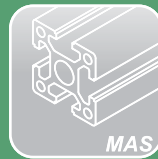


MGS

Machine Guard System

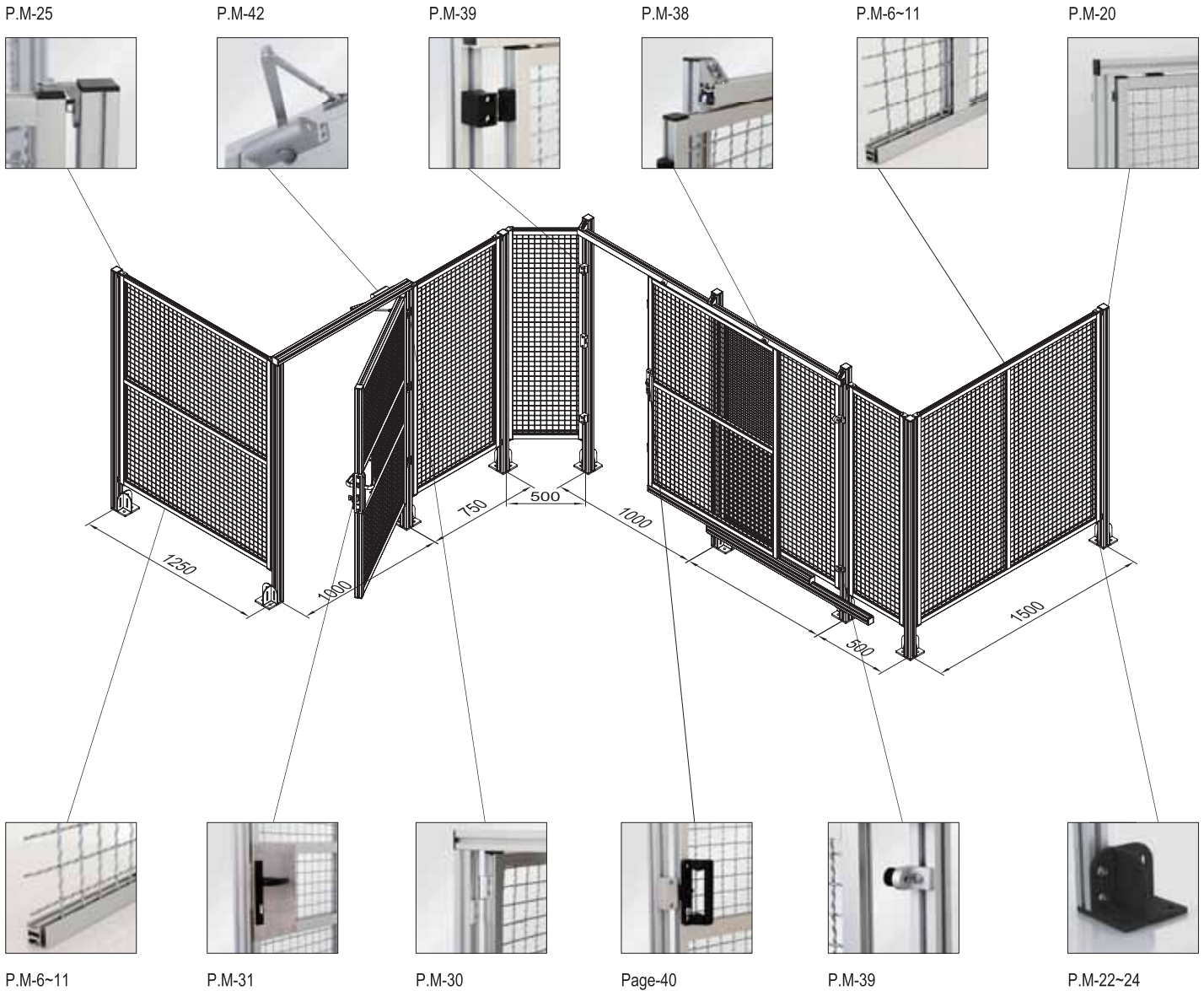




Machine Guard System (MGS) is designed for customers with advanced guarding need. The special design of guarding profiles offers more stable structure and better appearance and unique fastening elements bring faster and safer connections. The guarding unit can be with woven meshes, PMMA panels, aluminum composite panels or similar panel materials. Please refer to MGS catalogue for detail usage instructions.






































Machine Guard System

The machine guard system is a separate system which has been designed to meet the different kinds of demand from customers. The outside appearance gives the whole set a beautiful look. The adjustment of the fastening style increases the reliability of the products and allow the installation of meshes, PMMA panels, aluminum composite panels, different panel-like and so on. Installing net and panel uses different profiles, for more details please refer to the profile sections.



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End Cap for Protective Grille Profile  P.M-14	Clamping Profile Unit  P.M-15~16	Clamping Profile  P.M-17	Bushing  P.M-18	End Cap for Clamping Profile  P.M-18
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Friction Strip Components  P.M-41	Die Cast Bracket  P.M-41	Door Shutter  P.M-42	Safety Lock  P.M-42	Guard rail kick plate profile  P.M-43
Machine guard kick plate end cap  P.M-43	Machine guard kick plate profile  P.M-44			

Modular Assembly System

MAS

Machine Guard System

MGS

Stair and Platform System

SPS

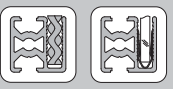
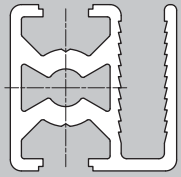

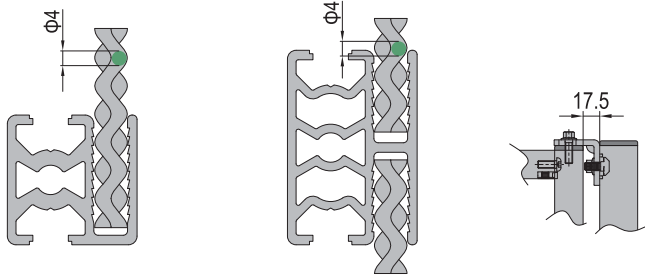

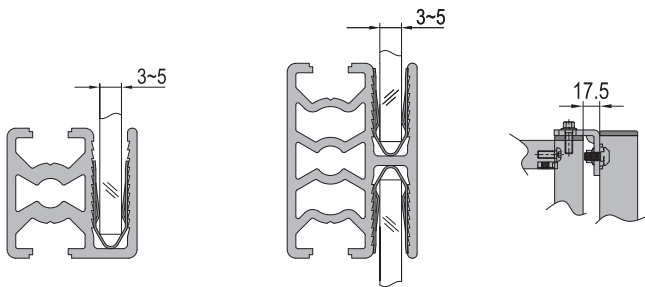
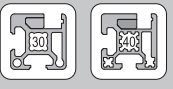
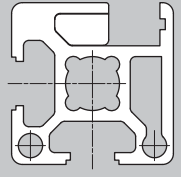

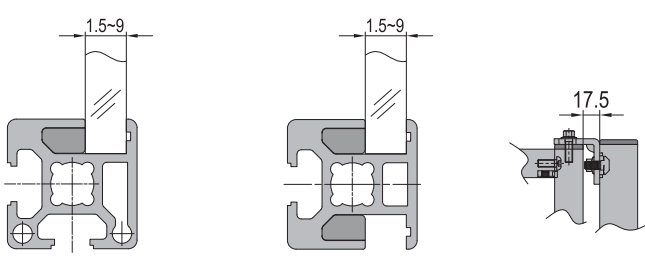

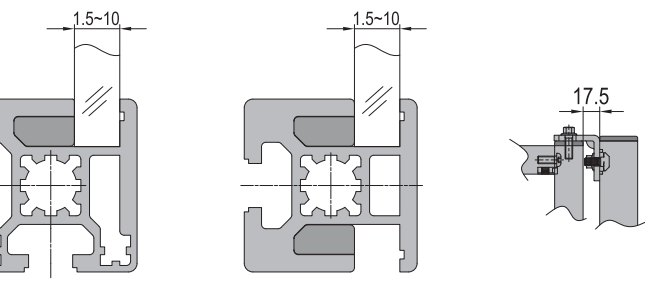

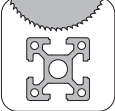
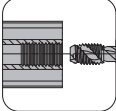
Tubular Framing System

TFS



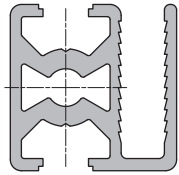
Selection Reference of Standard Unit

Standard unit is composed of either the protective grille profile or clamping profile. Protective grille profile could insert not only the meshes, but also the panels, and the spring clamping nut will be used if inserting panels (the recommended distance of nut is 300mm). Clamping profiles only could insert the panels, and machining will be needed on the profiles to fasten the panels in appropriate positions (the recommended distance of machining is 300mm). The specifications are compared as below.

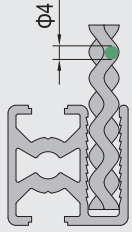
  Protective Grille Profile	 Protective Grille Profile Inserting Mesh		
	 Protective Grille Profile Inserting Panel		
  Clamping Profile	 Clamping Profile PG30		
	 Clamping Profile PG40		
Machining Symbol	 Drilling	 Angle cutting	 Thread tapping

Selection Reference of Standard Unit

Protective Grille Profile



- Efficiency ★★★★★
- Cost ★★★★★
- Leakproofness ★★★
- Flexibility ★★★★★

Protective Grille Profile Inserting Mesh
40x40mm, Φ4 woven mesh

Eg: PN30.14000425.STA.01

01

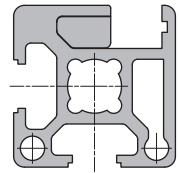


Protective Grille Profile Inserting Panel
3-5mm transparent PMMA panel

Spring Clamping Nut: Recommended distance is 300mm
Eg: PN30.14000425.STA.02

02

Clamping Profile



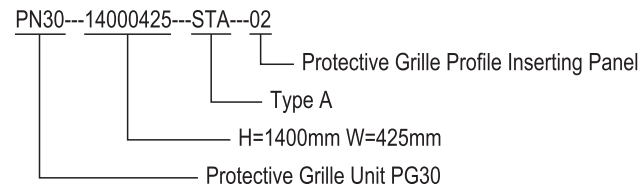
- Efficiency ★★★
- Cost ★★★
- Leakproofness ★★★★★
- Flexibility ★★★




Clamping Profile Inserting Panel
1.5-9mm transparent PMMA panel

Top thread: Recommended distance is 300mm
Eg: PP30.14000425.STA

Item Number Reference:

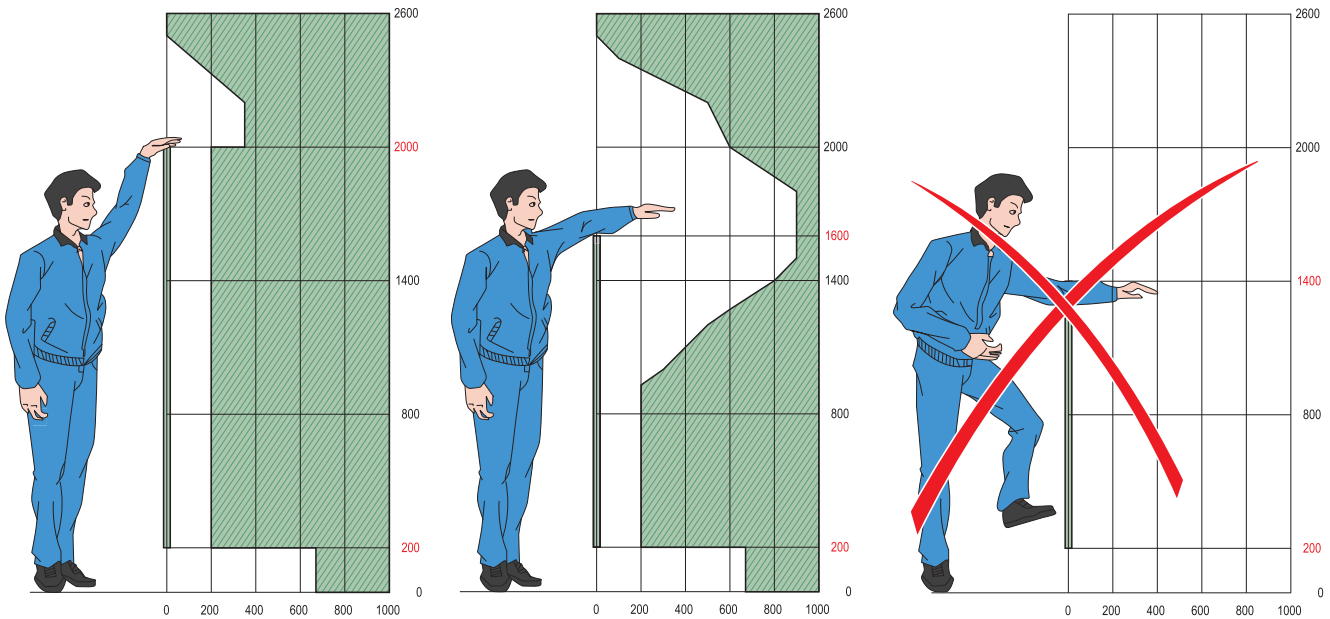


✘ Using protective grille profile insert panel is more economic and quick. However the leakproofness is not as good as the clamping profile, and the thickness of panel also limited to 3 to 5mm. The panel thickness of standard units are all 4mm, if there is no special request on panel thickness, the protective grille profile is recommended.

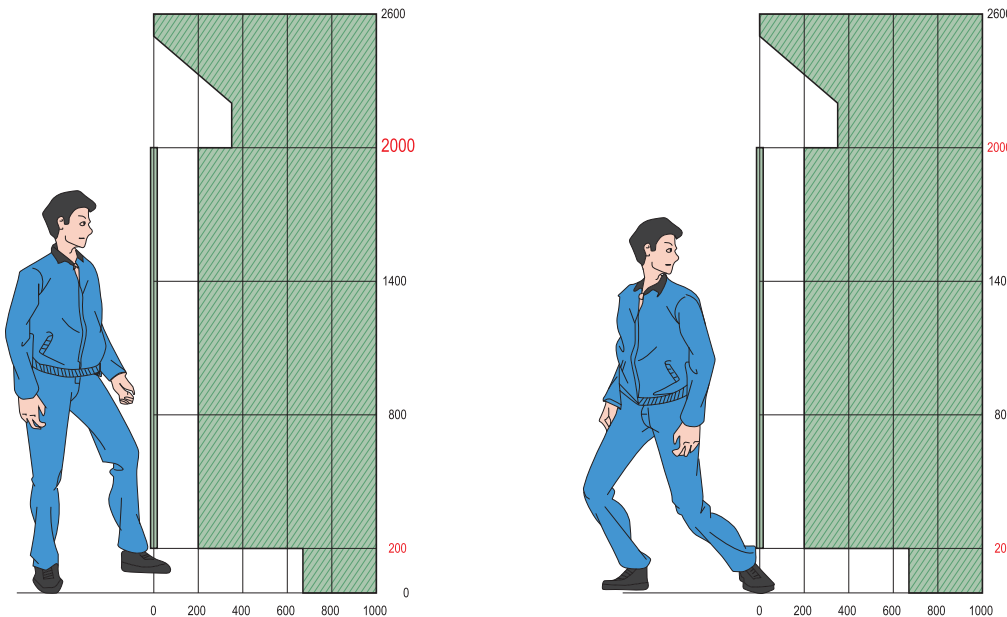


Safety Distance

Machine guard system offers protection against parts that fly out, leaking liquid materials or similar things. The safety distances are dependent on the machine guard height. As figure indicated (safety area is marked in green shadow): Safety distance should be 200mm away from the machine guard. When the height of machine guard is 2000mm, there is still a small part of distance around 350mm from the top cannot get security protection, and it cannot guarantee sufficient safety if the height is less than 1400mm.

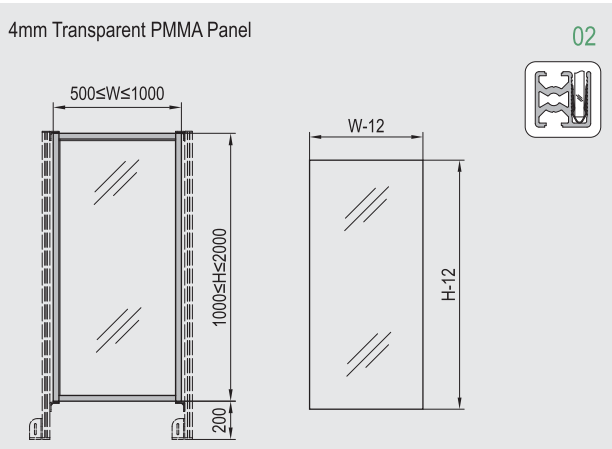
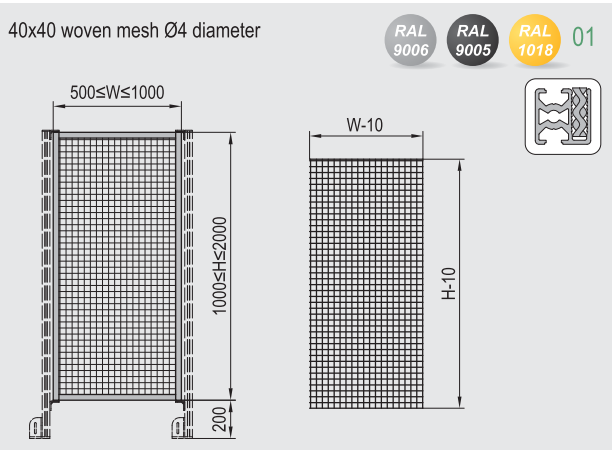


The height from the floor is 200mm. As figure indicated (safety area is marked in green shadow): The distance of 650mm in the foot area cannot get sufficient safety protection.



