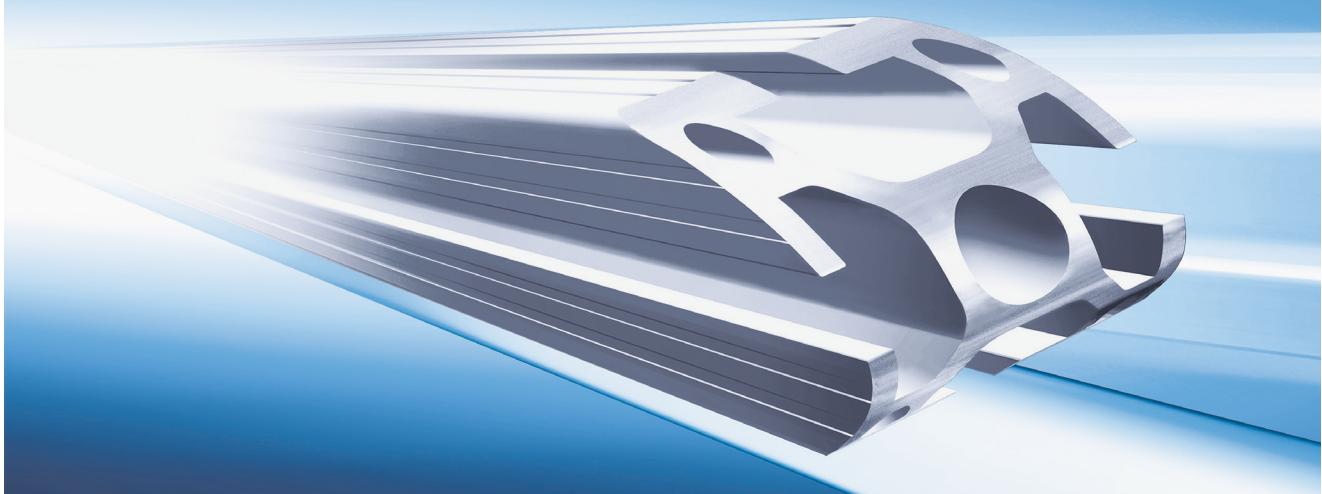




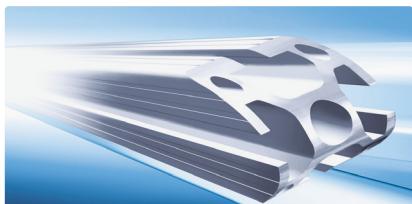
» Safety barriers

The key ...



» The Profile System

powered by
MayCAD
Design Software



The Profile System



The Clean-Room System



The Tube Clamping System



The Conveyor System



The Telescopic System



The Linear System



The Personnel Transfer System



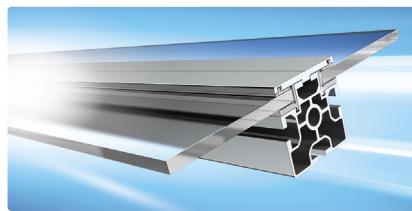
The Skid Transfer System



The Dust Protection System



Safety Barriers

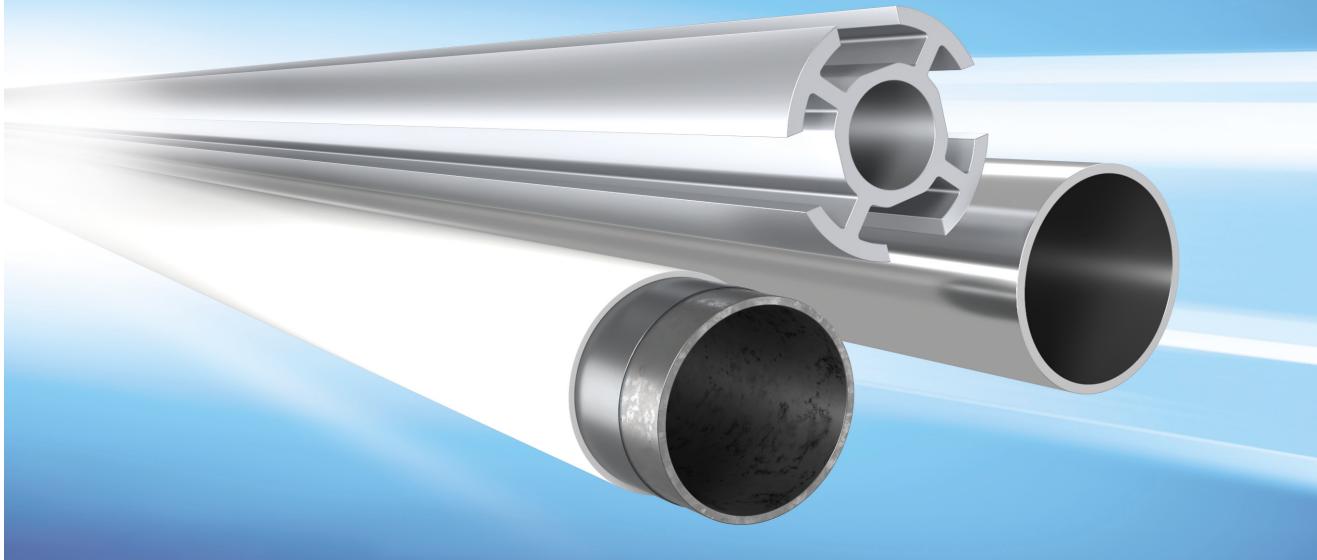


The Modular Wall System



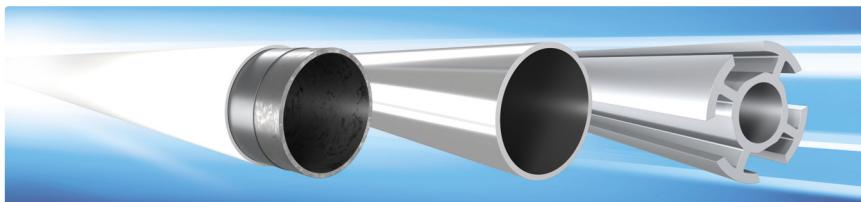
Noise Resist

... to success !



