



Protective fences
and modular security
systems



	Index
4	Our services
7	Sicura Group
8	Techno system
14	Novatek system
21	Special infill panels Novatek - Ecotek
22	Ecotek system
24	Opening accessories
28	Locks and Microswitches accessories
30	Sheet metal enclosures
36	Soundproofing Cabins
38	Parapets system
40	Screen system
42	Inox system
46	Norms



We are a company that was founded in 1996 with the aim of the protecting people from the risk of an accident at work through safety systems that comply with European rules.

Initially aligned only on the machine tool market with specific. Protective functions, further, developed with its own product range on the market of the plant construction with system safety fences.

Customer care

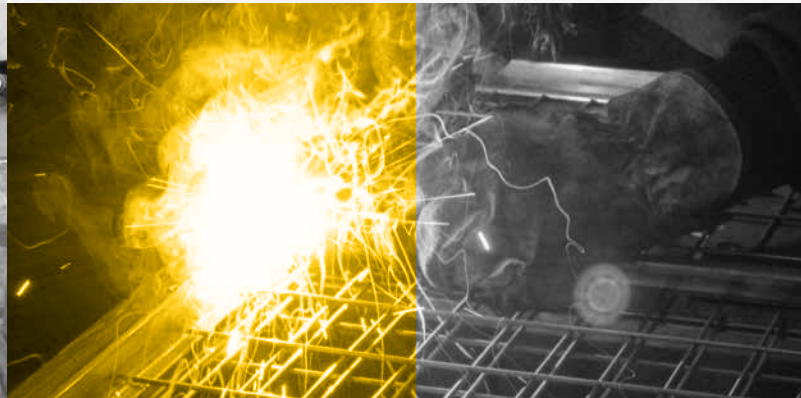
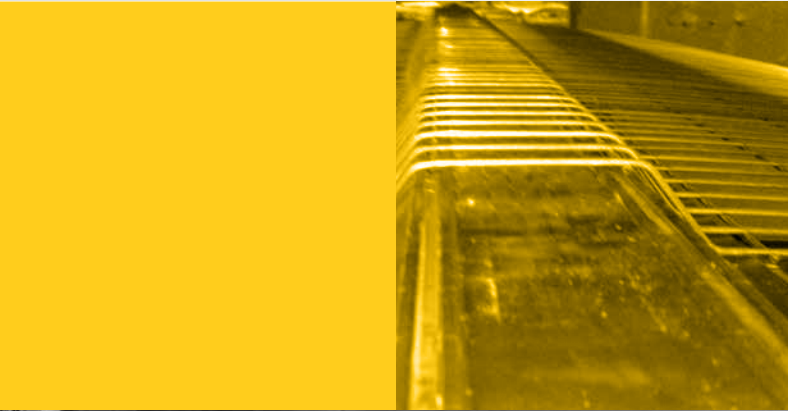
High quality products

Delivery speed

Constant innovation

has always been the distinguishing feature of PROTEC as a reference point in the Italian market.

www.protec-italy.net





Warehouse and fast shipping

Protec has a large selection of finished products in stock (yellow color RAL1003 and scratch resistant black) to make a fast delivery possible.



Packaging

The packaging is made of wood and this construction is strong enough to ensure safe transport. It can also be ordered here wood packaging that is treated according to the ISPM-15 standard.





The Group

Many skills for one vision

A true team is much more than the sum of its parts. Sicura offers truly complete solutions and systems thanks to an organisation in which each division is integrated with the others in terms of services, vision, customised approach, in the search for the best performance. 8 operating sites, over 280 employees, 4 specialised companies in a constant reciprocal relationship, to guarantee 360° answers in the delicate management of safety, the environment and quality.

From fire safety to machine safety to training, the group studies every specific need to protect people and the working environment, optimising the client's budget and resources. No standard solution, only tailor-made answers.

Thanks to specific divisions that are always interconnected, Sicura tackles each project with a precise method, organised and tested method and operates in the following operational segments:



System Techno

The Techno protective fence system, Ø3 mm wire, Ø4 mm wire was created to help all customers determine the hazardous areas to provide a solution with steel material that is cost effective and easy to install.

This product is made with self-supporting grid panels, with a mesh size that improves visibility to the machine that stands behind the fence.



Cheap

The costs are minimized because it is made as a self-supporting fence.



Modularity

All components are modular; so the same panels can be used both as fixed elements and with the help of a Kit, as a double or sliding door.



Visibility

The innovative system of the 32x67 (wirednetting) improves the vision of the machinery inside the restricted area.



Modification on place during installation

This system has the big advantage to be changed on place, with the use of a few Tools and it does not have to be repainted afterwards.



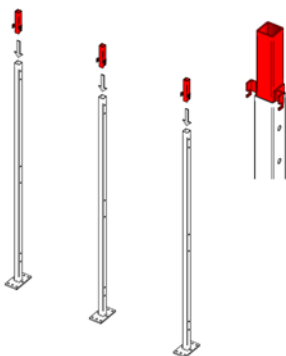


The QUICK TECHNO kit is an instrument designed exclusively to reduce assembly time, it is possible to install this 3-prolongation kit by a single installer. The system complies with the applicable regulations. A fundamental requirement for permanent guards is their fixing, which must be obtained with systems that require the use of tools for opening them and, as far as possible, they must not be able to remain in their place in the absence of their fixing means.

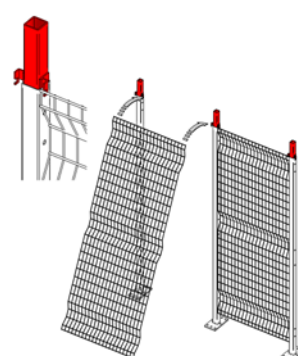
Therefore at the end of the operations, the kit must be necessarily removed.



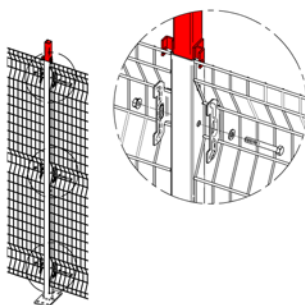
Step 1



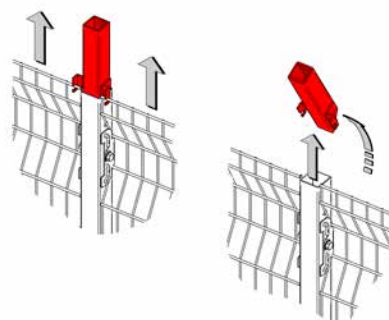
Step 2



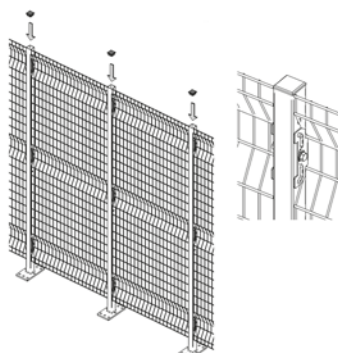
Step 3



Step 4

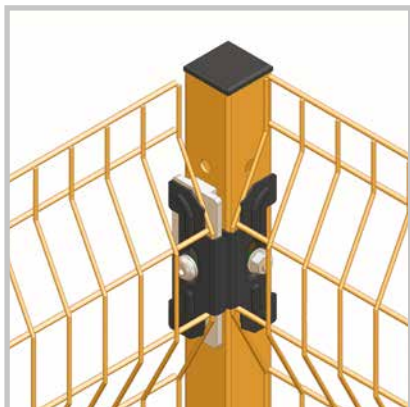


Step 5



Video

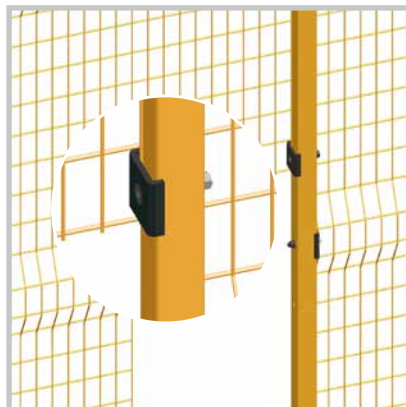


Convex corners kit

With this accessory you can realize
Internal angle of 90°.

Panel inclination kit

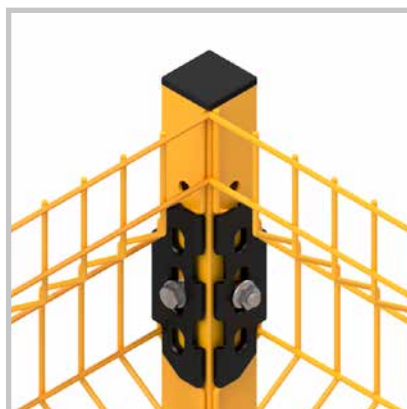
With this accessory you can make
angle connections with inclinations
of 30° to 180°.

Panel fixing kit 1 fold

This accessory allows you to be able
to fix the panel to the posts later,
after having changed or shortened it
horizontally.

Intermediate screw kit

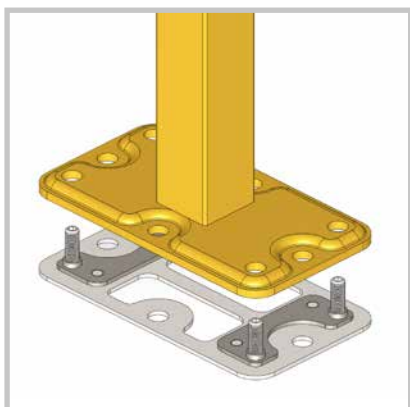
This kit contains 6 plates and
corresponding screws for H 2000 8
plates and corresponding screws for
H 2520.

Angle screw kit

This kit contains 6 plates and
corresponding screws for H 2000 8
plates and corresponding screws for
H 2520.

Terminal screw kit

This kit contains 3 plates and
corresponding screws for H 2000 4
plates and corresponding screws for
H 2520.

Leveling kit

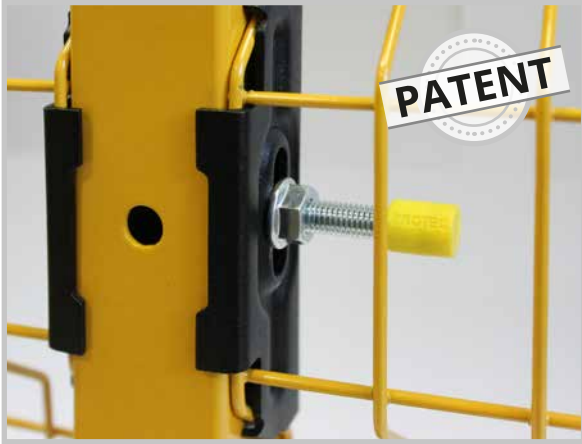
This kit allows the leveling of the post.
Ideal for setting the door posts.

Posts 40x40**Posts 50x50**

Unlosable screw set

The Machinery Directive requires that “fastening systems must remain attached to the fences or to the machine when removing the protections”.

The screws must not be missed unless the panel or panels need to be removed for normal maintenance and it is not possible to act on the access already provided (doors).



