



# MACHINE SECURITY FENCE SYSTEMS

YOUR VALUES ARE UNDER PROTECTION



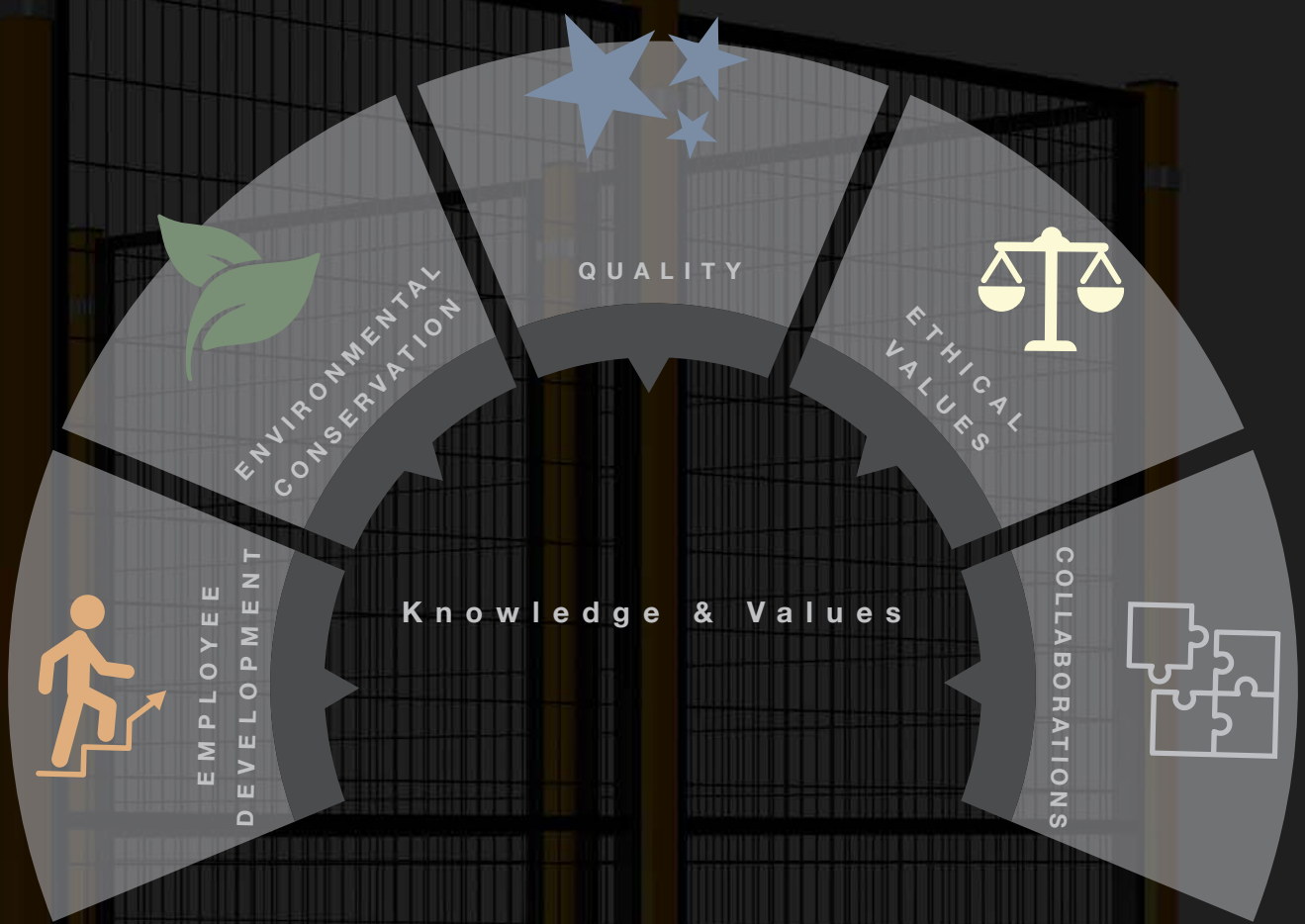
CE

[www.porsafe.com](http://www.porsafe.com)



## PRODUCTION STANDARDS

- TS EN ISO 12100 general principles of design-risk assessment and risk reduction
- TS EN ISO 13857 safety distances to prevent hazard zones being reached by upper and lower limbs
- TS EN ISO 14119 interlocking devices associated with protections - principles of design and selection
- TS EN ISO 14120 general requirements for design and fixed and movable protections



Imagination is more important  
than knowledge.