» The Pipe & Joint System

powered by
MayTube
Design Software



The Pipe & Joint System



The Trailer System

The ideal modular system

MayTec offers a comprehensive, harmonised modular system. All modules can be combined in any way conceivable.

The accessories provide functional and aesthetic solutions for a wide range of applications.

Service

The MayTec service is as versatile as the MayTec modular system.

You may choose:

- delivery of standard elements ex-factory
- delivery of profiles, pipes and accessories cut to size according to parts list for customer's assembly
- delivery of pre-fitted modular components
- delivery of completely assembled units
- assembly at your premises

Implementation

The MayTec modular system is easy to process and quick to assemble. Its flexible and modular construction means it can be easily modified and is reusable at any time.

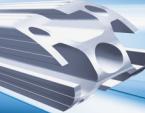
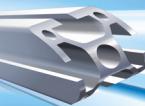
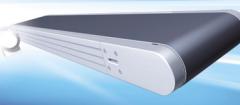
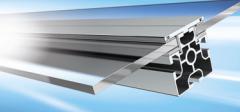
An experienced team will support you in implementing the MayTec system, tailored to your individual applications, taking into consideration your dimensions, loading capacity and stability.

Applications

- assembly and inspection stations
- display systems
- exhibition cabinets and stands
- FiFo shelves
- flow shelves

- machine bases
- machine enclosures
- machine guarding
- partitions and protective walls
- plant equipment

- protective and work cabinets
- sequence trolleys
- special shelves
- transfer and supply trolleys
- work stations

	Title	DE	GB	FR	ES	IT	CZ
	Product Summary	•	•	•	•	•	•
	The Profile System	•	•	•	•	•	
	The Inch System		•				
	The Pipe & Joint System	•	•		•	•	
	The Trailer System	•	•			•	
	The Conveyor System	•	•	•		•	
	The Linear System	•	•				
	The Modular Wall System	•	•			•	
	Safety Barriers	•	•				
	The Tube Clamping System	•					
	The Telescopic System	•	•			•	
	MayCAD / MayTube	•	•	•	•	•	

Download at <http://maytec.com.de>

	Page
Frame variations	3
Unit without frame	3
Unit with frame	
Mounting of panel elements	4
Classifications.....	5
Standard unit dimensions.....	6
Safety barriers: Designs.....	7
Safety barrier unit without frame.....	7
Safety barrier unit with frame	8
Single hinged door.....	9
Double hinged door.....	10
Sliding door.....	11
Profiles.....	12
Profile group 40, E3-slot, P (plain).....	12
Profile group 40, E3-slot	12
Profile group 45, E4-slot, P (plain).....	12
Panel profiles 30, F-slot, P (plain)	13
Panel profiles 40, E3-slot, P (plain)	14
Panel profiles 50, E4-slot, P (plain)	15
Wire net profiles 30, F-slot, P (plain)	16
Wire net profiles 40, F / E3-slot, P (plain)	16
Standards for guards	17
Static load.....	18
Dynamic load	19
Test layout.....	19
Safety barrier unit without frame.....	20
Safety barrier unit with frame	21

Design: Unit without frame**Design: Unit with frame**

Fastening with brackets

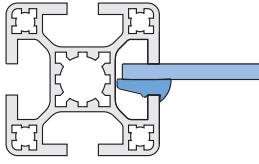
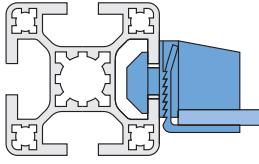
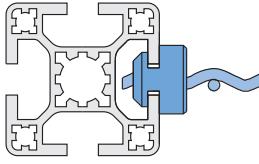
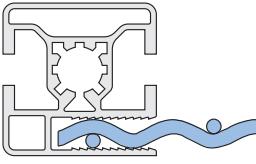
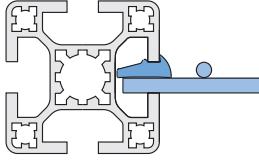
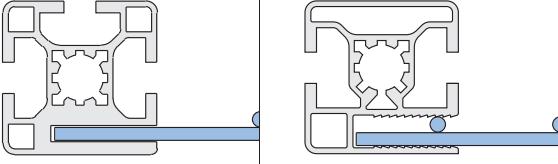
**Design: Unit with frame**

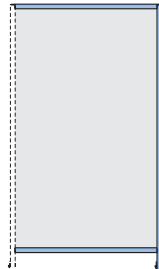
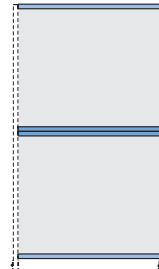
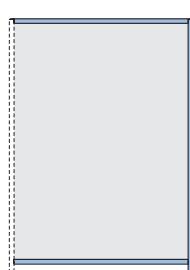
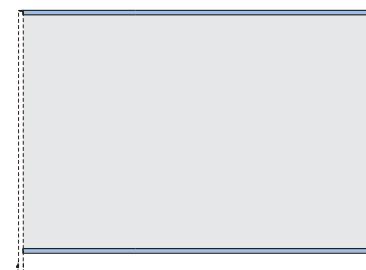
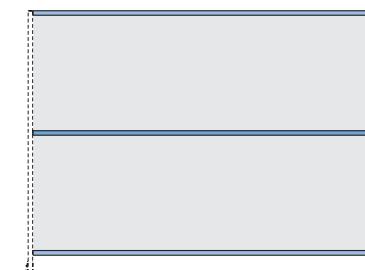
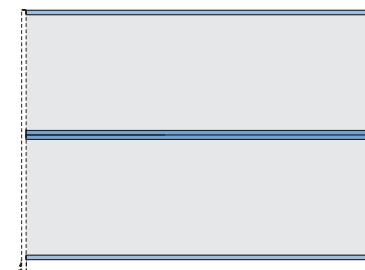
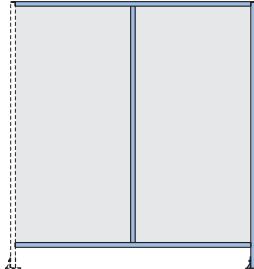
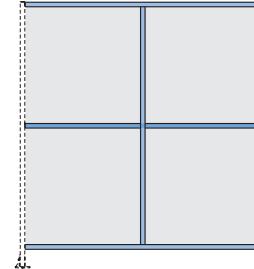
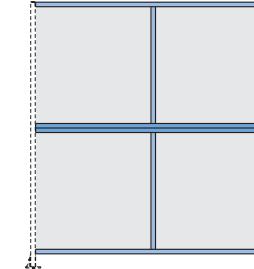
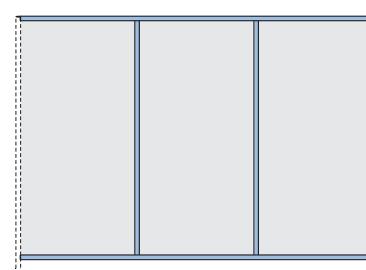
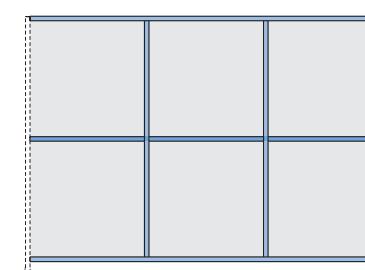
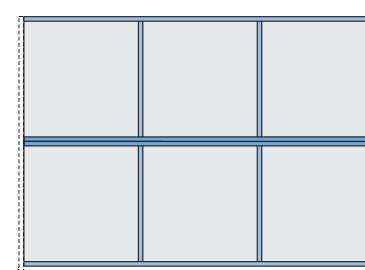
Fastening with angles