Protective Grille Unit

PG30 Type A

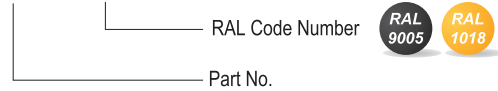


Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG30-Type A-01	1400	425	6.5	PN30.14000425.STA.01
		675	8.8	PN30.14000675.STA.01
		925	11	PN30.14000925.STA.01
	1800	425	8.2	PN30.18000425.STA.01
		675	10.9	PN30.18000675.STA.01
		925	13.7	PN30.18000925.STA.01
PG30-Type A-02	1400	425	6.5	PN30.14000425.STA.02
		675	8.7	PN30.14000675.STA.02
		925	10.8	PN30.14000925.STA.02
	1800	425	8.1	PN30.18000425.STA.02
		675	10.7	PN30.18000675.STA.02
		925	12.9	PN30.18000925.STA.02

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PN30.14000425.STA.01-RAL9005



Associated kits (To be ordered separately)



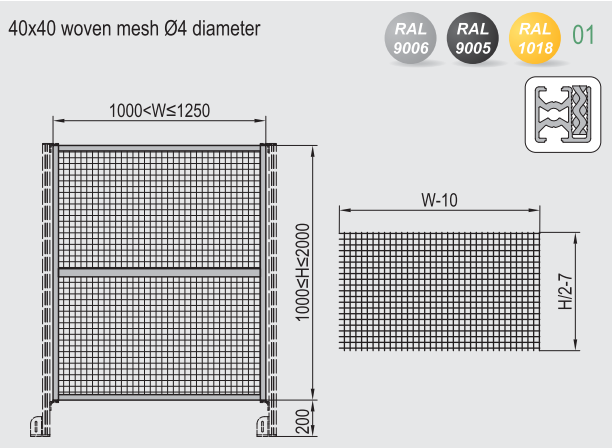
Strut Elements P.M-19~24



Connecting Elements P.M-25

Protective Grille Unit

PG30 Type B

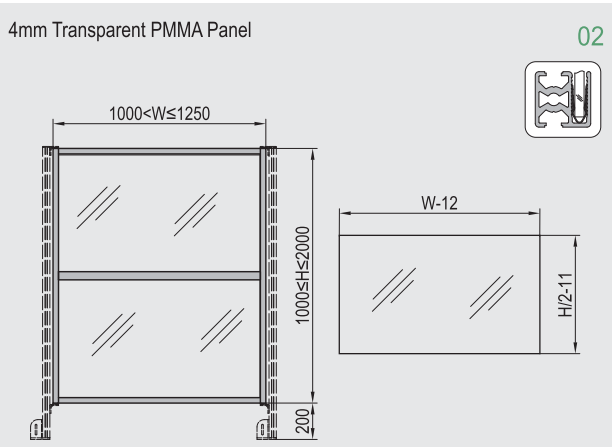
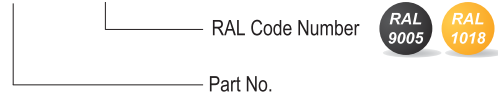


Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG30-Type B-01	1400	1175	14.6	PN30.14001175.STB.01
	1800		17.8	PN30.18001175.STB.01
PG30-Type B-02	1400		14.4	PN30.14001175.STB.02
	1800		17.5	PN30.18001175.STB.02

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PN30.14001175.STB.01-RAL9005



Associated kits (To be ordered separately)



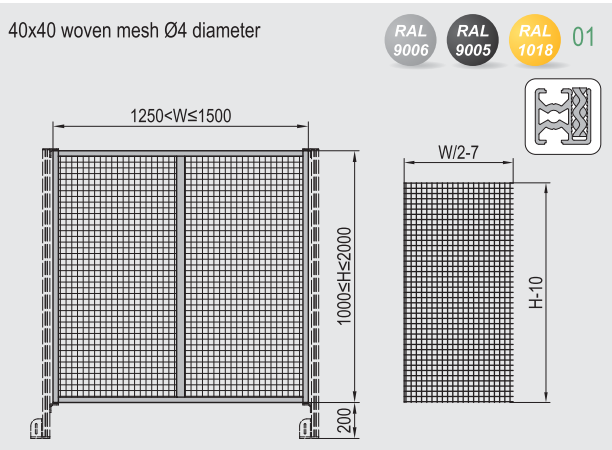
Strut Elements P.M-19~24



Connecting Elements P.M-25

Protective Grille Unit

PG30 Type C

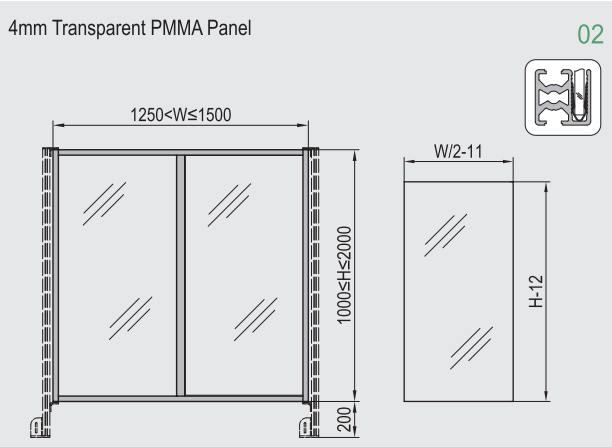
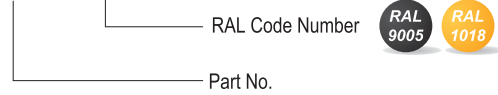


Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG30-Type C-01	1400	1425	17.1	PN30.14001425.STC.01
	1800		21.3	PN30.18001425.STC.01
PG30-Type C-02	1400		16.9	PN30.14001425.STC.02
	1800		20.9	PN30.18001425.STC.02

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PN30.14001425.STC.01-RAL9005



Associated kits (To be ordered separately)



Strut Elements P.M-19~24

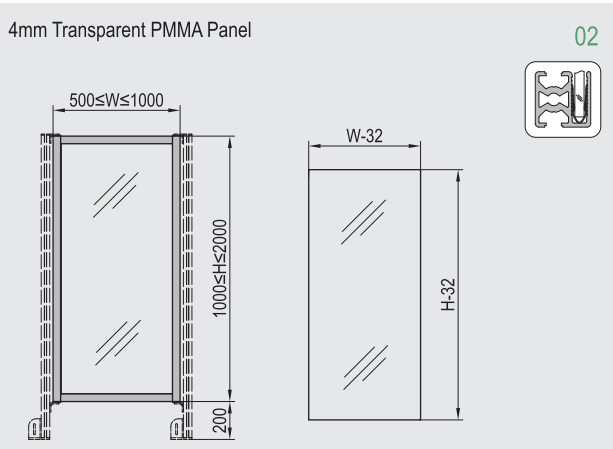
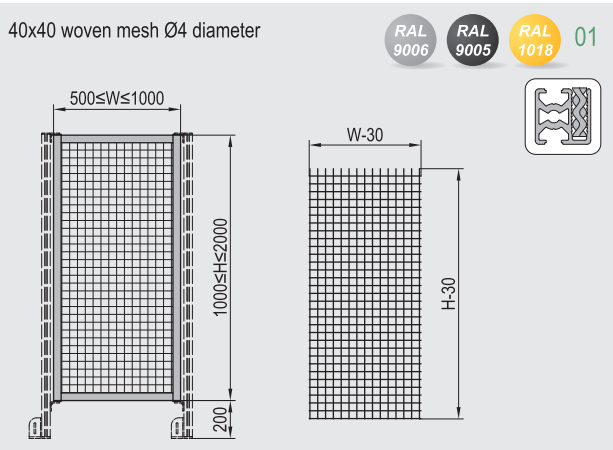


Connecting Elements P.M-25



Protective Grille Unit

PG40 Type A

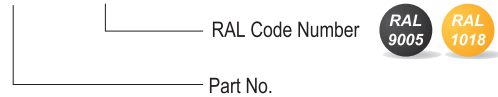


Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG40-Type A-01	1400	420	8.3	PN40.14000420.STA.01
		670	10.8	PN40.14000670.STA.01
		920	13.4	PN40.14000920.STA.01
	1800	420	10.4	PN40.18000420.STA.01
		670	13.4	PN40.18000670.STA.01
		920	16.4	PN40.18000920.STA.01
PG40-Type A-02	1400	420	8.3	PN40.14000420.STA.02
		670	10.7	PN40.14000670.STA.02
		920	13.2	PN40.14000920.STA.02
	1800	420	10.3	PN40.18000420.STA.02
		670	12.5	PN40.18000670.STA.02
		920	16.2	PN40.18000920.STA.02

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PN40.14000420.STA.01-RAL9005



Associated kits (To be ordered separately)



Strut Elements P.M-19~24

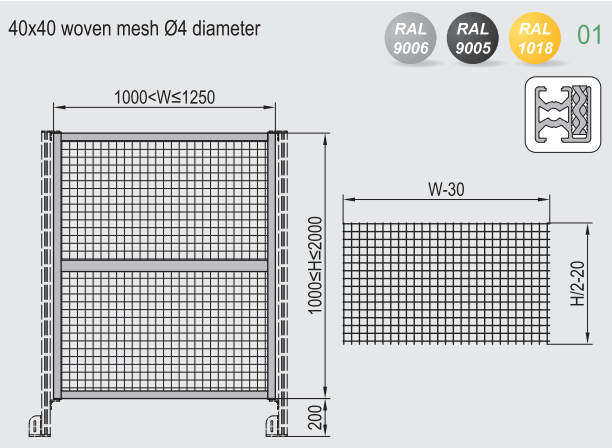


Connecting Elements P.M-25



Protective Grille Unit

PG40 Type B

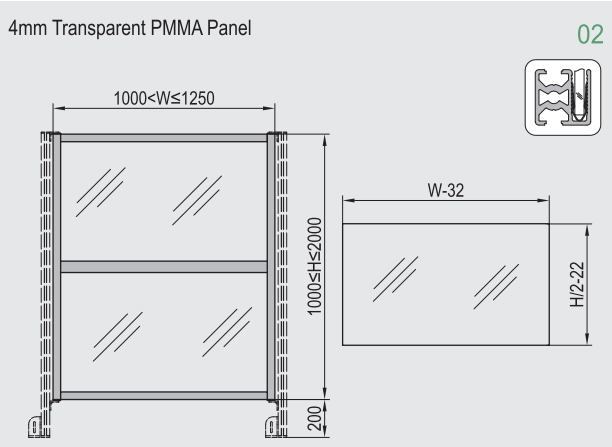
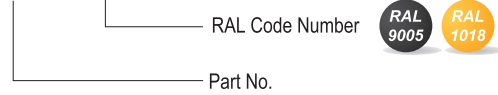


Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG40-Type B-01	1400	1170	18.1	PN40.14001170.STB.01
	1800		21.6	PN40.18001170.STB.01
PG40-Type B-02	1400		17.9	PN40.14001170.STB.02
	1800		23.4	PN40.18001170.STB.02

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PN40.14001170.STB.01-RAL9005



Associated kits (To be ordered separately)



Strut Elements P.M-19~24

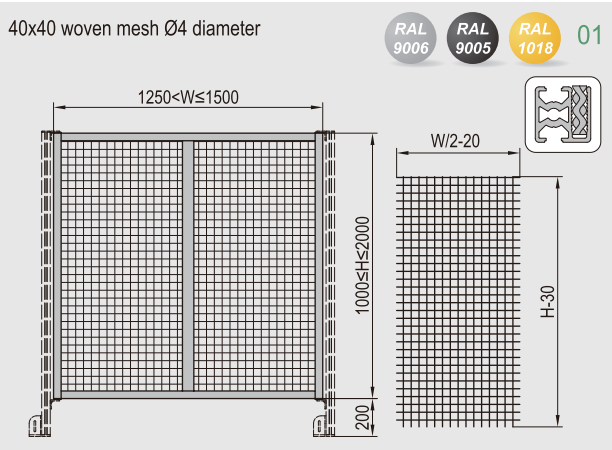


Connecting Elements P.M-25



Protective Grille Unit

PG40 Type C

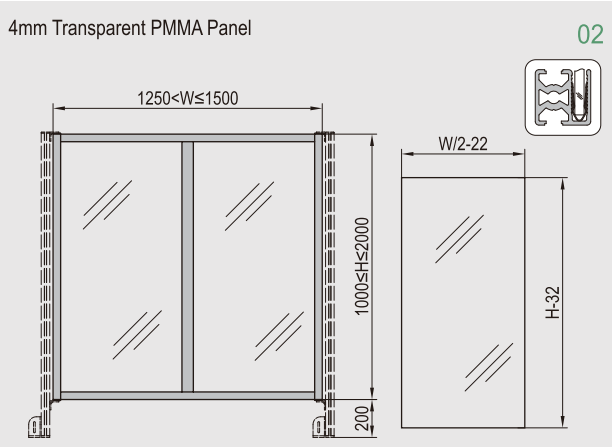
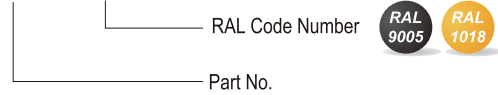


Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG40-Type C-01	1400	1420	21	PN40.14001420.STC.01
	1800		25.9	PN40.18001420.STC.01
PG40-Type C-02	1400		20.8	PN40.14001420.STC.02
	1800		25.5	PN40.18001420.STC.02

Item Number Reference

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PN40.14001420.STC.01-RAL9005



Associated kits (To be ordered separately)



Strut Elements P.M-19~24



Connecting Elements P.M-25

Protective Grille Profile



30x30 1 Grille slot



30x45 2 Grille slots



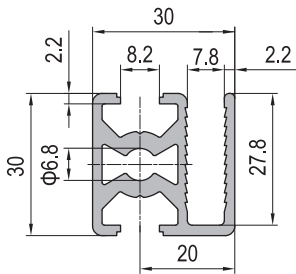
40x40 1 Grille slot



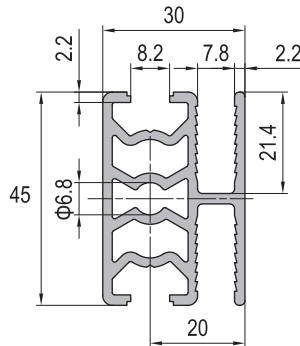
40x60 2 Grille slots

Protective grille profile could insert not only the meshes but also the panels, and the spring clamping nut will be used if inserting panels, the recommended distance of nut is 300mm (refer to P.M-14).

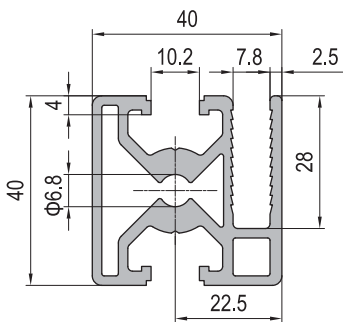
PG30 30x30 1 Grille slot



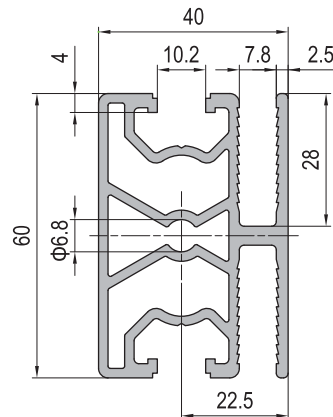
PG30 30x45 2 Grille slots



PG40 40x40 1 Grille slot



PG40 40x60 2 Grille slots



Description	Moment of Inertia $I_x(\text{cm}^4)$	Moment of Inertia $I_y(\text{cm}^4)$	Moment of Resistance $W_x(\text{cm}^3)$	Moment of Resistance $W_y(\text{cm}^3)$	Mass (kg/m)	Part No.
Protective Grille Profile PG30 30x30 1 Grille slot	3.37	2.47	2.2	1.6	0.94	1.22.30.030030.01
Protective Grille Profile PG30 30x45 2 Grille slots	7.22	4.67	4.81	2.08	1.24	1.22.30.030045.02
Protective Grille Profile PG40 40x40 1 Grille slot	9.85	8.05	4.93	4.03	1.6	1.22.40.040040.01
Protective Grille Profile PG40 40x60 2 Grille slots	23.25	13.57	11.63	4.52	2.0	1.22.40.040060.02

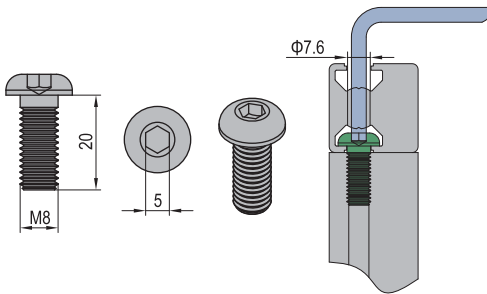
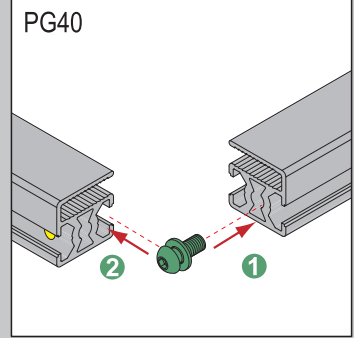
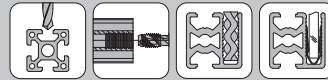




Bolt Connector

A simple and economic way to replace end connector with more connection reliability.

Material: zinc plated steel



AE	Fastening Set
	M8 Washer zinc plated

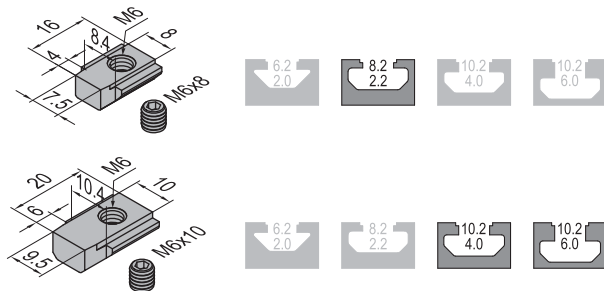
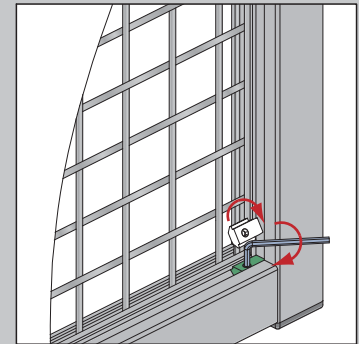
Description	Fastening Set	Mass (g)	Part No.
Bolt Connector-PG30		10	3.81.M8.20
Bolt Connector-PG40	1xAE	12	3.81.M8.20.ST



Anti-torsion Subsequent Nut

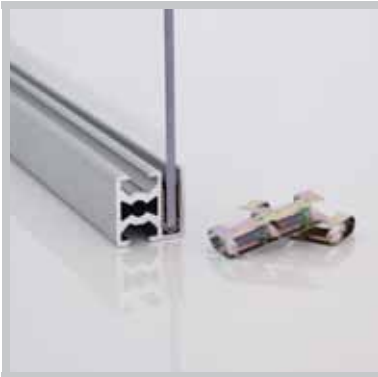
Prevent torsion from connecting profiles with screw connectors.

Material: nickel plated steel



Description	Mass (g)	Part No.
Anti-torsional Subsequent Nut-8 (with top thread)	10	2.32.08.M6
Anti-torsional Subsequent Nut-10 (with top thread)	15	2.32.10.M6

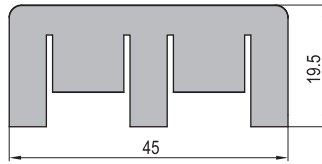
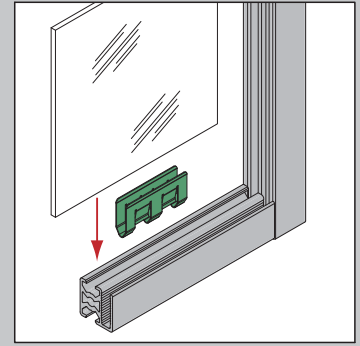




Spring Clamping Nut

Spring clamping nut has to be used when inserting panels and recommend installing distance is 300mm.

