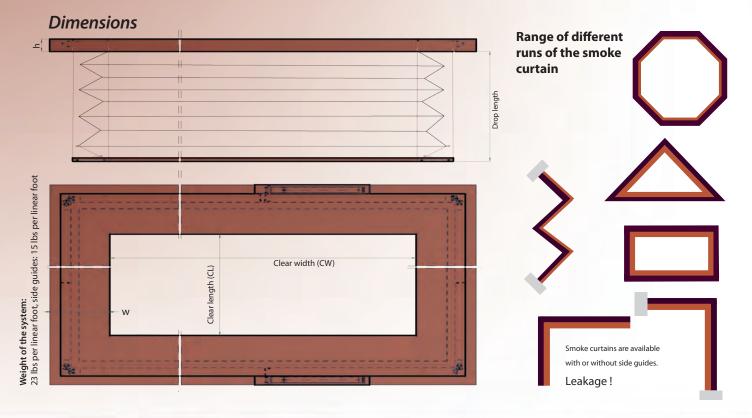


### System description

- · automatic smoke protection with a high temperature classification
- · closed polygon shape or open systems with connection to the wall by special side guides, lengths up to 53' per side and a drop length up to 20'
- · rectangular corners or angles from 30° up to 150°
- · corners without additional columns
- (high tightness even in case of high pressure)
- · low installation height
- · self-leveling bottom bar (flush sealing with the ceiling)
- · warp-free bottom bar
- · drive unit with fail-safe technology (closing without auxiliary power)
- · drive unit with 10,000 cycles
- · redundant drive unit as fall protection

System width	m width Drop length		w
≤ 300'	10'	4.92"	19.29"
≤ 300'	10' - 20'	8.86"	19.29"

At least 2 drive units and one more for each 33' above 66' perimeter Other dimensions on request



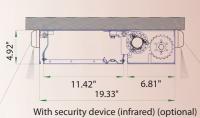


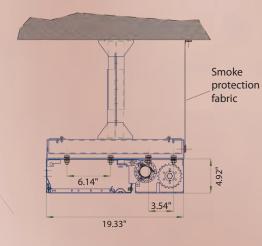




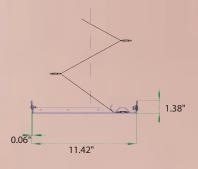
### Range of housings

# 11.42" 6.81" 19.33"

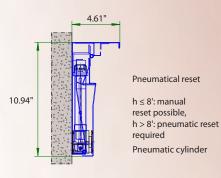




### **Bottom bar**



### Side guide for open polygone



Tubular motor with fail-safe technology		Stoebich Smoke Curtain S
STORIES AND	Automatic smoke curtain	Closing without electric power
	Temperature classification	DH120 (2,000 °F / 120 min.)
	Closing speed (depends on the drive)	6" - 12" per sec. e.g. drop length 30' = 60 sec. in the closed position
	Gap - housing	0"
	Gap - edges embrasure	0" (closed system)
	Gap - joint	0"
	Max. permeability of the smoke curtain fabric at 400 °F	0.0342 ft³/ft²/min
	Test temperature	At ambient temperature and at 400 °F
	Free area - casing	= Length of the housing x gap housing = $L \times 0$ inches = $0$ inches <sup>2</sup>
	Free area - edges	$= D \times gap - edges = D \times 0 \text{ inches} = 0 \text{ inches}^2$
	Free area - joint	= D x gap - joint x number of joints = D x 0 inches x number of joints = 0 inches $^2$
	Standard	UL 1784, UL 864, OSHPD CA certificate, European standard EN 12101-1
Stoebich Smoke Fabric E / P	Standard of the fabric	ASTM E84
	D = drop length of the smoke curt	ain

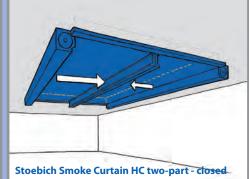


# Stoebich Smoke Curtain H / HC

### **Automatic horizontal smoke curtain (UL 1784)**







### System description - Stoebich Smoke Curtain HC

- $\cdot$  system for large openings in ceilings without supporting or tensioning cables up to 33' x 33' (two-part version up to 33' x 66')
- housing and bottom bar build a closed casing under operating condition
- · motorized closing and opening (emergency power supply is required)