**Design: Unit with frame**

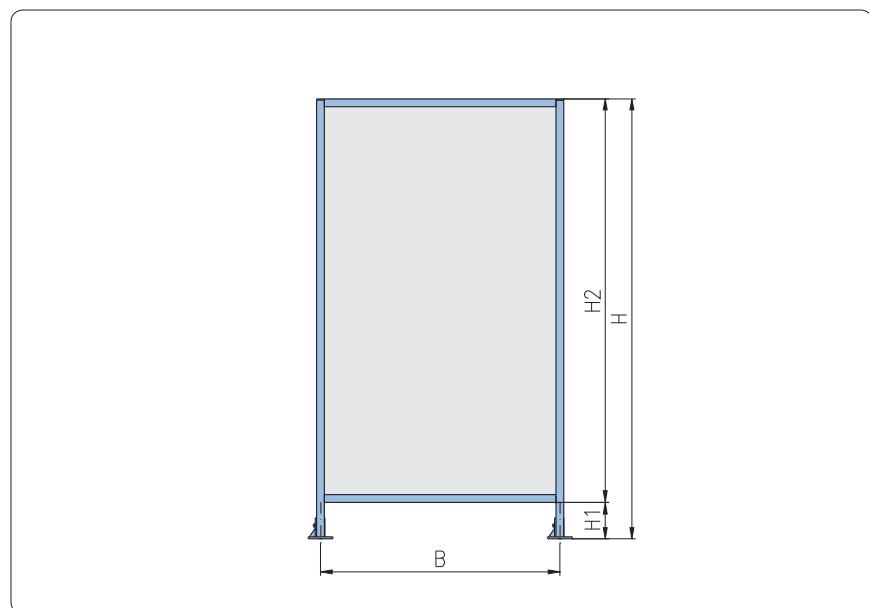
Fastening with hanging brackets



Panel element	Frame profile		
	Standard	Panel	Wire net
Polycarbonate	 with wedge profile	 with mounting clamp blocks	
Wire net		 with mounting sockets	
Welded wire net (steel)		 with wedge profile	

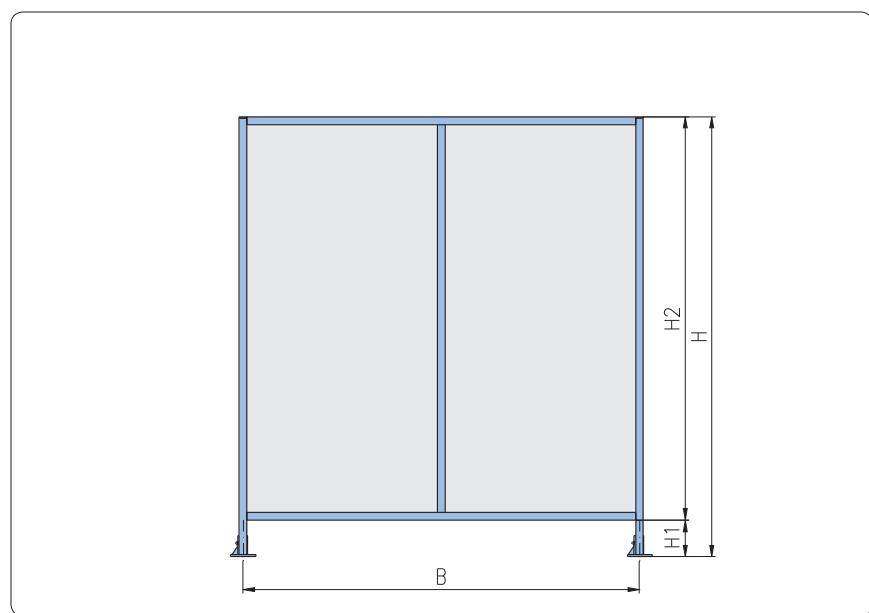
without cross strut	with cross strut	divided
		
		
		
		
		

Single panel unit



H	H1		B				
1,800							
2,000	200	300	250	500	750	1,000	1,250
2,200							
2,300							

Double panel unit



H	H1		B				
1,800							
2,000	200	300	1,500	1,750	2,000	2,250	2,500
2,200							
2,300							

**Safety barrier unit:
without frame**


Unit										Post					
Panel element		Frame profile			Mounting		Post profile								
		Standard	Pa-	Wire	of panel		Standard		Panel						
40x40, 4E	45x45, 4E	40x40	30x30	40x40	wedge profile	m. clamp blocks	mounting sockets	40x40	40x80	80x80	80x80, corner	45x45	45x90	60x80 5E	60x80 6E
Polycarbonate transparent	4 mm	•	•		•	•		•	•	•	•	•	•	•	•
Wire net alu	3x20x20 mm	•	•			•	•	•	•	•	•	•	•	•	•
	4x30x30 mm	•	•			•	•	•	•	•	•	•	•	•	•
steel	4x30x30 mm, 4x40x40 mm	•	•			•	•	•	•	•	•	•	•	•	•
Welded wire net (steel)	3x25x25 mm	•	•		•		•	•	•	•	•	•	•	•	•
	4x40x40 mm	•	•		•		•	•	•	•	•	•	•	•	•
Welding protecting glass	green-brown	4 mm	•	•	•	•	•	•	•	•	•	•	•	•	•