Material: spring steel

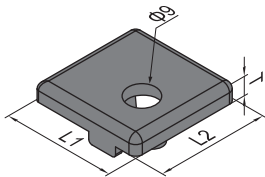
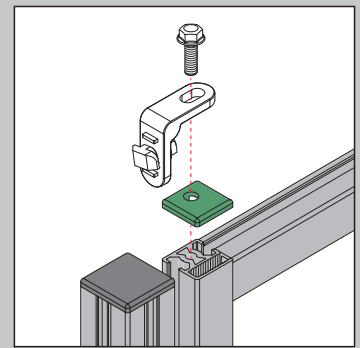


Description	Mass (g)	Part No.
Spring Clamping Nut	7	6.42.01



To prevent injury and improve end appearance, the bore hole enables assembly of profile and connectors.

Material : Black ABS



Description	L1 (mm)	L2 (mm)	T (mm)	Mass (g)	Part No.
End Cap for Protective Grille Profile- PG30-3030	40	40	5	4	4.13.30.3030.SM
End Cap for Protective Grille Profile- PG40-4040				6	4.13.40.4040.SM



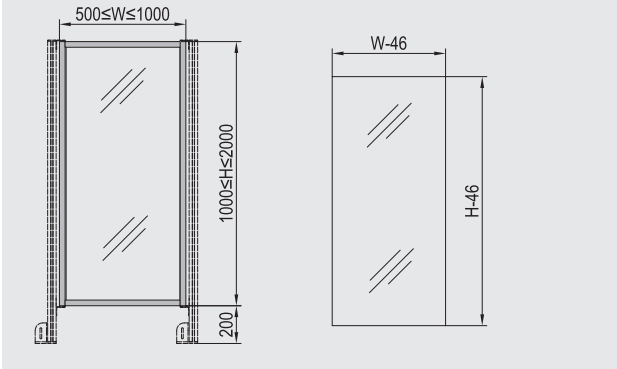
Clamping Profile Unit

PG30

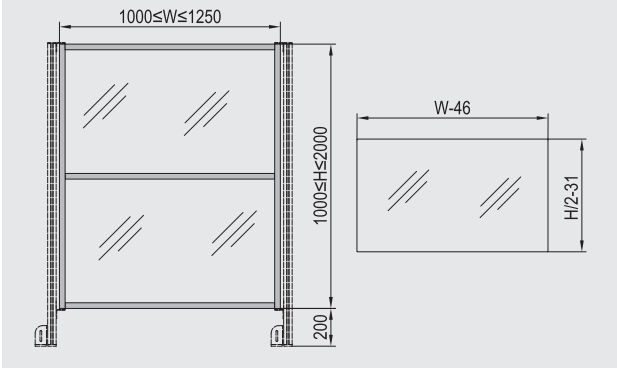
4mm Transparent PMMA Panel



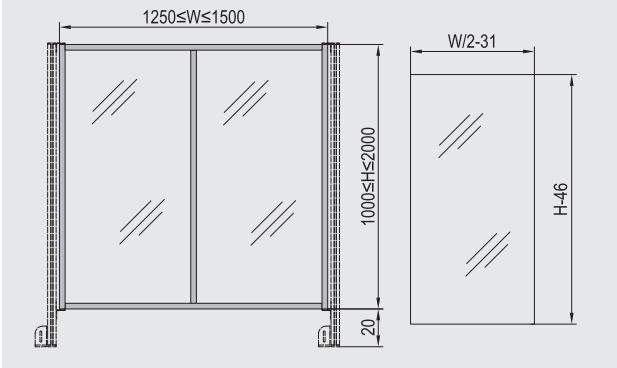
Type A



Type B



Type C



Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG30-Type A	1400	425	6.4	PP30.14000425.STA.
		675	8.6	PP30.14000675.STA
		925	10.8	PP30.14000925.STA
	1800	425	8	PP30.18000425.STA
		675	10.7	PP30.18000675.STA
		925	13.4	PP30.18000925.STA
PG30-Type B	1400	1175	15.2	PP30.14001175.STB
	1800		18.2	PP30.18001175.STB
PG30-Type C	1400	1425	17.8	PP30.14001425.STC
	1800		21.3	PP30.18001425.STC

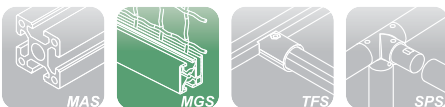
Associated kits (To be ordered separately)



Strut Elements P.M-19~24



Connecting Elements P.M-25



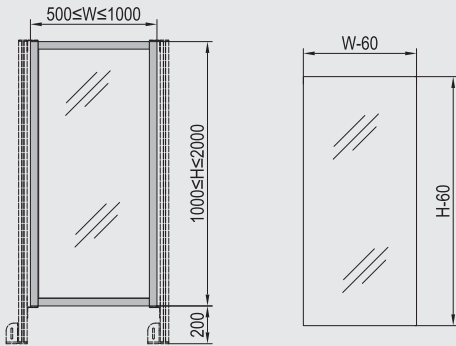
Clamping Profile Unit

PG40

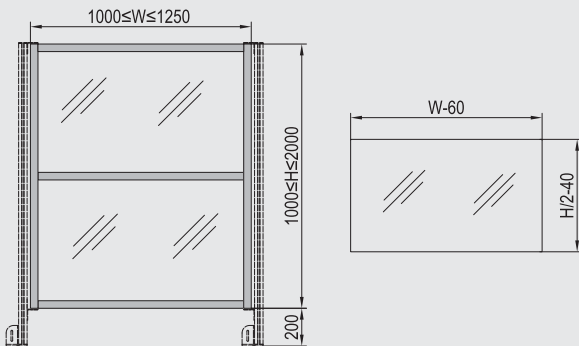
4mm Transparent PMMA Panel



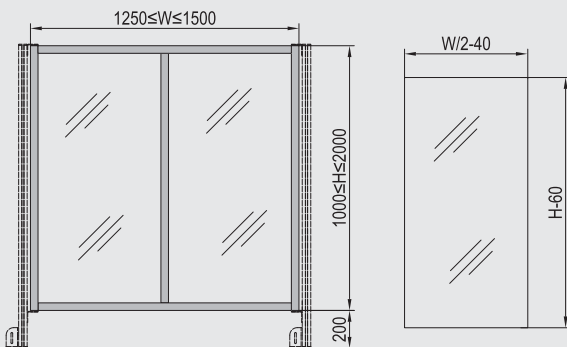
Type A



Type B



Type C



Description	H (mm)	W (mm)	Mass (kg)	Part No.
PG40-Type A	1400	420	10.2	PP40.14000420.STA
		670	12.9	PP40.14000670.STA
		920	15.6	PP40.14000920.STA
	1800	420	12.6	PP40.18000420.STA
		670	15.8	PP40.18000670.STA
		920	19	PP40.18000920.STA
PG40-Type B	1400	1170	20.9	PP40.14001170.STB
	1800		24.8	PP40.18001170.STB
PG40-Type C	1400	1420	24.2	PP40.14001420.STC
	1800		28.5	PP40.18001420.STC

Associated kits (To be ordered separately)



Strut Elements P.M-19~24



Connecting Elements P.M-25

Modular Assembly System

MAS

Machine Guard System

MGS

Stair and Platform System

SPS

Tubular Framing System

TFS



Clamping Profile



30x30 1 Clamping slot



30x30 2 Clamping slots Parallel



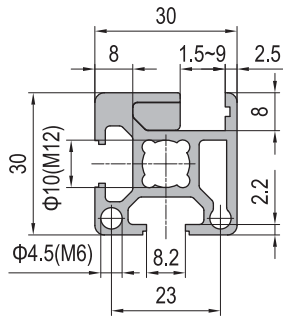
40x40 1 Clamping slot



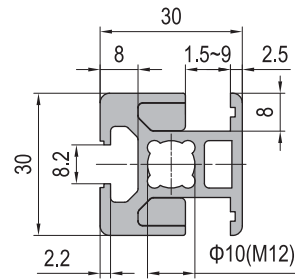
40x40 2 Clamping slots Parallel

Clamping profiles only could insert the panels with thickness range of 1.5-9mm for PG30 and 1.5-10mm for PG40, and machining will be needed on the profiles to fasten the panels in appropriate positions, the recommended distance of machining is 300mm.

PG30 30x30 1 Clamping slot

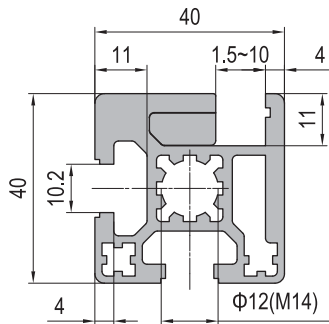


PG30 30x30 2 Clamping slots Parallel

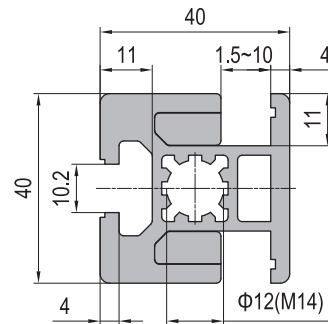


※ M4x10mm top thread recommended for PG30 profile (panel thickness 3-5mm)

PG40 40x40 1 Clamping slot



PG40 40x40 2 Clamping slots Parallel



※ M4x12mm top thread recommended for PG40 profile (panel thickness 3-5mm).

Description	Moment of Inertia $I_x(\text{cm}^4)$	Moment of Inertia $I_y(\text{cm}^4)$	Moment of Resistance $W_x(\text{cm}^3)$	Moment of Resistance $W_y(\text{cm}^3)$	Mass (kg/m)	Part No.
Clamping Profile PG30 30x30 1 Clamping slot	3.7	2.7	1.8	1.4	1.1	1.21.30.030030.01
Clamping Profile PG30 30x30 2 Clamping slots Parallel	3.5	3.3	2.2	2.2	1.3	1.21.30.030030.02P
Clamping Profile PG40 40x40 1 Clamping slot	12.3	9.5	4.4	3.4	2.2	1.21.40.040040.01
Clamping Profile PG40 40x40 2 Clamping slots Parallel	12.4	12.1	5.8	6.1	2.6	1.21.40.040040.02P

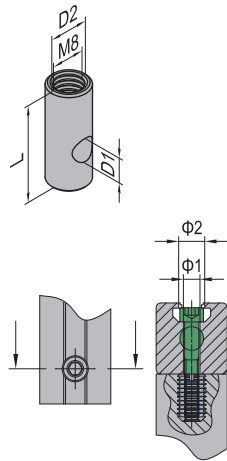
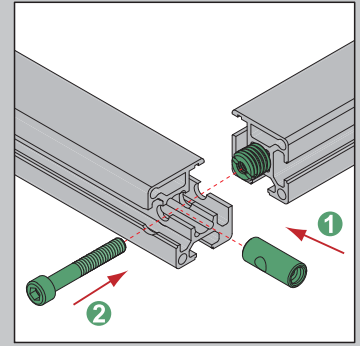
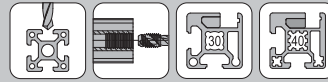




Bushing

To realize quick installation of clamping profile unit with connecting elements.

Material : zinc plated steel



CI	Fastening Set	GD	Fastening Set
	M6x40 Bolt zinc plated		M8x45 Bolt zinc plated
	M12→M6 Hole Reducer Bolt nickel plated		M14→M8 Hole Reducer Bolt nickel plated

Description	L	D1	D2	φ1	φ2	Fastening Set	Mass (g)	Part No.
Bushing-PG30 (set)	25	6	10	7	11	1xCI	20	PPJ30.ST
Bushing-PG40 (set)	30	8	12	9	14	1xGD	40	PPJ40.ST

Modular Assembly System

MAS

Machine Guard System

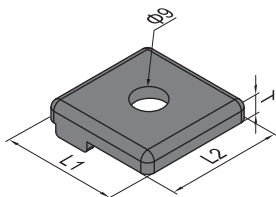
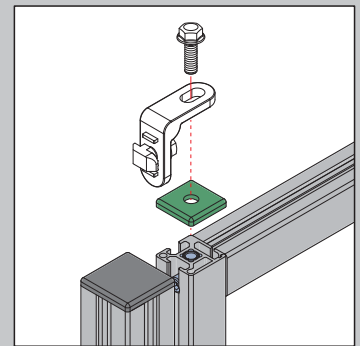
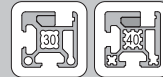
MGS



End Cap for Clamping Profile

To prevent injury and improve end appearance, the bore hole enables assembly of profile and connectors.

Material : Black ABS



Description	L1 (mm)	L2 (mm)	T (mm)	Mass (g)	Part No.
End Cap for Clamping Profile-PG30-3030	30	30	5	4	4.12.30.3030.SM
End Cap for Clamping Profile-PG40-4040	40	40		6	4.12.40.4040.SM

Stair and Platform System

SPS

Tubular Framing System

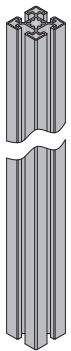
TFS



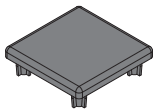


Strut Elements

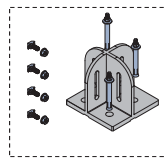
PG30 machine guard unit: H=1400mm, PG40 40x40 light strut profile recommended;
 H=1800mm, special PG40 40x80 profile for strut elements recommended
 PG40 machine guard unit: H=1400mm, PG40 45x45 light strut profile recommended;
 H=1800mm, special PG40 45x90 profile for strut elements recommended



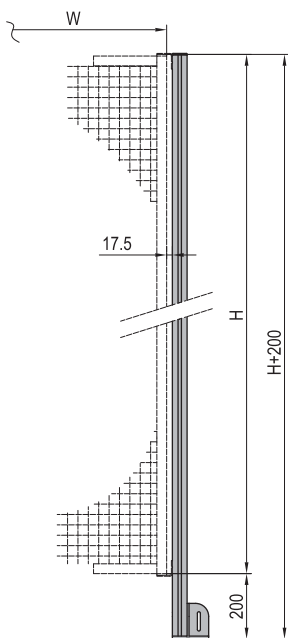
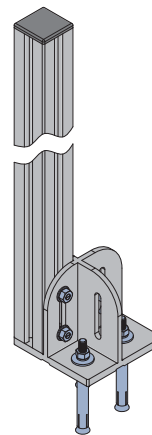
P.M-20



P.M-21



P.M-22-24

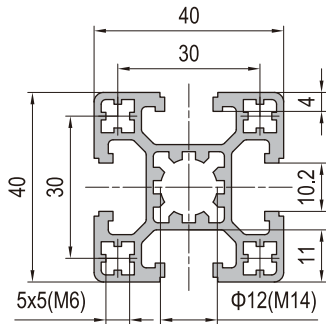


Description	Strut Profile	H (mm)	Part No.
Strut Elements H1400	40x40L	1400	PBH1400.4040.ST
	40x80		PBH1400.4080.SE.ST
	45x45L		PBH1400.4545.ST
	45x90		PBH1400.4590.SE.ST
Strut Elements H1800	40x40L	1800	PBH1800.4040.ST
	40x80		PBH1800.4080.SE.ST
	45x45L		PBH1800.4545.ST
	45x90		PBH1800.4590.SE.ST

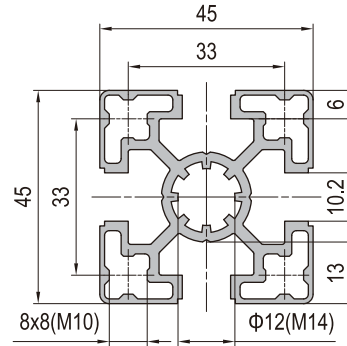
Components for Strut Elements

Profile for strut elements

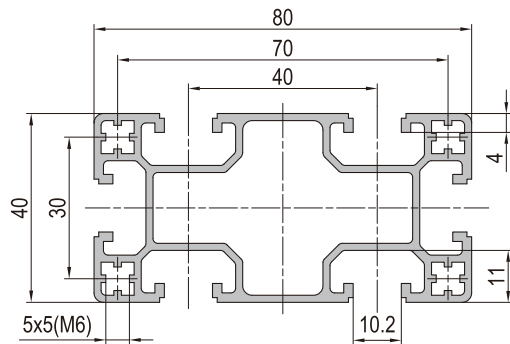
PG40 40x40 4 slots light



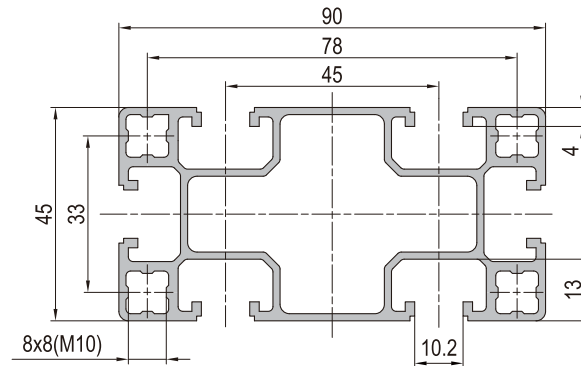
PG45 45x45 4 slots Light



PG40 40x80 6 slots For strut elements



PG45 45x90 6 slots For strut elements



Description	Moment of Inertia $I_x(\text{cm}^4)$	Moment of Inertia $I_y(\text{cm}^4)$	Moment of Resistance $W_x(\text{cm}^3)$	Moment of Resistance $W_y(\text{cm}^3)$	Mass (kg/m)	Part No.
Strut Profile PG40 40x40 4 slots Light	8.6	8.6	4.3	4.3	1.5	1.11.40.040040.04L
PG40 40x80 6 slots for strut elements	13.6	50.7	6.8	12.7	1.83	1.42.40.040080.06.SE
Strut Profile PG45 45x45 4 slots Light	10.5	10.5	4.7	4.7	1.6	1.11.45.045045.04L
PG45 45x90 6 slots for strut elements	20.1	77.2	8.9	17.2	2.2	1.42.45.045090.06.SE



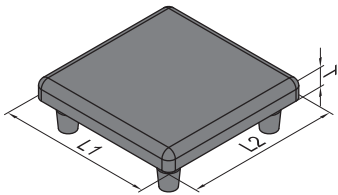


End Cap

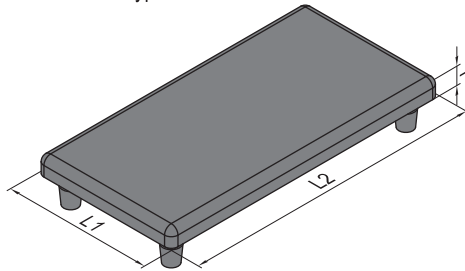
To prevent staff from any injury and improve profile end appearance.

