Fibershield

Flexible Fire Protection Closures

Fibershield-P *Z - 6.60 - 2127*
Fibershield-E
Fibershield-I
Fibershield-H/HC
Fibershield-S
Fibershield-F
Fibershield-W

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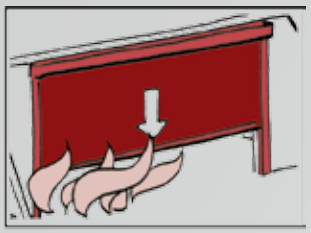
STÖBICH FIRE PROTECTION

Innovation for your Protection!

Protection concepts with automatic textile fire protection closures:



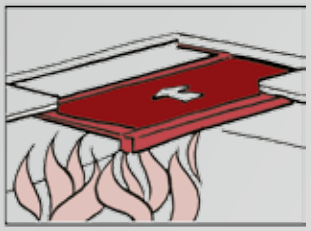
1. For openings in walls

How to seal large openings in walls – which create fire compartments – according to the protection target although the available space is limited or other architectural demands exist?

These automatic systems are very small and easily integrated into any situation. You may choose between the protection targets "E90-180" or "EI30-120" depending on the fire protection classification ("invisible fire protection").

Fire protection closures:

- Fibershield-P
- Fibershield-E
- Fibershield-W
- Fibershield-I

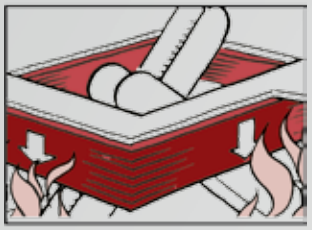


2. For openings in ceilings

How to seal large openings in ceilings – which create fire compartments – according to the protection target although the available space is limited or architectural demands exist?

These automatic systems are very small and easily integrated into any situation. You may choose between the protection targets "E90-180", "EW60-120" or "EI30-120" depending on the fire protection classification ("invisible fire protection").

- Fibershield-H+HC

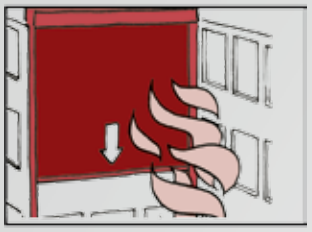


3. For fire protection which goes around the corner

Provided that no limitations caused by side guides or columns can be accepted (as in the case of prestigious buildings) – how to adjust the existing high demands of fire protection closures to architectural constructions even when it has to create a room or has to go around the corner?

Fire protection closure Fibershield-S offers a polygon shaped design without the necessity of disturbing side guides but still maintaining the required tightness. Due to the flat design, the system is easily integrated into ceilings and can be built with extremely large widths and lengths.Whereas the angle may be between 30° and 150°.

- Fibershield-S

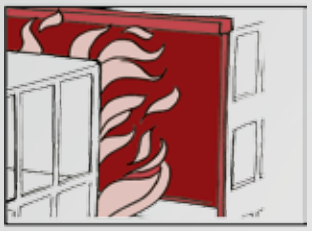


4. For openings in façades in corner situations

When buildings or parts of a building connect to each other in a corner situation or if they are separated by a fire wall, no openings in the fire wall are allowed within 5 m. This does not apply in situations when parts of the building connect to each other at an angle of more than 120° (§1 German building regulation). How to guarantee this if operable windows are planned?

The protection is assured by the possibility to install them inside or outside the building. With this automatic sealing system, operable standard windows without fire-rated glazing can be used. Therefore the room comfort is not restricted.

- Fibershield-F
- Fibershield -W

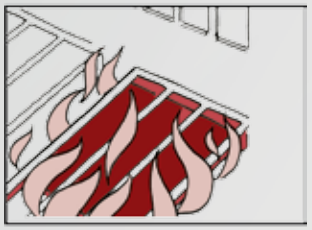


5. For openings in façades with a minor distance between the buildings

German regulations demand a minimum distance of 3 to 5 metres between buildings. Subject to a lower deviation of these requirements the adjacent walls need to be designed as fire walls. Openings have to be closed in a fire-resistant manner to avoid the passage of fire. How to guarantee this if operable windows are planned?

The protection is assured by the possibility to install them inside or outside the building. With this automatic sealing system, operable standard windows without fire-rated glazing can be used. Therefore the room comfort is not restricted. The robust functionality is approved by a weathering test for 10 years made by the MFPA Leipzig.

- Fibershield-F
- Fibershield -W



6. For openings in façades and canopies

When the roof of building extensions join to walls with openings or to walls which are not fire-retardant, the fire rating of these walls within the distance of 5 m needs to be identical to the roofing of the adjoining building (§30 German building regulation). How to solve this problem?

The protection is assured by the possibility to install them inside or outside the building. With this automatic sealing system, operable standard windows without fire-rated glazing can be used. Therefore the room comfort is not restricted.

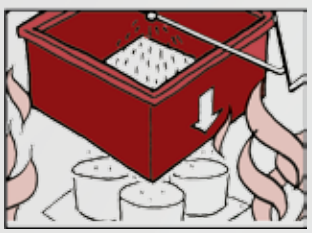
- Fibershield-F
- Fibershield -W
- Fibershield-H

7. To prevent the passage of fire from one level to another

A textile fire protection closure designed as a barrier that prevents the passage of flames from one level to another. How to solve this problem without limiting the field of view?

Fire protection closures which are integrated into a building and being activated by fire detection or a thermal release mechanism create automatically in the case of fire a fire barrier.

- Fibershield-W
- Fibershield-E



8. To create a section

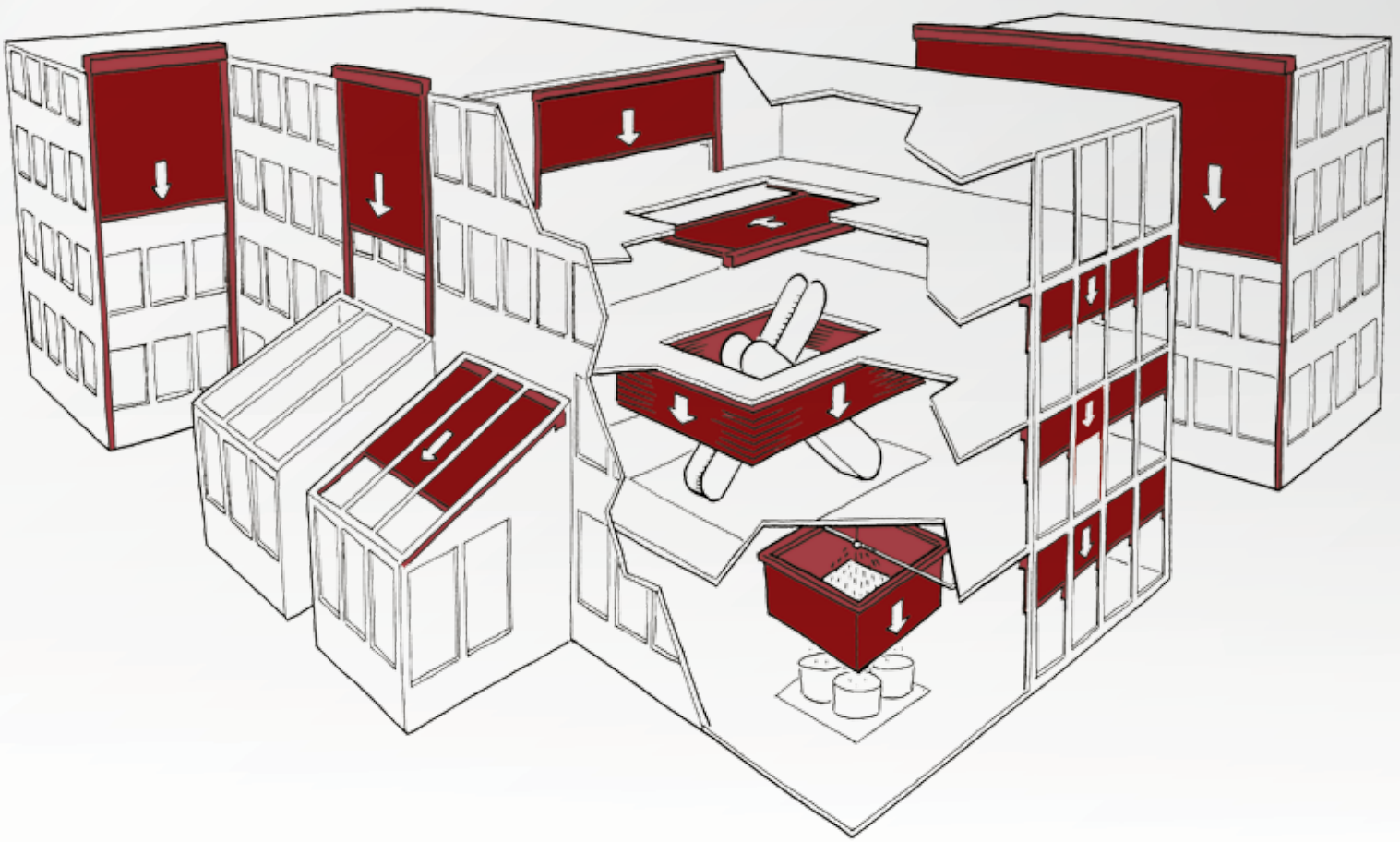
The creation of sections within fire compartments limits the risk of fire to especially endangered machines or installations. How to achieve such a sealing?

The fire protection closures Fibershield creates the required walls or even ceilings. In case of a fire, these rooms can be flooded by high pressure water-spray extinguishing systems or gas extinguishing systems that extinguish the fire. The fire protection systems are designed in dependence on the allowed leakage. Systems with side guides are used to match the high demands concerning tightness for gas extinguishing systems.

- Fibershield-E
- Fibershield-S

Invisible fire protection!

Building in the future – with innovative textile sealing systems



We, the inventors of textile fire protection closures invest our know-how and our ressources to offer you further innovative solutions for fire protection concepts which follow individual protection targets.