**Safety barrier unit:
with frame**


Unit									Post			Fastening
Panel element		Frame profile			Mounting		Post profile			of element		
		Standard	Pa-	Wire	of panel	Standard	Panel					
Polycarbonate	transparent	4 mm	•	40x40, 4E	•	wedge profile	40x40	45x45, 4E	40x80	80x80	80x80, corner	•
			•	45x45, 4E	•	m. clamp blocks	45x45	40x40	40x80	45x90	60x80 5E	•
				40x40	30x30	mounting sockets	45x90	40x80	80x80	60x80 6E	60x80 6E	•
Wire net	alu	3x20x20 mm	•		•	•	•		•	•	•	•
			•		•	•	•		•	•	•	•
		4x30x30 mm	•		•	•	•		•	•	•	•
			•		•	•	•		•	•	•	•
steel		4x30x30 mm, 4x40x40 mm	•		•	•	•		•	•	•	•
			•		•	•	•		•	•	•	•
Welded wire		3x25x25 mm	•		•	•	•		•	•	•	•
net (steel)			•		•	•	•		•	•	•	•
		4x40x40 mm	•		•	•	•		•	•	•	•
			•		•	•	•		•	•	•	•
Welding	green-	4 mm	•		•	•	•		•	•	•	•
protecting	brown		•		•	•	•		•	•	•	•
glass												

Single hinged door



Unit										Post					
Panel element		Frame profile			Mounting		Post profile								
		Standard	Pa-	Wire	of panel		Standard		Panel						
40x40, 4E	45x45, 4E	40x40	30x30	40x40	wedge profile	m. clamp blocks	mounting sockets	40x40	40x80	80x80	80x80, corner	45x45	45x90	60x80 5E	60x80 6E
Polycarbonate transparent	4 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wire net alu	3x20x20 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	4x30x30 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•
steel	4x30x30 mm, 4x40x40 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Welded wire net (steel)	3x25x25 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	4x40x40 mm	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Welding protecting glass	green-brown	4 mm	•	•	•	•	•	•	•	•	•	•	•	•	•

Double hinged door

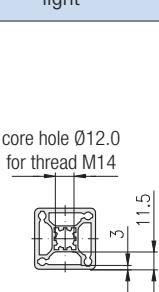


Unit										Post				Locking	
Panel element		Frame profile			Mounting		Post profile								
		Standard	Panel	Wire net	of panel element	wedge profile	m. clamp blocks	mounting sockets	Standard	Panel	Standard	Panel	Standard	Panel	
Polycarbonate transparent	4 mm	•	40x40, 4E		•	•	•	•	40x40	45x45, 4E	80x80	80x80, corner	45x45	60x80 5E	•
Wire net alu	3x20x20 mm	•			•	•	•	•	40x80		80x80		45x90	60x80 6E	•
	4x30x30 mm	•			•	•	•	•			•	•	•	•	•
steel	4x30x30 mm, 4x40x40 mm	•			•	•	•	•	•		•	•	•	•	•
Welded wire net (steel)	3x25x25 mm	•			•	•	•	•			•	•	•	•	•
	4x40x40 mm	•			•	•	•	•	•		•	•	•	•	•
Welding protecting glass	green-brown 4 mm	•			•	•	•	•	•		•	•	•	•	•

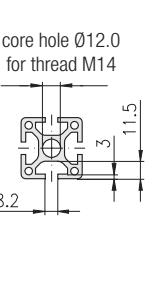
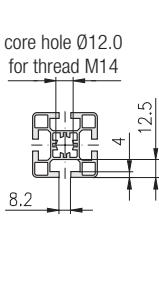
Sliding door



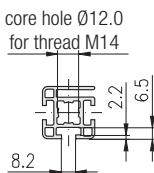
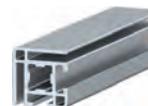
Unit										Post				
Panel element		Frame profile			Mounting		Post profile							
		Standard	Panel	Wire net	of panel element	wedge profile	m. clamp blocks	mounting sockets	Standard	Panel				
Polycarbonate transparent	4 mm	•	40x40, 4E		•	•		•	•	•	•	•	•	
			45x45, 4E		•									
				40x40										
					30x30									
						40x40								
Wire net alu	3x20x20 mm	•				•	•	•	•	•				
			•				•							
Wire net steel	4x30x30 mm, 4x40x40 mm	•				•	•	•	•	•				
			•				•							
Welded wire net (steel)	3x25x25 mm	•				•		•	•	•				
			•				•							
Welding protecting glass	green-brown 4 mm	•				•		•	•	•				
			•				•							

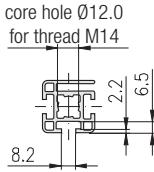
light	 core hole Ø12.0 for thread M14 3 11.5				
Description	Profile 40x40, 4E, LP	Profile 40x80, 6E, LP	Profile 80x80, 8E, LP		
bar, 6 m	1.11.040040.43LP.60	1.11.040080.64LP.60	1.11.080080.83LP.60		
packing unit (number)	1.11.040040.43LP.61 (8)	1.11.040080.64LP.61 (4)	1.11.080080.83LP.61 (2)		
moment of inertia cm ⁴ moment of resistance cm ³ weight kg/m	$I_x = 9.9$ $I_y = 9.9$ $W_x = 4.9$ $W_y = 4.9$ $G = 1.5$	$I_x = 62.7$ $I_y = 17.7$ $W_x = 15.6$ $W_y = 8.8$ $G = 2.5$	$I_x = 114.0$ $I_y = 114.0$ $W_x = 28.4$ $W_y = 28.4$ $G = 4.1$		

Profile group 40 mm, E3-slot
Profile group 45 mm, E4-slot, P (plain)

