

# Innovative Smoke and Fire protection solutions for **Medical facilities**



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**STÖBICH**  
FIRE PROTECTION

*Innovation for your Protection!*

## 1. Automatic textile smoke curtains for passages



How can you fulfil the demands of safe smoke extraction concepts in areas where smoke barriers close all the way down to the floor level – especially if there are requests for escape possibilities?



Smoke barrier Stripecoil with CE-label



Creation of smoke compartments in escape routes respectively in areas where the smoke barrier is closed down to the floor level and persons and hospital beds have to pass and to be passed through the system. The Stripecoil system is available in drop length up to 3,5 m with a twin coil system for unlimited width. The frequency of persons passing through the smoke barriers is at approx. 200/minute at a width of 3 m.



## 2. Smoke curtains with a curved course



How can you integrate a smoke curtain in an architecturally attractive surrounding, e.g. an entrance area, lobby and at the same time also provide a leakage of 0%?



Smoke curtain Smokeshield-C – the curved smoke curtain with a leakage of 0 %



The Smokeshield-C can be perfectly integrated in the architecture because of its different shapes like circle- or ellipse shape but also as open curved (serpentine) system. The smoke curtain is hidden in the suspended ceiling and provides a leakage of 0%



## 3. Automatic smoke barrier made of a fabric



How can you make sure that the smoke will not be spread out through large openings by the elevator shaft from one floor to the next or from one room to the next? Or how can be sealed smoke tight large openings in accordance with DIN 18095 or EN 1634-3?



Smoke protection closure Fiberseal Evolution-Sa or -Sm, Fiberseal-H, Fiberseal-S in accordance with DIN EN 1634-3.



Secure, large scale smoke closures even at high pressure loads (50 pa) and temperatures up to 200°C. Due to the small architectural design, highest demands are covered ("Invisible fire protection"). Optionally smoke protection closures can be designed as fire protection closures.



## 4. Creation of areas to guide smoke or as fire protection closure



How can the existing high demands on tightness of smoke barriers be fulfilled? Or how can a fire protection closure for a room in prestigious buildings be adjusted to the architecture? No limitation by side guides or pillars can be accepted?



Smoke guiding: Smokeshield-S Fire protection closure: Fibershield-S



Smoke protection closure Smokeshield-S offers a polygon shaped design. No disturbing side guides are necessary to achieve the requested tightness. Due to the flat design, the systems can be perfectly integrated into ceilings and are available in extremely large widths and lengths where the angles may vary from +/- 90° (30° - 150°).



## 5. Automatic textile fire protection closures for nurses' lounges / reception desks



Openings of nurses' lounges must be sealed off in case of danger so that in case of fire in nurse's lounge there will be no effect in the floor.



Fire protection closure Fibershield Room



These automatic systems are very small and can be well integrated in the architecture. Depending on fire protection classification it can be chosen between E- and EW-classification ("Invisible fire protection").



## 6. Automatic fire protection closures made of a fabric – to seal openings in walls



How is it possible to seal openings in an architecturally appealing environment with fire protection closures which need heat insulating characteristics with the classification EI 90 (T 90) while affecting the architecture as less as possible?



Fire protection closure Fibershield-P, Fibershield-E, Fibershield-I and Fibershield-W tested in accordance with DIN EN 1634-1.



These automatic systems are very small and can be well integrated in the architecture. Depending on fire protection classification it can be chosen among the protection targets "E 90 – 180", "EW 60 – 90" or "EI 30 – EI 60 without water, EI 120 with water". ("Invisible fire protection").

