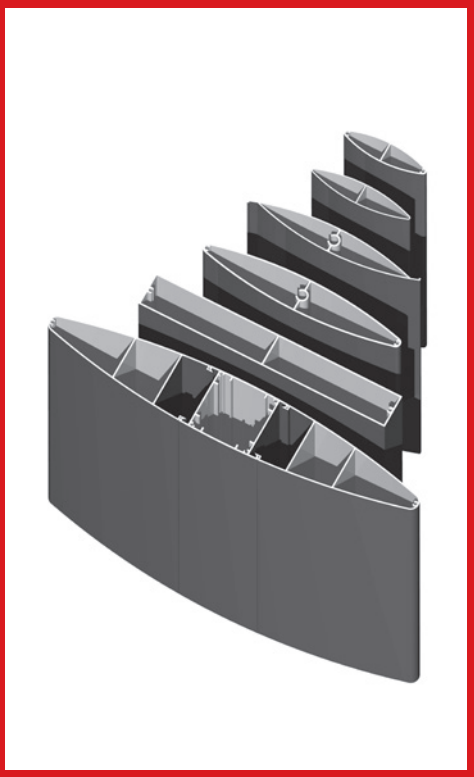
WICSOLAIRE
Sunshade system



Product range | Workshop manual 03.2013

WICONA®
TECHNOLOGY FOR IDEAS

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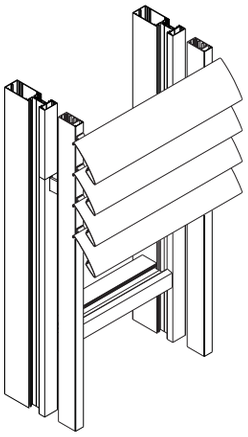
Content

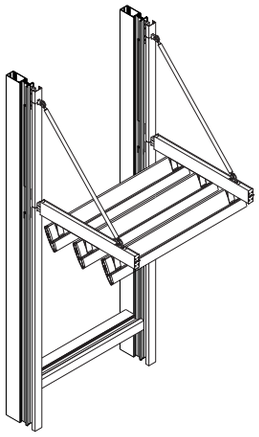
Product concept

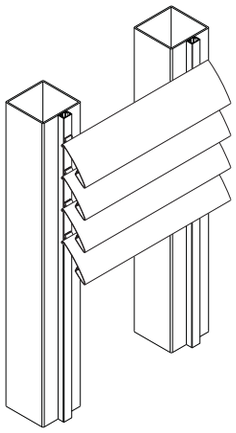


THE CONCEPT

The fixed or mobile brise-soleil, or sun shade, is a contemporary architectural feature. Incorporating such a system improves the comfort of occupants while reducing energy consumption in buildings by reducing the need for air conditioning in the summer and heating in the winter.

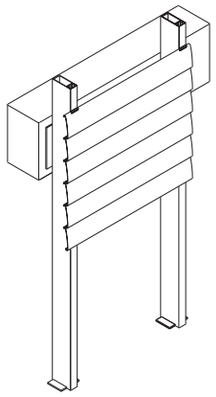
Attached directly to the curtain wall, a rooflight, or an independent framework, WICSOLAIRE provides a maximum benefit through multiple solutions:
- Horizontal or vertical
- Canopy
- Fixed or movable





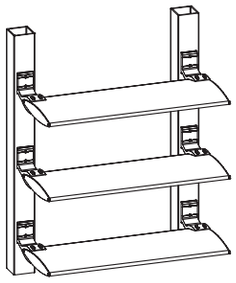
COMPONENTS

WICSOLAIRE is a complete system comprising:
- 2 blades, measuring 100 mm and 150 mm wide, to be clipped
- 7 one-piece elliptical blades, measuring 100 mm to 300 mm wide
- 5 composite elliptical blades, 350 to 600 mm wide
- 1 rectangular blade 300 mm wide
- 4 designs of semi-elliptical blades, 175 to 300 mm wide
- A louver range for incorporation in the cladding
- An aluminium cladding system



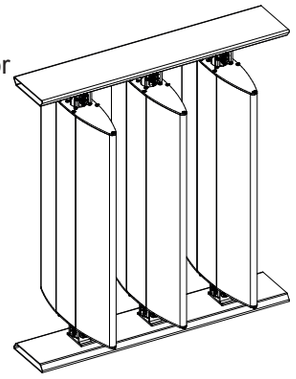
Systems for anchoring to the curtain wall, in the form of aluminium lugs with four angles of inclination (15° / 30° / 45° / 60°).

Systems for attaching to an independent structure, in the form of aluminium logs with four angles of inclination (0° / 15° / 30° / 45°) or aluminium flanges and blocks.



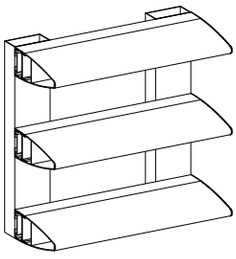
STATICAL DESIGN

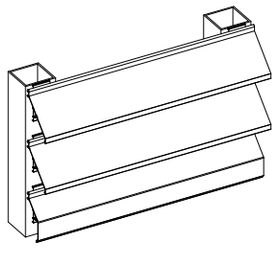
For the statical design and dimensioning, the respective country specific requirements need to be considered.



ALUMINIUM

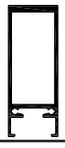
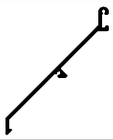
The aluminium of WICONA's WICSOLAIRE is certified:
- "6060 building" aluminium alloy
- polyester stoved powder-coating finish, QUALICOAT label
- anodized finish, QUALANOD label
- marine quality for sites with a marine or aggressive atmosphere

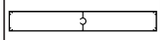
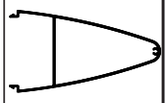
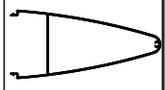
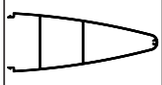
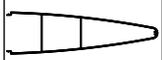


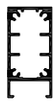
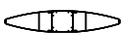
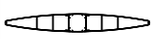


Inertia

I

y x x' y'	Ref.	Ixx' (cm⁴)	Iyy' (cm⁴)	Ixx'/v (cm³)	Iyy'/v (cm³)
	3930020	-	-	-	-
	3130012	56.93	11.83	11.48	6.96
	3930200	27	23,43	4,9	5,4
	3930201	35,5	10,1	5,7	3,2
	3930202	2,9	34,3	2,3	6,9
	3930025	2,37	62,1	2,06	10,33
	3930024	8,18	215,3	5,45	23,9
	3930205	6,5	202,3	4,3	19,6
	3930023	22,54	541,82	11,27	45,13

y x x' y'	Ref.	Ixx' (cm⁴)	Iyy' (cm⁴)	Ixx'/v (cm³)	Iyy'/v (cm³)
	3930022	44,29	888,05	17,72	65,76
	3930208	45,5	1082,1	18,2	72,1
	3130018	56,4	1601,3	28,2	106,7
	3930210	42,1	12,7	11,2	4,6
	3930213	34,7	95,5	9,6	14
	3930214	41,4	158,5	11,5	19,3
	3930215	50,1	244,4	19,9	25,6
	3930216	89,9	806,4	24,9	59,9
	3930217	40,95	21,17	10,92	8,47

y x x' y'	Ref.	Ixx' (cm⁴)	Iyy' (cm⁴)	Ixx'/v (cm³)	Iyy'/v (cm³)	y x x' y'	Ref.	Ixx' (cm⁴)	Iyy' (cm⁴)	Ixx'/v (cm³)	Iyy'/v (cm³)
	3930218	2,64	0,02	1,23	0,11		**3960021**	27,19	9,98	7,01	5,87
	**3930228**	140,7	266,2	38,2	43,7		**3960022**	31,59	10,44	7,70	6,14
	**3930229**	154,1	392,2	42	54,3		**3960043**	1,9	4,3	0,9	2,5
	**3930230**	171,5	564	46,8	66,9						
	**3930231**	173,4	977,6	47,6	83,8						
	**3930232**	221,9	1625,5	61	124,4						
	**3960001**	0,32	19,85	0,30	3,99						
	**3960002**	2,73	70,68	1,59	8,68						
	**3960004**	0,18	13,71	0,16	2,96						

I

Applications

Blades 3960001 and 3960002 on WICTEC curtain wall

Horizontal blades

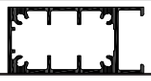
E = spacing of blades (mm)
N = numbers of frames
L = axis dimensions of frames (mm)
H = height of WICSOLAIRE element (mm)
K = max. number of blades per cleats (depends on static calculation)

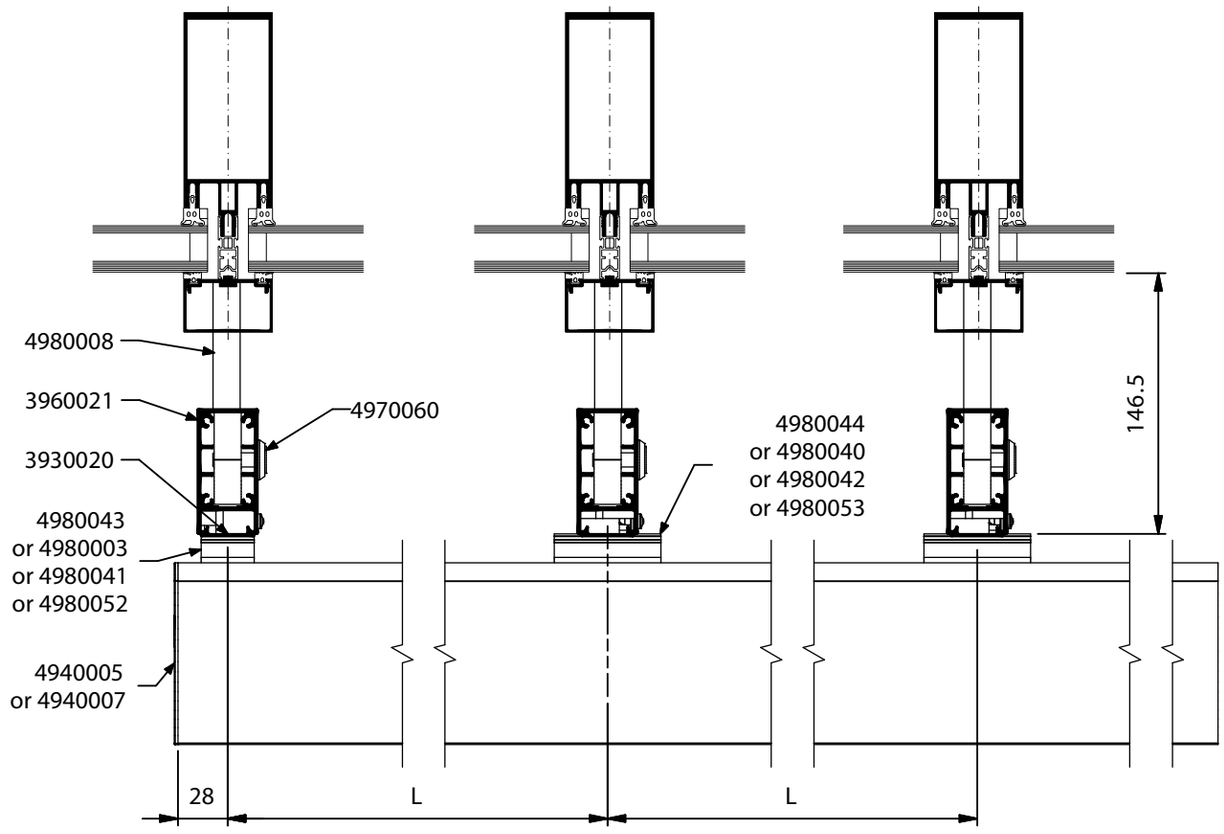
C = entire portion of (H / E) - 1
Example: If **H** = 6000 mm and **E** = 130 mm → **H / E** = 46,15
therefore **C** = 45

J = number of cleats per support profile = rounded up (C+1) / K
Example: If **K** = 12 und **C** = 45 → **(C+1) / K** = 46/12 = 3,83 so that **J** = 4

M = number of fields per blade width
max.**M** = entire portion of (max. **blade width** - 23) / **L**
Example: L = 1350 mm, max.width = 6000 mm → 5977/1350 = 4,43 so **M** = 4

PROFILES

Ref.	Profiles	Cutting	Quantities		Dimensions
3960002 or 3960001		90°/90°	outer blade	2 x (C + 1)	M x L + 23
			inner blade	(N/M - 2) x (C + 1)	M x L - 10
3960004		90°/90°	outer cover	2 x (C + 1)	L - 55
			inner cover	(N - 2) x (C + 1)	L - 70
3960021		90°/90°	N + 1		H
3930020		90°/90°	outer spacer	(N + 1) x 2	(H - C x E - 30) / 2
			intermediate spacer	C x (N + 1)	E - 30



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Blades 3960001 and 3960002 on WICTEC curtain wall

Horizontal blades

ACCESSORIES

Ref.	Description	Quantity
4980003 / 4980041 / 4980043 or 4980052	Blade holder (30 mm)	2 x (C + 1)
4980040 / 4980042 / 4980044 or 4980053	Blade holder (60 mm)	(N - 1) x (C + 1)
4070530	Self tapping screw, M4 x 16	4 x (C + 1)
199136	Washer with collar	J x (N + 1)
4940005 or 4940007	150 mm end cap 100 mm end cap	C + 1 2 x (C + 1)
4970060	Countersunk screw M8 x 30	J x (N + 1)
4980008	Mounting bracket , 125 mm	J x (N + 1)
4980015	End cap for 70 mm supp. profile	N + 1
4070081	Self tapping screw ST5.5 x 29	4 x J x (N + 1)
4900134	Spacer / fitting part	N + 1
4070528	Self tapping screw Ø4.2x16	2 x (N + 1)
4170079	Screw ST4.8 x 16	4 x (N + 1)

GASKETS

Ref.	Description	Quantity
4010114	Gasket for blade cap	(L/2) x N x (C+1)

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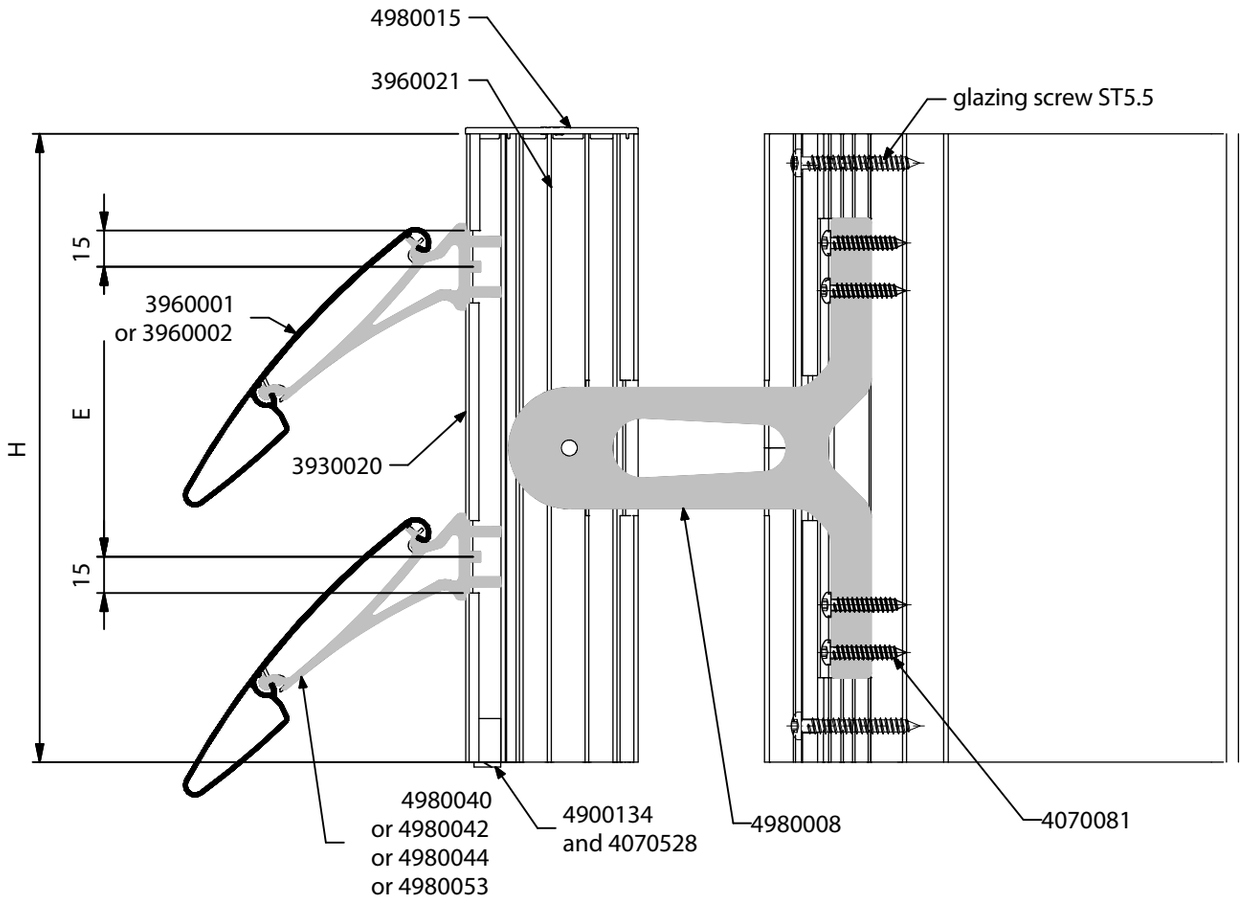

DOC-0000825495

Blades 3960001 and 3960002 on WICTEC curtain wall

Horizontal blades, 90° angle

E = spacing of blades (mm)
N = numbers of frames
L = axis dimensions of frames (mm)
H = height of WICSOLAIRE element (mm)
K = max. number of blades per cleats (depends on static calculation)
P = blade overhang (mm)

C = entire portion of (H / E)
Example: If **H** = 6000 mm and **E** = 130 mm → **H / E** = 46,15
therefore **C** = 46

J = number of cleats per support profile = rounded up (C+1) / K
Example: If **K** = 12 und **C** = 46 → **(C+1) / K** = 47/12 = 3,92 so that **J** = 4

M = number of fields per blade width
max.**M** = entire portion of (max. **blade width** - 23) / **L**
Example: L = 1350 mm, max.width = 6000 mm → 5977/1350 = 4,43 so **M** = 4

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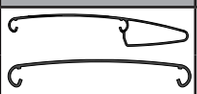
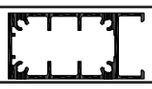
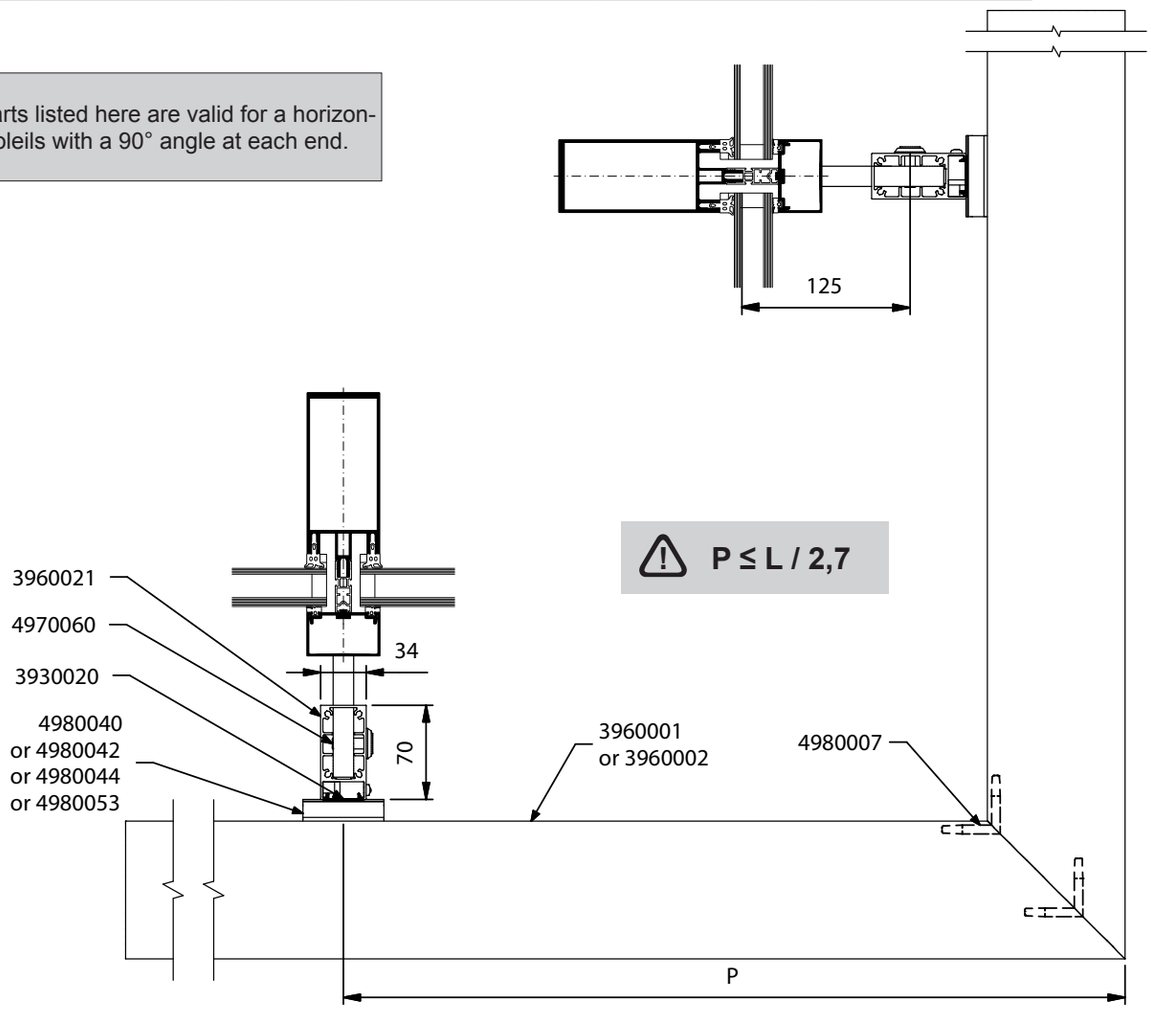
PROFILES

Ref.	Profiles	Cutting	Quantities		Dimensions
3960002 or 3960001		90°/90°	outer blade	2 x (C + 1)	M x L - 5 + P
			inner blade	(N/M - 2) x (C + 1)	M x L - 10
3960004		90°/ 45° 90° / 90°	outer cover	2 x (C + 1)	~ P - 40
			inner cover	(N - 2) x (C + 1)	L - 70
3960021		90°/90°	N + 1		H
3930020		90°/90°	outer spacer	(N + 1) x 2	(H - C x E - 30) / 2
			intermediate spacer	C x (N + 1)	E - 30

Note: The parts listed here are valid for a horizontal brise-soleils with a 90° angle at each end.



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Blades 3960001 and 3960002 on WICTEC curtain wall

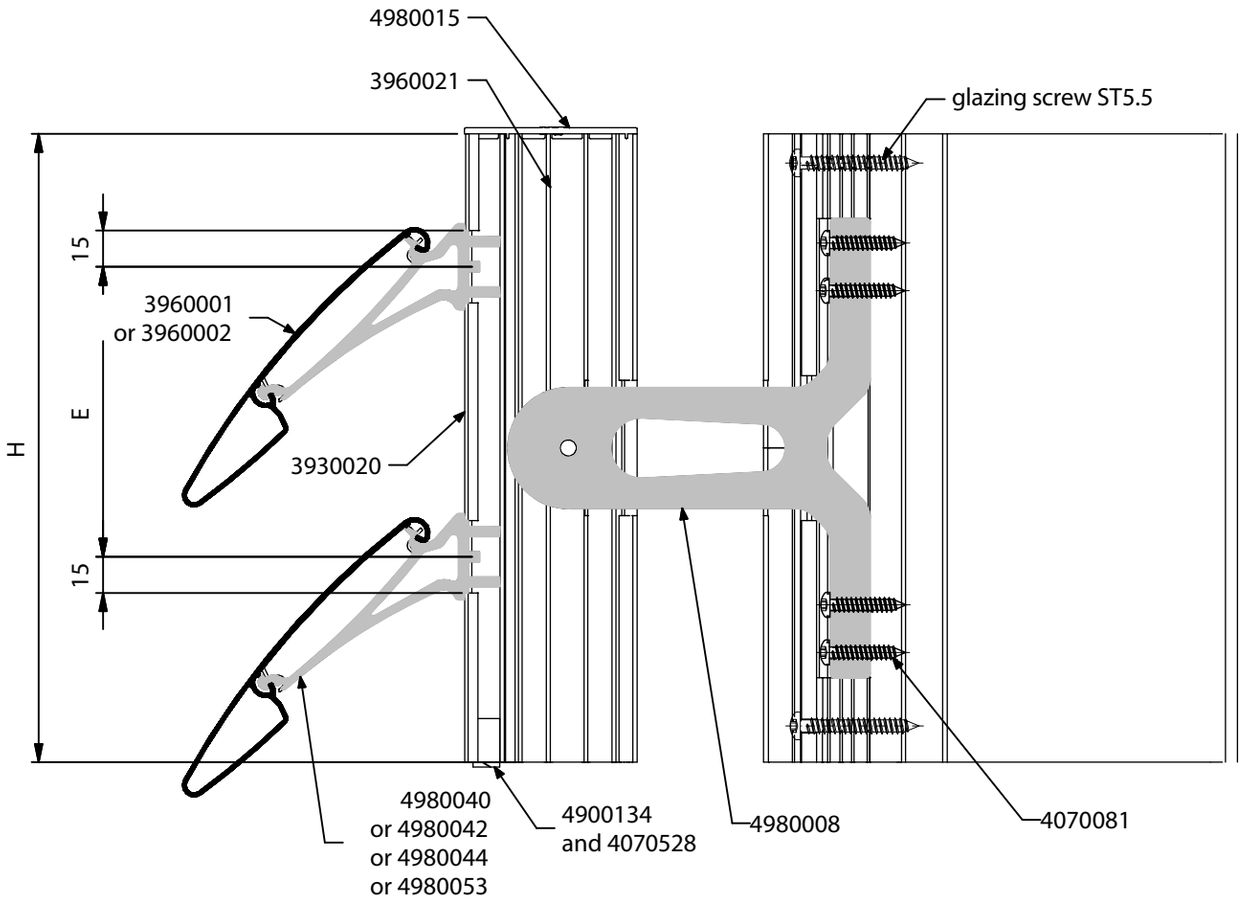
Horizontal blades, 90° angle

ACCESSORIES

Ref.	Description	Quantity
4980003 / 4980041 / 4980043 or 4980052	Blade holder (30 mm)	2 x (C + 1)
4980040 / 4980042 / 4980044 or 4980053	Blade holder (60 mm)	(N - 1) x (C + 1)
199136	Washer with collar	J x (N + 1)
4970060	Countersunk screw M8 x 30	J x (N + 1)
4980007	Blade connector 90°	2 x (C + 1)
4980008	Mounting bracket, 125 mm	J x (N + 1)
4980015	End cap for 70 mm supp.profile	N + 1
4070081	Self tapping screw ST5.5 x 29	4 x J x (N + 1)
4900134	Spacer / fitting part	N + 1
4070528	Self tapping screw Ø4.2x16	2 x (N + 1)
4170079	Screw ST4.8 x 16	4 x (N + 1)

GASKETS

Ref.	Description	Quantity
4010114	Gasket for blade cap	(L/2) x N x (C+1)



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Blades 3960001 and 3960002 on WICTEC curtain wall

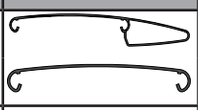
Horizontal blades, canopy

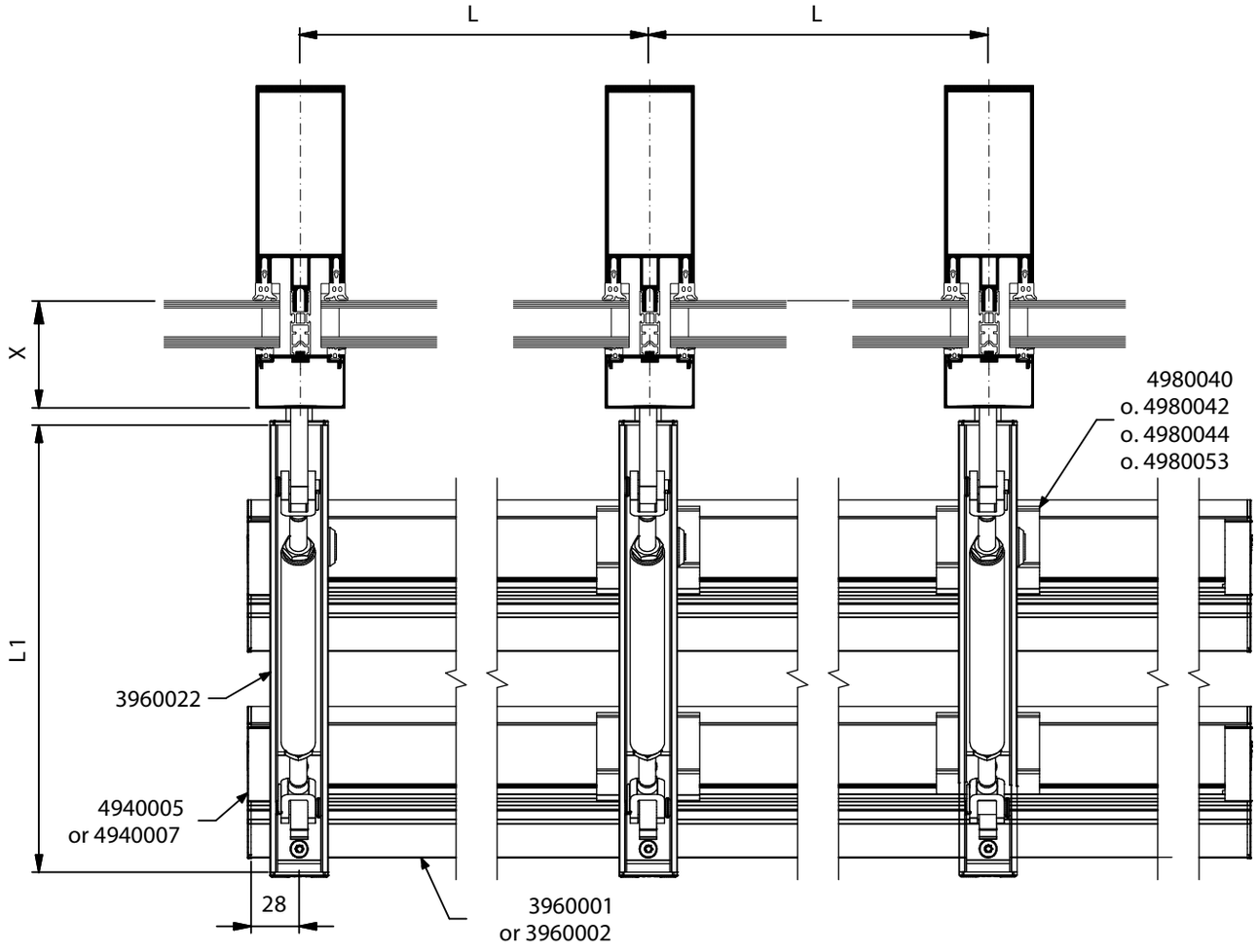
E = spacing of blades (mm)
N = numbers of frames
L = axis dimensions of frames (mm)
L1 = total depth of WICSOLAIRE element (mm)

C = entire portion of (H / E)
Example: If **H** = 6000 mm and **E** = 130 mm → **H / E** = 46,15
therefore **C** = 46

M = number of fields per blade width
max.**M** = entire portion of (max. **blade width** - 23) / **L**
Example: L = 1350 mm, max.width = 6000 mm → 5977/1350 = 4,43 so **M** = 4

PROFILES

Ref.	Profiles	Cutting	Quantities		Dimensions
3960002 or 3960001		90°/90°	outer blade	2 x (C + 1)	M x L + 23
			inner blade	(N/M - 2) x (C + 1)	M x L - 10
3960004		90°/90°	outer cover	2 x (C + 1)	L - 55
			inner cover	(N - 2) x (C + 1)	L - 70
3960022		90°/90°	N + 1		LK
3930020		90°/90°	outer spacer	(N + 1) x 2	(L1 - C x E - 30) / 2
			intermediate spacer	C x (N + 1)	E - 30
3930013		90°/90°	N + 1		L2



DOC-0000825536

Blades 3960001 and 3960002 on WICTEC curtain wall

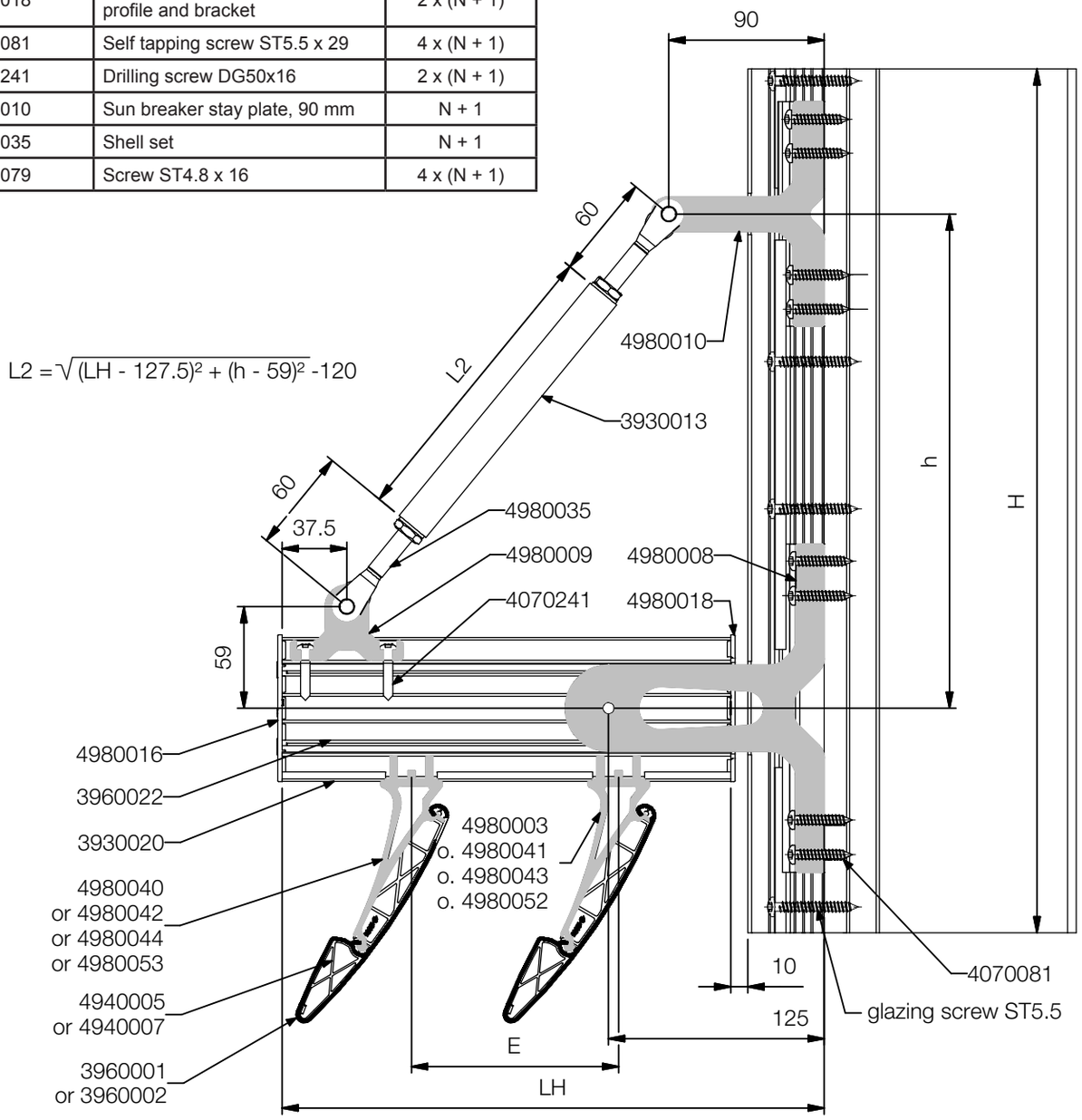
Horizontal blades, canopy

ACCESSORIES

Ref.	Description	Quantity
4980003 / 4980041 / 4980043 or 4980052	Blade holder (30 mm)	2 x (C + 1)
4980040 / 4980042 / 4980044 or 4980053	Blade holder (60 mm)	(N - 1) x (C + 1)
4070530	Self tapping screw, M4 x 16	4 x (C + 1)
199136	Washer with collar	N + 1
4940005 or 4940007	150 mm end cap 100 mm end cap	C + 1 2 x (C + 1)
4970060	Countersunk screw M8 x 30	N + 1
4980008	Mounting bracket, 125 mm	N + 1
4980009	Mounting bracket, 31 mm	N + 1
4980016	End cap for 82 mm supp. profile	N + 1
4980018	End cap for 82 mm support profile and bracket	2 x (N + 1)
4070081	Self tapping screw ST5.5 x 29	4 x (N + 1)
4070241	Drilling screw DG50x16	2 x (N + 1)
4980010	Sun breaker stay plate, 90 mm	N + 1
4980035	Shell set	N + 1
4170079	Screw ST4.8 x 16	4 x (N + 1)

GASKETS

Ref.	Description	Quantity
4010114	Gasket for blade cap	(L/2) x N x (C+1)



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Blades 3960001 and 3960002
on an independent supporting structure
Horizontal blades - 30 mm bearing profile

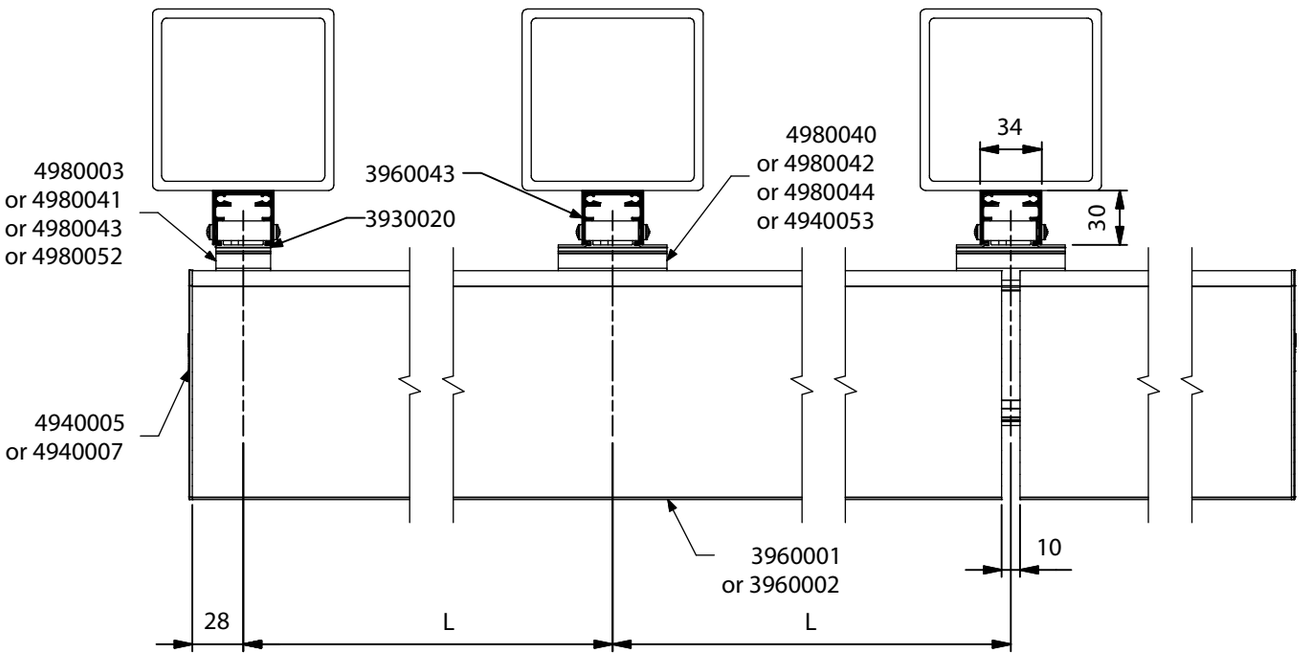
E = spacing of blades (mm)
N = numbers of frames
L = axis dimensions of frames (mm)
H = height of WICSOLAIRE element (mm)
K = max. number of blades per cleats (depends on static calculation)

C = entire portion of (H / E)
Example: If **H** = 6000 mm and **E** = 130 mm → **H / E** = 46,15
therefore **C** = 46

M = number of fields per blade width
max.**M** = entire portion of (max. **blade width** - 23) / **L**
Example: L = 1350 mm, max.width = 6000 mm → 5977/1350 = 4,43 so **M** = 4

PROFILES

Ref.	Profiles	Cutting	Quantities		Dimensions
3960002 or 3960001		90°/90°	outer blade	2 x (C + 1)	M x L + 23
			inner blade	(N/M - 2) x (C + 1)	M x L - 10
3960004		90°/90°	outer cover	2 x (C + 1)	L - 55
			inner cover	(N - 2) x (C + 1)	L - 70
3960043		90°/90°	N + 1		H
3930020		90°/90°	outer spacer	(N + 1) x 2	(H - C x E - 30) / 2
			intermediate spacer	C x (N + 1)	E - 30