Material and Color: black ABS

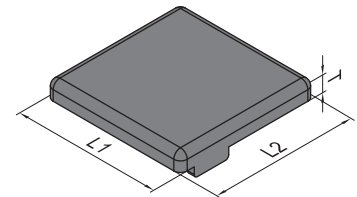
Type B



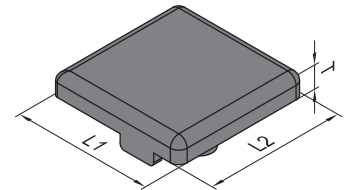
Type C



Type F



Type G



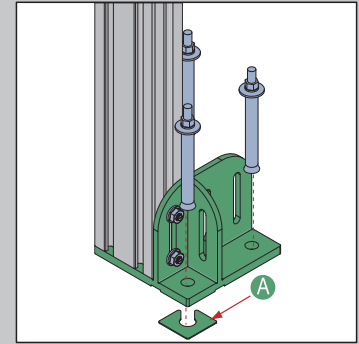
Description		L1 (mm)	L2 (mm)	T (mm)	Mass (g)	Part No.
Type B	End Cap-PG40-4040	40	40	5	6	4.11.40.4040
	End Cap-PG45-4545	45	45		8	4.11.45.4545
Type C	End Cap-PG40-4080	40	80	5	13	4.11.40.4080
	End Cap-PG45-4590	45	90		16	4.11.45.4590
Type F	End Cap-Clamping Profile PG30-3030	30	30	5	4	4.12.30.3030
	End Cap-Clamping Profile PG40-4040	40	40		6	4.12.40.4040
Type G	End Cap-Protective Grille Profile PG30-3030	30	30	5	4	4.13.30.3030
	End Cap-Protective Grille Profile PG40-4040	40	40		6	4.13.40.4040



Base Plate

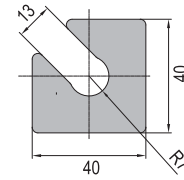
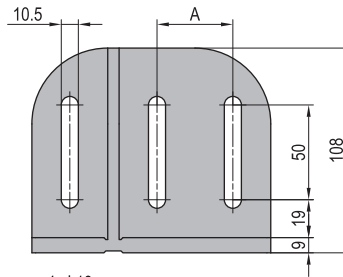
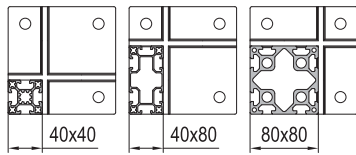
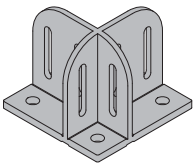
To support strut profile at the bottom. Expansion bolts chocked into floor can offer a high stability.

Material and surface treatment: cast steel, anti-corrosive

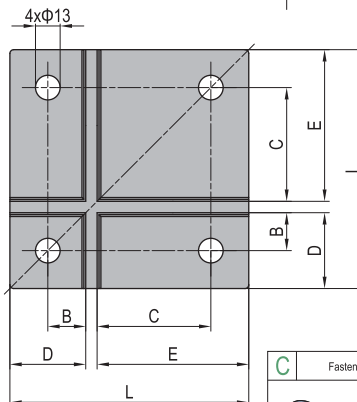
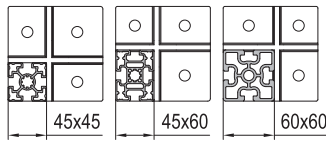
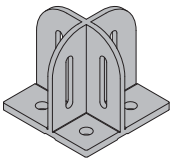


A Base Plate Gasket
To adjust the degree of vertical profile and uneven ground.

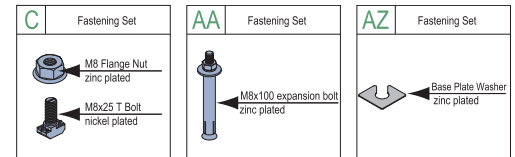
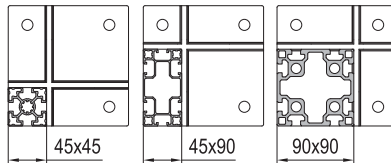
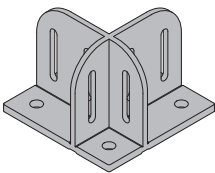
Base Plate 4080



Base Plate 4560



Base Plate 4590



Description	L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Fastening Set	Mass (g)	Part No.
Base Plate-4080 (pcs)	126	40	20	60	40	80	2xAZ	1930	5.11.4080
Base Plate-4080 (set A)							4xC+3xAA+2xAZ	2240	5.11.4080.STA
Base Plate-4080 (set B)							6xC+3xAA+2xAZ	2290	5.11.4080.STB
Base Plate-4080 (set C)							8xC+3xAA+2xAZ	2340	5.11.4080.STC
Base Plate-4560 (pcs)	111		22.5	30	45	60	2xAZ	1600	5.11.4560
Base Plate-4560 (set)							4xC+3xAA+2xAZ	1910	5.11.4560.ST
Base Plate-4590 (pcs)	141	45	22.5	67.5	45	90	2xAZ	2330	5.11.4590
Base Plate-4590 (set A)							4xC+3xAA+2xAZ	2640	5.11.4590.STA
Base Plate-4590 (set B)							6xC+3xAA+2xAZ	2690	5.11.4590.STB
Base Plate-4590 (set C)							8xC+3xAA+2xAZ	2740	5.11.4590.STC
Base Plate Gasket A								9	5.11.01

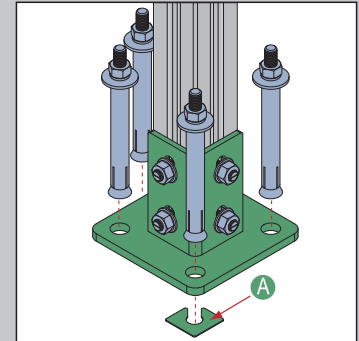




Base Plate 

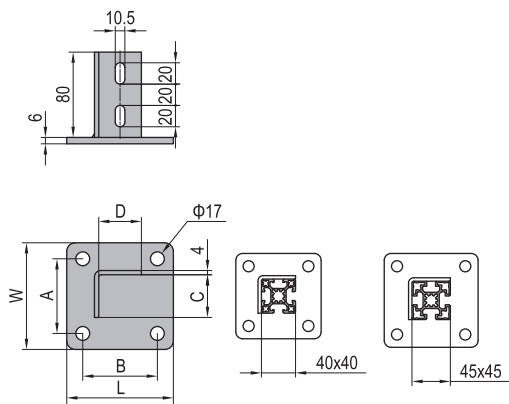
To support strut profile mounted between sections of machine guard system, Expansion bolts checked into floor can offer very high stability.

Material and Color: carbon steel, black electrophoresis

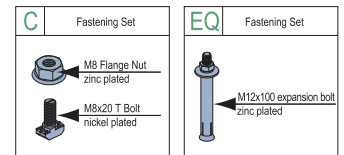
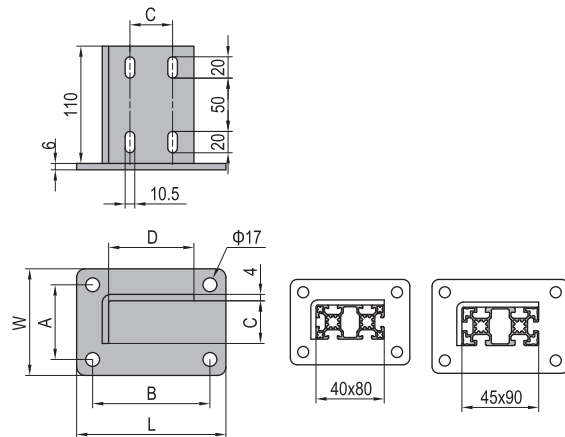


A Base Plate Gasket
To adjust the degree of vertical profile and uneven ground.

Base Plate 40x40/45x45



Base Plate 40x80/45x90



Description	L (mm)	W (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Fastening Set	Mass (g)	Part No.
Base Plate-4040 (pcs)	100	100	70	70	40	40		629	5.13.4040
Base Plate-4040 (set)							4xC+4xEQ	1275	5.13.4040.ST
Base Plate-4545 (pcs)	110	110	80	80	45	45		1022	5.13.4545
Base Plate-4545 (set)							4xC+4xEQ	1710	5.13.4545.ST
Base Plate-4080 (pcs)	140	100	70	110	40	80		753	5.13.4080
Base Plate-4080 (set)							6xC+4xEQ	1400	5.13.4080.ST
Base Plate-4590 (pcs)	160	110	80	130	45	90		1243	5.13.4590
Base Plate-4590 (set)							6xC+4xEQ	1920	5.13.4590.ST

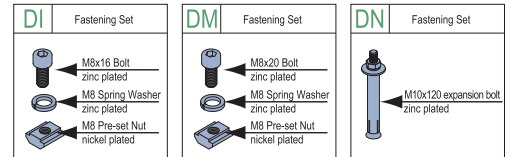
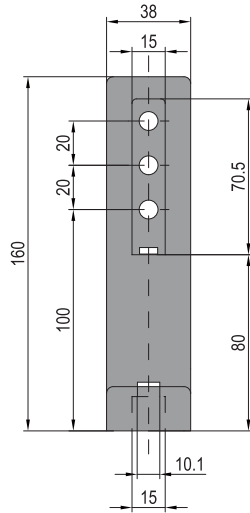
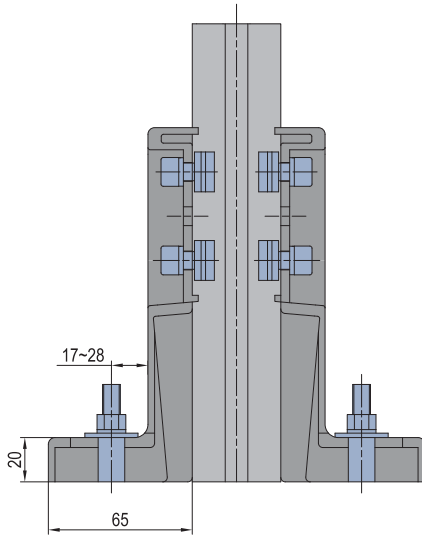
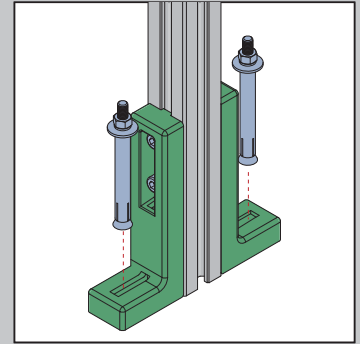




L Base  Economical

L base is to fix the profile on the floor and adjust the height of the profile to the floor.

Material: diecast aluminum, black electrophoresis



Description	Fastening Set	Mass (g)	Part No.
L Base (pcs)		236	5.52.10.P
L Base-PG40 (set)	2xDI+1xDN	303	5.52.10.04.ST.P
L Base-PG45 (set)	2xDM+1xDN	306	5.52.10.06.ST.P

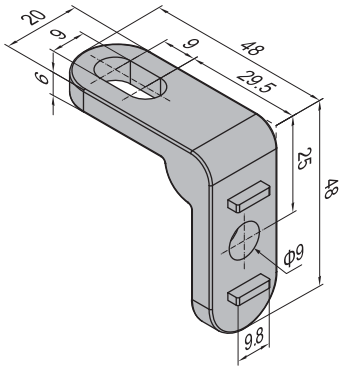
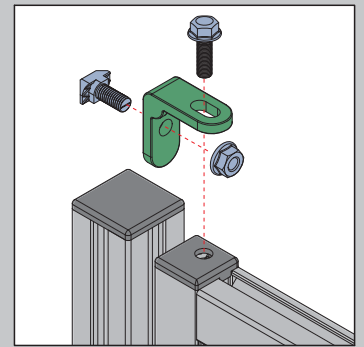
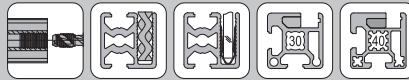




Connecting Element

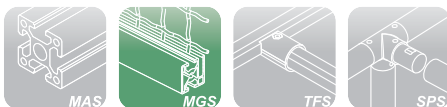
To connect protective fences with strut element.

Material: Die cast zinc



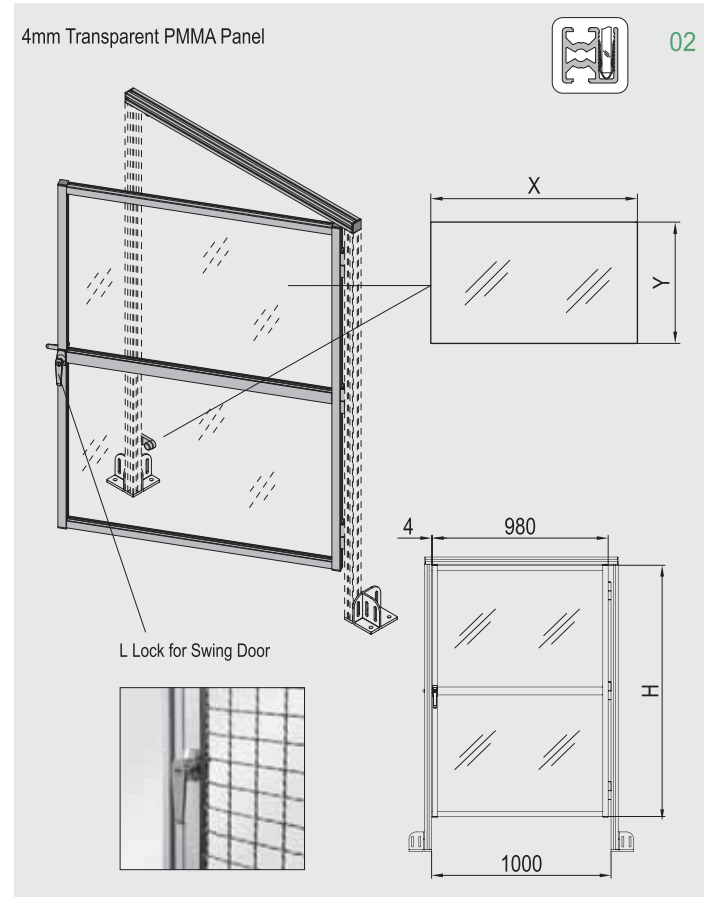
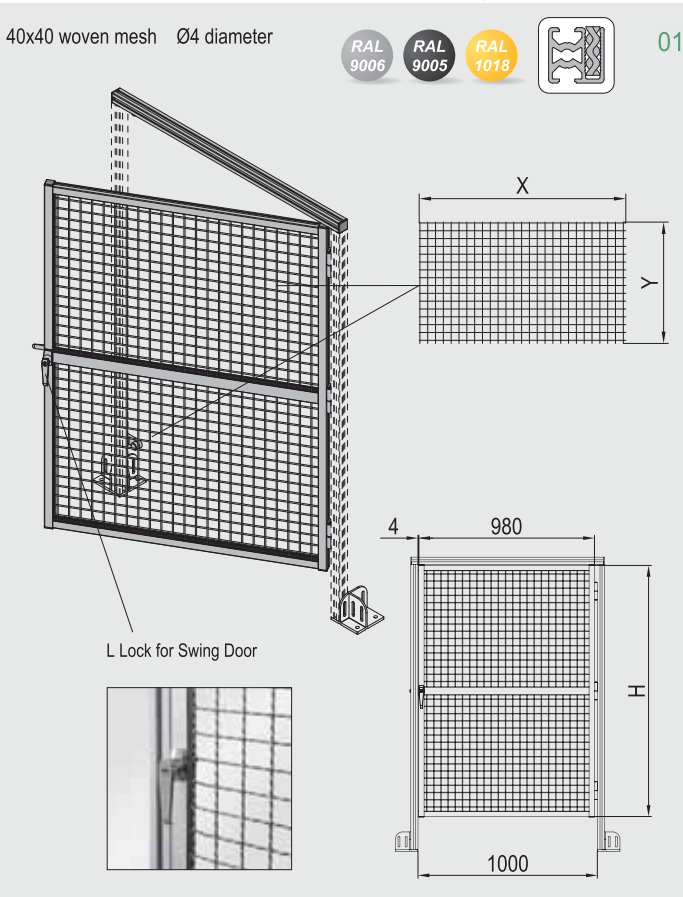
HA	Fastening Set	HB	Fastening Set
	M8x25 Bolt zinc plated		M8x20 Bolt zinc plated
	M8 Flange Nut zinc plated		M8 Flange Nut zinc plated
	M8x20 T Bolt nickel plated		M8x20 T Bolt nickel plated

Description	Fastening Set	Mass (g)	Part No.
Connecting Element for Protective Grille Unit	1×HA	96g	PNC.ST
Connecting Element for Clamping Profile Unit	1×HB	94g	PPC.ST



Swing Door

Swing Door for Protective Grille Unit-Economical

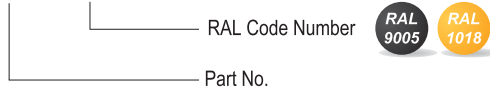


Description	H (mm)	X (mm)	Y (mm)	Mass (kg)	Part No.(R)	Part No.(L)
Protective Grille Unit-Economical-PG30-01	1400	970	693	16.2	PNDH.30.1400.ST.01.E	PNDH.30.1400.ST.01.L.E
	1800		893	17.5	PNDH.30.1800.ST.01.E	PNDH.30.1800.ST.01.L.E
Protective Grille Unit-Economical-PG30-02	1400	968	689	16	PNDH.30.1400.ST.02.E	PNDH.30.1400.ST.02.L.E
	1800		889	17.3	PNDH.30.1800.ST.02.E	PNDH.30.1800.ST.02.L.E
Protective Grille Unit-Economical-PG40-01	1400	950	680	18.4	PNDH.40.1400.ST.01.E	PNDH.40.1400.ST.01.L.E
	1800		880	21.5	PNDH.40.1800.ST.01.E	PNDH.40.1800.ST.01.L.E
Protective Grille Unit-Economical-PG40-02	1400	948	678	18.3	PNDH.40.1400.ST.02.E	PNDH.40.1400.ST.02.L.E
	1800		878	21.3	PNDH.40.1800.ST.02.E	PNDH.40.1800.ST.02.L.E

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PNDH.30.1400.ST.01-RAL9005



Associated kits (To be ordered separately)



Strut Elements (One end of strut profile need to be tapping M14x30 screw)

..... P.M-19-24



Door Shutter (One end of strut profile need to be tapping M14x30 screw)