Albert Einstein





## FRAMED SYSTEMS / BLB

BLB fence safety systems contain machine security fences to which safety panels are connected between flanged poles with using custom-build connecting devices. The safety panels are mounted with BLB montage apparatus for the posts. Protective structure distance standards for system height are taken into account. (ISO 13857: 2008)



**Post Material** : Box Profile (50\*50 mm)  
**Panel Material** : Box Profile (30\*20 mm)  
**Internal Panel Material** : DT Panel ( ø 3 mm / 100\*25 mm)

**Standard Post Color** : Ral 1028  
 Ral 7040  
**Standard Panel Color** : Ral 9005



Detail 1



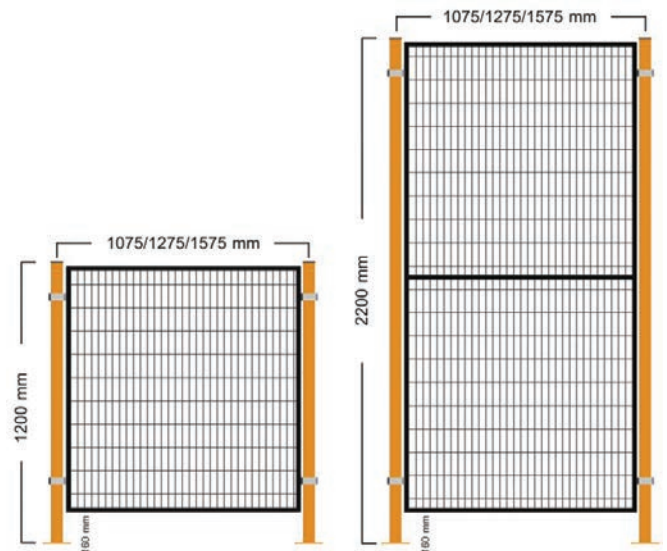
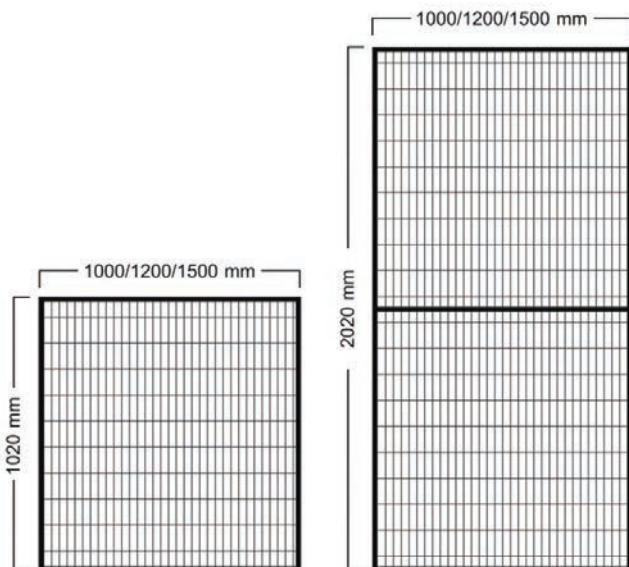
Detail 2



Detail 3



Detail 4





## FRAMED SYSTEMS / BLB-N

BLB-N fence safety systems contain ground clearances with custom-build mounting components. Protective structure distance standards for system height are taken into account. (ISO 13857: 2008)



Post Material : Box Profile (50\*50 mm)  
Panel Material : Box Profile (30\*20 mm)  
Internal Panel Material : DT Panel (  $\varnothing$  3 mm / 100\*25 mm)

