



Data centre

Security barriers
for server rooms





HELLO...



Diverse, innovative and customer-oriented

Kern Studer AG specialises in the development, design, manufacture and sale of mesh and sheet metal partitions as well as gate systems for residential and industrial buildings.

In Samstagern, Yverdon-les-Bains and Schwarzach (DE), we employ more than 80 people, and have in excess of 20 assembly teams on the road all over Switzerland and Germany for our customers. Many of our employees can look back on more than 20 years of experience and know exactly what our customers want.



Most of the products in our range are developed in-house and are optimally tailored to the needs of our customers. In addition to our own production, we also have various components produced externally, mainly by well-organised, locally based manufacturers. The aim is for each product component to be produced by the most suitable company; and preferably in Switzerland or Germany.

The result: Kern Studer AG partition walls are the fruition of a lot of great ideas with major added value. They impress with top quality, flexibility and low prices. Last but not least, people are the focus of our activities. We conduct and maintain an ethical corporate management with values as the basis of our economic and personal actions.

Kind regards
Urs Studer and Simon Kern



SOLID STEEL PLATE SECURITY
FLEXIBLE + FAST
ECONOMICAL SOLUTION
GRID PRODUCTION





Grid partitions for data centres

We have specialised in securing data centre cages for some years now. Our long-standing customers trust our high-quality products and especially appreciate our reliable and clean assembly work.

Our fitters are very well aware of how to conduct themselves in data centres and know what security requirements our customers place on us.

Kern Studer AG's modular product range is so diverse that we can meet all customer requirements without any difficulty whatsoever. Whether it concerns safety barriers filled in with mesh, metal sheeting or plexiglass, crawl space barriers, cold aisle partitions or door systems in any design.

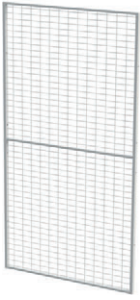




Security barriers

Access security in data centres



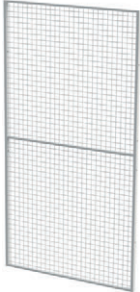


MultiSafe grid element

Our standard grid element is available with a mesh size of 50 x 30 mm. Powder-coated in RAL 9018, available from stock. Other RAL colours available on request. The grids are ideally suited for access control in server environments.

Specifications

Mesh width:	50 x 30 mm – approx. 75% free cross-section
Wire mesh:	3.0 mm vertical/2.5 mm horizontal
Tubular steel frame:	30 x 20 mm vertical/25 x 15 mm horizontal
Colour:	RAL 9018 papyrus white

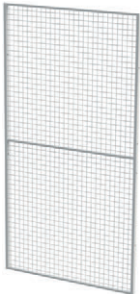


MultiSafe-F grid element

A reinforced version of our MultiSafe grid element with a mesh size of 25 x 25 mm. Suitable for applications with increased security requirements. Powder coated in RAL 9018 or RAL colour of your choice.

Specifications

Mesh width:	25 x 25 mm – approx. 70% free cross-section
Wire mesh:	3.0 mm vertical/2.5 mm horizontal
Tubular steel frame:	30 x 20 mm vertical/25 x 15 mm horizontal
Colour:	RAL 9018 papyrus white/RAL colour of choice



MultiSafe-V grid element

Mesh elements with a fine mesh tailored to your requirements. For example with a 20 x 20 mm grid mesh. Many other dimensions are possible by arrangement. With an all-round angular frame made of 3 mm steel, the elements are available in a powder-coated version in RAL 9018 or RAL colour of your choice.

Specifications

Mesh width:	according to your specifications
Wire frame:	according to mesh size
Steel angular frame:	30 x 30 mm, 3 mm thick
Colour:	RAL 9018 papyrus white/RAL colour of choice

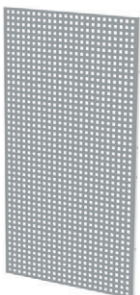


MultiGuard solid sheet steel element

Our solid sheet steel elements are used for projects that require privacy protection. The MultiGuard elements are made of galvanised sheet metal and have double bevelled edges on all sides. Available in powder-coated version RAL 9018 or RAL colour of your choice.

