

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# Overview

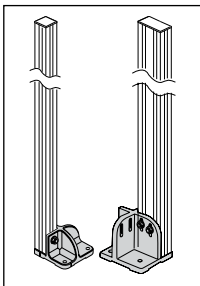
Bosch Rexroth offers a wide range of machine and perimeter guarding options for creating physical enclosures, guards, and barriers to protect workers. EcoSafe panels assemble easily from standard components and installation is a snap. Partitions can be constructed of

wire mesh screens, protective panes or panels, then mounted directly into the T-slot of profiles, or attached to profiles that have already been integrated into a system.

## EcoSafe Guarding Components

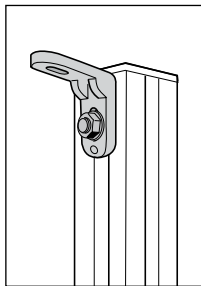
Follow the easy steps below to order the necessary components for your EcoSafe enclosure. A sample EcoSafe structure and additional information about the EcoSafe system is listed on pages 6-2 and 6-3.

**Step 1**



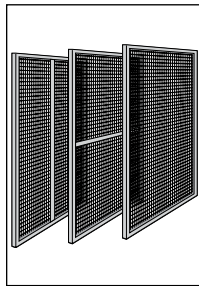
Support Posts  
6-4

**Step 2**



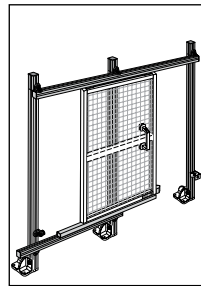
Panel Mounting  
Bracket Kits  
6-5

**Step 3**



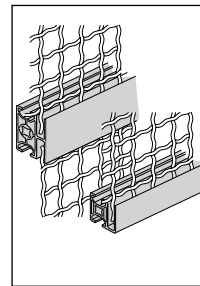
Protective Frames  
6-6 & 6-7

**Step 4**



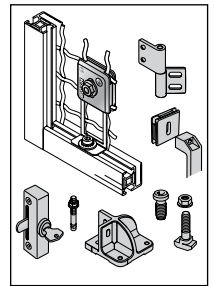
EcoSafe Door  
Components  
6-8 to 6-10

**Step 5**



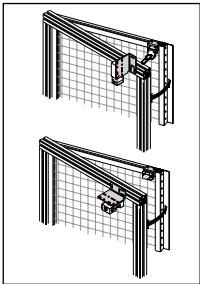
EcoSafe Frame  
Profiles  
6-11 & 6-12

**Step 6**

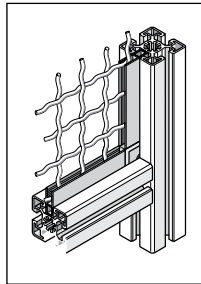


Wire Mesh  
Grounding Terminal  
& Installation Acces-  
sories  
6-13 - 6-15

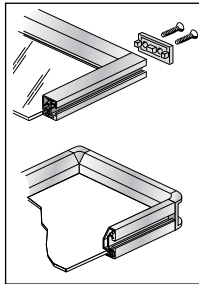
## Other Guarding Components



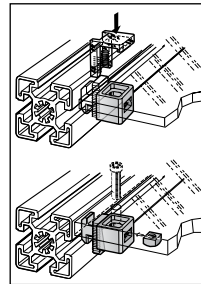
Safety Switch  
Mounting Bracket  
Kits  
6-16



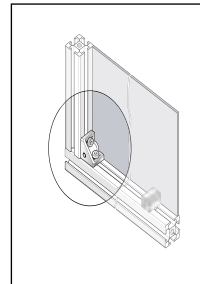
Wire Mesh Frame  
Profile and Corner  
Connectors  
6-17



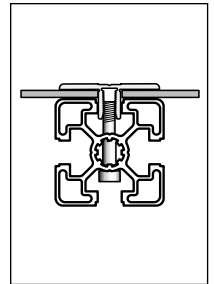
Frame Profiles  
22.5x30F &  
22.5x45F  
6-18 & 6-19



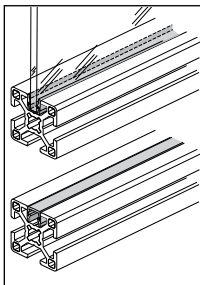
Variofix Panel  
Mounting  
Fasteners  
6-20



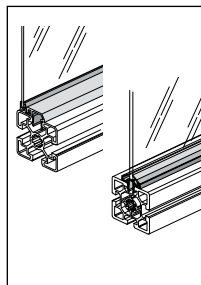
Panel Mount Gus-  
sets  
6-21 & 6-22



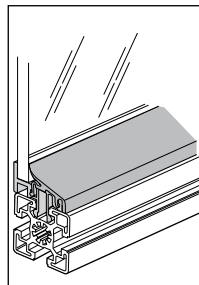
Heavy Duty Clamp  
Profiles  
6-23



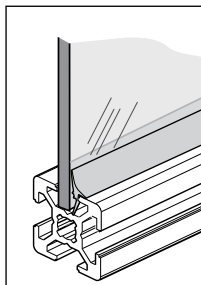
Panel Support  
Inserts  
6-24



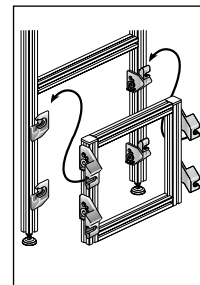
Removable Panel  
Support Inserts  
6-25



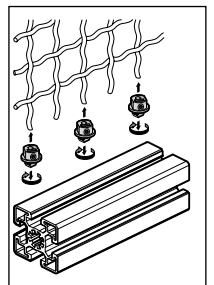
Flush-Mount  
Removable Panel  
Support Inserts  
6-26



Glazing Strip  
6-27



Removable Frame  
Brackets  
6-28



Clamp Bushing  
6-29

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# EcoSafe Guarding

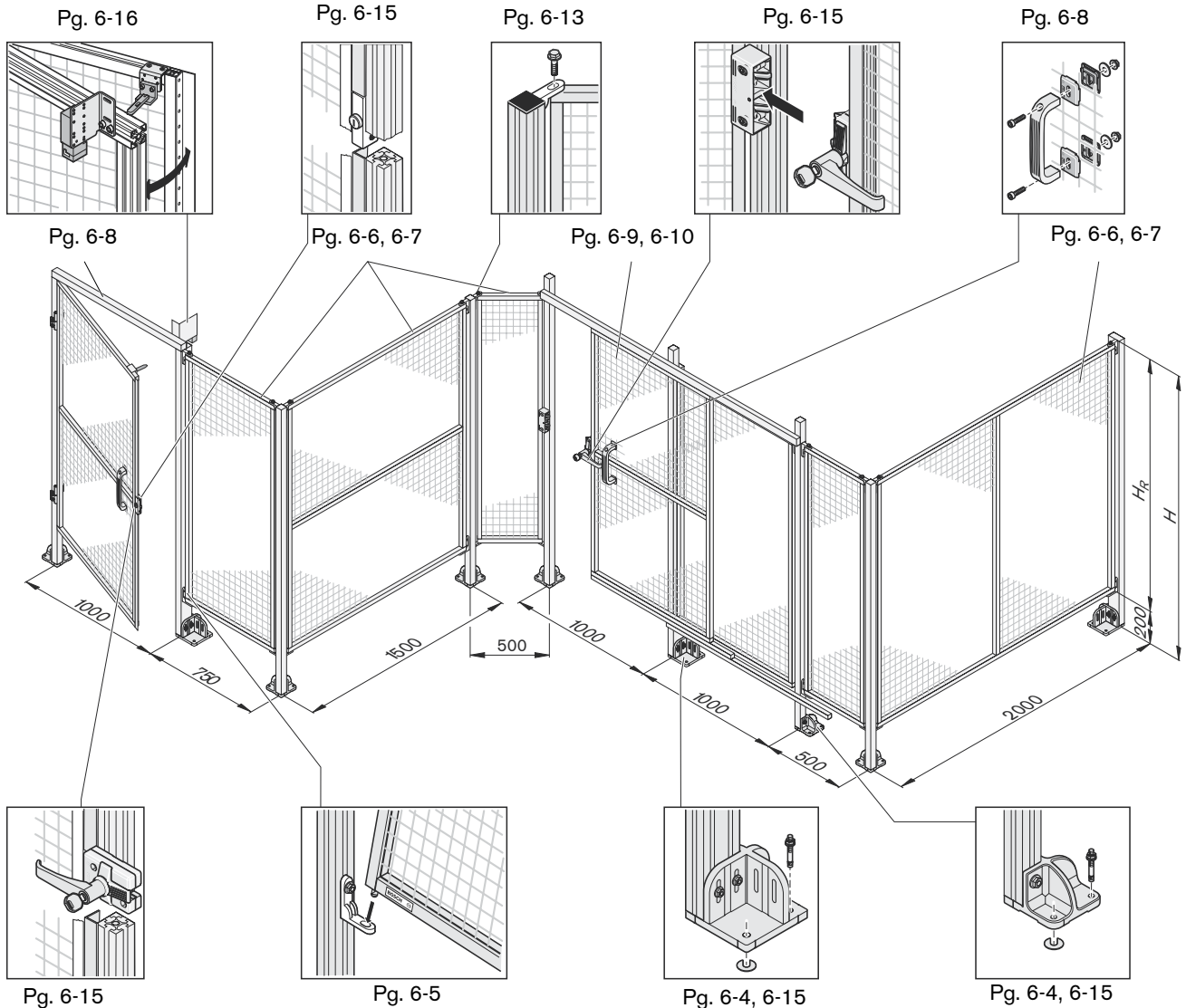
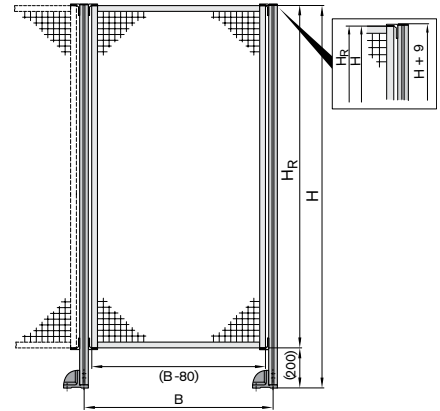
## Width

In order to simplify planning and assembly, system width **B** is always given as the distance from the middle of one support to the middle of the next support. EcoSafe protective frames can be made to order in widths from 250mm up to 2500mm.

## Height

In all height information, the system height **H** and the frame height **H<sub>R</sub>** are different. Frame height **H<sub>R</sub>** can be specified from 250mm to 2000mm maximum. In order to guarantee easy access for cleaning machines, a distance to the ground of 200mm is required.

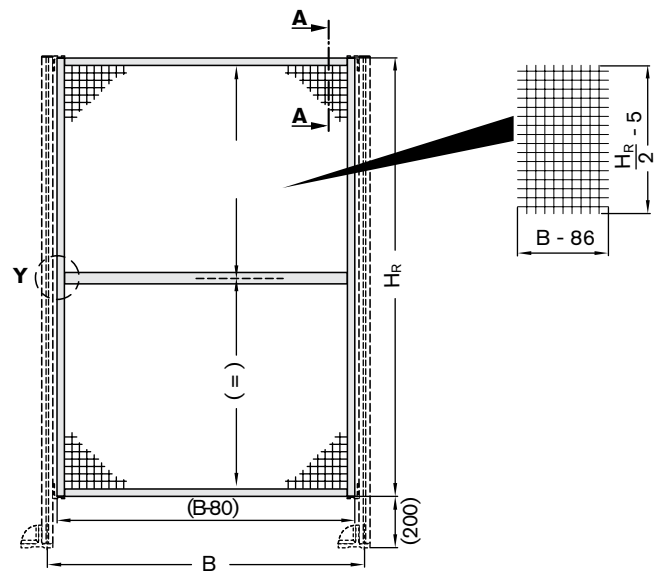
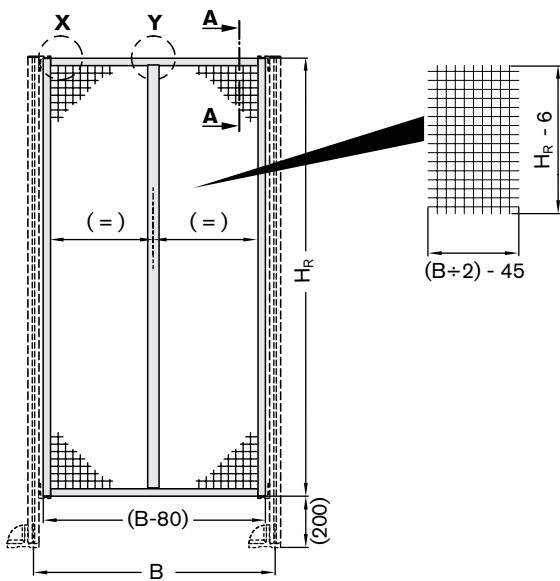
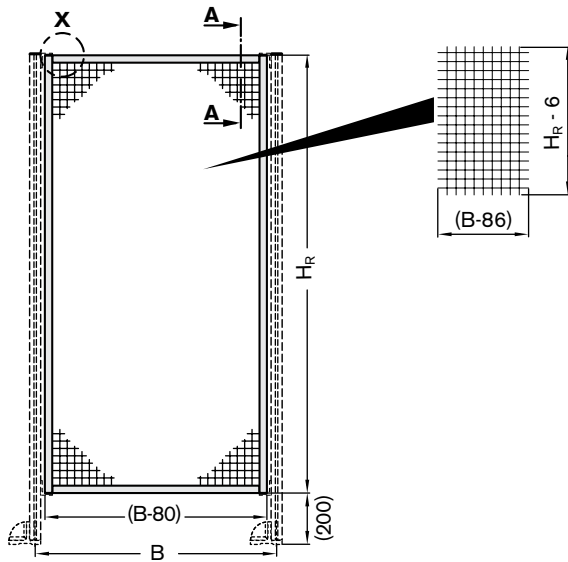
The distance to the ground can be adjusted if required. Also when planning your guarding, consider that protective guards in the 1800mm height can be converted into doors.



Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

### Assembling EcoSafe Guarding

EcoSafe frame profiles are an economical solution for the construction of protective guards with woven wire grilles or panels. The grille is held securely in the special groove so that it cannot rattle, and a special mounting rim is not required. Panels are installed with spring clamps to prevent rattling. The profiles are connected together with self-tapping S8x25 screws.



**Assembly Note**

**Drilling Tips**

**X**

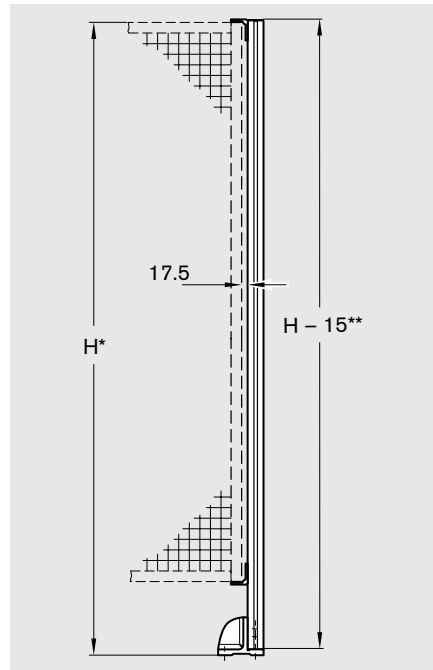
**A - A**

**Y**

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

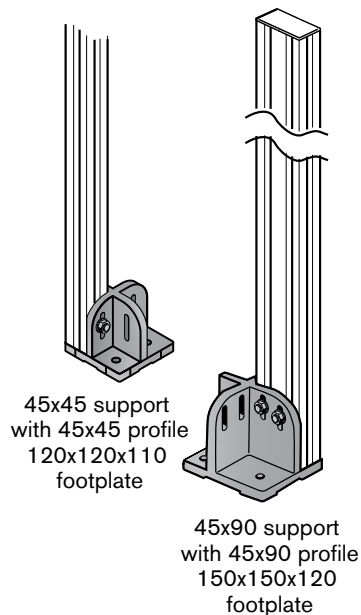
# Support Post Assemblies

## Support Posts <sup>10</sup>



**Features:**

- Used for perimeter type guards
- Two styles available: 45x45 for standard applications, and 45x90 for heavy-duty applications
- Can be used to support EcoSafe panels or panels made using standard 30- and 45-series profiles
- Includes footplate and end cap



6

**Technical Data**

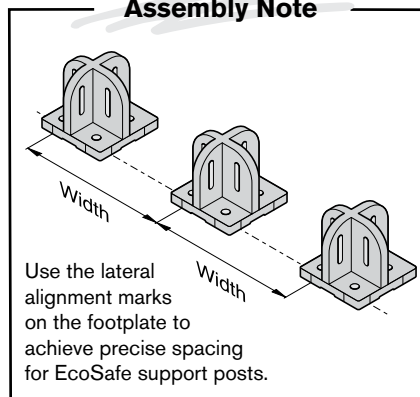
Technical drawing of a support post showing a force  $F$  applied to the side and a diameter  $D$ . The height of the post is 1000mm.

<b>F [N]</b>	100	150	300	450	600
<b>D [mm]</b>	4	6	13	21	31

Description	Qty. Req'd	Part Number
<b>45x45 Support Post (includes the following)</b>		
45x45 profile, square cut to length	1	8 981 992 026/ __mm**
45x45 end cap	1	3 842 502 674
Footplate 120x120x110	1	3 842 527 553
24mm T-bolt kit	2	8 981 021 344
S12x30 connection screw	1	8 981 021 302
<b>45x90 Support Post (includes the following)</b>		
45x90 profile, square cut to length	1	3 842 992 432/ __mm**
45x90 end cap	1	3 842 511 783
Footplate 150x150x120	1	3 842 524 469
24mm T-bolt kit	2	8 981 021 344
S12x30 connection screw	1	8 981 021 302

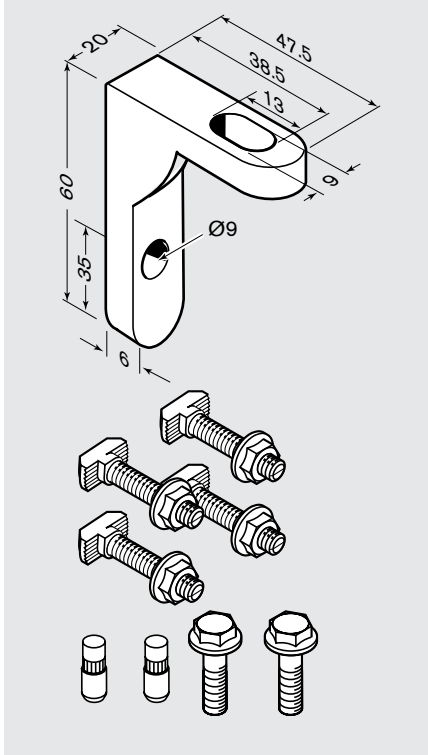
\* specify height (H)  $\geq 450\text{mm} \leq 2300\text{mm}$   
 \*\* specify height (H-15)  $\geq 450\text{mm} \leq 2300\text{mm}$

**Assembly Note**



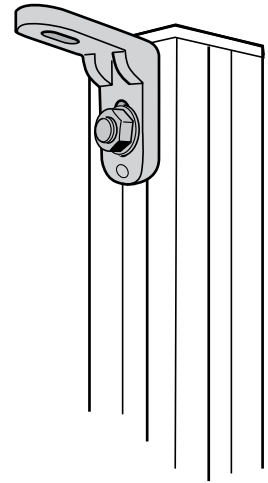
Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

**Panel Mounting Bracket Kit** 



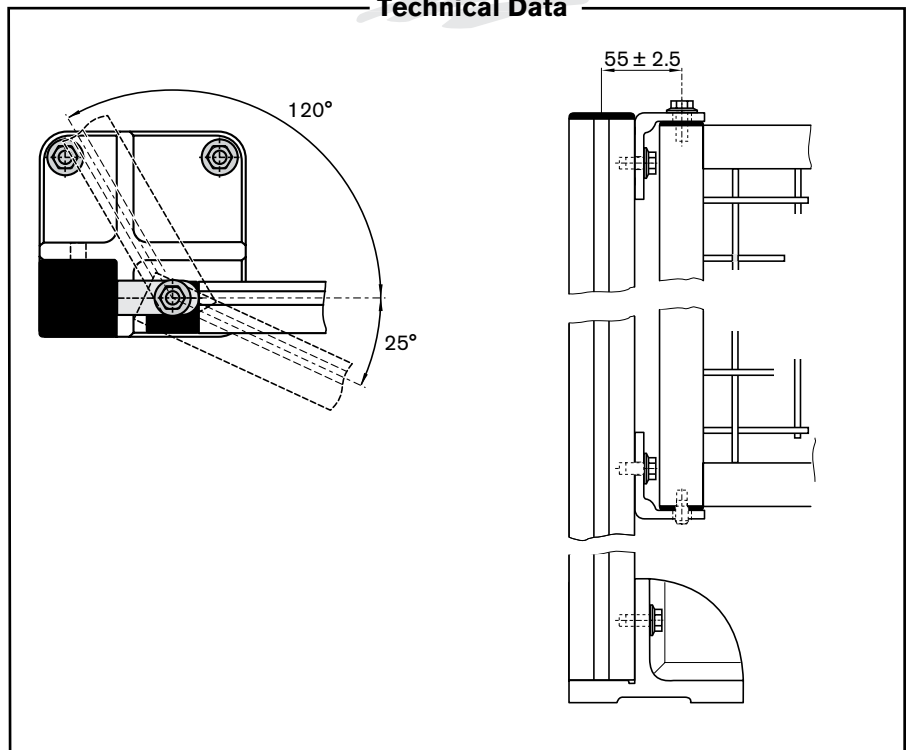
**Features:**

- Used to mount EcoSafe panels to pre-assembled vertical supports
- Pins hold the bottom corners of the panel and screws secure it at the top
- Panels can be mounted in a 145° range to the vertical support, allowing guarding to easily follow the work area
- Includes four brackets, two pins, two panel mounting screws, and four T-bolt kits



Description	Lot Size	Part Number
Panel mounting bracket kit	1	3 842 522 481

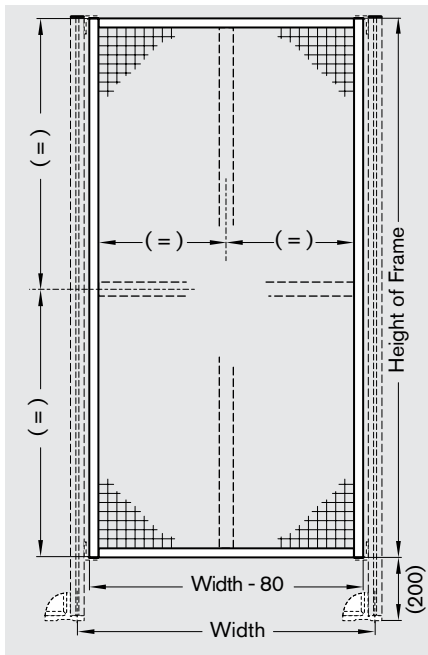
**Technical Data**



Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# EcoSafe Guarding Components

## Protective Frames 8



**Features:**

- 30x30 WG aluminum frames can hold solid panels or wire mesh
- Attach frames to support posts using panel mounting brackets
- Allow fast assembly of perimeter guarding
- Three styles are available: Undivided, Vertically Divided, and Horizontally Divided. For ordering and component details, see the next page

**Note:**

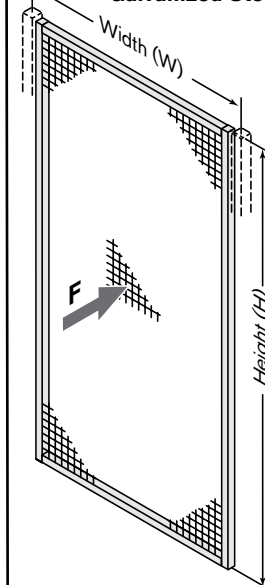
- EcoSafe panels are designed and built by your local Bosch Rexroth distributor. Call 1-800-REXROTH for the location of your nearest authorized Bosch Rexroth framing distributor.

6

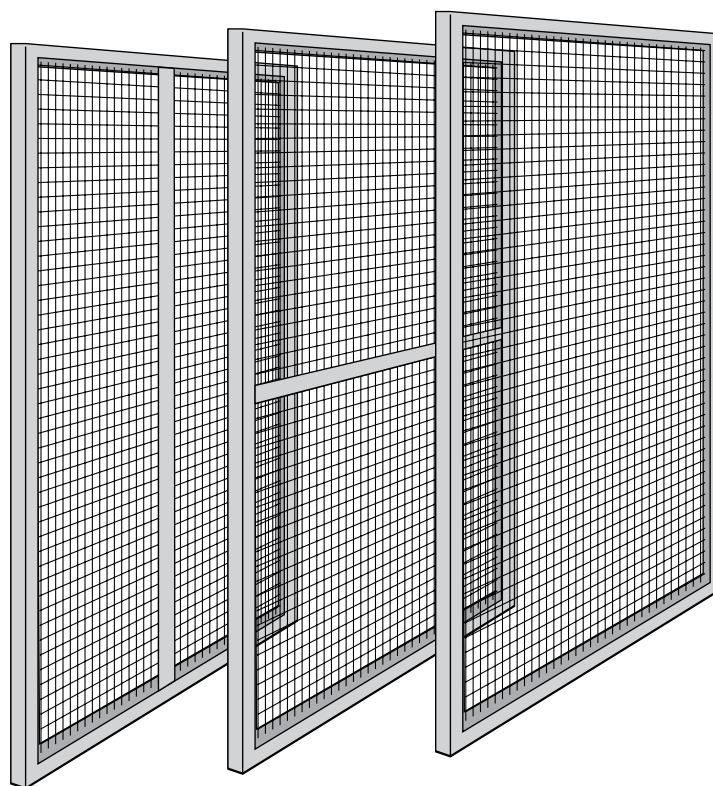
**Technical Data**

**for Frames with Galvanized Steel Mesh**

Force needed to push woven 12AWG triple crimp wire out of frame profile as tested statically in the center of panel with a 200mm dia. steel plate.



<b>H [mm]</b>	1800	1800	1800
<b>W [mm]</b>	750	1000	1500
<b>F<sub>max</sub> [N]</b>	1100	730	550



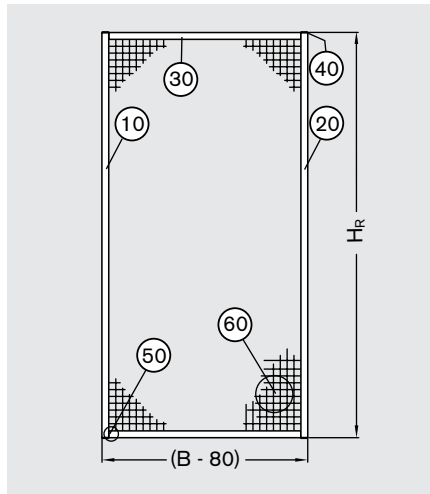
**Vertically Divided**

**Horizontally Divided**

**Undivided**

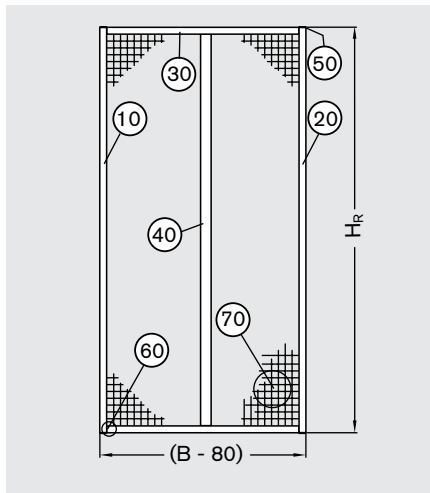
Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

**Undivided EcoSafe Panel**



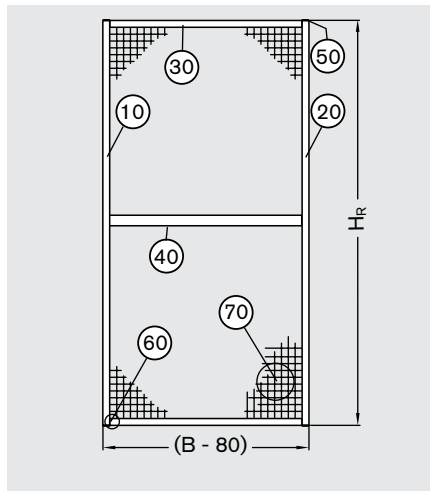
Description	Qty. Req'd.	Part Number
10 30x30 WG40 left-hand: drilled both ends 7.8mm, one end tapped M8, 40mm deep L=H <sub>R</sub> , specify length ≥250mm≤2000mm	1	3 842 992 978/ __mm
20 30x30 WG40 right-hand: drilled both ends 7.8mm, one end tapped M8, 40mm deep L=H <sub>R</sub> , specify length ≥250mm≤2000mm	1	8 981 992 247/ __mm
30 30x30 WG40: square cut to length L=(B-80)-60, specify length ≥210mm≤2440mm	2	3 842 992 972/ __mm
40 End cap 30x30 WG30/40	4	3 842 522 345
50 S8x25 self-tapping screw	4	3 842 523 970
60 Panel, specify type, L x W = (B-92) x (H <sub>R</sub> -12) (4-5mm thick)	1	Contact your distributor

**Vertically Divided EcoSafe Panel**



Description	Qty. Req'd.	Part Number
10 30x30 WG40 left-hand: drilled both ends 7.8mm, one end tapped M8, 40mm deep L=H <sub>R</sub> , specify length ≥250mm≤2000mm	1	3 842 992 978/ __mm
20 30x30 WG40 right-hand: drilled both ends 7.8mm, one end tapped M8, 40mm deep L=H <sub>R</sub> , specify length ≥250mm≤2000mm	1	8 981 992 247/ __mm
30 30x30 WG40: drilled in center 7.8mm, L=(B-80)-60, specify length ≥210mm≤2440mm	2	3 842 992 984/ __mm
40 30x45 WG40, square cut to length, L=H <sub>R</sub> -60, specify length ≥210mm≤1940mm	1	3 842 992 973/ __mm
50 End cap 30x30 WG30/40	4	3 842 522 345
60 S8x25 self-tapping screw	4	3 842 523 970
70 Panel, specify type, L x W = (B/2) -51 x (H <sub>R</sub> -12) (4-5mm thick)	2	Contact your distributor

**Horizontally Divided EcoSafe Panel**

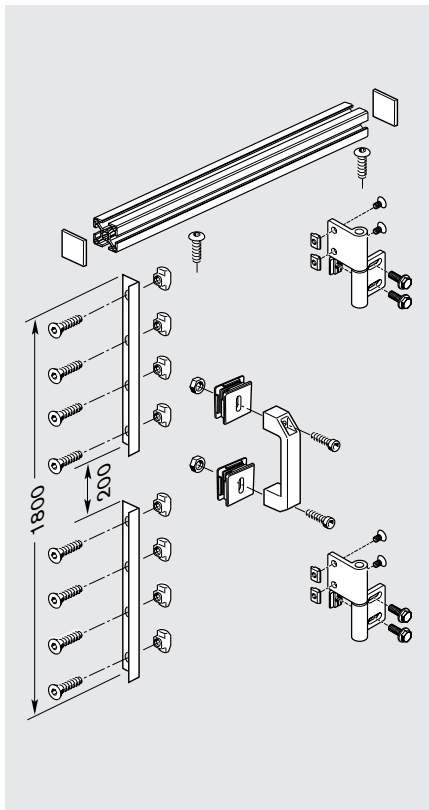


Description	Qty. Req'd.	Part Number
10 30x30 WG40 left-hand: drilled both ends and center 7.8mm; one end tapped M8, 40mm deep L=H <sub>R</sub> , specify length ≥250mm≤2000mm	1	3 842 992 985/ __mm
20 30x30 WG40 right-hand: drilled both ends and center 7.8mm, one end tapped M8, 40mm deep L=H <sub>R</sub> , specify length ≥250mm≤2000mm	1	8 981 992 247/ __mm
30 30x30 WG40: L=(B-80)-60, specify length ≥210mm≤2440mm	2	3 842 992 984/ __mm
40 30x45 WG40: square cut to length, L=(B-80)-60, specify length ≥210mm≤2440mm	1	R 980 992 421/ __mm
50 End cap 30x30 WG30/40	4	3 842 522 345
60 S8x25 self-tapping screw	4	3 842 523 970
70 Panel, specify type, L x W = (B-92) x (H <sub>R</sub> /2) -12 (4-5mm thick)	2	Contact your distributor

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

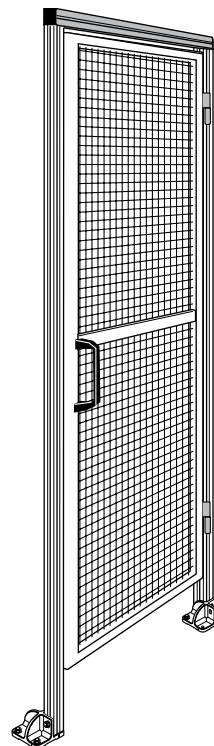
# EcoSafe Guarding Components

## Door Component Kit



**Features:**

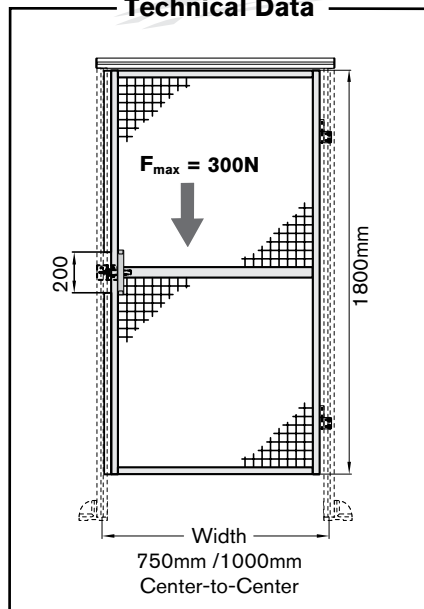
- Create hinged doors with EcoSafe protective frames
- Includes all hardware necessary, including handle, hinges, door jamb profile and top frame profile, and fasteners
- Two standard sizes available: 750mm wide x 1800mm high and 1000mm wide x 1800mm high (width measured center-to-center of support posts)
- Does NOT include lock or latch; order separately in Section 5: Doors and Door Components



6

Description	Lot Size	Part Number
Door component kit, 750mm x 1800mm	1	<b>3 842 523 165</b>
Door component kit, 1000mm x 1800mm	1	<b>3 842 523 166</b>

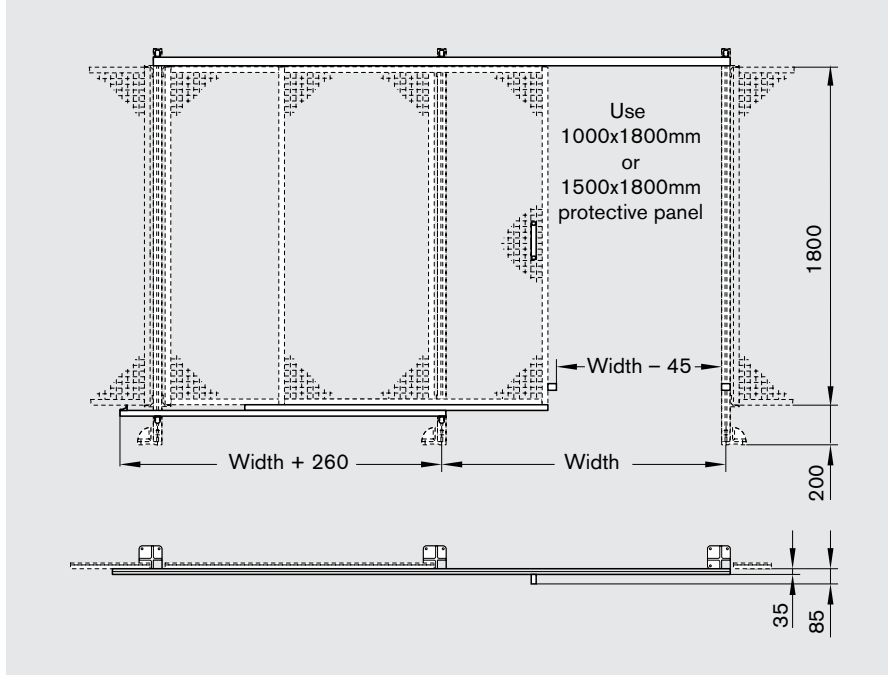
**Technical Data**





Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

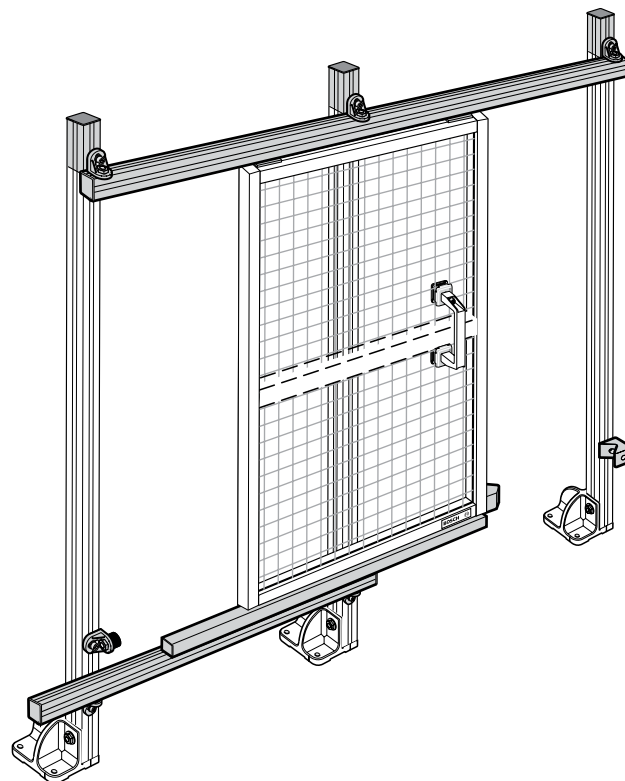
**Sliding Door Kit with Overhead Trolley**



**Features:**

- Overhead sliding doors create a wide opening clear of trip hazards, providing easy access for personnel or equipment
- A positive stop keeps the door in place when closed
- Includes all hardware necessary, including handle, rollers, stops, top and bottom frame profiles, and fasteners
- Two standard sizes available for use with standard protective frames: 1000mm wide x 1800mm high or 1500 wide x 1800mm high (width measured center-to-center of support posts)
- Uses easy-sliding Delrin® bearings and rollers
- Does NOT include lock or latch

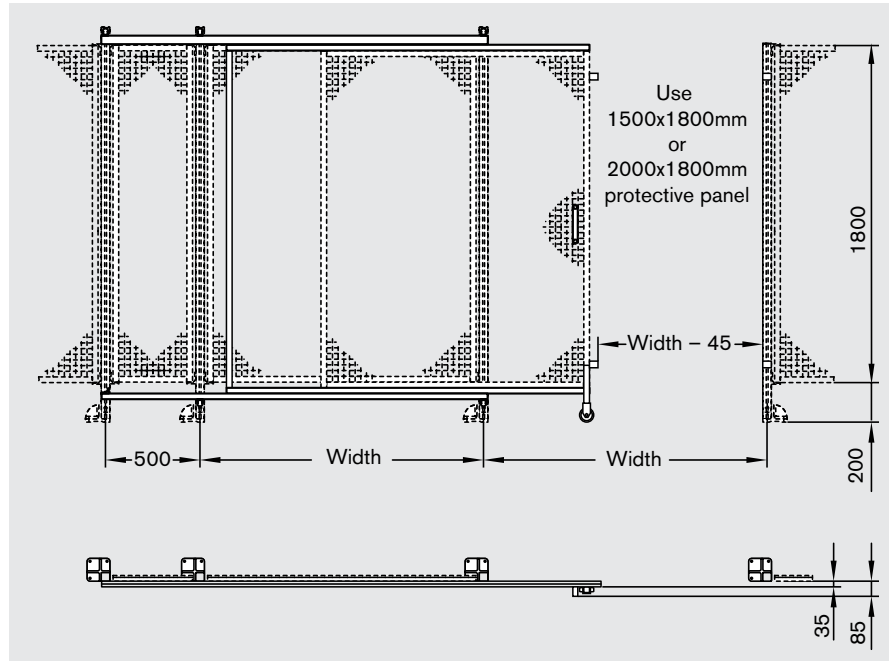
Description	Lot Size	Part Number
Overhead sliding door kit, 1000mm x 1800mm	1	3 842 524 163
Overhead sliding door kit, 1500mm x 1800mm	1	3 842 524 164



## Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

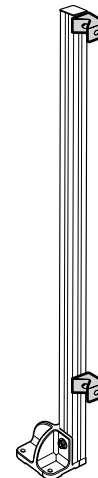
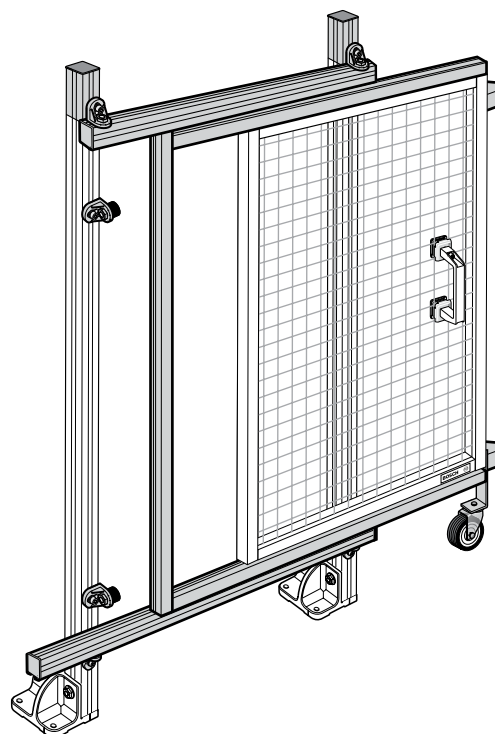
## EcoSafe Guarding Components

## Sliding Door Kit with Lower Rail Guide

**Features:**

- Overhead sliding doors create an extra-wide opening clear of trip hazards, providing easy access for personnel or equipment
- No guides across doorway to restrict overhead clearance
- Rollers in the upper door track provide easy movement while the lower roller guide provides additional support and stability
- A positive stop keeps the door in place when closed
- Includes all hardware necessary, including handle, rollers, stops, top and bottom frame profiles, and fasteners
- Two standard sizes available for use with standard protective frames: 1500mm wide x 1800mm high or 2000 wide x 1800mm high (width measured center-to-center of support posts)
- Uses easy-sliding Delrin® bearings and rollers
- Does NOT include lock or latch

Description	Lot Size	Part Number
Sliding door kit with roller guide 1500mm x 1800mm	1	3 842 524 165
Sliding door kit with roller guide 2000mm x 1800mm	1	3 842 524 166



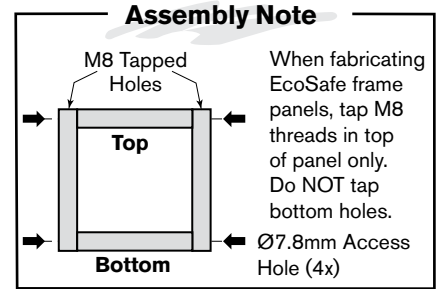
Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# EcoSafe Frame Profiles

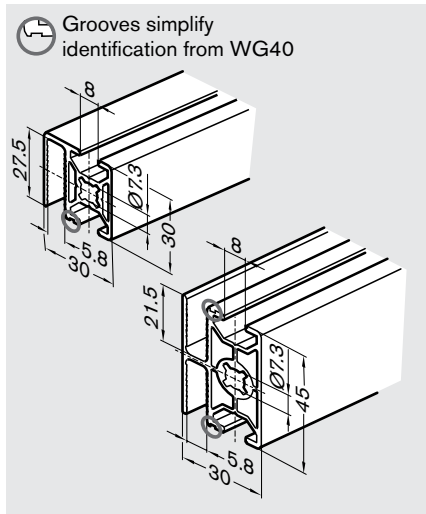
These specially designed profiles are used to construct EcoSafe frames, and can also be used for other guarding applications.

**Features:**

- Deep slots with serrated sides hold wire mesh or wire grill panels
- Each has two 8mm T-slots
- Spring clamps (available on the next page) allow use with a wide variety of mesh and panel thicknesses

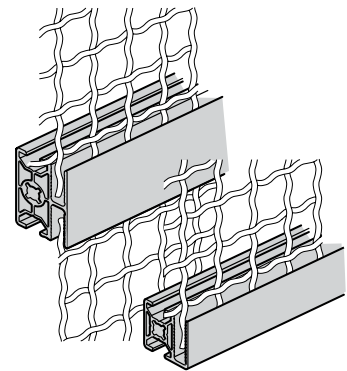


## 30x30 WG30 & 30x45 WG30



**Features:**

- Deep slots with serrated sides hold wire mesh or wire grill panels securely
- For use with panels and mesh up to 5.8mm thick (2-4mm with spring clamps, available on next page)
- Each has two 8mm T-slots



**Non-Machined End Finish Options**

Non-Machined End Finish Options	Part Number
Profile 30x30 WG30, pkg. of 20, 5600mm long	<b>3 842 522 462</b>
Profile 30x30 WG30, single, 5600mm long	<b>3 842 522 458</b>
Profile 30x45 WG30, pkg. of 20, 5600mm long	<b>3 842 522 463</b>
Profile 30x45 WG30, single, 5600mm long	<b>3 842 522 459</b>

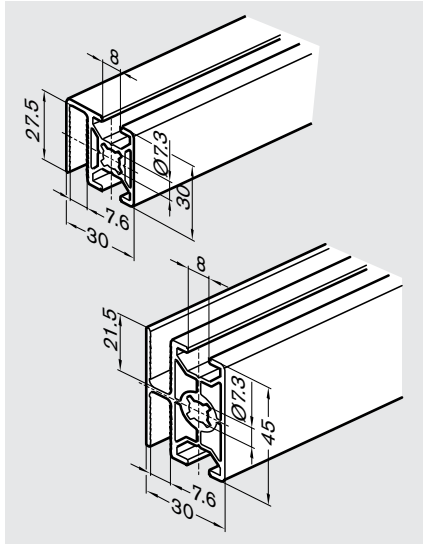

**Machined Options**

Machined Options	End Finish	Part Number
Profile 30x30 WG30, -/-, specify length $\geq 30\text{mm} \leq 5600\text{mm}$		<b>3 842 992 970/ __mm</b>
Profile 30x45 WG30, -/-, specify length $\geq 30\text{mm} \leq 5600\text{mm}$		<b>3 842 992 971/ __mm</b>
Profile 30x30 WG30, right-hand, D7.8VS/D7.8VS-M8, specify length $\geq 75\text{mm} \leq 5600\text{mm}$		<b>8 981 992 244/ __mm</b>
Profile 30x30 WG30, left-hand, D7.8VS-M8/D7.8VS, specify length $\geq 75\text{mm} \leq 5600\text{mm}$		<b>3 842 992 977/ __mm</b>

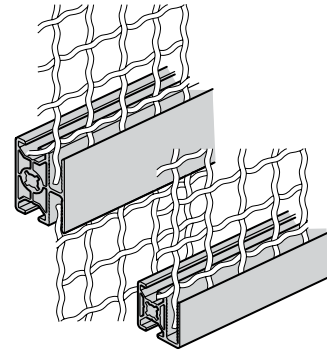
Please contact your distributor for other machining options.

## Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

## EcoSafe Frame Profiles





30x30 WG40 & 30x45 WG40 **Features:**

- Deep slots with serrated sides hold wire mesh or wire grill panels securely
- For use with panels and mesh up to 7.6mm thick (4-5mm with spring clamps)
- Each has two 8mm T-slots

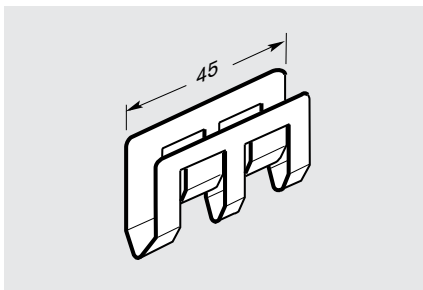
**Non-Machined End Finish Options**

Non-Machined End Finish Options	Part Number
Profile 30x30 WG40, pkg. of 20, 5600mm long	<b>3 842 522 464</b>
Profile 30x30 WG40, single, 5600mm long	<b>3 842 522 460</b>
Profile 30x45 WG40, pkg. of 20, 5600mm long	<b>3 842 522 465</b>
Profile 30x45 WG40, single, 5600mm long	<b>3 842 522 461</b>

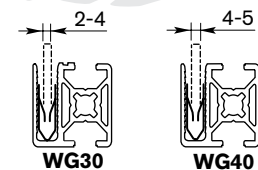
**Machined Options**

Machined Options	End Finish	Part Number
Profile 30x30 WG40, -/-, specify length $\geq 30\text{mm} \leq 5600\text{mm}$		<b>3 842 992 972/ __mm</b>
Profile 30x45 WG40, -/-, specify length $\geq 30\text{mm} \leq 5600\text{mm}$		<b>3 842 992 973/ __mm</b>
Profile 30x30 WG40, right-hand, D7.8VS/D7.8VS-M8, specify length $\geq 75\text{mm} \leq 5600\text{mm}$		<b>8 981 992 247/ __mm</b>
Profile 30x30 WG40, left-hand, D7.8VS-M8/D7.8VS, specify length $\geq 75\text{mm} \leq 5600\text{mm}$		<b>3 842 992 978/ __mm</b>

Please contact your distributor for other machining options.

**Spring Clamp****Features:**

- Use with EcoSafe WG30 and WG40 frame profiles to hold thinner panels and mesh securely in the serrated groove of the profile
- Recommended minimum spacing is every 250mm, or more as needed

**Assembly Note**

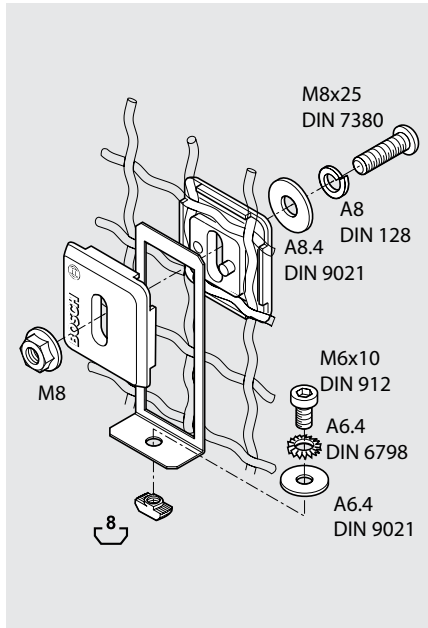
Use spring clamps when panels or mesh have a thickness smaller than the serrated slot in the profile. Use every 250mm, or more as needed.

Description	Lot Size	Part Number
Spring Clamp	1	<b>3 842 525 014</b>

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# EcoSafe Accessories

## Wire Mesh Grounding Terminal <sup>8</sup>

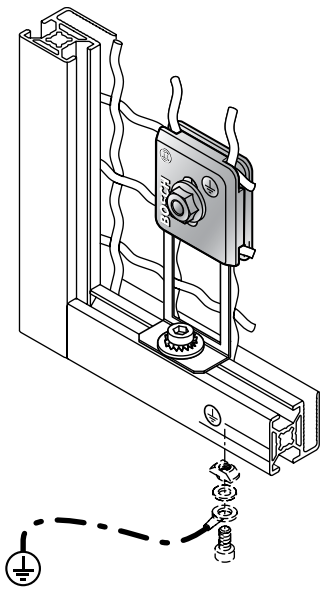


**Features:**

- Connects wire mesh protective panels to a grounding conductor system
- Ensures safe channeling of short circuit currents up to 63 Amps nominal current
- Includes mounting hardware

**Material:**

- Terminal: stainless steel
- Clamping element: black polyamide
- Hardware: zinc-plated steel



Description	Lot Size	Part Number
Wire mesh grounding terminal	1	<b>3 842 525 833</b>

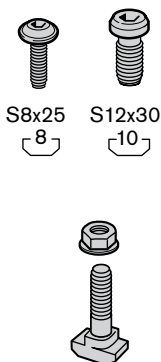
## Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures







## EcoSafe Accessories

## Other Accessories and Installation Components

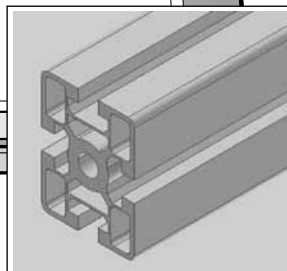
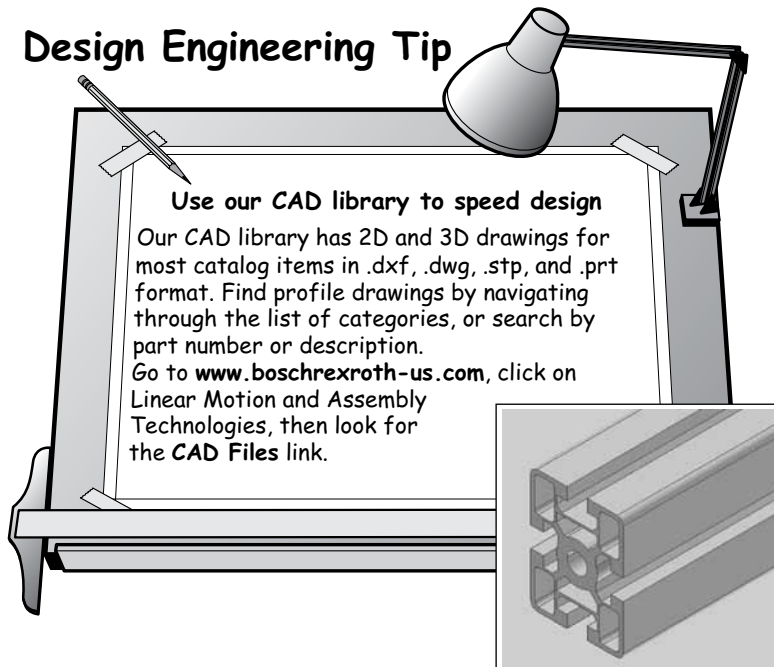
Below and on the next page is a list of other accessories and components that are typically used when installing EcoSafe guarding. These components are listed in more detail elsewhere in this catalog, but have been included here for quick reference.

From floor anchoring elements to end caps, these components are listed by their respective sections in this catalog. For additional information, refer to the section for that component.



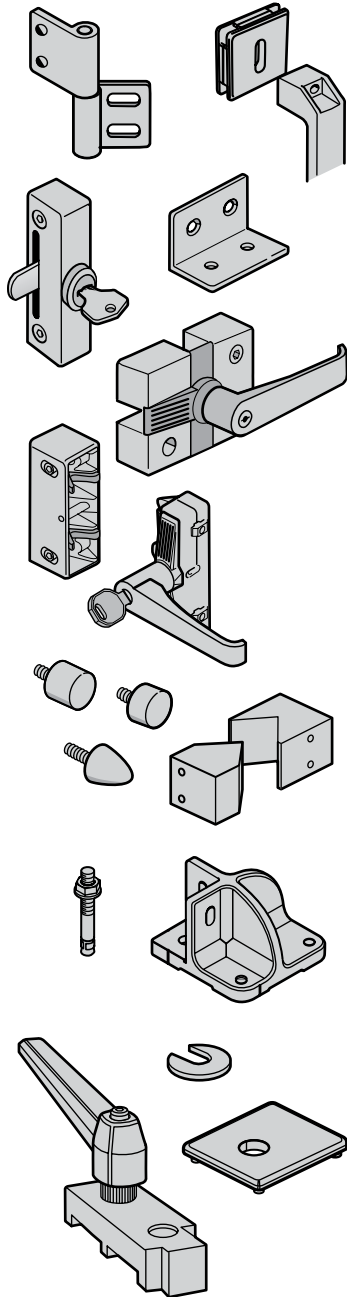
Description	Lot Size	Part Number
<b>Section 3: Profile Connectors</b>		
S8x25 self-tapping connection screw 	1	<b>3 842 523 970</b>
S8x25 self-tapping connection screw 	1	<b>3 842 527 174</b>
S12x30 self-tapping connection screw 	1	<b>8 981 021 302</b>
S12x30 self-tapping connection screw 	1	<b>3 842 530 236</b>
<b>Section 4: Fasteners</b>		
19mm M8 T-bolt fastening kit 	1	<b>8 981 021 343</b>
24mm M8 T-bolt fastening kit 	1	<b>8 981 021 344</b>

## Design Engineering Tip



## Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

## Other Accessories and Installation Components



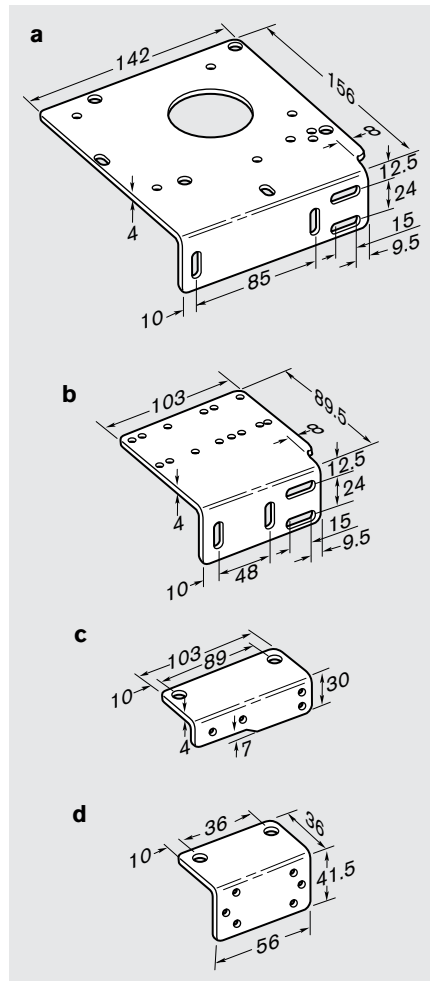
Description	Lot Size*	Part Number
<b>Section 5: Doors and Door Components</b>		
Handle mounting plate	1	3 842 523 308
Large cylindrical door stop	10	3 842 510 642
Small cylindrical door stop	10	3 842 510 464
Bullet-shaped door stop	10	3 842 510 165
Sliding door stop	1	3 842 524 490
Adjustable hinge	2	3 842 535 694
30x30 WG30 and WG40 lock adapter plate	1	3 842 523 243
Standard lock with random selection from 150 key variations	1	3 842 522 479
Single master key, fits all 150 random key variations (for use with lock 3 842 522 479 only)	1	3 842 523 315
Standard lock with uniform key	1	3 842 523 320
Lockable handle, 30-30/45-45, random key	1	3 842 525 821
Lockable handle, 30-30/45-45, uniform key	1	3 842 525 822
Lock, 30-30/45-45, uniform key	1	3 842 525 823
Lock for sliding doors, random key	1	3 842 525 946
Lock for sliding doors, uniform key	1	3 842 525 947
<b>Section 7: Floor to Frame Elements</b>		
120x120x110 footplate	1	3 842 527 553
150x150x120 footplate	1	3 842 524 469
8x76mm long anchor bolt for 120x120 footplates	1	3 842 526 560
10x89mm long anchor bolt for 150x150 footplates	1	3 842 526 561
Footplate leveling washer	100	3 842 528 189
<b>Section 9: Caps and Finishing Elements</b>		
EcoSafe end cap	1	3 842 522 345
<b>Section 16: Tools</b>		
8mm drilling and boring jig, (for Ø7.8mm & Ø11mm holes)	1	3 842 528 577
10mm drilling and boring jig (for Ø9.8mm, Ø17mm, & Ø21mm holes)	1	3 842 528 574

\* For smaller quantities, please contact your local distributor.

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# Other Guarding Components

## Safety Switch Mounting Bracket Kits

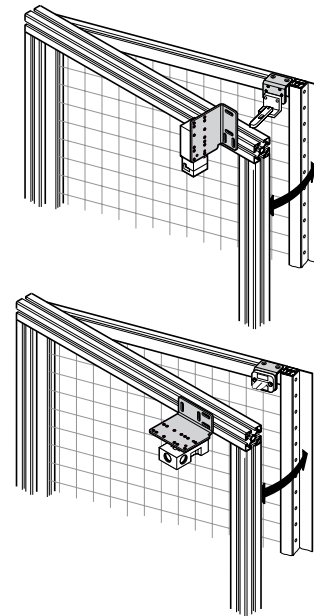


**Features:**

- Safety switch mounting brackets and activator brackets attach commercially available safety switches to Bosch Rexroth profiles
- Includes bracket mounting hardware

**Material:**

- Galvanized sheet steel



Description	Lot Size	Part Number
<b>A</b> Safety switch mount bracket kit (Includes safety switch bracket <b>b</b> and activator bracket <b>d</b> )	1	<b>3 842 522 475</b>
<b>B</b> Safety switch mount bracket kit (Includes safety switch bracket <b>a</b> and activator bracket <b>d</b> )	1	<b>3 842 522 476</b>
<b>C</b> Safety switch mount bracket kit (Includes safety switch bracket <b>a</b> and activator bracket <b>c</b> )	1	<b>3 842 522 477</b>

**Compatibility Data**

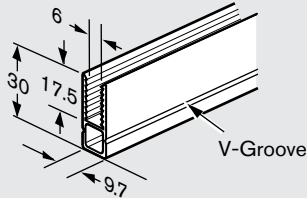
To use Safety Switch	with Latch Activator	Order Bracket Kit
Euchner NZ1 VZ Euchner NZ2 VZ Euchner NZ1 VS Euchner NZ2 VS Schmersal AZ 15/16 - B1 Schmersal AZ 15/16 - B2 Schmersal AZ 15/16 - B3 Schmersal AZ 15/16 - B20 Telemecanique XCS - A Telemecanique XCS - C Telemecanique XCS - PA (Telemecanique XCS - TE)	024298; 024299 024298; 024299 024298; 024299 024298; 024299 B2; B2-1747 B2; B2-1747 B2; B2-1747 B2; B2-1747 XCS-Z03 XCS-Z03 XCS-Z13 XCS-Z13	<b>A</b>
Euchner TZ Telemecanique XCS - E Telemecanique XCS - TE Telemecanique XCS - PA	024298; 024299 XCS-Z03 XCS-Z13 XCS-Z13	<b>B</b>
Schmersal AZM 160	N/A	<b>C</b>



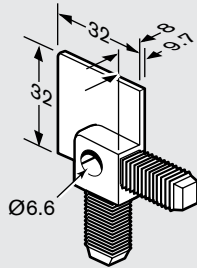
Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

Wire Mesh Frame Profile and Corner Connectors 10

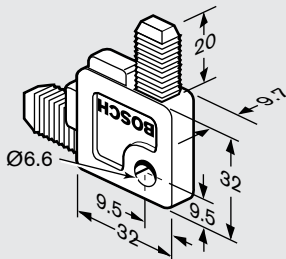
Wire Mesh Frame Profile



Inside Corner Connector



Outside Corner Connector

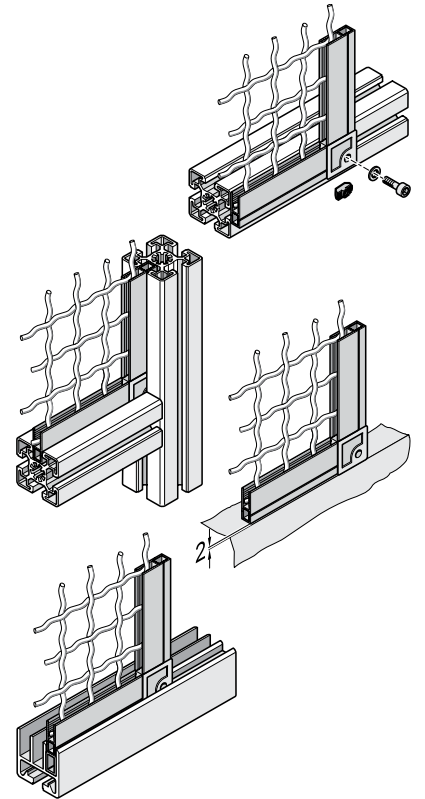


Features:

- Used to construct safety guards, protective enclosures, sliding doors, gate frameworks, etc.
- Toothed slot in profile holds 12 AWG wire mesh with 12mm or 40mm wire spacing
- Completed framework fits into 10mm T-slots
- Can be mounted to the surface of a structure using holes in corner connectors or using the V-groove in the frame profile as a drilling guide for mounting holes (use M6 screws and T-nuts for surface mounting to profile T-slots)
- Corner connectors join sections of wire mesh frame profile to create inside or outside corners
- Outside corner connectors require cutting a 24x24mm notch in the wire mesh to accommodate the connector

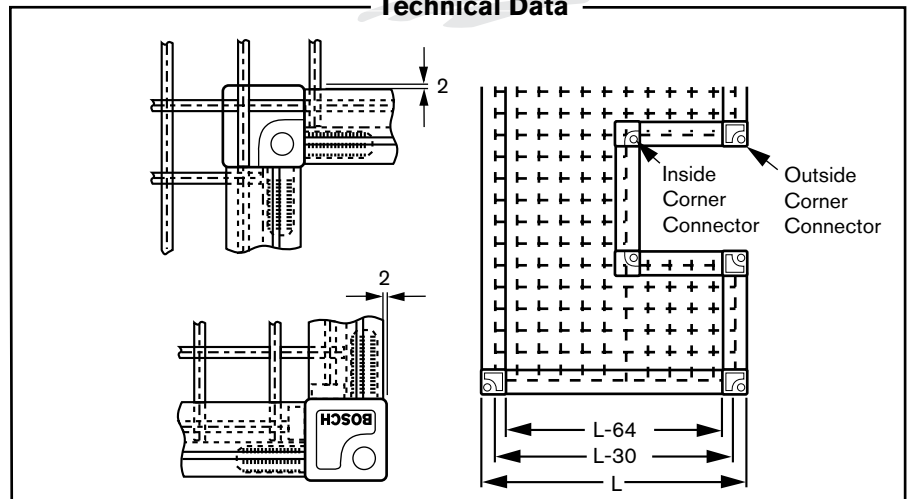
Material:

- Wire mesh frame: black anodized aluminum
- Corner connectors: black polyamide 6



Description	Lot Size	Part Number
Wire mesh frame profile, 3000mm long	1	3 842 305 766
Inside corner connector	1	3 842 305 768
Outside corner connector	1	3 842 305 767

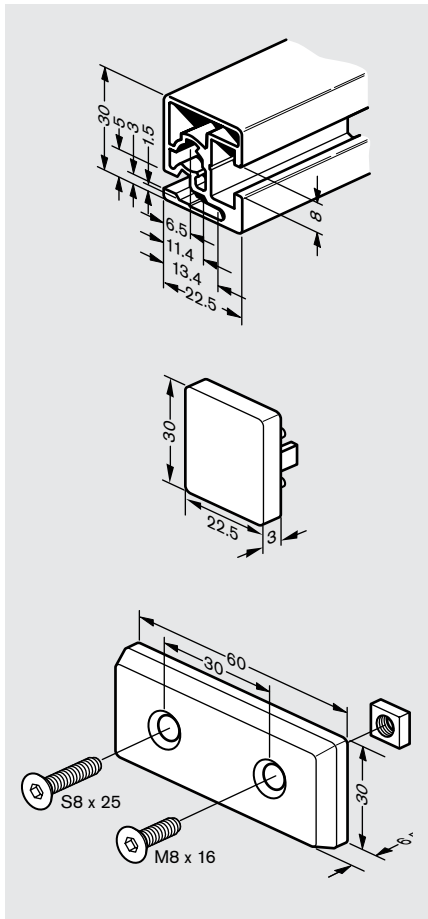
Technical Data



Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# Other Guarding Components

## Frame Profile (22.5x30F)

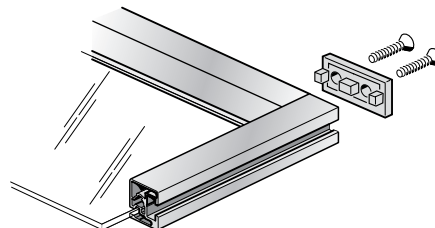


**Features:**


- Stepped slot to hold panels 1.5mm, 3mm, or 5mm thick
- Economical means for building material trays and shelves
- End caps and joining connectors available separately
- Has one 8mm T-slot

**Material:**


- Frame profile: anodized aluminum
- End cap: black polyamide 12 (conductive)
- Joining connector: black polyamide



6


Non-Machined End Finish Options	Lot Size*	Part Number
Profile 22.5x30F, pkg. of 20, 5600mm long		<b>3 842 515 229</b>
Profile 22.5x30F, single, 5600mm long		<b>3 842 515 228</b>
Corner connector with hardware	4	<b>3 842 535 661</b>
End cap 	1	<b>3 842 516 720</b>

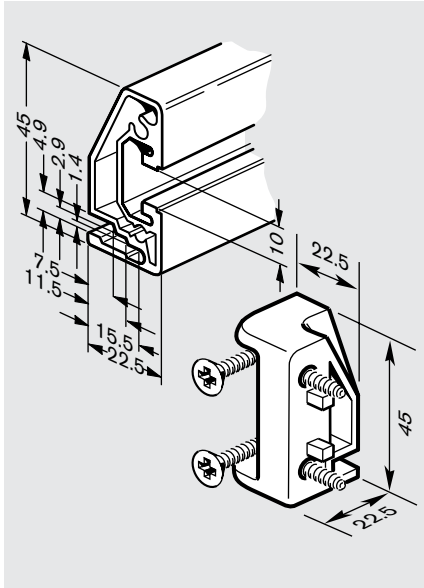
\* For smaller quantities, please contact your local distributor.