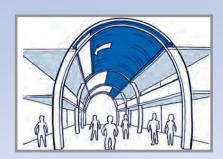
# Weight of the system: 35 lbs per linear foot, side guides: 15 lbs per linear foot Clear length Cross-section (other scale)

### System description - Stoebich Smoke Curtain H

- system for large openings in ceilings up to 66' in width and high drop length
- tensioning cables in a distance of 5' to support the fabric with large dimensions as well as for the pressure load in case of smoke
- · high variability in design (e.g. arch-shape)
- safe-closing process up to 17' drop length with gas spring (no auxiliary energy) or with duplex drive system (electrical power supply is required) for drop length up to 30'
- · spring system is closing with fail-safe technology

### Special design:

Deviation from the linear closing direction possible.

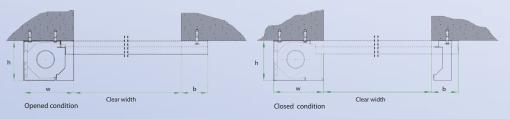


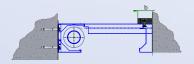
System	Clear width	Clear length	a	b	h	w	f
Spring	≤ 4.6'	≤ 5'	4.72"	4.29"	7.48"	7.87"	7.48"
Spring	≤ 15'	≤ 9.5'	4.72"	4.29"	7.48"	9.84"	7.48"
Spring	≤ 15'	9.5' - 16.4'	5.91"	4.29"	9.25"	11.42"	9.25"
Spring	15' - 100'	9.5' - 16.4'	5.91"	8.86"	9.25"	12.60"	9.25"
Duplex	≤ 66'	9.5' - 27.9'	6.30"	13.19"	10.79"	13.98"	3.15"
HC (1-part)	≤ 20'	≤ 20'	7.87"	8.66"	9.25"	11.81"	3.15"
HC (1-part)	≤ 33'	≤ 33'	11.81"	12.99"	15.75"	19.69"	5.91"
HC (2-part)	≤ 33'	≤ 66'	11.81"	19.69"	15.75"	19.69"	5.91"

Other configurations and special design on request

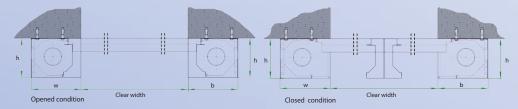


### **Stoebich Smoke Curtain HC (one-part): housings**



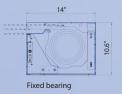


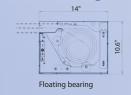
### Stoebich Smoke Curtain HC (two-part): housings