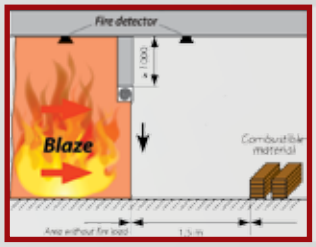
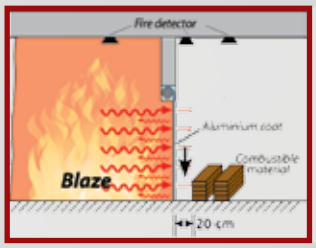
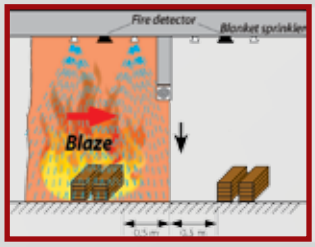
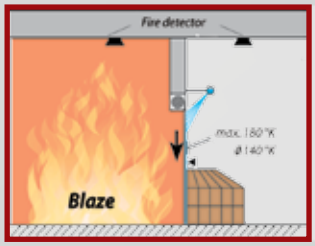
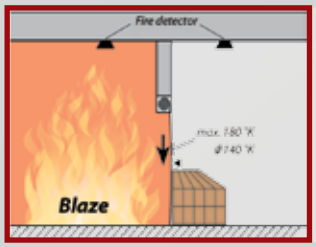
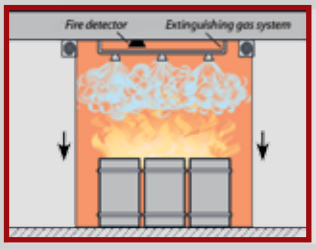
11 successful global innovations – already introduced onto the international market – are the result of our efforts.

One of them is the textile fire protection closure with different classifications and time classes as well as different fire characteristics from B1 to A2. Through this, modern protection concepts can be realised without restriction to the architectural design or the utilisation of the building.

With more than 15 years of experience and more than a 100 fire tests with flexible fire protection systems, we could realise approx. 10.000 projects in the following sectors:

Airports, assurance buildings, automotive industry, banks, barracks, canteens, car dealerships, car parks, cinemas, cold storage rooms, commercial properties, food industry, furniture and hardware stores, historic monuments, homes for elderly, hospitals, hotels, industrial plants, kindergartens, museums, office, public and residential buildings, schools, shopping centres, timber industry, town halls, train stations, training centres, underground train stations, universities, warehouses...

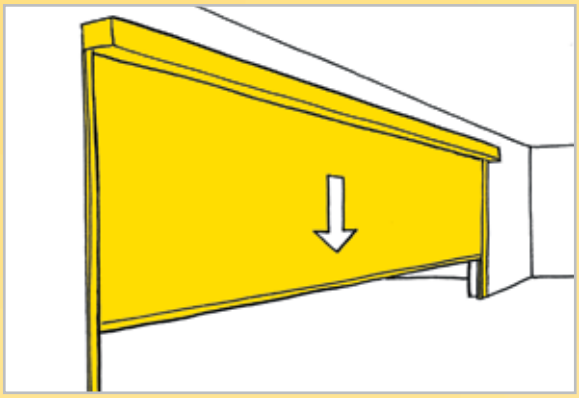
Protection Targets

	Characteristics according to DIN EN 13501-2	Definition/ classification	Achieved protection targets within the fire resistance classes	Approvals (tests according to DIN EN 1363-1, DIN EN 1634-1 and DIN EN 14600 durability and functional test)
	**E**	Integrity is the resistance against fire to avoid a passage of flames or hot gases (The protection target EI is achieved by fire load free zone EI 30 = 1,0 m, EI 60 = 1,5 m, EI 90 = 2,0 m.) Protection target EI 30: x = 1000 mm Protection target EI 90: x = 2000 mm	E 90 E 120 E 240	UB III/B-06-005 UB III/B-07-010-1 UB III/B-05-020 UB III/B-06-016 GU IV/97-73 UU IV/97-25 UB III/B-04-045 LP-1216.2/02 UB III/B-08-033 3344/097/09 UB 3.1 / 09-018 UB 3.1 / 09-021 UB 3.3 / 09-020 IBS 08062416 UB 3.3 / 10-018-1 UL 10D for E120 UL 10D for E90 UL 10C for E120
	**EW**	Integrity with a limitation of heat transmission Limitation of the heat transmission is the characteristic to reduce the heat being transferred through a fire protection system to limiting materials. (The protection target EI is achieved by fire load free zone). Protection target EI 30: x = 200 mm Protection target EI 60: x = 300 mm Protection target EI 90: x = 500 mm	EW 30 EW 60 EW 90 EW 120	UB III/B-08-012 UB III/B-07-003 UB 3.3/ 10-035-1 UB 3.3/ 11-009-1
	**E +** Sprinkler	Insulation with intensified sprinkler protection Insulation is the ability of the system to avoid the transmission of fire caused by heat radiation. The transmission has to be limited in a way, that neither the opposite fire side surface nor any other materials near to this surface ignite and so persons are protected. x = 200 – 500 mm depending on the environment	EI 90 EI 120 EI 180	UB III/B-08-016 UB III/B-05-006 IBS 08062415 UB III/B-07-10-2
	**E +** Water film	In case of fire - heat insulation with a water film (The surface temperature is lower than the admissible limit value)	EI 90 EI 120 EI 180	08/32309876 Part 1 2011-Efectis-R0495
	**EI** Dry	Insulation without water in case of fire	EI 30 EI 60	(3162/794/10)-AH (3699/959/10)-AH 304/878/09 3053/504/10
	**Transmission from one level to another**	Avoidance of transmission of flames from one level to another without (with) balustrade	The necessary barrier (or lintel) height of 1m is automatically created in case of fire	B 15045 UB III/B-05-006-A1 proof of weathering
	**Extinguishing**	Creation of sections Limitation of a room which is usually not there to avoid the transmission of flames or hot gases to the room without fire. Enclosure by textile fire protection closures with the targets: limitation of the fire, smothering of the fire, extinguishing of the fire by gases or water-spray.	Enclosure by textile fire protection closures with the target to: · limit the fire · quench the fire · extinguish the fire with gases or water-spray	

Fibershield-P

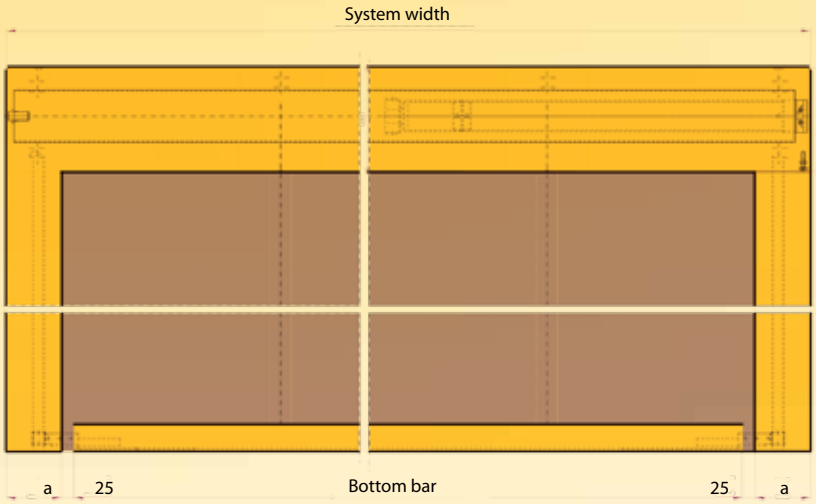
Approval: Z-6.60 - 2127

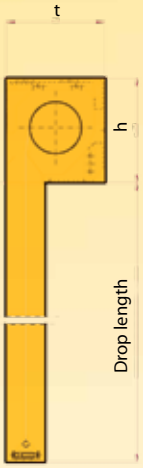
The Premium textile fire protection closure to match highest demands and to achieve large dimensions



Description of the Fibershield-P system

- approval classification E90, 10.000 cycles
- scope of approval 1.000 mm x 2.000 mm – 6.000 mm x 5.000 mm
- made of one piece up to a width of 30 m and for a large drop length (see table)
- highest variability for construction and design
- drive system "Gravigen" as a standard – closing without auxiliary power, no fire-rated cables necessary
- high number of cycles of the motors of 10.000 cycles
- only one drive system is necessary – therefore a reduced effort for the installation
- different protection targets E, EW, EI (with water) by using different types of fabrics
- large widths as well as the self-levelling bottom bar (for the standard casing)
- the safety edge in combination with the self levelling bottom bar is possible as an option
- continuing lateral fixing of the fabric by using the side guides with steel rod for large drop lengths, high pressures, high tightness and gentle closing
- warping free bottom bars even in case of temperature influence
- large fire protection closures of min. class C 1 according to DIN EN 13501-2



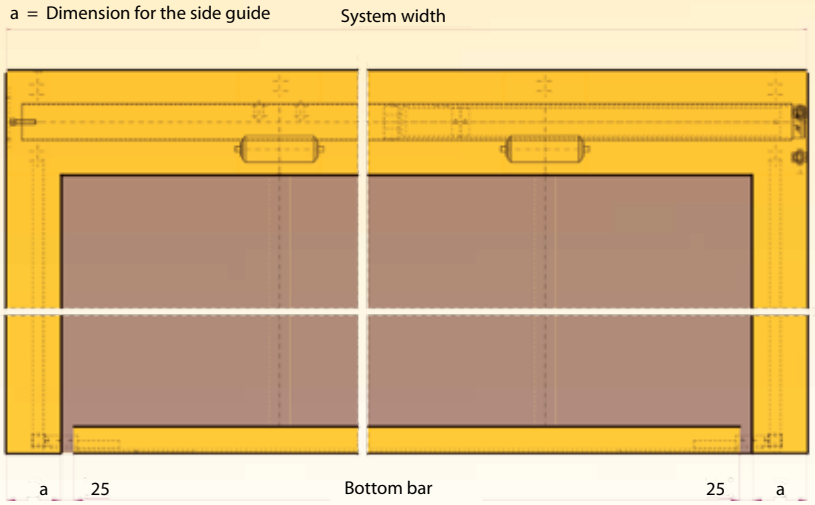


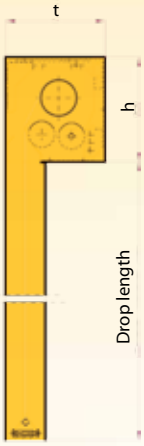
Fixed bearing

Fabric	System width	Drop length	t (mm)	h (mm)
Heliotex EW 90 / 120	< 4 m	≤ 2 m	190	250
Heliotex EW 90 / 120	< 4 m	≤7,5 m	235	290
Protex 1100.1 A2 / B1	> 0,9 m - ≤ 1,4 m	≤ 3,5 m	190	250
Protex 1100.1 A2 / B1	> 1,4 m - ≤ 4 m	≤ 3,5 m	190	200
Protex 1100.1 A2 / B1	< 4 m	> 3,5 m - ≤ 6 m	190	250
Protex 1100.1 A2 / B1	< 4 m	> 6 m - ≤ 9 m	235	290

