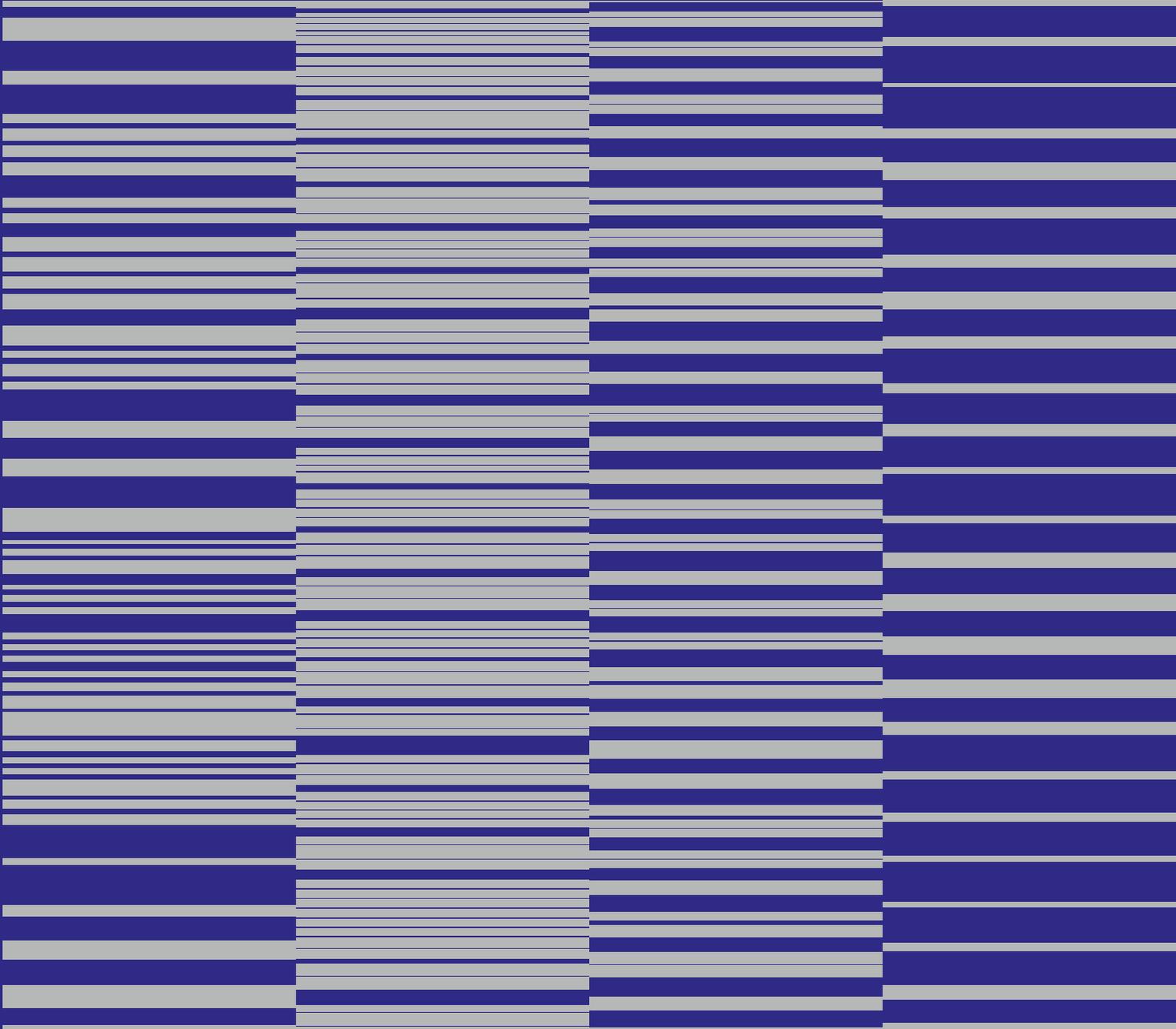


TECHNICAL MANUAL

NEVA®

EXTERNAL BLINDS

V.03 — 2025



CONTENT

EXTERNAL BLINDS

Colour version of the slats	10
External blinds S90, Z90, Z70, C80, C65, F80	12

SELF-BEARING SYSTEMS

STF self-bearing system	38
STL self-bearing system	64
Façade system	74

ISO-KASTL AND ISO-PANEL

ISO-KASTL	82
ISO-PANEL	90

COVER SHEETS AND COMPONENTS

Cover sheets	94
Upper profile holders	100
Types of guide rails	108
Holes for mounting, number and their location	110
Guide rail holders and string holders	112

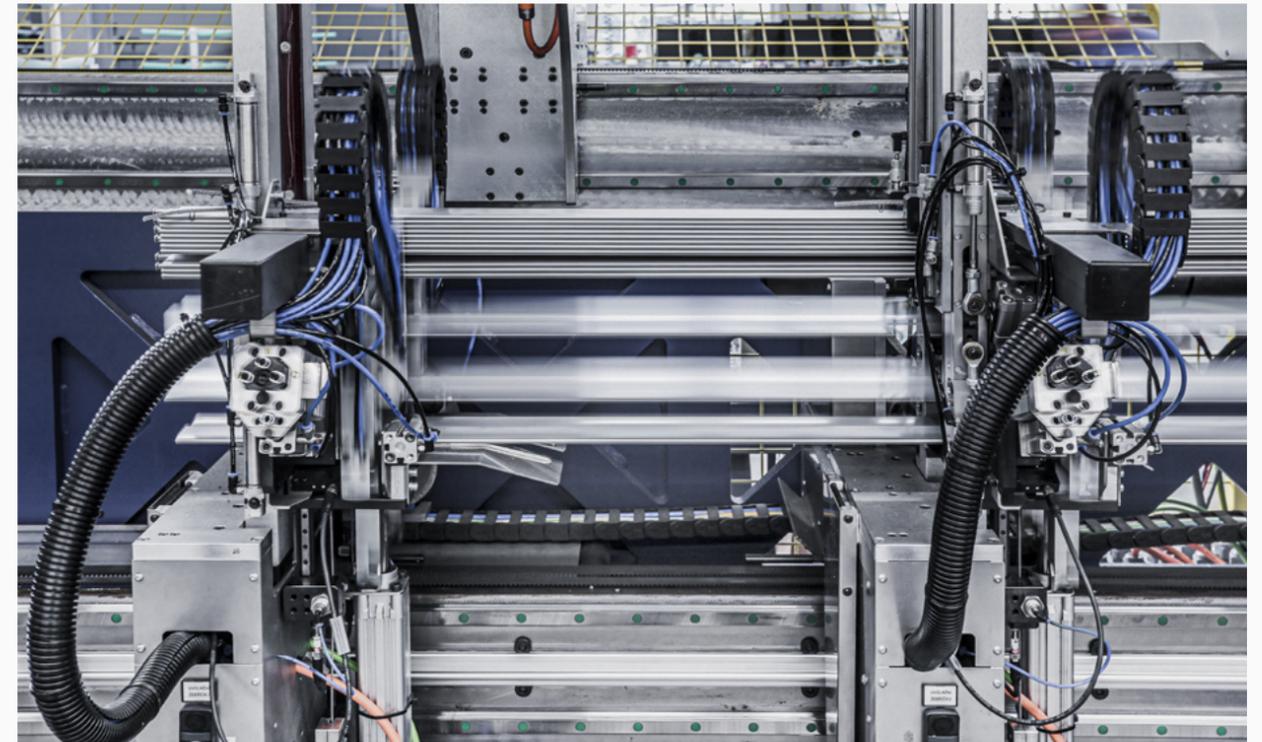
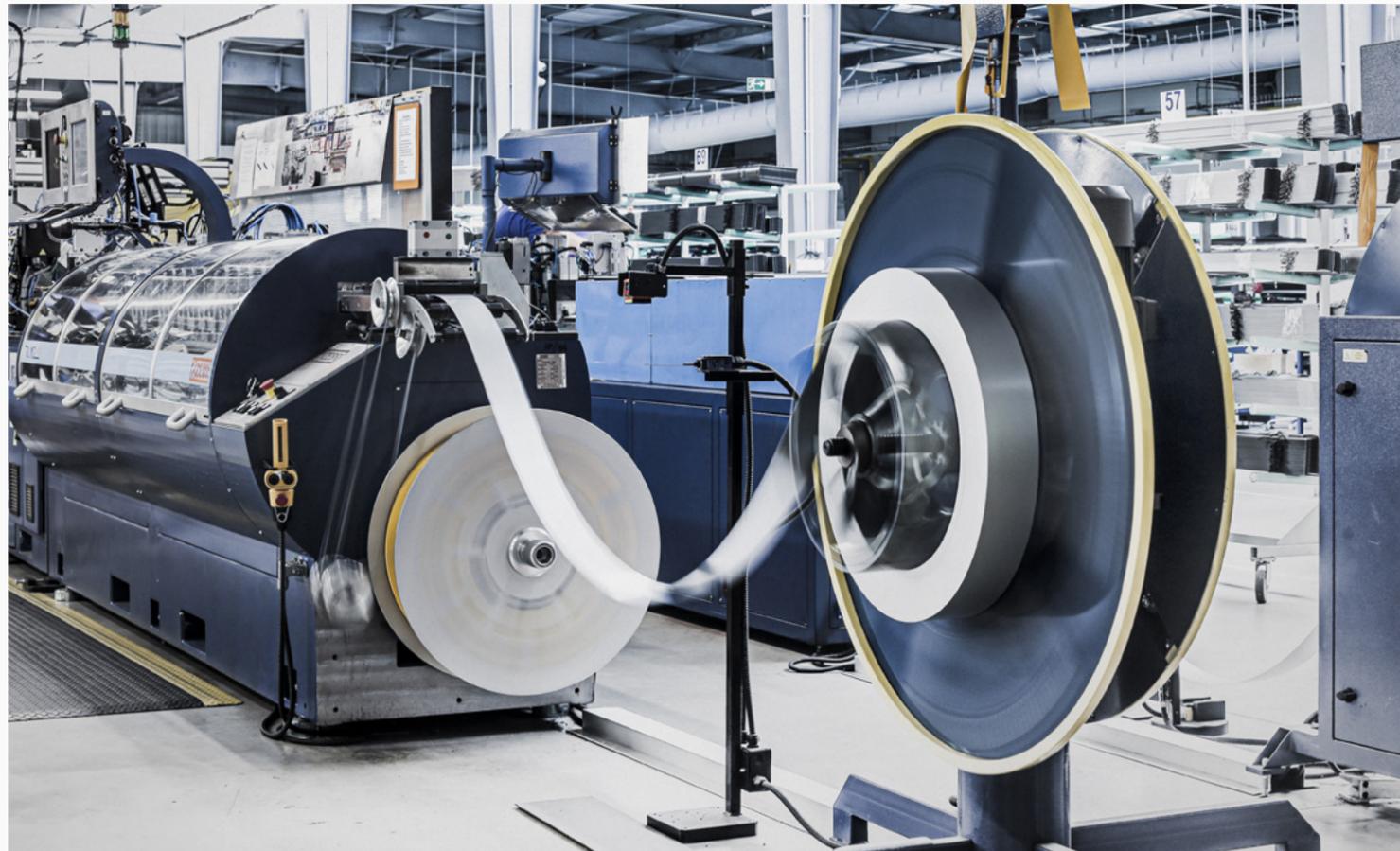
TECHNICAL INFORMATION

Measurements of standard blinds	118
Position of additional cable	120
Measurements of corner blinds	124
Gearboxes	126
Cranks, grommets	127
Connections and blinds connection diagram	129
Optional components	130
Tilting of slats	130
Ladder shortener	131
Working position 3-position bearing	131
Bearing arrangement	132
Height of blind packet	133
Height (V)	134
Motor connection – wiring, motor location	135
Characteristics and features of external blinds	138
Installation, operation and maintenance instructions	147

COMMERCIAL DOCUMENTS

Declaration of performance and declaration of conformity	160
General Terms and Conditions	174
Complaints Policy	179
Transport Conditions and Handling of the Goods	186

WE MAKE EXTERNAL SHADING FOR MORE THAN 40 COUNTRIES OF THE WORLD



We have been a leading Czech manufacturer of external blinds since 1990. Our manufacturing lines make more than 100,000 external blinds and textile screens every year which we supply to customers all around the world for single-family and apartment houses, office buildings, winter gardens, pergolas and public buildings. NEVA is not only about products, but also about family values and personal approach

Family values are not mere routine words to us, but reality we live on a day-to-day basis. It is reflected in the company internal relationships or in our approach to cooperation with business partners. We take pride in a personal and fair approach - what we say and agree to applies without any exception. Our history and values create solid foundation for future innovations and company development.



WE ADD TOP-CLASS SERVICING TO THE TOP-QUALITY PRODUCT

WIDE RANGE OF ENGINEERING SOLUTIONS



We have got a wide portfolio of engineering solutions that cover various self-bearing systems for simple mounting and anchoring of blinds, including façade systems, concealed systems (under the plaster), corner solutions and other components for the successful execution of constructions.

FAST COMMUNICATION



The quality of service is just as important to us as the quality of the actual product. We have a responsible sales team for each region that is able to respond quickly to your requirements and ensure that you always get the necessary information.

IN-HOUSE POWDER COATING PLANT



We paint all aluminium components in our own powder paint shop using façade paints featuring UV stability as per GSB and Qualicoat standards. As standard, we paint using RAL colours as well as other, special colours upon request.

FLEXIBLE PACKAGING



We adapt the method of packing to the transport method so that the packaging protects the product during transport, minimise labour intensity during unpacking and the amount of waste on the construction site. You can encounter packing in bubble-wrap, in returnable boxes or crates for transport between continents.

MINIMUM OF PLASTIC COMPONENTS



We strive to manufacture our blinds of the highest quality possible and with as long service life as possible. We minimise the use of plastic components and we seek alternative solutions. We do not use plastic ladder connections, inserts of slat cut-through holes, ladder mounts or guide pins.

ADVANCED MACHINERY



Whether this involves slats, upper profiles, cover sheets or small components, we manufacture everything using state-of-the-art machinery to ensure the required quality of material processing.

EASY INSTALLATION



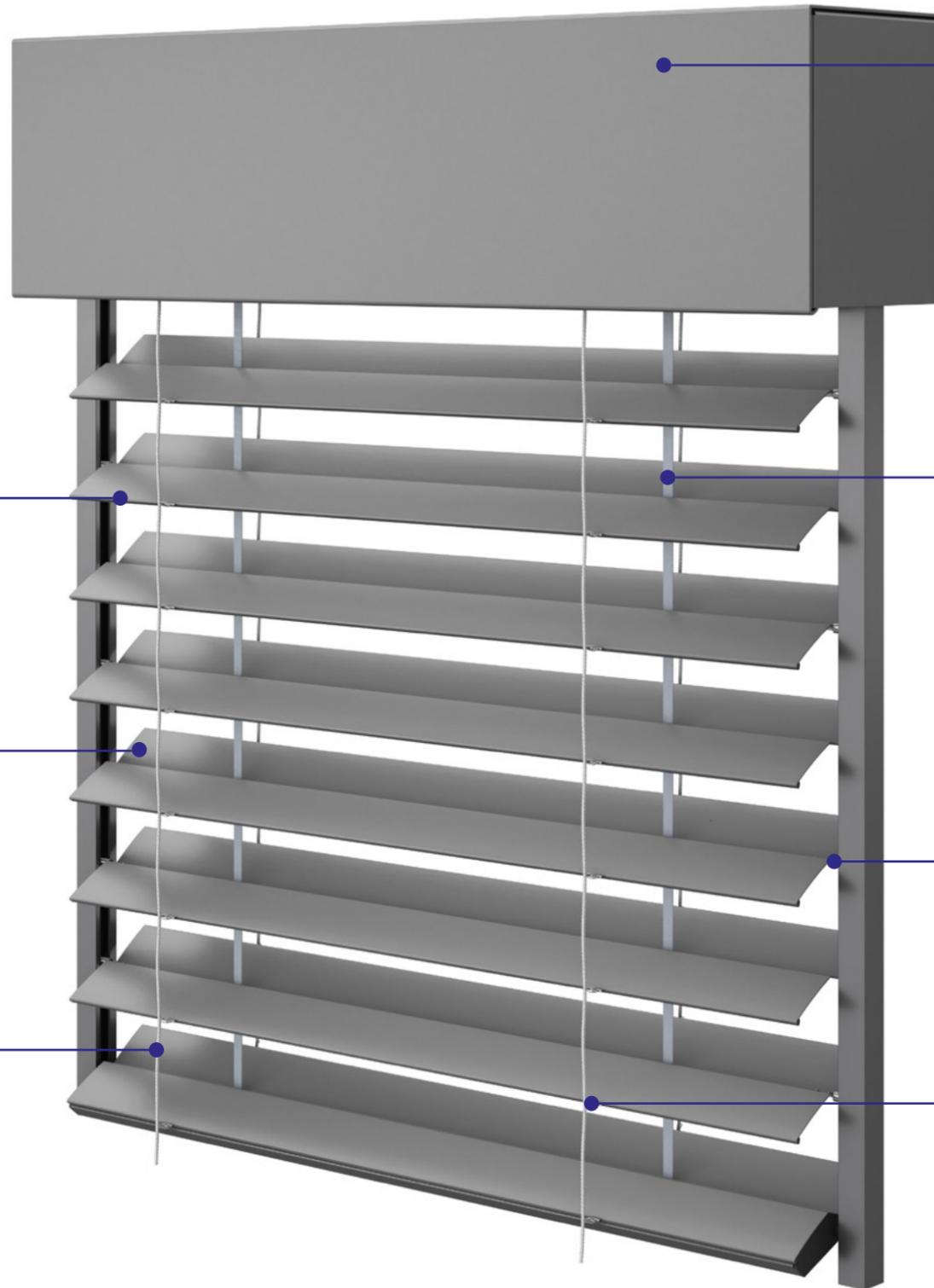
We supply our blinds that have been checked, adjusted and having their end positions set. Self-bearing systems speed up installation and reduce the time spent on the construction site. When designing new solutions, we focus on as fast and simple installation as possible, which reduces your overhead costs related to installation.

EMPHASIS ON SUSTAINABILITY



We strive to make sustainable products, we obtain part of electrical energy from our own photovoltaic panels and we use cartons or returnable crates for repeated use in packing. We make ISOPANELS using recycled PET, and our powder shop technology minimises emissions.

NOT ALL BLINDS ARE IDENTICAL



RUBBER SEALING

We roll rubber sealing into type Z and S slats that does not crack or fall out, thereby preventing the formation of undesirable translucent spots.

SLAT

As one of few manufacturers, we offer structured slat rolls as standard. This type of material increases abrasion resistance, facilitates cleaning and reduces dirt sticking to the slat. Cut-through holes of slats for lift tapes are rounded so as to prevent damage to them.

LADDER

For most slat types we use a ladder with Kevlar fibre, which is extremely strong and extends the service life of the blinds. We attach the ladder to the bearing by means of a quality metal connection.

UPPER PROFILE

We make upper profiles from rolled galvanised sheets or extruded aluminium, which we can paint in any colour. We manufacture cover sheets 1.5 and 2 mm thick using a carefully chosen aluminium alloy for maximum strength.

LIFT TAPE

For external blinds we use superiorly wide 8mm lift tapes by a Swiss supplier. As a result, our tapes reach a tensile strength of up to 90 kilograms.

GUIDE PINS

Special metal elliptical guide pins that are attached to slats under high pressure increase the resistance of the external blind against wind while reducing its noise at the same time.

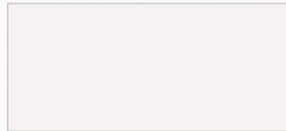
SLAT HOOKS

To correctly attach the ladder to the slat, we use metal hooks that are shot-fired with high pressure. We have developed a specific shape for these hooks, thanks to which individual slats do not snag on one another.

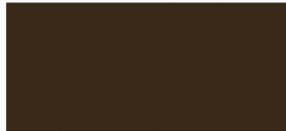
EXTERNAL BLINDS

SLAT COLOURS

010 / 010H



071



110



130



140 / 140 H



240



266



330



716 / 716H



721



722



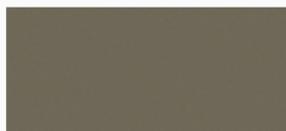
735



737



739



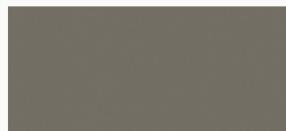
780



905



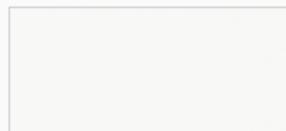
907 / 907H



908 / 908H



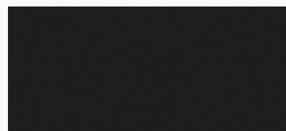
910



DB703



YW359F



COLOUR VERSION OF SLATS

Number	Name	Paint	Recommended accessory colour*	Component colour**	S90	Z90	Z70	C80	C65	F80***
010	white	S	RAL 9003	grey	■	■	■	■	■	—
010H	white	H/HB	RAL 9003	grey	—	—	—	—	—	■
071	brown	S	VSR071	black	■	■	■	■	■	—
110	taupe	S	VSR110	grey	■	■	■	■	■	—
130	grey	S	RAL 7038	grey	■	■	■	■	■	—
140	silver	S	RAL 9006	grey	■	■	■	■	■	—
140H	silver	H/HB	RAL 9006	grey	■	■	■	■	■	■
240	light beige	S	VSR240	grey	■	■	■	■	■	—
266	black-green	S	January2	black	■	■	■	■	■	—
330	red-purple	S	RAL 3004	black	■	■	■	■	■	—
716	anthracite grey	S	RAL 7016	black	■	■	■	■	■	—
716H	anthracite grey	H/HB	RAL 7016	black	—	—	—	—	—	■
721	black-grey	S	RAL 7021	black	■	■	■	■	—	—
722	yellow-brown	S	RAL 7022	black	■	■	■	■	—	—
735	light grey	S	RAL 7035	grey	■	■	■	■	—	—
737	dust grey	S	RAL 7037	grey	■	■	■	■	—	—
739	quartz grey	S	RAL 7039	grey	■	■	■	■	■	—
780	bronze	S	VSR780	grey	■	■	■	■	■	—
905	black	S	RAL 9005	black	■	■	■	■	—	—
907	silver-grey	S	RAL 9007	grey	■	■	■	■	■	—
907H	silver-grey	H/HB	RAL 9007	grey	—	—	—	—	—	■
908	dark bronze	S	SW203G	grey	■	■	■	■	—	—
908H	dark bronze	H/HB	SW203G	grey	—	—	—	—	—	■
910	white	S	RAL 9010	grey	■	■	■	■	■	—
DB703	dark grey	S	DB703	black	■	■	■	■	■	—
YW359F	black sand	S	YW359F	black	■	■	■	■	■	—

H - smooth coating, S - textured coating, HB - smooth coating without painted edges (only for F80)

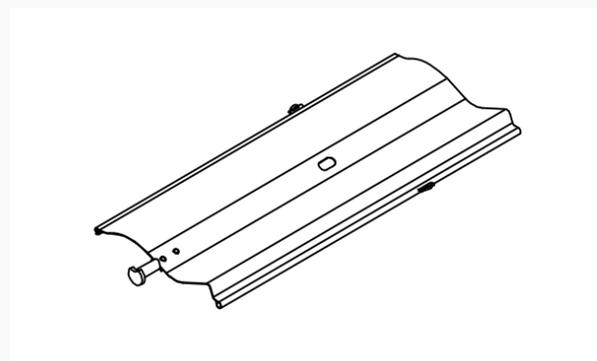
* The colour indication is only indicative, it is the closest shade to the colour of the slats.

** Colours for ladders, plastic guide pins, lift types, bottom profile end caps and slat sealing profiles are available in grey and black.

The standard colour is shown in the table, a second variant is available on request.

***F80 blinds can be supplied with painted or unpainted slat edges.

External blinds

S90**STANDARD VERSION****Slat**

- S shape, width 90 mm
- aluminium, thickness 0.42 mm
- colour of the slats according to the standard sample book
- rolled in seal
- metal elliptical guide pins
- metal hooks for attaching the ladder
- one-sided tilting
- hemmed edges of the slats

Upper profile

- made of galvanised steel 56×58 mm
- upper profile holders No. 1 or No. R1

Control

- control by standard wired motor

Guiding

- extruded aluminium guide rails painted in RAL colour (type S, SDV, SDV2, O, Z)
- holders for guide rails A, B, C painted in RAL colour

Bottom profile

- bottom profile made of extruded aluminium painted in RAL colour

Components

- 8 mm wide lift tape (grey, black)
- ladder with Kevlar fibre (grey, black)
- stainless steel ladder connection

OTHER DESIGN OPTIONS**Slat**

- non-standard slat colour
- double-sided guide pins
- perforation of the slats
- divided tilt of slats (ladder shortener)
- tilting of slats to 104°

Upper profile

- extruded aluminium upper profile 57×58 mm
- painting of the aluminium upper profile in RAL colour
- upper profile holders according to the offer

Control

- control by another type of motor
- connected blinds - up to 3 blinds per one common drive
- crank control (white, silver anodised, brown)
- crank grommet 45°/90°, length 500 mm (4 edges/6 edges)
- corner crank grommet 45° length 400 mm (4 mm, 4 edges)
- crank grommet of other than standard length
- removable crank
- cord control

Guiding

- guide rails according to the offer
- guide rail holders according to the offer
- end caps for guiding rails S, SDV, SDV2, O, Z, H, HDV, STL and STL DV

Bottom profile

- bottom profile lock

Other design options

- self-supporting STF, STL, façade system
- non-standard paint colour
- working position 3-position bearing (only with motor with 2 lower end positions)

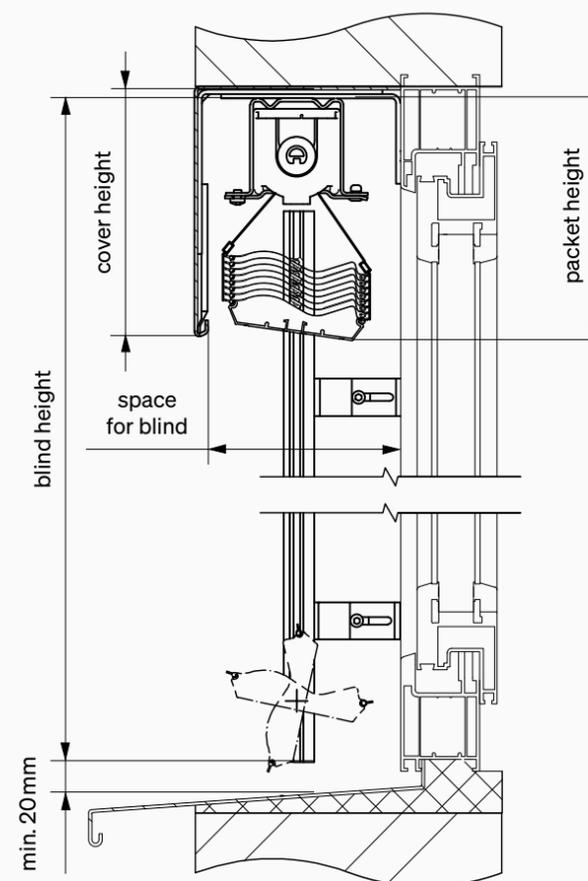
BASIC TECHNICAL PARAMETERS

Guide type	guide rails	
Control	motor	crank
Width	600–5,000 mm	400–5,000 mm
Height	500–5,000 mm	500–5,000 mm
Max. area of 1 blind	20 m ²	9 m ²
Max. width of connected blinds*8 running metres	8 running metres	

* No more than 3 blinds can be connected per 1 drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

SPACE FOR BLIND

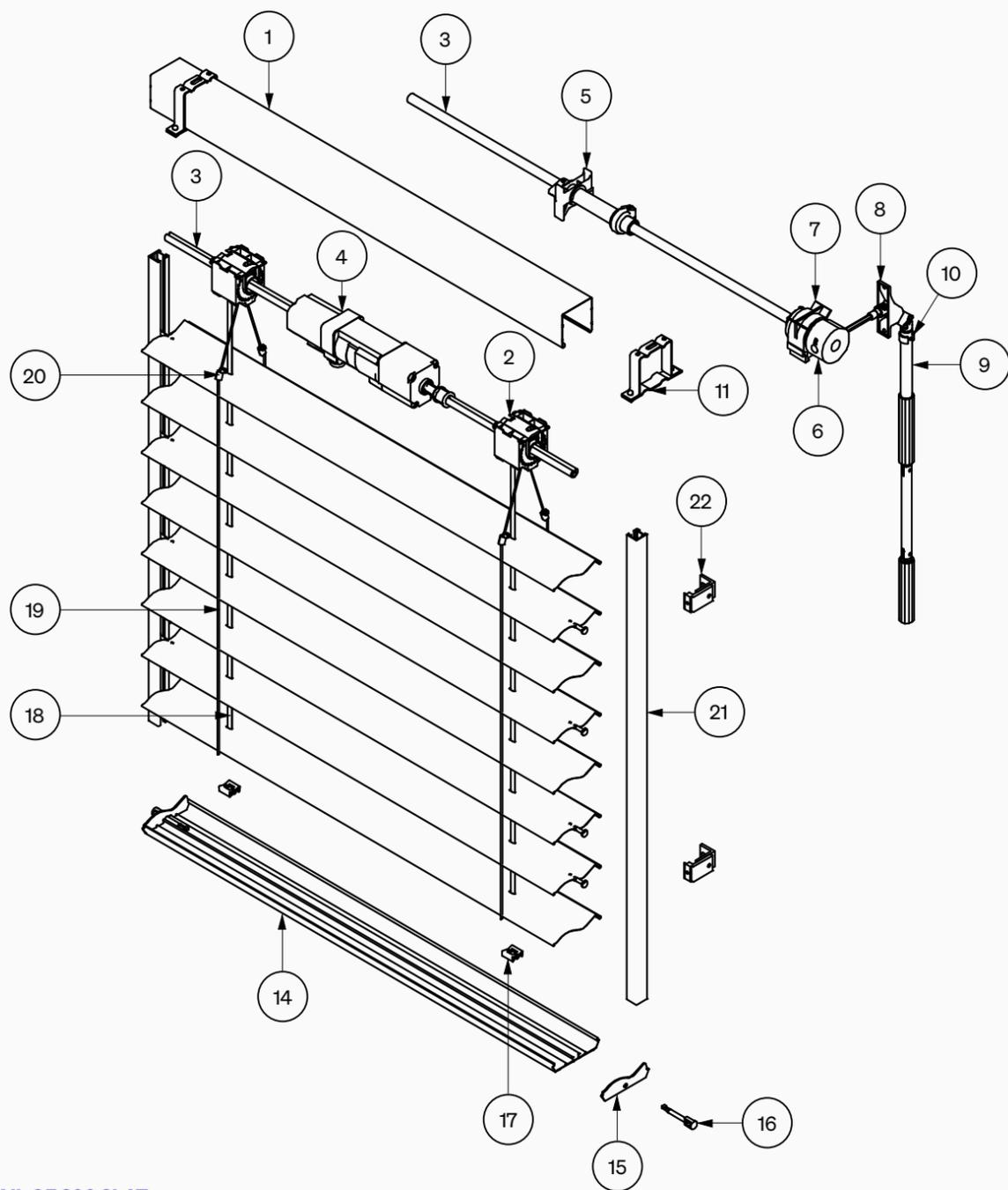
Recommended	130 mm	Minimum	125 mm
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BLIND CROSS-SECTION**HEIGHT OF BLIND PACKET**

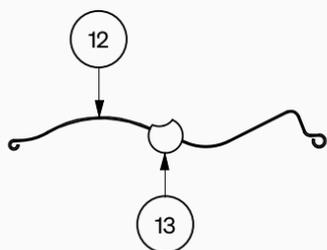
Total blind height in mm	Packet height in mm
500 – 1,250	180*
1,251 – 1,500	190*
1,501 – 1,750	200*
1,751 – 2,000	210*
2,001 – 2,250	220*
2,251 – 2,500	240
2,501 – 2,750	250
2,751 – 3,000	260
3,001 – 3,250	280
3,251 – 3,500	290
3,501 – 3,750	300
3,751 – 4,000	310
4,001 – 4,250	330
4,251 – 4,500	340
4,501 – 4,750	350
4,751 – 5,000	360

* Pay attention to the height of the cover. A gap may occur between the cover and the 1st slat when the blind is lowered.

EXTERNAL BLINDS S90



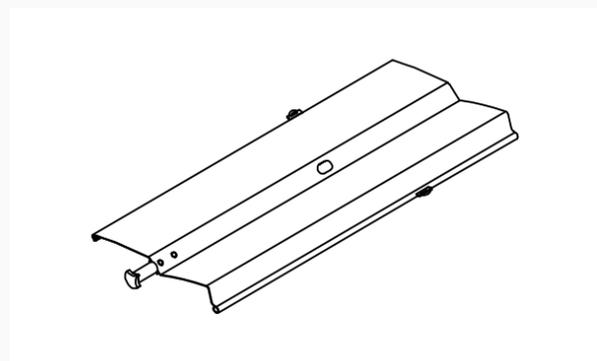
DETAIL OF S90 SLAT



Identification	Name
----------------	------

1	Upper profile
2	S90 bearing
3	Shaft
4	Motor
5	Limit stop
6	Gear
7	Gear holder
8	Grommet
9	Crank
10	Locking clip
11	Upper profile holder
12	S90 slat
13	S90 guide pin
14	S90 bottom profile
15	S90 bottom profile end cap
16	Guide pin for bottom profile end cap
17	Lift tape holder
18	Lift tape 8 mm
19	S90 ladder
20	Ladder connection
21	Guide rail
22	Guide rail holder

External blinds

Z90**STANDARD VERSION****Slat**

- Z shape, width 90 mm
- aluminium, thickness 0.42 mm
- colour of the slats according to the standard sample book
- rolled in seal
- metal elliptical guide pins
- metal hooks for attaching the ladder
- one-sided tilting
- hemmed edges of the slats

Upper profile

- made of galvanised steel 56×58 mm
- upper profile holders No. 1 or No. R1

Control

- control by standard wired motor

Guiding

- extruded aluminium guide rails painted in RAL colour (type S, SDV, SDV2, O, Z)
- holders for guide rails A, B, C painted in RAL colour

Bottom profile

- bottom profile made of extruded aluminium painted in RAL colour

Components

- 8 mm wide lift tape (grey, black)
- ladder with Kevlar fibre (grey, black)
- stainless steel ladder connection

OTHER DESIGN OPTIONS**Slat**

- non-standard slat colour
- double-sided guide pins
- perforation of the slats
- divided tilt of slats (ladder shortener)
- tilting of slats to 104°

Upper profile

- extruded aluminium upper profile 57×58 mm
- painting of the aluminium upper profile in RAL colour
- upper profile holders according to the offer

Control

- control by another type of motor
- connected blinds - up to 3 blinds per one common drive
- crank control (white, silver anodised, brown)
- crank grommet 45°/90°, length 500 mm (4 edges/6 edges)
- corner crank grommet 45° length 400 mm (4 mm, 4 edges)
- crank grommet of other than standard length
- removable crank
- cord control

Guiding

- guide rails according to the offer
- PVC coated 3mm stainless steel string (grey, black)
- combination of string/guide rail
- additional string in the blind
- guide rail holders and string holders according to the offer
- end caps for guiding rails S, SDV, SDV2, O, Z, H, HDV, STL and STL DV

Bottom profile

- bottom profile lock

Other design options

- self-supporting STF, STL, façade system
- non-standard paint colour
- working position 3-position bearing (only with motor with 2 lower end positions)

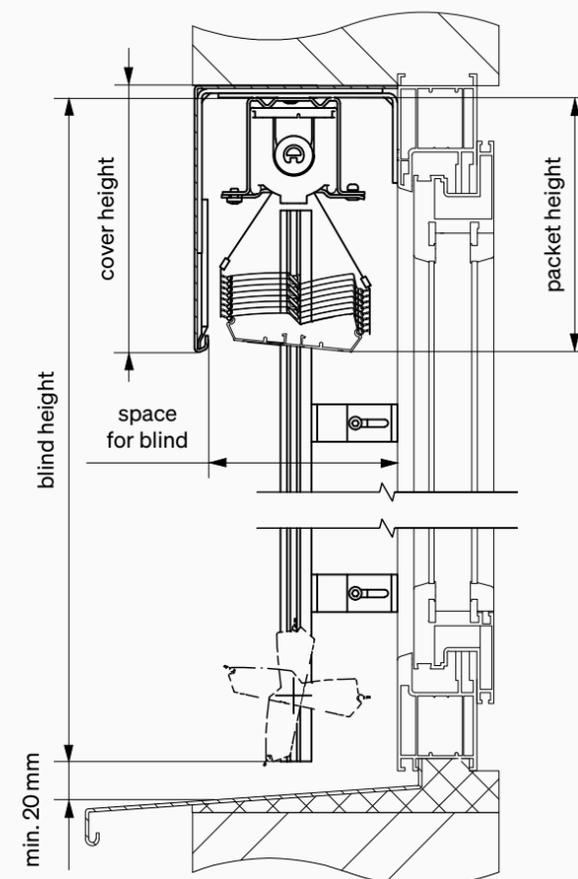
BASIC TECHNICAL PARAMETERS

Guide type	guide rails		cable, cable/guide rail combination	
	motor	crank	motor	crank
Width	600–5,000 mm	400–5,000 mm	600–4,000 mm	400–4,000 mm
Height	500–5,000 mm	500–5,000 mm	500–4,000 mm	500–4,000 mm
Max. area of 1 blind	20 m ²	9 m ²	16 m ²	9 m ²
Max. width of connected blinds*	8 running metres	8 running metres	8 running metres	8 running metres

* No more than 3 blinds can be connected per 1 drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

SPACE FOR BLIND

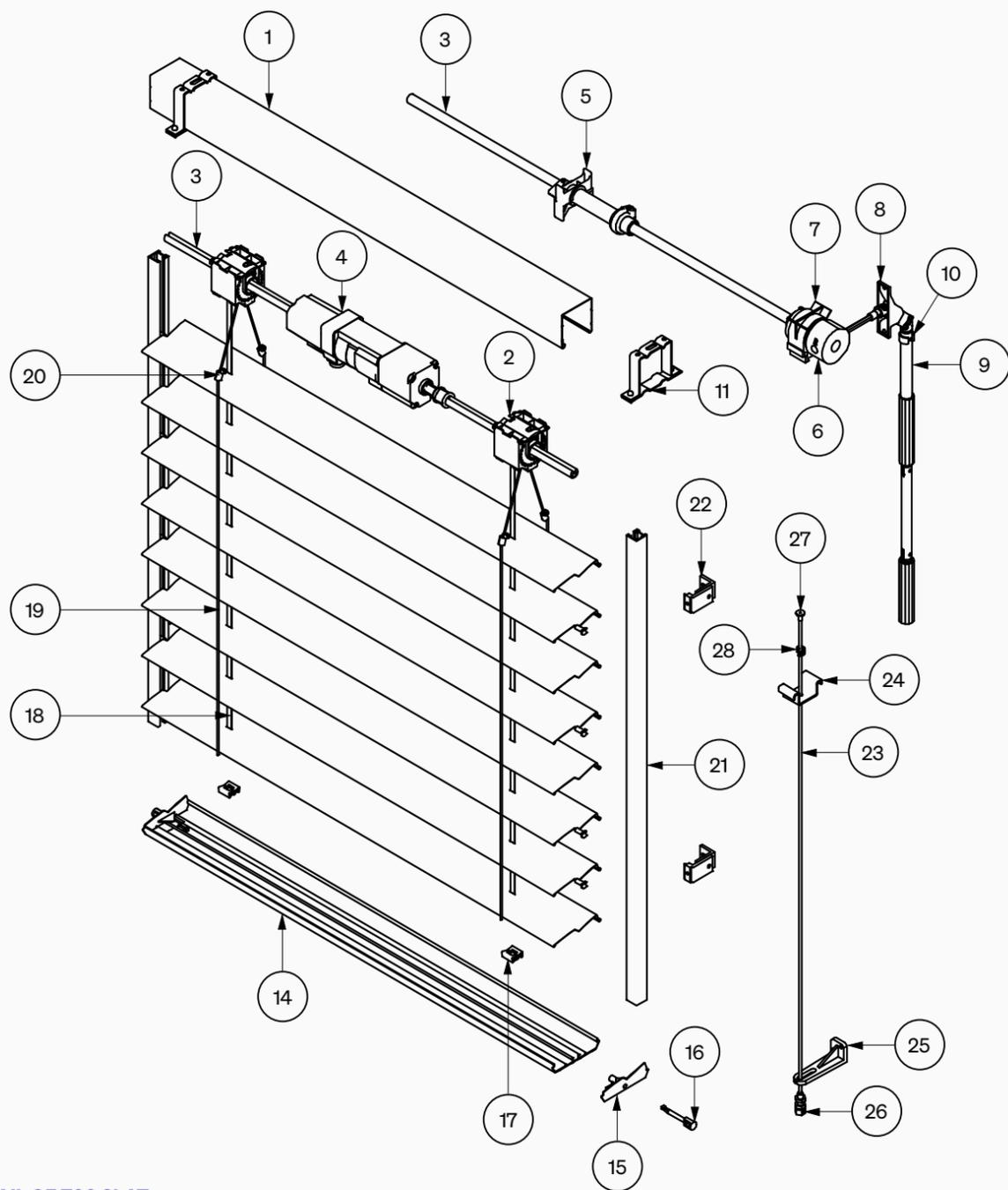
Recommended	130 mm	Minimum	125 mm
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BLIND CROSS-SECTION**HEIGHT OF BLIND PACKET**

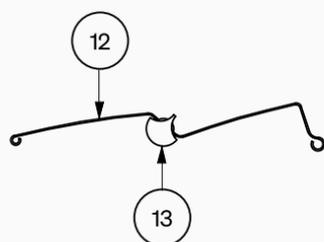
Total blind height in mm	Packet height in mm
500 – 1,250	180*
1,251 – 1,500	190*
1,501 – 1,750	200*
1,751 – 2,000	210*
2,001 – 2,250	220*
2,251 – 2,500	240
2,501 – 2,750	250
2,751 – 3,000	260
3,001 – 3,250	280
3,251 – 3,500	290
3,501 – 3,750	300
3,751 – 4,000	310
4,001 – 4,250	330
4,251 – 4,500	340
4,501 – 4,750	350
4,751 – 5,000	360

* Pay attention to the height of the cover. A gap may occur between the cover and the 1st slat when the blind is lowered.

EXTERNAL BLINDS Z90



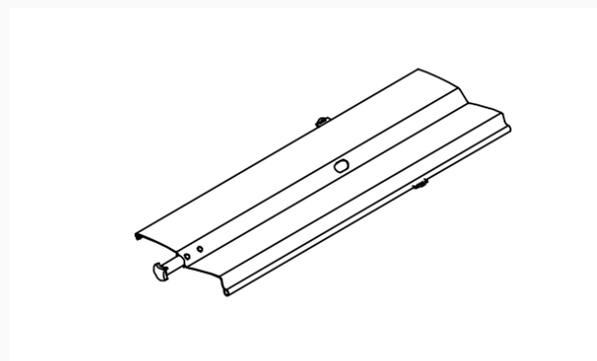
DETAIL OF Z90 SLAT



Identification Name

Identification	Name
1	Upper profile
2	Z90 bearing
3	Shaft
4	Motor
5	Limit stop
6	Gear
7	Gear holder
8	Grommet
9	Crank
10	Safety clip
11	Upper profile holder
12	Z90 slat
13	Z90 guide pin
14	Z90 bottom profile
15	Z90 bottom profile end cap
16	Guide pin for bottom profile end cap
17	Lift tape holder
18	Lift tape 8 mm
19	Z90 ladder
20	Ladder connection
21	Guide rail
22	Guide rail holder
23	String 3 mm
24	Upper string holder
25	String holder
26	Tensioning screw
27	Upper string rivet
28	String spring

External blinds

Z70**STANDARD VERSION****Slat**

- Z shape, width 70 mm
- aluminium, thickness 0.42 mm
- colour of the slats according to the standard sample book
- rolled in seal
- metal elliptical guide pins
- metal hooks for attaching the ladder
- one-sided tilting
- hemmed edges of the slats

Upper profile

- made of galvanised steel 56×58 mm
- upper profile holders No. 1 or No. R1

Control

- control by standard wired motor

Guiding

- extruded aluminium guide rails painted in RAL colour (type S, SDV, SDV2, O, Z)
- holders for guide rails A, B, C painted in RAL colour

Bottom profile

- bottom profile made of extruded aluminium painted in RAL colour

Components

- 8 mm wide lift tape (grey, black)
- ladder with Kevlar fibre (grey, black)
- stainless steel ladder connection

OTHER DESIGN OPTIONS**Slat**

- non-standard slat colour
- double-sided guide pins
- perforation of the slats

Upper profile

- extruded aluminium upper profile 57×58 mm
- painting of the aluminium upper profile in RAL colour
- upper profile holders according to the offer

Control

- control by another type of motor
- connected blinds - up to 3 blinds per one common drive
- crank control (white, silver anodised, brown)
- crank grommet 45°/90°, length 500 mm (4 edges/6 edges)
- corner crank grommet 45° length 400 mm (4 mm, 4 edges)
- crank grommet of other than standard length
- removable crank
- cord control

Guiding

- guide rails according to the offer
- PVC coated 3mm stainless steel string (grey, black)
- combination of string/guide rail
- additional string in the blind
- guide rail holders and string holders according to the offer
- end caps for guiding rails S, SDV, SDV2, O, Z, H, HDV, STL and STL DV

Bottom profile

- bottom profile lock

Other design options

- self-supporting STF, STL, façade system
- non-standard paint colour
- working position 3-position bearing (only with motor with 2 lower end positions)

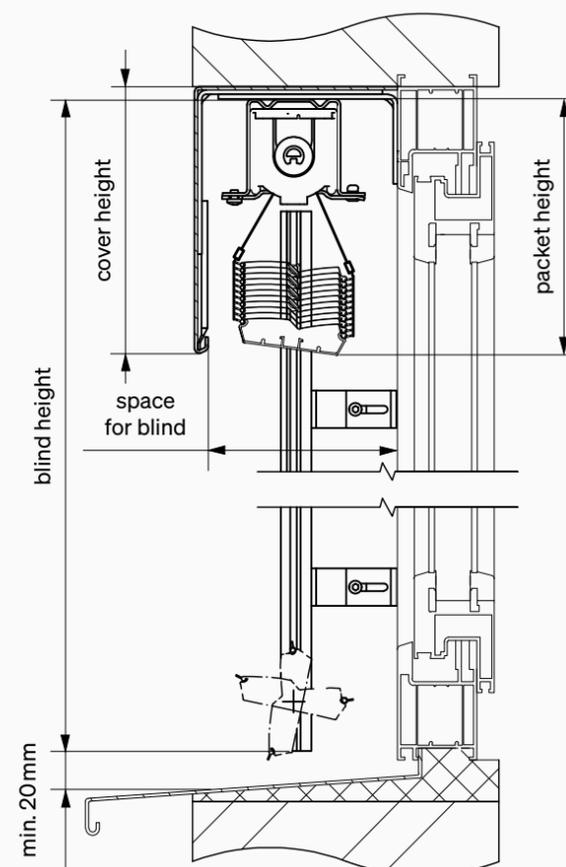
BASIC TECHNICAL PARAMETERS

Guide type	guide rails		cable, cable/guide rail combination	
	motor	crank	motor	crank
Width	600–5,000 mm	400–5,000 mm	600–4,000 mm	400–4,000 mm
Height	500–5,000 mm	500–5,000 mm	500–4,000 mm	500–4,000 mm
Max. area of 1 blind	20 m ²	9 m ²	16 m ²	9 m ²
Max. width of connected blinds*	8 running metres	8 running metres	8 running metres	8 running metres

* No more than 3 blinds can be connected per 1 drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

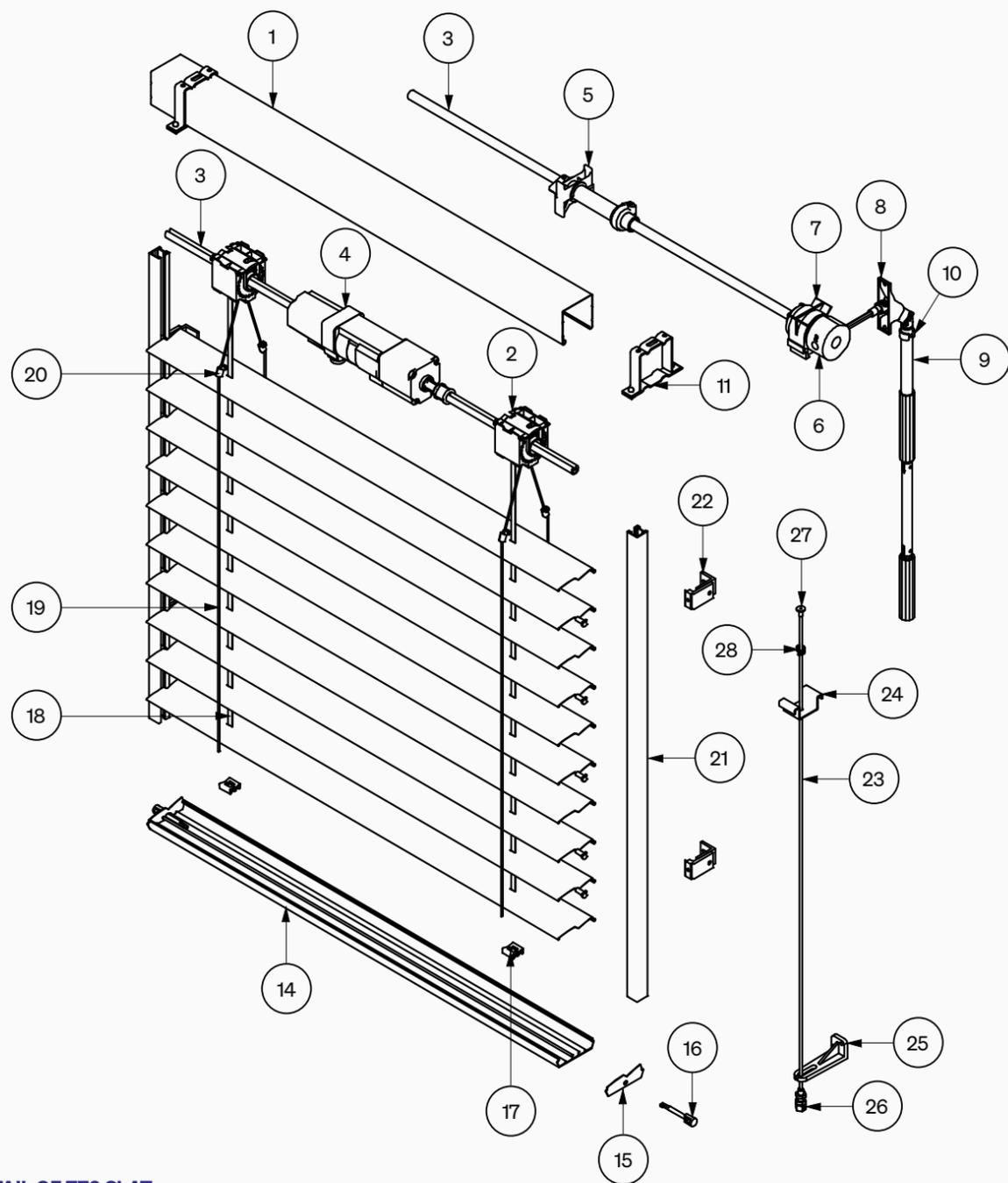
SPACE FOR BLIND

Recommended	Minimum
130 mm	120 mm

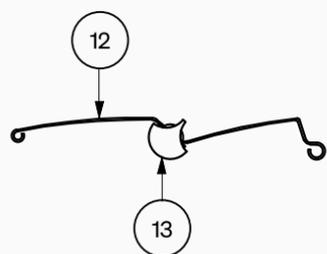
BLIND CROSS-SECTION**HEIGHT OF BLIND PACKET**

Total blind height in mm	Packet height in mm
500 – 1,250	200
1,251 – 1,500	220
1,501 – 1,750	230
1,751 – 2,000	250
2,001 – 2,250	270
2,251 – 2,500	280
2,501 – 2,750	300
2,751 – 3,000	320
3,001 – 3,250	340
3,251 – 3,500	350
3,501 – 3,750	370
3,751 – 4,000	390
4,001 – 4,250	410
4,251 – 4,500	420
4,501 – 4,750	440
4,751 – 5,000	460

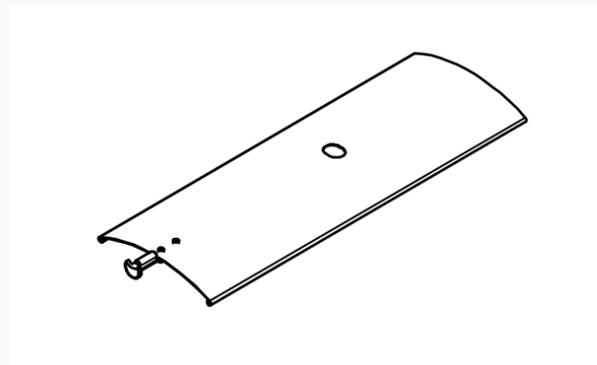
EXTERNAL BLINDS Z70



DETAIL OF Z70 SLAT



Identification	Name
1	Upper profile
2	Z70 bearing
3	Shaft
4	Motor
5	Limit stop
6	Gear
7	Gear holder
8	Grommet
9	Crank
10	Locking clip
11	Upper profile holder
12	Z70 slat
13	Z70 guide pin
14	Z70 bottom profile
15	Z70 bottom profile end cap
16	Guide pin for bottom profile end cap
17	Lift tape holder
18	Lift tape 8 mm
19	Z70 ladder
20	Ladder connection
21	Guide rail
22	Guide rail holder
23	String 3 mm
24	Upper string holder
25	String holder
26	Tensioning screw
27	Upper string rivet
28	String spring



STANDARD VERSION

Slat

- C shape, width 80 mm
- aluminium, thickness 0.42 mm
- colour of the slats according to the standard sample book
- metal elliptical or plastic guide pins
- double-sided tilting
- hemmed edges of the slats

Upper profile

- made of galvanised steel 56×58 mm
- upper profile holders No. 1 or No. R1

Control

- control by standard wired motor

Guiding

- extruded aluminium guide rails painted in RAL colour (type S, SDV, SDV2, O, Z)
- holders for guide rails A, B, C painted in RAL colour

Bottom profile

- bottom profile made of extruded aluminium painted in RAL colour

Components

- 8 mm wide lift tape (grey, black)
- H-shaped ladder with Kevlar fibre (grey, black)
- stainless steel ladder connection

OTHER DESIGN OPTIONS

Slat

- non-standard slat colour
- perforation of the slats
- one-sided tilting
- divided tilt of slats (ladder shortener)

Upper profile

- extruded aluminium upper profile 57×58 mm
- painting of the aluminium upper profile in RAL colour
- upper profile holders according to the offer

Control

- control by another type of motor
- connected blinds - up to 3 blinds per one common drive
- crank control (white, silver anodised, brown)
- crank grommet 45°/90°, length 500 mm (4 edges/6 edges)
- corner crank grommet 45° length 400 mm (4 mm, 4 edges)
- crank grommet of other than standard length
- removable crank
- cord control

Guiding

- guide rails according to the offer
- PVC coated 3mm stainless steel string (grey, black)
- combination of string/guide rail
- additional string in the blind
- guide rail holders and string holders according to the offer
- end caps for guiding rails S, SDV, SDV2, O, Z, H, HDV, STL and STL DV

Other design options

- self-supporting STF, STL, façade system
- non-standard paint colour

BASIC TECHNICAL PARAMETERS

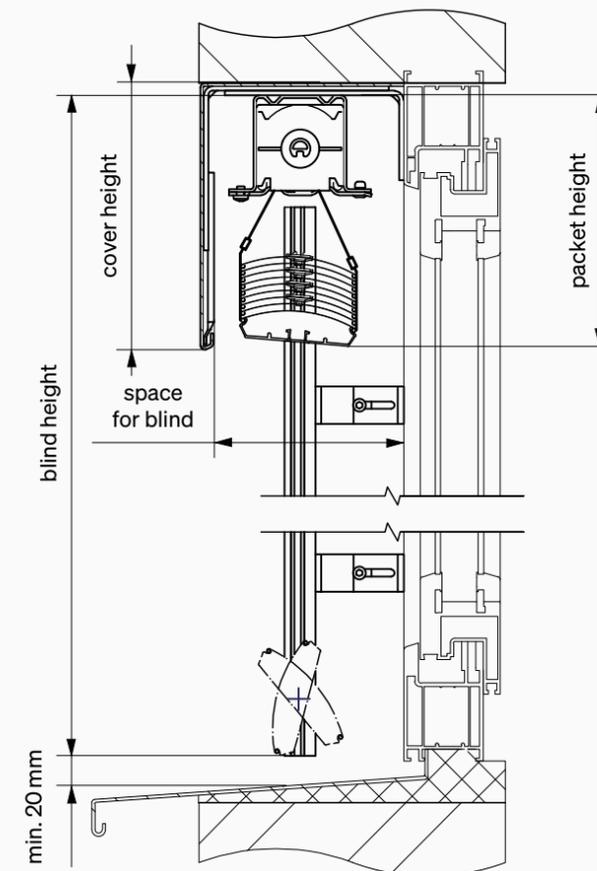
Guide type	guide rails		cable, cable/guide rail combination	
	motor	crank	motor	crank
Width	600–5,000 mm	400–5,000 mm	600–4,000 mm	400–4,000 mm
Height	500–5,000 mm	500–5,000 mm	500–4,000 mm	500–4,000 mm
Max. area of 1 blind	20 m ²	9 m ²	16 m ²	9 m ²
Max. width of connected blinds*	8 running metres	8 running metres	8 running metres	8 running metres

* No more than 3 blinds can be connected per 1 drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

SPACE FOR BLIND

Recommended	130 mm	Minimum	120 mm
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BLIND CROSS-SECTION

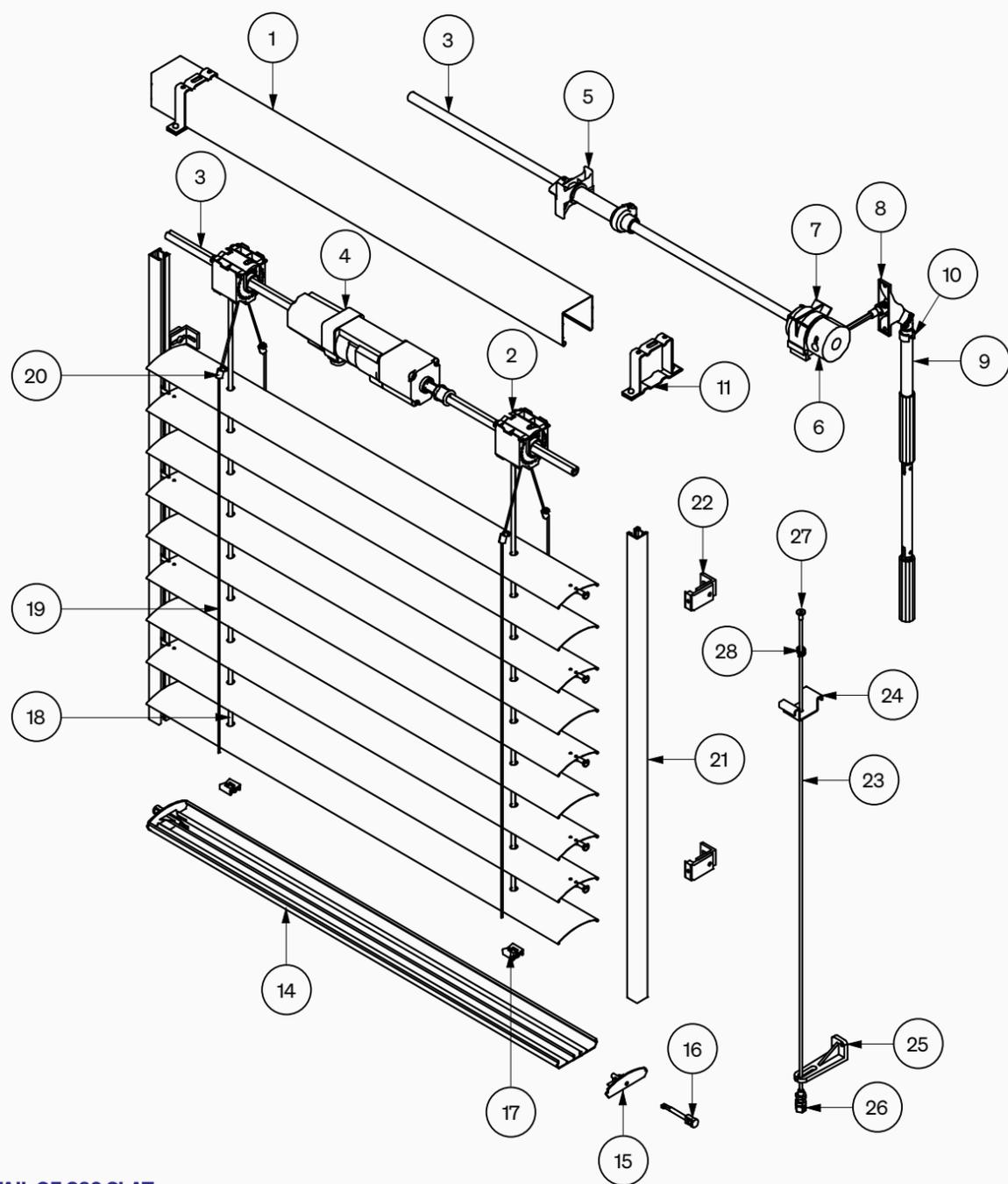


HEIGHT OF BLIND PACKET

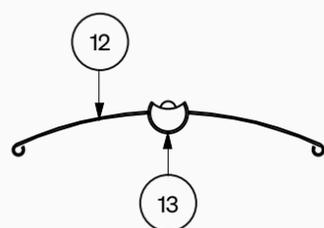
Total blind height in mm	Packet height in mm
500 – 1,250	190*
1,251 – 1,500	210
1,501 – 1,750	230
1,751 – 2,000	240
2,001 – 2,250	250
2,251 – 2,500	270
2,501 – 2,750	280
2,751 – 3,000	300
3,001 – 3,250	320
3,251 – 3,500	330
3,501 – 3,750	350
3,751 – 4,000	360
4,001 – 4,250	380
4,251 – 4,500	400
4,501 – 4,750	410
4,751 – 5,000	430

* Pay attention to the height of the cover. A gap may occur between the cover and the 1st slat when the blind is lowered.

EXTERNAL BLINDS C80

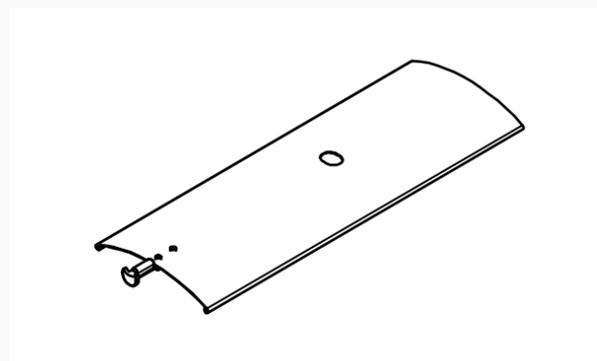


DETAIL OF C80 SLAT



Identification	Name
1	Upper profile
2	C80 bearing
3	Shaft
4	Motor
5	Limit stop
6	Gear
7	Gear holder
8	Grommet
9	Crank
10	Locking clip
11	Upper profile holder
12	C80 slat
13	C80 guide pin
14	C80 bottom profile
15	C80 bottom profile end cap
16	Guide pin for bottom profile end cap
17	Lift tape holder
18	Lift tape 8 mm
19	C80 ladder
20	Ladder connection
21	Guide rail
22	Guide rail holder
23	String 3 mm
24	Upper string holder
25	String holder
26	Tensioning screw
27	Upper string rivet
28	String spring

External blinds

C65**STANDARD VERSION****Slat**

- C shape, width 65 mm
- aluminium, thickness 0.42 mm
- colour of the slats according to the standard sample book
- metal elliptical or plastic guide pins
- double-sided tilting
- hemmed edges of the slats

Upper profile

- made of galvanised steel 56×58 mm
- upper profile holders No. 1 or No. R1

Control

- control by standard wired motor

Guiding

- extruded aluminium guide rails painted in RAL colour (type S, SDV, SDV2, O, Z)
- holders for guide rails A, B, C painted in RAL colour

Bottom profile

- bottom profile made of extruded aluminium painted in RAL colour

Components

- 8 mm wide lift tape (grey, black)
- H-shaped ladder with Kevlar fibre (grey, black)
- stainless steel ladder connection

OTHER DESIGN OPTIONS**Slat**

- non-standard slat colour
- perforation of the slats
- one-sided tilting

Upper profile

- extruded aluminium upper profile 57×58 mm
- painting of the aluminium upper profile in RAL colour
- upper profile holders according to the offer

Control

- control by another type of motor
- connected blinds - up to 3 blinds per one common drive
- crank control (white, silver anodised, brown)
- crank grommet 45°/90°, length 500 mm (4 edges/6 edges)
- corner crank grommet 45° length 400 mm (4 mm, 4 edges)
- crank grommet of other than standard length
- removable crank
- cord control

Guiding

- guide rails according to the offer
- PVC coated 3mm stainless steel string (grey, black)
- combination of string/guide rail
- additional string in the blind
- guide rail holders and string holders according to the offer
- end caps for guiding rails S, SDV, SDV2, O, Z, H, HDV, STL and STL DV

Other design options

- self-supporting STF, STL, façade system
- non-standard paint colour

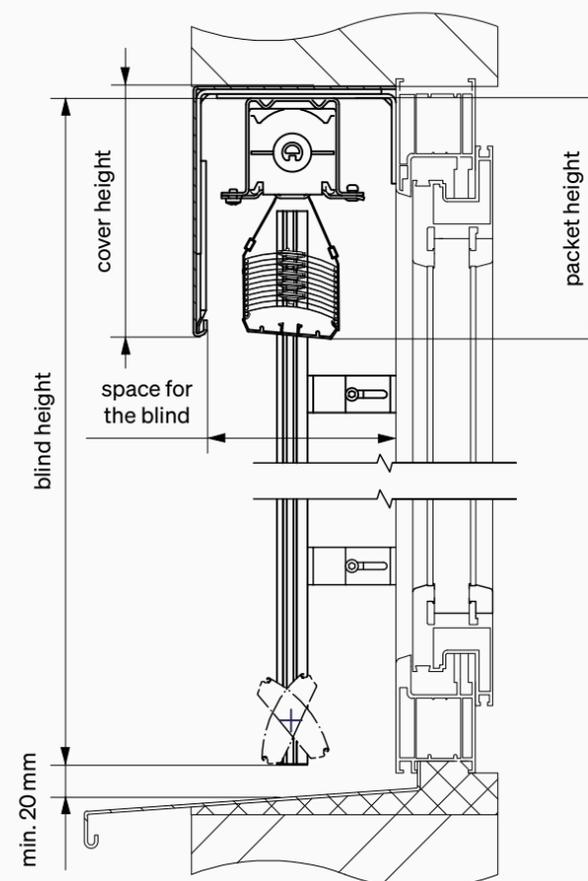
BASIC TECHNICAL PARAMETERS

Guide type	guide rails		cable, cable/guide rail combination	
	motor	crank	motor	crank
Width	600–5,000 mm	400–5,000 mm	600–4,000 mm	400–4,000 mm
Height	500–5,000 mm	500–5,000 mm	500–4,000 mm	500–4,000 mm
Max. area of 1 blind	20 m ²	9 m ²	16 m ²	9 m ²
Max. width of connected blinds*	8 running metres	8 running metres	8 running metres	8 running metres

* No more than 3 blinds can be connected per 1 drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

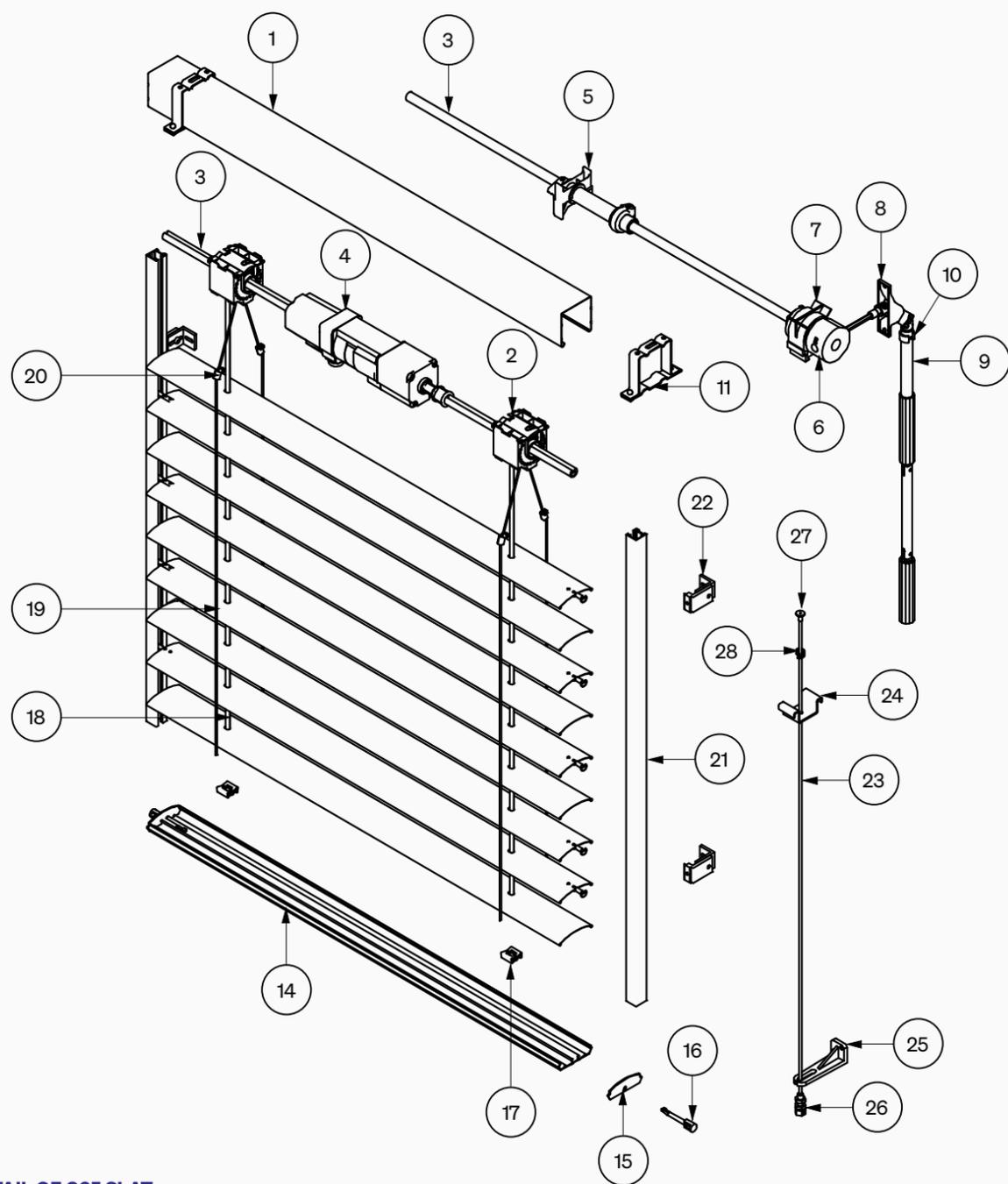
SPACE FOR BLIND

Recommended	130 mm	Minimum	110 mm
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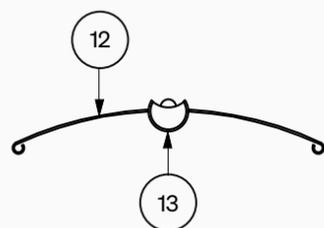
BLIND CROSS-SECTION**HEIGHT OF BLIND PACKET**

Total blind height in mm	Packet height in mm
500 – 1,250	200
1,251 – 1,500	220
1,501 – 1,750	240
1,751 – 2,000	260
2,001 – 2,250	280
2,251 – 2,500	300
2,501 – 2,750	320
2,751 – 3,000	340
3,001 – 3,250	360
3,251 – 3,500	380
3,501 – 3,750	400
3,751 – 4,000	420
4,001 – 4,250	440
4,251 – 4,500	460
4,501 – 4,750	480
4,751 – 5,000	500

EXTERNAL BLINDS C65

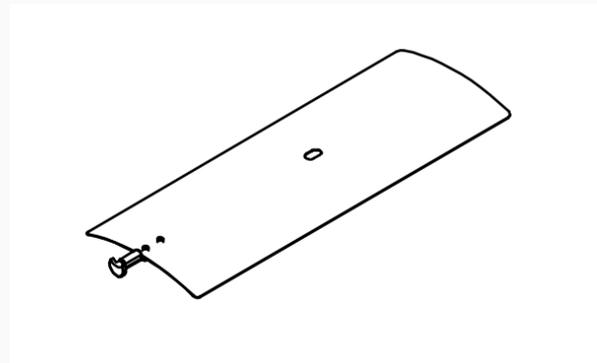


DETAIL OF C65 SLAT



Identification Name

1	Upper profile
2	C65 bearing
3	Shaft
4	Motor
5	Limit stop
6	Gear
7	Gear holder
8	Grommet
9	Crank
10	Locking clip
11	Upper profile holder
12	C65 slat
13	C65 guide pin
14	C65 bottom profile
15	C65 bottom profile end cap
16	Guide pin for bottom profile end cap
17	Lift tape holder
18	Lift tape 8 mm
19	C65 ladder
20	Ladder connection
21	Guide rail
22	Guide rail holder
23	String 3 mm
24	Upper string holder
25	String holder
26	Tensioning screw
27	Upper string rivet
28	String spring



STANDARD VERSION

Slat

- flat-edged slat, width 80 mm
- special aluminium alloy, flexible slats 0.42 mm thick
- colour of the slats according to the standard sample book
- metal elliptical or plastic guide pins
- double-sided tilting

Upper profile

- made of galvanised steel 56×58 mm
- upper profile holders No. 1 or No. R1

Control

- control by standard wired motor

Guiding

- extruded aluminium guide rails painted in RAL colour (type S, SDV, SDV2, O, Z)
- holders for guide rails A, B, C painted in RAL colour

Bottom profile

- bottom profile made of extruded aluminium painted in RAL colour

Components

- 8 mm wide lift tape (grey, black)
- H-shaped ladder (grey, black)
- stainless steel ladder connection

OTHER DESIGN OPTIONS

Slat

- non-standard slat colour
- perforation of the slats
- one-sided tilting
- divided tilt of slats (ladder shortener)

Upper profile

- extruded aluminium upper profile 57×58 mm
- painting of the aluminium upper profile in RAL colour
- upper profile holders according to the offer

Control

- control by another type of motor
- connected blinds - up to 3 blinds per one common drive
- crank control (white, silver anodised, brown)
- crank grommet 45°/90°, length 500 mm (4 edges/6 edges)
- corner crank grommet 45° length 400 mm (4 mm, 4 edges)
- crank grommet of other than standard length
- removable crank
- cord control

Guiding

- guide rails according to the offer
- PVC coated 3mm stainless steel string (grey, black)
- combination of string/guide rail
- additional string in the blind
- guide rail holders and string holders according to the offer
- end caps for guiding rails S, SDV, SDV2, O, Z, H, HDV, STL and STL DV

Other design options

- self-supporting STF, STL, façade system
- non-standard paint colour

BASIC TECHNICAL PARAMETERS

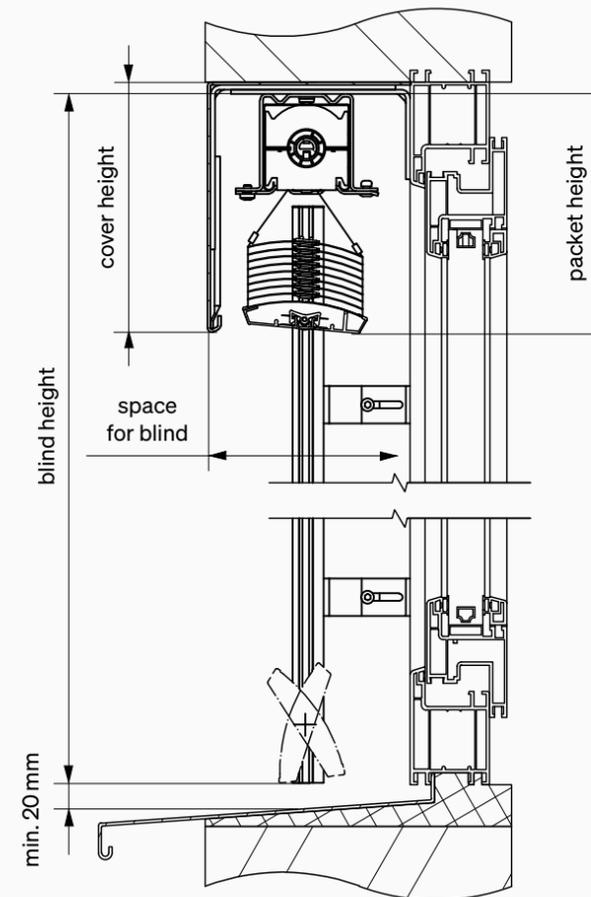
Guide type	guide rails		cable, cable/guide rail combination	
	motor	crank	motor	crank
Width	600–4,000 mm	400–4,000 mm	600–4,000 mm	400–4,000 mm
Height	500–4,000 mm	500–4,000 mm	500–4,000 mm	500–4,000 mm
Max. area of 1 blind	16 m ²	9 m ²	16 m ²	9 m ²
Max. width of connected blinds*	8 running metres	8 running metres	8 running metres	8 running metres

* No more than 3 blinds can be connected per 1 drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

SPACE FOR BLIND

Recommended	130 mm	Minimum	120 mm
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BLIND CROSS-SECTION

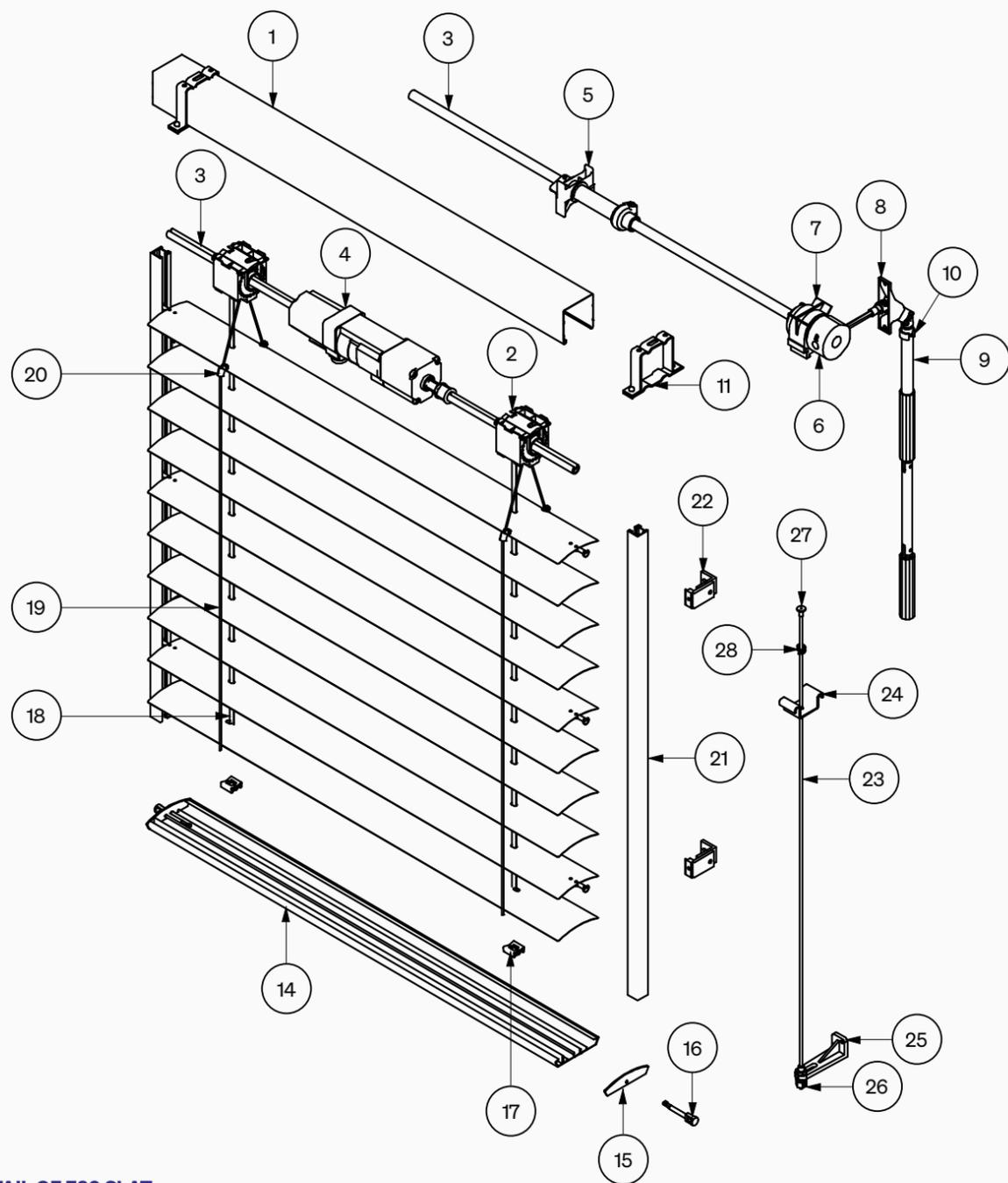


HEIGHT OF BLIND PACKET

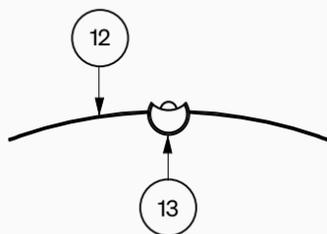
Total blind height in mm	Packet height in mm/guide rail	Packet height in mm/string
500 – 1,250	160*	150*
1,251 – 1,500	170*	160*
1,501 – 1,750	180*	170*
1,751 – 2,000	190	170*
2,001 – 2,250	200	180*
2,251 – 2,500	210	190
2,501 – 2,750	220	200
2,751 – 3,000	230	200
3,001 – 3,250	240	210
3,251 – 3,500	250	220
3,501 – 3,750	260	220
3,751 – 4,000	260	230

* Pay attention to the height of the cover. A gap may occur between the cover and the 1st slat when the blind is lowered.

EXTERNAL BLINDS F80



DETAIL OF F80 SLAT

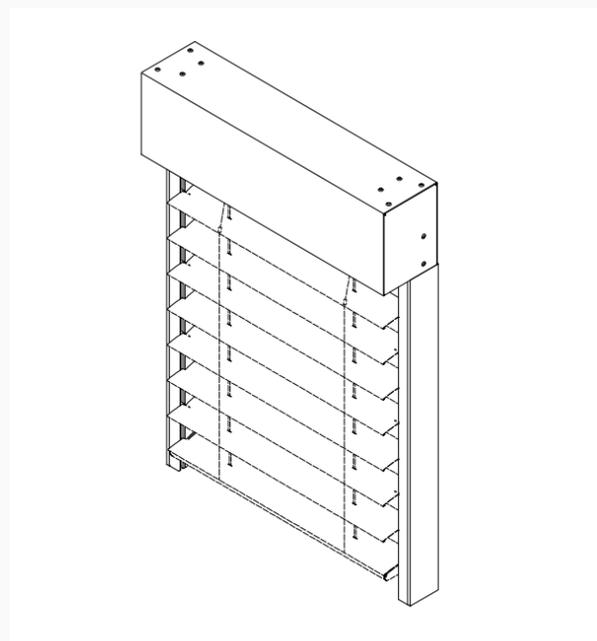


Identification	Name
1	Upper profile
2	F80 bearing
3	Shaft
4	Motor
5	Limit stop
6	Gear
7	Gear holder
8	Grommet
9	Crank
10	Locking clip
11	Upper profile holder
12	F80 slat
13	F80 guide pin
14	F80 bottom profile
15	F80 bottom profile end cap
16	Guide pin for bottom profile end cap
17	Lift tape holder
18	Lift tape 8 mm
19	F80 ladder
20	Ladder connection
21	Guide rail
22	Guide rail holder
23	String 3 mm
24	Upper string holder
25	String holder
26	Tensioning screw
27	Upper string rivet
28	String spring

SELF-BEARING SYSTEMS

Self-bearing system

STF WITH COVER SHEET



STANDARD VERSION

Guiding

- STF1 or STF2 guide rails painted in RAL colour
- plastic or aluminium Z-type guide rail painted in RAL colour for STF2 rail
- distance profiles for STF (max. 2 units)

Control

- control by standard wired motor

Cover sheet

- 2mm thick aluminium cover sheet painted in RAL colour
- cable holes with rubber grommet

OTHER DESIGN OPTIONS

Guiding

- cutting of STF profiles at an angle of 4°

Control

- control by another type of motor

Cover sheet

- self-adhesive XPS insulation 10 mm thick on the front side A of the cover sheet
- 20 mm or 40 mm thick XPS insulation on the back of the C cover sheet type F31, F32
- double-sided coating of cover sheet

Other design options

- integrated roller screen only for type F11- and F21-type cover sheets
- non-standard paint colour

OTHER TECHNICAL PARAMETERS

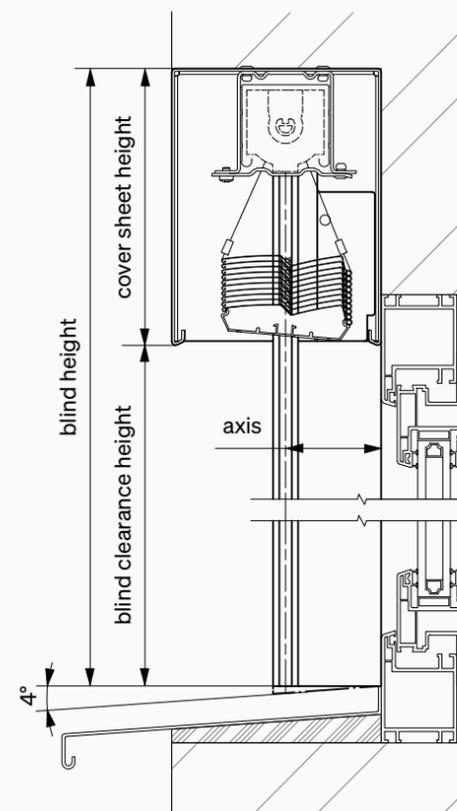
- the self-bearing system without additional anchoring is supplied with the blind already installed in the cover sheet
- for a self-bearing system wider than 2,300 mm or higher than 3,500 mm, the system is supplied with the blind separately and must be supplemented with an additional cover sheet anchorage
- the self-bearing system is supplied only with holders No. 1 attached to the cover sheet
- for a self-bearing system wider than 2,300 mm or higher than 3,500 mm, holders No. 2 (without holder No. 1) for additional anchoring are included

BASIC TECHNICAL PARAMETERS

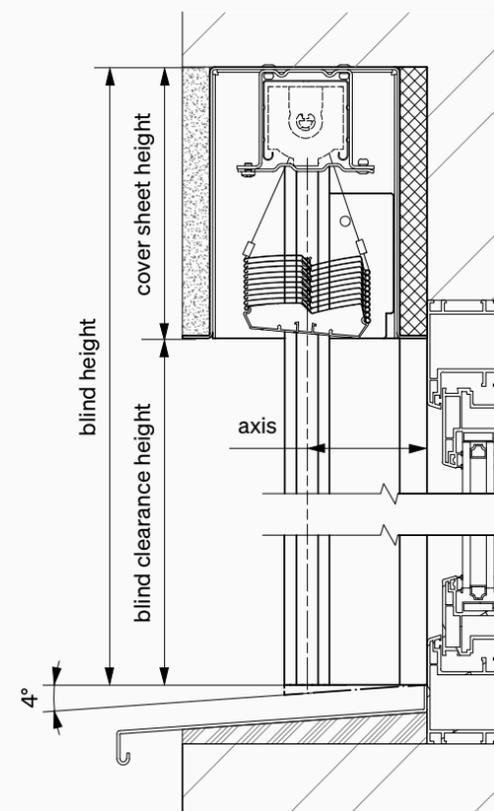
	without additional anchoring	with additional anchoring
Anchoring of the upper profile (cover)		
Control	motor	motor
Width	600–2,300 mm	2,301–4,000 mm
Height	500–3,500 mm	3,501–5,000 mm*
Max. area of 1 blind	8 m ²	20 m ²
Max. width of connected blinds	not applicable	not applicable

* The maximum height with the F80 blind is 4,000 mm.

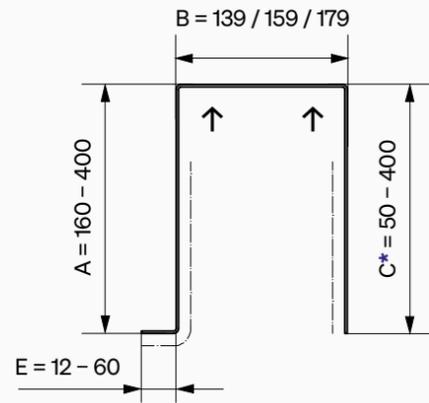
STF CROSS-SECTION - VISIBLE VARIANT



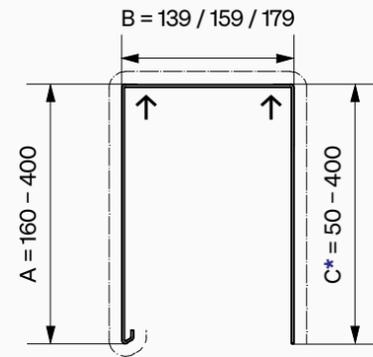
STF CROSS-SECTION - CONCEALED VARIANT (UNDER PLASTER)



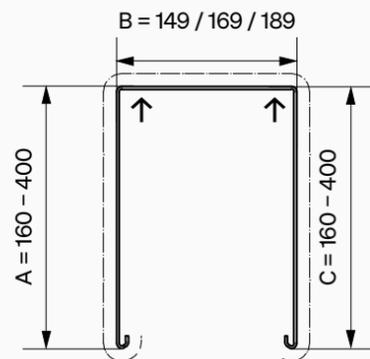
Type F11



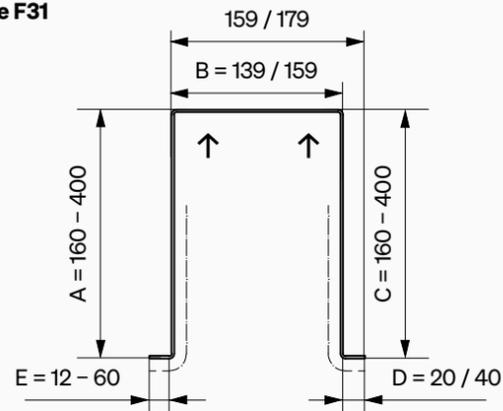
Type F21



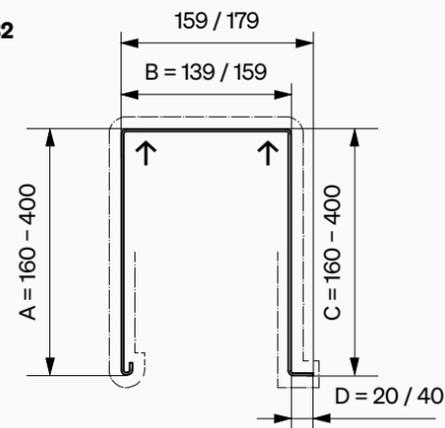
Type F30



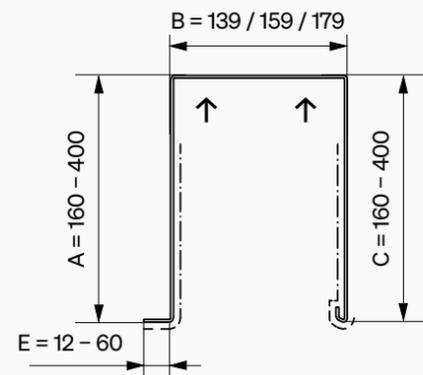
Type F31



Type F32

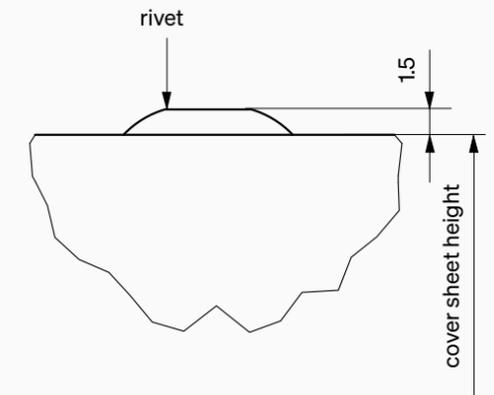
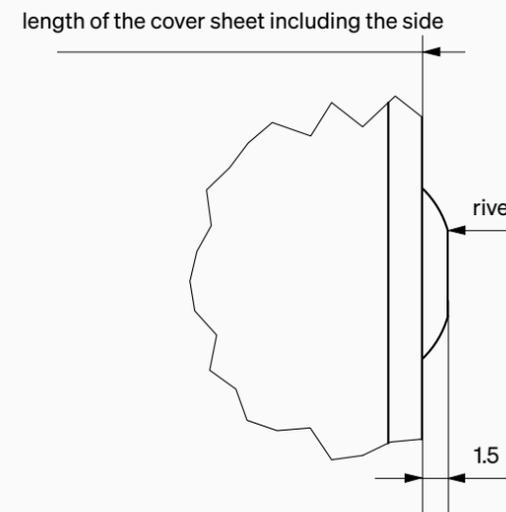
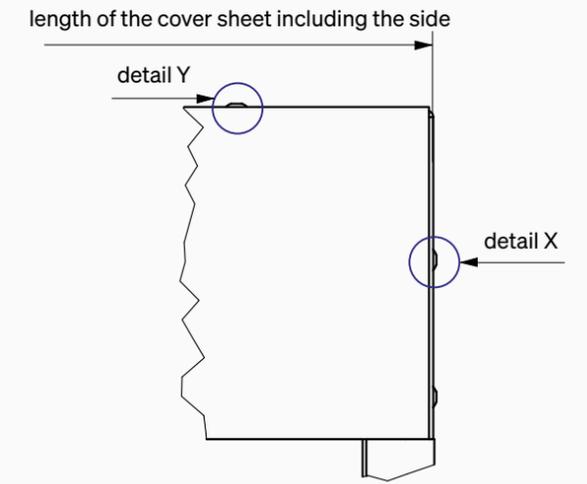
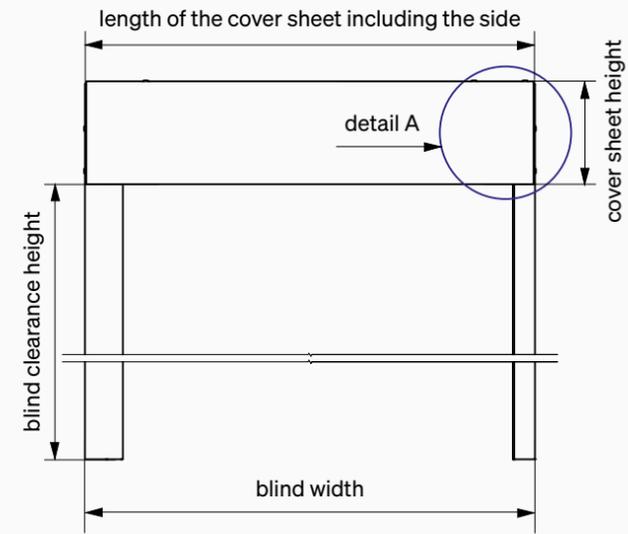


Type F33



* Type F11 and F21 sheets may have different heights A and C, but the dimension C must be a minimum of 50mm and a maximum of A-side.
 — Type F30, F31, F32 and F33 sheets have dimensions A and C must be identical

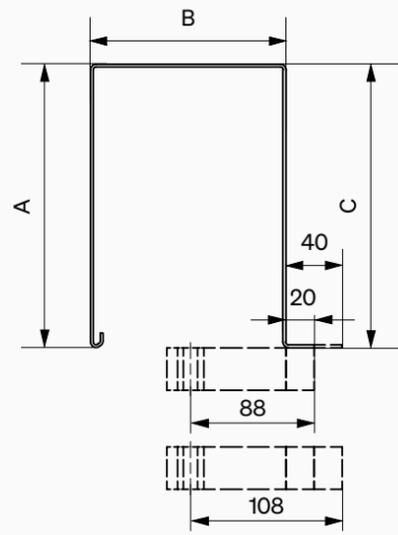
↑ location of the painting hole | painting side



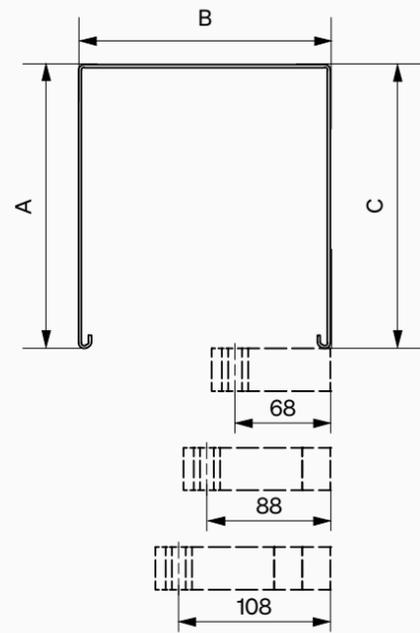
— the length of the cover sheet equals the total width of the blind, including side parts

POSITION OF THE COVER SHEET IN RELATION TO THE STF PROFILE

Cover sheets with bend D (F31, F32)

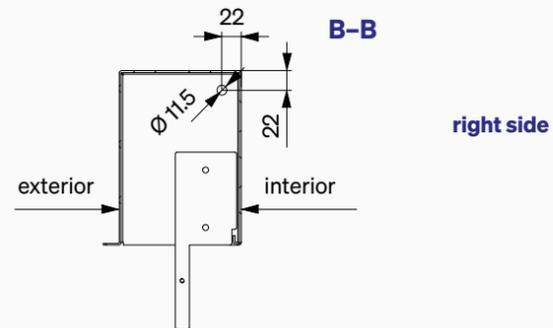
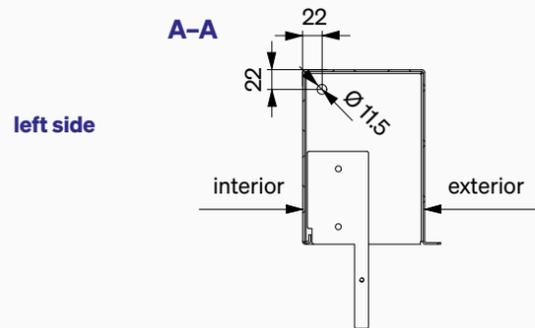
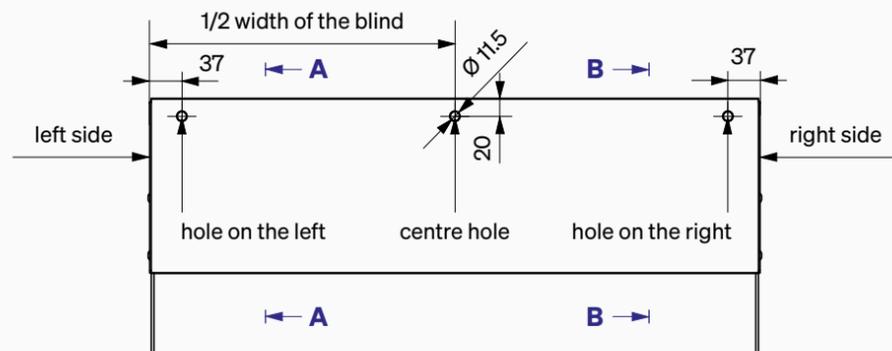


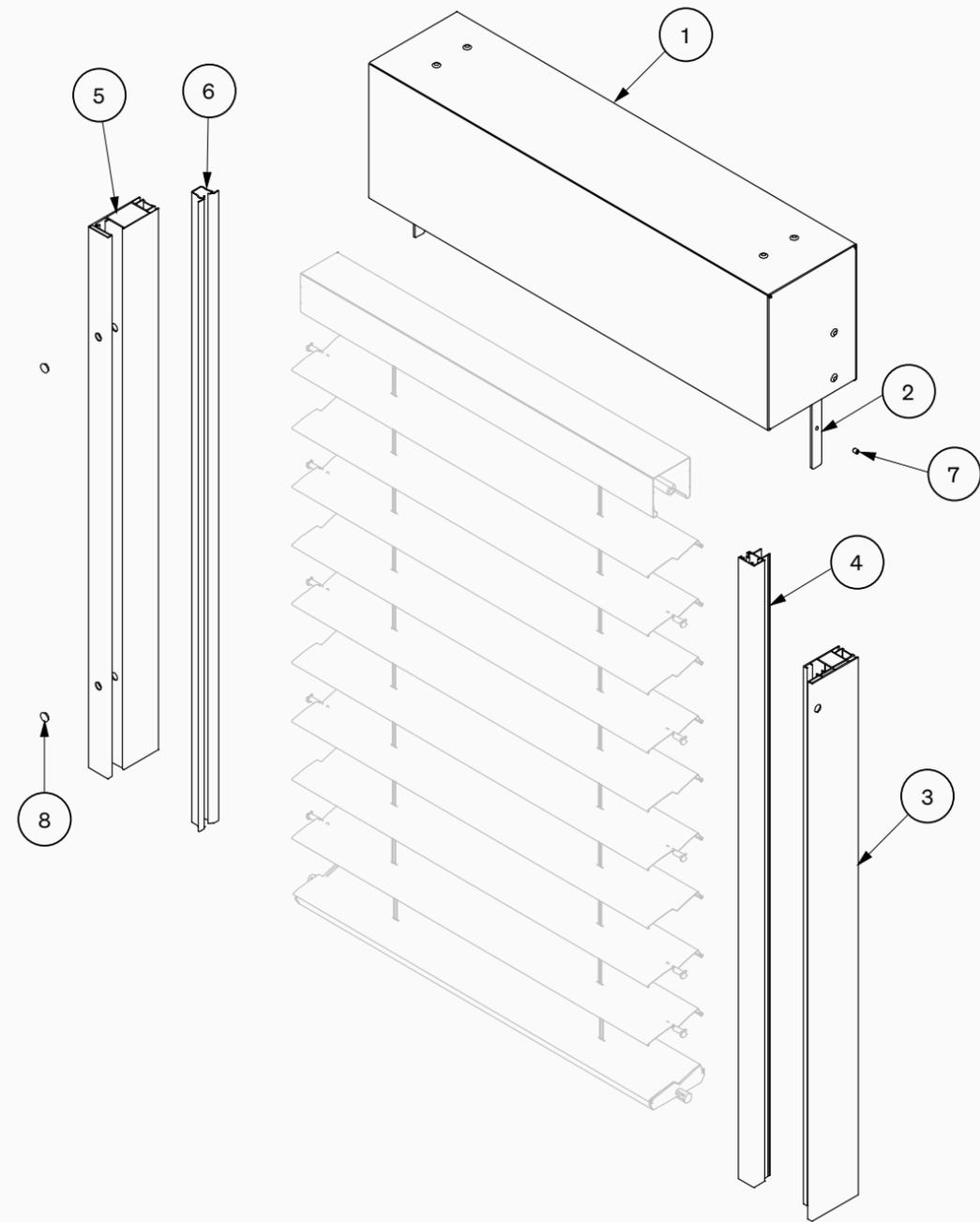
Cover sheets without bend D (F11, F21, F30, F33)



VARIANTS OF HOLES FOR THE SUPPLY CABLE

Openings - rear side of the cover sheet / interior view

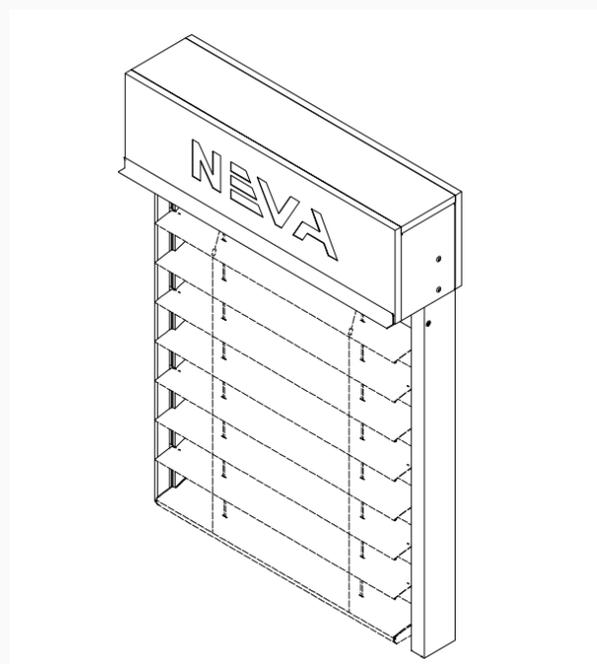




Identification	Name
1	Cover sheet type F11, F21, F30, F31, F32, F33
2	Al bracket for STF cover
3	STF1 guide rail body
4	STF1 guide rail, removable
5	STF2 guide rail body
6	Plastic or aluminium profile type Z
7	Set screw M5x6 internal hexagon, flat
8	Guide hole cap for STF2

Self-bearing system

STF WITH ISO-KASTL



STANDARD VERSION

Guiding

- STF1 or STF2 guide rails painted in RAL colour
- plastic or aluminium Z-type guide rail painted in RAL colour for STF2 rail
- distance profiles for STF (max. 2 units)

Control

- control by standard wired motor

ISO-KASTL

- without thermal insulation or with 20 mm XPS thermal insulation
- made of Purenite plates 15 mm thick
- interior coating with RAL 7037 façade paint
- front profile type Standard, type A and type B painted in RAL colour
- rear profile type U and type T painted in RAL colour
- 2 mm thick aluminium sides
- internal reinforcing L-profiles

OTHER TECHNICAL PARAMETERS

- the self-bearing system without additional anchoring is supplied with the blind already installed in the ISO-KASTL
- for a self-bearing system wider than 2,300 mm or more 3,500 mm, the system is supplied with the blind separately and must be supplemented with additional ISO-KASTL anchoring
- the self-bearing system is supplied only with holders No. 1 attached to the ISO-KASTL
- for self-bearing system wider than 2,300 mm or more 3,500 mm, ISO-KASTL holders with thermal insulation are included

OTHER DESIGN OPTIONS

Guiding

- cutting of STF profiles at an angle of 4°

Control

- control by another type of motor

Other design options

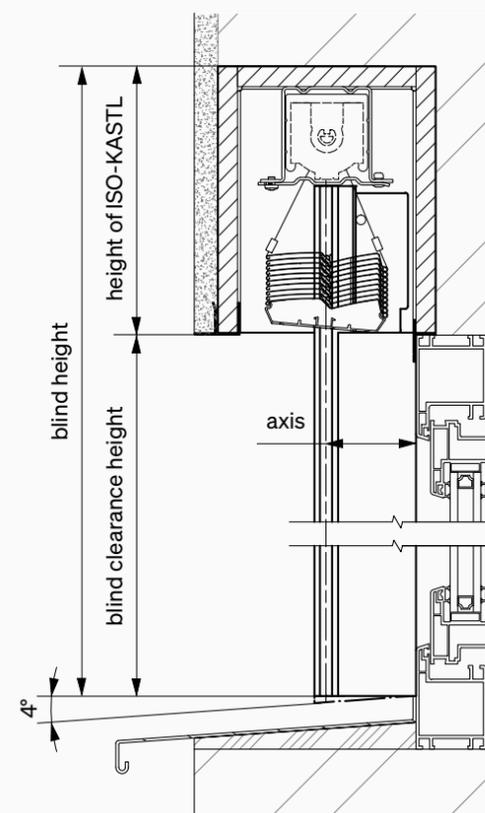
- non-standard paint colour

BASIC TECHNICAL PARAMETERS

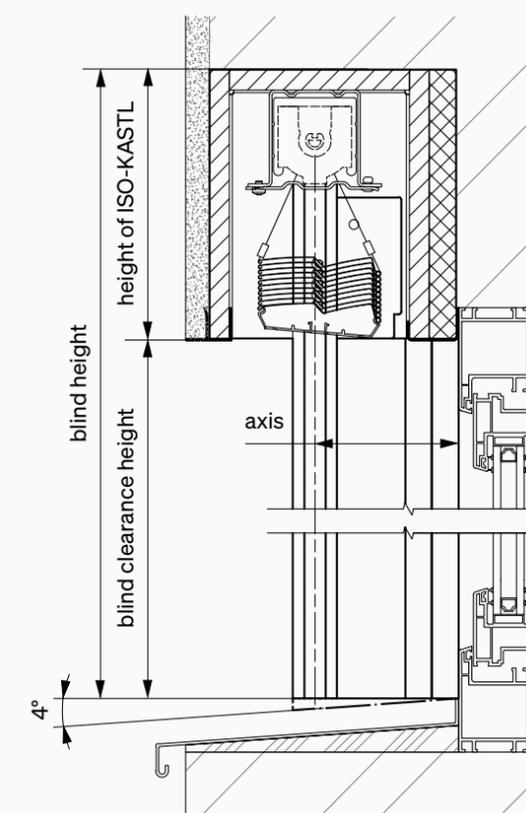
	without additional anchoring	with additional anchoring
Anchoring of the upper profile (cover)		
Control	motor	motor
Width	600–2,300 mm	2,301–4,000 mm
Height	500–3,500 mm	3,501–5,000 mm*
Max. area of 1 blind	8 m ²	20 m ²
Max. width of connected blinds	not applicable	not applicable

* The maximum height with the F80 blind is 4,000 mm.

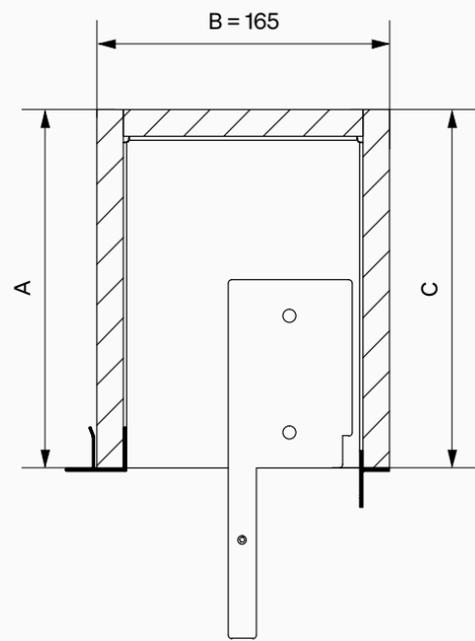
CROSS-SECTION WITH T PROFILE



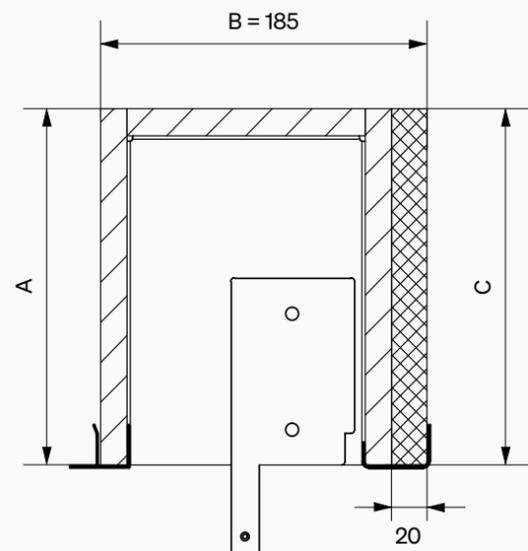
CROSS-SECTION WITH U PROFILE



CROSS-SECTION OF ISO-KASTL WITHOUT INSULATION



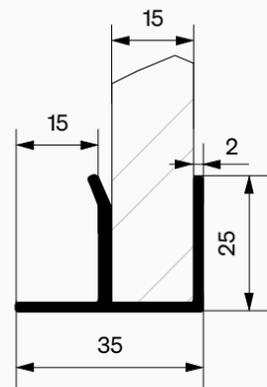
CROSS-SECTION OF ISO-KASTL WITH INSULATION



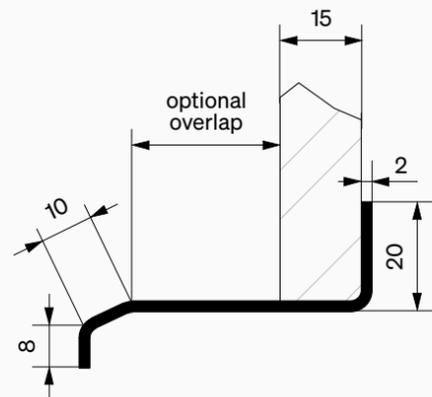
— the dimensions of sheets A and C must be identical

FRONT PROFILES

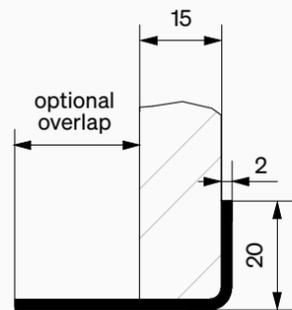
Standard type



Type A

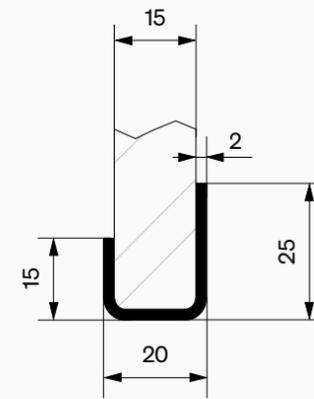


Type B

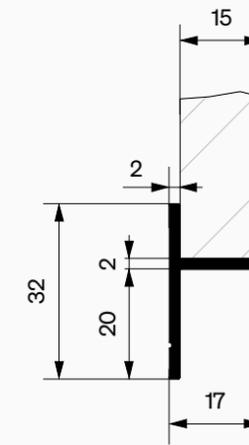


REAR PROFILES WITHOUT INSULATION

Type U

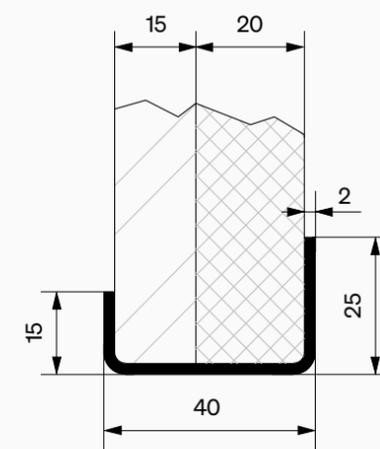


Type T

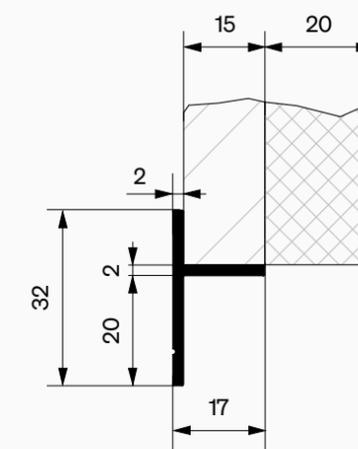


REAR PROFILES WITH INSULATION

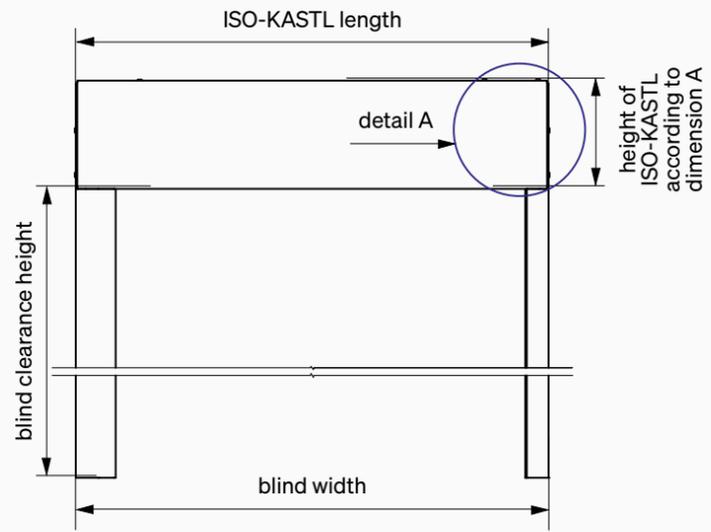
Type U



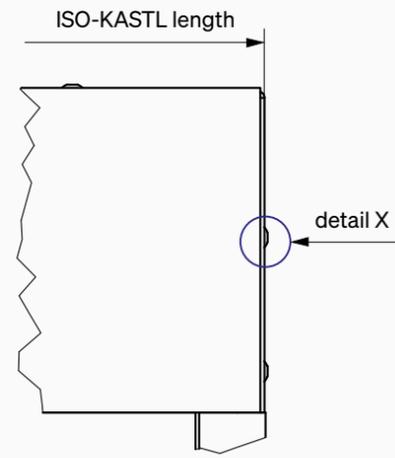
Type T



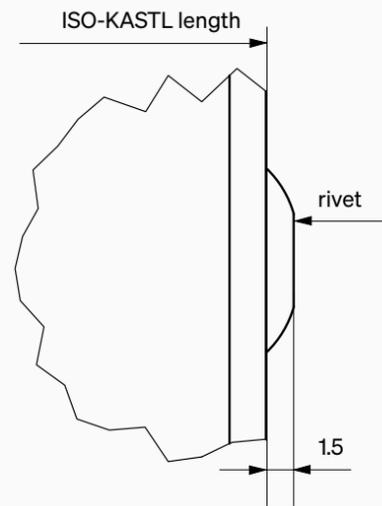
FRONT VIEW



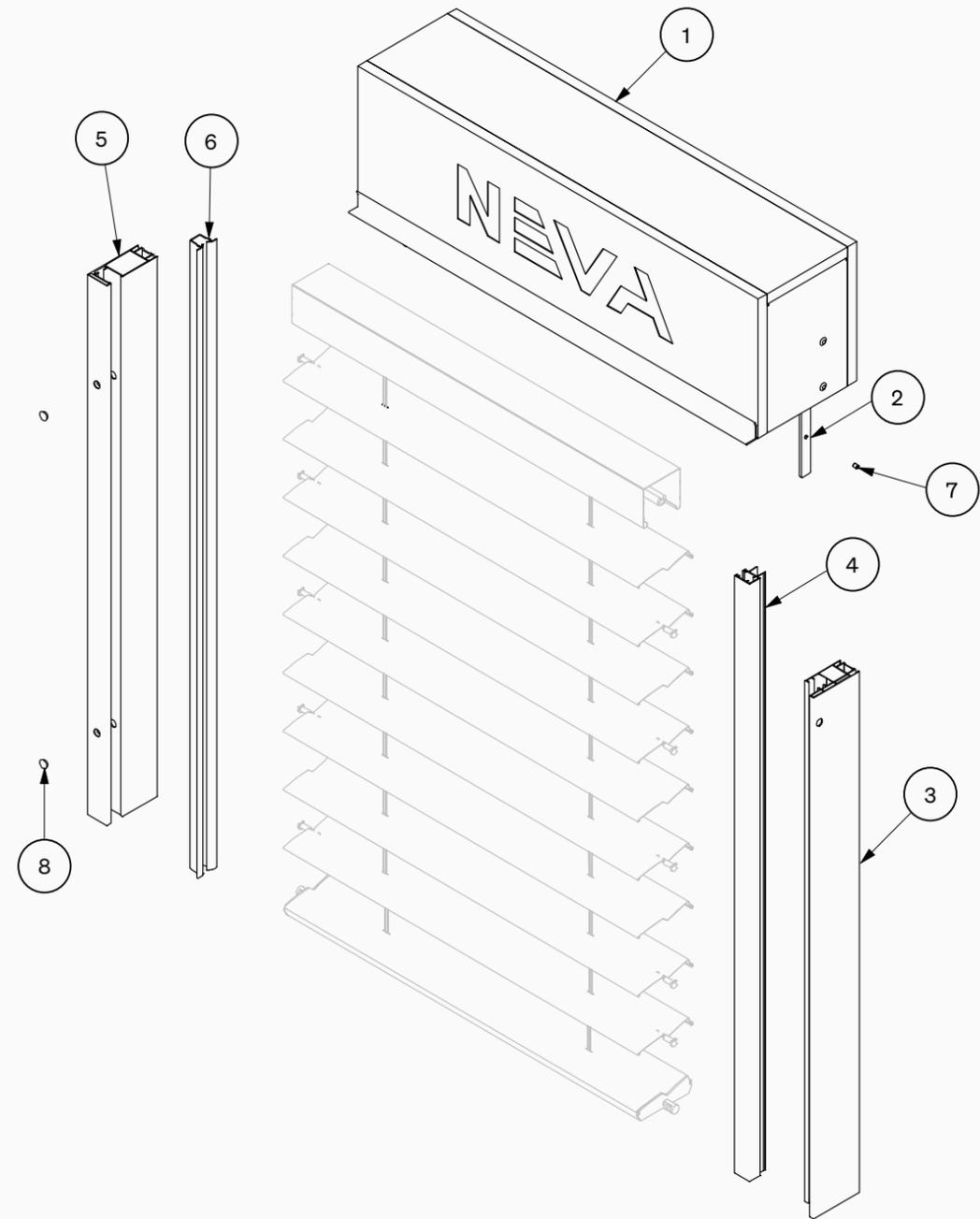
DETAIL A



DETAIL X



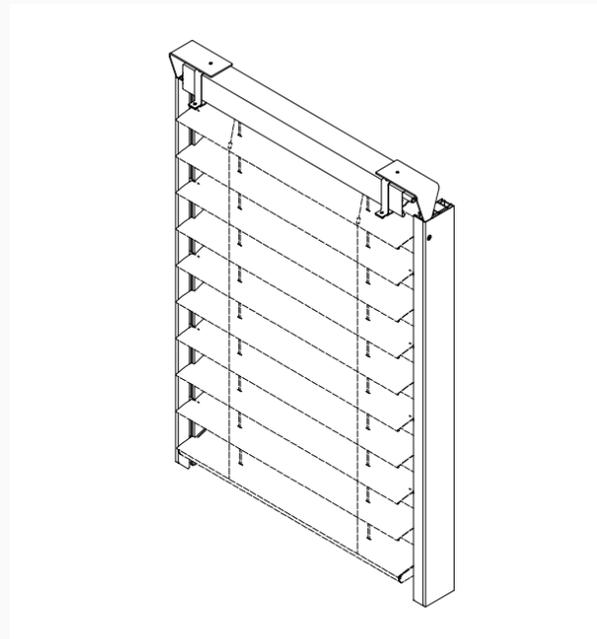
STF WITH ISO-KASTL



Identification	Name
1	ISO-KASTL
2	Al bracket for STF cover
3	STF1 guide rail body
4	STF1 guide rail, removable
5	STF2 guide rail body
6	Plastic or aluminium profile type Z
7	Set screw M5×6 internal hexagon, flat
8	Guide hole cap for STF2

Self-bearing system

STF WITHOUT COVER



STANDARD VERSION

Guiding

- STF1 or STF2 guide rails painted in RAL colour
- plastic or aluminium Z-type rail painted in RAL colour for STF2
- distance profiles for STF (max. 2 units)

Control

- control by standard wired motor

OTHER DESIGN OPTIONS

Guiding

- cutting of STF profiles at an angle of 4°
- painting of the guide rails in a colour other than RAL

Control

- control by another type of motor

OTHER TECHNICAL PARAMETERS

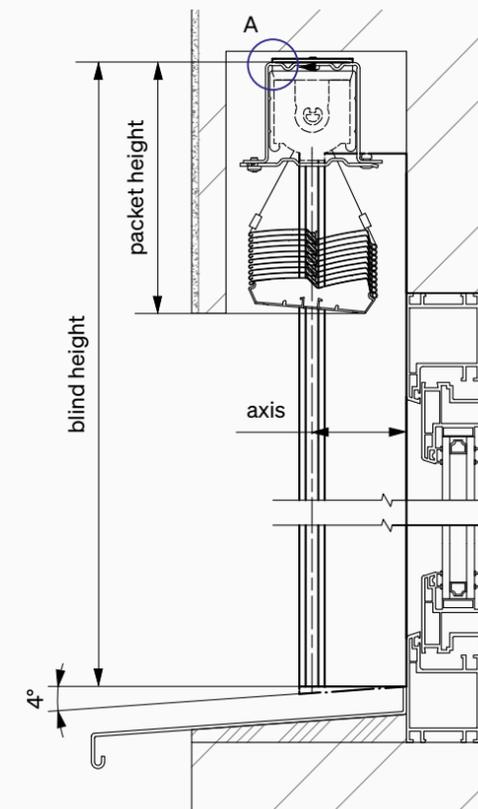
- for a self-bearing system wider than 2,300 mm or higher than 3,500 mm, the system must be supplemented with additional anchoring of the upper profile of the blind
- for a self-bearing system wider than 2,300 mm or higher than 3,500 mm, holders No. 2 are included

BASIC TECHNICAL PARAMETERS

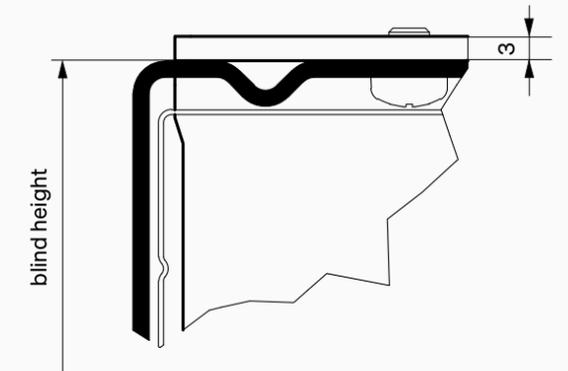
Anchoring the upper profile	without additional anchoring	with additional anchoring
Control	motor	motor
Width	600–2,300 mm	2,301–4,000 mm
Height	500–3,500 mm	3,501–5,000 mm*
Max. area of 1 blind	8 m ²	20 m ²
Max. width of connected blinds	not applicable	not applicable

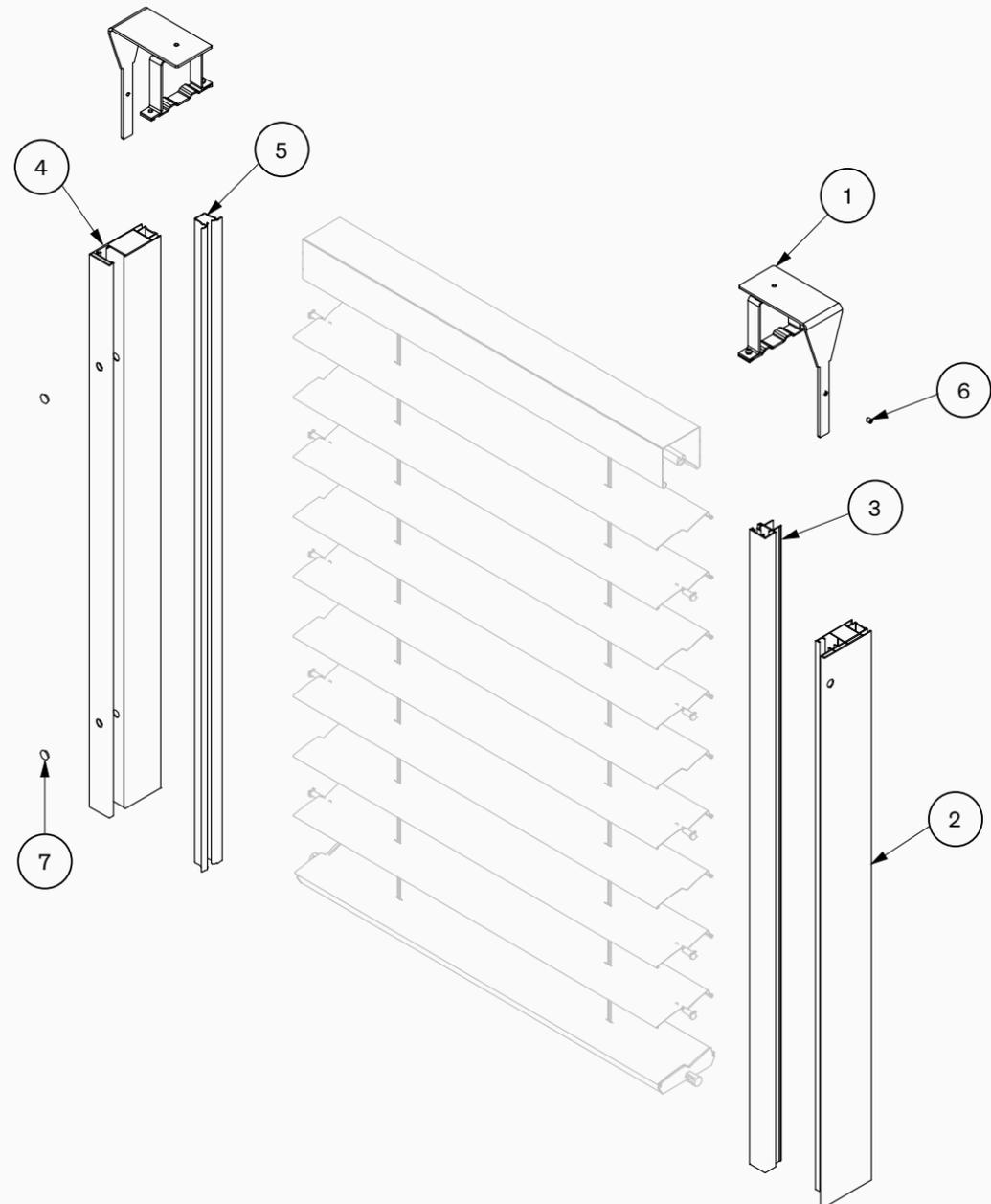
* The maximum height with the F80 blind is 4,000 mm.

CROSS-SECTION OF STF WITHOUT COVER SHEET



DETAIL A

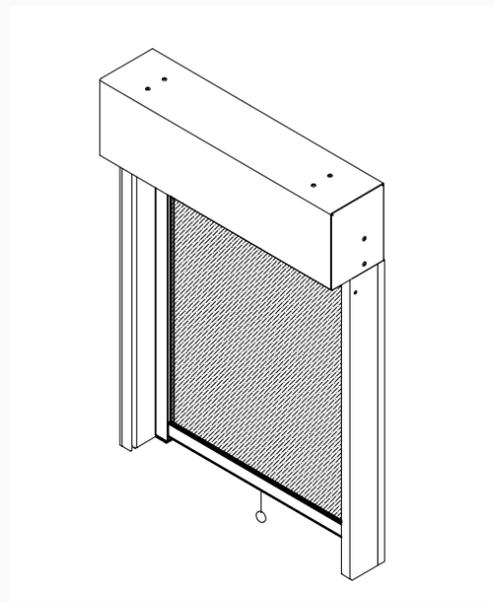




Identification	Name
1	STF upper profile bracket
2	STF1 guide rail body
3	STF1 guide rail, removable
4	STF2 guide rail body
5	Plastic or aluminium profile type Z
6	Set screw M5×6 internal hexagon, flat
7	Guide hole cap for STF2

Self-bearing system

INTEGRATED INSECT SCREEN



STANDARD VERSION

Guiding

- grey screen colour
- control profile painted in RAL colour
- aluminium guide rails painted in RAL colour
- guide rail hole cap and guide rail end cap in anthracite RAL 7016
- fixing the control profile in the guide rails of the screen
- spring brake

Control

- manual control

OTHER TECHNICAL PARAMETERS

- STF system with an integrated screen is supplied with at least one distance profile
- The screen profiles are painted in the same colour as the STF guide rail system

OTHER DESIGN OPTIONS

Guiding

- screen offset
- multiple screens up to 3 in one system

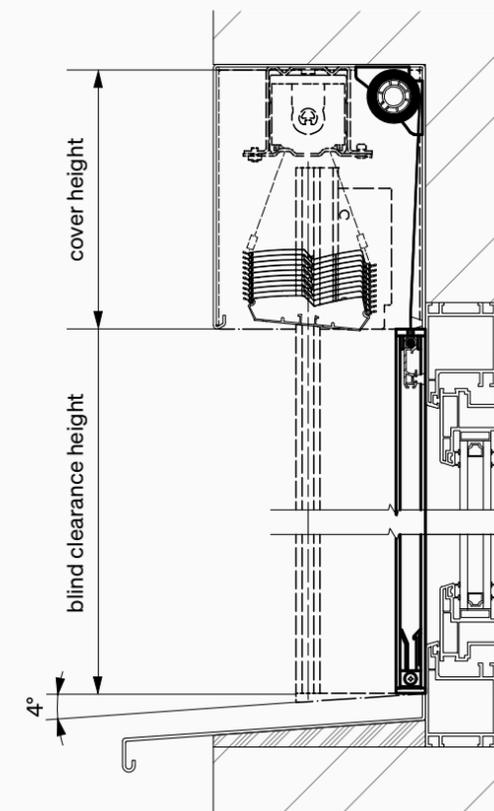
Other design options

- non-standard paint colour

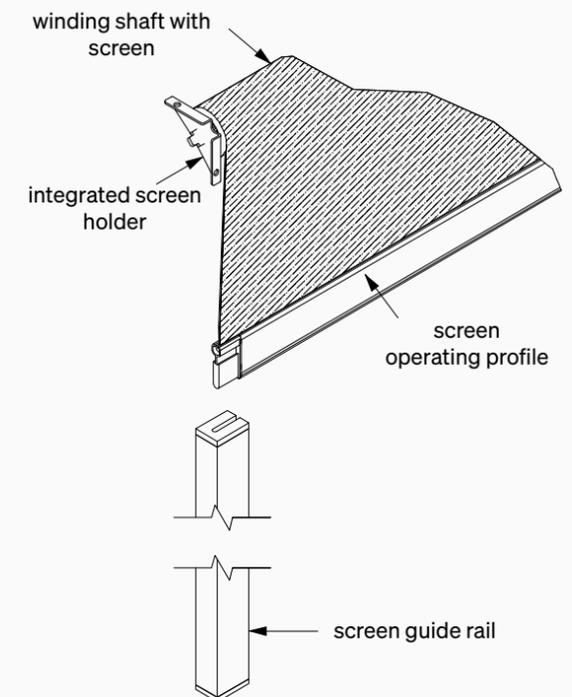
BASIC TECHNICAL PARAMETERS

Integrated insect screen	without offset	with offset
Width of blind with screen	715 – 2,065 mm	715 – 4,000 mm
Screen width	–	650 – 2,000 mm
Clearance	max. 2,200 mm	max. 2,200 mm
Cover height	max. 300 mm	max. 300 mm

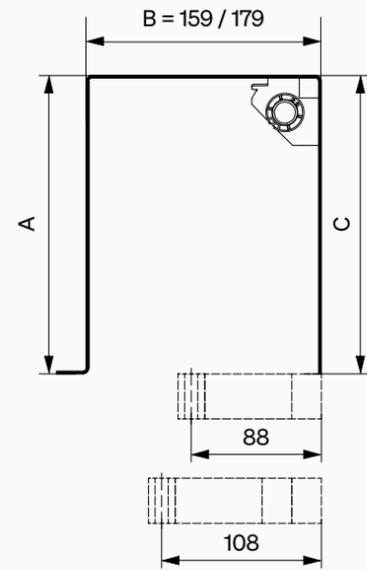
CROSS-SECTION OF INTEGRATED INSECT SCREEN



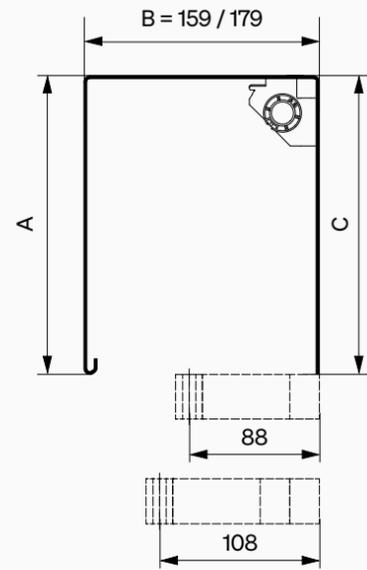
BASIC ELEMENTS OF INTEGRATED INSECT SCREEN



Sheet type F11



Sheet metal type F21



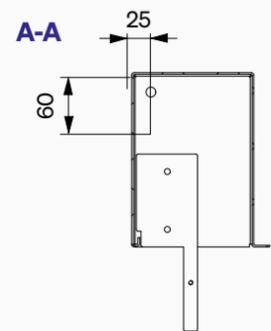
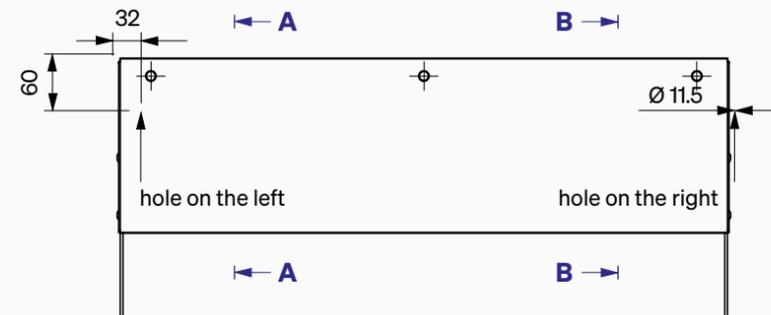
Dimension B - 159 mm:
blind axis 88 mm

Dimension B - 179 mm:
blind axis 108 mm

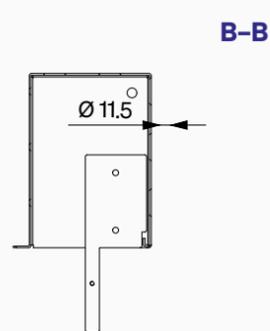
Dimensions A, C - max. 300 mm
Dimensions A and C must be the same

VARIANTS OF HOLES FOR THE SUPPLY CABLE

Openings - rear side of the cover sheet / interior view



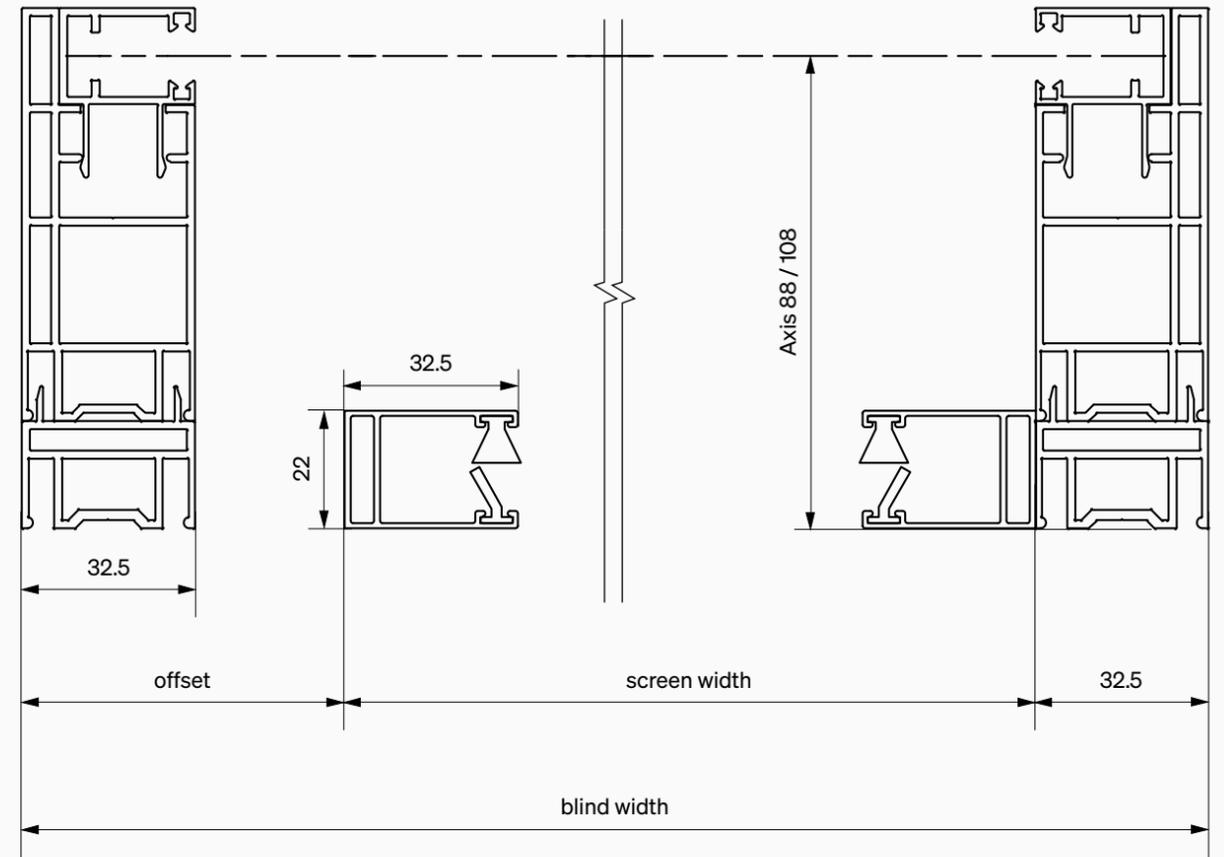
left side



right side

With offset

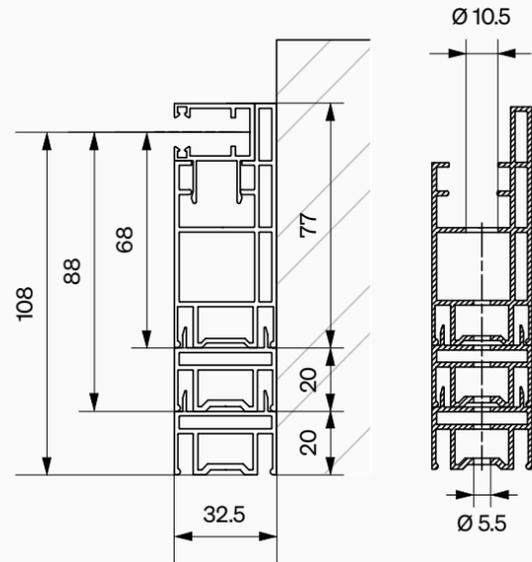
Without offset



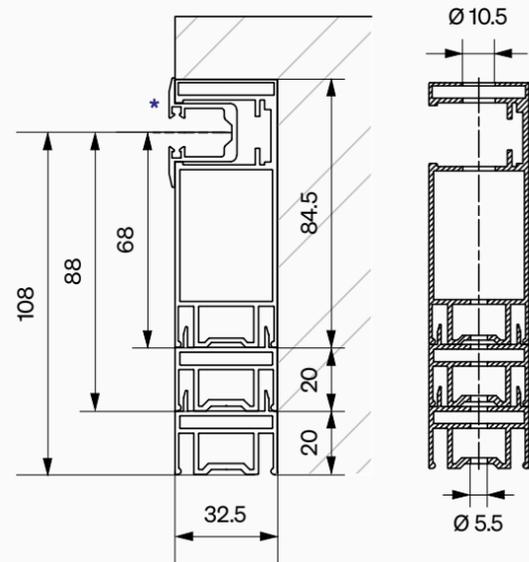
INTERIOR

- the offset is specified from left to right when viewed from the interior
- without offset, the screen is made exactly into the space between the STF guide rails

STF1 + mounting holes

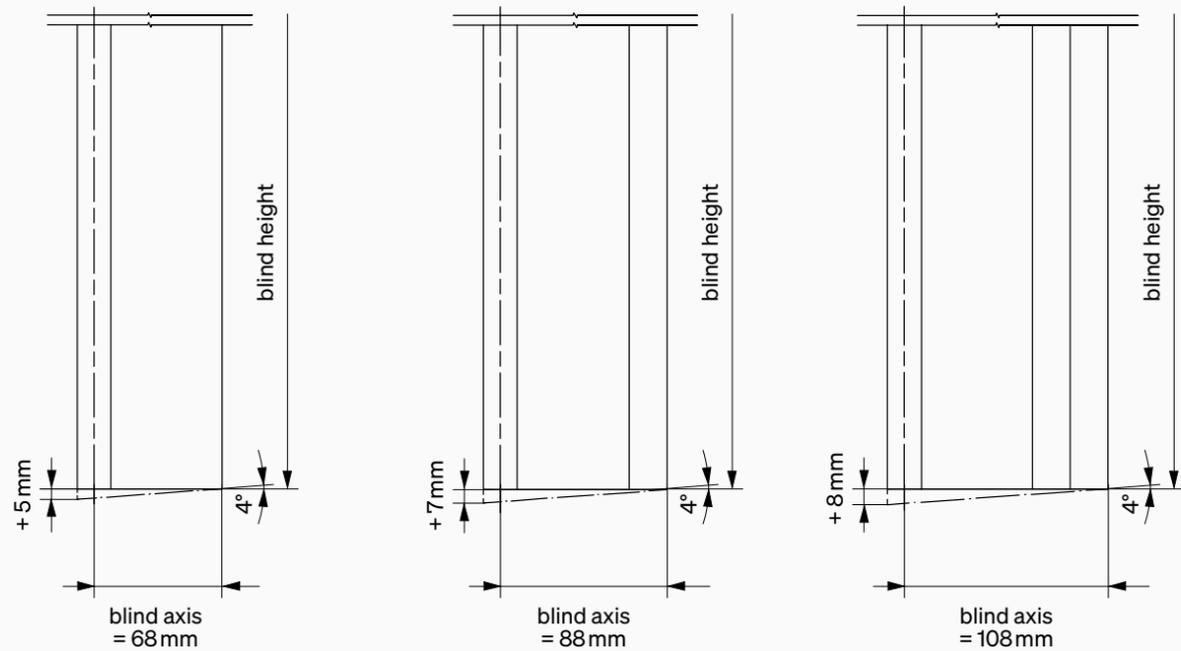


STF2 + mounting holes

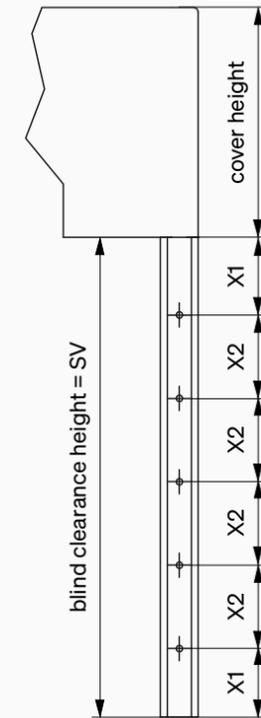


* Aluminium profile type Z or plastic recessed see page 108.

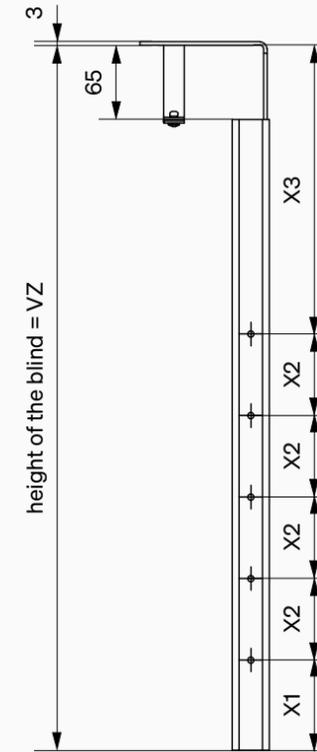
4° CUTTING ANGLE FOR STF SYSTEMS



STF with cover



STF without cover



NUMBER OF HOLES FOR MOUNTING THE BLIND WITH COVER

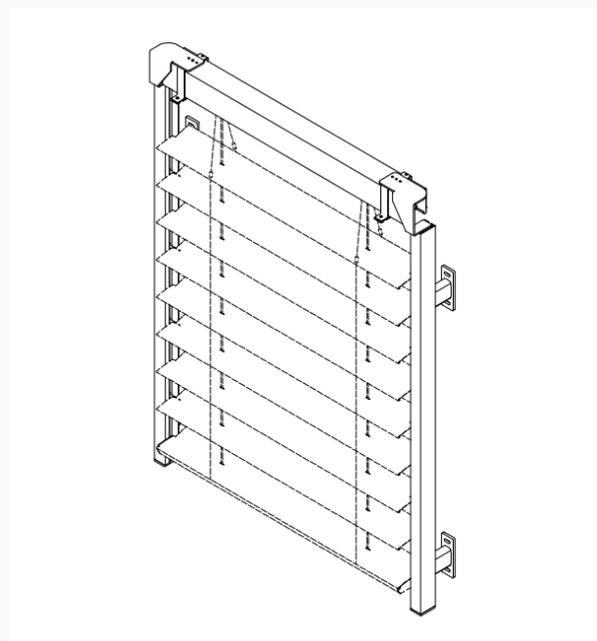
Clearance height + cover height (mm)	Number of holes for mounting	X1 (mm)	X2 (mm)
500 - 1,399	2	130	-
1,400 - 2,199	3	130	(SV - 260)/2
2,200 - 3,099	4	130	(SV - 260)/3
3,100 - 3,999	5	130	(SV - 260)/4
4,000 - 5,000	6	130	(SV - 260)/5

NUMBER OF HOLES FOR MOUNTING THE BLIND WITHOUT COVER

Height of blind	Number of holes for mounting	X1 (mm)	X2 (mm)	X3 (mm)
500 - 1,399	2	130	-	according to the packet height + 100
1,400 - 2,199	3	130	[VZ - (X1+X3)]/2	according to the packet height + 100
2,200 - 3,099	4	130	[VZ - (X1+X3)]/3	according to the packet height + 100
3,100 - 3,999	5	130	[VZ - (X1+X3)]/4	according to the packet height + 100
4,000 - 5,000	6	130	[VZ - (X1+X3)]/5	according to the packet height + 65

Self-bearing system

STL STANDARD VARIANT



STANDARD VERSION

Guiding

- STL or STL DV guide rails painted in RAL colour
- plastic or aluminium profile type Z painted in RAL colour
- KV holders painted in RAL colour or pre-drilled guide rails for anchoring into the jamb

Control

- control by standard wired motor

OTHER TECHNICAL PARAMETERS

- for a self-bearing STL system wider than 2,300 mm or higher than 3,500 mm, the system must be supplemented with additional anchoring of the upper blind profile
- for a self-bearing STL system wider than 2,300 mm, or higher than 3,500 mm, holders No. 2 are included
- in the case of anchoring STL profiles using telescopic holders TA, TB, TC and TD, it is necessary to place the guide rails on a solid base that will bear the weight of the blind

OTHER DESIGN OPTIONS

Guiding

- TA, TB, TC, TD holders painted in RAL colour

Control

- control by another type of motor
- connected blinds - up to 3 blinds per one common drive
- crank control (white, silver anodised, brown)
- crank grommet 45°/90°, length 500 mm (4 edges/6 edges)
- corner crank grommet 45° length 400 mm (4 mm, 4 edges)
- crank grommet of other than standard length

Other design options

- non-standard paint colour

BASIC TECHNICAL PARAMETERS

Anchoring the upper profile	without additional anchoring		with additional anchoring	
	motor	crank	motor	crank
Width	600–2,300 mm	460–2,300 mm	2,301–5,000 mm*	2,301–5,000 mm*
Height	500–3,500 mm	500–3,500 mm	3,501–5,000 mm*	3,501–5,000 mm*
Max. area of 1 blind	8 m ²	8 m ²	20 m ²	9 m ²
Max. width of connected blinds**	6.9 running metres	6.9 running metres	8 running metres	8 running metres

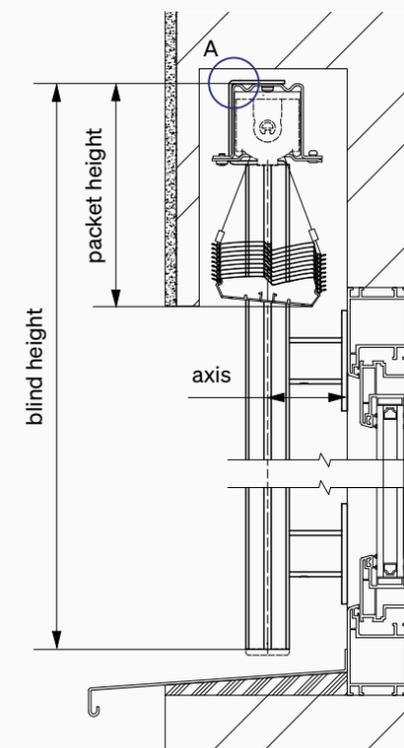
* The maximum height and height with the F80 blind is 4,000 mm.

** Three blinds at most can be connected per 1 drive, the drive must be placed in the middle of the assembly.

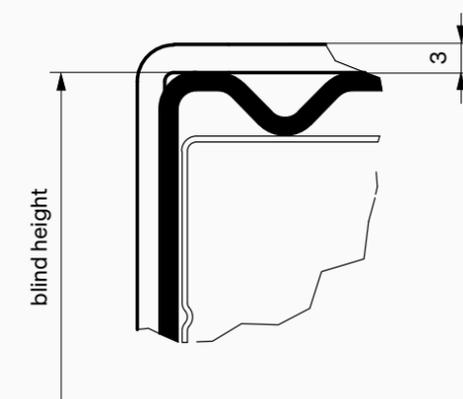
The maximum number of bearings on each side of the drive is 5.

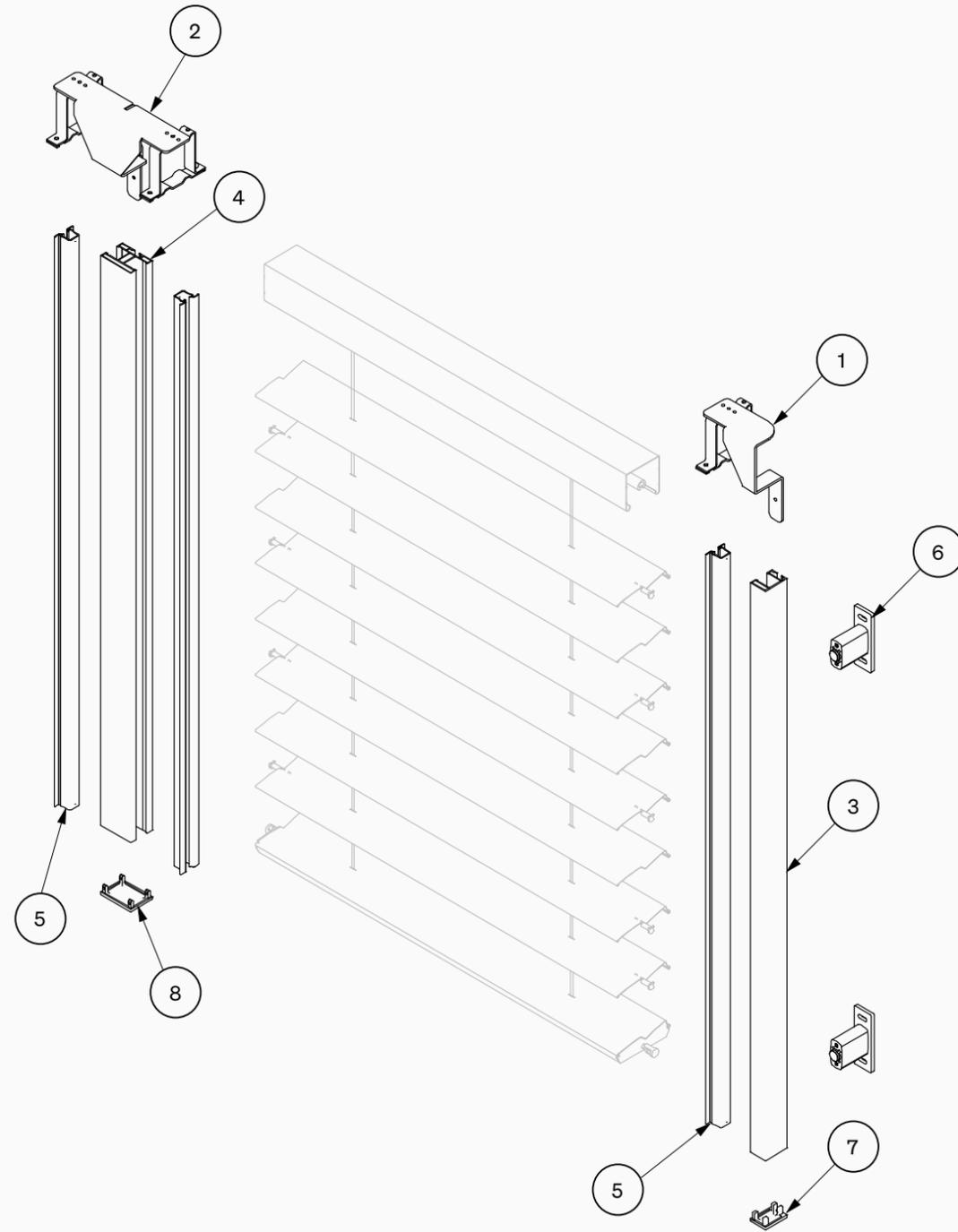
With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

CROSS-SECTION OF STL SYSTEM



STL DETAIL A

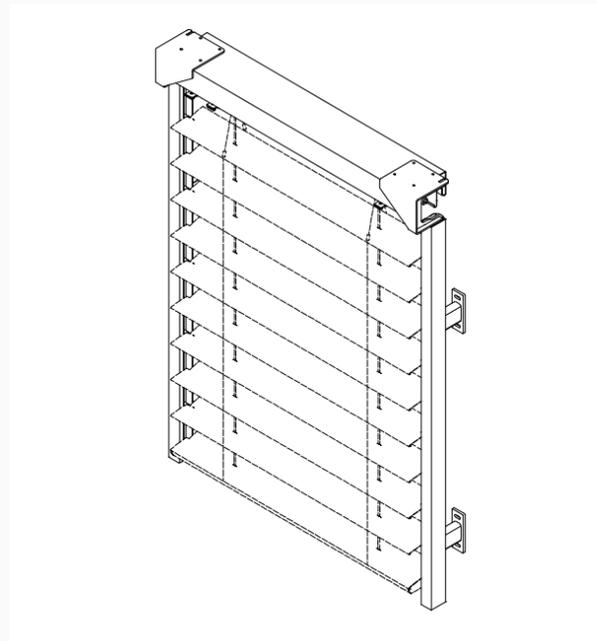




Identification	Name
1	STL mounting bracket
2	STL DV mounting bracket
3	STL guide rail
4	STL DV guide rail
5	Plastic or aluminium profile type Z
6	KV holder
7	STL guide rail end cap
8	STL DV guide rail end cap

Self-bearing system

STL REINFORCED VARIANT



STANDARD VERSION

Guiding

- STL or STL DV guide rails painted in RAL colour
- plastic or aluminium profile type Z painted in RAL colour
- KV holders painted in RAL colour or pre-drilled guide rails for anchoring into the jamb

Control

- control by standard wired motor

OTHER DESIGN OPTIONS

Guiding

- painting of guide rails and holders in a colour other than RAL

Control

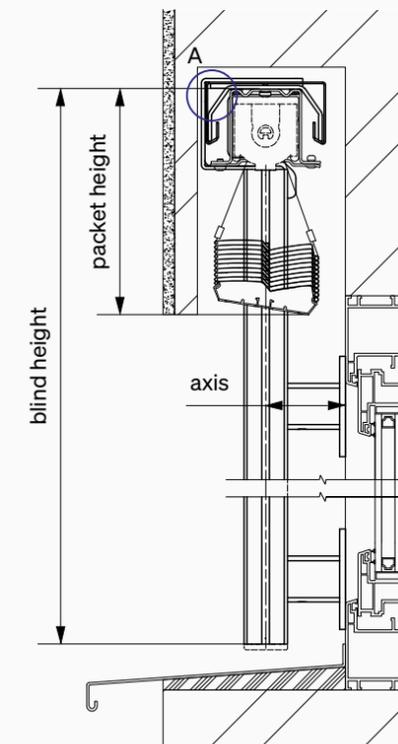
- control by another type of motor
- connected blinds - up to 3 blinds per one common drive

BASIC TECHNICAL PARAMETERS

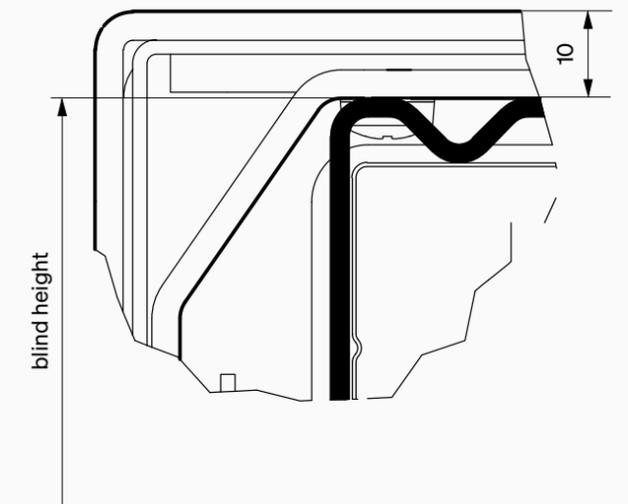
Anchoring the upper profile	without additional anchoring
Control	motor
Width	600–4,000 mm
Height	500–3,500 mm
Max. area of 1 blind	11 m ²
Max. width of connected blinds*	8 running metres

* Three blinds at most can be connected per one drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

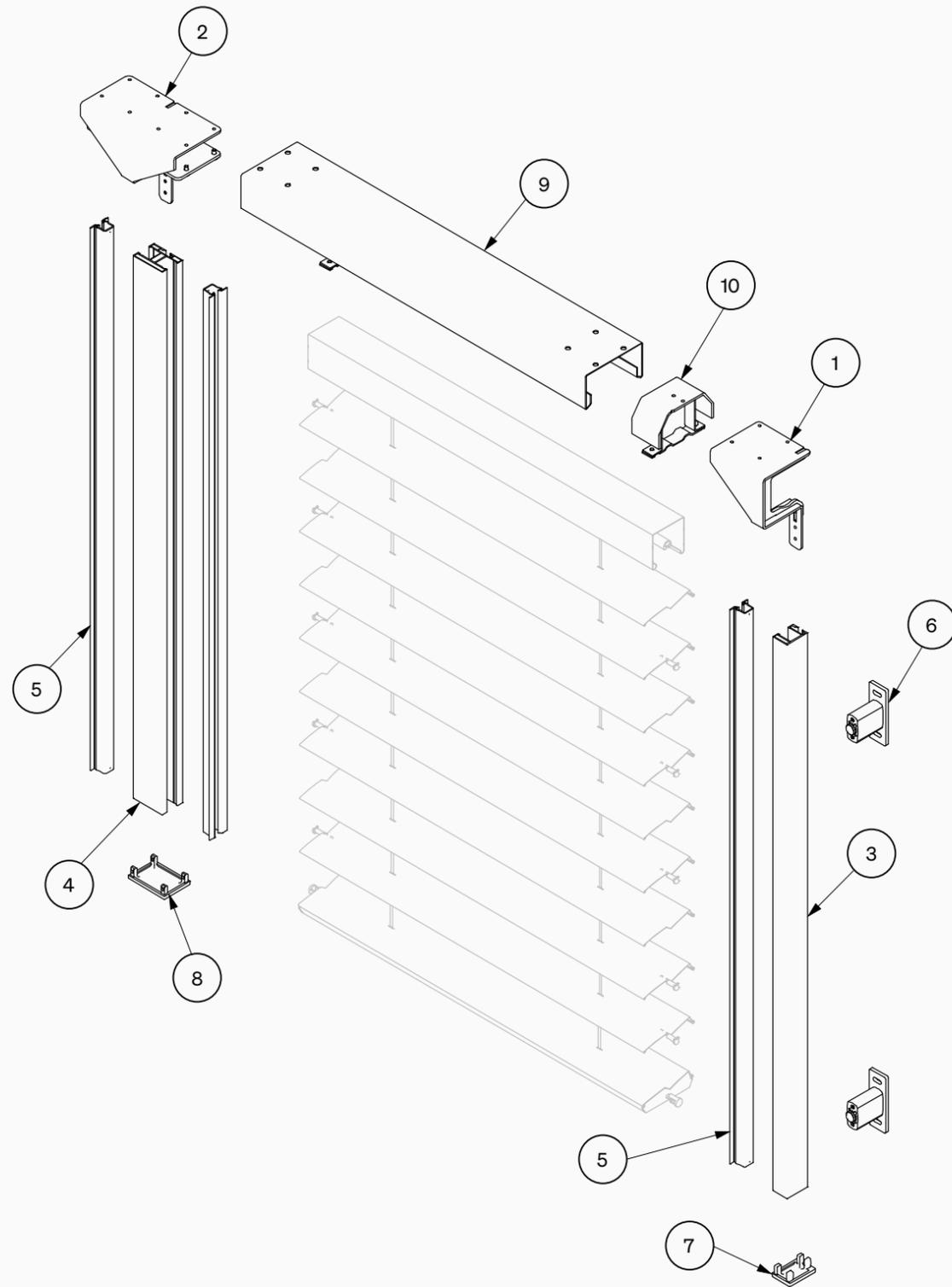
CROSS-SECTION OF REINFORCED STL SYSTEM



STL REINFORCED DETAIL A

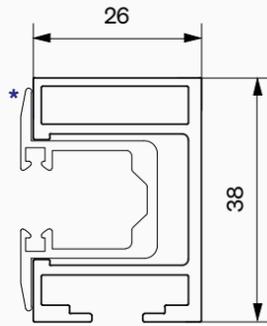


STL - REINFORCED VARIANT

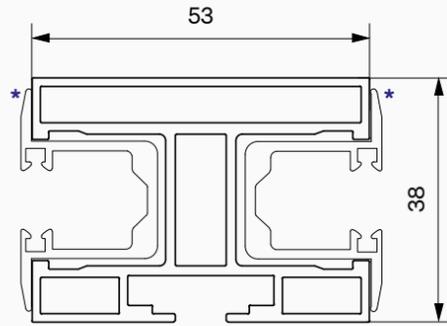


Identification	Name
1	STL mounting bracket - reinforced
2	STL DV mounting bracket - reinforced
3	STL guide rail
4	STL DV guide rail
5	Plastic or aluminium profile type Z
6	KV holder
7	STL guide rail end cap
8	STL DV guide rail end cap
9	Reinforced top profile
10	HPZ holder

Type STL

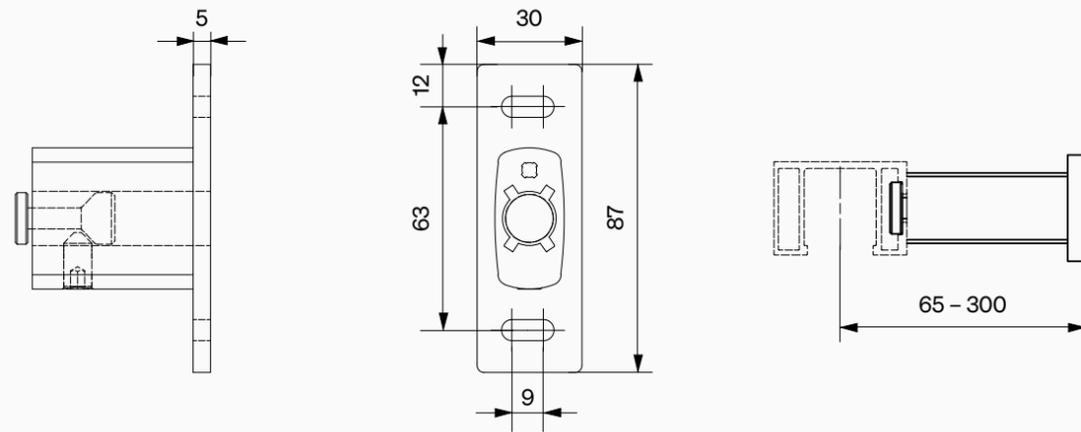


Type STL DV



* Plastic profile or aluminium profile type Z painted in RAL colour see page 108.
Type Z aluminium profiles come in 2 pieces with continuous rubber sealing as standard.

KV HOLDER FOR STL SYSTEMS

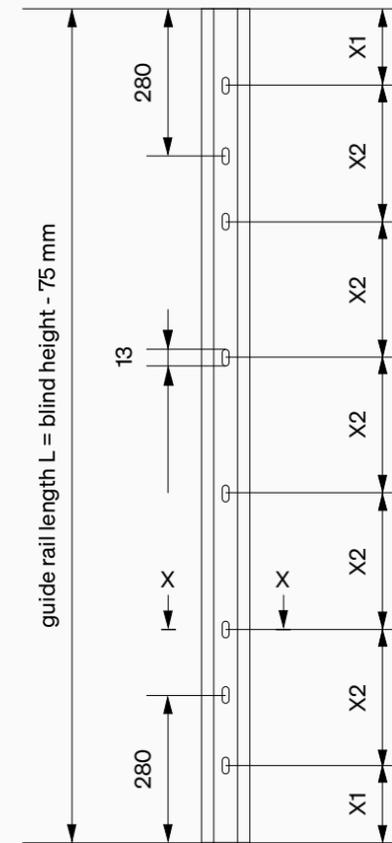


— KV holder is made to measure according to the axis of the blind

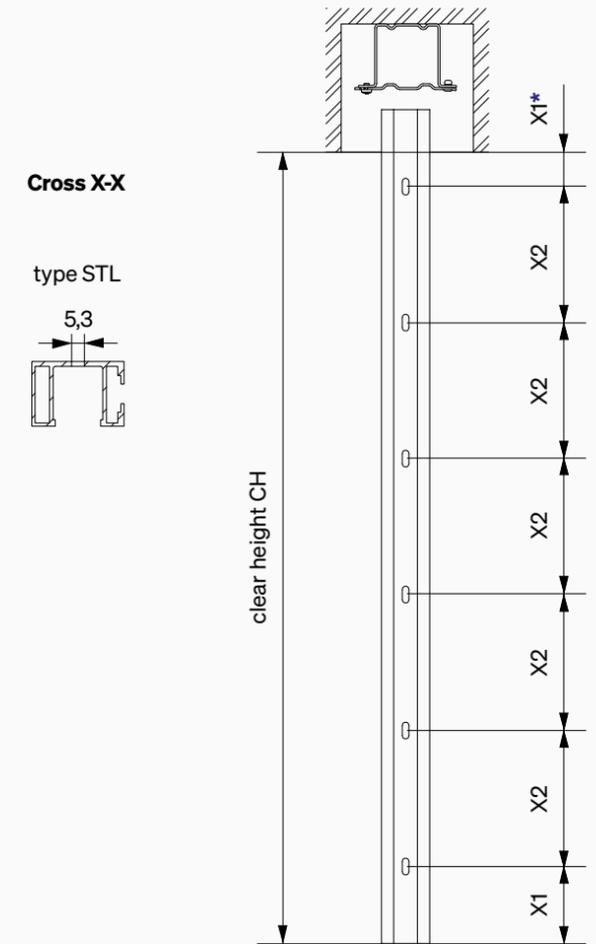
NUMBER OF GUIDE RAIL HOLDERS

Blind height	Number of holders
500 – 1,399	2
1,400 – 2,199	3
2,200 – 3,099	4
3,100 – 3,999	5
4,000 – 5,000	6

Standard drilling



Drilling according to clear height



NUMBER AND LOCATION OF HOLES FOR MOUNTING THE STL GUIDE RAIL

Blind height (mm)	Number of holes for mounting	X1	X2
500-799	2	120	-
800-1399	2	200	-
1400-2199	3	200	(L-400)/2
2200-3099	4	200	(L-400)/3
3100-3999	5	200	(L-400)/4
4000-5000	6	200	(L-400)/5

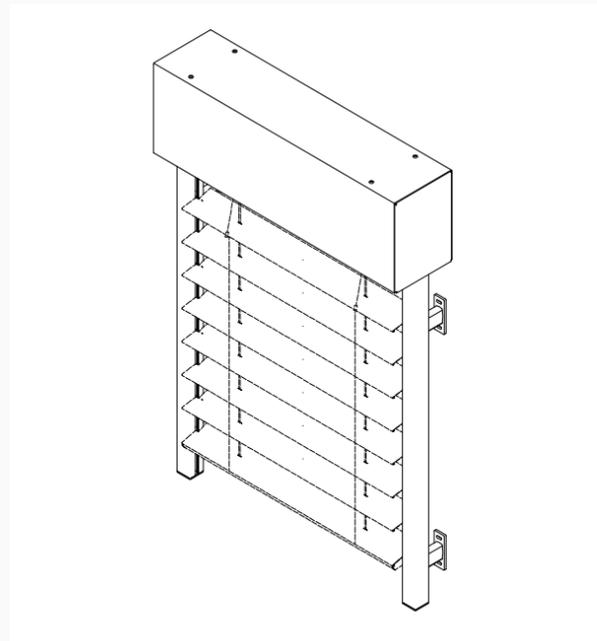
NUMBER AND LOCATION OF HOLES FOR MOUNTING THE STL GUIDE RAIL

Clear height CH (mm)	Number of holes for mounting	X1	X1*	X2
500-1500	2	200	100	-
1501-2700	3	200	100	(CH-300)/2
2701-3900	4	200	100	(CH-300)/3
3901-5000	5	200	100	(CH-300)/4

X1* The distance of the first hole when the clear height is specified is 100 mm from the clear height.

Self-bearing system

FAÇADE SYSTEM



STANDARD VERSION

Guiding

- H and HDV guide rails painted in RAL colour
- KV holders painted in RAL colour

Control

- control by standard wired motor

Cover panels

- façade system cover sheet type 6 and 7, 2 mm thick, painted in RAL colour

OTHER DESIGN OPTIONS

Control

- control by another type of motor

Cover sheets

- double-sided coating of cover sheet

Other design options

- non-standard paint colour

OTHER TECHNICAL PARAMETERS

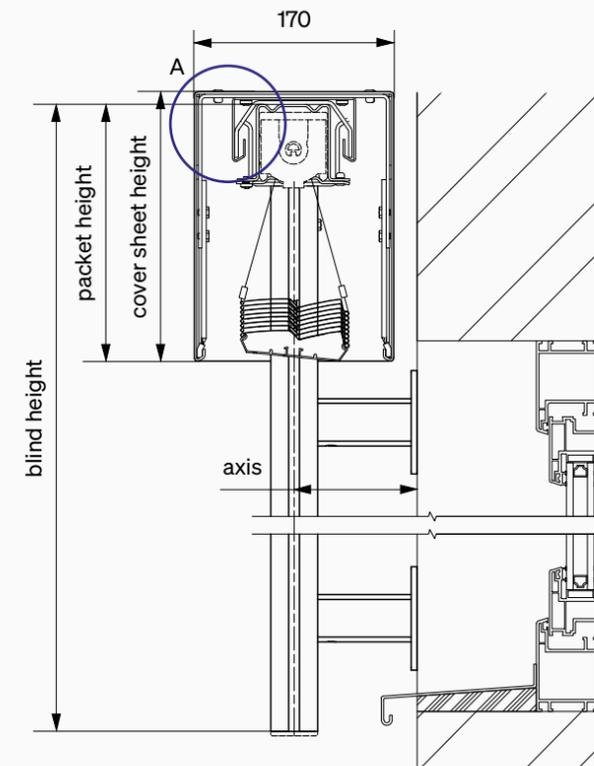
- maximum sheet length is 4,000 mm
- the sides and connections are attached to the cover sheets by spot welds on exposed sides A and C
- in the case of assemblies it is necessary to add a drawing to the order

BASIC TECHNICAL PARAMETERS

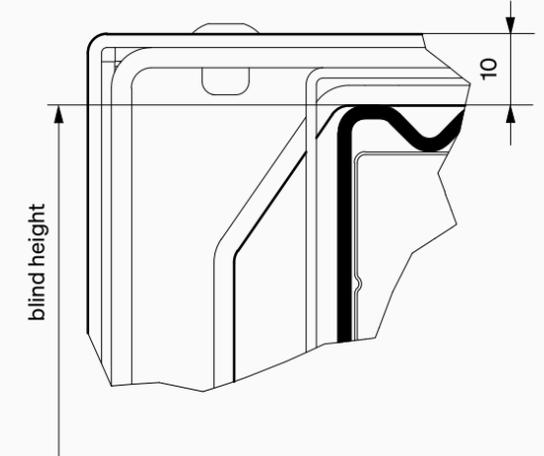
Control	motor
Width	600–3,950 mm
Height	500–4,000 mm
Max. area of 1 blind	14 m ²
Max. width of connected blinds*	8 running metres

* No more than 3 blinds can be connected per 1 drive, the drive must be placed in the middle of the assembly. The maximum number of bearings on each side of the drive is 5. With connected blinds, the maximum variation of the blind tilt angles may be up to 20°.

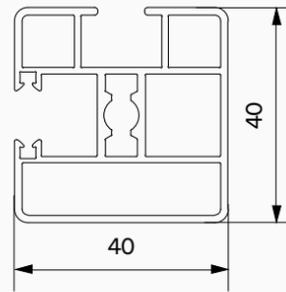
CROSS-SECTION OF THE FAÇADE SYSTEM



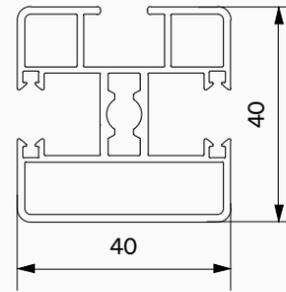
FAÇADE SYSTEM DETAIL A



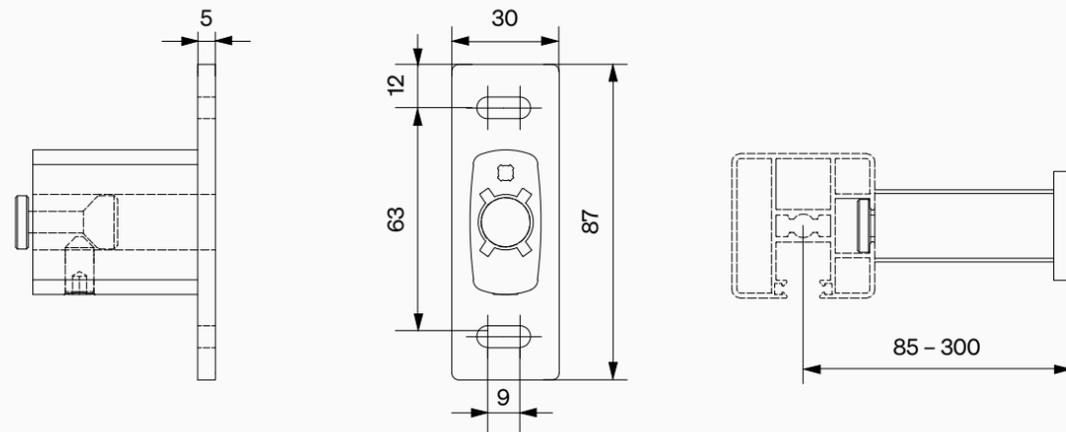
Type H



Type HDV



KV HOLDER

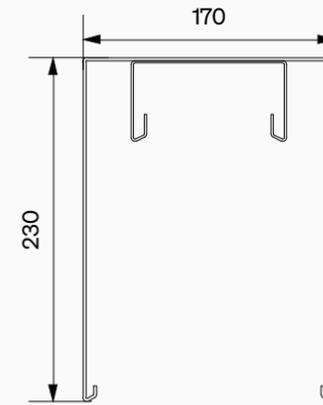


— KV holder is made to measure according to the axis of the blind

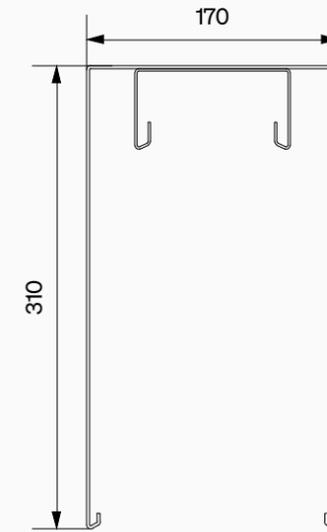
NUMBER OF GUIDE RAIL HOLDERS

Blind height	Number of holders
500 – 1,399	2
1,400 – 2,199	3
2,200 – 3,099	4
3,100 – 4,000	5

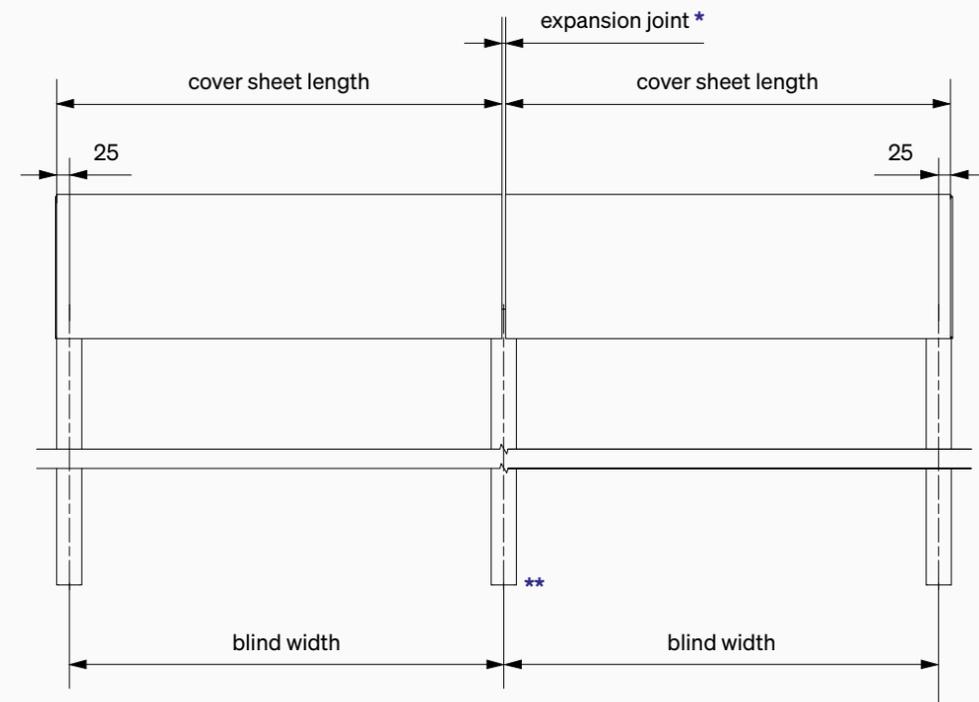
Type 6



Type 7

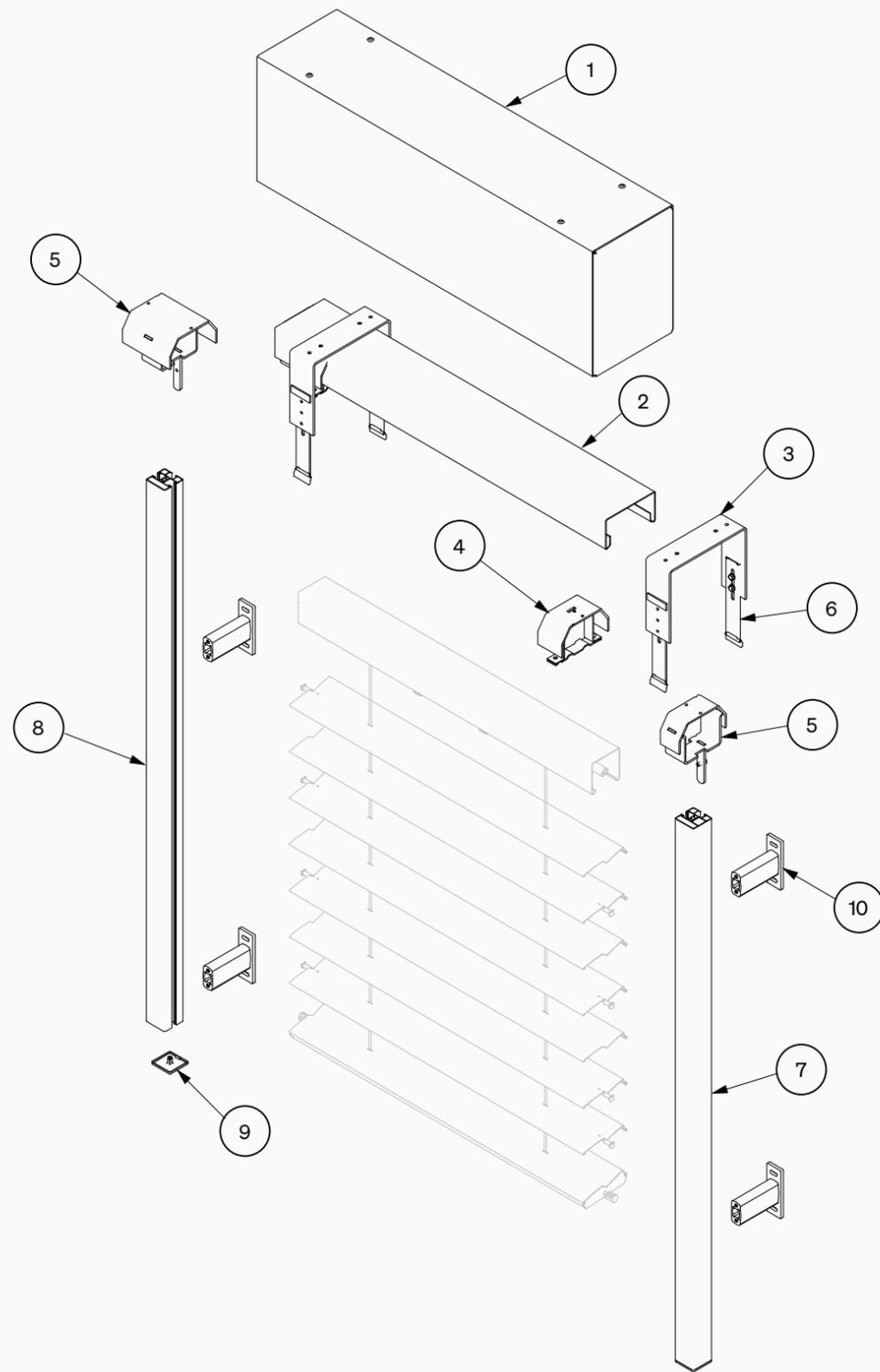


MEASUREMENT AND JOINING OF COVER SHEETS



* Next connecting sheet is loosely slid onto the connection, when ordering it is necessary to take into account the expansion joint, which is 2mm per 1 running metre depending on the thermal expansion of the material.

** A double guide rail or 2 single guide rails spaced no more than 500mm from the joint must be placed at the point of connection of the cover sheets.

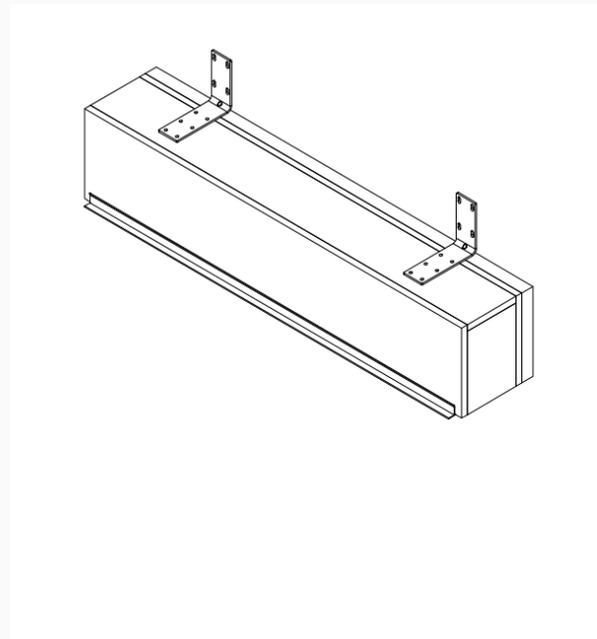


Identification	Name
1	Cover sheet type 6, 7
2	Reinforcing upper profile
3	Bracket for cover sheet and strengthened reinforcing profile
4	Blind holder
5	Holder for H/HDV guide rail
6	Extension for cover sheet
7	H guide rail
8	HDV guide rail
9	Guide rail end cap
10	KV holder

ISO-KASTL A ISO-PANEL

ISO-KASTL and ISO-PANEL

ISO-KASTL



STANDARD VERSION

ISO-KASTL

- cover made of Purenite plates including 15mm Purenite sides
- variant without insulation or with 20mm, 30mm, 40mm XPS insulation
- internal reinforcing L-profiles
- interior coating with RAL 7037 façade paint

Front profile

- type Standard, Type A and Type B painted in RAL colour

Rear profile

- type U and type T painted in RAL colour

Components

- holders for fixing the KASTL
- connections for ISO-KASTL assemblies

OTHER TECHNICAL PARAMETERS

- front profile always attached to the ISO-KASTL
- rear profile always supplied separately
- coefficient of thermal conductivity of Purenite: $\lambda = 0.083 \text{ W/m.K}$

OTHER DESIGN OPTIONS

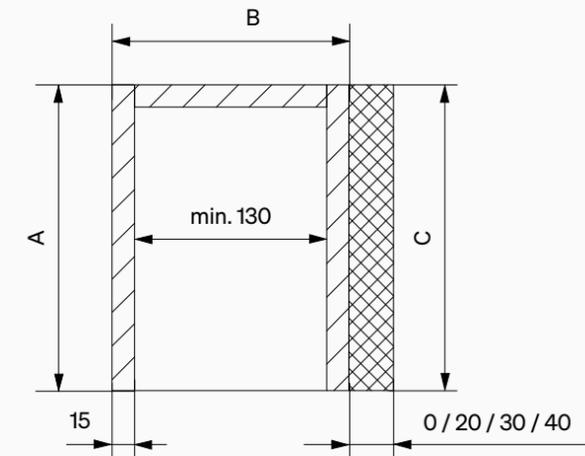
ISO-KASTL

- 2mm thick aluminium sides
- insulation of a thickness or type other than XPS
- corner assemblies

Other design options

- non-standard paint colour of profiles

CROSS-SECTION OF ISO-KASTL

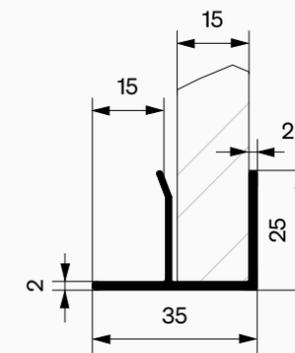


Standard dimensions without insulation

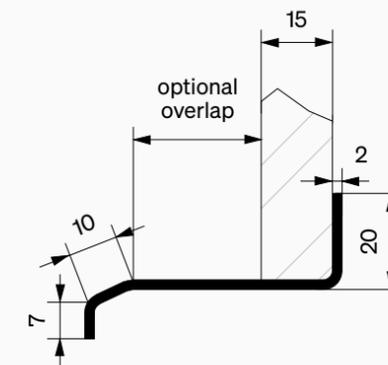
Side A	Side B	Side C
205	160	205
245	160	245
265	160	265
295	160	295
325	160	325

TYPES OF FRONT PROFILES

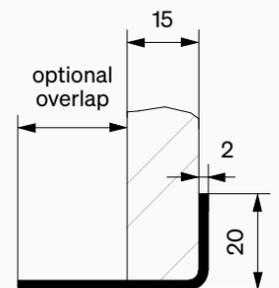
Standard type



Type A

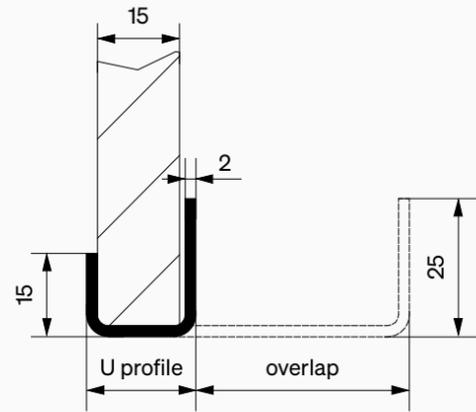


Type B

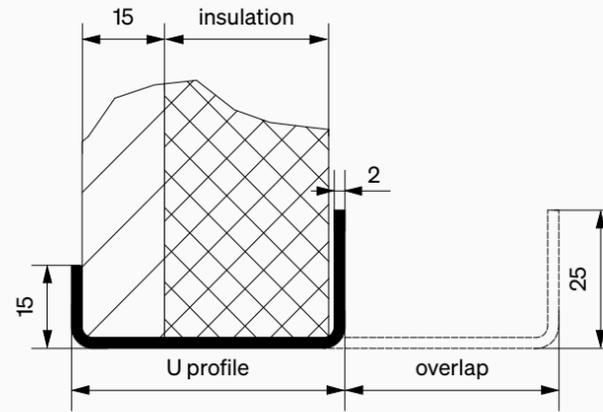


TYPES OF REAR PROFILES - MOUNTING ON WINDOW FRAME

U profile without insulation



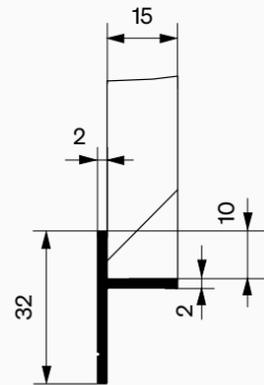
U profile with insulation



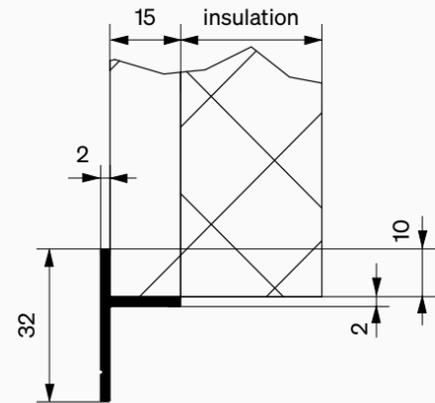
Insulation	U profile	Overlap
0 mm	20 mm	0 - 80 mm

Insulation	U profile	Overlap
20 mm	40 mm	0 - 60 mm
30 mm	50 mm	0 - 50 mm
40 mm	60 mm	0 - 40 mm

T profile without insulation

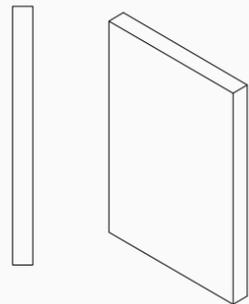


T profile with insulation

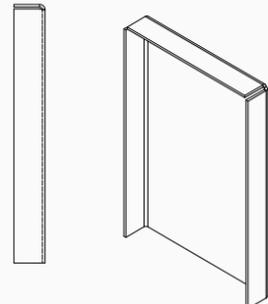


TYPES OF ISO-KASTL SIDES

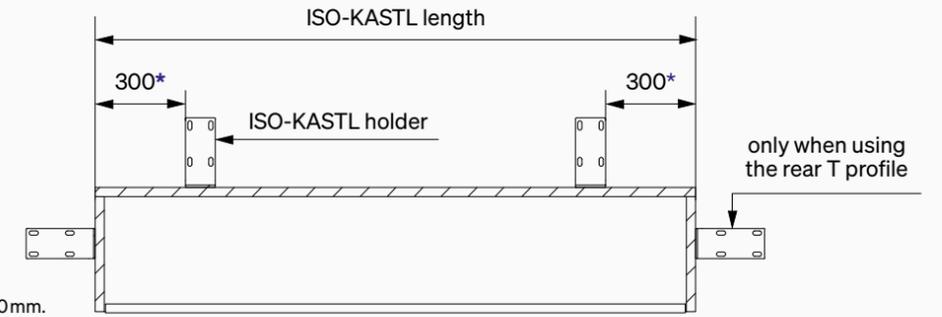
Standard Purenite side 15 mm thick



2mm thick aluminium side



ISO-KASTL HOLDERS



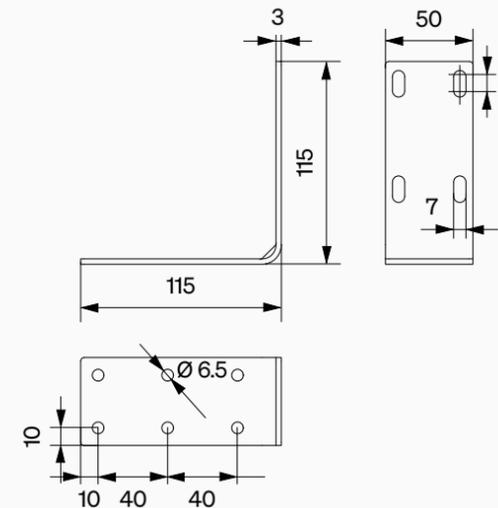
* For length < 1,200 mm = 150 mm.

Cover length (mm)	Number of holders with rear U profile	Number of holders with rear T profile
0-1,299	2	4
1,300-2,399	3	5
2,400-3,599	4	6
3,600-5,399	6	8
5,400-7,199	8	10
7,200-8,999	10	12
9,000-10,800*	12	14

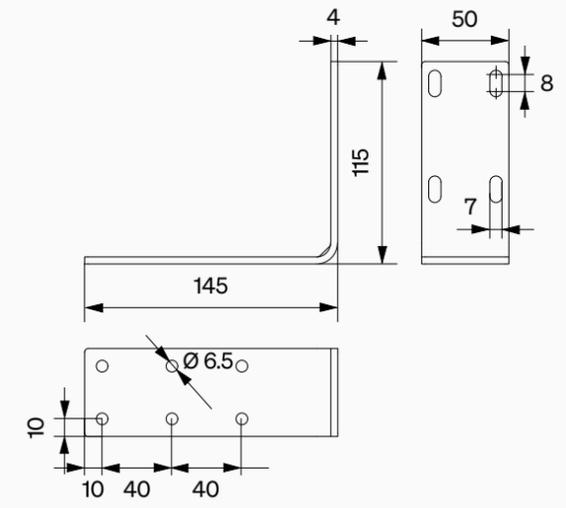
* In the case of a longer cover above 10,800 mm, an additional holder each 900 mm is required.

TYPES OF ISO-KASTL HOLDERS

Without insulation

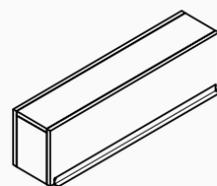
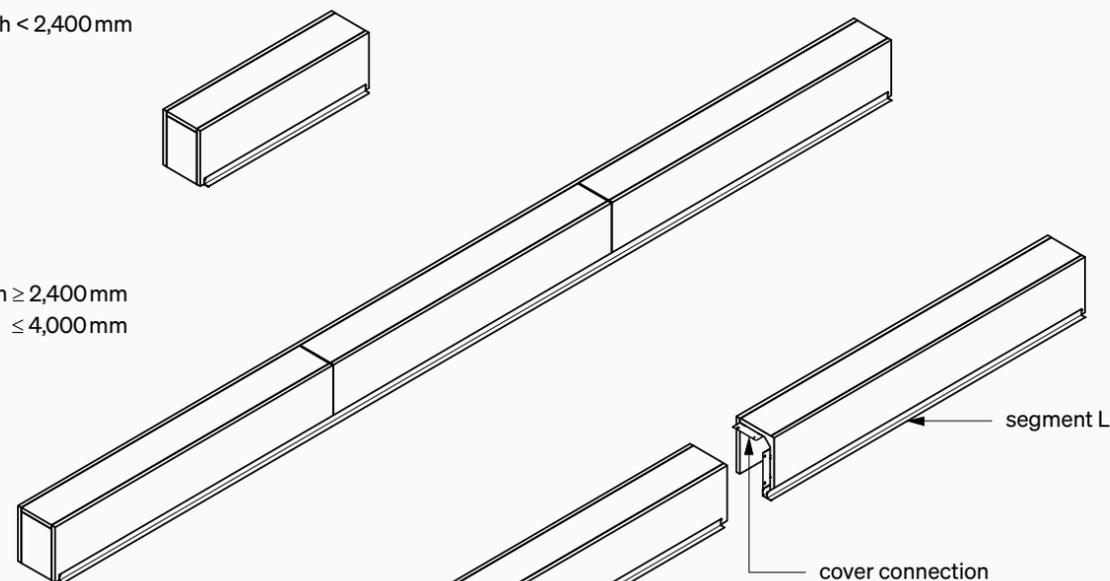


With insulation

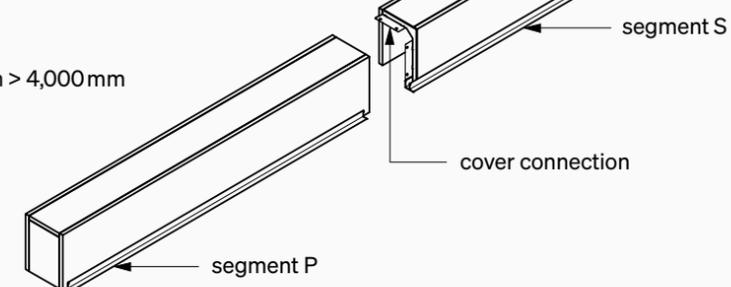


COVER DIVISION

Cover length < 2,400 mm

cover length $\geq 2,400$ mm
 $\leq 4,000$ mm

cover length > 4,000 mm



PACKAGING METHOD

- maximum length of the cover supplied as a whole is 4,000 mm
- covers over 4,000 mm in width are supplied in 3 or more segments
- maximum length of one segment is 1,800 mm
- for divided covers that start and end with a corner cut, a mounting joint is created between the front profiles

CALCULATION OF THE NUMBER OF SEGMENTS

$$\text{Number of segments} = \frac{\text{total length of the assembly}}{1,800}$$

- round the result up to a whole number

CALCULATION OF SEGMENT LENGTH

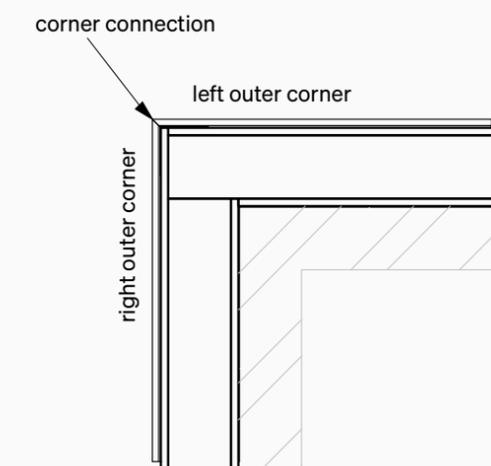
- total assembly length/number of segments
- round the result to centimetres (length applies to S and L segments)
- segment length P – difference between the total length of the assembly and the sum of the lengths of segments S and L

CALCULATION OF THE NUMBER OF CONNECTIONS

- number of connections = number of segments - 1

DESIGN OF CORNER ASSEMBLIES

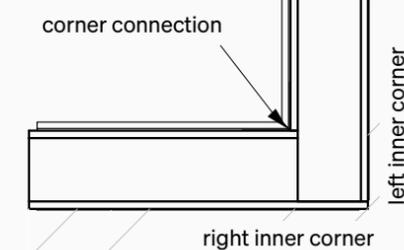
Outer corner



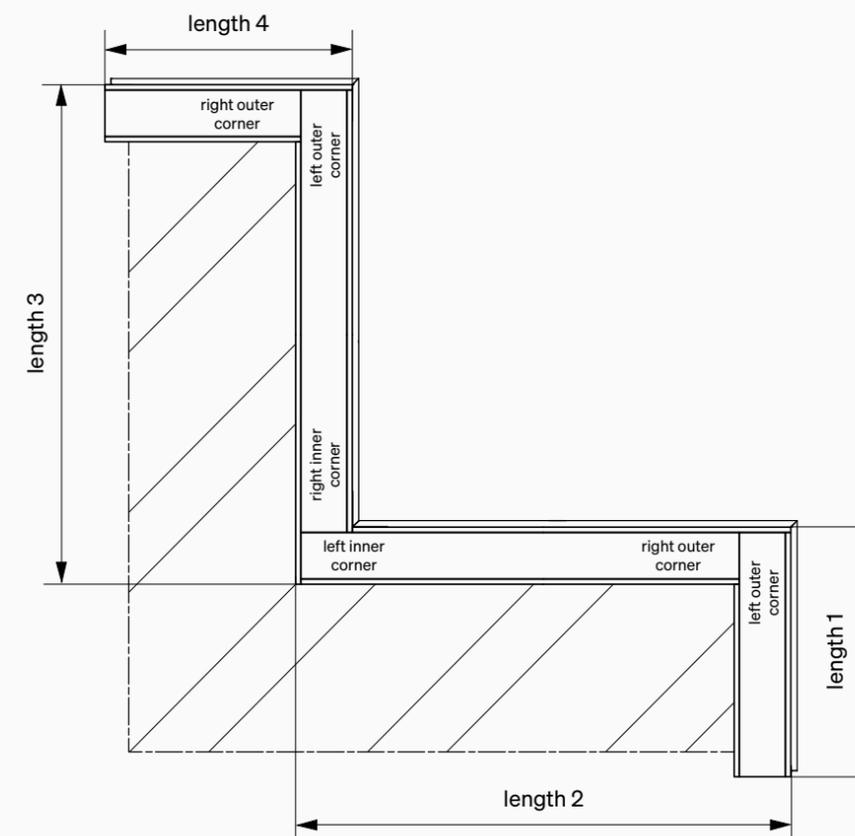
Inner corner

EXTERIOR

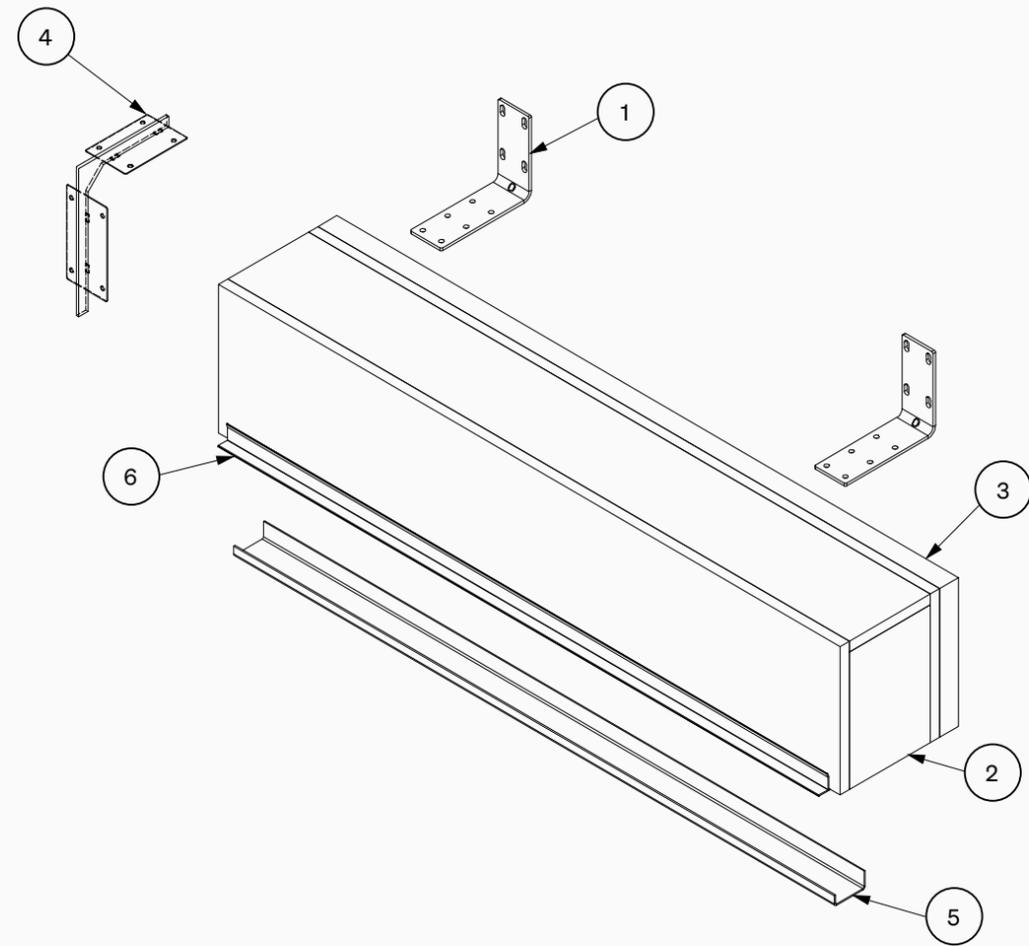
INTERIOR



EXAMPLE OF CORNER ASSEMBLY



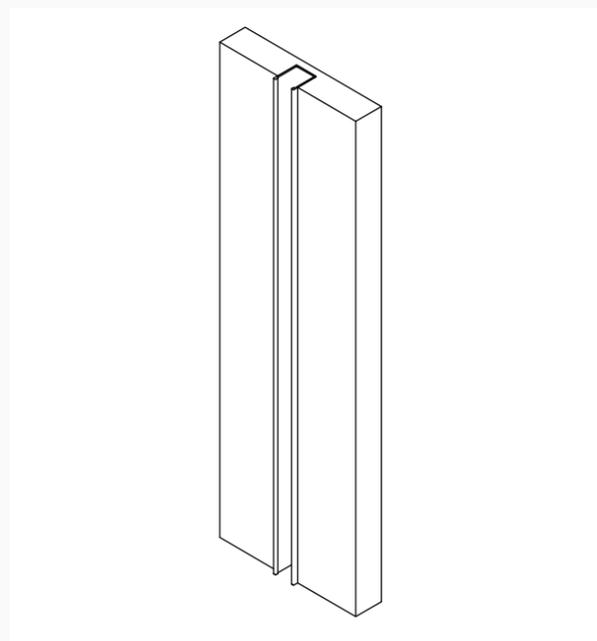
ISO-KASTL



Identification	Name
1	ISO-KASTL holder
2	ISO-KASTL
3	XPS insulation
4	ISO-KASTL connection
5	Rear profile
6	Front profile

ISO-KASTL and ISO-PANEL

ISO-PANEL



STANDARD VERSION

ISO-PANEL

- 30 mm thick recycled PET granulate sheets

Standard versions

- atypical solution

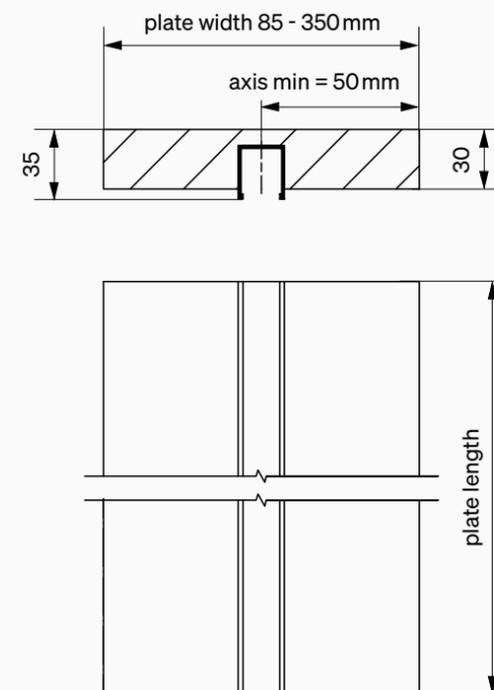
Casing

- U-type casing for recessed Z-type guide rail
- extruded aluminium profile

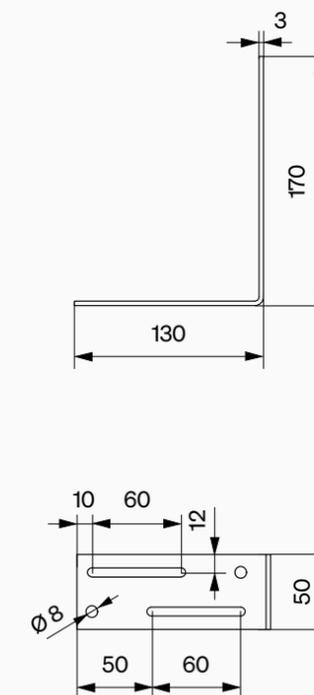
BASIC TECHNICAL EXECUTION

Standard dimensions	Width	Length	Axis
ISO-PANEL A (atypical solution)	85–350 mm	max. 5,000 mm	50–315 mm
Casing	–	max. 7,000 mm	–

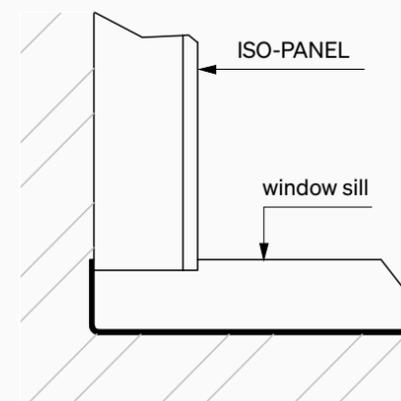
SECTION / FRONT VIEW



ISO-PANEL HOLDER



DETAIL OF SILL FITTING

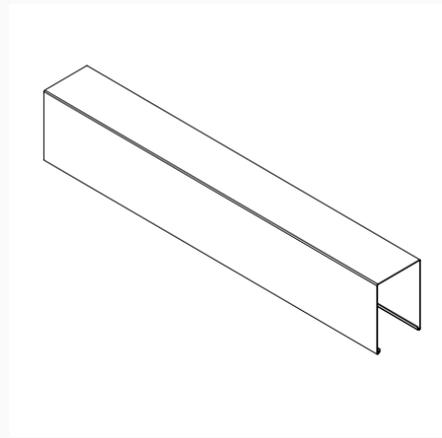


NUMBER OF ANCHOR POINTS/HOLDERS FOR THE ISO-PANEL

Blind height	Number of anchor points/ holders for the ISO-panel
600 – 1,799 mm	2
1,800 – 3,099 mm	3
3,100 – 3,999 mm	4
4,000 – 4,799 mm	5
4,800 – 5,000 mm	6

COVER SHEETS AND COMPONENTS

COVER SHEETS AND COMPONENTS



STANDARD VERSION

Cover panels

- 1.5mm thick aluminium sheets painted in RAL colour

OTHER DESIGN OPTIONS

Cover sheets

- 2mm thick aluminium sheets
- sides of cover sheets with appropriate sheet thickness
- attachment of sides of cover sheets
- attachment of cover sheet connections
- cover sheet connections
- cutting of sheets at an angle for corner assemblies

Insulation

- 10mm thick XPS insulation on the front side A of the cover sheets
- XPS insulation 20mm, 30mm or 40mm thick on the back side C of the cover sheets type 31 and 32
- insulation of other thickness or type other than XPS 20mm, 30mm or 40mm on the back side C of the cover sheet type 31 or 32

Other design options

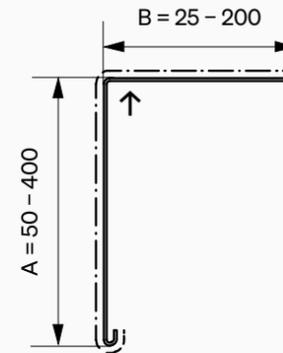
- non-standard paint colour
- painting of a side other than standard
- double-sided painting

OTHER TECHNICAL PARAMETERS

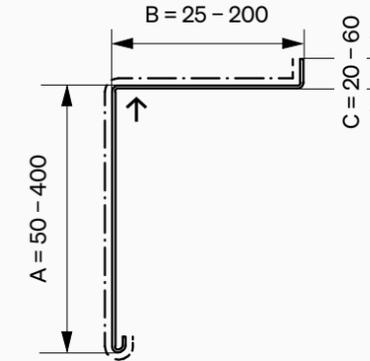
- maximum sheet length is 4,000mm
- we recommend ordering sheet metal over 3,000mm in thickness of 2mm
- minimum bend angle 65°
- covers with dimensions below the specified recommended values do not fall into the category of covers, as it is not possible to ensure their guaranteed characteristics or compliance with the tolerances of the basic dimensions

TYPES OF COVER SHEETS INCLUDING PAINTING

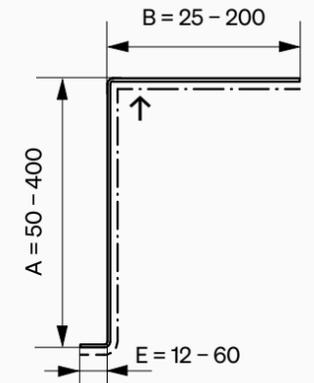
Type 1



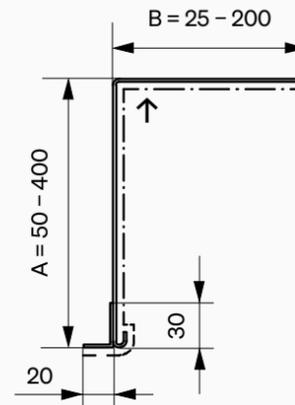
Type 2



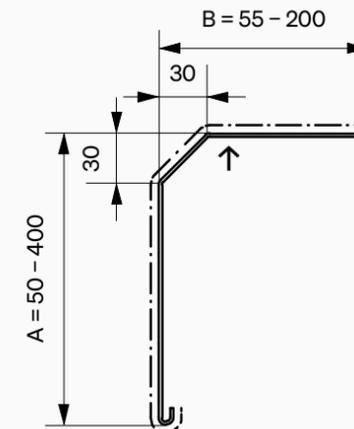
Type Z



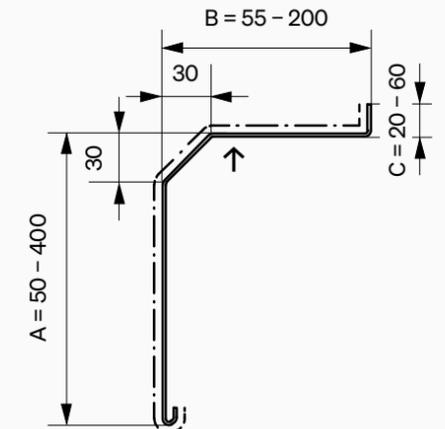
Type 1L *



Type 1B

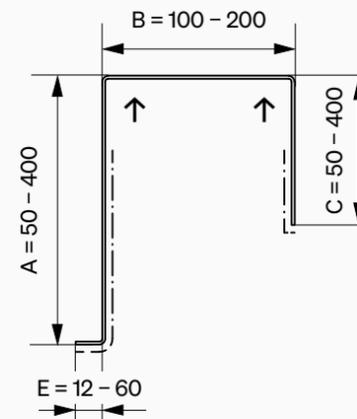


Type 2B

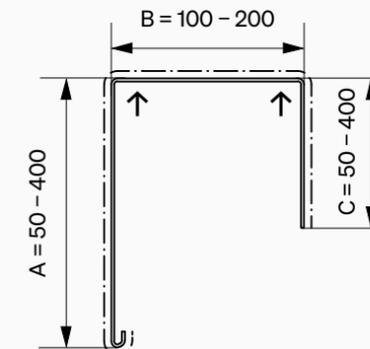


* The 20x30 profile of sheet type 1L is spot welded. The attachment of the L-profile to the cover sheet can be ordered as a variant. For the cover sheets type 1L, the cover is supplied with an L profile as standard, which is only attached, not fixed.

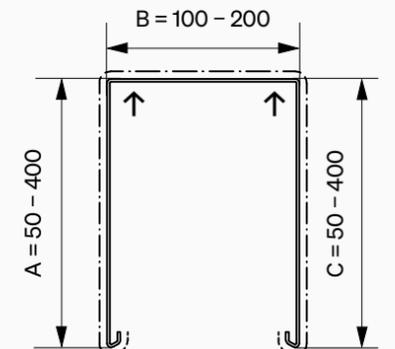
Type 11



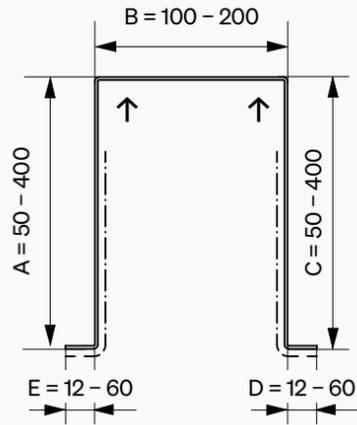
Type 21



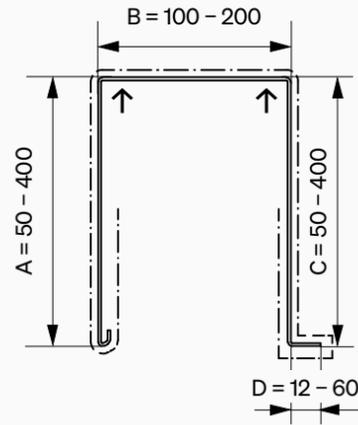
Type 3



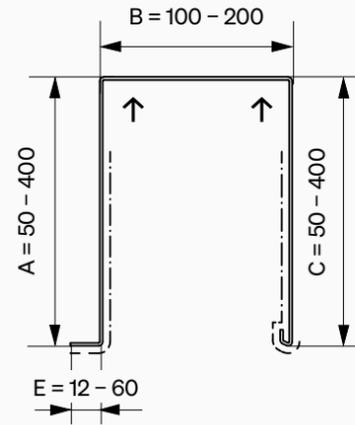
Type 31



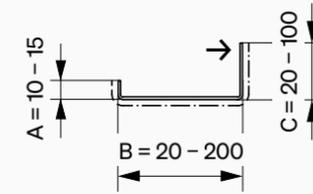
Type 32



Type 33



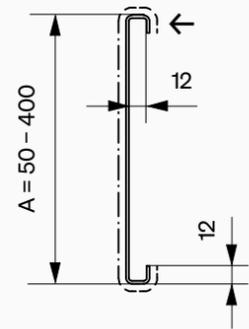
Type U*



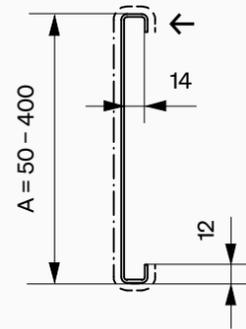
* For the 2 mm sheet thickness variant, the A side is always 15 mm.

↑ location of the painting hole | painting side

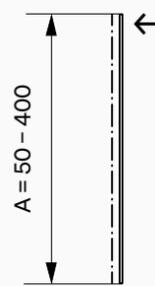
Type 1CH12



Type 1CH14



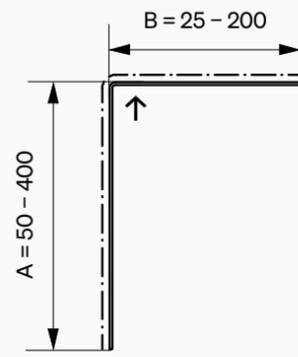
Type 1P



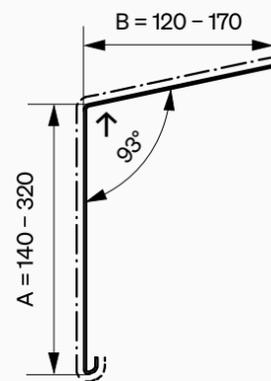
Type 1PP



Type 1V

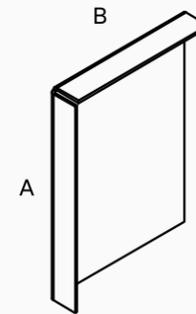


Type 1F

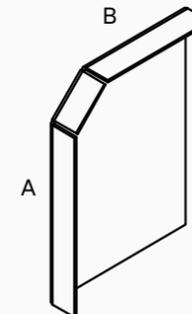


SIDES OF COVER SHEETS

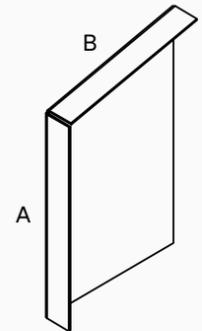
Side type 1



Side type 1B



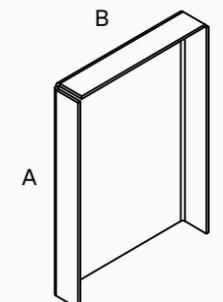
Side type 1F

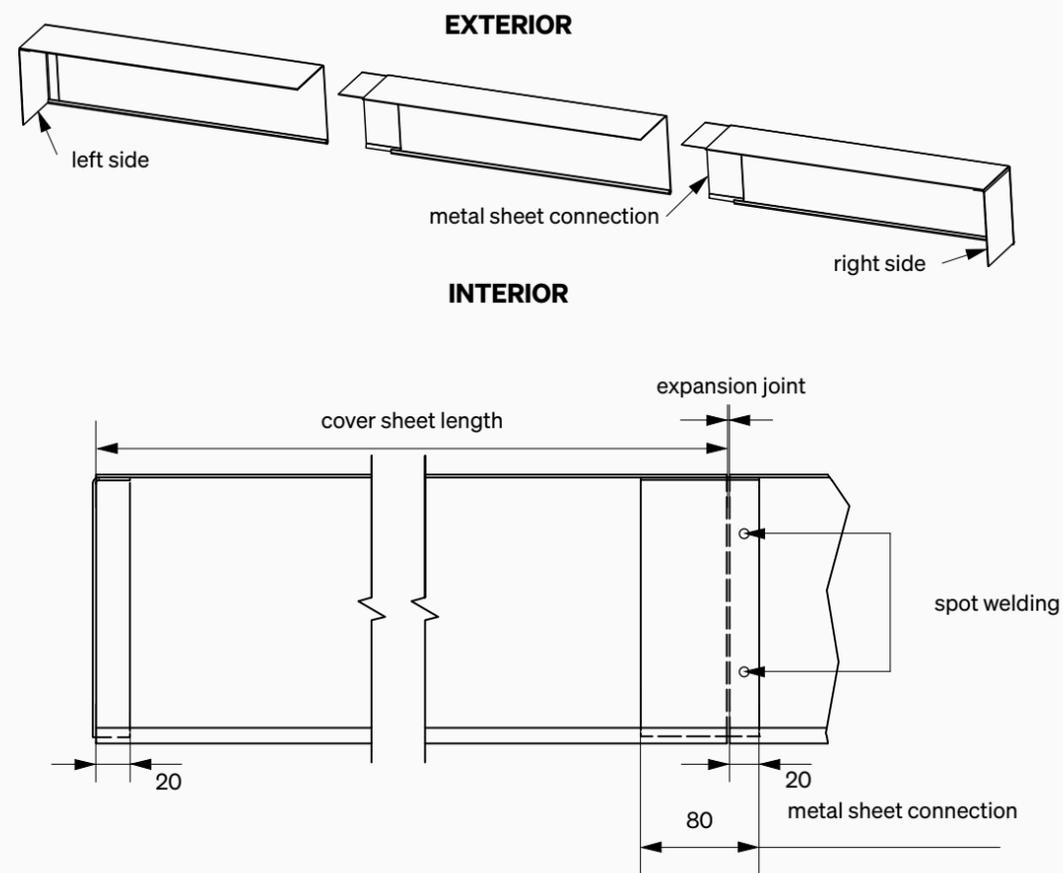


Side type 1CH



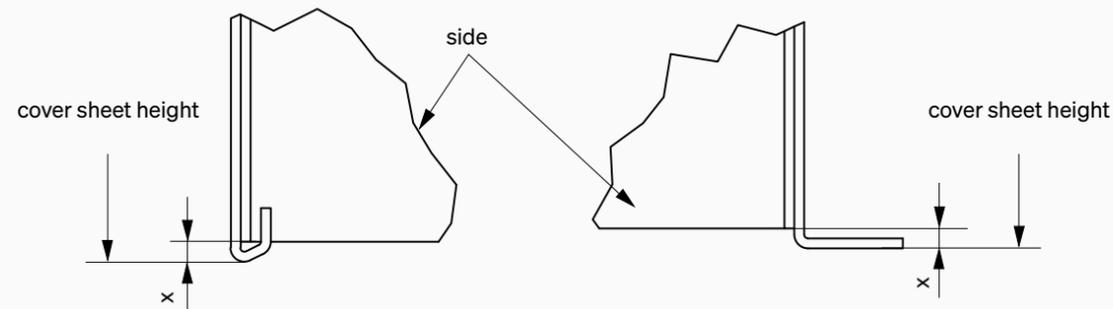
Side type 3





DETAIL OF SIDE FITTING

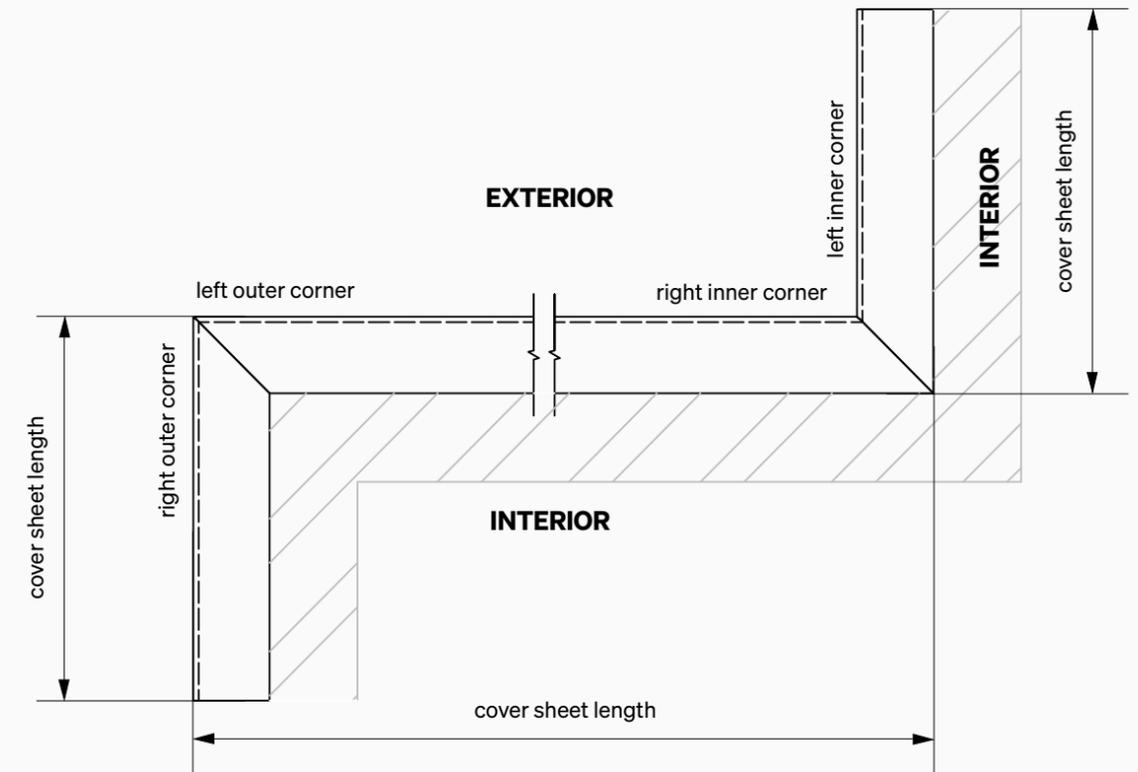
$x = 2 \times$ material thickness



- the sides and connections are supplied not pre-drilled, loosely attached, including rivets of the colour of the sheet as standard
- in the case of attachment of sides and connections, the sides and connections are attached using spot welds
- the connection is always attached to only one cover sheet for an expansion option
- the size of an expansion joint needs to be specified on the basis of the cover sheet length
- the thermal expansion of the material must be taken into account 2mm per linear metre of cover sheet

ATTENTION:

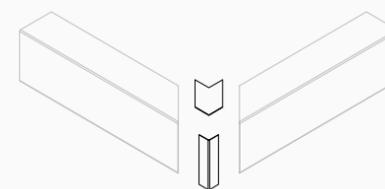
- when using sides, the total length of the sheet is extended by the thickness of the cover sheet material for each side



- in the case of a corner assembly, it is necessary to provide a drawing, the corner is determined when viewed from the interior

CORNER CONNECTION

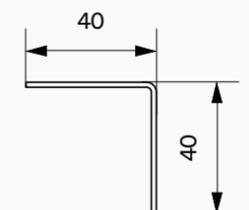
Assembling the corner



Connection on side B

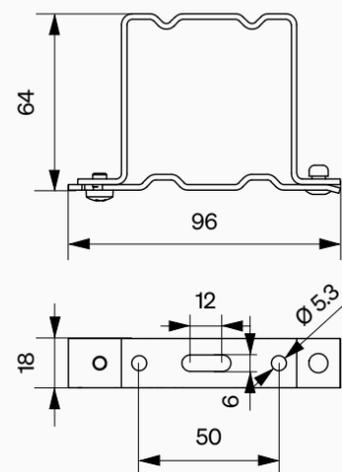


Connection on side A and C

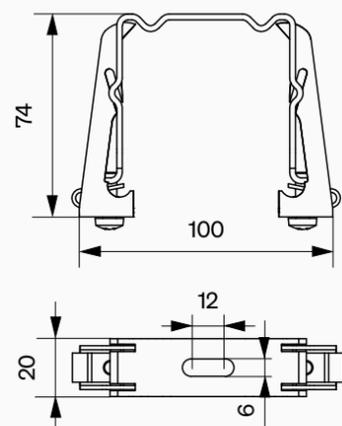


UPPER PROFILE HOLDERS

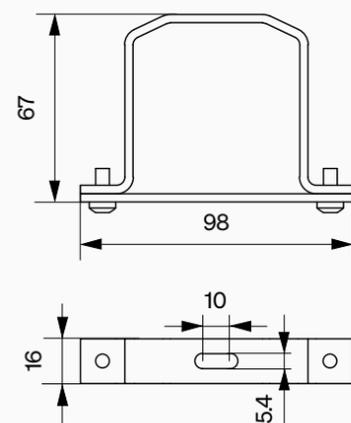
Holder No. 1



Holder No. R1



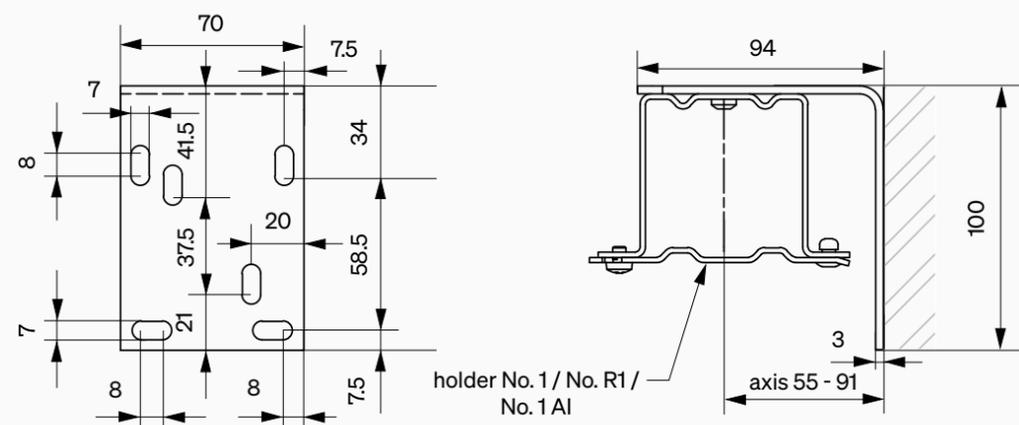
Holder No. 1 AI *



* For aluminium upper profile.

Holder No. 2

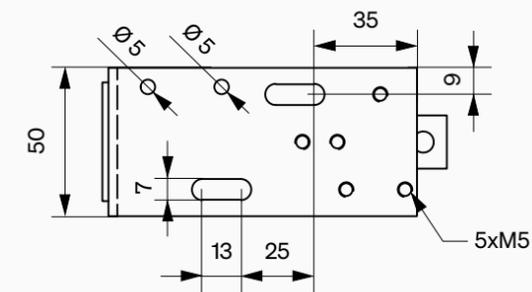
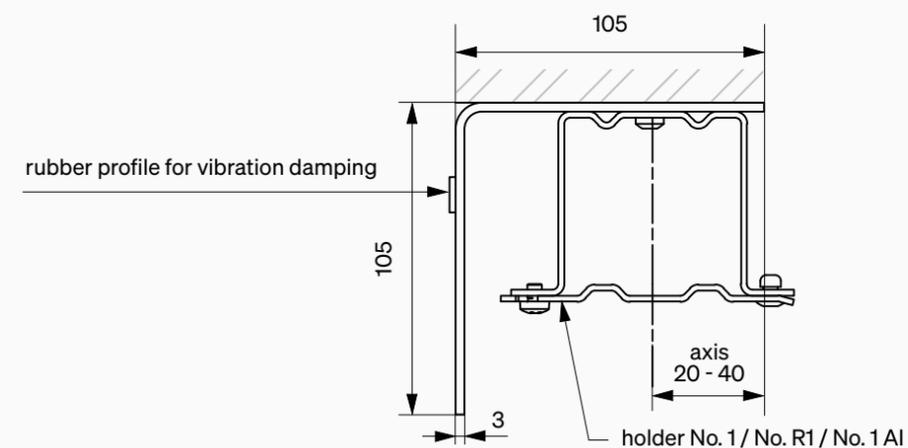
— wall mounting



holder No. 1 / No. R1 /
No. 1 AI

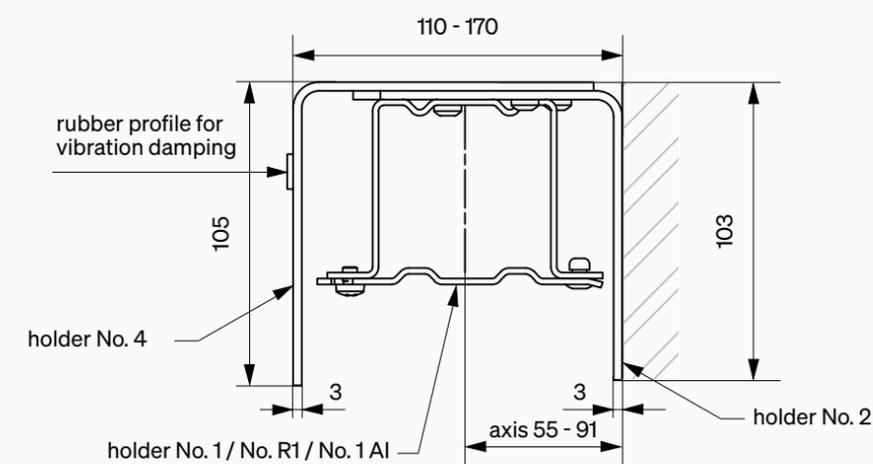
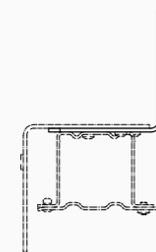
Holder No. 4

- ceiling mounting
- possibility of attaching the cover sheet by means of an extension: type KP 1, 2, 1L, 21, 3, 32



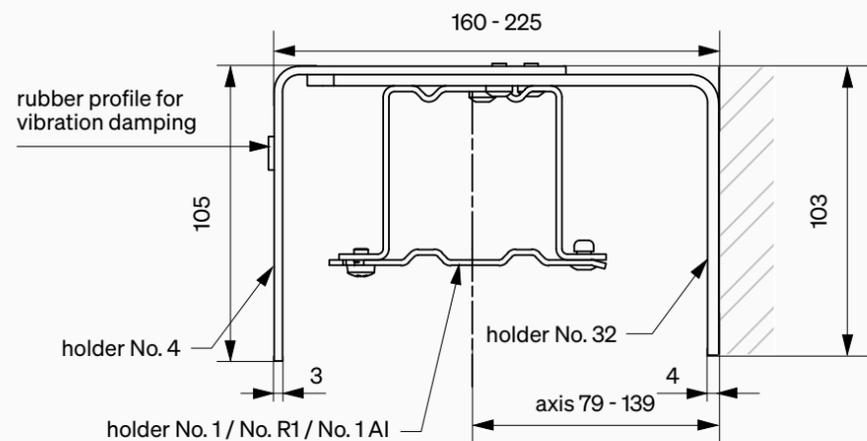
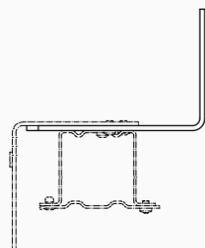
Holder No. 3

- wall mounting
- possibility of attaching the cover sheet by means of an extension: type KP 1, 2, 1L, 21, 3, 32
- alternative solution

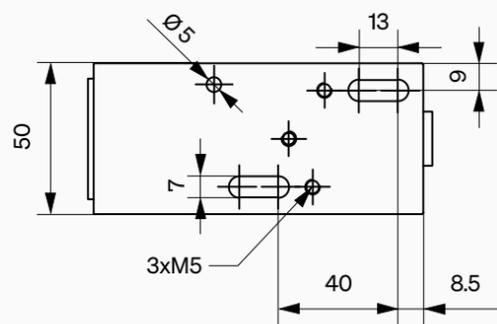
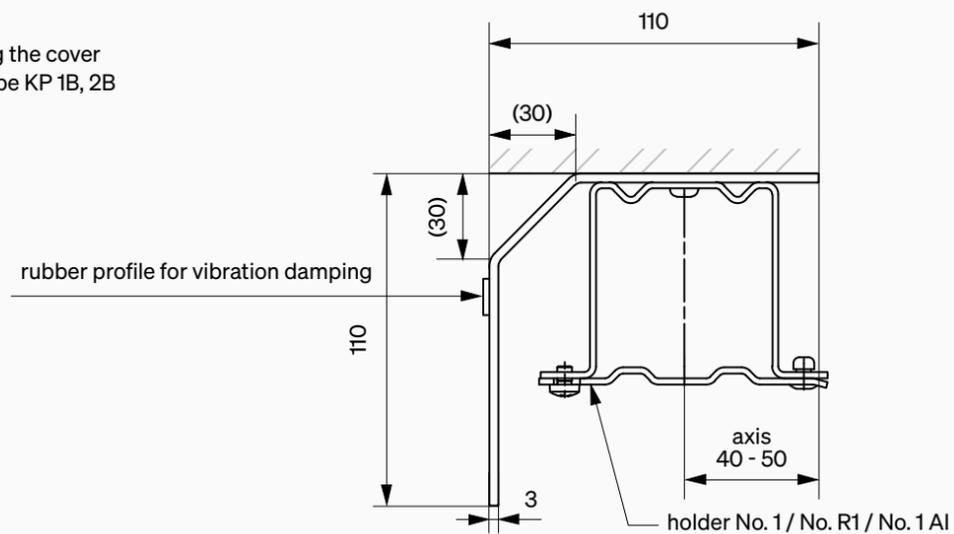


Holder No. 33

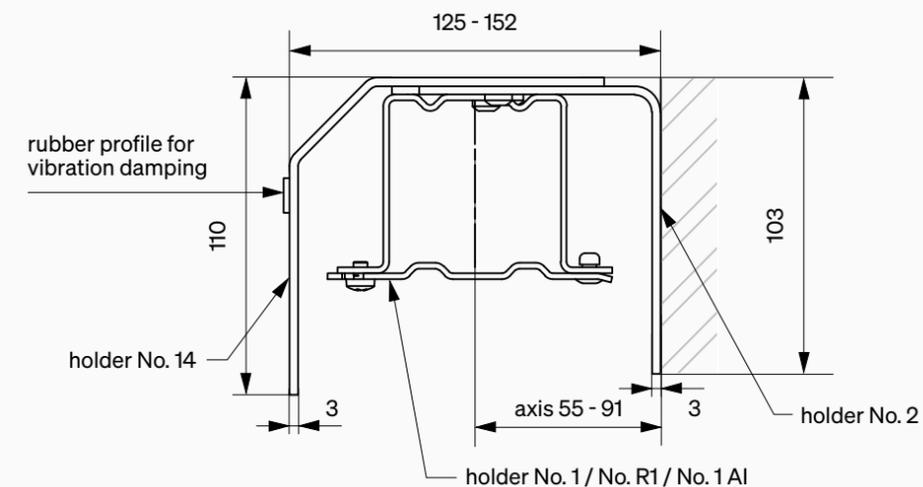
- wall mounting
- possibility of attaching the cover sheet by means of an extension: type KP 1, 2, 1L, 21, 3, 32
- alternative solution

**Holder No. 14**

- ceiling mounting
- possibility of attaching the cover sheet by extension: type KP 1B, 2B

**Holder No. 13**

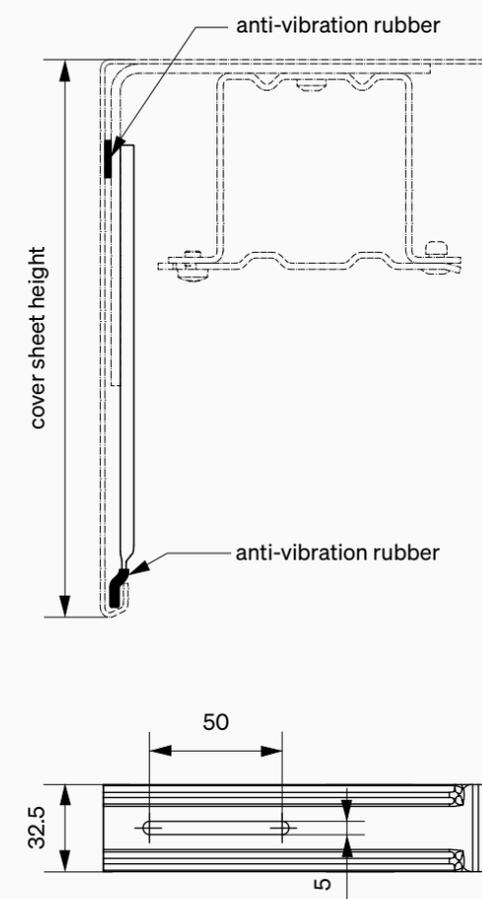
- wall mounting
- possibility of attaching the cover sheet by extension: type KP 1B, 2B

**Extension**

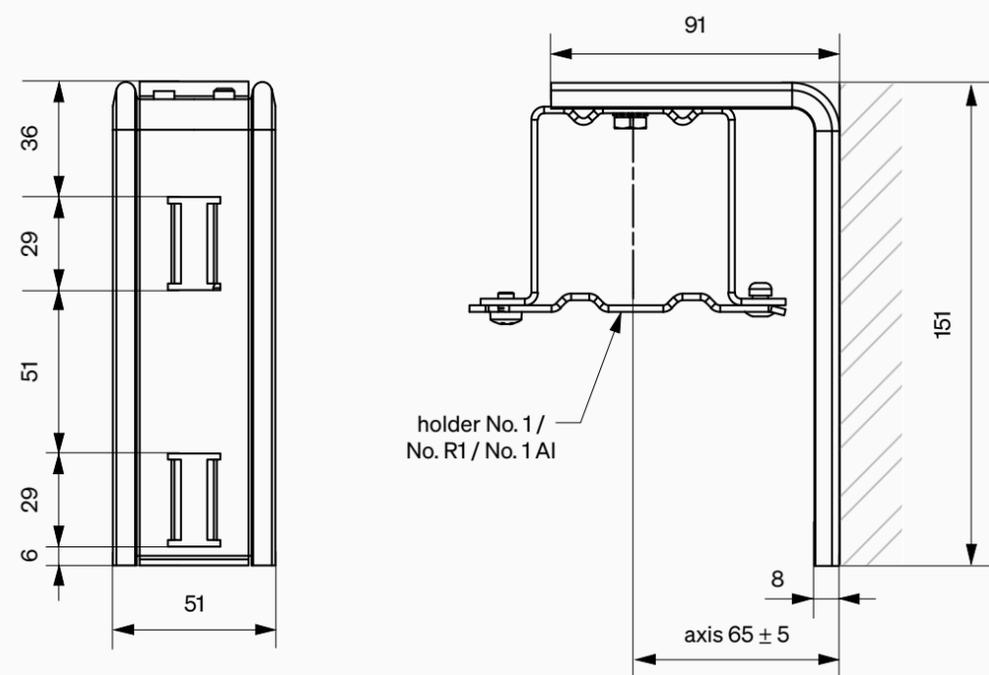
- use for holders 4, 3, 3L, 3S, 3P, 5, 13, 14, 33
- anti-vibration rubber
- the size of the extension is determined by the cover sheet height

EXTENSION TABLE

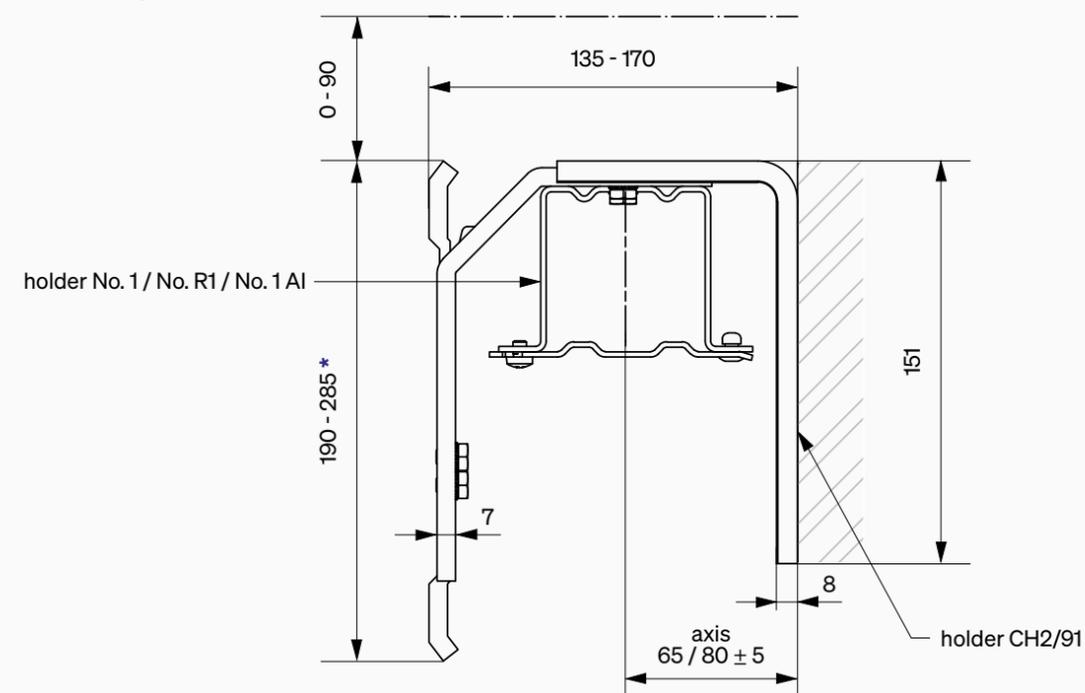
Identification	Cover sheet height
A	140-180
B	181-230
C	231-280
D	281-330
E	331-380
F	381-430
G	431-480
H	481-530



Holder CH2/91

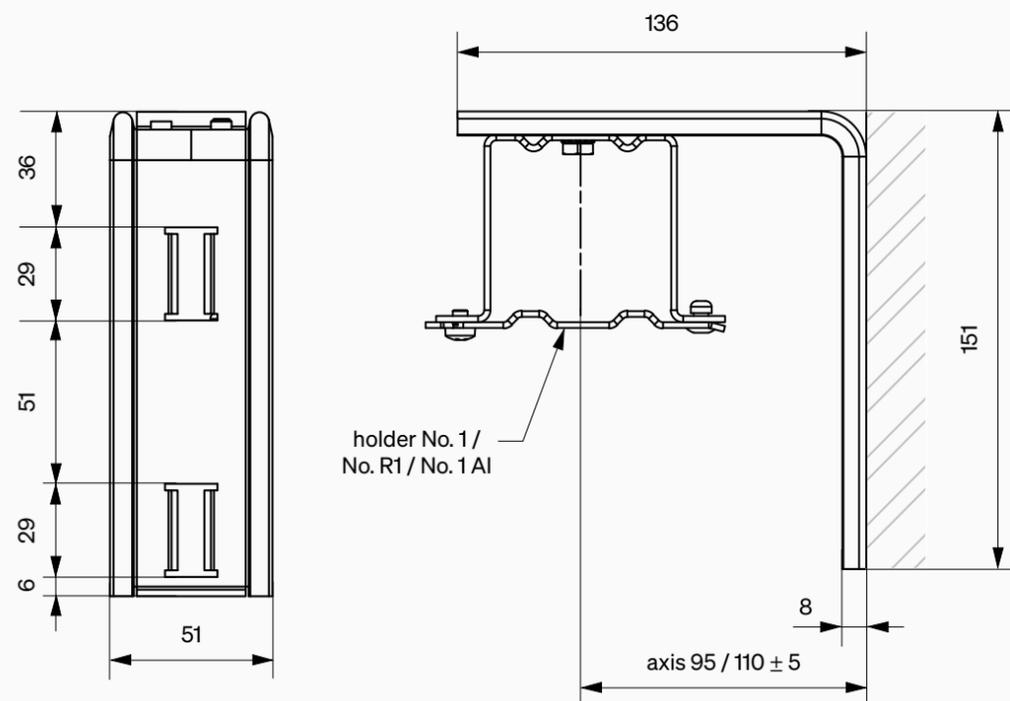


Holder CH3/91

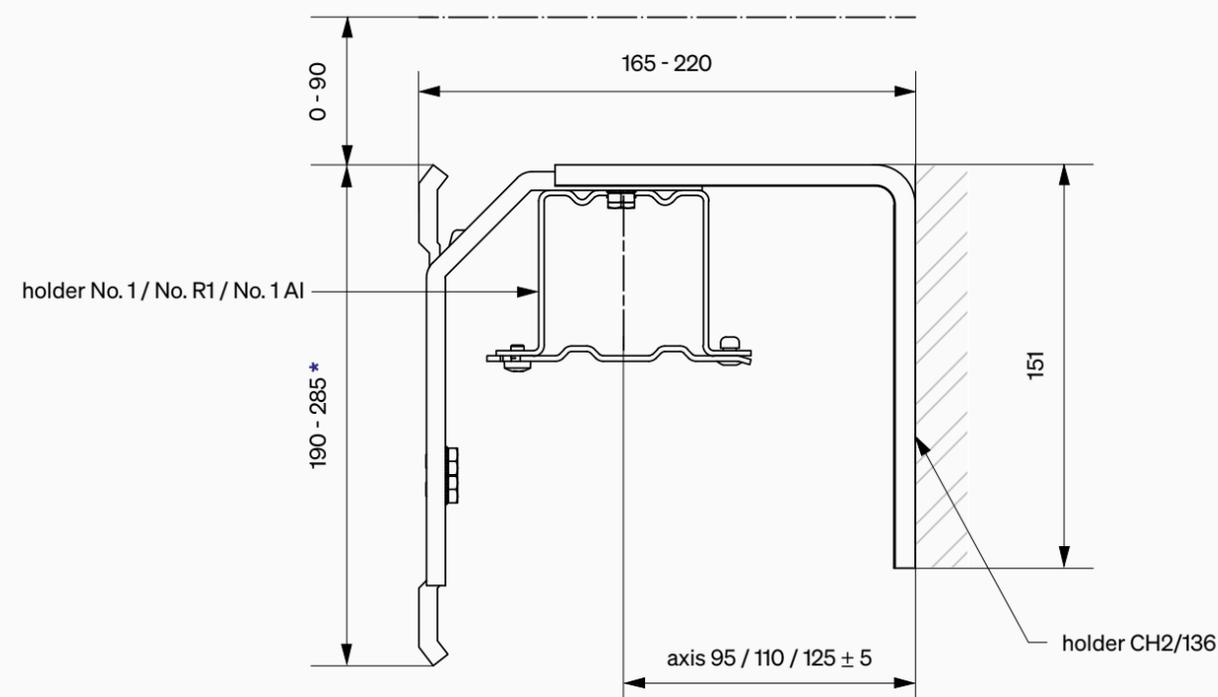


* Variant solution holder CH3/91 lang 300 - 410 mm.

Holder CH2/136



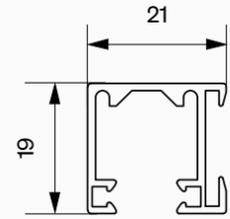
Holder CH3/136



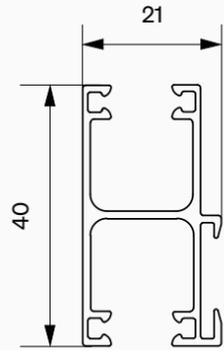
* Variant solution holder CH3/136 lang 300 - 410 mm.

TYPES OF GUIDE RAILS

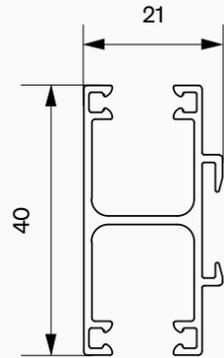
Type S



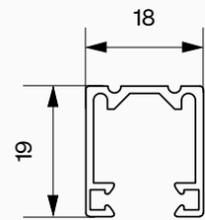
Type SDV



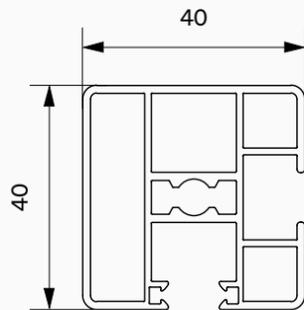
Type SDV2



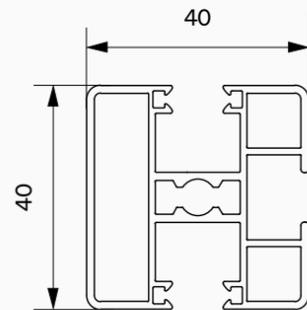
Type O



Type H

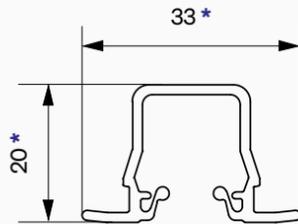


Type HDV



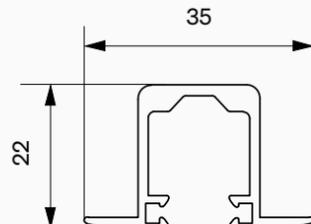
Plastic recessed profile

— for STF2, STL, STL DV



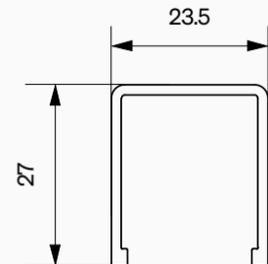
Type Z

— for STF2, STL, STL DV, casing, ISO-PANEL



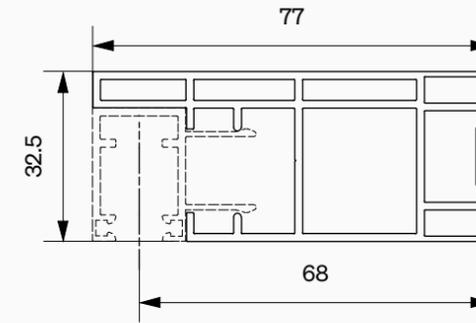
Casing

— for type Z

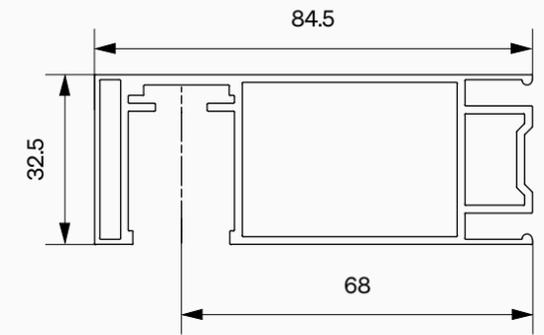


* Dimensions when closed.

Type STF1

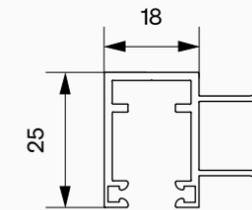


Type STF2 *

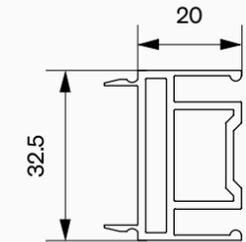


* The guide rail includes a Z profile or a recessed plastic profile.

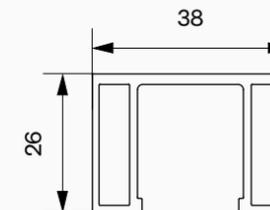
Removable profile STF1



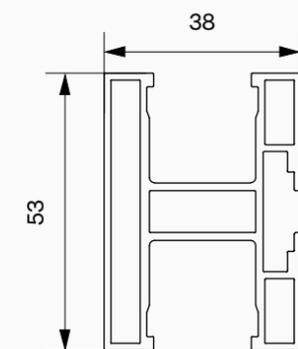
Distance STF profile



Type STL *



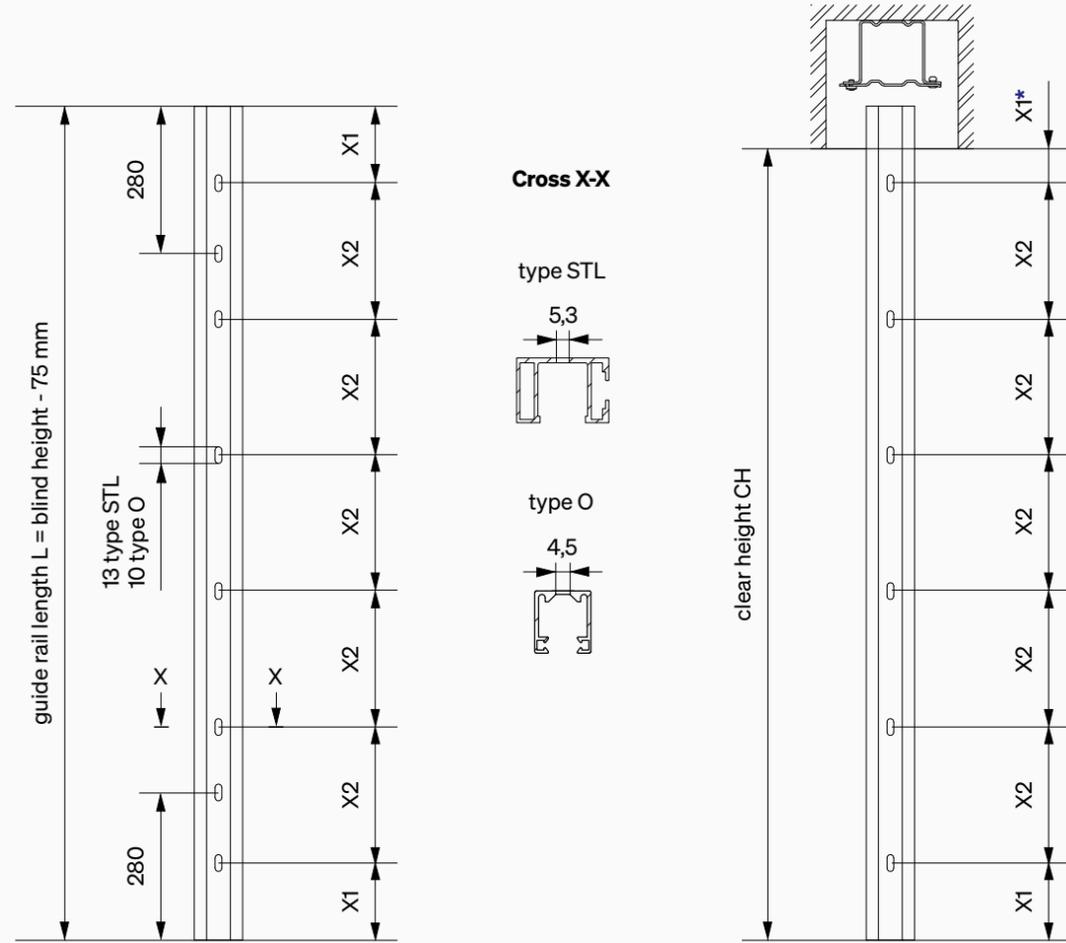
Type STL DV *



* The guide rail includes a Z profile or a recessed plastic profile.

Standard drilling

Drilling according to clear height



NUMBER AND LOCATION OF HOLES FOR MOUNTING THE STL AND O TYPE GUIDE RAILS

Blind height (mm)	Number of holes for mounting	X1	X2
500-799	2	120	-
800-1399	2	200	-
1400-2199	3	200	(L-400)/2
2200-3099	4	200	(L-400)/3
3100-3999	5	200	(L-400)/4
4000-5000	6	200	(L-400)/5

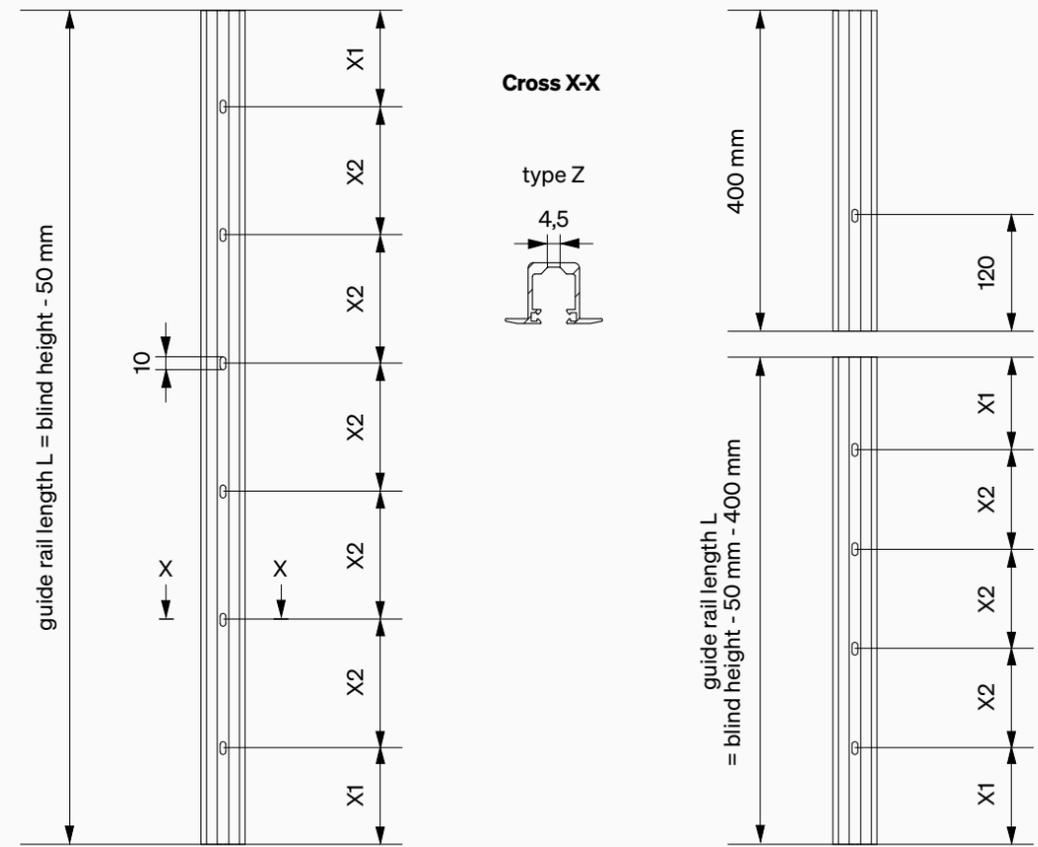
NUMBER AND LOCATION OF HOLES FOR MOUNTING THE STL AND O TYPE GUIDE RAILS

Clear height CH (mm)	Number of holes for mounting	X1	X1*	X2
500-1500	2	200	100	-
1501-2700	3	200	100	(CH-300)/2
2701-3900	4	200	100	(CH-300)/3
3901-5000	5	200	100	(CH-300)/4

X1* The distance of the first hole when the clear height is specified is 100 mm from the clear height.

One-piece guide profile

Split guide profile (delivered in 2 pieces)

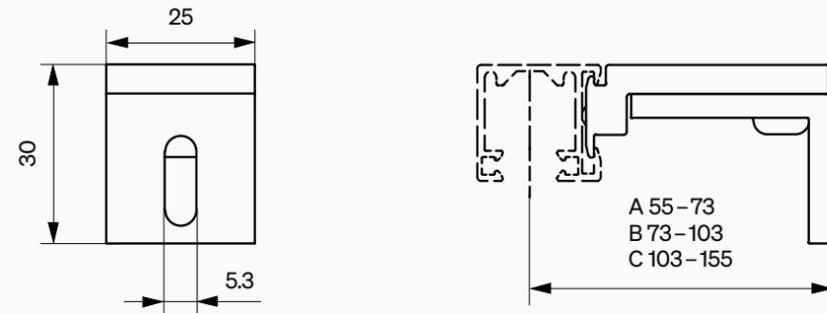


NUMBER AND LOCATION OF HOLES FOR MOUNTING THE Z TYPE GUIDE RAIL

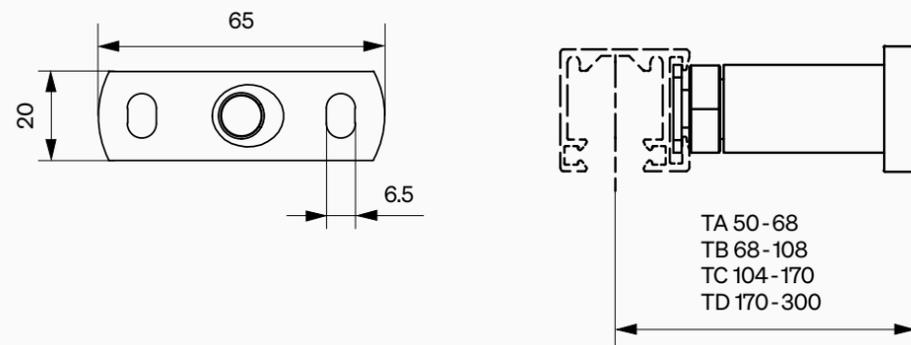
Blind height (mm)	Number of holes for mounting	X1	X2
500-799	2	100	-
800-1799	2	250	-
1800-3099	3	250	(L-500)/2
3100-3999	4	250	(L-500)/3
4000-4799	5	250	(L-500)/4
4800-5000	6	250	(L-500)/5

GUIDE RAIL HOLDERS

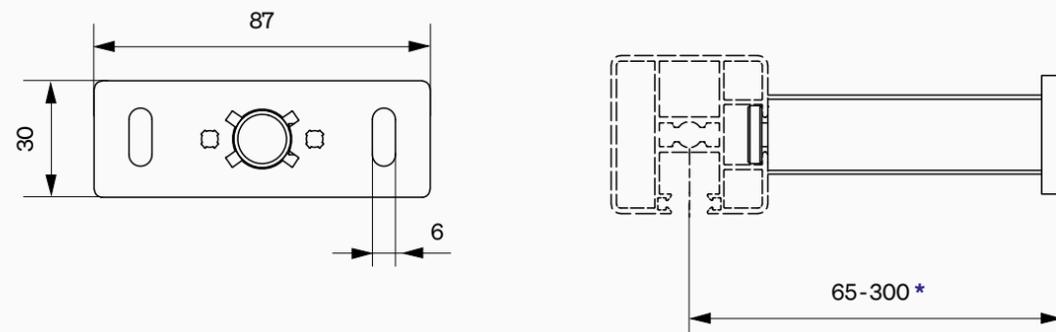
Standard holder



Telescopic holder



KV holder



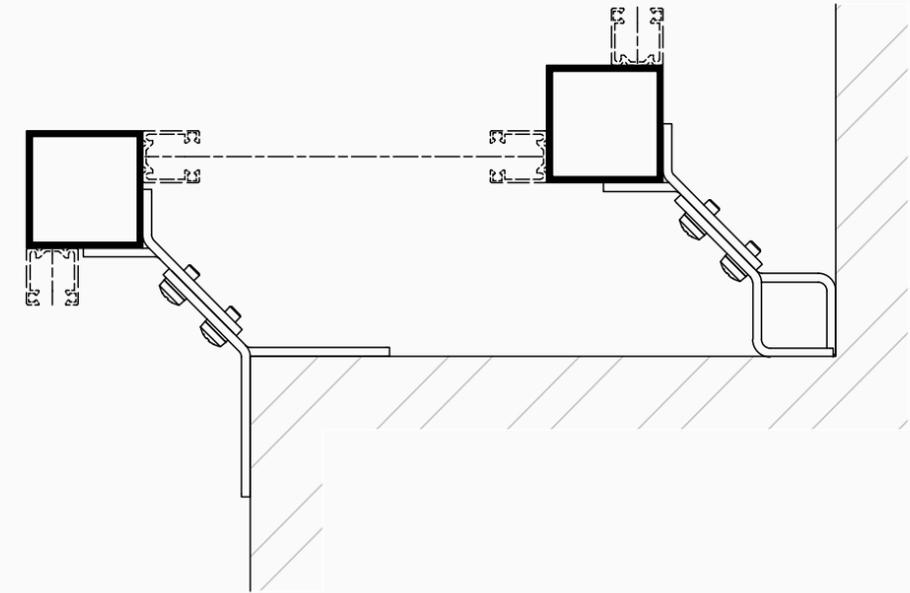
* The holder is not adjustable.

Outer corner holder

- RA 65-80
- RB 80-100
- RC 100-140
- RD 140-220

Inner corner holder

- RVA 70-80
- RVB 80-100
- RVC 100-140
- RVD 140-220

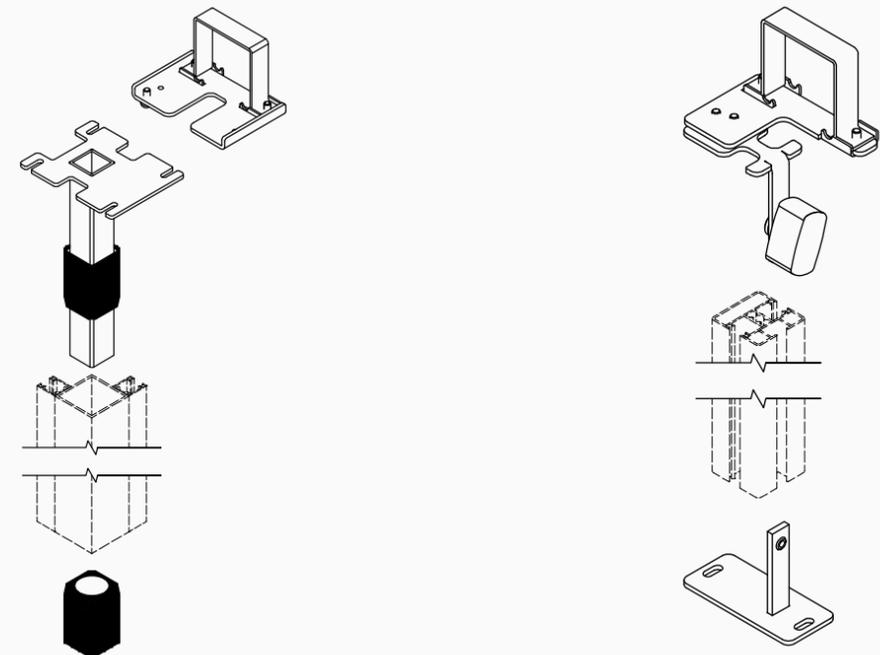


SPR corner holder

— ceiling - floor or upper profile - floor mounting

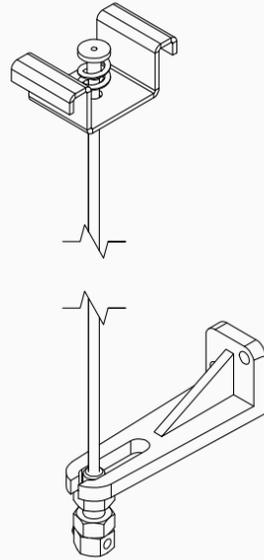
SPV upper holder

— the holder is designed for H or HDV guide rails
 — mounting on the upper profile - floor

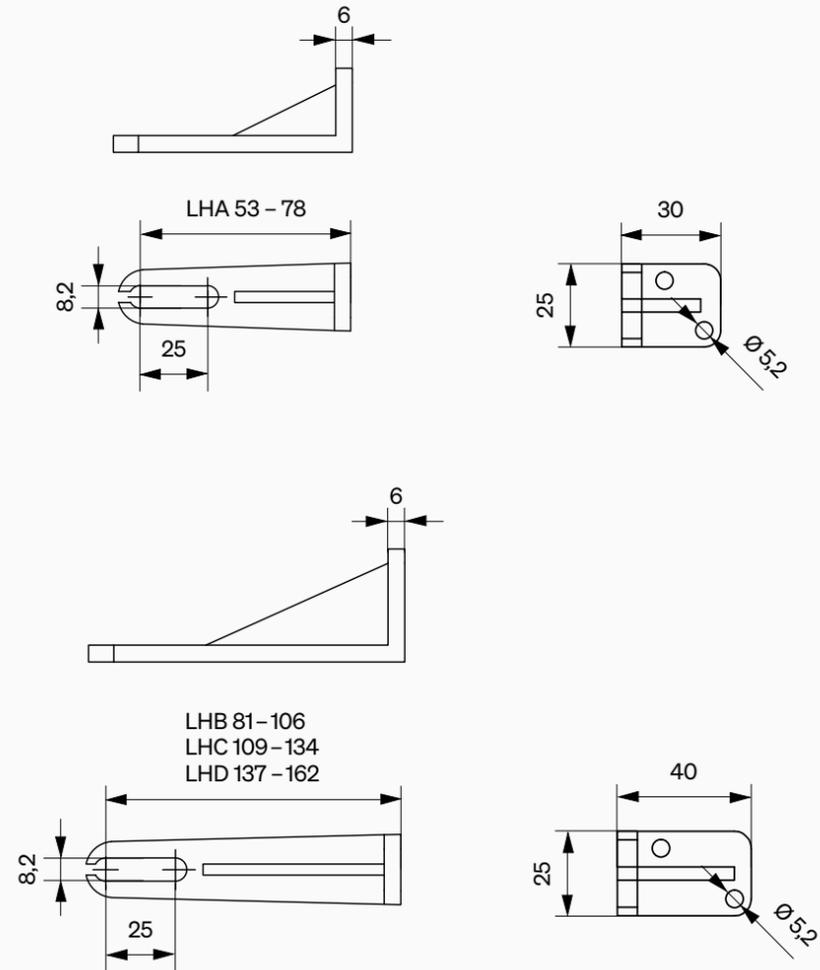


STRING HOLDERS

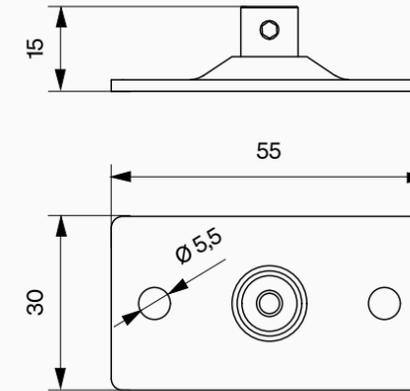
Wire holder schematic



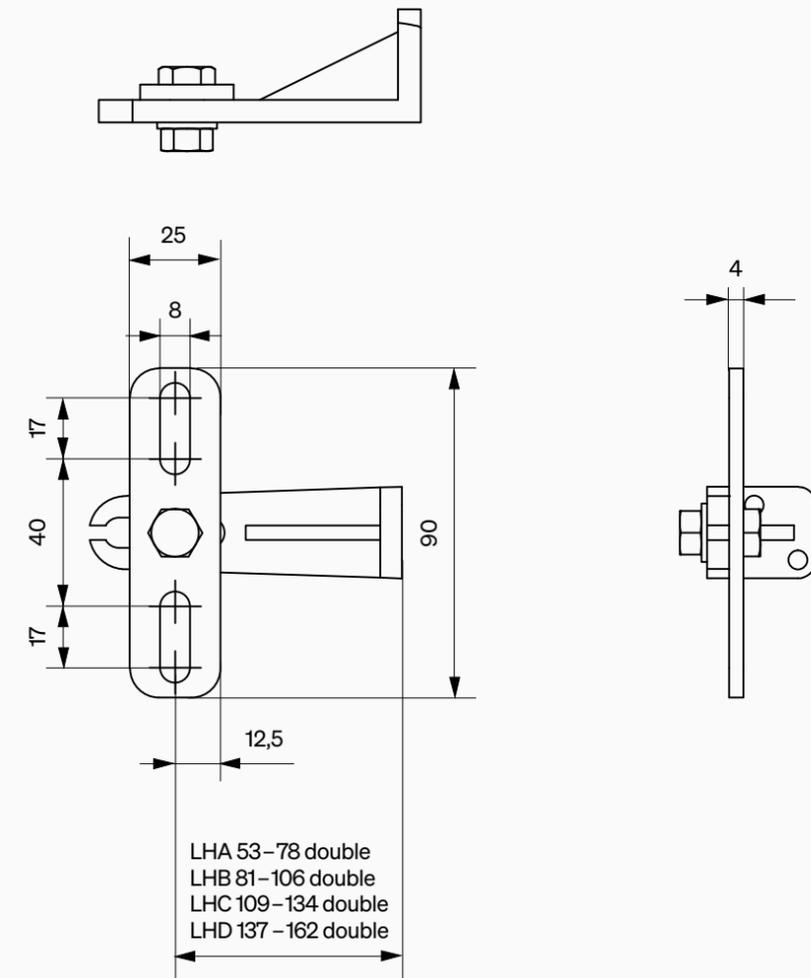
String holder



String holder - sill

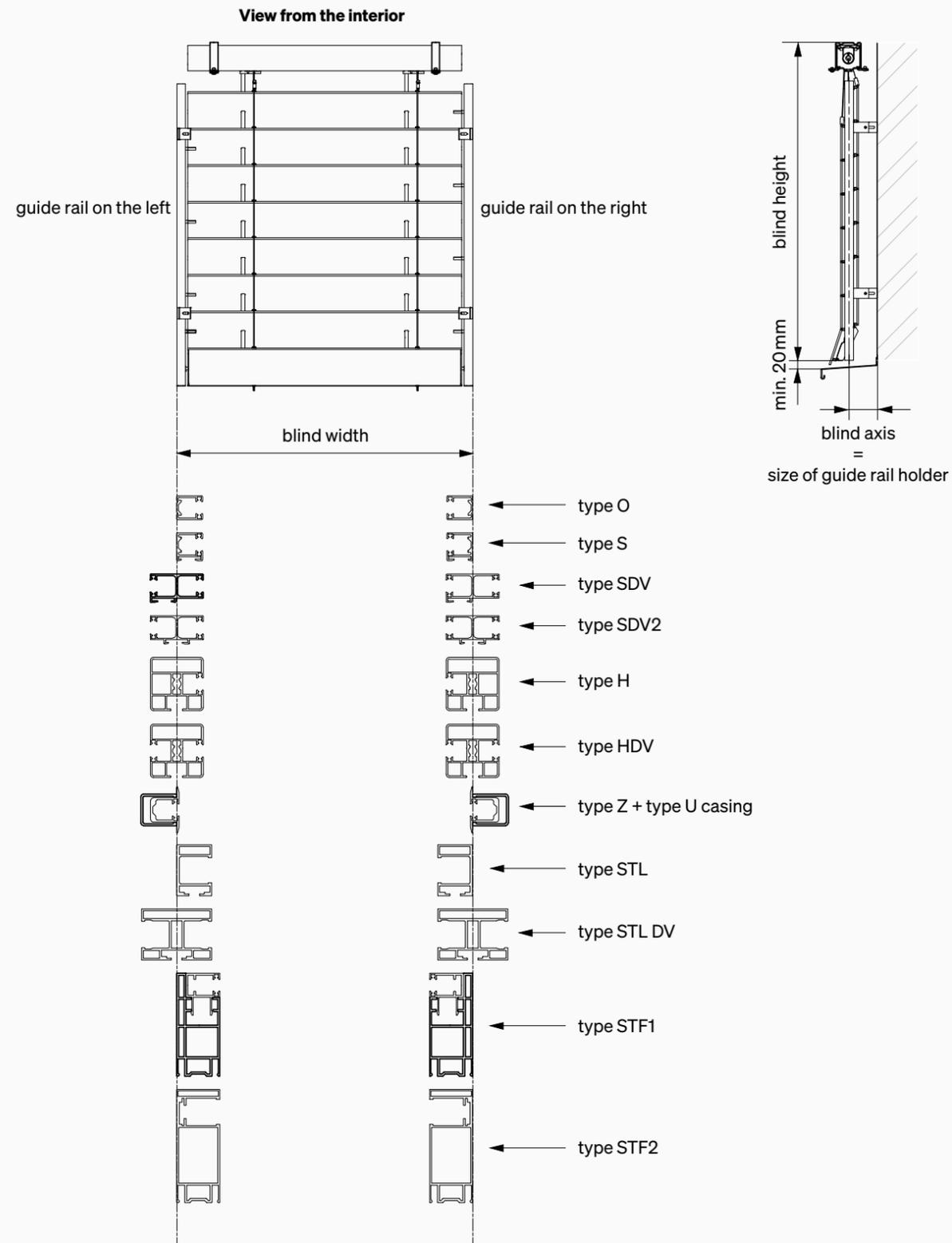


String holder double



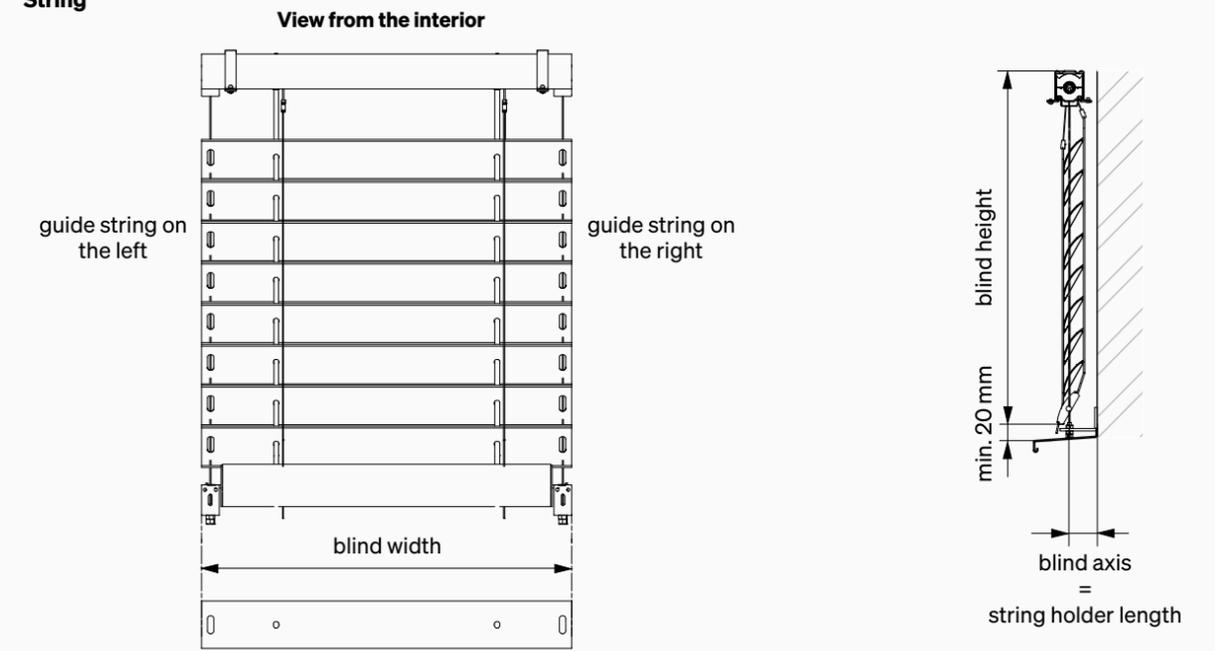
TECHNICAL DETAILS

Guide rails

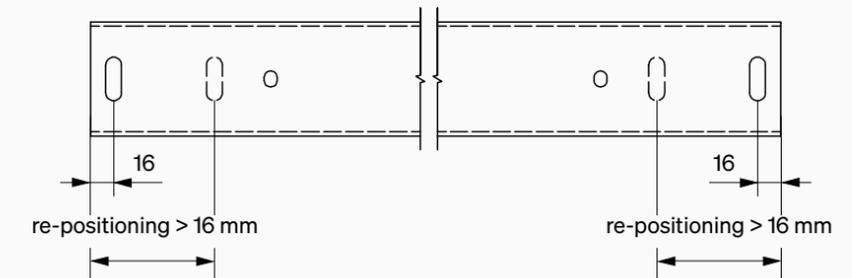


* All the information is specified in mm and when viewed from the interior.

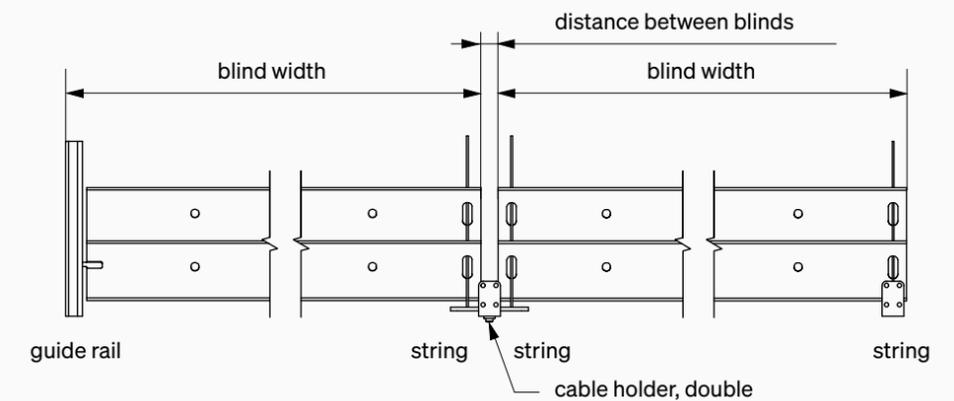
String



Change of the position of the edge wire



A guide-rail and string combination, a string assembly



Distance between blinds

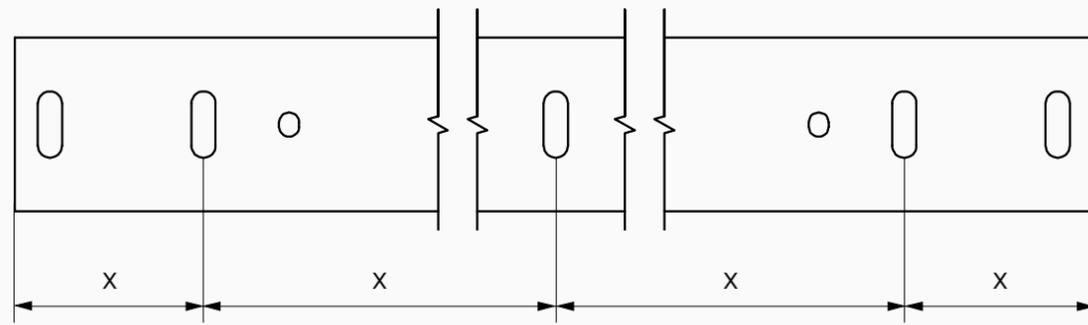
Recommended distance 20mm.

When a double holder is used, the distance is limited to 8–42 mm.

External blinds
Self-bearing systems
ISO-KASTL and ISO-PANEL
Cover sheets and components
Technical information
Commercial documents

External blinds
Self-bearing systems
ISO-KASTL and ISO-PANEL
Cover sheets and components
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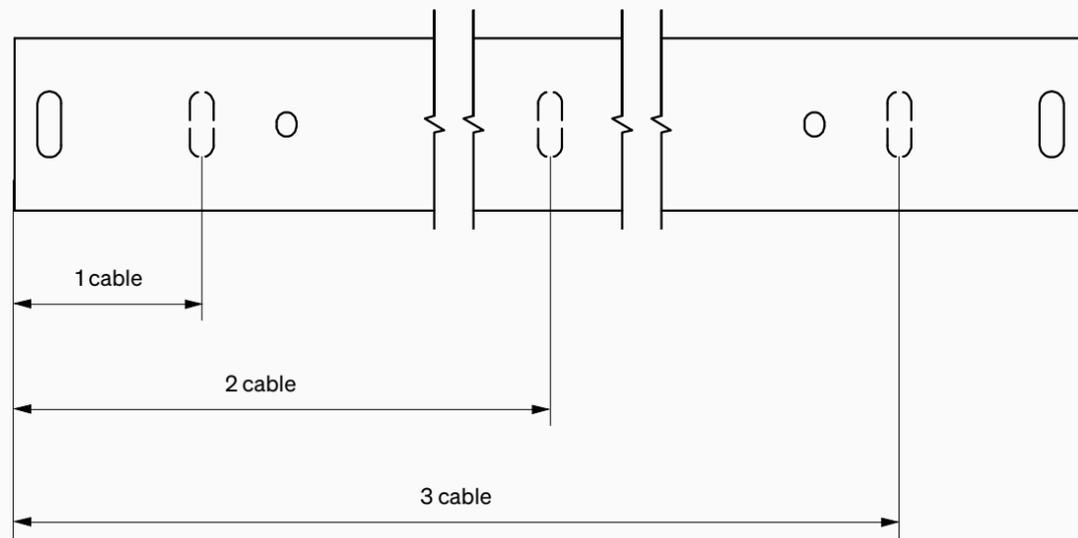
POSITION OF ADDITIONAL CABLE FOR BLINDS WITH CABLE



STANDARD DISTANCE OF ADDITIONAL CABLES

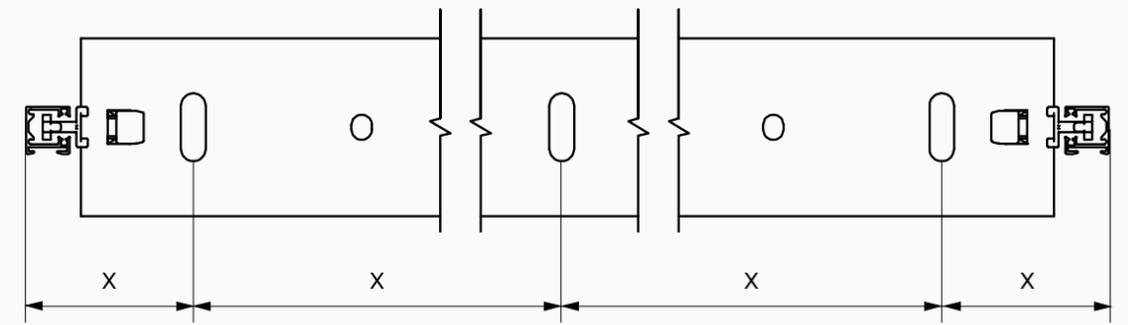
Number of cables	Distance of cable (X)
1 cable	$X = \text{width of blind} / 2$
2 cables	$X = \text{width of blind} / 3$
3 cables	$X = \text{width of blind} / 4$

Changing the distance of the additional cable



If the value is not entered, the cable is placed according to the standard calculation according to the table above. The cable distance is entered from the left side of the interior.

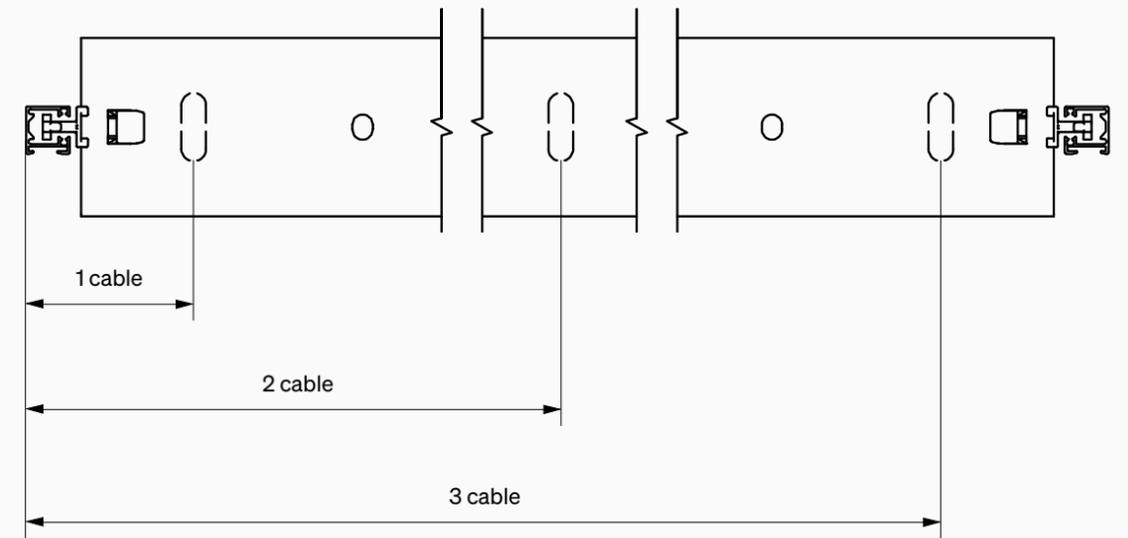
POSITION OF THE ADDITIONAL CABLE FOR BLINDS WITH GUIDING RAIL



STANDARD DISTANCE OF ADDITIONAL CABLES

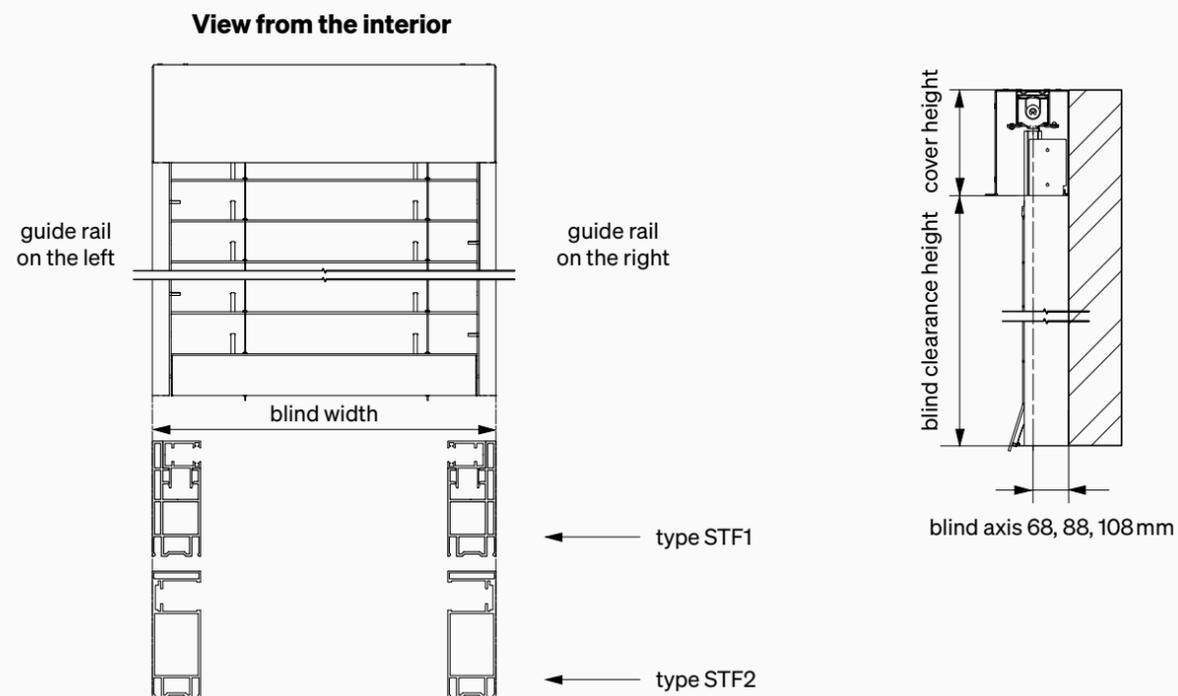
Number of cables	Distance of cable (X)
1 cable	$X = \text{width of blind} / 2$
2 cables	$X = \text{width of blind} / 3$
3 cables	$X = \text{width of blind} / 4$

Changing the position of the additional cable with guiding rail

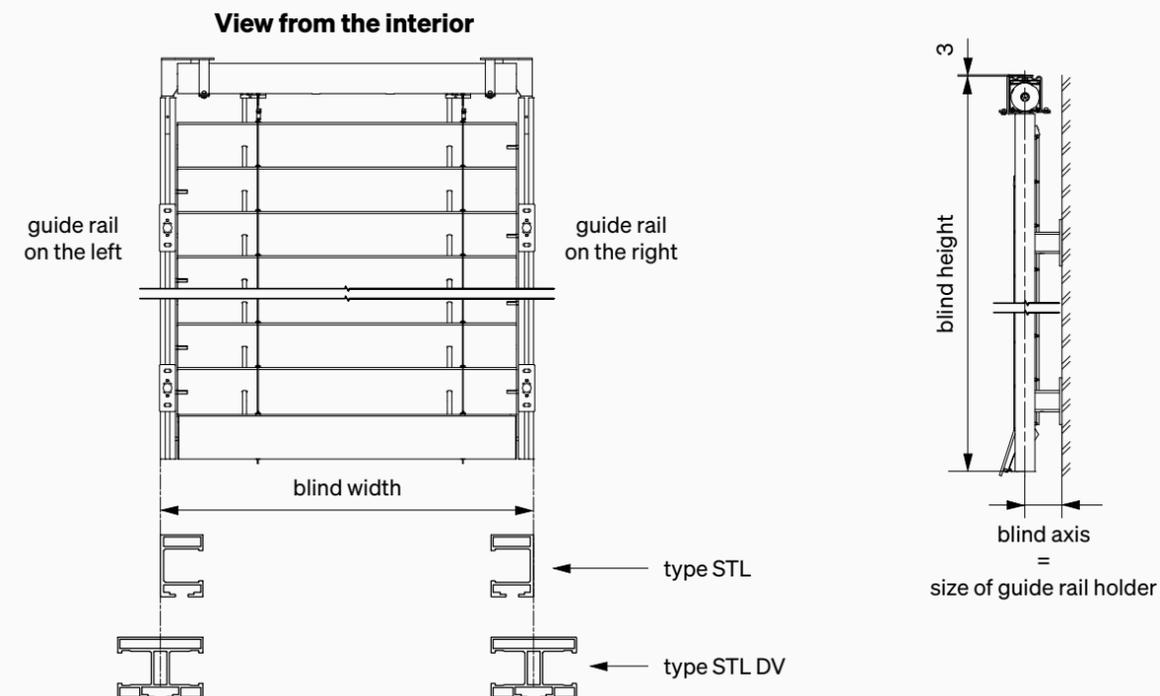


If the value is not entered, the cable is placed according to the standard calculation according to the table above. The cable distance is entered from the left side of the interior.

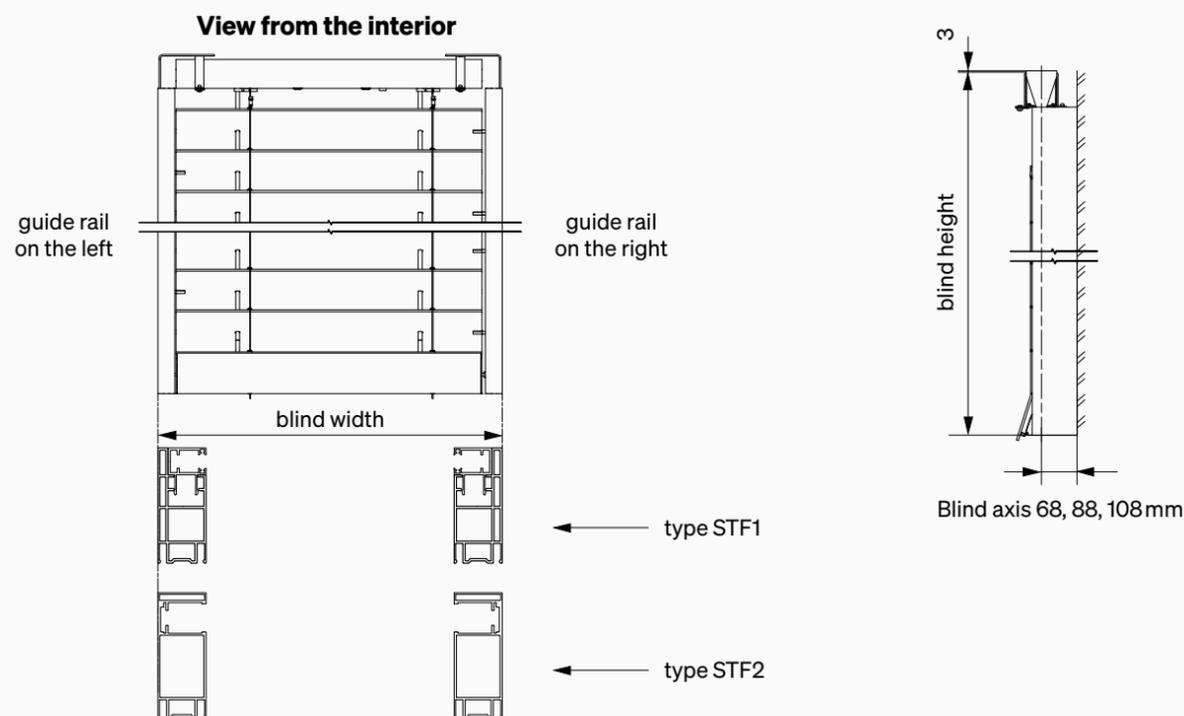
STF self-bearing system with cover sheet or ISO-KASTL concealed case (under the plaster)



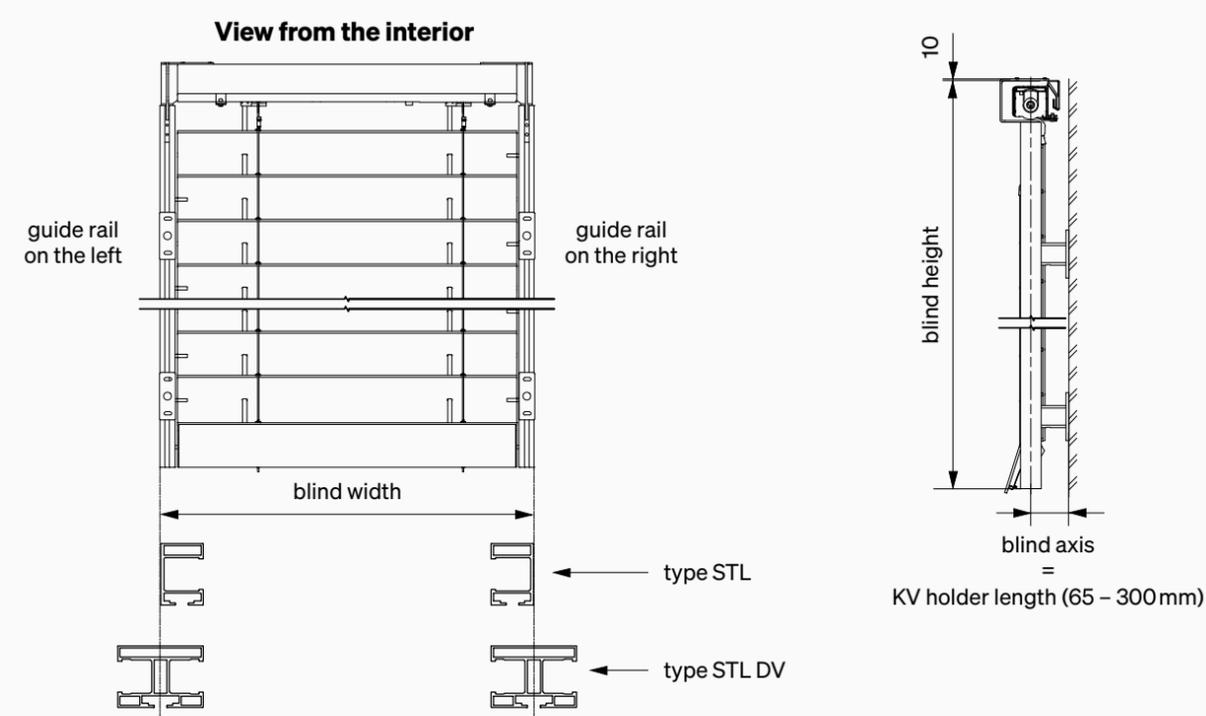
STL standard self-bearing system



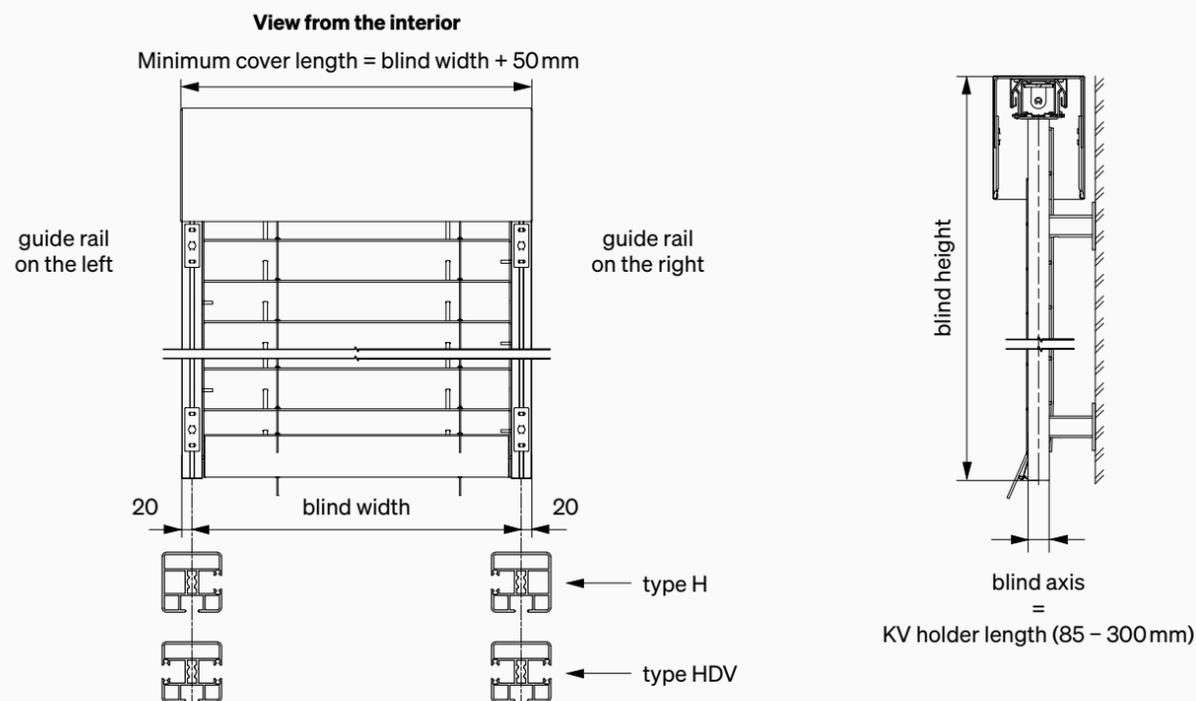
Self-bearing STF system without cover



Self-bearing STL reinforced system

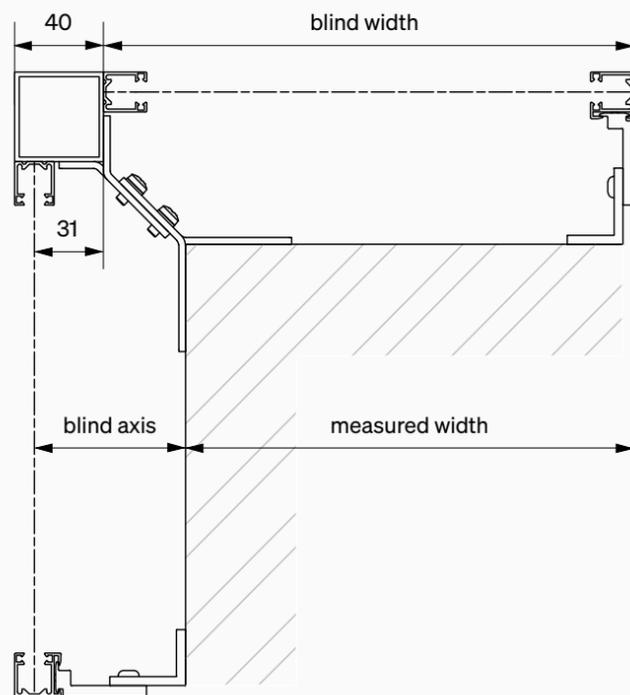


Façade system



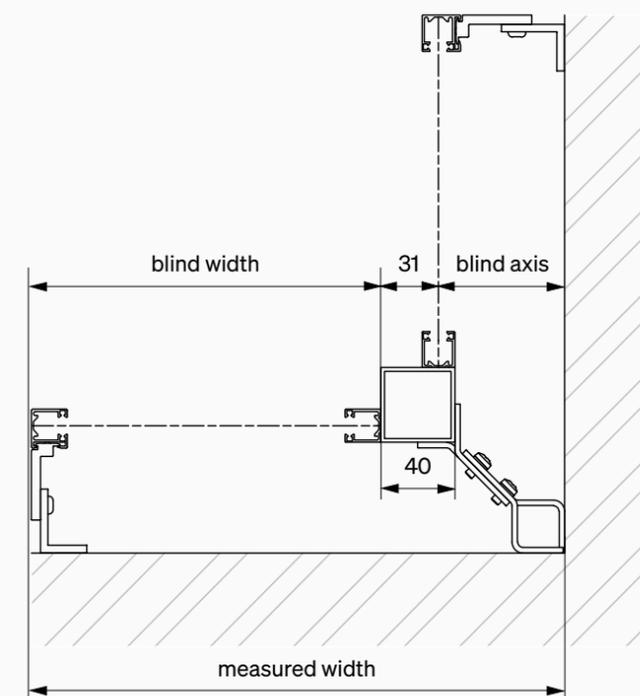
MEASUREMENTS OF CORNER BLIND OUTER AND INNER CORNER

Outer corner



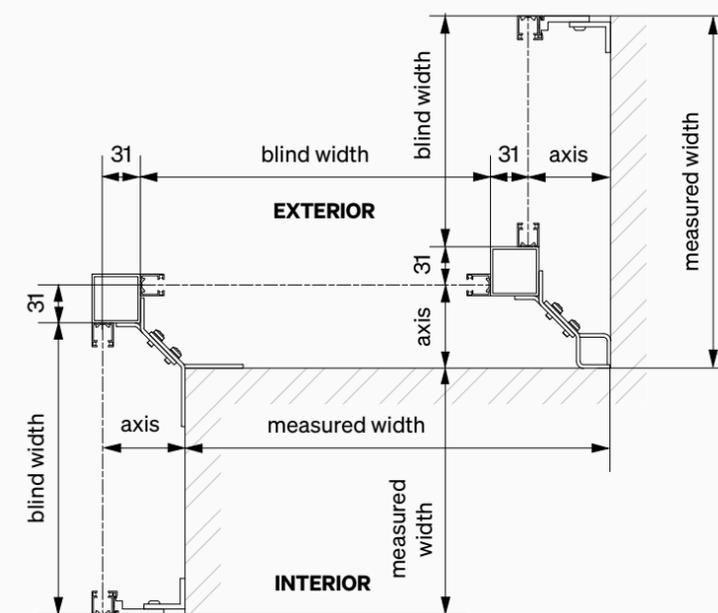
- blind width = measured width + blind axis - 31mm
- applies to the calculation of both blinds
- in case of different axes of blinds, we recommend consulting the manufacturer, NEVA, on the parameters of the blinds at all times.
- corner holders can only be used for blinds with identical axes

Inner corner



- blind width = measured width - blind axis - 31mm
- applies to the calculation of both blinds
- in case of different axes of blinds, we recommend consulting the manufacturer, NEVA, on the parameters of the blinds at all times.
- corner holders can only be used for blinds with identical axes

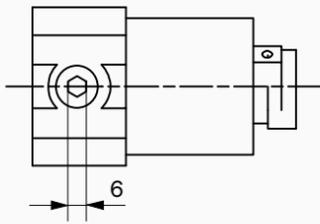
Outer and inner corner



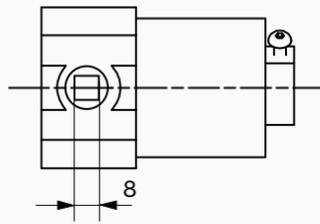
- blind width outer corner = measured width + blind axis - 31mm
- blind width inner corner = measured width - blind axis - 31mm
- blind width between outer and inner corner = measured blind width - 62mm
- in case of different axes of blinds, we recommend consulting the manufacturer, NEVA, on the parameters of the blinds at all times
- corner holders can only be used for blinds with identical axes

GEARS

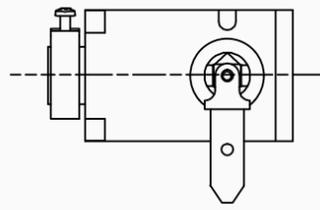
Gear 6 mm, 6 edges *



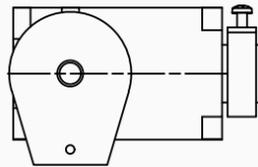
Gear 8 mm, 4 edges *



Gear with nose without grommet

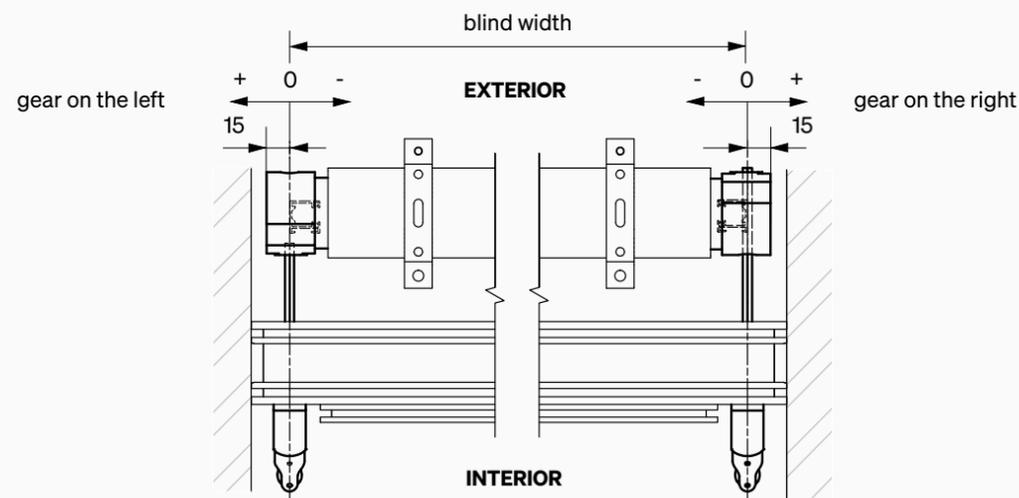


Gear cord



* The grommet for the gear must be either 6 mm hexagonal or 8 mm square and sufficiently long to reach into the metal part of the gear.

GEAR LOCATION AND SHIFT

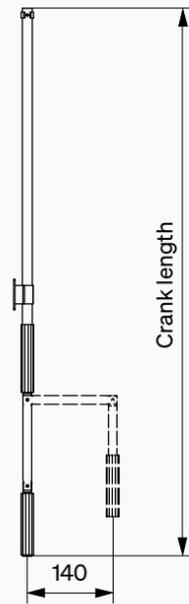


ATTENTION:

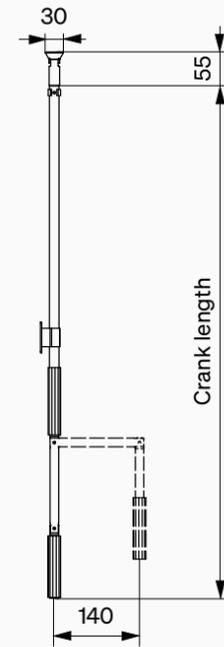
- for the gear on the right, the grommet must be extended up to the metal part of the gear
- gear position P, L is determined from the interior view
- gear in position 0 exceeds the width of the blind by 15 mm

CRANKS

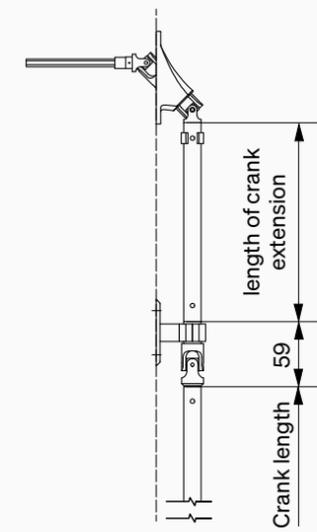
Standard crank



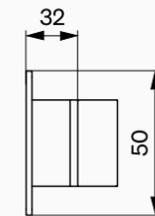
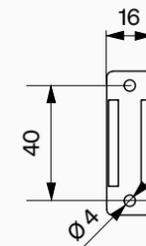
Removable crank



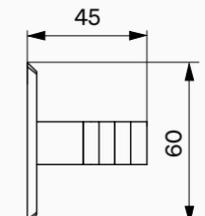
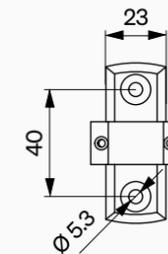
Crank cardan joint



Crank holder

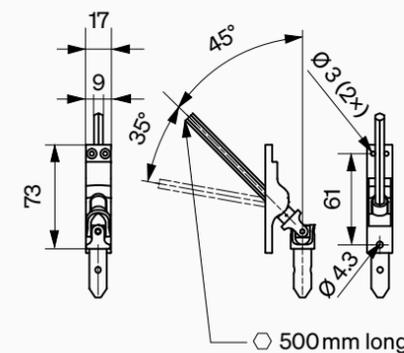


Cardan joint holder

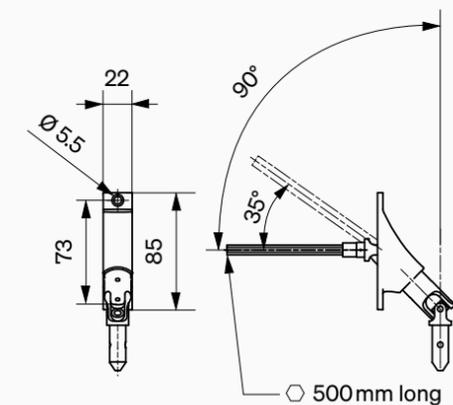


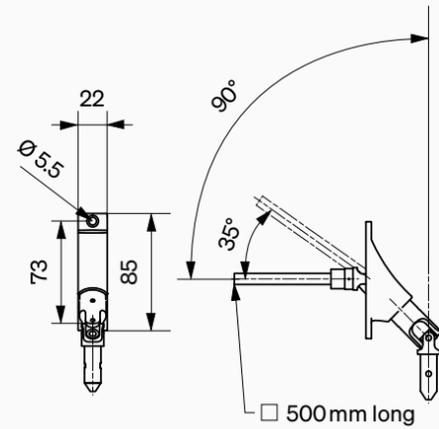
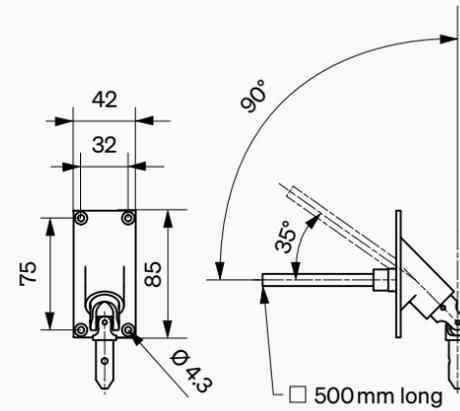
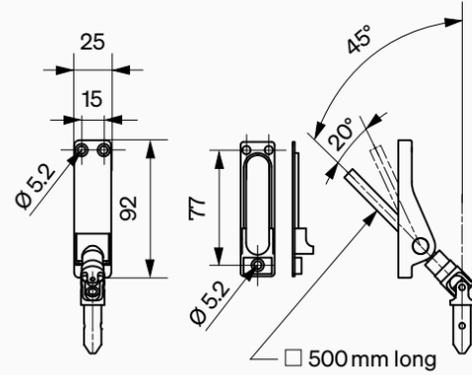
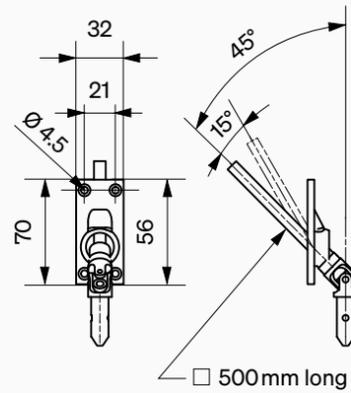
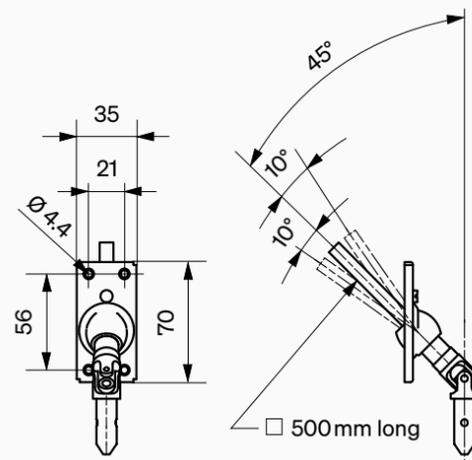
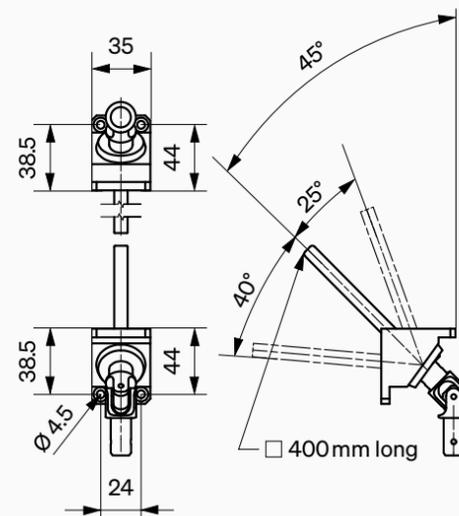
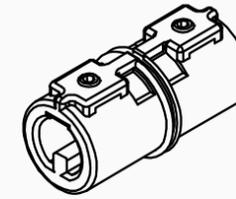
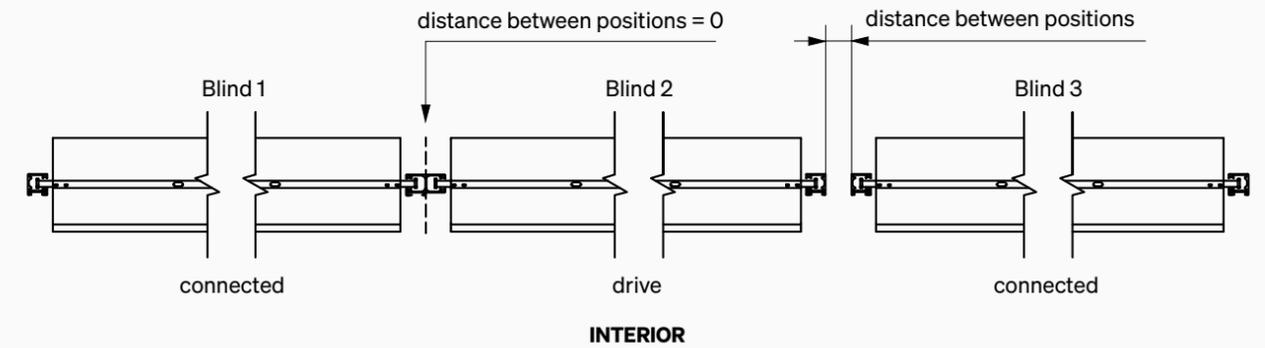
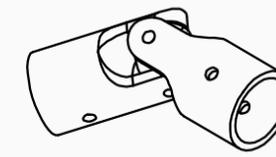
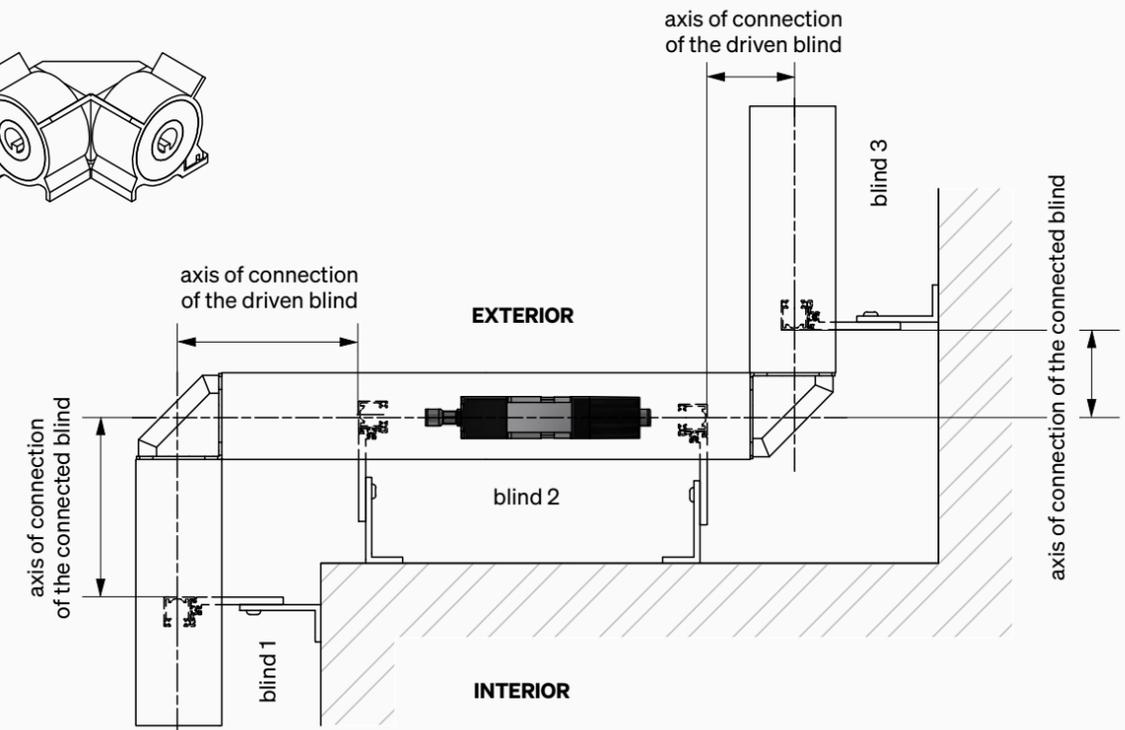
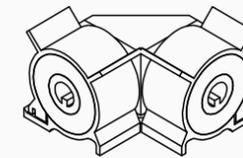
GROMMETS

Crank grommet 45° (6 mm, 6 edges)



Crank grommet 90° (6 mm, 6 edges)

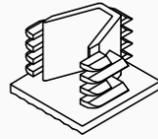


Crank grommet 90° (8 mm, 4 edges)**Crank grommet 90° (8 mm, 4 edges) 42×85 mm****Crank grommet 45° (8 mm, 4 edge plastic) 25×90 mm****crank grommet 45° (8 mm, 4 edge plastic) 32×70 mm****crank grommet 45° (8 mm, 4 edges inox) 35×70 mm****Corner crank grommet (8 mm, 4 edges)****CONNECTIONS AND CONNECTION DIAGRAM OF BLINDS****Straight connection****45° connection****Corner connection 90°**

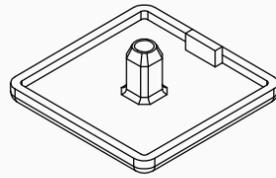
ATTENTION:
— the connection axis is at least 30 mm

OPTIONAL COMPONENTS

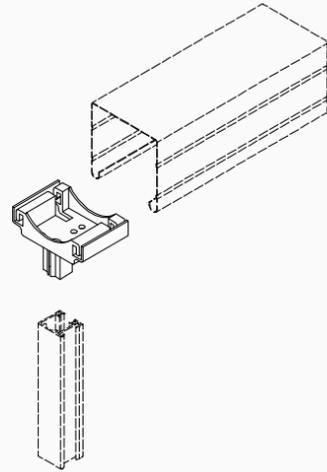
Guide rail end caps for type S, SDV, SDV2, O, Z



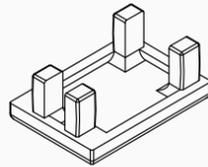
Guide rail end caps for type H, HDV



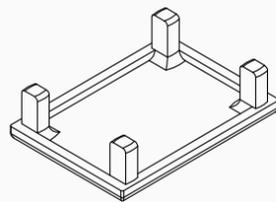
Plastic holder



Guide rail end caps for STL type



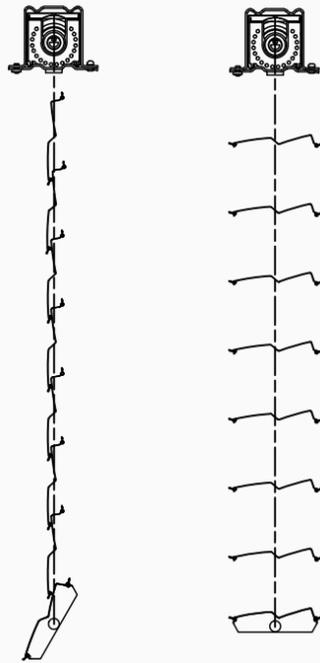
Guide rail end caps for type STL DV



- it is not used as a bearing holder of a guide rail, only as a mounting aid for precise mounting
- length of the upper rail = blind width

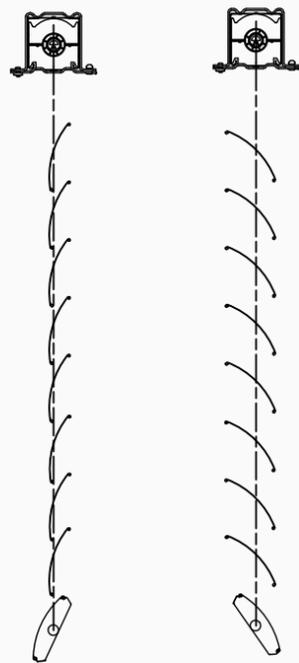
TILTING OF SLATS

Blinds S90, Z90, Z70 (single-sided)



downward direction upward direction

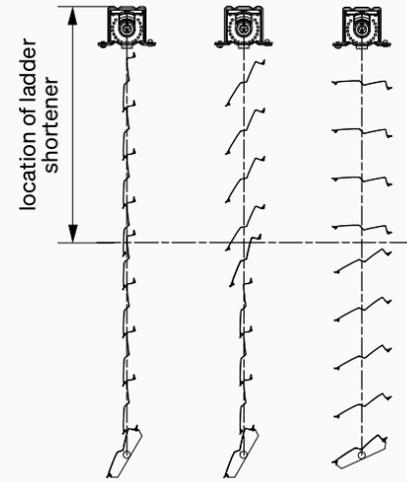
Blinds C80, C65, F80 (double-sided)



downward direction upward direction

DIVIDED TILTING OF SLATS (LADDER SHORTENER)

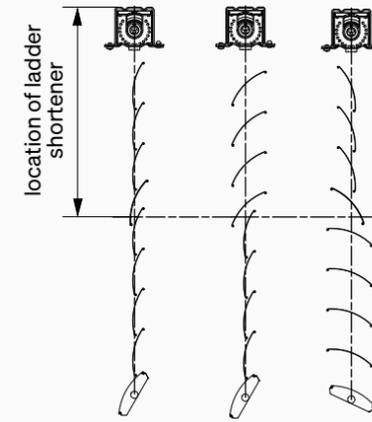
Blinds S90, Z90



downward direction intermediate position upward direction

— for Z70 and C65 blinds impossible

Blinds C80, F80

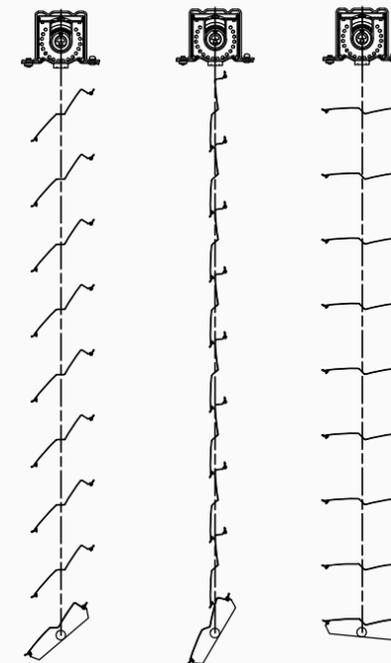


downward direction intermediate position upward direction

Detail of threading of the ladder shortener



WORKING POSITION, 3-POSITION BEARING



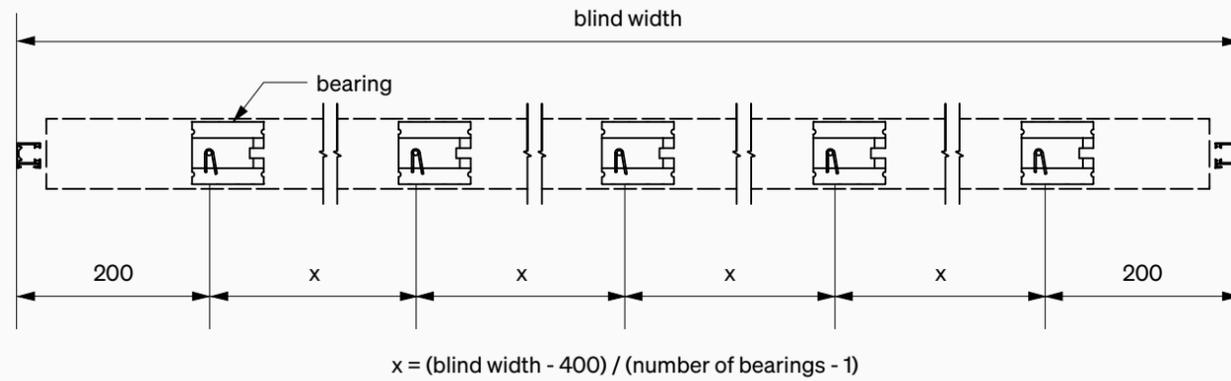
downward direction lower end position upward direction

- allows lowering the blinds in a semi-opened position
- If a 3-position bearing is used, the slats can be tilted to the full standard extent only in the lower end position
- blinds with 3-position bearings must be fitted with special motors that enable the function of 2 lower end positions

External blinds
Self-bearing systems
ISO-KASTL and ISO-PANEL
Cover sheets and components
Technical information
Commercial documents

External blinds
Self-bearing systems
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BEARING ARRANGEMENT



- the bearing distance is as far as the axis of the lift tape
- blinds with a width of 700 - 999 mm have a first bearing of 150 mm → $x = (\text{width of the blind} - 300) / (\text{number of bearings} - 1)$
- the position of the gearbox may affect a shift of the bearings
- the position of the additional central wire may affect the movement of the bearings

Number of bearings for all types of blinds

HEIGHT	WIDTH											
	mm	1,000	1,200	1,300	1,400	1,700	1,800	2,000	2,200	2,300	2,400	2,800
2,500	2	2	2	2	3	3	3	3	3	3	3	4
3,000	2	2	2	3	3	3	3	3	4	4	4	4
4,000	2	2	3	3	3	3	3	4	4	4	4	4
5,000	3	3	3	3	3	4	4	4	4	5	5	5

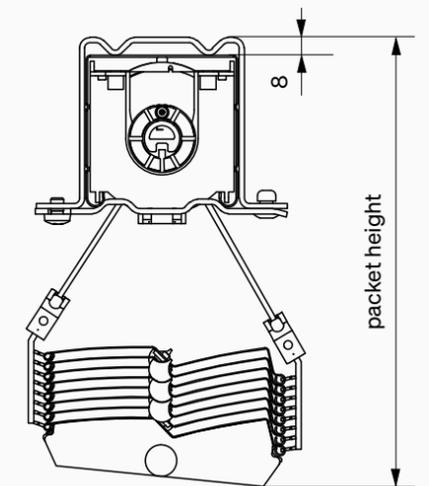
HEIGHT	WIDTH											
	mm	3,100	3,200	3,400	3,600	3,700	3,900	4,000	4,400	4,500	4,800	5,000
2,500	4	4	4	5	5	5	5	5	5	6	6	6
3,000	4	5	5	5	5	5	5	5	6	6	6	7
4,000	5	5	5	5	6	6	7	7	7	7	8	8
5,000	6	6	6	7	7	8	8	-	-	-	-	-

HEIGHT OF BLIND PACKET

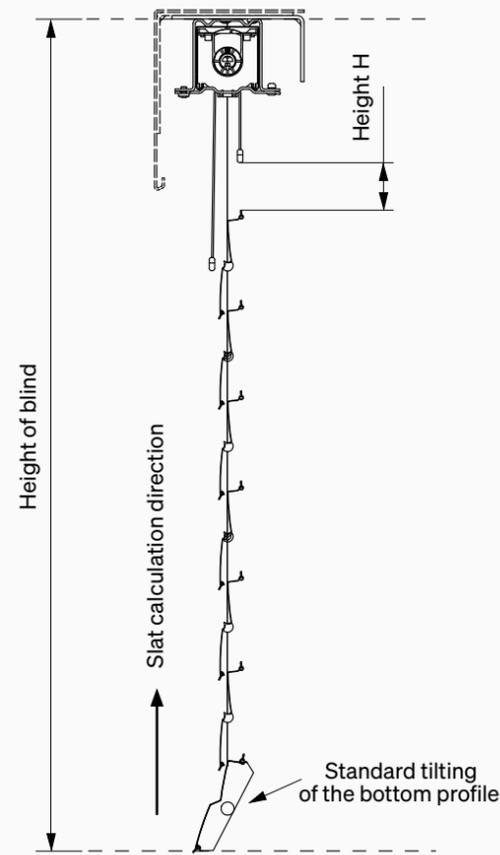
Total height of blind in mm	S90, Z90	Z70	C80	C65	F80 guide rail	F80 string
500–1,250	180*	200	190*	200	160*	150*
1,251–1,500	190*	220	210	220	170*	160*
1,501–1,750	200*	230	230	240	180*	170*
1,751–2,000	210*	250	240	260	190	170*
2,001–2,250	220*	270	250	280	200	180*
2,251–2,500	240	280	270	300	210	190
2,501–2,750	250	300	280	320	220	200
2,751–3,000	260	320	300	340	230	200
3,001–3,250	280	340	320	360	240	210
3,251–3,500	290	350	330	380	250	220
3,501–3,750	300	370	350	400	260	220
3,751–4,000	310	390	360	420	260	230
4,001–4,250	330	410	380	440	–	–
4,251–4,500	340	420	400	460	–	–
4,501–4,750	350	440	410	480	–	–
4,751–5,000	360	460	430	500	–	–

ATTENTION:

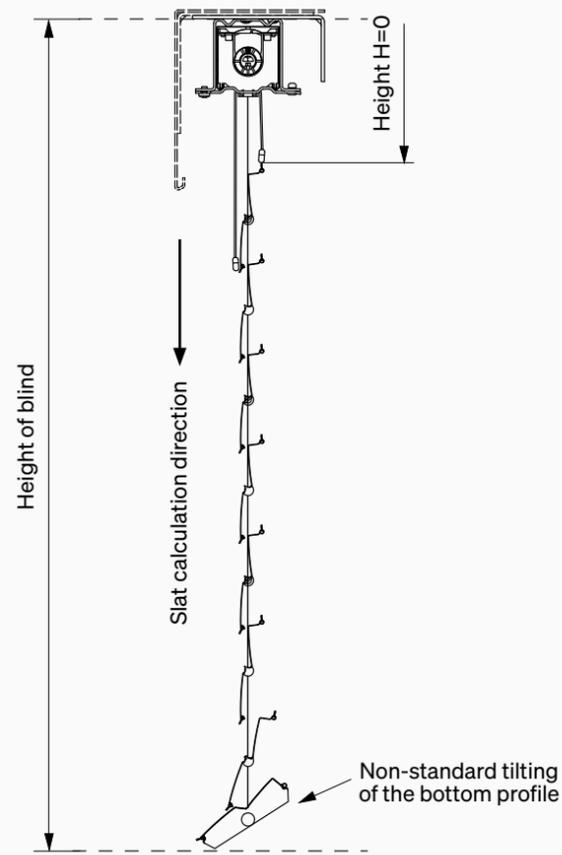
- for values marked with *, space may form between the cover and the first slat with the blind lowered in the closed position
- in that case, we recommend a minimum height of cover S90, Z90 – 230 mm, C80 – 200 mm, F80 – 190 mm or specifying height $H=0$ (see chapter Technical information - HEIGHT H).



Height H



Height H=0



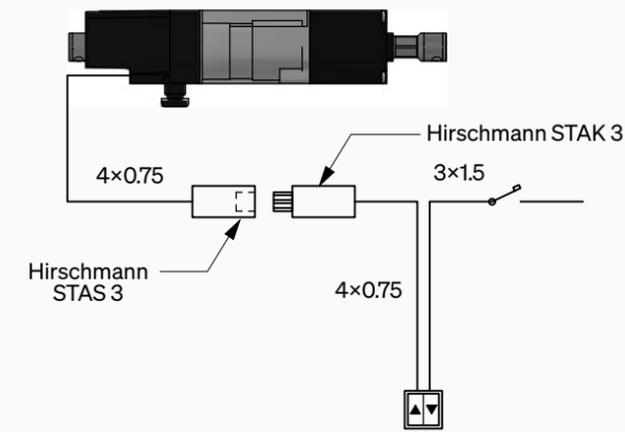
TECHNICAL PARAMETRES

- height H is the distance between the top edge of the first slat and the ladder joint in the fully extended and closed state of the blind
- the height H is normally calculated and set by the manufacturer to achieve the maximum shading effect (all slats are fully closed) at the desired overall height of the blind, which is achieved by optimising the number of slats in the blinds, and by setting the corresponding height H
- the height H is adjusted depending on the slat type and the height of the blind
- selecting the height H=0 ensures that there is no gap between the cover (the recommended cover height must be selected, see page 133) and the first slat
- If the upper height H=0 is set, a slat is added, and non-standard tilting of the bottom profile and the adjacent slats may occur (see Fig. Height H=0)
- in case there is a set of multiple blinds with different blind height, we recommend specifying H=0 so that the blind slats are at the same height

- motor settings can be found in the motor manufacturer's documentation
- minimum conductor cross-section 0.75 mm and maximum conductor cross-section 1.5 mm
- wiring of the motors must be done by a responsible person possessing the appropriate licence in the country concerned

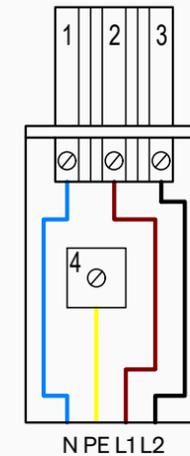
Wiring diagram of a standard blind motor with local control

- standard cable length from the motor is 500 mm
- standard blind wall switch



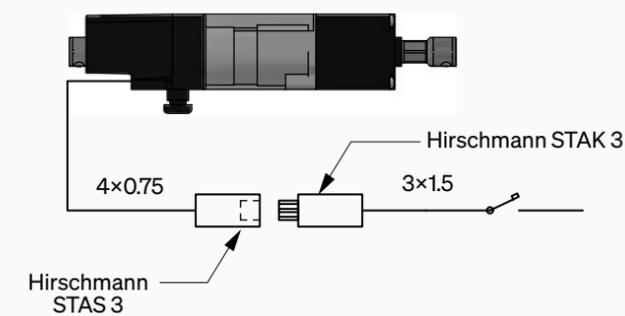
Hirschmann STAK 3 wiring

- N** neutral conductor
- L1** phase - upwards
- PE** protective conductor
- L2** phase - downward direction



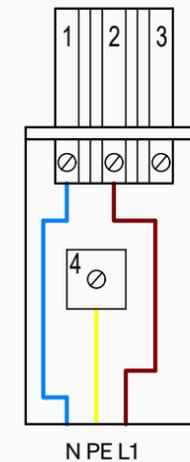
Wiring diagram of remote controlled blind motor

- standard cable length from the motor is 500 mm
- it is necessary to order a remote control or a control unit for SmartHome
- remotely controlled motors cannot be connected to a local blind control switch

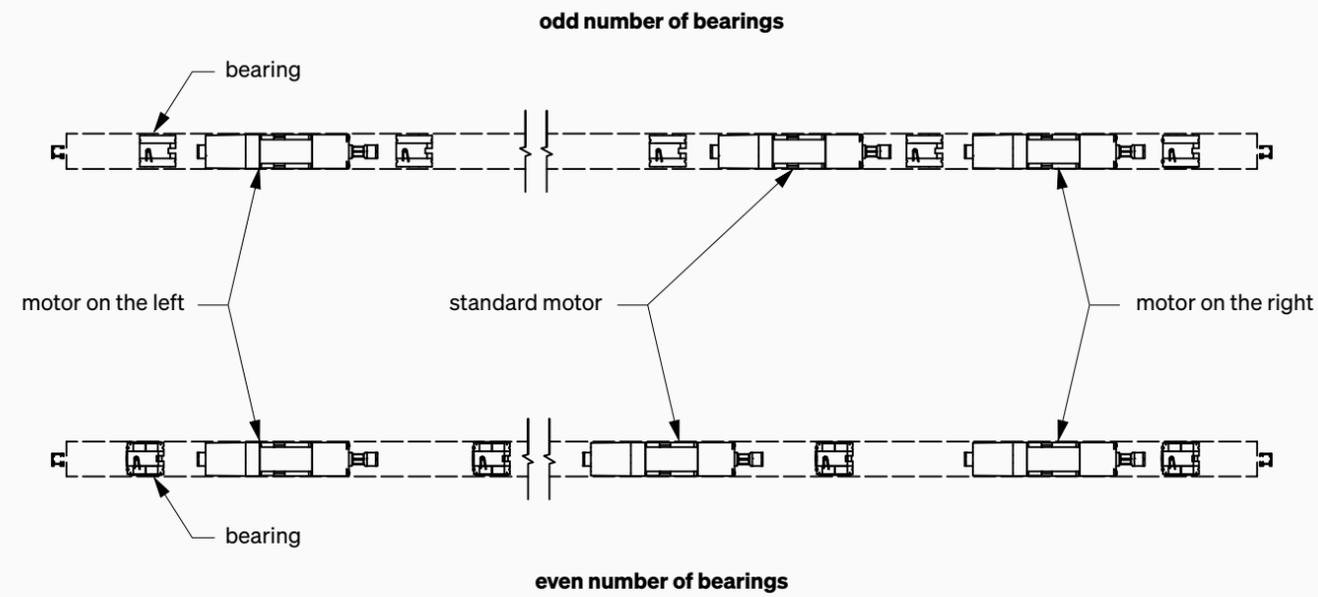


Hirschmann STAK 3 wiring

- N** neutral conductor
- L1** phase
- PE** protective conductor



MOTOR LOCATION



- when viewed from the interior
- blind motors are designed as centre motors
- thus, we recommend placing the motors in the centre of the blinds
- motors placed out of the centre of the blinds may affect the correct functioning and service life of the blind / motor

CHARACTERISTICS AND FEATURES OF EXTERNAL BLINDS

GENERAL PRODUCT CHARACTERISTICS

External blinds are classified as external shading. They are installed on the outside of buildings or other building structures. They provide protection from direct sunlight and thus directly affect the light and thermal conditions inside the building.

By extending/retracting (increasing/decreasing the surface area covered by the curtain) and tilting the slats (opening/closing the blind), they allow the natural lighting of rooms inside the building to be continuously controlled.

External blinds are not intended for darkening, and light transmission is permissible. The external blind is not designed to prevent unauthorised entry, it is not bullet-proof or blast-proof, or airtight.

There is no specific requirement for the equipment in terms of noise.

External blinds do not serve as a barrier against wind.

PRODUCT DESCRIPTION

External blinds consist of a bearing profile with a movement system, slats, guide rails, upper and guide rail holders, cover sheets or ISO-KASTL blind cases.

The drive train consists of a drive and bearings connected by an extruded aluminium alloy shaft. Everything is housed in a bearing upper profile made of galvanised steel sheet or aluminium alloy extrusion.

The drive can be manual with a crank or cord or motorised. The motors used are single-phase with characteristics 230 V / 50 Hz; 110 V / 60 Hz and power up to 250 W.

The bearings are made of PBT (polybutylene terephthalate) type plastic and control the slats by means of ladders and lift tapes. Ladders and tapes are made of textile and Kevlar fibres.

The slats come in different widths, shapes and colours and are made of painted aluminium alloy sheet.

Some slat types are fitted with rubber sealing on their edges.

The upper profile with the movement system and slats is attached to the building or other structure using the upper profile holders. These are made by bending or pressing steel strips.

Guidance and stability of the blind slats is ensured by means of guide rails, steel strings or their combinations. A special type of guide rail is ISO-PANEL, where the guide rail is embedded in a plate made of recycled PET granulate.

The guide rails and steel strings are attached to the building or other structure using holders. The guide rails, guide rail holders and string holders are made by extrusion from aluminium alloys.

To cover and protect the slats of the blind that is pulled down, cover sheets or ISO-KASTL blind cases built into the building are used.

The cover sheets are produced in various shapes, sizes and colours by bending, welding or riveting from aluminium alloy sheets.

ISO-KASTL is made of Purenit (a PIR-based hard polyurethane foam material) and is anchored to the building using steel brackets.

In the case of self-bearing blinds, the bearing part of the blind comprises guide rails which are mounted on the bearing element of the construction directly or by means of holders.

Some types of self-supporting blinds can be supplemented with an integrated roller screen to protect the interior from insects.

The roller screen consists of a movement system, a control bar, guide rails and sealing brushes.

The movement system consists of a winding spring, a shaft with a wound screen and a spring brake. Everything is integrated into the external blind cover sheet.

The winding spring and spring brake are made by coiling steel wire. The screen is made of fibreglass, coated with PVC-type plastic and wound on an extruded aluminium alloy shaft.

The screen is secured by extruded profiles made of aluminium alloy.

The sealing of the screen in the guide rails or to the building is done with brush seals. These are made of polypropylene and nylon.

All plastic parts such as end caps, limit stops, guide bushes or closing mechanisms are made of PVC (polyvinyl chloride) or PBT (polybutylene terephthalate).

SELECTED PRODUCT CHARACTERISTICS

The external blind is manufactured in accordance with the requirements of EN 13659 and thus complies with all relevant provisions of the European Community regulations, government regulations and standards to which it conforms and is CE marked in accordance with these regulations.

RESISTANCE TO WIND LOAD

The resistance of external blinds, depending on their type and size, is specified in the tables below. The resistance value of each blind is indicated on the CE label.

Definition of classes according to the Beaufort wind force scale

Beaufort resistance level	Wind resistance class	Wind speed (km/h)	Wind type	Wind characteristics
0	0	0 to 1	Calm	Smoke rises vertically.
1	0	2 to 5	Light air	Smoke drift indicates wind direction, still wind vanes.
2	0	6 to 11	Light breeze	Wind felt on face, leaves rustle, vanes begin to move.
3	0	12 to 19	Gentle breeze	Leaves and small twigs constantly moving, light flags extended.
4	1	20 to 28	Moderate breeze	Dust, leaves, and loose paper lifted, small tree branches move
5	2	29 to 38	Fresh breeze	Small trees in leaf begin to sway.
6	3	39 to 49	Strong breeze	Larger tree branches moving, umbrellas become difficult to use.
7	4	50 to 61	High wind	Whole trees moving, resistance felt walking against wind.
8	5	62 to 74	Moderate breeze	Twigs breaking off trees, generally impedes progress.
9	6	75 to 88	Gale	Slight structural damage occurs.
10	–	89 to 102	Strong breeze	Seldom experienced on land, trees broken or uprooted, "considerable structural damage".
11	–	103 to 117	Violent storm	Widespread damage.
12	–	over 118	Hurricane	Devastation, carries houses away, moves heavy masses.

Wind load resistance - guide rails

Maximum height up to 5,000 mm

	0 - 1,000		1,001 - 2,000		2,001 - 3,000		3,001 - 4,000		4,001 - 4,500		4,501 - 5,000	
	EN 13659 (+A1)	Beaufort										
S90												
Class	6	9	5	8	4	7	3	6	2	5	1	4
Max. wind speed (km/h)	≤ 88		≤ 74		≤ 61		≤ 49		≤ 38		≤ 28	
Maximum area (m ²)	5.0		10.0		15.0		20.0		20.0		20.0	
Maximum height (mm)	5,000		5,000		5,000		5,000		4,400		4,000	
Z90												
Class	6	9	5	8	4	7	3	6	2	5	1	4
Max. wind speed (km/h)	≤ 88		≤ 74		≤ 61		≤ 49		≤ 38		≤ 28	
Maximum area (m ²)	5.0		10.0		15.0		20.0		20.0		20.0	
Maximum height (mm)	5,000		5,000		5,000		5,000		4,400		4,000	
Z90*												
Class	6	9	6	9	5	8	4	7	3	6	2	5
Max. wind speed (km/h)	≤ 88		≤ 74		≤ 61		≤ 49		≤ 38		≤ 28	
Maximum area (m ²)	5.0		10.0		15.0		20.0		20.0		20.0	
Maximum height (mm)	5,000		5,000		5,000		5,000		4,400		4,000	
Z70												
Class	6	9	5	8	4	7	3	6	2	5	1	4
Max. wind speed (km/h)	≤ 88		≤ 74		≤ 61		≤ 49		≤ 38		≤ 28	
Maximum area (m ²)	5.0		10.0		15.0		20.0		20.0		20.0	
Maximum height (mm)	5,000		5,000		5,000		5,000		4,400		4,000	
C80												
Class	5	8	4	7	3	6	2	5	1	4	(0)	3
Max. wind speed (km/h)	≤ 74		≤ 61		≤ 49		≤ 38		≤ 28		≤ 19	
Maximum area (m ²)	5.0		10.0		15.0		20.0		20.0		20.0	
Maximum height (mm)	5,000		5,000		5,000		5,000		4,400		4,000	
C65												
Class	5	8	4	7	3	6	2	5	1	4	(0)	3
Max. wind speed (km/h)	≤ 74		≤ 61		≤ 49		≤ 38		≤ 28		≤ 19	
Maximum area (m ²)	5.0		10.0		15.0		20.0		20.0		20.0	
Maximum height (mm)	5,000		5,000		5,000		5,000		4,400		4,000	
F80												
Class	4	7	3	6	2	5	1	4	(0)	3	(0)	2
Max. wind speed (km/h)	≤ 61		≤ 49		≤ 38		≤ 28		≤ 19		≤ 11	
Maximum area (m ²)	4.0		8.0		12.0		16.0		18.0		20.0	
Maximum height (mm)	4,000		4,000		4,000		4,000		4,000		4,000	

* Double-sided tenoning

Wind load resistance - string, string/guide rail combination

Height up to 2,500 mm

	0 - 800		801 - 2,000		2,001 - 3,500		3,501 - 4,000	
	EN 13659 (+A1)	Beaufort						
Z90								
Class	3	6	2	5	1	4	(0)	3
Max. wind speed (km/h)	≤ 49		≤ 38		≤ 28		≤ 19	
Maximum area (m ²)	2.0		5.0		7.5		10.0	
Maximum height (mm)	2,500		2,500		2,500		2,500	
Z70								
Class	3	6	2	5	1	4	(0)	3
Max. wind speed (km/h)	≤ 49		≤ 38		≤ 28		≤ 19	
Maximum area (m ²)	2.0		5.0		7.5		10.0	
Maximum height (mm)	2,500		2,500		2,500		2,500	
C80								
Class	3	6	2	5	1	4	(0)	3
Max. wind speed (km/h)	≤ 49		≤ 38		≤ 28		≤ 19	
Maximum area (m ²)	2.0		5.0		7.5		10.0	
Maximum height (mm)	2,500		2,500		2,500		2,500	
C65								
Class	3	6	2	5	1	4	(0)	3
Max. wind speed (km/h)	≤ 49		≤ 38		≤ 28		≤ 19	
Maximum area (m ²)	2.0		5.0		7.5		10.0	
Maximum height (mm)	2,500		2,500		2,500		2,500	
F80								
Class	2	5	1	4	(0)			
Max. wind speed (km/h)	≤ 38		≤ 28		≤ 19		≤ 11	
Maximum area (m ²)	2.0		5.0		8.75		10.0	
Maximum height (mm)	2,500		2,500		2,500		2,500	

Wind load resistance - string, string/guide rail combination

Height 2,501 - 4,000 mm

	0 – 800		801 – 2,000		2,001 – 3,500		3,501 – 4,000	
	EN 13659 (+A1)	Beaufort						
Z90								
Class	2	5	1	4	(0)	3	(0)	2
Max. wind speed (km/h)	≤ 38		≤ 28		≤ 19		≤ 11	
Maximum area (m²)	3.2		8.0		12.0		16.0	
Maximum height (mm)	2,501 – 4,000		2,501 – 4,000		2,501 – 4,000		2,501 – 4,000	
Z70								
Class	2	5	1	4	(0)	3	(0)	2
Max. wind speed (km/h)	≤ 38		≤ 28		≤ 19		≤ 11	
Maximum area (m²)	3.2		8.0		12.0		16.0	
Maximum height (mm)	2,501 – 4,000		2,501 – 4,000		2,501 – 4,000		2,501 – 4,000	
C80								
Class	2	5	1	4	(0)	3	(0)	2
Max. wind speed (km/h)	≤ 38		≤ 28		≤ 19		≤ 11	
Maximum area (m²)	3.2		8.0		12.0		16.0	
Maximum height (mm)	2,501 – 4,000		2,501 – 4,000		2,501 – 4,000		2,501 – 4,000	
C65								
Class	2	5	1	4	(0)	3	(0)	2
Max. wind speed (km/h)	≤ 38		≤ 28		≤ 19		≤ 11	
Maximum area (m²)	3.2		8.0		12.0		16.0	
Maximum height (mm)	2,501 – 4,000		2,501 – 4,000		2,501 – 4,000		2,501 – 4,000	
F80								
Class	1	4	(0)	3	(0)	2	(0)	1
Max. wind speed (km/h)	≤ 38		≤ 28		≤ 19		≤ 11	
Maximum area (m²)	3.2		8.0		12.0		16.0	
Maximum height (mm)	2,501 – 4,000		2,501 – 4,000		2,501 – 4,000		2,501 – 4,000	

We do not recommend using the blinds for installation in open spaces, balconies, pergolas etc.

RESISTANCE OF NON-RETRACTABLE COMPONENTS TO PRESSURE LOAD

All fixed parts of the external blind, i.e. parts that are not retractable (e.g. cover sheets, guide rails, etc.) when the blind is in the fully extended position, are designed to withstand a pressure of 800 Pa.

OPERATING FORCE CLASS FOR MANUALLY OPERATED EXTERNAL BLINDS

Manually operated external blinds are classified as Class 1 according to EN 13659. The operating force for external blinds operated by a crank does not exceed 30 N. The operating force for cord-operated external blinds does not exceed 90 N.

DURABILITY CLASS

External blinds are classified according to EN 13659 as durability class 3. Durability class 3 corresponds to a minimum of 14 years of use at 2 cycles per day.

ADDITIONAL THERMAL RESISTANCE ΔR

The additional thermal resistance for all types of blinds corresponds to $\Delta R = 0.08 \text{ K.m}^2/\text{W}$.

TOTAL SOLAR ENERGY TRANSMITTANCE g_{tot}

The total solar transmittance is given in the table and is determined for the basic colour groups light/medium/dark.

Colours are defined according to the absorption factor α (see EN 13659):
 — light colour group, where $\alpha < 0.5$: white, creamy, yellow, orange, light red
 — medium colour group, where $0.5 \leq \alpha < 0.8$: grey, dark red, light green, light brown, light blue
 — dark colour group, where $\alpha \geq 0.8$: blue, green, brown, black
 Type C glazing according to EN 14501 was used to calculate the solar factor g_{tot} .

	g_{tot}		
	Light colour	Medium colour	Dark colour
External blind pulled down and closed	0.037	0.055	0.086
External blind blind pulled down and opened at 45°	0.107	0.104	0.097

SAFETY

Electrical safety, class of protection against electric shock

Electric drives comply with EN 60335-2-97.
 Protection against electric shock: class I (230 V AC).

RESISTANCE TO CORROSION

Corrosion resistance of metal parts: resistance class at least C2.

SURFACE TREATMENTS USED FOR METAL MATERIALS

Painting (aluminium and steel alloy parts)

We use polyester façade powder paints designed for use on structural aluminium and galvanised steel parts. The qualitative assessment of the coated parts is governed by the GSB standard or Qualicoat Class 1. The standard coating thickness ranges from 50 to 120 μm .

ATTENTION:

— with various production paint batches, it is not possible to entirely prevent shade or effect deviations on painted surfaces

Galvanising (steel parts)

We use electrochemically deposited coating according to ČSN EN ISO 2081 - Fe/Zn 10-12/B/Tx (electrochemically deposited coating of zinc with a thickness of 10–12 µm on iron or steel with a colourless chromate conversion coating, the sealing agent can, but does not have to be used) or electrochemically deposited coating ČSN EN ISO 2081 - Fe/Zn 10-12/C/T2nL (electrochemically deposited coating of zinc of 10–12 µm thickness on iron or steel with an iridescent chromate conversion coating and sealing agent without integrated lubricant).

Hot-dip galvanising (steel parts)

Hot-dip galvanising according to EN 10346 - Z200 MAC.
Hot-dip zinc galvanising with a coating weight of 200 g/m² (coating thickness 10–20 µm) with a coating design with a small zinc bloom (M), normal surface quality (A) and chemical surface passivation (C).

ATTENTION:

- when visually inspecting surface-treated parts, observe the prescribed viewing distance and angle
- the viewing distance for outdoor parts is 3 m; the viewing angle is perpendicular to the surface

TOLERANCE OF BASIC DIMENSIONS OF THE BLIND

Blind width

blind width: ± 2 mm

Length of slats

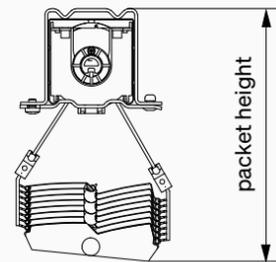
slat length ≤ 2,000 mm: ± 0.5 mm
slat length > 2,000 mm: ± 0.75 mm

Blind height

when fully extended and closed: ± 10 mm

Packet height

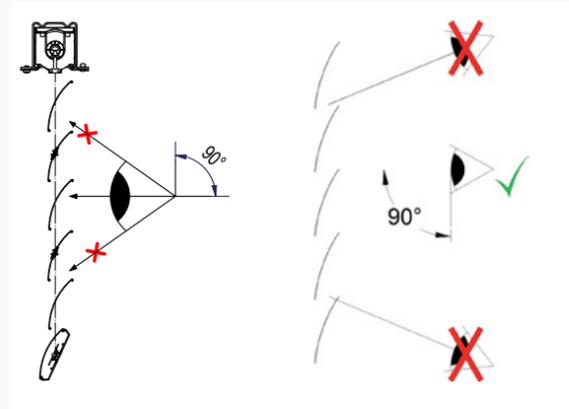
packet flatness: ± 10 mm



ADDITIONAL TOLERANCES RELATED TO THE FUNCTION OF THE BLINDS

Closing of the blind slats

When the curtain is fully drawn, the slats must overlap each other. A right-angled view of the closed slats must not allow a view through them. This means that the setting of slat angles in one curtain may differ from top to bottom. This necessarily means that at certain viewing angles, from top to bottom or bottom to top, it is possible to see through the slats. This effect can be greater or lesser depending on the shape of the slats. Lateral translucency between the guide rail and the slat and an opening in the slats is also allowed.



Inclined operation

The deviation from the horizontal at any point between the fully extended and retracted position is a maximum of - 15 mm/m of the blind height.



Slat shape tolerance

Permissible deviation T - torsion

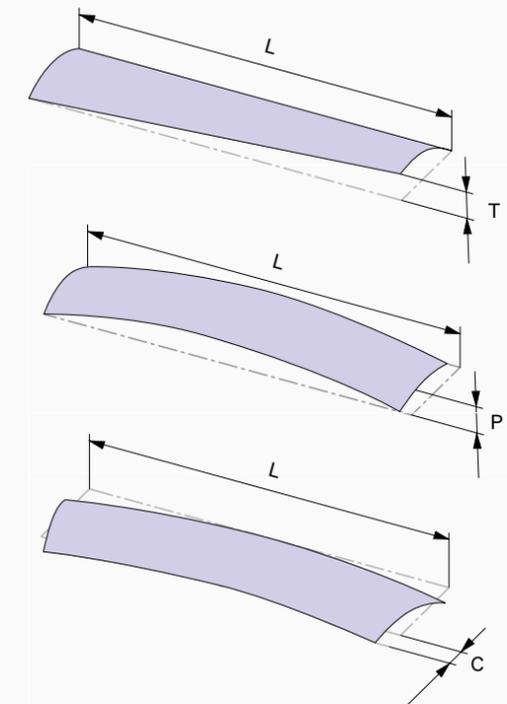
$L \leq 1,000$ mm T = 3 mm
 $L \leq 2,000$ mm T = 4 mm
 $L \leq 3,000$ mm T = 5 mm
 $L \leq 4,000$ mm T = 6 mm
 $L \leq 5,000$ mm T = 7 mm

Permissible deviation P - longitudinal deflection

$L \leq 1,000$ mm P = 3 mm
 $L \leq 2,000$ mm P = 4 mm
 $L \leq 3,000$ mm P = 5 mm
 $L \leq 4,000$ mm P = 6 mm
 $L \leq 5,000$ mm P = 7 mm

Permissible deviation C - transverse deflection

$L \leq 1,000$ mm C = 3 mm
 $L \leq 2,000$ mm C = 4 mm
 $L \leq 3,000$ mm C = 5 mm
 $L \leq 4,000$ mm C = 6 mm
 $L \leq 5,000$ mm C = 7 mm



TOLERANCES OF BASIC DIMENSIONS OF COVER SHEETS

— applies to standardised types of cover sheets

Tolerance of dimensions

- side A to E: ± 1.5 mm
- length without sides:
 - length = 2,000 mm: ± 1 mm
 - $2,000 \leq \text{length} < 4,000$ mm: ± 2 mm
- length with sides: ± 4 mm
- angle of bend: ± 2°

Shape tolerance

- flatness up to a length of 2 m: 5 mm (measurement methodology according to EN 485-4)
- flatness up to a length of 4 m: 10 mm (measurement methodology according to EN 485-4)

TOLERANCES OF BASIC DIMENSIONS OF ISO-KASTL AND ISO-PANEL

Tolerance of dimensions

- side A, B, C of ISO-KASTL: ± 2 mm
- width and thickness of the ISO-PANEL: ± 2 mm
- length: 0.1% of the length

Shape tolerance (deflection)

- flatness: 0.15% of the length

TOLERANCES OF BASIC DIMENSIONS OF METAL PARTS MADE BY FORMING

For example, upper profile holders, ISO-KASTL holders, ISO-PANEL holders etc.

- length tolerance: ± 2 mm
- material thickness tolerance: ± 0.5 mm
- bending angle tolerance: $\pm 2^\circ$

SPEED OF EXTENDING AND RETRACTING THE BLIND

- maximum speed does not exceed 0,07 m/s

ASSESSMENT OF CONSTANCY OF PERFORMANCE AND CE MARKING

The external blind is manufactured in accordance with the requirements of EN 13659 and thus complies with all relevant provisions of the European Community regulations, government regulations and standards to which it conforms and is CE marked in accordance with these regulations.

Declaration of Performance

- see chapter Commercial documents

Declaration of conformity (for motorised blinds)

- see chapter Commercial documents

CE marking

- is located on the right side of the upper profile when viewed from the interior (see below for an example of the marking)

ŽALUZIE NEVA s.r.o. Háj 370 798 12 Kralice na Hané		← Name and registered office of the manufacturer:
01 2018-Z90-001 EN 13659:2004+A1:2008		← Year of attachment of CE marking Declaration of performance marking European harmonised standard used
external blinds type Z90 Outdoor use Wind load resistance: class 5		← Product designation Intended use of the product Class of declared performance

PRODUCT MARKING

The marking is located on the right side of the upper profile when viewed from the interior, next to the CE marking, and adds additional mandatory and customer information.

Mandatory data:

- Date of production - month, year
- power information (applies to motorised blinds) - voltage, frequency, power input

INSTRUCTIONS FOR INSTALLATION, OPERATION AND MAINTENANCE

IMPORTANT SAFETY INSTRUCTIONS

WARNING - COMPLIANCE WITH THESE INSTRUCTIONS IS IMPORTANT FOR THE SAFETY OF PERSONS KEEP THESE INSTRUCTIONS

GENERAL SAFETY INSTRUCTIONS

- operating instructions must be read before using the product
- follow the installation, operation and maintenance instructions, incorrect installation can lead to serious injury and material damage
- if the product is installed in windy areas and where there are frequent power outages, we recommend the use of an alternative power source
- if the product is installed in every opening of the building, consider the need for evacuation if it is already provided for in national regulations

INSTALLATION INSTRUCTIONS

Safety instructions for installing the device

- installation, connection to the power distribution network, testing and commissioning may only be carried out by a person with a professional electrical qualification corresponding to the applicable regulations
- you must comply with the legal regulations in force in the country concerned
- the installer carrying out the installation must provide the end user with appropriate instructions for the use and maintenance of the product
- use only original parts for installation and servicing
- changes to the design or configuration of the product must not be made without consulting the manufacturer
- before installing the blind, remove all unnecessary wiring and decommission all equipment at the installation site that is not required for motor drive
- the moving rotating parts of the drive must be installed higher than 2.5m above the floor or any other level from which they could be accessed
- permanently installed control devices, such as push-button controls, must be positioned visibly
- if a tip device switch is used to operate the blind, it must be located so that it has a direct view of the moving screen but away from the moving parts at a height preferably less than 1.3m

General Instructions

- check the condition, completeness and integrity of the product before installation
- for motorised blinds, check that the motor type is correct and that the supply cable is intact and undamaged
- do not install a damaged or incomplete product
- the blind is assembled, adjusted and set by the manufacturer according to the required specifications (position of the motor or manual control gear, height V, corresponding packet height, blind height and flatness of the bottom profile, end positions are set)
- before installation, it must be verified that the anchoring substrate (concrete, brick, wood, steel, plastic, etc.) provides sufficiently firm support for the product
- always install the blind in combination with a cover or in a pre-prepared box, the blind drive must not be exposed to direct weather conditions

Fastening and anchoring technology for mechanical anchoring

- use only fasteners suitable for application to the anchoring substrate (concrete, brick, wood, steel, plastic, etc.), including their appropriate anchor length
- follow the instructions of the manufacturer of the fastening and anchoring technology for the application
- observe the tightening torques for the fasteners:
 - screw (material steel) / nut (material aluminium alloy: 2 N.m)
 - screw (material steel) / nut (material steel: 3 N.m)

ATTENTION:

- the manufacturer is not responsible for improperly chosen means of anchoring the product to the mounting substrate, as this is strongly dependent on the mounting conditions and not on the design of the product

Weight data

- blinds without cover sheet: approx. 2.5 kg/m²
- blinds with cover sheet and self-bearing systems: approx. 3.5 kg/m²
- ISO-KASTL: approx. 7 kg/m



Assembly videos



Service videos

Installation instructions

- installation instructions can be found on our YouTube channel

INSTALLATION OF STANDARD BLINDS**Installing the upper profile holders**

Anchoring scheme:

- for assembly, use fasteners with a minimum shank diameter of 4.8 mm
- each holder must be anchored with at least 2 pieces of fasteners
- the number of holders according to the width of the blind is determined by the table below

Width of the blind in mm	Number of upper profile holders
600 - 1,699	2
1,700 - 2,699	3
2,700 - 3,399	4
3,400 - 3,999	5
4,000 - 4,699	6
4,700 - 5,000	7

ATTENTION:

- always check before installation that there is no collision between the holder and the blind bearing
- the full number of holders must always be used for anchoring

Setting of holders:

- flatness of horizontal alignment of the holders: tolerance ± 2 mm
- adjust the axis of the blind (distance of the axis of rotation of the slats from the opening or the building): tolerance ± 2 mm
- check that all anchor and set screws are tightened

Installation of the blind packet

- insert the upper profile with the blind into the holders of the upper profile
- centre the blind sideways
- secure the upper profile of the blind in the upper profile holders No. 1, No. R1 or No. 1 AI by tightening the corresponding screws

ATTENTION:

- when an No. R1 holder is used, it should be checked that the holder is correctly secured on both sides of the upper profile

Installation of guide rails

- if using guide rails holders, assemble them with the guide rails
- slide the guide rails onto the guide pins of the packet slats

Anchoring scheme for attaching the guide rail holders or the guide rails directly to the building:

- for assembly, use fasteners with a minimum shank diameter of 3.5 mm
- the number of guiding rail holders or number of anchoring points on the guiding rails, depending on the height of the blind, is specified in the table below

Blind height in mm	Number of holders/anchor points
500 - 1,799	2
1,800 - 3,099	3
3,100 - 3,999	4
4,000 - 4,799	5
4,800 - 5,000	6

ATTENTION:

- when using the guide rail holders, all holes on the holder prepared for this purpose must be used for anchoring
- when directly anchoring the guide rails, all holes prepared for this purpose on the guide rail must be used for anchoring

Positioning and setting of guide rails:

- adjust the axis of the blind (distance of the axis of rotation of the slats from the opening or the building): tolerance ± 2 mm
- check the perpendicularity of the guide rail to the opening or building: tolerance ± 2 mm
- check the width of the blind along the entire length of the guide rails: tolerance of the blind width ± 2 mm
- check that all anchor and set screws are tightened

INSTALLATION OF SELF-BEARING STF SYSTEMS

Assembly of the STF system with cover (with cover sheet or ISO-KASTL)

- slide the guide rail bodies onto the brackets on the sides of the cover and secure them with set screws

Assembling the STF system without cover

- connect the STF brackets to the upper profile of the blind using the upper profile holder No. 1
- centre the blind sideways
- slide the guide rail bodies onto the STF bracket with the blind and secure them with set screws

Installation into the building

Anchoring scheme:

- for assembly, use fasteners with a minimum shank diameter of 4.8 mm
- the number of anchor points on the guide rail according to the height of the blind is determined by the table below

ATTENTION:

- all holes prepared for this purpose on the guide rail must be used for anchoring

Blind height in mm	Number of anchor points
500 - 1,399	2
1,400 - 2,199	3
2,200 - 3,099	4
3,100 - 3,999	5
4,000 - 5,000	6

- in the case of a system with additional anchoring, the cover or the upper profile of the blind must be additionally anchored with a holder according to the type of system
 - holders are included
 - the number of additional holders for the upper profile is determined by the table below

ATTENTION:

- handle the assembled STF set with care, there is a risk of damaging the side of the cover sheet or the STF holder

Width of the blind in mm	Number of additional upper profile holders
2,300 – 2,699	1
2,700 – 3,399	2
3,400 – 3,999	3
4,000 – 4,699	4
4,700 – 5,000	5

Installation of the system in the building

- system flatness in the horizontal plane: tolerance ± 2 mm
- check the width of the blind along the entire length of the guide rails: tolerance of the blind width ± 2 mm
- check that all anchor and set screws are tightened

In the case of the STF system with cover and integrated roller screen

- Installation of the guide rails of the screen into the building:
 - applies only to a roller screen with an offset, a screen without an offset has guide rails integrated into the guide rails of the blind
 - depending on the size of the offset and the width of the screen, always install at least one net guide rail to the frame of the opening
 - for assembly use fasteners with countersunk head and shank diameter 3 mm
 - check the width of the screen along the entire length of the guide rails: tolerance of the screen width ± 2 mm

ATTENTION:

- all holes prepared for this purpose on the guide rail must be used for anchoring

- lower the roller screen to about 1/2 the height of the screen guide rail so that the screen is in front of the guide rails
- slide the transport pins out of the end caps of the control profile of the screen
- tilt the control profile and insert its individual ends into the guide rails of the screen and then return the control profile to the horizontal position
- setting the lower position of the screen control profile:
 - using the closing mechanism located in the guide rails of the screen, adjust the lower position of the control profile so that its sealing brush touches the frame of the opening
 - secure the closing mechanism in the guide rail with the screw included in the mechanism
 - flatness of the control profile of the screen in the horizontal plane: tolerance ± 2 mm

Note: The upper positions of the screen control profile are not set. The limit stop is part of the guide rail of the screen.

In the case of an STF system with a cover with additional anchoring, the blind is not installed in the cover

- install the blind into the cover
- insert the upper profile with the blind into the upper profile holders that are part of the cover
- centre the blind sideways
- secure the upper profile of the blind in the holders of the upper profile No. 1 by tightening the corresponding screws

Assembly of guide rails

For STF1 system: removable profile STF1

- slide the removable profile STF1 onto the guide pins of the slat packet and press it into the body of the guide rail

For STF2: plastic recessed profile or Z-type guide rail

- slide the plastic guide rail onto the guide pins of the slat packet and press it into the guide rail body
- slide the Z-type guide rail onto the guide pins of the slat packet, insert it into the body of the guide rail and secure it with the screw supplied

INSTALLATION OF SELF-BEARING STL SYSTEMS

Assembly of the STL system

STL standard variant

- connect the STL bearing holders with the upper profile holder No. 1 to the upper profile of the blind, slide the guide rails onto the bearing holder with the blind and secure them with set screws

STL reinforced variant

- assemble the reinforced upper profile with the STL bearing holders (for the reinforced version) using the screws provided, slide the guide rails onto the bearing holder and secure them with the set screws
- position the HPZ holders in the reinforced upper profile so that they do not collide with the blind bearings
- insert the upper profile with the blind into the HPZ holders
- centre the blind sideways
- secure the upper profile of the blind in the holders of the upper profile No. 1 by tightening the corresponding screws

Note: The blind can also be installed after the system has been installed in the building.

Installation into the building

Anchoring scheme:

- use fasteners (screws) with a minimum shank diameter of 4.8 mm
- the number of guide rail holders or the number of anchor points on the guide rail according to the height of the blind is determined by the table below

ATTENTION:

- in the case of anchoring the STL system of the standard version using telescopic guide-rail holders, the guide rails must be placed on a solid base

Blind height in mm	Number of holes/holders for guide rails
500-1,399	2
1,400 – 2,199	3
2,200 – 3,099	4
3,100 – 3,999	5
4,000 – 5,000	6

ATTENTION:

- the full number of holders must always be used for anchoring
- when using the guide rail holders, all holes on the holder prepared for this purpose must be used for anchoring

- in the case of the standard STL system with additional anchoring, the upper profile of the blind must be additionally anchored using the holder in question
- holders are included
- the number of additional anchoring holders is determined by the table below

Width of the blind in mm	Number of additional upper profile holders
2,300 – 2,699	1
2,700 – 3,399	2
3,400 – 3,999	3
4,000 – 4,699	4
4,700 – 5,000	5

Installation of the system in the building

- system flatness in the horizontal plane: tolerance ± 2 mm
- check the width of the blind along the entire length of the guide rails: tolerance of the blind width ± 2 mm
- check that all anchor and set screws are tightened

Assembly of guide rails

- slide a plastic recessed rail or Z-type guide rail onto the guide pins of the packet slats
- press the plastic guide rail into the guide rail body
- Z-type guide rails must be secured in the body of the guide rail with the screw included in the delivery

ATTENTION:

- handle the assembled STL set with care, there is a risk of damage to the STL bearing holder

INSTALLATION OF SELF-BEARING FAÇADE SYSTEMS

Installation into the building

Anchoring scheme of the guide rail holders

- for assembly, use fasteners with a minimum shank diameter of 4.8 mm
- the number of guide rail holders according to the height of the blind is determined by the table below

Blind height in mm	Number of guide rail holders
500–1,399	2
1,400–2,199	3
2,200–3,099	4
3,100–4,000	5

ATTENTION:

- for anchoring it is necessary to use all holes prepared for this purpose on the holder

Installation of the system in the building

- slide the guide rails onto the guide rail holders and secure them
 - spacing of the holders (blind width): tolerance of blind width ± 2 mm
 - system flatness in the horizontal plane: tolerance ± 2 mm
- check that all anchor and set screws are tightened
- slide the holder for connection to the guide rails, which is located in the reinforcement profile of the cover sheet, onto the guide rails and secure it by tightening the set screw

Installation of the blind packet

- insert the upper profile with the blind into the upper profile holders that are part of the cover
- centre the blind sideways
- secure the upper profile of the blind in the holders of the upper profile No. 1 by tightening the corresponding screws

CONNECTING MOTORISED BLINDS TO THE MAINS

- connect the blind drive to the mains
 - connections must comply with EN 60335-2-97
 - wiring diagrams for individual motor types can be found on the motor manufacturer's website

ATTENTION:

- ensure that the supply cable is properly secured and not in contact with rotating parts of the drive or other moving parts of the blind
- ensure that the supply cable is not in contact with sharp edges
- ensure that the supply cable with the connection connector remains accessible, and that it can be easily replaced or disconnected from the power supply

CHECKING THE ADJUSTMENT OF THE END POSITIONS

- check the adjustment of the end positions of the blind

Manually operated blinds (manually operated by crank or cord)

- the adjustment of the end positions is carried out by means of a mechanical limit stop, which is located in the movement system mounted in the upper profile

Motor-operated blinds

- instructions for setting the individual end positions can be found on the motor manufacturer's website

ATTENTION:

- when the blind is fully extended and closed, the bottom profile must not touch the floor or sill
- check the gaps between the slats and the guide rail:
 - minimum gap: 3 mm
 - maximum gap: 6 mm
- in case of setting $V=0$, non-standard tilting of the lower profile in the lower end position may occur

INSTALLING THE COVER SHEET

Installing the cover sheet containing side B

- install the cover sheets to the upper profile holders 3, 3L, 3S, 3P, 4, 13, 14, 33, 5

We recommend:

- that you install the cover sheet before installing the blind packet

Anchoring scheme:

- for mounting use rivets with a shank diameter of 4.8 mm
- if a rivet cannot be used, a screw with a minimum shank diameter of 4.8 mm can be used
- the number of holders corresponds to the length of the cover sheet and is the same as the number of holders of the upper profile in relation to the width of the blind of the given type
- number of installation holes for attaching the cover sheet to the upper profile holder: 1

ATTENTION:

- all holders and holes on the holder must be used for anchoring

- if the cover sheet has a hem, use an extension to strengthen it
- insert the extension into the hem and secure it to the holder using the supplied fasteners

Installation of cover sheet type 1CH12 and 1CH14

- install the cover sheets to the upper profile holders No. CH3/91; CH3/136
- the cover sheet is installed by means of both its hems (upper and lower)
- insert both extensions, which are part of the holders, into the hems and secure them to the holder

Anchoring scheme:

- the number of holders corresponds to the length of the cover sheet and is the same as the number of holders of the upper profile in relation to the width of the blind of the given type

Note: In the case of an assembly consisting of several cover sheets, an expansion joint must be created at the point of connection of the cover sheets. The linking of the cover sheets is made by means of a sheet connection. This is always firmly connected to one cover sheet, the connecting cover sheet is only slid onto the connection. This makes it possible to create the necessary expansion joint. The expansion joint is determined by the length of the cover sheet. The thermal expansion of the material of approx. 2 mm per linear metre of cover sheet must be taken into account.

INSTALLATION OF ISO-KASTL

Installation of ISO-KASTL rear profiles

Anchoring scheme:

- use countersunk-head fasteners with a shank diameter of 3.5 mm
- the number of anchor points for installing the rear profile is determined by the table below

Cover length in mm	Number of anchor points for rear profile
500–1,299	2
1,300–2,399	3
2,400–3,599	4
3,600–4,000	6

Setting the rear profile

- flatness of horizontal alignment of the profiles: tolerance ± 2 mm

Installation of ISO-KASTL

- insert the ISO-KASTL into the prepared rear profile and use the ISO-KASTL holders to attach it to the building
- use the included countersunk-head fasteners with a shank diameter of 3.5 mm and a length of 16 mm to connect the individual segments of the ISO-KASTL cases

ATTENTION:

- each segment of the ISO-KASTL must be anchored into the building with at least 2 ISO-KASTL holders

Anchoring scheme for connecting the holder to the ISO-KASTL:

- use the included fasteners with a shank diameter of 4.8 mm and a length of 20 mm to connect the holder to the ISO-KASTL
- use at least 4 prepared holes on each ISO-KASTL holder
- the minimum distance of the fastener from the edge of the ISO-KASTL plate is 5 \times the shank diameter
- the minimum distance between two fasteners is 5 \times the shank diameter
- holders should always be anchored to side B of the ISO-KASTL

Anchoring scheme for installing the ISO-KASTL holder to the building:

- for installation of the ISO-KASTL holder into the building use fasteners with a shank diameter of min. 4.8 mm
- use at least 2 prepared holes on each ISO-KASTL holder
- the number of ISO-KASTL holders is determined by the table below
 - when using the rear T-profile, 2 extra ISO-KASTL holders are supplied, these are designed to anchor the sides of the ISO-KASTL

Cover length in mm	Number of ISO-KASTL holders for rear U-profile	Number of ISO-KASTL holders for rear T-profile
0-1,299	2	4
1,300-2,399	3	5
2,400-3,599	4	6
3,600-5,399	6	8
5,400-7,199	8	10
7,200-8,999	10	12
9,000-10,800	12	14

Note: For cover sheet lengths exceeding 10,800 mm, two holders are required for each additional segment.

ATTENTION:

- the full number of holders must always be used for anchoring

Installation of ISO-KASTL into the building

- flatness of horizontal seating of ISO-KASTL: tolerance ± 2 mm
- parallelism of the "A" side of the ISO-KASTL with the opening or structure: tolerance ± 2 mm

Note: A product colour change is not considered a defect.

INSTALLING THE ISO-PANEL

Modifying the panel

- the panel body (recycled PET) can be cut with a sharp knife, hacksaw or electric circular saw
- the casing (aluminium alloy profile) can be cut with a hacksaw or angle grinder

Anchoring directly into the building

- always carry it out through the casing (made of aluminium alloy)
- always pre-drill the casing
- for assembly, use fasteners with a minimum shank diameter of 3.5 mm and a maximum screw head height of 4 mm

Anchoring into the building using ISO-PANEL holders

Anchoring scheme for connecting the holder to the ISO-PANEL

- for connection use plastic turbo dowels with screws, which are included in the ISO-PANEL holder delivery
- number of turbo dowels: 2 pcs / ISO-PANEL holder
- screw the dowels directly into the ISO-PANEL, the dowel holes do not need to be pre-drilled

or

- make the connection via the casing
- always pre-drill the casing
- use screws with a minimum shank diameter of 3.5 mm and a maximum screw head height of 4 mm

Number of anchoring points/holders

- the number of anchoring points/holders is specified in the technical specification of the ISO-PANEL product

Seating the panel

- the panel's perpendicularity to the opening (window): 2 mm / panel size
- flatness of the panel in the vertical plane: 2 mm / panel size
- distance of the axis of the casing from the opening (window): ± 2 mm
- parallelism (spacing of two opposite panels): ± 2 mm
- if the cover is used to hold the rolled-up blind, adjust the panel and slide it up to the ceiling part of the cover
- the panel must be mounted against the sill so that the casing does not allow water to flow into the façade
- it is necessary to ensure reliable and sensitive tightening of the panel

ATTENTION:

- for ISO-PANEL, the sum of the thicknesses of the two layers of plaster must not exceed 5 mm (outer edge of the casing)

RECOMMENDED APPLICATION OF ADHESIVE SEALANT WITH REINFORCING FABRIC AND EXTERIOR PLASTER

- the application of adhesive sealant with reinforcing fabric and exterior plaster is suitable for all concealed versions of the product
- apply flexible adhesive (type C2) and reinforcing fabric to the outside of the panel
- emphasis should be placed on proper cross netting of the front sides with connection to the surrounding areas
- during application it is necessary to follow the manufacturer's technological instructions
- apply the exterior plaster in accordance with the manufacturer's technological instructions

OPERATING INSTRUCTIONS FOR EXTERNAL BLINDS

Operation of manually operated external blinds

- extending and retracting, opening and closing the slats of blinds
- The external blind may be stopped and the slats tilted at any height.

Crank control

- by rotating the crank to the left or to the right

Cord control

- by pulling the front or rear cord downwards

Operation of motor-operated external blinds

- extending and retracting, opening and closing the slats of the blinds:
 - is done with a switch or remote control

N. B.: The external blind may be stopped and the slats tilted at any height.

ATTENTION:

- never press the up and down direction on the remote control at the same time
- there are clearances in the blinds drive that can cause misalignment of the slats with the control, especially when changing the drive speed

ATTENTION:

In winter, during freezing periods, check to see whether the bottom profile or the slat guide pins have not frozen onto the guide rails or window-sill before operating the external blind. If so, remove the frost carefully, otherwise the blinds may be mechanically damaged. The external blinds have the wind load resistance of the blind indicated on the manufacturing label. If the wind speed is higher than the label, the blind must be pulled up to the upper position. The manufacturer bears no responsibility for damage caused by climatic influences or improper use.

Operation of the integrated roller screen

The control of the roller screen is manual and is carried out by vertical movement of the control bar (from top to bottom and vice versa).

Extending

— is performed by moving the control profile of the screen from the upper to the lower end position, this position is secured automatically

Retracting

— to release the control profile from the lower end position, push the control profile downwards, after releasing the control profile the screen will automatically move to the upper end position

- for screens over approx. 1m wide, we recommend pressing in the vicinity of the guide rails
- safe speed and smoothness of movement is ensured by the spring brake, however, we recommend holding the control profile when moving upwards

ATTENTION:

— in winter, in the event of frost and ice, check before handling the screen whether some parts of the screen are frozen, if so, remove the frost carefully, otherwise mechanical damage to the product may occur

MAINTENANCE INSTRUCTIONS**Maintenance instructions for external blinds**

- external blinds do not require any special maintenance
- all the moving parts are self-lubricating
- use only water for cleaning

Maintenance instructions for the integrated roller screen

- the roller screen does not require special maintenance
- only use a vacuum cleaner with a flat attachment without brushes for cleaning
- clean at the lowest possible suction power

ATTENTION:

- DO NOT USE ANY GREASE!
- DO NOT USE ANY CHEMICAL OR ABRASIVE AGENTS FOR CLEANING!

Safety instructions for operation and maintenance of the equipment

- children are not allowed to play with the blind control device, the remote control must be kept out of the reach of children
- when manually operating the blind, watch the movement of the blind and keep people at a safe distance until the blind is fully extended or retracted
- the blinds must not be operated when maintenance (e.g. window cleaning) is being carried out in the vicinity
- in this case, disconnect the automatically operated blinds from the power supply
- do not move the blind if there are persons or objects in dangerous proximity to the blind
- carry out a regular check (inspection) of the installation of the blind drive, especially with regard to stability and signs of wear or damage to the cables
- do not use the product if repair is necessary
- in case of any visible wear, malfunction (e.g. incorrect end positions) or damage to the product, pull the blind to the upper end position (if possible), disconnect it from the power supply and contact the installer
- the user is forbidden to make any repairs or adjustments to the blind
- when carrying out inspection or maintenance, the blind drive must be disconnected from the power supply in a reliable manner, ensuring that it cannot be switched on unintentionally or without authorisation

COMMERCIAL DOCUMENTS

DECLARATION OF PERFORMANCE

NEVA®



2018-S90-001

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type S90 external blinds with guide rails and motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load					
	6	5	4	3	2	1
Width	0 – 1,000	1,001 – 2,000	2,001 – 3,000	3,001 – 4,000	4,001 – 4,500	4,501 – 5,000
Maximum area	5.0 m ²	10.0 m ²	15.0 m ²	20.0 m ²	20.0 m ²	20.0 m ²
Max. height	5,000mm	5,000mm	5,000mm	5,000mm	4,400mm	4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-Z90-001

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type Z90 external blinds with guide rails and motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load					
	6	5	4	3	2	1
Width	0 – 1,000	1,001 – 2,000	2,001 – 3,000	3,001 – 4,000	4,001 – 4,500	4,501 – 5,000
Maximum area	5.0 m ²	10.0 m ²	15.0 m ²	20.0 m ²	20.0 m ²	20.0 m ²
Max. height	5,000mm	5,000mm	5,000mm	5,000mm	4,400mm	4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-Z90-002

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type Z90 external blinds with guide rails, with double-sided tenoning and with motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load					
	6	6	5	4	3	2
Width	0 – 1,000	1,001 – 2,000	2,001 – 3,000	3,001 – 4,000	4,001 – 4,500	4,501 – 5,000
Maximum area	5.0 m ²	10.0 m ²	15.0 m ²	20.0 m ²	20.0 m ²	20.0 m ²
Max. height	5,000mm	5,000mm	5,000mm	5,000mm	4,400mm	4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-Z90-003

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type Z90 external blinds with guide strings or with a combination of string and guide rail and with motorised or manual drive

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load			
	3	2	1	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	2.0 m ²	5.0 m ²	7.5 m ²	10.0 m ²
Max. height	2,500mm	2,500mm	2,500mm	2,500mm

Class	Resistance to wind load			
	2	1	(0)	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	3.2 m ²	8.0 m ²	12.0 m ²	16.0 m ²
Max. height	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-Z70-001

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type Z70 external blinds with guide rails and motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load					
	6	5	4	3	2	1
Width	0 – 1,000	1,001 – 2,000	2,001 – 3,000	3,001 – 4,000	4,001 – 4,500	4,501 – 5,000
Maximum area	5.0 m ²	10.0 m ²	15.0 m ²	20.0 m ²	20.0 m ²	20.0 m ²
Max. height	5,000mm	5,000mm	5,000mm	5,000mm	4,400mm	4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-Z70-002

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type Z70 external blinds with guide strings or with a combination of string and guide rail and with motorised or manual drive

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load			
	3	2	1	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	2.0 m ²	5.0 m ²	7.5 m ²	10.0 m ²
Max. height	2,500mm	2,500mm	2,500mm	2,500mm

Class	Resistance to wind load			
	2	1	(0)	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	3.2 m ²	8.0 m ²	12.0 m ²	16.0 m ²
Max. height	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-C80-001

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type C80 external blinds with guide rails and motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load					
	5	4	3	2	1	(0)
Width	0 – 1,000	1,001 – 2,000	2,001 – 3,000	3,001 – 4,000	4,001 – 4,500	4,501 – 5,000
Maximum area	5.0 m ²	10.0 m ²	15.0 m ²	20.0 m ²	20.0 m ²	20.0 m ²
Max. height	5,000mm	5,000mm	5,000mm	5,000mm	4,400mm	4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-C80-002

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type C80 external blinds with guide strings or with a combination of string and guide rail and with motorised or manual drive

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load			
	3	2	1	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	2.0 m ²	5.0 m ²	7.5 m ²	10.0 m ²
Max. height	2,500mm	2,500mm	2,500mm	2,500mm

Class	Resistance to wind load			
	2	1	(0)	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	3.2 m ²	8.0 m ²	12.0 m ²	16.0 m ²
Max. height	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-C65-001

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type C65 external blinds with guide rails and motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load					
	5	4	3	2	1	(0)
Width	0 – 1,000	1,001 – 2,000	2,001 – 3,000	3,001 – 4,000	4,001 – 4,500	4,501 – 5,000
Maximum area	5.0 m ²	10.0 m ²	15.0 m ²	20.0 m ²	20.0 m ²	20.0 m ²
Max. height	5,000mm	5,000mm	5,000mm	5,000mm	4,400mm	4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-C65-002

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type C65 external blinds with guide strings or with a combination of a string and guide rail and with motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load			
	3	2	1	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	2.0 m ²	5.0 m ²	7.5 m ²	10.0 m ²
Max. height	2,500mm	2,500mm	2,500mm	2,500mm

Class	Resistance to wind load			
	2	1	(0)	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	3.2 m ²	8.0 m ²	12.0 m ²	16.0 m ²
Max. height	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm	2,501–4,000mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-F80-001

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type F80 external blinds with guide strings or with a combination of a string and guide rail and with motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Resistance to wind load				
Class	3	2	(0)	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	2.0 m ²	5.0 m ²	8.75 m ²	10.0 m ²
Max. height	2,500 mm	2,500 mm	2,500 mm	2,500 mm

Resistance to wind load				
Class	1	(0)	(0)	(0)
Width	0 – 800	801 – 2,000	2,001 – 3,500	3,501 – 4,000
Maximum area	3.2 m ²	8.0 m ²	14.0 m ²	16.0 m ²
Max. height	2,501–4,000 mm	2,501–4,000 mm	2,501–4,000 mm	2,501–4,000 mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-F80-002

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Type F80 external blinds with guide rails and motorised or manual operation

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13659:2004+A1:2008

6. DECLARED PERFORMANCE

Resistance to wind load						
Class	4	3	2	1	(0)	(0)
Width	0 – 1,000	1,001 – 2,000	2,001 – 3,000	3,001 – 4,000	4,001 – 4,500	4,501 – 5,000
Maximum area	4.0 m ²	8.0 m ²	12.0 m ²	16.0 m ²	18.0 m ²	20.0 m ²
Max. height	4,000 mm	4,000 mm	4,000 mm	4,000 mm	4,000 mm	4,000 mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

DECLARATION OF PERFORMANCE

NEVA®



2018-NET-003

1. UNIQUE IDENTIFICATION CODE OF THE PRODUCT TYPE

Integrated roller screen

2. INTENDED USE

External use in buildings and other structures

3. MANUFACTURER

ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

4. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

System 4

5. HARMONISED STANDARD

EN 13561:2004+A1:2008

6. DECLARED PERFORMANCE

Class	Resistance to wind load	
	1	0
Width	0–1,200mm	1,201–2,000mm
Max. height	1,200mm	2,500mm

The performance of the above-stated product is in conformity with the set of declared performance.

This declaration of performance is issued in compliance with Regulation (EU) No. 305/2011 under the sole responsibility of the above-stated manufacturer.

Signed for and on behalf of the manufacturer:

Ladislav Vrána, Managing Director

Given in Kralice na Hané, dated:
1 January 2018

EC/EU DECLARATION OF CONFORMITY

NEVA®



Manufacturer ŽALUZIE NEVA s.r.o., Háj 370, 798 12 Kralice na Hané

Product S90, Z90, Z70, C80, C65, F80, with guide rails or strings or with a combination of string and guide rail and with motor drive

Description External use in buildings and other structures

We declare that the above-mentioned machinery meets all the applicable provisions of the EC regulations, government decrees and standards set forth below.

Government Regulation No. 176/2008 Coll., on technical requirements for machinery, as amended by Government Regulation No. 170/2011 Coll., Government Regulation No. 229/2012 Coll., and Government Regulation No. 320/2017 Coll. (Directive 2006/42/EC of the European Parliament and of the Council as amended by Directive 2009/127/EC of the European Parliament and of the Council, and by Commission Decision 2012/32/EU).

Government Regulation No. 118/2016 Coll., on conformity assessment of electrical equipment designed for use within certain voltage limits when making it available on the market. (Directive 2014/35/EU of the European Parliament and of the Council).

Government Regulation No. 117/2016 Coll., on conformity assessment of products in terms of electromagnetic compatibility when making them available on the market. (Directive 2014/30/EU of the European Parliament and of the Council).

APPLIED HARMONISED STANDARDS

ČSN EN ISO 12100:2011 (EN ISO 12100:2010)

ČSN EN 60335-1 ed. 3:2012 (EN 60335-1:2012)

ČSN EN 60335-2-97 ed. 2:2007 (EN 60335-2-97:2006)

ČSN EN 61000-6-3 ed. 2:2007 (EN 61000-6-3:2007)

ČSN EN 55014-1 ed. 4:2017 (EN 55014-1:2017)

ČSN EN ISO 13849-1:2017 (EN ISO 13849-1:2015)

ČSN EN 13659:2015 (EN 13659:2015)

This declaration is issued under the sole responsibility of the manufacturer and applies exclusively to the machinery as it was placed on the market. It does not apply to components that have been added by the end user or to subsequent modifications made by the end user.

Given in Kralice na Hané, dated:
15 May 2020

Ladislav Vrána, CEO and the person authorised to compile
the technical file, address identical to the manufacturer

GENERAL TERMS AND CONDITIONS

This document is issued by ŽALUZIE NEVA s.r.o. as the seller (contractor). The following conditions are governed by the law of the Czech Republic, unless its application is excluded by binding provisions of international law.

An integral part of the General Terms and Conditions are the Transport Conditions and the Complaints Policy of ŽALUZIE NEVA s.r.o. as amended.

These General Terms and Conditions govern the relations between ŽALUZIE NEVA s.r.o. and its business partners and do not apply to consumers.

GENERAL PROVISIONS

These Terms and Conditions govern the mutual rights and obligations of the Seller and the Buyer (hereinafter referred to as the **“Buyer”**) in the sale of goods.

These Terms and Conditions form an integral part of the Purchase Agreement and the Buyer, by signing the Purchase Agreement, also confirms that they read these Terms and Conditions and that they expressly acknowledge that these Terms and Conditions form part of the contractual arrangement between them and the Seller. The Terms and Conditions are also available for viewing on the Seller's website. Different terms and conditions of the Buyer are excluded, unless otherwise agreed in writing. Any contractual arrangements amending these terms and conditions must be made in writing and confirmed in writing by both the Seller and the Buyer. Provisions that deviate from these Terms and Conditions may be agreed upon in the text of the actual Purchase Agreement. Any different provisions in the Purchase Agreement shall prevail over the provisions of the Terms and Conditions.

Object of purchase

The object of purchase under the Purchase Agreement is the goods specified in the Purchase Agreement (hereinafter referred to as “Goods”). The data on the goods, including the purchase price at the time of conclusion of the Purchase Agreement, are decisive. Goods means the shading equipment and its components (e.g. boxes under the plaster, cover sheets, insect screens) supplied by the Seller, which are specified in the manufacturer's technical data sheets as to type, method of execution, characteristics and price. Technical data sheets of the manufacturer are published on the website of ŽALUZIE NEVA s.r.o. (www.neva.eu).

Deliveries of goods according to individual orders placed by the Buyer are considered as separate purchase agreements.

OBLIGATIONS OF THE PARTIES

Seller's obligations:

- the obligation to hand over to the Buyer the item which is the object of the purchase on the basis of the Purchase Agreement
- the obligation to allow the Buyer to acquire title to the item subject to the purchase upon fulfilment of all obligations

Buyer's obligations:

- the obligation to take over the thing that is the object of the purchase from the Seller
- the obligation to pay the Seller the purchase price of the item being purchased

ORDERING OF GOODS

It is possible to order Goods:

- on the manufacturer's order form
- via the manufacturer's website application

- a) In both cases, the order for Goods must contain the customer's specification.
- b) All fields specifying the product in terms of quantity, type, design and accessories must be completed.
- c) Incomplete orders will be returned to the customer for completion.
- d) If the order is not placed on the Seller's forms or through the manufacturer's website application, the order must include at least the following matters:
 - the date when the order is issued
 - the date of the requested delivery of the Goods
 - ordering entity (person)
 - specifications of the ordered Goods according to the designation in the Product Technical Data Sheets
- e) An order is deemed to have been placed when it is delivered to the Seller in person, by post, by e-mail or via the website application.
- f) If the persons authorised to place an order on behalf of the Buyer are not specified in the General Purchase Agreement, the person authorised to place an order on behalf of the Buyer is the person authorised by the Buyer or it is usual due to their job title; in case of a change, the Buyer is obliged to notify the Seller of this fact in writing, otherwise the Seller is not responsible for any orders placed by an unauthorised person; in case of orders via the website application, the Buyer is entitled to request a change of the access password in case of a change of the authorised person.
- g) If the order meets the requirements set out in these GTC, an order confirmation may be drawn up and sent to the Buyer. If the Buyer does not object in writing within 24 hours of the moment when an order confirmed is delivered to them, the order is considered approved by the Buyer and is sent to production. This concludes the Purchase Agreement between the two parties.
- h) An order placed via the website application is confirmed interactively by the Seller in the list of orders placed by the Buyer. In such a case, the individual Purchase Agreement shall be regarded as concluded when the Seller confirms the order in the list of sent orders.
- i) The Buyer acknowledges that they are obliged to check the order confirmation.
- j) If the Buyer requires a change after the order has been placed, they are obliged to notify the Seller in writing without undue delay. Changes to the order are subject to the Seller's consent. Any costs for changing the order are the responsibility of the Buyer.
- k) If the Seller, when processing the order, finds that the delivery of the Goods cannot be effected under the conditions specified in the order, it shall inform the Buyer of this fact. In the event that the Buyer approves the proposal of new terms, the Seller shall indicate the different terms of delivery of the Goods in the order confirmation unless the parties agree to cancel the order.
- l) The Seller is not liable to the Buyer for any incomplete or incorrect deliveries of Goods which were caused due to incorrect or inaccurate orders placed by the Buyer. Clarification of the order due to its incompleteness or inaccuracy is the right of the Seller, not its obligation. The technical specifications of the Seller's individual products, their components and parts, limit dimensions and standard designs are given in the Manufacturer's Technical Data Sheets.

DELIVERY OF THE GOODS

- a) The date of completion of production of the Goods is indicated on the order confirmation. In the event of cancellation of the Purchase Agreement, the Buyer is obliged to pay the invoiced costs incurred to the Seller.
- b) If the Seller is unable to make the delivery within the required time, it has the right (even after the conclusion of the contract) to set a new, later delivery date and notify the Buyer of this new delivery date.
- c) The place of delivery of the Goods is the address indicated as the Buyer's registered office or place of business unless otherwise specified in the Purchase Agreement.
- d) If the Buyer (Customer) requires delivery to an address other than the Buyer's (Customer's) registered office or contractually agreed location, this fact must be stated at the time of ordering. This change may affect the overall cost of transport. The Seller is allowed to deliver the Goods in partial deliveries.

- e) The method of delivery and packaging of the Goods is specified in more detail in the Transport Conditions of ŽALUZIE NEVA s.r.o. These are an integral part of the GTC.
- f) The price for transport of the Goods to the place of delivery is not included in the purchase price of the Goods and is determined by the current price list of the Seller or public carrier and is charged separately in addition to the purchase price of the Goods.
- g) The documents necessary for the receipt and use of the Goods shall be deemed to be the delivery note or other document issued by the public carrier, which shall be issued to the Buyer after receipt of the Goods. The Seller is not obliged to provide any other documents or papers for the acceptance of the Goods.
- h) If the Buyer defaults on taking delivery of the Goods at the agreed time, the Seller is entitled to demand a storage charge from the seventh day following the agreed date of completion of the order. The storage charge is calculated at a minimum amount of 2 EUR/day per one stock unit. Each stock unit may contain products with a maximum gross weight of 400kg.
- i) The Buyer shall confirm receipt of the Goods on a copy of the delivery note or another shipping document of the carrier.

PURCHASE PRICE

- a) The purchase price of the Goods is specified in the Seller's price list. The purchase price specified in the price list does not include VAT, installation and usually transport of the Goods.
- b) The amount of the purchase price may be adjusted in the General Purchase Contract or agreement in the form of a rebate document, in the form of a discount on the purchase price (rebate) of the Buyer.
- c) Should the input prices be changed, including utilities or other circumstances affecting the price of the Goods, the Seller is entitled to change the basic purchase price of the relevant Goods. The Seller shall notify the Buyer of this intention to increase the basic purchase price. The Seller will also make price changes in the website application on the relevant date. The decisive price change date is crucial for the actual change and not the time at which the price lists are modified.
- d) In the event of a change in the purchase price of individual types of Goods, the date on which the order was placed by the Buyer with the Seller is decisive.

METHOD OF PAYMENT OF THE PURCHASE PRICE

- a) Unless otherwise agreed, the price shall be paid by the Buyer in the form of an advance or settlement invoice due ten days from the date of issue.
- b) The Seller shall always be entitled to demand an advance payment in the form of an advance invoice issued by the Seller upon confirmation of the order for the Goods, and by entering into the Purchase Agreement, the Buyer explicitly agrees to that. In the event of the Buyer's delay with the payment of the advance invoice, the Seller shall be entitled to terminate this Purchase Agreement.
- c) If it is agreed that the purchase price for deliveries of the Goods will be billed in invoices, the minimum invoice requirements as far as the contents are concerned must comply with the minimum requirements specified by the applicable legislation dealing with tax and accounting documents.
- d) The Seller has the right to issue an invoice for the purchase price of Goods delivered:
 - on the day when the delivery is effected, i.e. on the date of handover of the Goods to the Buyer, or on the date of dispatch of the delivery from the Seller's manufacturing plant even though it comes earlier than the date when the delivery is effected
 - the date of handover of the Goods to the public carrier at the Seller's manufacturing plant
- e) The invoice can be sent to the Buyer by post or e-mail to the address specified by the Buyer in the individual purchase orders.
- f) Should the Buyer default on payment of the purchase price for previous deliveries of the Goods, the Seller is entitled to condition further deliveries of the Goods by settlement of the due amount of the purchase price in default and settlement of the purchase price for the following deliveries of the Goods in advance prior to handover of the Goods or, as the case may be, by requiring an advance payment to be made on the purchase price for delivery of the Goods. Such fact shall be notified to the Buyer.
- g) Should the Seller provide the Buyer with a discount on the purchase price as a payment term for timely settlement of the purchase price for the individual deliveries of the Goods, the details of provision of the discount on the purchase price shall be given on an individual basis in writing.

- h) The key date for giving a discount is the date when the amount in question is credited to the Seller's bank account.
- i) The date on which the total financial amount is credited to the Seller's account is considered as the date of payment of the price. The provisions of Section 1805(2) of Act No. 89/2012 Coll., the Civil Code, as amended (hereinafter referred to as the "Civil Code") shall not apply. If the Buyer defaults on payment of the purchase price, the Seller shall have the right to withdraw from Agreements already concluded.
- j) Lodging a complaint or damage to the Goods that occurred after the risk thereof passed to the Buyer shall have no suspensive effect on the payment of the price of the Goods in full at the stipulated time.

RETENTION OF TITLE

- a) The Buyer acquires title to the Goods only when the relevant purchase price has been paid in full. The risk of damage to the Goods, however, passes to the Buyer upon acceptance of the Goods or when the Goods are handed over to a public carrier for transport.
- b) Should the Buyer install the Goods for a third party prior to the purchase price due date, the Buyer shall use the payments received from the third party preferentially for settlement of the purchase price to the Seller.

TRANSFER OF THE RISK OF DAMAGE TO THE GOODS

The risk of damage to the Goods shall pass to the Buyer:

- a) On the date of delivery, i.e. when the Goods are handed over to the Buyer.
- b) In the event that transport is ordered by the Buyer, the liability for damage to the Goods passes to the Buyer at the moment of handing over the Goods to the carrier.

DEFECTS IN GOODS

Details regarding the claiming of defects in the Goods and their claiming are regulated by the Seller's Complaints Policy, which is binding on both parties.

DEFAULT

- a) If the Seller defaults on delivering the Goods, the Buyer is entitled to issue the Seller a contractual penalty in the amount of 0.05% of the price of the undelivered products for each day of default unless the General Purchase Agreement specifies otherwise.
- b) If the Buyer defaults on payment of the purchase price, the Seller is entitled to issue the Buyer a contractual penalty in the amount of 0.05% of the total due amount for each day of default; this is without prejudice to the Seller's right to receive the full compensation for damage.

PERSONAL DATA PROTECTION

- a) In accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (hereinafter referred to as "the Regulation"), the Buyer is informed of the processing of personal data, namely name, surname, date of birth and residence (hereinafter referred to as the "personal data"), with the understanding that these are processed and stored by the Seller for the purposes of the performance of the Purchase Agreement and for the purposes of fulfilling the legal obligations to identify the parties. The personal data of the Buyer will be processed according to the Seller's internal guidelines on the processing of personal data. The protection of personal data is supervised by the Office for Personal Data Protection.
- b) The Buyer is informed that the Seller may entrust a third party as a processor to process the Buyer's personal data. Without the Buyer's prior consent, the personal data shall not be provided to any third parties except those parties in charge of transporting the Goods.
- c) The personal data will be processed for the period necessary for the purposes of the performance of the Purchase Agreement and for the period of keeping the Seller's customer records. The Buyer acknowledges that it is possible to send to the Buyer's e-mail address (if the Buyer has consented to the processing of this data) commercial communications within the meaning of Section 7 of Act No. 480/2004 Coll., on certain information society services, unless the Buyer expressly states that they do not consent to the sending of such commercial communications.
- d) If the Buyer requests information on the processing of their personal data, the Seller is obliged to provide such information to the Buyer. Furthermore, the Buyer shall be expressly informed of the following rights:

- to have access to their personal data (pursuant to Article 15 of the Regulation)
- to request their rectification (Article 16 of the Regulation)
- to the deletion of their personal data without undue delay provided that reasons pursuant to Article 17 of the Regulation are given
- to restrict the processing of their personal data in cases pursuant to Article 18 of the Regulation
- to data portability in cases stipulated in Article 20 of the Regulation
- to withdraw the consent granted pursuant to Article 7(3) of the Regulation
- lodge a complaint against the Seller (controller) pursuant to Article 77 of the Regulation

OTHER PROVISIONS

- The parties expressly agree that the entire regime of legal relations between them shall be governed by the provisions of the Czech Civil Code.
- In the event that the Seller unintentionally breaches an obligation or obligations arising from the individual purchase agreement, the Seller shall only be obliged to compensate the Buyer for direct damage up to a maximum of the individual purchase price of the defective Goods or part thereof, and up to a maximum of 50% of the purchase price of the defective Goods in respect of the claim for further damages. The Seller shall not be liable for any indirect, supplementary or consequential damage or lost profit that may be incurred by the Buyer in connection with the deliverables, e.g. in the event they are used incorrectly. By concluding the Purchase Agreement, the Buyer expressly agrees to this fact.
- The maximum hourly rate for repairs and travel is determined by the normal cost price of these costs at the place and time of installation, up to a maximum of €45/hour and €0.35/km, respectively.
- The parties have agreed that all disputes arising from their mutual relations and from the orders and individual purchase agreements executed in compliance with these GTC shall be decided by an ordinary court with jurisdiction in the area of the Seller's (contractor's) registered office provided that a different method of resolution of their disputes has not been agreed upon between the parties.
- Changes to the Purchase Agreement must be made in writing and approved by both parties; this also applies to an amendment to this provision.
- The Seller is not liable for losses or damage inflicted on the Buyer due to a breach of the Purchase Agreement, such as due to non-delivery or late delivery of the Goods owing to force majeure events, e.g. war, floods, fire, legal strike, lack of material, utilities, fuel, or for another objective cause that was not due to the Seller's fault. In such a case, the Buyer is obliged to take delivery of the Goods whenever they are delivered to them by the Seller at a later time.

PACKAGING

Upon receipt of the Goods, the Buyer assumes title to the packaging of the Goods; however, this shall not apply to packaging that is marked as returnable by the Seller.

COMPLAINTS POLICY

An integral part of these Terms and Conditions is the Complaints Policy, which governs the rights and obligations of the parties in respect of defective performance.

TRANSPORT CONDITIONS AND HANDLING OF THE GOODS

The transport conditions and handling of the Goods are an integral part of these Terms and Conditions.

CONDITIONS FOR SURFACE COATED PARTS

The conditions for surface coated parts are an integral part of these Terms and Conditions.

TEMPORARY AND FINAL PROVISIONS

The current text of the Terms and Conditions shall come into effect on 1 July 2024 and replace the Terms and Conditions in force from 1 September 2019. Individual purchase agreements and orders for the supply of Goods made after these Terms and Conditions come into force are subject to these Terms and Conditions. The text of this document is drawn up in the Czech language. In the event of a dispute or any doubts in the interpretation of other language versions, the Czech language version shall be decisive at all times.

COMPLAINTS POLICY

In accordance with the relevant provisions of Act No. 89/2012 Coll., the Civil Code, as amended (hereinafter referred to as the "Civil Code"), Act No. 634/1992 Coll., on Consumer Protection, as amended, and its own General Terms and Conditions and Transport Conditions, ŽALUZIE NEVA s.r.o., as the seller (contractor), issues this Complaints Policy. Matters not regulated by this Complaints Policy, or by the General Terms and Conditions or the Transport Conditions of ŽALUZIE NEVA s.r.o. shall be governed by the law of the Czech Republic.

The Transport Conditions and the General Terms and Conditions of ŽALUZIE NEVA s.r.o. as amended form an integral part of the Complaints Policy.

The operator of the online shop (also seller and contractor) on the website www.neva.eu (hereinafter referred to as the "online shop") is:

ŽALUZIE NEVA s.r.o.

Registered office: Háj 370, 798 12 Kralice na Hané

Company ID No.: 26301270

Registered in the Commercial Register maintained by the Regional Court in Brno, Section C, Insert 42544

Email: info@neva.eu

Phone: +420 588 003 550

RIGHTS AND OBLIGATIONS OF THE BUYER (CUSTOMER)

If a defect occurs in the goods, i.e. a condition where the goods are not delivered in accordance with the order, the purchase agreement, the contract for work or the General Terms and Conditions of Delivery, the buyer (customer) has the right to claim this defect.

The goods to be claimed, or the agreed part thereof, must be delivered back to the seller (contractor) in complete condition unless the buyer (customer) and the seller (contractor) agree otherwise in advance. The buyer shall enclose a written document (e.g. order confirmation or complaint report) with the order number, a detailed description of the defect complained of and the buyer's contact details. In order to prove the claim, it is necessary to attach a photo or video documentation of the defect and send it to the responsible person of the seller (contractor) without delay.

In the event that the buyer (customer) hands over the goods to the seller for repair/warranty repair and the goods are not sufficiently packaged, the buyer (customer) acknowledges that the seller (contractor) shall not be liable for any defects or other damage resulting from the transport and subsequent handling of the goods (damage, deformation, scratches, breakage, loss of parts or accessories, etc.). Removal of such defects will be carried out upon approval by the buyer (customer) and then billed to the buyer (customer). This provision also applies by analogy to cases of repair of goods as separate contractual relationships, i.e. also to situations where the goods to be repaired are not the product of the seller's (contractor's) company and the customer (client) has ordered the repair of the goods (work) from the seller (contractor) separately.

Obvious damage to the goods, their packaging or incomplete delivery upon delivery must be immediately addressed with the carrier and the irregularities must be recorded in the waybill. The buyer (customer) is not obliged to accept such goods from the carrier and shall inform the Seller without undue delay of the damage found. The buyer (customer) shall duly check the completeness of the goods and their accessories on the day of acceptance or at the earliest possible date, but no later than within 5 working days.

In case of personal collection by the buyer (customer), the moment of acceptance of the goods is the moment of transfer of the risk of damage to the goods from the seller (contractor) to the buyer (customer). If the buyer (customer) does not inspect the goods upon acceptance, they can only complain about defects detectable during this inspection if they prove that these defects

(e.g. missing accessories) already existed at the time of the transfer of the risk of damage to the goods. In order for the reimbursement of the actual costs reasonably incurred in connection with the claimed product (goods) to be accepted, it is necessary to specify these costs accurately, to inform the seller (contractor) of them without delay and, if necessary, to support them with proper invoices from subcontractors of necessary services, if the seller (contractor) so requests. The buyer (customer) is not automatically entitled to payment of these costs. The seller (contractor) reserves the right to first assess the complaint and determine whether the buyer is entitled to claim the goods and to determine the amount of allowable costs associated with the complaint. The right to reimbursement of the costs of the complaint is recognised for the duration of the basic warranty. In the case of an extended warranty, the buyer (customer) has the right to have the goods (product) repaired at the manufacturer's (contractor's) registered office, where the goods (product) will be delivered at their own expense, or to have the claimed parts delivered free of charge.

In the case of a complaint of a larger scale (multiple defects), the seller (contractor) has the right to assess the complaint at the place of assembly before the goods are dismantled.

The amount of eligible costs related to the complaint is determined by the General Terms and Conditions or the Transport Conditions of ŽALUZIE NEVA s.r.o.

SELLER'S RIGHTS AND OBLIGATIONS

The seller (contractor) is responsible for the fact that the goods are free from defects when taken over by the buyer (customer), in particular that at the time of handover the goods are in accordance with the provisions of Section 2161 of the Civil Code, i.e.:

- they conform to the agreed description, type and quantity as well as quality, functionality, compatibility, interoperability and other agreed properties,
- they are fit for the purpose for which the buyer requires them and to which the seller has agreed,
- they are delivered with the agreed accessories and instructions for use, including the assembly or installation manual.

The seller is liable to the buyer - consumer that, in addition to the agreed properties:

- the item is fit for the purpose for which an item of this type is normally used, also taking into account third-party rights, legal regulations, technical standards or code of conduct of the industry if there are no technical standards,
- In terms of its quantity, quality and other properties, including service life, functionality, compatibility and safety, the item corresponds to the usual properties of items of the same kind that the buyer may reasonably expect, also taking into consideration public statements made by the seller or another person in the same contractual chain, especially advertising or marking,
- the item is delivered with the accessories including packaging, including the assembly manual or other instructions for use that the buyer may reasonably expect,
- in terms of its quality or design, the item corresponds to the sample or template that the seller provided to the buyer before entering into the agreement.

If the buyer is a consumer, then the item shall be deemed as defective already upon acceptance if a defect occurs within one year of acceptance unless the nature of the item or defect rules it out. This period shall not run for the time for which the buyer is unable to use the item if the buyer pointed out the defect legitimately.

Liability rights for defects in the goods (product) by the seller (contractor) do not apply in particular to cases where the defect or damage has occurred owing to:

- mechanical damage to the goods or their parts,
- demonstrably impermissible interventions in the mechanism of the goods or parts thereof, and on the deliverables that, following acceptance by the buyer, have been processed, modified or inseparably connected with another item,
- natural disaster or as a result of another external event outside the seller's (contractor's) control or due to a repair made by a person other than a service provider,
- electrical overvoltage,
- demonstrably incorrect storage, improper use of the goods or parts thereof, improper maintenance, excessive load or overload, incorrect installation by the customer or a third party, unprofessional repair, unprofessional intervention, natural wear and tear, improper or negligent handling, the action of electrical, chemical or other mechanical influences, use of another non-original spare part or due to another influence that is not within the seller's control,
- use of the goods or parts thereof contrary to the instructions for use (Technical Data Sheet) that are included in the Technical Data Sheet of the product at www.neva.eu, to defects that have arisen in connection with using the goods contrary to Czech National Standards (CSN) and customary use as well as in the event that defects were due to the deliverables being placed in unsatisfactory conditions,
- due to the fact that the deliverables were installed in equipment that is not at the current level of corresponding technical modifications, or to defects due to the fact that modifications have been made to the deliverables other than those stipulated for it by the manufacturer, seller or service provider,

- demonstrably unprofessional installation of the goods or parts thereof, or installation in unsuitable premises,
- deviations in the dimensions of the goods or parts thereof which do not exceed the manufacturer's manufacturing tolerances as stated in the Product Technical Data Sheets on the website of the online shop,
- deviations in the inclined operation of the blinds that do not exceed the manufacturer's manufacturing tolerance as specified in the Technical Data Sheets of the product on the website www.neva.eu,
- variations in slat tilt that do not exceed the manufacturer's manufacturing tolerance as specified in the Product Data Sheets on the website, online shop.

The seller's (contractor's) liability for defects does not apply to:

- wear and tear caused by normal use of the goods,
- goods sold at a reduced price due to a defect for which the reduced price was agreed,
- in the case of used goods, for a defect corresponding to the degree of use or wear and tear that the goods had when taken over by the buyer,
- or if it results from the nature of the goods.

The buyer that is a consumer is entitled to exercise the right arising from a defect that manifests itself in the goods within 2 years of their acceptance. The parties are aware of the fact that a court will grant the right arising from a defect even in the event that the defect was not pointed out without undue delay after the buyer could have discovered it if exercising sufficient care, and that if the buyer pointed out the defect to the seller justifiably, the period in the first sentence of this article shall not run for the time for which the buyer is unable to use the item.

The seller shall issue to the buyer that is a consumer a written confirmation of when the buyer lodged the complaint, what is the content of the complaint and the manner of handling of the complaint required by the buyer that is a consumer, consumer's contact details for the purpose of provision of information; the seller shall further issue a confirmation of the date and manner of complaint settlement, including confirmation of the repair completed and its duration, or a written justification for rejecting the complaint, as the case may be. An employee charged with complaint processing must be present in the seller's business premises throughout the operating hours.

The seller or a person authorised by the seller shall decide on a complaint by the buyer that is a consumer immediately or, in complicated situations, within three working days. This time limit shall not include a reasonable period of time based on the type of product or service needed for professional evaluation of the defect. In the case of the buyer that is a consumer, the complaint including the removal of the defect must be settled and the consumer must be notified of it no later than 30 days of the complaint being lodged unless otherwise agreed between the seller and the buyer. The fruitless elapse of this period shall result in the buyer's - consumer's right to withdraw from the contract or demand a reasonable discount.

The seller shall issue the buyer - consumer with a confirmation of the date and method of complaint settlement, including a confirmation of the repair and its duration or, as the case may be, a written justification for rejecting the complaint.

The buyer can obtain more detailed information on the status of the complaint by writing to the email address info@neva.eu or by calling +420 588 003 550.

The seller (contractor) has the right to assess the defect of the goods at the place of use or installation before the goods are dismantled. The seller (contractor) may send its technician or a technician of the supplier of the claimed components to assess the installation. If the seller or its supplier is not allowed to assess the installation on site, the seller has the right to reject the complaint.

The seller shall be liable for defects resulting from unprofessional installation or other unprofessional commissioning of the goods only if the installation of the goods was agreed in the purchase contract between the buyer and the seller and the installation was performed by the seller or a person authorised by the seller.

The transport of the goods for which a complaint has been lodged shall be borne by the buyer; if the complaint is found to be legitimate, the buyer who is a consumer may demand the payment of cost incurred due to the transport of the goods that were the subject of the complaint. The seller shall send repaired goods or replacement goods that were the subject of the complaint to the buyer at the seller's expense.

LOGGING OF COMPLAINTS

The buyer (customer) files a complaint with the responsible employee of the seller. A complaint may be lodged non-stop using e-mail or in person or by phone throughout the company's operating hours, and the seller's contact details for complaint lodging purposes are as follows:

ŽALUZIE NEVA s.r.o.

Registered office: Háj 370, 798 12 Kralice na Hané

Company ID No.: 26301270

Registered in the Commercial Register maintained by the Regional Court in Brno, Section C, Insert 42544

Email: info@neva.eu

Phone: +420 588 003 550

The buyer (the customer) is obliged to prove that their claim for the settlement of the complaint is justified, i.e. that in addition to the complaint of defects, they also document the data on the acquisition of the goods (which they prove with the relevant document and the warranty certificate, if issued). The buyer (customer) must lodge a complaint without undue delay within the time limits according to Section 2112 and Section 2618 of the Civil Code.

Within the complaint, the buyer shall also specify:

- proper identification of the buyer, place where the defective deliverables are located,
- name of the customer's employee who reports the defect and who is simultaneously authorised to report a defect, and his/her phone number(s),
- date of lodging the complaint regarding the defect,
- identification of the goods in which the defect occurs, including the delivery note (acceptance certificate, invoice or another similar document),
- description of the defect and circumstances under which it manifests itself,
- what right arising from defective performance it has chosen,
- The buyer that is a consumer shall be entitled to exercise the right from defects that occur in consumer goods within 24 months from acceptance of the goods.

If the buyer that is a consumer requests so, the seller shall confirm to the buyer in writing the scope and duration of the seller's obligations in the event of defective performance. The seller has obligations arising from defective performance to the buyer that is a consumer at least to such an extent to which the manufacturer's obligations arising from defective performance last. The confirmation shall specify the seller's name, registered office and identification data, as well as any other data needed to establish its identity.

If necessary, the seller shall give a comprehensible explanation in the confirmation to the buyer that is a consumer of the content, scope, conditions and duration of the seller's liability as well as the manner in which rights arising from the defect can be exercised. In the confirmation the seller shall also state that other rights of the buyer - that is a consumer - relating to the purchase of the item are not affected. Failure to meet these obligations is without prejudice to the validity of the confirmation.

The seller hereby informs the buyer that is a consumer that if there is a consumer dispute under a contract arising between them that cannot be resolved amicably, the consumer may file a motion for out-of-court resolution of such a dispute with a designated entity for out-of-court resolution of consumer disputes, which is

Czech Trade Inspection Authority
Central Inspectorate – ADR Department
Štěpánská 44
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The consumer can also use the on-line dispute resolution platform set up by the European Commission at <http://ec.europa.eu/consumers/odr/>.

The rules laid down by the Czech Trade Inspection Authority, which govern the procedure for the extra-judicial resolution of consumer disputes, as well as the application form for submitting a proposal, are available to the buyer on the website of the Czech Trade Inspection Authority at: adr.coi.cz or www.coi.cz.

If the seller of the service provider finds out that it does not involve a defect covered by liability for defects, the customer shall bear all expenses and costs associated with the complaint about the defect, in the amount of seller's or service provider's rates in force.

WARRANTY PERIOD AND TIME LIMIT FOR LODGING A COMPLAINT

The rights and obligations of the buyer and the seller concerning rights arising from defective performance shall be governed by the generally binding legislation (in particular the provisions of Sections 1914 to 1925, Sections 2099 to 2117, and Sections 2161 to 2174 of the Civil Code).

1. A complaint will be admitted on condition that:

- the complaint is lodged on time,
- the conditions set out in the Technical Data Sheet of the product, which can be found on the website www.neva.eu, or the generally known rules for the use of the item are complied with,
- the goods are not defective due to improper handling by the buyer (customer)/user or due to normal wear and tear,
- the warranty card (if issued) is presented,
- the purchase price for the work or the goods has been paid in full.

2. The warranty period is:

- 2 years of standard warranty + 2 years of extended warranty for the blinds and their components. Extended warranty - under the extended warranty, repairs of warranty defects will be carried out free of charge at the ŽALUZIE NEVA s.r.o. headquarters, or components for these repairs will be delivered to the customer free of charge, other related costs are not covered,
- 5 years of warranty on Somfy, Geiger and Elero motors,
- 2 years on electronics.

The warranty period shall start on the date on which the goods are handed over to the buyer (customer). Should the goods not be handed over and accepted due to lack of assistance on the part of the buyer (customer), the warranty period shall begin to run on the day when the goods or work were supposed to be accepted.

3. The warranty period is not to be confused with the normal service life of the goods, i.e. the period of time for which the goods, with proper use and care, can last given their characteristics, the purpose for which they are intended and the differences in intensity of use.

4. The seller is not responsible for an increase in the extent of damage if the buyer (customer) uses the goods despite being aware of the defect. A complaint about obvious defects (e.g. damage to the packaging of the goods) caused by the carrier must be made directly with the carrier upon delivery. In order to make a claim caused by the transport company, it is necessary to leave the goods at the place of delivery, including the original packaging, at the moment of discovery of the defect. Take appropriate documentation of the damage (photos, video, etc.) and ensure that a damage report is drawn up with the transport company.

5. If the buyer's (customer's) complaint is settled by replacing the defective goods with faultless ones, the new goods shall not be subject to a new warranty period, nor shall the time elapsing from the acknowledgement of the complaint to the moment when the buyer (customer) is obliged to take delivery of the goods be included in the warranty period. If the complaint is settled by repair, the time that elapses between the acknowledgement of the complaint and the moment when the buyer (customer) is obliged to take delivery of the repaired product is not included in the warranty period.

REPAIRABLE DEFECTS

1. Removable defects are those defects where their removal does not impair the appearance, function and quality of the products and the repair can be carried out properly. The seller (the contractor) is responsible for assessing the nature of the defect. The deadline for the removal of the defect will be set by the seller (contractor) in relation to its current operational possibilities.
2. If the defect is a removable defect, the buyer (customer) may demand that the defect should be removed free of charge and properly, and the seller (contractor) shall decide whether this shall be done by repair or replacement of the item (unless this is disproportionate to the nature of the defect). If the removal of the defect is not possible, the buyer (customer) may demand a reasonable discount on the price of the item or withdraw from the contract.
3. If the defect is a removable defect within the warranty period of already used goods, the buyer (customer) has the right to demand only free, timely and proper removal of the defect, while the seller (contractor) is obliged to remove the defect within the time limit set by it.
4. The seller (contractor) can always replace the defective item with a faultless one instead of removing the defect.
5. In the event that the complaint is settled by replacing the goods with faultless goods, the buyer (customer) is obliged to return the faulty goods to the seller (contractor). If the goods are not returned within 1 month of the replacement, the buyer (customer) will be charged for the goods at the price applicable at the time of purchase.

IRREMOVABLE DEFECTS

1. Irremovable defects are defects which cannot be successfully and completely removed within the specified time limit. If the defect is irremovable and prevents the proper use of the product, the buyer (customer) may, at his option, demand:
 - replacement of the goods for faultless goods
 - termination of the purchase contract and reimbursement of the paid purchase price
2. The same rights belong to the buyer (customer) if the defects are removable, but if the buyer cannot use the product properly due to the recurrence of the same defect after repair or due to a greater number of defects. As a rule, such a product is considered to be one which has the same defect in the same place after at least two previous repairs.
3. If there are other irremovable defects that do not prevent the proper use of the product for its intended purpose, the buyer (customer) is entitled to a reasonable discount on the price. If there is a change in the customer's price in the period since the purchase of the goods, the buyer (customer) will be granted a discount on the price valid at the time of purchase.

REMOVAL OF DEFECTS IN THE CASE OF BUYER - CONSUMER

If the buyer is a consumer, the provisions set forth in the article Removal of defects in the case of the buyer - consumer of the Complaints Policy shall apply in relation to the rights arising from defects instead of the provisions of the article Removable defects and the article Irremovable defects of the Complaints Policy.

If an item has a defect, the buyer may demand that it should be removed. At their discretion, the buyer may demand the delivery of a new item free from defects or the repair of the item unless the chosen method of defect removal is impossible or disproportionately costly as compared to the other method; this shall be assessed mainly considering the significance of the defect, the value that the item would have without the defect and the fact whether or not the defect can be remedied using the other method without considerable difficulty for the buyer.

The seller may refuse to remove a defect if it is impossible or disproportionately costly mainly considering the significance of the defect and the value that the item would have without the defect.

The provisions of Sections 1923, 2106 and 2107 of the Civil Code on the rights from defective performance shall not apply.

The seller shall remove the defect within a reasonable time after the defect was pointed out in order not to cause considerable difficulties to the buyer, and the the nature of the item and the purpose for which the buyer purchased the item shall be taken into account.

The seller shall take over the item to remove the defect at its own expense. If this requires the dismantlement of an item which was installed in accordance with the nature and purpose of the item before the defect manifested itself, the seller shall dismantle the defective item and install a repaired or new item, or pay the cost associated therewith.

If the buyer fails to take over the item within a reasonable time after being notified by the seller of the possibility to take over the item following repair, the provisions of Section 2159(3) of the Civil Code shall apply mutatis mutandis.

The buyer may demand a reasonable discount or withdraw from the contract if

- the seller refused to remove the defect or failed to remove it in accordance with Section 2170(1) and (2) of the Civil Code,
- the defect manifests itself repeatedly,
- the defect constitutes a fundamental breach of the contract,
- the seller's statements or the circumstances make it clear that the defect will not be removed within a reasonable time or without considerable difficulty for the buyer.

A reasonable discount shall be determined as the difference between the value of the item without the defect and the value of the defective item that the buyer received.

The buyer may not withdraw from the contract if the defect in the item is insignificant; the defect shall be deemed not to be insignificant. The provisions of Sections 2110 and 2111 of the Civil Code shall not apply.

If the buyer withdraws from the contract, the seller shall refund the purchase price to the buyer without undue delay after receiving the item or after the buyer proves that they have sent the item.

The buyer may not withdraw from the contract or demand delivery of new goods if the buyer cannot restore the goods to the condition in which it the buyer received them. However, this shall not apply.

- if the condition of the goods has changed as a result of an inspection done to identify a defect in the goods,
- if the buyer has used the goods prior to discovering the defect,
- if the buyer did not cause the impossibility to return the goods in an unchanged condition by their own acts or omissions,
- if the buyer has sold the goods before the discovery of the defect, if the buyer has consumed them or if the goods have been altered during regular use; if this has happened only partially, the buyer shall return to the seller what can still be returned and shall provide the seller with a compensation up to the amount in which the buyer benefited from the use of the goods,
- the buyer is not entitled to exercise the right from defective performance if the buyer had prior knowledge that the goods are defective before taking possession of them, or if the buyer caused the defect themselves.

The buyer shall not have any right arising from defective performance if the defect was caused by the buyer themselves.

Wear and tear of an item due to its customary use or, with respect to a used item, wear and tear corresponding to the extent of its previous use shall not constitute a defect in goods.

HANDLING A COMPLAINT BY PROVIDING A DISCOUNT

Upon agreement with the buyer (customer), a complaint may be resolved by providing an adequate discount. If the goods come with a warranty card, the discount and the reason for providing the discount shall be specified on this warranty card. The discount is authorised to be granted by the designated employees of ŽALUZIE NEVA s.r.o. If there is a change in the customer's price in the period since the purchase of the goods, the buyer (customer) will be granted a discount on the price valid at the time of purchase.

GOODS SOLD AT LOWER PRICES

1. Used products, or products that have defects that do not prevent the product from being used for its intended purpose, are sold only at lower prices.
2. The buyer (customer) must be notified about the fact that the goods show a defect and what type of defect it is. The seller shall not be liable for such defects in new or used products for which a lower price has been agreed.
3. If the price has been reduced for commercial reasons (e.g. due to a post-seasonal sale) and if the goods are sold as new, faultless goods, the seller is fully liable for the defects of the goods sold.

DISPUTE RESOLUTION

Disputes arising in the context of the complaint procedure shall be decided by the general court at the registered office of the seller (contractor) unless the parties have agreed on another way of resolving their disputes.

FINAL PROVISIONS

The buyer is obliged to get acquainted with the Complaints Policy, the General Terms and Conditions, the Transport Regulations before the actual purchase of the goods. The buyer accepts the Complaints Policy upon acceptance of the goods from the seller or carrier. The Seller reserves the right to amend the rules.

If the customer is a consumer, the provisions of the Complaints Policy that are worded by derogation from the law to the consumer's detriment shall not apply to the customer.

The current text of the Complaints Policy shall come into effect on 1 July 2024, and the Complaints Policy in effect from 1 September 2019 shall expire on this day.

The wording of this Complaints Policy is in the Czech language. In the event of a dispute or any doubts in the interpretation of other language versions, the Czech language version shall be decisive at all times.

TRANSPORT CONDITIONS AND HANDLING OF THE GOODS

This document issued by ŽALUZIE NEVA s.r.o. as the Seller (Contractor) is an integral part of the General Terms and Conditions and governs the conditions for the delivery of products to the Buyer (Customer). The following conditions are governed by the law of the Czech Republic, unless its application is excluded by binding provisions of international law.

PACKAGING

The Seller's (Contractor's) products may be packed in several ways, particularly in foil, in a carton, on a pallet or in a shipping crate, or in some other suitable manner. The packaging must reflect the method of transport to the Buyer (Customer).

Unless agreed to otherwise in advance, the packaging type is to be determined by the Seller (Contractor).

The outer packaging is marked with the seller's label, which contains in particular: the delivery address of the buyer, the order designation and additional information about the product. In addition, the outer packaging of the products may be labelled with handling and storage instructions and shall be followed.

The accessories are packed in carton boxes marked with the Seller's (Contractor's) label.

Should the Buyer (Customer) require a form of packaging other than usual, such requirement shall be specified at the time of submission of the purchase order. This change may be subject to a charge. The suitability of the packaging is assessed by the manufacturer and in the event of disagreement, the manufacturer shall convey the decision to the Buyer.

The Buyer is obliged to store packaging and its accessories designated by the Seller as returnable in an appropriate place and return them to the Seller in an appropriate condition. If returnable packaging is not returned or if they are damaged due to insufficient care by the Buyer, the Buyer may be afterwards required to pay the damages.

TRANSPORT

The Seller's (Contractor's) products can be sent in several ways:

- **By the Buyer's own transport.** The Buyer or a carrier ordered by them takes over the order at the Seller's plant.
- **By the Seller's transport.** The Seller delivers the goods to the Buyer's place of business or to another address agreed beforehand, using internal transport or an external carrier secured by the Seller as part of a regular delivery route.
- **By external transport.** The Seller sends the goods to the Buyer's place of business or to another, pre-agreed address, using a selected external carrier.

The cost of transport shall be borne by the Seller or the Buyer pursuant to the Terms and Conditions, the particular order and the related delivery terms of Incoterms 2020. The transfer of risk is governed by INCOTERMS 2020.

The Buyer (Customer) is responsible for ensuring that the place of unloading is accessible and suitable for unloading from a standard lorry.

UNLOADING ASSISTANCE

For orders with a total weight over 150 kg or individual packages over 35 kg, the cooperation of the Buyer is required. The driver must not unload goods himself/herself in a volume greater than the above (occupational safety, possibility of damage).

When unloading the goods, the carrier is only obliged to prepare the goods for unloading from the loading area of the vehicle, not to further handle the goods at the place of unloading.

In the pre-announced unloading date, the Buyer shall provide the carrier with the possibility of depositing the goods and communication (telephone contact) for the possibility of announcing the unloading time if the Buyer requests a telephone announcement, this must be stated in writing at the time of placing the order, together with a contact person and mobile phone number for the announcement.

The cost due to the absence of the Buyer or person authorised by them at the place and time of unloading may be subject to additional billing for cost so incurred. Delays caused by the Buyer result in a delay in planned unloading at other customers. Extra costs invoiced to the Buyer may be added together in this way.

For the delivery of large-volume orders, i.e. goods placed on a pallet, in a crate or container, the Buyer shall secure appropriate equipment and its operation for unloading the goods.

If the Buyer or their representative is not present at the agreed time and place of unloading, and if it is not possible to contact the Buyer by telephone, the Seller or the carrier shall unload the goods at an alternative place designated by the Seller or, in the case of deliveries within the EU, take the goods back to the Seller. At this point, the goods are deemed to have been delivered. The costs related to finding storage capacities, storing or returning the shipment to the Seller's place of business as well as further transport to the Buyer are already recharged in full to the Buyer.

DELIVERY DATE

The time of delivery to the Customer and unloading times are determined by the number of unloadings, the route plan, the traffic situation and, for orders with delivery outside the EU, the customs procedure. The anticipated date of unloading specified in the Seller's ordering system is considered to be the probable date of delivery of the goods. The Buyer is also informed about this date by e-mail. The Customer can check this date with the Seller.

If the Buyer requires the exact delivery of the goods to the place at the time they wish (so-called FIXTERMIN) or outside a standard delivery day (EXPRES), they must make this request at least 5 working days before the date of the announced completion of production, which is stated in the written order confirmation. A fee is charged for the service.

ACCEPTANCE OF GOODS (ORDERS)

When taking delivery of the goods, the Buyer shall ensure that a person authorised to take delivery of the goods is present. In the consignment note and accompanying documents under legislation, the Buyer or a person authorised by them shall indicate their name in block letters, affix their signature and, if applicable, the stamp of the accepting organisation. The paper form of the consignment note may be replaced by digital form and electronic signature. In the event that the goods are taken over by another person or the document does not contain all the required particulars, the Seller may change the conditions of transport and invoicing. The Buyer is responsible for taking delivery of the goods even if the order was unloaded at their request in their absence or if they were represented by a person designated by them, even if the order was unloaded at an alternative place. During unloading, the Buyer (Customer) or a person appointed by them on the basis of the delivery note checks in particular the number of packages, the condition of the packaging and the goods.

RESERVATIONS

In the event of incompleteness of a delivered order or suspected damage, the defects must be immediately photographed and recorded in the consignment note or other relevant shipping document. This must be reported in writing to the Seller immediately, but no later than 48 hours after the unloading of the order (goods). In the event of a later claim, it is not possible to ensure an objective assessment of the claim and to recover damages from the carrier. For this reason, the claim may not be admitted by the Seller.

Unloading without assistance

If the Customer's responsible person is not present during unloading and thus it is unloading without assistance, the Seller shall bear no liability for any quantity which may be the subject of a complaint or alleged damage to goods, and the consignment shall be deemed to have been duly delivered. Unloading without assistance is also subject to a charge unless agreed otherwise.

HANDLING OF GOODS

The products can be transported only using covered means of transport, in original packaging, in a horizontal position, secured against displacement.

The products packaged separately (bubble foil and carton) are intended for manual handling. Wooden pallets and crates are adapted for manual handling using mechanised palletization resources.

STORAGE OF GOODS

Products need to be stored as follows:

- on a flat pad, minimum pad length = package length
- in horizontal position
- with an ambient temperature of -5 °C to +40 °C
- in a dry and roofed place
- protected from direct sunlight, condensed humidity and dirt

CHANGES IN TRANSPORT REQUIREMENTS BY THE BUYER

If the Buyer (Customer) requires delivery to an address other than the Buyer's (Customer's) registered office or contractually agreed usual place of delivery, this fact must be stated at the time of ordering, but no later than 5 days before the date of completion of production of the orders concerned. In the event that the Buyer informs the Seller late, this requirement may be rejected or made subject to a charge by the Seller. The Buyer is responsible for ensuring that the place of unloading is accessible and suitable for unloading from a standard lorry.

This change may affect the overall cost of transport.

EXTRAORDINARY COST OF TRANSPORT

According to the specification in the delivery conditions, they may be subject to additional charges:

- Extra packaging compared to the arranged standard
- Change in the place or date of delivery 5 days and less before the date of completion of the order
- EXPRES or FIXTERMIN delivery
- Absence during unloading
- Unreturned or damaged returnable packaging

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