The standard EN ISO 14120 states: Movable protective equipment,

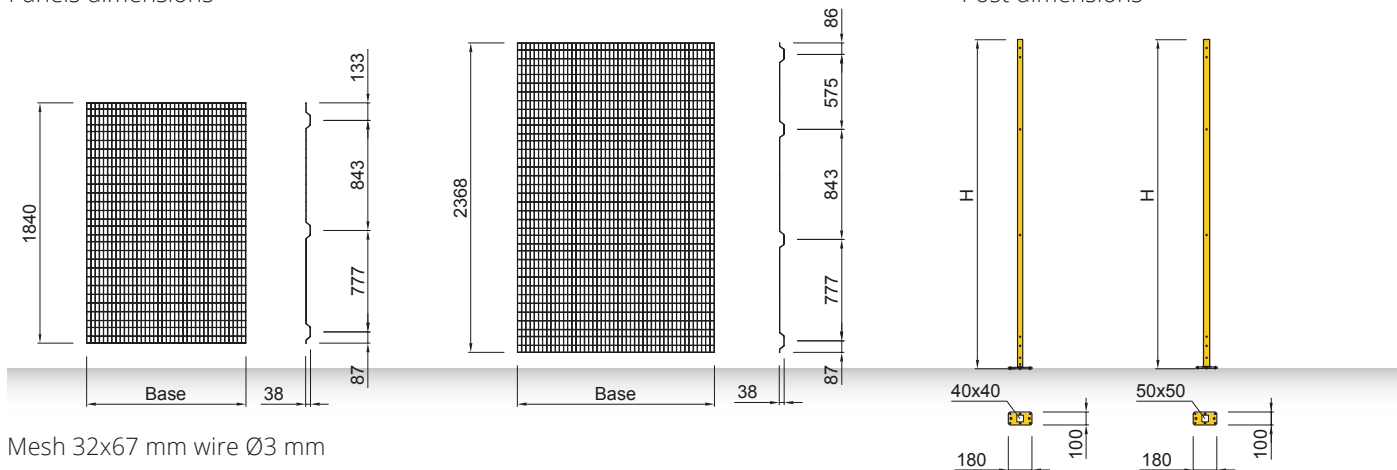
if access frequency is high (more than once a week) or if removal of the fixed guard may be difficult, a movable guard with lock must be provided.

In accordance to current regulations, the set of non-removable screws is easy to install and it is always provided.



System Techno wire Ø3

Panels dimensions



Mesh 32x67 mm wire Ø3 mm

Floor light 160 mm for panels - 100 mm for doors

Panels dimensions

	Item No	Item No	Base	Height	
	PNNT001	PNNT001N	259	1840	
	PNNT002	PNNT002N	419		
	PNNT003	PNNT003N	707		
	PNNT004	PNNT004N	1027		
	PNNT005	PNNT005N	1219		
	PNNT006	PNNT006N	1507		
	PNNT013	PNNT013N	2019		
		PNNT008	PNNT008N	259	2368
		PNNT009	PNNT009N	419	
		PNNT010	PNNT010N	707	
		PNNT011	PNNT011N	1027	
		PNNT012	PNNT012N	1219	
		PNNT007	PNNT007N	1507	
		Doors panels	-	PNNA 015	
-	PNNA 016		1000		
-	PNNA 017		1200		
-	PNNA 018		1500		
Doors panels	-	PNNA2501	700	2405	
	-	PNNA2502	1000		
	-	PNNA2503	1200		
	-	PNNA2504	1500		

Post dimensions

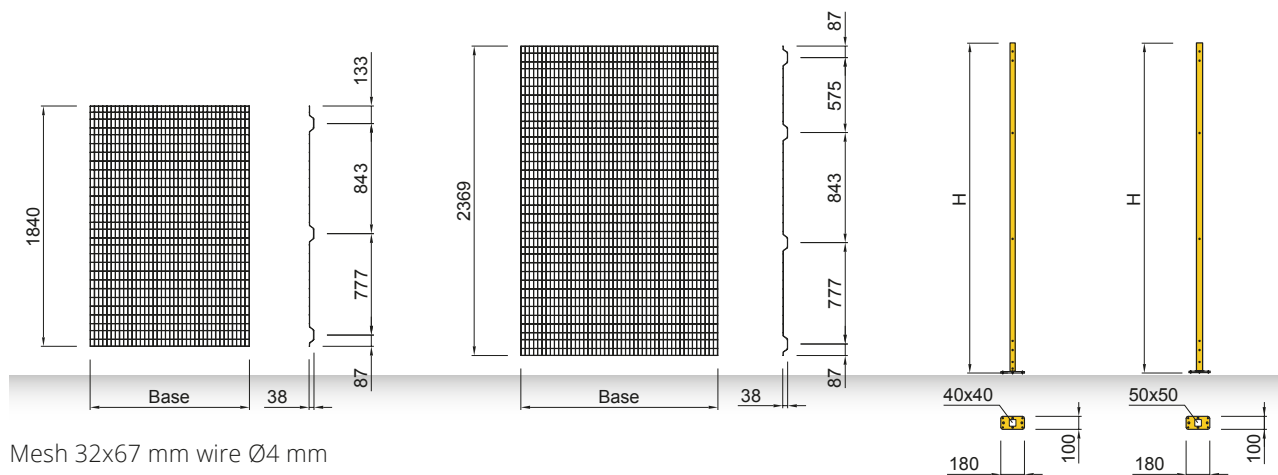
Item No	Height (H)	Cross Section	Plate	Color
MT113 (intermediate)	2000	40x40	100x180	RAL 1003
MATEC110 (angular)	2000	40x40	100x180	
MT2500 (intermediate)	2520	40x40	100x180	
MATEC2500 (angular)	2520	40x40	100x180	
MT300 (intermediate)	2000	50x50	100x180	RAL 1003
MATEC301 (angular)	2000	50x50	100x180	
MT350 (intermediate)	2520	50x50	100x180	
MATEC351 (angular)	2520	50x50	100x180	
KRMT001	Kit leveling for posts 40x40 - 50x50 Level plate dim. 100x180 sp. 25/10			

Stock colors for
panels and posts



RAL

System Techno wire Ø4



Mesh 32x67 mm wire Ø4 mm
 Floor light 160 mm for panels - 100 mm for doors

System
Techno

Panels dimensions

	Item No RAL 1003	Item No RAL 9005 anti scratch	Base	Height
Panels	PNNT116	PNNT116N	260	1840
	PNNT117	PNNT117N	420	
	PNNT118	PNNT118N	708	
	PNNT110	PNNT110N	1028	
	PNNT115	PNNT115N	1220	
	PNNT120	PNNT120N	1508	
	PNNT125	PNNT125N	2020	
	PNNT130	PNNT130N	2500	
Doors	PNNT121	PNNT121N	260	2369
	PNNT122	PNNT122N	420	
	PNNT123	PNNT123N	708	
	PNNT204	PNNT204N	1028	
	PNNT205	PNNT205N	1220	
	PNNT206	PNNT206N	1508	
	Doors panels	-	PNNA105	
-		PNNA110	1000	
-		PNNA115	1200	
-		PNNA120	1500	
Doors panels	-	PNNA155	700	2405
	-	PNNA160	1000	
	-	PNNA165	1200	
	-	PNNA170	1500	

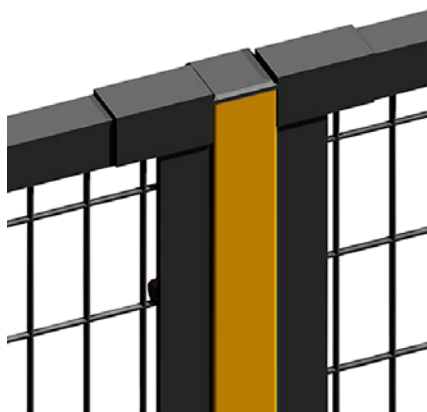
Post dimensions

Item No	Height (H)	Cross Section	Plate	Color
MT113 (intermediate)	2000	40x40	100x180	
MATEC110 (angular)	2000	40x40	100x180	
MT2500 (intermediate)	2520	40x40	100x180	
MATEC2500 (angular)	2520	40x40	100x180	
MT300 (intermediate)	2000	50x50	100x180	
MATEC301 (angular)	2000	50x50	100x180	
MT350 (intermediate)	2520	50x50	100x180	
MATEC351 (angular)	2520	50x50	100x180	
KRMT001	Kit leveling for posts 40x40 - 50x50 Level plate dim. 100x180 sp. 25/10			

System Novatek

The Novatek system is a specific solution made of steel at a low cost, aesthetically beautiful and easy to install with optimum stability; Ideal for all operations in dangerous areas that need to be isolated. The visibility of the closed off zone is the strong point of this product; the cooperation between the grid mesh and black color significantly improves the visibility of the hazardous area.

Scratch resistance is guaranteed by a special black color.



Modularity

Each component has been designed to be modular. The same panels can be found both as solid elements, as kits and as a hinged door or sliding door their use.

Visibility

The innovative system of 32x67 Ø3 wire combined with the black color of the panel improves the visibility of the machines inside the separate zone.

Strong

The Novatek panel has a welded grid behind the profile, it gives more elegance and stability.



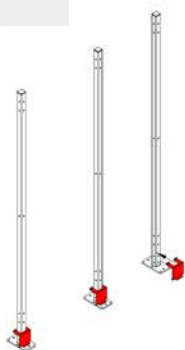


The QUICK NOVATEK kit is a tool designed to save time this kit consisting of 3 brackets, allows installation even from a single worker. The system complies with the applicable regulations. A basic requirement for fixed guards is their attachment, which must be maintained with systems which require the use of tools for opening and as much as possible they must not be able to remain in place without their fasteners.

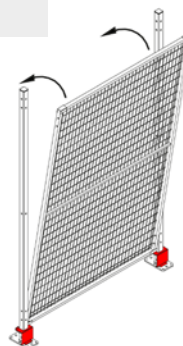
At the end of the construction operations, the kit must be removed.



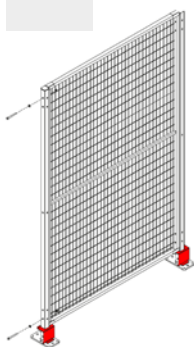
Step **1**



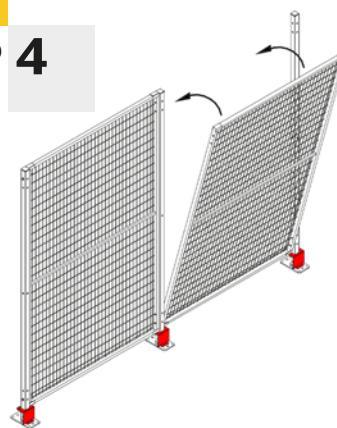
Step **2**



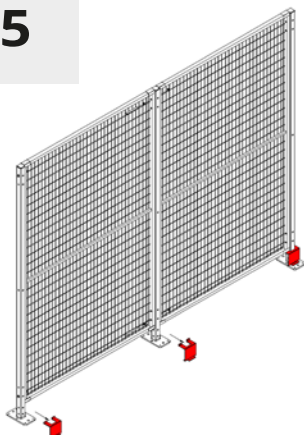
Step **3**



Step **4**



Step **5**



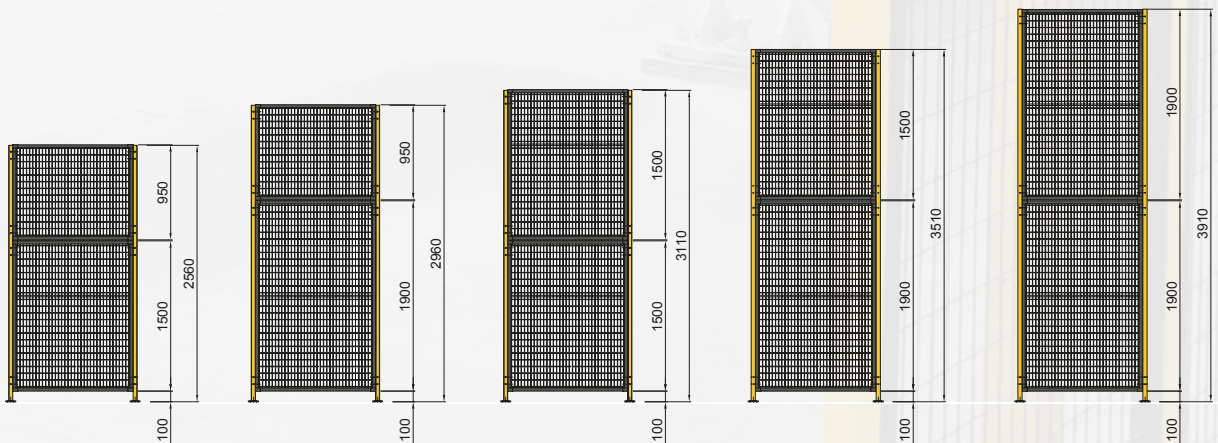
Video





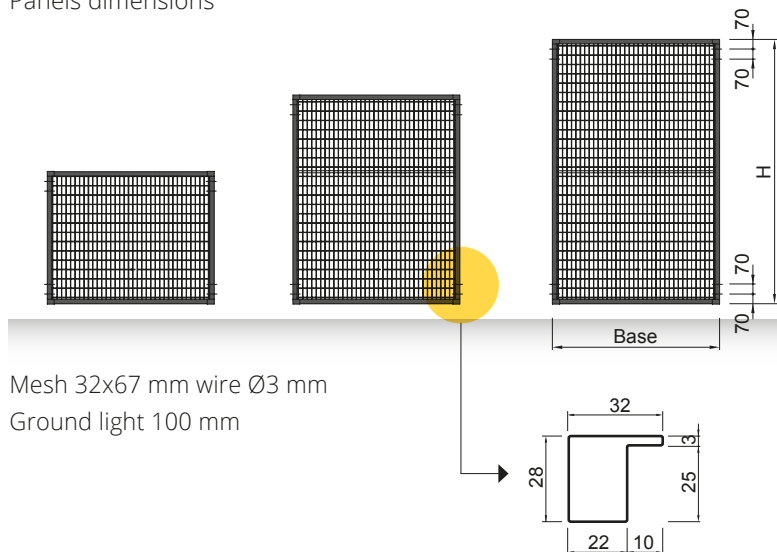
Modularity in height

The NOVATEK and ECOTEK systems combined with suitable posts, allow the construction of perimeter protections with high heights, preventing the operator from accessing the danger zone from above and any leaking of the processed material.

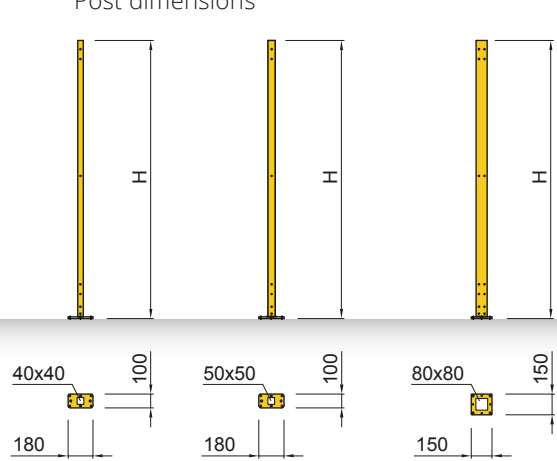


System Novatek

Panels dimensions



Post dimensions



Panels dimensions

Item No	Base	Height	Color
PNNA001	250	950	
PNNA002	400		
PNNA003	700		
PNNA004	1000		
PNNA005	1200		
PNNA006	1500		
PNNA030	250	1300	
PNNA031	400		
PNNA032	700		
PNNA033	1000		
PNNA034	1200		
PNNA035	1500		
PNNA007	250	1500	
PNNA008	400		
PNNA009	700		
PNNA010	1000		
PNNA011	1200		
PNNA012	1500		
PNNA013	250	1900	
PNNA014	400		
PNNA015	700		
PNNA016	1000		
PNNA017	1200		
PNNA018	1500		

Post dimensions

Item No	Height (H)	Cross Section	Plate	Color
MT111	1050	40x40	100x180	
MT114	1400	40x40	100x180	
MT112	1600	40x40	100x180	
MT113	2000	40x40	100x180	
MT115	2560	40x40	100x180	
KRMT001	Kit leveling for posts 40x40 - 50x50 Level plate dim. 100x180 sp. 25/10			
MT704	2000	50x50	100x180	
MT705	2560	50x50	100x180	
MT706	2960	50x50	100x180	
MT707	3110	50x50	100x180	
MT708	3510	50x50	100x180	
KRMT001	Kit leveling for posts 40x40 - 50x50 Level plate dim. 100x180 sp. 25/10			
MT211	1050	80x80	150x150	
MT214	1400	80x80	150x150	
MT212	1600	80x80	150x150	
MT213	2000	80x80	150x150	
MT215	2560	80x80	150x150	
MT216	2960	80x80	150x150	
MT217	3110	80x80	150x150	
MT218	3510	80x80	150x150	
MT219	3910	80x80	150x150	
KA201ZN KF100	Level plate dim. 150x150 sp. 30/10 Grains M8x25			

Stock colors for panels and posts



Post

The post is a basic element to ensure high stability, our posts are all equipped with a welded plate.

The installation of our posts is a lot faster than the traditional systems. The position of the holes allows the attachment of the post without moving it from the desired position.



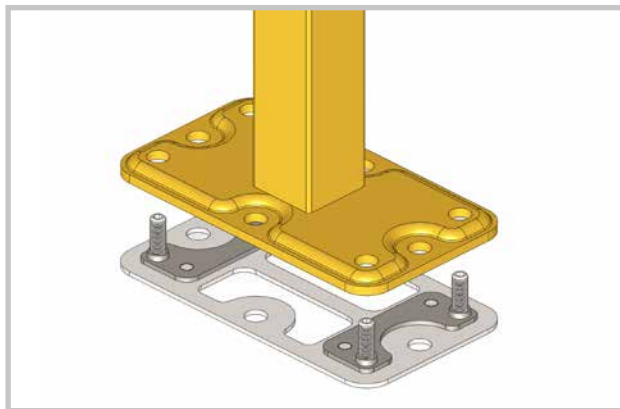
Post 40x40



Post 50x50



Post 80x80



Leveling kit

Height-adjustable post



This post allows, under unfavorable floor conditions with large inclinations, an easy regulation. Available in 40x40 and 50x50 section.

Intermediate Post



It is ideal for long stretches and allows to place this foot in an intermediate place of a standard post, ensuring anyway good impact resistance and economic savings.

System **Novatek-Ecotek**



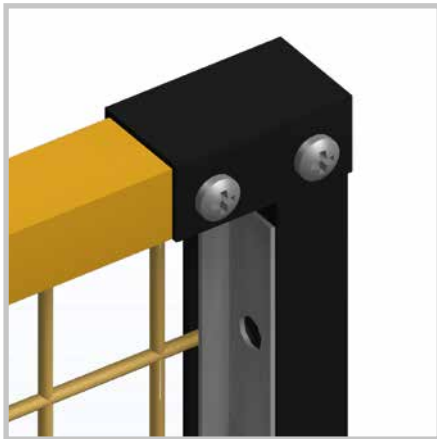
Unlosable screw set

The Machinery Directive requires that “fastening systems must remain attached to the guards or to the machine when removing the guards”. The screws must not be missed unless the panel or panels need to be removed for normal maintenance and it is not possible to act on the access already provided (eg doors).

The UNI EN 14120 says: Mobile protections - when the frequency of access is high (more than once a week), or if the solid safety fence is removed It may be difficult to provide a movable guard with a latch.

In compliance with current regulations, the captive screw kit is easy to install and **will be provided on request**.

Panel cut set



✓ Novatek ✗ Ecotek

With Novatek panel cut set The framed panels can be modified and adapted on site no need to weld no need to paint them again.

Special panel fastening tool kit



✓ Novatek ✓ Ecotek

This kit allows the panels to be fixed to positions of posts that are not yet drilled.

Panel inclination kit



✓ Novatek ✓ Ecotek

With this kit, you can get inclinations from 30 ° to 180 °.

Panels with logo



✓ Novatek ✗ Ecotek

Panels can be prepared on request with custom logo, ideal for those who want to make company logo visible

Extension kit



✓ Novatek ✓ Ecotek

With the help of a screw connection you can easily reach the extension of a panel from 30 to 120 mm.

Panel connection kit

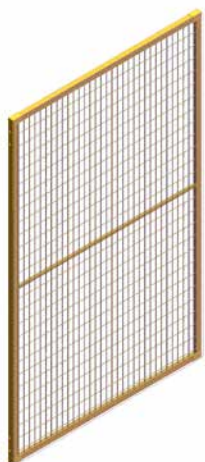


✓ Novatek ✗ Ecotek

With this kit can be connected two panels to realize intermediate lengths of panels. Ideal for special sliding doors with floor guide or to make longer standard panels.

Special finishings **Novatek - Ecotek**

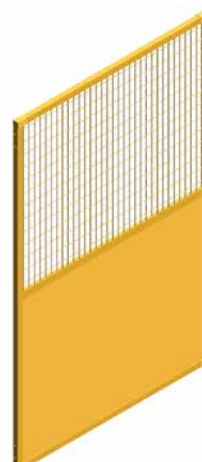
Finishing has become more and more requested, so we want to introduce a wide range of possibilities.



Novatek Ecotek



Novatek Ecotek



Novatek Ecotek

Grid

Grid panel with smaller mesh size that allows to reduce the safety distance of the danger zone.

TEC grid with 15x105 Ø3 mesh

RT grid with 11x60 Ø3 mesh

Grid + PVC or polycarbonate

32x67 mesh panel with front finishing made of PVC or polycarbonate.

Application that prevents from the outcoming of the lubricating fluid and shaving; ideal too to reduce the safety distance.

Grid + metal sheet

32x67 mesh grid on the upper part. Full metal thick 15/10 on the lower part.

Application that prevents the outflow of fluids and machine shaving.



Novatek Ecotek



Novatek Ecotek



Novatek Ecotek

Metal sheet

Full sheet metal, 15/10 thickness for Novatek version. 10/10 thickness full sheet metal for the Ecotek version.

Thick panel ideal application for welding islands, because it does not allow lightning - shedding. It can also be used to prevent outcoming of lubricating fluid and machine shaving.

Polycarbonate + sheet metal

4 mm thick polycarbonate panel. Full sheet thickness 15/10 lower part.

Ideal application for delimiting the big machine tools. Polycarbonate (shockproof) fixed with special glass stops, enables the vision of the island from the side of the operator and protects at the same time from the outcoming of lubricating fluid and machine shaving.

Polycarbonate

Polycarbonate thickness 4 mm.

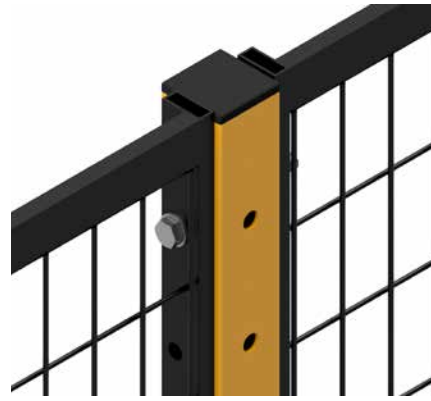
Ideal application around the isolated zone completely visible with polycarbonate (shockproof) Supplied with special glass stops.

System Ecotek

The Ecotek system was created with the special purpose to deliver a framed panel at low cost.

The structure of this panel comes with a profile 10x25, that made it light and at the same time stable.

Visibility is a strength point of this product; the duo grid and black color, improves quite much the visibility of the danger zone. Scratch resistance is guaranteed by a special powder paint.



Cheap

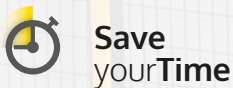
The costs are compared to the same NOVATEK system, cheaper because it is produced with a lighter tube system 10x25.

Modularity

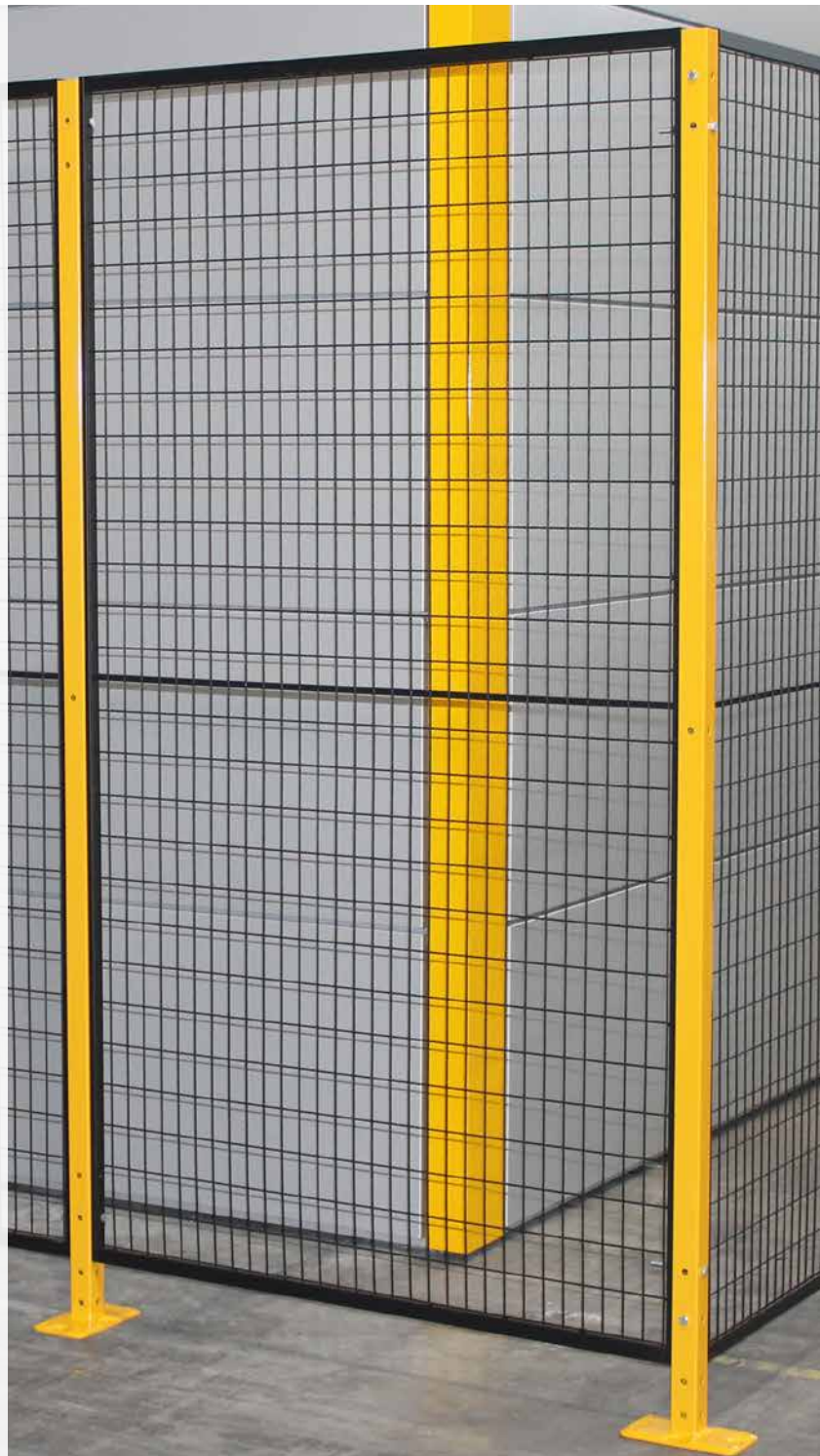
Each component has been designed to be modular. In fact, all PROTEC modular systems are useful the same grid. The doors are created with the same Novatek series.

Visibility

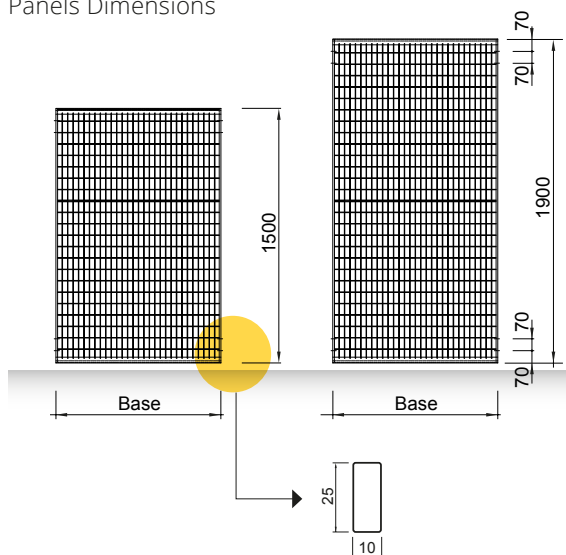
The innovative system of the 32x67 mesh, wire Ø3 combined with the black color of the panel improves the visibility of the machines in the restricted zone.



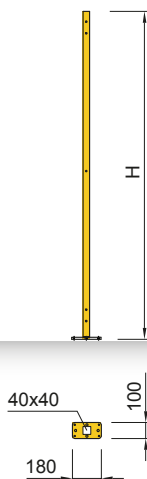
Video



Panels Dimensions

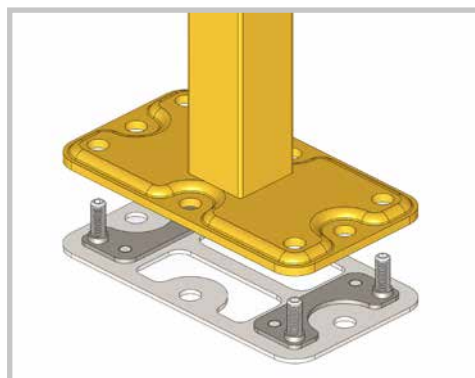


Post Dimensions



Panels dimensions

	Item No	Base	Height	Color
	PNNE010	250	1500	RAL 9005 Anti scratch
	PNNE011	410		
	PNNE012	700		
	PNNE013	1020		
	PNNE014	1210		
	PNNE015	1500		
	PNNE020	250	1900	
	PNNE021	410		
	PNNE022	700		
	PNNE023	1020		
PNNE024	1210			
PNNE025	1500			
Doors panels	PNNA009	700	1500	RAL 9005 Anti scratch
	PNNA010	1000		
	PNNA011	1200		
	PNNA012	1500		
Doors panels	PNNA015	700	1900	
	PNNA016	1000		
	PNNA017	1200		
	PNNA018	1500		



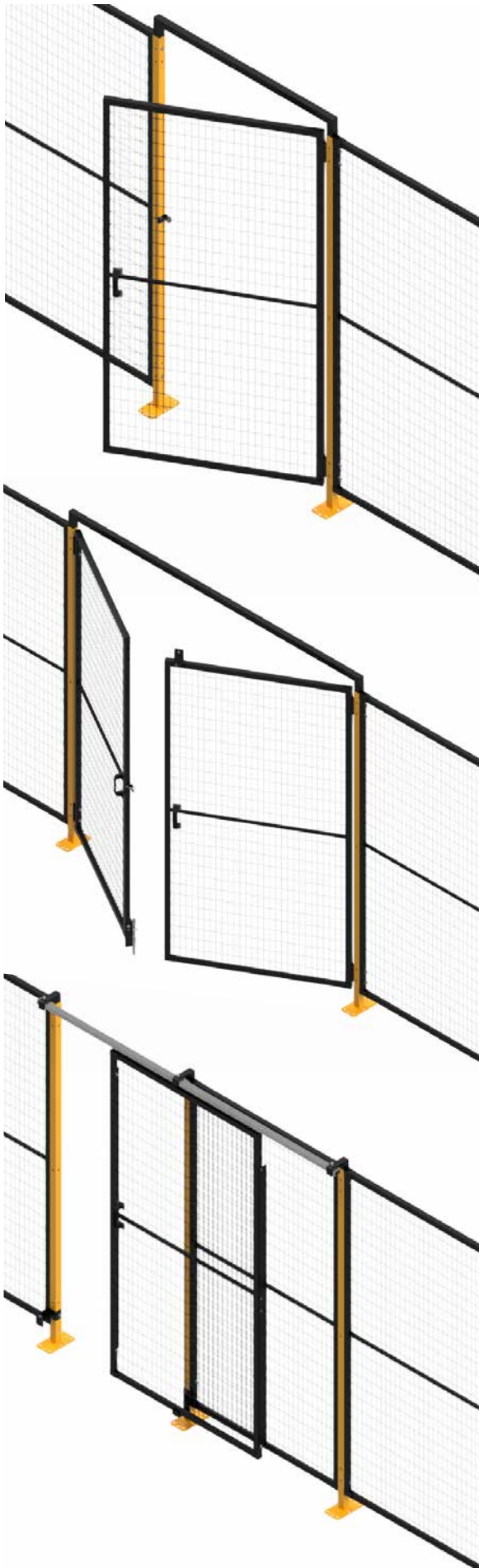
Post dimensions

Item No	Height (H)	Cross Section	Plate	Color
MT112	1600	40x40	100x180	RAL 1003
MT113	2000	40x40	100x180	
KRMT001	Kit leveling for posts 40x40 - 50x50 Level plate 100x180 sp. 25/10			

Special colors for panels and posts



Components to the Accesses



Single double door

The door was designed as antipanic door: through a magnet system it allows Evacuation from the isolated zone by pressing the Door panel.

- Light 735 Center distance 775 (Panel B = 700)
- Light 1035 Center distance 1075 (Panel B = 1000)
- Light 1235 Center distance 1275 (Panel B = 1200)
- Light 1535 Center distance 1575 (Panel B = 1500)

Double doors

The double-door uses the same concept of the single door but with a vertical bolt allows to anchor one of the two door panels to the ground.

- Light 1450 Center distance 1490 (Panel B = 700 + 700)
- Light 2050 Center distance 2090 (Panel B = 1000 + 1000)
- 2450 light center distance 2490 (panel B = 1200 + 1200)
- 3050 light center distance 3090 (panel B = 1500 + 1500)

Single hanging sliding door

The single sliding door uses, at the top, a single upper guide with a rolling rack, in the lower part there is a plastic profile (Polizene) that allows the smooth running of the panel.

- Light 865 Center distance 905 (Panel B = 1000)
- Light 1065 Center distance 1105 (Panel B = 1200)
- Light 1365 Center distance 1405 (Panel B = 1500)

Double hanging sliding door

The double sliding door allows opening from the two doors in a opposite way and uses the same single-door concept.

- Light 1223 Center distance 1263 (Panel B = 700 + 700)
- Light 1823 Center distance 1863 (Panel B = 1000 + 1000)
- Light 2223 Center distance 2263 (Panel B = 1200 + 1200)
- Light 2823 Center distance 2863 (Panel B = 1500 + 1500)

Single sliding door with floor guide

The simple sliding door uses a floor guide, upon the panel with two wheels. The same panel is guided in the upper part of a plate with nylon roller system.

- Light 792 Center distance 896 (Panel B = 1000)
- Light 992 Center distance 1096 (Panel B = 1200)
- Light 1292 Center distance 1396 (Panel B = 1500)

Option with rubber wheel

The same set can be requested as a rubber wheel option that allows, at the top and bottom, that the light remain free from obstacles; Example: Transpallet movement.

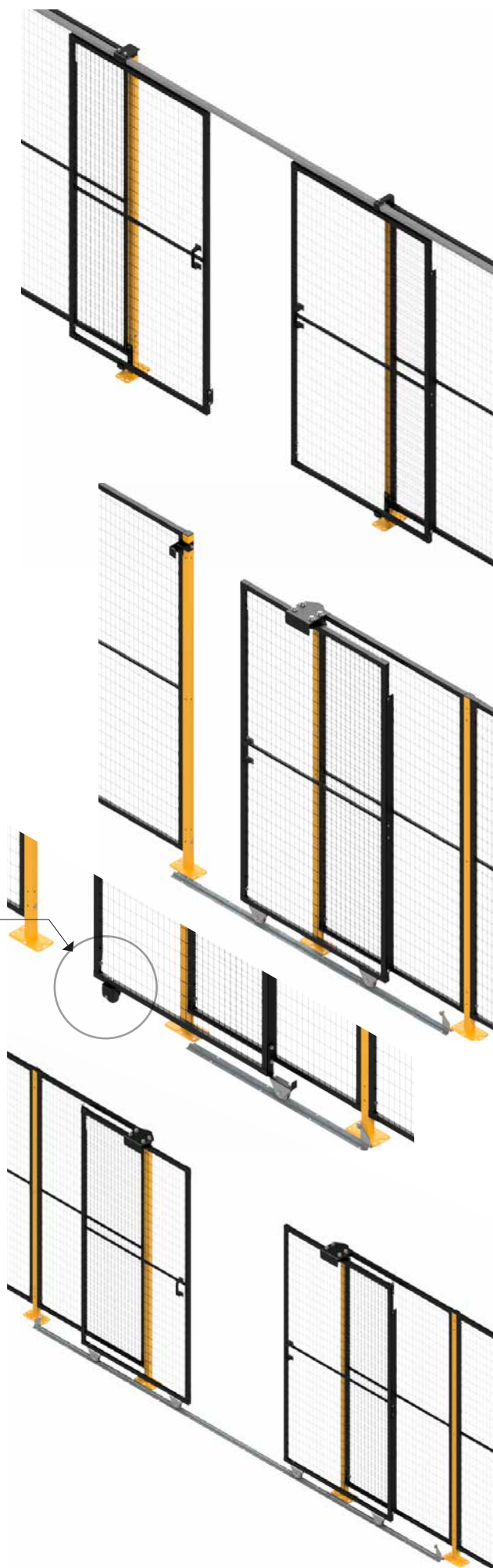
Double sliding door

The double sliding door makes it possible to open the two doors in opposite directions and uses the same concept of the single sliding door.

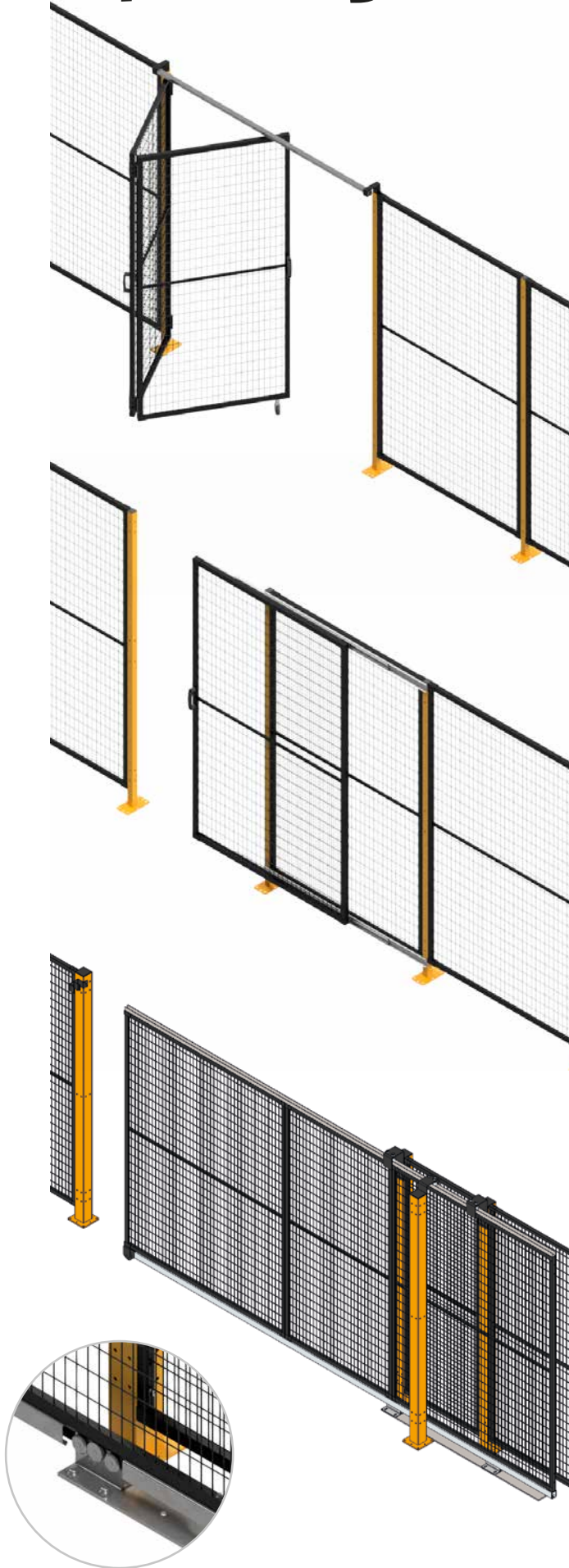
- Light 1065 Center distance between 1233 (Panel B = 700 + 700)
- Light 1665 Center distance 1833 (Panel B = 1000 + 1000)
- Light 2065 Center distance 2233 (Panel B = 1200 + 1200)
- Light 2665 Wheelbase 2833 (Panel B = 1500 + 1500)

Option with rubber wheel

The option can also be requested for this kit



Additions to the Openings



Folding door

The folding door allows a pack opening from all doors. The operation of this door is done by an upper guide and a rubber wheel in the lower part, so that the good stability is guaranteed. It is possible to deliver folding doors with or without floor guide.

Single or double telescopic door

The telescopic door has the advantage of having no guides in the Upper or lower part, it is ideal for these customers who may have problems with obstacles.

His operation takes advantage of the telescopic sliding guides or linear handling systems that guarantee excellent efficiency and long life.

Self-supporting door

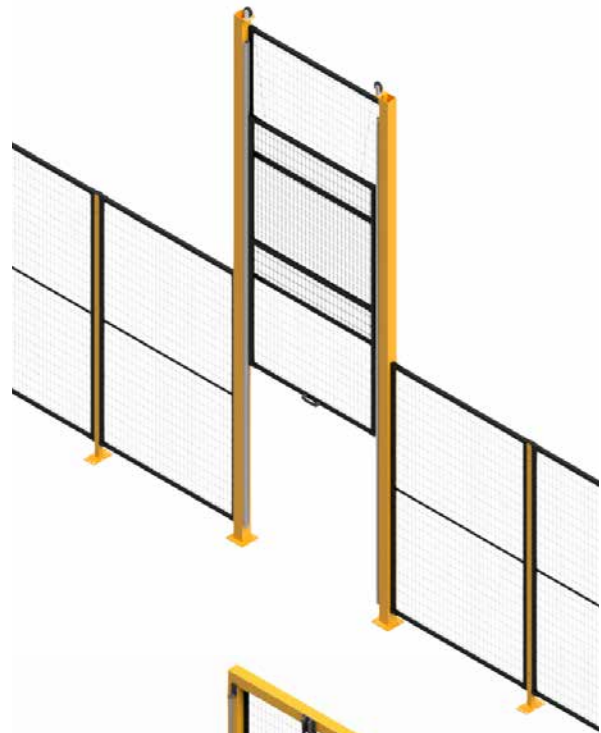
The self-supporting door was made to eliminate the obstacles from the top and the bottom of the transit room.

Using standard panels we can supply also large doors in an a cheap way and with limited delivery times.

Door light - mm	Panel - mm
725	1000
875	1200
1125	1500
1425	1000 + 1000
1825	1000 + 1500
2125	1500 + 1500
2425	1000 + 1500 + 1000
2725	1500 + 1000 + 1500
3025	1500 + 1500 + 1500
3425	1500 + 1000 + 1000 + 1500

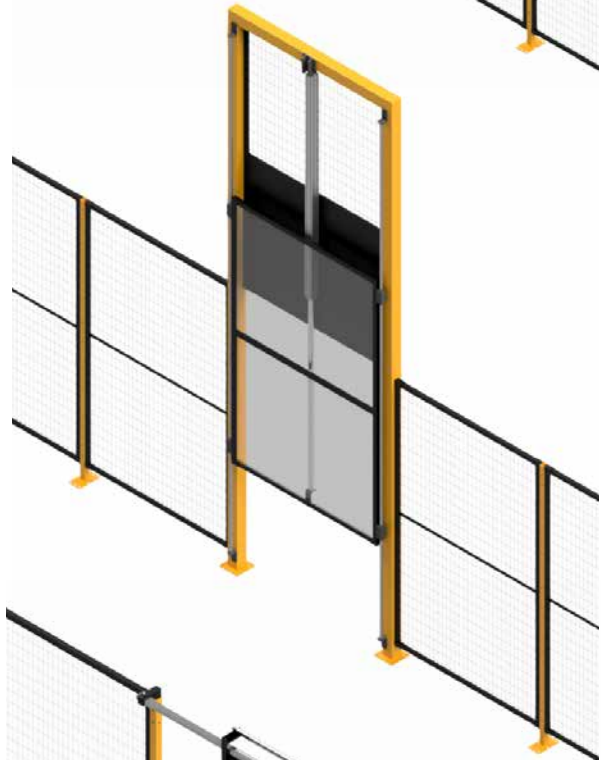
Vertical manual sliding door

The vertical sliding door with manual movement uses a system of pulleys, linear guides and counterweights this guarantees its safety, functionality and long life.



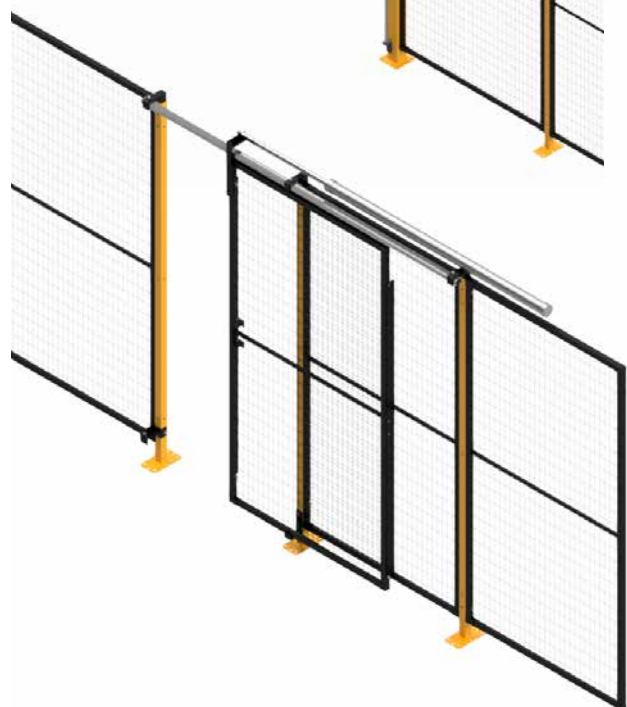
Vertical automatic sliding door

The vertical pneumatic sliding door uses a system of pulleys, linear guides with balls circulation and counterweights that guarantee the Safety, functionality and durability. For this application we recommend, in the accessible area, the use of a buffer made of shockproof material, to prevent the operator from shearing danger.



Horizontal automatic sliding sliding door

The suspended pneumatic sliding door uses the standard sliding door set with additional clamps and a pneumatic piston which is suitable for the requested light.



Complements

Locks and microswitches



Anti-panic lock for flying doors

The anti-panic lock for flying doors are usually used in automatic warehouses. It fulfills the need to lock the door and at the same time allows the operator to exit in case of closure.

Available with:

Differents keys, Art. No. : KP050

Same key, Art. Nr. : 101020201



Lock for doors or sliding doors

The lock allows to close the flying door or the sliding door with key to avoid the access by unauthorized people and to prevent staff to remain closed inside the protected area. It is designed for use from one to three padlocks to prevent the operators intervening in the machinery remain accidentally imprisoned.

Cod. 101020021 Door lock with door (opening with right hand)

Code 101020022 Door lock with door (opening with the left hand)

Cod.101020150 Lock for sliding door (opening with the right hand)

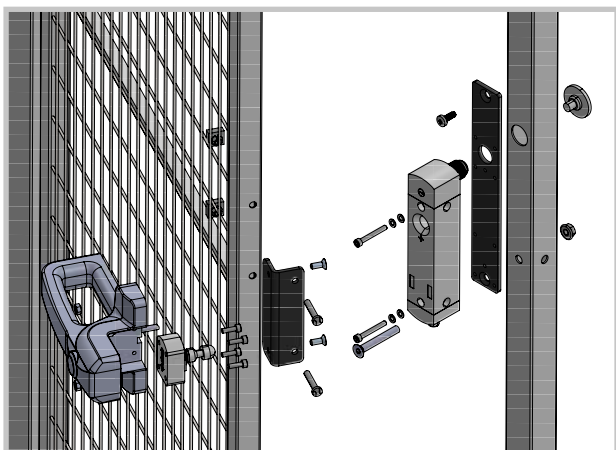
Cod.101020151 Sliding door lock (opening with the left hand)



Interlocking system

The interlocking system is a device that increases the security level of the facility.

It prevents the start-up of the machine against the will of the person inside the restricted area thanks to a coded key system that cannot be duplicated.



Custom-made brackets for microswitches and electromechanical locks

Our technical department is able to design customised brackets for your microswitches or solenoid locks:

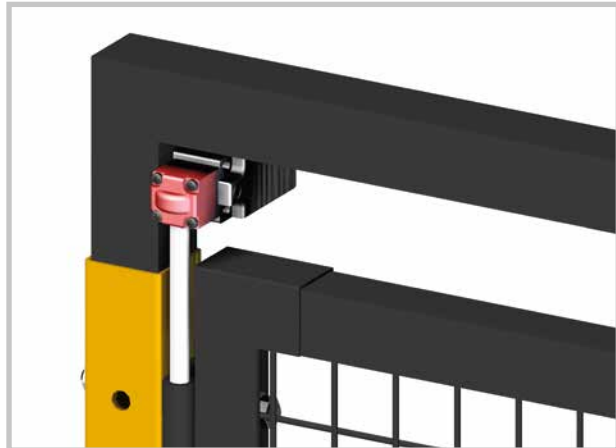
Pizzato, Euchner, Schmersal, etc.

Microswitch kit for flying doors

Uses a safety switch fixed above the hinge, model Pizzato FR2096-L16M1 1NO + 2NC; positioned and secured he is firmly connected to the hinge.

Code: 101030100 for hinged doors without upper crossbar

Code: 101030101 for hinged doors with upper crossbar



RFID switch kit with lock for turning doors

Uses a safety switch Pizzato model NG 2D1D411A-F31

Cod. 101030147 (*)

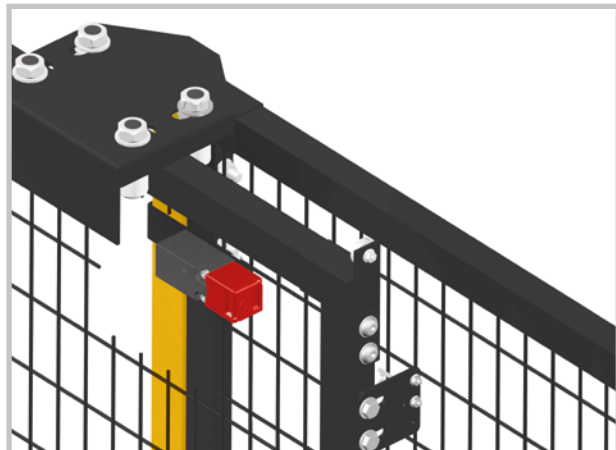


Micro-kit for sliding doors

Uses a safety switch model FR2093-D1M1 1NO + 2NC; positioned between the fixed panel and the door panel and it is compatible both for the hanging sliding doors as well as for doors equipped with a floor guide.

Cod. 101030102 (*)

Code 7030002867 Protective housing for shielding the security device (on request)



RFID switch kit with sliding door lock

Uses a safety switch from Pizzato.

Code: 101030148 (*) with NG 2D1D411A-F31 device

Code: 101030191 (*) with NS D4A21SMK-F41 device



(*) Mounting systems (screws) comply with Table 3 of UNI EN 14119

Modules applications

Metal sheet

The metal sheet module system was created to suit all manufacturers and users of machine tools and welding areas: a steel sheet solution at a reasonable cost, aesthetically beautiful, powerful and easy to install.

The structure can be integrated with properly laminated and sized glass windows.





Waterproof protection

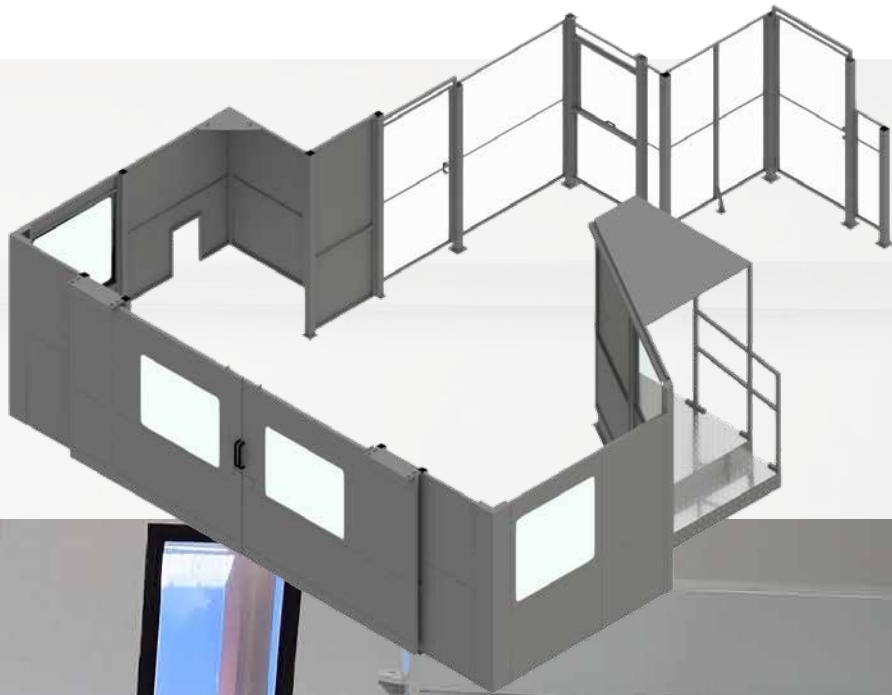
The sheet metal system can also be waterproof and so to prevent the outcoming of lubricating fluid from the protected zone.



Modules applications **Metal sheet**

With the aim to make the relationship with the customers more and more unique, we have also added to our range the sheet metal and soundproof cabs. The booth design is done in cooperation with the customer, our technical department is able to advise the best suitable solution and realize the dimensional drawing. The cabs can be equipped with manual or pneumatic opening doors and porthole or inspection windows.





Modules applications **Metal sheet**



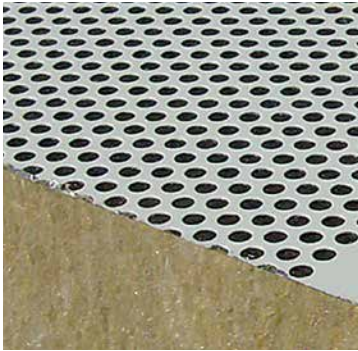
Modules applications
Metal sheet

Cabins

Soundproof

We are able to solve noise related problems in accordance to the rules, as far as it is compatible with the requirements of safety and functionality. Our strength is the realization of turnkey systems for the control and industrial sound insulation of the machines in operation. The cabs, along with the function of noise protection, can protect the operator from possible outflows of splinters or leftovers of the machine in operation. The components used for the construction of the cabins always offer the best performance of Insulation / sound absorption, mechanical resistance and environmental impact. The chambers can be equipped with manual or pneumatic door opening and windows or inspection portholes. The metal profiles of doors and windows are made of anodised aluminum.





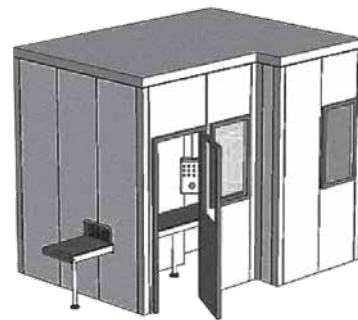
Our technical department is able to guide the customer to the best solution depending on the type of noise and the number of dB hit. Our soundproof panels are made of external steel girders pre-painted and galvanized, with perforated inner wall. The insulation will be achieved by an insulating layer of high density mineral fibers.

This particular system allows a remarkable soundproof performance. All panels have a usable pitch of 1000 mm, thickness: 50, 80 and 100 mm. The noise protection data were tested at 1 meter height and 1 meter distance from the wall in the fully closed version, listed by thickness:

50 mm = 24 dB (A) Leq

80 mm = 29 dB (A) Leq

100 mm = 31 dB (A) Leq



Protection Parapets

The application areas are multiples, from the boundary of pedestrian paths in the companies up to fall protection on stages and machines with walkable roof.


We have created a modular guard-rail, quick to install, very strong with the characteristic of being easily adaptable in the dockyard.

The standard guard-rail has a length of 1000 or 1500mm, a height of 1100mm from the ground.

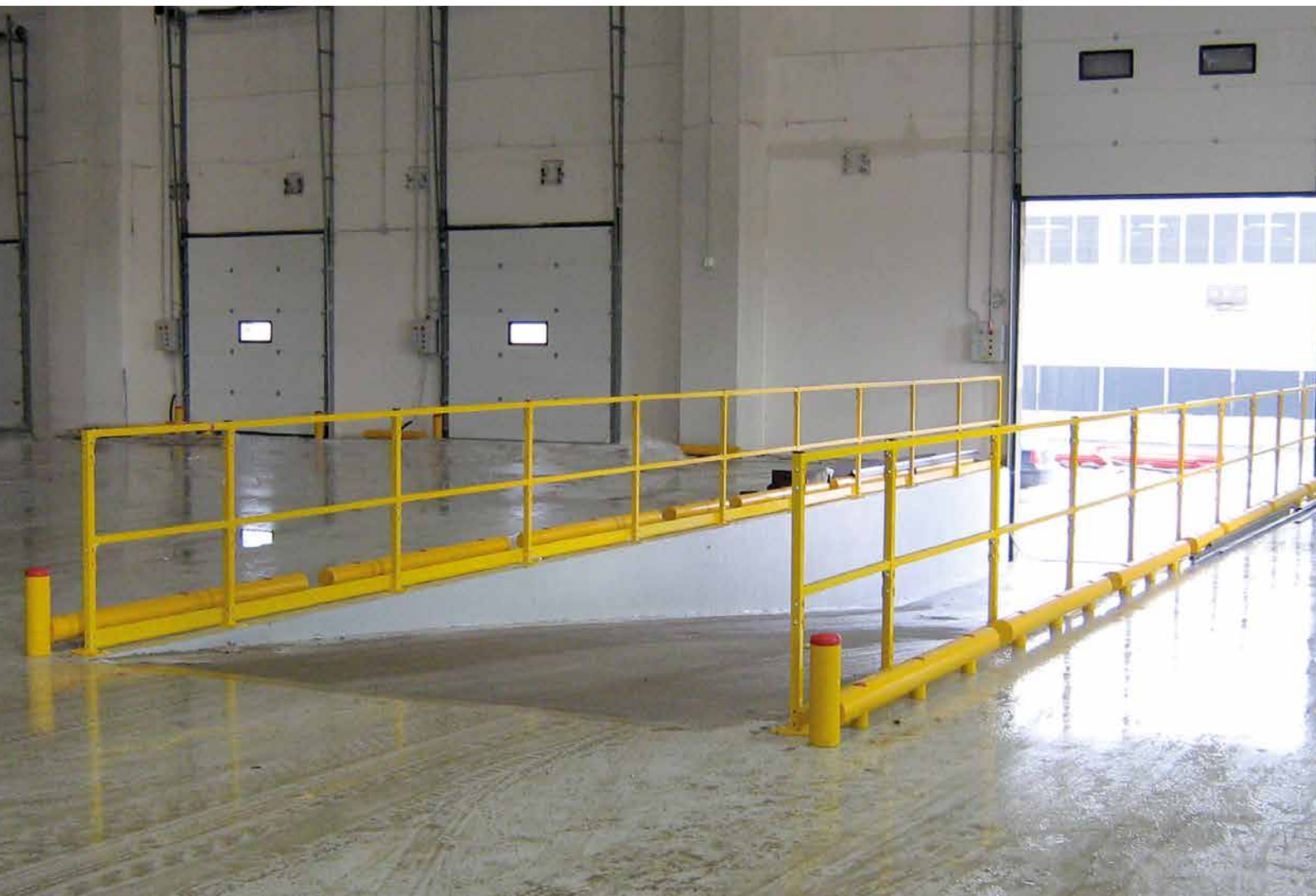
With only components, the system allows you to make straight and angular sections.

The guard-rail is composed of posts with or without ground plate, horizontal tubes, foot stop plate and support brackets.

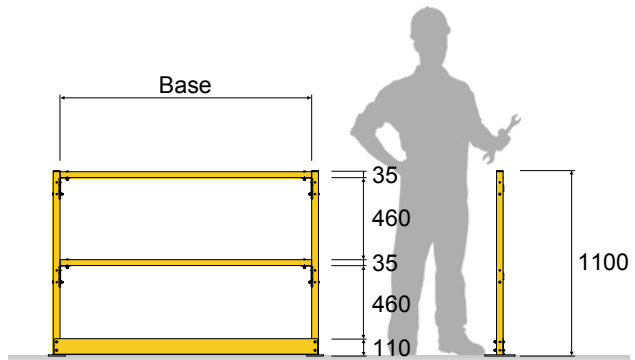
 **Fast installation**

 **Adjustable**

 **Modular**



Item No	Description
MT110	Post 40x40 with plate 100 x 180 H = 1100 yellow RAL 1003
CR001	Tubular current 35x35 B=1000 yellow RAL 1003
CR002	Tubular current 35x35 B=1500 yellow RAL 1003
LR001	Metal sheet to stop on foot H=100 B=1070 yellow RAL 1003
LR002	Metal sheet to stop on foot H=100 B=1570 yellow RAL 1003
7030401021	Stirrup support yellow RAL 1003
101010047	Screw kit for fixing guard-rail module



Standard colors



Colors on request



System Screen

SCREEN is a protection for the back wall of rack storage systems. If required, it can be used as a backstop. It was designed to prevent the fall of objects of shelves and to prevent persons and property damage.

It is slightly strong and allows a fast installation of the grid and the profiles, without welding or special operations.

Screen is a product that consists of just a few elements that offers a great flexibility and economy.

The installation of the Screen System was designed to shorten the assembly times; the aluminum crossbars stand as a guide for the grid and are anchored to the frame by the mounting brackets.

Our technical office is able to provide the most suitable solutions to plan each project according to the customer requirements.

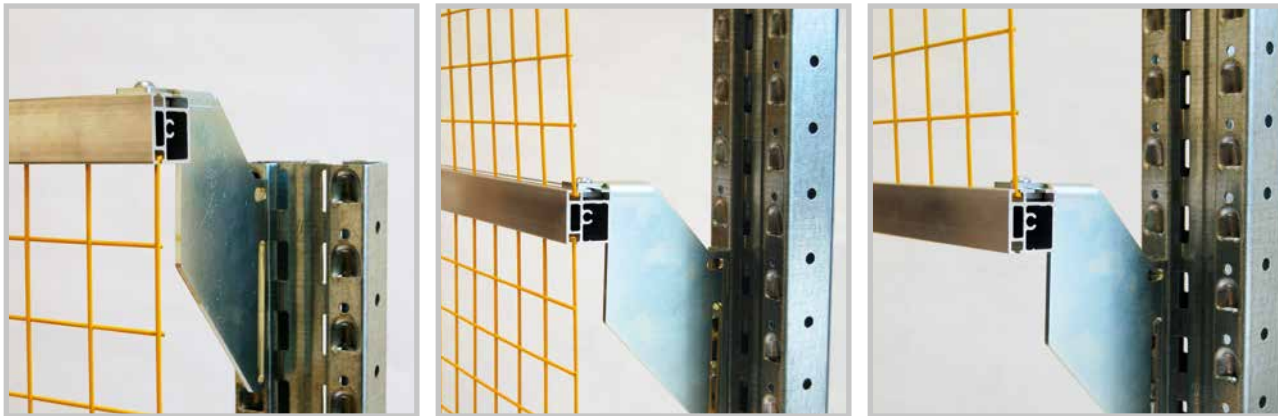
 **Cheap**

 **Fast to install**

 **Visible**

 **Adjustable**





Panel connection kit



The connection set allows the use of the entire length of the aluminum profiles, possibly adapting only the final part of the same, thus optimizing any potential waste.

The connection between the panels is done quickly and easily thanks to the attachment of galvanized hooks, which gives good stability.

It is recommended to use 4 elements for each panel connection.

(Included the clamping pliers).



Item No.	Type	Dimensions (mm)	Color
PNNS001	Net	B= 1503 H=1503 50x50 ø3	 RAL 1003
B05020215	Aluminium profile	L = 6000 Section 37x40	 Aluminium (not anodized)
101010056	Union profiles kit		Galvanized
101010053	Kit stirrups	L = 150	Galvanized
101010054	Kit stirrups	L = 200	Galvanized
101010055	Kit stirrups	L = 250	Galvanized

Possible production of panels with special dimensions

Colors on request



System Inox

The **INOX FOOD** safety system in **AISI 304 DECOATED STAINLESS STEEL** is made up of self-supporting Ø4mm mesh panels and 50x50 U-profile uprights. The system is mainly used by those who have to delimit dangerous areas in agri-food or pharmaceutical environments or where the use of a stainless steel product is required. The available doors are either swing or sliding suspended, and are completely pre-assembled to reduce installation time. All details have been designed and studied to facilitate the drainage of water from the surfaces.

The **TECHNO INOX** safety system in **AISI 304** stainless steel consists of self-supporting panels in Ø3mm mesh and 40x40 square section uprights with a welded plate. 40x40 square section uprights with a welded plate 100x180; the coupling is made by a special bracket. The system is mainly used by those who have to delimit dangerous areas in damp or wet environments. The doors available are either swing or sliding doors and are completely pre-assembled to reduce installation time.

REGISTER



On-site modifications

This system has the great advantage of being modified on site with the use of very few tools.



Visibility

The innovative 32x67 mesh system improves the visibility of the machinery inside the segregated area.

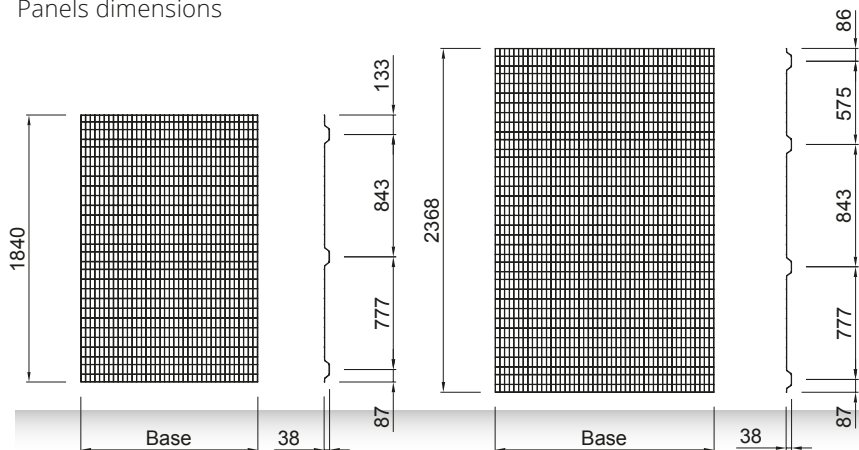


Toughness

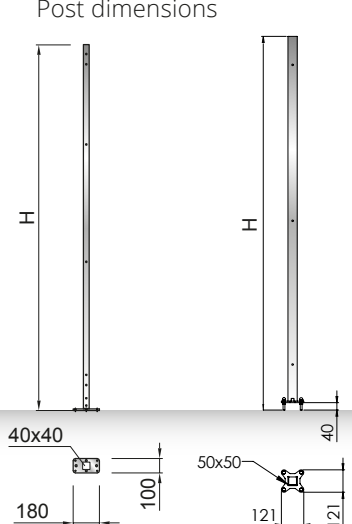
The panel is solid thanks to the particular conformation of the mesh constructed from Ø4 and Ø5 wires.



Panels dimensions



Post dimensions



Mesh 32x67 mm wire Ø3 mm Stainless steel
 Floor light 160 mm for panels - 100 mm for doors

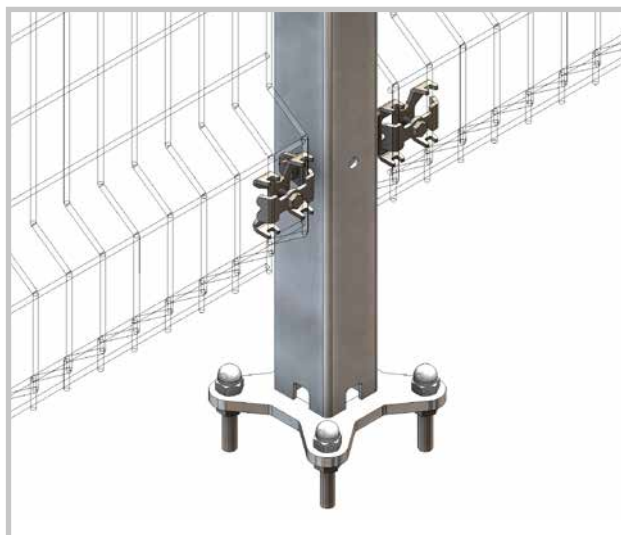
INOX FOOD

Panels dimensions Ø4

Item No	Base	Height
PNXF20201840	2020	1840
PNXF15082369	1508	2369

Post dimensions

Item No	Height (H)	"U" Section
MTXF2000	2000	50x50
MTXF2520	2520	50x50



TECHNO INOX

Panels dimensions Ø3

Item No	Base	Height
PNXT15071840	1507	1840
PNXT15072368	1507	2368

Post dimensions

Item No	Height (H)	Square section
MTXT2000	2000	40x40
MTXT2520	2000	40x40

System **Inox**

Swing door

The swing door has been designed as a panic door. A magnet system, that allows evacuation from the inside of the segregated area by pushing the door panel. It consists of 2 uprights 2140mm high, 3 welded hinges; It is sold fully assembled, with upper cross-piece.

Swing door size with upper crossbar

Item No	Height	Light	Section	Overall Dimensions	Opening
PAXFDX10362140T	2140	1036	50x50	1135	Right opening
PAXFSX10362140T	2140	1036	50x50	1135	Left opening
PAXFDX10362640T	2640	1036	50x50	1135	Right opening
PAXFSX10362640T	2640	1036	50x50	1135	Left opening
PAXTDX10362140T	2140	1036	50x50	1135	Right opening
PAXTSX10362140T	2140	1036	50x50	1135	Left opening
PAXTDX10362640T	2640	1036	50x50	1135	Right opening
PAXTSX10362640T	2640	1036	50x50	1135	Left opening



Description

- Inox Food
- Techno Inox

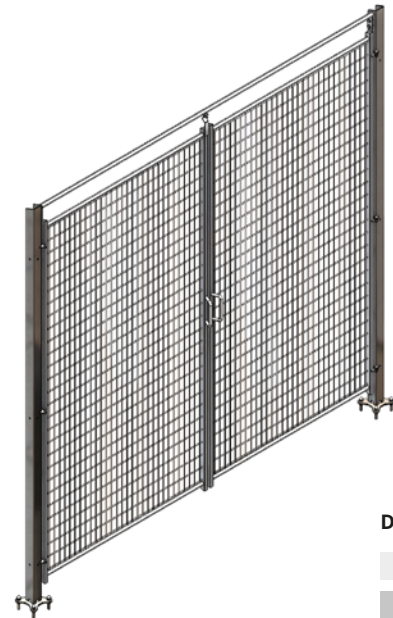


Double swing door

The double swing door has been designed as a panic door: by means of a magnet system, it allows evacuation from inside the segregated area by pushing the door panel. from inside the segregated area by pushing the door panel. It consists of 2 uprights with a height of 2140 mm, 6 welded hinges and welded handles. It is sold fully assembled, with upper cross-piece.