Specifications

Double bend:	30/10 mm
EVZ sheet steel:	1.25 mm
Colour:	RAL 9018 papyrus white/RAL colour of choice

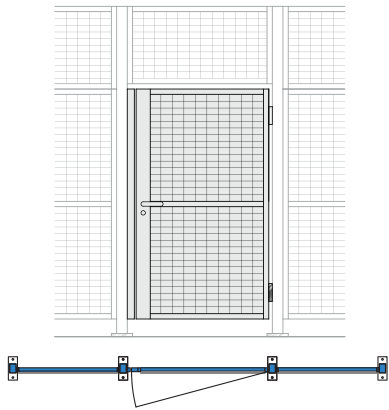


MultiGuard-L perforated sheet metal element

Perforated sheet metal elements with the perforation you desire according to the free cross-section required. All common perforations can be used. In powder-coated version RAL 9018 or RAL colour of your choice.

Specifications

Perforation:	Qg 10-14, approx. 51% free cross-section Qg 10-20, approx. 25% free cross-section Rv 5-8, approx. 35% free cross-section Various others on request
Sheet steel:	1.5 mm
Single bend:	50 mm
Colour:	RAL 9018 papyrus white/RAL colour of choice



Folding doors

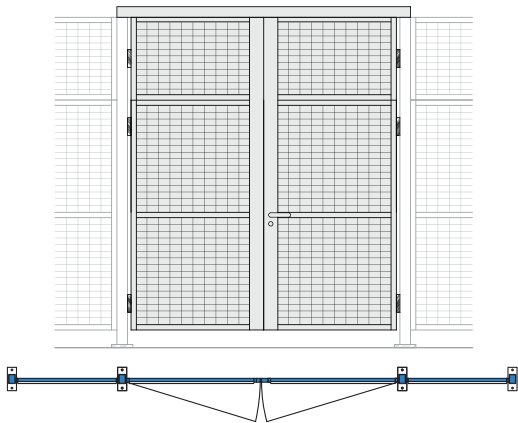
Door widths		Door heights
600 mm	1100 mm	1900 mm
700 mm	1200 mm	2200 mm
800 mm	1300 mm	2400 mm
900 mm	1400 mm	2650 mm
1000 mm	1500 mm	2950 mm

Lock: Mortice lock, panic lock, self-locking panic lock, motorised lock on request

E-door opener: with or without electric door opener
Standard, tamper-resistant up to 3750 N
Security, tamper-resistant up to 6500 N

Door contact: with or without door contact

Door closer: with or without door closer



Double folding doors

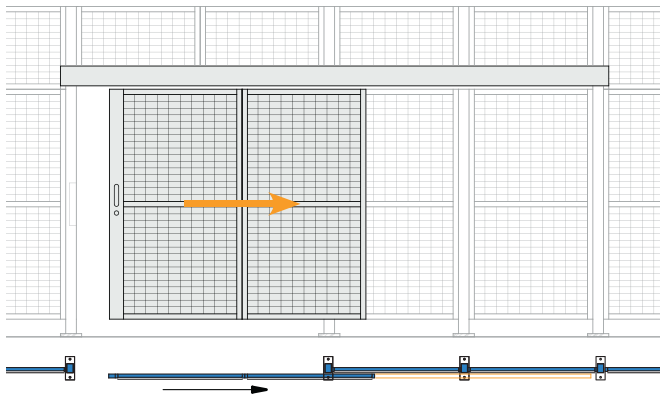
Door widths		Door heights	
1710 mm	2510 mm	1900 mm	2650 mm
1910 mm	2710 mm	2200 mm	2950 mm
2110 mm	2910 mm	2400 mm	
2310 mm	3110 mm		

Lock: Mortice lock, panic lock, self-locking panic lock, motorised lock on request

E-door opener: with or without electric door opener
Standard, tamper-resistant up to 3750 N
Security, tamper-resistant up to 6500 N

Door contact: with or without door contact

Door closer: with or without door closer



Sliding doors (with slide rail over the opening)

Door widths	Door heights	
600 – 1500 mm	1900 mm	2950 mm
1600 – 3000 mm	2200 mm	3200 mm
3100 – 4500 mm	2400 mm	3500 mm
	2650 mm	

Lock: Mortice lock

E-door opener: with or without electric door opener
Standard, tamper-resistant up to 8000 N