DOC-0000823944

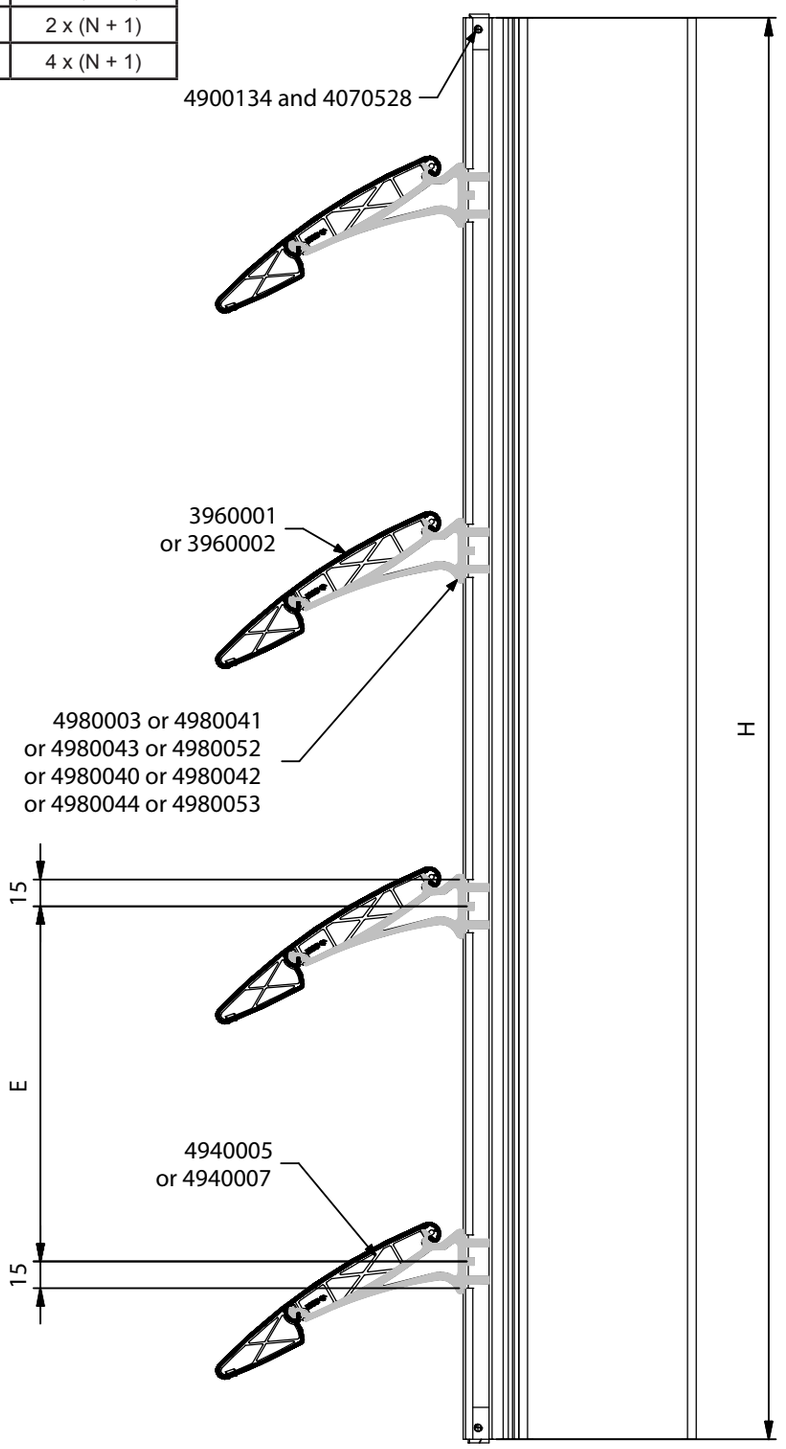
Blades 3960001 and 3960002
on an independent supporting structure
Horizontal blades - 30 mm bearing profile

ACCESSORIES

Ref.	Description	Quantity
4980003 / 4980041 / 4980043 or 4980052	Blade holder (30 mm)	2 x (C + 1)
4980040 / 4980042 / 4980044 or 4980053	Blade holder (60 mm)	(N - 1) x (C + 1)
4070530	Self tapping screw, M4 x 16	4 x (C + 1)
4940005 or 4940007	150 mm end cap 100 mm end cap	C + 1 2 x (C + 1)
4900134	Spacer / fitting part	2 x (N + 1)
4070528	Self tapping screw Ø4.2x16	4 x (N + 1)

GASKETS

Ref.	Description	Quantity
4010114	Gasket for blade cap	(L/2) x N x (C+1)



DOC-0000823944

Blades 3960001 and 3960002
on an independent supporting structure
Horizontal blades - 90 mm bearing profile

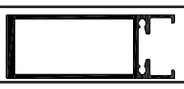
E = spacing of blades (mm)
N = numbers of frames
L = axis dimensions of frames (mm)
H = height of WICSOLAIRE element (mm)
K = max. number of blades per cleats (depends on static calculation)

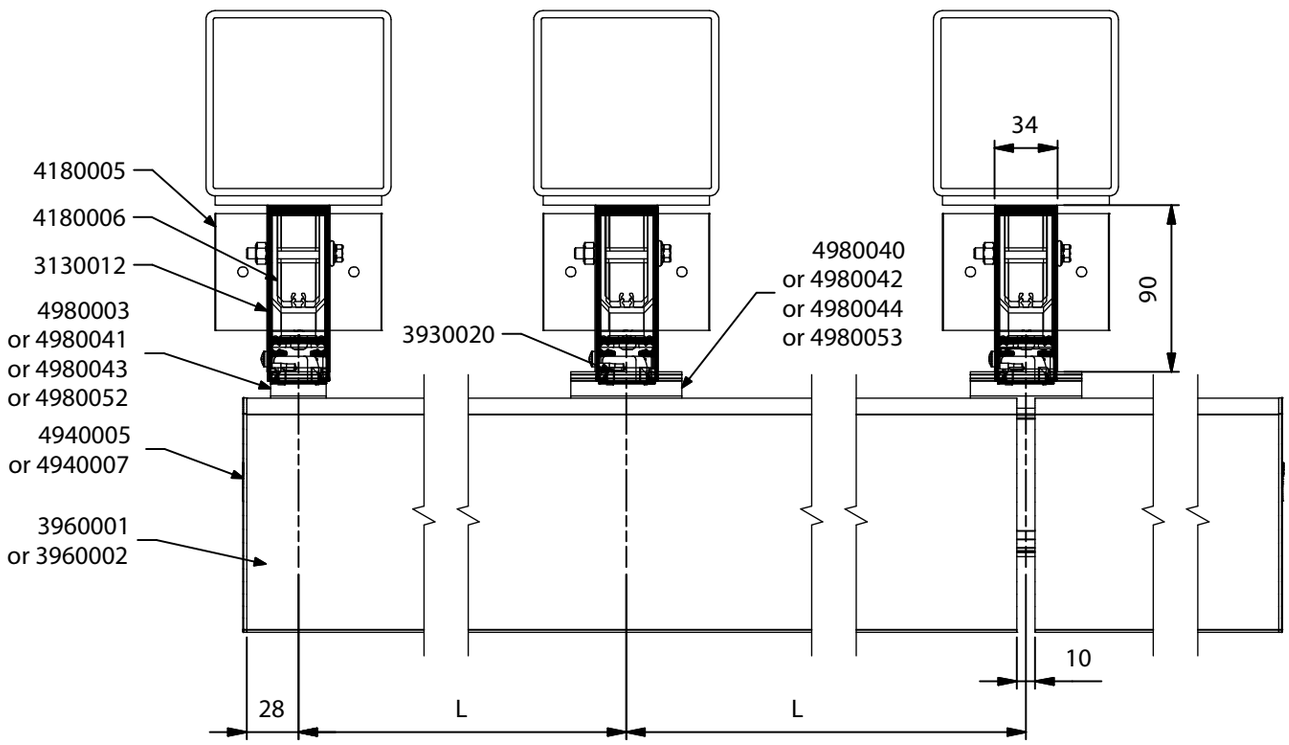
C = entire portion of (H / E)
Example: If **H** = 6000 mm and **E** = 130 mm → **H / E** = 46,15
therefore **C** = 46

M = number of fields per blade width
max.**M** = entire portion of (max. **blade width** - 23) / **L**
Example: L = 1350 mm, max.width = 6000 mm → 5977/1350 = 4,43 so **M** = 4

Y = number of fastenings 4180006
Y = rounded up **H / 3000**, then **Y** = 2

PROFILES

Ref.	Profiles	Cutting	Quantities		Dimensions
3960002 or 3960001		90°/90°	outer blade	2 x (C + 1)	M x L + 23
			inner blade	(N/M - 2) x (C + 1)	M x L - 10
3960004		90°/90°	outer cover	2 x (C + 1)	L - 55
			inner cover	(N - 2) x (C + 1)	L - 70
3130012		90°/90°	N + 1		H
3930020		90°/90°	outer spacer	(N + 1) x 2	(H - C x E - 30) / 2
			intermediate spacer	C x (N + 1)	E - 30



DOC-0000823991

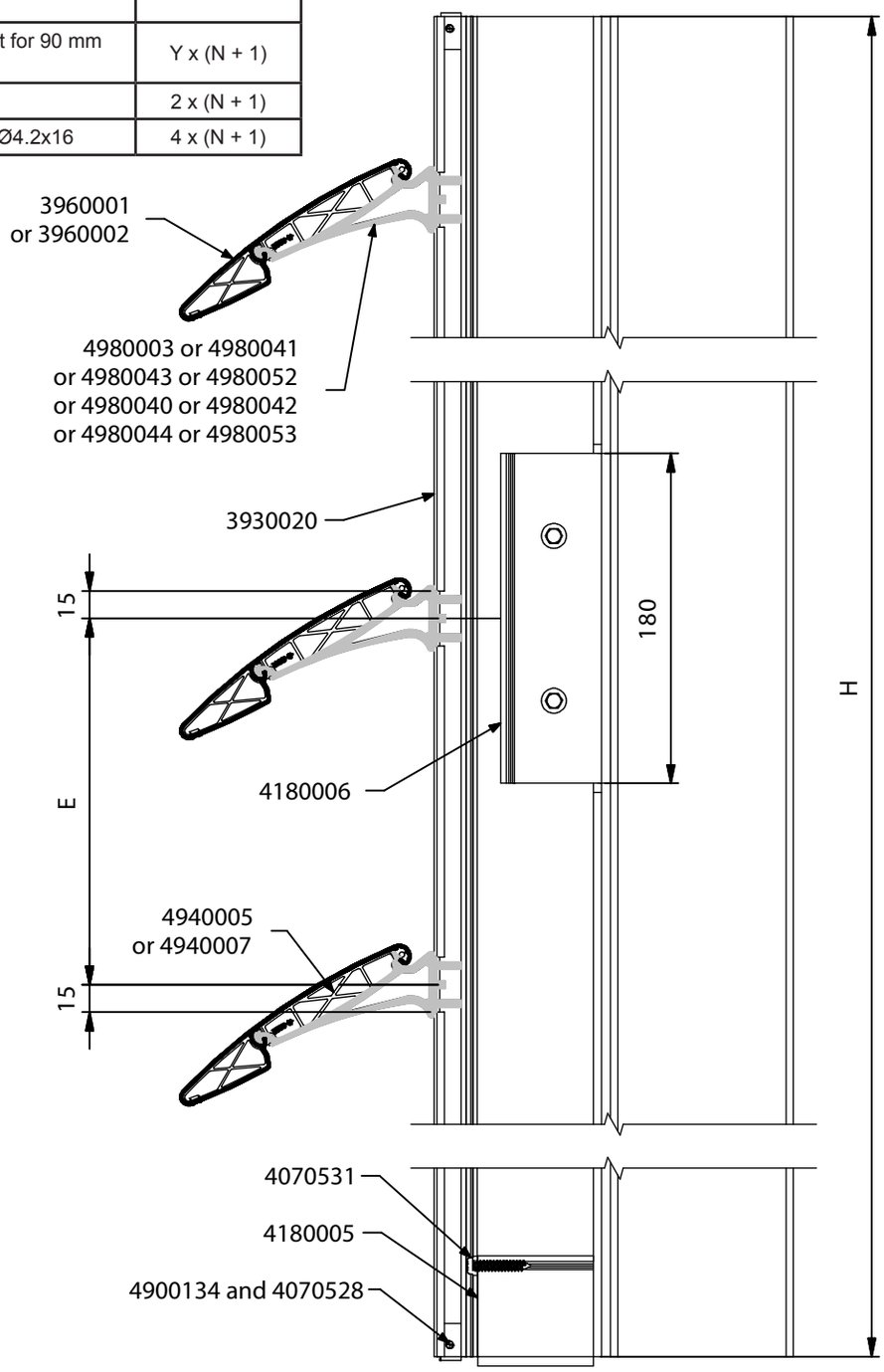
Blades 3960001 and 3960002
on an independent supporting structure
Horizontal blades - 90 mm bearing profile

ACCESSORIES

Ref.	Description	Quantity
4980003 / 4980041 / 4980043 or 4980052	Blade holder (30 mm)	2 x (C + 1)
4980040 / 4980042 / 4980044 or 4980053	Blade holder (60 mm)	(N - 1) x (C + 1)
4070530	Self tapping screw, M4 x 16	4 x (C + 1)
4070531	Self tapping screw, ST3.9 x 35	N + 1
4940005 or 4940007	150 mm end cap 100 mm end cap	C + 1 2 x (C + 1)
4180005	Base fixing spigot for 90 mm support profile	N + 1
4180006	Vertical fixing spigot for 90 mm support profile	Y x (N + 1)
4900134	Spacer / fitting part	2 x (N + 1)
4070528	Self tapping screw Ø4.2x16	4 x (N + 1)

GASKETS

Ref.	Description	Quantity
4010114	Gasket for blade cap	(L/2) x N x (C+1)



DOC-0000823991

Blades 3960001 on an independent supporting structure

Cladding on 30 mm bearing profile

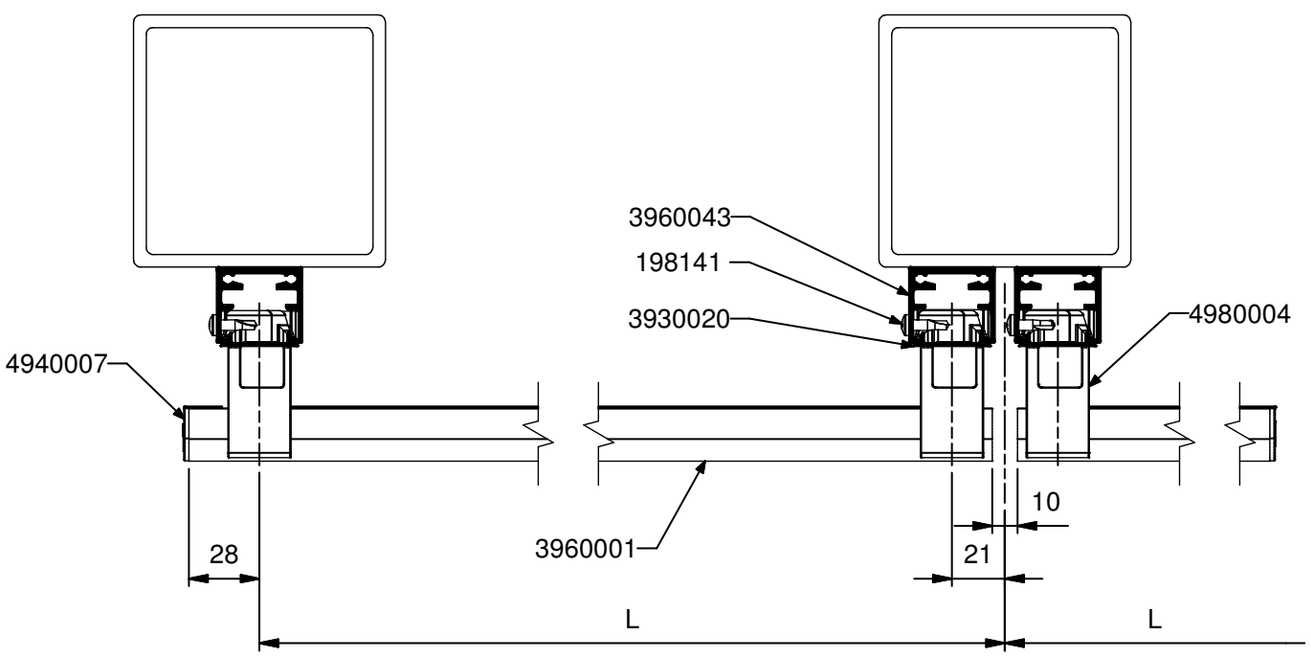
N = numbers of frames
L = axis dimensions of frames (mm)
H = height of WICSOLAIRE element (mm)

C = entire portion of (H / 100) - 1
Example: If **H** = 2580 mm → **H / 100** = 25,8
therefore **C** = 24 (= number of blades)

PROFILES

Ref.	Profiles	Cutting	Quantities		Dimensions
3960001		90°/90°	outer blade	2 x C	L + 23
			inner blade	(N - 2) x C	L - 10
3960004*		90°/90°	outer cover	2 x C	L - 56
			inner cover	(N - 2) x C	L - 77
3960043		90°/90°	2 x N		H
3930020		90°/90°	outer spacer	(N + 1) x 2	[H - (C + 1) x 100] / 2
* ... only if necessary					

Note: For a cladding width that is greater than the frame, the support section must be doubled.



DOC-0000824036

Blades 3960001 on an independent supporting structure

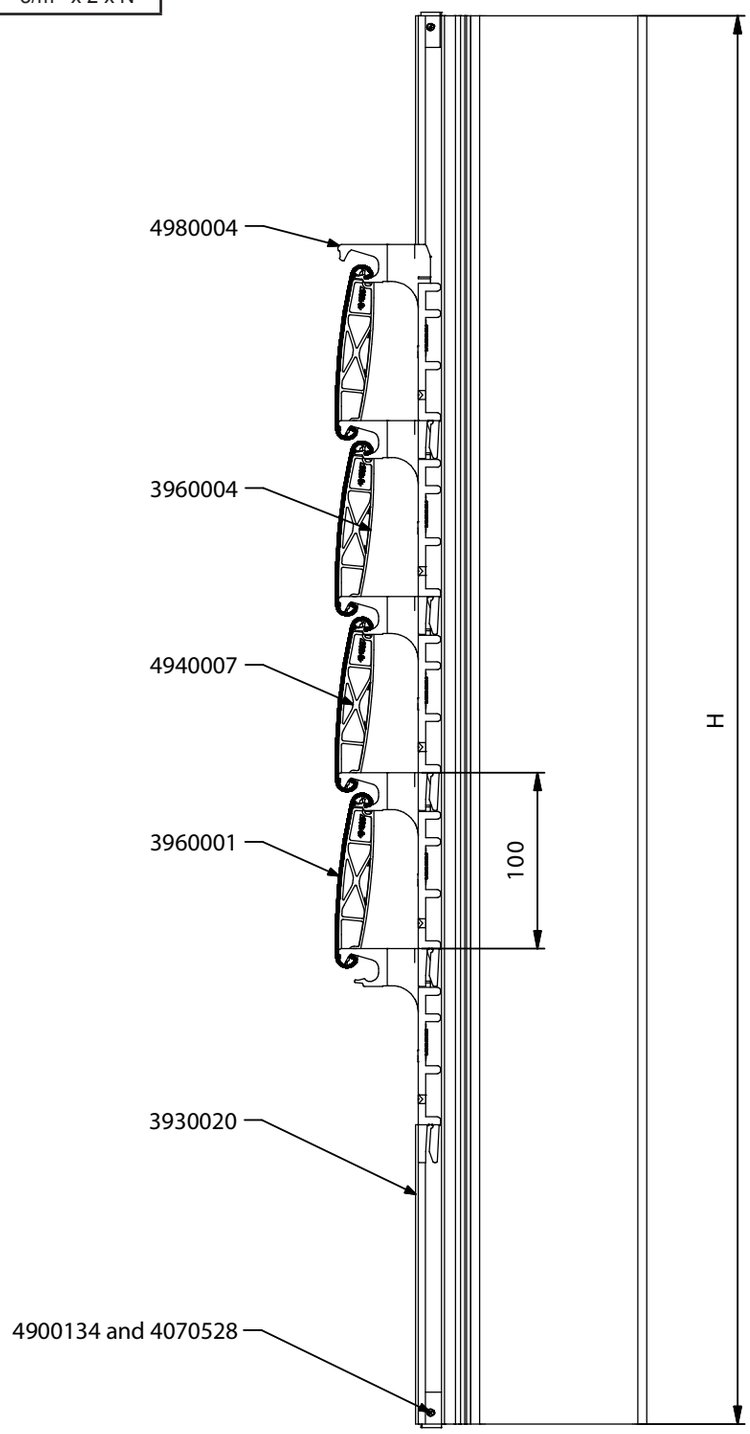
Cladding on 30 mm bearing profile

ACCESSORIES

Ref.	Description	Quantity
4070530	Self tapping screw, M4 x 16	4 x C
4940007	100 mm end cap	2 x C
4980004	Holder for cladding wall	2 x N x (C + 1)
4900134	Spacer / fitting part	2 x N
4070528	Self tapping screw Ø4.2x16	4 x N
198141	Self tapping screw ST4.2 x 19	3/m x 2 x N

GASKETS

Ref.	Description	Quantity
4010114*	Gasket for blade cap	(L/2) x N x C
* ... only if necessary (for covering)		



DOC-0000824036

Blades 3960001 on an independent supporting structure

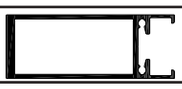
Cladding on 90 mm bearing profile

N = numbers of frames
L = axis dimensions of frames (mm)
H = height of WICSOLAIRE element (mm)

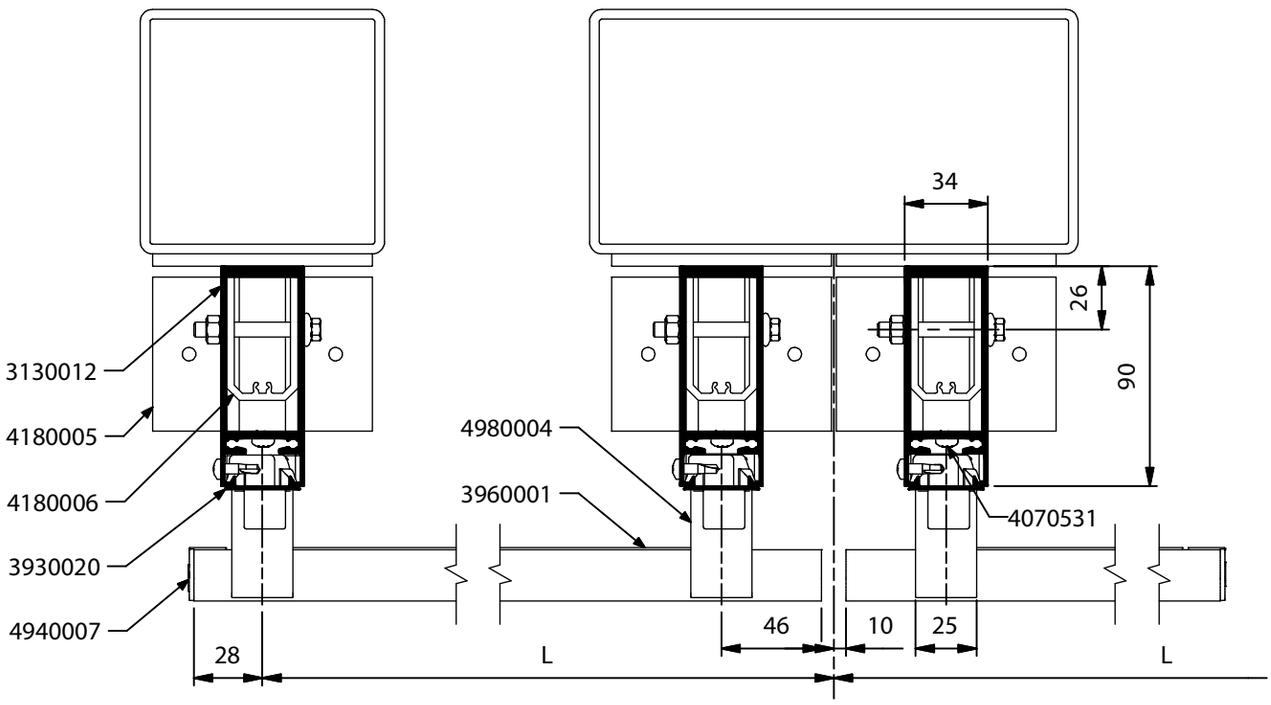
C = entire portion of (H / 100) - 1
Example: If **H** = 2580 mm → **H / 100** = 25,8
therefore **C** = 24 (= number of blades)

Y = number of fastenings 4180006
Y = rounded up **H / 3000**, then **Y** = 2

PROFILES

Ref.	Profiles	Cutting	Quantities		Dimensions
3960001		90°/90°	outer blade	2 x C	L + 23
			inner blade	(N - 2) x C	L - 10
3960004*		90°/90°	outer cover	2 x C	L - 81
			inner cover	(N - 2) x C	L - 127
3130012		90°/90°	2 x N		H
3930020		90°/90°	outer spacer	(N + 1) x 2	[H - (C + 1) x 100] / 2
* ... only if necessary					

Note: For a cladding width that is greater than the frame, the support section must be doubled.
The application requires a vertical fastener 4180006 every three metres of height.



DOC-0000824130

Blades 3960001 on an independent supporting structure

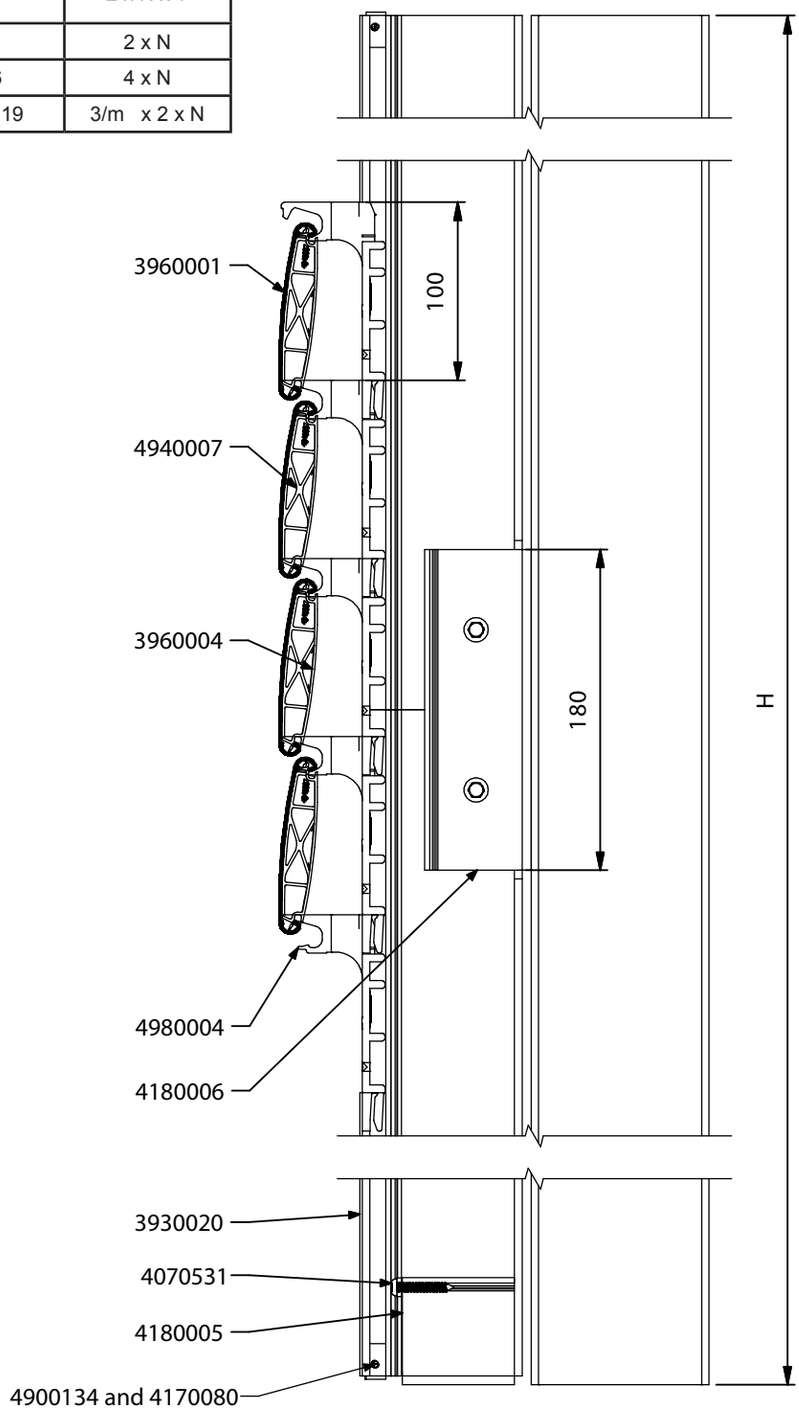
Cladding on 90 mm bearing profile

ACCESSORIES

Ref.	Description	Quantity
4070530	Self tapping screw, M4 x 16	4 x C
4070531	Self tapping screw, ST3.9 x 35	2 x N
4940007	100 mm end cap	2 x C
4980004	Holder for cladding wall	2 x N x (C + 1)
4180005	Base fixing spigot for 90 mm support profile	2 x N
4180006	Vertical fixing spigot for 90 mm support profile	2 x N x Y
4900134	Spacer / fitting part	2 x N
4070528	Self tapping screw Ø4.2x16	4 x N
198141	Self tapping screw ST4.2 x 19	3/m x 2 x N

GASKETS

Ref.	Description	Quantity
4010114*	Gasket for blade cap	(L/2) x N x C
* ... only if necessary (for covering)		

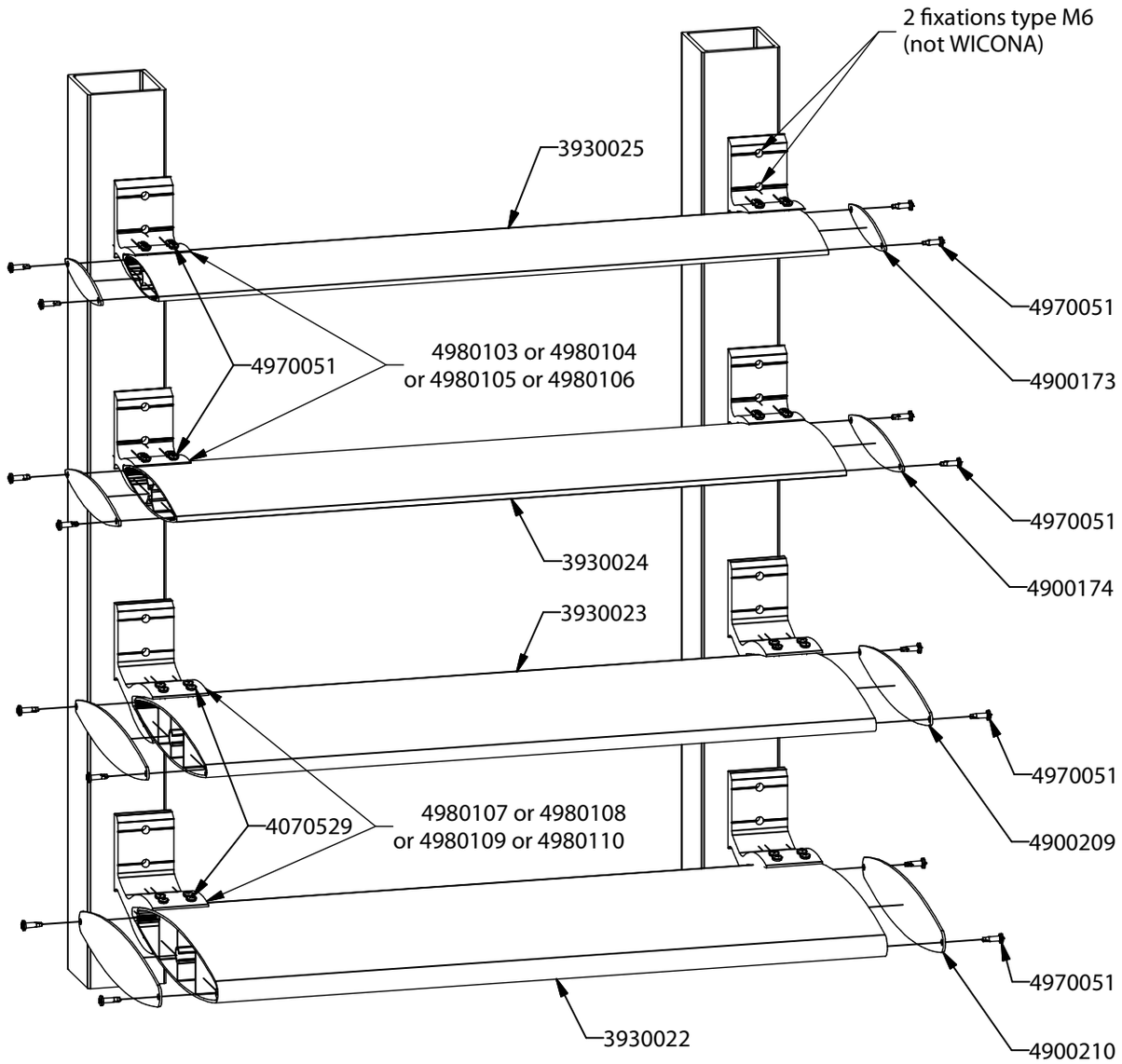


DOC-0000824130

One-piece fixed blades
on an independent supporting structure
Continuous horizontal blades, 120 mm to 270 mm

PROFILES AND ACCESSORIES

Ref.	Profiles	Description	End flange	Clip / blade screws
3930025		Blade 120 x 25	4900173	4970051
3930024		Blade 180 x 30	4900174	
3930023		Blade 240 x 40	4900209	4070529
3930022		Blade 270 x 50	4900210	



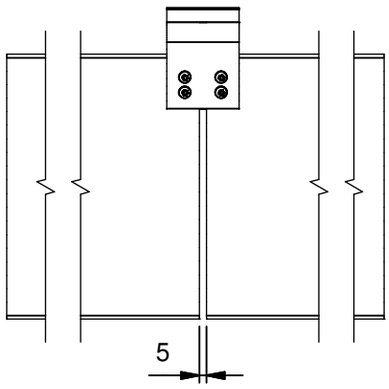
DOC-0000830047

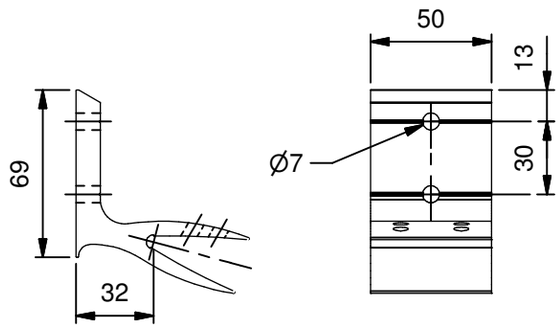
One-piece fixed blades
on an independent supporting structure
Continuous horizontal blades, 120 mm to 270 mm

CLIP SELECTION

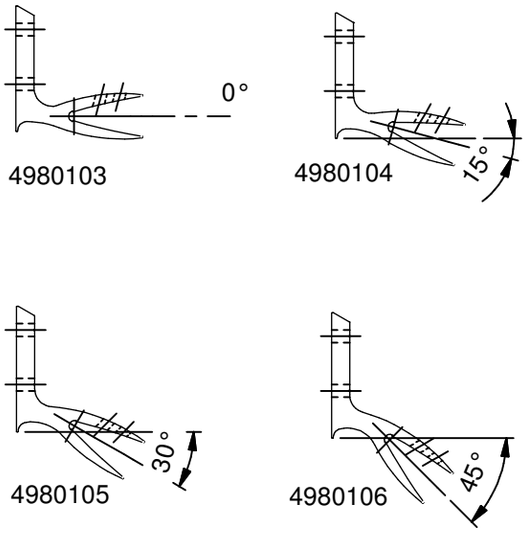
Angle of clip	Reference	
	For blades sized 120 and 180 (mm)	For blades sized 240 and 270 (mm)
Clip to 0°	4980103	4980107
Clip to 15°	4980104	4980108
Clip to 30°	4980105	4980109
Clip to 45°	4980106	4980110

For blade coupling

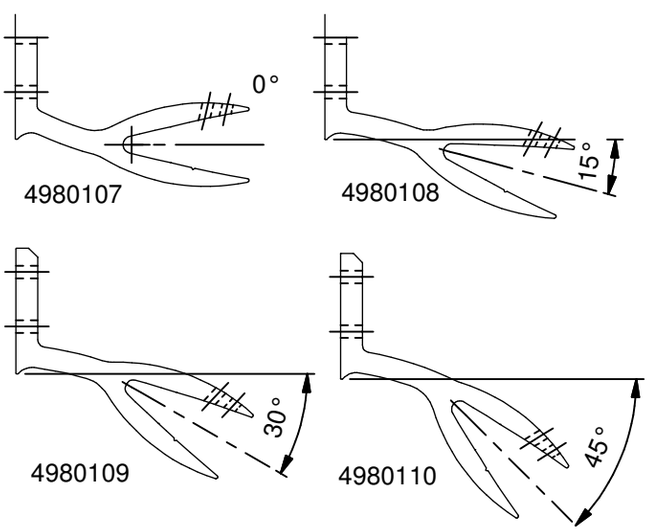


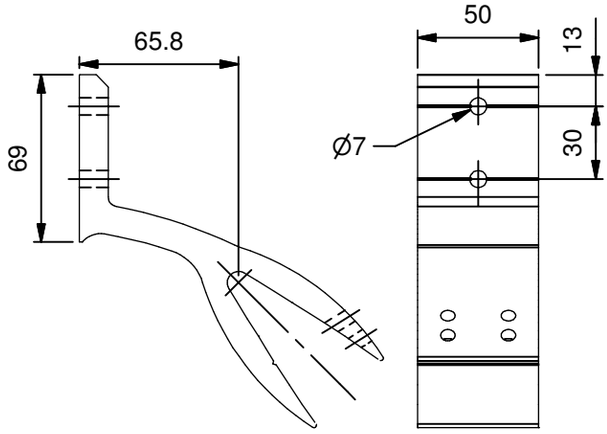


Clips for blades sized 120 mm and 180 mm



Clips for blades sized 240 mm and 270 mm



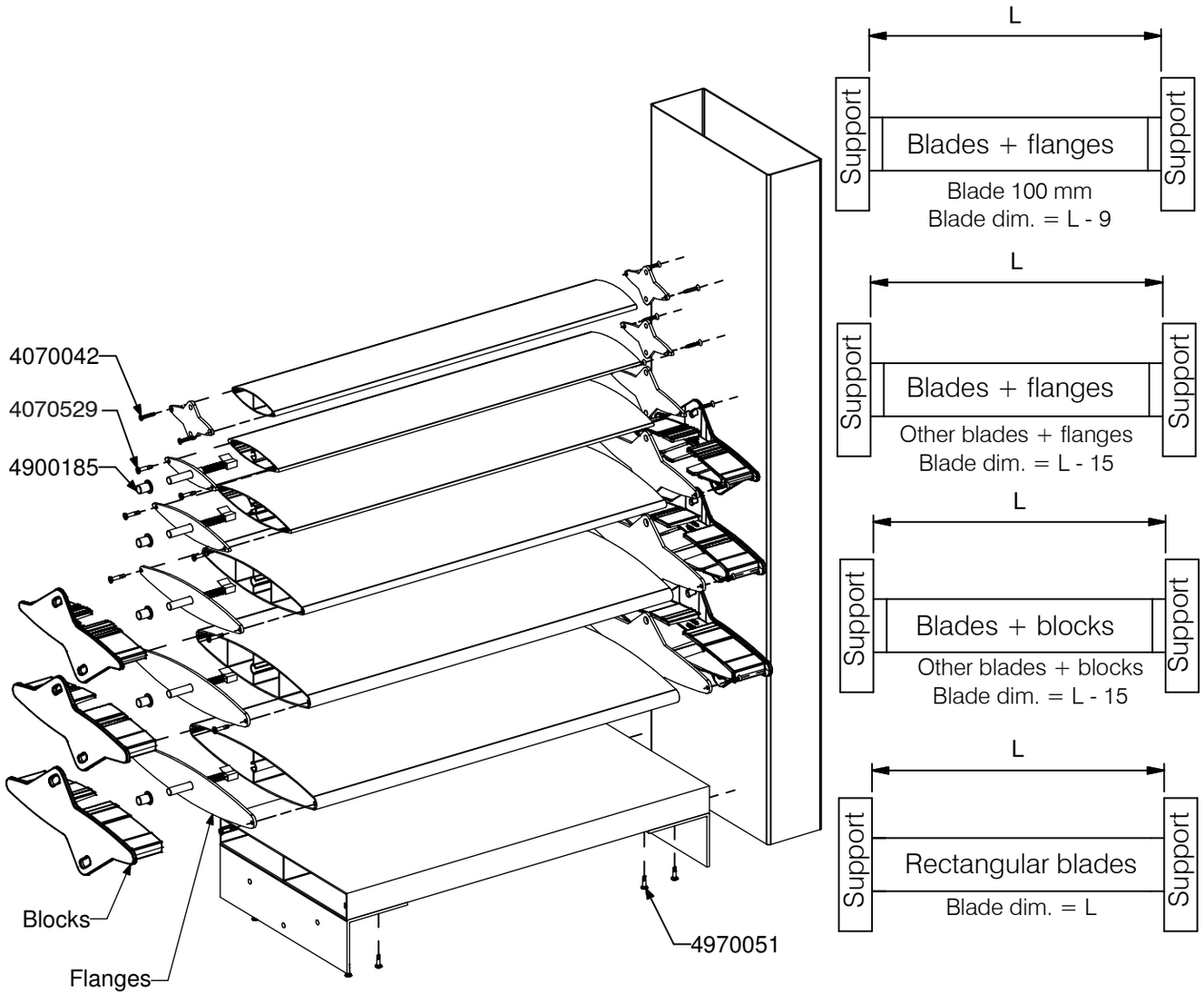


DOC-0000783847

One-piece fixed blades
on an independent supporting structure
Horizontal blades between 100 mm to 300 mm bearing structure

PROFILES AND ACCESSORIES

Ref.	Profile	End part		Blade / end piece screws
3930202		Flanges	4900172	4070042
3930025		Flanges	4900171 and 4900186	4070042 + 4070529
3930024		Flanges	4900170 and 4900182	4070042 + 4070529
3930023		Flanges	4900168 and 4900223	4070042 + 4070529
		Blocks	4900177 and 4900178	nested
3930022		Flanges	4900167 and 4900224	4070042 + 4070529
		Blocks	4900179 and 4900180	nested
3930208		Flanges	4900169 and 4900225	4070042 + 4070529
		Blocks	4900240 and 4900241	nested
3130018		Flanges	4900242	4970051

