SKY**FORCE**

Fall Protections for Juliet Balconies

The System of Invisibility.
Once again sets innovative trends with the SKY**FORCE** fall protection for juliet balconies. It is the first practically invisible system application. But what is even better: It is the best and most cost-effective system application on the market. There is no system which can be mounted easier and quicker. This saves you unnecessary frustration and gives you valuable additional time and profit potential. Thanks to the "Prefabricated System",you save 45 minutes of mounting time per set.

We have consistently implemented both the quick and easy installation as well as the classical and timeless design. The fall protection can be easily installed behind the shutter guide rails with simple tools. As a matter of course, SKY**FORCE** is also compatible with any window profile: Thanks to our unrivalled and predestined Slide & Click Technique, the system can be mounted directly onto the window frame or masonry. Best of all, you can cover all glass thicknesses, heights and widths with only one profile.

Glass and Product Selection
SKY**FORCE** glass dimensions acc. to AbP. For additional special dimensions, please refer to the test certificates.

Glass width up to	Glass thickness	Glass height
1200 mm	10.76 mm	800 - 1200 mm
1400 mm	12.76 mm	500 - 1200 mm
1700 mm	16.76 mm	500 - 1200 mm
3000 mm	21.52 mm	300 - 1200 mm

Essential Features
- Easy ordering thanks to packaging sets of 500, 700, 900, 1000, 1100 and 1200 mm
- Prefabricated System, all systems are pre-assembled - Mounting advantage of up to 30 minutes per set
- Storage lengths of 5000 mm available to allow customer-made solutions
- With drainage channels
- Nearly tool-free installation
- Colour design possible according to RAL
- Suitable for plastic, aluminium wooden and metal frames
- With General Building Inspection Test Certificate AbP and BS6180
- Glass mounting from inside or outside You have the choice.