Machined Options	End Finish	Part Number
Profile 22.5x30F, -/-, specify length $\geq 30\text{mm} \leq 5600\text{mm}$		<b>3 842 992 493/ __mm</b>

Please contact your distributor for other machining options.

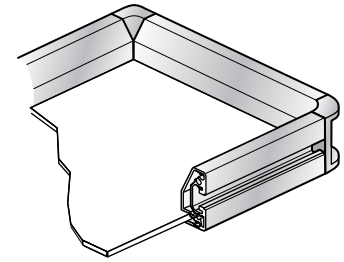
Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

**Frame Profile (22.5x45F)** 



**Features:**

- Stepped slot to hold panels 1.5mm, 3mm, or 5mm thick
- Corner brackets with self-tapping screws available separately
- End cap available; see Section 9: Caps and Finishing Elements
- Has one 10mm T-slot




**Material:**

- Frame profile: anodized aluminum
- Corner bracket: die-cast zinc

Non-Machined End Finish Options	Lot Size	Part Number
Profile 22.5x45F, pkg. of 20, 5600mm long		<b>3 842 508 102</b>
Profile 22.5x45F, single, 5600mm long		<b>3 842 508 103</b>
Corner bracket with hardware	4	<b>3 842 535 637</b>
Screw, countersunk, self-tapping 4.5 Phillips (replacement)		<b>3 842 508 022</b>

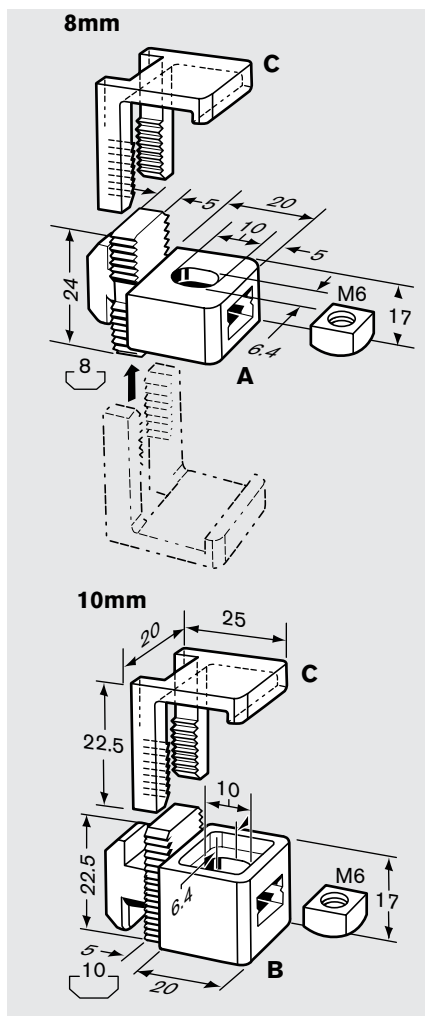
\* For smaller quantities, please contact your local distributor.

Machined Options	End Finish	Part Number
Profile 22.5x45F, -/-, specify length $\geq 30\text{mm} \leq 5600\text{mm}$		<b>3 842 992 411/ __mm</b>

Please contact your distributor for other machining options.

## Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

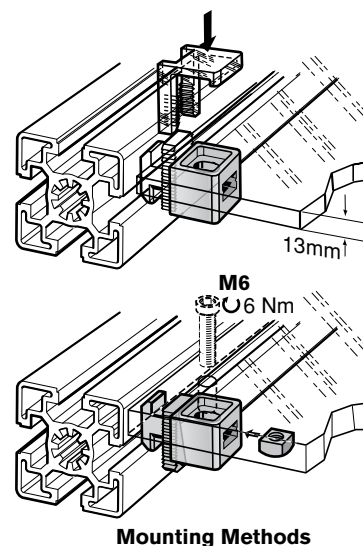
## Other Guarding Components

Variofix Panel Mounting Fasteners <sup>8</sup> <sup>10</sup> **GoTo****Features:**

- Used for mounting panels, panes, and plates up to 13mm thick to 8mm or 10mm T-slotted profiles
- Panels can be mounted after the frame structure is completed
- Sturdy construction
- Quick installation—fastener twist-locks into place in the profile's T-slot
- Panels can be secured in one of two ways: with the detent clip, or with M6 screws and nut (M6 nut pre-installed, contact your distributor for appropriate length M6 screws)
- Variofix puller tool (sold separately, see Section 16: Tools for details) simplifies detent clip removal

**Material:**

- Variofix fastener: black polyamide
- Detent clips: clear plastic

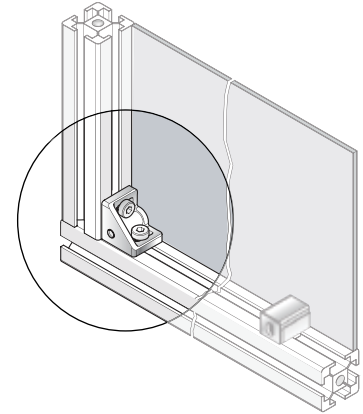
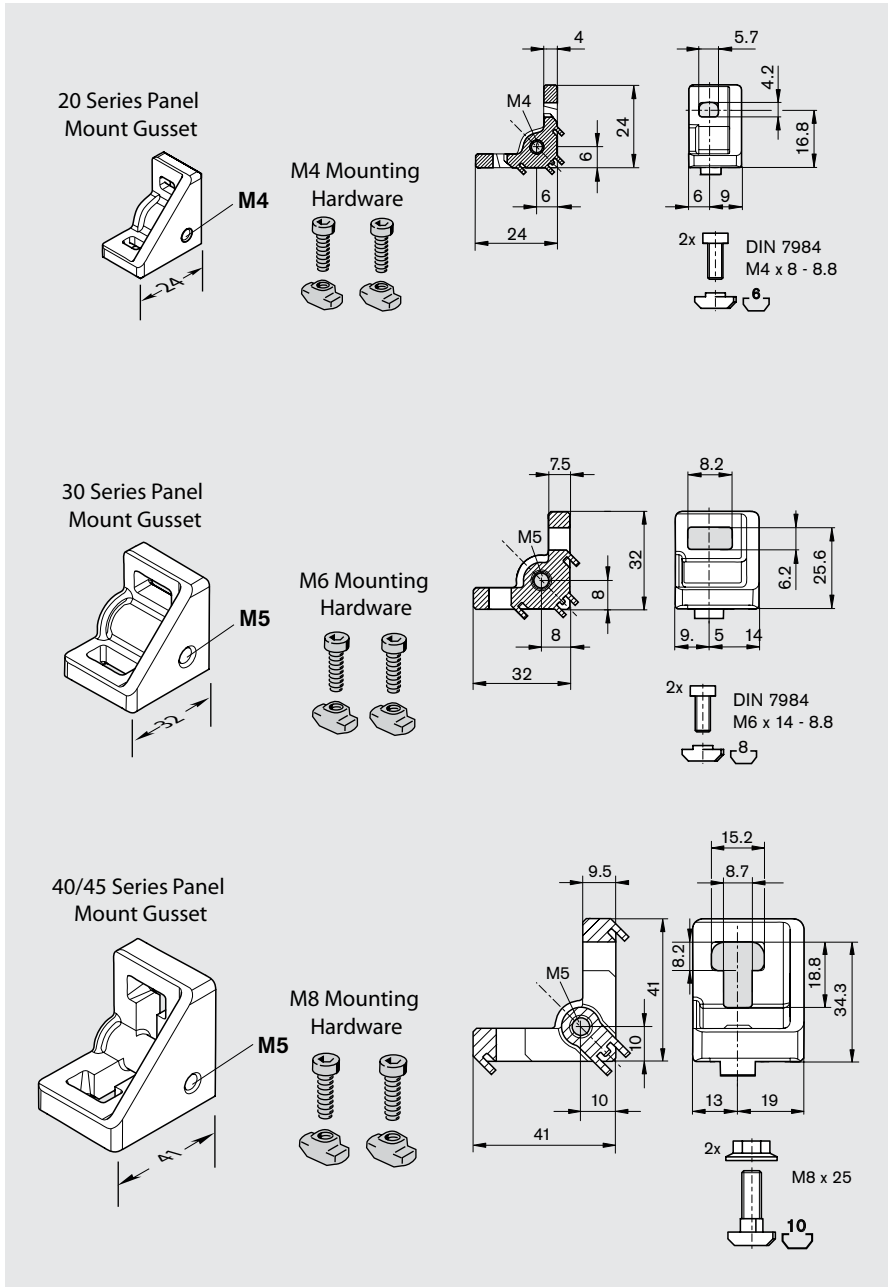
**Mounting Methods**

Description	Lot Size*	Part Number
<b>A</b> 8mm Variofix fastener <b>without</b> clip	10	<b>3 842 535 696</b> <b>GoTo</b>
<b>B</b> 10mm Variofix fastener <b>without</b> clip	10	<b>3 842 529 239</b> <b>GoTo</b>
<b>C</b> 8mm & 10mm Variofix detent clip	10	<b>3 842 184 738</b> <b>GoTo</b>
Variofix puller tool (see Section 16: Tools for details)	1	<b>3 842 526 589</b>

\* For smaller quantities, please contact your local distributor.

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

Panel Mount Gussets



**Features:**

- Panel mount gusset doubles as both profile connector and panel mount
- Pre-tapped panel mount gusset for easy installation
- Gusset kit includes mounting hardware

**Material:**

- Gusset: Die-cast aluminum

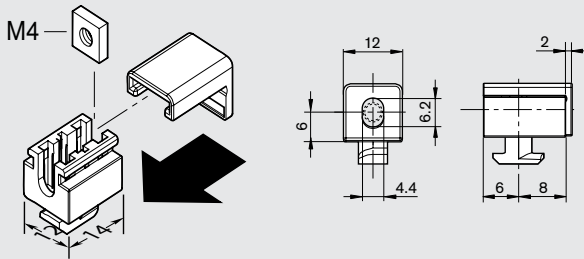
Description	Lot Size	Part Number
20 Series Panel Mount Gusset	1	3 842 536 489
20 Series Panel Mount Gusset Kit	1	3 842 536 670
30 Series Panel Mount Gusset	1	3 842 536 490
30 Series Panel Mount Gusset Kit	1	3 842 536 671
40/45 Series Panel Mount Gusset	1	3 842 536 491
40/45 Series Panel Mount Gusset Kit	1	3 842 536 672

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

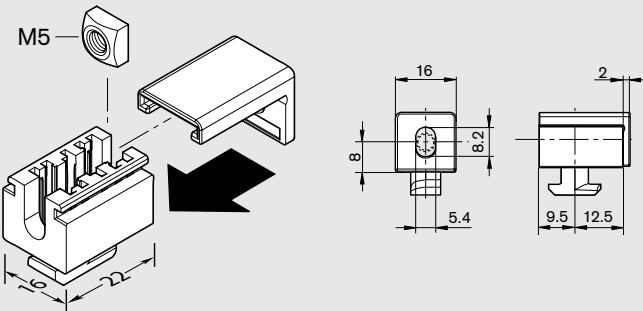
# Other Guarding Components

## Variofix Blocks

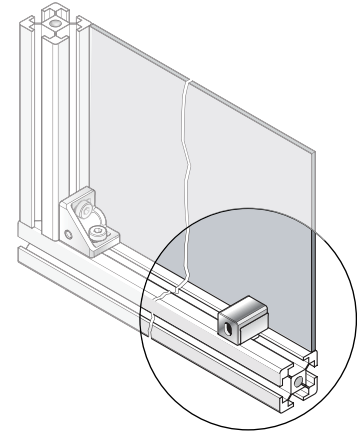
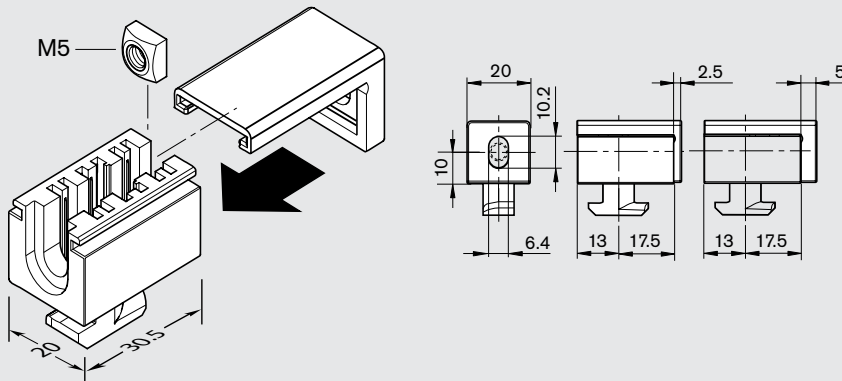
20 Series Variofix Block