Standard Post Color : Ral 1028  
Ral 7040  
Standard Panel Color : Ral 9005



Detail 1



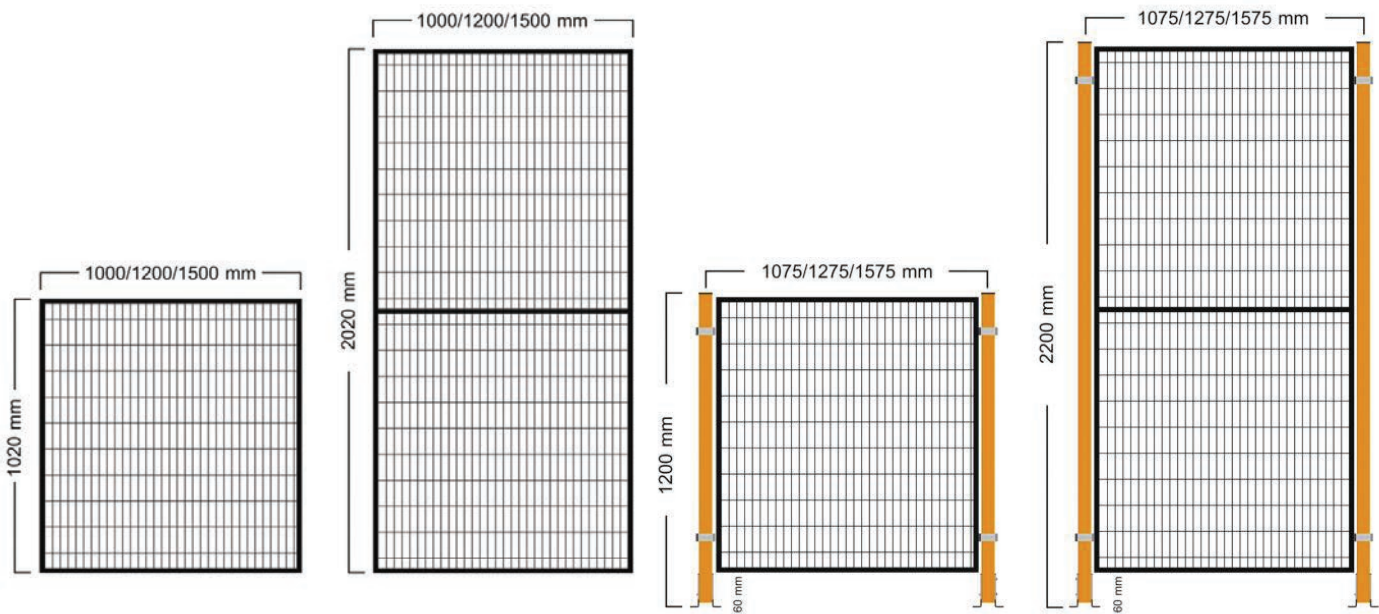
Detail 2



Detail 3



Detail 4

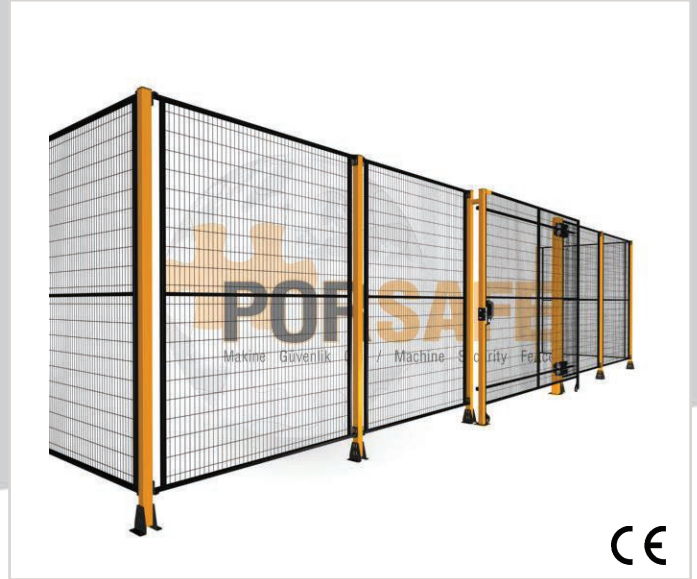






## FRAMED SYSTEMS / LB-N

LB-N fence safety systems contain ground clearances with custom-build mounting components. The system also comprises simple installation with mounted bolt holes. Protective structure distance standards for system height are taken into account. (ISO 13857: 2008)



**Post Material** : Box Profile (50\*50 mm)  
**Panel Material** : Box Profile (30\*20 mm)  
**Internal Panel Material** : DT Panel (  $\varnothing$  3 mm / 100\*25 mm)

**Standard Post Color** : Ral 1028  
 Ral 7040  
**Standard Panel Color** : Ral 9005



Detail 1



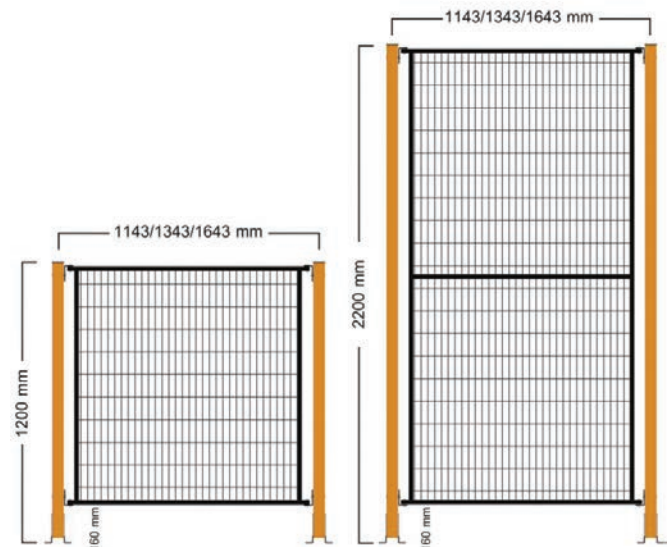
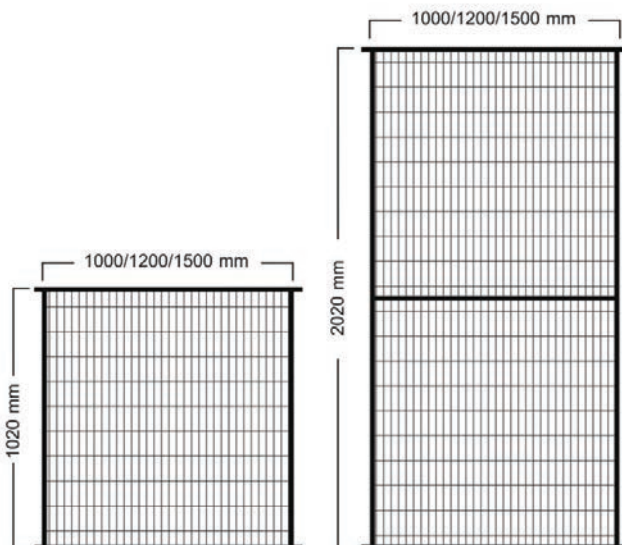
Detail 2



Detail 3



Detail 4





## FRAMED SYSTEMS / LB-PS

LB-N fence safety systems comprise self-standing posts and poles attached with bolts contain simple installation and low-price. Protective structure distance standards for system height are taken into account. (ISO 13857: 2008)