The dimensions of the casing for drop lengths of 9-12 m depend on the requested coil

a = Dimension for the side guide



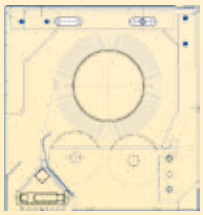


Floated bearing

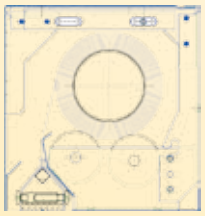
Fabric	System width	Drop length	t (mm)	h (mm)
Heliotex EW 90 / 120	> 4 m - ≤ 12 m	≤ 2 m	190	250
Heliotex EW 90 / 120	> 4 m - ≤ 12 m	≤ 6 m	235	290
Protex 1100.1 A2 / B1	> 4 m - ≤ 12 m	≤ 3,5 m	190	200
Protex 1100.1 A2 / B1	> 4 m - ≤ 12 m	> 3,5 m - ≤ 6 m	190	250
Protex 1100.1 A2 / B1	> 4 m - ≤ 12 m	> 6 m - ≤ 9 m	235	290

The dimensions of the casing for drop lengths of 9-12 m depend on the requested coil

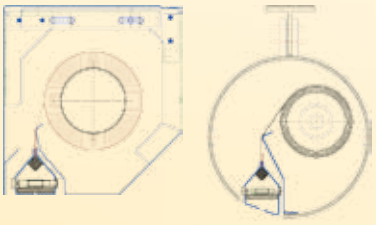
Range of casings



Standard - Fixed bearing



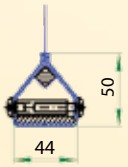
Standard - Floated bearing



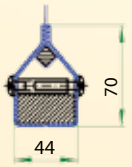
Range of special constructions

Bottom bars

Standard for small widths

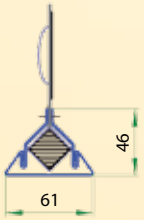


type 4,6



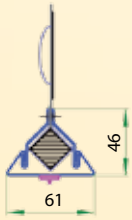
heavy, type 9,6

small, type 5,61



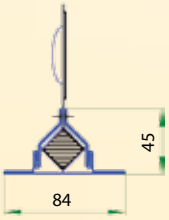
type 3,84 F

Self-levelling bottom bar without safety edge



type 3,84 FK

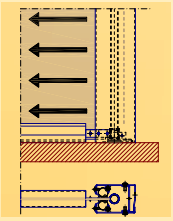
Self-levelling bottom bar – optional with safety edge



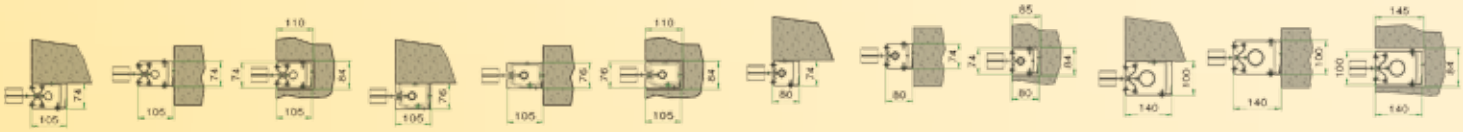
Self-levelling bottom bar without safety edge, under the ceiling

Range of side guides

Continuous fabric clamping due to rod guiding for high pressures and high tightness



Type	Drop length	Surface
80 E	≤ 3,5 m	≤ 18 m²
105 E	≤ 6 m	≤ 50 m²
105 V	≤ 6 m	≤ 70 m²
140 E	≤ 9 m	≤ 120 m²



Typ 105 E installation to the wall

Typ 105 E installation in the embrasure

Typ 105 E installation in the niche

Typ 105 V installation to the wall

Typ 105 V installation in the embrasure

Typ 105 V installation in the niche

Typ 80 E installation to the wall

Typ 80 E installation in the embrasure

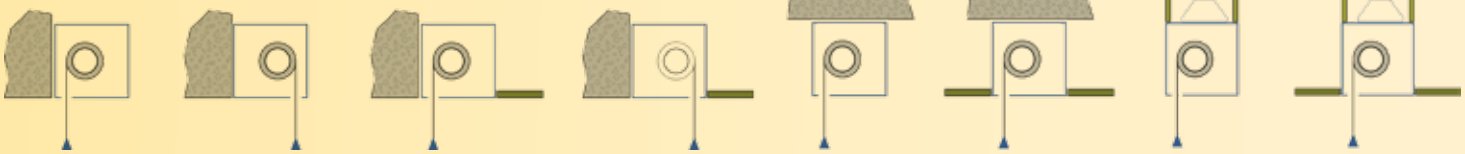
Typ 80 E installation in the niche

Typ 140 E installation to the wall

Typ 140 E installation in the embrasure

Typ 140 E installation in the niche

Alternatives for the installation



Installation of the casing to the wall, front site run

Installation of the casing to the wall, rear site run

Installation of the casing to the wall, false ceiling is attached to the casing on one side, front site run

Installation of the casing to the wall, false ceiling is attached to the casing on one side, rear site run

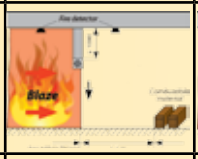
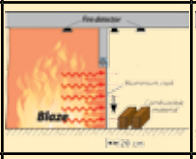
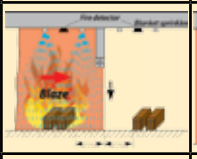
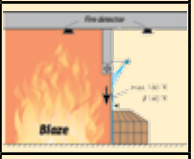
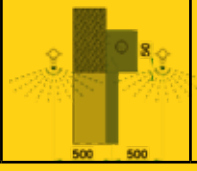
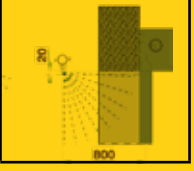
Installation of the casing directly to the ceiling

Installation of the casing directly to the ceiling, false ceiling is attached to the casing on both sides

Installation of the casing to the ceiling by using hangers

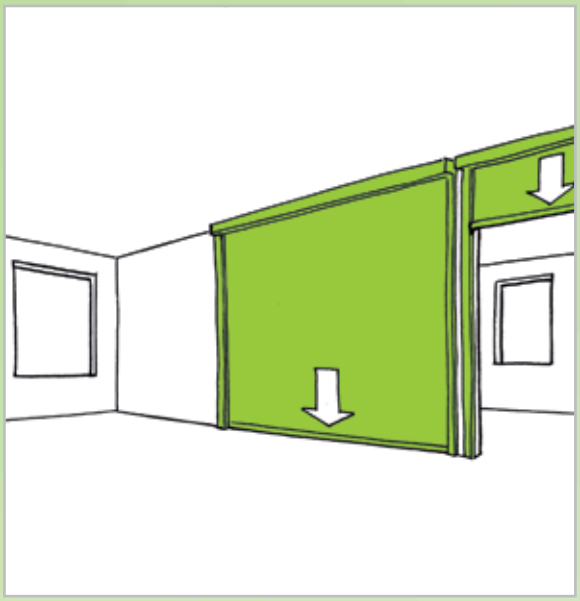
Installation of the casing to the ceiling by using hangers, false ceiling is attached to the casing on both sides

Protection targets

Protection targets	Integrity	Integrity with limitation of the heat transmission	Insulation with intensified sprinkler protection in case of fire	Insulation with water-spray in case of fire
				
Classification	E 90 E120 E 240	EW 90 EW 120	EI 120 EI 180	EI 90
Fabric	Protex 1100.1-A2	Heliotex EW 90 Heliotex EW 120	Protex 1100.1-A2	Protex 1100.1-A2
Test report	UB III/B-07-010-1 UB III/B-04-045 LP-1216.2/02 UB 3.1/ 09-018 UB III/08-033 UB 3.1/09-018, UB 3.3/09-202 UL 10D E120, UL 10C E120	UB III/B-08-012 UB III/B-07-003 UB 3.3 / 10-035-1 UB 3.3 / 11-009-1	UB III/B-05-006 UB III/08-016 UB III/B-07-10-2	UU IV/00-39-1 UB III/B-02-008-1 08/32309876 2011-Efectis-R0495
Water irrigation				

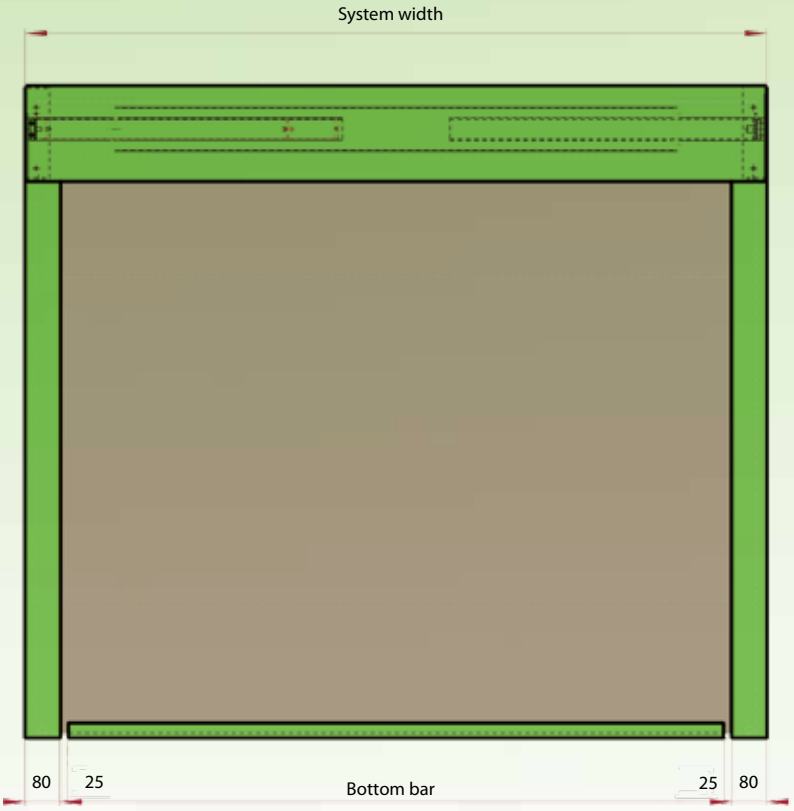
Fibershield-E

The Economical textile fire protection closure with the highest level of standardisation



Description of the Fibershield-E system

- high level of standardisation which leads to an economic sealing system with a maximum width of up to 6 m and a drop length of up to 8 m or a width up to 7 m and a drop length of up to 5 m.
- drive system "Gravigen" as a standard – closing without auxiliary power, no fire-rated cables necessary
- high number of cycles of the motors of 10.000 cycles
- different protection targets E, EW, EI (with water) by using different types of fabrics
- side guides with buttons
- large fire protection closures of min. class C 1 according to DIN EN 13501-2
- optional with safety edge
- optional with self-levelling bottom bar



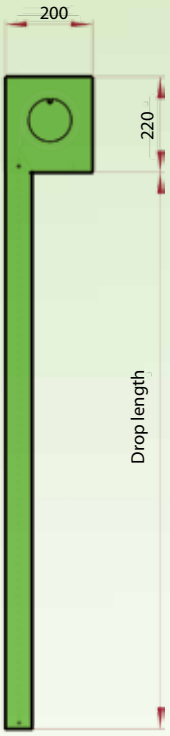


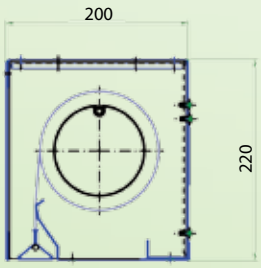
Table of dimensions (standard design)