30 Series Variofix Block



40/45 Series Variofix Block



**Features:**

- Variofix block steadies wider panels
- Gusset kit includes mounting hardware

**Material:**

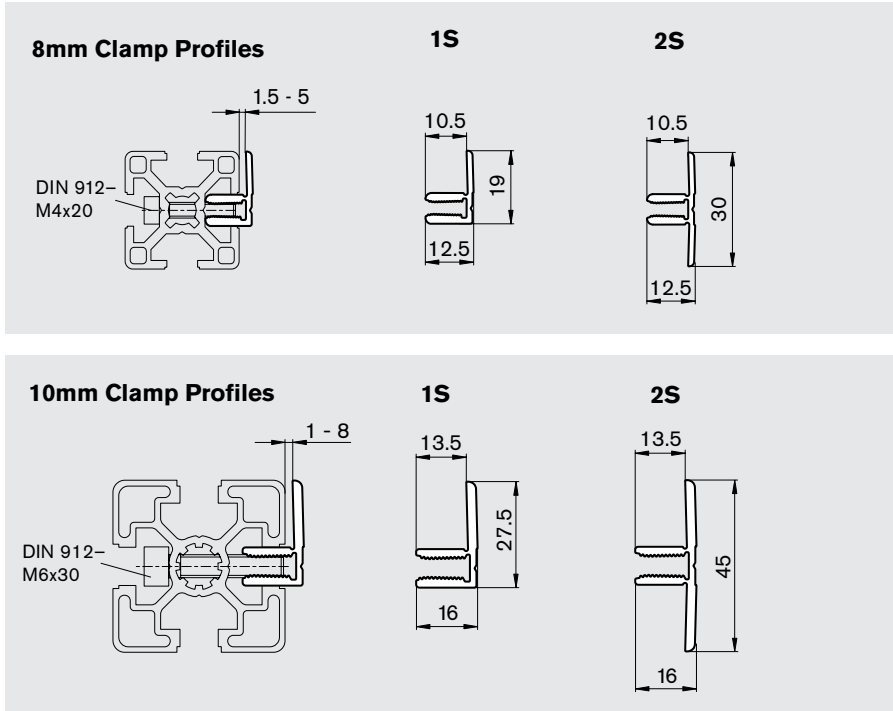
- Variofix block: PA, black

Description	Lot Size*	Part Number
20 Series Variofix Block	10	3 842 536 493
30 Series Variofix Block	10	3 842 536 494
40/45 Series Variofix Block	10	3 842 536 495

\* For smaller quantities, please contact your local distributor.

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

Heavy-Duty 8mm and 10mm Clamp Profiles 



**Features:**

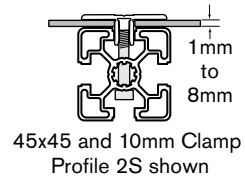
- Allow easy installation of panels, grilles and panes to standard profile frames
- Use for surface mounting thin panels to profiles with 8 or 10mm T-slots
- Locking screws provide strong, secure connection

**Material:**

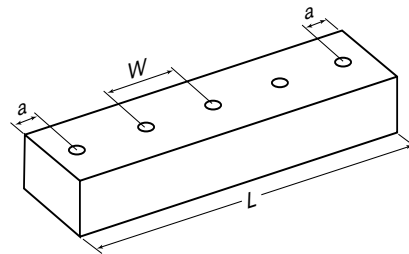
- Anodized aluminum

**Machining Required:**

- Through-holes in frame profile for locking screws (see Assembly Note below)



**Assembly Note**



$$a = \frac{L - (n \times W)}{2}$$

*For optimum hole spacing in the frame profile, use the formula above to calculate (a) – the distance between the profile edge and the end holes*

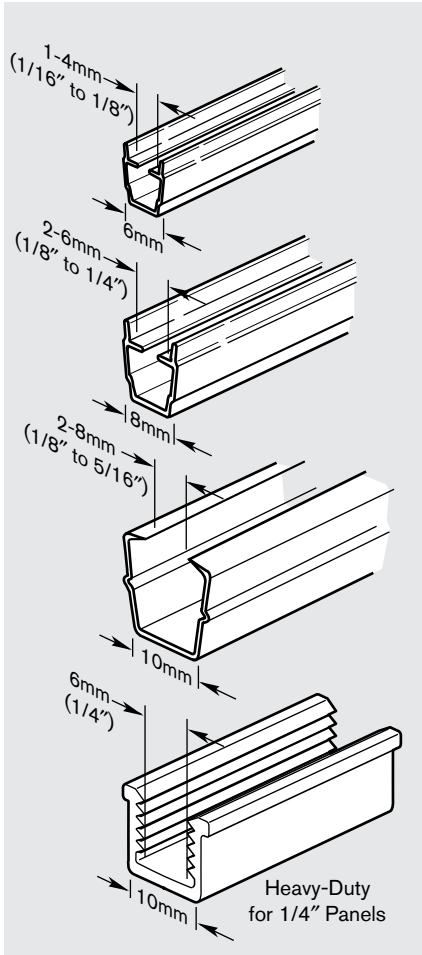
**NOTE:**  
 n = The number of screw holes  
 W = Space between holes  
 a = Dimension from hole to end profile must be ≥ 50mm  
 L = Length of profile

Description	Part Number
8mm Clamp Profile 1S, single, 3000mm long	3 842 524 057
8mm Clamp Profile 1S, Pkg. 10, 3000mm long	3 842 524 058
8mm Clamp Profile 1S, Single, -/-, Specify length ≥30mm≤3000mm	3 842 993 017/ __mm
8mm Clamp Profile 2S, single, 3000mm long	3 842 524 060
8mm Clamp Profile 2S, Pkg. 10, 3000mm long	3 842 524 061
8mm Clamp Profile 2S, Single, -/-, Specify length ≥30mm≤3000mm	3 842 993 018/ __mm
10mm Clamp Profile 1S, single, 3000mm long	3 842 524 063
10mm Clamp Profile 1S, Pkg. 10, 3000mm long	3 842 524 064
10mm Clamp Profile 1S, Single, -/-, Specify length ≥30mm≤3000mm	3 842 993 019/ __mm
10mm Clamp Profile 2S, single, 3000mm long	3 842 524 066
10mm Clamp Profile 2S, Pkg. 10, 3000mm long	3 842 524 067
10mm Clamp Profile 2S, Single, -/-, Specify length ≥30mm≤3000mm	3 842 993 020/ __mm

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

6

**Panel Support Inserts**    **GoTo**

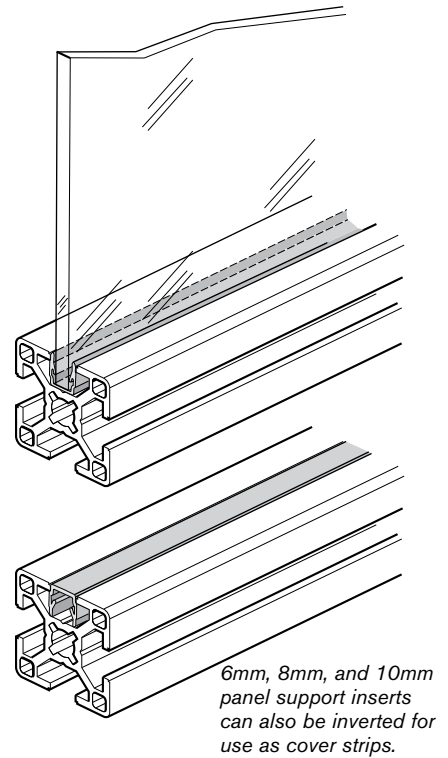


**Features:**

- Securely fasten panels from 2mm to 8mm thick in profiles with 6mm, 8mm, or 10mm T-slots
- Sturdy design prevents panels from shifting within the T-slot
- Easy snap-in installation
- Can be inverted for use as a black T-slot cover strip
- When using heavy 1/4" panels in a 10mm T-slot, the heavy-duty panel support is recommended

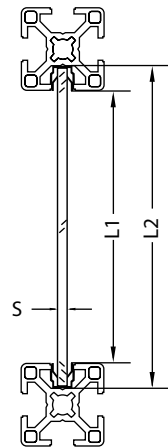
**Material:**






- Black polypropylene



Description	Lot Size	Part Number
6mm panel support insert, 2000mm long	1	<b>3 842 518 343</b> <i>GoTo</i>
8mm panel support insert, 2000mm long	1	<b>3 842 518 347</b> <i>GoTo</i>
10mm panel support insert, 2000mm long	1	<b>3 842 518 351</b> <i>GoTo</i>
Heavy-duty 10mm panel support insert, 2000mm long	1	<b>3 842 146 906</b>

**Panel Sizing Dimensions**



	L2 (mm)	S (mm)
	L1 + 7.7*	1-4
	L1 + 14.4*	2-6
	L1 + 21.4*	2-8
	L1 + 16*	6 (1/4≤)
	L1 + 24.4*	2-8

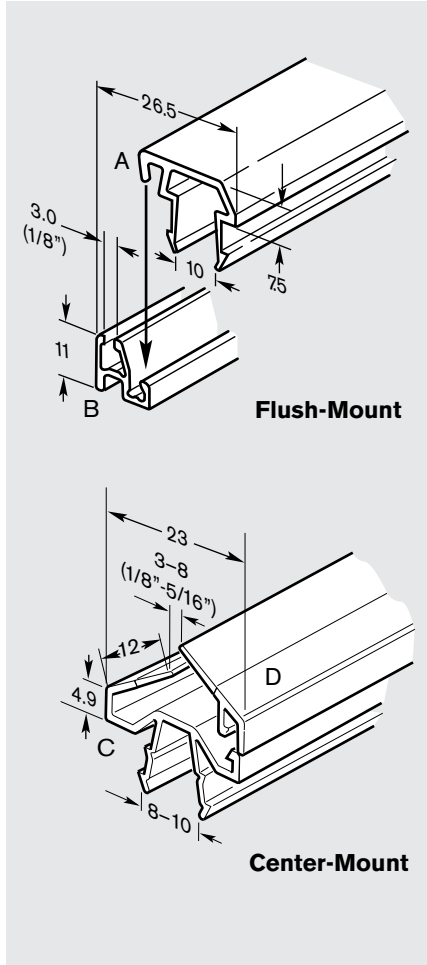
\* Tolerance is +0.0 -0.1  
Note: 45x45 and 45x90 only!



Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# Other Guarding Components

## Removable Panel Support Inserts

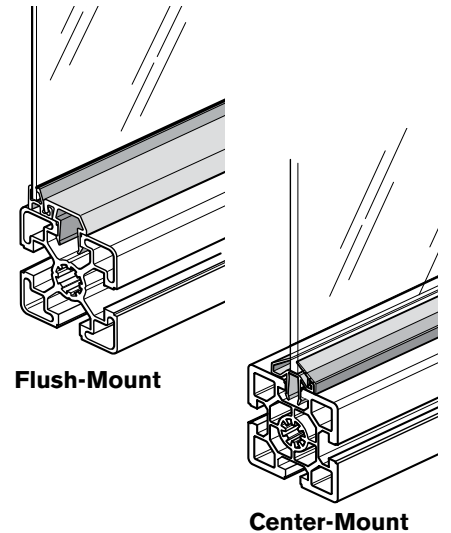


**Features:**

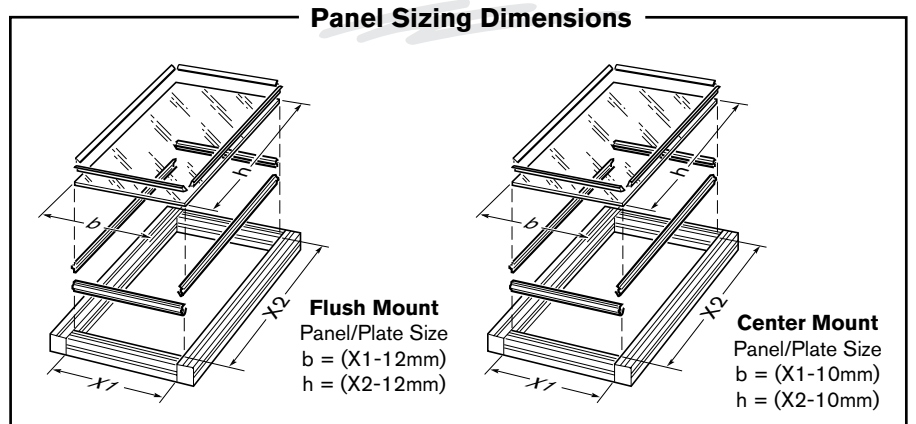
- Easy snap-in installation, even after structure is built
- Flush-mount inserts (components A and B) hold 3mm (1/8") thick panels to profiles with 10mm T-slots, with panels fitting flush with the front edge of the profile
- Center-mount inserts (components C and D) hold panels 3-8mm (1/8"-5/16") thick to profiles with 8mm or 10mm T-slots, with panels centered over the profile's T-slot
- Provides clean, finished appearance
- Prevents dust and moisture migration
- Allows panel or pane replacement without disassembling structure

**Material:**

- Flush-mount insert (A & B): black polypropylene
- Center-mount insert (C & D): black PVC