..... P.M-42



Modular Assembly System

MAS

Machine Guard System

MGS

Stair and Platform System

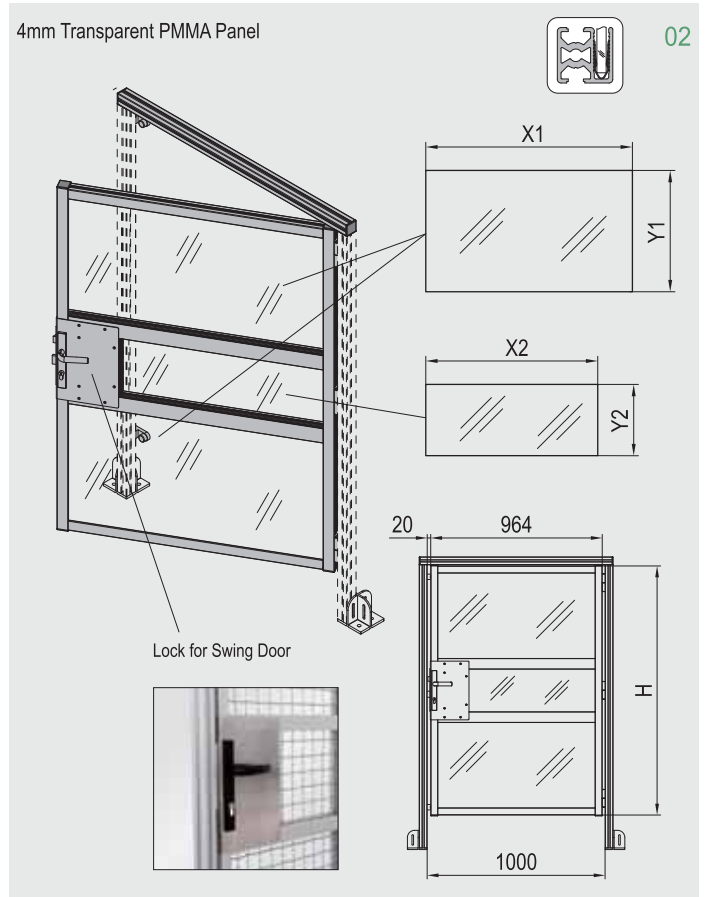
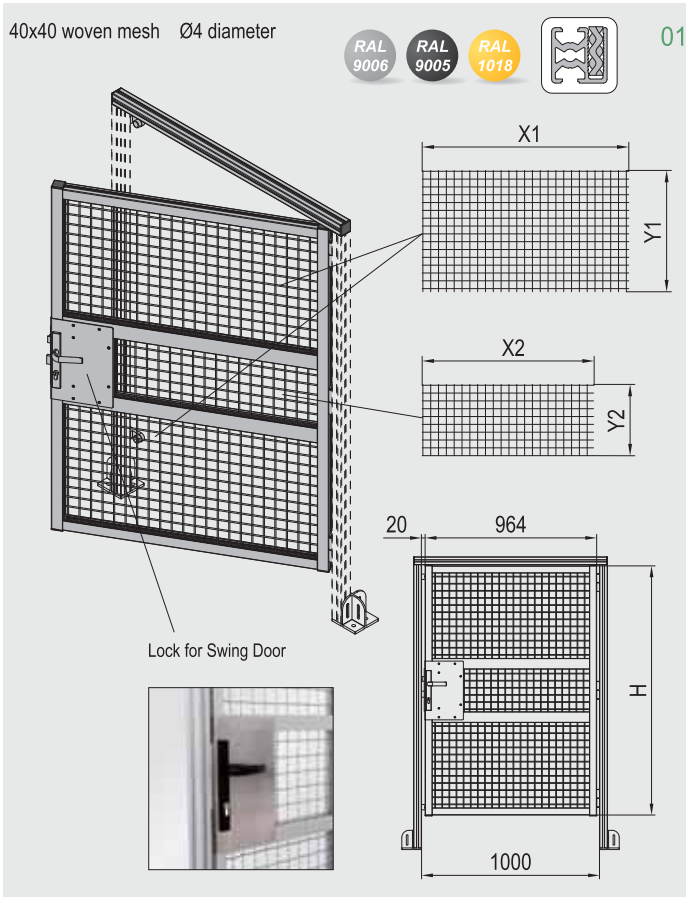
SPS

Tubular Framing System

TFS

Swing Door

Swing Door for Protective Grille Unit

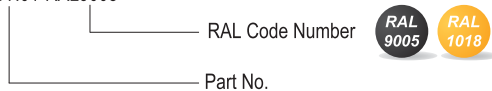


Description	H (mm)	X1 (mm)	Y1 (mm)	X2 (mm)	Y2 (mm)	Mass (kg)	Part No.(R)	Part No.(L)
Protective Grille Unit-PG30-01	1400	954	543	769	295	22.5	PNDH.30.1400.ST.01	PNDH.30.1400.ST.01.L
	1800		743			25.7	PNDH.30.1800.ST.01	PNDH.30.1800.ST.01.L
Protective Grille Unit-PG30-02	1400	952	539	767	290	22.4	PNDH.30.1400.ST.02	PNDH.30.1400.ST.02.L
	1800		739			25.5	PNDH.30.1800.ST.02	PNDH.30.1800.ST.02.L
Protective Grille Unit-PG40-01	1400	934	530	754	290	24.7	PNDH.40.1400.ST.01	PNDH.40.1400.ST.01.L
	1800		730			27.8	PNDH.40.1800.ST.01	PNDH.40.1800.ST.01.L
Protective Grille Unit-PG40-02	1400	932	528	752	288	24.6	PNDH.40.1400.ST.02	PNDH.40.1400.ST.02.L
	1800		728			27.7	PNDH.40.1800.ST.02	PNDH.40.1800.ST.02.L

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PNDH.30.1400.ST.01-RAL9005



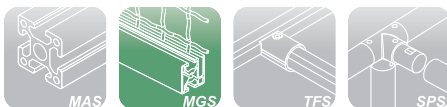
Associated kits (To be ordered separately)



Strut Elements (One end of strut profile need to be tapping M14x30 screw)
 P.M-19-24



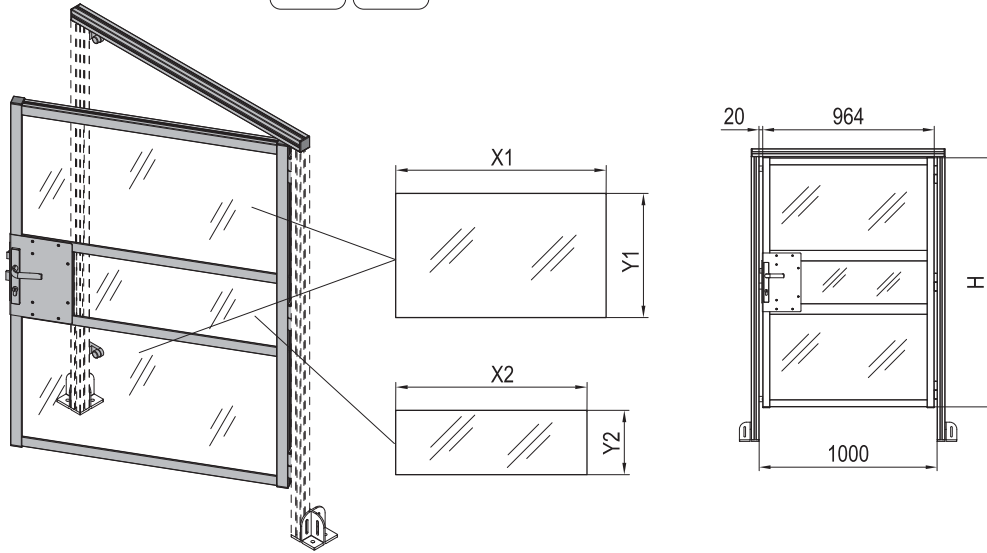
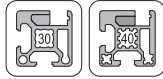
Door Shutter (One end of strut profile need to be tapping M14x30 screw)
 P.M-42



Swing Door

Swing Door for Clamping Profile Unit

4mm Transparent PMMA Panel



Description	H (mm)	X1 (mm)	Y1 (mm)	X2 (mm)	Y2 (mm)	Mass (kg)	Part No.(R)	Part No.(L)
Clamping Profile Unit-PG30	1400	918	519	733	284	18.9	PPDH.30.1400.ST	PPDH.30.1400.ST.L
	1800		719			21.5	PPDH.30.1800.ST	PPDH.30.1800.ST.L
Clamping Profile Unit-PG40	1400	904	510	724	280	27.8	PPDH.40.1400.ST	PPDH.40.1400.ST.L
	1800		710			31.3	PPDH.40.1800.ST	PPDH.40.1800.ST.L

Associated kits (To be ordered separately)


 Strut Elements (One end of strut profile need to be tapping M14x30 screw)
 P.M-19-24

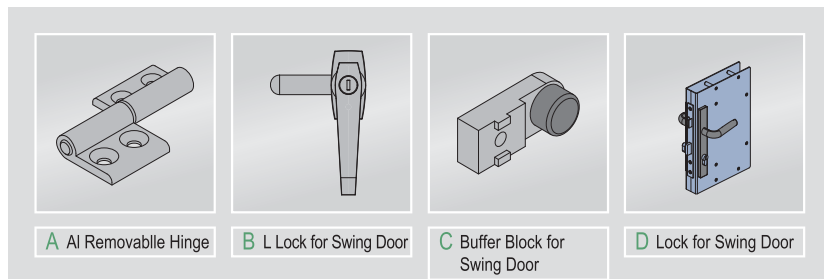
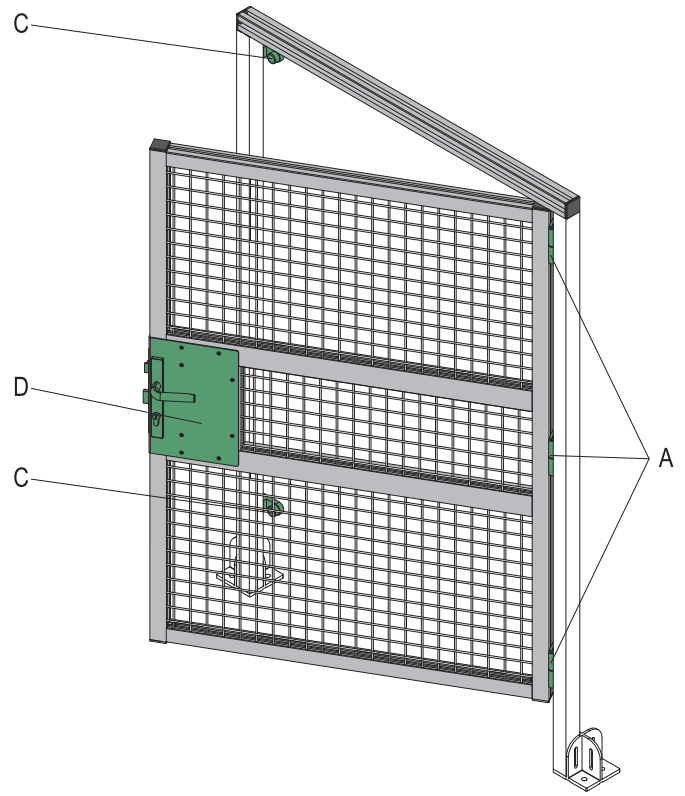
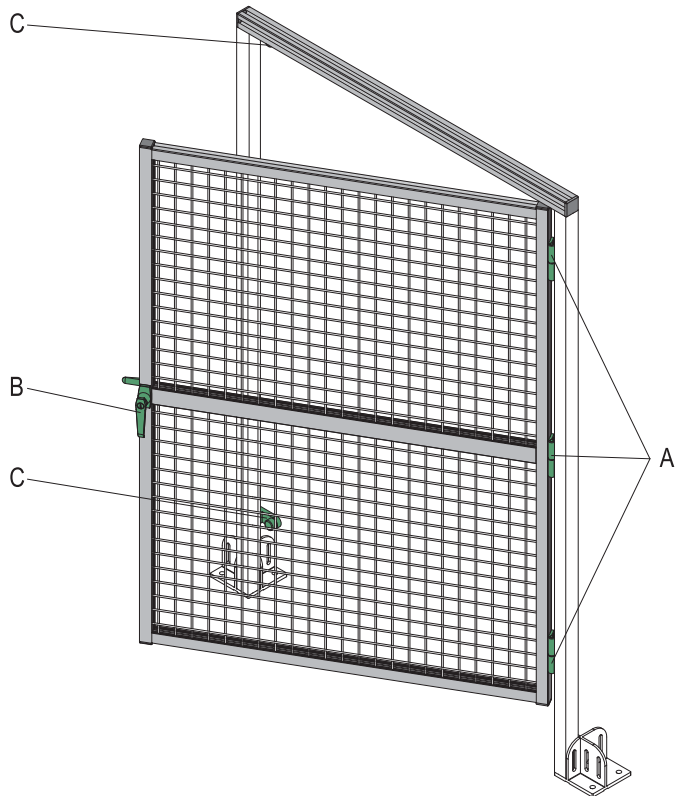
 Door Shutter (One end of strut profile need to be tapping M14x30 screw)
 P.M-42


Components for Swing Door

Swing Door are normally composed of A,B and C as shown in the below figure.

Swing Door for Protective Grille Unit-Economical

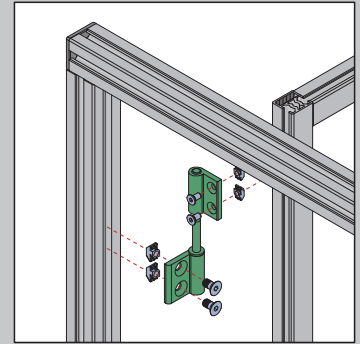
Swing Door for Protective Grille Unit





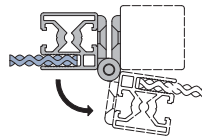
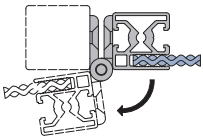
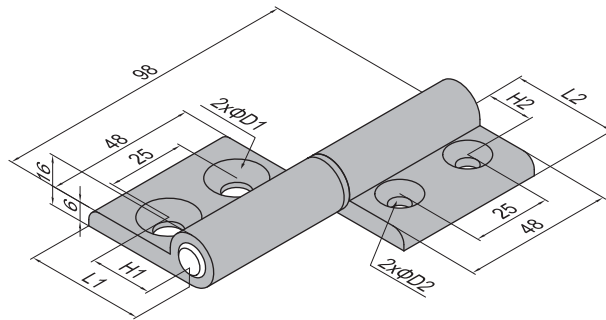
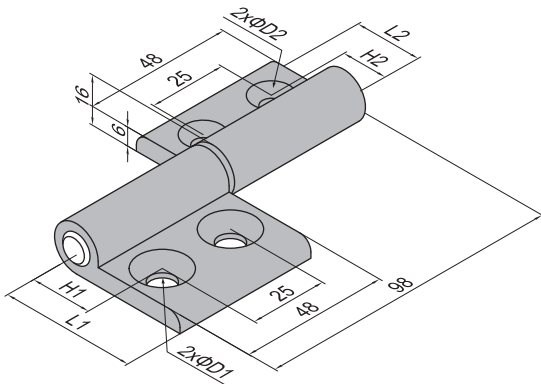
AI Removable Hinge

Material and Color: aluminum alloy, nature anodized



AI Removable Hinge-L

AI Removable Hinge-R



FF	Fastening Set	FG	Fastening Set
	M6x12 Bolt zinc plated		M8x16 Bolt zinc plated
	M6 T Nut nickel plated		M8 T Nut nickel plated

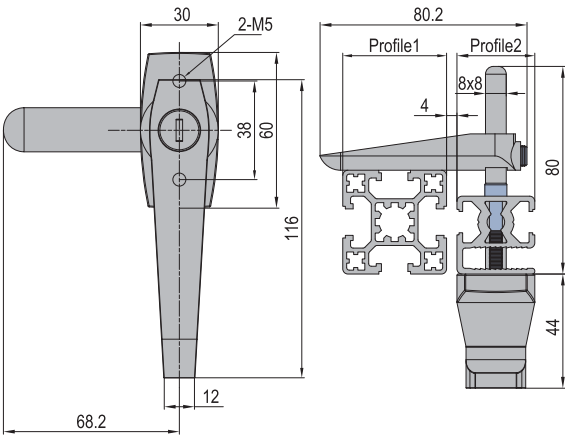
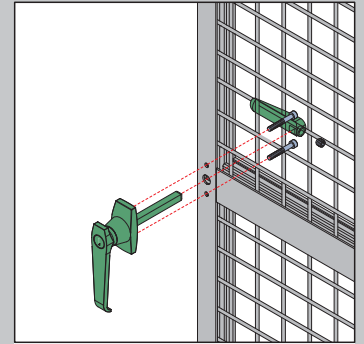
Description	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	D1 (mm)	D2 (mm)	Fastening Set	Mass (g)	Part No.(L)	Part No.(R)
Protective Grille Unit-30/40 (set)	20	20	28	38	6.5	8.5	2xFF+2xFG	158	7.27.30.40.ST.SM	7.26.30.40.ST.SM
Protective Grille Unit-45/45 (set)	22.5	22.5	38	38	8.5	8.5	4xFG	186	7.27.45.45.ST	7.26.45.45.ST
Clamping Profile Unit-30/40 (set)	20	15	38	28	8.5	6.5	2xFF+2xFG	158	7.27.30.40.ST	7.26.30.40.ST
Clamping Profile Unit-40/45 (set)	22.5	20	38	38	8.5	8.5	4xFG	186	7.27.40.45.ST	7.26.40.45.ST





L Lock for Swing Door

Material and Color: zinc alloy, polish finish



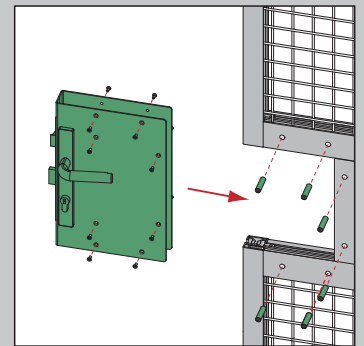
ED	Fastening Set	EE	Fastening Set	DH	Fastening Set
	M5x35 Bolt zinc plated		M5x45 Bolt zinc plated		M6x8 Set Screw stainless steel

Description	Profile 1	Profile 2	Fastening Set	Mass (g)	Part No.
L Lock for Swing Door-PG30	40x40L	30X30	1xDH+2xED	294	7.32.30.30.P
L Lock for Swing Door-PG40	45x45L	40X40	1xDH+2xEE	297	7.32.40.40.P

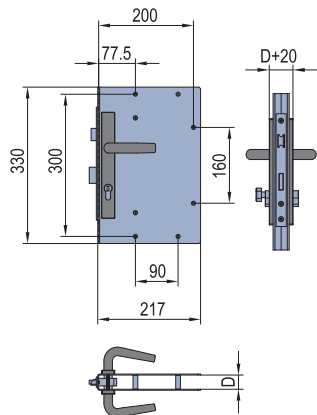


Lock for Swing Door

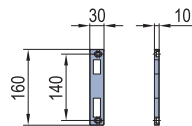
Material and Color: Lock Body: stainless steel
Lock Slot: aluminum



Lock Body



Lock Slot



CP	Fastening Set
	M6x12 Bolt zinc plated
	M6 T Nut nickel plated

Description	D (mm)	Fastening Set	Mass (g)	Part No.
Lock for Swing Door-PG30	30	2xCP	4100	PNDH30.LK
Lock for Swing Door-PG40	40		4800	PNDH40.LK

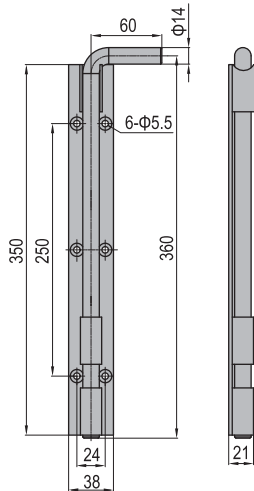
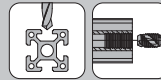
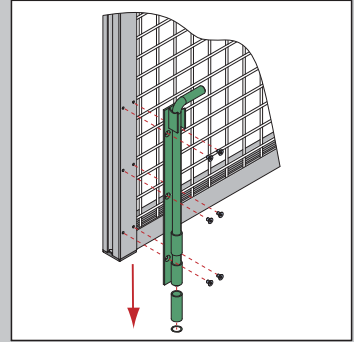




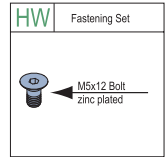
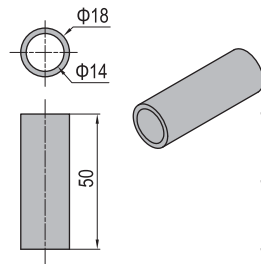
Ground Latch

Ground Latch is used to lock the door on the ground and make the door not opened optionally.