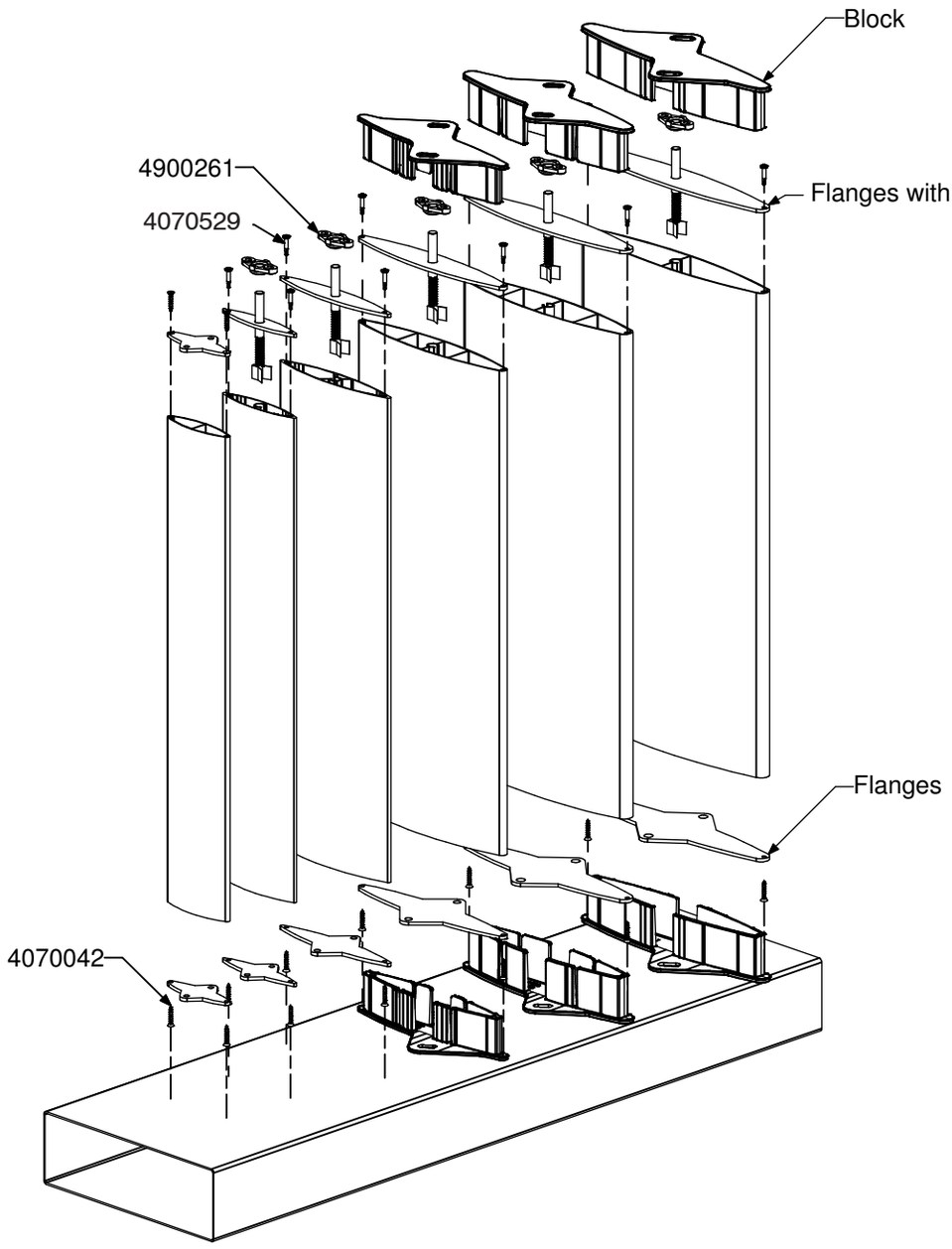


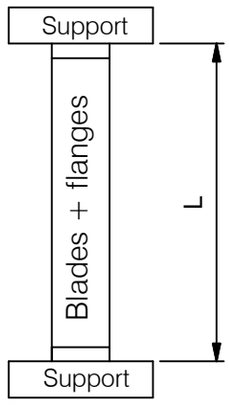
DOC-0000823120

One-piece fixed blades
on an independent supporting structure
Vertical blades between 100 mm to 300 mm bearing structure

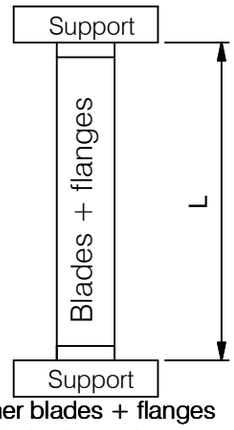
PROFILES AND ACCESSORIES

Ref.	Profile	End part		Blade / end piece screws
3930202		Flanges	4900172	4070042
3930025		Flanges	4900171 and 4900186	4070042 + 4070529
3930024		Flanges	4900170 and 4900182	4070042 + 4070529
3930023		Flanges	4900168 and 4900223	4070042 + 4070529
		Blocks	4900177 and 4900178	nested
3930022		Flanges	4900167 and 4900224	4070042 + 4070529
		Blocks	4900179 and 4900180	nested
3930208		Flanges	4900169 and 4900225	4070042 + 4070529
		Blocks	4900240 and 4900241	nested

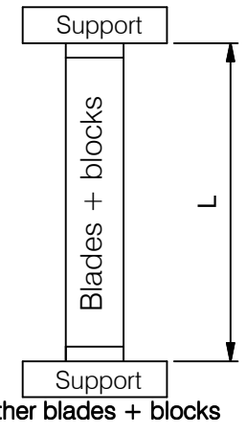




Blade 100 mm
Blade dim. = L - 9



Other blades + flanges
Blade dim. = L - 15

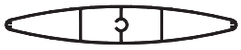
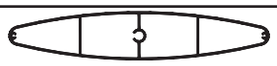


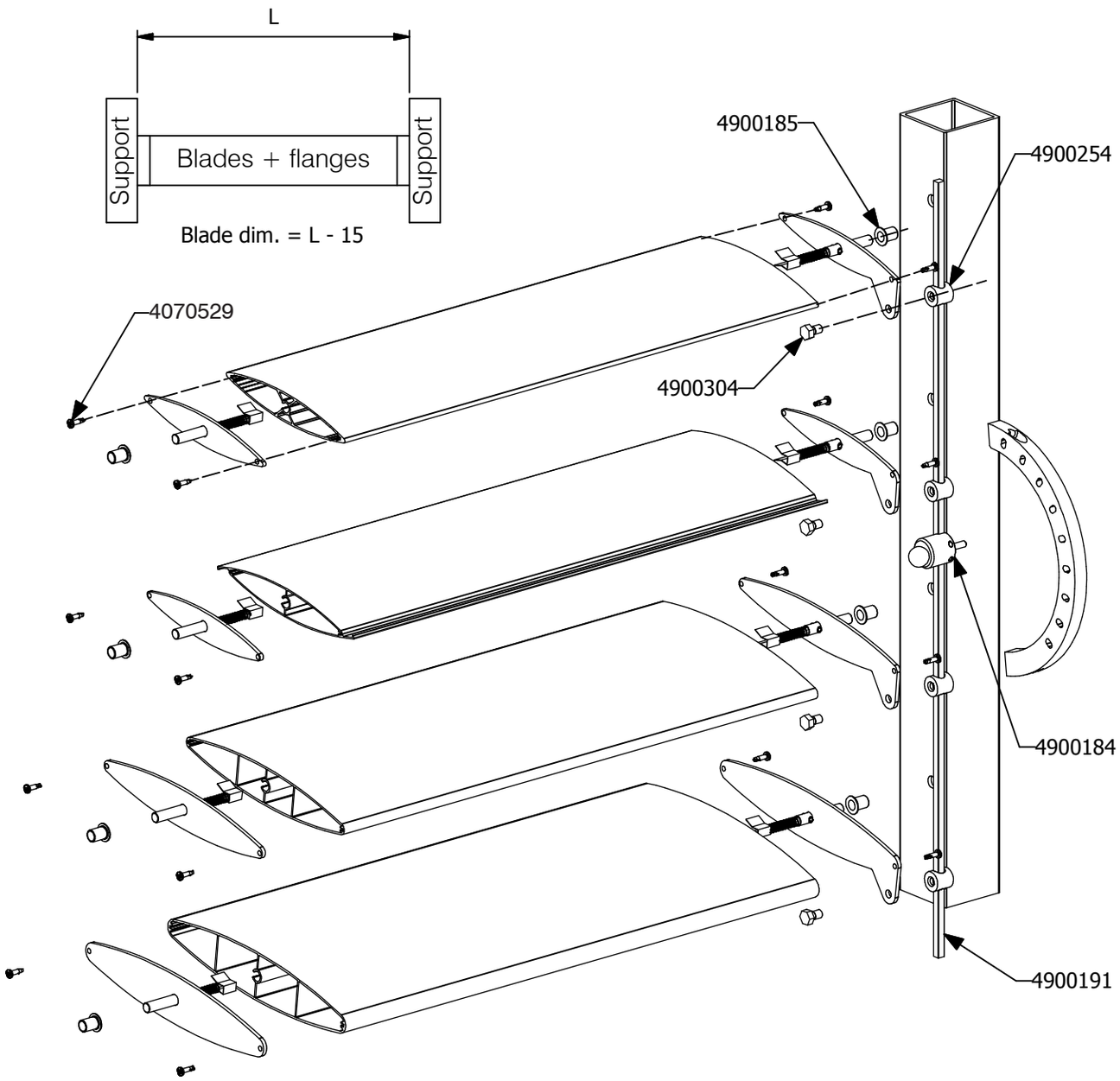
Other blades + blocks
Blade dim. = L - 15

DOC-0000823106

One-piece movable blades
on an independent supporting structure
Horizontal blades, from 180 mm to 270 mm - manual positioning

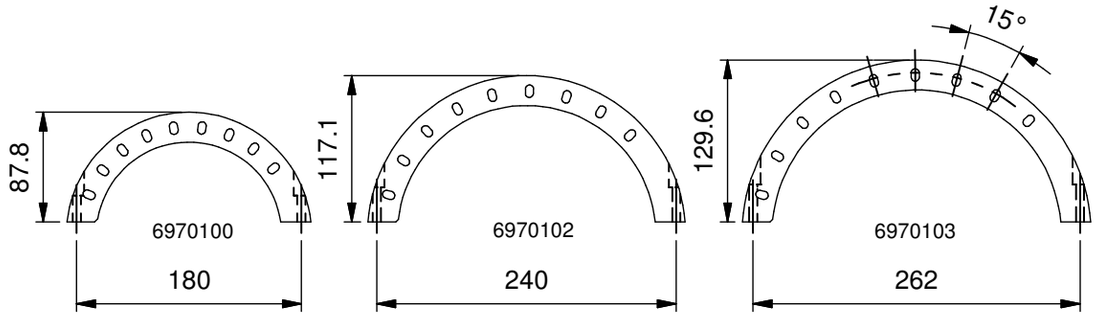
PROFILES AND ACCESSORIES

Ref.	Profile	Pivoting flange	Pivoting flange with lug	Arc
3930024		4900182	4900181	6970100
3930205		4900222	4900213	
3930023		4900223	4900214	6970102
3930022		4900224	4900215	6970103

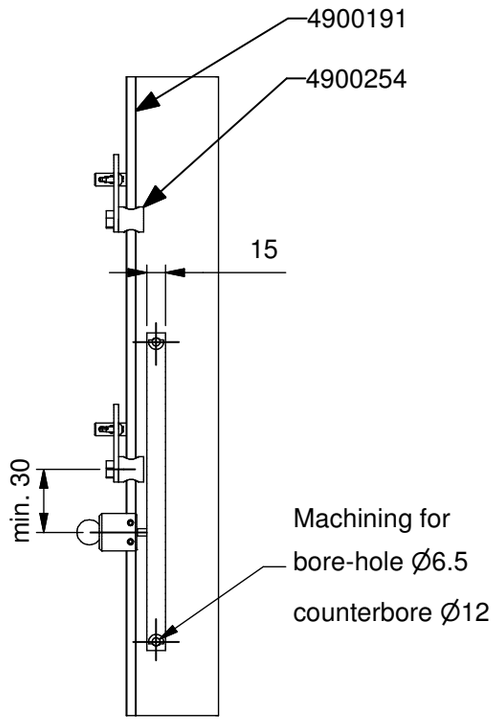


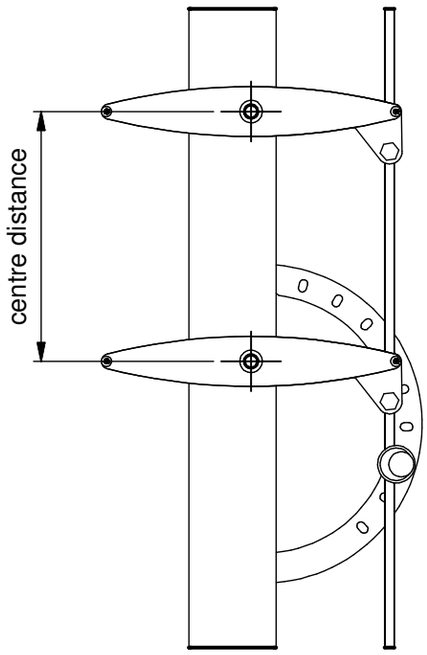
DOC-0000817461

One-piece movable blades
on an independent supporting structure
Horizontal blades, from 180 mm to 270 mm - manual positioning

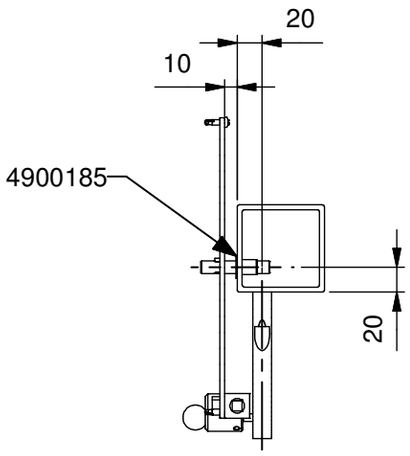


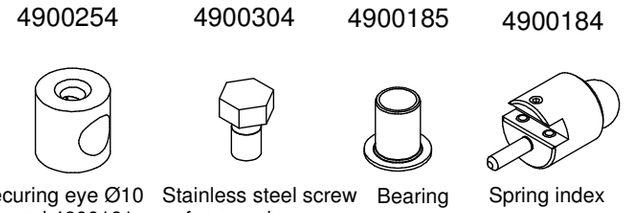
Note: The arc 6970100 is used for 180 mm and 210 mm blade.





Note: recommended centre distance = blade width + minimum 5 mm
rod length max. 3 m



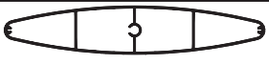


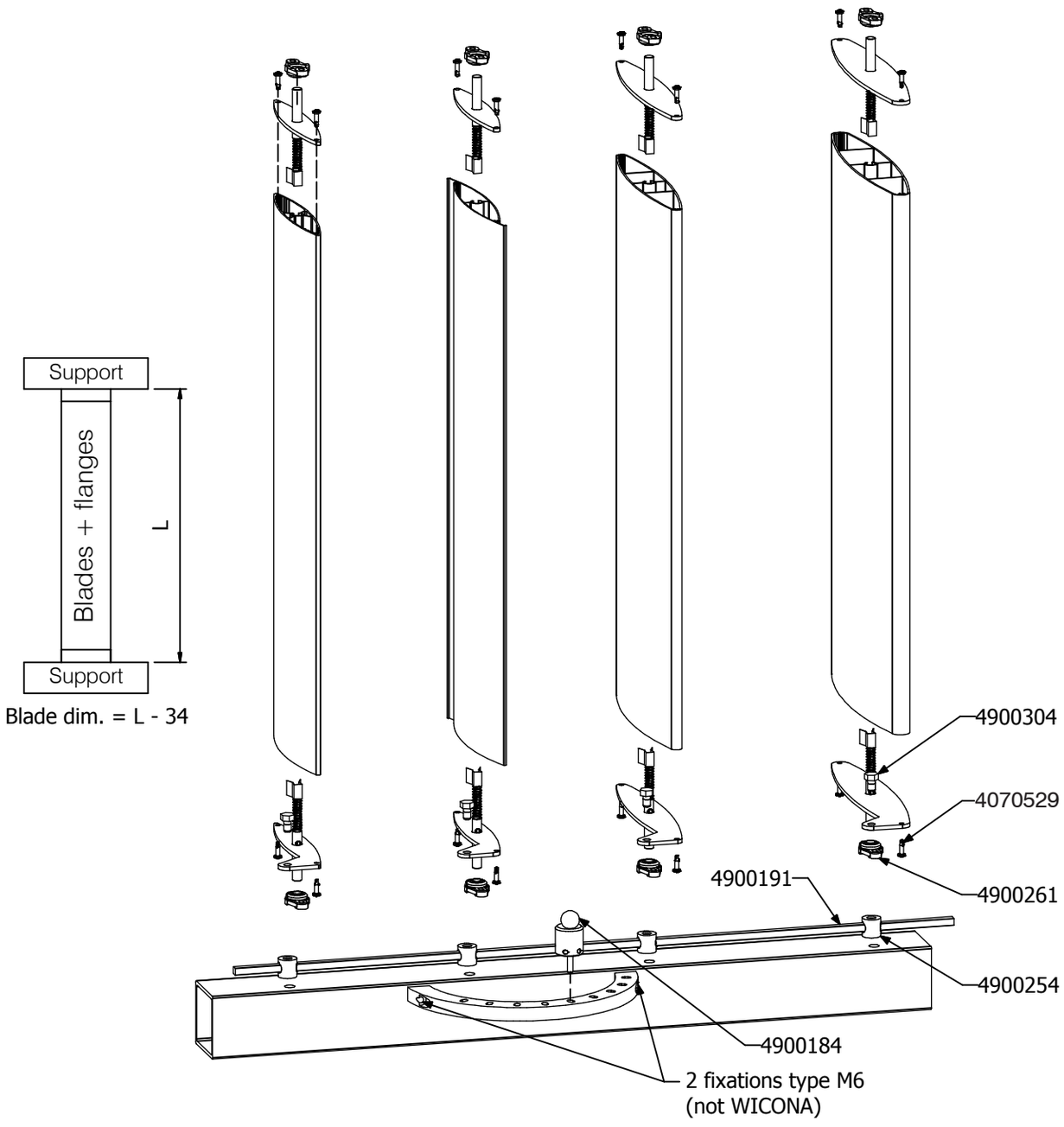
Securing eye Ø10 for rod 4900191 | Stainless steel screw for securing eye | Bearing | Spring index

DOC-0000817492

One-piece movable blades
on an independent supporting structure
Vertical blades, from 180 mm to 270 mm - manual positioning

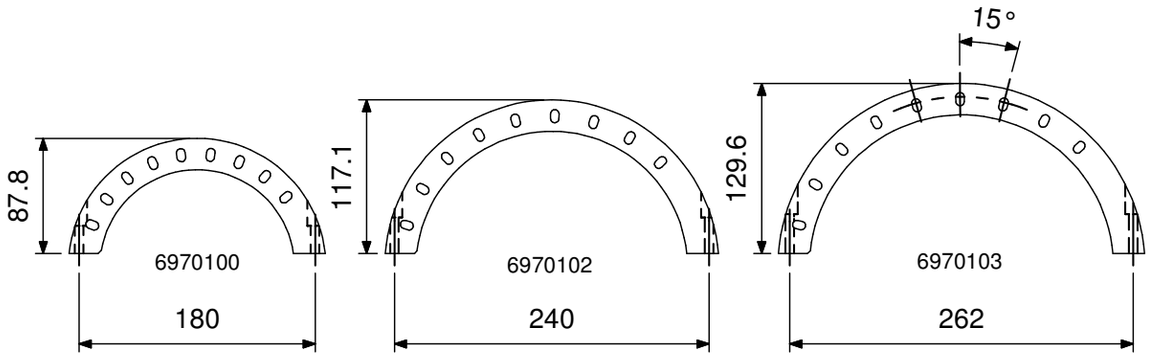
PROFILES AND ACCESSORIES

Ref.	Profile	Pivoting flange	Pivoting flange with lug	Arc
3930024		4900182	4900181	6970100
3930205		4900222	4900213	
3930023		4900223	4900214	6970102
3930022		4900224	4900215	6970103

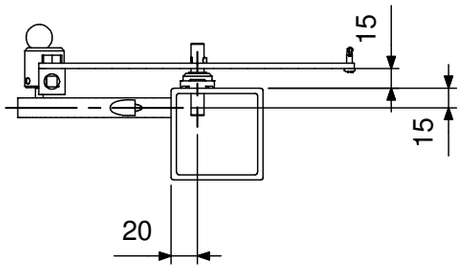


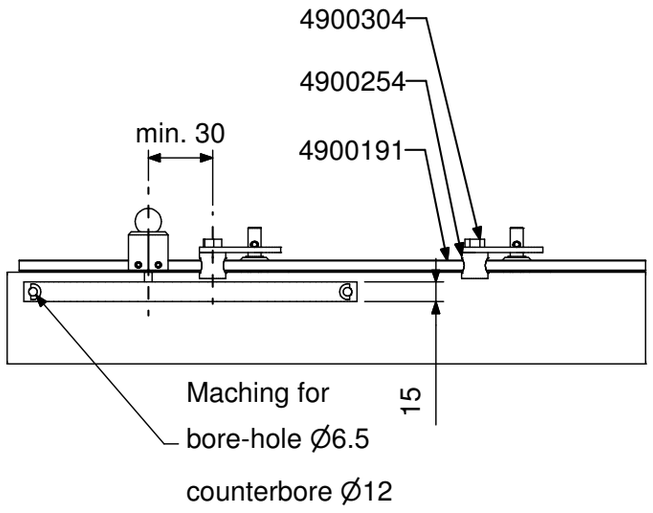
DOC-0000817504

One-piece movable blades
on an independent supporting structure
Vertical blades, from 180 mm to 270 mm - manual positioning



Note: The arc 6970100 is used for 180 mm and 210 mm blade.



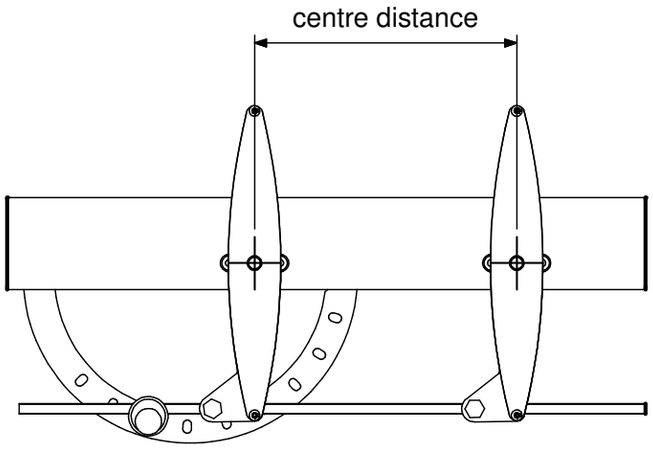


4900254

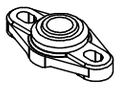
Securing eye Ø10
for rod 4900191

4900304

Steinless steel screw
for securing eye

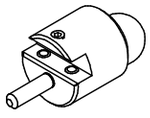


4900261



Bearing

4900184



Spring index

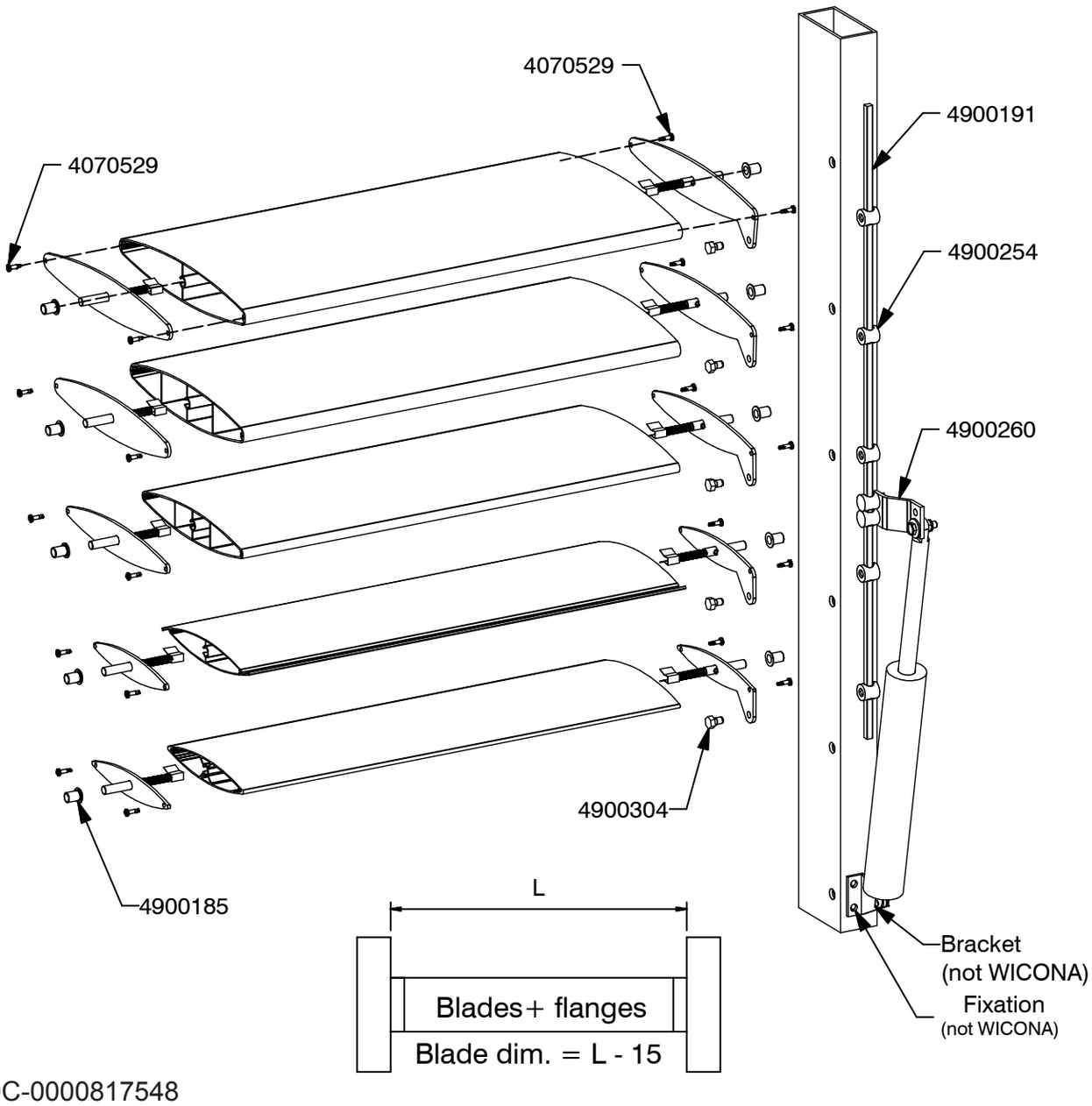
Note: recommended centre distance = blade width + minimum 5 mm
rod length max. 3 m

DOC-0000817515

One-piece movable blades
on an independent supporting structure
Horizontal blades, from 180 mm to 300 mm - motorised positioning

PROFILES AND ACCESSORIES

Ref.	Profile	Pivoting flange	Pivoting flange with lug
3930024		4900182	4900181
3930205		4900222	4900213
3930023		4900223	4900214
3930022		4900224	4900215
3930208		4900225	4900216



DOC-0000817548

One-piece movable blades on an independent supporting structure

Horizontal blades, from 180 mm to 300 mm - motorised positioning

4900254

Securing eye Ø10 for rod 4900191

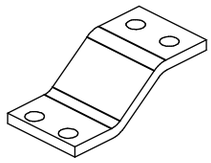
4900304

Stainless steel screw for securing eye

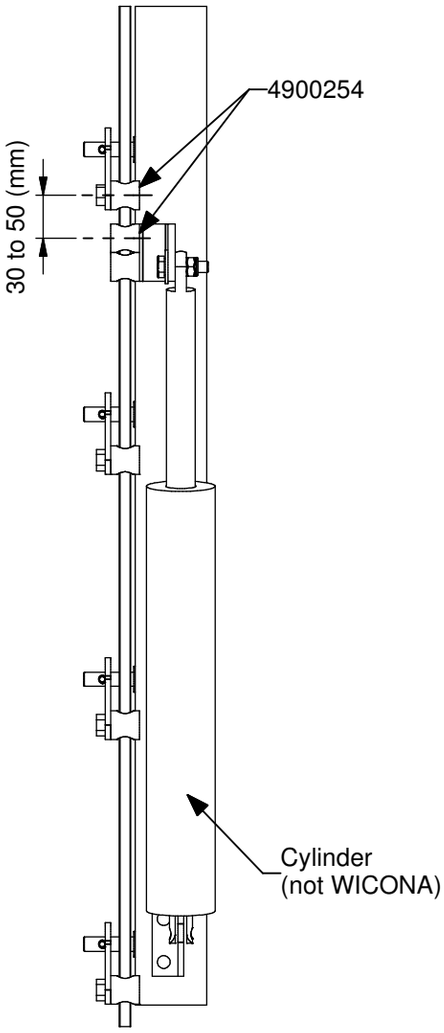
4900185

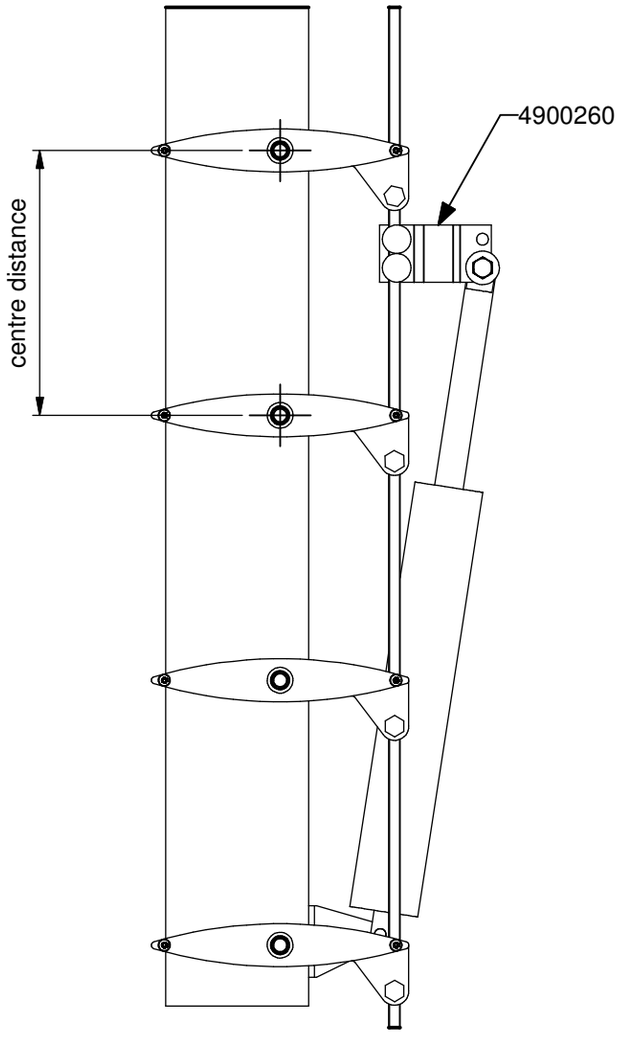
Bearing

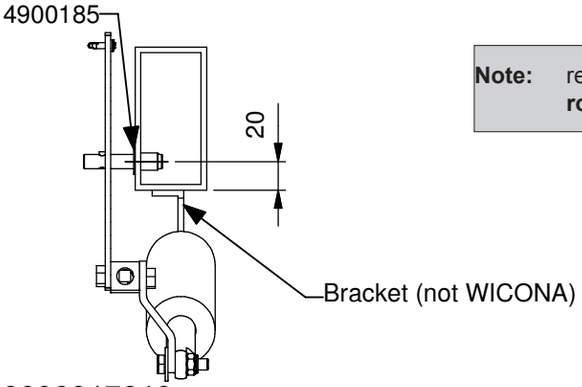
4900260



Cylinder / rod link piece







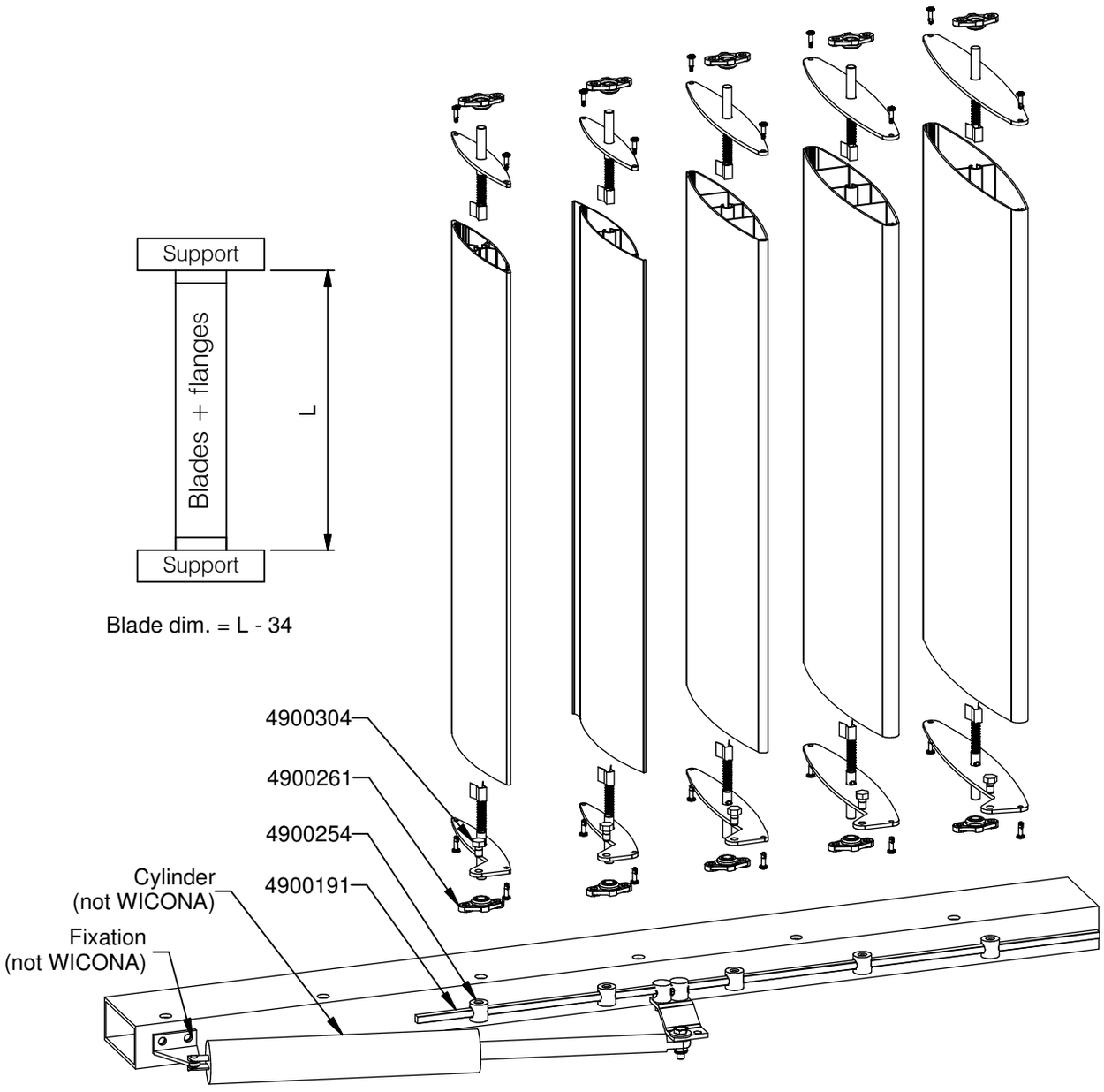
Note: recommended centre distance = blade width + minimum 5 mm
rod length max. 3 m

DOC-0000817618

One-piece movable blades
on an independent supporting structure
Vertical blades, from 180 mm to 300 mm - motorised positioning

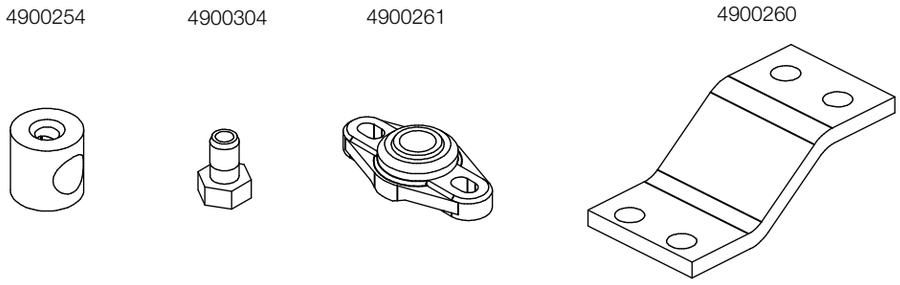
PROFILES AND ACCESSORIES

Ref.	Profile	Pivoting flange	Pivoting flange with lug
3930024		4900182	4900181
3930205		4900222	4900213
3930023		4900223	4900214
3930022		4900224	4900215
3930208		4900225	4900216



DOC-0000817654

One-piece movable blades
on an independent supporting structure
Vertical blades, from 180 mm to 300 mm - motorised positioning

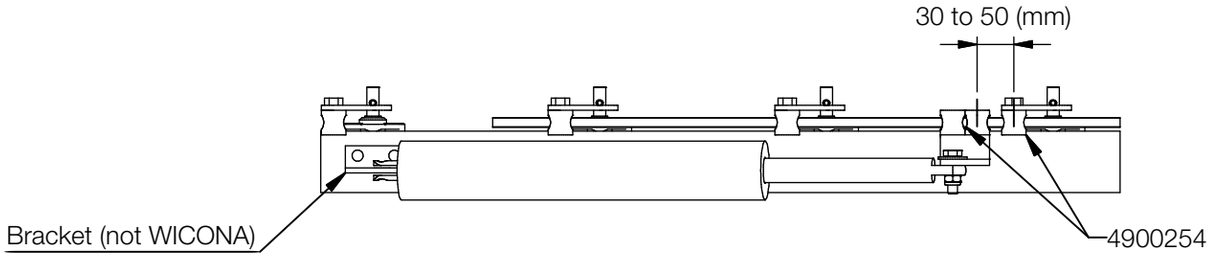


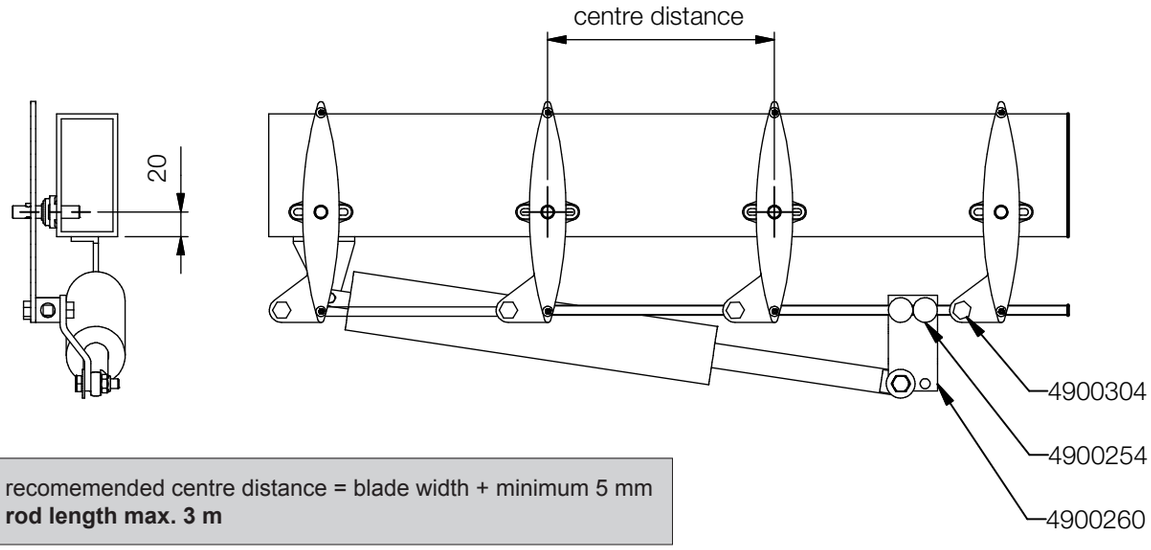
Securing eye 10 for rod 4900191

Stainless steel screw for securing eye

Bearing

Cylinder / rod link piece

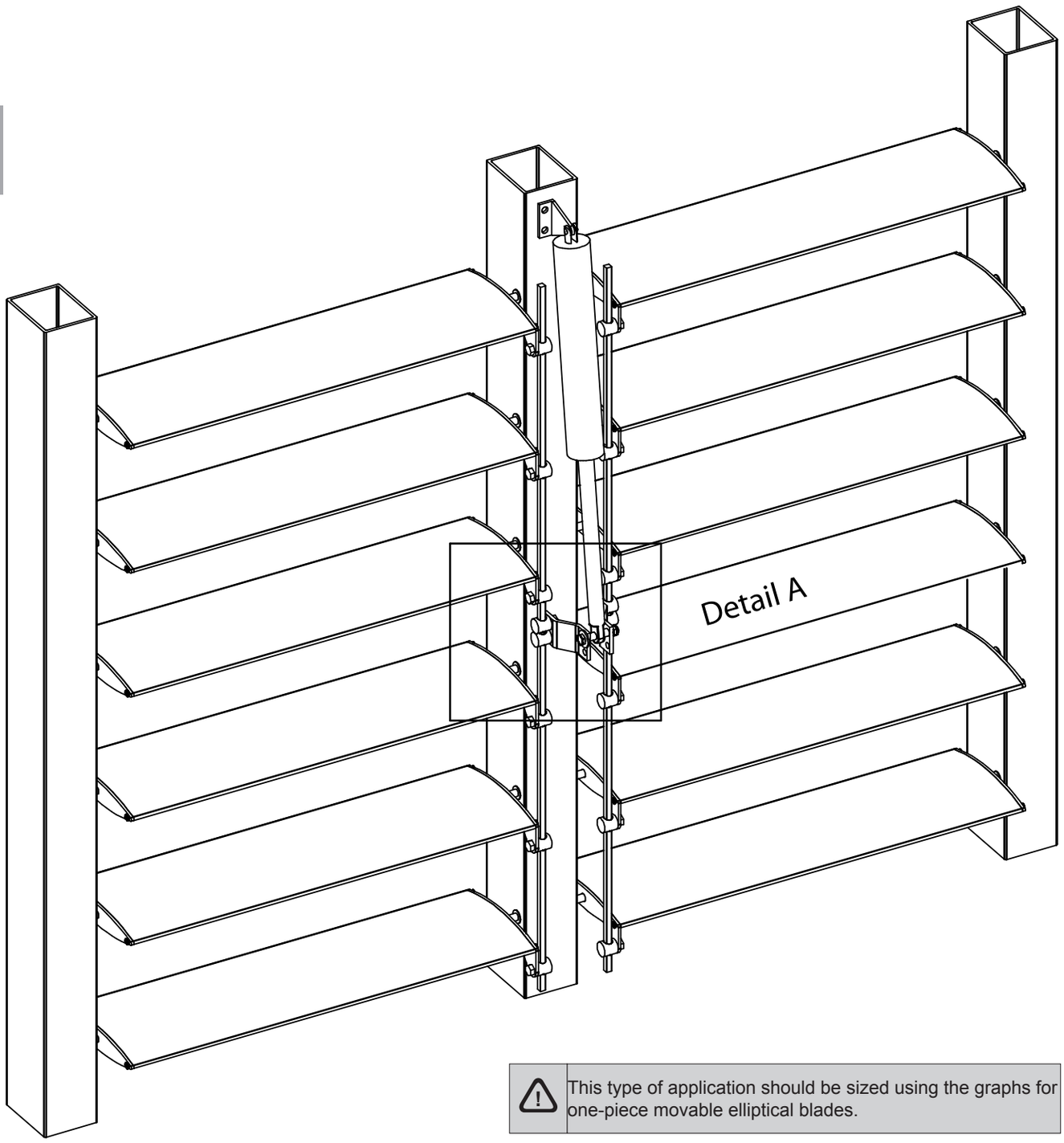




Note: recomemended centre distance = blade width + minimum 5 mm
rod length max. 3 m

DOC-0000817682

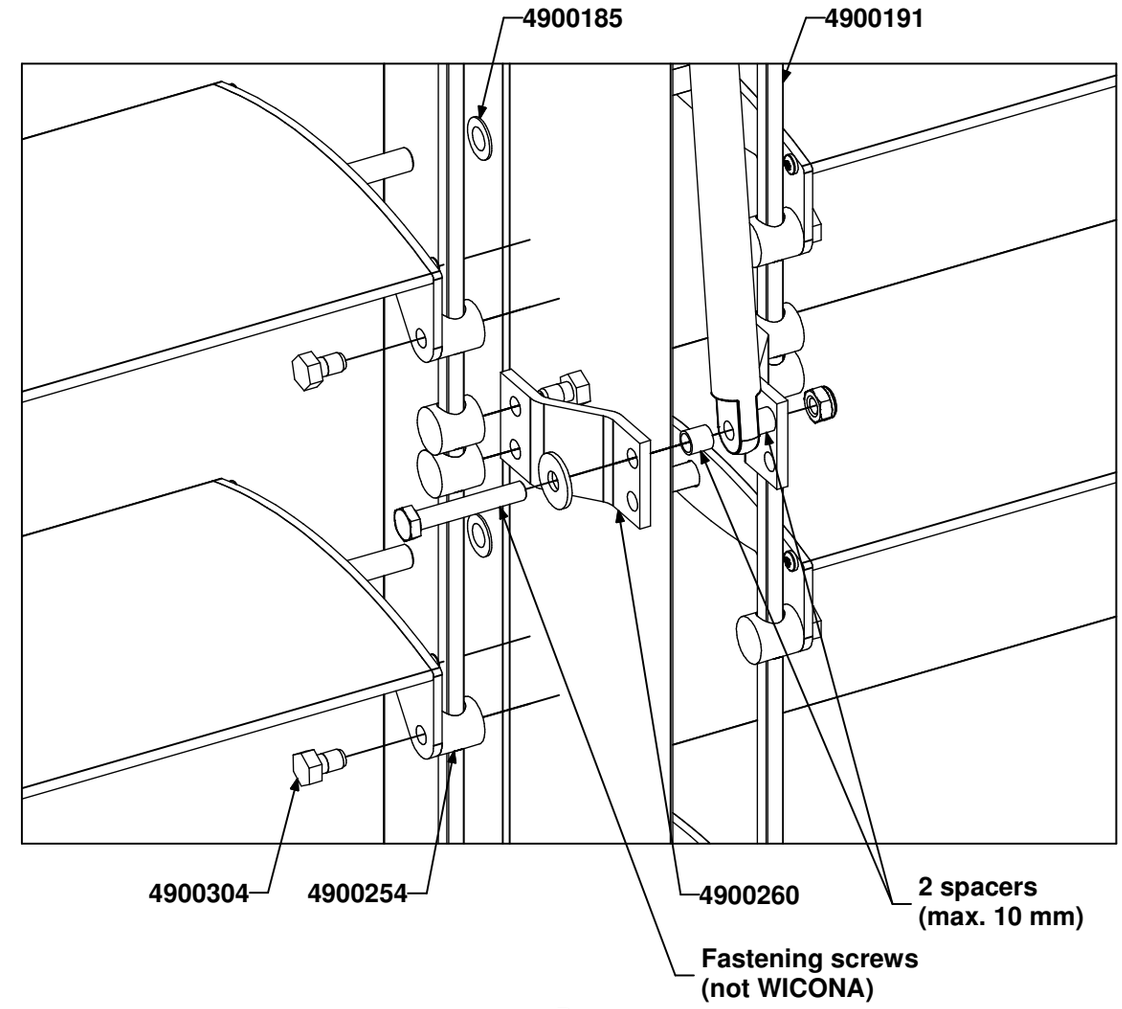
One-piece movable blades
on an independent supporting structure
Motorisation of two frames with a single cylinder

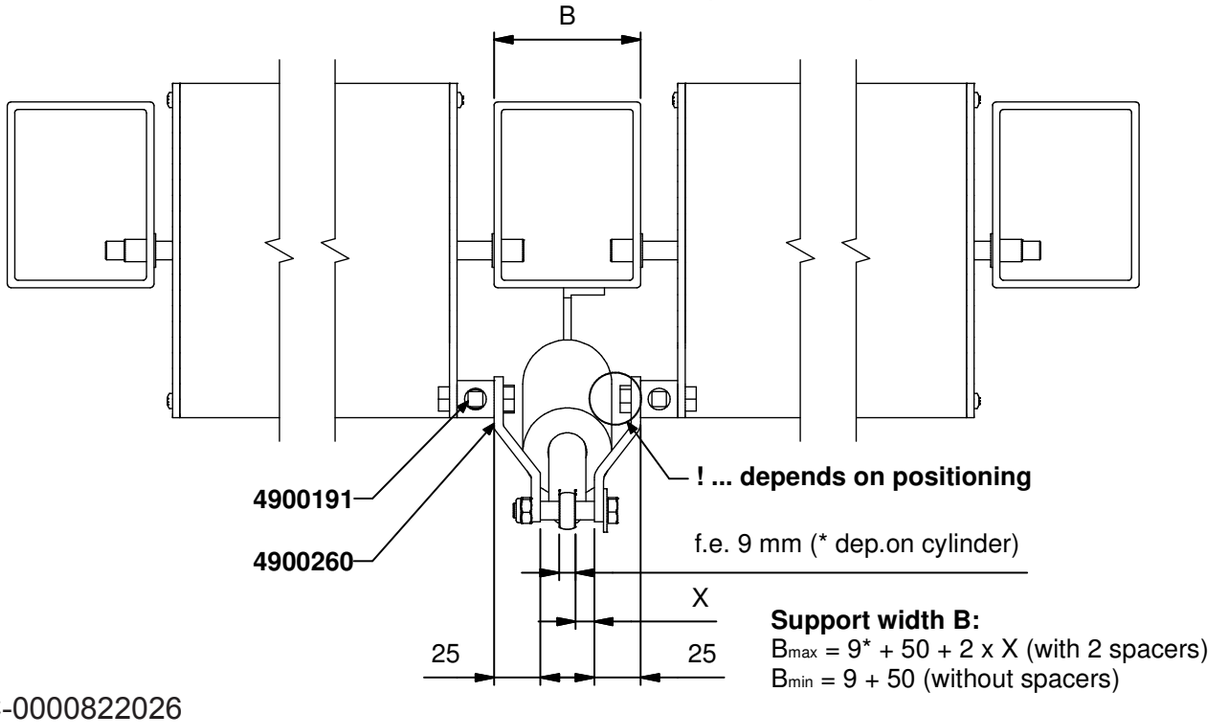


⚠ This type of application should be sized using the graphs for one-piece movable elliptical blades.