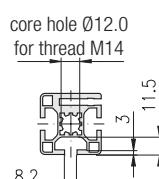
heavy	 core hole Ø12.0 for thread M14 8.2 11.5		light	 core hole Ø12.0 for thread M14 8.2 12.5			
Description	Profile 80x80, 8E, angle, S	Description	Profile 45x45, 4E, LP	Description	Profile 45x90, 6E, LP		
bar, 6 m	1.11.080080.87S.60	bar, 6 m	1.11.045045.43LP.60	bar, 6 m	1.11.045090.64LP.60		
packing unit (number)	1.11.080080.87S.61 (2)	packing unit (number)	1.11.045045.43LP.61 (8)	packing unit (number)	1.11.045090.64LP.61 (4)		
moment of inertia cm ⁴ moment of resistance cm ³ weight kg/m	$I_x = 120.0$ $I_y = 120.0$ $W_x = 23.8$ $W_y = 23.8$ $G = 6.3$	Trägheitsmoment cm ⁴ Widerstandsmoment cm ³ Gewicht kg/m	$I_x = 13.5$ $I_y = 13.5$ $W_x = 6.0$ $W_y = 6.0$ $G = 1.9$	$I_x = 98.0$ $I_y = 27.5$ $W_x = 21.8$ $W_y = 12.2$ $G = 3.3$			

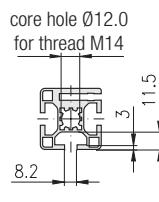
 machining data  *Profile machining 1.1A (Catalogue 'The Profile System')*

light 				
Description	Panel profile 30x30, OF, LP	Panel profile 30x30, 2F, corner, LP 4	Panel profile 30x30, 3F, LP 4	Panel profile 30x50, 3F, LP 4
bar, 6 m	1.14.030030.03LP0.60	1.14.030030.22LP4.60	1.14.030030.33LP4.60	1.14.030050.34LP4.60
packing unit (number)	1.14.030030.03LP0.61(10)	1.14.030030.22LP4.61(10)	1.14.030030.33LP4.61(10)	1.14.030050.34LP4.61 (6)
moment of inertia cm ⁴	$I_x = 3.8$ $I_y = 3.8$	$I_x = 3.3$ $I_y = 3.3$	$I_x = 3.3$ $I_y = 2.8$	$I_x = 5.5$ $I_y = 11.8$
moment of resistance cm ³	$W_x = 2.4$ $W_y = 2.4$	$W_x = 2.2$ $W_y = 2.2$	$W_x = 2.2$ $W_y = 1.8$	$W_x = 3.6$ $W_y = 4.8$
weight kg/m	$G = 1.1$	$G = 1.0$	$G = 0.9$	$G = 1.5$

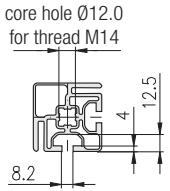
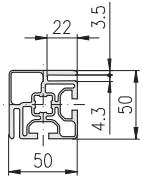
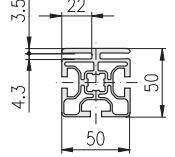
light 				
Description	Panel profile 30x30, 2F, LP 5	Panel profile 30x50, 2F, LP 5		Panel profile 30x30, 2F, LP 6
bar, 6 m	1.14.030030.23LP5.60	1.14.030050.24LP5.60		1.14.030030.23LP6.60
packing unit (number)	1.14.030030.23LP5.61(10)	1.14.030050.24LP5.61(10)		1.14.030030.23LP6.61 (6)
moment of inertia cm ⁴	$I_x = 4.3$ $I_y = 3.3$	$I_x = 7.0$ $I_y = 14.7$		$I_x = 3.6$ $I_y = 2.8$
moment of resistance cm ³	$W_x = 2.8$ $W_y = 2.2$	$W_x = 4.7$ $W_y = 5.9$		$W_x = 2.4$ $W_y = 1.9$
weight kg/m	$G = 1.2$	$G = 1.9$		$G = 1.0$

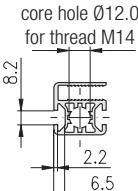
 machining data  *Profile machining 1.1A (Catalogue 'The Profile System')*

light				
				
Description	Panel profile 40×40, 2E, corner, LP 4	Panel profile 40×40, 3E, LP 4	Panel profile 40×60, 3E, LP 4	Panel profile 60×80, 5E, LP 4
bar, 6 m	1.14.040040.22LP4.60	1.14.040040.33LP4.60	1.14.040060.34LP4.60	1.14.060080.54LP4.60
packing unit (number)	1.14.040040.22LP4.61 (8)	1.14.040040.33LP4.61 (8)	1.14.040060.34LP4.61 (8)	1.14.060080.54LP4.61 (4)
moment of inertia cm ⁴	$I_x = 10.3$ $I_y = 10.3$	$I_x = 10.2$ $I_y = 8.7$	$I_x = 14.8$ $I_y = 26.3$	$I_x = 100.4$ $I_y = 50.4$
moment of resistance cm ³	$W_x = 5.2$ $W_y = 5.2$	$W_x = 5.1$ $W_y = 4.3$	$W_x = 7.4$ $W_y = 8.8$	$W_x = 25.1$ $W_y = 16.8$
weight kg/m	$G = 1.8$	$G = 1.65$	$G = 2.4$	$G = 3.8$