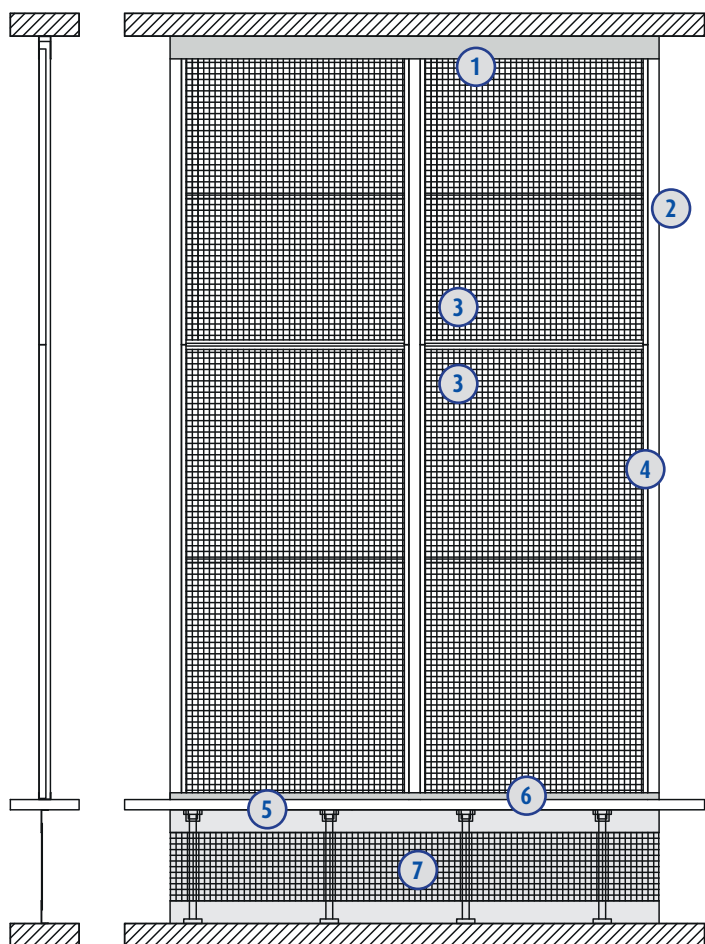
Door contact: with or without door contact

Technology

Fillings | Closures | Doors

Conception

Fixing



1 Ceiling clearance

Fastening with U-profiles for 0 mm ceiling clearance, completely closed

2 Supports

50 x 50 mm supports up to a room height of 4.5 m, 50 x 100 mm supports for room heights from 4.5 m, powder-coated in RAL colour of your choice

3 Base and top element

Grid, solid or perforated sheet steel element, can be selected from our range

4 Safety screw fittings

At the customer's request, with non-detachable safety screw connections

5 Installation on raised floor

Partition bolted permanently to the raised floor, the floor panels cannot be opened in the area of the partition wall

