

Sliding – Folding

## Architectural hardware for sliding shutters



## About Hawa AG

Our metier since 1965 has been pivoting, sliding and folding hardware systems – along with the fascinating applications they have opened for our customers. Thus, we have grown into a name of international repute within our specialist areas of glass/metal/wood architectural hardware, and hardware for furniture.

We – and hence our customers – are totally committed to Swiss quality. Despite the fact that we now export over 80% of our output, production is located at home in Mettmenstetten. This is not least because our business philosophy is still based on characteristically Swiss values like precision, reliability, and durability.

## About this catalogue

Designing façades, screening from view and the sun, solving problems, saving time – our hardware carries an impact that reaches far beyond its essential sliding, stacking and folding functionality. This catalogue provides you with detailed ordering information and technical data for our entire range of sliding shutters folding and sliding hardware systems. And should you have a specific requirement in the pipeline, please contact us – we are happy to be of help.

## Find out about the rest of the Hawa range:

### Architectural hardware glass/metal

- Glass sliding doors with patch suspension
- Glass sliding doors with suspension/retainer profiles
- Glass sliding walls
- Metal sliding doors

Catalogue order no: 15752

### Architectural hardware wood

- Sliding doors
- Folding/Centre fold "Accordion" wall
- Wood sliding partitions
- Windows

Catalogue order no: 15625

### Furniture hardware wood

- Sliding cabinet/wardrobe doors
- Side stacking cabinet/wardrobe doors
- Pivot sliding furniture doors
- Folding cabinet/wardrobe doors, panels can be moved freely to and fro
- Folding cabinet/wardrobe doors

Catalogue order no: 15282

Hawa – a worldwide name for

# Quality, Support and Service

## **Pages 4–7**

Overview of the hardware for folding and sliding shutters

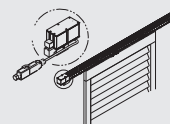
## **Pages 8–21**

Manual sliding shutters



## **Pages 22–31**

Automatic sliding shutters



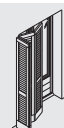
## **Pages 32–36**

Sliding shutters – Bottom guides/Locking mechanisms



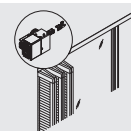
## **Pages 38–43**

Manual folding sliding shutters



## **Pages 44–53**

Automatic folding sliding shutters



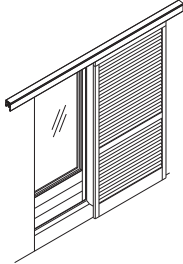
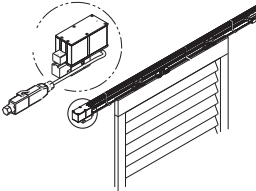
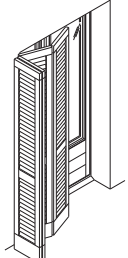
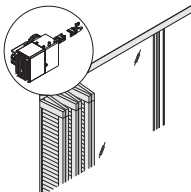
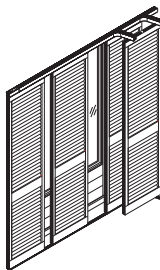
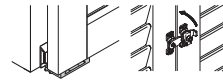
## **Pages 54**

Stacking sliding shutters



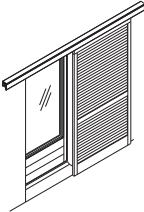
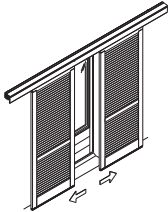
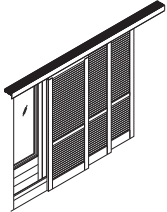
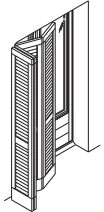
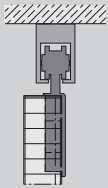
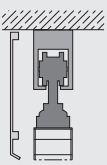
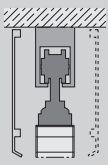
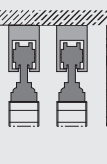
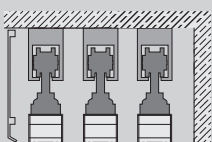
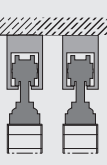
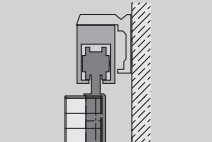
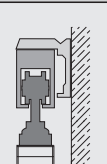
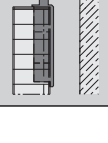
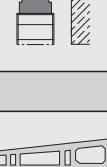
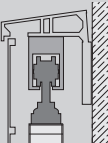
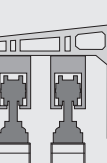
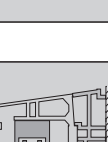

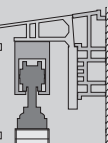
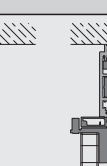
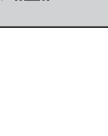
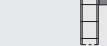

## **Pages 56–58**

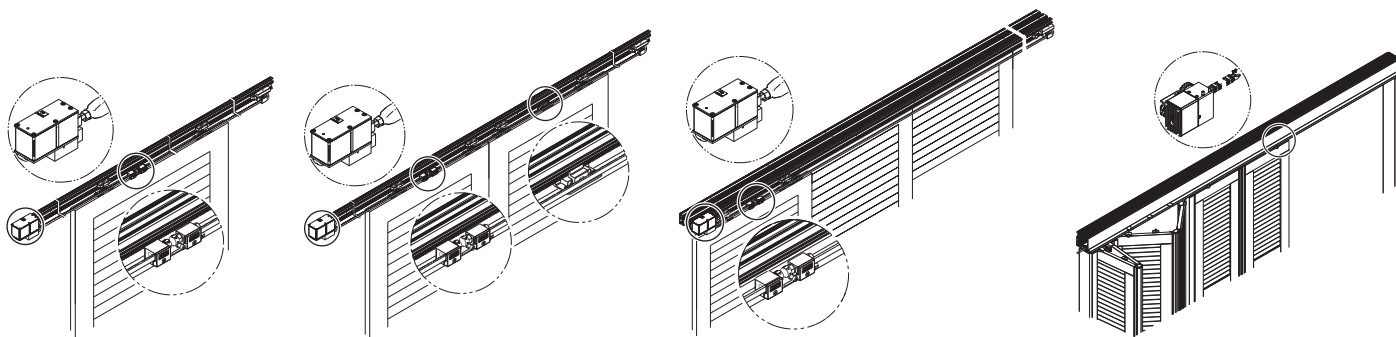
General Terms and Conditions (GTC)  
Always up-to-date – [www.hawa.ch](http://www.hawa.ch)

	Recommended applications in:			For external use		Curved installations	Mode of fixing		Mode of system		www.hawa.ch		Hardware systems	Maximum door weight	Pages
	Residential buildings	Public buildings	Industrial buildings	Non coastal areas	Coastal areas	Minimum radius mm/inch	Wall fitting	Ceiling fitting	manual	automatic	HAWA-Productfinder ⇒ full information	HAWA-Systemplanner ⇒ planning and quoting			
<b>Manual sliding shutters</b> 													Overview of the hardware for folding and sliding shutters		6
	●	●	●	●	❶		●	●	●		●	●	HAWA-Frontslide 60/A	60 kg    132 lbs.	8
	●	●	●	●	❶		●	●	●		●	●	HAWA-Frontslide 60/A-Symmetric	60 kg    132 lbs.	12
	●	●	●	●	❶		●	●	●		●	●	HAWA-Frontslide 60/A-Telescopic	60 kg    132 lbs.	16
	●	●	●	●	❶		●	●	●		●	●	HAWA-Frontslide 60/B	60 kg    132 lbs.	20
<b>Sliding shutters</b> 	●	●	●	●	❶		●	●		●	●	●	HAWA-Frontslide 60/matic	60 kg    132 lbs.	22
	●	●	●	●	❶		●	●		●	●	●	HAWA-Frontslide 60/matic-Symmetric	60 kg    132 lbs.	22
	●	●	●	●	❶		●	●		●	●	●	HAWA-Frontslide 60/matic-Telescopic	60 kg    132 lbs.	28
<b>Manual folding sliding shutters</b> 	●	●		●	❶			●	●		●		HAWA-Frontfold 20	20 kg    44 lbs.	38
<b>Automatic folding sliding shutters</b> 													HAWA-Frontego 30/matic	NEW 30 kg    66 lbs.	44
<b>Stacking sliding shutters</b> 	●	●	●	●	❶	2000 (6'6 <sup>3</sup> / <sub>4</sub> ")		●	●				HAWA-Aperto 60/H – Bespoke solutions	60 kg    132 lbs.	54
<b>Accessories</b> 													Bottom guides		32
													Locking mechanisms, HAWA-bar bolt lock		34
<b>Miscellaneous</b>													General Terms and Conditions (GTC)		56
													Always up-to-date – www.hawa.ch		58
❶ possible under certain conditions															



## Overview of the hardware for folding and sliding shutters

										
		HAWA-Frontslide 60/A	HAWA-Frontslide 60/B	HAWA-Frontslide 60/matic	HAWA-Frontslide 60/A-Symmetric	HAWA-Frontslide 60/matic-Symmetric	HAWA-Frontslide 60/A- Telescopic	HAWA-Frontslide 60/matic- Telescopic	HAWA-Frontfold 20	HAWA-Fronttego 30/matic
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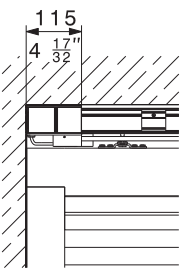

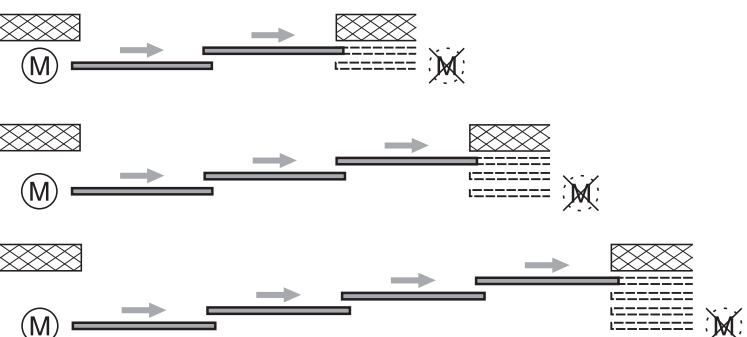

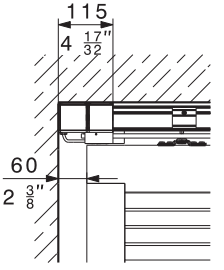
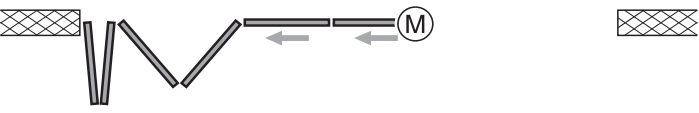
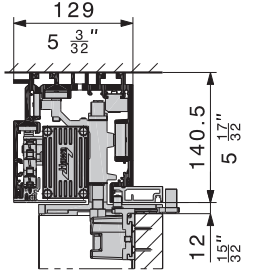
HAWA-Frontslide 60/matic

HAWA-Frontslide 60/matic-Symmetric

HAWA-Frontslide 60/matic-Telescopic

HAWA-Frontego 30/matic

## Possible positions for the drive unit

	Maximum number and weight of the sliding shutters	Installation instructions	Drive unit (M)
 <p>HAWA-Frontslide 60/matic</p>	1 at 60 kg (1 at 132 lbs.)	21524	
 <p>HAWA-Frontslide 60/matic-Symmetric</p>	2 at 60 kg (2 at 132 lbs.)	21524	
 <p>HAWA-Frontslide 60/matic-Telescopic</p>	2 at 60 kg (2 at 132 lbs.)  3 at 50 kg (3 at 110 lbs.)  4 at 40 kg (4 at 88 lbs.)	21525	
 <p>HAWA-Frontslide 40/4/matic- &amp; 40/4/A-Telescopic (available on special request)</p>	4 at 40 kg (4 at 88 lbs.)	20607	
 <p>HAWA-Frontego 30/matic</p>	6 at 30 kg (6 at 66 lbs.)	available on special request	

## Sliding shutters for a functional façade finish.

**Hardware system for wood, metal or aluminium sliding shutters with a panel weight up to 60 kg (132 lbs.)**

### Description

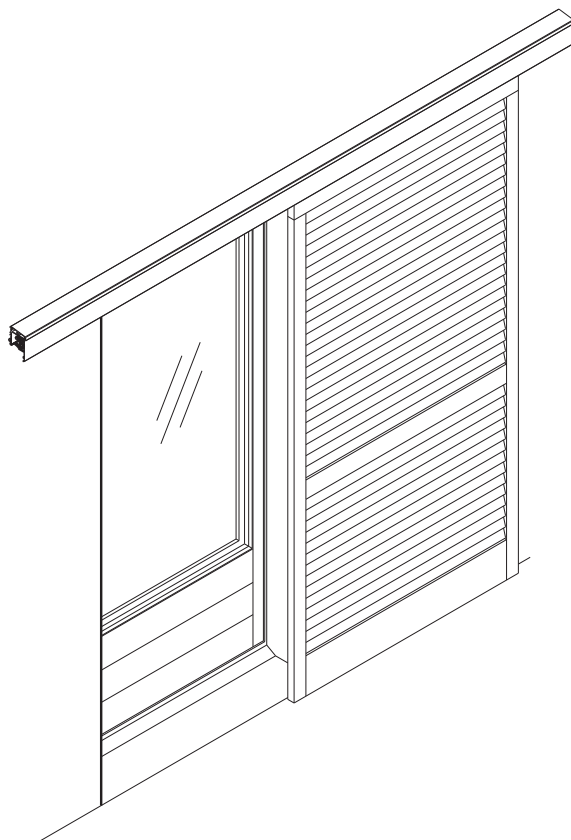
HAWA-Frontslide 60/A is a dependable hardware system for manually-operated sliding shutters, with different fitting options. Attached to the ceiling or window lintel, the top track screws directly to the load-bearing surface. An angled profile support is available for wall fitting, whereby the top track secures to the support profile using special assembly screws supplied by Hawa. On the aesthetic side, aluminium covering screens in natural anodized or plain finishes for custom painting simply clip-on to the inside or outside edges of the top track. In buildings with an air gap behind the façade, open window shutters can slide out of sight into the void between the building wall and the façade.

### Applications

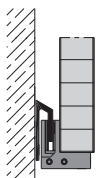
Ideal in building façades designed for privacy and shade, and where space is at a premium, e.g. schools, hotels, public buildings, office premises, low-energy homes, etc.

### Features of the HAWA-Frontslide 60/A

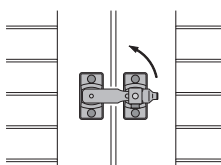
- Maximum sliding shutter weight: 60 kg (132 lbs.)  
(Systems for heavier shutters available on request)
- Sliding shutter thickness: 28–40 mm ( $1\frac{1}{8}$ "– $1\frac{19}{32}$ " )
- Minimum sliding shutter width: 400 mm ( $1'3\frac{3}{4}$ " )
- Maximum sliding shutter high: 3200 mm (10'6")
- Maximum sliding shutter surface: 6.24 m<sup>2</sup> (20'5  $\frac{11}{16}$ " )
- Corrosion-resistant materials
- Fast and efficient assembly from below and from the façade side
- Clip-on covers for inside or outside attachment
- The sliding shutters can be moved into any position
- For wood, metal or aluminium sliding shutters
- Various top track and bottom guide assembly options
- External tests certify the highest wind resistance (Class 6)



Guides  
→ pages Seite 32



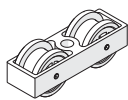
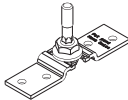
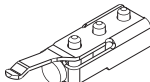
Locking mechanisms  
→ pages 34



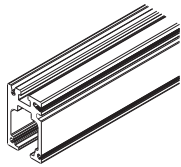

## Set without top tracks and bottom guide channels

	code
HAWA-Frontslide 60/A, partial set for 1 sliding shutter	17977

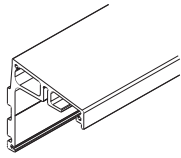
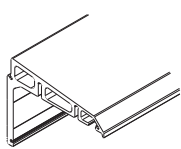
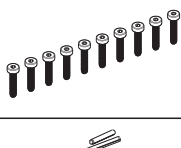


## Set comprising

		piece	code
	Two-wheeled trolley, M8, with plastic wheels	2	17119
	Top fixing plate, stainless steel, with hanger bolt M8	2	17023
	Track stop with adjustable retainer	2	17027

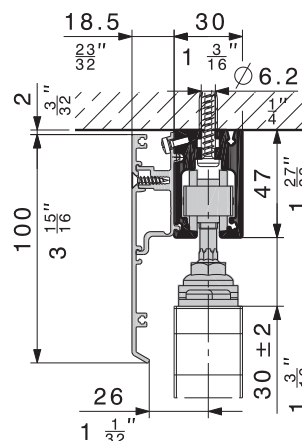
## Top tracks for installations with or without covering screens

Caution: Hole positions vary.		mm/inch	code
	Top track to manual systems, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	21372
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	21373
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21374
		cut to size	21375
	Connecting bolts, set of 6 pieces		17221

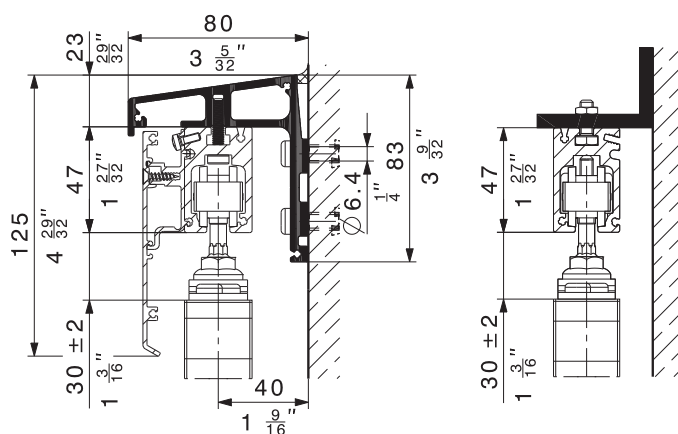
## Angled profile support

Caution: Hole positions vary.		mm/inch	code
	Angled profile support for one sliding level, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	21376
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	21377
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21378
		cut to size	21379
	Angled profile support for one sliding level, alu unanodized, predrilled	6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21380
		cut to size	21381
	Angled profile support for two sliding levels, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	21382
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	21383
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21384
		cut to size	21385
	Angled profile support for two sliding levels, alu unanodized, predrilled	6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21386
		cut to size	21387
	Special fixing screws for securing top track to angled profile support, set of 10 pieces (3 pieces per metre)		21467
	Connecting bolts, set of 6 pieces		17221
Special screws (code 21467) <b>must</b> be used for best results when fixing the track to the angled profile support.			

## Ceiling or window lintel fitting

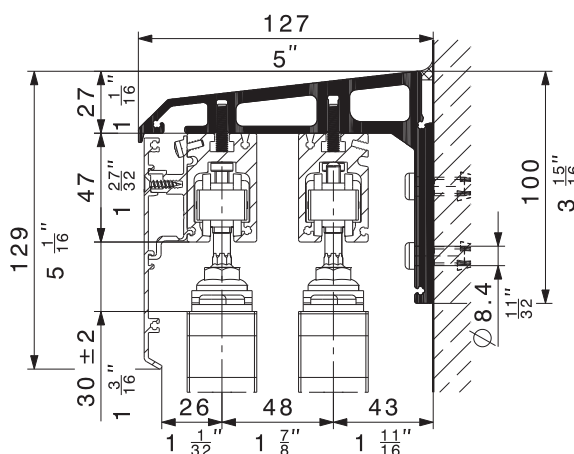


## Wall fitting



Angled profile support for one sliding level

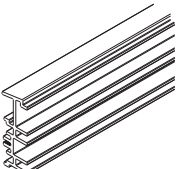
Fixing bracket provided by customer



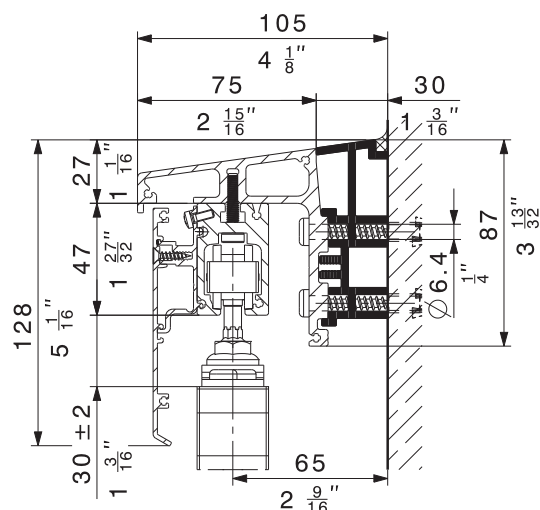
Angled profile support for two sliding level



## Spacer profile for angled profile support for one sliding level

		mm/inch	code
	Spacer profile for angled profile support for one sliding level, alu plain anodized	2500 (8'2 $\frac{7}{16}$ " )	19726
		3500 (11'5 $\frac{13}{16}$ " )	19725
		6000 (19'8 $\frac{7}{32}$ " )	19724
		cut to size	19727

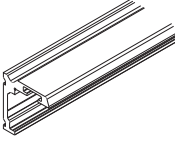

## Wall fitting with increased clearance (weatherboard)



Spacer profile for angled profile support for one sliding level

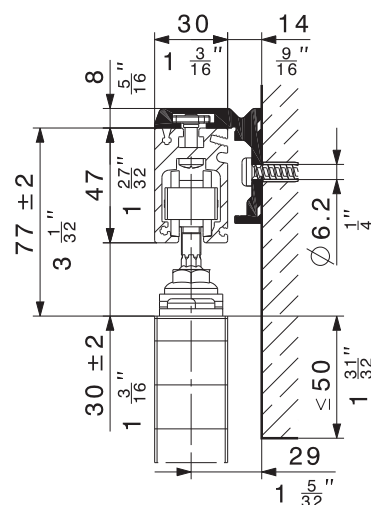
## Wall fitting version without covering screens

### Side-fixing angled profile without covering screens

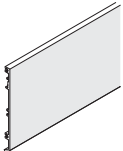



Caution: Hole positions vary.		mm/inch	code
	Side-fixing angled profile, alu plain anodized, predrilled	2500 (8'2 $\frac{7}{16}$ ")	18407
		4000 (13'1 $\frac{1}{2}$ ")	18637
		6000 (19'8 $\frac{7}{32}$ ")	18406
		cut to size	18408
	Fitting set for side fixing, set of 10 pieces (3 pieces per metre)		21675

## Wall fitting without covering screens

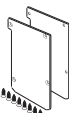
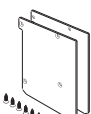
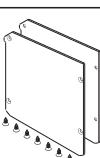
Clever wall fixing with angled profile gives a high-quality finish, even without covers. Top tracks secure simply and quickly using groove nuts, with easy levelling thanks to the continuous angle profile.



## Covering screens

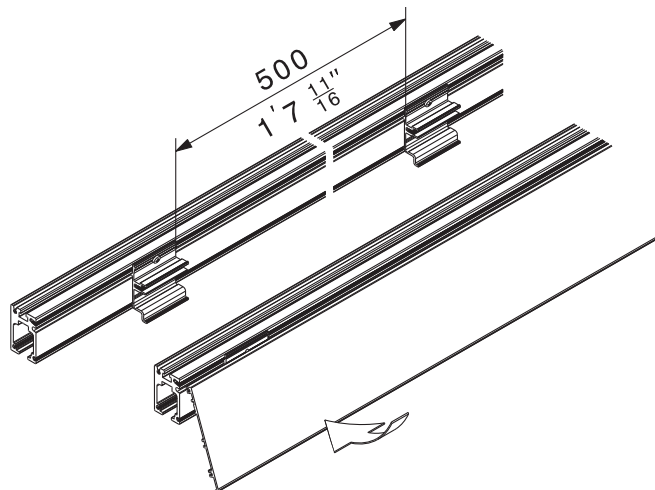
		mm/inch	code
	Covering screens, alu plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	19722
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	19721
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19720
		cut to size	19723
	Covering screens, alu unanodized	6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19736
		cut to size	19737
	Parts for fitting top track cover for manual systems, set of 5 pieces		21468
	Connecting bolts, set of 6 pieces		17221

## Front cover plates

		aluminium	code
	Front cover plates, for wall fitting, <b>for one sliding levels</b> , without spacer profile, 1 pair	plain anodized	19778
		unanodized	19832
	Front cover plates, for wall fitting, <b>for one sliding levels</b> , with spacer profile, 1 pair	plain anodized	19779
		unanodized	19833
	Front cover plates, for wall fitting, <b>for two sliding levels</b> , without spacer profile, 1 pair	plain anodized	21469
		unanodized	21470

## Fitting the covering screens

Cover fixings (code 21468) are required for attaching the covering screens.