One-piece movable blades
on an independent supporting structure
Motorisation of two frames with a single cylinder

Detail A





Support width B:
B_{max} = 9* + 50 + 2 x X (with 2 spacers)
B_{min} = 9 + 50 (without spacers)

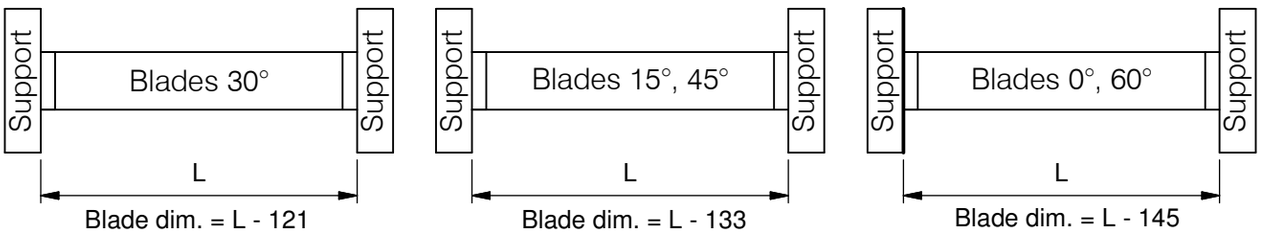
DOC-0000822026

Composite blades on an independent supporting structure

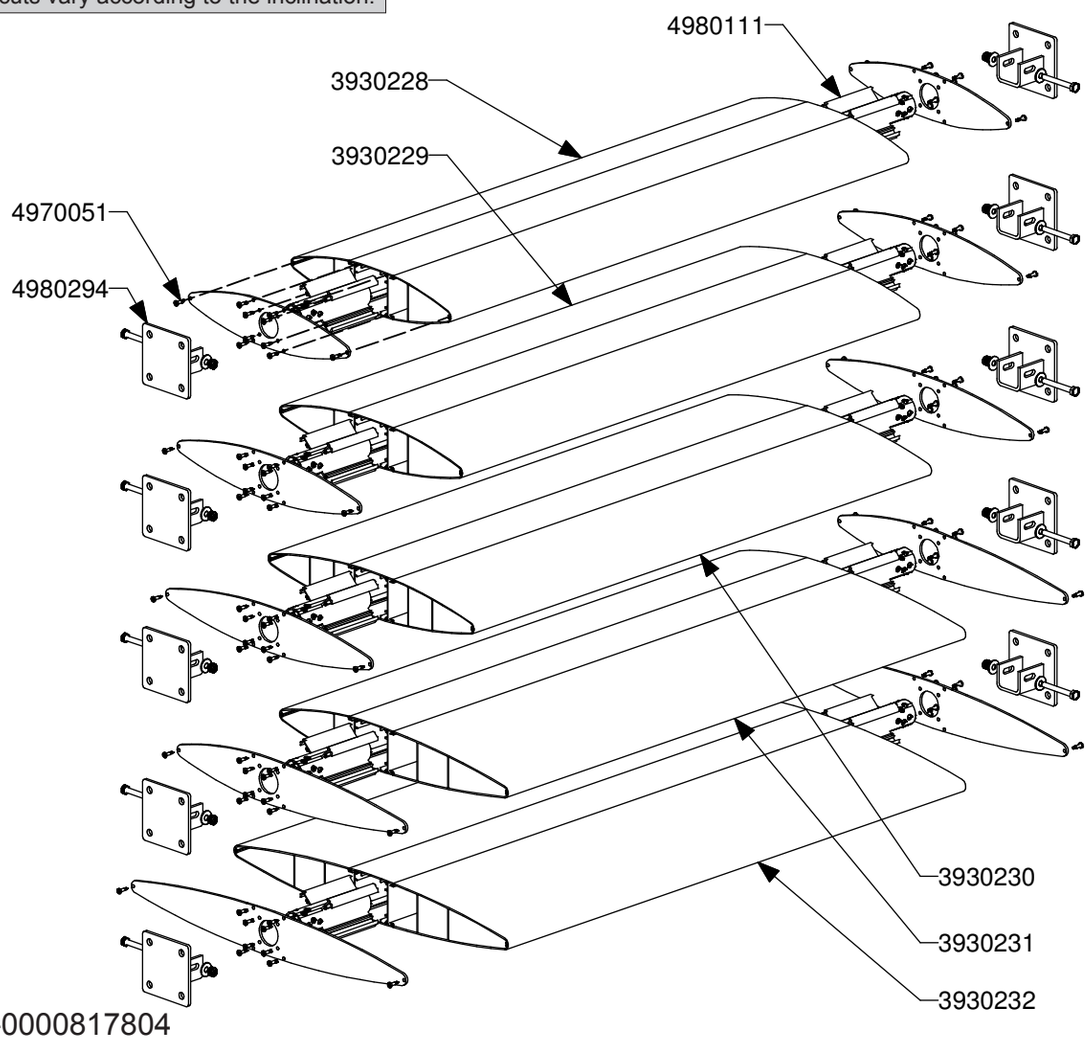
Horizontal blades between 350 mm to 600 mm bearing structure

PROFILES AND ACCESSORIES

Ref.	Profile	Description	End flange	Screws flanges / sleeve / blade
3930228		Blade 350 x 75	4900281	4970051
3930229		Blade 400 x 75	4900282	
3930230		Blade 450 x 75	4900283	
3930231		Blade 500 x 75	4900284	
3930232		Blade 600 x 75	4900285	



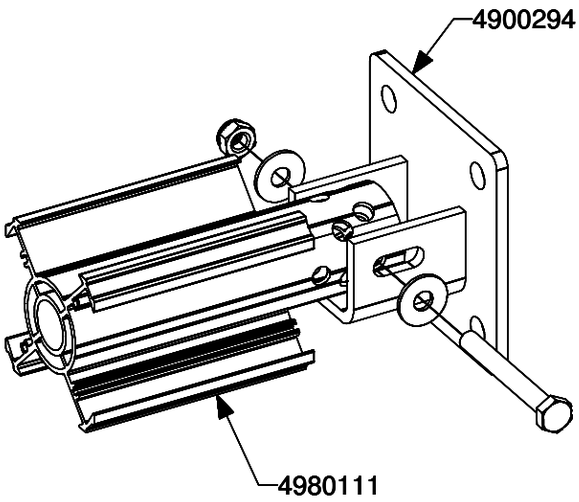
The cuts vary according to the inclination.

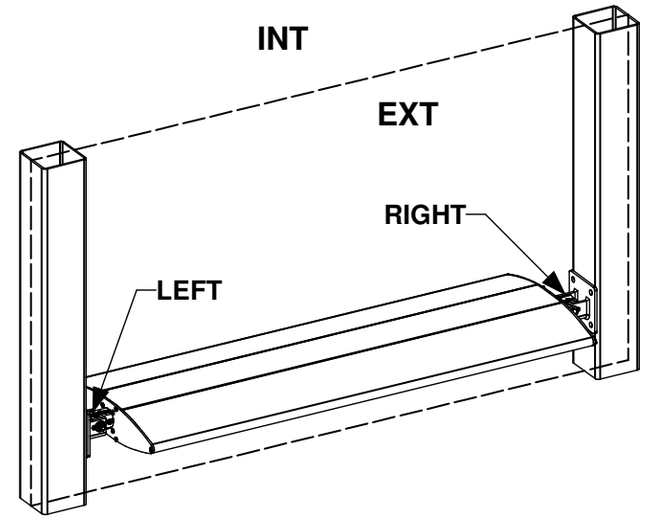


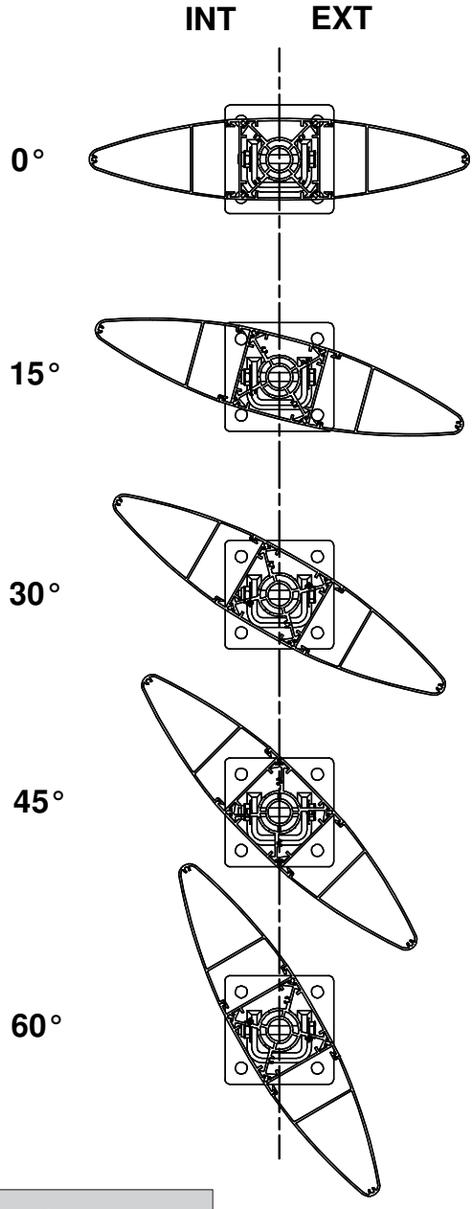
DOC-0000817804

Composite blades on an independent supporting structure

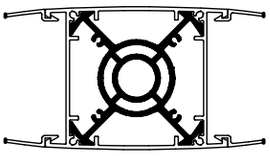
Horizontal blades between 350 mm to 600 mm bearing structure



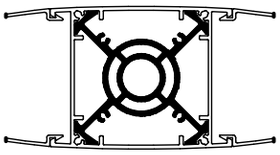




Note: Depending on positioning (left or right) in the assembly and the direction of the blades, the sleeve must be inserted into the blade in different positions.



Position 1



Position 2

Direction of blades and positioning of sleeves

	0°	15°	30°	45°	60°
LEFT	Position 1	Position 1	Position 2	Position 2	Position 1
RIGHT	Position 1	Position 2	Position 2	Position 1	Position 1

DOC-0000817804

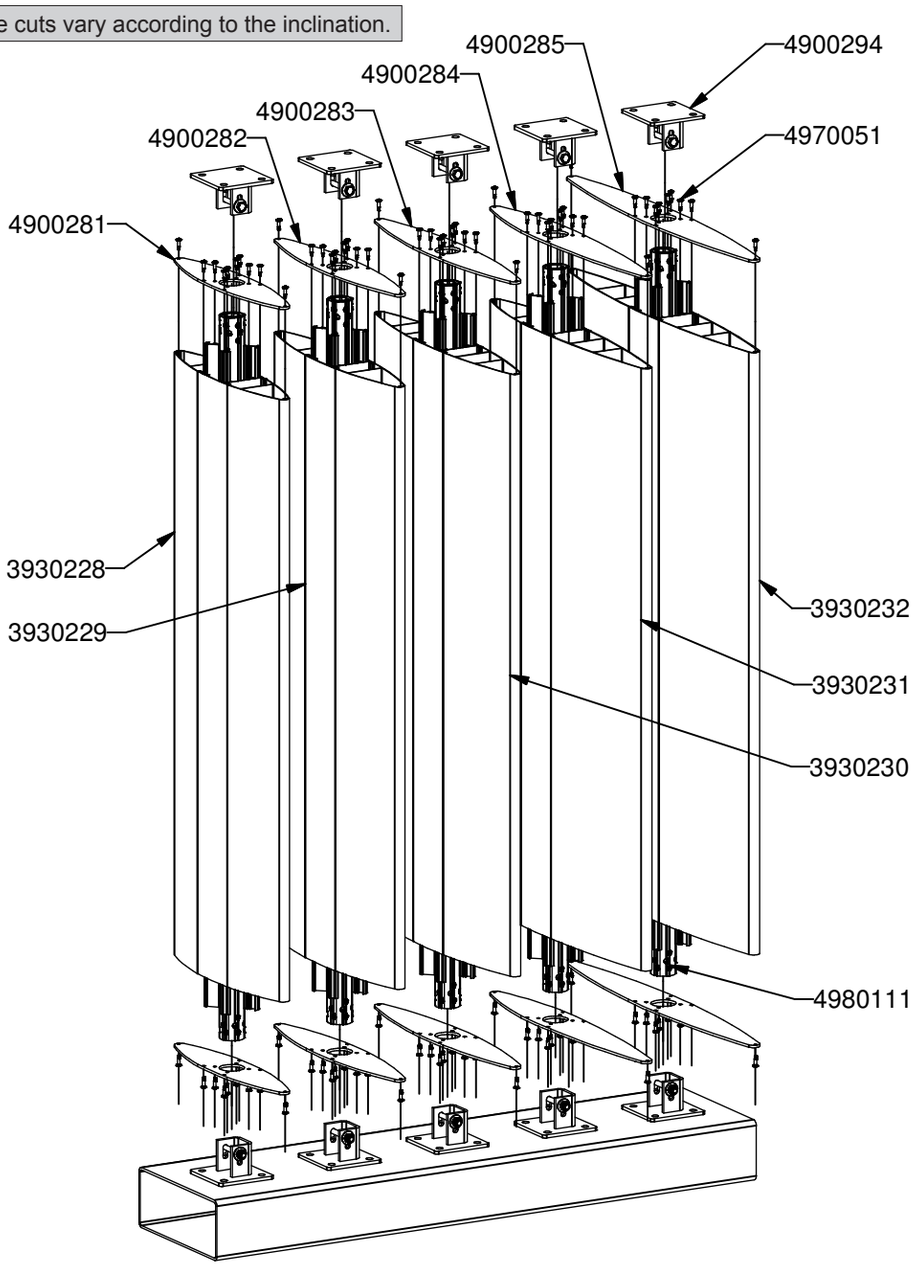
Composite blades on an independent supporting structure

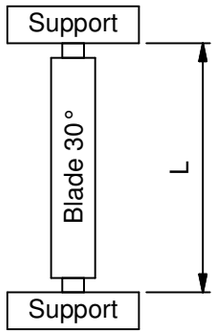
Vertical blades between 350 mm to 600 mm bearing structure

PROFILES AND ACCESSORIES

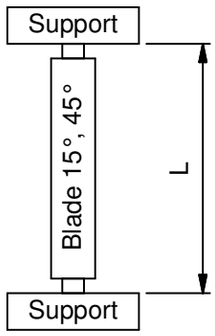
Ref.	Profile	Description	End flange	Screws flanges / sleeve / blade
3930228		Blade 350 x 75	4900281	4970051
3930229		Blade 400 x 75	4900282	
3930230		Blade 450 x 75	4900283	
3930231		Blade 500 x 75	4900284	
3930232		Blade 600 x 75	4900285	

The cuts vary according to the inclination.

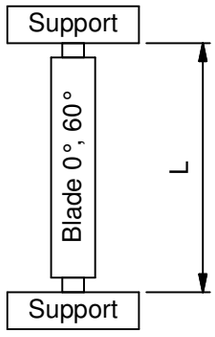




Blade dim. = L - 121



Blade dim. = L - 133

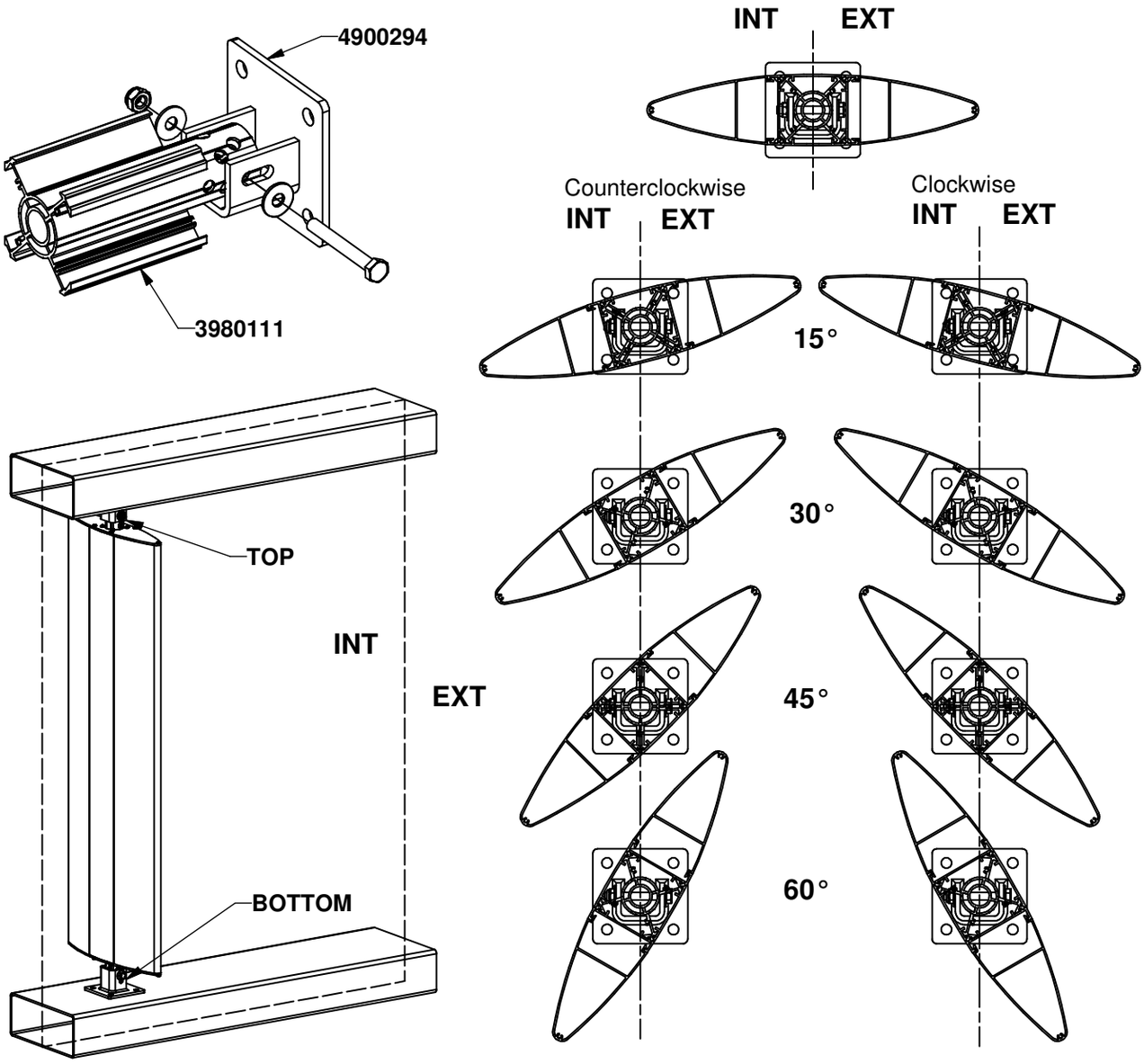


Blade dim. = L - 145

DOC-0000830062

Composite blades on an independent supporting structure

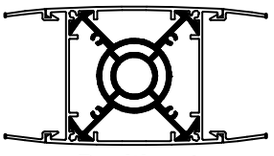
Vertical blades between 350 mm to 600 mm bearing structure



Note: Depending on positioning (top or bottom) in the assembly and the direction of the blades, the sleeve must be inserted into the blade in different positions.

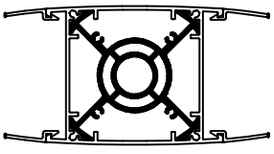
Direction of blades and positioning of sleeves

Clockwise	0°	15°	30°	45°	60°
BOTTOM	Position 1	Position 2	Position 2	Position 1	Position 1
TOP	Position 1	Position 1	Position 2	Position 2	Position 1



Position 1

Counter-clockwise	0°	15°	30°	45°	60°
BOTTOM	Position 1	Position 1	Position 2	Position 2	Position 1
TOP	Position 1	Position 2	Position 2	Position 1	Position 1



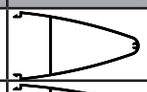
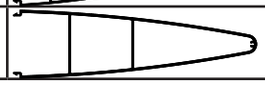
Position 2

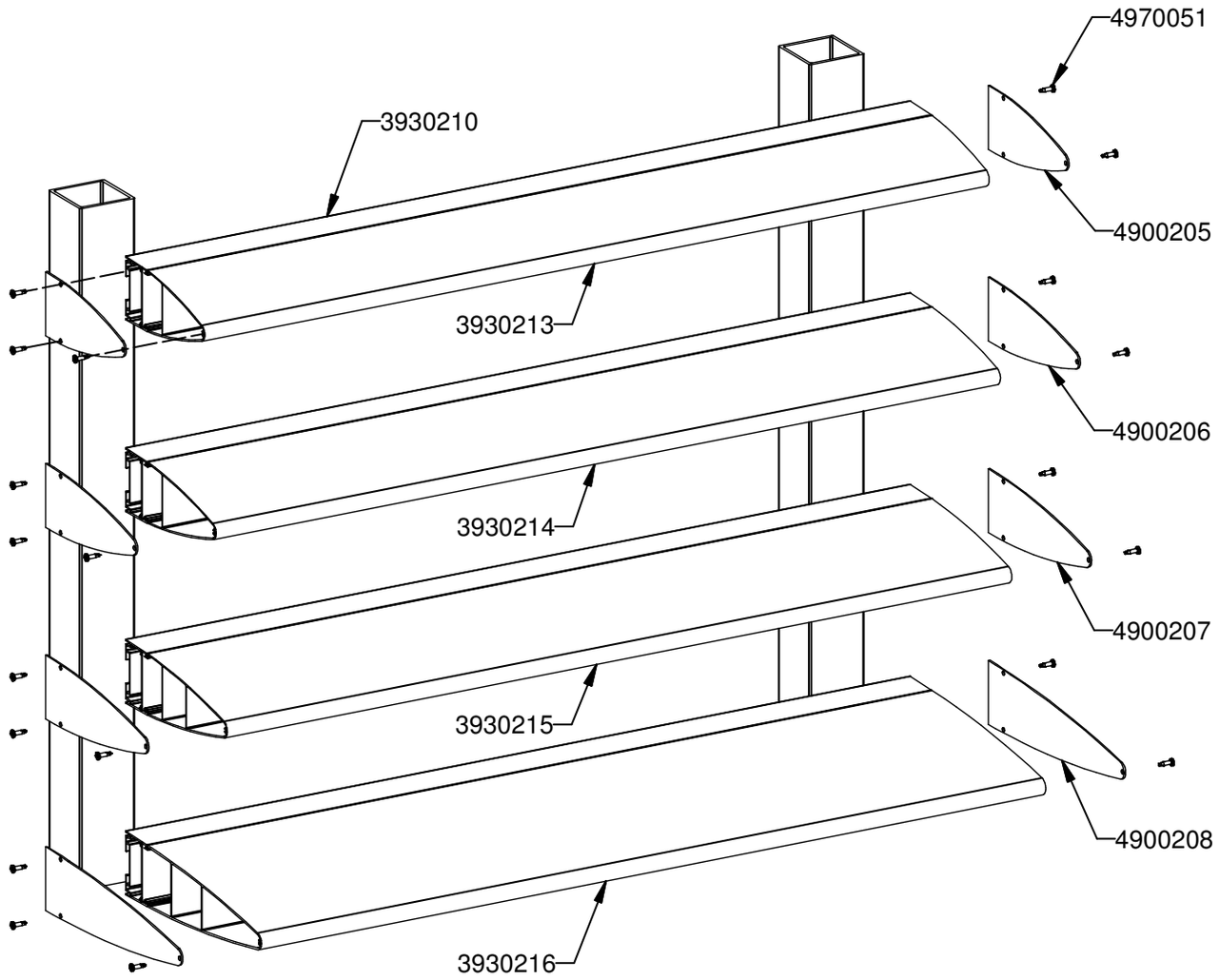
DOC-0000806226

Composite blades on an independent supporting structure

Horizontal semi-elliptical blades

PROFILES

Ref.	Profile	Description	Support profile
3930213		Blade 127 mm	3930210
3930214		Blade 152 mm	
3930215		Blade 177 mm	
3930216		Blade 252 mm	

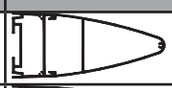


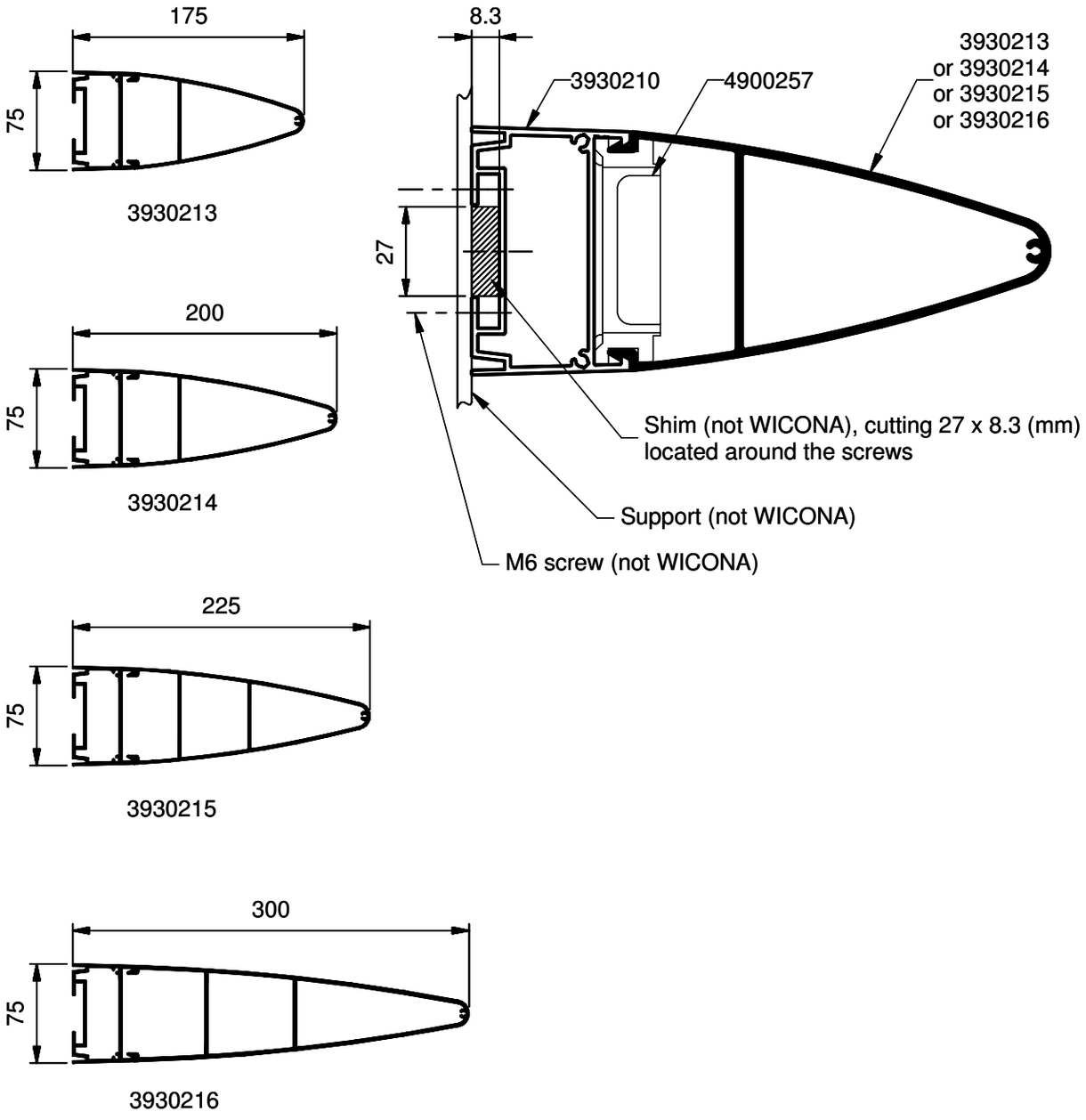
DOC-0000818204

Composite blades on an independent supporting structure

Horizontal semi-elliptical blades

ACCESSORIES

Description	Profile	End flange	Screw flange / profile	Clip-locking block
Blade 175 mm		4900205	4970051	4900257 1 shim at each end + 1 shim every 3 meters
Blade 200 mm		4900206		
Blade 225 mm		4900207		
Blade 300 mm		4900208		

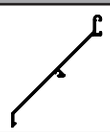


DOC-0000818204

Louvers

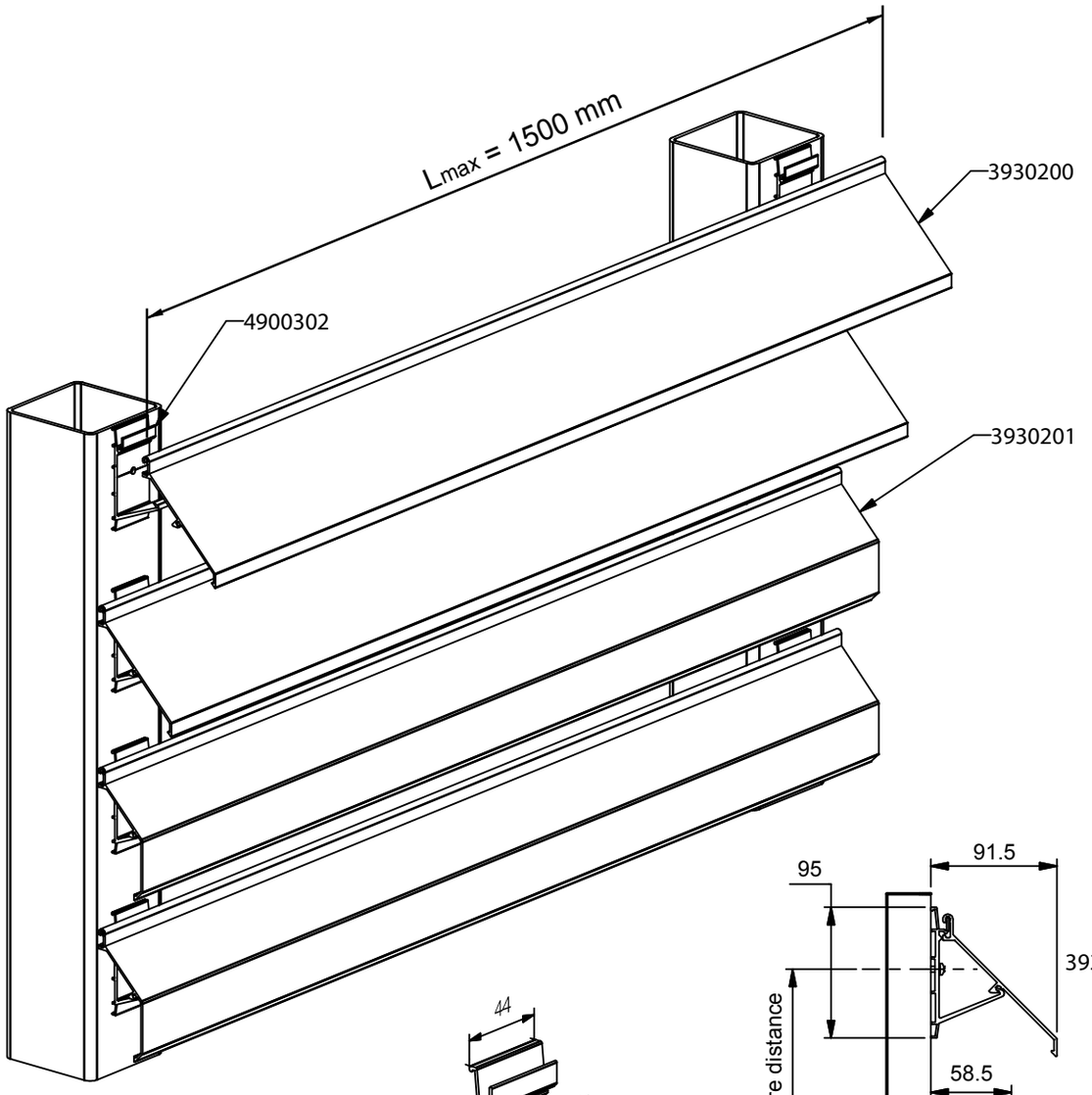
Louvers on independent supporting structure

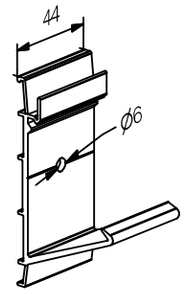
PROFILES

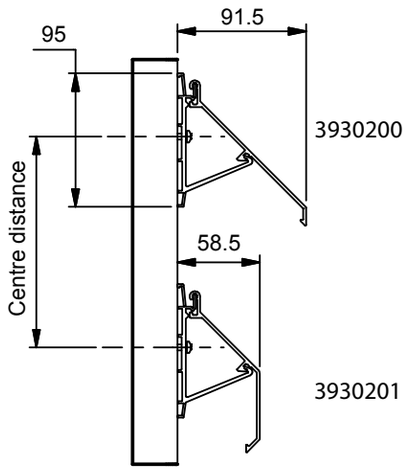
Ref.	Profile	Description
3930200		Louver profile 100 mm
3930201		Louver profile 115 mm

ACCESSORIES

Ref.	Description	Screws for assembly
4900302	Louver clip	not WICONA







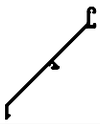
4900302 - Louver clip

DOC-0000806655

Louvers

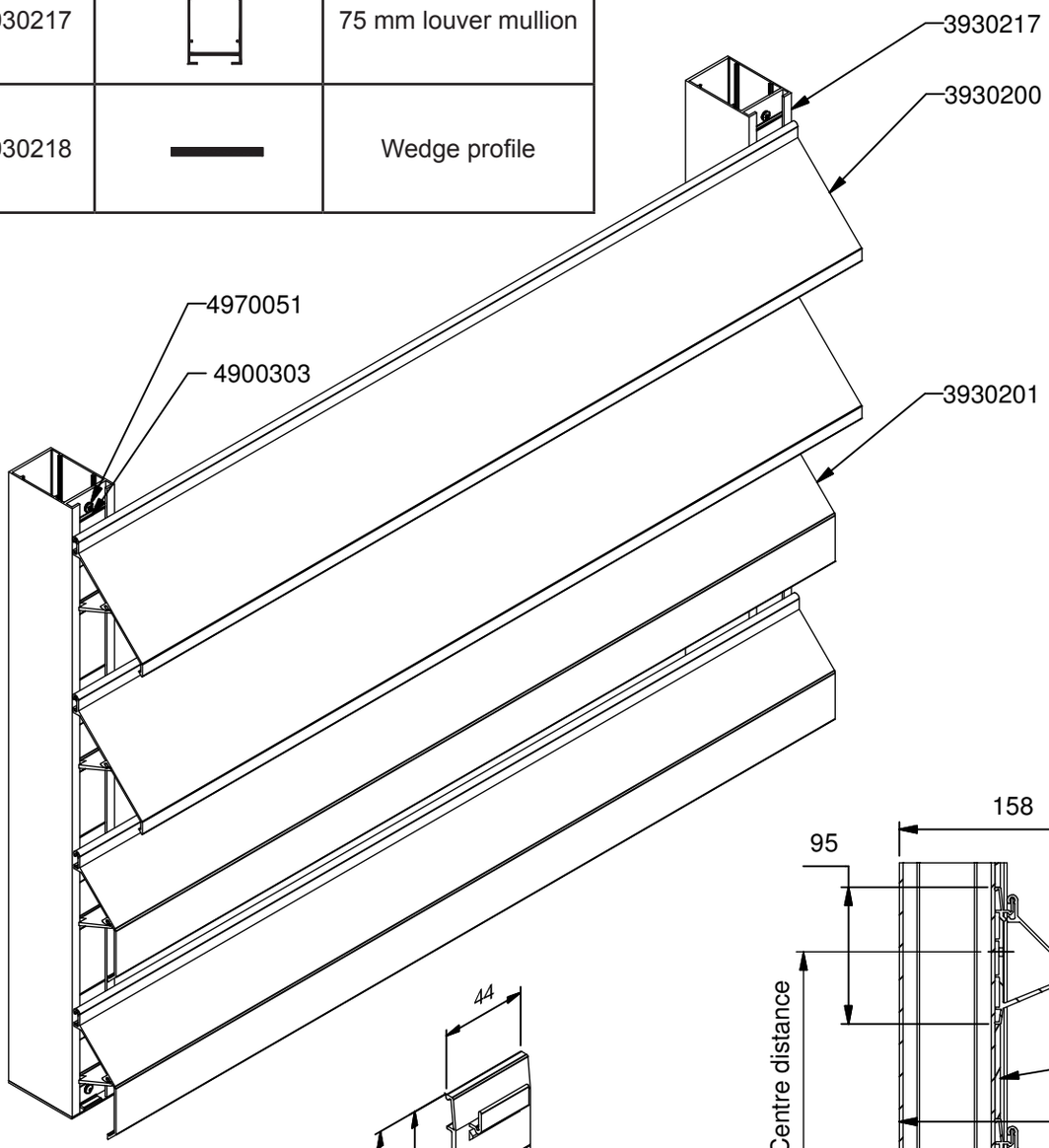
Louvers on supporting profile 3930217

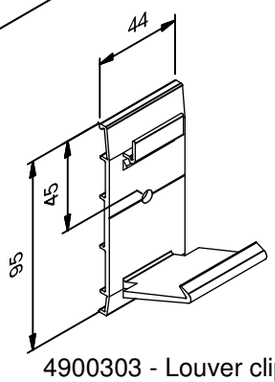
PROFILES

Ref.	Profile	Description
3930200		Louver profile 100 mm
3930201		Louver profile 115 mm
3930217		75 mm louver mullion
3930218		Wedge profile