Material: zinc plated steel



Bushing



Description	Fastening Set	Mass (g)	Part No.
Ground Latch-PG40 (set)	6xHW	930	PNDH40.LG.ST

Modular Assembly System

MAS

Machine Guard System

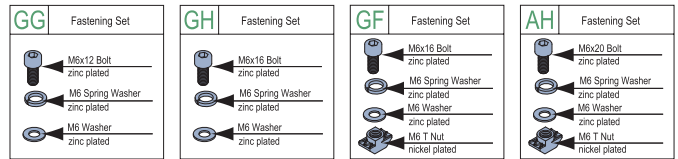
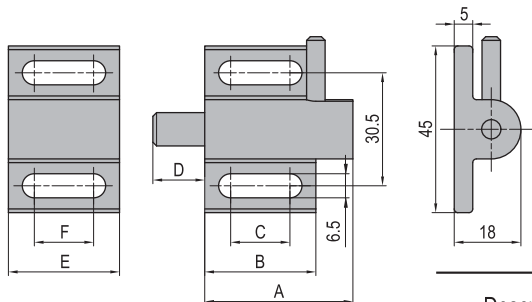
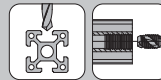
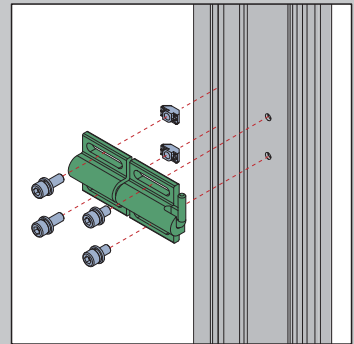
MGS



Door Latch

Door Latch is used to fix and lock the door to make sure the door cannot opened optionally.

Material: Door Latch: aluminum Latch Rod: stainless steel



Description	Fastening Set	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Mass (g)	Part No.
Door Latch-PG30	2xGG+2xGF	40	30	16	14	30	16	97	PNDH30.LD.ST
Door Latch-PG40	2xGH+2xAH	50	40	26	17	40	26	129	PNDH40.LD.ST

Stair and Platform System

SPS

Tubular Framing System

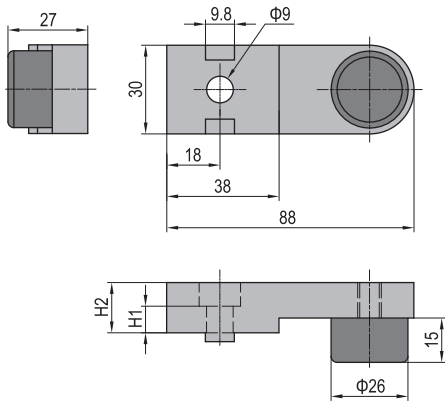
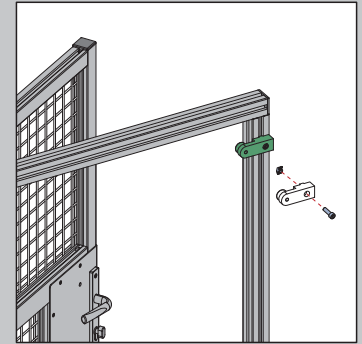
TFS





Buffer Block for Swing Door

Material: aluminum alloy



CC	Fastening Set	CD	Fastening Set
	M8x20 Bolt zinc plated		M8x25 Bolt zinc plated
	M8 T Nut nickel plated		M8 T Nut nickel plated

Description	H1 (mm)	H2 (mm)	Fastening Set	Mass (g)	Part No.
Buffer Block for Swing Door-PG30	9	17	1xCC	112	PNDH30.BB
Buffer Block for Swing Door-PG40	14	22	1xCD	121	PNDH40.BB

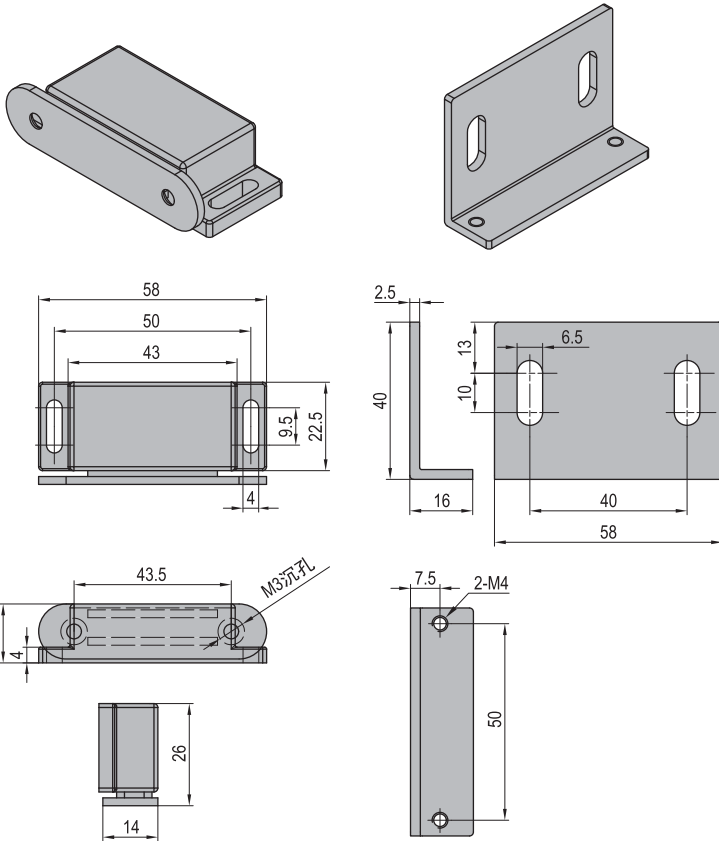
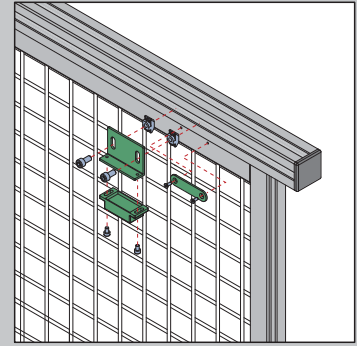
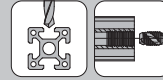




Doormagnet

Doormagnet has the function of absorption and fixation which cannot make the door opened optionally.

Material: Doormagnet-stainless steel
Connector-zinc plated steel



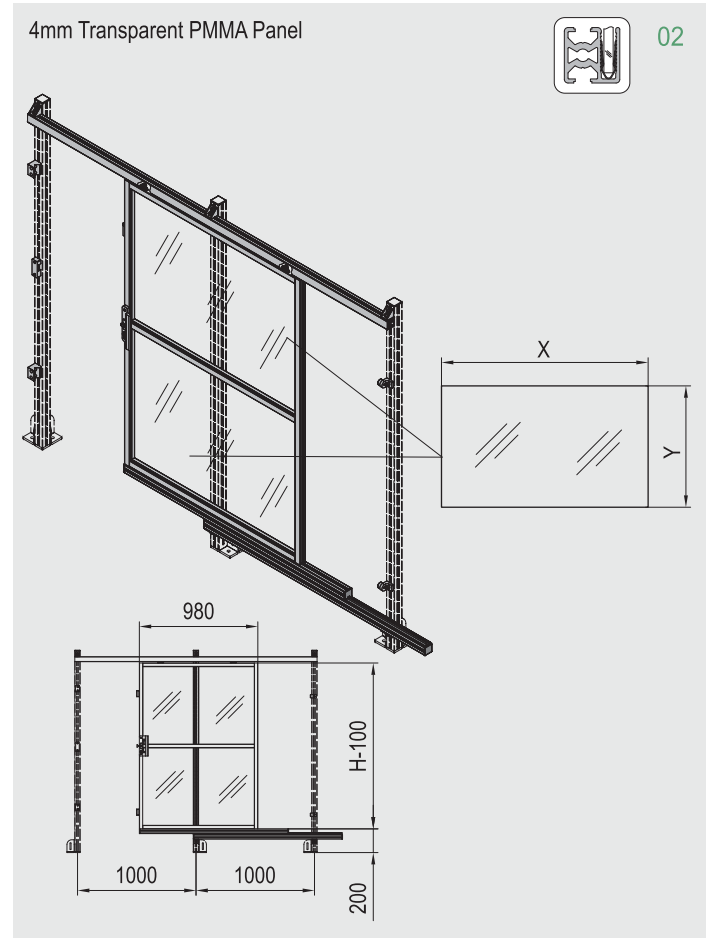
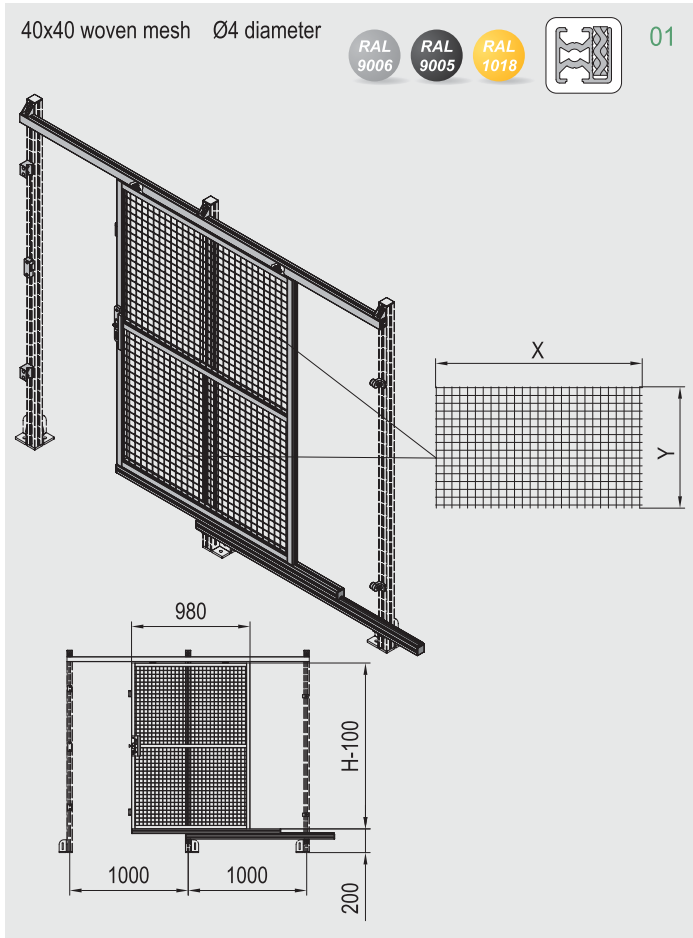
HX	Fastening Set	HY	Fastening Set	CP	Fastening Set
	M4x6 Bolt zinc plated		M3x8 Bolt zinc plated		M6x12 Bolt zinc plated M6 T Nut nickel plated

Description	Fastening Set	Mass (g)	Part No.
Doormagnet (pcs)		61	PNDH.DM
Doormagnet (set)	2xHX+2xHY+2xCP	133	PNDH.DM.ST



Sliding Door

Sliding Door for Protective Grille Unit

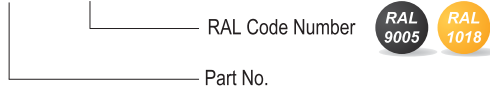


Description	H(mm)	X(mm)	Y(mm)	Mass (kg)	Part No.(R)	Part No.(L)
Protective Grille Unit-PG30-01	1400	970	643	21.2	PNDS.30.1400.ST.01	PNDS.30.1400.ST.01.L
	1800		843	24	PNDS.30.1800.ST.01	PNDS.30.1800.ST.01.L
Protective Grille Unit-PG30-02	1400	968	639	21.6	PNDS.30.1400.ST.02	PNDS.30.1400.ST.02.L
	1800		839	23.8	PNDS.30.1800.ST.02	PNDS.30.1800.ST.02.L
Protective Grille Unit-PG40-01	1400	950	630	24.7	PNDS.40.1400.ST.01	PNDS.40.1400.ST.01.L
	1800		830	27.8	PNDS.40.1800.ST.01	PNDS.40.1800.ST.01.L
Protective Grille Unit-PG40-02	1400	948	628	23	PNDS.40.1400.ST.02	PNDS.40.1400.ST.02.L
	1800		828	27.7	PNDS.40.1800.ST.02	PNDS.40.1800.ST.02.L

Item Number Reference:

The part number is for gray woven mesh in the default configuration, please specify with RAL code if other color is required, such as RAL9005 for black, RAL1018 for yellow.

ex: PNDS.30.1400.ST.01-RAL9005



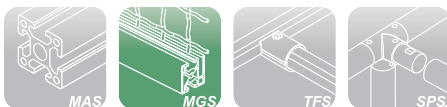
Associated kits (To be ordered separately)



Strut Elements P.M-19~24



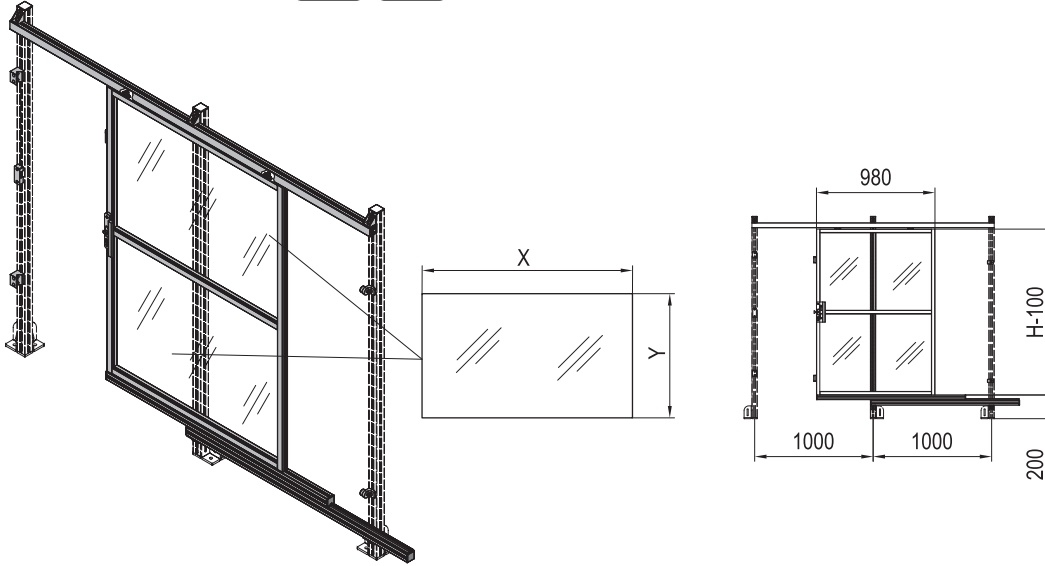
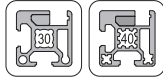
Die Cast Bracket P.M-41



Sliding Door

Sliding Door for Clamping Profile Unit

4mm Transparent PMMA Panel



Description	H(mm)	X(mm)	Y(mm)	Mass (kg)	Part No.(R)	Part No.(L)
Clamping Profile Unit-PG30	1400	934	619	21.1	PPDS.30.1400.ST	PPDS.30.1400.ST.L
	1800		819	23.8	PPDS.30.1800.ST	PPDS.30.1800.ST.L
Clamping Profile Unit-PG40	1400	920	610	27	PPDS.40.1400.ST	PPDS.40.1400.ST.L
	1800		810	30.5	PPDS.40.1800.ST	PPDS.40.1800.ST.L

Associated kits (To be ordered separately)