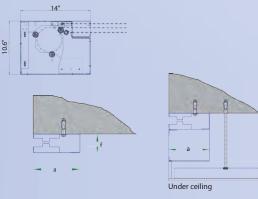


### **Stoebich Smoke Curtain H: housings**

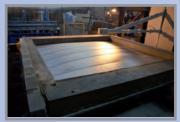




### Side guide, bottom bar, feeding edge



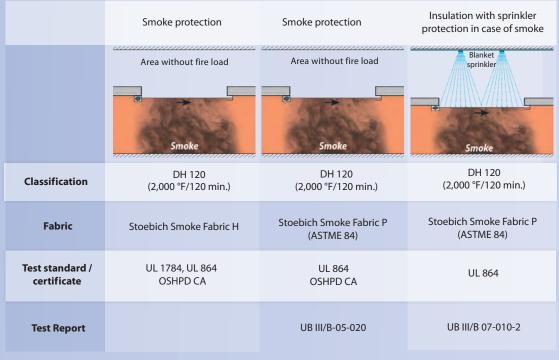
### **Protection targets**







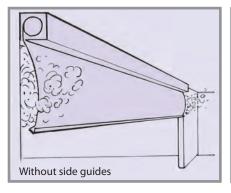
Tested in Europe's biggest furnace

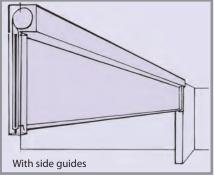


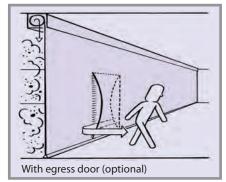


# Stoebich Smoke Curtain P

### Automatic vertical smoke curtain for large dimensions and highest demands (UL 1784)



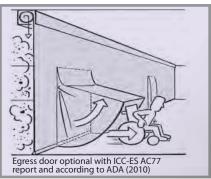




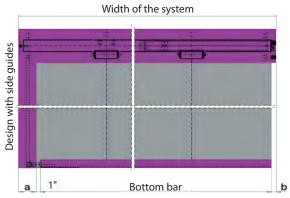
### System description

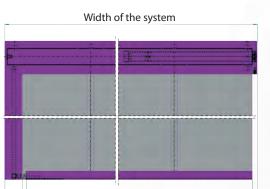
- · automatic smoke protection with a high temperature classification
- $\cdot$  0 % leakage with side guides
- · one-part with a system width up to 160' and a large drop length up to 30'
- · high variability in construction and design
- $\cdot$  no openings remaining within the housing area
- · drive unit with fail-safe technology (closing without auxiliary power)

- $\cdot$  drive unit with 10,000 cycles
- · self-leveling bottom bar, safety edge (optional)
- · egress door for smoke curtains, closing down to the floor (optional)
- · suitable as smoke curtain that is flush with the floor

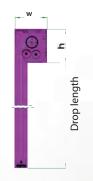


### **Dimensions**



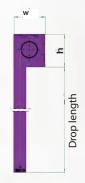


Bottom bar



Design without side guides

Design without side guides



### System table (without side guides)

Fabric	System width	Drop length	w	h
Stoebich Smoke Fabric P	3' - 5'	≤12'	7.48"	9.84"
Stoebich Smoke Fabric P	5' - 160'	≤12'	7.48"	7.87"
Stoebich Smoke Fabric P	4' - 160'	12' - 20'	7.48"	9.84"
Stoebich Smoke Fabric P	6' - 160'	20' - 30'	9.25"	11.41"

Other dimensions on reques

### System table (with side guides)

	_			
Fabric	System width	Drop length	w	h
Stoebich Smoke Fabric P	3' - 5'	≤12'	7.48"	9.84"
Stoebich Smoke Fabric P	5' - 100'	≤12'	7.48"	7.87"
Stoebich Smoke Fabric P	4' - 75'	12' - 20'	7.48"	9.84"
Stoebich Smoke Fabric P	6' - 70'	20' - 30'	9.25"	11.41"

Other dimensions on request

- a = Side guide
- b = Gap without side guide



Design with side guides



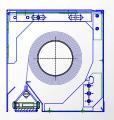




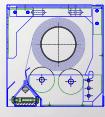




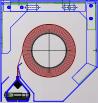
### Range of housings



Standard -Fixed bearing



Standard -Floating bearing



Range of special constructions

### Range of side guides

Туре	Drop length	Square footage
80 E	≤ 11.5'	≤ 194 ft²
105 E	≤ 20'	≤ 538 ft²
105 V	≤ 20'	≤ 754 ft²
160 E	≤ 30'	≤ 1,129 ft <sup>2</sup>

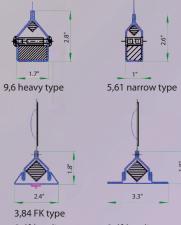


3,84 F type Self-leveling bottom bar without safety

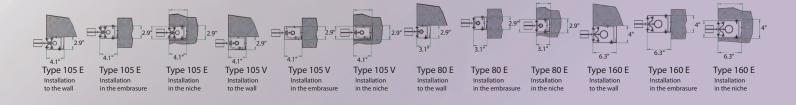
edge (optional)

4,6 type

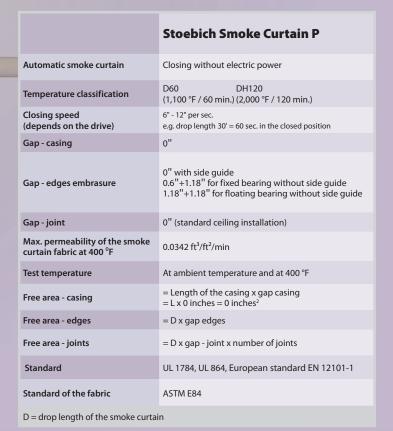
**Bottom bars** 



Self-leveling Self-leveling bottom bar, bottom bar without with safety edge safety edge, under (optional) the ceiling (optional)