Fabric	System width	Drop length	t (mm)	h (mm)
Ecotex 1100	< 6 m	≤ 8 m	200	220
Ecotex 1100	< 7 m	≤ 5 m	200	220
Heliotex EW	< 4 m	≤ 5 m	200	220
Heliotex EW	< 5 m	≤ 4 m	200	220
Heliotex EW	< 6 m	≤ 3 m	200	220

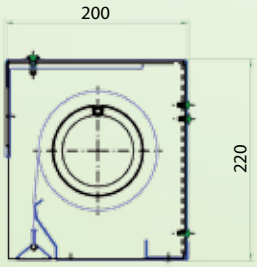
The dimensions of the casing for drop lengths of 9-12 m depend on the requested coil



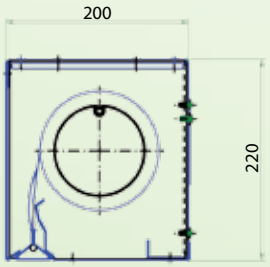

Range of casings



Installation to the ceiling

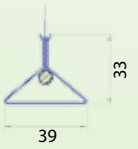


Installation to the wall



With self-levelling bottom bar

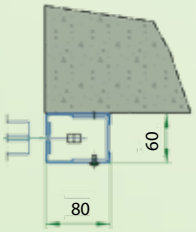
Bottom bars



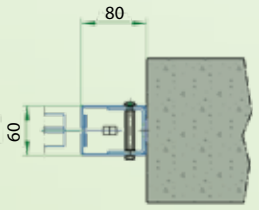
Standard design

Self-levelling bottom bar

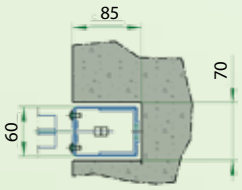
Range of side guides



type 80 K

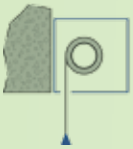


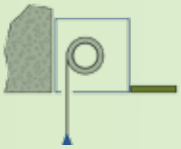
type 80 KB

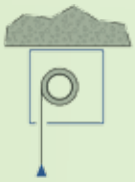


type 80 KN

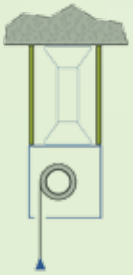
Alternatives for the installation

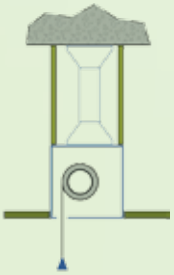

Installation of the casing to the wall, front site run


Installation of the casing to the wall, false ceiling is attached to the casing on one side, front site run

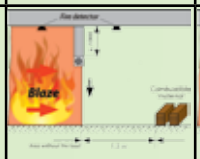
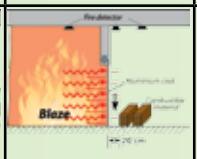
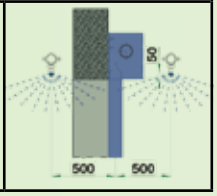

Installation of the casing directly to the ceiling


Installation of the casing directly to the ceiling, false ceiling is attached to the casing on both sides

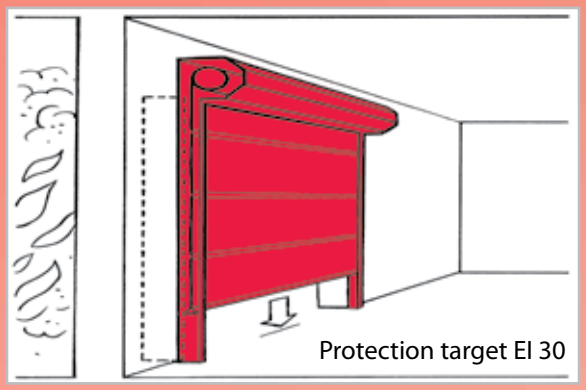

Installation of the casing to the ceiling by using hangers


Installation of the casing to the ceiling by using hangers, false ceiling is attached to the casing on both sides

Protection targets

Protection targets	Integrity	Integrity with limitation of the heat transmission	Insulation with sprinkler protection in case of fire
			
Classification	E 90	EW 90	EI 120
Fabric	Ecotex 1100-B1 Ecotex 1100-A2	Heliotex EW 90	Ecotex 1100-B1 Ecotex 1100-A2
Test report	UB III/B-06-005 3102/717/07, UB 3.1/09-021 UL 10D	UB III/B-08-012	UB III/B-08-016
Water irrigation			

Fibershield-I

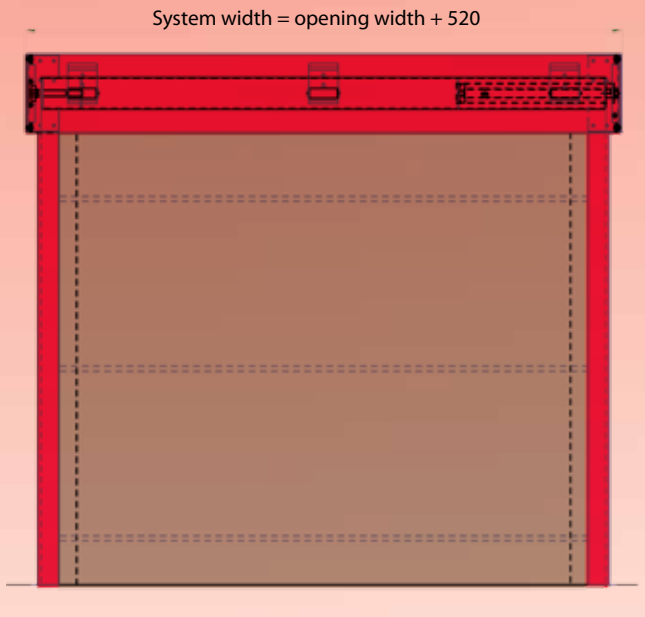


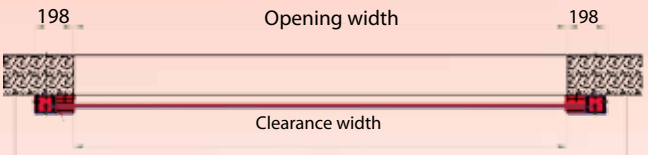
System width	Drop length	t (mm)	h (mm)
< 6,0 m	< 3,0 m	510	400
< 6,0 m	< 4,0 m	575	450

Bigger dimensions on request

Description of the system Fibershield-I EI30

- fire resistance EI 30 tested according to EN 1634-1
- single-layer textile fire-retarding sealing
- multi-layer fabric, insulation by swelling in case of fire and heat consumption
- less space requirement (see table)
- standard dimensions up to CW x CH = 6.000 mm x 4.000 mm
- simple mounting to the wall to a shear wall (that means no preliminary frame on site necessary)
- dry system (no water discharge necessary)
- closing by fail-safe technology, motorized re-opening
- emergency opening with battery backup (optional)
- optional surveillance of closing edgings and areas

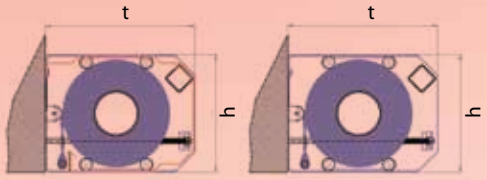




Standard version: space requirement for installation = opening width + 700

Special construction: space requirement for installation = opening width + 540

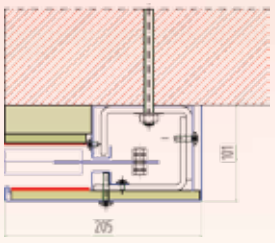
Casing/Installation



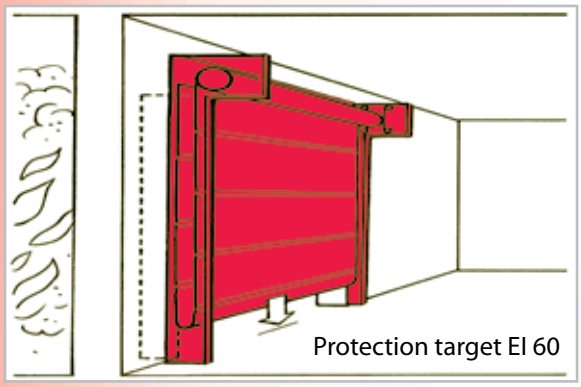
Protection target

Protection target	Integrity and insulation
	
Classification	EI 30 EW 90 E120
Fabric	Intutex EI 30
Test report	(3162/794/10)-AH (3699/959/10)-AH

Side guide



The Insulating textile fire protection closure with little demand for space and without water



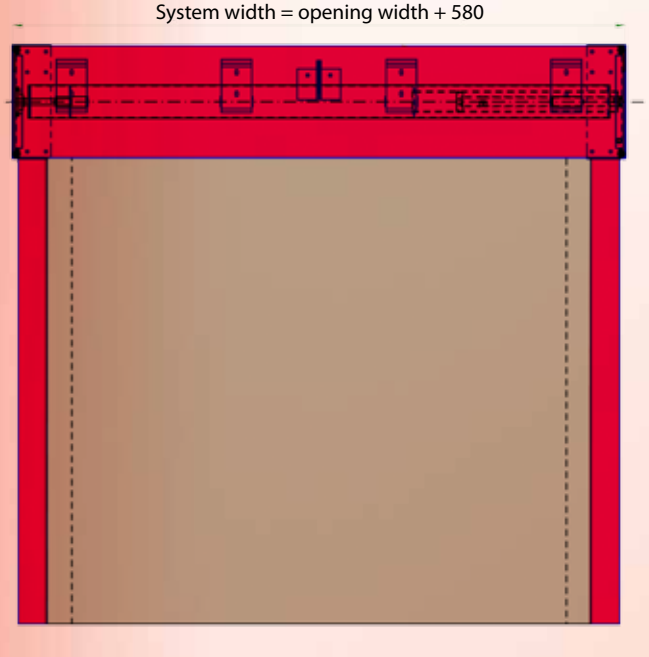
Description of the system Fibershield-I EI 60