Strut Elements P.M-19~24

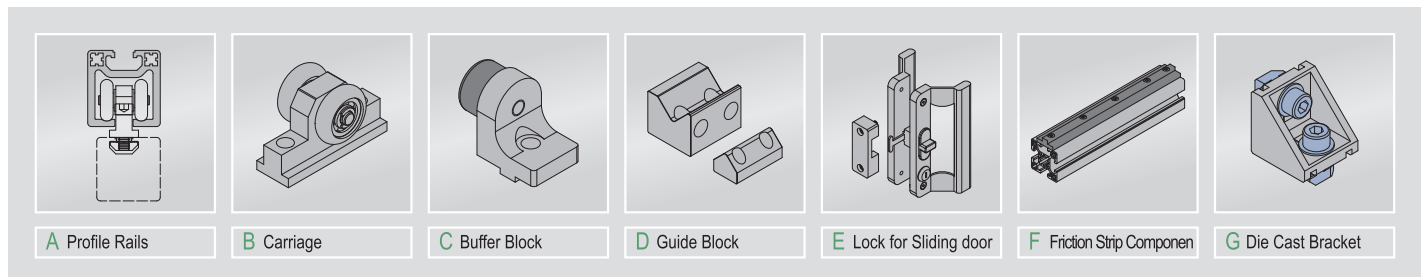
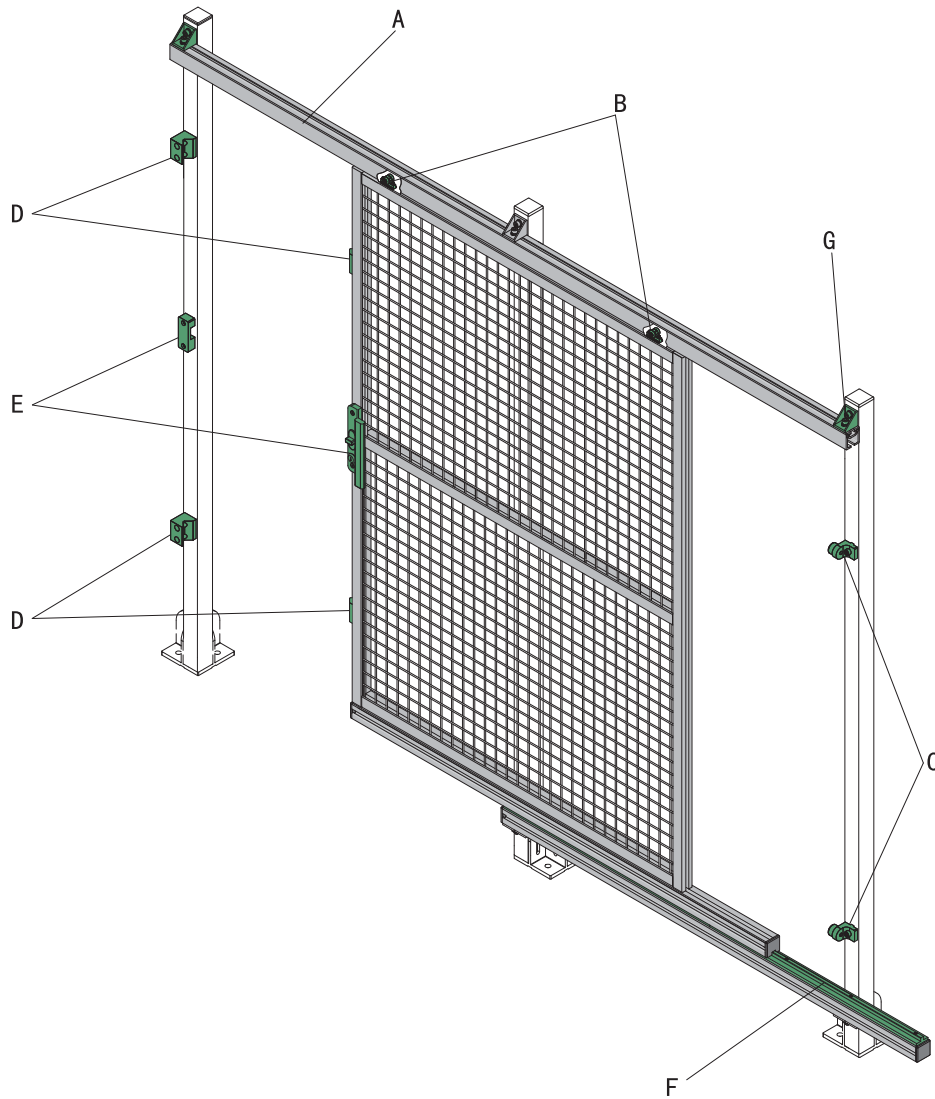


Die Cast Bracket P.M-41



Components for Sliding Door

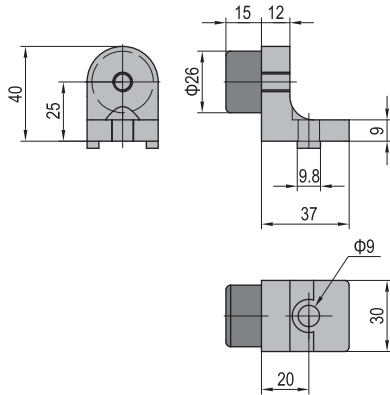
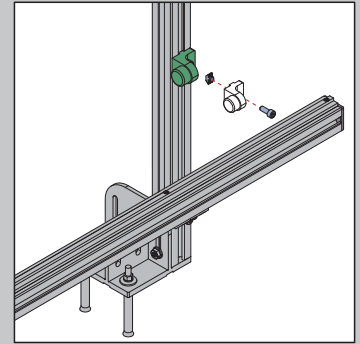
Sliding door are normally composed of A,B,C,D,E,F and G as shown in the below figure.





Buffer Block for Sliding Door

Material: aluminum alloy



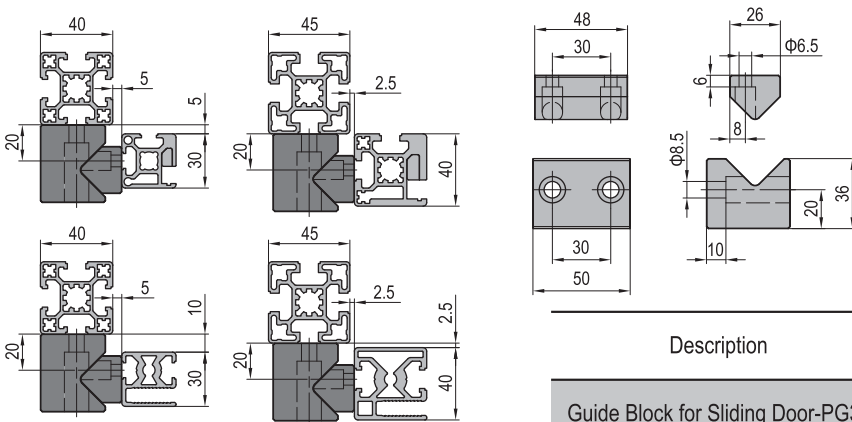
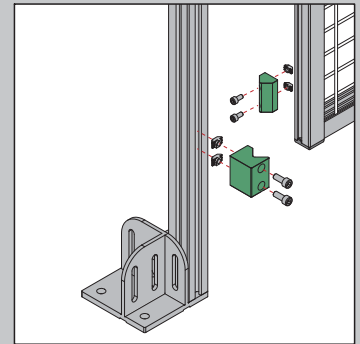
CC	Fastening Set
	M8x20 Bolt zinc plated
	M8 T Nut nickel plated

Description	Fastening Set	Mass (g)	Part No.
Buffer Block for Sliding Door	1xCC	64	PBDS.BB



Guide Block for Sliding Door

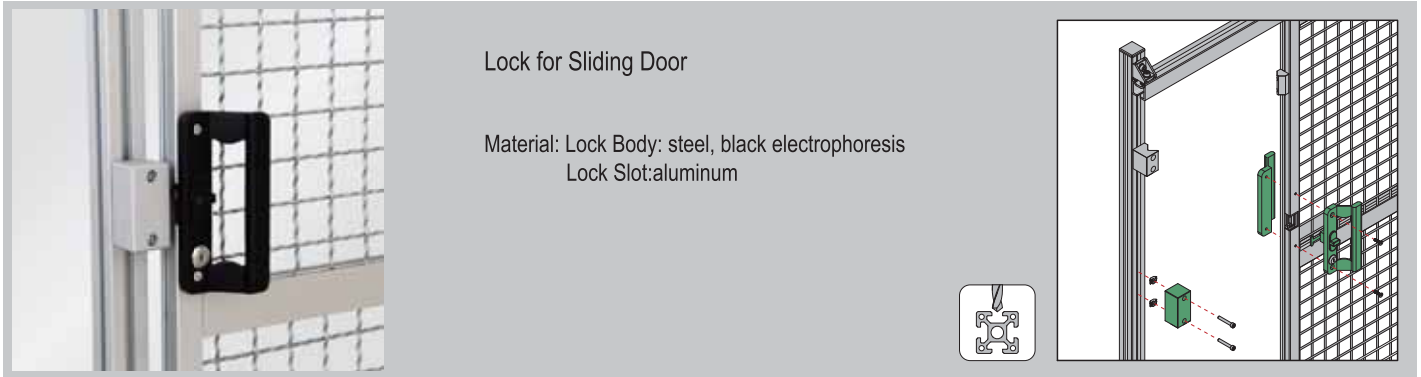
Material: POM



HD	Fastening Set	HE	Fastening Set	HF	Fastening Set
	M8x20 Bolt zinc plated		M6x12 Bolt zinc plated		M6x16 Bolt zinc plated
	M8 T Nut nickel plated		M6 T Nut nickel plated		M6 T Nut nickel plated

Description	Fastening Set	Mass (g)	Part No.
Guide Block for Sliding Door-PG30	2xHD+2xHE	151	PBDS30.DS
Guide Block for Sliding Door-PG40	2xHD+2xHF	157	PBDS40.DS

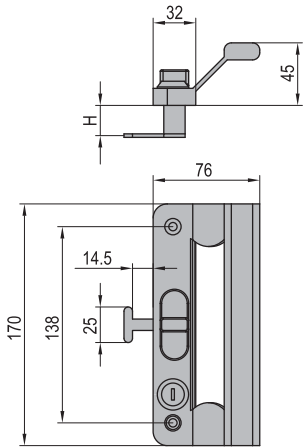




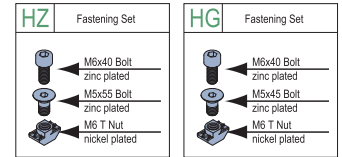
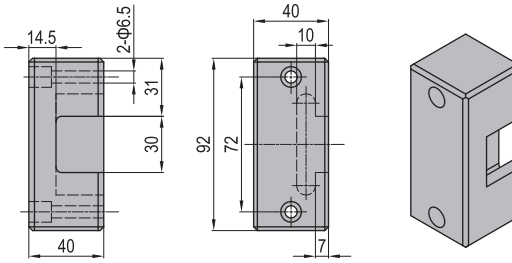
Lock for Sliding Door

Material: Lock Body: steel, black electrophoresis
Lock Slot:aluminum

Lock Body



Lock Slot



Description	H (mm)	Fastening Set	Mass (g)	Part No.
Lock for Sliding Door of Protective Grille Unit-PG30	18	2xHG	956	PNDS30.LK
Lock for Sliding Door of Protective Grille Unit-PG40	20	2xHZ	960	PNDS40.LK
Lock for Sliding Door of Clamping Profile Unit-PG30	12	2xHG	956	PPDS30.LK
Lock for Sliding Door of Clamping Profile Unit-PG40	18	2xHZ	960	PPDS40.LK

※ The lock shown above is used on right open door, please specify if the lock is to be used on left open door.

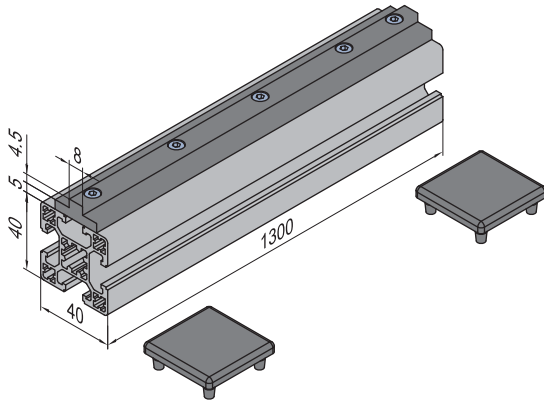
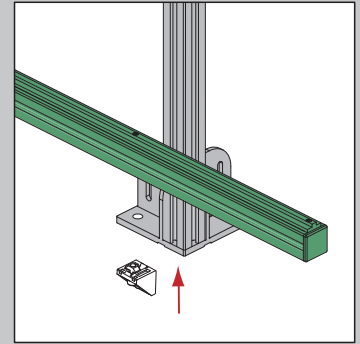




Friction Strip Components

The friction strip enable economical and low wear guides for manual sliding doors.

Material: UHMW PE



GE	Fastening Set
	M4x14 Bolt zinc plated
	M4 T Nut nickel plated

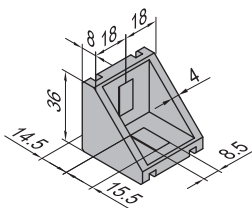
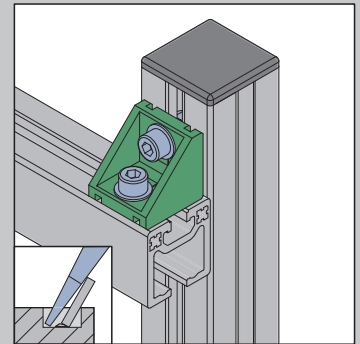
Description	Fastening Set	Mass (kg)	Part No.
Friction Strip Components (set)	5xGE	2.1	PPDS.FS.ST



Die Cast Bracket

Diecast used to connect profile rail with friction strip.

Material: Die cast aluminium



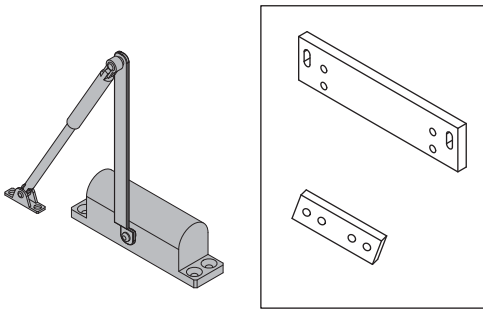
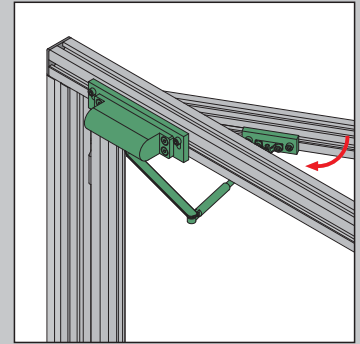
D	Fastening Set
	M8x20 Bolt zinc plated
	M8 Washer zinc plated
	M8 T Nut nickel plated

Description	Fastening Set	Mass (g)	Part No.
Die cast bracket-PG40-40x40 (set D)	2xD	92	3.21.40.4040.STD



Door Shutter

Door shutter is used on swing door and it makes door closed automatically.



HH	Fastening Set	HJ	Fastening Set	HK	Fastening Set	HL	Fastening Set
	M6x20 Bolt zinc plated		M6x14 Bolt zinc plated		M6x10 Bolt zinc plated		M6x20 Bolt zinc plated
	M6 Washer zinc plated						M6 Washer zinc plated
	M6 T Nut nickel plated						

Description	Fastening Set	Part No.
Door Shutter for Protective Grille Unit	2xHH+4xHJ+2xHK+2xHL	PNDH.DS.ST
Door Shutter for Clamping Profile Unit	4xHH+4xHJ+2xHK	PPDH.DS.ST

✕ Strut profile used on swing door constructed with meshes need to be tapped with 2 pcs of M6X15 screw when using door shutter.



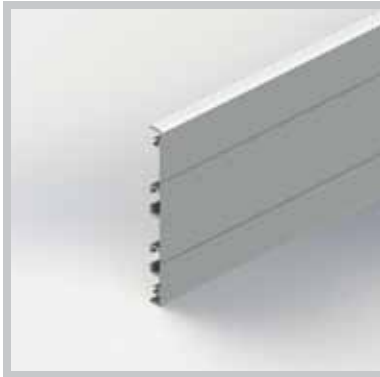
Safety Lock

The integrated EUCHNER and OMRON lock ensure the safety and stability of the whole machine guard system.

Description	Part No.
Safety Lock	PBDH.SO

✕ The EUCHNER or OMRON lock is suggested, please refer to EUCHNER or OMRON catalogue for detail specification number or please contact with us for detail.

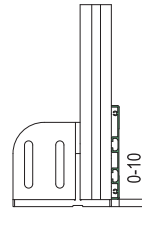
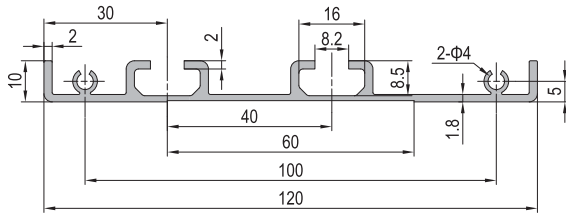
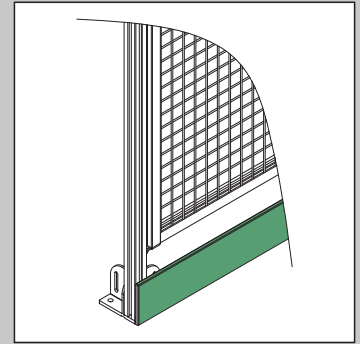




Guard rail kick plate profile

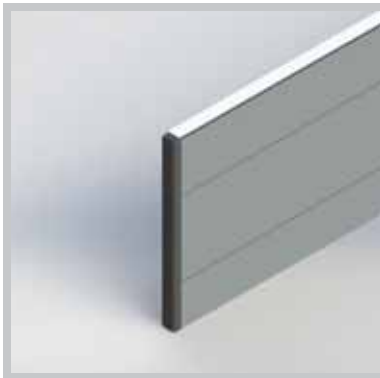
The kick plate profile is installed at the lower part of the machine guard unit to keep the small component or other objects outside and ensure the stability and good appearance of the unit.

Material: 6063-T5 Surface treatment: satin anodized



✳ The machine guard kick plate can be adjusted up and down in 10mm range.

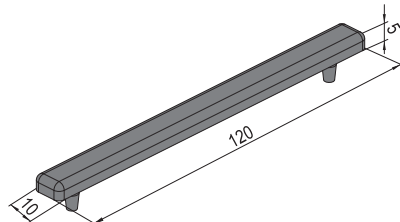
Description	Moment of Inertia $I_x(\text{cm}^4)$	Moment of Inertia $I_y(\text{cm}^4)$	Moment of Resistance $W_x(\text{cm}^3)$	Moment of Resistance $W_y(\text{cm}^3)$	Mass (kg/m)	Part No.
Guard rail kick plate profile	0.33	48.3	0.66	8.1	0.95	1.42.10.010120.01



Machine guard kick plate end cap

To prevent staff from any injury and improve profile end appearance.