Tubular motor with fail-safe technology	
(TOBIE)	





# Stoebich Smoke Curtain X

### Automatic passable smoke curtain



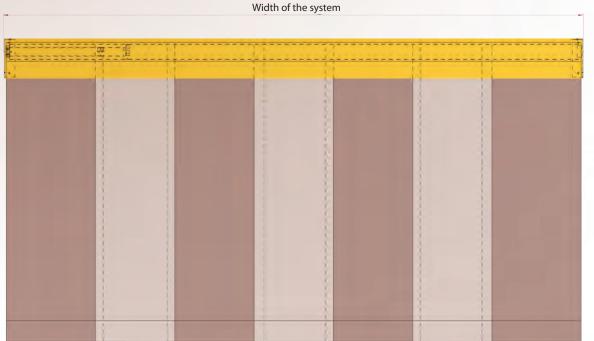
### System description

- · automatic smoke protection with a high temperature classification
- · creation of smoke compartments in alleyways respectively in escape routes with a passage for people
- (200 persons per minute at a system width of 10' is possible)
- double-coil system (unlimited system width possible, drop length up to 12')
- · low installation height
- · drive unit with fail-safe technology (closing without auxiliary power)
- · drive unit with 10,000 cycles
- · soft, elastic and interrupted bottom bar to avoid any injuries
- · translucent fabric (optimized visibility in the area of the passage)

System width	Drop length	w	h
5' - 9'	≤ 12'	13"	10.63"
9' - 50'	≤ 12'	13"	7.87"

Other dimensions on request

### **Dimensions**

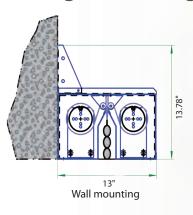




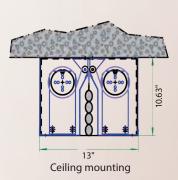


### Range of housings

### **Bottom bar**

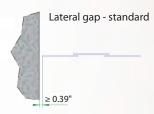


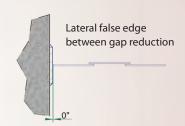






### **Lateral gap**



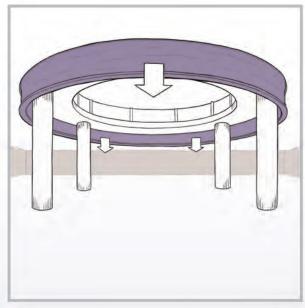


Tubular motor with		Stoebich Smoke Curtain X
fail-safe technology	Automatic smoke curtain	Closing without electric power
J. S.	Temperature classification	DH30 D120 (2,000 °F / 30 min) (1,100 °F / 120 min)
	Closing speed (depends on the drive)	Approx. 6" per sec. e.g. drop length 12' = 24 sec. in the closed position
	Gap - casing	0"
	Gap - edges embrasure	≥ 0.39"
	Gap - joint	≥ 0.39"
	Max. permeability of the smoke curtain fabric at 400 °F	0.0342 ft³/ft²/min
	Test temperature	At ambient temperature and at 400 °F
	Free area - casing	= Length of the casing x gap casing = $L \times 0$ inches = $0$ inches <sup>2</sup>
	Free area - edges	= D x gap - edges
	Free area - joints	= D x gap - joint x number of joints
	Standard	UL 864, OSHPD CA certificate, European standard EN 12101-1
	Standard of the fabric	ASTM E84
	D = drop length of the smoke curt	ain
Staghich Smoka Fahric B		