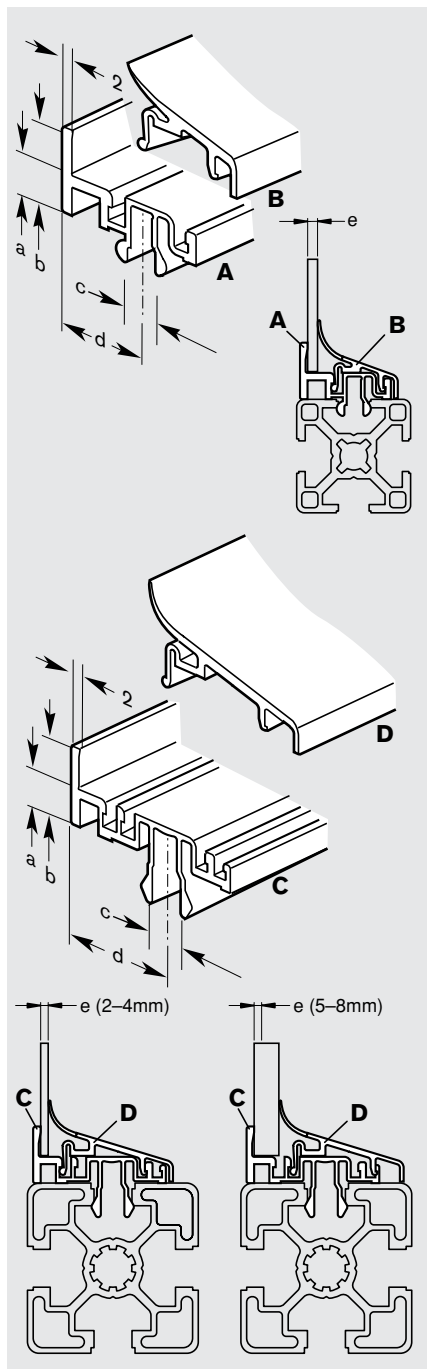
Description	Lot Size	Part Number
<b>A</b> Flush-mount insert, component A, 2000mm long	1	<b>3 842 512 313</b>
<b>B</b> Flush-mount insert, component B, 2000mm long	1	<b>3 842 512 307</b>
<b>C</b> Panel support base, 2000mm long	1	<b>3 842 519 565</b> <i>GoTo</i>
<b>D</b> Panel support glazing strip, 2000mm long	1	<b>3 842 519 567</b>



GoTo [boschrexroth-us.com/framing](http://boschrexroth-us.com/framing) to get these in stock items **FAST** from your local distributor

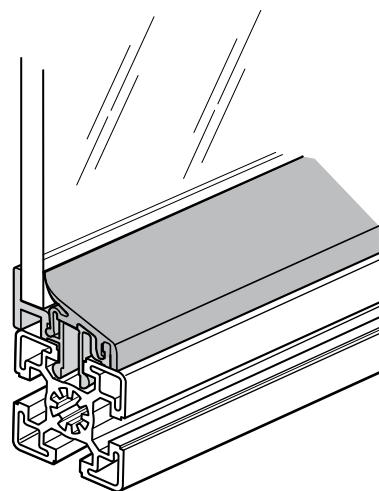
Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

Flush-Mount Removable Panel Support Inserts 



**Features:**

- Securely fasten panels 2–6mm thick in 30-series profiles or 2–8mm thick in 40-series profiles
- Flush-mount panel inserts for 45-series profiles have two positions: one to hold panels 2–4mm thick, the other holds panels 5–8mm thick
- Easy snap-in installation, even after structure is built
- Panel mounts flush with profile's surface; provides clean, finished appearance
- Prevents dust and moisture migration; aluminum strip is suitable for clean-room applications
- Does not interfere with unidirectional air flow
- Allows panel or pane replacement without disassembling structure
- Resistant to acid, caustic solutions, alcohol, mineral oil, and benzene




**Material:**

- Support strip A or C: anodized aluminum
- Glazing strip B or D: light gray polypropylene/thermoplastic elastomer

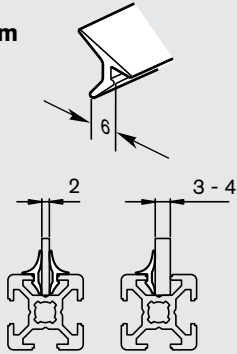
Description	Lot Size	Part Number
30-series panel support base <b>A</b> , 2000mm long	1	<b>3 842 524 025</b>
30-series panel glazing strip <b>B</b> , 2000mm long	1	<b>3 842 524 026</b>
40-series panel support base <b>A</b> , 2000mm long	1	<b>3 842 529 761</b>
40-series panel glazing strip <b>B</b> , 2000mm long	1	<b>3 842 529 762</b>
45-series panel support base <b>C</b> , 2000mm long	1	<b>3 842 524 027</b>
45-series panel glazing strip <b>D</b> , 2000mm long	1	<b>3 842 524 028</b>

Profile series	Dimension in mm				Panel Thickness e
	a	b	c	d	
<b>30mm</b>	7	15	8	14	2–6mm
<b>40mm</b>	10	20	10	17	2–8mm
<b>45mm</b>	7	15	10	20	2–8mm

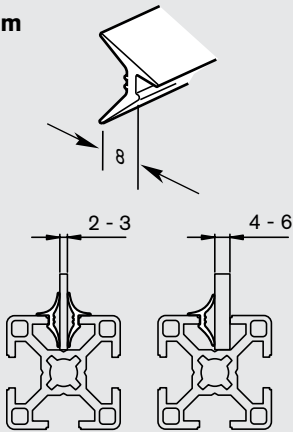
Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

**Glazing Strip** 6 8 10 

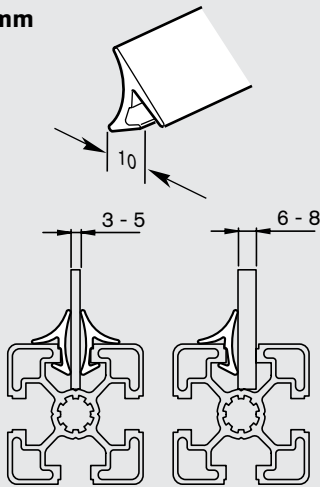
**6mm**



**8mm**



**10mm**

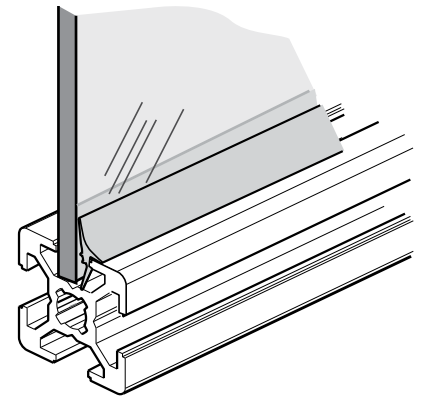


**Features:**

- Effectively seals panels or panes into the profile T-slot
- Available for profiles with 6mm, 8mm, or 10mm T-slots
- Can be added after a structure is assembled
- Prevents panels from rattling
- Use one for thicker panels, or install on both sides of the panel for thinner panels
- Resistant to acid, caustic solutions, alcohol, mineral oil, and benzene

**Material:**

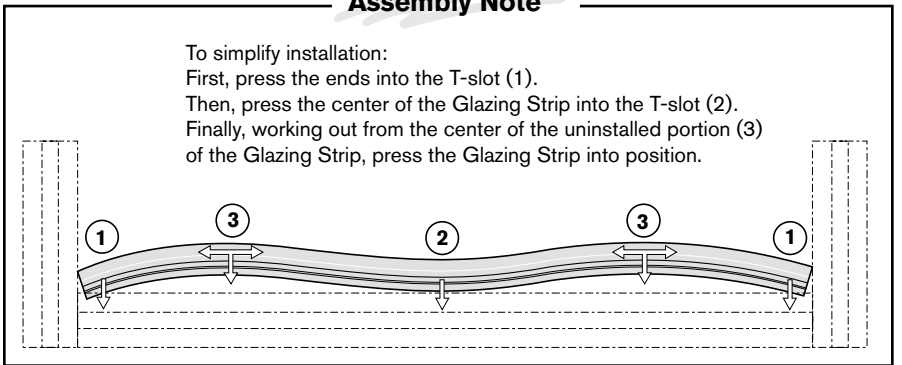
- Light gray thermoplastic elastomer



Description	Lot Size	Part Number
6mm glazing strip, 10,000mm long	1	3 842 523 493
8mm glazing strip, 10,000mm long	1	3 842 523 494
10mm glazing strip, 10,000mm long	1	3 842 527 185

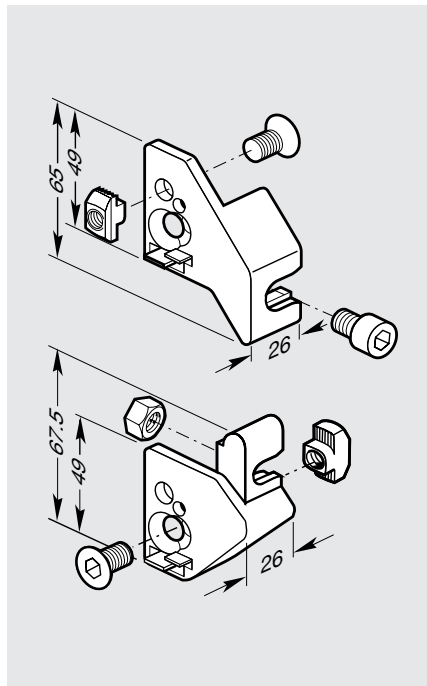
**Assembly Note**

To simplify installation:  
 First, press the ends into the T-slot (1).  
 Then, press the center of the Glazing Strip into the T-slot (2).  
 Finally, working out from the center of the uninstalled portion (3) of the Glazing Strip, press the Glazing Strip into position.



## Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

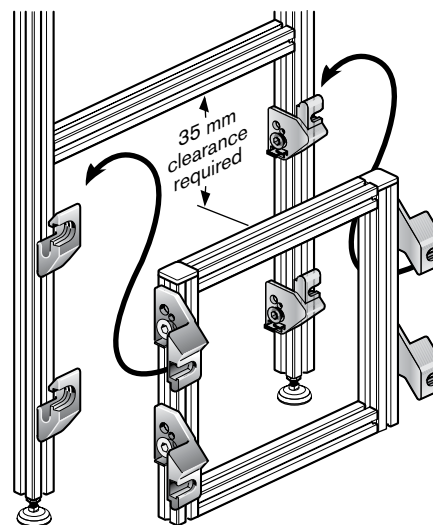
## Other Guarding Components


Removable Frame Brackets **Features:**

- Construct lift-off guards and panel assemblies where safety requires removal with tools
- Allows easy access to structures or machinery; simply loosen the locking screw on each bracket and lift off
- Includes mounting hardware
- Same brackets are used for both left- and right-side mounting; simply orient 180° opposed

**Material:**


- Bracket: die-cast zinc
- Hardware: zinc-plated steel

**Description****Lot Size\*****Part Number**

Removable frame brackets for connecting profile with 45mm side to profile with 30mm side 

4

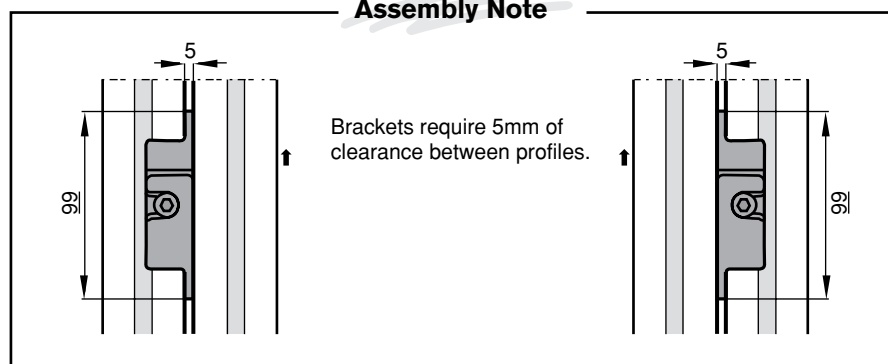
**3 842 515 531**

Removable frame brackets for connecting two profiles with 45mm sides 

4

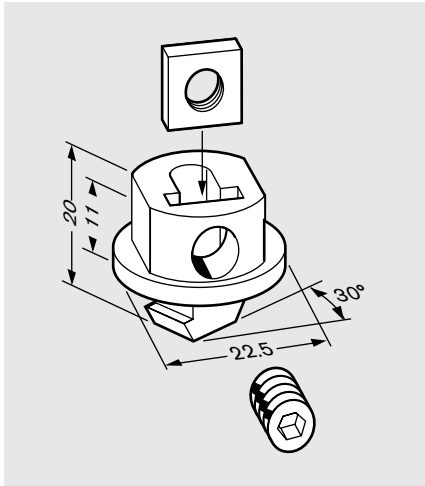
**3 842 515 863**

\* For smaller quantities, please contact your local distributor.

**Assembly Note**

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

**Clamp Bushing**  

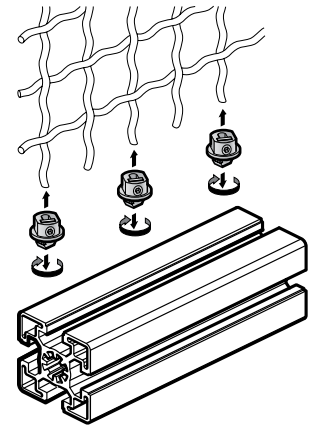


**Features:**

- Economical means of attaching wire mesh screens to profiles with 8mm or 10mm T-slots
- Accommodates wire diameters up to 3.1mm

**Material:**

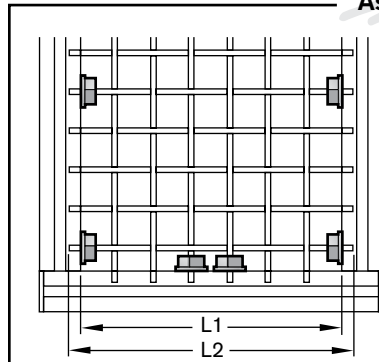
- Die-cast zinc



Description	Lot Size*	Part Number
Clamp bushing	10	<b>3 842 515 244</b>


\* For smaller quantities, please contact your local distributor.


**Assembly Note**



To simplify installation:

1. Place bushings on wire mesh so T-heads align with the profile T-slot
2. Tighten set screws until clamp bushings are snug on the wire mesh
3. Insert bushings into the profile T-slot, loosen set screw, and twist lock the clamp bushings into place in the T-slot
4. Retighten set screws

  $L2=L1+9$

  $L2=L1+12$

Section 6: EcoSafe™ Guarding and Machine/Safety Enclosures

# Notes