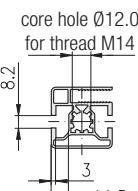
light		Profile for door stop		
				
		Assembly drawing		Assembly drawing
Description	Panel profile 60×80, 6E, LP 4	Profile 20×30, 1F, LP		
bar, 6 m	1.14.060080.64LP4.60	1.11.020030.14LP.60		
packing unit (number)	1.14.060080.64LP4.61 (4)	1.11.020030.14LP.61 (10)		
moment of inertia cm ⁴	$I_x = 88.1$ $I_y = 52.0$	$I_x = 2.2$ $I_y = 1.4$	$I_x = 113.0$ $I_y = 64.0$	$I_x = 89.2$ $I_y = 53.3$
moment of resistance cm ³	$W_x = 22.1$ $W_y = 17.3$	$W_x = 1.5$ $W_y = 1.4$	$W_x = 28.5$ $W_y = 21.3$	$W_x = 22.3$ $W_y = 17.7$
weight kg/m	$G = 3.7$	$G = 0.7$	$G = 4.5$	$G = 4.4$

 machining data  *Profile machining 1.1A (Catalogue 'The Profile System')*

light     			
Description	Panel profile 50x50, 2E, corner, LP 4	Panel profile 50x50, 3E, LP 4	
bar, 6 m packing unit (number)	1.14.050050.22LP4.60 1.14.050050.22LP4.61 (6)	1.14.050050.39LP4.60 1.14.050050.39LP4.61 (6)	
moment of inertia cm ⁴ moment of resistance cm ³ weight kg/m	$I_x = 19.4$ $I_y = 19.4$ $W_x = 7.6$ $W_y = 7.6$ $G = 2.4$	$I_x = 24.1$ $I_y = 21.4$ $W_x = 8.0$ $W_y = 8.5$ $G = 2.7$	

light	  		
Description	Wire net profile 30x30, 2F, LP 7.5	Wire net profile 30x45, 2F, LP 7.5	
bar, 6 m	1.15.030030.23LP7.60	1.15.030045.24LP7.60	
packing unit (number)	1.15.030030.23LP7.61(10)	1.15.030045.24LP7.61 (8)	
moment of inertia cm ⁴	$I_x = 2.6$ $I_y = 3.2$	$I_x = 4.3$ $I_y = 7.4$	
moment of resistance cm ³	$W_x = 1.7$ $W_y = 2.1$	$W_x = 2.9$ $W_y = 3.3$	
weight kg/m	$G = 0.86$	$G = 1.15$	

Wire net profiles 40, F / E3-slot, P (plain)

light	  		
Description	Wire net profile 40x40, 2E, LP 7.5	Wire net profile 40x60, 2E, 1F, LP 7.5	
bar, 6 m	1.15.040040.23LP7.60	1.15.040060.34LP7.60	
packing unit (number)	1.15.040040.23LP7.61 (8)	1.15.040060.34LP7.61 (8)	
moment of inertia cm ⁴	$I_x = 7.5$ $I_y = 8.2$	$I_x = 12.2$ $I_y = 22.5$	
moment of resistance cm ³	$W_x = 3.8$ $W_y = 4.1$	$W_x = 6.1$ $W_y = 7.5$	
weight kg/m	$G = 1.35$	$G = 1.97$	

machining data  *Profile machining 1.1A (Catalogue 'The Profile System')*

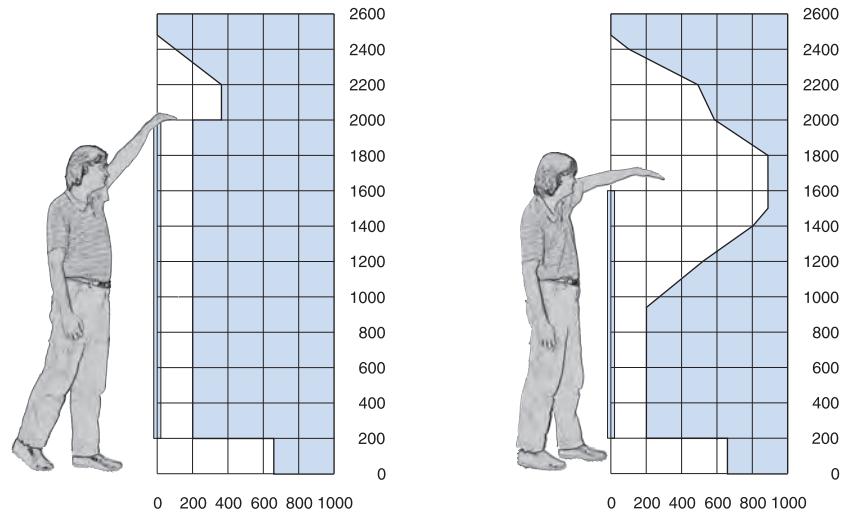
Standards for guards

Besides the essential safety requirements of the **machinery directive 98/37/EC** and the **DIN EN ISO 12100 part 1+2 - safety of machinery** - the following standards (Type B Standards) apply when designing guards, e.g. safety barriers.

EN 294 - Safety distances to prevent danger zones being reached by the upper limbs

The safety distances depend on the height and size of the opening in the safety guard. A mesh size of 40×40 mm requires a safety distance of 200 mm.

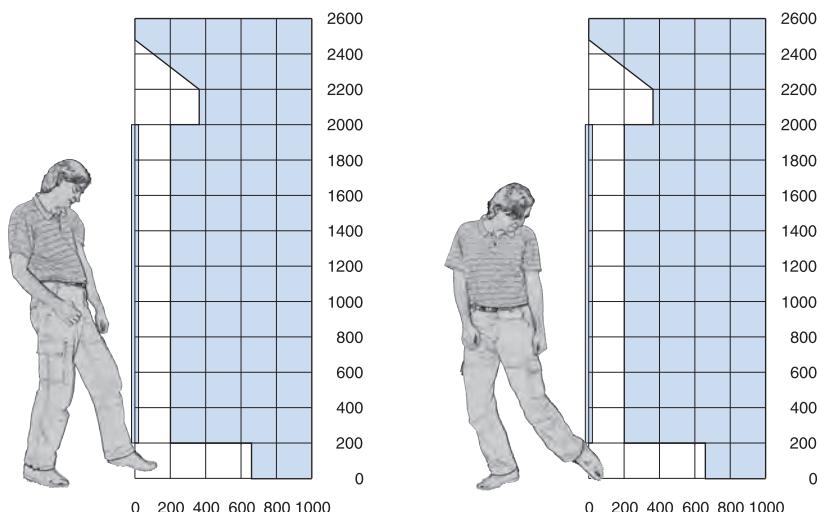
The following figures show the safety distance profiles in accordance with **EN 294** and **EN 811** for two different heights of the safety barrier. The safety distance layout of a concrete safety barrier always requires a risk assessment according to **DIN EN ISO 12100**.