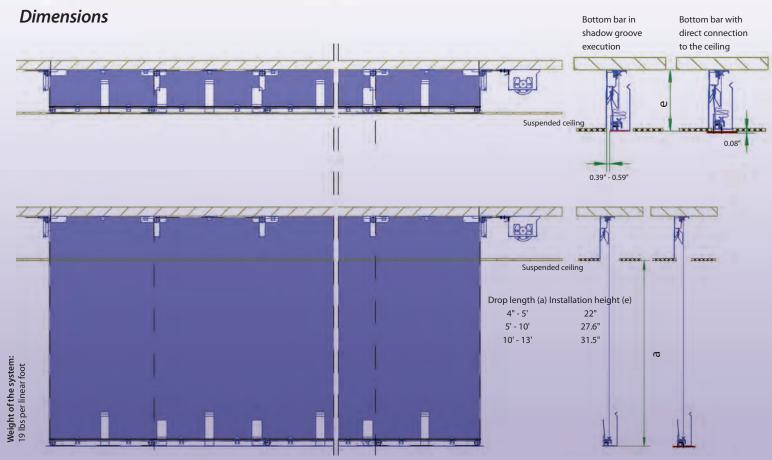
# Stoebich Smoke Curtain C

### Automatic curved smoke curtain with a leakage of 0 %



### **System description**

- · automatic smoke protection with a high temperature classification
- · system width up to 1,000' and drop length up to 13'
- · closed, curved design for installation in circle- or elli
- · no overlapping and remaining openings (connected modules)
- · fabric and housing integrated in the suspended ceilings
- · drive unit with fail-safe technology (closing without auxiliary power)
- · drive unit with 10,000 cycles
- · lightning integrable (optional)













### **Previous solution:**

# Divided, overlapping smoke curtain elements

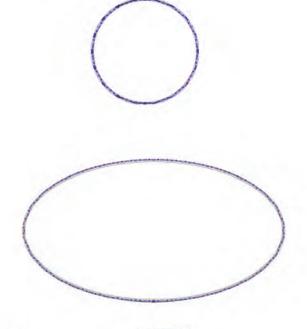


### **Stoebich innovation:**

### **Continuous smoke curtain**



### Range of curve courses



### Tubular motor with fail-safe technology



	Stoebich Smoke Curtain C
Automatic smoke curtain	Closing without electric power
Temperature classification	D120 (1,100 °F / 120 min.)
Closing speed (depends on the drive)	5" per sec. e.g. drop length 13' = 30 sec. in the closed position
Gap - casing	0"
Gap - edges embrasure	0"
Gap - joint	0"
Max. permeability of the smoke curtain fabric at 400 °F	0.0342 ft³/ft²/min
Free area - casing	= Casing length x gap casing = L x 0 inches = 0 inches <sup>2</sup>
Free area - edges	= D x gap - edges
Free area - joints	= D x gap - joint x number of joints
Standard	UL 864, European standard EN 12101-1
Standard of the fabric	ASTM E84
D = drop length of the smoke curta	in



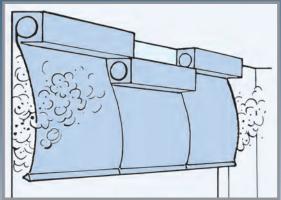






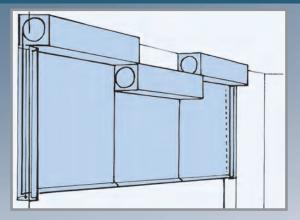
# Stoebich Smoke Curtain M

### Automatic standard smoke curtain with modular design (UL 1784)

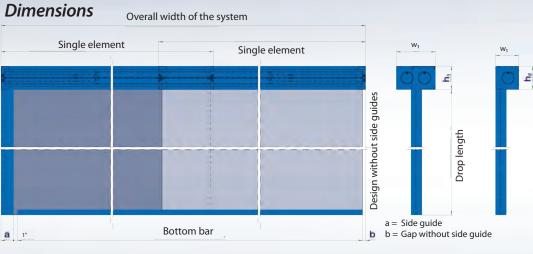


### System description

- · automatic smoke protection with a high temperature classification
- · pre-manufactured single elements to create one complete unit (modular installation)
- · unlimited system width possible, drop length up to 23'
- · connected bottom bar across all elements



- · alternatively with side guides
- · drive unit with fail-safe technology (closing without auxiliary power)
- · drive unit with 10,000 cycles
- · suitable as smoke curtain that is flush with the floor
- · self-leveling bottom bar, safety edge (optional)