CE

Post Material : Box Profile (50\*50 mm)  
 Panel Material : Box Profile (30\*20 mm)  
 Internal Panel Material : DT Panel (ø 3 mm / 100\*25 mm)

Standard Post Color : Ral 1028  
 Ral 7040  
 Standard Panel Color : Ral 9005



Detail 1



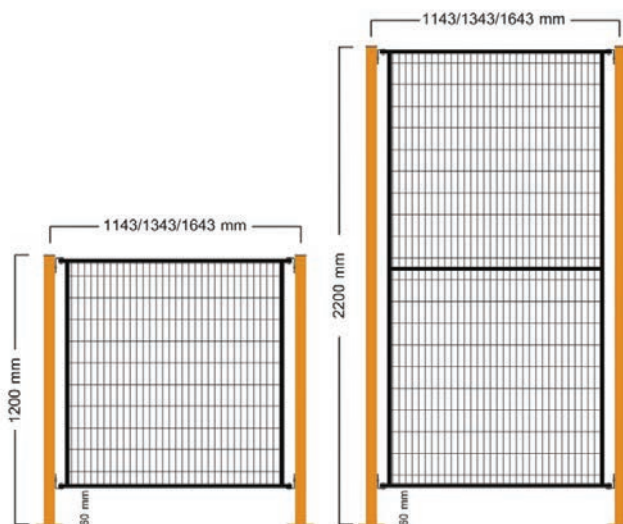
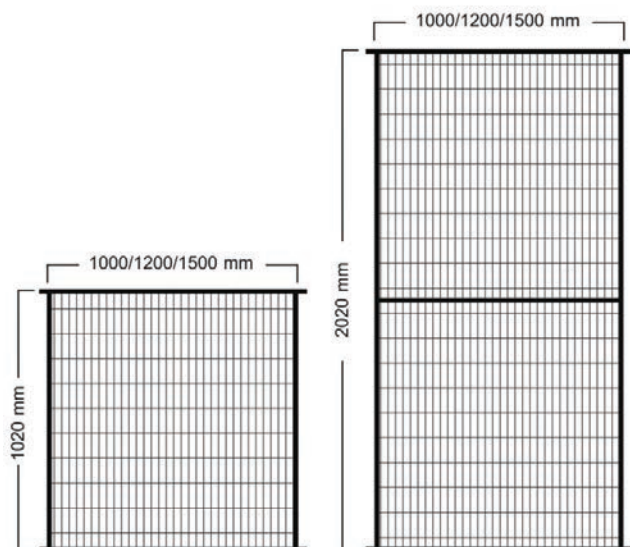
Detail 2



Detail 3



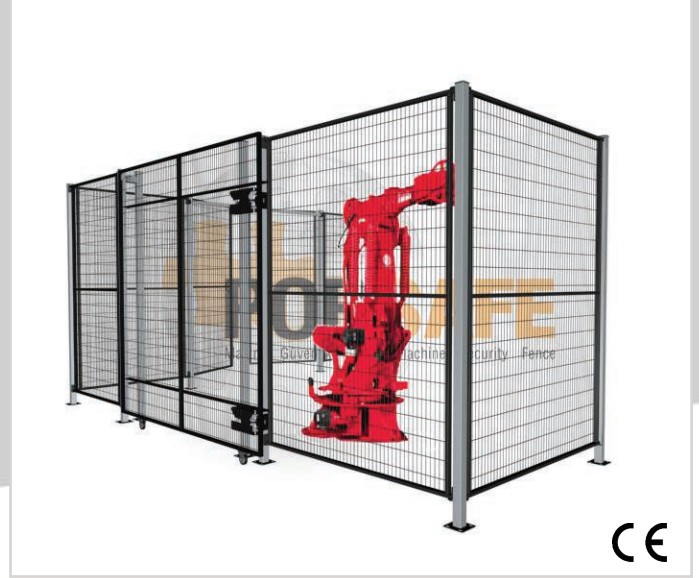
Detail 4





## FRAMED SYSTEMS / LB

LB security systems in which panel connection elements are installed with self-standing poles. Protective structure distance standards for system height are taken into account. (ISO 13857: 2008)



**Post Material** : Box Profile (50\*50 mm)  
**Panel Material** : Box Profile (30\*20 mm)  
**Internal Panel Material** : DT Panel (  $\varnothing$  3 mm / 100\*25 mm)