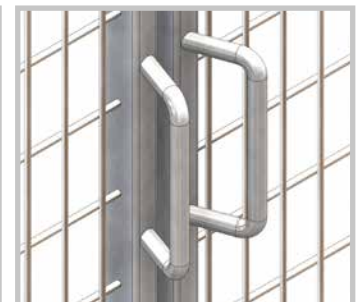
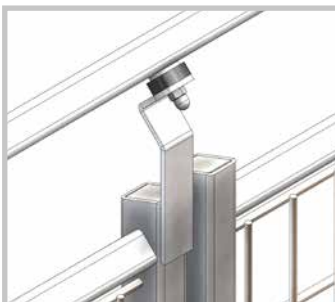
Double swing door size

Item No	Height	Light	Section	Overall Dimensions	Opening
PADXFDX20572140T	2140	2057	50x50	2157	Right opening
PADXFDX20572640T	2640	2057	50x50	2157	Left opening
PADXTDX20572140T	2140	2057	50x50	2157	Right opening
PADXTDX20572640T	2640	2057	50x50	2157	Left opening



Description

- Inox Food
- Techno Inox

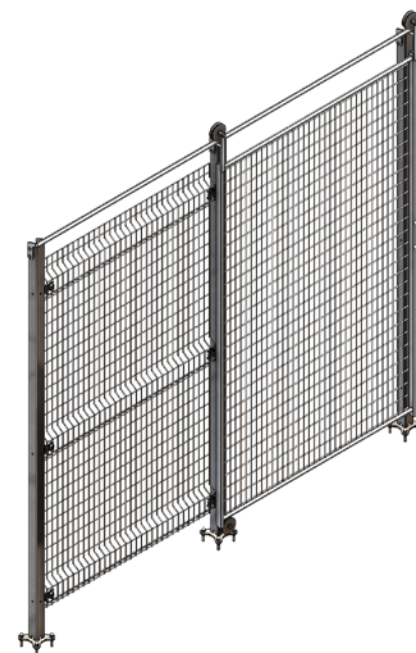


Single suspended sliding door

The suspended sliding door is supplied pre-assembled; all profiles have been designed to prevent water deposits, in fact there are no flat surfaces. It consists of 3 uprights with a height of 2140 mm and 3 wheels.

Suspended sliding door dimensions

Item No	Height	Light	Section	Overall Dimensions	Opening
PSXFDX10602140	2140	1060	50x50	2300	Right opening
PSXFSX10602140	2140	1060	50x50	2300	Left opening
PSXFDX14092140	2140	1409	50x50	2684	Right opening
PSXFSX14092140	2140	1409	50x50	2684	Left opening
PSXFDX10602640	2640	1060	50x50	2300	Right opening
PSXFSX10602640	2640	1060	50x50	2300	Left opening
PSXFDX14092640	2640	1409	50x50	2684	Right opening
PSXFSX14092640	2640	1409	50x50	2684	Left opening
PSXTDX10602140	2140	1060	50x50	2300	Right opening
PSXTSX10602140	2140	1060	50x50	2300	Left opening
PSXTDX14092140	2140	1409	50x50	2684	Right opening
PSXTSX14092140	2140	1409	50x50	2684	Left opening
PSXTDX10602640	2640	1060	50x50	2300	Right opening
PSXTSX10602640	2640	1060	50x50	2300	Left opening
PSXTDX14092640	2640	1409	50x50	2684	Right opening
PSXTSX14092640	2640	1409	50x50	2684	Left opening



Description

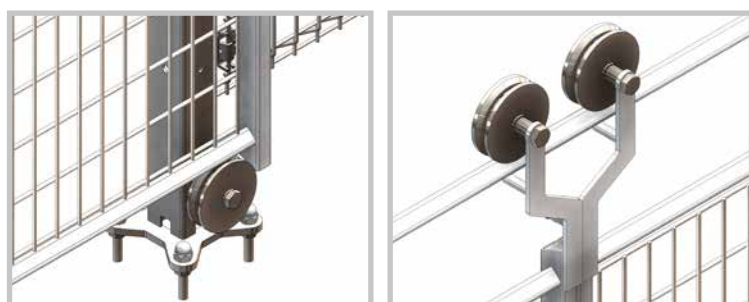
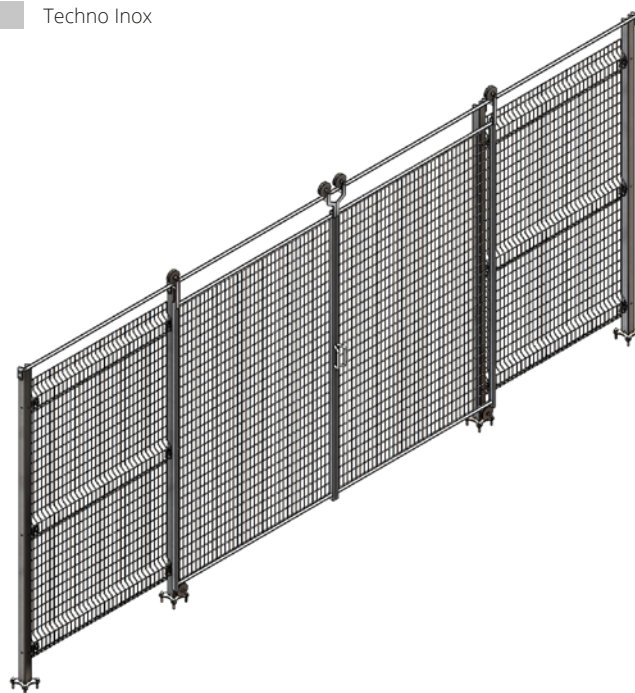
- Inox Food
- Techno Inox

Suspended double sliding door

The suspended double sliding door is supplied pre-assembled. All profiles are designed to prevent water deposits. No flat surfaces. It consists of 4 uprights with a height of 2640 mm.

Double suspended sliding door dimensions

Item No	Height	Light	Section	Overall Dimensions
PSDXF23002140	2140	2300	50x50	4680
PSDXF26402140	2640	2300	50x50	4680
PSDXT23002140	2140	2300	50x50	4680
PSDXT26402140	2640	2300	50x50	4680



Description

- Inox Food
- Techno Inox

Regulations



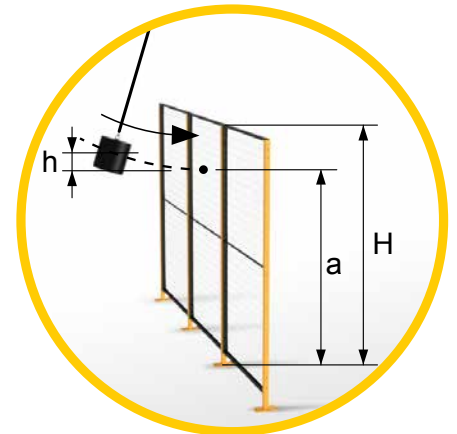
Modular guards have been developed according to the criteria of the following reference standards

- EN ISO 12100** Safety of machinery - General principles for design - Risk assessment and risk reduction.
- EN ISO 13849-1** Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design.
- EN 60204-1** Safety of machinery - Electrical equipment of machines - Part 1: General requirements.
- EN ISO 13857** Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs.
- EN ISO 13854** Safety of machinery - Minimum gaps to avoid crushing of parts of the human body
- 2006/42/CE** Machinery directive.
- EN ISO 14119** Safety of machinery - Interlocking devices associated with guards - Principles for design and selection.
- EN ISO 14122-3** Permanent means of access to machinery - Stairs, stepladders and guard-rails
- EN ISO 14120** Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards

Look at the resistance TEST

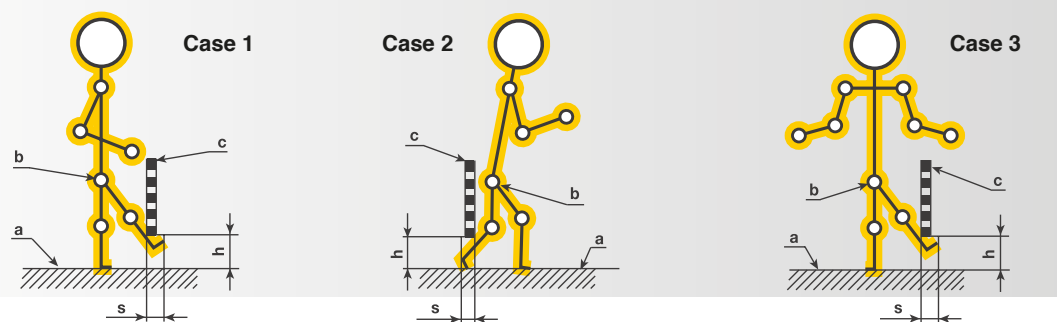


- H:** Guard height
- h:** Falling down height
- a:** $H \cdot 2/3 (\leq 1600)$
Height of point of impact, which shall not be higher than 1600



Reference tables lower limbs EN ISO 13857, Annex B

Restriction of freedom of movement under protective structures



Irregular openings and accessibility from below: Slit openings >180mm and square or circular openings, >240mm allow access to the entire body.

Height of the protective structure h	Distance s		
	Case 1	Case 2	Case 3
$h \leq 200$	≥ 340	≥ 665	≥ 290
$200 < h \leq 400$	≥ 550	≥ 765	≥ 615
$400 < h \leq 600$	≥ 850	≥ 950	≥ 800
$600 < h \leq 800$	≥ 950	≥ 950	≥ 900
$800 < h \leq 1000$	≥ 1125	≥ 1195	≥ 1015

Dimensions in mm

Reference table for the upper limbs

Limiting the freedom of movement over the protective structures

EN ISO 13857, 4.2.1

Reaching upwards

- If there is a low risk from hazard zone, then the height of the hazard zone, h , shall be 2 500 mm or more.
- If there is a high risk from the hazard zone, then the height of the hazard zone, h , shall be 2 700 mm or more.

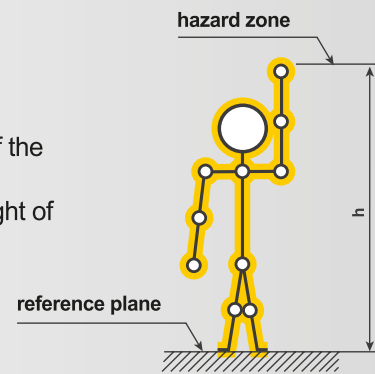


Fig. 1

EN ISO 13857, 4.2.2

Reaching over protective structures

- a height of hazard zone
- b height of protective structure
- c horizontal safety distance to hazard zone

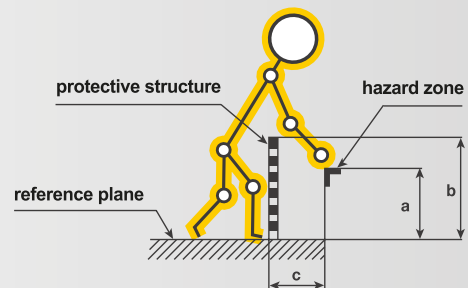


Fig. 2

In the following table (relevant to high risk) the protective structures with a lower height of 1000 mm, are not mentioned because they do not limit enough, the movement of the body.

Protection systems with a height below 1400 mm should not be used without additional safety measures.

If the risk situation is reduced, protection systems with a height greater than - or equal to 1000 mm are allowed.

The safety distance, shown in the table below with a dash, mean that must be used the distances in relationship with the grid mesh with 32x67 mesh and $\varnothing 3$ wire or 40x40 wire $\varnothing 3 - \varnothing 4$, the minimum safety distance is 200 mm.

Table 2 High risk

Height of dangerous area a	Height of protective structure b									
	1000	1200	1400	1600	1800	2000	2200	2400	2500	2700
Horizontal distance from the danger zone c										
2700	-	-	-	-	-	-	-	-	-	-
2600	900	800	700	600	600	500	400	300	100	-
2400	1100	1000	900	800	700	600	400	300	100	-
2200	1300	1200	1000	900	800	600	400	300	-	-
2000	1400	1300	1100	900	800	600	400	-	-	-
1800	1500	1400	1100	900	800	600	-	-	-	-
1600	1500	1400	1100	900	800	500	-	-	-	-
1400	1500	1400	1100	900	800	-	-	-	-	-
1200	1500	1400	1100	900	700	-	-	-	-	-
1000	1500	1400	1000	800	-	-	-	-	-	-
800	1500	1300	900	600	-	-	-	-	-	-
600	1400	1300	800	-	-	-	-	-	-	-
400	1400	1200	400	-	-	-	-	-	-	-
200	1200	900	-	-	-	-	-	-	-	-
0	1100	500	-	-	-	-	-	-	-	-

Dimensions in mm



www.protec-italy.net

EN protection catalog
January 2022
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