Single module

System width	Drop length	w <sub>1</sub> x h <sub>2</sub>
≤ 16'	≤ 15'	5.91" x 5.91"
≤ 16'	15' - 23'	7.28" x 7.28"
16' - 23'	≤ 15'	7.28" x 7.28"

Other dimensions on request

### Multiple module - parallel

System width	Drop length	w <sub>1</sub> x h <sub>1</sub>	
> 23'	≤ 15'	9.84" x 5.91"	
> 23'	15' - 23'	12.6" x 7.28"	

Other dimensions on request

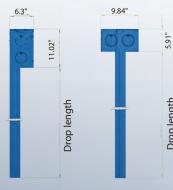
### Multiple module - one upon the other

System width	Drop length	Housing
> 23'	≤ 15'	6.3" x 11.02"
> 23'	15' - 23'	7.68" x 13.78"

Other dimensions on request

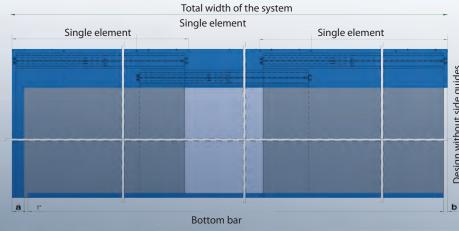








Design with side guides





Design with side guides

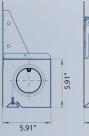








### **Range of housings**

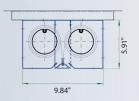




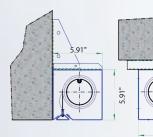
Single smoke Modular smoke curtain - wall curtain - wall



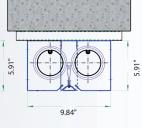
Single smoke curtain - ceiling



Modular smoke curtain - ceiling



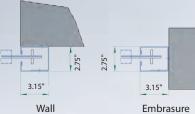
Self-leveling bottom bar with single smoke curtain

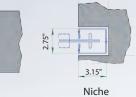


Self-leveling bottom bar with modular smoke curtain

### Range of side guides

(standard)





**Bottom bars** 







Self-leveling bottom bar (optional)

Tubular motor with fail-safe technology



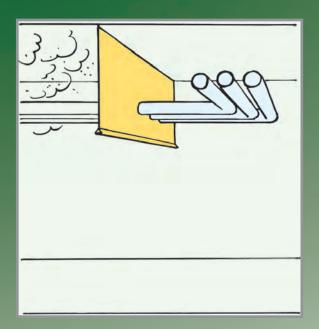
	Stoebich Smoke Curtain M	
Automatic smoke curtain	Closing without electric power	
Temperature classification	D120 (1,100 °F / 120 min.)	
Closing speed (depends on the drive)	Approx. 6"per sec. e.g. drop length 30' = 60 sec. in the closed position	
Gap - casing	0"	
Gap - edges embrasure	0" with side guide 0.78" + 0.78" without side guides	
Gap - joint	0.66" (standard ceiling installation) 0" (standard wall installation)	
Max. permeability of the smoke curtain fabric at 400 °F	0.0342 ft³/ft²/min	
Test temperature	At ambient temperature and at 400 °F	
Free area - casing	= Length of the casing x gap casing = L x 0 inches = 0 inches <sup>2</sup>	
Free area - edges	= D x gap - edges	
Free area - joints	= D x gap - joint x number of joints	
Standard	UL 1784, UL 864, OSHPD CA certificate, European standard EN 12101-1	
Standard of the fabric	ASTM E84	
D = drop length of the smoke curtain	in	







# **Stoebich Draft Curtain**



### System description

- · fixed smoke protection with a high temperature classification
- · large dimensions are possible (unlimited system widths, height depends on the wind pressure which may occur)
- · pending fixing or fixing at the lateral and lower area
- extremely small static load to the building structure (weight of the fabric: 0.08 0.14 lbs/ft²)
- · fabric tested according to ASTM E84
- easy sealing of systems which pass through the fixed barrier (e.g. ventilation ducts, tubes, cable routes, I-beams)
- number of systems which pass through the fixed barrier is
   expandable or changeable during the whole life of installation