**Standard Post Color** : Ral 1028  
 Ral 7040  
**Standard Panel Color** : Ral 9005



Detail 1



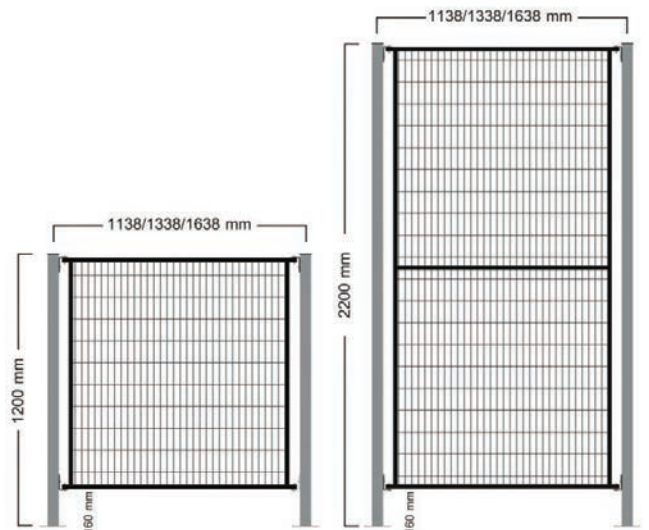
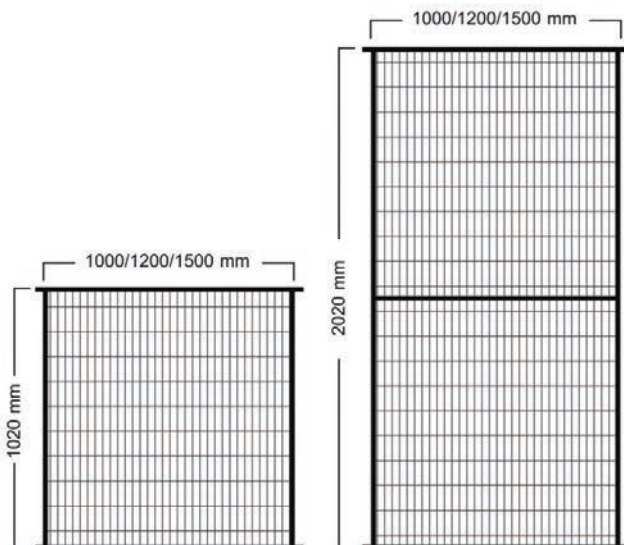
Detail 2



Detail 3



Detail 4







## FRAMED SYSTEMS / CVB

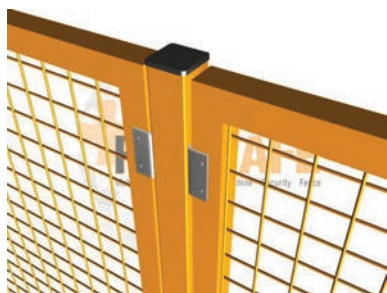
LB security systems in which panel connection elements are installed with self-standing poles. Protective structure distance standards for system height are taken into account. (ISO 13857: 2008)



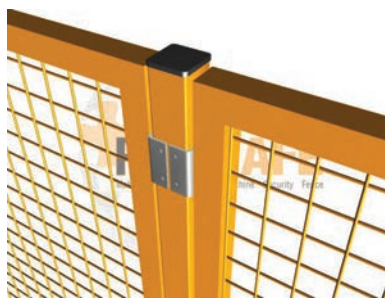
CE

**Post Material** : Box Profile (50\*50 mm)  
**Panel Material** : Box Profile (40\*40 mm)  
**Internal Panel Material** : DT Panel (ø 3 mm / 50\*50 mm)

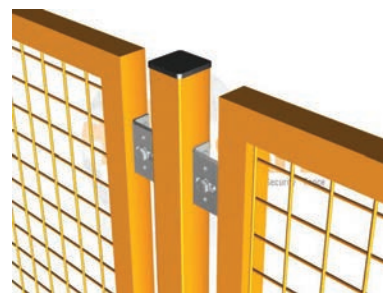
**Standard Post Color** : Ral 1028  
 Ral 7040  
**Standard Panel Color** : Ral 1028



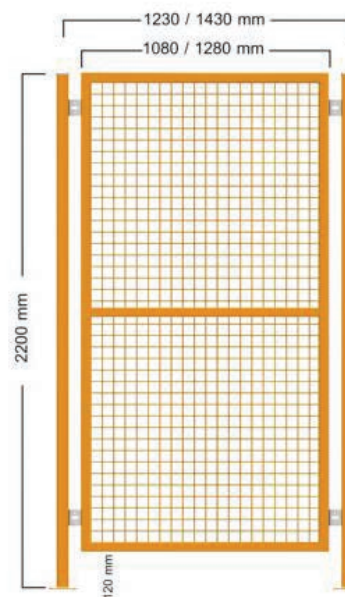
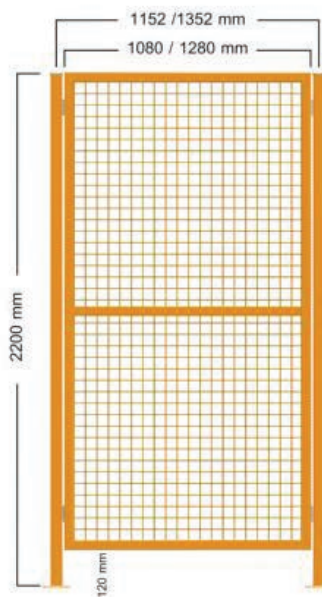
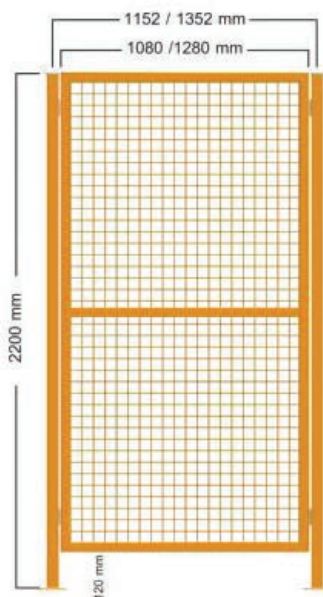
Mounting Method 1



Mounting Method 2



Mounting Method 3





## NON-FRAMED SYSTEMS / BT PANEL

BT systems in which plain panels mounted. In BT systems stretching and vibration is acceptable in its construction status. This situation enables to construct panels without building into frame.



<b>Post Material</b>	: Box Profile (50*50/60*60 mm)
<b>Panel Material</b>	: ø 4,3 mm, 50*50 mm/50*150 mm

<b>Standard Post Color</b>	: Ral 1028
<b>Standard Panel Color</b>	: Ral 1028



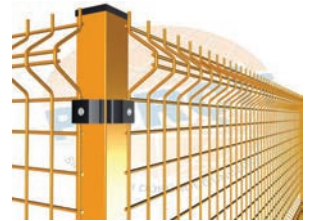
Detail 1



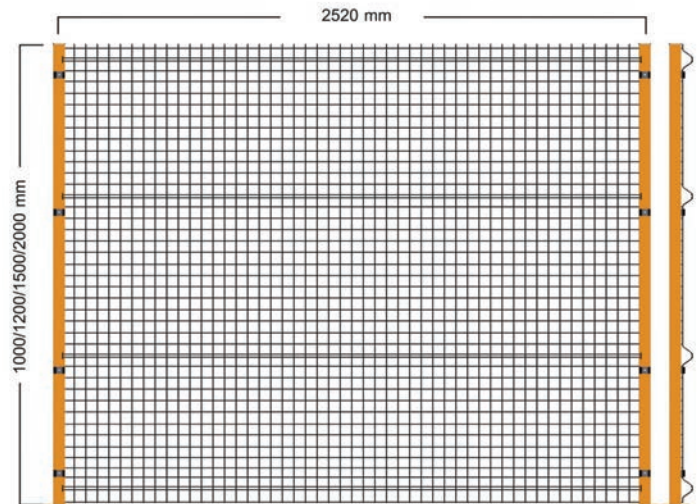
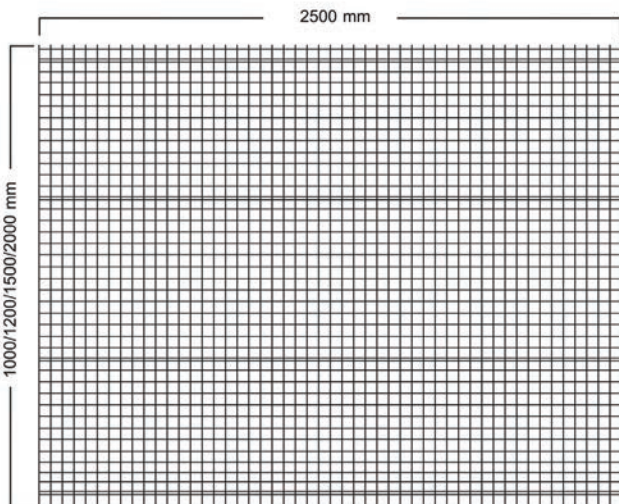
Detail 2



Detail 3



Detail 4







## NON-FRAMED SYSTEMS / DT PANEL

DT systems in which plain panels mounted.

In DT systems stretching and vibration is acceptable in its construction status. This situation enables to construct panels without building into frame.



CE

**Post Material** : Box Profile (50\*50/60\*60 mm)  
**Panel Material** :  $\varnothing$  6/6/6 mm, 50\*200 mm

**Standard Post Color** : Ral 1028  
**Standard Panel Color** : Ral 1028



Detail 1



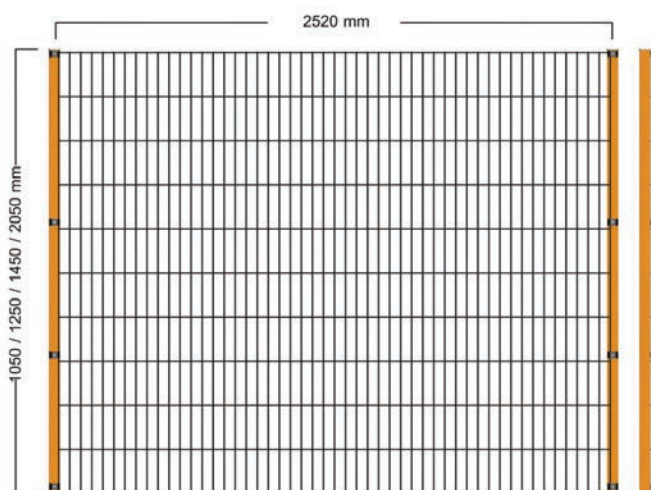
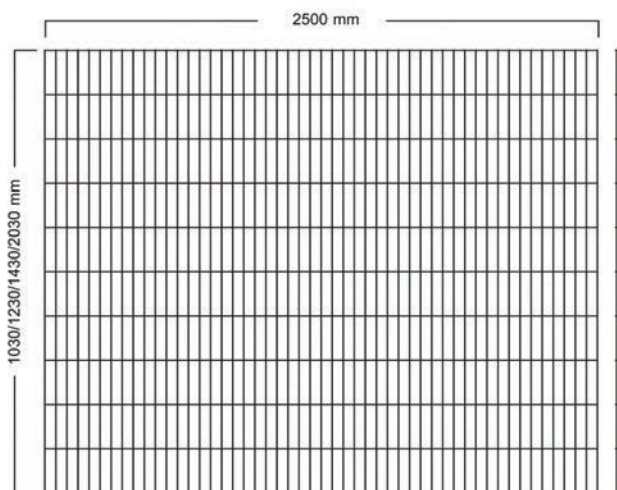
Detail 2



Detail 3



Detail 4







## FIELD SEPARATION SYSTEMS

The system offers products which are using in environmental arrangements. The system can be designed and manufactured with demand.



## HIT ABSORBING SYSTEMS

The system is manufactured for the protection of machinery and fence systems from forklift dangers.





## TRANSPARENT FRONTAL ENCLOSED SYSTEMS

The system is a type of panel in which the object is put into the frame and the transparent materials are used. These transparent materials can be variable such as polycarbonate and acrylic glass etc., with demand.



## OPAQUE (NON-TRANSPARENT) FRONTAL ENCLOSED SYSTEMS

The system is a type of panel in which the object is put into the frame and the non-transparent materials are used. These non-transparent materials can be variable such as steel plate, wood etc., with demand.





## BVK GATES

BVK doors uses fence posts as main frame, consisting of wing and upper bars. The lightweight structure provides both economical and efficient working area.



**Post Material** : The existing post is being used.  
**Wing Material** : Box Profile (30\*20 mm)  
**Internal Wing Material** : DT Panel (ø 3 mm/100\*25 mm)

**Standart Lock** : Magnet Lock  
**Standart Wing Color** : Ral 9005  
 Ral 7040



Wing



Wing+Fence Post Combination



Door-Fence Combination I



Door-Fence Combination II





## FRAMED GATES

Framed doors have a compact structure and its prominent feature is its ease of installation and eye-filling structure. Possible negative appearance of the weight of the wing in the sections are balanced by framing.



**Post/Frame Material** : Box Profile (50\*50 mm)  
**Wing Material** : Box Profile (50\*50 mm)  
**Internal Wing Material** : DT Panel/BT Panel

**Standart Lock** : Magnet Lock  
**Standart Wing Color** : Ral 9005  
 Ral 7040



Framed Operator Entrance



Post Profile Entrance



Double Winged Framed



Door+Fence Combination I



Door-Fence Combination II



## O-RAY GATES

O-Ray Doors are installed between the groups of spools placed in the vertical axis and the door wing opening is angular. The lack of rail on the floor provides a problem-free working environment for forklift like vehicle entrances. It has appropriate infrastructure for the installation of electronic locking systems.



**Post/Frame Material** : Box Profile (80\*80 cm)  
**Wing Material** : Box Profile (30\*20 mm)  
**Internal Wing Material** : DT Panel/BT Panel

**Standart Lock** : Magnet Lock  
**Standart Wing Color** : Ral 9005  
 Ral 7040



Detail 1



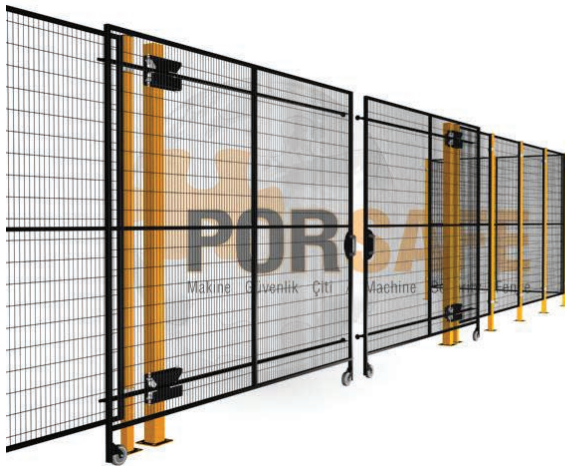
Detail 2



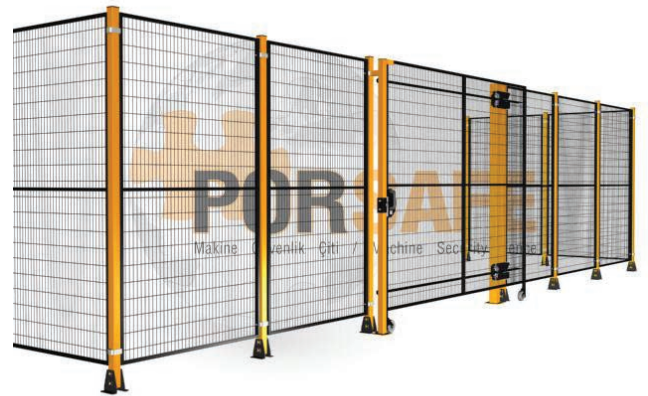
Detail 3



Detail 4



Door-Fence Combination I



Door-Fence Combination II





## Y-RAY GATES

Y-Doors meet the needs of the field with a wing mounted horizontally above the wing and other components to help the wing work linearly. Y-Doors does not contain the obstacles to pass is positively affecting the active working area. It has appropriate infrastructure for the installation of electronic locking systems.



CE

**Rail Material** : C Profile (special production)  
**Wing Material** : Box Profile (30\*20 mm)  
**Internal Wing Material** : DT Panel/BT Panel

**Standart Lock** : Magnet Lock  
**Standart Wing Color** : Ral 9005  
 Ral 7040



Detail 1



Detail 2



Detail 3



Detail 4



Door-Fence Combination I



Door-Fence Combination II





## Z-RAY GATE

Z-Ray doors preferred for wider openings in which the wing material sections expand. In Z-Ray Doors, there is not only a passive underground rail and there is no negativity that would prevent any vehicle transition.



<b>Rail Material</b>	: Plate+Transmission
<b>Wing Material</b>	: Box Profile (40*40 mm)
<b>Internal Wing Material</b>	: DT Panel/BT Panel

<b>Standart Lock</b>	: Magnet Lock
<b>Standart Wing/Post Color</b>	: Ral 9005 Ral 7040



Detail 1



Detail 2



Detail 3



Detail 4



DM Lock



DM-K Lock



Magnet Lock



DM Lock Bracket



MGB Lock Bracket



Slide Bracket



CE



BLB Mounting Device



LB Mounting Device



LB-N Mounting Device



CVB Mounting Device



BT Mounting Device



DT Mounting Device



Door Bar Mounting Device



Y-Ray Door Rail Set



BVK Hinge



Adjustable Hinge



O-Ray Spool Group



Ground Wheel



Side Closure Frame

The piece that allows standard panels to be narrowed down to various levels.



Elastic Frame

The material that small looking like window for frames.



Cable Canal

Developed material for cable transition.



Detachable Panel

A system for quick and easy panel detachment.



Alternative Floor Connection

A solution for adhering the system to different conditions in floor.



Panel Bar

A material developed for the sharp parts of BT Panels

**ACCORDING TO TS EN ISO 13857, MACHINE (DANGER ZONE) AND FENCE (SECURE ZONES) REGULATION DISTANCES**

CHART 1

ACCES TO SECURE ZONES- HIGH RISK

HIGHT OF THE RISK ZONE (MACHINE HIGHT) (A)	HIGHT OF THE SECURE ZONE (FENCE HIGHT) (B)									
	1000	1200	1400	1600	1800	2000	2200	2400	2500	2700
	VERTICAL SECURE ZONE MARGIN					(MACHINE-FENCE MARGIN) (C)				
2700	0	0	0	0	0	0	0	0	0	0
2600	900	800	700	600	600	500	400	300	100	0
2400	1100	1000	900	800	700	600	400	300	100	0
2200	1300	1200	1000	900	800	600	400	300	0	0
2000	1400	1300	1100	900	800	600	400	0	0	0
1800	1500	1400	1100	900	800	600	0	0	0	0
1600	1500	1400	1100	900	800	500	0	0	0	0
1400	1500	1400	1100	900	800	0	0	0	0	0
1200	1500	1400	1100	900	700	0	0	0	0	0
1000	1500	1400	1000	800	0	0	0	0	0	0
800	1500	1300	900	600	0	0	0	0	0	0
600	1400	1300	800	0	0	0	0	0	0	0
400	1400	1200	400	0	0	0	0	0	0	0
200	1200	900	0	0	0	0	0	0	0	0
0	1100	500	0	0	0	0	0	0	0	0

(A) ZONES LESS THAN 1000 MM DOES NOT ADDED IN THE CHART

(B) ZONES LESS THAN 1400 MM SHOULD NOT BE USED WITHOUT SECURITY MEASURES.

(C) LOOK 4.2.1 FOR 2700 MM OR HIGHER ZONES.

**ACCORDING TO TS EN ISO 13857, MACHINE (DANGER ZONE) AND FENCE (SECURE ZONES) REGULATION DISTANCES**

CHART 1

ACCES TO SECURE ZONES- LOW RISK

HIGHT OF THE RISK ZONE (MACHINE HIGHT) (A)	HIGHT OF THE SECURE ZONE (FENCE HIGHT) (B)								
	1000	1200	1400	1600	1800	2000	2200	2400	2500
	VERTICAL SECURE ZONE MARGIN					(MACHINE-FENCE MARGIN) (C)			
2500	0	0	0	0	0	0	0	0	0
2400	100	100	100	100	100	100	100	100	0
2200	600	600	500	500	400	350	250	0	0
2000	1100	900	700	600	500	350	0	0	0
1800	1100	1000	900	900	600	0	0	0	0
1600	1300	1000	900	900	500	0	0	0	0
1400	1300	1000	900	800	100	0	0	0	0
1200	1400	1000	900	500	0	0	0	0	0
1000	1400	1000	900	300	0	0	0	0	0
800	1300	900	600	0	0	0	0	0	0
600	1200	500	0	0	0	0	0	0	0
400	1200	300	0	0	0	0	0	0	0
200	1100	200	0	0	0	0	0	0	0
0	1100	200	0	0	0	0	0	0	0

(A) ZONES LESS THAN 100 MM DOES NOT ADDED IN THE CHART

(B) LOOK 4.2.1 FOR 2500 MM OR HIGHER ZONES.