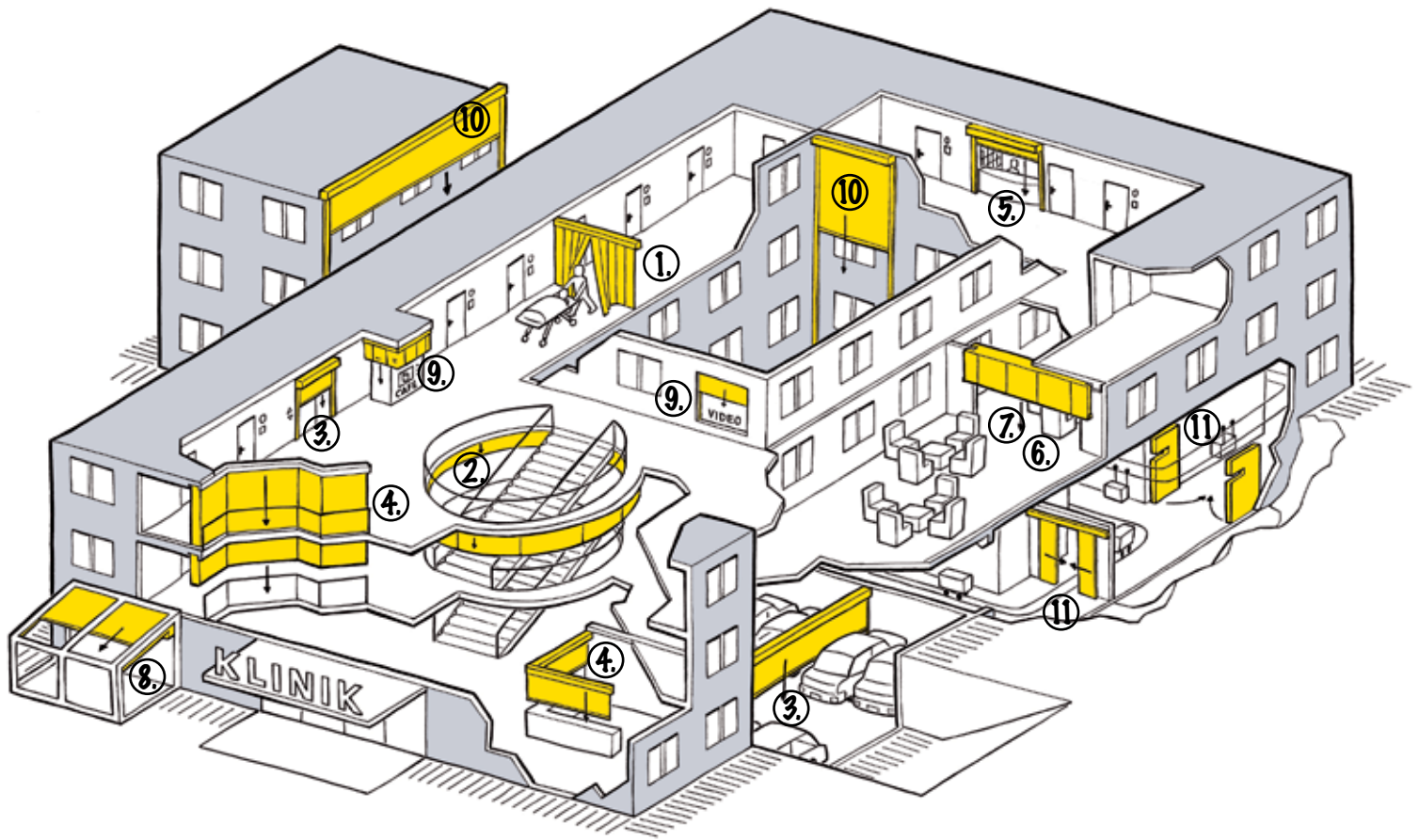




# Medical facilities – To make them sure with an attractive design

## Targets

- Design freedom is saved
- Utilization freedom is secured
- No restriction of the conveyor system
- Professional advice up to the execution
- Durability and warranty extended indefinitely by service contracts



For all these products as well as further devices, e.g. doors (all types), smoke heat exhausting systems, the company Protec24-Facility -Service - a member of the Stoebich-group- offers around the clock service organised from more than 20 locations in Germany



## 7. Fire protection closures with classification EI without water admission



How is it possible to seal openings in an architecturally appealing environment with fire curtains which need heat insulating characteristics with the classification EI 90 (T 90) while affecting the architecture as less as possible?



Fire protection closure "Hidden Shield" – the textile fire protection closure with the classification EI 30 / EI 90



This closure that meets highest architectural demands and open design concepts, is the first fire protection closure in the world without side guides. Due to the special and structural construction there are no further compensatory actions, such as sprinklers, necessary to reach the textile closures' protection target



## 8. Automatic textile fire- or smoke protection closures for openings in ceilings



In case of high architectural demands – how can you assure that openings in ceilings, which create fire compartments, can be sealed according to the protection target?



Textile horizontal fire protection closures Fibershield-H tested in accordance with DIN EN 1634-1.



These systems allow for a horizontal sealing of large openings in ceilings up to a width of 20 m and of great lengths. The drive systems assures a safe closing process. The drive unit makes ensure safe closing. The protection targets E 120 respectively EI 120 (insulation with sprinkler) can be achieved).



## 9. Fire protection hoods for electric devices as screens, snack vending machines



When there are screens, snack vending machines or other electrical equipments with a fire load in necessary corridors in the building, it has to be ensured that the fire does not affect the escape. How can the protection be ensured with restriction of the operating procedure?



Fire protection hood copy cap



Tested fire protection hoods, automatically unfold from picture frames or ceilings and enclose the object with is to be protected. The fire is smothered and the smoke is captured underneath the hood. These hoods can even protect high-quality equipment against forge water (e.g. by activated sprinklers).



## 10. Fire protection closures to close openings in façades – external application



If two fire compartments converge at a buildings inside corner or if the distance between the buildings is less than 3 – 5 meters or the roof of an extension is connected to a wall with openings, it has to be assured that the fire does not spread through the openings in the façade. Which opportunities are there without having to close the openings with masonry?