EN 811 - Safety distances to prevent danger zones being reached by the lower limbs

When the following preconditions are fulfilled EN 811 allows greater openings than EN 294:

- the related persons are at least 14 years old
 - it is justifiable predictable that for reaching the hazardous area only the lower limbs are used.
- In accordance with EN 811 openings greater than 180 mm (slit shaped) or 240 mm (square / circular type) allow access to the whole body. Besides this an extended rule exists for ground clearance, where access from upright position is assumed. Ground clearance of 200 mm results in a safety distance of 665 mm for the feet area, as it is shown in the following figures.



DIN EN 953 - Guards

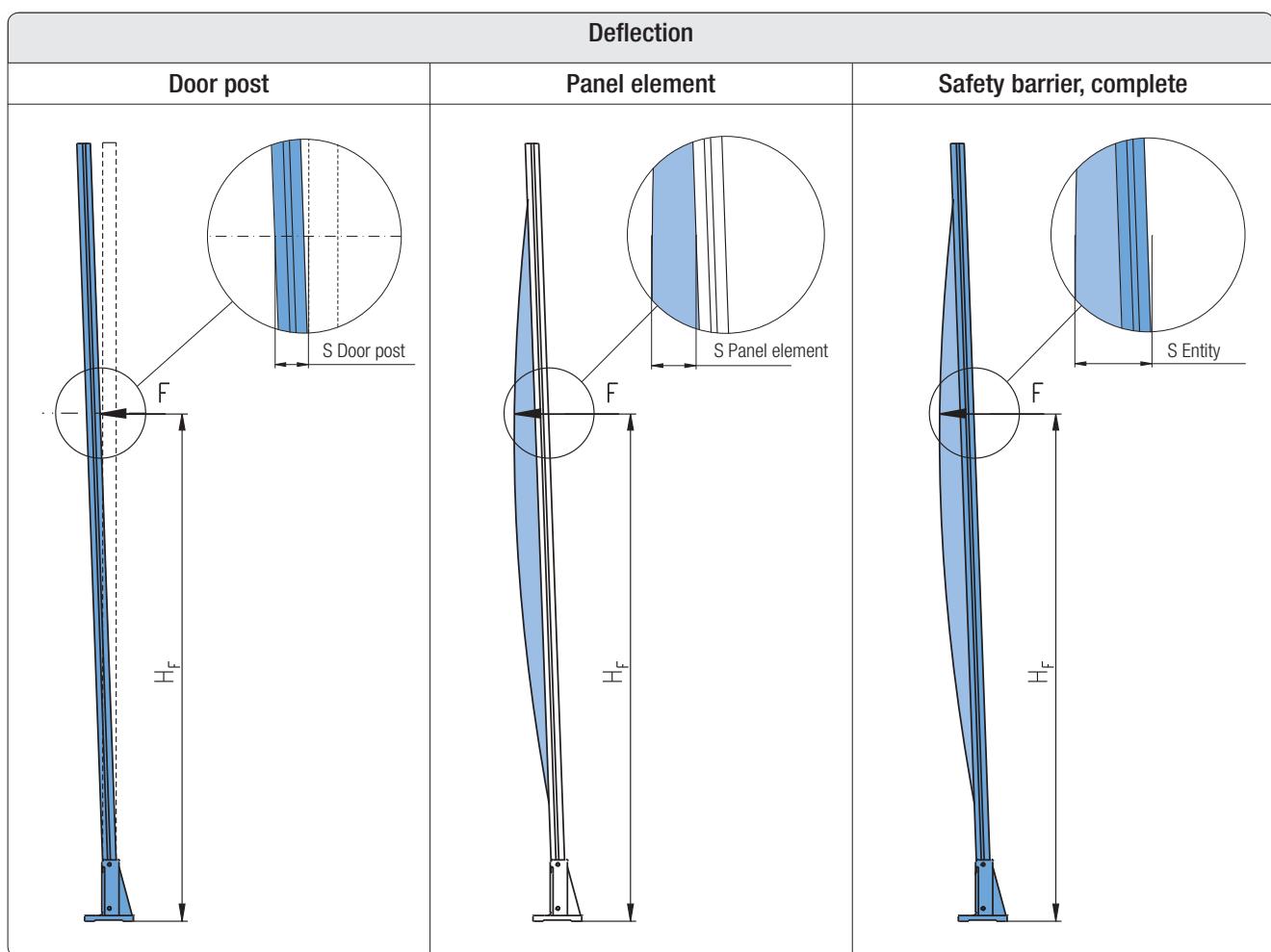
General requirements for the design and construction of fixed and movable guards

Note

If for a certain machinery a special machinery safety standard (Type C Standard) is provided, the specifications of this Type C Standard take precedence.

Examples of Type C Standards:

- DIN EN 619 - Continuous handling equipment and systems
 - DIN EN 693 - Hydraulic presses
 - DIN EN 775 - Industrial robots.
- Recommendations for safety