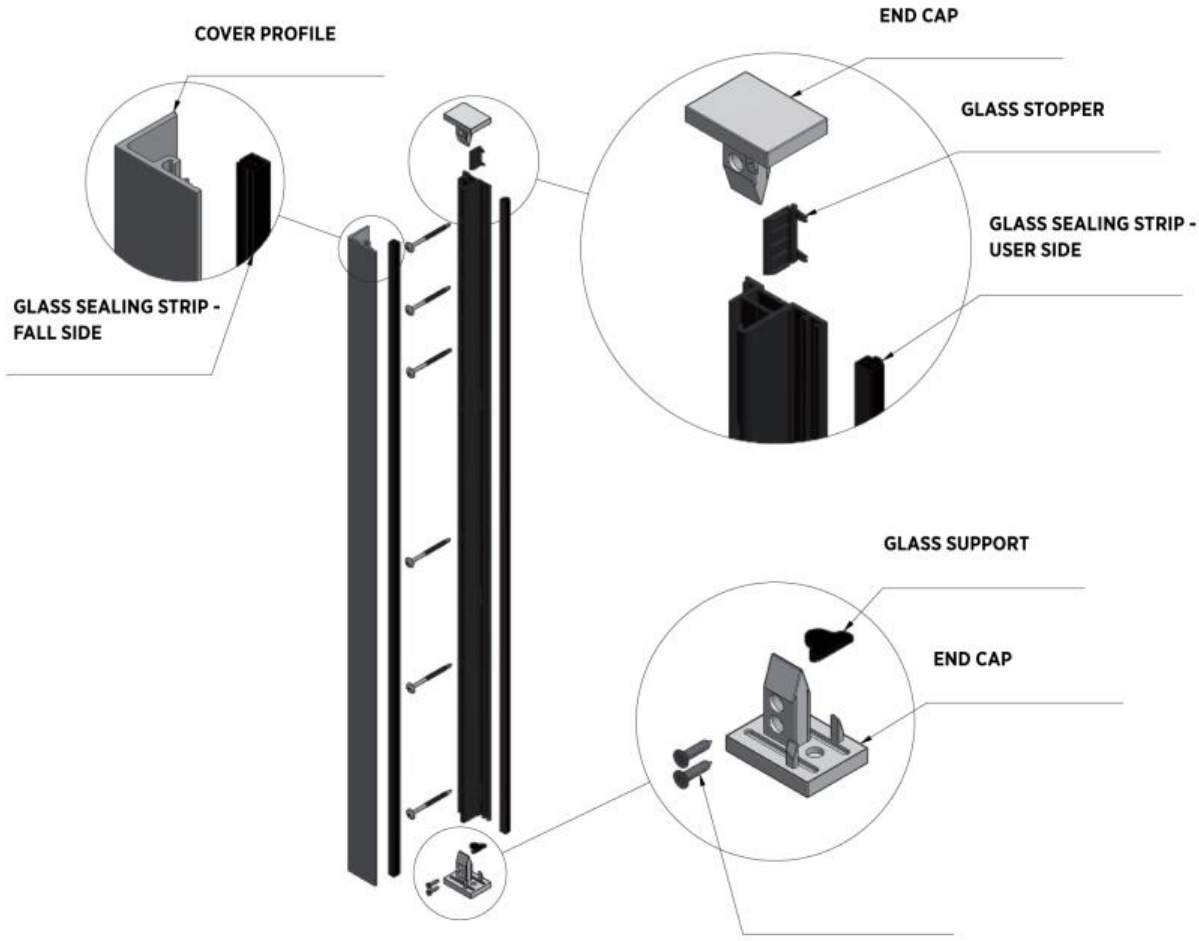
riba product selector

TESTED according to BS6180

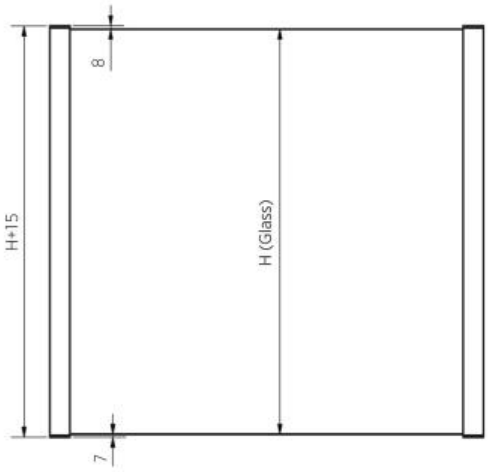
LINE LOADS UP TO 1.5kN

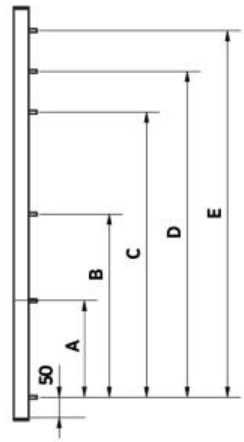
Quick and simple mounting
Different finishes
Available for different glass thicknesses, pre-assembled as set
The coolest of all names

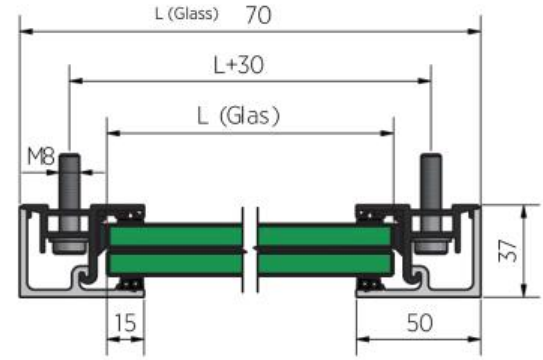
SKY**FORCE** TOP MOUNT



Glass Dimensions Skyforce Top Mount







Glas Height (H)	500 mm	700 mm	900 mm	1000 mm	1100 mm	1200 mm
A	50 mm	50 mm	133 mm	200 mm	233 mm	265 mm
B	-	100 mm	266 mm	400 mm	466 mm	535 mm
C	200 mm	400 mm	600 mm	700 mm	800 mm	900 mm
D	300 mm	500 mm	700 mm	800 mm	900 mm	1000 mm
E	400 mm	600 mm	800 mm	900 mm	1000 mm	1100 mm

Surface finish code for your Skyforce order

.10	Aluminium, mill finish
.11	Aluminium, anodised
.13	RAL glossy
.13-AG	RAL 7016
.13-TW	RAL 9016
.16	RAL structured matt
.16sb	RAL structured matt in Stealth Black colour
.18	RAL matt
.18-AG	RAL 7016
.18-TW	RAL 9016
.19	ARMOR RAL, powder coat surface protection

Juliet balcony, 2-part complete set, top mount

| See chapter "Handrails" for edge protection

Height:	**500 mm**	**700 mm**	**900 mm**	**1000 mm**	**1100 mm**	**1200 mm**
Rubber set for	Art. no.	Art. no.	Art. no.	Art. no.	Art. no.	Art. no.
10 - 11 mm	16.1005.010.xx	16.1007.010.xx	16.1009.010.xx	16.1010.010.xx	16.1011.010.xx	16.1012.010.xx
12-13.5 mm	16.1005.012.xx	16.1007.012.xx	16.1009.012.xx	16.1010.012.xx	16.1011.012.xx	16.1012.012.xx
15 mm	16.1005.015.xx	16.1007.015.xx	16.1009.015.xx	16.1010.015.xx	16.1011.015.xx	16.1012.015.xx
16 - 17.5 mm	16.1005.016.xx	16.1007.016.xx	16.1009.016.xx	16.1010.016.xx	16.1011.016.xx	16.1012.016.xx
19 mm	16.1005.019.xx	16.1007.019.xx	16.1009.019.xx	16.1010.019.xx	16.1011.019.xx	16.1012.019.xx
20 - 21.5 mm	16.1005.020.xx	16.1007.020.xx	16.1009.020.xx	16.1010.020.xx	16.1011.020.xx	16.1012.020.xx

Juliet balcony, centrepiece, top mount

Height:	**500 mm**	**700 mm**	**900 mm**	**1000 mm**	**1100 mm**	**1200 mm**
Rubber set for	Art. no.	Art. no.	Art. no.	Art. no.	Art. no.	Art. no.
10 - 11 mm	16.1505.010.xx	16.1507.010.xx	16.1509.010.xx	16.1510.010.xx	16.1511.010.xx	16.1512.010.xx
12-13.5 mm	16.1505.012.xx	16.1507.012.xx	16.1509.012.xx	16.1510.012.xx	16.1511.012.xx	16.1512.012.xx
15 mm	16.1505.015.xx	16.1507.015.xx	16.1509.015.xx	16.1510.015.xx	16.1511.015.xx	16.1512.015.xx
16 - 17.5 mm	16.1505.016.xx	16.1507.016.xx	16.1509.016.xx	16.1510.016.xx	16.1511.016.xx	16.1512.016.xx
19 mm	16.1505.019.xx	16.1507.019.xx	16.1509.019.xx	16.1510.019.xx	16.1511.019.xx	16.1512.019.xx
20 - 21.5 mm	16.1505.020.xx	16.1507.020.xx	16.1509.020.xx	16.1510.020.xx	16.1511.020.xx	16.1512.020.xx

Juliet balcony, screw-on profile, left and right

| Sales unit: 1 piece

Model SF	Aluminium black
Length	Art. no.
5000	16.9510.005.15

Juliet balcony, cover profile, left and right

| Sales unit: 1 piece

Model SF	Mill finish	Coloured
Length	Art. no.	Art. no.
5000	16.9511.005.10	16.9511.005.13/16/18

Juliet balcony, end cap, left and right

| Fixing screw 91.1140.419.30
| Sales unit: 4 pieces

Model SF	Mill finish	Plain aluminium	Coloured
	Art. no.	Art. no.	Art. no.
	16.9001.010.10	16.9001.010.11	16.9001.010.13/16/18

Juliet balcony, screw-on profile, centre

| Sales unit: 1 piece

Model SF	Aluminium black
Length	Art. no.
5000	16.1650.005.15

Juliet balcony, cover profile, centre

| Sales unit: 1 piece

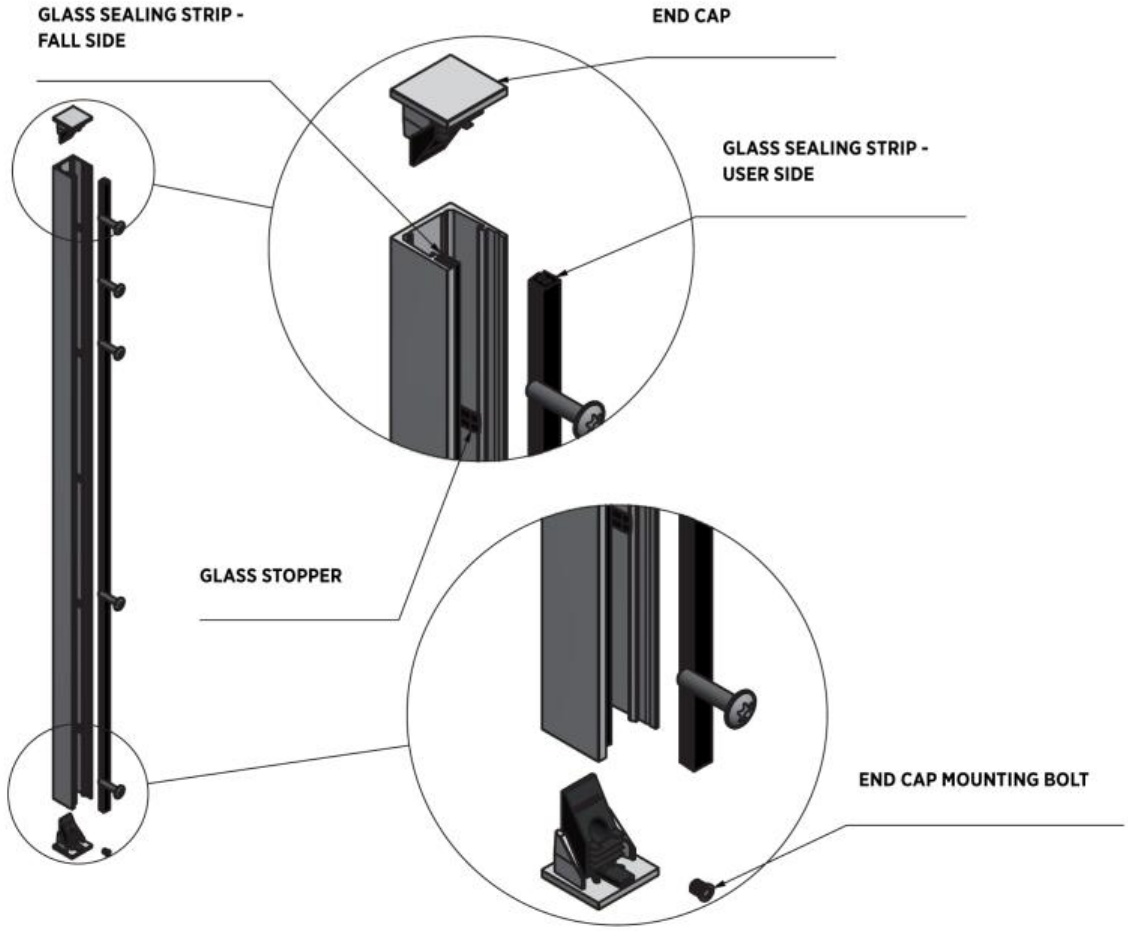
Model SF	Mill finish	Coloured
Length	Art. no.	Art. no.
5000	16.1750.005.10	16.1750.005.13/16/18

Juliet balcony, end cap, centre

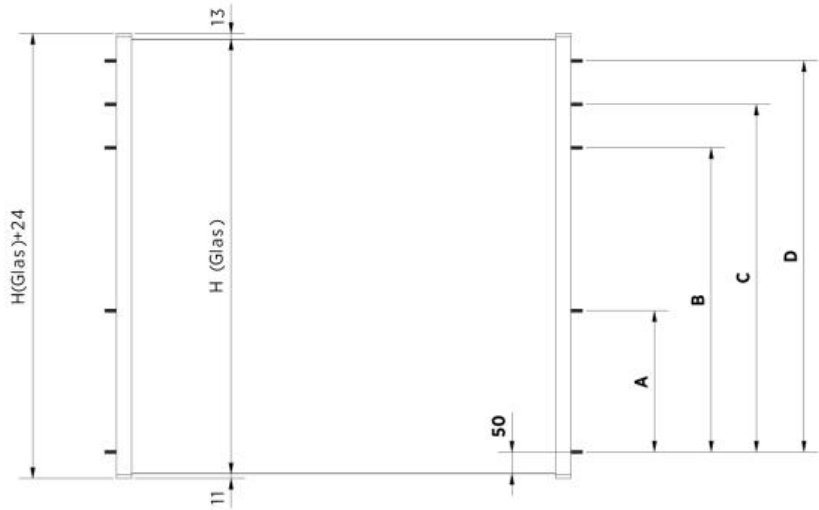
| Fixing screw 91.1140.419.30
| Sales unit: 2 pieces

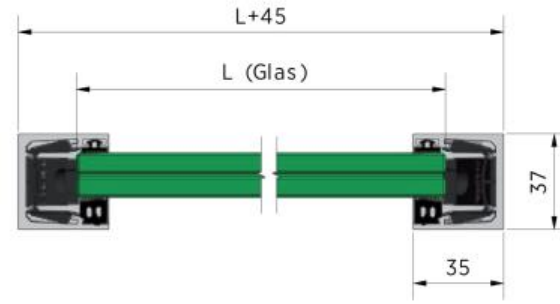
Model SF	Mill finish	Plain aluminium	Coloured
	Art. no.	Art. no.	Art. no.
	16.9001.015.10	16.9001.015.11	16.9001.015.13/16/18

SKY**FORCE** SIDE MOUNT



Glass Dimensions Skyforce Side Mount





Height (H)	500 mm	700 mm	900 mm	1000 mm	1100 mm	1200 mm
A	-	-	250	325	375	425
B	200	400	600	700	800	900
C	300	500	700	800	900	1000
D	400	600	800	900	1000	1100

Surface finish code for your Skyforce order

.10	Aluminium, mill finish
.11	Aluminium, anodised
.13	RAL glossy
.13-AG	RAL 7016
.13-TW	RAL 9016
.16	RAL structured matt
.18	RAL matt
.18-AG	RAL 7016
.18-TW	RAL 9016
.19	ARMOR RAL, powder coat surface protection

Juliet balcony, side, 2-part complete set, side mount

| See chapter "Handrails" for edge protection

Height:	**500 mm**	**700 mm**	**900 mm**	**1000 mm**	**1100 mm**	**1200 mm**
Rubber set for	Art. no.	Art. no.	Art. no.	Art. no.	Art. no.	Art. no.
10 - 11 mm	16.2005.010.xx	16.2007.010.xx	16.2009.010.xx	16.2010.010.xx	16.2011.010.xx	16.2012.010.xx
12-13.5 mm	16.2005.012.xx	16.2007.012.xx	16.2009.012.xx	16.2010.012.xx	16.2011.012.xx	16.2012.012.xx
15 mm	16.2005.015.xx	16.2007.015.xx	16.2009.015.xx	16.2010.015.xx	16.2011.015.xx	16.2012.015.xx
16-17.5 mm	16.2005.016.xx	16.2007.016.xx	16.2009.016.xx	16.2010.016.xx	16.2011.016.xx	16.2012.016.xx
19 mm	16.2005.019.xx	16.2007.019.xx	16.2009.019.xx	16.2010.019.xx	16.2011.019.xx	16.2012.019.xx
20-21.5 mm	16.2005.020.xx	16.2007.020.xx	16.2009.020.xx	16.2010.020.xx	16.2011.020.xx	16.2012.020.xx

Juliet balcony, screw-on profile, left and right, Reveal Mounting

| Sales unit: 1 piece

Model SF	Mill finish	Plain aluminium	Coloured
Length	Art. no.	Art. no.	Art. no.
5000	16.2150.005.10	16.2150.005.11	16.2150.005.13/16/18

Juliet balcony, Endcap, left and right, Reveal Mounting

| Sales unit: 4 pieces

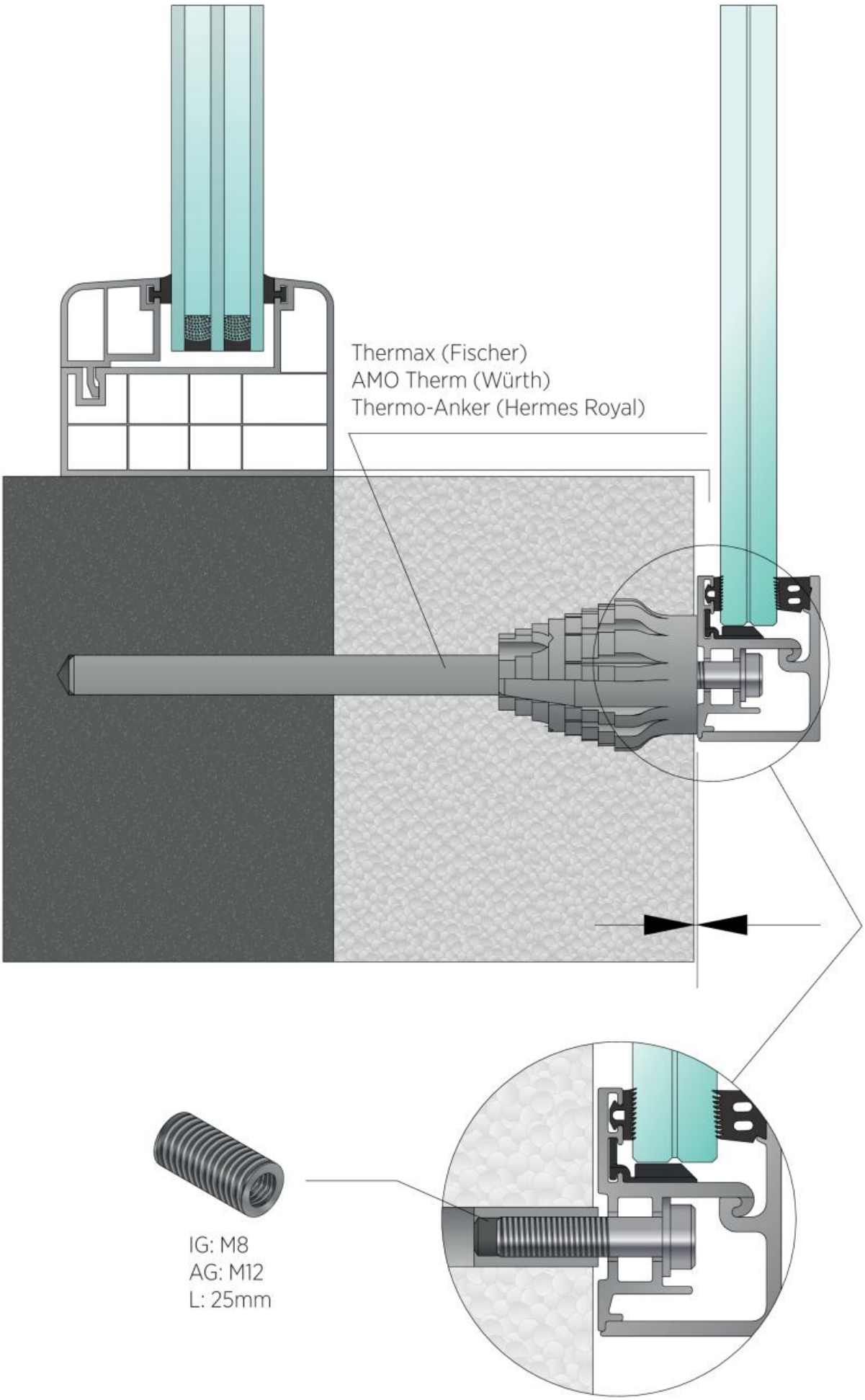
Model SF	Mill finish	Plain aluminium	Coloured
	Art. no.	Art. no.	Art. no.
	16.9001.010.10	16.9001.010.11	16.9001.010.13/16/18

Juliet balcony, Encap Mounting Bolt

| Sales unit: 10 pieces

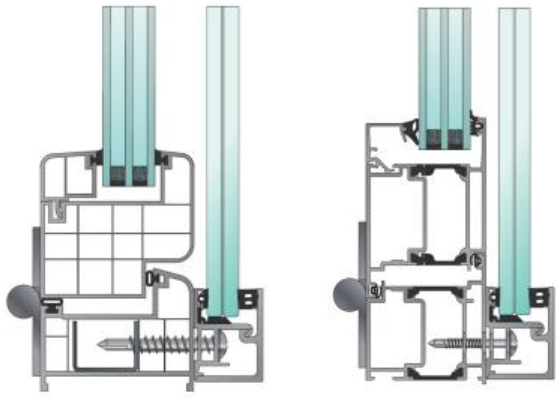
Model SF	V4A
	Art. no.
	16.9004.020.30

Skyforce – Thermal Insulation Installation Example

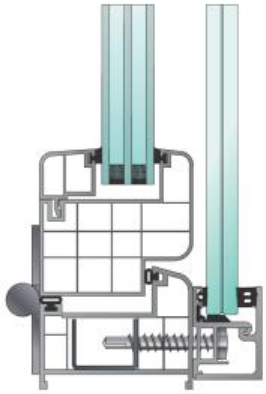


Application overview TOP Mount

aluminium & plastic frames
selfdrilling screw



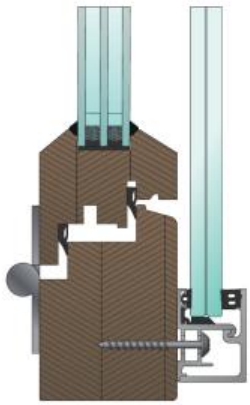
aluminium & plastic frames
stainless steel screw



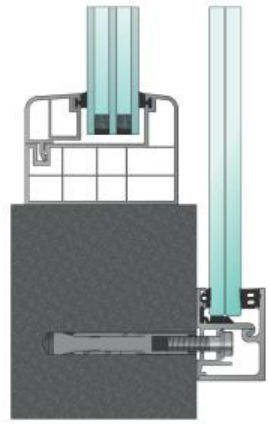
aluminium frames

steel frames

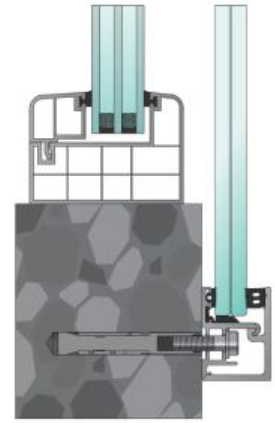
wooden frames



concrete frames

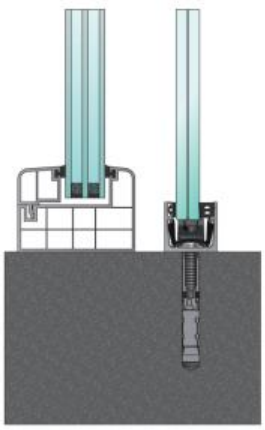


stone frames

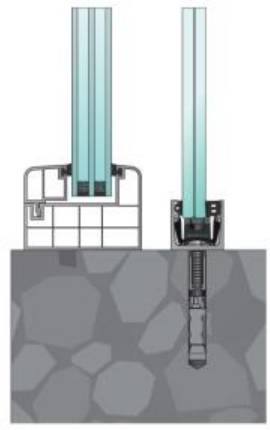


Application overview SIDE Mount

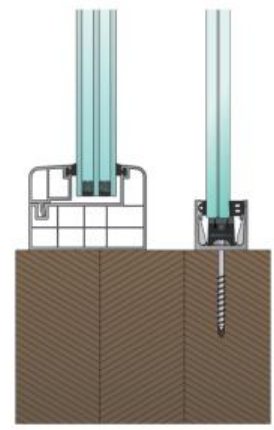
concrete frames



stone frames



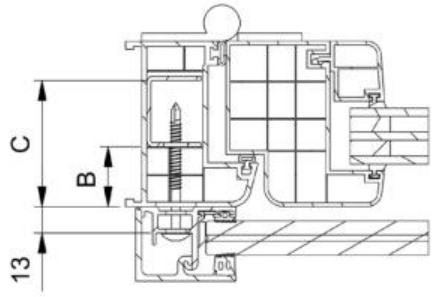
wooden frames



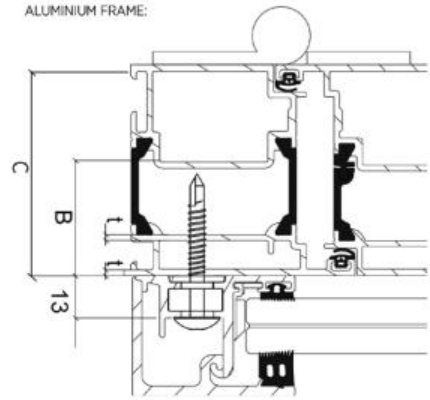
Fixing screw, self-tapping for plastic frames with steel core & aluminium frame, top mount

- Plastic frame: The screw needs a 1.5 mm steel core in the frame profile.
- Aluminium frame: The screw needs two walls with "t" total ≥ 3.2 mm
- Aluminium frame: Screw length max. 45 mm
- Material: Zinc-plated steel

PLASTIC FRAME:



ALUMINIUM FRAME:



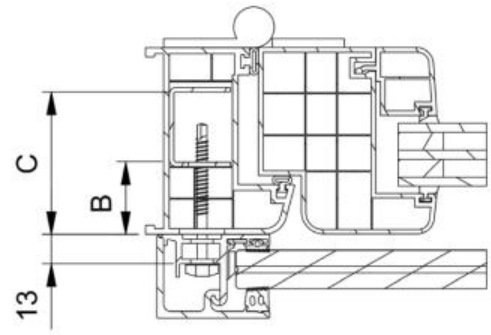
Model 9005			Sales Unit 12	Sales Unit 100
Length	B	C (min.)	Art. no.	Art. no.
45 mm	0 - 14 mm	35 mm	16.9005.604.81	16.9015.604.81
55 mm	15 - 24 mm	45 mm	16.9005.605.81	16.9015.605.81
65 mm	25 - 34 mm	55 mm	16.9005.606.81	16.9015.606.81
75 mm	35 - 44 mm	65 mm	16.9005.607.81	16.9015.607.81
85 mm	45 - 54 mm	75 mm	16.9005.608.81	16.9015.608.81
95 mm	55 - 64 mm	85 mm	16.9005.609.81	16.9015.609.81
105 mm	65 - 74 mm	95 mm	16.9005.610.81	16.9015.610.81
125 mm	75 - 94 mm	115 mm	16.9005.612.81	16.9015.612.81
150 mm	95 - 120 mm	140 mm	16.9005.615.81	16.9015.615.81

Refer to the test report for the number of fixings.

Stainless steel fixing screw for plastic frames with steel core & aluminium frame, top mount

- Ø 6.3
- The anchors are not self-tapping and must be pre-drilled (16.9011.05x.00)
- Aluminium frame: Screw length max. 50 - 82 mm
- Finish exterior application: V4A (outside)
- Sales unit: 12 pieces

Model 9005		AISI 316 (outside)
Length	B	Art. no.
50 mm	0 - 25 mm	16.9012.605.20
64 mm	25 - 40 mm	16.9012.606.20
75 mm	40 - 50 mm	16.9012.607.20
82 mm	50 - 55 mm	16.9012.608.20
92 mm	55 - 65 mm	16.9012.609.20
102 mm	65 - 75 mm	16.9012.610.20
115 mm	75 - 90 mm	16.9012.611.20



Skyforce Drill

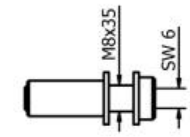
For pre-drilling holes for mounting stainless steel screw 16.9012.6xx.20

| Ø 5 mm (for 1.5 mm wall thickness)
| Ø 5.3 mm (for 2.0 – 4.0 mm wall thickness)
| sales unit: 1 piece

Model 9011	
Diameter	Art. no.
5.0 mm	16.9011.050.00
5.3 mm	16.9011.053.00

Fixing anchor for aluminium frames, Top Mount

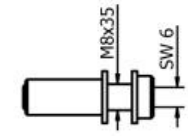
| Finish exterior application: V4A (exterior)
| Sales unit: 12 pieces



Model 9006	**AISI 316 (exterior)**
	Art. no.
	16.9006.835.30

Fixing anchor for steel frames, Top Mount

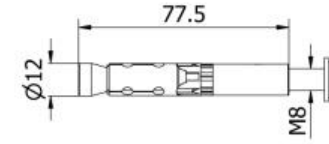
| Finish exterior application: V4A (exterior)
| Sales unit: 12 pieces



Model 9008	**AISI 316 (exterior)**
	Art. no.
	16.9008.835.30

Fixing anchor for concrete frames, Top Mount

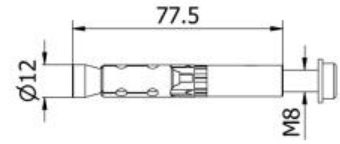
| Finish exterior application: V4A (exterior)
| FH II 12 fixing anchor/M8 I A4 + screw M8x30
| Sales unit: 12 pieces



Model 9009	**AISI 316 (exterior)**
	Art. no.
	16.9009.835.30

Fixing anchor for stone frames, Top Mount

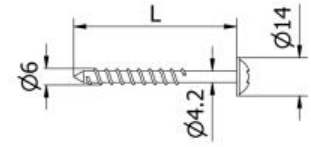
- For natural stone with a dense structure
- Finish exterior application: V4A (exterior)
- FH II 12 fixing anchor/M8 I A4 + screw M8x30
- Sales unit: 12 pieces



Model 9010	AISI 316 (exterior)
	Art. no.
	16.9010.835.30

Fixing anchor for wooden frames, Top and Side Mount

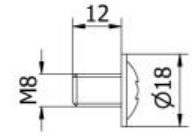
- Finish exterior application: V4A (exterior)
- Ø 6
- Sales unit: 12 pieces



Model 9007	AISI 316 (exterior)
Length	Art. no.
60 mm	16.9007.660.30
80 mm	16.9007.680.30

Fixing anchor for aluminium and steel frames, Side Mount

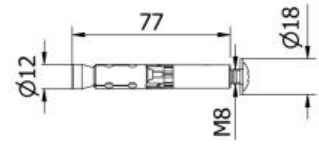
- Finish exterior application: V4A (exterior)
- Sales unit: 10 pieces



Model 1190	AISI 316 (exterior)
	Art. no.
	91.1190.812.30

Fixing anchor for concrete frames, Side Mount

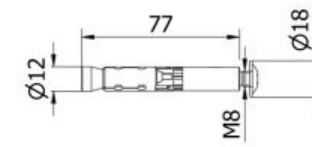
- Finish exterior application: V4A (exterior)
- FH II 12 fixing anchor/M8 I A4 + screw M8x30
- Sales unit: 10 pieces



Model 9029	AISI 316 (exterior)
	Art. no.
	16.9029.835.30

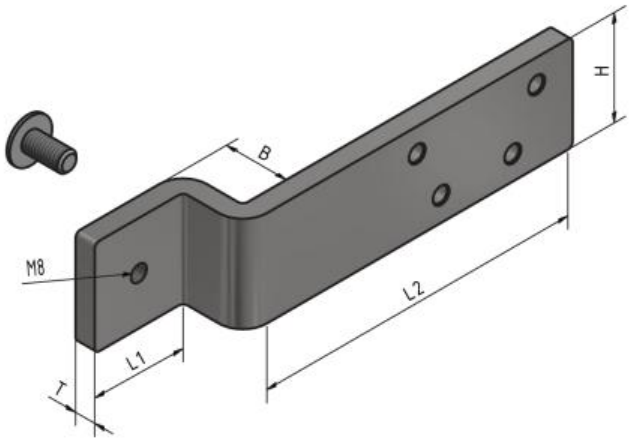
Fixing anchor for stone frames, Side Mount

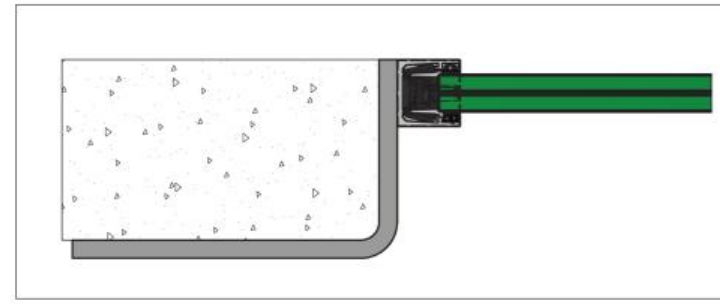
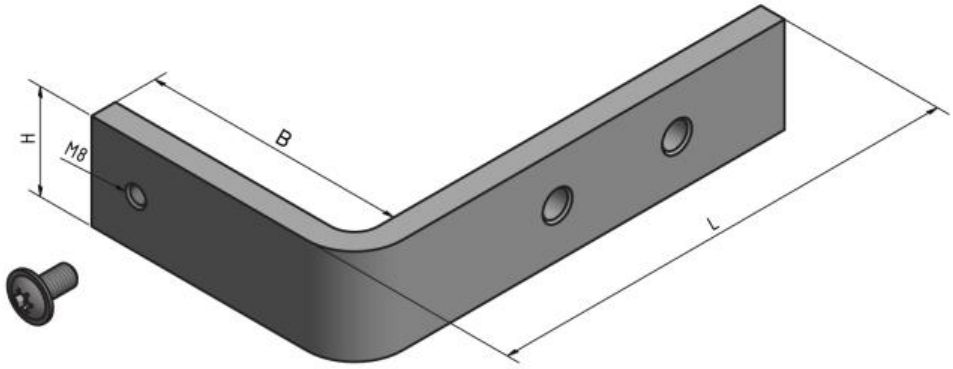
- For natural stone with a dense structure
- Finish exterior application: V4A (exterior)
- FH II 12 fixing anchor/M8 I A4 + screw M8x30
- Sales unit: 10 pieces



Model 9020	AISI 316 (exterior)
	Art. no.
	16.9020.835.30

Skyforce Side – Aluminium and Steel Installation Example





Available upon request