Material and Color: black ABS

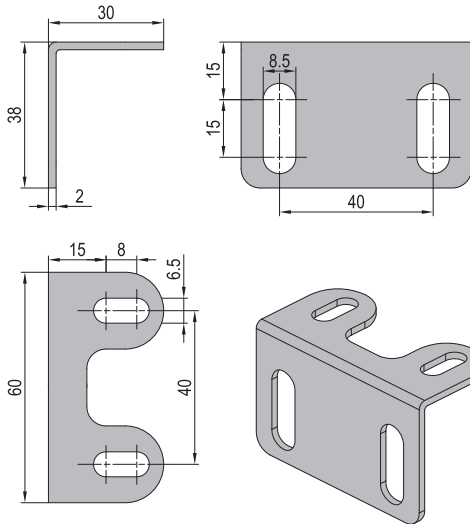
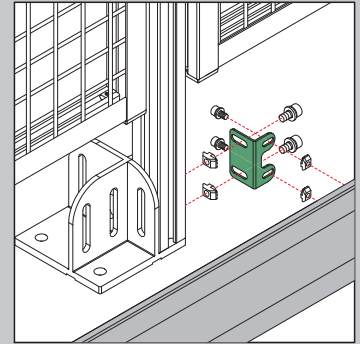


Description	Mass (g)	Part No.
Machine guard kick plate end cap	5	4.12.30.10.010120



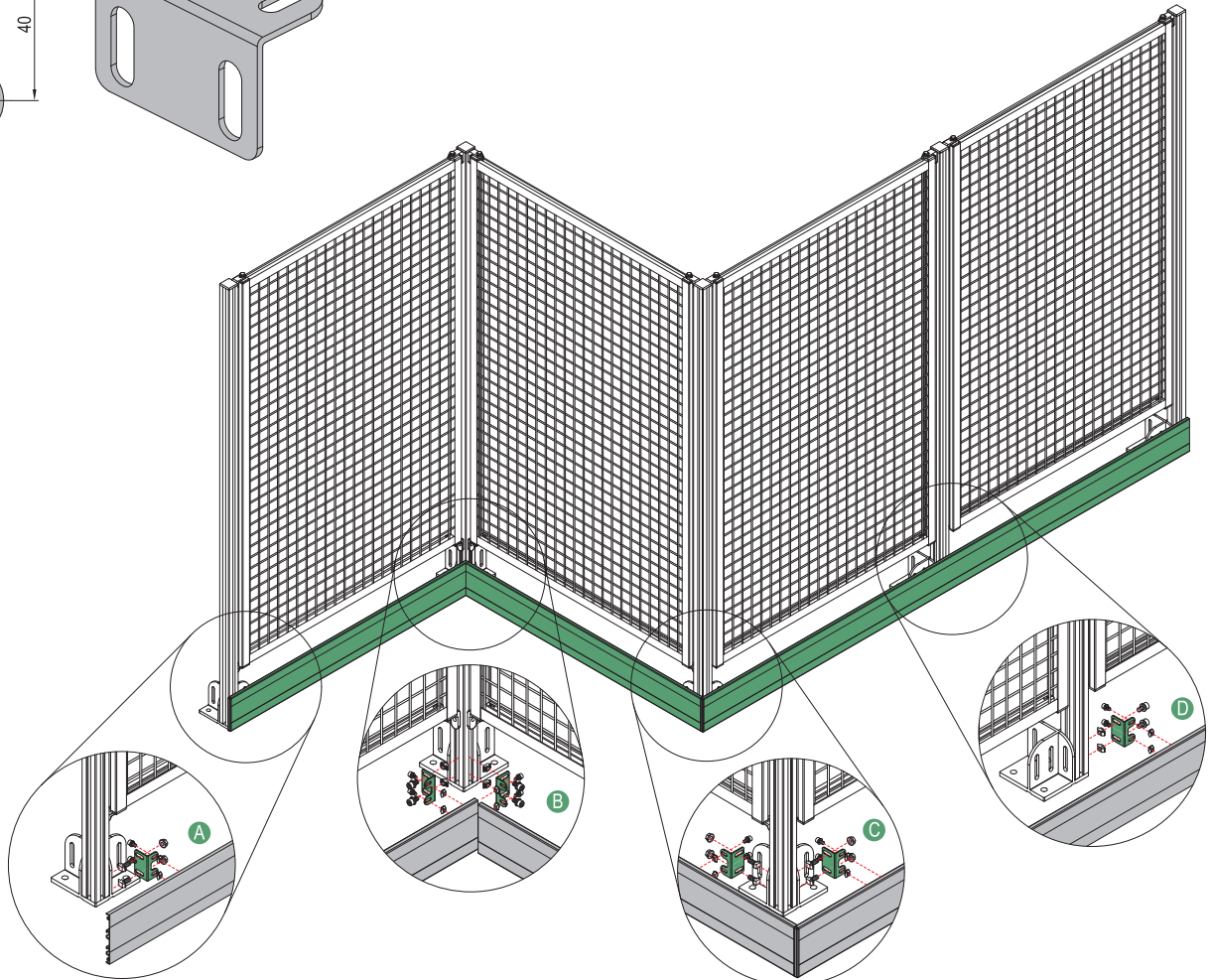
Machine guard kick plate profile

The kick plate connector is for connection between kick plate profile and the machine guard unit. Only one set of fastening set is needed at the location A and C and can be used both on kick plate connector and base plate.



EA	Fastening Set	EB	Fastening Set
	M6x12 Bolt zinc plated		M8x16 Bolt zinc plated
	M6 Spring Washer zinc plated		M8 Spring Washer zinc plated
	M6 Washer zinc plated		M8 Washer zinc plated
	M6 T Nut-8.2 nickel plated		M8 T Nut-10.2 nickel plated

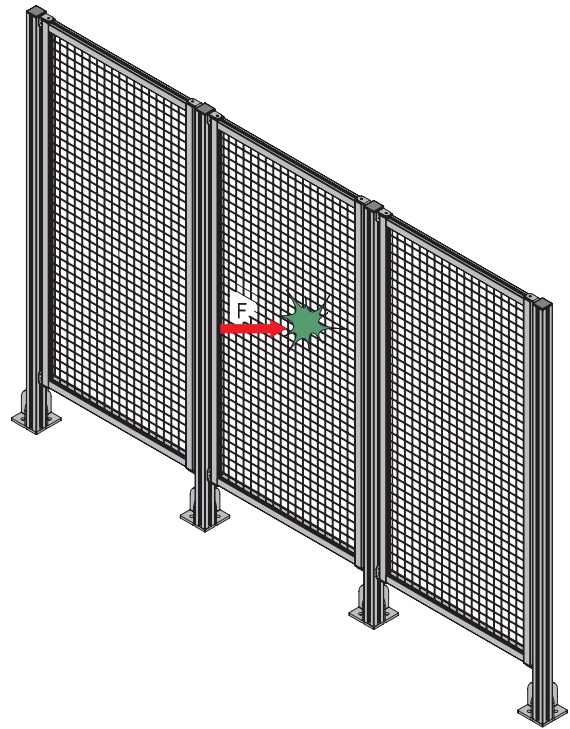
Description	Fastening Set	Mass (g)	Part No.
Machine guard kick plate profile (pcs)		46	PNDH40.MGKPP
Machine guard kick plate profile (set)	2xEA+2xEB	78	PNDH40.MGKPP.ST



Load Capacity of Machine Guard (PG40)

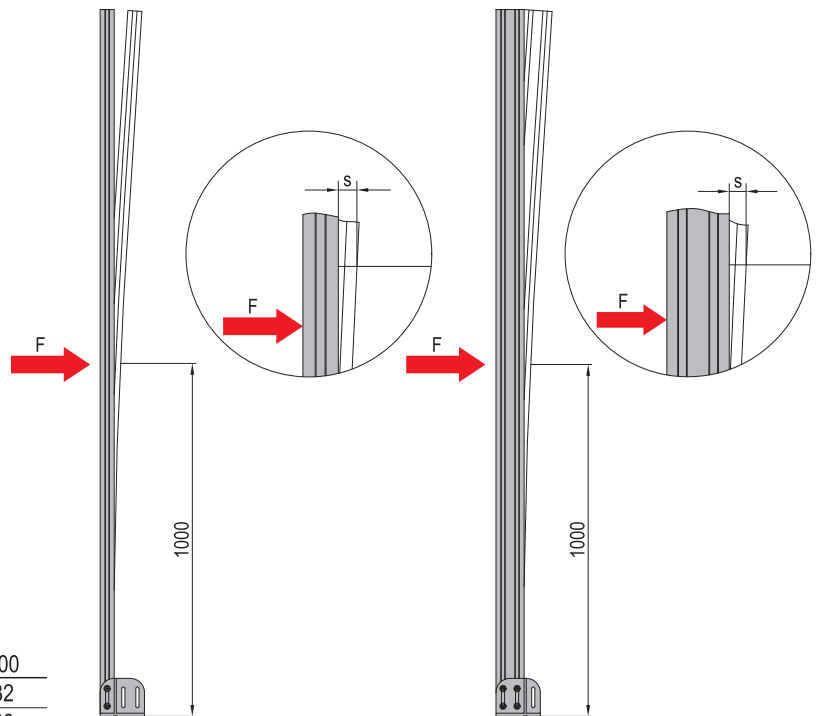
The special fastening structure design gives the machine guard system a higher capacity of load. An excess load will generate a temporary deformation. When the excess load is removed, it will come back to its initial state. Here after is the value of F-the maximal excess load.

P.M-09	H(mm)	W(mm)	F(N)
PN40.18000420.STA.01	1800	420	1500
PN40.18000670.STA.01	1800	670	1000
PN40.18000920.STA.01	1800	920	800



Load Capacity of Strut Element (PG40)

The force needed to excure the machine guard system strut elements, was determined in a series of tests as following.



F[N]	100	150	300	450	600
s [mm] 45x45	6	10	14	23	32
45x90	3	4.5	7.5	13.5	20

Assembly of Protective Grille Unit

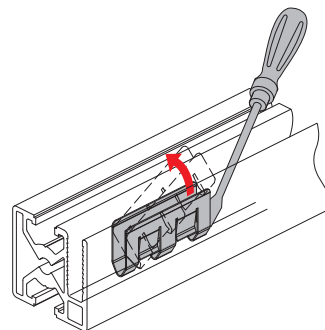
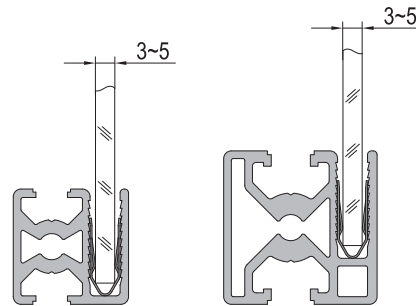
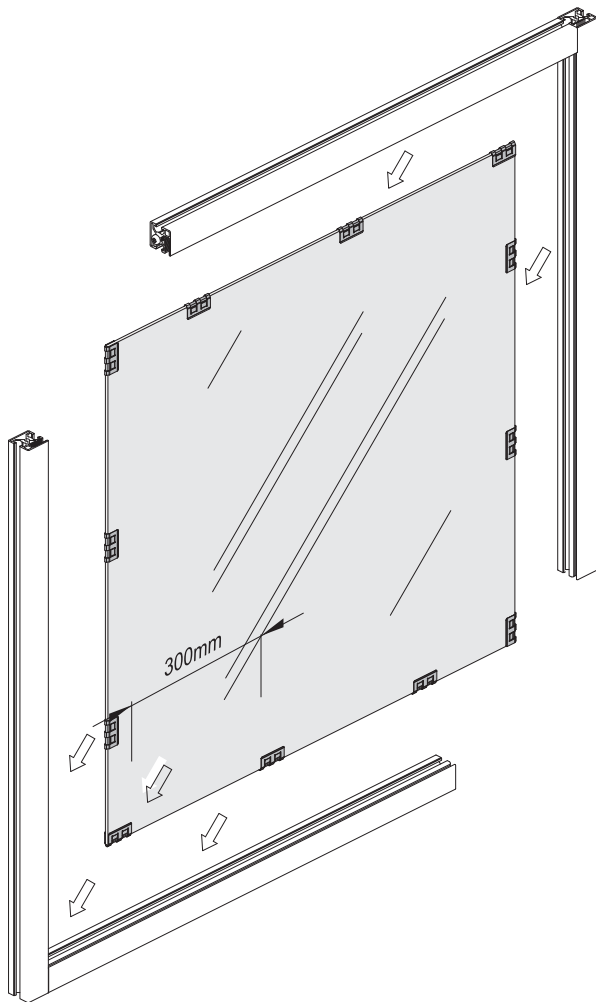
Assembly of spring clamping nut

Assembly:

1. Preassemble the frame.
2. Place spring clamping nut on panel. One element in each corner prevents the panels from rattling.
3. Insert panel in the preassembled frame.
4. Mount the frame.

Disassembly:

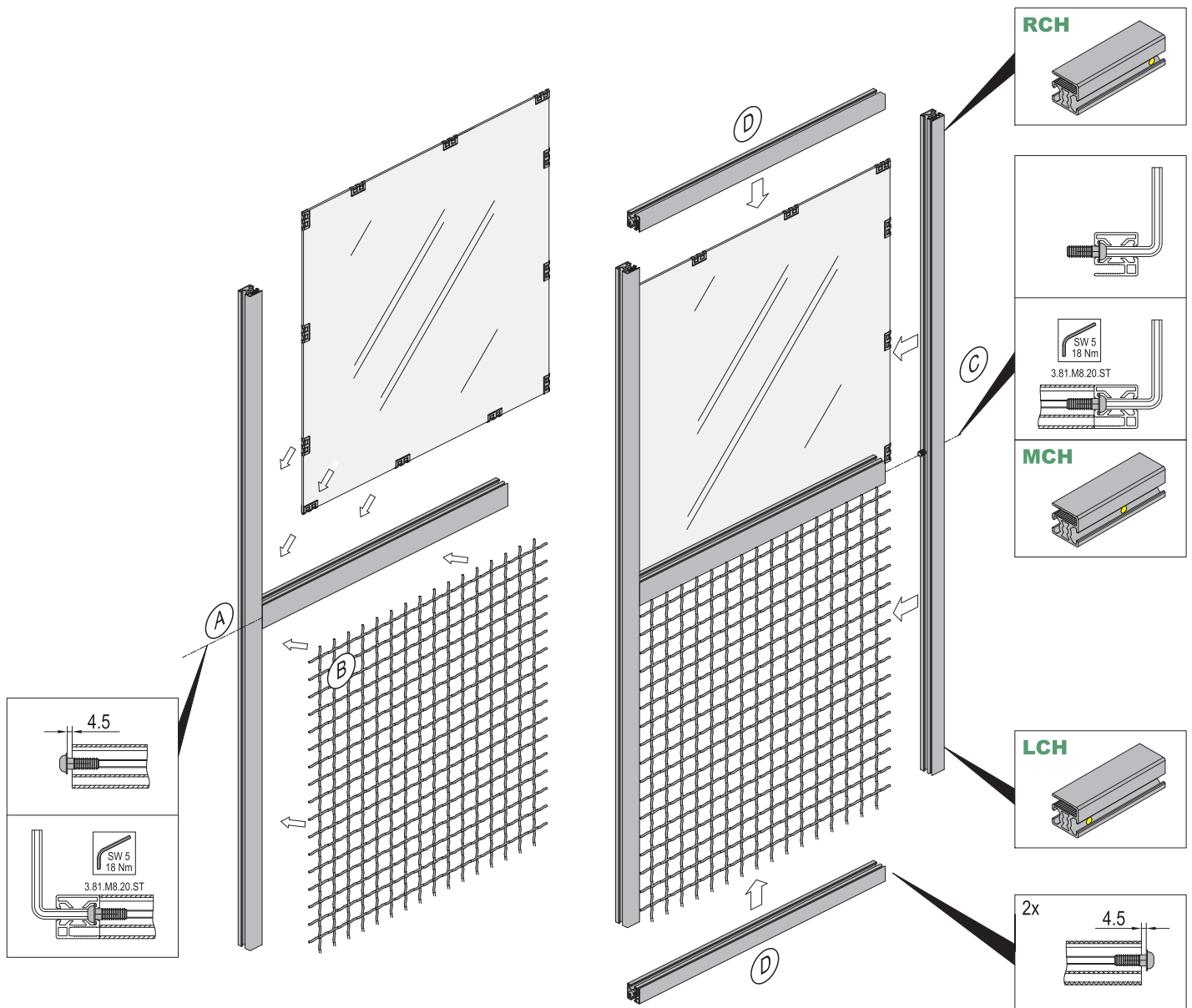
1. Disassemble the frame.
2. Remove panel.
3. Remove the spring clamping nuts in the groove using a screwdriver.



Assembly of Protective Grille Unit

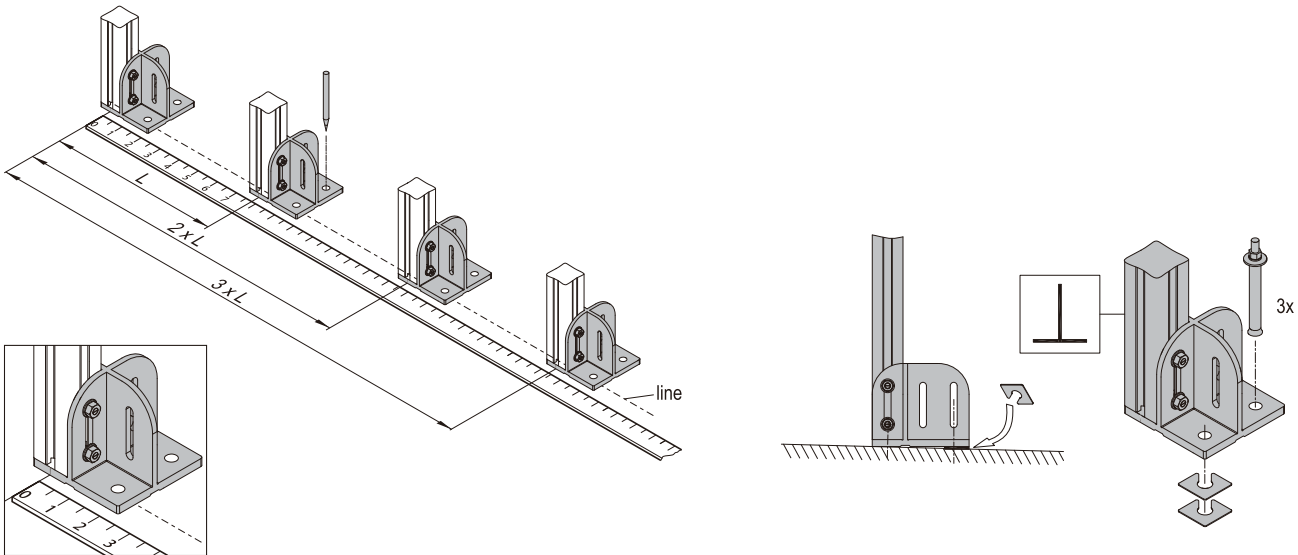
Assembly of Protective Frames

1. Make a "T" out of protective grille profile (take 40x40 protective grille profile as example), then preassemble screw connector (3.81.M8.20.ST) as figure A indicated.
2. Insert woven wire mesh or panel into the corner as figure B indicated.
3. Slide the screw connectors into the profile groove and tighten loosely as figure C indicated.
4. Insert outer profiles as figure D indicated.
5. Tighten all screws.
6. The side profile of protective grille unit should be drilled. RCH/MCH/LCH shows the position of the hole.



Assembly of Strut Element

For constructing machine guard strut elements. Enables you to draw straight lines on the floor for aligning and positioning supports quickly and easily.



A gasket will be needed to adjust vertical alignment on uneven floor.

Assembly of Protective Grille Unit

1. Mount the connecting elements by positioning tool, and then fasten the screw A.
2. Attach the connecting elements to protective grille unit, mount the screw B.
3. Attach the lower connecting elements to protective grille unit, and then fasten screw C.
4. Mount the screw D on the protective grille unit, and then fasten the screw to finish assembly work.