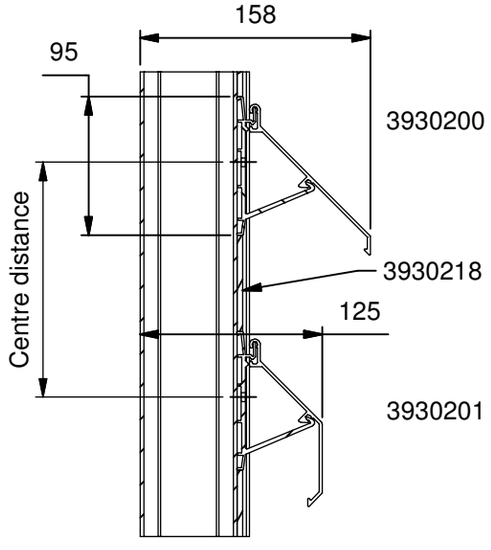
ACCESSORIES

Ref.	Description	Screws for assembly
4900302	Louver clip	not WICONA





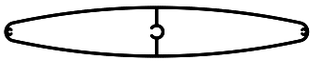
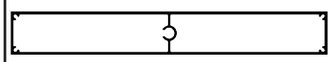
4900303 - Louver clip

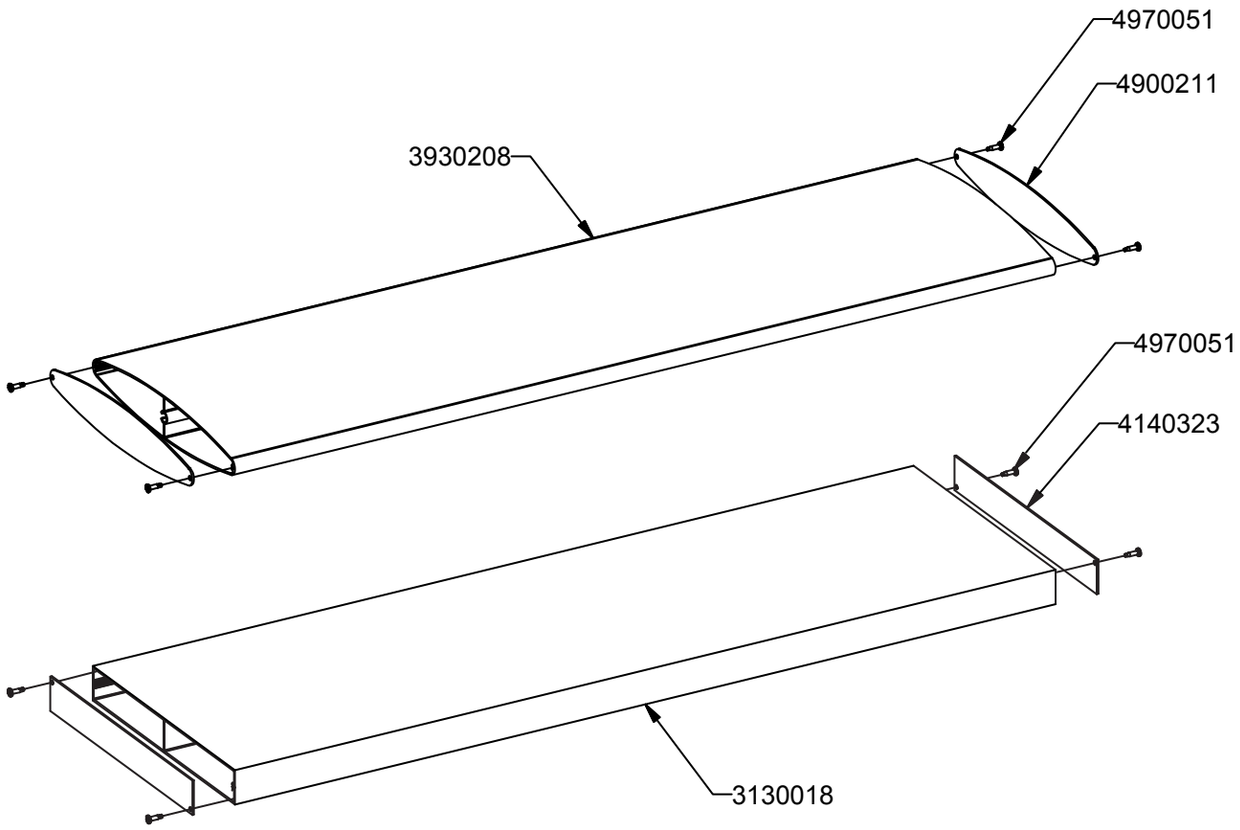


DOC-0000829978

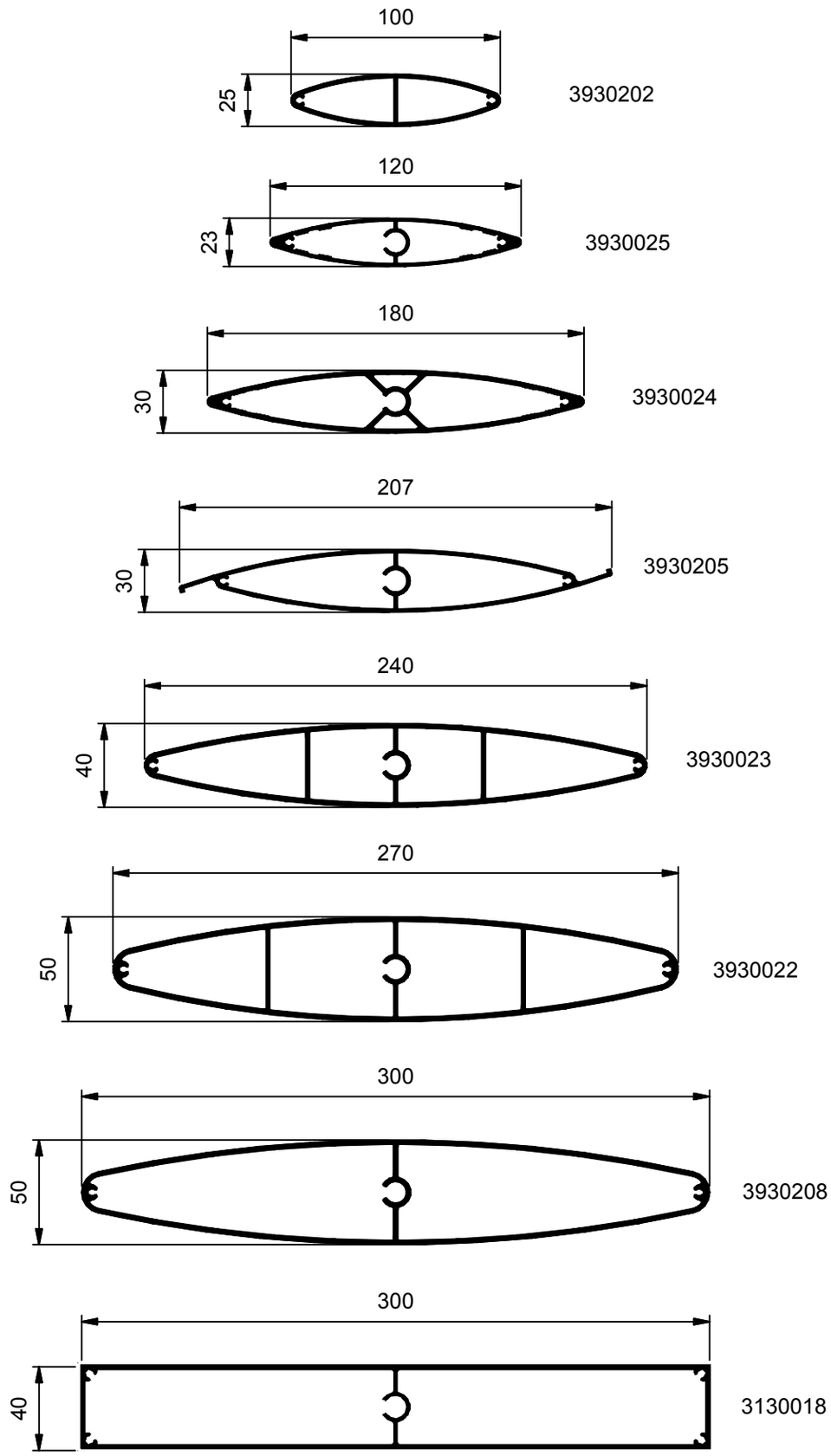
Further applications

PROFILES AND ACCESSORIES

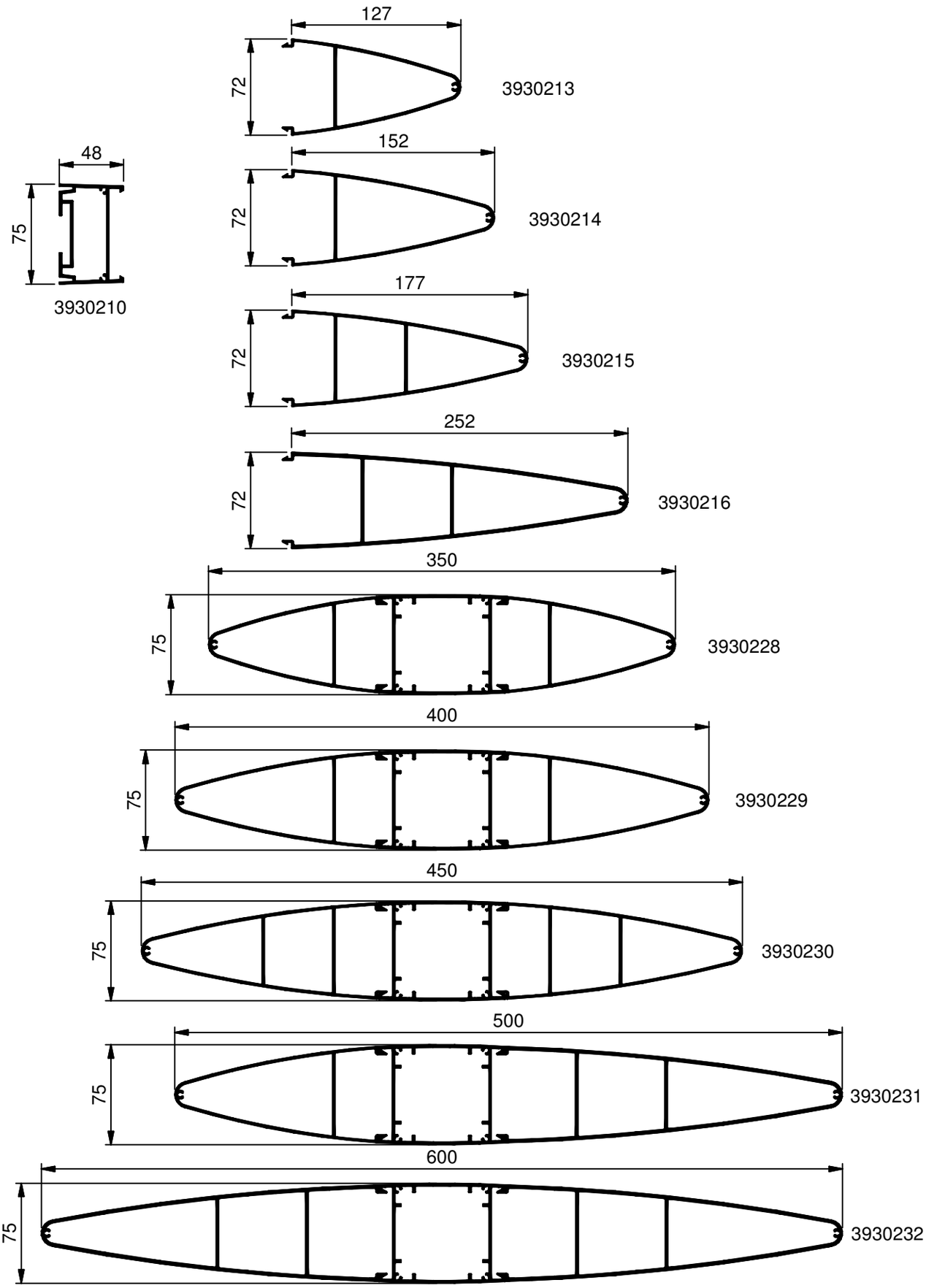
Ref.	Profile	Description	End part	Screw flange/blade
3930208		Blade 300 x 50	4900211	4970051
3130018		Blade 300 x 40	4140323	



Summary of profiles

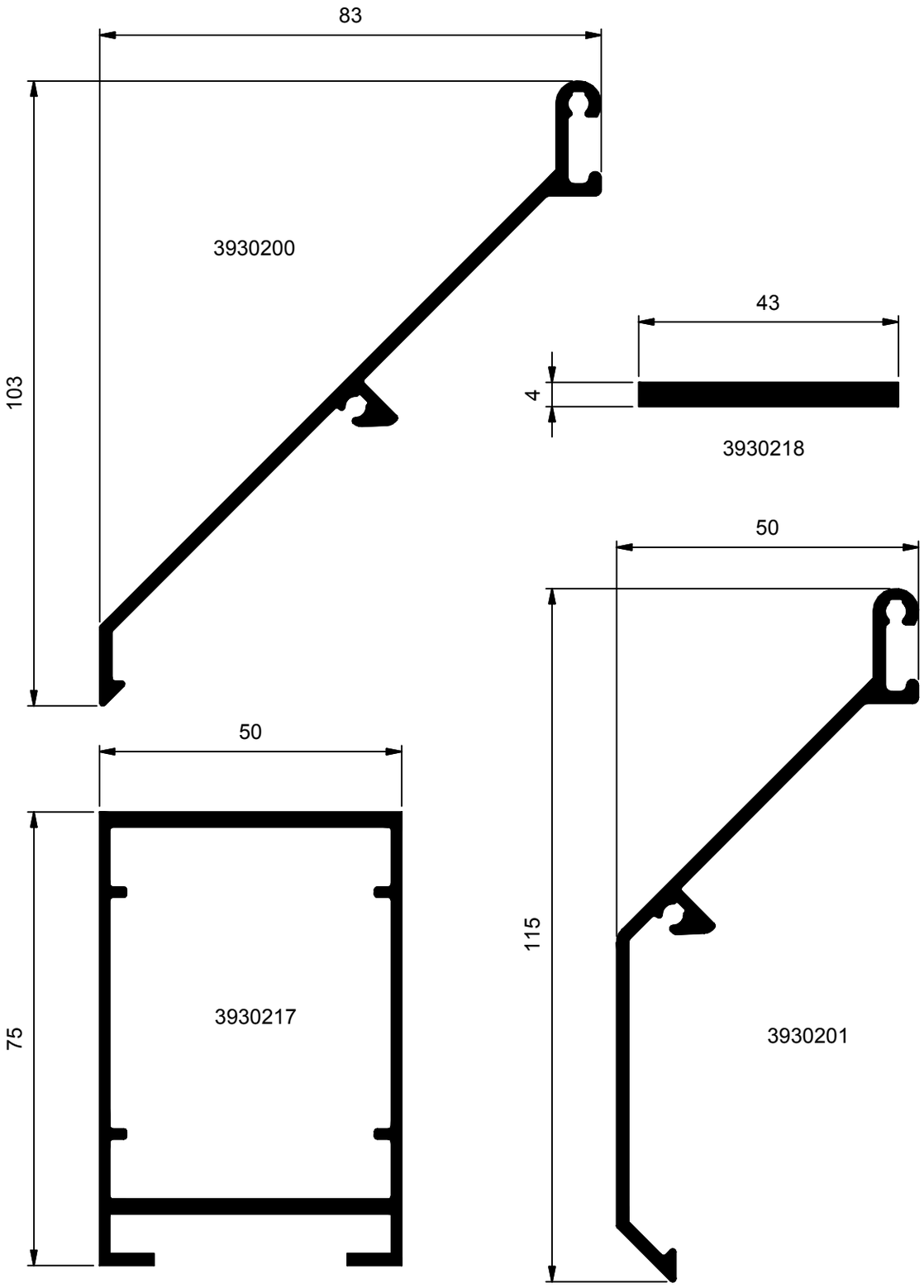


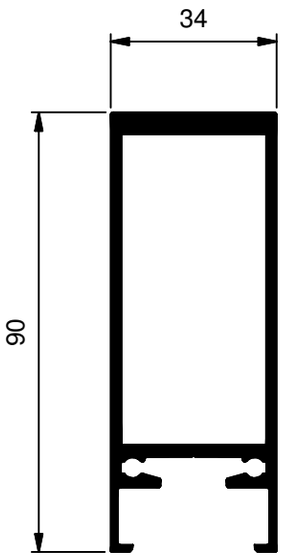
DOC-0000818572



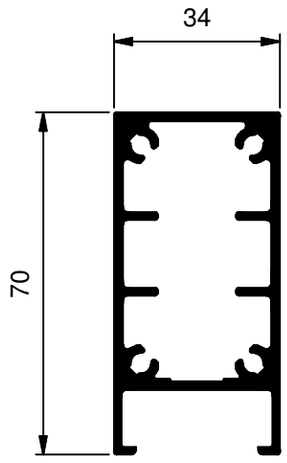
DOC-0000818627

Pr

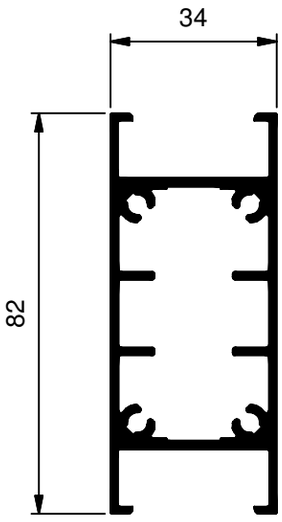




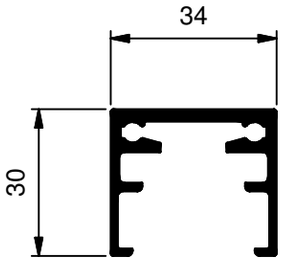
3130012



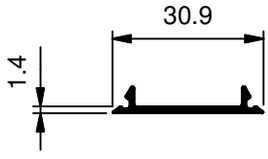
3960021



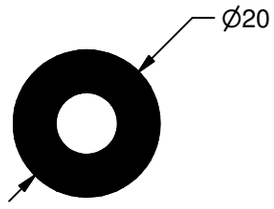
3960022



3960043

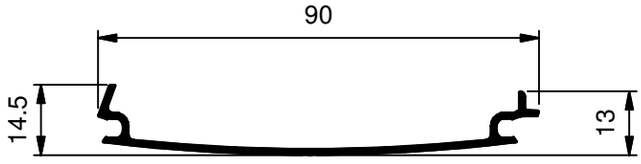


3930020

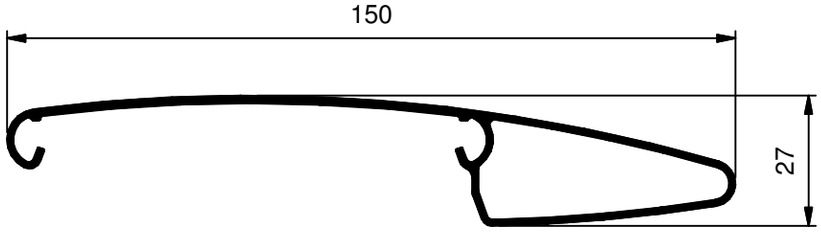


3930013

3960001



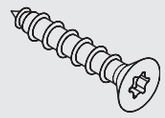
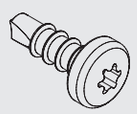
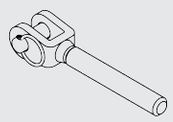
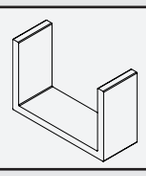
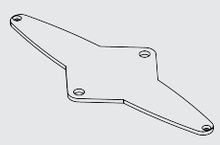
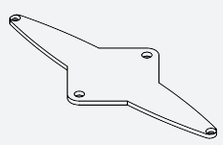
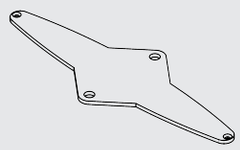
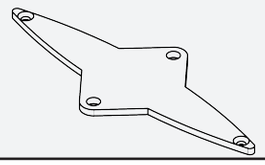
3960004



3960002

DOC-0000818666

ACCESSORIES

Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4070042	Countersunk screw ST4.2x25	100	WICSOLAIRE Stainless steel	
4070081	pan head screw ST5.5x29	100	WICSOLAIRE Stainless steel	
4070241	Self-drilling screw DG50x16	100	WICSOLAIRE Stainless steel	
4980010	Sun breaker stay plate, 90 mm	1	WICSOLAIRE Al	
4980035	Suspension	10	WICSOLAIRE Stainless steel	
4900134	Spacer/fitting part	20	WICSOLAIRE Al	
4900167	2 wings (0°) plug for 270 mm blade	10	WICSOLAIRE Al	
4900168	2 wings (0°) plug for 240 mm blade	10	WICSOLAIRE Al	
4900169	2 wings (0°) plug for 300 mm blade	10	WICSOLAIRE Al	
4900170	2 wings (0°) plug for 180 mm blade	10	WICSOLAIRE Al	

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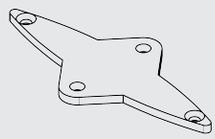
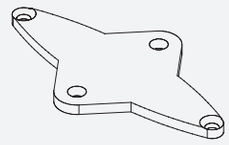
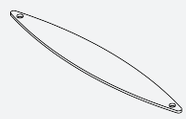
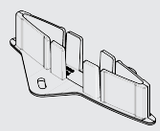
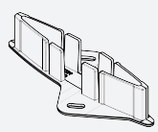
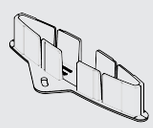
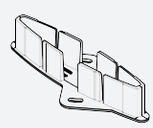
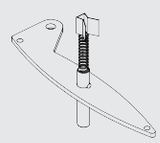
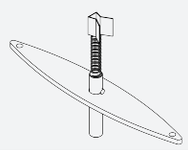
Article	**Designation** / Indications Assignment	PU	Application Material	Figure
4900171	2 wings (0°) plug for 120 mm blade	10	WICSOLAIRE Al	
4900172	2 wings (0°) plug for 100 mm blade	10	WICSOLAIRE Al	
4900173	End seal for 120 mm blade	10	WICSOLAIRE Al	
4900174	End seal for 180 mm blade	10	WICSOLAIRE Al	
4900177	R. footplate (30°to45°) for 240 mm blade	10	WICSOLAIRE Al	
4900178	L. footplate (30° to 45°) for 240 mm blade	10	WICSOLAIRE Al	
4900179	R. footplate (30° to 45°) for 270 mm blade	10	WICSOLAIRE Al	
4900180	L. footplate (30° to 45°) for 270 mm blade	10	WICSOLAIRE Al	
4900181	Adjustable plug for 180 mm blade	10	WICSOLAIRE Al Stainless steel	
4900182	End seal with retractile pin for 180 mm blade	10	WICSOLAIRE Al,Stainless steel	

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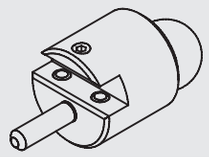
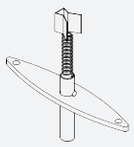
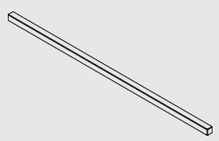
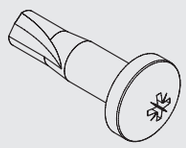
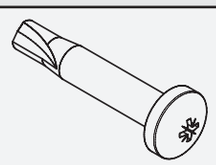
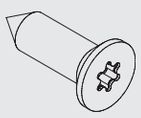
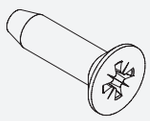
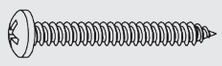
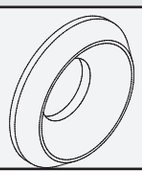
Article	**Designation** / Indications Assignment	PU	Application Material	Figure
4900184	Index spring for rod ø10	1	WICSOLAIRE Al Stainless steel	
4900186	End seal with retractile pin for 120 mm blade	10	WICSOLAIRE Al Stainless steel	
4900191	Stainless steel square rod, 8 mm, length 3 m	1	WICSOLAIRE Stainless steel	
4900185	Bearing ø 10	20	WICSOLAIRE Plastic	
198141	Screw ST4.2x19	100	WICSOLAIRE Stainless steel	
4070529	Self tapping screw ST4.2x22	100	WICSOLAIRE Stainless steel	
4170079	Screw ST4.8 x 16c	100	WICSOLAIRE Stainless steel	
4070530	Self tapping stainless screw M4x16	50	WICSOLAIRE Stainless steel	
4070531	Stainless steel screw, ST3.9x35	50	WICSOLAIRE Stainless steel	
199136	Washer with collar	50	WICSOLAIRE Stainless steel	

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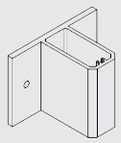
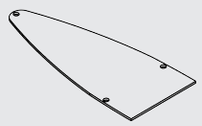
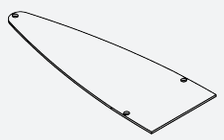
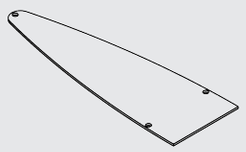
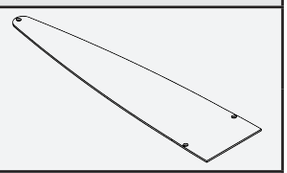
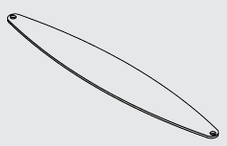
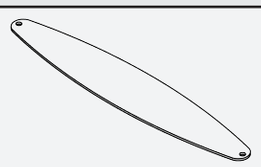
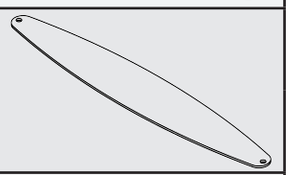
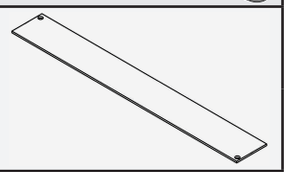
Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4180005	Base fixing spigot for 90 mm support profile	2	WICSOLAIRE Al	
4180006	Vertical fixing spigot for 90 mm supp. profile	2	WICSOLAIRE Al	
4900205	Plug 175 mm cap 1/2 ellip.blade	10	WICSOLAIRE Al	
4900206	Plug 200 mm cap 1/2 ellip.blade	10	WICSOLAIRE Al	
4900207	Plug 225 mm cap 1/2 ellip.blade	10	WICSOLAIRE Al	
4900208	Plug 300 mm cap 1/2 ellip.blade	10	WICSOLAIRE Al	
4900209	End seal for 240 mm blade	10	WICSOLAIRE Al	
4900210	End seal for 270 mm blade	10	WICSOLAIRE Al	
4900211	End seal for 300 mm blade	10	WICSOLAIRE Al	
4140323	End seal rectangular 300 mm blade	10	WICSOLAIRE Al	

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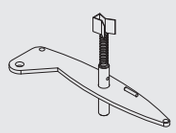
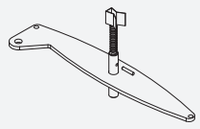
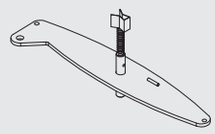
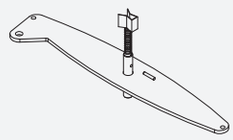
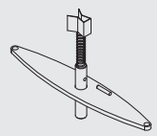
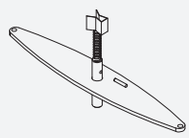
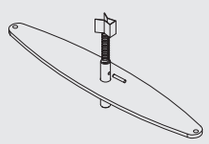
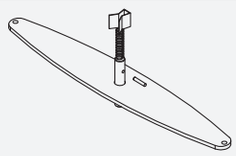
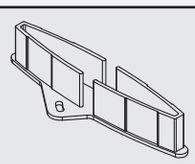
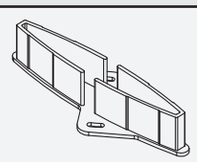
Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4900213	Adjustable plug 210 mm blade	10	WICSOLAIRE Al Stainless steel	
4900214	Adjustable plug 240 mm blade	10	WICSOLAIRE Al Stainless steel	
4900215	Adjustable plug 270 mm blade	10	WICSOLAIRE Al Stainless steel	
4900216	Adjustable plug 300 mm blade	10	WICSOLAIRE Al Stainless steel	
4900222	End seal retractil.pin 210 mm blade	10	WICSOLAIRE Al Stainless steel	
4900223	End seal retractil.pin 240 mm blade	10	WICSOLAIRE Al Stainless steel	
4900224	End seal retractil.pin 270 mm blade	10	WICSOLAIRE Al Stainless steel	
4900225	End seal retractil.pin 300 mm blade	10	WICSOLAIRE Al Stainless steel	
4900240	Right footplate 30/45° 300 mm blade	10	WICSOLAIRE Al	
4900241	L footplate 30/45° 300 mm blade	10	WICSOLAIRE Al	

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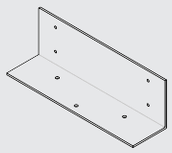
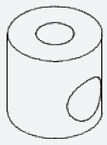
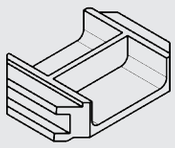
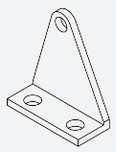
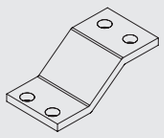
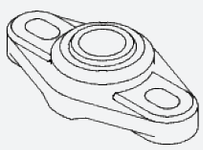
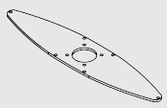
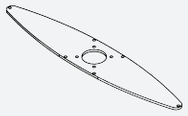
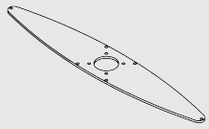
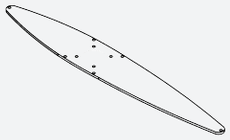
Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4900242	Corner cleat	10	WICSOLAIRE Al	
4900254	Stainless steel eyelet ø10	6	WICSOLAIRE Stainless steel	
4900257	Security wedge composite blade	20	WICSOLAIRE Plastic	
	Connecting part spingle drive/structure (not by WICONA)	1	WICSOLAIRE Al	
4900260	Connecting part spindle drive/rod	1	WICSOLAIRE Al	
4900261	Flange bearing 2 mounting holes ø10	20	WICSOLAIRE -	
4900281	End seal for 350 mm blade	10	WICSOLAIRE Al	
4900282	End seal for 400 mm blade	10	WICSOLAIRE Al	
4900283	End seal for 450 mm blade	10	WICSOLAIRE Al	
4900284	End seal for 500 mm blade	10	WICSOLAIRE Al	

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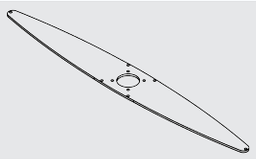
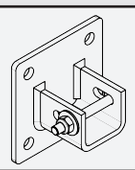
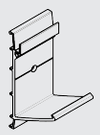
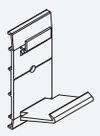
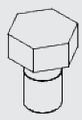
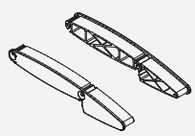
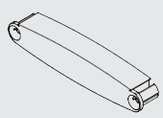
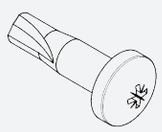
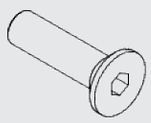
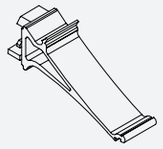
Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4900285	End seal for 600 mm blade	10	WICSOLAIRE Al	
4900294	Corbel	2	WICSOLAIRE Al Stainless steel	
4900302	louvers blade clip	10	WICSOLAIRE Al	
4900303	Clip for louvers upright profile	10	WICSOLAIRE Al	
4900304	Stainless screw for eyelet, M8	6	WICSOLAIRE Stainless steel	
4940005	End caps for 150 mm blade (3960002)	10	WICSOLAIRE PA	
4940007	End cap for 100 mm blade (3960001)	20	WICSOLAIRE PA	
4970051	Screw ST4.2x16 TX 20	100	WICSOLAIRE Stainless steel	
4970060	Countersink screw M8x30	100	WICSOLAIRE Stainless steel	
4980003	Blade holder 30°(30 mm)	10	WICSOLAIRE Al	

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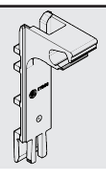
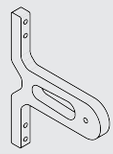
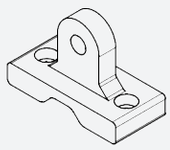
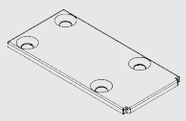
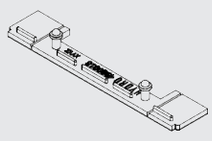
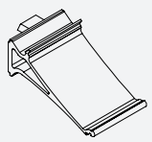
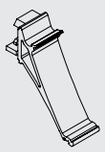
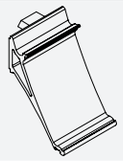
Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4980004	Holder for wall cladding	20	WICSOLAIRE PA	
4980007	Blade connector 90°	20	WICSOLAIRE PA	
4980008	Mounting bracket bs	1	WICSOLAIRE Al	
4980009	Brace fixing bs	1	WICSOLAIRE Al	
4980015	End cap for 70 mm support profile	10	WICSOLAIRE PA	
4980016	End cap for 82 mm support profile	10	WICSOLAIRE PA	
4980018	End cap, split, for 82 mm support profile	10	WICSOLAIRE PA	
4980040	Blade holder 30° (60 mm)	10	WICSOLAIRE Al	
4980041	Blade holder 60° (30 mm)	10	WICSOLAIRE Al	
4980042	Blade holder 60° (60 mm)	10	WICSOLAIRE Al	

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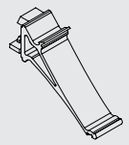
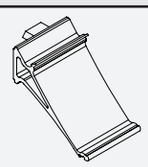
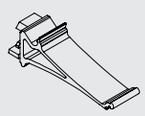
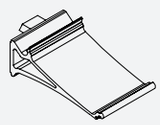
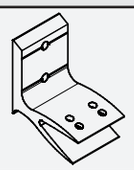
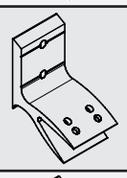
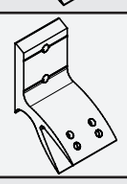
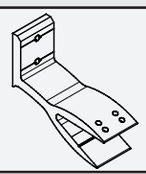
Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4980043	Blade holder 45° (30 mm)	10	WICSOLAIRE Al	
4980044	Blade holder 45° (60 mm)	10	WICSOLAIRE Al	
4980052	Blade holder 15° (30 mm)	10	WICSOLAIRE Al	
4980053	Blade holder 15° (60 mm)	10	WICSOLAIRE Al	
4980103	Pliers 0° for blades 120/180	20	WICSOLAIRE Al	
4980104	Pliers 15° for blades 120/180	20	WICSOLAIRE Al	
4980105	Pliers 30° for blades 120/180	20	WICSOLAIRE Al	
4980106	Pliers 45° for blades 120/180	20	WICSOLAIRE Al	
4980107	Big pliers 0° blades 240/270	20	WICSOLAIRE Al	
4980108	Big pliers 15° blades 240/270	20	WICSOLAIRE Al	

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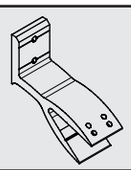
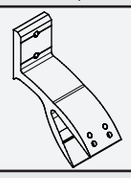
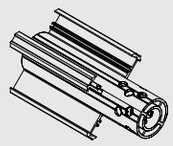
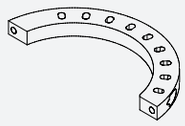
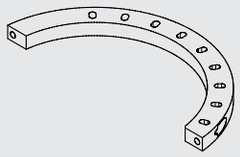
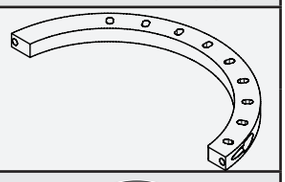
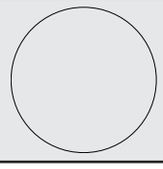
Article	**Designation** / Indications	PU	Application	Figure
	Assignment		Material	
4980109	Big pliers 30° blades 240/270	20	WICSOLAIRE Al	
4980110	Big pliers 45° blades 240/270	20	WICSOLAIRE Al	
4980111	Swivelling corbel 0° to 60°	20	WICSOLAIRE Al	
6970100	Protractor for blade 180 mm and 210 mm	1	WICSOLAIRE Al	
6970102	Protractor for blade 240 mm	1	WICSOLAIRE Al	
6970103	Protractor for blade 270 mm	1	WICSOLAIRE Al	
4010114	Sealing cord, d=5,3 mm	100 m	WICSOLAIRE EPDM foamed	

A

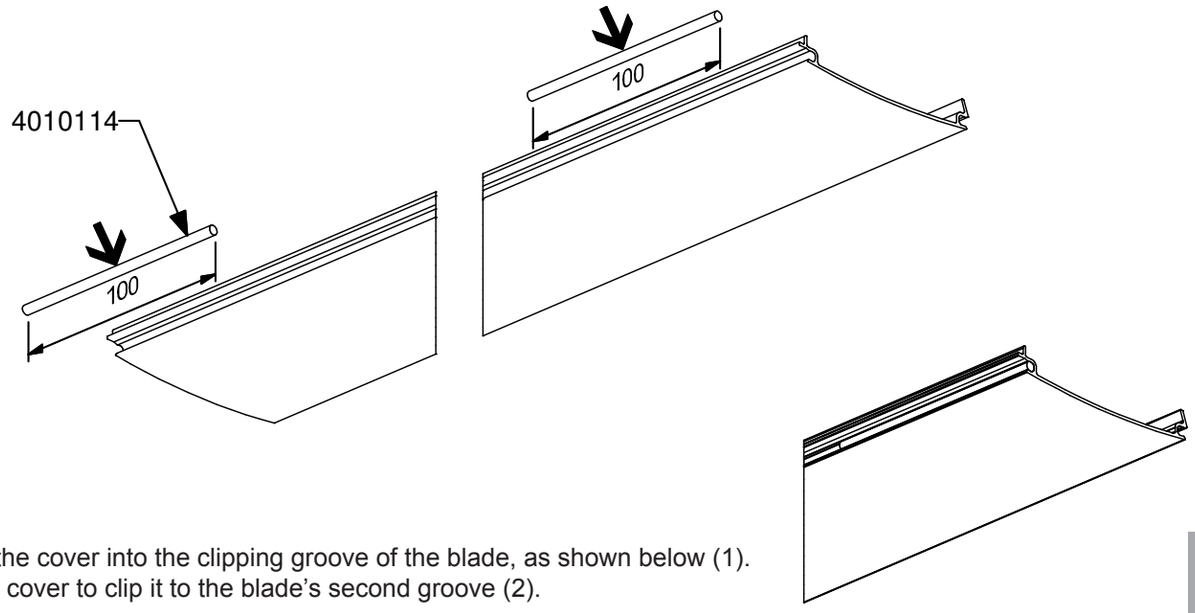
Fabrication and montage

Processing of blades

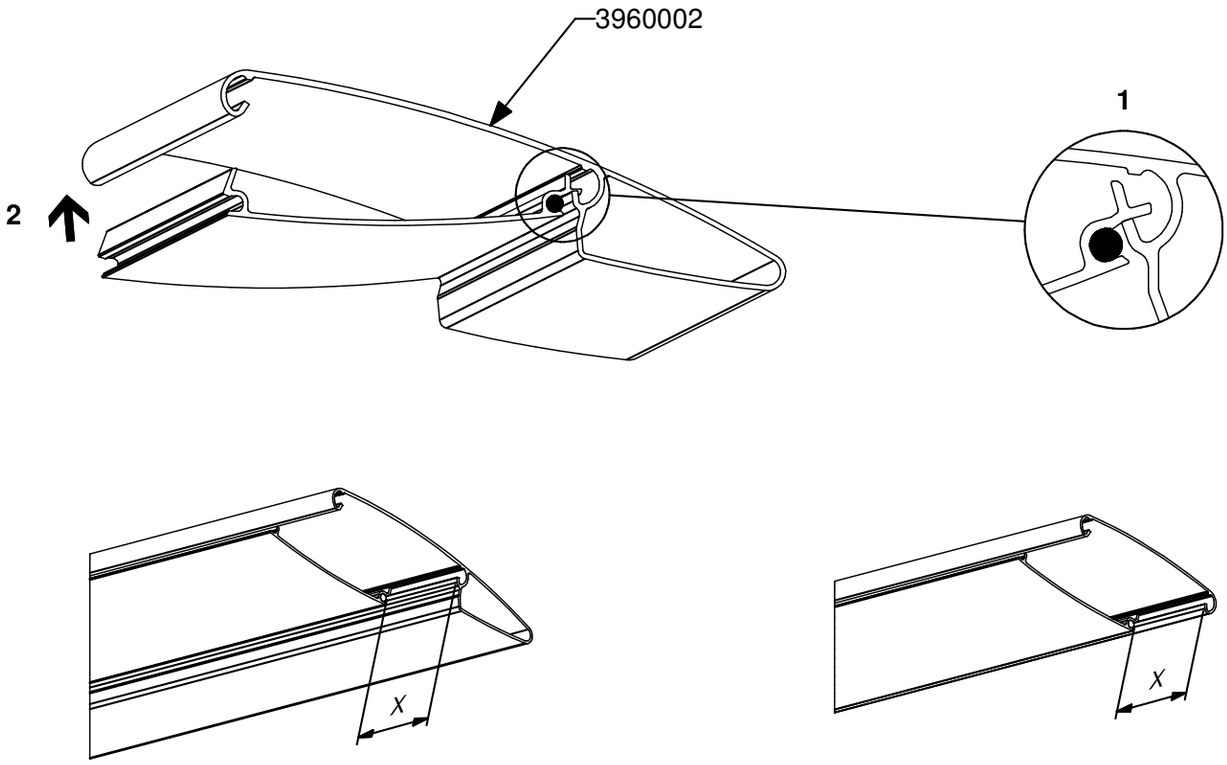
Clipped blades, 100 mm and 150 mm

Assembly sequence:

1. Insert the length from 100 mm 4010114 coupling every 300 mm in the groove in front of the blade cover.



2. Engage the cover into the clipping groove of the blade, as shown below (1). Twist the cover to clip it to the blade's second groove (2).