Fibershield-F



By installations outside of the building, but also on the inside, this protection can be guaranteed. With these automatic sealing systems standard windows without fireproof glazing can be used. These standard windows are operable and therefore do not restrict the room-comfort.



## 11. Conveyor system closure for uninterrupted and interrupted conveyor systems



Various goods are transported criss-cross through the building by various conveyor systems like roller-, belt-, chain carrying or circular conveyors. Thereby they often break through fire protection compartments.

How can theses openings be sealed in case of fire?



Conveyor system closures of different series Universal RGT, OS ECClos



The operation is always guaranteed as the cross section of the conveyor system is not affected. The systems – even for large cross sections – can be designed for over or under pressure operation. The conveyor system closures are applicable for dusty, lamellar, sliceable materials.



## 12. CANopen bus – cross linked hold open units with approval Z-6.5-1990 / 2011



Are cross linked control units (hold open units) with a certificate of usability for smoke doors, fire protection doors, conveyor systems closures, etc. available? They need to communicate with bus control units, have to protect complex units and need to be handled easily



Bus control unit RZ-7 BMZ-2 with or without RZ7 locking device



The bus control unit for Stöbich products as well as for all further brands of smoke and fire protection closures. Using the operator panel, all systems can be controlled and easily be extended. This increases the safety as well as the comfort and reduces the effort for installation.



# Example of use:

Automatic textile smoke curtain  
for passages.



Proof of the feasibility to  
walk through for persons,  
wheelchairs and hospital beds



## Approval of efficacy of smoke shielding

Result according  
to test report no. BCL – G 328/10:

Smoke at the fire side, visibility approx. 1 m,

At the averted fire side, visibility approx. 20 m



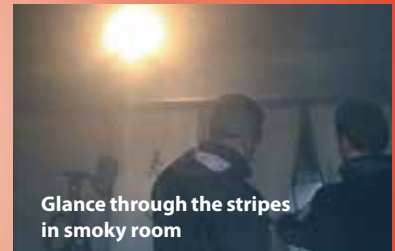
Testing laboratory



Measuring apparatus



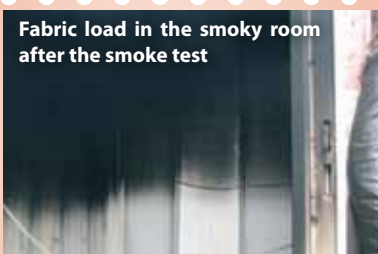
Testing team



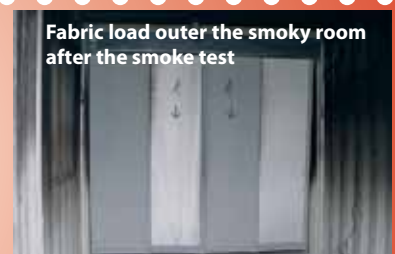
Glance through the stripes  
in smoky room



Glance into the test chamber  
during extreme smoke and  
temperature pollution



Fabric load in the smoky room  
after the smoke test



Fabric load outer the smoky room  
after the smoke test

# Invisible fire protection!



„Bauen im Bestand“  
from the Federal Ministry



MDR 1 award for the TV  
Series „simple genius“



Certificate "mips 2005"  
April 2005, Moskau



"Brandschutz des Jahres  
2011" von FeuerTRUTZ



German Award of Innovation  
"Architektur + Bauwesen"

## Extract of our references

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Anna Krankenhaus Herne, St. Olavs Hospital Trondheim Norwegen, Krankenhaus Siloah Hannover, Krankenhaus der Barmherzigen Brüder Regensburg, Landkreis Passau Krankenhaus Rotthalmünster, Krankenhaus Alb-Donau-Kreis Blaubeuren, Leopoldina Krankenhaus der Stadt Nürnberg, AKH Allgemeines Krankenhaus Offenburg, Krankenhaus Tuttlingen Villingen-Schwenningen, HBK - Heinrich-Braun-Krankenhaus Zwickau, Krankenhaus Sangerhausen, Evangelisches Krankenhaus Luckau, Krankenhaus Zittau, Krankenhaus Grimma, Paracelsus Krankenhaus Nauen, Johanniter Krankenhaus Stendal, Krankenhaus Spremberg Potsdam, Hufeland Krankenhaus Bad Langensalza, St. Josef Krankenhaus Zerbst, St. Antonius Krankenhaus Köln, Marien-Hospital Gelsenkirchen, St. Vincenz Krankenhaus Paderborn, St. Clemens Krankenhaus Oberhausen, St. Elisabeth Krankenhaus Gerolstein, Krankenhaus der Augustinerinnen Köln, Städtisches Krankenhaus Nettetal, St.-Germain-En-Laye Paris, Christie Hospital Manchester, South Tees Hospital Middlesborough Cleveland,

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