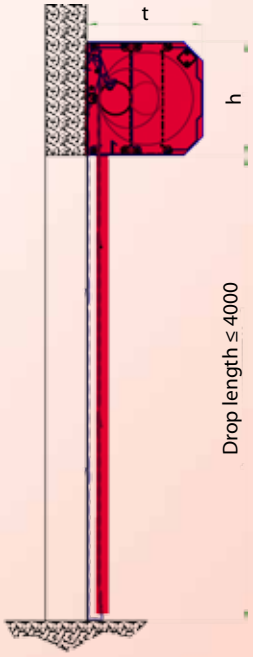
- fire resistance EI 60 tested according to EN 1634-1
- double-layer textile fire-retarding sealing
- multi-layer fabric, insulation by swelling in case of fire and heat consumption
- less space requirement, dimension up to CW x CH = 6.000 mm x 4.000 mm (see table)
- simple mounting to the wall to a shear wall (that means no preliminary frame on site necessary)
- dry system (no water discharge necessary)
- motorized opening and closing with battery backup
- emergency opening with battery backup (optional)
- optional surveillance of closing edgings and areas

System width	Drop length	t (mm)	h (mm)
< 6,0 m	< 3,0 m	660	560
< 6,0 m	< 4,0 m	735	650

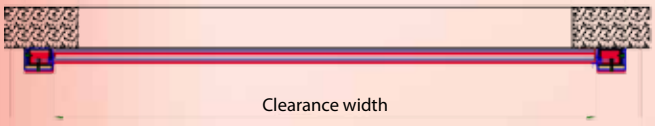
Bigger dimensions on request

System width = opening width + 580





260 Opening width 260

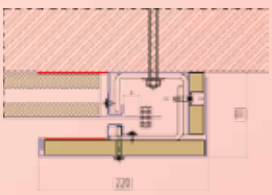


Clearance width

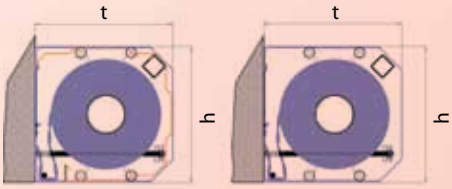
Standard version: space requirement for installation = opening width + 800

Special construction: space requirement for installation = opening width + 600

Side guide



Casing/Installation



With casing Without casing

Protection target

Protection target	Integrity and insulation
	
Classification	EI 60
Fabric	Intutex EI 60
Test report	(3004/878/09)-AH expert report(3053/504/10)-AH

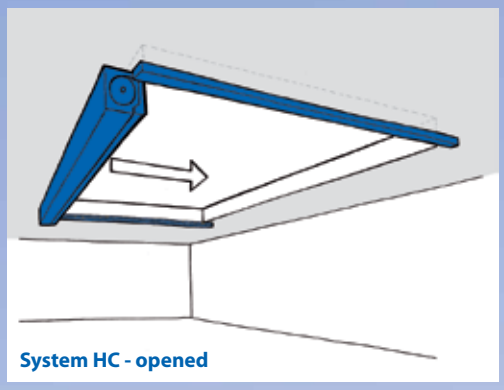
Fibershield-H+HC

The textile Horizontal fire protection closure for openings in ceilings

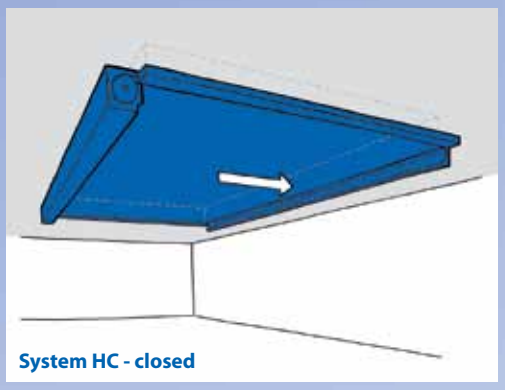
new generation - without tensioning ropes

patent pending

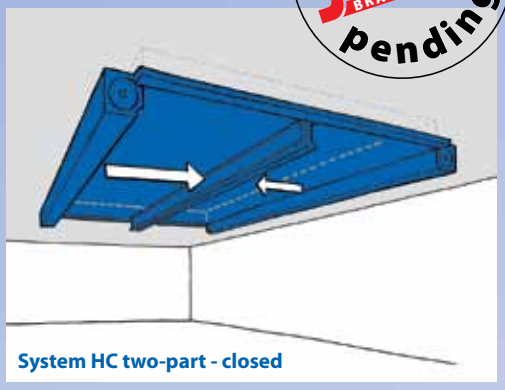
Tested systems tested according to DIN 4102 as well as to DIN EN 1634-1
High flexibility due to low space requirement (installation under the ceiling and into the embrasure)



System HC - opened



System HC - closed



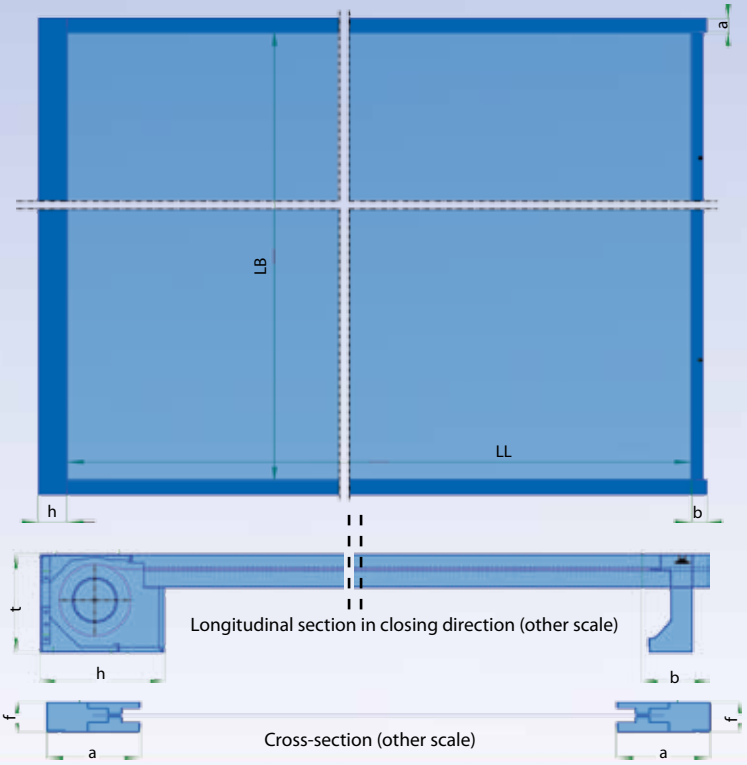
System HC two-part - closed

System description Fibershield-HC

- sealing system for large openings in ceilings without supporting or tensioning ropes up to 10 x 10 m
- casing and bottom bar build a closed casing in operating condition (patent applied)
- extensive testings with the dimensions 5 x 5 m till E 120 and EW 60
- two-part version in design status with the dimensions 10 x 20 m with centrally locking end bars

System description Fibershield-H

- large openings in ceilings till 20 m width and high drop lengths – see table
- tensioning ropes in a distance of 1.5 m to support the fabric with large dimensions as well as to withstand the pressure load in case of fire
- high variability in dependence on the design e.g. arch-shape
- safe closing process up to 5 m drop length, optionally with gas tension springs that means without auxiliary energy, or with Duplex drive system with guaranteed power supply up 60 9 m drop length



Special design:
Deviation from the linear closing direction

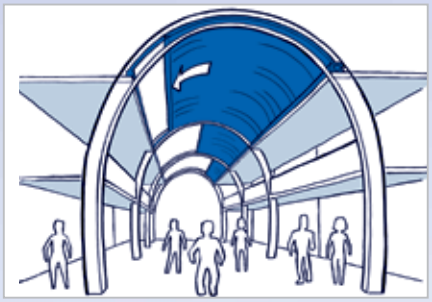
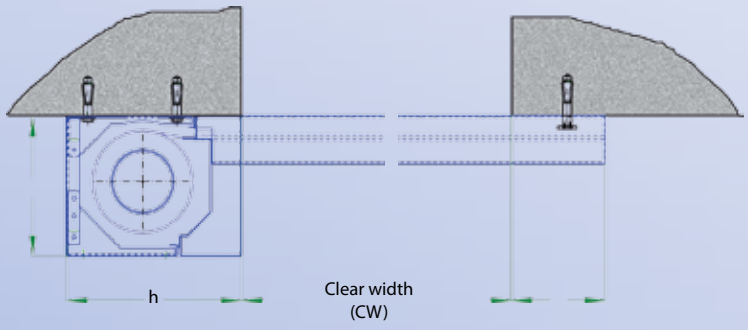


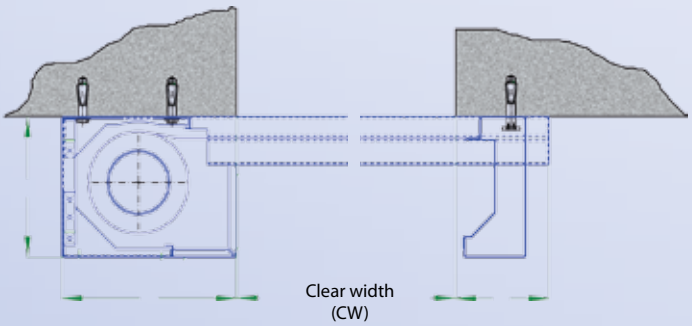
Table of dimensions (standard design)

System version	LB (m)	LL (m)	a (mm)	b (mm)	t (mm)	h (mm)	f (mm)
Spring	< 1,4	< 1,5	120	109	190	200	190
Spring	4,5	< 2,9	120	109	190	250	190
Spring	4,5	≥ 2,9 < 5	150	109	235	290	235
Spring	≥ 4,5 < 30	≥ 2,9 < 5	150	225	235	320	235
Duplex	< 20	≥ 2,9 < 8,5	160	335	274	355	80
HC	< 6	< 6	200	220	235	300	80
HC	< 10	< 10	300	330	400	500	150
HC	< 10	< 20	300	500	400	500	150

Fibershield-HC: casing

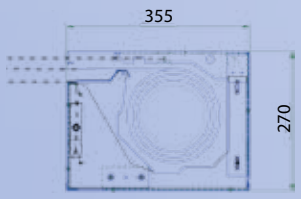


opened condition

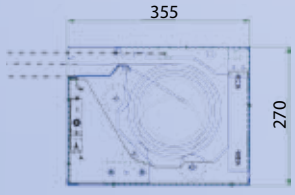


closed condition

Fibershield-H: casing

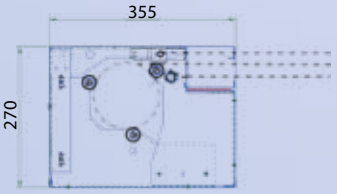


Fixed bearing

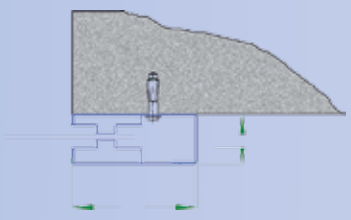


Floating bearing

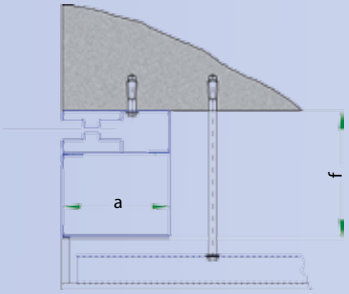
Bottom bar and feeding edge



Side guide



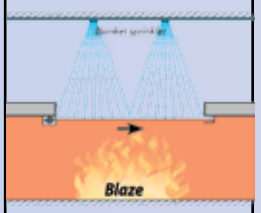
Floating bearing



Under ceiling

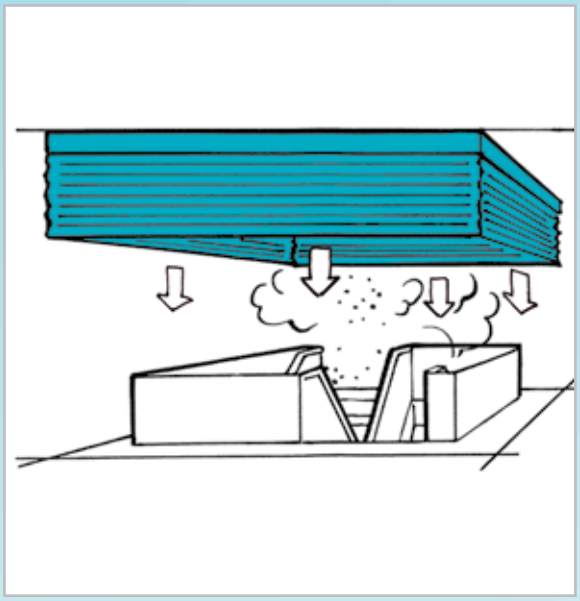
Protection targets

Testing in the EU´s largest oven

Protection target	Integrity HC	Integrity H	Insulation with sprinkler protection in case of fire
			
Classification	E 120 EW 60	E 120	EI 120
Fabric	Protex 1100.1 A2	Heliotex EW 120	Protex 1100.1 A2 special coating
Test report	UB III/B-05-020 UL 10C	12-G-021	UB III/08-016

Fibershield-S

The room creating textile fire protection closure that means fire protection which goes around the corner



Description of the Fibershield-S system

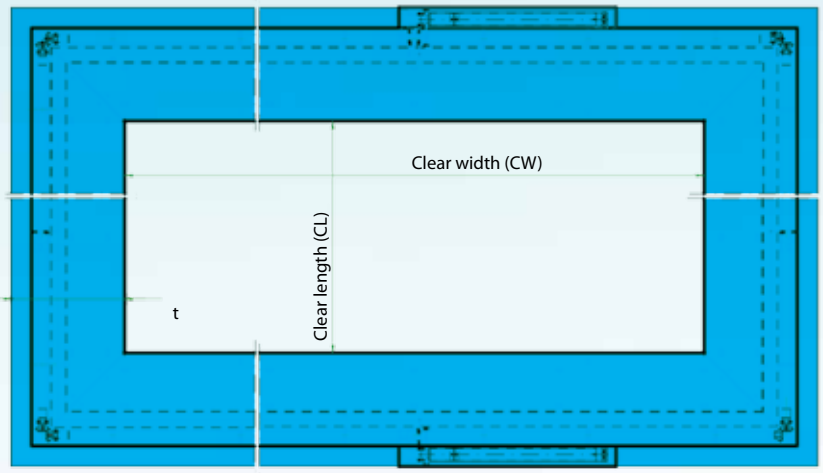
- rectangular or polygon shaped base area of the closure
- rectangular corners or differing from the right angle 30° up to 150°
- creates corners without additional columns - low installation height
- self levelling bottom bar to give a flush sealing with the ceiling
- warp free bottom bars even in cases of temperature influence
- closed polygon shape or open systems with connection to the wall by special side guides, length up to 16 m and a drop length of up to 6 m
- drive system "Gravigen" as a standard – closing without auxiliary power, no fire-rated cables necessary
- high number of cycles of the motors of 10.000 cycles
- redundant drive units as fall protection
- large fire protection closures of min. class C 1 according to DIN EN 13501-2

System description Fibershield-S EI120

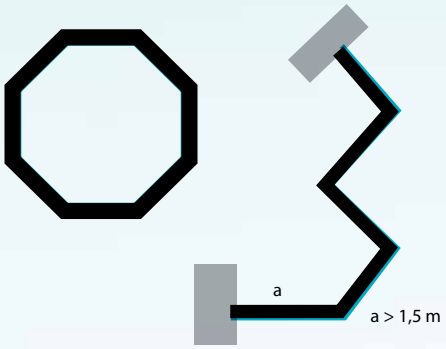
- additional unrolling fabric to form a chamber for the insulation by inside water sprinklers

Perimeter of the system	Drop length	t (mm)	h (mm)
< 50 m	≤ 3 m	490	125
< 50 m	> 3 m - ≤ 6 m	490	225

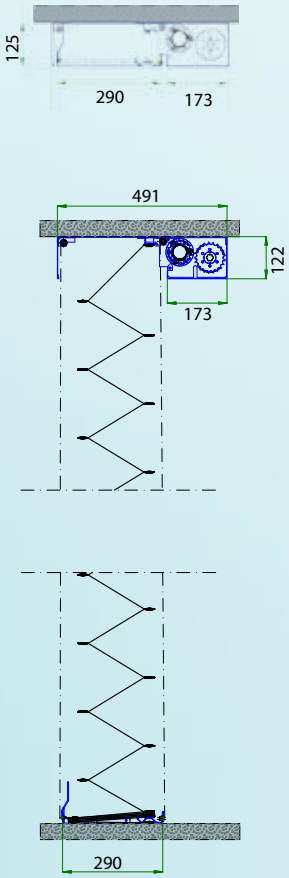
At least 2 drive units
and one more for each 10 m above 20 m perimeter



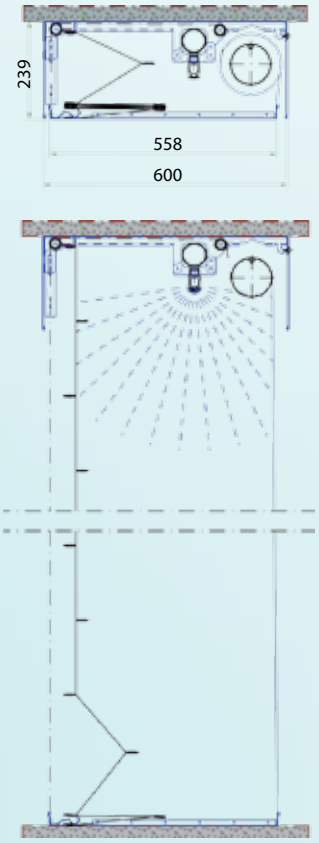
Range of runs of the fire protection closure



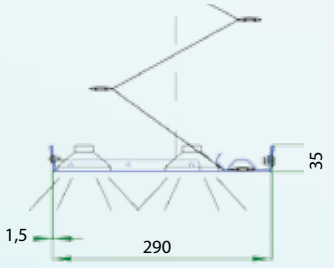
Casing S



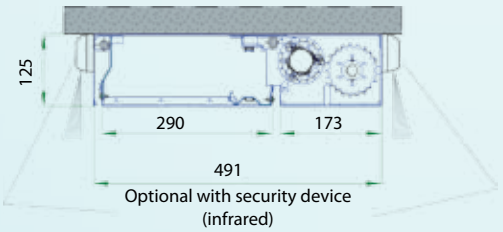
Casing S EI 120



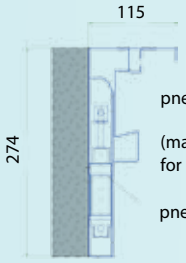
Bottom tray



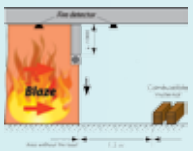
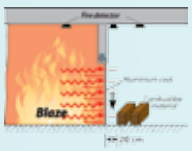
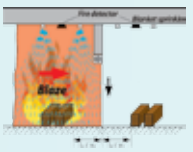
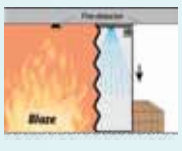
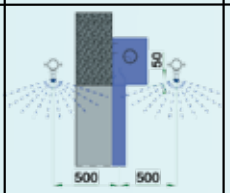
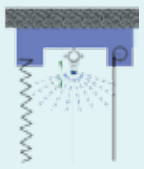
Optional with spots or lightening strip (if necessary the construction height has to be heightened)



Side guide for open polygones

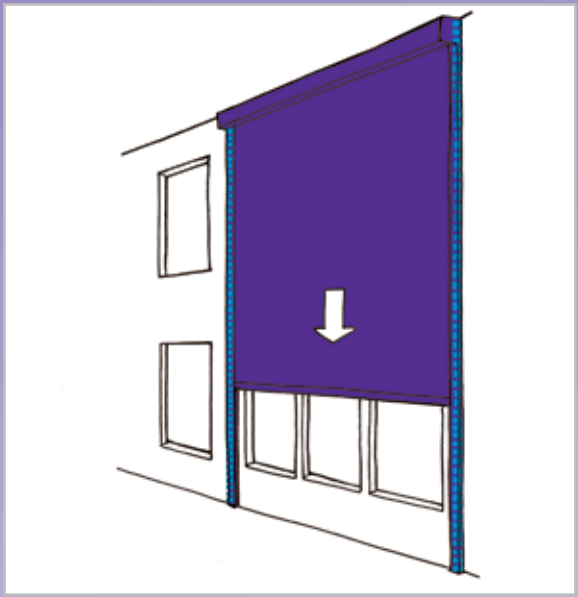


Protection targets

Protection targets	Integrity	Integrity with limitation of the heat transmission	Insulation with intensified sprinkler protection in case of fire	Insulation by water mist in the intermediate layer
				
Classification	E 120	EW 30	EI 90	EI 120
Fabric	Ecotex 1100-A2	Ecotex 1100-A2	Ecotex 1100-A2	Ecotex 1100-A2
Test Report	IBS 08062416 UB 3.3 / 10-018-1	IBS 08062415 UB 3.3 / 10-018-1	IBS 08062416	Currently tested
Water irrigation				

Fibershield-F

The textile fire protection closure for openings in façades, installation outside a building

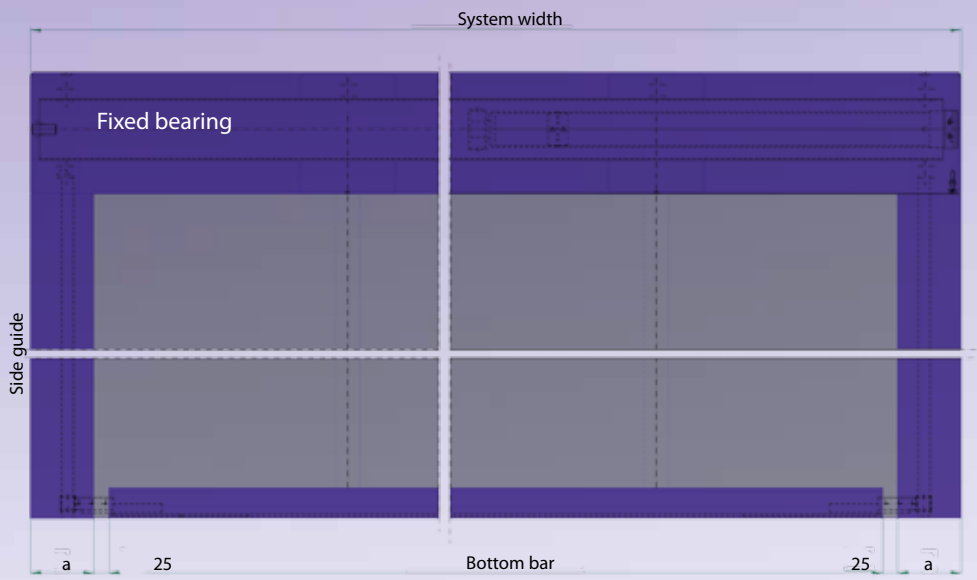


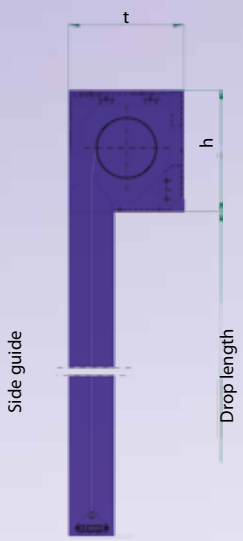
Outdoor weathering test with exterior application over 10 years

UB III / B-05-006-A1

Description of the Fibershield-F system

- special design for the application under climatic influence
- highest variability for installations to façades (non insulated façades, insulated façades, with combustible or non-combustible insulation)
- proven components for the application on the outside of a building, more than 15 years of experience
- temperature control to avoid the icing of the side guides
- safe drive units which guarantee a safe closing even in case of low temperatures
- Gravigen-effect – closing without auxiliary power supply, no fire-rated cables necessary





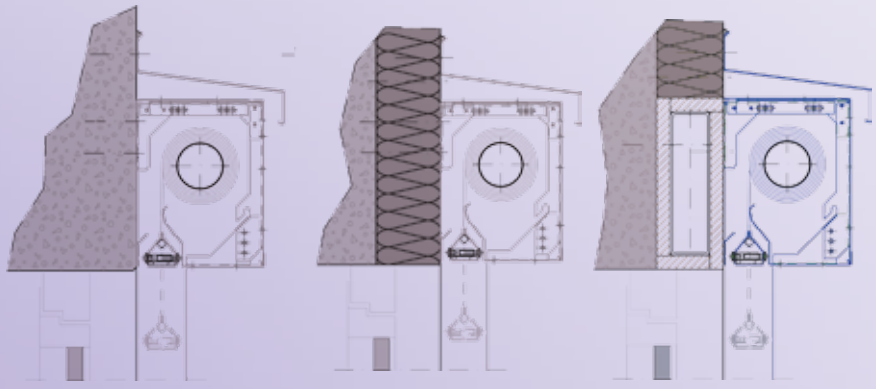
a = Dimension for the side guide

Fabric	System width	Drop length	t (mm)	h (mm)
Heliotex EW	< 5 m	≤ 2 m	190	250
Heliotex EW	< 5 m	≤ 6 m	235	290
Protex 1100 2S	< 5 m	< 3,5 m	190	200
Protex 1100 2S	< 5 m	> 3,5 m - ≤ 6 m	190	250
Protex 1100 2S	< 5 m	> 6 m - ≤ 7 m	235	290

Standard dimensions

Special construction are possible for higher drop lengths or bigger system widths.

Installation of the casings

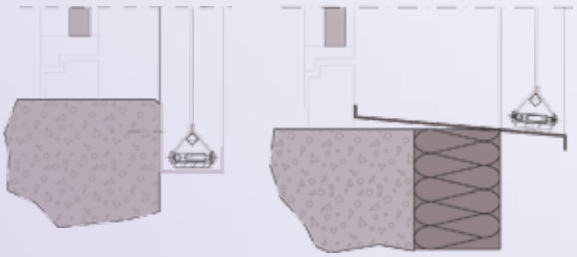


Without insulation

With combustible insulation

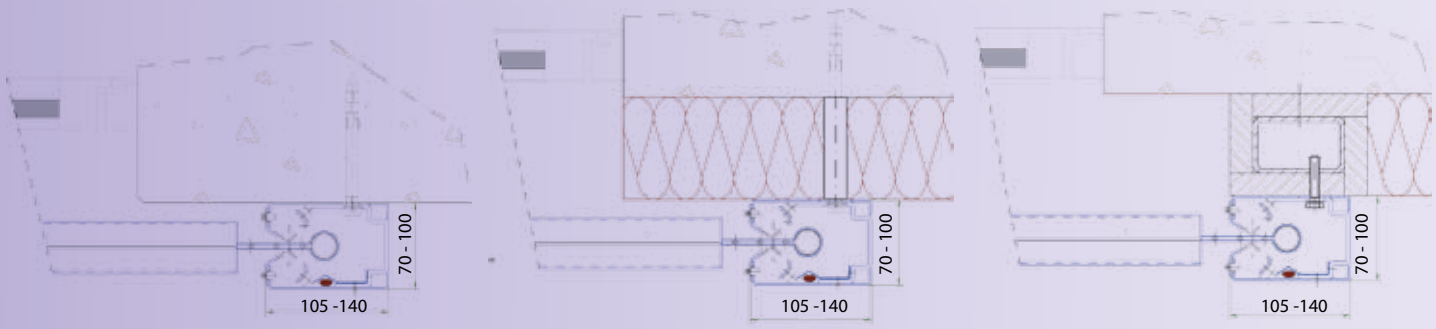
With non-combustible insulation

Bottom bars



(alternative solutions are possible in case of closing onto non-combustible materials)

Installation of the side guides

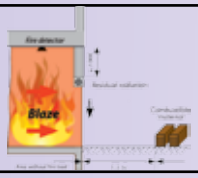


Without insulation

With non-combustible insulation

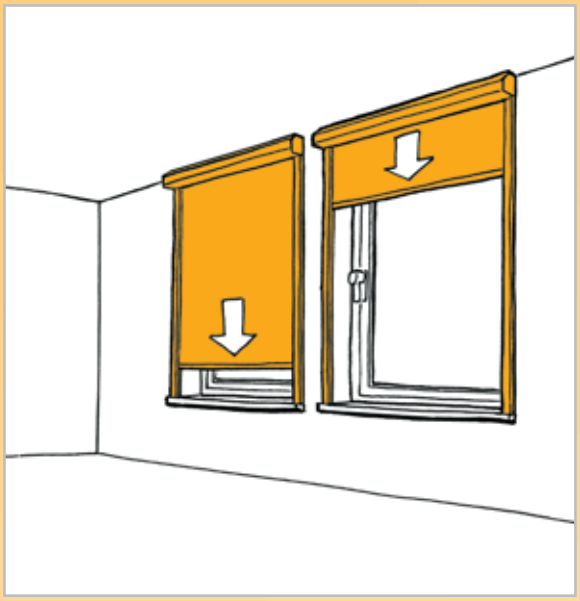
With combustible insulation

Protection targets

Protection targets	Integrity	Integrity with limitation of the heat transmission	Prevention of a transmission of flames from one level to another
			
Classification	E 120	EW 90	E 120
Fabric	Protex 1100-2S	Heliotex EW-90	Protex 1100-2S
Test reports	GU IV/97-73	UB III/B-08-012	B 15045

Fibershield-W

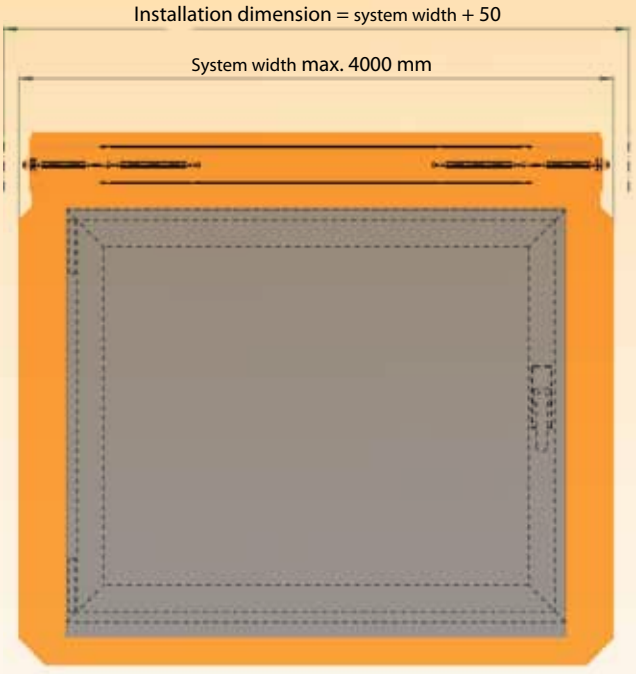
The textile fire protection closure for openings in façades, installation inside a building or for small openings

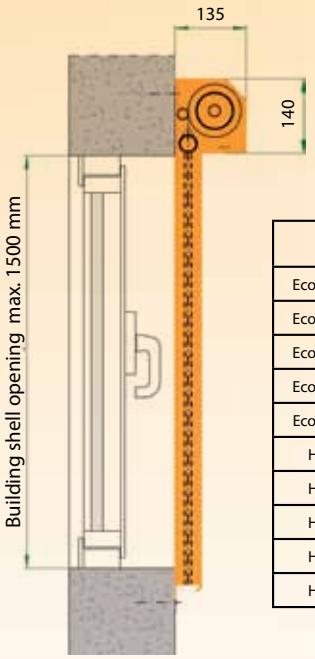


Description of the Fibershield-W system

Widths up to 4 m with smaller drop lengths, otherwise up to 1,5 m square (see table)

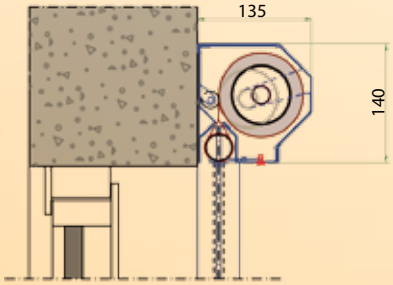
- textile fire protection closure for window openings
- cost saving solution by a manual re-opening, a motorized drive is possible
- standard operable windows can be used. Metal windows require the "Ecotex" fabric, wooden or plastic windows require the "Heliotex" fabric
- soft bottom bar to match the safety demands concerning industrial safety
- thermo mechanical release; optional release by fire detection elements
- by prevention of a flame flashover over the balustrade, the drop length is limited to max. 1 m
- standard drive by a hand wheel respectively by a hexagon nut, optional a crank handle may be used.