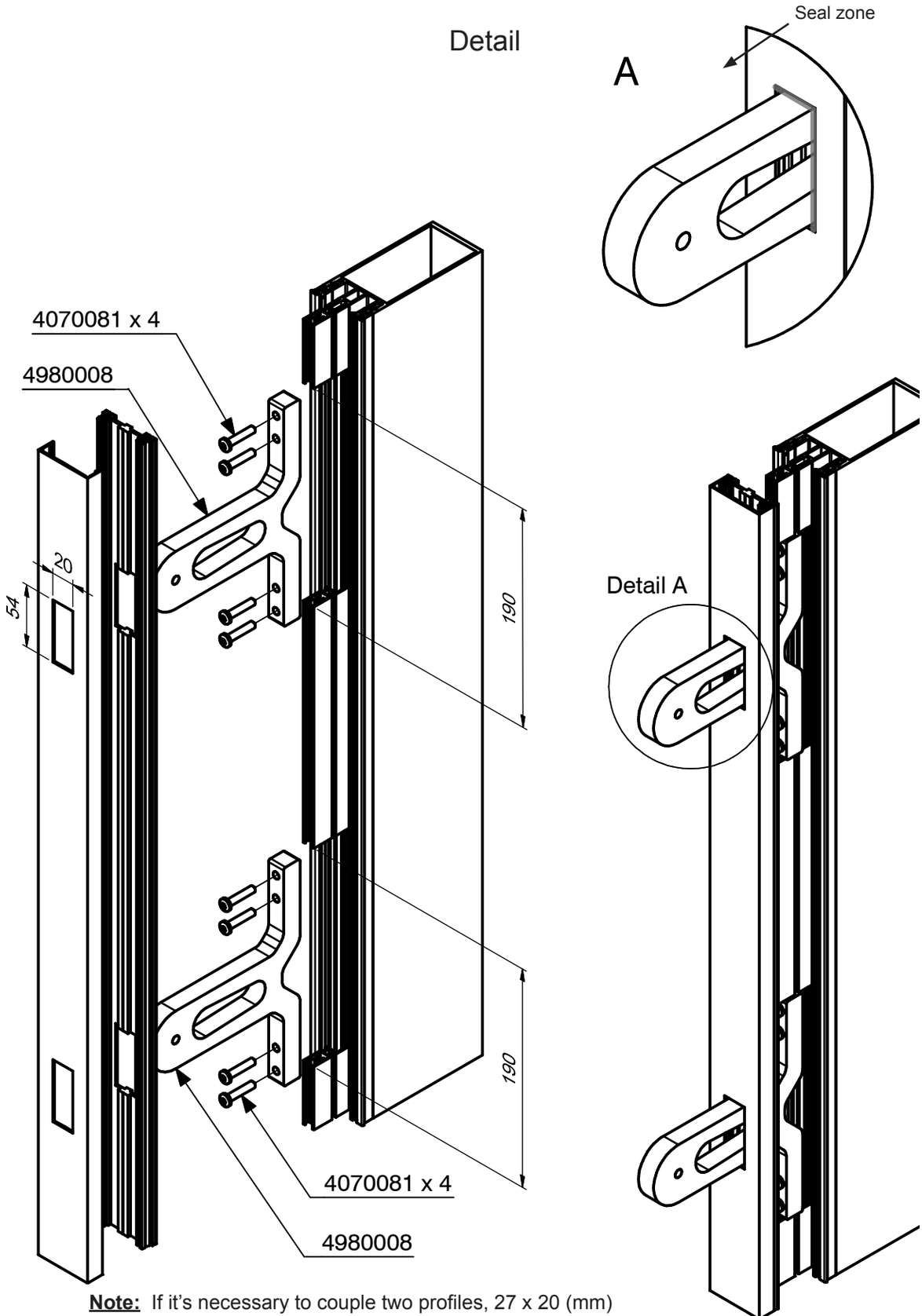


Note: The cover's offset value X (compared to the blade) is determined based on the theoretical position of the fastening supports, given a planned 5 mm between the cover and each of its supports.

DOC-0000818862

Machining profiles for assembly with coninuous pressure plate

Clipped blades, 100 mm and 150 mm

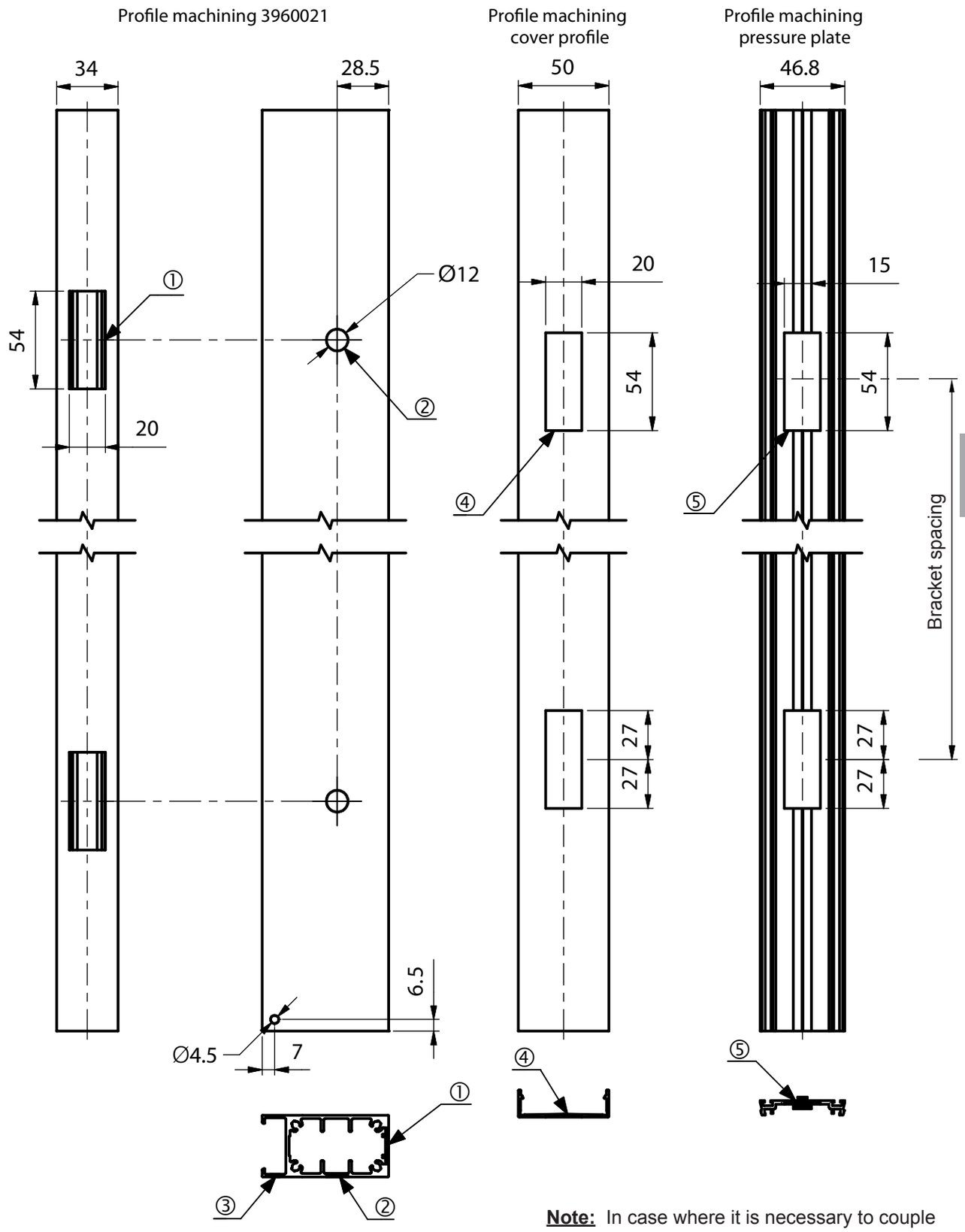


Note: If it's necessary to couple two profiles, 27 x 20 (mm) is machined in each of the two profiles.

DOC-0000884763

Machining profiles for assembly with coninuous pressure plate

Clipped blades, 100 mm and 150 mm



Note: In case where it is necessary to couple two profiles, it is essential to leave expansion clearence of at least 5 mm.

FM

DOC-0000884662

Assembly of blade support profile 3960021

Clipped blades, 100 mm and 150 mm

Assembly sequence:

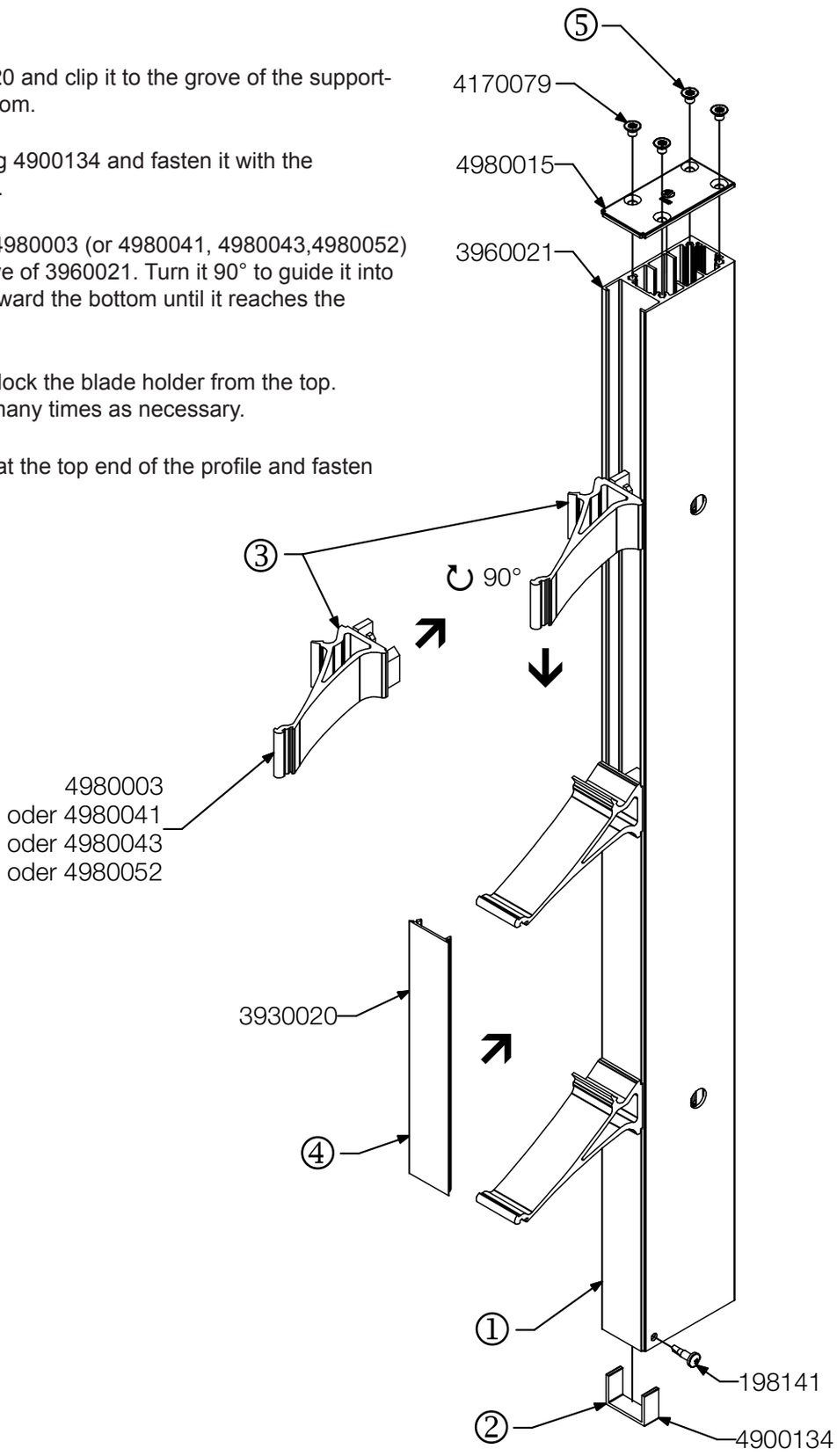
① Slice a first spacer 3930020 and clip it to the grove of the support-profile 3930021 at the bottom.

② Install the low spacer fitting 4900134 and fasten it with the screw 198141 or 4070528.

③ Position the blade holder 4980003 (or 4980041, 4980043,4980052) at a 90° incline in the goove of 3960021. Turn it 90° to guide it into its final position. Slide it toward the bottom until it reaches the spacer 3930020.

④ Click the spacer that will block the blade holder from the top. Repeat steps 3 and 4 as many times as necessary.

⑤ Put the end cap 4980014 at the top end of the profile and fasten it on four screws 4170079.



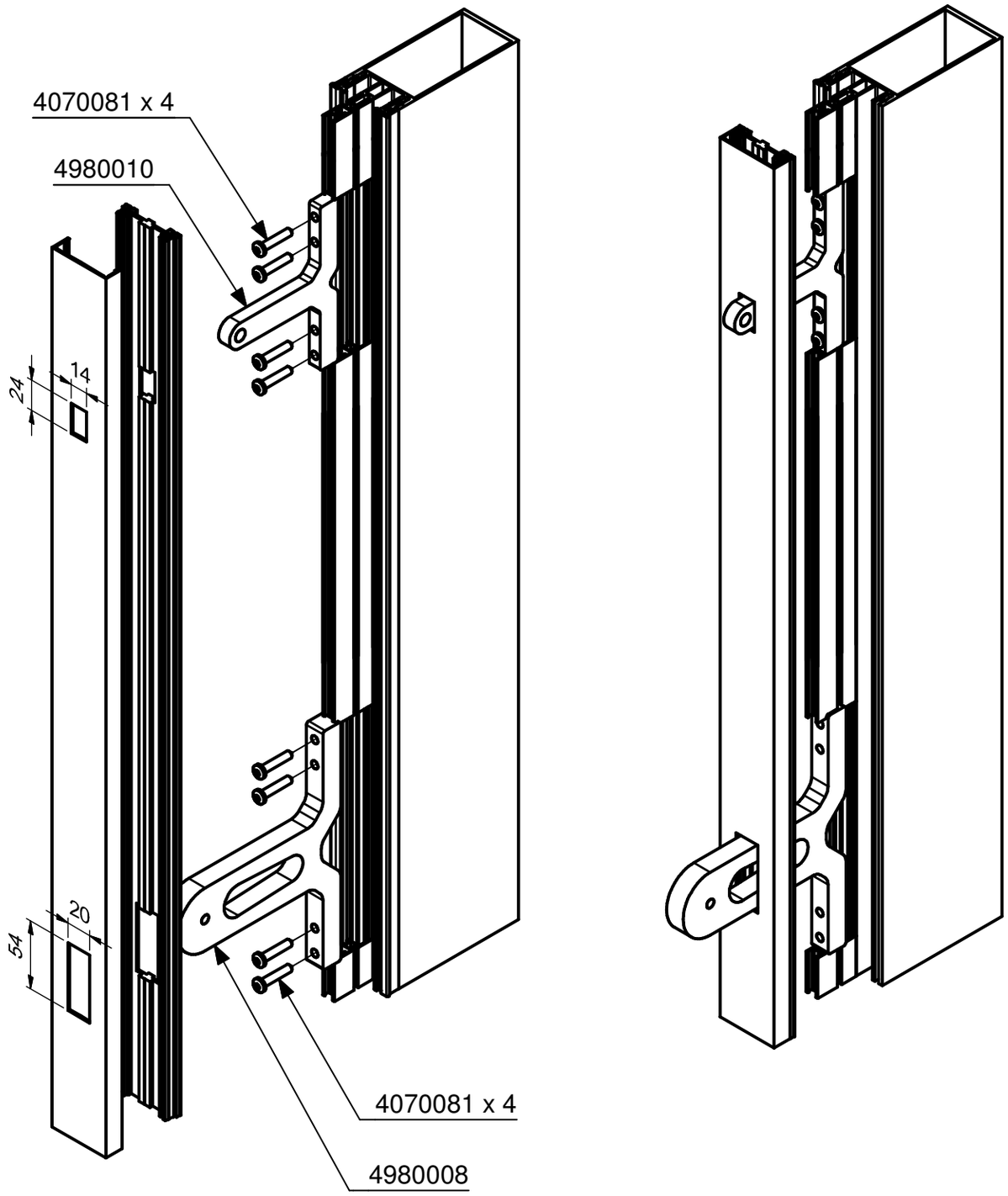
FM

DOC-0000819195

Assembly of blade support on vertical support profile

Clipped blades, 100 mm and 150 mm

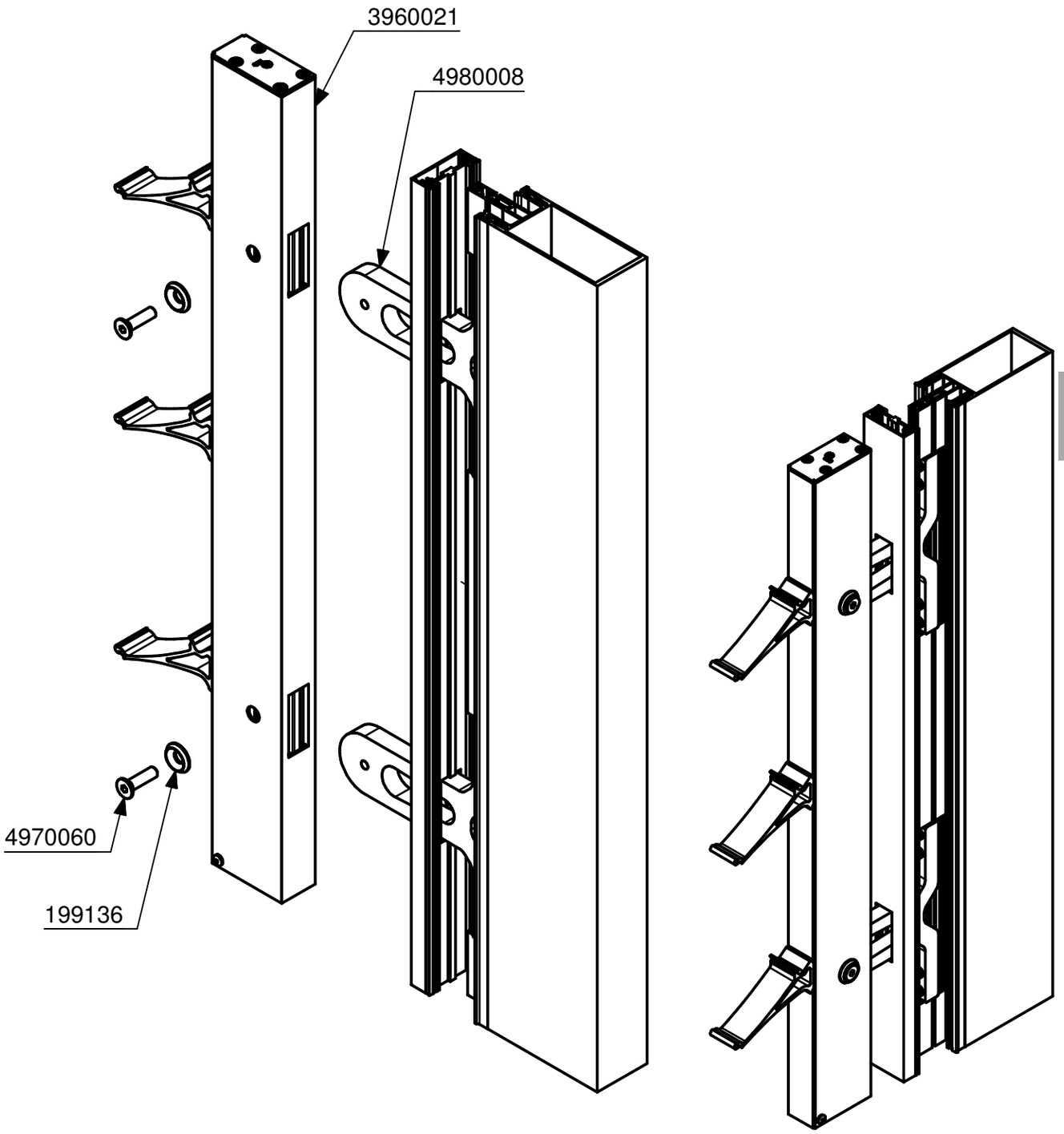
Note: Engage the profile 3960021 on the cleats 4980008 near the rectangular machining and then assemble them using screw 4970060 with washer 199136.



DOC-0000884923

Assembly of the vertical support section for canopy
Clipped blades, 100 mm and 150 mm

Note: Mount the mounting bracket 4980010 onto the mullion and then counter-drill the mullion and the mounting bracket.

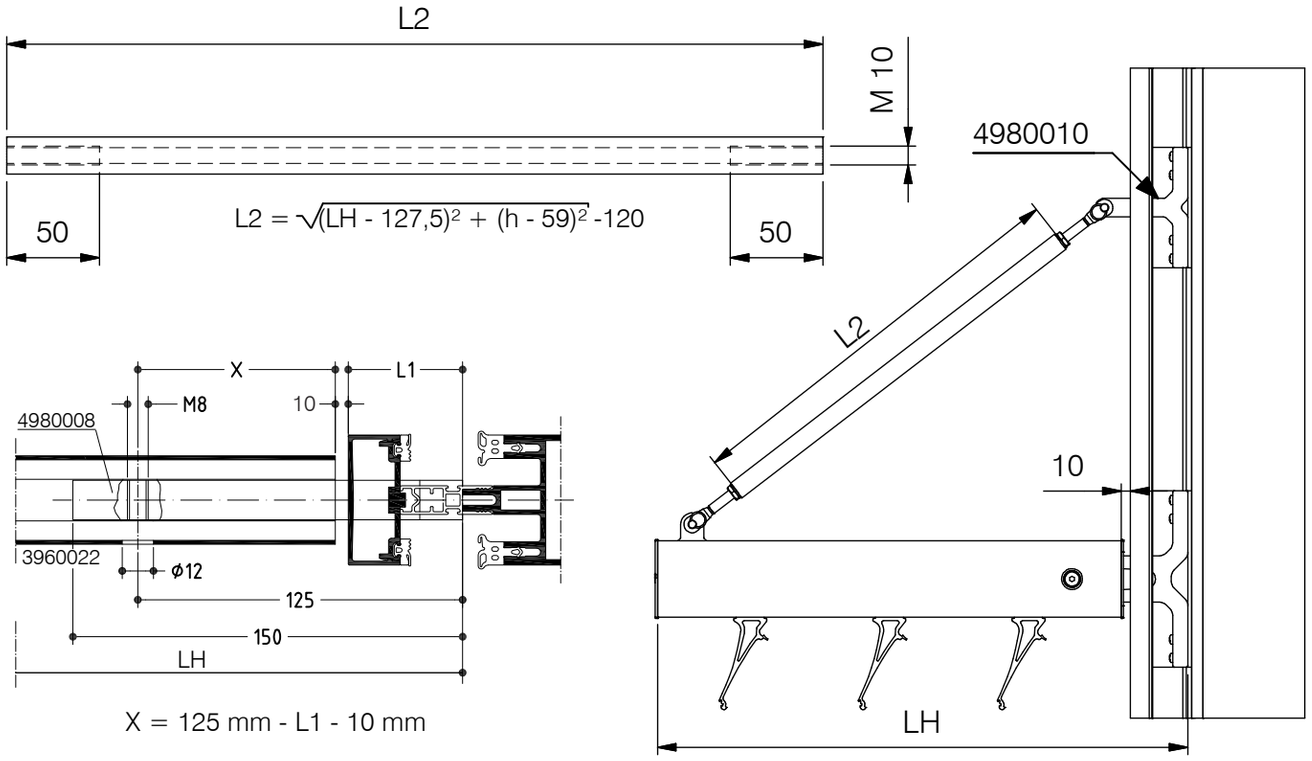


Assembly of the support section for canopy

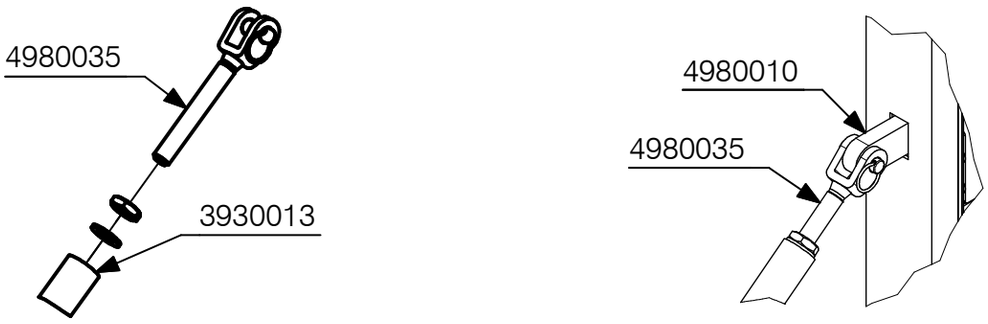
Clipped blades, 100 mm and 150 mm

Assembly sequence:

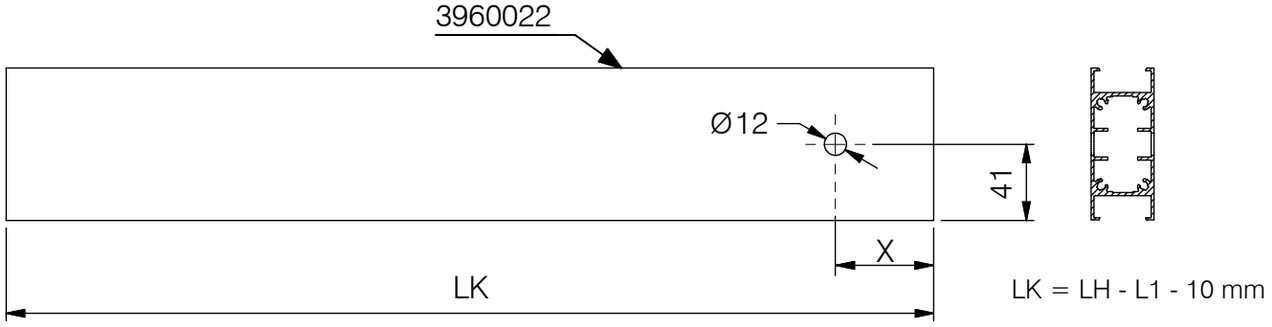
1. Slice the profile 3930013 at length L2 and tap the ends on 50 mm, diameter M10.



2. Screw a clevis pin 4980035 into each end of the profile 3930013 and mount everyone onto the top mounting plate 4980010.



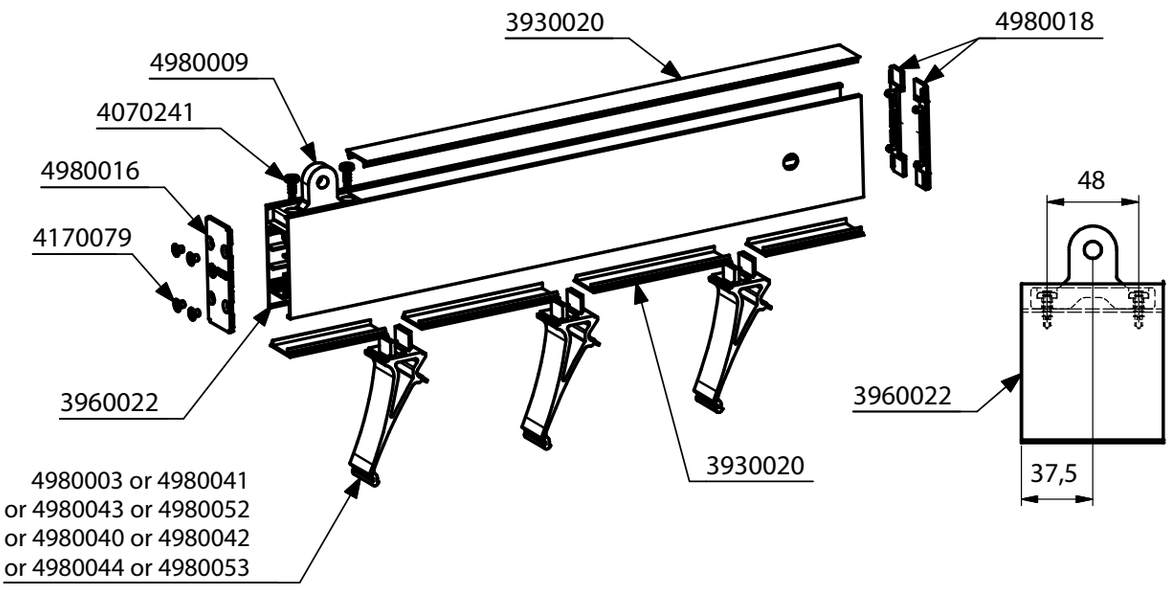
3. Drill profile 360022 for fixing on mounting bracket 4980008.



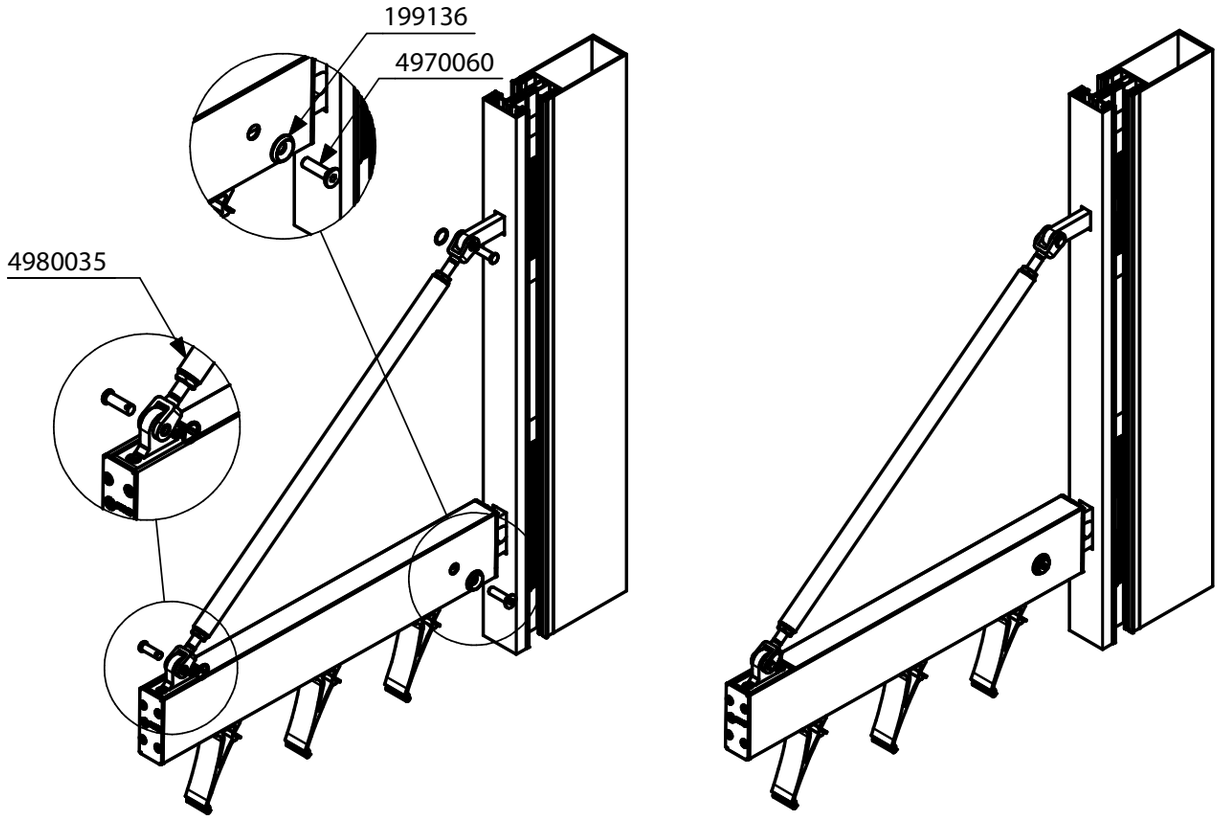
DOC-0000886555

Assembly of blade support on support profile for canopy
Clipped blades, 100 mm and 150 mm

4. Fasten mounting bracket 4980009 onto the profile 3960022 using screws 4070241. Next, insert pieces of the spacer profile 3930020 and the blade holders, as described above. Put the end caps 4980016 and 4980018 at the ends of the profile.



5. Fasten the assembly to the cleat 4980008 using screw 4970060 with washer 199136. Then adjust the screws in the clevis pins to be able to assembly the inner clevis pin with mounting bracket 4980009.



DOC-0000885237

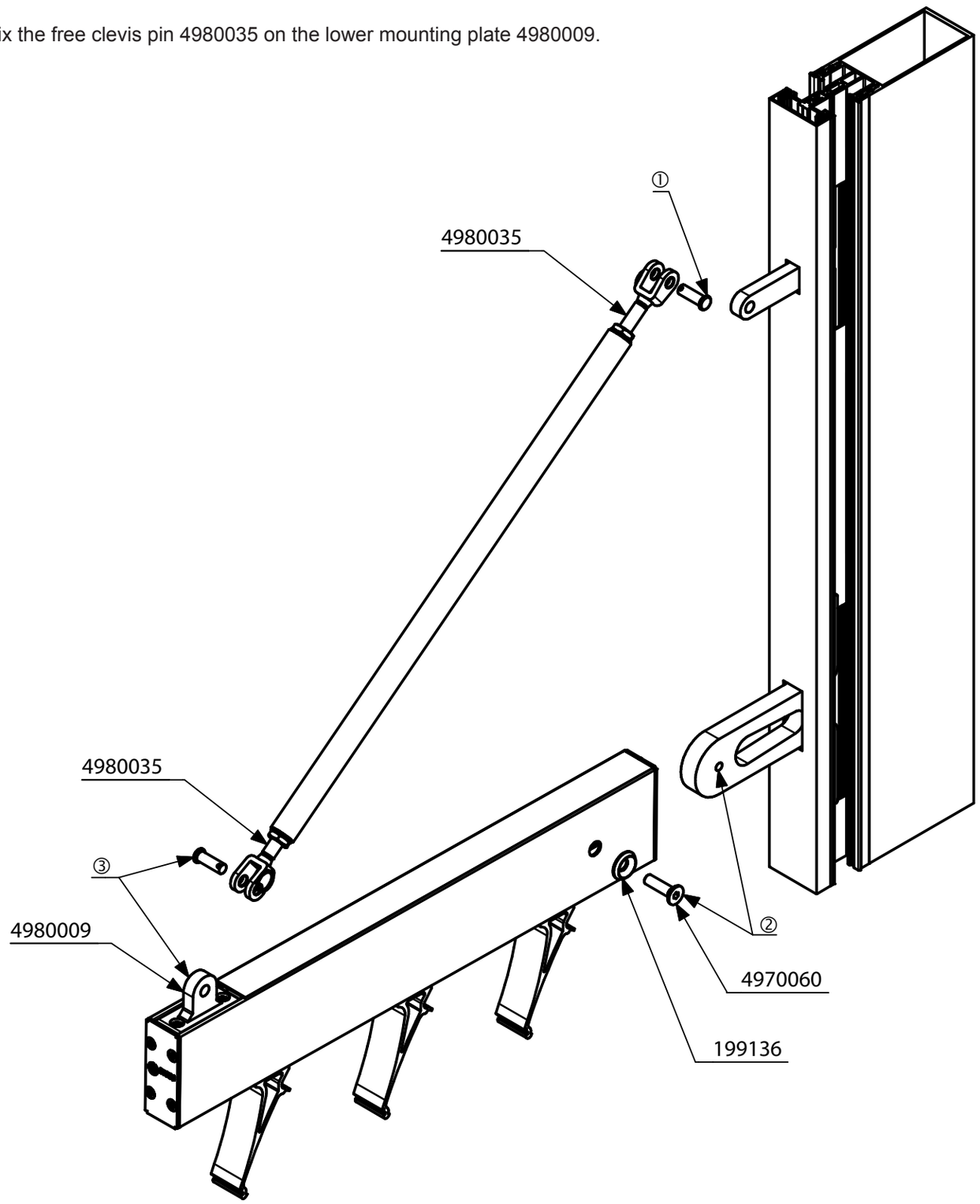
Assembly of blade support on support profile for canopy
Clipped blades, 100 mm and 150 mm

Summary of installation:

1. Fix the clevis pin 4980035 on the upper mounting plate 4980010.

2. Mount the support profile 3960022 on the bracket 4980008.

3. Fix the free clevis pin 4980035 on the lower mounting plate 4980009.



FM

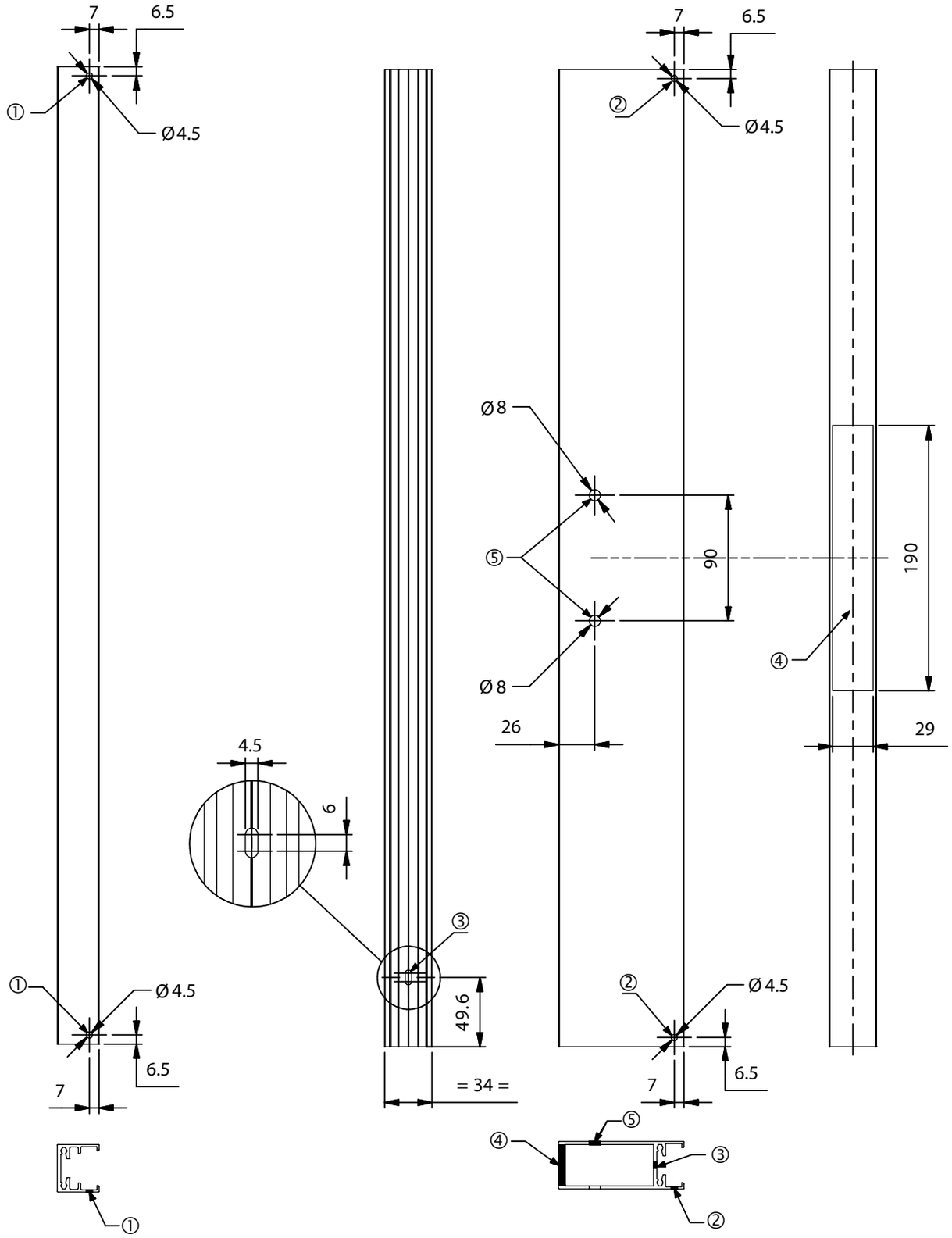
DOC-0000885237

Machining of support profiles, 30 mm and 90 mm

Clipped blades, 100 mm and 150 mm

Machining of profile 3960043
support profil 30 mm

Machining of profile 3130012
support profil 90 mm



Note: If it's necessary to couple two support profiles, the rectangular support for a vertical fastener must be positioned in level with this coupling.

DOC-0000819564

FM

Assembly of support profiles, 30 mm and 90 mm

Clipped blades, 100 mm and 150 mm

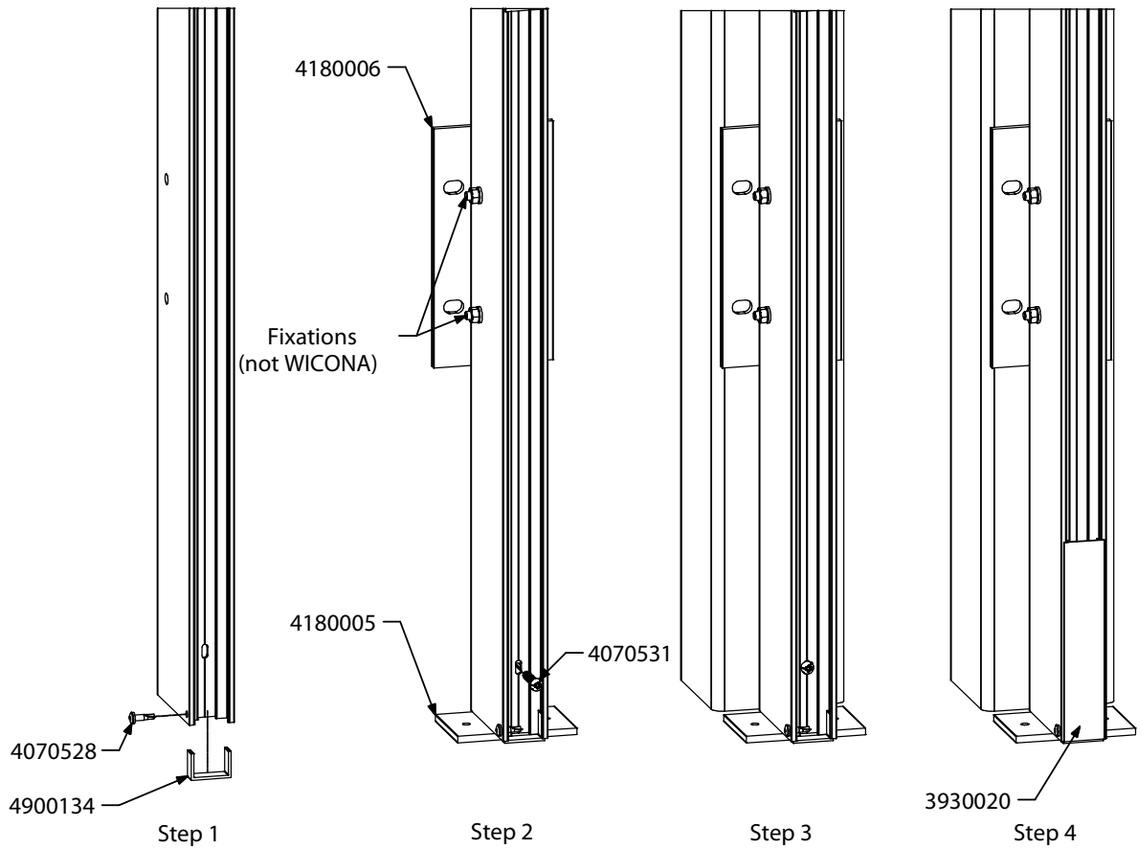
Assembly sequence:

1. First, set up the spacer fitting 4900134 at the low end of support profile (3130012 or 3960043) and fasten it with screw 4070528.

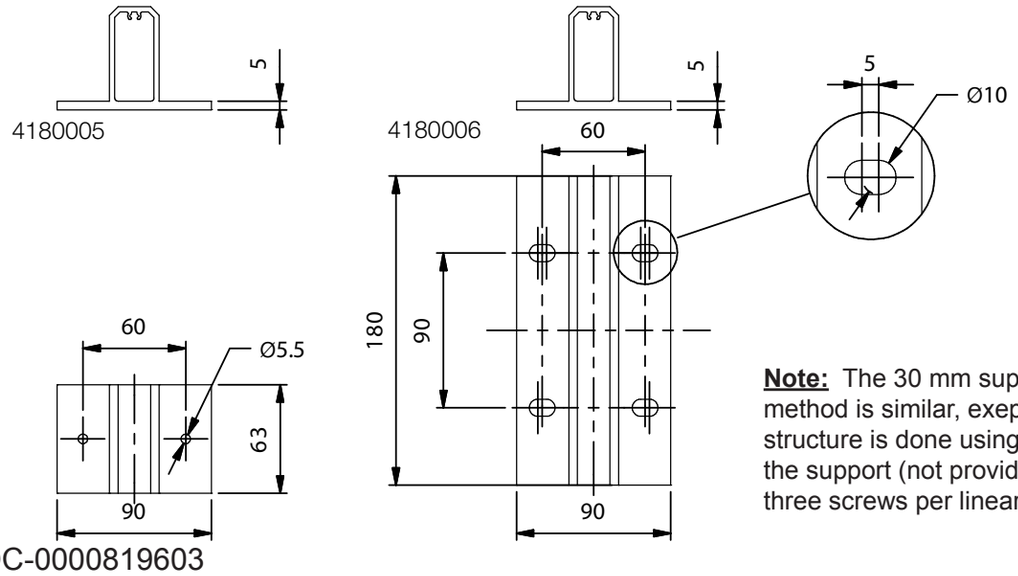
2. Mount fastener 4180005 and 4180006 onto the profile. Fix the connection below with screw 4070531.

3. Attach everything to the ground and the vertical structure with appropriate screws.

4. Clip a first piece of spacer profile 3930020 in.



Details of fixing parts

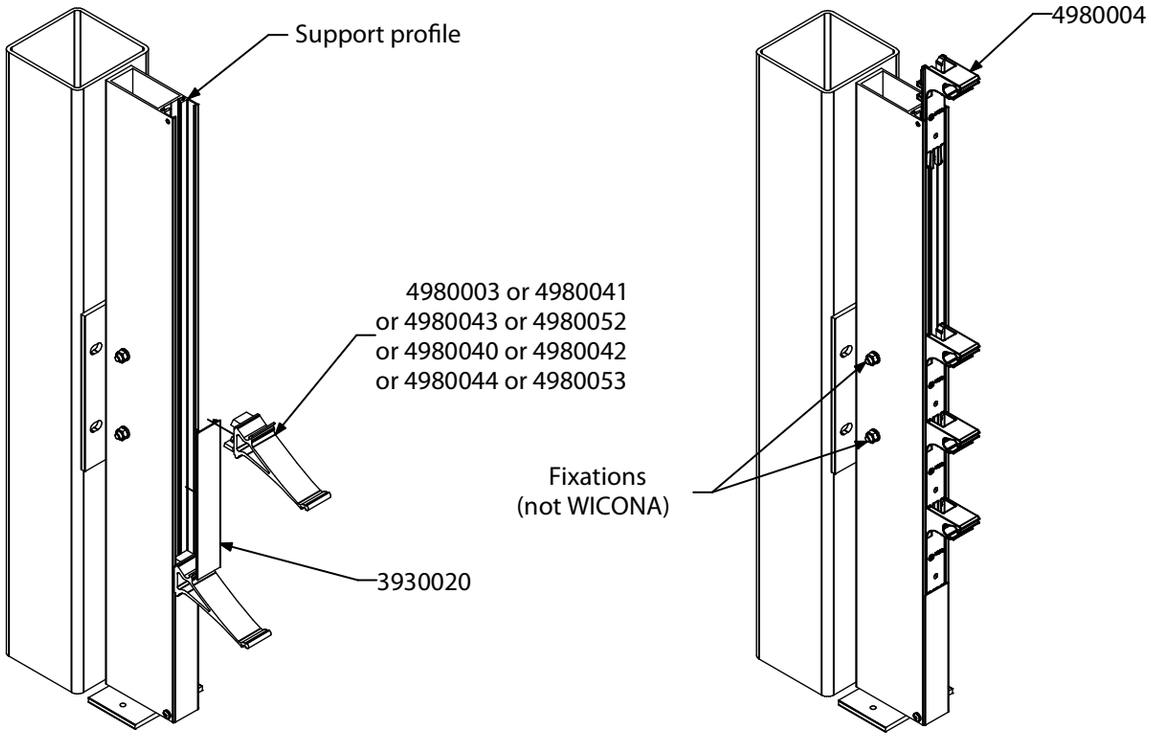


Note: The 30 mm support profile mounting method is similar, exept that fastening to the structure is done using suitable screws for the support (not provided by WICONA), with three screws per linear meter.

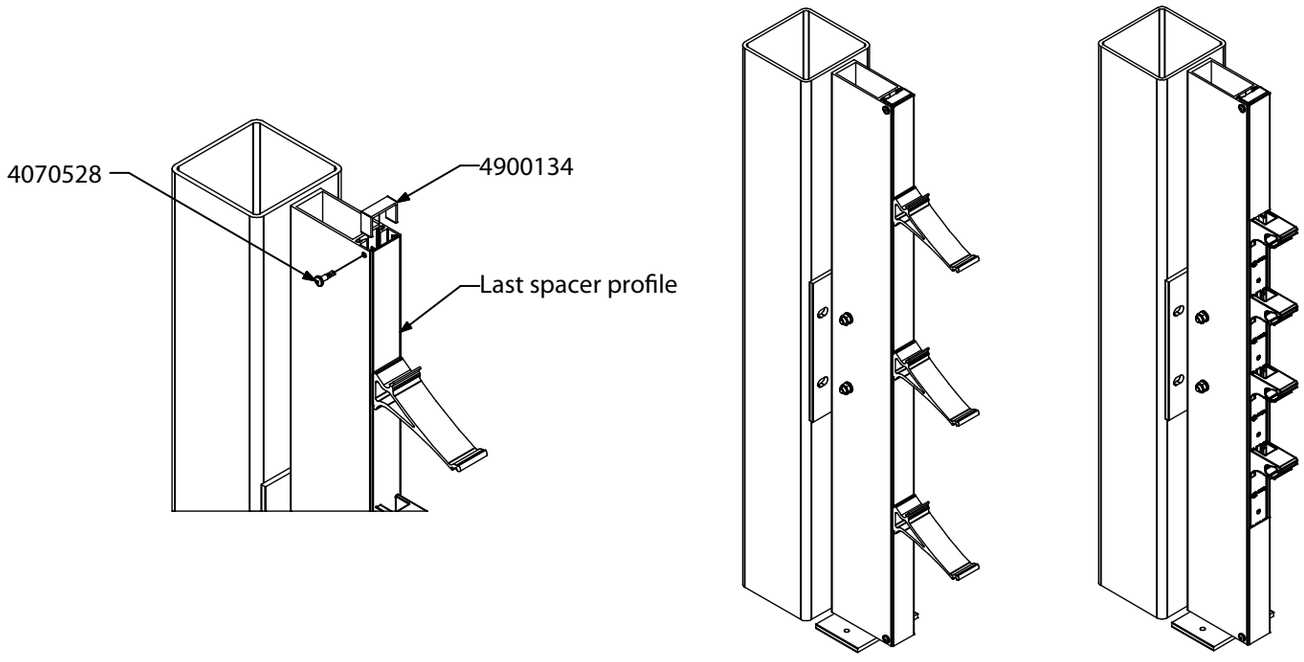
DOC-0000819603

Assembly of support profiles, 30 mm and 90 mm
Clipped blades, 100 mm and 150 mm

5. Following the chosen blade clipping system, insert the blade holders and spacer profiles into the support profile (3130012 or 3960043)



6. After inserting the last spacer part into the support profile, put a spacer fitting 4900134 at the top and fasten it with a screw 4070528.

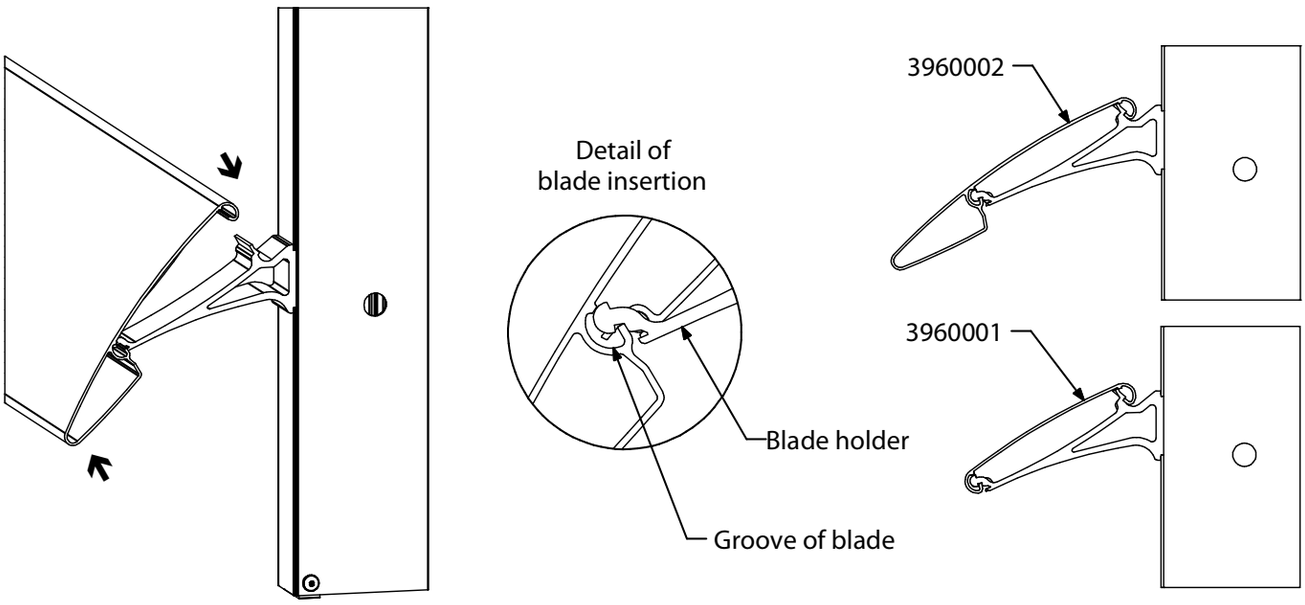


FM

Clipping blades

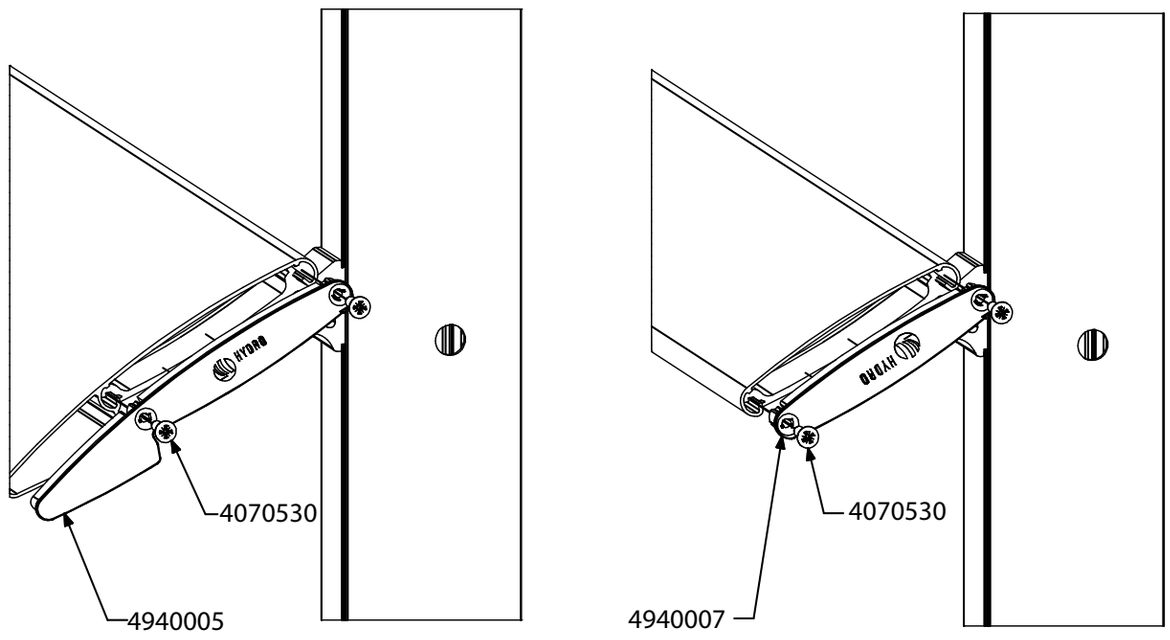
Clipped blades, 100 mm and 150 mm

1. Insert the front of the blade holders in the inner groove of the blade (3960001 or 3960002), as shown in the detail view. Then tilt the blade by pressing the rear and lifting the front.



FM

2. Insert the caps 4940005 or 4940007 (depending on the blade) at the ends of the blades and tighten them each with two screws 4070530.



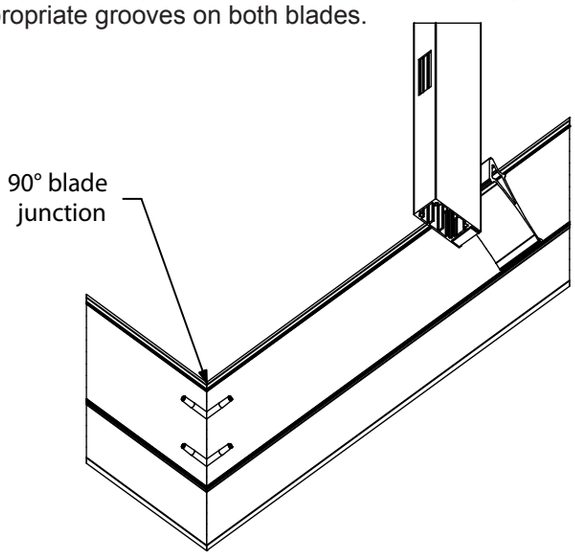
DOC-0000819710

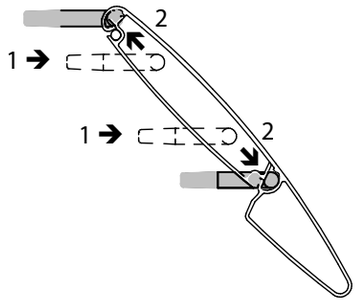
Clipping blades

Clipped blades, 100 mm and 150 mm

Junction of blades at 90°

In case of a 90° junction of the blades, positioning the connector angles and clip them into the appropriate grooves on both blades.

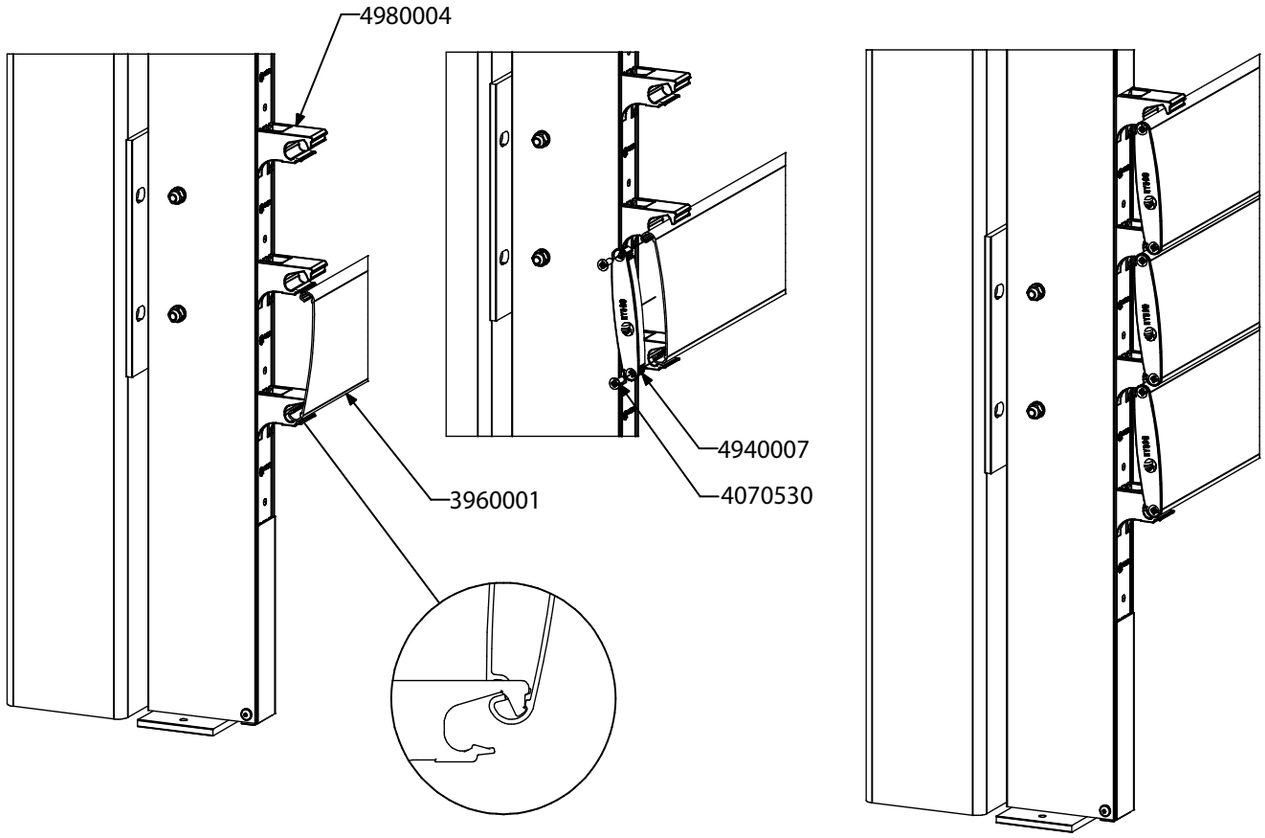




FM

Cladding

Mount the blades on the support pieces 4980004, beginning from the bottom, by placing the inner groove of the blade on the upper hook of lower support and then pressing the upper part against the adjacent holder. Finally, insert the end caps and fix them each with two screws 4070530.



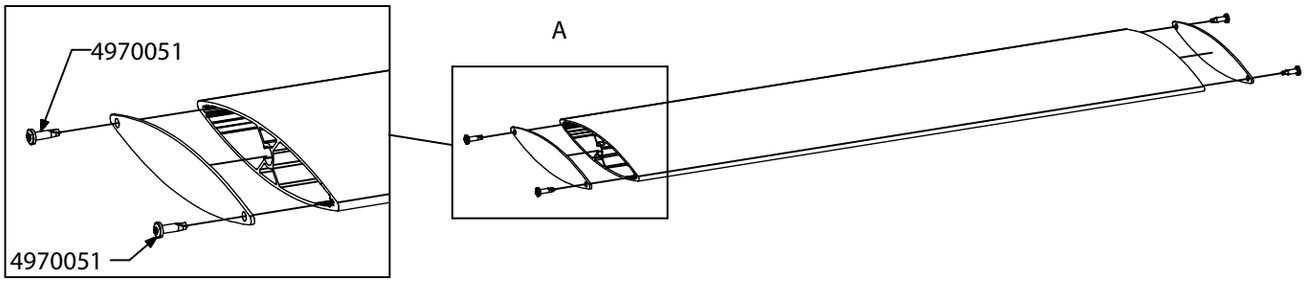
DOC-0000819859

Assembly of continuous horizontal blades

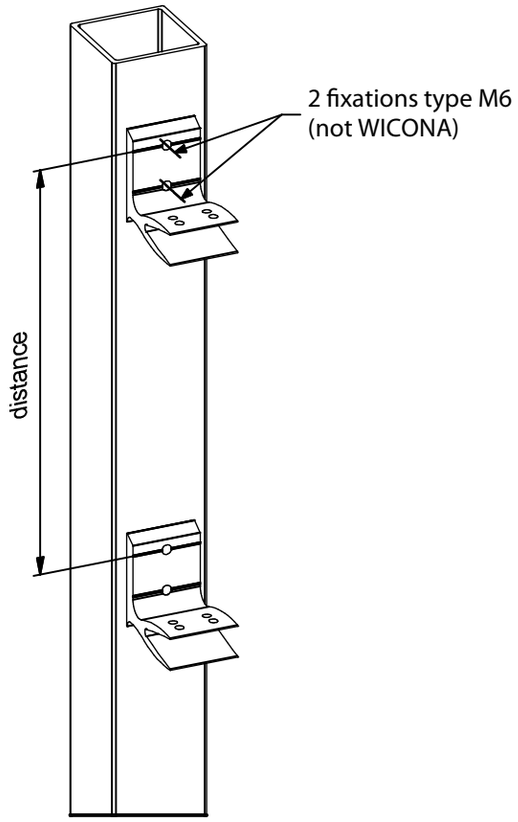
One-piece blades, 120 mm and 270 mm

Assembly sequence:

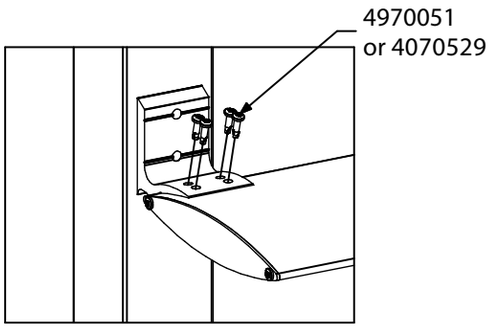
1. Assemble the end flanges on the blades.

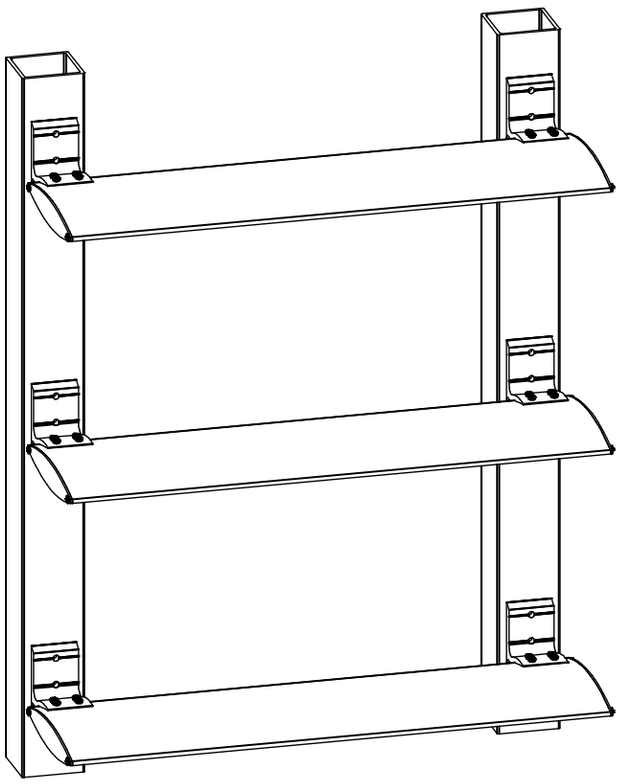


2. Fasten the clip pliers along the support profile.



3. Position the blades on the holders and fasten them using screws 4970051 (120 mm and 180 mm blades) or screws 4070529 (240 mm or 270 mm blades)





Note:
Based on the distance between blades, accessibility to the screws may be limited.
If so, be sure to mount the blades starting with the bottom row.

FM

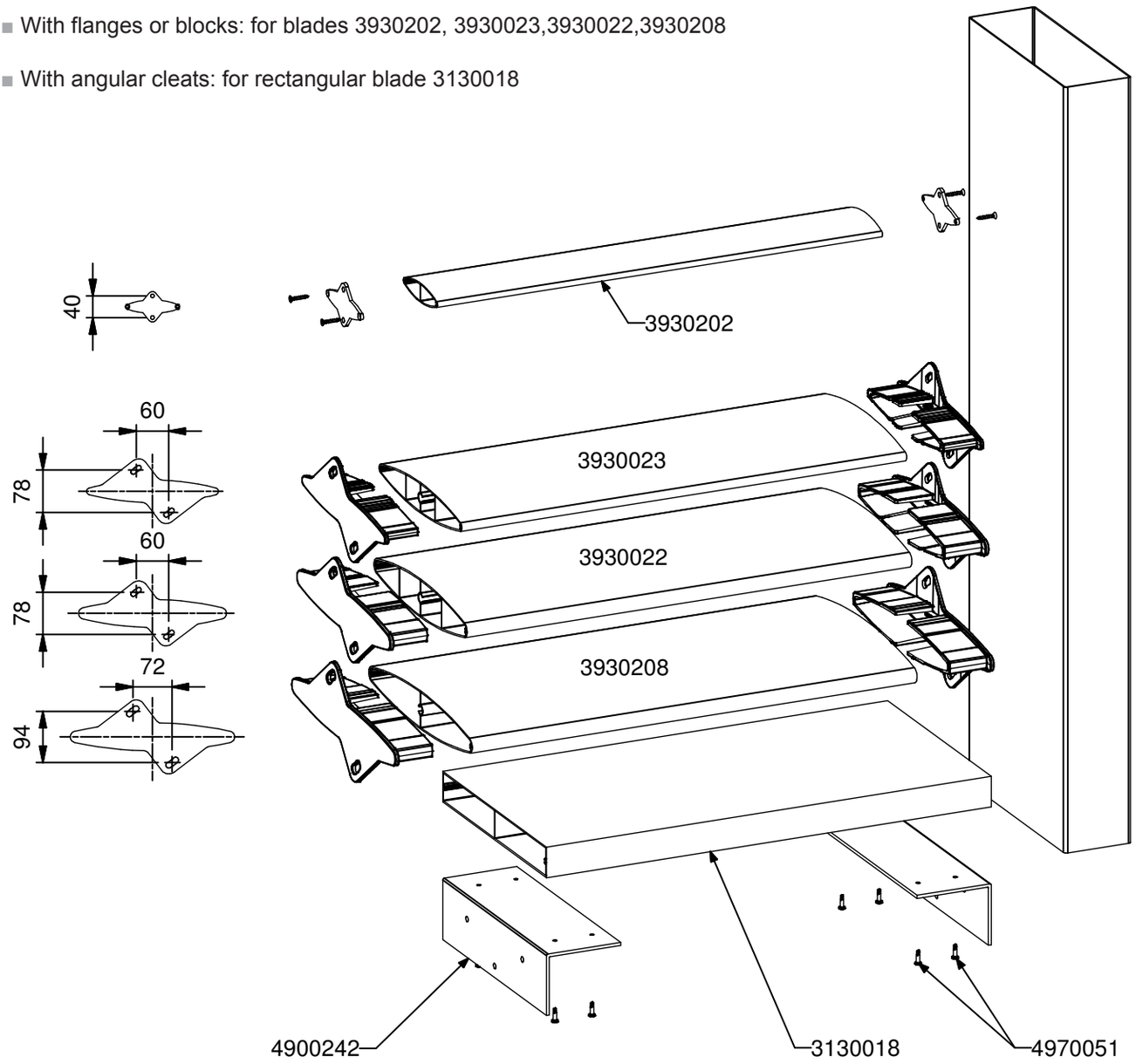
DOC-0000819949

Manufacture of fixed one-piece blades

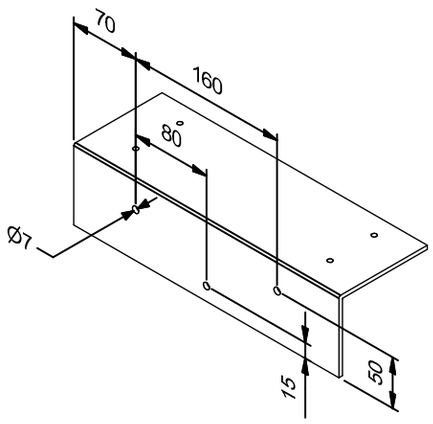
Blades 100 mm to 300 mm between bearing structure

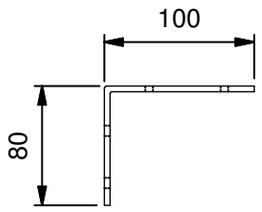
Types of assembly

- With flanges or blocks: for blades 3930202, 3930023,3930022,3930208
- With angular cleats: for rectangular blade 3130018



Detail of angular cleat 4900242





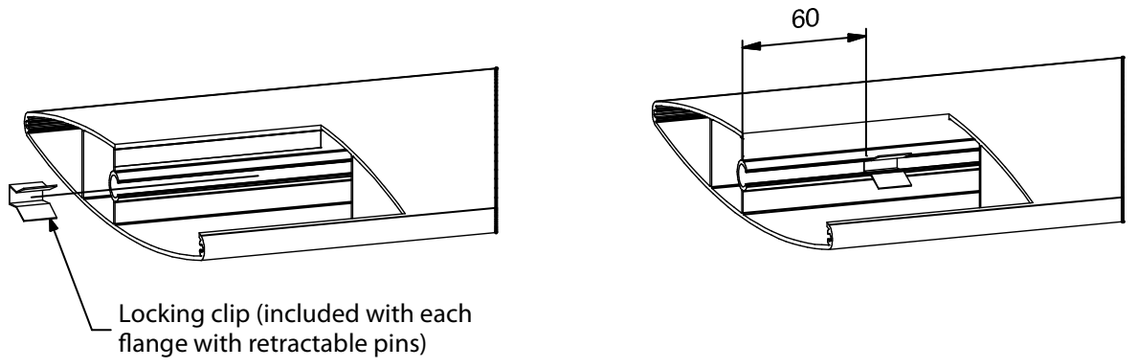
DOC-0000820164

Manufacture of fixed one-piece blades

Blades 120 mm to 300 mm between bearing structure

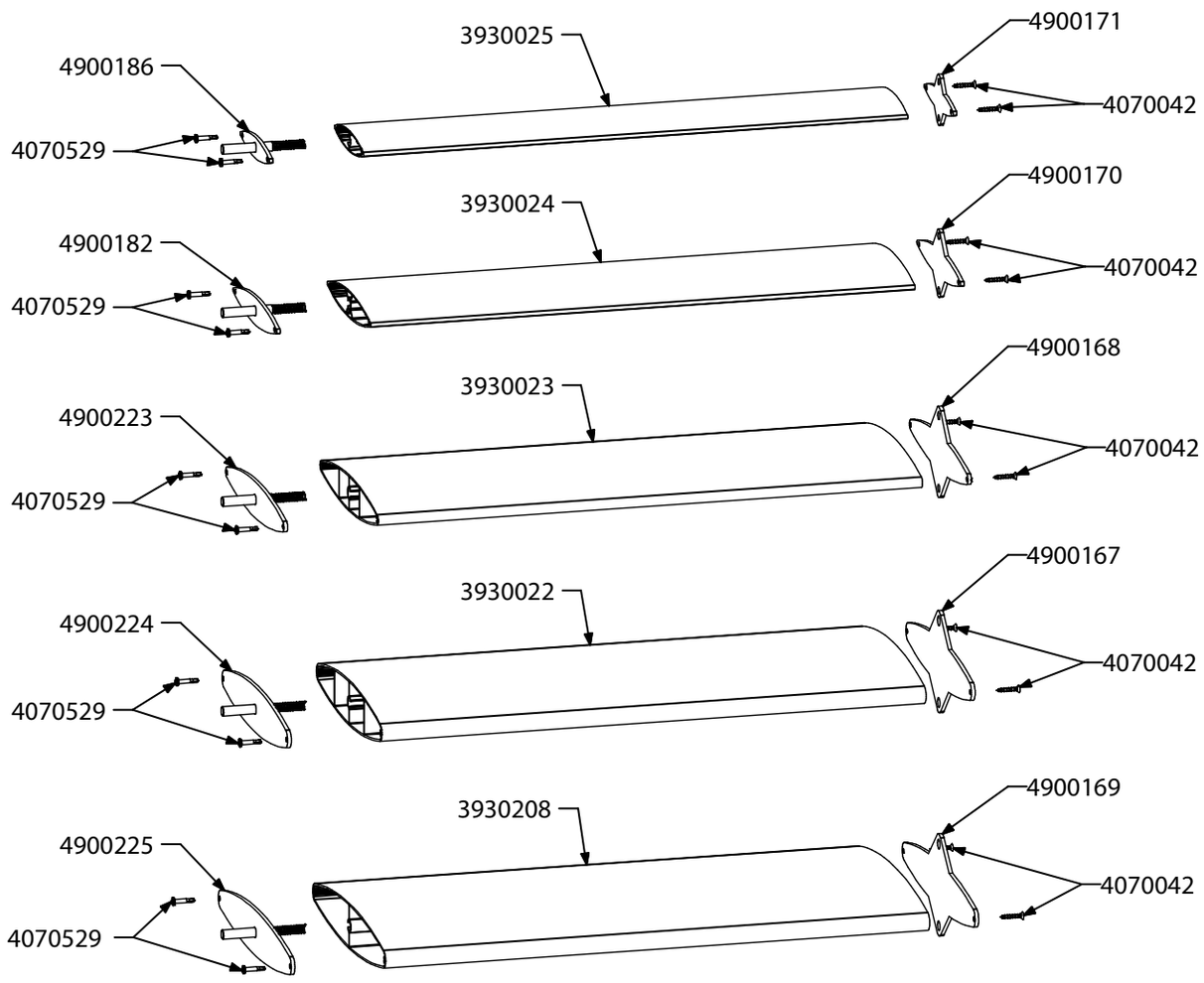
- With flanges and flanges with recractable pins, for bades: 3930025, 3930024, 3930023,3930022,3930208

1. Position a locking clip into the blade, at the end where the flanges with retractable pins will attach.



FM

2. Screw the flanges to the ends of the blade, particular evently in using of flanges with retractable pins.



DOC-0000820306

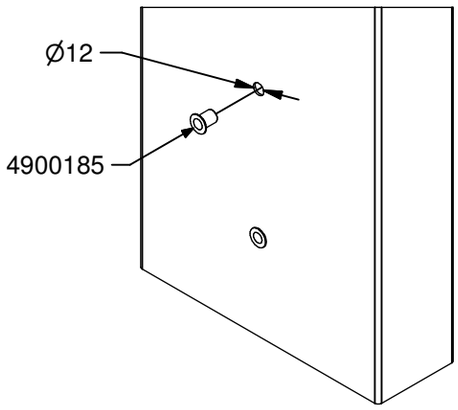
Manufacture of one-piece blades

Blades 120 mm to 300 mm between bearing structure

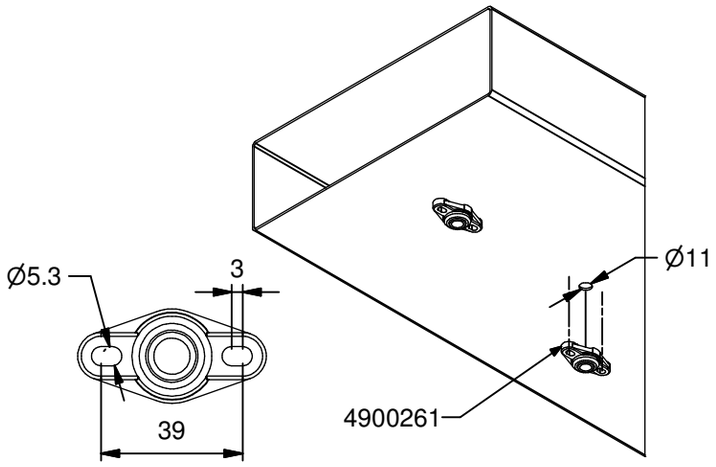
Assembly sequence:

1. Machine the support structure to accommodate the flanges with pins and attach the bearings according to the chosen blade configuration (horizontal or vertical blades).

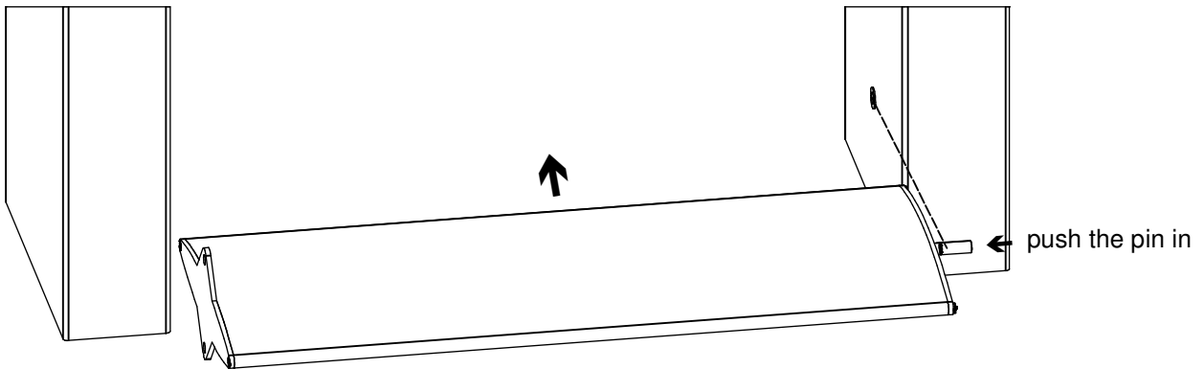
Horizontal configuration: holes Ø 12 + bearing 4900185



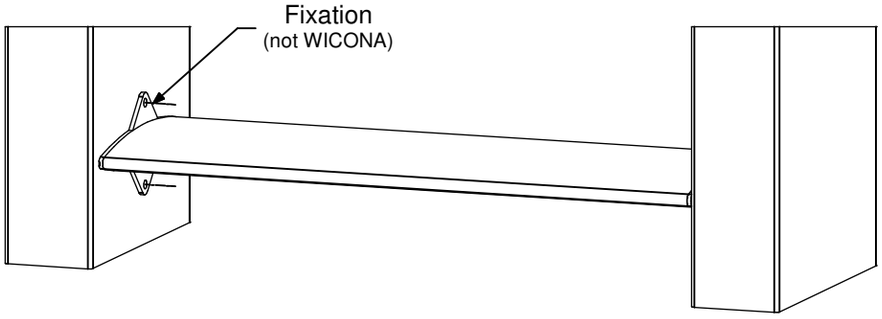
Vertical configuration: holes Ø 11 + bearing 4900216



2. Hold down the rectractable pins so that the blade can be inserted betwenn the support structur and then bring the pin into the bearing.



3. Complete the fixing of the blade by screwing the flange to the support structure.



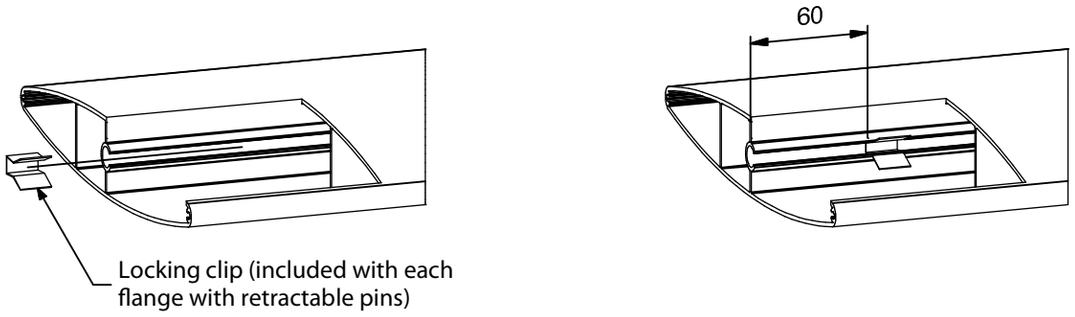
DOC-0000820388

Manufacture of movable one-piece blades

Blades 180 mm to 270 mm / 300 mm between bearing structure

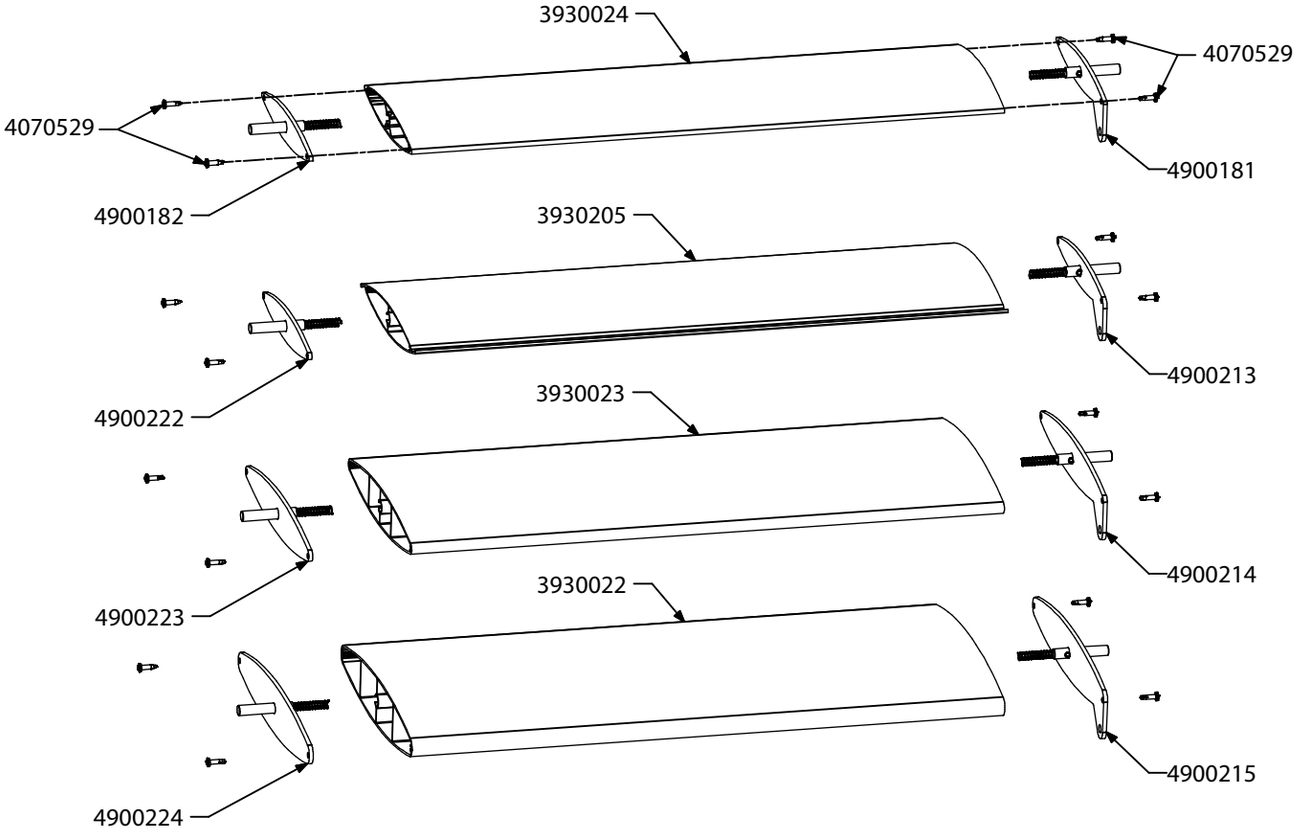
Note: Manufacturing of one-piece movable blades is the same for horizontal and vertical blade configuration.