## Guides and locking mechanisms for sliding shutters

Bottom guides and locking mechanisms: → pages 32–36.

## Order specifications

- Number of sets
- Number and length of top tracks
- For wall fittings:
  - Number, length and type of angled profile support
  - Number of **special fixing screw sets**
- Number, length and type of covering screens
- Number of fitting parts to covering screens
- Number, length and type of bottom guide channels
- Number and type of guides

## Optional order specifications

- Number, length and type of spacer profiles for angled profile support
- Number and type of front cover plates
- Number of connecting bolt sets to profiles and covering screens
- Number of stop bumper to bottom guide channels
- Number and type of sliding shutter locking mechanisms

## Planning/installation

For planning and installation purposes, please use the installation drawing code 19872. (→ [www.hawa.ch](http://www.hawa.ch) → HAWA-Productfinder)

## Sliding shutters moved symmetrically.

**Hardware for 2 sliding wood, metal or aluminium shutters of up to 60 kg (132 lbs.), opening simultaneously left and right.**

### Description

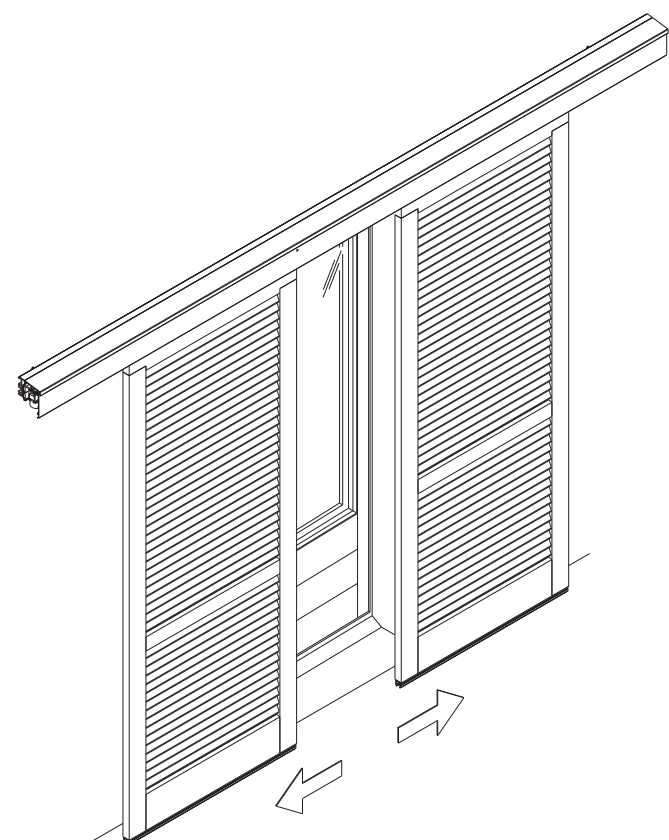
HAWA-Frontslide 60/A-Symmetric is a dependable hardware system for manually-operated sliding shutters, with different fitting options. Attached to the ceiling or window lintel, the top track screws directly to the load-bearing surface. An angled profile support is available for wall fitting, whereby the top track secures to the support profile using special assembly screws supplied by Hawa. On the aesthetic side, aluminium covering screens in natural anodized or plain finishes for custom painting simply clip-on to the inside or outside edges of the top track. The system offers a further plus-point with the toothed belt, where a single movement can operate a pair of shutters in symmetry. In buildings with an air gap behind the façade, open window shutters can slide out of sight into the void between the building wall and the façade.

### Applications

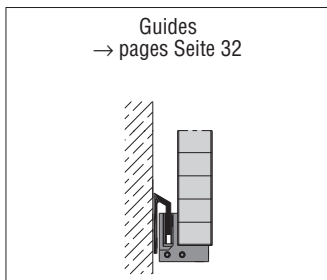
Ideal in building façades designed for privacy and shade, and where space is at a premium, e.g. schools, hotels, public buildings, office premises, low-energy homes, etc.

### Features of the HAWA-Frontslide 60/A-Symmetric

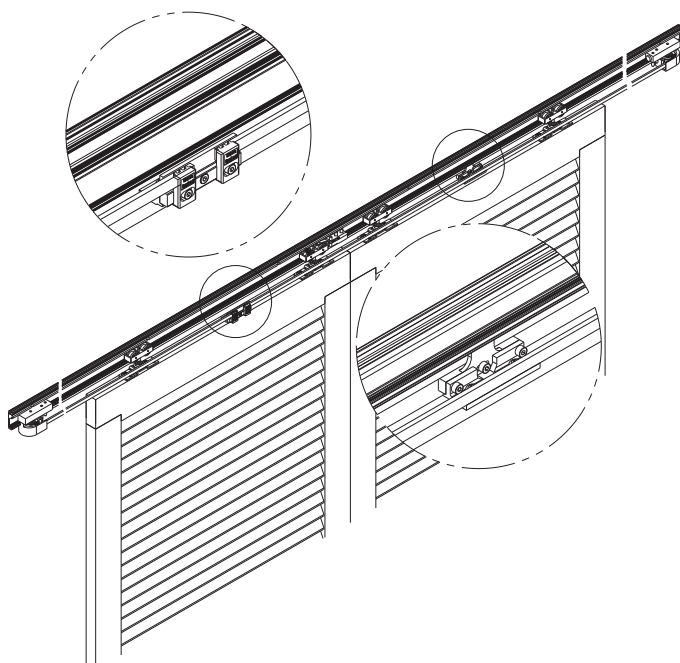
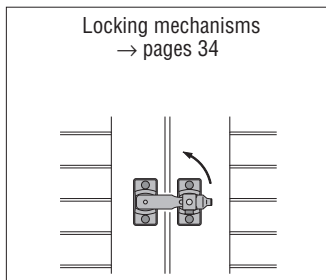
- Maximum sliding shutter weight: 60 kg (132 lbs.)  
(Systems for heavier shutters available on request)
- Sliding shutter thickness: 28–40 mm ( $1\frac{1}{8}$ – $1\frac{19}{32}$ " )
- Sliding shutter width: 500–1500 mm ( $1'7\frac{11}{16}$ – $4'11\frac{1}{16}$ " )
- Maximum sliding shutter height: 3200 mm (10'6")
- Maximum sliding shutter surface: 6.24 m<sup>2</sup> (20'5  $\frac{11}{16}$ " )
- Corrosion-resistant materials
- Fibreglass-reinforced toothed belts guarantee high tensile strength and a low level of expansion
- Shutters can be removed without loosening the toothed belt
- Fast and efficient assembly from below and from the façade side
- Clip-on covers for inside or outside attachment
- The sliding shutters can be moved symmetrically into any position
- For wood, metal or aluminium sliding shutters
- Various top track and bottom guide assembly option
- External tests certify the highest wind resistance (Class 6)



Guides  
→ pages Seite 32



Locking mechanisms  
→ pages 34

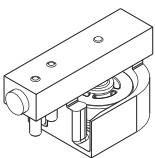
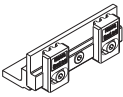
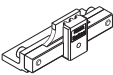
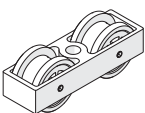
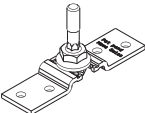
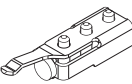


Subject to modification. Metric specifications are exact. Inches are approximate.


## Set without top tracks and bottom guide channels

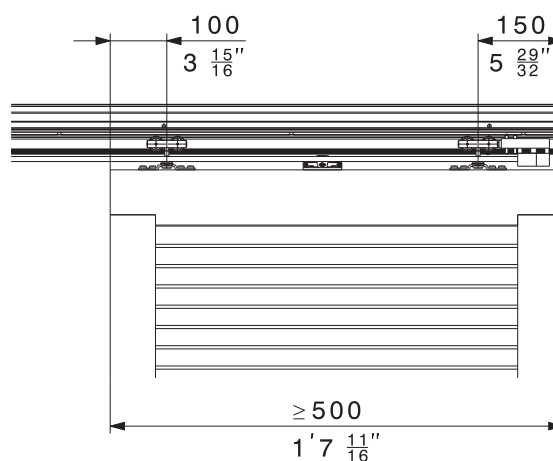
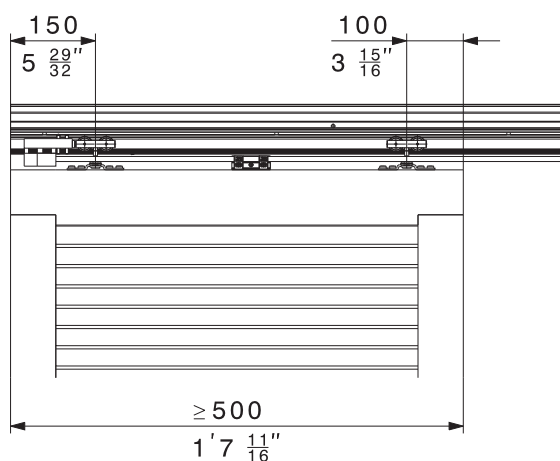
	code
HAWA-Frontslide 60/A-Symmetric, partial set for 2 sliding shutters, without toothed belt	20574

## Set comprising

	piece	code
	2	20351
	1	20352
	1	20353
	4	17119
	4	17023
	1	17027

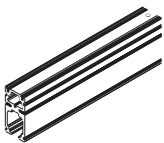

## Toothed belt

	length	code
	5 m (16'4 <sup>27</sup> / <sub>32</sub> ")	19667
	8 m (26'2 <sup>31</sup> / <sub>32</sub> ")	19682
	10 m (32'9 <sup>23</sup> / <sub>32</sub> ")	19668
	15 m (49'2 <sup>9</sup> / <sub>16</sub> ")	20370
	50 m (164' <sup>1</sup> / <sub>2</sub> ")	19669
Length of toothed belt = 2x top track		

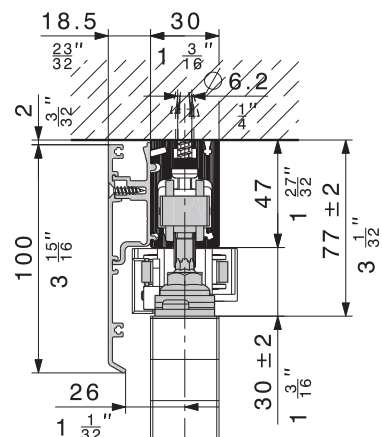




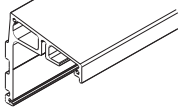



## Top tracks for installations with or without covering screens

Achtung: Die Lochdistanzen variieren.		mm/inch	code
	Top track for manual systems, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	21372
		3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	21373
		6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21374
		cut to size	21375
	Connecting bolts, set of 6 pieces		17221

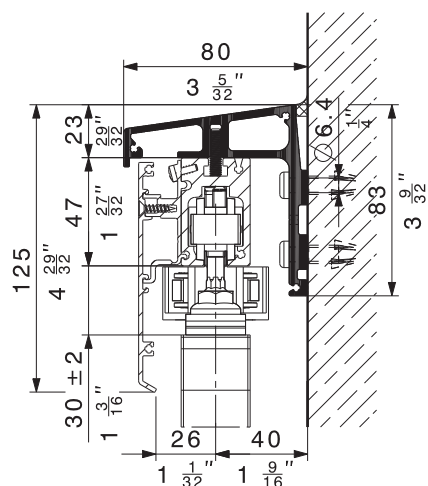
## Ceiling or window lintel fitting



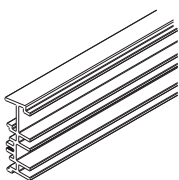
## Angled profile support

Caution: Hole positions vary.		mm/inch	code
	Angled profile support for one sliding level, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	21376
		3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	21377
		6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21378
		cut to size	21379
	Angled profile support for one sliding level, alu unanodized, predrilled	6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21380
		cut to size	21381
	Special fixing screws for securing top track to angled profile support, set of 10 pieces (3 pieces per metre)		21467
	Connecting bolts, set of 6 pieces,		17221
Special screws (code 21467) <b>must</b> be used for best results when fixing the track to the angled profile support.			

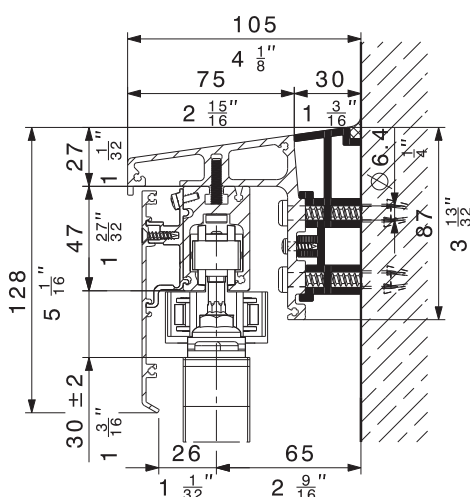
## Wall fitting



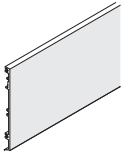



## Spacer profile for angled profile support for one sliding level

		mm/inch	code
	Spacer profile for angled profile support for one sliding level, alu plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	19726
		3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	19725
		6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	19724
		cut to size	19727

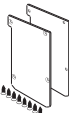
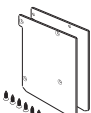
## Wall fitting with increased clearance (weatherboard)



## Covering screens

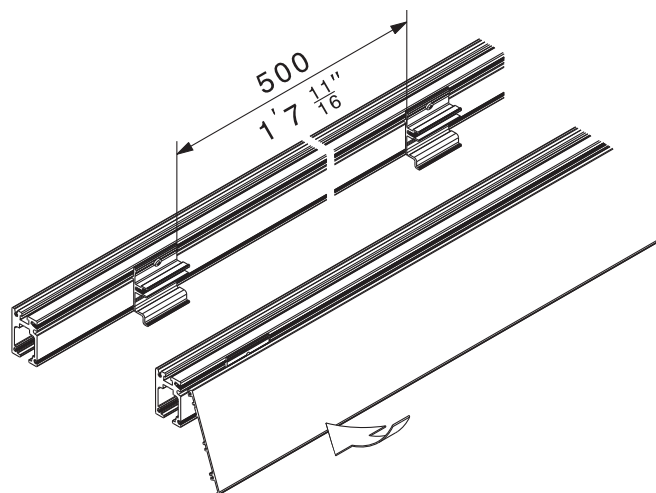
		mm/inch	code
	Covering screens, alu plain anodized	2500 (8'2 $\frac{7}{16}$ ")	19722
		3500 (11'5 $\frac{13}{16}$ ")	19721
		6000 (19'8 $\frac{7}{32}$ ")	19720
		cut to size	19723
	Covering screens, alu unanodized	6000 (19'8 $\frac{7}{32}$ ")	19736
		cut to size	19737
	Parts for fitting top track cover for manual systems, set of 5 pieces		21468
	Connecting bolts, set of 6 pieces		17221

## Front cover plates

		aluminium	code
	Front cover plates, for wall fitting, for one sliding level, without spacer profile, 1 pair	plain anodized	19778
		unanodized	19832
	Front cover plates, for wall fitting, for one sliding level, with spacer profile, 1 pair	plain anodized	19779
		unanodized	19833

## Fitting the covering screens

Cover fixings (code 21468) are required for attaching the covering screens.



## Guides and locking mechanisms for sliding shutters

Bottom guides and locking mechanisms: → pages 32–36.

## Order specifications

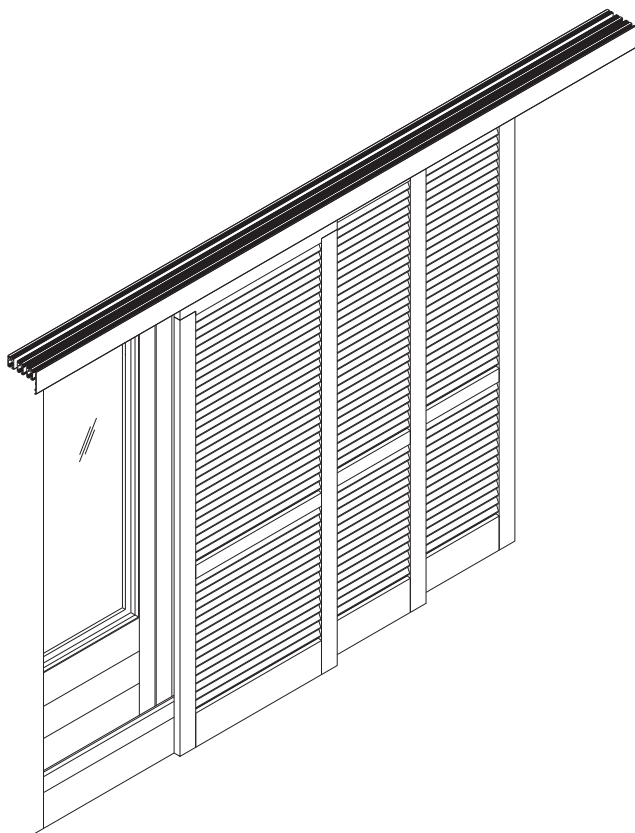
- Number of sets
- Number and length of top tracks
- Number and length of toothed belt
- For wall fittings:
  - Number, length and type of angled profile support
  - Number of **special fixing screw sets**
- Number, length and type of covering screens
- Number and type of fitting parts to covering screens
- Number, length and type of bottom guide channels
- Number and type of guides

## Optional order specifications

- Number, length and type of spacer profiles for angled profile support
- Number and type of front cover plates
- Number of connecting bolt sets to profiles and covering screens
- Number of stop bumper to bottom guide channels
- Number of bottom door stops
- Number and type of sliding shutter locking mechanisms

## Planning/installation

For planning and installation purposes, please use the installation drawing code 20164. (→ [www.hawa.ch](http://www.hawa.ch) → HAWA-Productfinder)



**A lot of motion with a single slide.**

**Hardware for simultaneously sliding up to 4 wood, metal or aluminium shutters of up to 60 kg (132 lbs.).**

## Description

HAWA-Frontslide 60/A-Telescopic is a reliable hardware system with modest space requirements for screening large window areas with manually operated sliding shutters. The shutters slide simultaneously into the open and closed position thanks to a toothed belt. And without any banging noises caused by colliding catches. Aluminium covering screens in either natural anodized or plain finishes ready for custom painting provide aesthetic appeal and are easily clipped on to the inside or outside of the top track. In buildings with ventilated cladding, open windows shutters can slide out of sight into the space between the building wall and the cladding.

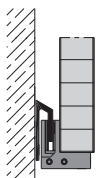
## Applications

Ideal for façades with a high proportion of glass, wherever screening and shade form part of the façade design, and where space is at a premium, e.g. schools, hotels, public buildings, office and administration premises, apartment buildings, low-energy houses, etc.

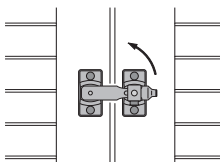
## Features of the HAWA-Frontslide 60/A-Telescopic

- Maximum sliding shutter weight: 60 kg (132 lbs.)  
(Systems for heavier shutters available on request)
- Sliding shutter thickness: 28–40 mm ( $1\frac{1}{8}$ "– $1\frac{19}{32}$ ")
- Sliding shutter width: 550 mm–1200 mm ( $1'9\frac{21}{32}$ "– $3'11\frac{1}{4}$ ")
- Maximum sliding shutter height: 3200 mm (10'6")
- Maximum sliding shutter surface: 6.24 m<sup>2</sup> (20'5  $\frac{11}{16}$ ")
- Corrosion-resistant materials
- Fibreglass-reinforced toothed belts guarantee high tensile strength and a low level of expansion
- Shutters can be removed without loosening the toothed belt
- Fast and efficient assembly from below and from the façade side
- Clip-on covering screens for inside or outside attachment
- For wood, metal or aluminium sliding shutters
- Various guide options
- External tests certify the highest wind resistance (Class 6)

Guides  
→ pages Seite 32



Locking mechanisms  
→ pages 34



**Two sliding shutters of up to 60 kg max. per panel**

Technical drawing of a mechanical assembly, likely a pump or motor component, showing dimensions in inches and fractions. The drawing includes a side view and a cross-sectional view of the internal components.

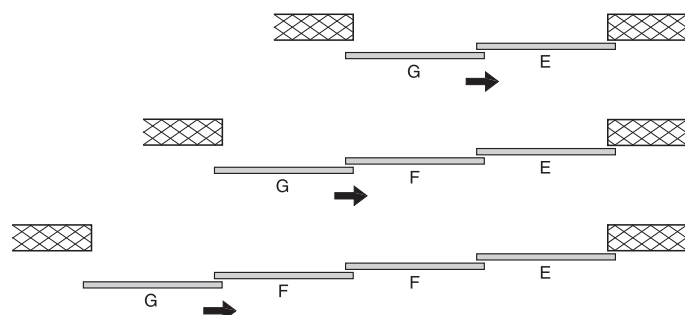
**Dimensions (inches):**

- Overall width: 127
- Overall height: 100
- Top horizontal segments: 48, 43
- Top horizontal segments (fractions):  $1 \frac{7}{8}$ ,  $1 \frac{11}{16}$
- Left vertical segments: 21, 27, 47, 30 ± 2
- Left vertical segments (fractions):  $\frac{13}{16}$ ,  $1 \frac{1}{16}$ ,  $1 \frac{27}{32}$ ,  $\frac{3}{16}$
- Internal horizontal segments: 30, 18, 30, 28
- Internal horizontal segments (fractions):  $1 \frac{3}{16}$ ,  $\frac{23}{32}$ ,  $1 \frac{3}{16}$ ,  $1 \frac{3}{32}$
- Right vertical segments: 8.4, 11
- Right vertical segments (fractions):  $\frac{11}{32}$ ,  $3 \frac{15}{16}$
- Bottom horizontal segments: 8, 8
- Bottom horizontal segments (fractions):  $\frac{5}{16}$ ,  $\frac{5}{16}$

The drawing shows a complex mechanical assembly with various components labeled G and E. The dimensions are provided in inches and fractions, indicating a high-precision design.

**Three sliding shutters of up to 60 kg max. per panel**

**Four sliding shutters of up to 60 kg max. per panel**



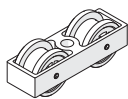
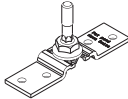
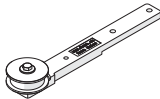



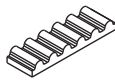
Hawa AG 8932 Mettmenstetten Switzerland [www.hawa.ch](http://www.hawa.ch) Tel. +41 44 767 91 91 Fax +41 44 767 91 78



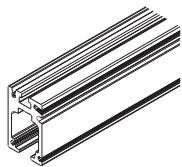

## Additional set for HAWA-Frontslide 60/A-Telescopic (Type F)

	code
HAWA-Frontslide 60/A-Telescopic, additional set for 1 sliding shutter	20210

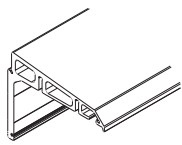


## Additional set comprising

		piece	code
	Two-wheeled trolley, M8, with plastic wheels	2	17119
	Top fixing plate, stainless steel, with hanger bolt M8	2	17023
	Guide pulley wheel, with fixing plate, long	1	20139
	Guide pulley wheel, with fixing plate, short	1	20140
	Driver, wide	1	20141
	Driver, narrow	1	20142
	Toothed belt, black, 2,7 m (8'10 5/16), fibreglass reinforced	1	20208

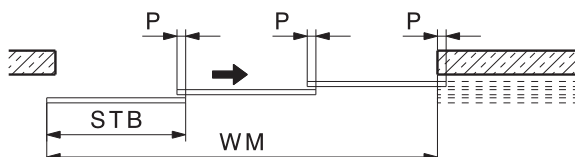
## Top tracks for installations with or without covering screens

Caution: Hole positions vary.		mm/inch	code
	Top track to manual systems, alu plain anodized, predrilled	2500 (8'2 7/16)	21372
		3500 (11'5 13/16)	21373
		6000 (19'8 7/32)	21374
		cut to size	21375
	Connecting bolts, set of 6 pieces		17221

## Angled profile support

Caution: Hole positions vary.		mm/inch	code
	Angled profile support for two sliding level, alu plain anodized, predrilled	2500 (8'2 7/16)	21382
		3500 (11'5 13/16)	21383
		6000 (19'8 7/32)	21384
		cut to size	21385
	Angled profile support for two sliding level, alu unanodized, predrilled	6000 (19'8 7/32)	21386
		cut to size	21387
	Special fixing screws for securing top track to angled profile support, set of 10 pieces (3 pieces per metre)		21467
	Connecting bolts, set of 6 pieces,		17221
Special screws (code 21467) <b>must</b> be used for best results when fixing the track to the angled profile support.			

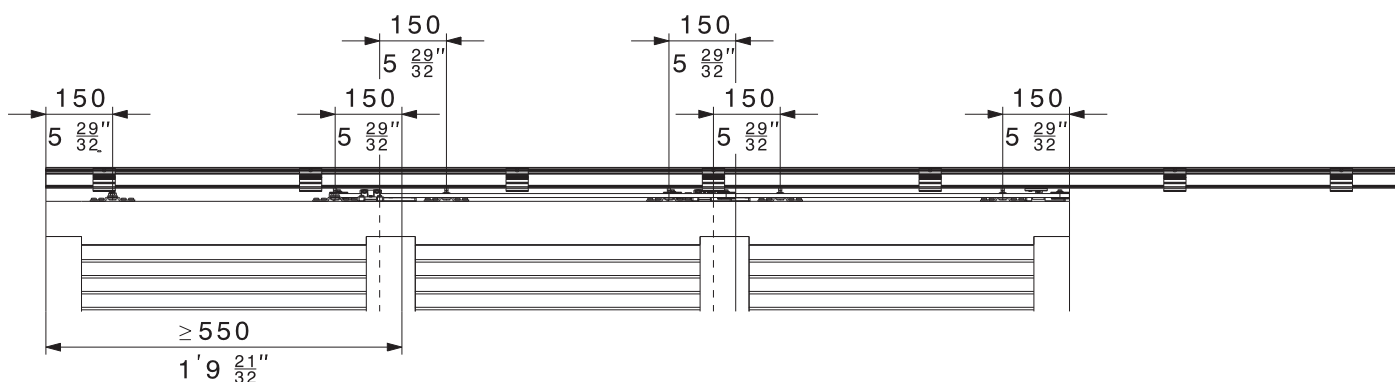
## Shutter width calculation



WM =	Wall dimensions
STB =	Sliding shutter width
AT =	Number of shutters
P =	Shutter overlap

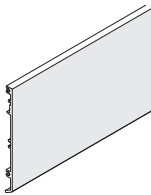
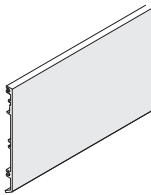


$$STB = \frac{WM}{AT} + P$$

$$P \geq 50 \text{ mm (1 } \frac{31}{32} \text{")}$$

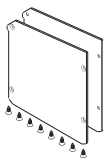


Subject to modification. Metric specifications are exact. Inches are approximate.

## Covering screens

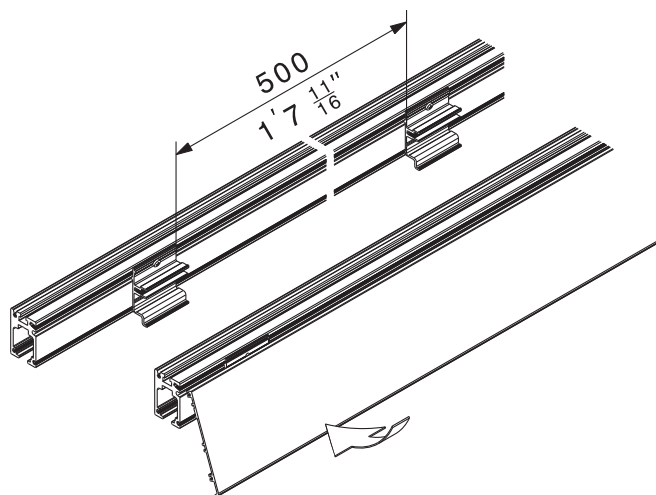
		mm/inch	code
	Covering screens, alu plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> ')	19722
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ')	19721
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ')	19720
		cut to size	19723
	Covering screens, alu unanodized	6000 (19'8 <sup>7</sup> / <sub>32</sub> ')	19736
		cut to size	19737
	Parts for fitting top track cover for manual systems, set of 5 pieces		21468
	Connecting bolts, set of 6 pieces		17221

## Front cover plates

		aluminium	code
	Front cover plates, for wall fitting, for two sliding level, without spacer profile, 1 pair	plain anodized	21469
		unanodized	21470

## Fitting the covering screens

Cover fixings (code 21468) are required for attaching the covering screens.



## Guides and locking mechanisms for sliding shutters

Bottom guides and locking mechanisms: → pages 32–36.

## Custom installations

Please contact Hawa for custom installations, such as symmetrically opening 4-door systems.



## Order specifications

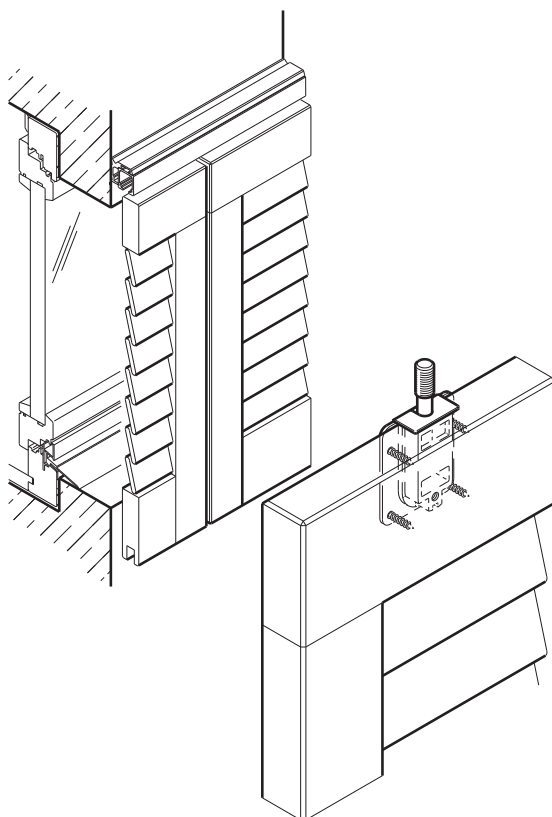
- Number of sets "Type E/G"
- Number of additional sets "Type F"
- Number and length of top tracks
- For wall fittings:
  - Number, length and type of angled profile support
  - Number of **special fixing screw sets**
- Number, length and type of covering screens
- Number of fitting parts to covering screens
- Number and length of Z-guide profiles
- Number and type of guides

## Optional order specifications

- Number of connecting bolt sets for profiles and covering screens
- Number and type of front cover plates
- Number and type of sliding shutter locking mechanisms

## Planning/installation

For planning and installation purposes, please use the installation drawing code 20165. (→ [www.hawa.ch](http://www.hawa.ch) → HAWA-Productfinder)



## Sliding shutters made easy.

**Hardware system with minimal installation height for wood or aluminium sliding shutters with a panel weight up to 60 kg (132 lbs.).**

### Description

HAWA-Frontslide 60/B is a straightforward solution for manually operated sliding shutters. Covering screens are unnecessary, whether the hardware is fixed directly to the ceiling or to the wall using angled profile support. A patented suspension results in minimal installation height and allows shutters to be fitted, removed and height-adjusted from inside the room. Sliding shutters can be moved to any position, for privacy and shade. In buildings with an air gap behind the façade, open window shutters can slide out of sight into the void between the building wall and the façade.

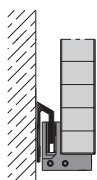
### Application

Ideal in building façades designed for privacy and shade, and where space is at a premium, e.g. schools, hotels, public buildings, office premises, low-energy homes, etc.

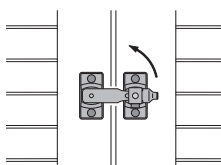
### Features of the HAWA-Frontslide 60/B

- Minimal installation height thanks to patented suspension cups
- Maximum sliding shutter weight: 60 kg (132 lbs.)  
(Systems for heavier shutters available on request)
- Sliding shutter thickness: 28–40 mm ( $1\frac{1}{8}$ "– $1\frac{19}{32}$ ")
- Minimum sliding shutter width: 400 mm ( $1'3\frac{3}{4}$ ")
- Maximum sliding shutter high: 3200 mm (10'6")
- Maximum sliding shutter surface: 6.24 m<sup>2</sup> (20'5  $\frac{11}{16}$ ")
- Corrosion-resistant materials
- Straightforward wall or ceiling installation, no covers required
- Height adjustment and shutter removal from inside the room
- The sliding shutters can be moved into any position
- For wood or aluminium sliding shutters
- Various top track and bottom guide assembly options
- External tests certify the highest wind resistance (Class 6)

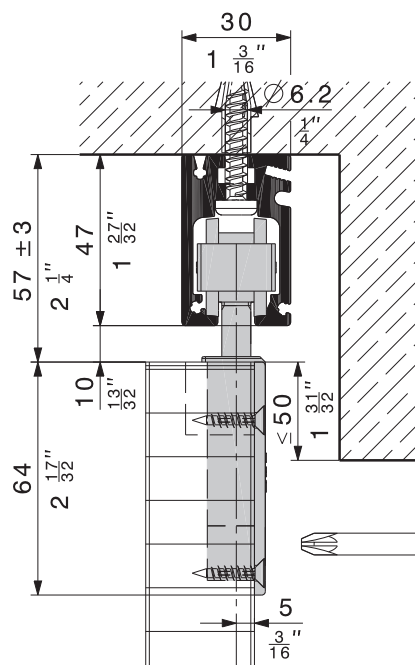
Guides  
→ pages Seite 32



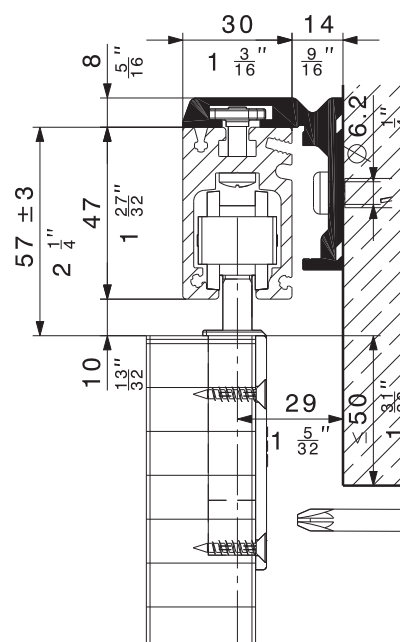
Locking mechanisms  
→ pages 34



### Ceiling fitting



### Wall fitting with side-fixing angled profile



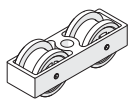

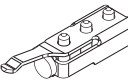
Sliding shutters can be fitted, removed and height-adjusted from inside the room.

Subject to modification. Metric specifications are exact. Inches are approximate.

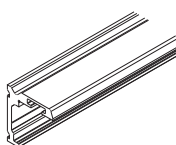

## Set for min. inst. height, without top tracks and bottom guide channels

	code
HAWA-Frontslide 60/B, partial set for 1 sliding shutter	19871

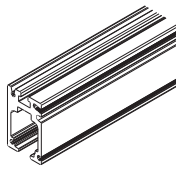
## Set comprising

		piece	code
	Two-wheeled trolley, M8, with plastic wheels	2	17119
	Concealed press-fit cup, alu, with hanger bolt M8	2	19900
	Track stop with adjustable retainer	2	17027

## Side-fixing angled profile without covering screens

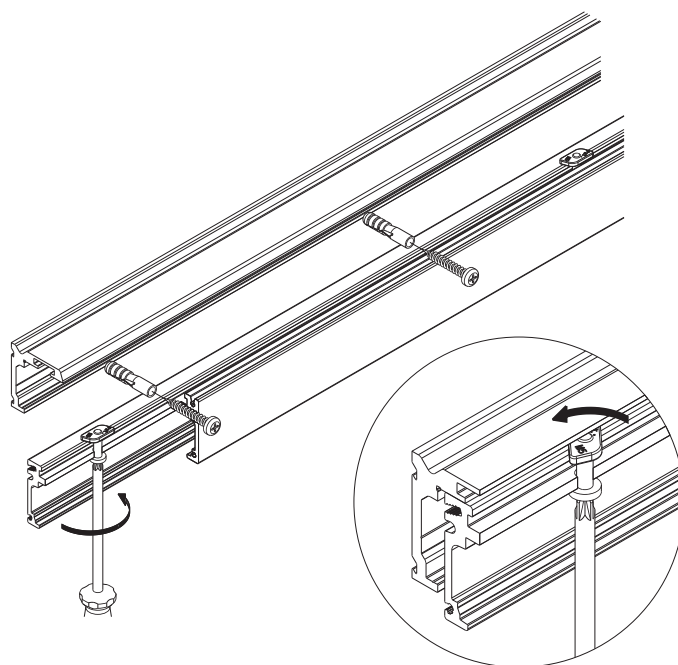
Caution: Hole positions vary.		mm/inch	code
	Side-fixing angled profile, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	18407
		4000 (13'1 <sup>1</sup> / <sub>2</sub> ")	18637
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	18406
		cut to size	18408
	Fitting set for side fixing, set of 10 pieces (3 pieces per metre)		21675

## Top tracks

Caution: Hole positions vary.		mm/inch	code
	Top track to manual systems alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	21372
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	21373
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21374
		cut to size	21375

## Side-fixing angled profile

Clever wall fixing with angled profile gives a high-quality finish, even without covers. Top tracks secure simply and quickly using groove nuts, with easy levelling thanks to the continuous angle profile.



## Guides and locking mechanisms for sliding shutters

Bottom guides and locking mechanisms: → pages 32–36.

## Order specifications

- Number of sets
- Number and length of top tracks
- Number, length and type of bottom guide channels
- Number and type of guides

## Optional order specifications

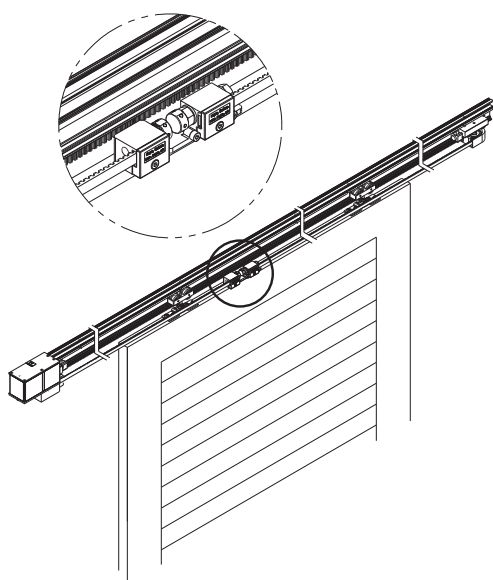
- Number and length of side-fixing angled profile for wall fixing
- Number of fitting sets for side fixing
- Number of track stops
- Number of bottom door stops
- Number and type of sliding shutter locking mechanisms

## Planning/installation

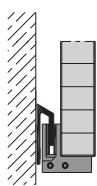
For planning and installation purposes, please use the installation drawing code 19873 (→ [www.hawa.ch](http://www.hawa.ch) → HAWA-Productfinder)



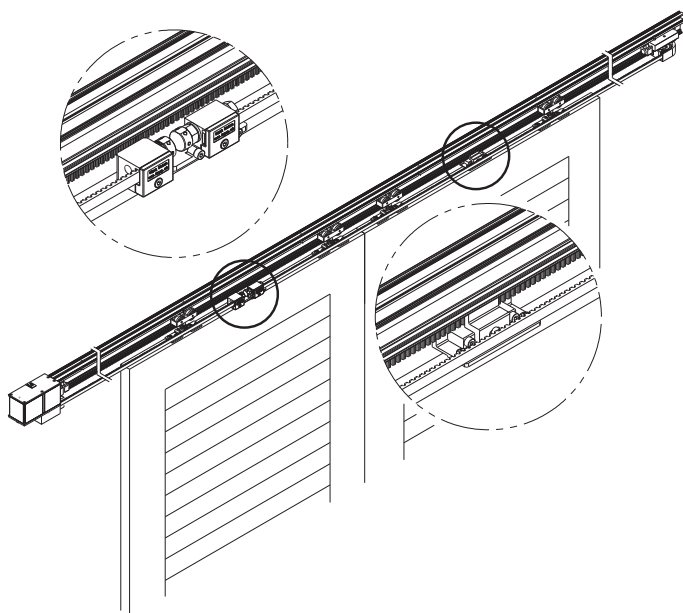
## HAWA-Frontslide 60/matic



Guides  
→ pages Seite 32



## HAWA-Frontslide 60/matic-Symmetric



## Sliding shutters – for automated convenience.

Hardware system for wood, metal or aluminium automatic sliding shutters with a panel weight up to 60 kg (132 lbs.).

Also suitable for symmetrical systems.

### Description

HAWA-Frontslide 60/matic is an electrically powered hardware system for sliding shutters. Its brushless electric motor, a HAWA-Motronic 60 with a high-quality transmission system and drive belt, guarantees a stable, maintenance-free system with a long life. No special connection cables or control box required thanks to controls integrated in the drive unit. Electrical installation therefore corresponds to the usual standard for shutter designs and enables the use of commercially available operating elements.

HAWA-Frontslide 60/matic allows maximum flexibility in façade design: various fixing and covering screen options cover virtually all needs.

The system offers a further plus-point with the driver for symmetric installations, where a single motor can operate a pair of shutters in symmetry.

### Application

Ideal in building façades designed for privacy and shade, and where space is at a premium, e.g. schools, hotels, public buildings, office premises, low-energy homes, or creative frontage designs in residential settings.

### Features of the

#### HAWA-Frontslide 60/matic, -Symmetric

- Drive unit: CE tested
- Sliding shutter thickness: 28–40 mm ( $1\frac{1}{8}$ "– $1\frac{19}{32}$ " )
- Maximum sliding shutter weight: 60 kg (132 lbs.)  
(Systems for heavier shutters available on request)
- Minimum sliding shutter width: 600 mm ( $1'11\frac{5}{8}$ " )
- Sliding shutter width (Symmetric): 550–1500 mm ( $1'9\frac{21}{32}$ "– $4'11\frac{1}{16}$ " )
- Maximum sliding shutter height: 3200 mm (10'6")
- Maximum sliding shutter surface: 6.24 m<sup>2</sup> ( $20'5\frac{11}{16}$ " )
- Maximum installation width: 6000 mm ( $19'8\frac{7}{32}$ " )
- Fibreglass-reinforced toothed belts guarantee high tensile strength and a low level of expansion
- High operating safety of the drive unit in outdoor areas thanks to splash water resistance
- The sliding shutters can be moved into any position for privacy or shade, etc.
- Shutters can be removed without loosening the toothed belt
- Straightforward wall or ceiling installation
- For wood, metal or aluminium sliding shutters
- Clip-on covers for attachment to inside and/or outside of track
- No maintenance

Drive unit technical details: → following page

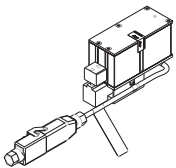
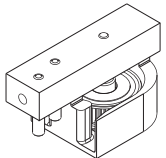
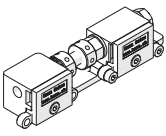

## Drive unit HAWA-Motronic 60

HAWA-Motronic 60 is a drive unit with integrated control for automating sliding hardware with a speed of 100 mm/s and a maximum drive force of 100 N. Drive commands are triggered by applying a current to the control wires. Commissioning is unnecessary, even after a power failure, as the controller detects the system's route and end points during the first journey. The drive unit stops and reverses when it encounters an obstacle

## HAWA-Motronic 60, set for sliding shutter drive

	code
HAWA-Motronic 60 for HAWA-Frontslide 60/matic, incl. control unit, toothed belt lock and pulley wheel	24837

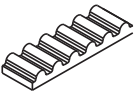
## Set comprising

		piece	code
	HAWA-Motronic 60 with integrated control and connecting cable with a premounted Hirschmann plug	1	24602
	Pulley wheel for automatic mechanism	1	19653
	Toothed belt lock	1	19654
	End stop alu	2	19652

## Toothed belt

Low-stretch glass fibre strands ensure strong resistance to tearing, with minimal extension and high impact load resistance when subjected to heavy flexing.

## Toothed belt

		length	code.
	Toothed belt, black, fibre glass reinforced	2,7 m (8'10 <sup>5</sup> / <sub>16</sub> ")	20208
		5 m (16'4 <sup>27</sup> / <sub>32</sub> ")	19667
		8 m (26'2 <sup>31</sup> / <sub>32</sub> ")	19682
		10 m (32'9 <sup>23</sup> / <sub>32</sub> ")	19668
		15 m (49'2 <sup>9</sup> / <sub>16</sub> ")	20370
		50 m (164' <sup>1</sup> / <sub>2</sub> ")	19669

### Calculation for length of toothed belt:

- HAWA-Frontslide 60/matic: 2 x installation width
- HAWA-Frontslide 60/matic-Symmetric: 2 x installation width

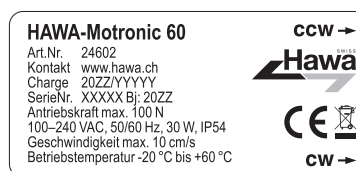
(The toothed belt lock is included with the HAWA-Motronic set 24837)

## Technical details HAWA-Motronic 60

- The control is integrated in the drive unit
- Power supply: 100–240 VAC, 50/60 Hz, 30 W
- Max. pre-fuse: 16 A
- Overvoltage category: II
- Protection class: I ⊕
- Operational temperature range: -20 °C – +60 °C
- Degree of siuling: 1
- Degree of protection: IP 54
- Max. speed: 100 mm/s
- Max. drive force: 100 N (protected internally against overload)
- Drive unit: CE tested
- Switch elements: provided by customer
- Mains electrical isolation: provided by customer

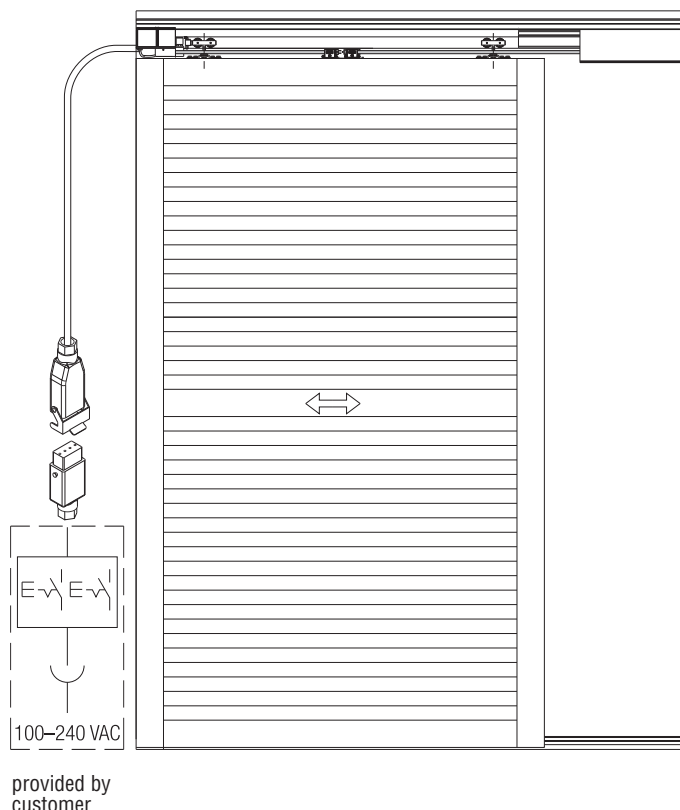
## Type label

Every drive unit carries a type label.



## Control and operation of the system

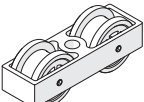
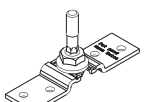
The systems are operated with commercially available electrical switches.



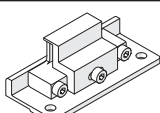
## Sliding shutter partial set, HAWA-Frontslide 60/matic

	code
HAWA-Frontslide 60/matic, partial set for 1 sliding shutter	19814

### Partial set comprising

	piece	code
	2	17119
	2	17023

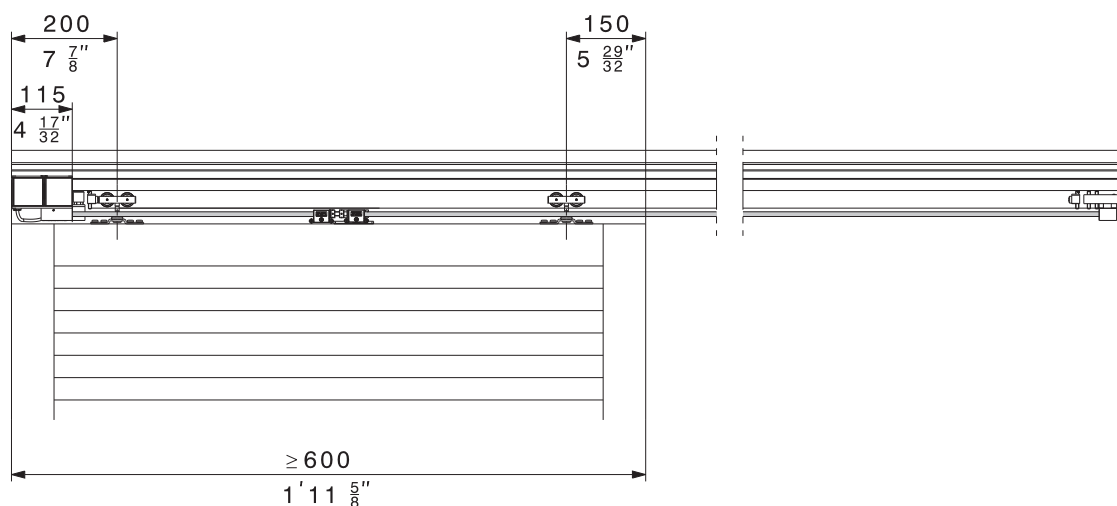
## Accessory, HAWA-Frontslide 60/matic-Symmetric

	code
 Driver for Symmetric installations	19655

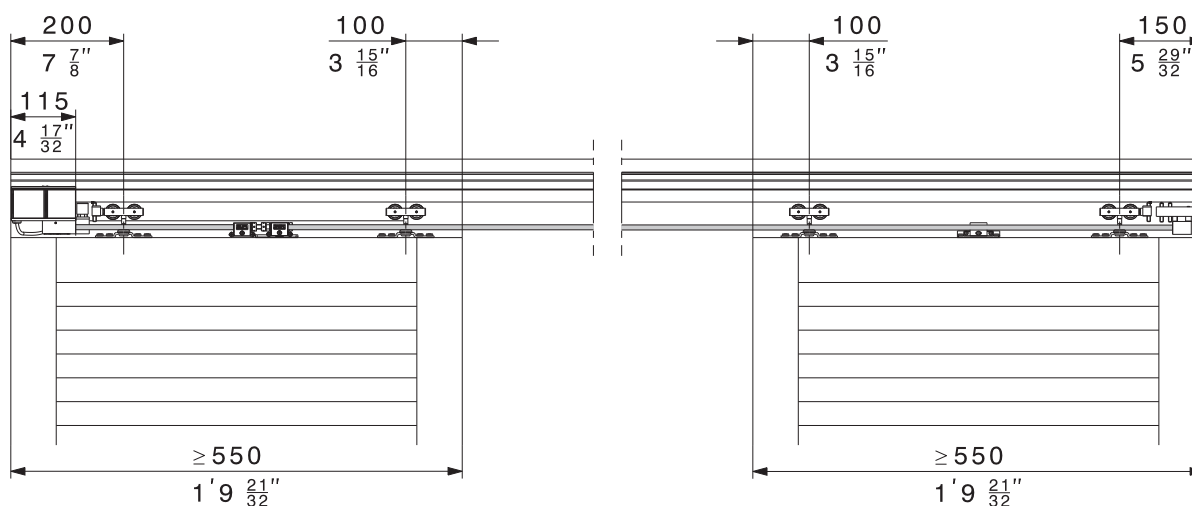
### For Symmetric installations comprising:

Partial set HAWA-Frontslide 60/matic 19814:	2 pieces
Driver for Symmetric installations 19655:	1 piece

## HAWA-Frontslide 60/matic

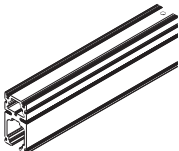



## HAWA-Frontslide 60/matic-Symmetric

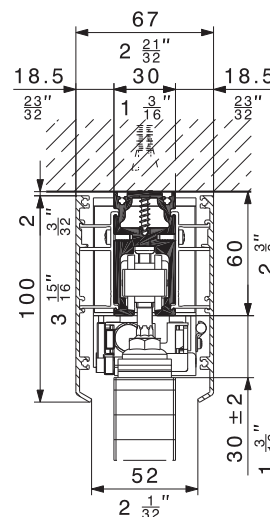


Subject to modification. Metric specifications are exact. Inches are approximate.

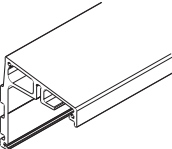


## Top tracks

Caution: Hole positions vary.		mm/inch	code
	Top track, alu plain anodized, predrilled	2500 (8'2 $\frac{7}{16}$ ")	19732
		3500 (11'5 $\frac{13}{16}$ ")	19731
		6000 (19'8 $\frac{7}{32}$ ")	19730
		cut to size	19733
	Connecting bolts, set of 6 pieces		17221
<b>Calculation for length of top track:</b>			
Length of top track = installation width - 115 mm (4 $\frac{17}{32}$ ") (drive unit)			

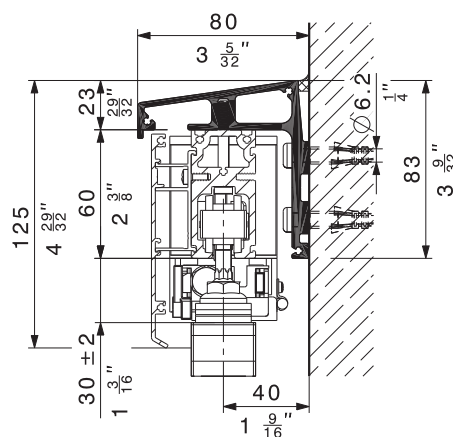
## Ceiling or window lintel fitting



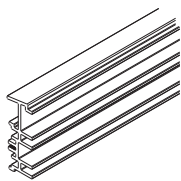
## Angled profiles

Caution: Hole positions vary.		mm/inch	code
	Angled profile support for one sliding level, alu plain anodized, predrilled	2500 (8'2 $\frac{7}{16}$ ")	21376
		3500 (11'5 $\frac{13}{16}$ ")	21377
		6000 (19'8 $\frac{7}{32}$ ")	21378
		cut to size	21379
	Angled support profile for one sliding level, alu unanodized, predrilled	6000 (19'8 $\frac{7}{32}$ ")	21380
cut to size		21381	
	Special fixing screws for securing top track to angled profile support, set of 10 pieces (3 pieces per meter)		19774
	Connecting bolts, set for 6 pieces		17221
Special screws (code 19774) <b>must</b> be used for best results when fixing the track to the angled profile support.			

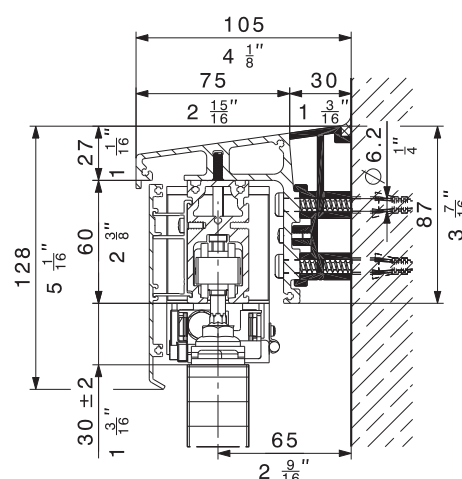
## Wall fitting



## Spacer profiles for angled profile

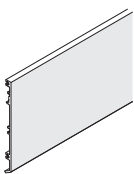
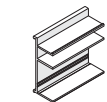
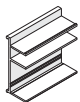

		mm/inch	code
	Spacer profile for angled profile support, alu pain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	19726
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	19725
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19724
		cut to size	19727

## Wall fitting with increased clearance (weatherboard)



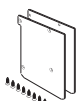


Subject to modification. Metric specifications are exact. Inches are approximate.

## Covering screens

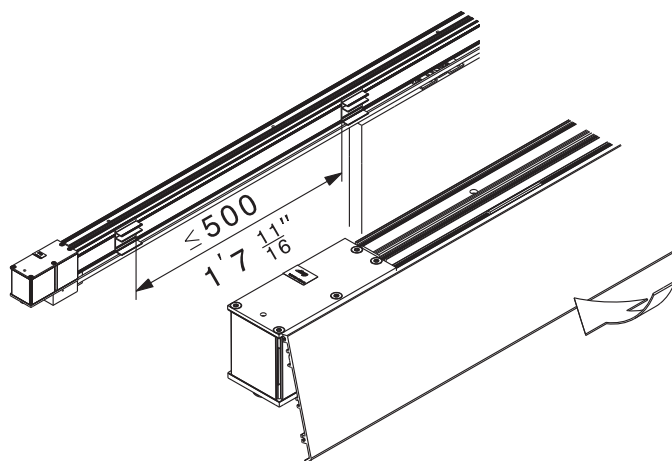
		mm/inch	code
	Covering screens, alu plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	19722
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	19721
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19720
		cut to size	19723
	Covering screens, alu unaodized	6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19736
		cut to size	19737
	Fitting parts to covering screens, alu, wide, set of 5 pieces		19776
	Connecting bolts, set of 6 pieces		17221

## Front cover plates

		aluminium	code
	Front cover plates, for ceiling fitting, (60/matic), 1 pair	plain anodized	19777
		unanodized	19831
	Front cover plates, for wall fitting without spacer profile, 1 pair	plain anodized	19778
		unanodized	19832
	Front cover plates, for wall fitting with spacer profile, 1 pair	plain anodized	19779
		unanodized	19833

## Fitting the covering screens

The same clip-on covering screens can be used to conceal both the inside and/or the outside of the top track. Cover fixings (code 19776) are required for attaching the covering screens.



## Bottom guides

Bottom guides: → page 32.

## Order specifications

- Number of sets HAWA-Motronic 60
- Number and length of toothed belt
- Number of partial sets HAWA-Frontslide 60/matic
- Number and length of top tracks
- For wall fittings:
  - Number, length and type of angled profile support
  - Number of **special fixing screw sets**
- Number, length and type of covering screens
- Number of cover fixing sets
- Number, length and type of bottom guide channels
- Number and type of guides

## Optional order specifications

- Number of drivers for symmetric installations
- Number, length and type of spacer profiles for angled profile support
- Number and type of front cover plates
- Number of connecting bolt sets for profiles and covering screens

## Planning/installation

For planning and installation purposes, please use the installation drawing code 24759.

**Special regulations apply to automated installations; please refer to operating instructions code 24675.**

(→ [www.hawa.ch](http://www.hawa.ch) → HAWA-Productfinder)





## Sliding shutters – automation in motion.

Hardware for simultaneously automatic sliding up to 4 wood, metal or aluminium sliding shutters.

### Description

The HAWA-Frontslide 60/matic-Telescopic can automatically move up to 4 sliding shutters simultaneously when combined with HAWA-Frontslide 60/matic drive components. Its brushless electric motor, a HAWA-Motronic 60 with a high-quality transmission system and drive belt, guarantees a stable, maintenance-free system with a long life. No special connection cables or control box are required as the controls are integrated in the drive unit. Electrical installation therefore corresponds to the usual standard for shutter designs and enables the use of commercially available operating elements.

The HAWA-Frontslide 60/matic-Telescopic allows maximum flexibility in façade design. Aluminium covering screens in either natural anodized or plain finishes ready for custom painting provide aesthetic appeal and are easily clipped on to the inside and/or outside of the top track. Top track and drive units are covered with one aluminium covering screen only.

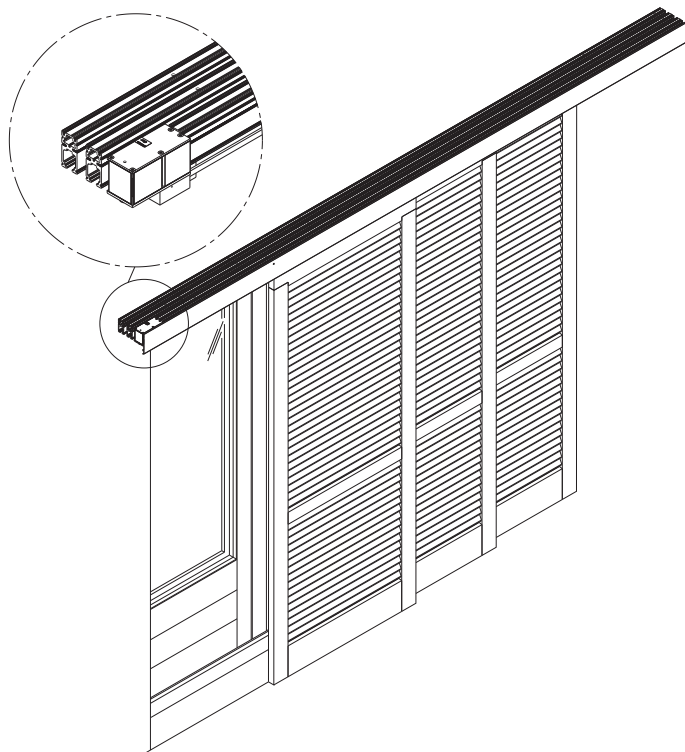
### Applications

Ideal for façades with a high proportion of glass, wherever screening and shade form part of the façade design, and where space is at a premium, e.g. schools, hotels, public buildings, office and administration premises, apartment buildings, low-energy houses, etc.

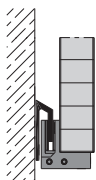
### Features of the HAWA-Frontslide 60/matic-Telescopic

- Drive unit: CE tested
- Sliding shutter thickness: 28–40 mm ( $1\frac{1}{8}$ "– $1\frac{19}{32}$ ")
- Maximum sliding shutter weight with 2 shutters: 60 kg (132 lbs.)/shutter
- Maximum sliding shutter weight with 3 shutters: 50 kg (110 lbs.)/shutter
- Maximum sliding shutter weight with 4 shutters: 40 kg (88 lbs.)/shutter (Systems for heavier shutters available on request)
- Sliding shutter width: 600–1200 mm ( $1'11\frac{5}{8}$ "– $3'11\frac{1}{4}$ ")
- Maximum sliding shutter height: 3200 mm (10'6")
- Maximum sliding shutter surface: 6.24 m<sup>2</sup> ( $20'5\frac{11}{16}$ ")
- Sliding shutters can be brought into any position
- Fibreglass-reinforced toothed belts guarantee high tensile strength and a low level of expansion
- Fast and efficient assembly from below and from the façade side
- Shutters can be removed without loosening the toothed belt
- Clip-on covers for attachment to inside and/or outside of track
- No maintenance

Drive unit technical details: → HAWA-Frontslide 60/matic



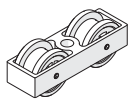
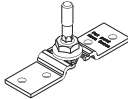
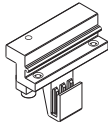
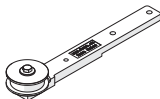
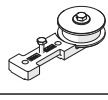
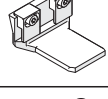
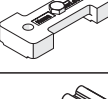
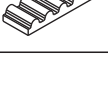
Guides  
→ pages Seite 32



## Set for HAWA-Frontslide 60/matic-Telescopic (Typ E/G)

	code
HAWA-Frontslide 60/matic-Telescopic, set for 2 sliding shutters, 600–1200 mm ( $1'11\frac{5}{8}"-3'11\frac{1}{4}"$ )	20209

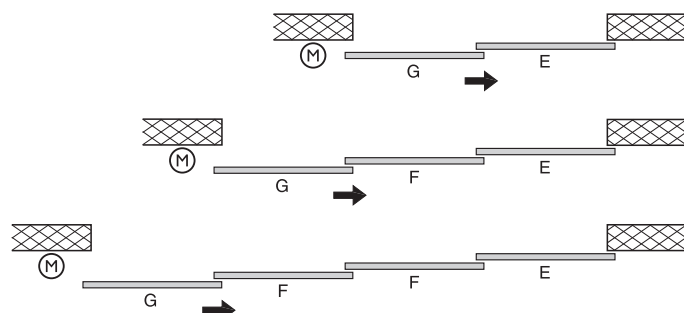
## Set comprising

		piece	code
	Two-wheeled trolley, M8, with plastic wheels	4	17119
	Top fixing plate, stainless steel, with hanger bolt M8	4	17023
	Toothed belt clamp for manual and automatic systems	1	21431
	Guide pulley wheel, with fixing plate, long	1	20139
	Guide pulley wheel, with fixing plate, short	1	20140
	Driver, wide	1	20141
	Driver counter-plate, wide	1	20246
	Toothed belt, black, 2,7 m ( $8'10\frac{5}{16}"$ ), fibreglass reinforced	1	20208

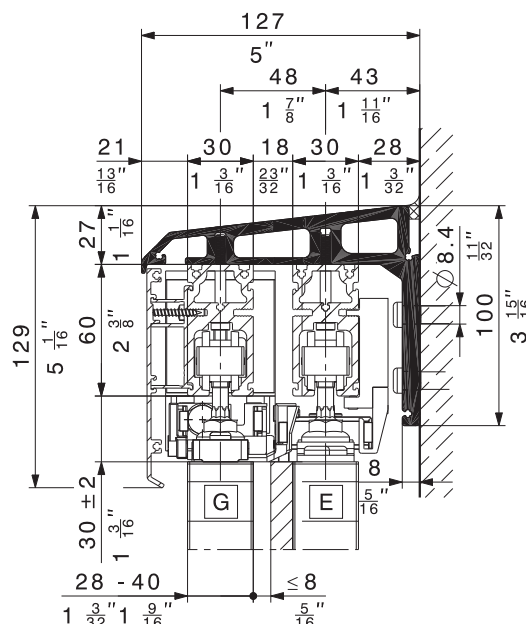
## Using additional sets

A maximum of two additional "Type F" sets can be used between the two-panelled basic set "Type E/G".

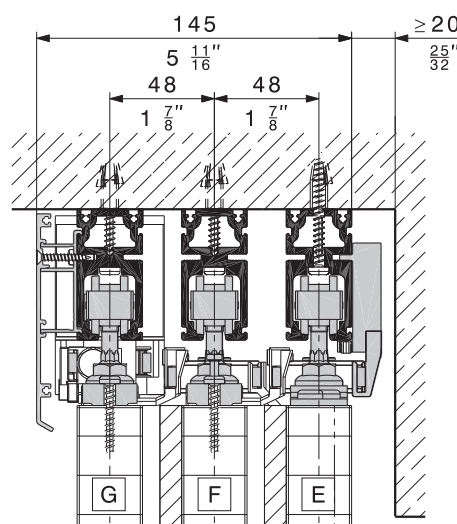
For dimensioning reasons the drive unit (M) must be positioned opposite the stacking space.



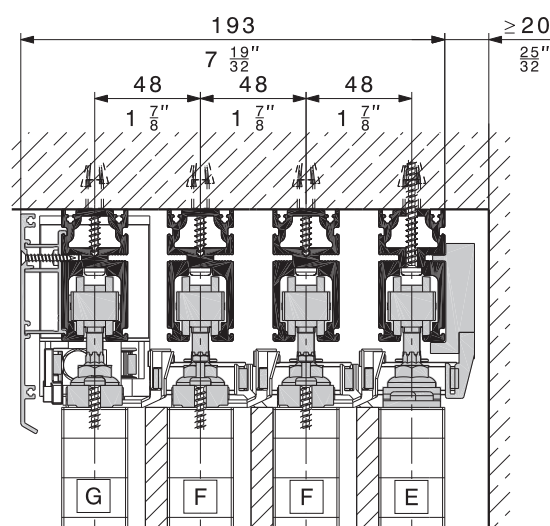
## Two sliding shutters of up to 60 kg max. per panel



## Three sliding shutters of up to 50 kg max. per panel





## Four sliding shutters of up to 40 kg max. per panel

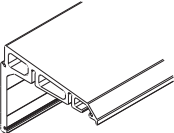




Subject to modification. Metric specifications are exact. Inches are approximate.

### Top tracks for installations with or without covering screens

Caution: Hole positions vary.		mm/inch	code
	Top track, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	19732
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	19731
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19730
		cut to size	19733
	Connecting bolts, set of 6 pieces		17221

### Angled profile support

Caution: Hole positions vary.		mm/inch	code
	Angled profile support for two sliding levels, alu plain anodized, predrilled	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	21382
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	21383
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21384
	Angled profile support for one sliding level, alu unanodized, predrilled	cut to size	21385
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	21386
		cut to size	21387
	Special fixing screws for securing top track to angled profile support, set of 10 pieces (3 pieces per metre)		19774
	Connecting bolts, set of 6 pieces,		17221

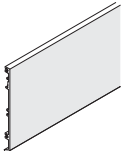
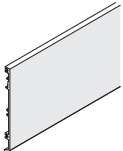


Special screws (code 19774) **must** be used for best results when fixing the track to the angled profile support.

→ HAWA-Frontslide 60/matic, page 23.

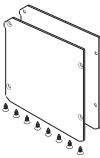


Subject to modification. Metric specifications are exact. Inches are approximate.

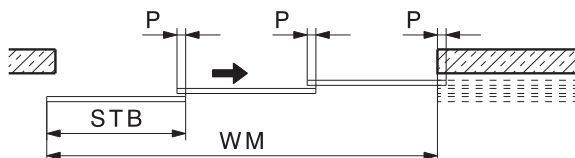
## Covering screens

		mm/inch	code
	Covering screens, alu plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	19722
		3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	19721
		6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19720
		cut to size	19723
	Covering screens, alu unanodized	6000 (19'8 <sup>7</sup> / <sub>32</sub> ")	19736
		cut to size	19737
	Fitting parts to covering screens, alu, wide, set of 5 pieces		19776
	Connecting bolts, set of 6 pieces		17221

## Front cover plates

		aluminium	code
	Front cover plates, for wall fitting, for two sliding level, without spacer profile, 1 pair	plain anodized	21469
		unanodized	21470

## Shutter width calculation



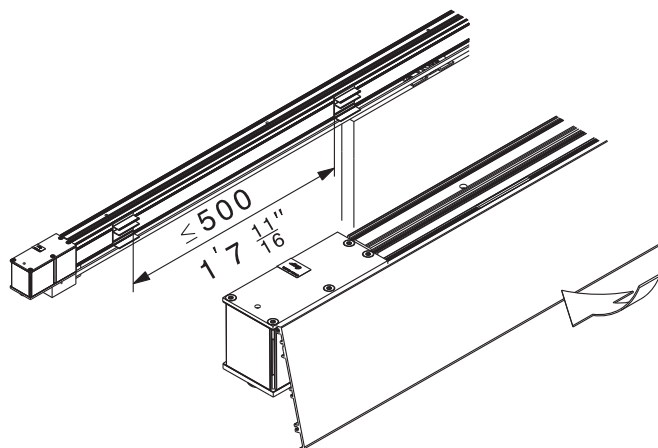
WM =	Wall dimensions
STB =	Sliding shutter width
AT =	Number of shutters
P =	Shutter overlap

$$STB = \frac{WM}{AT} + P$$

$$P = \geq 50 \text{ mm (1 } \frac{31}{32} \text{")}$$

## Fitting the covering screens

The same clip-on covering screens can be used to conceal both the inside and/or the outside of the top track. Cover fixings (code 19776) are required for attaching the covering screens.



## Bottom guides

Bottom guides: → page 32.

## Custom installations

Please contact HAWA for custom installations, such as symmetrically opening 4-door systems.



## Order specifications

- Number of sets HAWA-Motronic 60
- Number and length of toothed belts
- Number of sets HAWA-Frontslide 60/matic-Telescopic (Type E/G)
- Number of additional sets HAWA-Frontslide 60/matic-Telescopic (Type F)
- Number and length of top tracks
- For wall fittings:
  - Number, length and type of angled profile support
  - Number of **special fixing screw sets**
- Number, length and type of covering screens
- Number of cover fixing sets
- Number, length and type of bottom guides

## Optional order specifications

- Number of connecting bolt sets for profiles and covering screens
- Number and type of front cover plates

## Planning/installation

For planning and installation purposes, please use the planning and installation instruction code 24760.)

**Special regulations apply to automated installations; please refer to operating instructions code 24675.**

(→ [www.hawa.ch](http://www.hawa.ch) → HAWA-Productfinder)

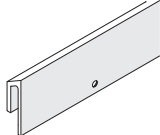
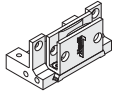
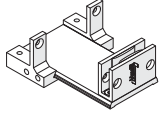

**Guides for sliding shutters up to 3200 mm (10'6") in height and 140 kg (308 lbs.) maximum weight.**

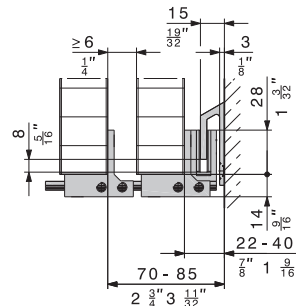
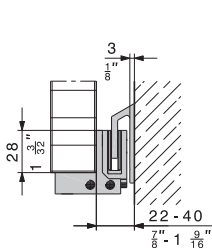
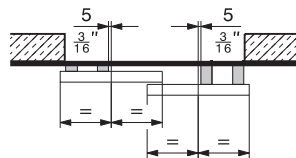
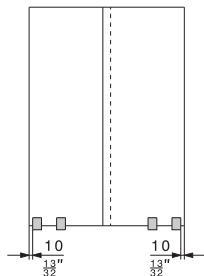
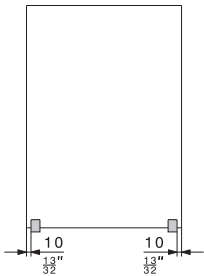
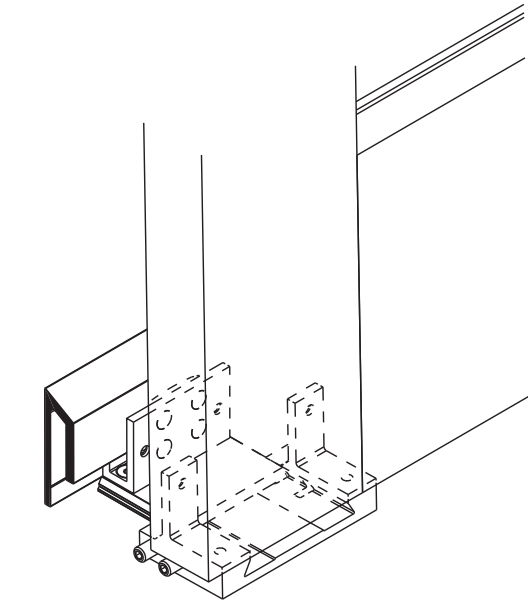
## Description

These guides are certified in accordance with the appropriate EU standard (wind resistance class 6) and can be used for a wide variety of applications. They are designed for sliding shutters up to 3200 mm (10'6") in height and a maximum weight of 140 kg (308 lbs.). Sliding shutter installations with 1 to 4 leaves, telescopic and symmetrical, manual or with a drive, can be easily realized with a minimal number of parts.

Commercially available, anodized aluminum bottom guide profiles can be used in combination with guide slider 24542.

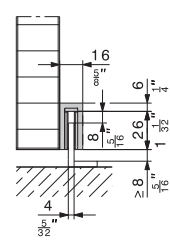
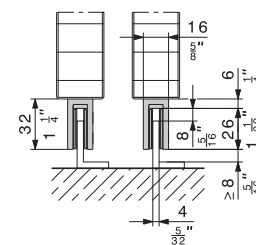
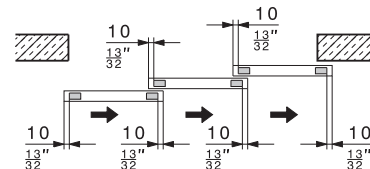
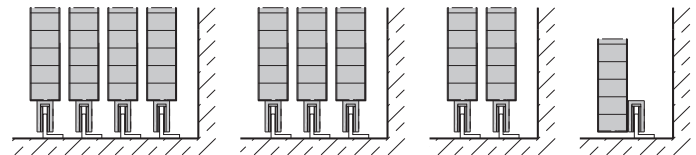
## Guides for HAWA-Frontslide

		mm	code
	Bottom guide channel, alu plain anodized, predrilled	6000 (19'8 <sup>1</sup> / <sub>32</sub> " )	24460
		cut to size	24462
	Floor guide unit, short, for bottom guide channel		24543
	Floor guide unit, long, for bottom guide channel		24544
	Screw-on guide slider		24542



Floor guide 24543, bottom guide channels 24460/24462

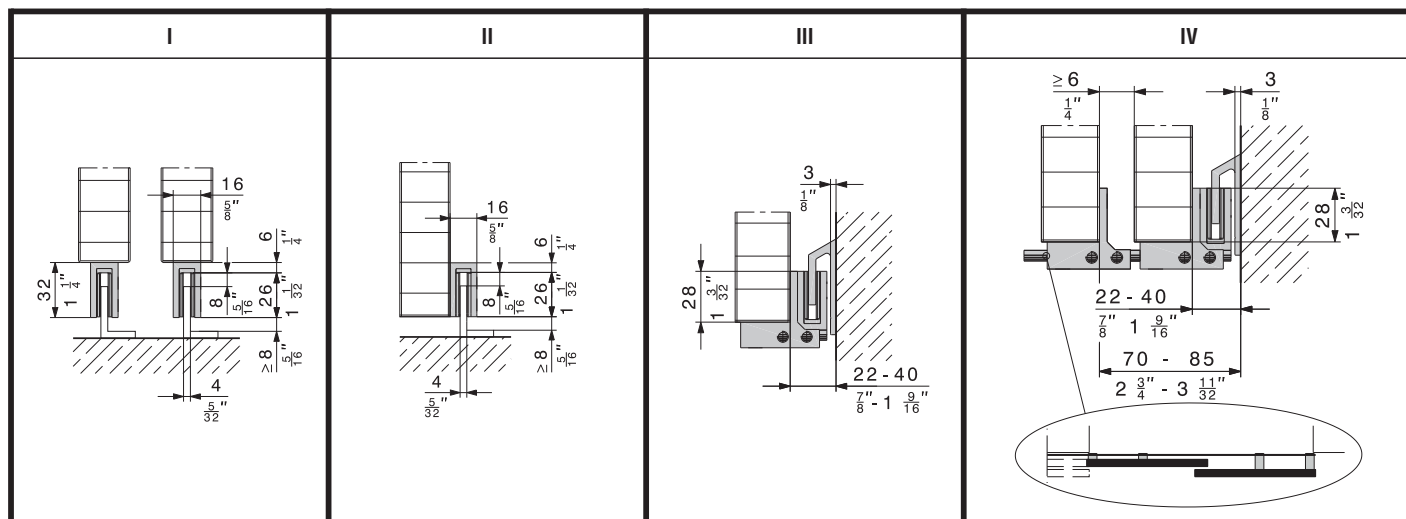
Floor guides 24543/24544, bottom guide channels 24460/24462



Guide slider 24542 from Hawa and commercially available, anodized aluminum bottom guide profile.

Subject to modification. Metric specifications are exact. Inches are approximate.

## Overview of the guides for HAWA-Frontslide



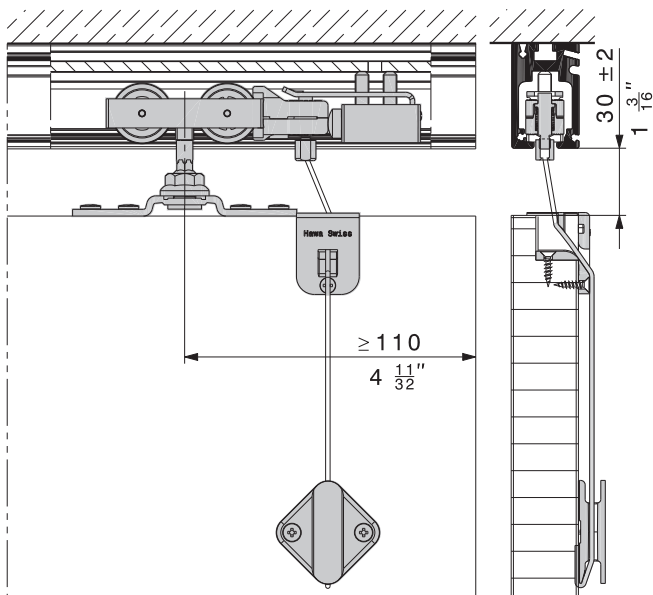
	I	II	III	IV
	✓	✓	✓	-
	✓		-	✓
	✓		-	-
	✓		-	-
	✓	✓	✓	-
	✓		-	✓
<p><b>Guide arrangements</b></p> <p>Certain guide options are freely adjustable. Further guide options available on request.</p>	 24542	 24542	 24543	 24543/24544
	 Alu profile anodized provided by others	 Alu profile anodized provided by others	 24460/24462	 24460/24462

Subject to modification. Metric specifications are exact. Inches are approximate.



## Sliding shutter locking

In combination with HAWA-Frontslide 60/A



The sliding shutter locking prevents shutters from opening by themselves.

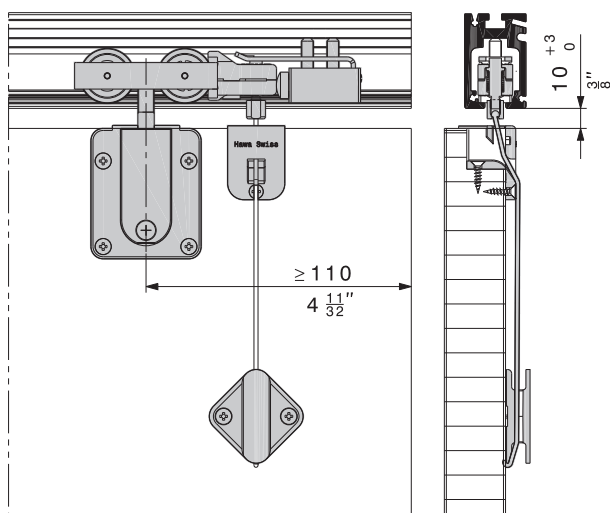
### Description

The sliding shutter lock automatically engages as the shutters close and can be released from the room interior side only using a pull-cord. This sophisticated system prevents shutters from opening by themselves, even under the most adverse wind conditions.

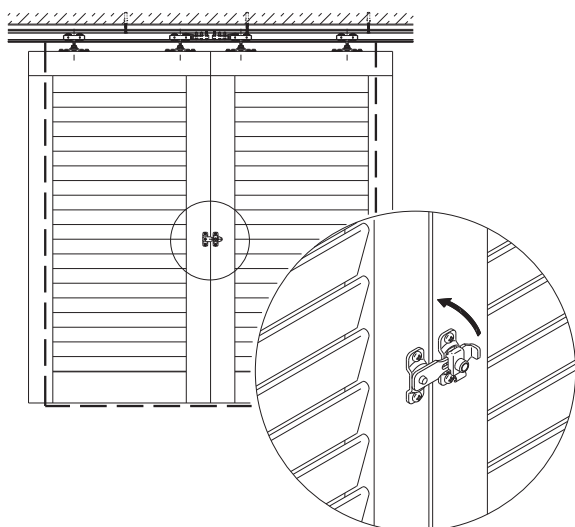
## Sliding shutter locking

	code
<p>Sliding shutter locking complete, for HAWA-Frontslide 60/A and 60/B</p>	19319

In combination with HAWA-Frontslide 60/B



## Catch for sliding shutters



The catch for sliding shutters holds sliding shutters together.

### Description

The sliding shutter catch holds together adjacent shutter pairs, which is a further means to prevent shutters from opening by themselves.

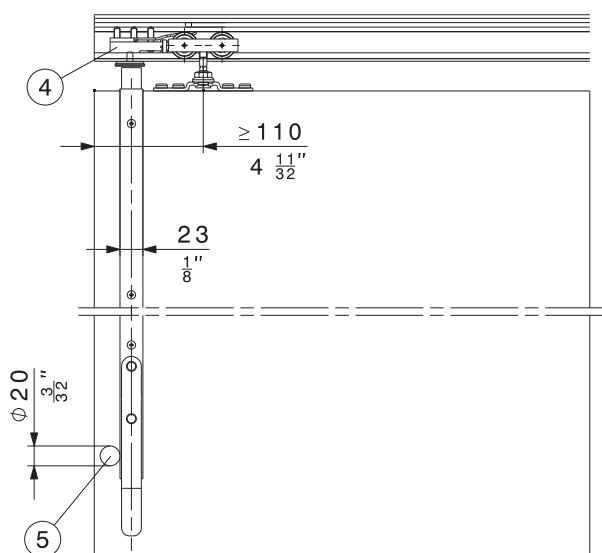
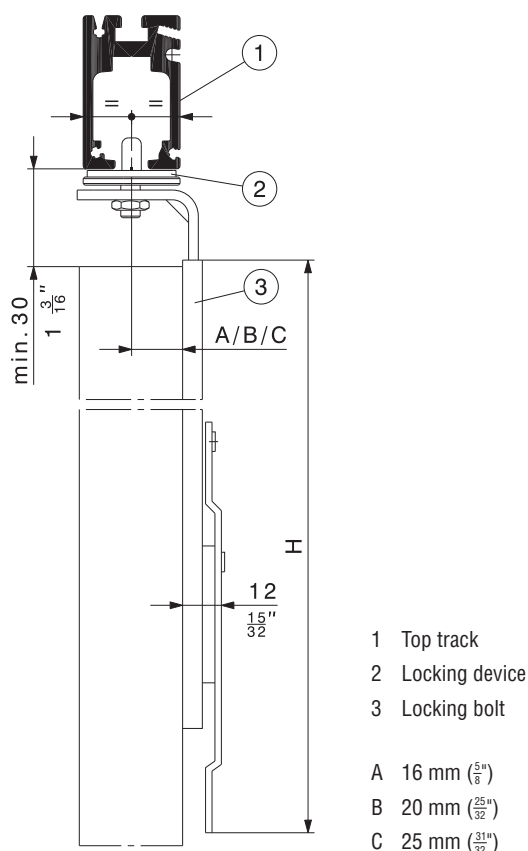
## Catch for sliding shutters

	code
<p>Catch for sliding shutters, stainless steel, with fixing screws</p>	17155

Subject to modification. Metric specifications are exact. Inches are approximate.

## Sliding shutter locking device

In combination with HAWA-Frontslide 60/A



## Sliding shutter locking device locks sliding shutters in any position.


### Description

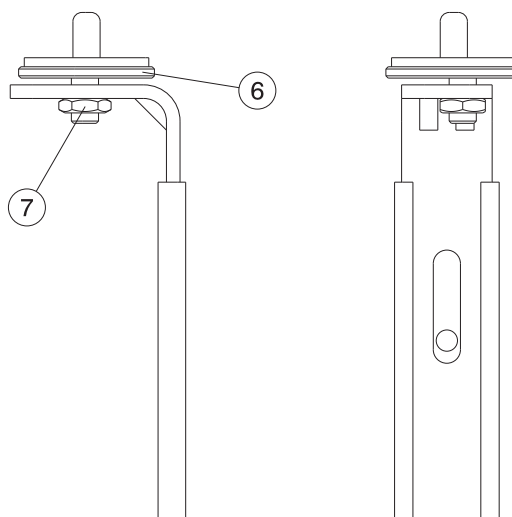
The sliding shutter locking device is designed to lock sliding shutters in any position on the track.

The locking device has an installation height of just 12 mm (15/32") and screws on to any type of shutter with no need for milling work; the device is also suitable for retrospective fitting.

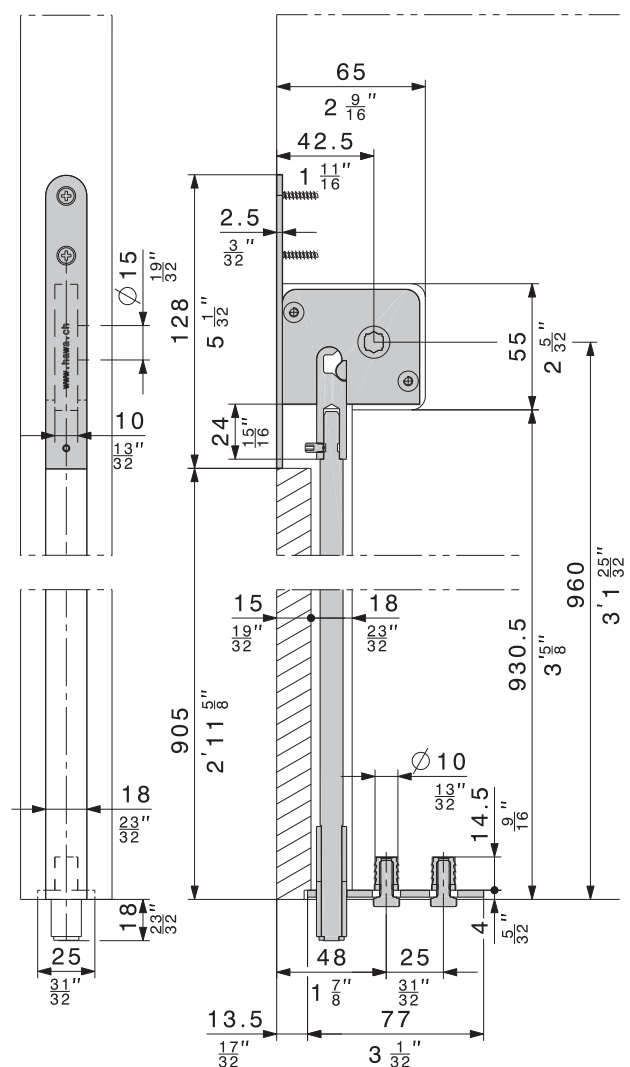
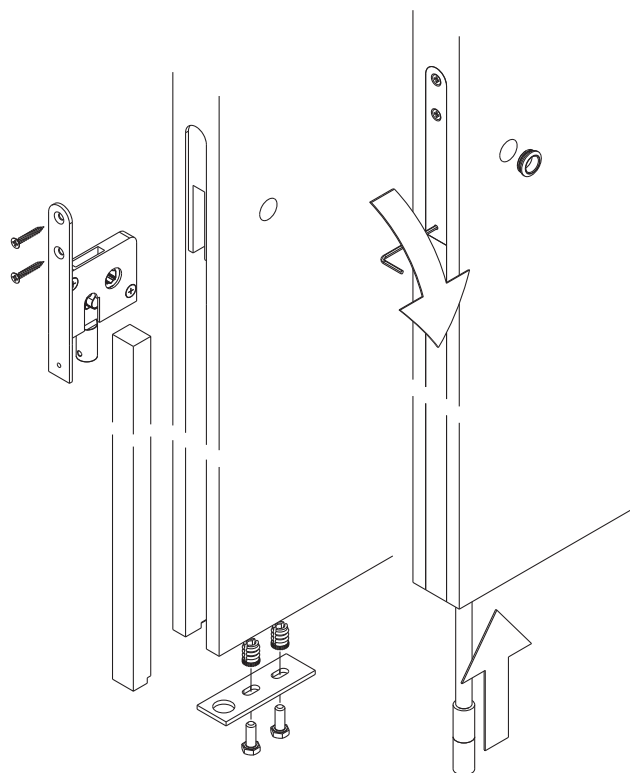
Two different lengths are available for an ideal gripping position.

### Sliding shutter locking device

	mm/inch	code
	800 (2'7 1/2")	23714
	1200 (3'11 1/4")	23715



### HAWA-bar bolt lock







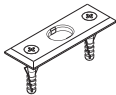


**HAWA-bar bolt lock for locking the sliding shutters.**

### Description

Bar bolt lock code 19592 secures the sliding shutters at regular handle height.

### HAWA-bar bolt lock

		Nr.
	<p>Bar bolt lock  Backset 42.5 mm (<math>1\frac{11}{16}</math>" )  Socket square/hexagonal, 7/8 mm  Total lift of push rod: 18 mm (<math>\frac{23}{32}</math>" )  Operation height: 960 mm (<math>3'1\frac{13}{16}</math>" ) complete</p> <p>The bar bolt lock can be operated from the door surface with a square/hexagonal key.</p>	19592
	<p>Thumbturn, chromium finish  for panel thickness 35 to 40 mm (<math>1\frac{3}{8}</math>" to <math>1\frac{19}{32}</math>" )</p>	13789
	<p>Key for deadbolt lock</p>	10723
	<p>Slip-fit rose, brass dull nickel finish</p>	13858
	<p>Floor-mounted sleeve with oblong hole and chromium plated brass spring cover</p>	13787
	<p>Rosette for floor-mounted sleeve 13787</p>	17326
	<p>Strike plate, chromium-plated steel</p>	13130

Subject to modification. Metric specifications are exact. Inches are approximate.



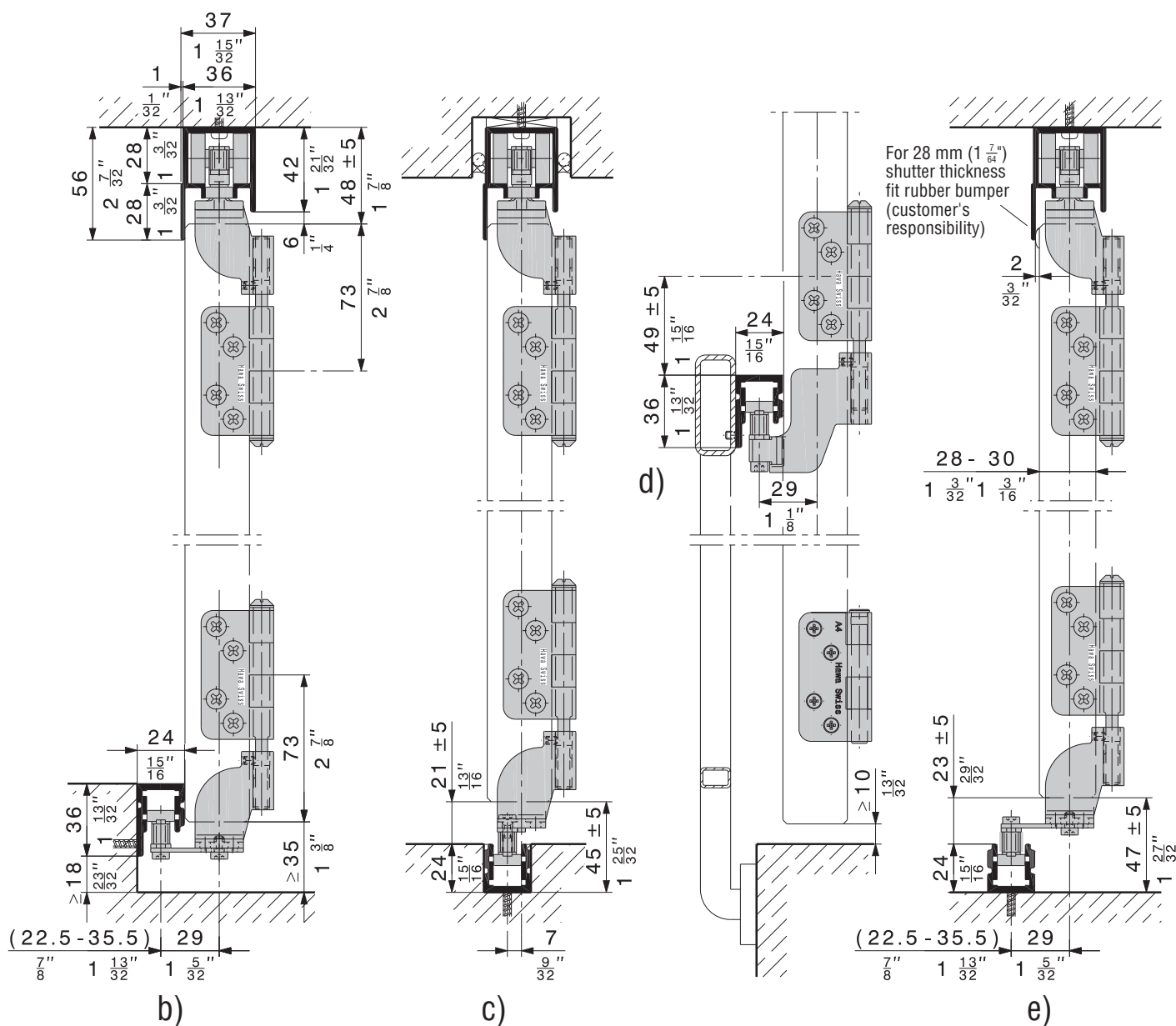
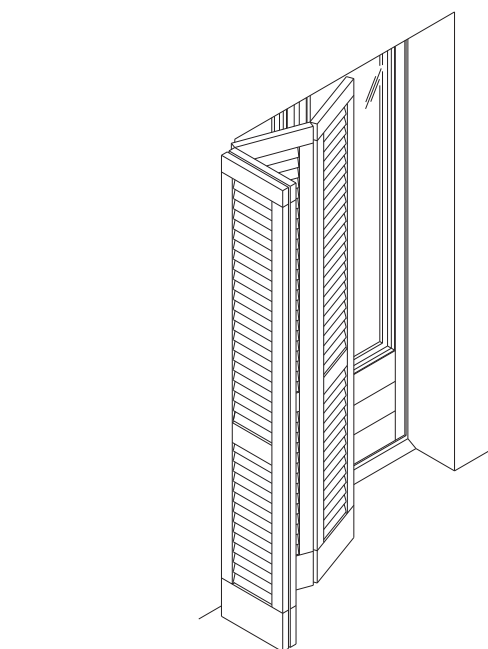
Hardware system for metal, aluminium or wood folding sliding shutters with a panel weight up to 20 kg (44 lbs.) (inset or overlay mounting).

## Description

HAWA-Frontfold 20 is a newly developed hardware system for sliding and folding shutters. With this hardware system, shutters can be folded together and placed sideways at an angle of 90° to the front of the window.

## Features of the HAWA-Frontfold 20

- Maximum shutter width 600 mm (1'11  $\frac{5}{8}$ " )
- Wood: shutter thicknesses, 28–36 mm (1  $\frac{7}{64}$ "–1  $\frac{27}{64}$ " )  
Metal/Aluminium: shutter thicknesses, 28–32 mm (1  $\frac{7}{64}$ "–1  $\frac{17}{64}$ " )
- Folding sliding shutters can be installed in front of the window or on the exterior of the balcony
- The folding stack is installed on one side with pivot bearings
- Versions are available for an odd or even number of panels
- The folding stack can be pushed sideways against a wall or used free-standing for privacy or protection against wind, etc.
- Closure with HAWA spring catch
- Adjustable vertically  $\pm 5$  mm ( $\frac{13}{64}$ " )

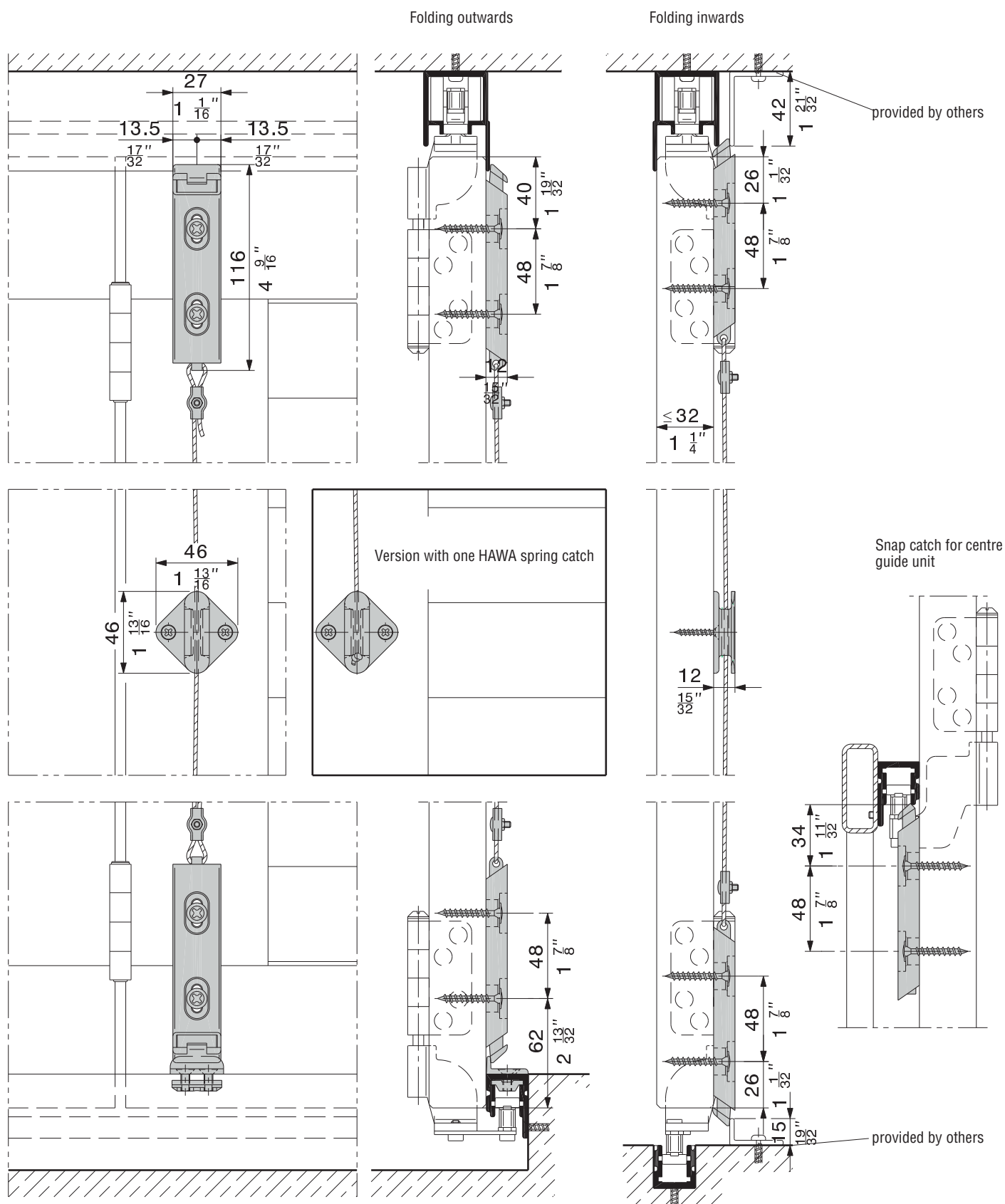


The bottom guide channels are not in line with the top track axis.

Subject to modification. Metric specifications are exact. Inches are approximate.

## Spring catch

HAWA spring catches can be used for closing and securing folding sliding shutters that open outwards or inwards.



Subject to modification. Metric specifications are exact. Inches are approximate.

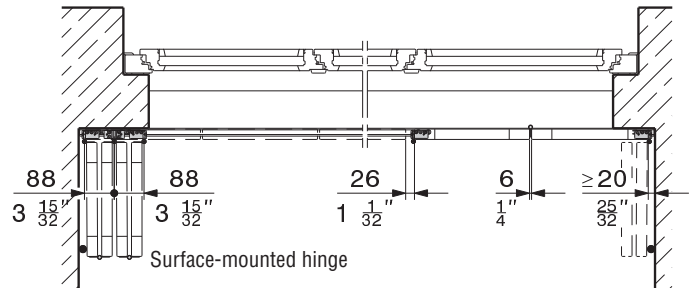


## Panel number

The panel number is illimited. Designs with odd and even panel numbers are possible.

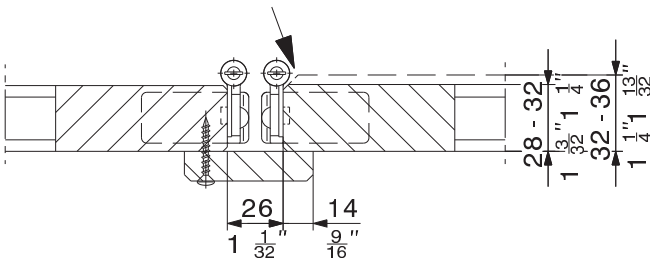


## Folding panel package and rebate width



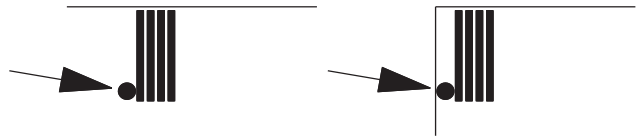
## Hinges pin

When the folding sliding shutters have thickness over 32 mm ( $1 \frac{17}{64}$ "), the hinge knuckles bearing must be recessed.

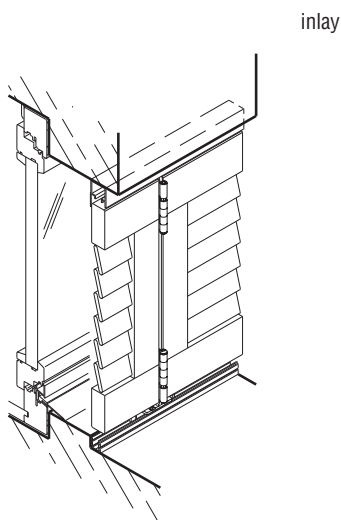


## Fit bumper stop

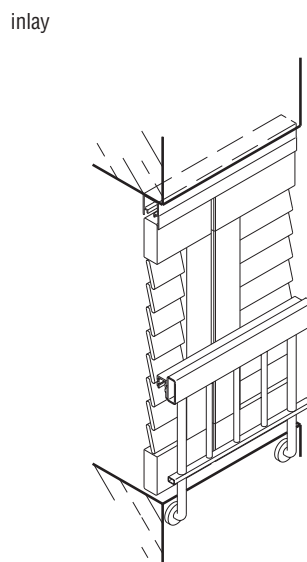
The stacked panels have to be protected against wind influence. Fit bumper stop so as to prevent the folding panel package from overturning. (provided by customer)



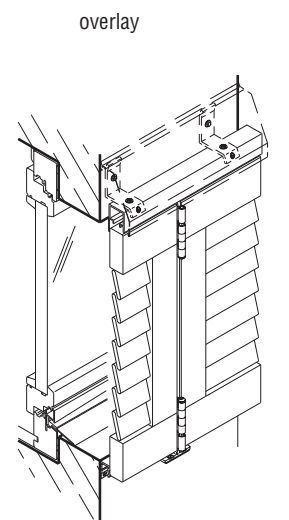
## Mounting variants



Bottom guide unit, without plate



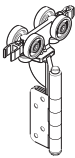

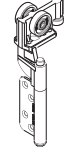
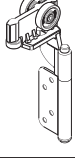
Centre guide unit



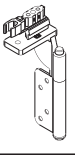
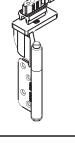
Bottom guide unit, with plate

Subject to modification. Metric specifications are exact. Inches are approximate.

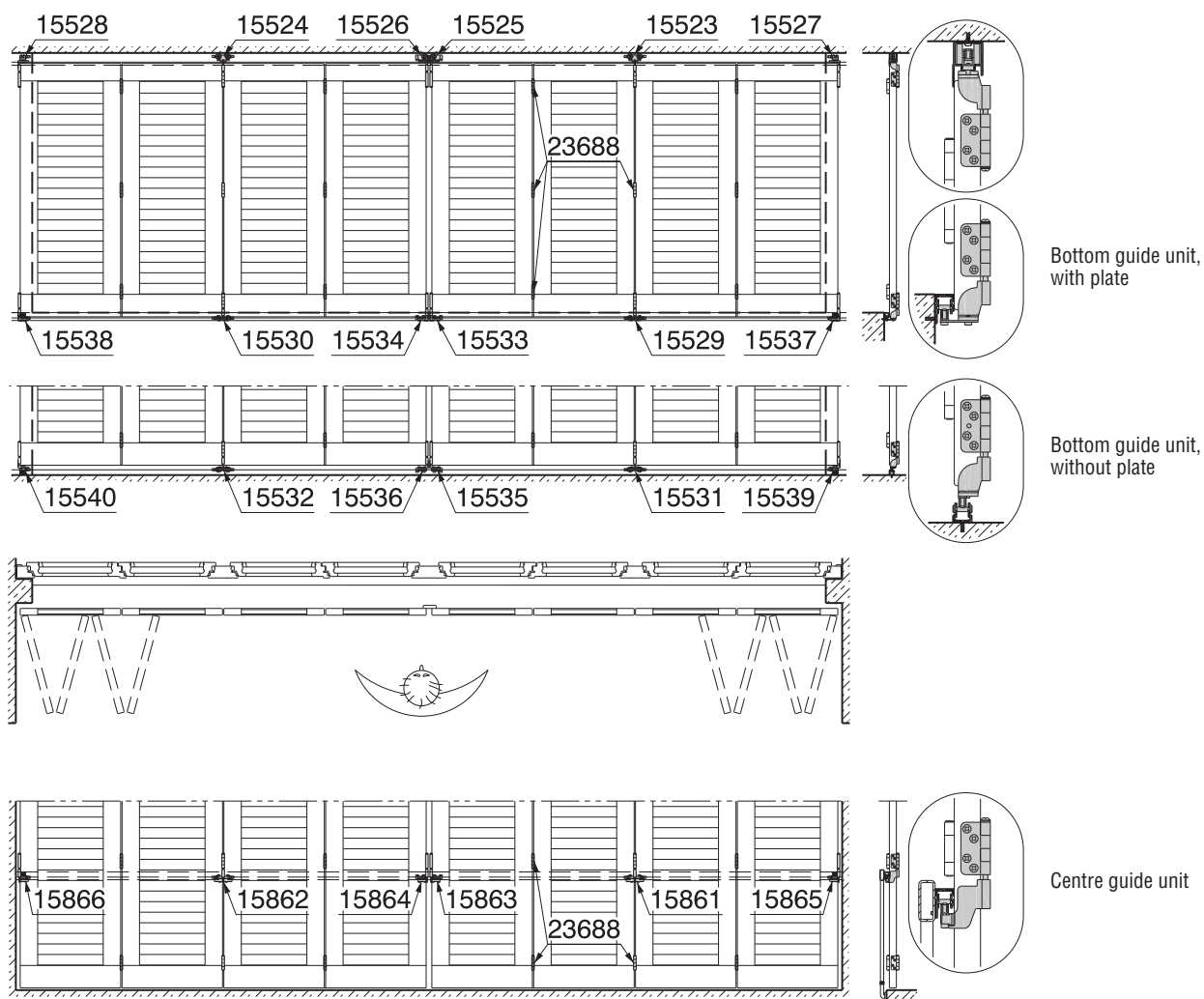
## Top centre trolleys

		folding to the	code
	Centre trolley with 4 plastic suspension wheels and 2 guide rollers, M8	right	15523
		left	15524
	Outer trolley with 2 plastic suspension wheels and 2 guide rollers, M8	right	15525
		left	15526

## Fixed suspension units

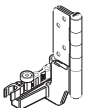
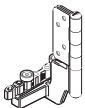
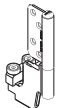
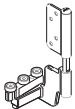
		folding to the	code
	Fixed suspension unit, M8	right	15527
		left	15528

## Hardware system components

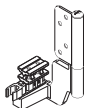
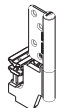


Subject to modification. Metric specifications are exact. Inches are approximate.

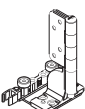
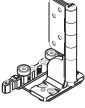
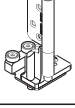
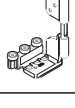
## Centre guide units, shutter thicknesses, 28–32 mm (1 $\frac{7}{64}$ "–1 $\frac{17}{64}$ ")

		folding to the	code
	Centre guide unit in the middle	right	15861
		left	15862
	Centre guide unit outside	right	15863
		left	15864

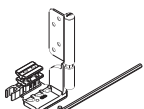
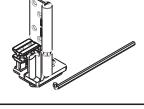
## Fixed bottom centre guide, shutter thicknesses, 28–32 mm (1 $\frac{7}{64}$ "–1 $\frac{17}{64}$ ")

		folding to the	code
	Fixed bottom centre guide unit	right	15865
		left	15866

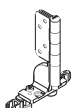
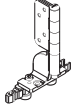

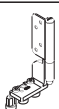
## Floor guide units, with plate

		folding to the	code
	Centre floor guide unit, M8, with 2 plastic guide rollers, with plate	right	15529
		left	15530
	Outer end floor guide unit, M8, with 3 plastic guide rollers, with plate	right	15533
		left	15534

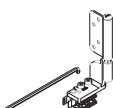
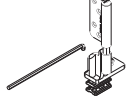
## Fixed floor guide units, with plate

		faltend nach	code
	Fixed floor guide unit, M8, with plate	right	15537
		left	15538

## Floor guides units, without plate

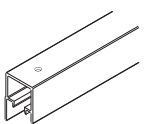
		folding to the	code
	Centre floor guide unit, M8, with 2 plastic guide rollers, without plate	right	15531
		left	15532
	Outer end floor guide unit, M8, with 3 plastic guide rollers, without plate	right	15535
		left	15536

## Fixed floor guide units, without plate

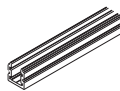
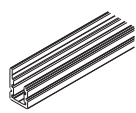
		folding to the	code
	Fixed floor guide unit, M8, without plate	right	15539
		left	15540

Subject to modification. Metric specifications are exact. Inches are approximate.

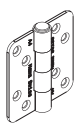
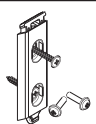
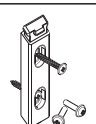



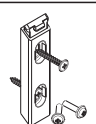
## Top tracks

Caution: Hole positions vary.			code
	Top track, alu plain anodized, predrilled	3500 mm (11'5 <sup>13</sup> / <sub>16</sub> " )	20984
		6000 mm (19'8 <sup>7</sup> / <sub>32</sub> " )	15403
		cut to size	15553

## Bottom guide channels

			code
	Bottom guide channel, alu plain anodized, undrilled	6000 mm (19'8 <sup>7</sup> / <sub>32</sub> " )	15405
		cut to size	15554
	Bottom guide channel, alu plain anodized, undrilled	3500 mm (11'5 <sup>13</sup> / <sub>16</sub> " )	20985
		6000 mm (19'8 <sup>7</sup> / <sub>32</sub> " )	15474
		cut to size	15555

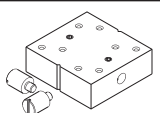
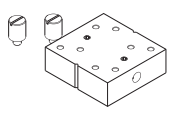


## Accessories

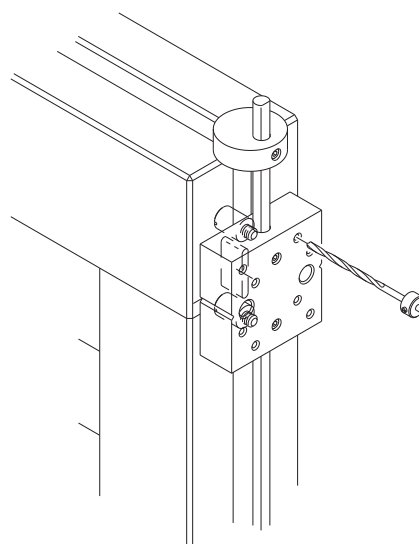
			code
	Hinge, stainless steel WNR 1.4404 (A4)		23688
	HAWA spring catch, alu plain anodized, opening	inwards	15513
		outwards	15514
	Angle-type strike plate for spring-catch		15661
	Cord for spring catch operation on top, including handle and clamp	top 2000 mm (6'6 <sup>47</sup> / <sub>64</sub> " )	15674
		top/bottom 4000 mm (13'1 <sup>31</sup> / <sub>64</sub> " )	15675
	Snap-lock, alu plain anodized (for centre guide units)		15917

## Number of hinges required

panel height	pieces
up to 1600 mm (5'3")	2
1601–2400 mm (5'3 <sup>1</sup> / <sub>32</sub> " –7'10 <sup>1</sup> / <sub>2</sub> " )	3
from 2401 mm (7'10 <sup>17</sup> / <sub>32</sub> " )	4

## Drilling jig and supplementary components

				code
	Drilling jig for hinges and suspension units, incl. threaded pins Ø 12 mm ( <sup>15</sup> / <sub>32</sub> " ), suitable for profiled bolt of Ø 8 mm ( <sup>5</sup> / <sub>16</sub> " ) diameter of an espagnolette lock			15888
	Drilling jig for riveting, incl. threaded pins Ø 12 mm ( <sup>15</sup> / <sub>32</sub> " ), suitable for profiled bolt of Ø 8 mm ( <sup>5</sup> / <sub>16</sub> " ) diameter of an espagnolette lock			19596
	Set of two threaded pins	shutter thickness 34 mm (1 <sup>11</sup> / <sub>32</sub> " )	Ø 8 mm ( <sup>5</sup> / <sub>16</sub> " )	15894
		shutter thickness 28 mm (1 <sup>7</sup> / <sub>64</sub> " )	Ø 16 mm ( <sup>5</sup> / <sub>8</sub> " )	15896
	Limit stop with setscrew, suitable to profiled bolt of Ø 8 mm ( <sup>5</sup> / <sub>16</sub> " ) diameter of an espagnolette lock			15899



Commercial espagnolette, Ø 8 mm ( <sup>5</sup>/<sub>16</sub>" )

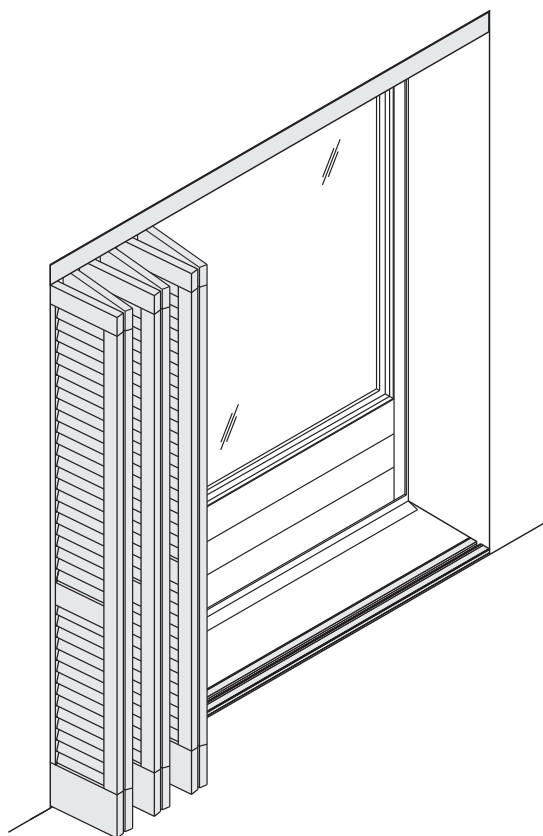
## Order specifications

- Number of panels folding to the right
- Number of panels folding to the left
- Number and type of spring catches
- Number of snap-locks
- Operation of spring catches upwards and downwards
- Number and type of cords for spring catch operation
- Number of additional hinges (top tracks and bottom guides function as hinges)
- Type and length of top track
- Type and length of bottom guide channel
- Number and type of floor guides
- Number and type of centre guide units

- With or without drilling jig
- With or without limit stop for drilling jig
- Number of threaded pin sets

## Planning/installation

Please use for planning and execution the installation instructions code 15284. (→ [www.hawa.ch](http://www.hawa.ch) → HAWA-Productfinder)



## Folding sliding shutters – automatic flush front.

**Automated hardware system for flush-front folding sliding shutters weighing up to 30 kg (66 lbs.).**

### Description

HAWA-Frontego 30/matic is a motorised hardware system for folding sliding shutters. A well-thought-out suspension system enables a flush-front construction and extensive freedom of design for the façade. A variety of mounting options leave virtually no wish unfulfilled. The automatic hardware system folds up to six sliding shutters and parks the package to one side at 90° to the slide axis. The drive system is powered by a brushless electric motor with a high-quality gear system and a proven drive belt; it is both wear-resistant and durable. The power supply unit (to be connected on site by others) with integrated feed and distribution and the Hirschmann plug do not need any additional connection cables. The electrical installation therefore corresponds to the usual standard for sunblind designs incorporating commercially available operating elements.

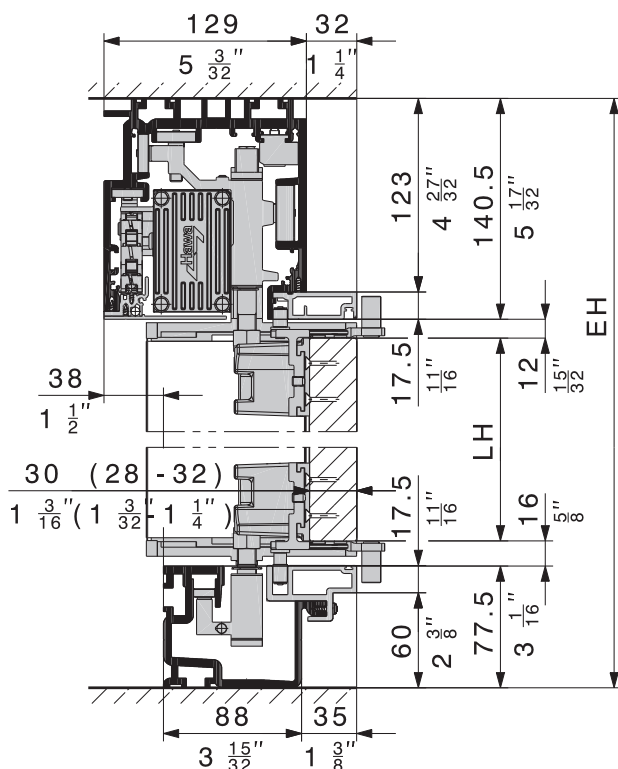
### Applications

Wherever sun and privacy screen are an integral aspect of façade design, including façades with a high proportion of glass, even when space is at a premium, for instance in schools, hotels, public buildings, office and administration buildings, low-energy houses and for creative and impressive façades on private homes.

### Features of the HAWA-Frontego 30/matic

- Drive unit: CE tested
- Hardware system developed in accordance with DIN EN 13659, which regulates performance and safety requirements as well as wind load resistance (certified for Class 6, tested for Class 8), durability (20,000 cycles, tested for Class 3)
- Protection and safety measures on the basis of DIN EN 12453
- The hardware system for automatic folding sliding shutters is suitable for purposes up to protection class 3 in accordance with VFF pamphlet KB.01
- Very high corrosion resistance; suitable for coastal areas; materials and coatings tested during a 1,000-hour salt spray test in accordance with DIN EN 9227
- Folding sliding shutter weight: max. 30 kg (66 lbs.)
- Folding sliding shutter height: 700–3200 mm (2'3 <sup>9</sup>/<sub>16</sub>"–10'6")
- Folding sliding shutter width: 300–600 mm (11 <sup>13</sup>/<sub>16</sub>"–1'11 <sup>5</sup>/<sub>8</sub>") (uniform for each installation)
- Folding sliding shutter thickness: 28–32 mm (1 <sup>1</sup>/<sub>8</sub>"–1 <sup>9</sup>/<sub>32</sub>")
- Designs: 2, 4 and 6 leaves, left or right hand application
- Symmetrical and asymmetrical installations are freely combinable
- Ceiling, window lintel, wall and façade mounting
- Folding sliding shutters and the top tracks and bottom guide channels can be installed from the inside or outside
- For folding sliding shutters made of wood, metal or fabric
- Folding sliding shutters can be locked top and bottom in any position
- Robust, burglar-deterrent engineering and self-locking drive
- Folding sliding shutters form a flush front when closed

Drive unit technical details: → following page



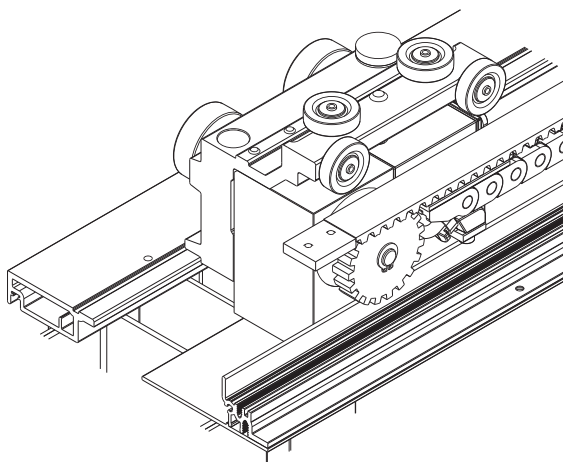
## HAWA-Frontego 30/matic drive system

HAWA-Frontego 30/matic moves folding sliding shutters at an average speed of 55 mm/s.

The intelligent control system was designed specifically for folding sliding shutters and enables them to be slowly accelerated up to an ideal speed and then gently decelerated and stopped. This keeps noise levels down and puts less strain on drive components. Commissioning is as convenient as it is simple: manual addressing is unnecessary thanks to the automatic detection of components such as the number of leaf pairs and left or right hand installation. Manual configuration using the diagnosis box is also possible.

## Caution: Not permitted for escape routes

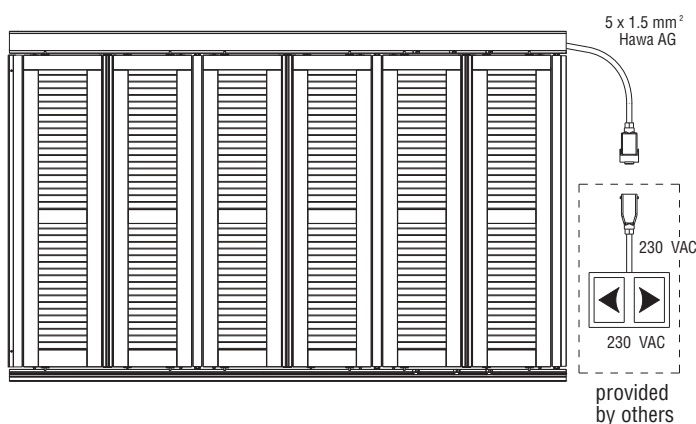
Escape route will be blocked if power supply fails when shutters are closed.



The drive and trolley form a compact unit

## Addressing and controlling the system

The systems are addressed in the same way as rolling shutter systems and operated via commercially available sunblind switches. Push-button operation is also possible for walk-in systems.



## Technical details HAWA-Frontego 30/matic

- |   |   |
|---|---|
| • Drive unit:                           | CE tested   |
| • Power supply:                         | 100 VAC to 240 VAC  |
| • Rated voltage                         | 28 V  |
| • Pre-fuse (max.):                      | 16 A  |
| • Overvoltage category:                 | II  |
| • Temperature range for storage:        | -25 °C to 60 °C   |
| • Temperature range for operation:      | -20 °C to 60 °C   |
| • Relative humidity:                    | 20 % to 98 %  |
| • Degree of contamination:              | 1   |
| • Protection class:                     | IP54  |
| • Speed (max.):                         | 70 mm/s   |
| • Average speed:                        | 55 mm/s   |
| • Static continuous drive force (max.): | 150 N   |
| • Static peak drive force (max.):       | 250 N<br>(start-up against wind)  |
| • Average drive power consumption:      | 20 W  |
| • Power consumption in standby mode:    | < 5 W   |
| • Parameterisation:                     | automatic during hardware commissioning or manual using the diagnosis box |

## Type label

Every drive and power supply unit has a type label.

### HAWA-Frontego 30/matic



Art.Nr. 23363  
Kontakt [www.hawa.ch](http://www.hawa.ch)  
SerieNr. XXXXX Bj: 20ZZ  
Charge 20ZZ/YYYYY  
100–240 VAC, 50/60 Hz, 60 W, IP54  
Betriebstemperatur -20 °C bis +60 °C



### HAWA-Frontego 30/matic



Art.Nr. 23364  
Kontakt [www.hawa.ch](http://www.hawa.ch)  
SerieNr. XXXXX Bj: 20ZZ  
Charge 20ZZ/YYYYY  
Antriebskraft max. 250 N  
28 VDC, 50 W, IP54  
Betriebstemperatur -20 °C bis +60 °C



## Commissioning box

The commissioning box for the HAWA-Frontego 30/matic is available as an option and enables simple commissioning via the main cable and Hirschmann plug.






## Diagnosis box

The diagnosis box for the HAWA-Frontego 30/matic is an option and offers the following benefits:

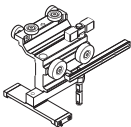
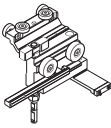
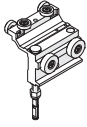
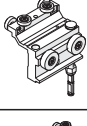
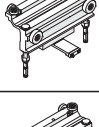
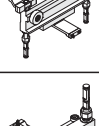
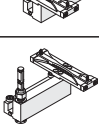
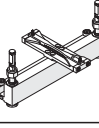

- Read out of important operating data such as operation and run-time, firmware version, error messages, etc.
- Firmware updates
- System operation






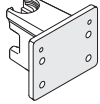

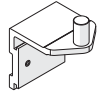
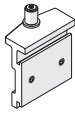
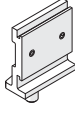


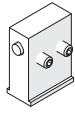

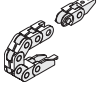



## HAWA-Frontego 30/matic, sets

		code
	HAWA-Frontego 30/matic, basic set, right	23622
	HAWA-Frontego 30/matic, basic set, left	23623
	HAWA-Frontego 30/matic, additional set, right	23624
	HAWA-Frontego 30/matic, additional set, left	23625
	HAWA-Frontego 30/matic, basic set, symmetric	23626
<ul style="list-style-type: none"> <li>Sets without top tracks and bottom guide channels</li> <li>Sets can be customised to suit your needs</li> </ul>		

## Set comprising

		23622	23623	23624	23625	23626	code
	Trolley with top track and bottom guide rollers, stop on left		1			1	23349
	Trolley with top track and bottom guide rollers, stop on right	1				1	23578
	Trolley with top track and bottom guide rollers, drive on left		1			1	23599
	Trolley with top track and bottom guide rollers, drive on right	1				1	23600
	Trolley with top track and bottom guide rollers, center left				1		23350
	Trolley with top track and bottom guide rollers, center right			1			23601
	Stop guide, left		1			2	23399
	Stop guide, right	1				1	23620
	Center guide, left and right			1	1		23400

## Set comprising

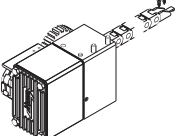
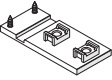

		23622	23623	23624	23625	23626	code
	Drive guide, left		1			1	23401
	Drive guide, right	1					23621
	Holder with assembly cross for symmetric					1	23582
	Assembly plate	4	4	4	4	8	23313
	Assembly plate for wind support and entry bolt	6	6	6	6	12	23418
	Bracket with wind support bolt	4	4	4	4	8	23423
	Bracket with entry bolt at top	1	1	1	1	2	23422
	Bracket with entry bolt at bottom	1	1	1	1	2	23641
	Connecting link module	1	1	1	1	2	23333
	Stop for connecting link module	2	2			4	23640
	Stop for bottom guide channel	1	1			2	23520
	Retainer plate for toothed belt	2	2			4	23627
	Power chain			1	1		23355
	Countersunk metal screws ST3.5x13/25 for top entry piece and entry track, set	1	1	1	1	2	23731
	Lens head metal screws ST3.5x13 for bottom entry piece and entry track, set of 8 pieces	1	1	1	1	2	23732
	Countersunk metal screws ST3.5x9.5 for power chain retainer profile and cover, set of 12 pieces	1	1	1	1	2	23733

Subject to modification. Metric specifications are exact. Inches are approximate.

## HAWA-Frontego 30/matic, set for folding sliding shutter drive

	code
HAWA-Frontego 30/matic, set incl. motor, cable, mains adapter, power chain	23676

### Set comprising

	piece	code
 Drive unit incl. cable 5.5 m (18'0 $\frac{17}{32}$ " )	1	23364
 Top track cable guide	1	23736
 Mains adapter for HAWA-Frontego 28 V with mains cable, 1 m (3'3 $\frac{3}{8}$ " ), mains cable, incl. Hirschmann plug (plug and socket)	1	23363

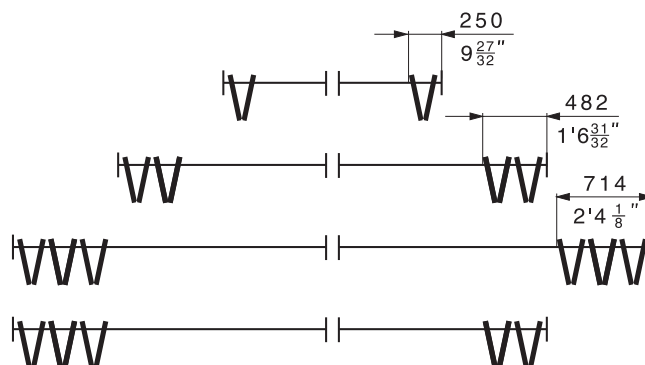
### Toothed belt

		code
	50 m (164'0 $\frac{1}{2}$ " )	20424
	cut to size	20425

## Folding sliding shutters

The HAWA-Frontego 30/matic stands for freedom of design in façade construction. The folding sliding shutters form a flush front with the façade when closed to conceal the top tracks and bottom guide channels. Shutters can be made of different materials such as metal, wood or fabric.

The number of shutters per system is limited to six leaves, or three pairs. The option to design left or right hand installations allows for any combination of symmetrical and asymmetrical systems. Every subsystem can be designed with a different folding sliding shutter width.



## Open folding sliding shutters

The folding package stands sideways, slightly opened, at 90° to the sliding axis.

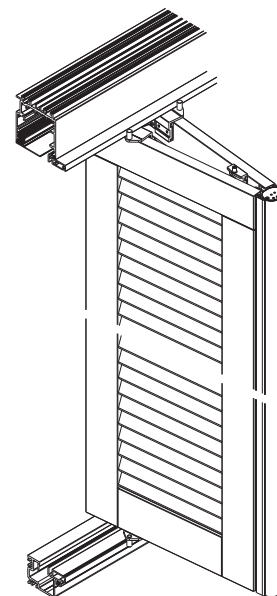
Guide width of folding packages (including wall connection) for left-hand or right-hand systems with a maximum shutter thickness of 32 mm (1  $\frac{9}{32}$ " ):

- 2 panels: 176 mm (6  $\frac{15}{16}$ " ), [+74 mm (2  $\frac{29}{32}$ " )]
- 4 panels: 408 mm (1'4  $\frac{1}{16}$ " ), [+74 mm (2  $\frac{29}{32}$ " )]
- 6 panels: 640 mm (2'1  $\frac{7}{32}$ " ), [+74 mm (2  $\frac{29}{32}$ " )]

57 mm (2  $\frac{1}{4}$ " ) need to be added for right-hand partial systems that are a component of an overall symmetrical or asymmetrical system. (The driver is the protection profile actuator).

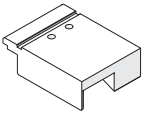
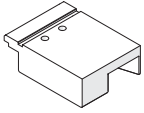
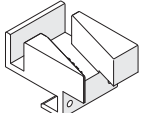
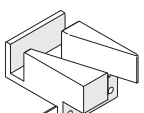
## Folding sliding shutters in the wind

Wind is an unavoidable element of façade construction and worthy of special attention, especially in connection with folding sliding shutters. HAWA-Frontego 30/matic is able to resist strong wind pressure both when open and closed thanks to integrated wind supports.

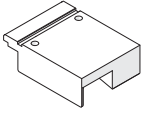
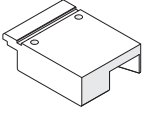
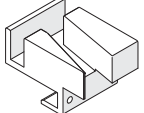
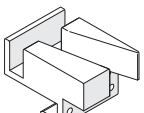


The slightly open folding paket resists even the most adverse wind conditions.

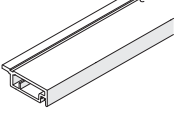
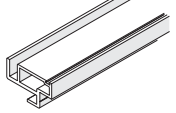
## Entry piece for folding sliding shutter width 300–325 mm

		2-panel	4-panel	6-panel	code
	Entry piece top left, shutter width 300–325 mm (11 $\frac{13}{16}$ "–1'0 $\frac{13}{16}$ " ), alu, plain anodized	1	2	3	23406
	Entry piece top right, shutter width 300–325 mm (11 $\frac{13}{16}$ "–1'0 $\frac{13}{16}$ " ), alu, plain anodized	1	2	3	23407
	Entry piece bottom left, shutter width 300–325 mm (11 $\frac{13}{16}$ "–1'0 $\frac{13}{16}$ " ), alu, plain anodized	1	2	3	23459
	Entry piece bottom right, shutter width 300–325 mm (11 $\frac{13}{16}$ "–1'0 $\frac{13}{16}$ " ), alu, plain anodized	1	2	3	23460

## Entry piece for folding sliding shutter width >325–600 mm

		2-panel	4-panel	6-panel	code
	Entry piece top left, shutter width >325–600 mm, (1'0 $\frac{13}{16}$ "–1'11 $\frac{5}{8}$ " ), alu, plain anodized	1	2	3	23894
	Entry piece top right, shutter width >325–600 mm, (1'0 $\frac{13}{16}$ "–1'11 $\frac{5}{8}$ " ), alu, plain anodized	1	2	3	23893
	Entry piece bottom left, shutter width >325–600 mm, (1'0 $\frac{13}{16}$ "–1'11 $\frac{5}{8}$ " ), alu, plain anodized	1	2	3	23896
	Entry piece bottom right, shutter width >325–600 mm, (1'0 $\frac{13}{16}$ "–1'11 $\frac{5}{8}$ " ), alu, plain anodized	1	2	3	23895

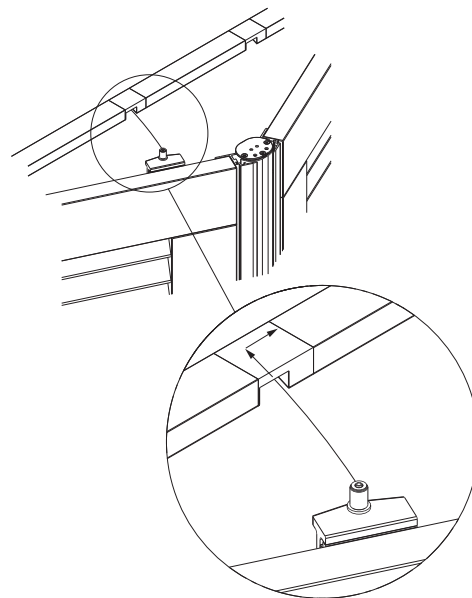
## Entry tracks

		mm/inch	code
	Entry track, top, alu, plain anodized, predrilled	6500 (21'3 $\frac{29}{32}$ " )	23308
		cut to size	23309
	Entry track, bottom, alu, plain anodized, predrilled	6500 (21'3 $\frac{29}{32}$ " )	23310
		cut to size	23311

## Security and locking

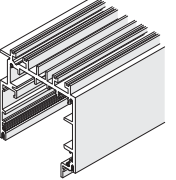
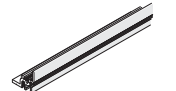

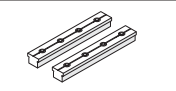
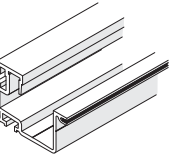
HAWA-Frontego 30/matic is a tried and tested, reliable system offering the greatest possible security.

- The system stops and reverses when it encounters an obstacle
- Robust, burglar-deterrent engineering and self-locking drive
- Optional integration of sun and wind detectors
- Shutters can be blocked in any position top and bottom
- The system is automatically locked when in the closed position



The entry pieces lock the system firmly when it is closed

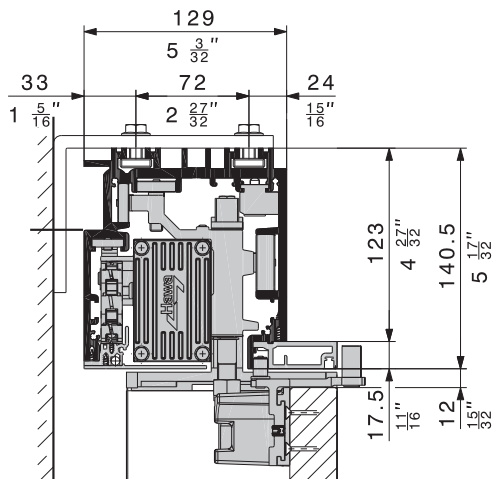
## Top track and bottom guide channel

		mm/inch	code
	Top track, alu, plain anodized, undrilled	6500 (21'3 $\frac{29}{32}$ " )	23306
		cut to size	23650
	Power chain retainer profile, alu, plain anodized, predrilled	6500 (21'3 $\frac{29}{32}$ " )	23307
		cut to size	23651
	Top track cover, alu, plain anodized, predrilled	6500 (21'3 $\frac{29}{32}$ " )	23304
		cut to size	23653
	Connection pieces for top track, set of 2 pieces (optional)		23734
	Bottom guide channel, alu, plain anodized, undrilled	6500 (21'3 $\frac{29}{32}$ " )	23312
		cut to size	23638

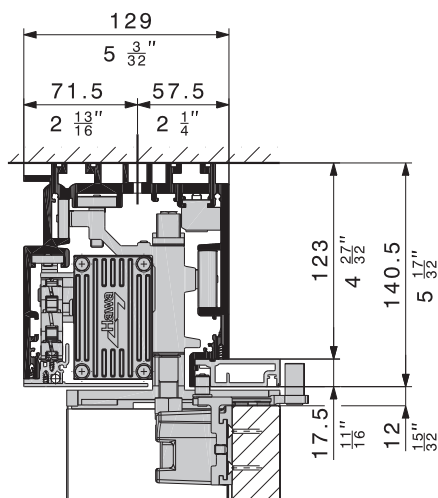
Subject to modification. Metric specifications are exact. Inches are approximate.

## Top track

The top track for the HAWA-Frontego 30/matic is designed for ceiling and wall mounting. Attachment points are required at least every two metres. The top track is easily installed with hammer head bolts (28/15) thanks to integrated T-grooves. Drilling the top tracks to anchor sleeves is also a convenient fastening method.



Wall mounting with brackets and hammer head bolts provided by others

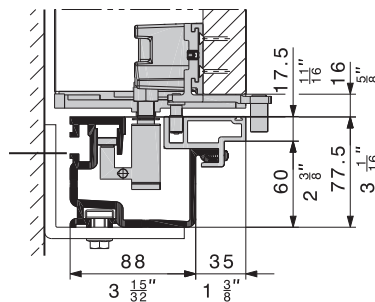


Ceiling mounting with anchors

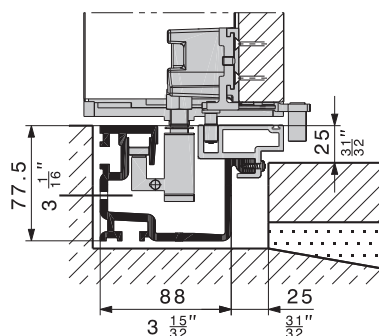
## Bottom guide

The bottom guide is designed for either wall mounting or countersinking in the floor. A removable floor plate can be used to reduce the distance between floor and guide channel. Attachment points are required at least every two metres. The guide channel is easily installed with hammer head bolts (28/15) thanks to integrated T-grooves. Drilling the guide channels to anchor sleeves is also a convenient fastening method.

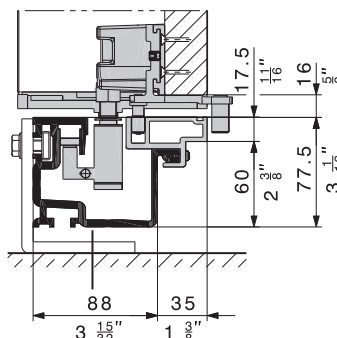
The guide channel is crush-resistant and therefore safe and stable to stand on.



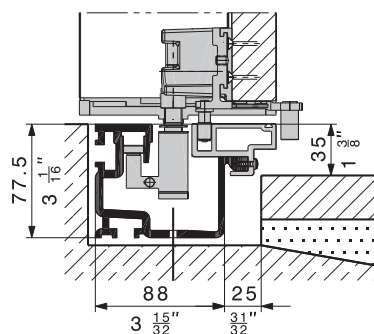
Wall mounting with brackets and hammer head bolts provided by others



Wall mounting with anchor, removable floor plate

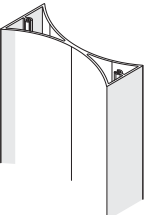

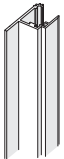

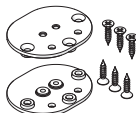
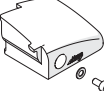



Floor mounting with brackets and hammer head bolts provided by others

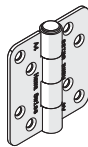


Floor mounting with anchor, fixed floor plate

## Safety set for walk-in systems

		mm/inch	code
	Screen profile, two-sided, alu, plain anodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23658
		cut to size	23659
	Screen profile, two-sided, alu, unanodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23318
		cut to size	23660
	Dual-axis profile, alu, plain anodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23391
		cut to size	23671
	Double hinge, left, alu, plain anodized, undrilled	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23387
		cut to size	23665
	double hinge, right, alu, plain anodized, undrilled	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23389
		cut to size	23668
	Cover for dual-axis hinge, complete alu, plain anodized		23675
	Safety screen left, complete		23935
	Safety screen right, complete		23936


## Hinge for non-walk-in systems

		code
	Hinge, stainless steel, WNR 1.4404 (A4)	23688

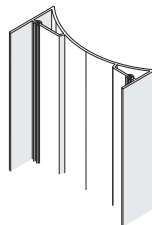
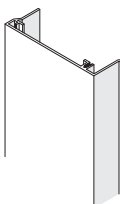
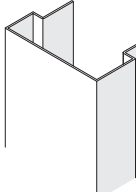
## Number of hinges required

Shutter height	pieces
up to 1600 mm (5'3")	2
1601– 2400 mm (5'3 <sup>1</sup> / <sub>32</sub> "–7'10 <sup>1</sup> / <sub>2</sub> " )	3
from 2401 mm (7'10 <sup>17</sup> / <sub>32</sub> " )	4

## Light screen profile for non-walk-in systems

		mm/inch	code
	Light screen profile, alu, plain anodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23776
		cut to size	23778
	Light screen profile, alu, unanodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23775
		cut to size	23777

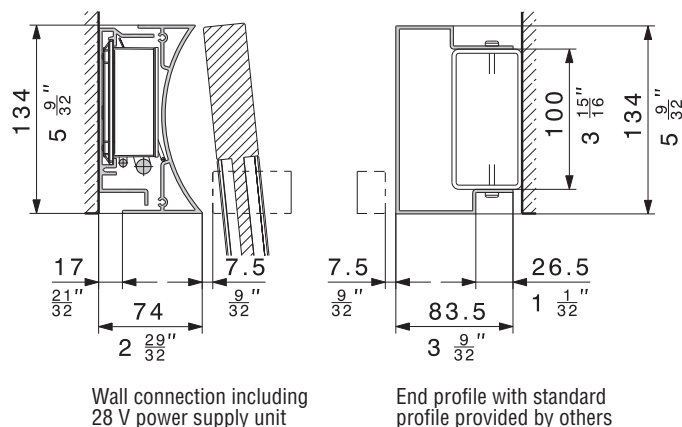
## Wall connection profile

		mm/inch	code
	Screen profile, one-sided, alu, plain anodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23316
		cut to size	23656
	Screen profile, one-sided, alu, unanodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23655
		cut to size	23657
	Mains adapter retainer profile, alu, plain anodized, predrilled	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23323
		cut to size	23662
	Mains adapter retainer profile, alu, unanodized, predrilled	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23661
		cut to size	23663
	End profile for drive side, alu, plain anodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23395
		cut to size	23473
	End profile for drive side, alu, unanodized	6500 (21'3 <sup>29</sup> / <sub>32</sub> " )	23673
		cut to size	23674

## Wall connection and opposite side

The wall connection profile has room for the 28 V power supply unit; together with the one-sided screen profile it provides for a high degree of security as well as protection against crushing and light intrusion.

An optional end profile for the opposite side in combination with a standard profile (provided by others) compensates structural differences in dimensions to achieve a uniform façade appearance.



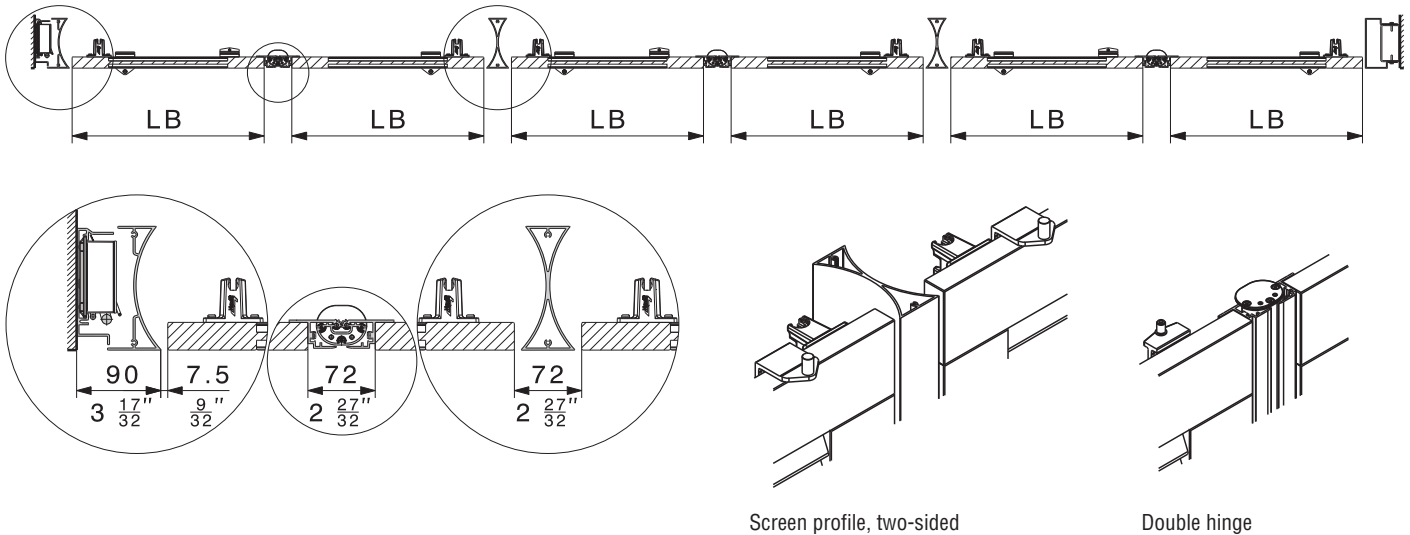
## Screen profile, double hinge and hinge

The screen profile not only optimises shading but also provides the best possible crush protection in conjunction with the double hinge for the greatest possible crush protection for walk-in systems.

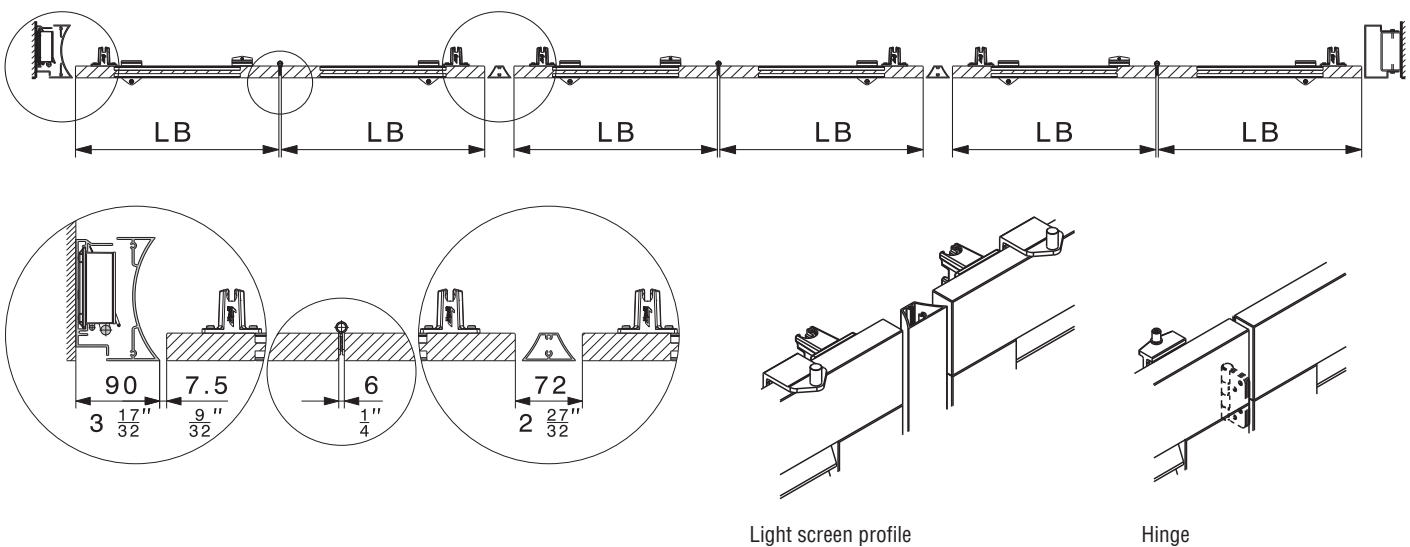
The economically favourable hinges and light screen profiles can be used for non-walk-in systems.

In the interest of a uniform façade appearance, however, walk-in and non-walk-in systems should not be combined.

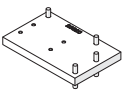
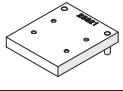
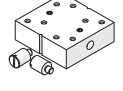
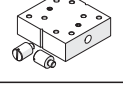

### Walk-in system



### Non-walk-in system



## Drilling jig and accessories

		code
	Drilling jig for assembly plate	23820
	Drilling jig for wind support and entry bolt	23821
	Drilling jig for hinge and suspension units, incl. threaded pins Ø 12 mm (15/32"), suitable for profiled bolt of Ø 8 mm (5/16) diameter of an espagnolette lock	15888
	Drilling jig for riveting, incl. threaded pins Ø 12 mm (15/32"), suitable for profiled bolt of Ø 8 mm (5/16) diameter of an espagnolette lock	19596
	Limit stop with setscrew, suitable for the profiled bolt of Ø 8 mm (5/16) diameter of an espagnolette lock	15899

## Accessories for service and commissioning

	code
Diagnosis box	23788
Commissioning box	23789

## Surface treatments

	code
Basic treatment fee to surface treatment, lump sum per colour	16741
Powder-coated light screen profile as per RAL code	23724
Powder-coated screen profile, two-sided as per RAL code	24064
Powder-coated screen profile, one-sided as per RAL code	24065
Powder-coated mains adapter retainer profile as per RAL code	24066
Powder-coated end profile for drive side as per RAL code	24067

## Planning / installation

Advice and installation through authorised installers.  
Please contact Hawa for further information.

## Proof of resistance to wind/climatic impact

HAWA-Frontego 30/matic was tested and certified by ift Rosenheim/Germany as follows:

- System: 6 panel, guided
- Folding sliding shutter weight: 30 kg (66 lbs.)
- Folding sliding shutter dimensions: 550 mm x 2322 mm\*  
(1'9 <sup>21</sup>/<sub>32</sub>" x 7'7 <sup>7</sup>/<sub>16</sub>" )
- System dimensions: 3620 mm x 2610 mm  
(11'10 <sup>17</sup>/<sub>32</sub>" x 8'6 <sup>3</sup>/<sub>4</sub>" )

\* The test was carried out with corrected wind loads for a maximum folding sliding shutter size of 600 mm x 3200 mm (1'11 <sup>5</sup>/<sub>8</sub>" x 10'6").

## Resistance to wind loads

- Test report 11-002875-PR01
- Class 6\*
- ift Rosenheim, 17 January 2013

\* Tested for Wind Class 8; not a wind resistance class as per product standard.

## Resistance to dynamic wind loads

- Test report 11-002875-PR01
- Angle of incidence 90°, shutters closed: 35 m/s (approx. 126 km/h = approx. 78 miles/h)\*
- Angle of incidence 0°, shutters open: 35 m/s (approx. 126 km/h = approx. 78 miles/h)\*
- ift Rosenheim, 17 January 2013

\* Maximum wind speed at the test institute.

## Wind classes

Wind class	1	2	3	4	5	6	[8] <sup>1</sup>
Wind speed in m/s	9,0	10,7	12,8	16,7	21,0	25,6	35,0
Wind speed in km/h	32,5	38,5	46,0	60,0	76,0	92,0	126,0
Rated test pressure in accordance with SN EN 13659 N/m <sup>2</sup>	50	70	100	170	270	400	750
Safety test pressure in N/m <sup>2</sup>	75	100	150	250	400	600	1125
Wind strength in accordance with Beaufort	5	6	7	8	9	10	12

<sup>1</sup> Not a wind resistance class as per product standard.  
Certified by ift Rosenheim.

## Functionality test under climatic impact

- Test report 11-002875-PR01
- Stress test 1: 5 cycles -20 °C / +60 °C
- Stress test 2: 5 cycles room temperature / +70 °C (irradiation)
- ift Rosenheim, 17 January 2013

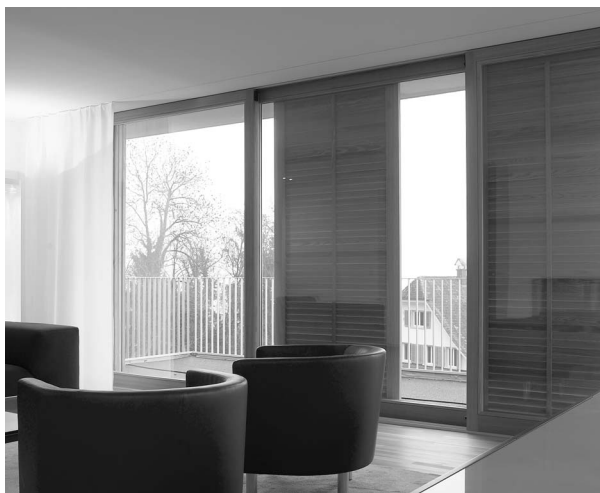
## Test in accordance with VFF pamphlet KB.01

Hardware system for power-operated folding sliding shutters in accordance with VFF pamphlet KB.01.

- Test report 13-001578-PR02
- Protection class 3 suitable for uses in accordance with VFF pamphlet KB.01
- ift Rosenheim, 7 October 2013







## New design options for façades:

### HAWA-Aperto 60/H for stackable wooden sliding shutters up to 60 kg (132 lbs.).

#### The principle

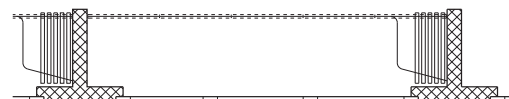
No matter how beautiful sliding hardware may be, it can at times be desirable to see slightly less of it. This is where HAWA-Aperto 60/H fits in perfectly. The system closes flush to provide a smooth cover over large glazed areas, allowing the shutters to be stacked away with ease and elegance. They offer no working surface for the wind when stacked parallel to the façade. However, they can also be stacked at a space-saving 90° to the running direction, for instance in a balcony alcove. HAWA-Aperto 60/H is tremendously flexible and thus virtually predestined for individual designs and special solutions. Please feel welcome to contact us – we will be pleased to help you to implement your ideas.

#### The benefits

- The first system on the market of parallel or 90° stacking wooden sliding shutters
- Provides shade for even the broadest window frontages
- Installations present a flush front when closed
- Excellent running characteristics, shutters can be moved individually and positioned anywhere
- Flexible, individual and durable design using corrosion-resistant materials



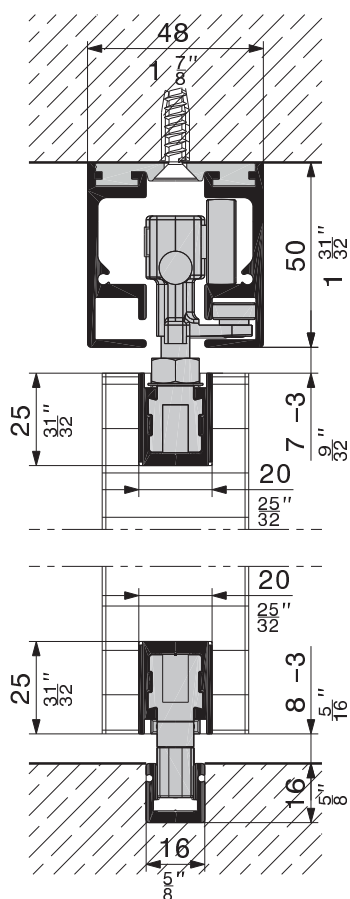
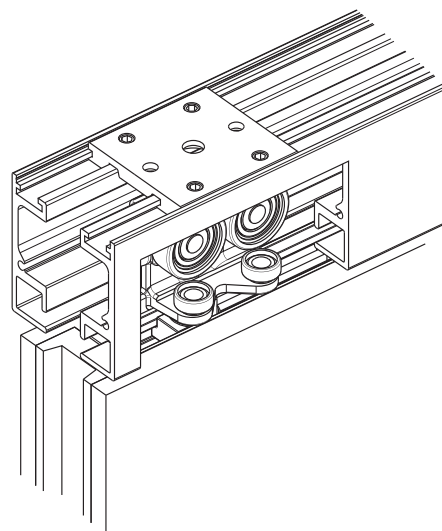
Example stacking parallel to the slide axis:  
Optimal space utilisation.



Example stacking 90° to the slide axis:  
The shutters run in front of the parapet and provide shade on the balcony.



Subject to modification. Metric specifications are exact. Inches are approximate.



Subject to modification. Metric specifications are exact. Inches are approximate.

## 1. General information

- 1.1 These GTC govern all contractual relationships with Hawa AG, Mettmenstetten, Switzerland (Hawa) and form an integral part of all such contractual relationships. Hawa does not accept any contrary or deviating business conditions of the contracting partner.
- 1.2 Oral agreements must be confirmed in writing to be valid.
- 1.3 Third parties who are not a contracting party do not have any claim to the application of any provisions of these GTC.
- 1.4 If individual provisions of these GTC should be declared invalid or unenforceable in part or in whole by the authorities in charge, the remaining provisions or the remainder of the questionable provisions of these GTC will not be affected.

## 2. Deliveries

- 2.1 Orders are only binding on Hawa if they are confirmed in writing by Hawa. If no specific delivery dates are agreed for deliveries and services, Hawa provides the deliveries and services within the scope of its normal business operations.
- 2.2 Dates and deadlines for deliveries and services are only binding for Hawa if they are agreed in writing and confirmed in a binding manner by Hawa. Hawa can only meet the agreed dates and deadlines if all documents, releases and other obligations of the contracting partner are delivered and performed on time. If this is not the case, all dates and deadlines will be extended appropriately.
- 2.3 If Hawa fails to meet agreed dates and deadlines for deliveries and services for reasons for which Hawa is responsible, the contracting partner must extend Hawa's deadline for the performance of its obligations by a suitable period of time. Within this extended deadline, Hawa can withdraw from the contract without becoming liable for any payments. If Hawa does not withdraw from or fulfil the contract within the extended deadline, the contracting partner may withdraw from the contract and request the reimbursement of any payments already made. Any further claims by the contracting partner, in particular claims arising from indirect or third-party damage, are excluded.
- 2.4 Hawa is entitled to make partial deliveries. If the contracting partner is in arrears with its payments, Hawa is entitled to hold back any other deliveries and services agreed with the contracting partner until all outstanding amounts have been paid and sufficient collateral has been provided for future deliveries and services.
- 2.5 Deliveries are made ex warehouse Hawa at the cost and risk of the contracting partner. Goods can only be returned with the express prior approval of Hawa. The cost of transporting and processing returned goods (incoming goods inspection including packaging, storage, etc.) will be borne by the contract partner.
- 2.6 The delivery terms are interpreted in accordance with Incoterms 2010 (International Commercial Terms), of the International Chamber of Commerce (ICC), unless agreed otherwise with the contracting partner.

## 3. Prices and payment terms

- 3.1 Price agreements, agreements on discounts and rebates, etc. are only binding for Hawa if they have been agreed in writing. Otherwise the prices set out in Hawa's current price list or in the order confirmations apply. These prices are expressed in Swiss francs, unless expressly agreed otherwise and confirmed in writing.
- 3.2 Hawa reserves the right to invoice a proportion of the freight charges. Freight and postage for express deliveries, deliveries by post and direct deliveries are charged in full. Any taxes and duties are passed on to the contracting partner. Hawa reserves the right to charge packaging at cost price; any requests for special packaging are charged separately.
- 3.3 Invoices must usually be paid net within 30 days. Payment is considered to have been made when the outstanding amount is credited to Hawa's account. If the contracting partner is in arrears with a payment, Hawa may, without issuing a reminder, charge interest on arrears from the 31st day following the invoice date at the interest rate charged by the business banks on current account overdrafts but at least 4% more than the current discount rate applied by the Swiss National Bank.
- 3.4 Payments made by the contracting partner are first credited to the oldest outstanding invoices. If costs and interests have already accrued, payments by the contracting partner are first credited to the costs, then to the interest and finally to the outstanding invoices. Hawa's claims may only be set off against counterclaims of the contracting partner with Hawa's consent or on the basis of a final and absolute court judgement.

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## 4. Reservation of ownership

- 4.1 The delivered goods remain the property of Hawa until the payment of all Hawa's claims against the contracting partner (including all current account balance claims). If orders are combined, the ownership reservation also applies to the value of the new goods.
- 4.2 The contracting partner may process and sell the goods subject to the ownership reservation as usual. The claim arising from the resale or for any other legal grounds is assigned to Hawa as collateral under these GTC.
- 4.3 If third parties seize the goods under ownership reservation, the contracting partner must point out that these goods belong to Hawa and inform Hawa of the seizure.
- 4.4 If the contracting partner is in arrears with a payment, Hawa is entitled to take back the delivered goods. The taking back of the goods by Hawa does not constitute a withdrawal from the contract and does not release the contracting partner from the obligation to fulfil its contractual duties.

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## 5. Product performance, duties to inform and instruct

- 5.1 If the product performance is not defined in Hawa's current catalogues, brochures, performance descriptions, etc., the requirements that must be met by the individual products must be agreed with Hawa in writing.
- 5.2 The contracting partner notes that adequacy of the products depends on many different factors and undertakes to consult the applicable planning and installation manuals.
- 5.3 In fulfilment of its duties to provide information and instruction, Hawa provides its contracting partners (usually specialist dealers, architects, planners, advisors, processors, etc.) with its catalogues, brochures, planning and installation manuals, maintenance manuals, factory-level advice and training.
- 5.4 Contracting partners are obliged to take note of Hawa's product information and in particular to order all manuals from Hawa and, if applicable, make these manuals available to processors and users.

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## 6. Warranty of title and quality, liability

- 6.1 Hawa warrants that the products do not violate the intellectual rights of any third parties.
- 6.2 The contracting partner must examine deliveries and services for defects immediately upon receipt. Hawa must be notified of any complaints without delay.
- 6.3 Hawa warrants flawless performance of the products delivered by Hawa and the durability of all parts except for parts subject to wear and tear for two years from the transfer of risk. The warranty does not apply to damage that arises from natural wear and tear, improper use, non-compliance with installation and maintenance manuals, changes to the delivered goods or replacement parts that do not meet Hawa's original specifications.
- 6.4 Hawa may request the contracting partner to return parts that are truly defective to Hawa at the contracting partner's cost and risk. Defects to part of a delivery do not entitle the contracting partner to refuse or return the whole delivery.
- 6.5 If the complaints are justified, the contracting partner is entitled to the improvement (repair) or replacement of the damaged part (as decided by Hawa). Hawa grants the same warranty as for the first delivery to any repairs or replacements, but this warranty is only valid for 6 months from the date of acceptance of the repairs or receipt of the replacement delivery.
- 6.6 Hawa expressly excludes any further liability, regardless of its legal basis, to the extent that this is possible under the law. This applies in particular to indirect and third-party damage.

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## 7. Applicable law, place of jurisdiction

- 7.1 Swiss law applies exclusively to all contractual agreements concluded with Hawa. The registered office of Hawa is the exclusive place of jurisdiction for all disputes arising from such contractual agreements.

The provisions of the UN Convention on the Sale of Goods are expressly excluded.





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## HAWA-Productfinder

The HAWA-Productfinder offers not only prompt assistance when searching for the best sliding solution but also an abundance of other information. Downloading brochures, photos, assembly instructions and drawings from the integrated and extensive Download Zone could not be more convenient.

### Full information

#### Documents

- [Order information](#)
- [Planning & installation](#)
- [Calculation aid](#)
- [Certificates](#)
- [Prospectus](#)
- [Tender invitation texts](#)

#### Links

- [Supply sources](#)
- [References](#)
- [Press centre](#)
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#### Download zone

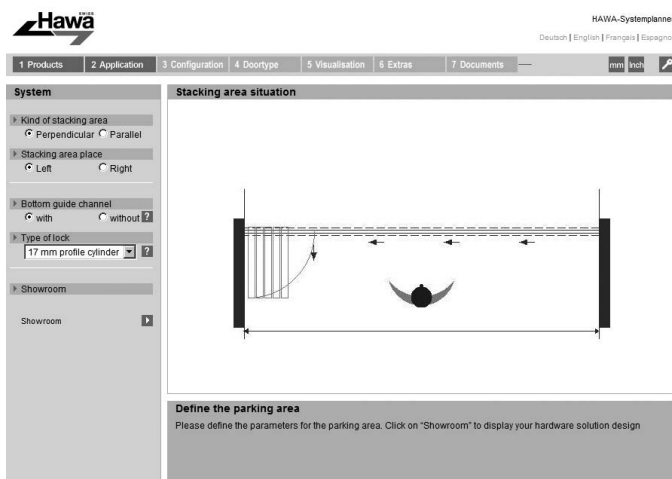
- [dxf](#)
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- [Accessories](#)
- [Images](#)

#### Only for distribution partners

- [VIP room](#)
- [Prices](#)

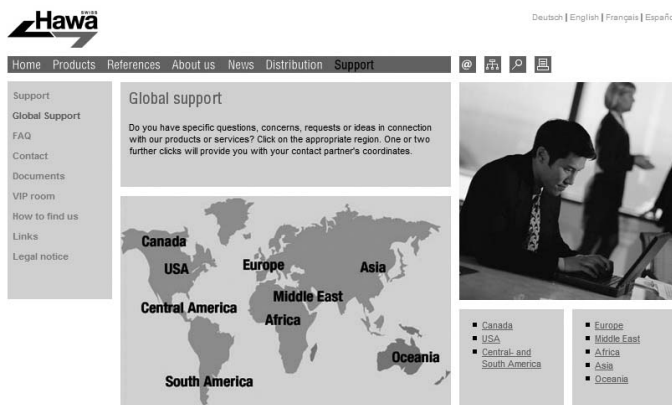
## HAWA-Systemplanner

Use the HAWA-Systemplanner to put sliding solutions together and automatically visualise them. You can generate CAD drawings, bills of materials and processing lists per mouse-click.



## Global Support

Do you have specific questions, concerns, requests or ideas in connection with our products or services? You can find your contact partner's coordinates under Support – Global Support.







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