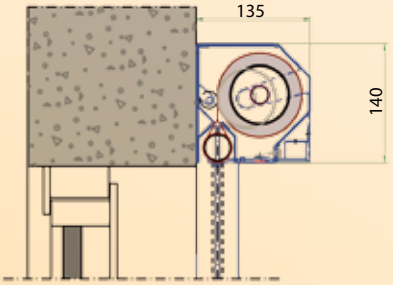


Fabric	System width	Drop length	t (mm)	h (mm)
Ecotex 1100 A2 / B1	< 0,5 m	< 0,5 m	135	140
Ecotex 1100 A2 / B1	< 1,5 m	< 2 m	135	140
Ecotex 1100 A2 / B1	< 1,8 m	< 1,8 m	135	140
Ecotex 1100 A2 / B1	< 2,3 m	< 1 m	135	140
Ecotex 1100 A2 / B1	< 4 m	< 1 m	135	140
Heliotex EW 90	< 0,5 m	< 0,5 m	135	140
Heliotex EW 90	< 1,5 m	< 1,4 m	135	140
Heliotex EW 90	< 1,8 m	< 1,4 m	135	140
Heliotex EW 90	< 2,3 m	< 1 m	135	140
Heliotex EW 90	< 4 m	< 1 m	135	140

Casing

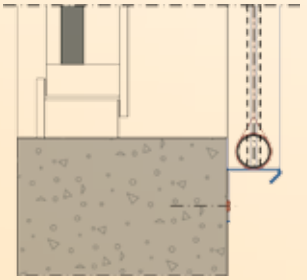


Thermomechanical
(Standard)

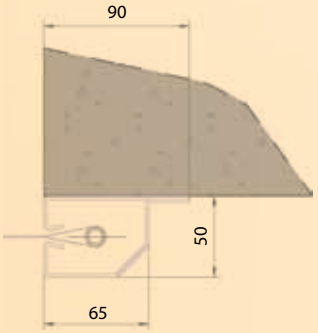


Electromechanical
(Special)

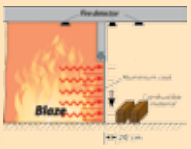
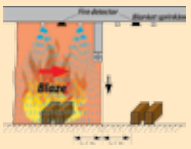
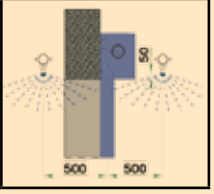
Bottom bar



Side guide



Protection targets

Protection targets	Integrity	Integrity with limitation of the heat transmission	Insulation with intensified sprinkler protection in case of fire
			
Classification	E 120	EW 90	EI 120
Fabric	Ecotex 1100-A2 Ecotex 1100-B1	Heliotex EW 90	Ecotex 1100-A2 Ecotex 1100-B1
Test report	UB III/B-06-016	UB III/B-08-012	UB III/B-08-016
Water irrigation			

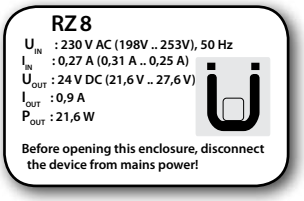
Approved hold open device

If Fibershield is used as a self closing fire protection closure, it has to be operated with an approved hold open device according to the **Directive for hold open devices** (October 1988). Which components need an approved hold open device?

The control units RZ type from Stöbich include **all required components** implicated by the approval

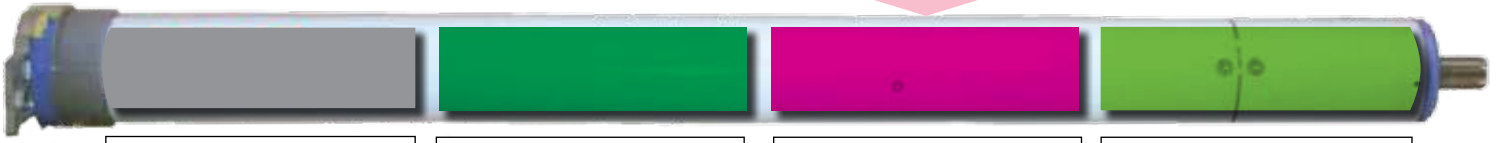
Release device + Power supply	Fire detection elements	Hold open device	Push button
		 (see figure below)	
RZ 7/BMZ-2/NT24 RZ 8	All in all 41 types from several manufacturers	All in all 117 types from several manufacturers	All types according to the "Directive for hold open devices"

The control units tested by VdS from Stöbich are **approved by the building authorities.**
RZ 8 - locking device Z-6.5-1872
RZ 7 - bus technique Z-6.5-2011 for human protection



Certificate of the hold open device (brake):

- cycle test of 10.000 cycles by MPA
- function tested interaction of the brake with the control unit by VdS
- production monitoring of the brake by VdS



Intelligent electronic displacement sensors	Patented Fail-Safe closing	Certified VdS monitored hold upen device	230 VAC motors with gear

Extract from the approval for textile fire protection closures Z-6.60-2127

The fire protection closure can be realized with a hold open unit appropriate for the closure which usability is approved by a general building authority approval.

If the manufacturer of the fire protection closure already installs parts of a hold open unit, these parts also have to comply with the regulations of the general building approval of the provided hold open unit.

History of the Hidden Champion

Simply Stöbich – global market leader in the sector of "invisible fire protection"

Since 1980 we at Stöbich Brandschutz GmbH actively work on the further development of fire protection sealing techniques. We are a medium-sized-family business from Goslar (Germany) and are very proud of having achieved the position of the global market leader in different segments of the fire protection technique.

During the last decades, we have invested an extensive amount of capital into the research and development. Numerous national and international awards for innovations as well as patents prove the high level of our developments and products "Made in Germany".

We have followed several development tendencies. Our primary vision was to create closure systems which are adjustable to multiple architectural shapes and situations. Therefore we offer modular systems which adapt to any protection concept.

Through the complete value added chain "weaving – coating – tailoring" of fabrics within the Stöbich Group of Companies, we have intensively analysed the use of new materials and have introduced successfully new product lines onto the market.

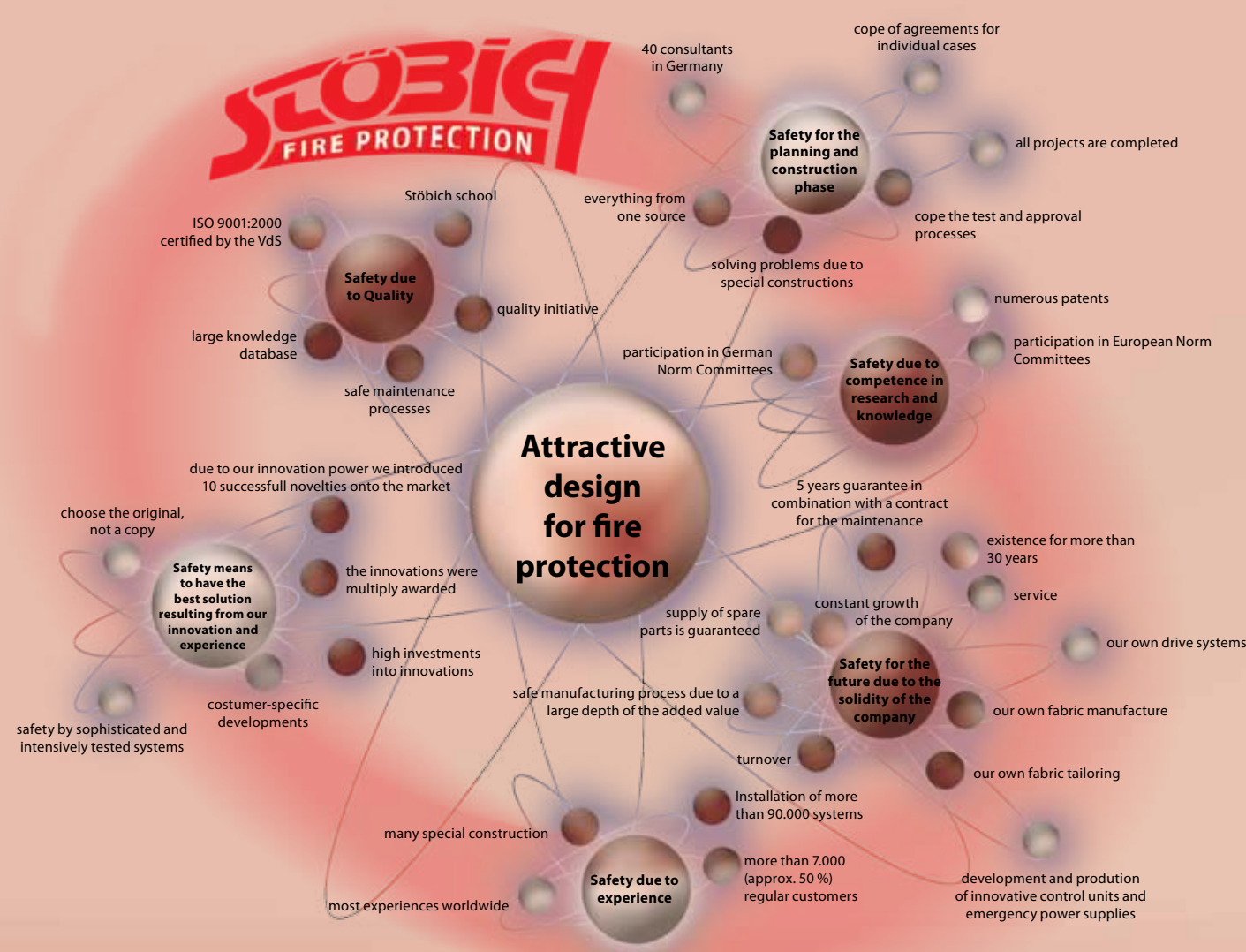
These are once more proof of our integral way of thinking. "From the practise, for the practise, for our customers all over the world".

This brochure gives you detailed information about protection concepts and solutions and finally which solution or product corresponds to your demands.

Selection of fabrics for fire protection closures

HELIOTEX EW 90

PROTEX 1100.1 A2



Awards for innovations

"Invisible fire protection!"

„Bauen im Bestand" from the Federal Ministry

MDR 1 award for the TV series „simply genious"

Certificate „mips" April 2005, Moskau

„Fire protection of the year 2011" by FeuerTRUTZ

German Award of Innovation „Architektur + Bauwesen"

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