

## Transparency through complete integration

**Hardware system for all-glass sliding doors (ESG/VSG) with concealed suspension, weighing up to 150 kg (330 lbs.).**

### Description

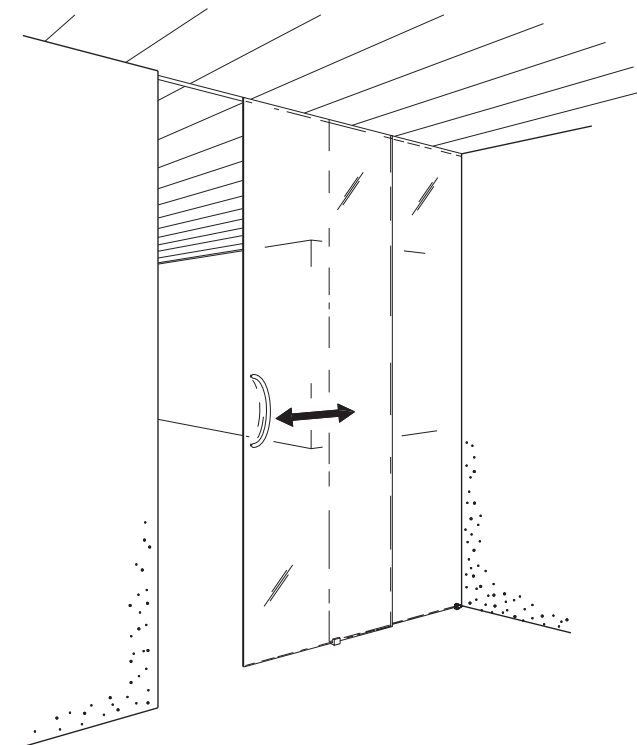
HAWA-Puro 100-150: fascinating aesthetic appeal, smooth and easy sliding, and exemplary ease of installation. There are many reasons why sliding solutions incorporating HAWA-Puro are so pleasing. High-quality ball bearing technology built into the system's trolleys allows you to slide doors weighing up to 150 kg (330 lbs.) smoothly and quietly along anodised top tracks. And assembly is made simple by benefits such as punctiform, rattle-proof, floor-mounted guides, centric glass suspension and the new, patent-pending wedge suspension. A further plus are removable additional profiles for quick and easy dressing and integration of fixed elements made of glass, wood or other materials.

### Applications

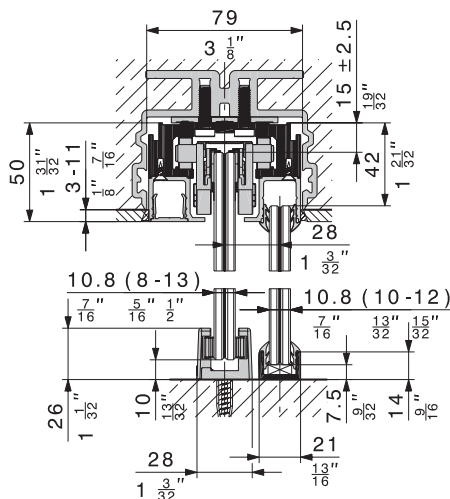
Wherever glass/glass or glass/wood combinations are used as room partitioning and design elements, not only in hotels, restaurants, conference rooms and administration buildings, but also for private interior design, especially in lofts with suspended ceilings.

### Features of the HAWA-Puro 100-150

- Maximum door weight 4-wheels, 100 kg (220 lbs.)
- Maximum door weight 6-wheels, 150 kg (330 lbs.)
- Minimum door width 750 mm (2'5  $\frac{17}{32}$ " )
- Trolleys with high-quality ball bearing technology
- Glass retention and wedge suspension technology integrated in the top track
- Can be combined with inset profile system HAWA-Adapto 100-150/P
- Ceiling joint profiles for suspended lightweight ceilings
- Form-fitting suspension of glass doors in the slide axis
- Additional profiles removable from below
- Glass thickness sliding door  
ESG: Toughened safety glass 8/10/12/12.7 mm ( $\frac{5}{16}$ " /  $\frac{13}{32}$ " /  $\frac{15}{32}$ " /  $\frac{17}{32}$ " )  
VSG: Laminated safety glass 8-13 mm ( $\frac{5}{16}$ " -  $\frac{17}{32}$ " )
- Glass thickness stationary glass  
ESG/VSG: 10-12 mm ( $\frac{13}{32}$ " -  $\frac{15}{32}$ " ) [with silicone up to 13 mm ( $\frac{17}{32}$ " )]

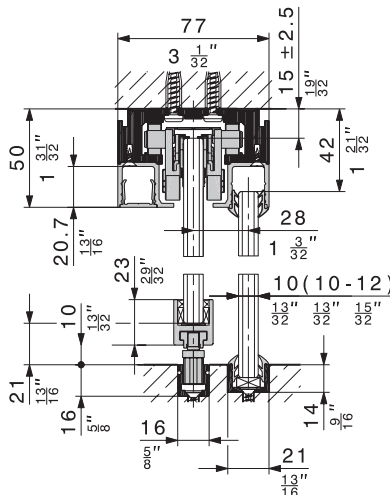


Integration in concrete ceilings



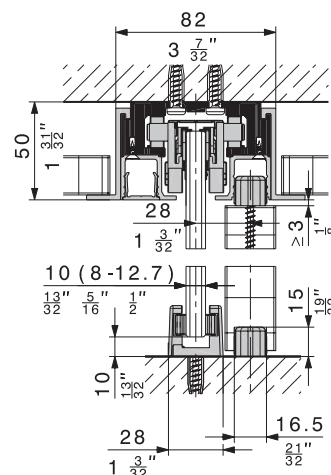
Two-part, rattle-proof floor guide and stationary element in a continuous surface-mounted floor profile.

Surface-mounted top track installation



Glass retention profile with rattle-proof floor guide and stationary glass in a continuous sunken floor profile.

Integration in suspended ceilings, with ceiling lug profiles

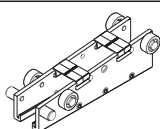
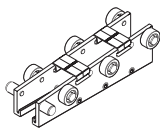

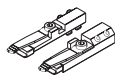




Two-part, rattle-proof floor guide and stationary element made of wood or other materials.


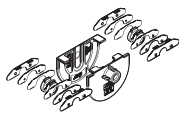
## HAWA-Puro 100-150, set without top track

	code
HAWA-Puro 100, set for 1 glass sliding door, ESG/VSG	21141
HAWA-Puro 150, set for 1 glass sliding door, ESG/VSG	21111
For two-panel sliding doors please order two sets for single doors.	

## Set comprising

		21141	21111	code
	Four-wheeled trolley, with plastic-tyred ball bearing wheels	2		21190
	Six-wheeled trolley, with plastic-tyred ball bearing wheels		2	21191
	Suspension wedges for glass mounting, set for 1 door	1	1	21193
	Track stop, 1 pair	2	2	21319
	Set of screws for mounting U-profile, 3,5 x 9,5 mm ( $\frac{5}{16}$ x $\frac{3}{8}$ ), set of 25 pieces	1	1	21128
	Hex key, 3 mm ( $\frac{1}{8}$ ) short version	1	1	10785

## Glass fixing parts

		glass thickness mm/inch	code
	Glass fixing parts for 1 sliding door, ESG	8 ( $\frac{5}{16}$ )	21194
		10 ( $\frac{13}{32}$ )	21195
		12 (12,7) ( $\frac{15}{32}$ / $\frac{1}{2}$ )	21196
	Glass fixing parts for 1 sliding door, VSG, incl. single use drilling jig	8,0-8,4 ( $\frac{5}{16}$ - $\frac{11}{32}$ )	21481
		8,5-10,4 ( $\frac{11}{32}$ - $\frac{13}{32}$ )	21390
		10,5-13,0 ( $\frac{13}{32}$ - $\frac{17}{32}$ )	21197

## Possible combinations

Flexible combination options with one-sided stationary elements in wood or glass and two-sided sliding door pockets in wood.



Stationary element in glass



Stationary element in wood



Stationary element as pocket in wood



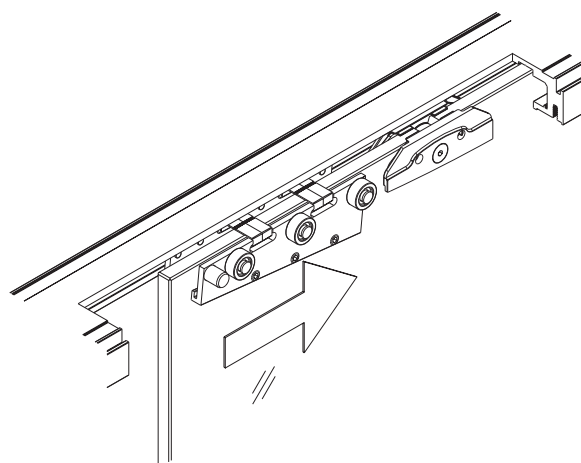
Two stationary elements and one sliding door



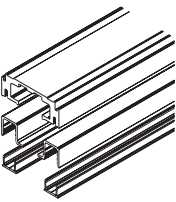
Two stationary elements and two sliding doors

## Wedge suspension for glass sliding doors

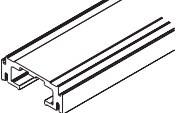


The new, patent-pending wedge suspension sets new standards with regard to the ease and speed of fitting and adjusting the height of sliding glass doors.



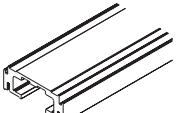


## Top track sets to HAWA-Puro 100-150

Caution: - Hole positions vary - Minor differences in colour are possible		mm/inch	code
	Top track set, alu plain anodized, predrilled, incl. u-profile and cover profile, alu plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	20864
		3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	20863
		6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21123
	Top track set, alu plain anodized, predrilled, incl. u-profile and cover profile, alu unanodized	6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	20857
	Top track set, alu stainless steel effect, brushed, predrilled, incl. u-profile and cover profile, alu stainless steel effect	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	20867
		3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	20866
		6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	20182

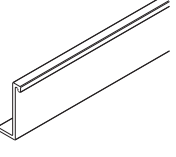
## Top track sets comprising

		mm	20864	20863	21123	20857	20866	20182	code
	Top track, predrilled, alu,	2500	1						21142
		3500	1						21143
	plain anodized	6000		1	1				21110
		2500				1			21317
	stainless steel effect, brushed	3500					1		21316
		6000						1	21144
	U-profile for fixing stationary section, predrilled, to top track, alu,	2500	2						21363
		3500	2						21361
	plain anodized	6000		2					21352
		6000			2				21354
	unanodized	2500				2			21364
		3500					2		21362
	stainless steel effect, brushed	6000						2	21353
	Cover profile to top track, alu	2500	2						20865
		3500	2						21230
	plain anodized	6000		2					21229
		6000			2				20855
	unanodized	2500				2			21315
		3500					2		21314
	stainless steel effect, brushed	6000						2	21283

## Top track profiles cut to size

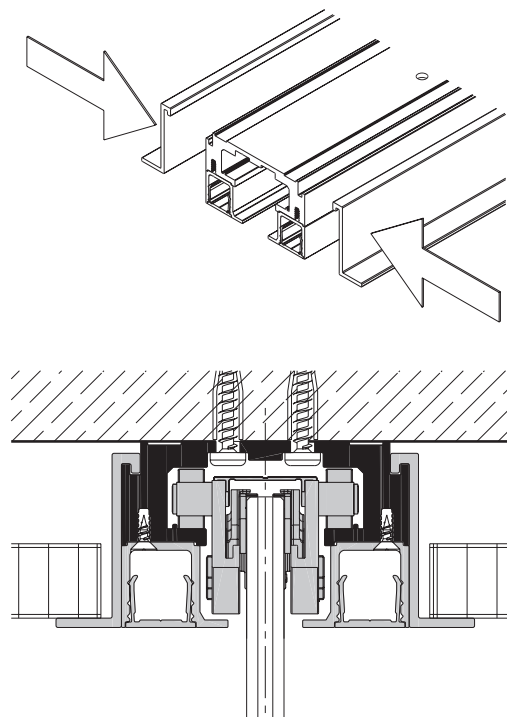
Caution: - Hole positions vary - Minor differences in colour are possible			code
	Top track, predrilled, alu, cut to size	plain anodized	21145
		stainless steel effect, brushed	21318
	U-Profile for fixing stationary section, predrilled, to top track, alu, cut to size	plain anodized	21365
		unanodized	21367
		stainless steel effect, brushed	21366
	Cover profile to top track, alu, cut to size	plain anodized	19548
		unanodized	20856
		stainless steel effect, brushed	21284

## Ceiling joint profiles

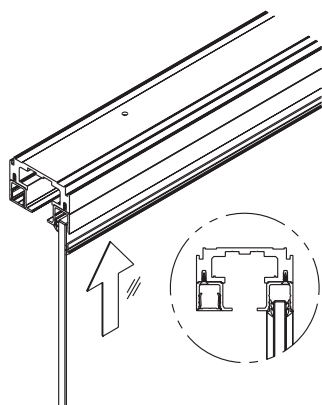
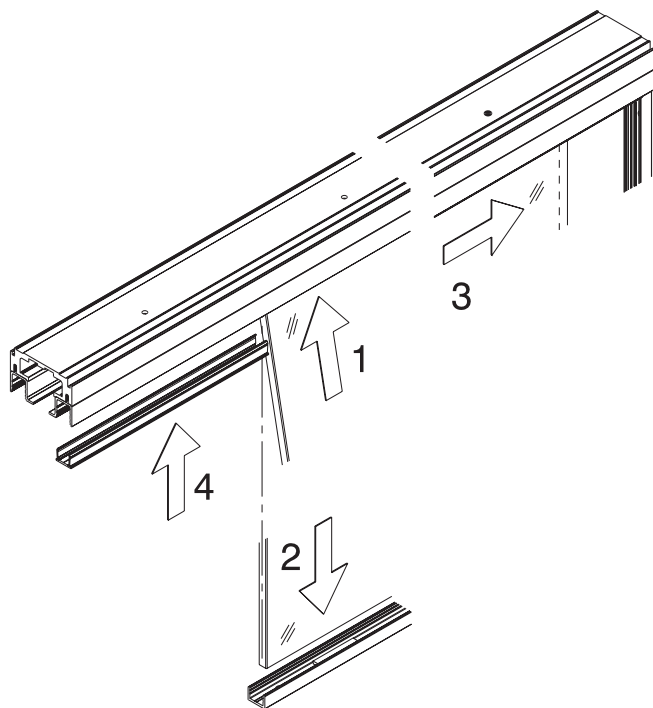
Caution: Minor differences in colour are possible		mm/inch	code
	Ceiling joint profile, alu plain anodized, to top track	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	21151
		3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	21149
		6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21250
		cut to size	21152
	Ceiling joint profile, alu unanodized, to top track	6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21037
		cut to size	21127
	Ceiling joint profile, alu, stainless steel effect, brushed, to top track	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	21321
		3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	21320
		6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21150
		cut to size	21322

## Integration in suspended ceilings

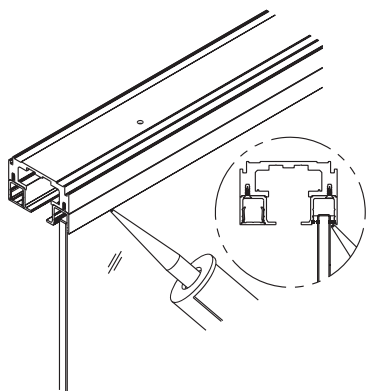
Ceiling joint profiles for top tracks enable simple designs for suspended lightweight ceilings. They are delivered as individual components. Maximum load per metre of ceiling joint profile: 15 kg/m.



## Fitting of stationary glass

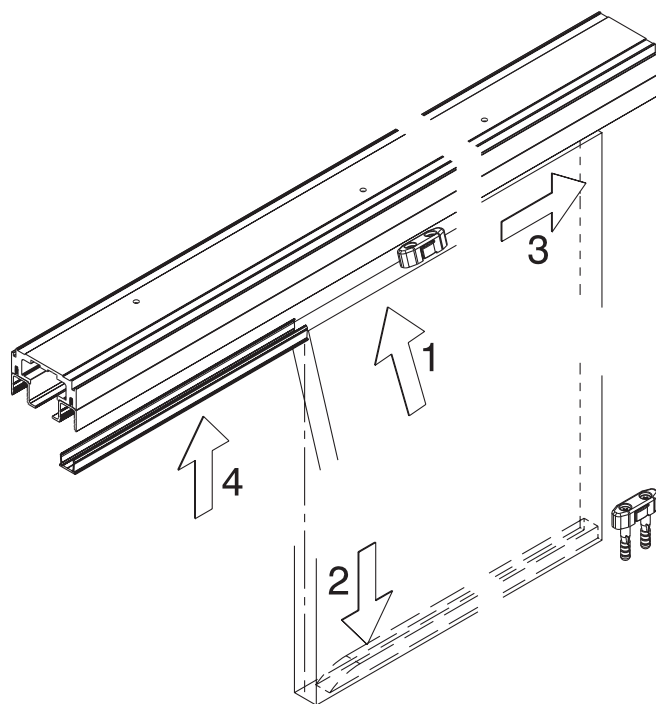


Dry glazing with the Hawa rubber profile.  
Attention:  
to be used on both sides, i.e.  
order double the amount.



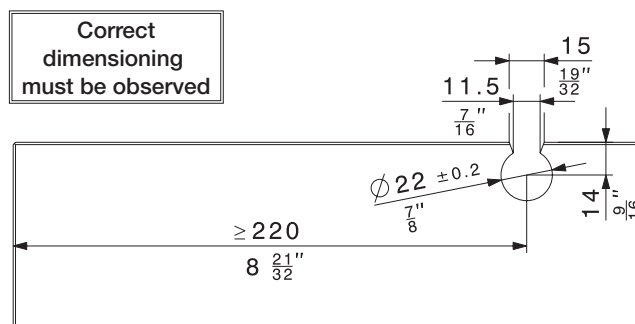
Silicone glazing provided by  
the customer.

## Fitting of stationary element in wood



## Glass cutouts for sliding door

Both toughened safety glass (ESG) and laminated safety glass (VSG) manufactured from ESG can be used.  
VSG permissible with max. offset of 2 mm ( $\frac{3}{32}$ ).  
Please use assembly instructions number 21133 for detailed glass calculations and to order glass elements.



Sliding door

**ESG:** 8/10/12/12.7 mm

( $\frac{5}{16}$ "/( $\frac{13}{32}$ "/( $\frac{15}{32}$ "/( $\frac{1}{2}$ "))

Toughened safety glass

**VSG:** 8 - 13 mm ( $\frac{5}{16}$ " -  $\frac{17}{32}$ ")

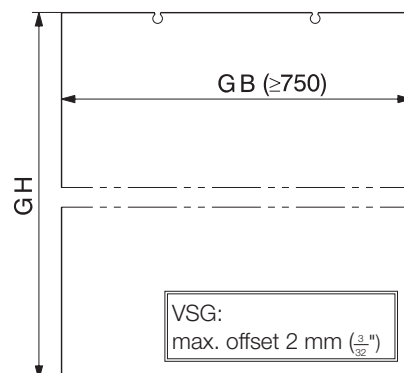
Laminated safety glass,  
manufactured from ESG

Stationary glass

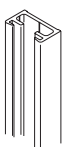

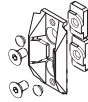

**ESG/VSG:** 10 - 12 mm

( $\frac{13}{32}$ " -  $\frac{15}{32}$ ")

(with silicone up to 13 mm)

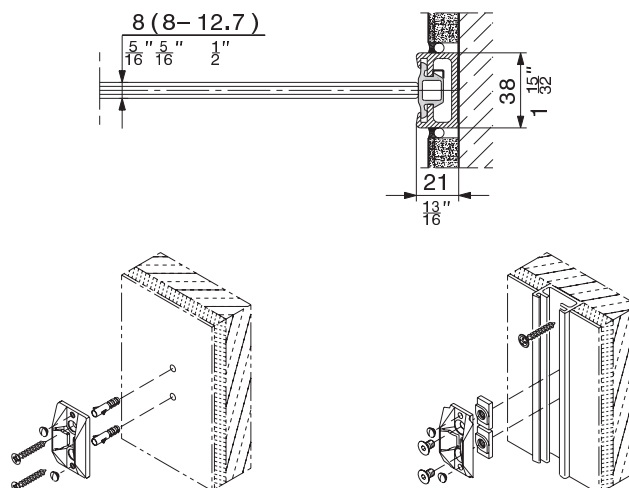


## Wall connection profile

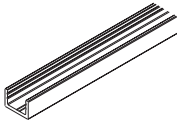

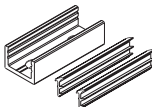
Caution: Minor differences in colour are possible.			mm/inch	code
	Wall profile, alu, undrilled	plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	17020
			3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	17021
		stainless steel effect, brushed	2500 (8'2 <sup>7</sup> / <sub>16</sub> ")	20119
			3500 (11'5 <sup>13</sup> / <sub>16</sub> ")	20120
	Seal profile, black, for wall profile	roll 2500 (8'2 <sup>7</sup> / <sub>16</sub> ")		16452
		roll 3500 (11'5 <sup>13</sup> / <sub>16</sub> ")		16453
	Centering assembly black for all glass sliding doors, to wall profile			18663
	Centering assembly grey for all glass sliding doors			18619

## Wall connection profile

The ideal wall connection profile for all-glass sliding doors with unprotected glass edges.

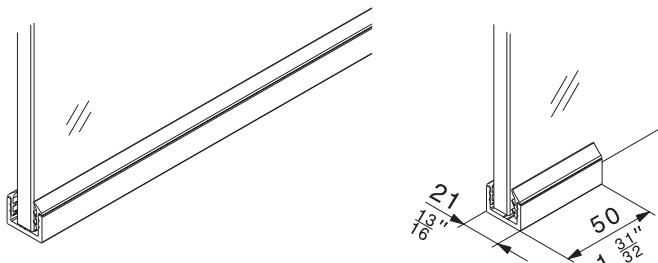


## Bottom, wall and rubber profile to fixed glass

Caution: - Hole positions vary - Minor differences in colour are possible			mm/inch	code
	Bottom/wall profile to fixed glass, alu, predrilled	plain anodized	4000 (13'1 <sup>1</sup> / <sub>2</sub> " )	19549
			6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	19561
			cut to size	20067
		stainless steel effect, brushed	4000 (13'1 <sup>1</sup> / <sub>2</sub> " )	21285
			6000 (19'8 <sup>7</sup> / <sub>32</sub> " )	21286
		cut to size	21287	
	Rubber profile, black, to fixed glass		roll of 10 m (32'9 <sup>23</sup> / <sub>32</sub> " )	19846
	Bottom/wall glass retainer piece, alu, predrilled, with rubber profile	plain anodized	50 mm (1 <sup>31</sup> / <sub>32</sub> " )	20274
		stainless steel effect, brushed	50 mm (1 <sup>31</sup> / <sub>32</sub> " )	21288

## Bottom/wall profile to fixed glass

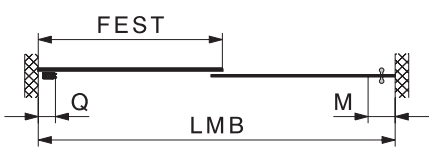
The retention profile provides stability for the stationary glass element, whether mounted on or sunk into the floor. If the load is low, an aesthetically pleasing glass holder of only 50 mm length can be used instead of the continuous floor or wall profile.



## Nominal order length for straight bottom profile


Approximate lengths for ordering floor profiles for stationary glass elements can be calculated as follows:

## Nominal order length for straight bottom profile

Installation	length incl. trimming reserve
	$\frac{LMB - M + Q + 30}{2}$
LMB = Entire opening width M = Door grip (incl. safety clearance) Q = Bottom door stopper [80 mm (3 <sup>5</sup> / <sub>32</sub> ")] Fest = Length of bottom profile	

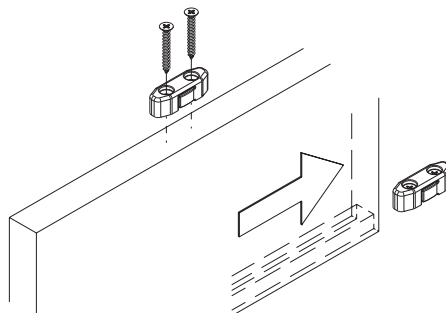
Refer to assembly instructions for further calculation formulas.

## Fixing set for stationary wood


		code
		21346
Fixing set for stationary wood part, black plastic, set of 4 pieces		

## Fixing set for stationary wood

The fixing set is needed to secure stationary elements made of wood or other materials. Fixing brackets are screwed to the top of the stationary element and to the floor.

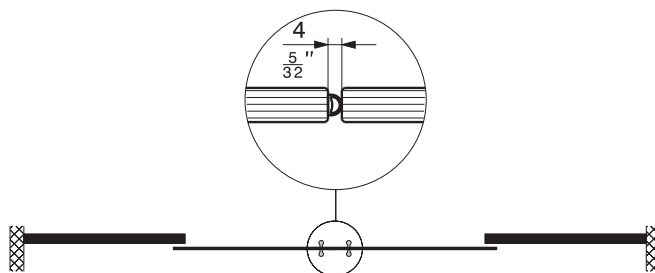


### Rubber profile for glass edge protection

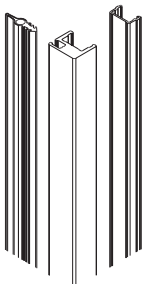
		roll of	code
	Rubber profile self-adhesive, for 8/10 mm ( $\frac{5}{16} \times \frac{13}{32}$ ") glass thickness, black, glass distance 4 mm ( $\frac{5}{32}$ ")	5 m (16'4 $\frac{27}{32}$ ")	19442
		10 m (32'9 $\frac{23}{32}$ ")	19443
		50 m (164' $\frac{1}{2}$ ")	19444
	Rubber profile self-adhesive, for 8/10 mm ( $\frac{5}{16} \times \frac{13}{32}$ ") glass thickness, translucent, glass distance 4 mm ( $\frac{5}{32}$ ")	5 m (16'4 $\frac{27}{32}$ ")	19445
		10 m (32'9 $\frac{23}{32}$ ")	19446
		50 m (164' $\frac{1}{2}$ ")	19447

### Rubber profile for glass edge protection

Self-adhesive rubber profile fitted along the glass edge minimises draughts and buffers impacts between adjacent all-glass sliding doors.

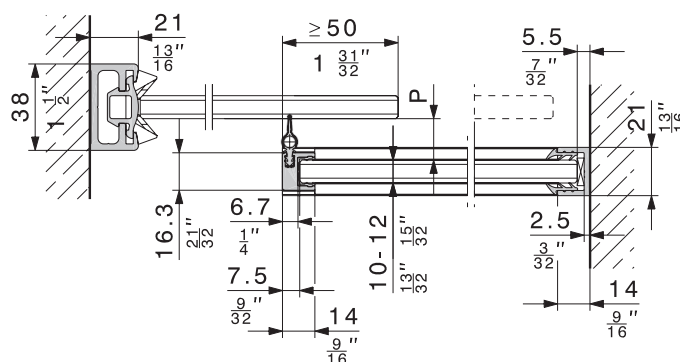


### Vertical sealing profile

Caution: Minor differences in colour are possible.			mm/inch	code
	Vertical seal 14/17, alu, for all-glass sliding doors with fixed glass, set for glass distance 14-17,5 mm	plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	20283
			3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	20284
		stainless steel effect, brushed	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	21290
			3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	21291
	Vertical seal 18/19, alu, for all-glass sliding doors with fixed glass, set for glass distance 18-19,5 mm	plain anodized	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	21246
			3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	21247
		stainless steel effect, brushed	2500 (8'2 <sup>7</sup> / <sub>16</sub> " )	21335
			3500 (11'5 <sup>13</sup> / <sub>16</sub> " )	21336

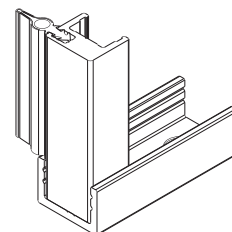
### Vertical sealing profile

The vertical sealing profile is effective against draughts. The slim aluminium profile affixes frontally to glass elements 10 or 12 mm ( $\frac{13}{32}$ " /  $\frac{15}{32}$ ") thick using silicone adhesive. The two-part rubber seal is recessed into the profile and offers three advantages: it slides almost noiselessly, creates minimal resistance to motion and, compared to conventional brush seals, retains its impeccable looks throughout years of service.



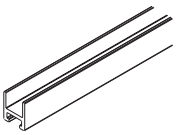
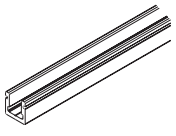

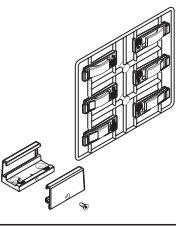

### Glass distance "P" for vertical sealing profile

system	glass thickness sliding door	vertical seal	glass thickness "P"
HAWA-Puro 100–150	11-13 mm $\left(\frac{7}{16}'' - \frac{17}{32}''\right)$	14/17	<b>14-17,5 mm</b> $\left(\frac{9}{16}'' - \frac{11}{16}''\right)$
	8-10 mm $\left(\frac{5}{16}'' - \frac{13}{32}''\right)$	18/19	<b>18-19,5 mm</b> $\left(\frac{23}{32}'' - \frac{25}{32}''\right)$



The vertical sealing profile is inserted into the floor/wall profile for stationary glass elements.

## Floor-mounted guides/Bottom door stop

Caution: Minor differences in colour are possible.			mm/inch	code
	Glass retention profile for floor guide, alu, for glass thickness 8-13 mm ( $\frac{5}{16}$ " - $\frac{17}{32}$ " )	plain anodized	6000 (19'8 $\frac{7}{32}$ " )	21402
			cut to size	21404
		stainless steel effect, brushed	6000 (19'8 $\frac{7}{32}$ " )	21405
			cut to size	21403
	Bottom guide channel, alu, predrilled 16x16x3 mm ( $\frac{5}{8}$ " x $\frac{5}{8}$ " x $\frac{1}{8}$ " )	plain anodized	3500 (11'5 $\frac{13}{16}$ " )	18864
			6000 (19'8 $\frac{7}{32}$ " )	18216
			cut to size	18477
	Floor guide, screw mounting, rattle proof, alu, for glass retention profile	plain anodized		21406
		stainless steel effect, brushed		21159
	Floor guide, screw mounting, rattle proof, 2-part, for glass thickness 8-13 mm ( $\frac{5}{16}$ " - $\frac{17}{32}$ " )	dull chromium finish		21029
		stainless steel effect, brushed		20858
	Bottom door stop with centering assembly	dull chromium finish		20773
		stainless steel effect, brushed		21473

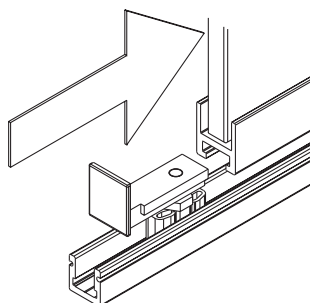
## Safety lock

Thanks to its combined aesthetic and security appeal, the HAWA-Toplock for all-glass sliding doors makes the ideal solution.

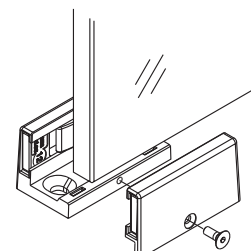
Details see pages 14-17.

## Floor guide variants

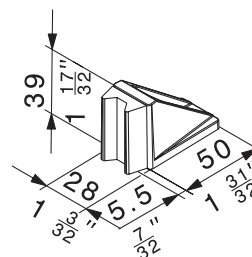
Doors can travel free of play through a continuous two-part floor guide. We recommend the continuous guide profile for doors wider than approx. 1500 mm to achieve optimum stability and best possible sliding properties. Furthermore, sliding doors should be stopped simultaneously at the top and bottom. The bottom door stopper does the job quietly and is gentle to the hardware.



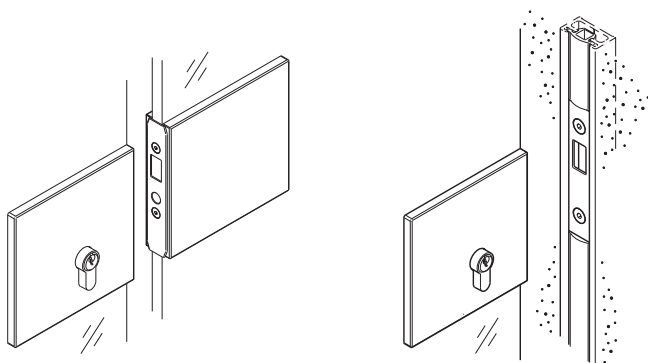
Rattle-proof floor guide, continuous



Rattle-proof floor guide, 2-part



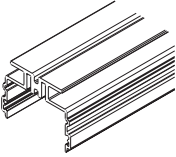
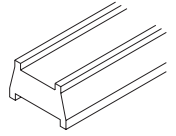
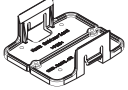

Bottom door stop with centering assembly



## HAWA-Adapto 100-150/P for HAWA-Puro 100-150

	mm/inch	code
HAWA-Adapto 100-150/P, inset profile for concrete surface, set for HAWA-Puro 100-150	2500 (8'2 $\frac{7}{16}$ " )	21446
	3500 (11'5 $\frac{13}{16}$ " )	21447
	6000 (19'8 $\frac{7}{32}$ " )	21448

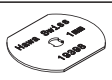




## Set comprising

		mm/inch	21446	21447	21448	code
	HAWA-Adapto 100-150/P inset profile for concrete surface, alu	2500 (8'2 $\frac{7}{16}$ " )	1			21157
		3500 (11'5 $\frac{13}{16}$ " )		1		21156
		6000 (19'8 $\frac{7}{32}$ " )			1	21154
	HAWA-Adapto 100-150/P polystyrene insert	1000 (3'3 $\frac{3}{8}$ " )	2	3	6	21399
		500 (1'7 $\frac{11}{16}$ " )	1	1		21400
	HAWA-Adapto 100-150/P assembly clips, plastic black		4	5	7	21350
	HAWA-Adapto 100-150/P cover plate, plastic grey		2	2	2	21343

## Fitting sets to HAWA-Adapto 100-150/P

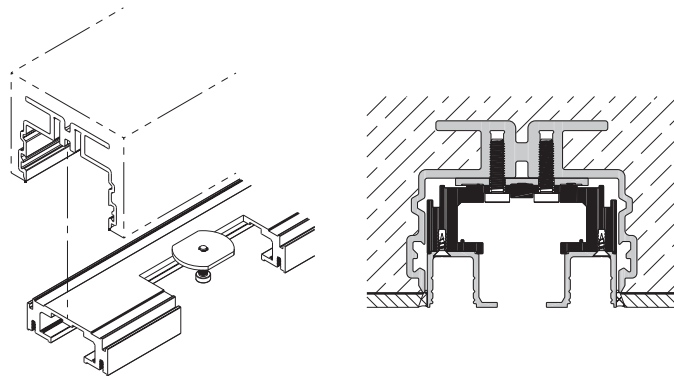
	mm/inch	code
Fitting sets to HAWA-Adapto 100-150/P	to 2500 (8'2 $\frac{7}{16}$ " )	21323
	2501 to 3500 (8'2 $\frac{15}{32}$ " - 11'5 $\frac{13}{16}$ " )	21324
	3501 to 6000 (11'5 $\frac{27}{32}$ " - 19'8 $\frac{7}{32}$ " )	21325

## Sets comprising

		mm/inch	21323	21324	21325	code
	Distance plate, plastic	1 ( $\frac{1}{16}$ " )	4	4	5	19398
		2 ( $\frac{3}{32}$ " )	4	4	5	19399
		3 ( $\frac{1}{8}$ " )	4	4	5	19400
		5 ( $\frac{7}{32}$ " )	4	4	5	19401
	Special pan head screws, 60 x 22 mm (2 $\frac{3}{8}$ " x $\frac{7}{8}$ " ), set of 10 pieces		1	2	3	20215

## Easy installation of HAWA-Puro top tracks

The HAWA-Adapto 100-150/P profile has two screw ducts. HAWA-Puro top tracks can be attached via the screw duct with special adjustable screws (cheese head screws). Dimensional differences in the structure can be quickly and effectively levelled out by inserting spacing plates at the track ends, with additional plates in the centre for lengths of more than 3,5 m.



## Please observe when designing

The HAWA-Adapto 100-150/P profile must be fitted exactly to the shuttering.

For planning and installation purposes, please use the installation drawing code 21119.

## Planning/installation

For planning and installation purposes, please use the installation drawing code 21133.

## Order specifications

- Type and quantity of sets
- Type and quantity of glass fixing parts
- Type and quantity of top track sets
- Type and quantity of floor-mounted guides

## Optional order specifications

- Type and quantity of HAWA-Adapto 100-150/P sets
- Type and quantity of HAWA-Adapto 100-150/P fitting sets
- Type and quantity of ceiling joint profiles
- Type and quantity of bottom guide channel
- Type and length of rubber profile for glass edge protection
- Type and quantity of wall connection profile

## Order specifications stationary sections

- Type and quantity of bottom/wall profile to fixed glass
- Quantity of rubber profile to fixed glass
- Type and quantity of vertical sealing profiles
- Quantity of fixing sets for stationary wood parts