6 Floor clearance

Securing with U-profiles for 0 mm ground clearance, completely closed

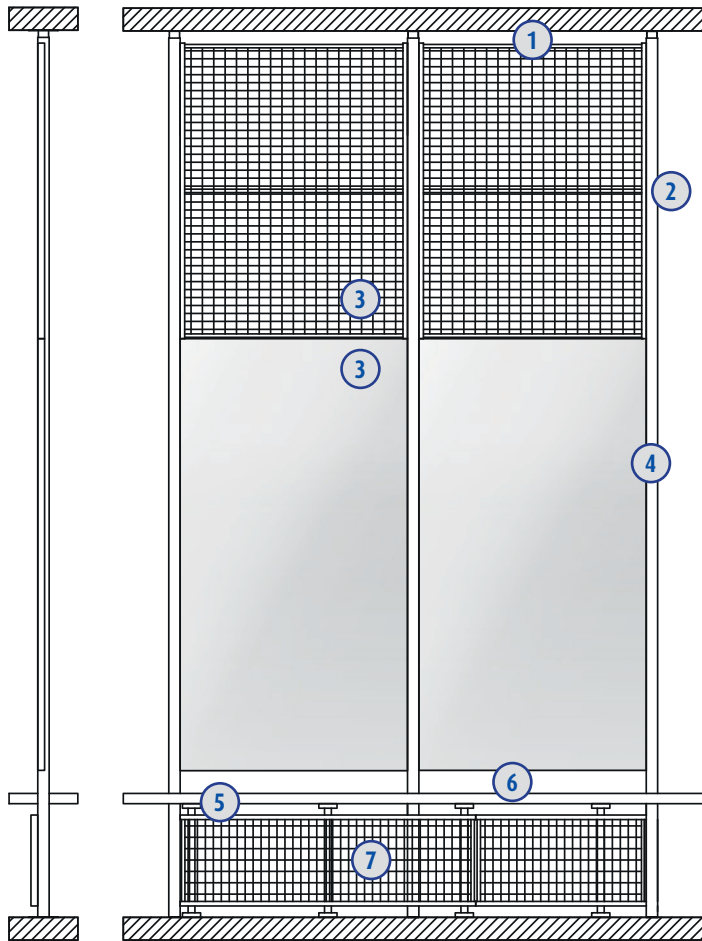
7 Underfloor grids

Mesh panels with a mesh size of 25 x 25 mm made of 3 mm wire. Riveted to the mounting bracket. Brackets bolted directly to the concrete floor and to the underside of the raised floor. Recesses in the bracket for support profiles of the raised floor. Completely closed.

DataSafe partition wall system

With our "DataSafe" system, we can completely separate two areas within a data hall. All rooms are closed in the best possible way both above and below the raised floor. The wall elements can be freely selected and combined. The partition wall and the underfloor grid are installed directly on the raised floor. In the area of the partition wall, the raised floor panels can no longer be opened. This system is used when security regarding access and pass-through is the top priority.

- Secures access
- Inexpensive and flexible
- Floor panels can still be opened



1 Ceiling clearance

Approx. 50 to 150 mm, depending on the top element

2 Supports

50 x 50 mm telescopic supports, sendzimir galvanised or powder-coated in RAL colour of your choice

3 Base and top element

MultiSafe grid element or MultiGuard solid steel sheet element, other elements possible by arrangement

4 Safety screw fittings

At the customer's request, with non-detachable safety screw connections

5 Installation through raised floor

Cut-out in the raised floor for telescopic supports, installation of the partition through the raised floor, floor panels can also be opened in the area of the partition

6 Floor clearance

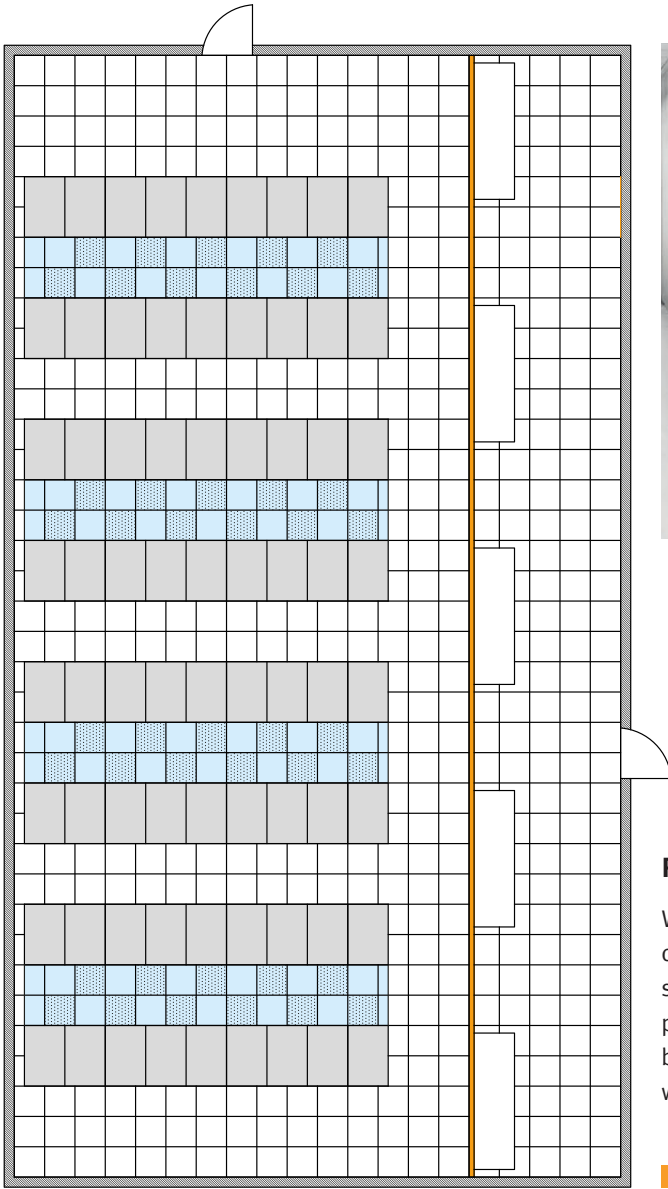
Securing with approx. 100 mm ground clearance

7 Underfloor grids

MultiSafe grid elements are installed horizontally in the sub-floor. Secured to telescopic supports or existing supports of the raised floor. The distance from the grid element to the concrete and raised floor is approx. 50 to 150 mm.