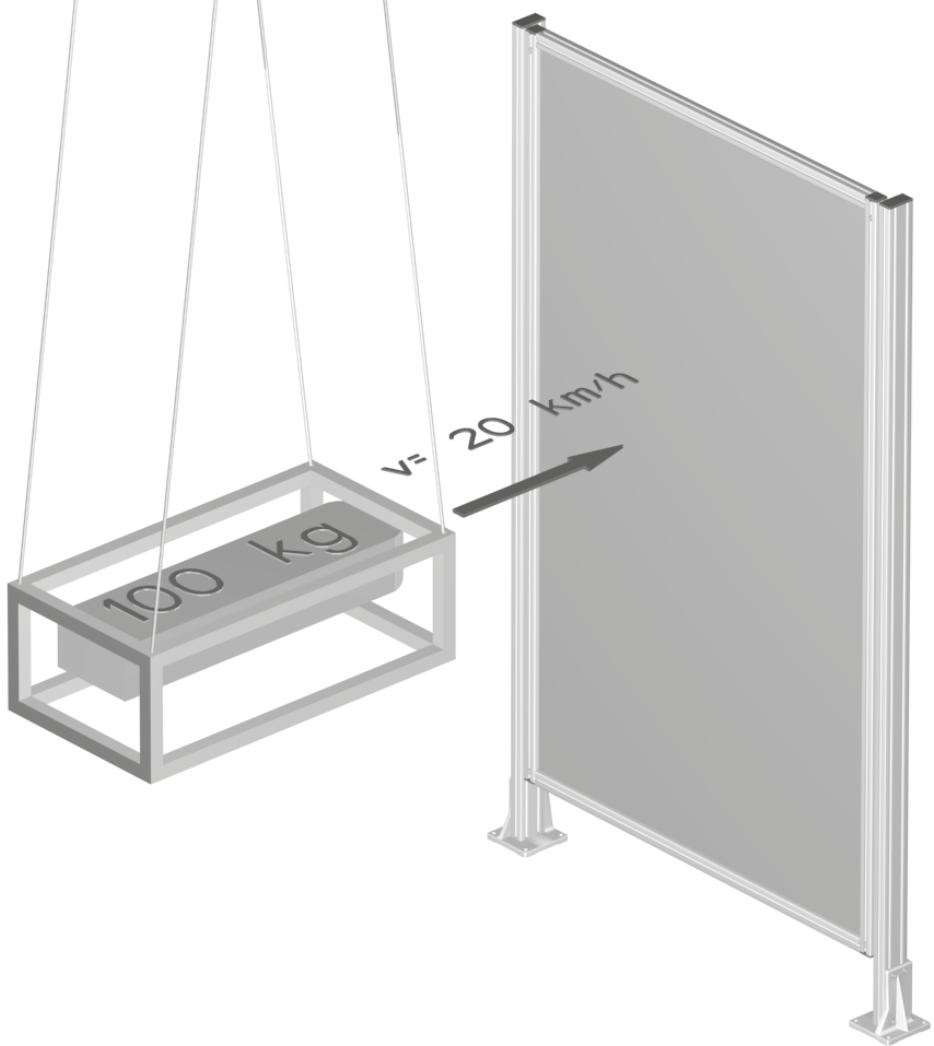

Safety barrier element: without frame
Panel element: Polycarbonate 4 mm

F in N								
	100	150	300	450	600	1,000	1,500	2,000
Profile 40x80, 6E, LP	1,000	1.0	2.0	3.0	5.0	6.0	10.0	15.0
	1,500	3.5	5.0	10.0	15.0	20.0	35.0	62.0

Standard profile	Door post H_F S in mm										
	Profile 40x80, 6E, LP		1,000	1.0	2.0	3.0	5.0	6.0	10.0	15.0	20.0
			1,500	3.5	5.0	10.0	15.0	20.0	35.0	62.0	95.0
	Safety barrier, complete $H_F = 1,500$ S in mm										
	Profile 40x80, 6E, LP	Door post	2.0	2.5	5.0	8.0	10.0	17.5	31.0	48.0	
		Panel element	30.0	38.0	49.0	59.0	65.0	82.0	98.0	115.0	
		Entity	32.0	40.5	54.0	67.0	75.0	99.0	129.0	163.0	

Panel profile	Door post H_F S in mm										
	Profile 60x80, 6E, Panel, LP		1,000	1.0	1.5	2.0	3.0	5.0	8.0	12.0	16.0
			1,500	2.6	3.5	7.0	10.0	14.0	26.0	40.0	52.0
	Safety barrier, complete $H_F = 1,500$ S in mm										
	Profile 60x80, 6E, Panel, LP	Door post	1.5	2.0	3.5	5.0	7.0	13.0	20.0	26.0	
		Panel element	35.0	39.0	48.0	54.0	60.0	73.0	84.0	94.0	
		Entity	36.5	41.0	51.5	59.0	67.0	86.0	104.0	120.0	

Test layout



Test conditions

During this test a body of 100 kg is accelerated to 20 km/h.

During impact of the body into the test barrier an energy of 1600 Joule will be released.

The impact zone is located at the upper third of the test barrier.

Safety barrier unit: without frame

Test with:	Panel element:	Polycarbonate 4 mm
Post:	Panel profile 60×80 mm	
Frame:	Panel profile 40×40 mm	



before impact



at impact



after impact

Result

MayTec safety barrier units succeeded all crash tests without permanent damage.



Safety barrier unit: with frame

Test with:	Panel element:	Polycarbonate 4 mm
Post:		Panel profile 60×80 mm
Frame:		Panel profile 40×40 mm



before impact



at impact



after impact

Result

MayTec safety barrier units succeeded all crash tests without permanent damage.



Safety barrier unit: with frame

Test with:	Panel element:	Welded wire net (steel) 4×40×40 mm
	Post:	Panel profile 60×80 mm
Frame	vertical:	Panel profile 40×40 mm
	horizontal:	Wire net profile 30×30 mm



before impact



at impact



after impact

Result

MayTec safety barrier units succeeded all crash tests without permanent damage.



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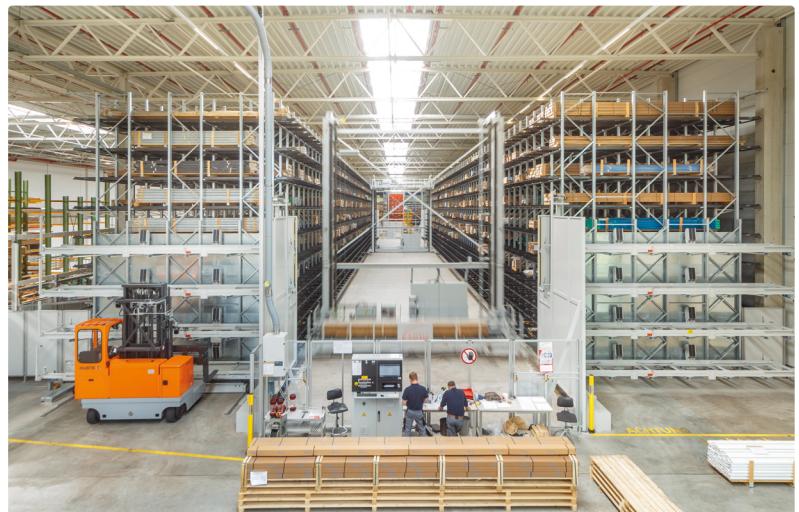
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MayTec GmbH plant in Olching



Accessory storage



Stock of aluminium profiles



Panel storage



Profile machining

The key ...

to success

universal

efficient

functional

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