1. Position a locking clip into the blade.



FM

2. Screw the flanges evently to the ends of the blade, one flange with the retractable pin to one end and the flange with the lug and those pin to the other end.



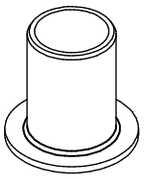
Assembly of movable one-piece blades - motorised positioning

Horizontal blades, from 180 mm to 300 mm

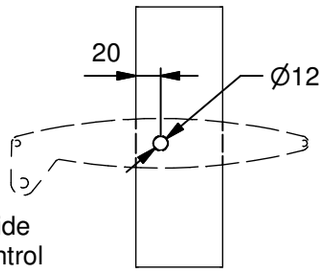
Assembly sequence:

1. Attach the bearing to the support structure and the flanges to the blades, as explained earlier.
   Every blade is equipped with one flange with a lug, positioned in same orientation at the side of the rod.

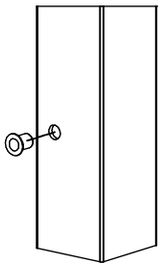
4900185



Bearing for movable horizontal blades

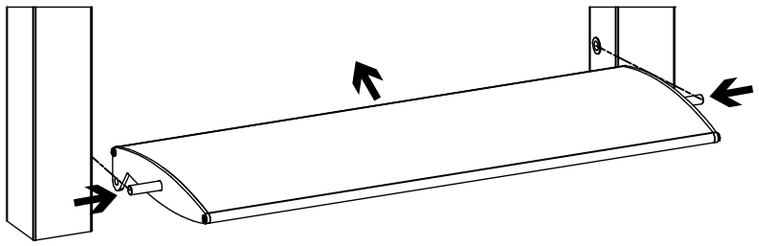


Side control



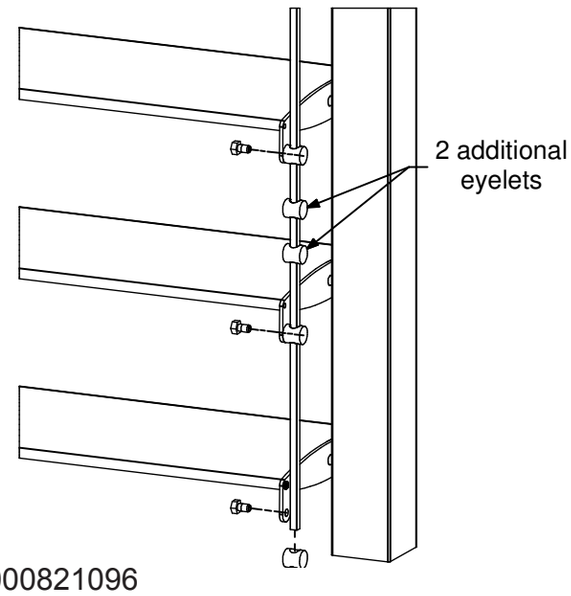
Note: The mounting method for vertical blades is similar, exept that for vertical blades the bearing 4900261 is used.

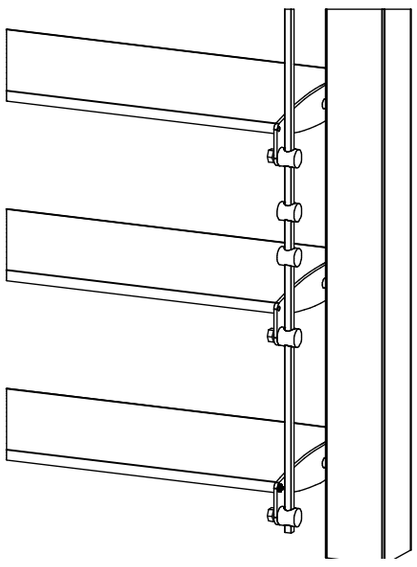
2. Hold down the rectractable pins so that the blade can be inserted betwenn the support structur and then bring the pin into the bearing.



3. Slide the securing eylets 4900254 onto the rod and then connect them with the lugs using securing eye screws 4900304.

Note: Don't forget the two securing eyelets, which are needed to connect the cylinder.



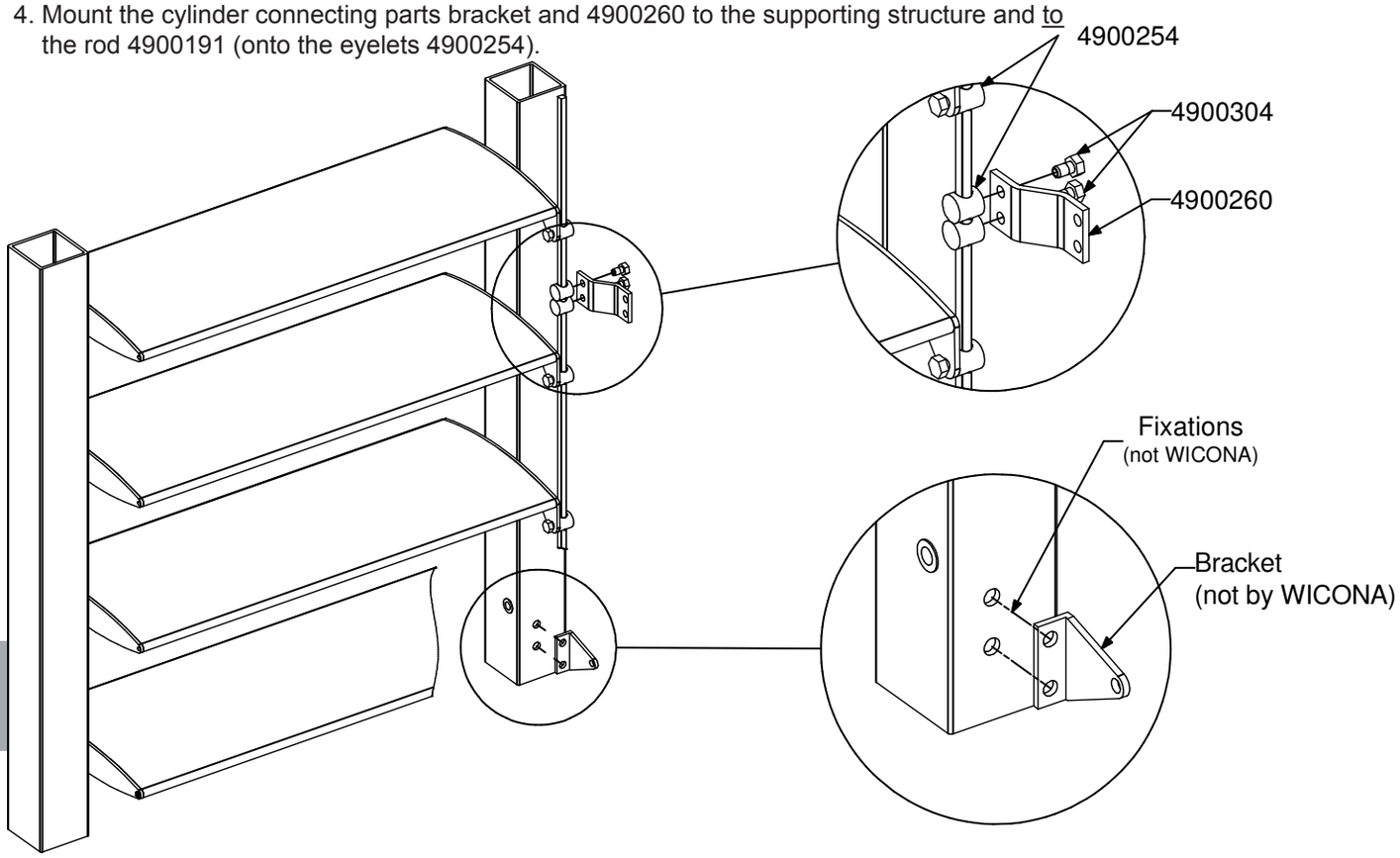


DOC-0000821096

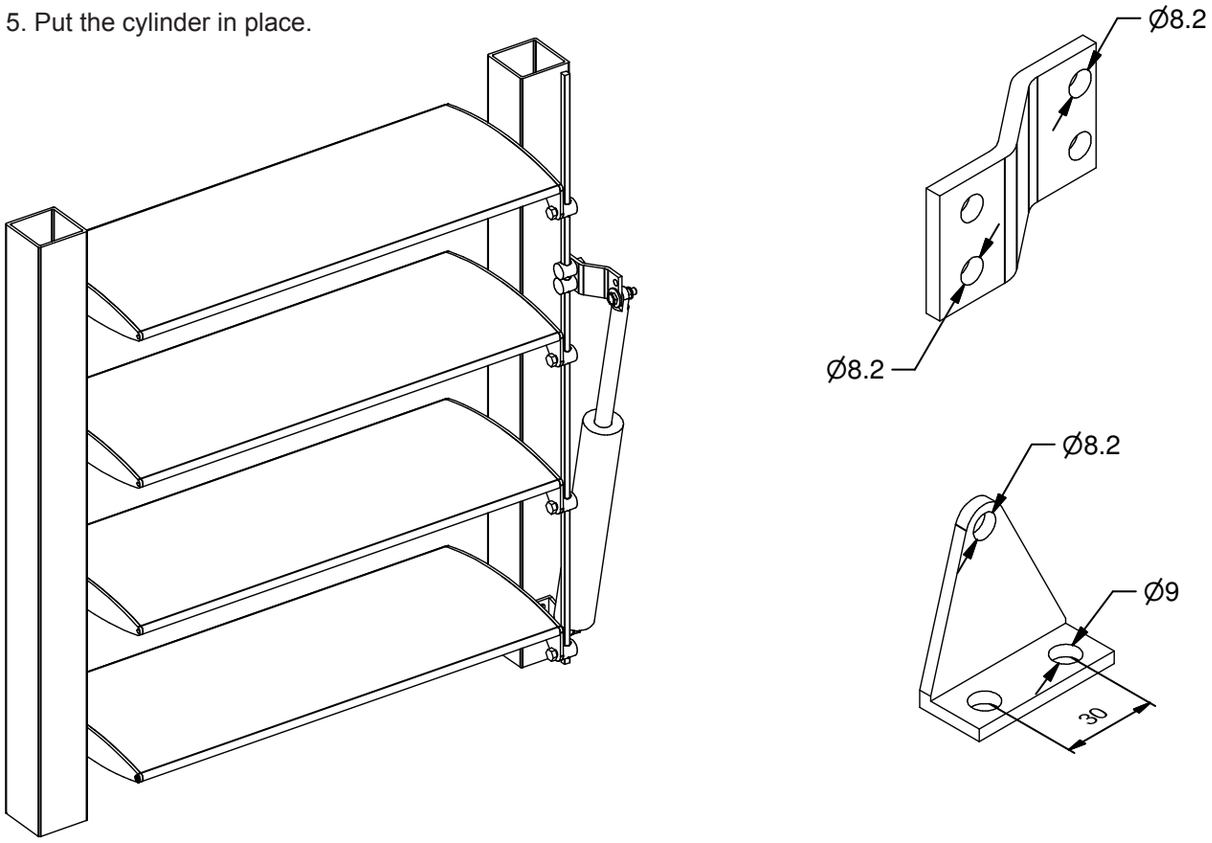
Assembly of movable one-piece blades - motorised positioning

Horizontal blades, from 180 mm to 300 mm

4. Mount the cylinder connecting parts bracket and 4900260 to the supporting structure and to the rod 4900191 (onto the eyelets 4900254).



5. Put the cylinder in place.

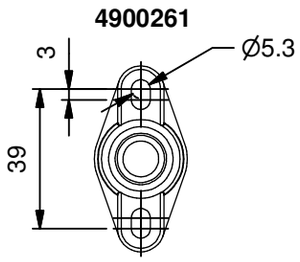


Assembly of movable one-piece blades

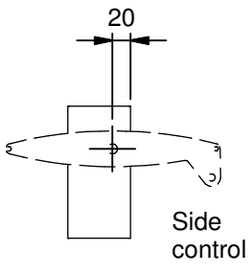
Vertical blades, from 180 mm to 270 mm

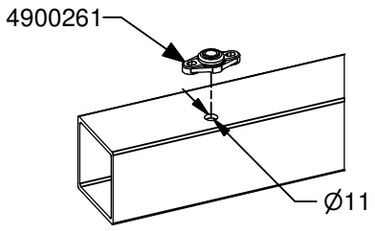
Assembly sequence:

1.Attach the bearing to the support structure and the flanges to the blades, as explained earlier.
Every blade is equipped with one flange with a lug, positioned in same orientation at the side of the rod.



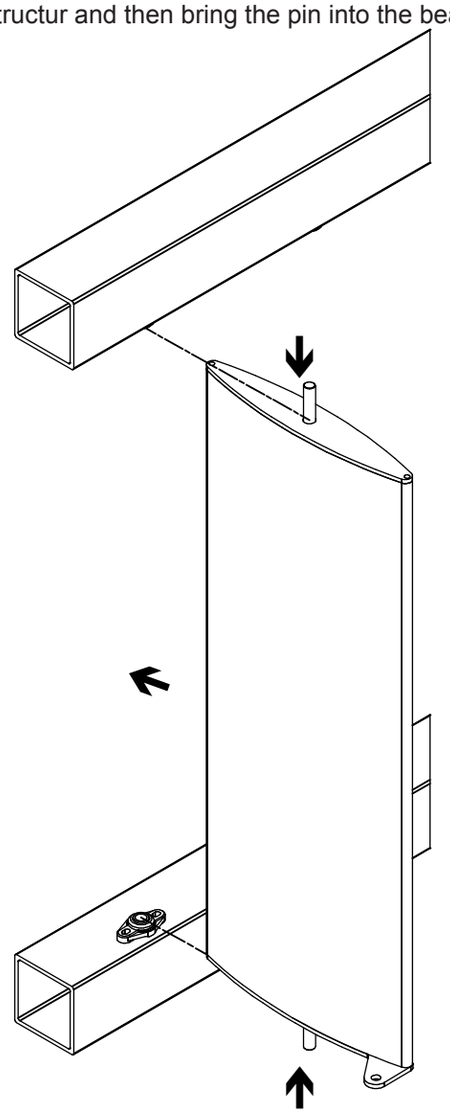
Bearing for movable vertical blades



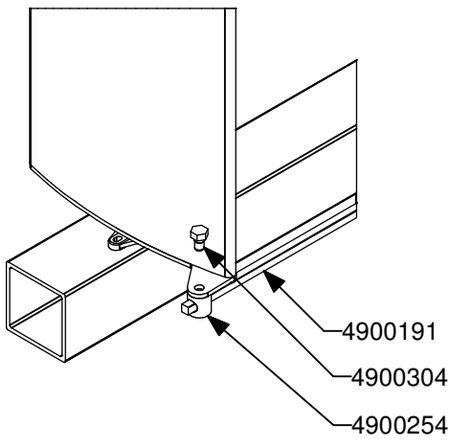


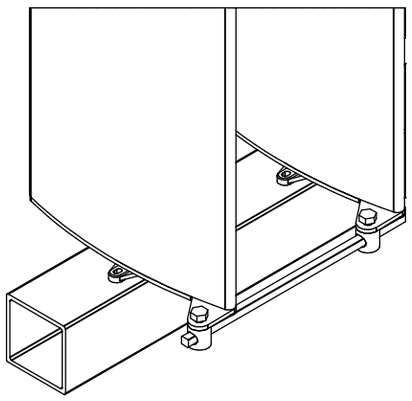
Note: The mounting method for horizontal blades is similar, exept that for horizontal blades the bearing 4900185 is used.

2. Hold down the rectractable pins so that the blade can be inserted betwenn the support structur and then bring the pin into the bearing.



3. Slide the securing eylets 4900254 onto the rod and then connect them with the lugs using securing eye screws 4900304.





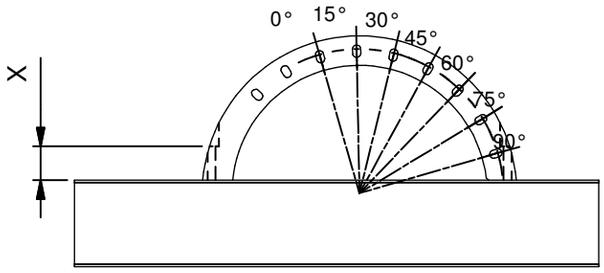
FM

DOC-0000821539

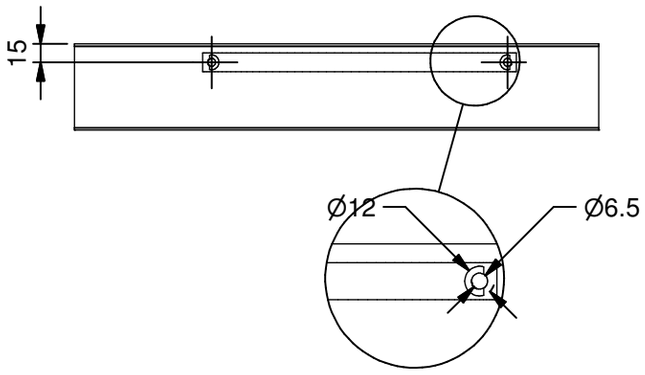
Assembly of movable one-piece blades - manual positioning

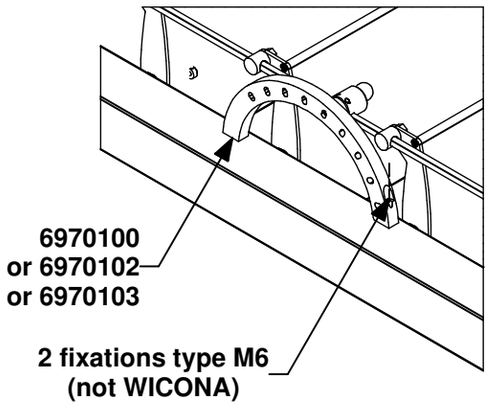
Vertical blades, from 180 mm to 270 mm

4. Attach the protractor to the support structure on side with the rod.



Blade	Protractor	X (mm)
3930024 and 3930205	6970100	21
3930023	6970102	27,6
3930022	6970103	30





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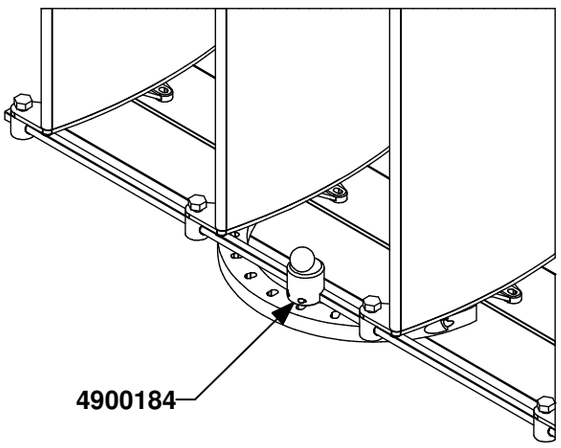
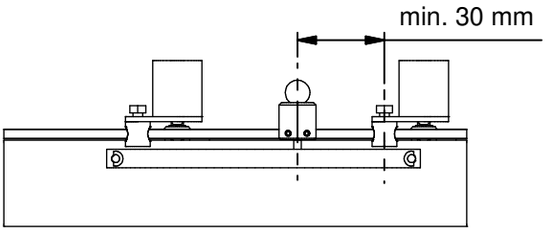
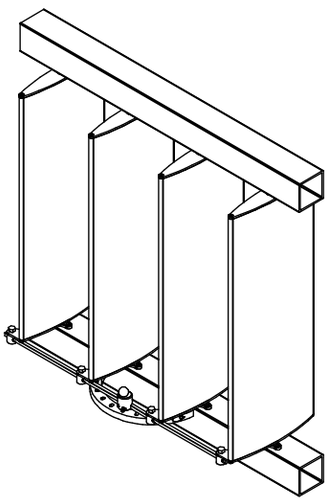
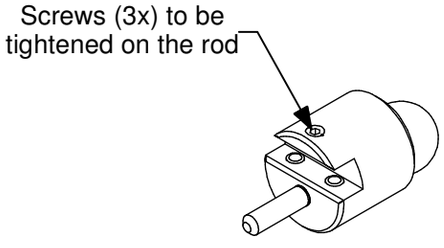
5. Place the index spring 4900184 on the rod 4900191 and tighten the three pressure screws.

Note: These screws are coated with threadlock.









4900184

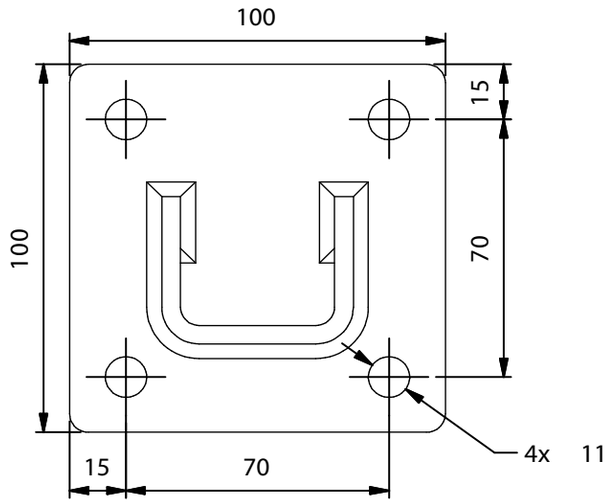
DOC-0000821539

Assembly of fixed composite blades

Horizontal blades 350 mm to 600 mm between bearing structure

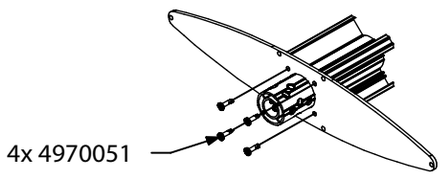
Assembly sequence:

1. Attach the corbels 4900294 to the support structure (fixing by customer).

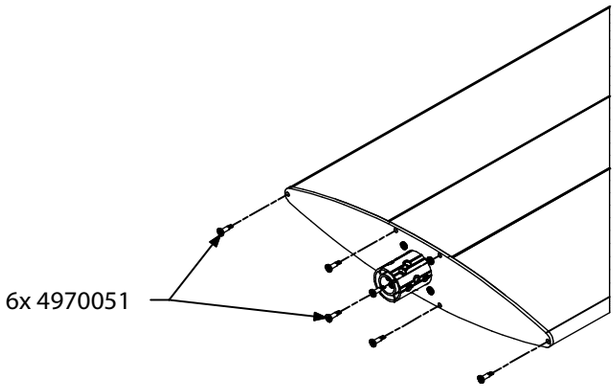


Refer to the table “Dirction of blades and positioning of sleeves” in chapter “applications” for composited blades

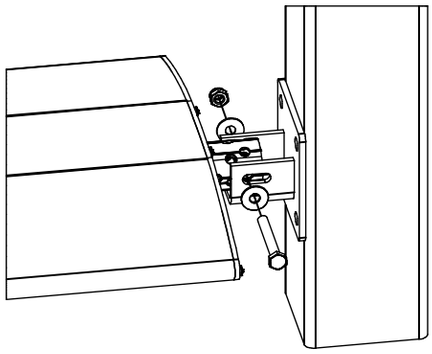
2. Assemble the flanges and sleeve (swivelling corbel). Be careful to position the sleeve at the chosen angle for the blade (see “composite blade on an independent structure”).

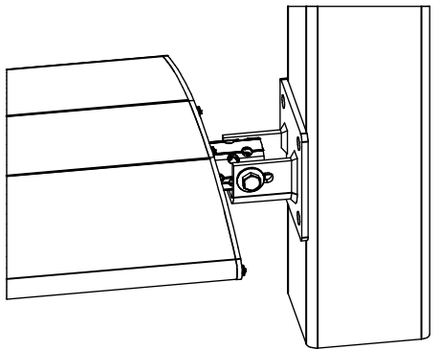


3. Mount the connected flanges set into the blade.



4. Mount the blades into the supporting corbel.





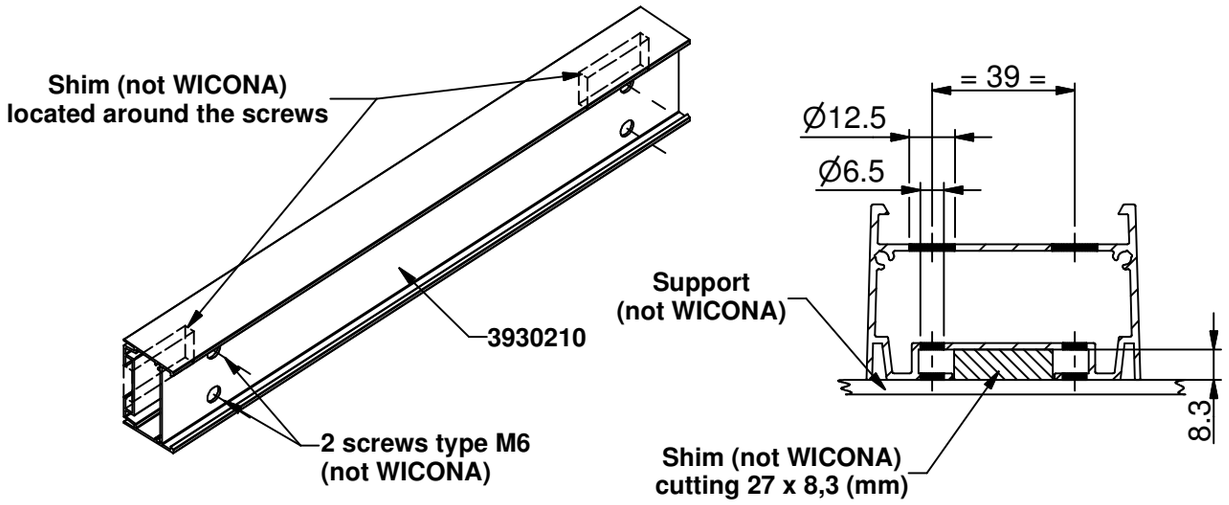
DOC-0000820452

Assembly of semi-elliptical composite blades

Horizontal blades, from 175 mm to 300 mm

Assembly sequence:

1. Attach the link profile 3930210 to the supporting structure.



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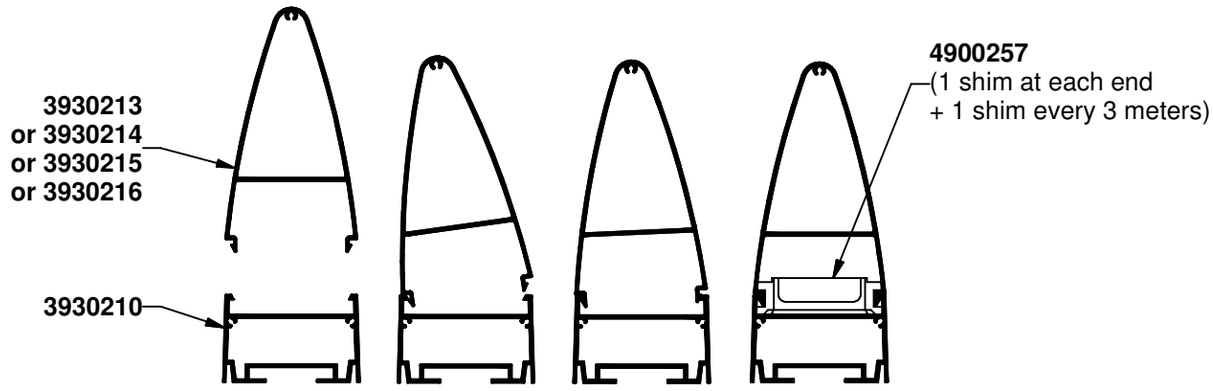
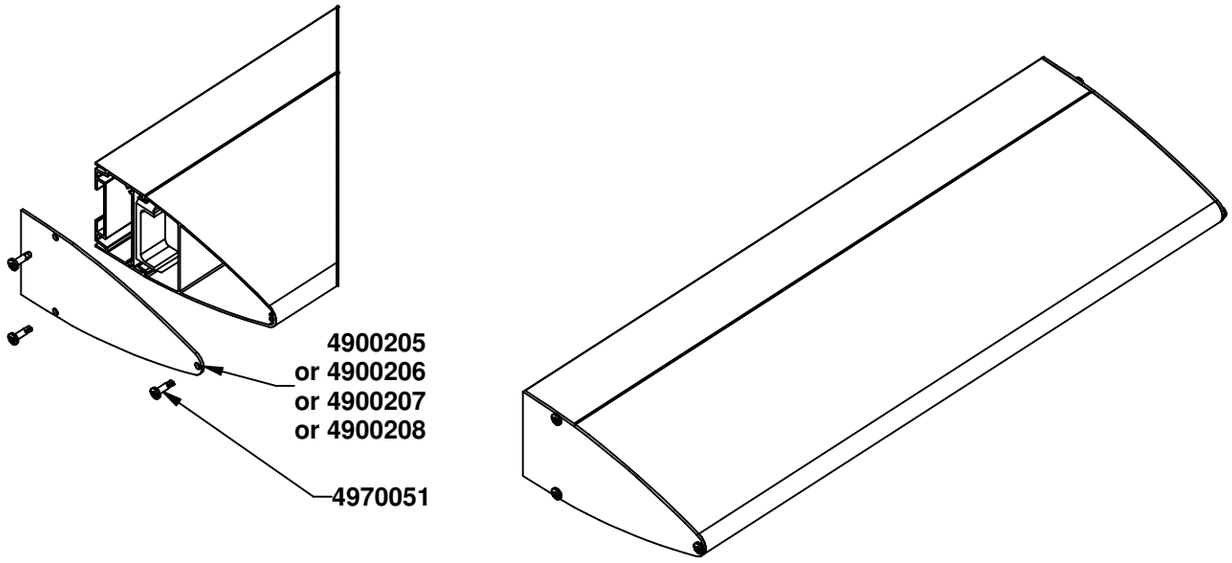
2. Clip the semi-elliptical blade profile to the link profile. Therefore additionaly clip-locking blocks 4900257 are needed (1 block at each end + 1 block every 3 meters).



3. Attach a flange to each end of the blade using screws 4970051.



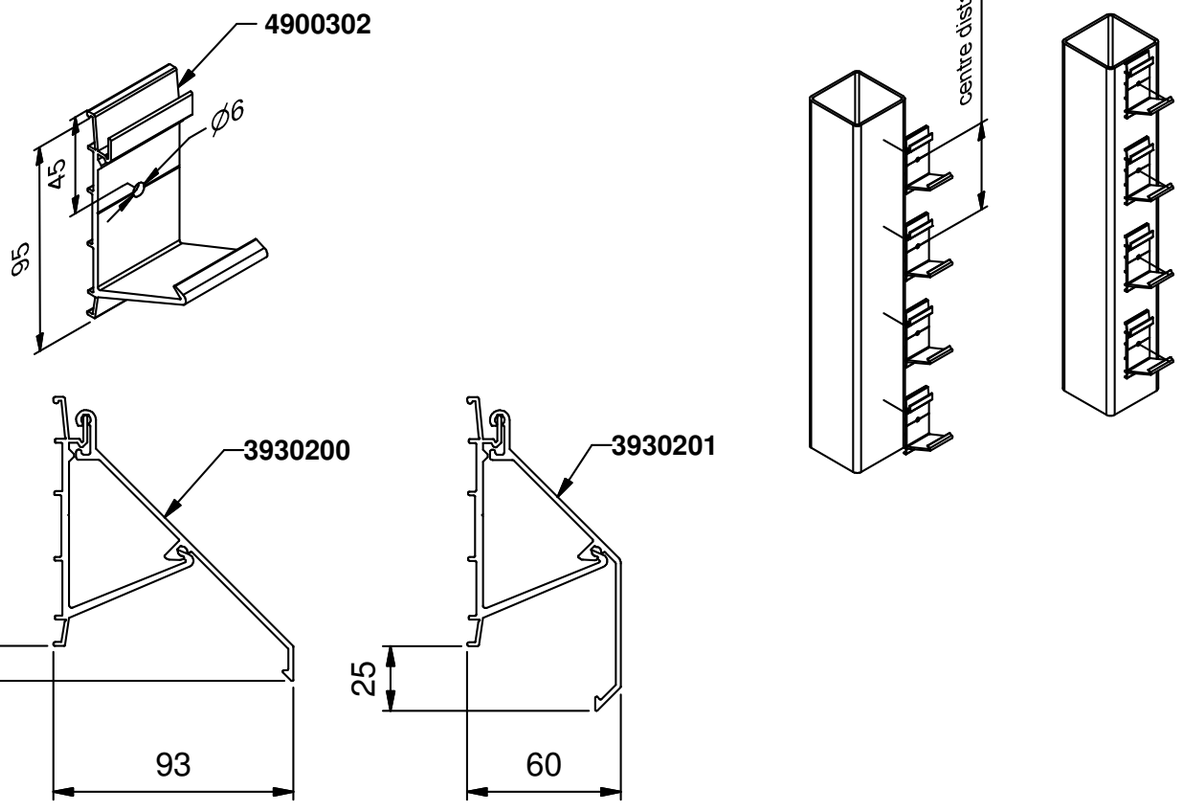
DOC-0000807223

Assembly of louvers

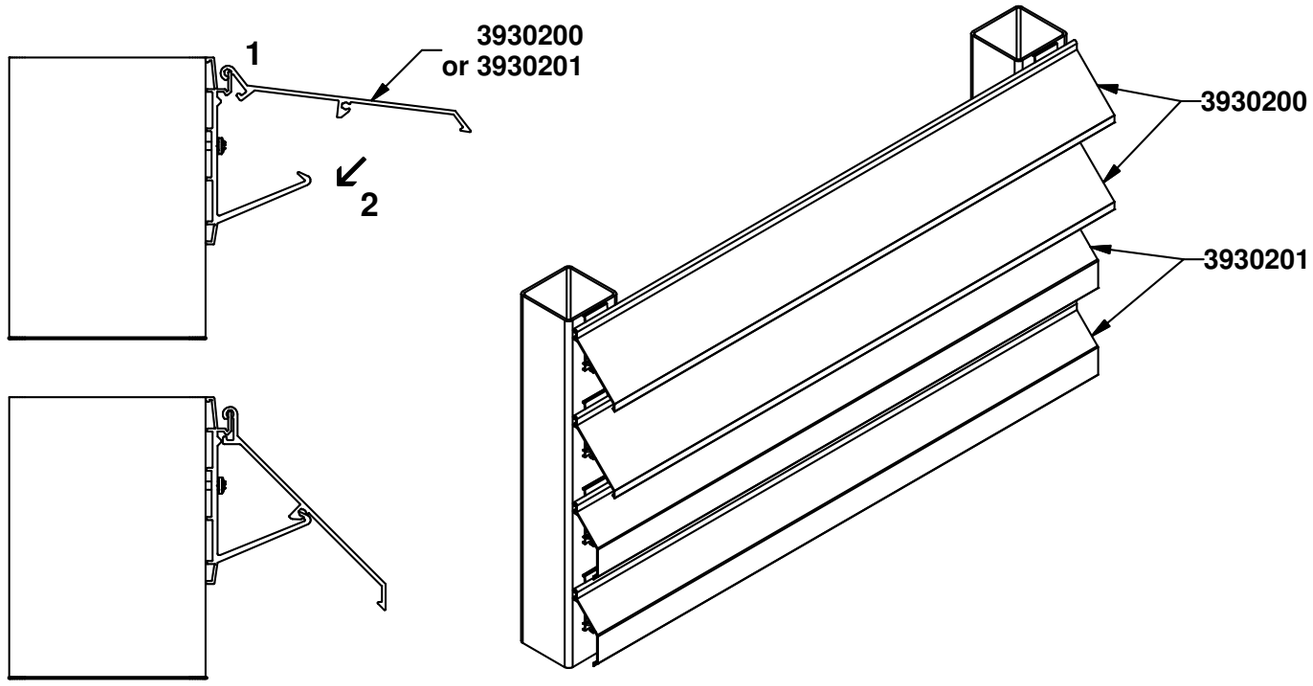
Louvers on independent supporting structure

Assembly sequence:

1. Screw the louver clips 4900302 to the support profiles.



2. Clip the louver into the holders (louver clips) beginning from the bottom.



DOC-0000807561

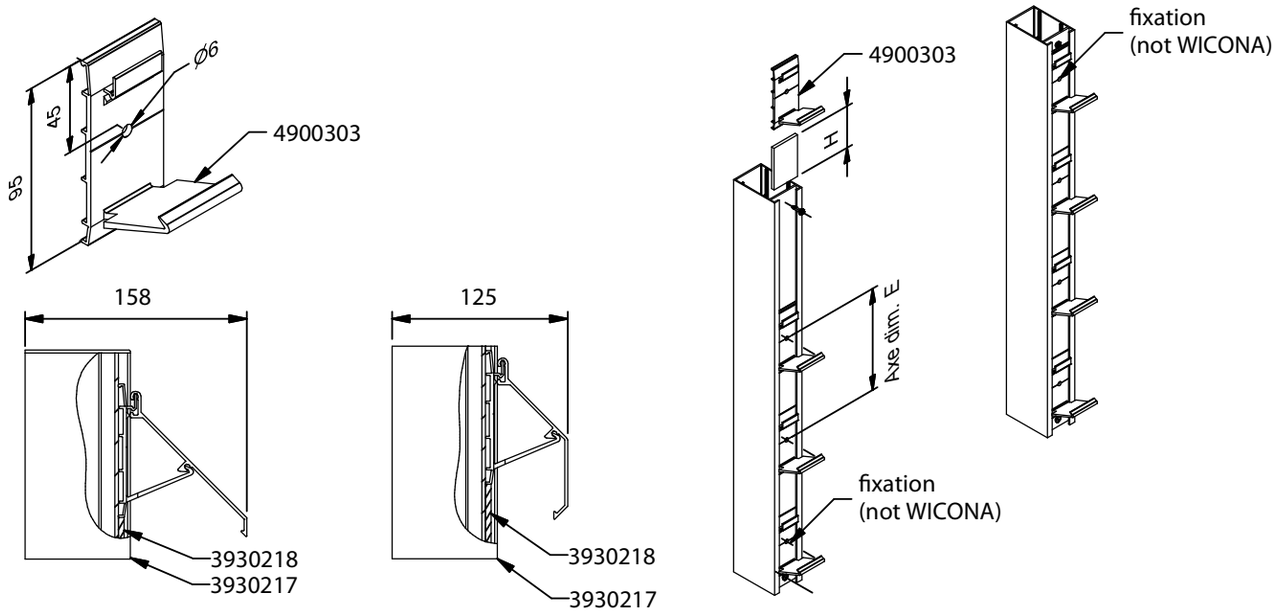
Assembly of louvers

Louvers on support profile 3930217

Assembly sequence:

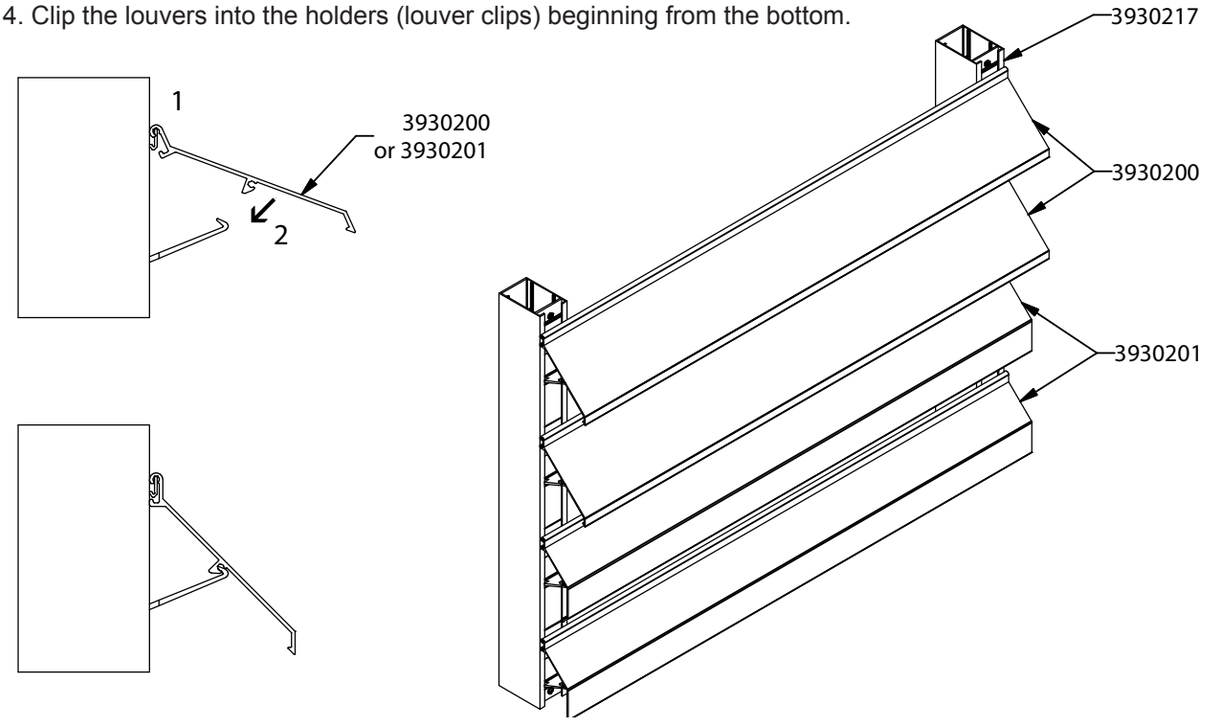
1. Place a first spacer shim from profile 3930218 on the bottom of the support profile 3930217 and fix it with a screw 4970051.
2. Slice the first louver clip 4900303 into the groove of profile 3930217 and fasten it (not WICONA screw). Then place the next spacer shim 3930218 into the support profile. Repeat these steps as many times as necessary.
3. Slice the last holder 4900303 into the support profile 3930217 and fasten it.

Note: Only the first and the last holder, the louver clips at the ends, must be screwed.



Cutting length of 3930218
H = E - 95

4. Clip the louvers into the holders (louver clips) beginning from the bottom.



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