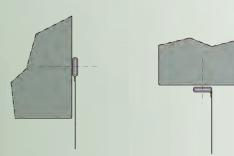
### **Dimensions**

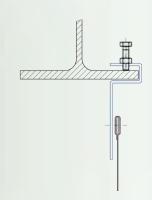
Width of the fixed smoke curtain



Height of the fixed smoke curtain

### Range of fixings

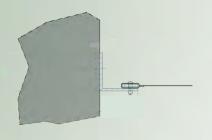


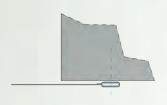


### **Bottom bar**

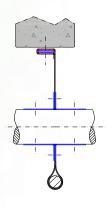


### Range of lateral fixings





### **Accomplishment of penetration**



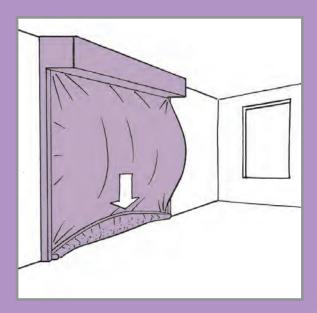


	Stoebich Draft Curtain		
Fixed smoke curtain	Elastic material		
Temperature classification	D60 DH120 (1,100 °F / 60 min.) (2,000 °F / 120 min.)		
Gap - edges embrasure	0"		
Gap - joint	0"		
Max. permeability of the smoke curtain fabric at 400 °F	0.0342 ft <sup>3</sup> /ft <sup>2</sup> /min		
Test temperature	At ambient temperature and at 400 °F		
Free area - edges	= D x gap - edges		
Free area - joint	= D x gap - joint x number of joints		
Standard of the fabric	ASTM E84		
D = drop length of the smoke curtain			



# Stoebich Smoke Curtain T

Automatic tight smoke curtain for high pressures and a smoke temperature of 400 °F



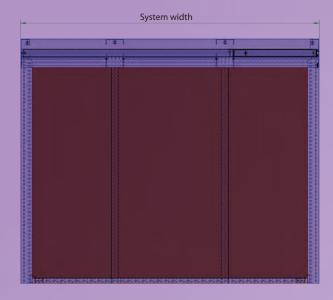
### System description

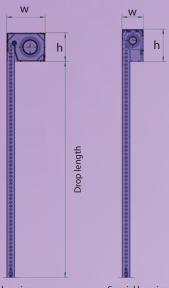
- · automatic tight smoke protection with a high temperature classification
- · system width up to 33' and a drop length up to 20'
- · passive sealing system with noncombustible sealing parts
- · elastic floor sealing to seal bigger unevenness
- · versatile mounting options
- · drive unit with fail-safe technology (closing without auxiliary power)
- · drive unit with 10,000 cycles
- · high quality fabric with silicone coating or with polyurethane coating
- · safety edge (optional)

Fabric	System width	Drop length	w	h	Housing
Stoebich Smoke Fabric E	≤ 33'	≤ 20'	13.78"	10.24"	standard
Stoebich Smoke Fabric E	≤ 16'	≤ 15'	11.22"	7.87"	special
Stoebich Smoke Fabric E	≤ 11'	≤ 11'	7.48"	11.42"	special
Stoebich Smoke Fabric F	< 23'	< 16'	11 42"	14.17"	special

Housing 11.22" x 7.87" exclusively for ceiling mounting

Other configurations and special design on request



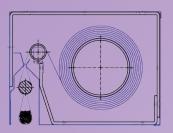


Standard housing

Special housing



### **Range of housings**



Standard housing



Special housing

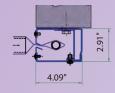
### **Bottom bars**



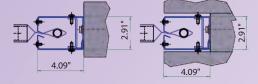
Standard

With safety edge

### **Installation of side guides**



Installation to the wall

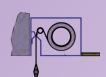


Installation in the embrasure Installation in the niche

### **Installation options**



Installation of the housing to the wall



Installation of the housing to the wall; false ceiling is unilaterally connected to the housing



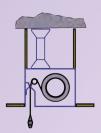
Installation of the housing directly to the ceiling



Installation of the housing directly to the ceiling, false ceiling is connected to the housing on both sides

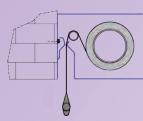


Installation of the housing over a suspension to the ceiling

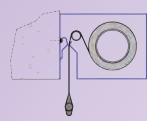


Installation of the housing over a suspension to the ceiling false ceiling is connected to the housing on both sides without fire protection

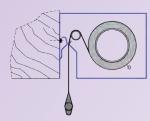
### **Mounting options**



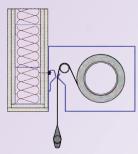
Mounting on bricking



Mounting on concrete



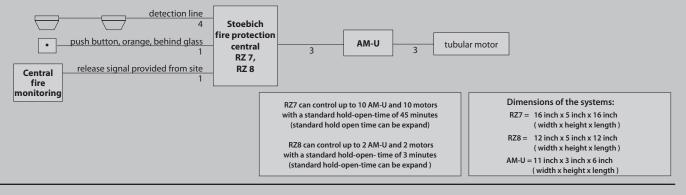
Mounting on wood



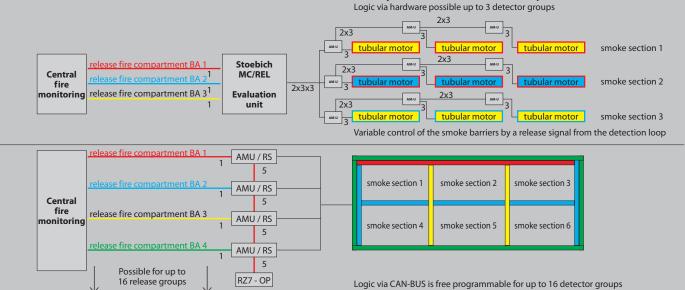
Mounting on light-weight wall



### Control units Variable control of the smoke curtains by release of the detection loop according to UL 864 **RZ 7, RZ 8, AMU**



### Variable control of the smoke curtains by release of the detection loop

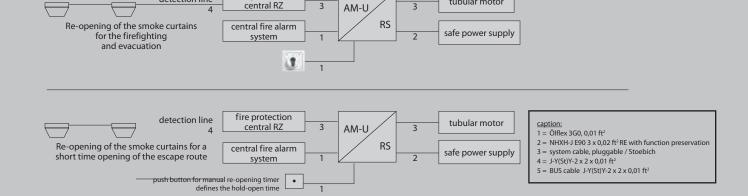


### Controlled, motor-driven re-opening despite of fire alarm

tubular motor

fire protection

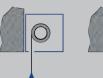
detection line



### **Tubular motor**



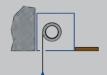
### **Installation situations**



Installation of the housing to the wall, from behind



Installation of the housing to the wall, from the front



Installation of the housing to the wall, lower part of the housing is flush on one side with the housing, from below



Installation of the housing to the wall, lower part of the housing is flush on one side with the housing, from below



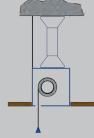
Installation of the housing directly to the ceiling, from behind/from below



Installation of the housing directly to the ceiling, lower part of the ceiling is flush on both sides with the housing, from below



Installation of the housing by suspensions to the ceiling, from behind/from below



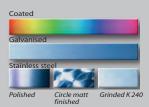
Installation of the housing by suspensions to the ceiling, from behind/from below

### **Design for the steel components**









### Fabric - smoke behaviour

Standard of the fabric: ASTM E84

For the following fabrics: Stoebich Smoke Fabric P Stoebich Smoke Fabric E Stoebich Smoke Fabric M

### Selection of fabrics for smoke curtains

Temperature classification D = 1,100 °F











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Since 1980 Stoebich Brandschutz GmbH has developed specialized separation technologies able to resist the effects of smoke and fire. Eleven of these are internationally recognized innovations and world novelties.



1980 **FIRST** CONVEYOR SYSTEM



1993 FIRST SMOKE CURTAIN 0%-LEAKAGE-INSTALLATION



1996 FIRST FIRE CURTAIN INSTALLATION, BOLTON UK

**UNTIL 2016** 

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