DataFlex partition wall system

Our "DataFlex" partition wall system is ideal for subdividing individual areas in the data centre. In order to ensure that unauthorised persons cannot gain access, additional MultiSafe grid elements are used in the sub-floor. The partition is installed through the raised floor. To do this, cut-outs are made in the raised floor in the area of the supports. The raised floor panels can still be opened.



Private suites

With this application, the data hall is completely separated from the maintenance corridor. In most cases, additional recesses for the cooling units (CRAH) are installed or a wall element with a suitable air outlet is selected. For this purpose, our partition wall system includes a variety of possible wall elements that can be combined together. We can tailor our system to your needs. Our «DataSafe» partition wall system is often used for this application.

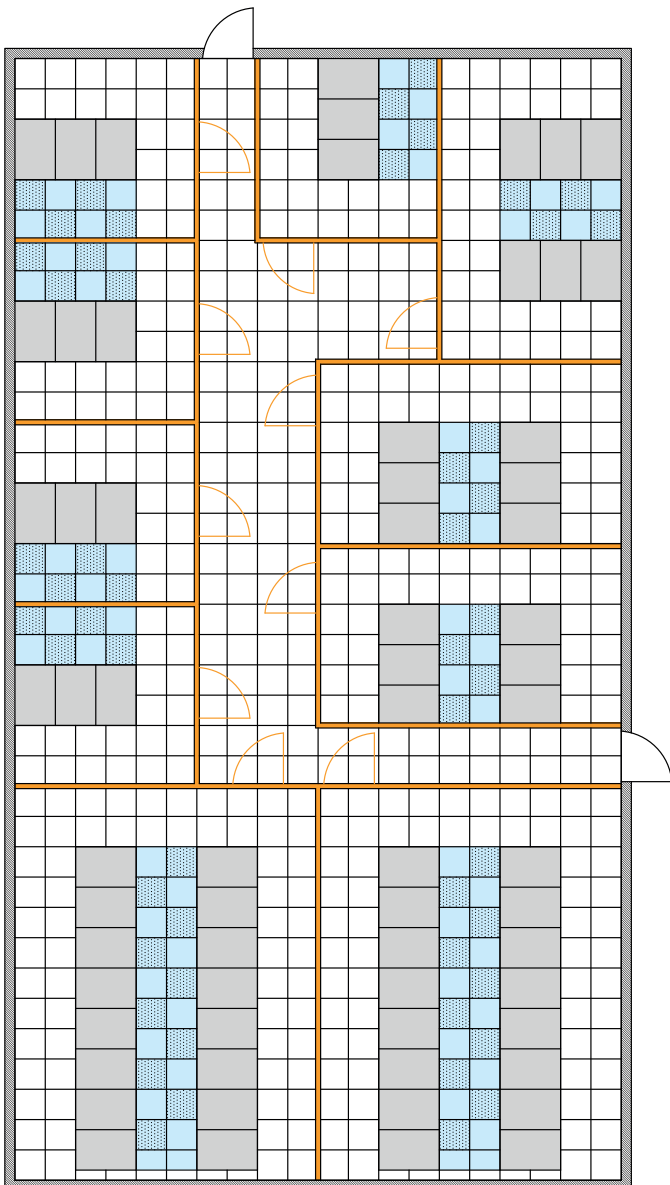
■ = server partitions
 ■ = server
 ■ = cold aisle

Application – Private Suites

Private data halls

Application – Private Cages

Private server rooms



Private Cages

Our partition wall systems are ideal for dividing a data hall into several areas. For example, “private cages” are created for individual customers to provide protection against unauthorised access. This gives the customer the option of monitoring access to the server environment itself. Our doors can be equipped with various locks, electric openers and other fittings to ensure the access control desired by the customer. Our «DataFlex» partition wall system is often used for this application.

■ = server partitions ■ = server ■ = cold aisle

Your competent partner for partition walls

Brochure overview:

