

E8000 E45

TECHNICAL CATALOGUE

SLIDING SYSTEM FOR WINDOWS AND DOORS
WITH THERMAL BREAK

Q72

E52

E3000 Q60

E2300 E75

E1600

E85 E19

E40

E3000

SLIDING SYSTEM FOR WINDOWS AND DOORS
WITH THERMAL BREAK



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ETEM HISTORY

ETEM is a leading aluminium extrusion company. It was founded in 1971 as a part of the largest metal manufacturing holding in the Balkans. With over 40 years of experience ETEM is a fully integrated designer and producer of architectural systems and aluminium profiles for industrial applications.

Our mission is to listen and promptly respond to our customers' requests and design and manufacture aluminium products and systems taking into consideration technical and aesthetic requirements.

ETEM focuses on sustainable development and has proven its concern about the protection of the natural environment by making considerable investments in anti-pollution measures and by optimizing production processes following the applicable standards of the European Union.

SERVICES WE PROVIDE

ETEM supports you with the following:

▷ design of conventional and bespoke architectural system solutions

▷ innovative engineering in the field of curtain walls, ventilated facades, doors, windows

▷ professional consultation and adequate technical advices ensured by our engineering team with wide experience in the field of profile extrusion as well as architectural systems' engineering

▷ reliable customer care constant support trainings technical support and audits on site

▷ high quality engineering which guarantees offering the best solution according to the specific features of every single project

▷ managing the process of certification in accordance with the applicable European standards in Notified Bodies

▷ production of non-standard length profiles and non-standard processing high quality powder coating

ETEM PRODUCTS AND SUSTAINABLE DEVELOPMENT

SUSTAINABLE DEVELOPMENT IS DEVELOPMENT THAT MEETS THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS.*

For many sustainable development is about environmental conservation. This is true but it also includes two other aspects: a social aspect and an economic aspect.

Sustainable development means striking the right balance between economic development social equity and environmental protection.

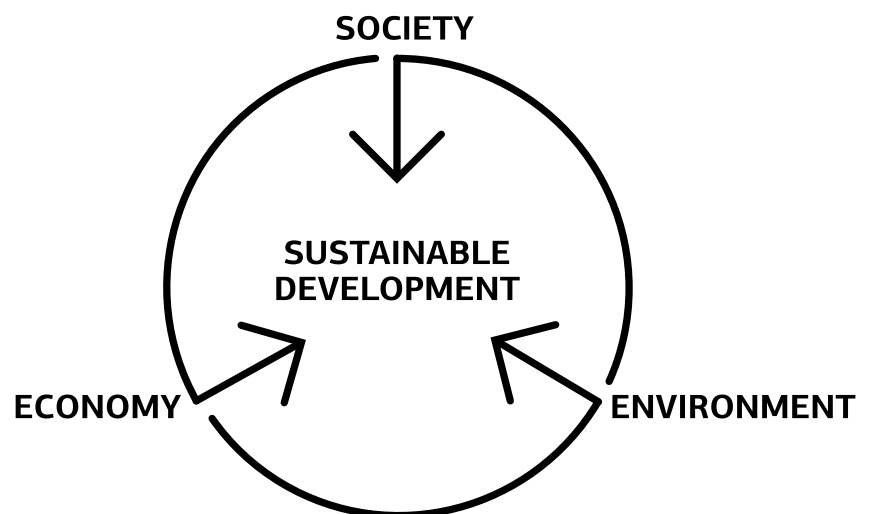
For us meeting this objective translates into the challenge of satisfying market demands at the lowest economic social and environmental cost possible.

ETEM has always designed architectural systems which are in compliance with all requirements for achieving high energy efficiency.

In order to assure the comfort of the building inhabitants ETEM systems adapt their functions to the changing environment.

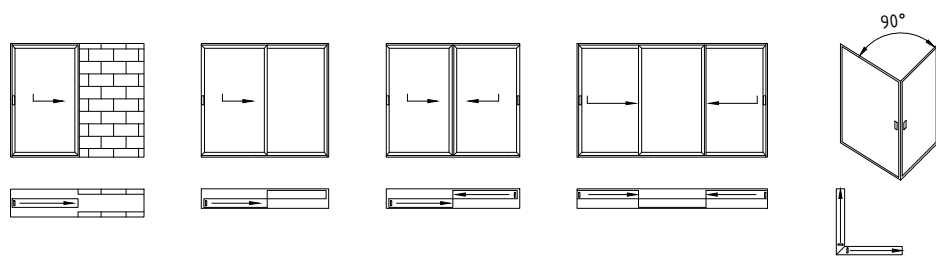
As a moderator between outside and inside our systems provide:

- ▷ ENERGY EFFICIENCY
- ▷ DAYLIGHT
- ▷ SUN-SHADING
- ▷ VENTILATION AND GOOD AIR QUALITY
- ▷ SAFETY AND SECURITY



TABLES

TYPOLOGIES / LIST OF PROFILES / CHARACTERISTICS



sliding system with thermal break



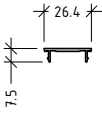
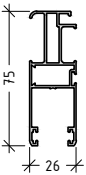
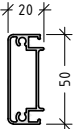
E3000

code	profile	weight length moment of inertia special condition	code	profile	weight length moment of inertia special condition
E3010		3384 g/m L=6.01 m $I_x=35.24 \text{ cm}^4$ $I_y=233.79 \text{ cm}^4$	E3012		635.6 g/m L=6.01 m $I_x=6.58 \text{ cm}^4$ $I_y=25.18 \text{ cm}^4$ KG special condition
E3003		2260 g/m L=6.01 m $I_x=7.04 \text{ cm}^4$ $I_y=179.85 \text{ cm}^4$	E5388		4835 g/m L=6.01 m $I_x=146.47 \text{ cm}^4$ $I_y=188.83 \text{ cm}^4$ KG special condition
E54200		2226 g/m L=6.01 m $I_x=4.183 \text{ cm}^4$ $I_y=40.89 \text{ cm}^4$ KG special condition	E5387		5443 g/m L=6.01 m $I_x=171.79 \text{ cm}^4$ $I_y=298.33 \text{ cm}^4$ KG special condition
E5313		375.6 g/m L=6.01 m $I_x=0.16 \text{ cm}^4$ $I_y=4.72 \text{ cm}^4$	E54550		2467 g/m L=6.01 m $I_x=62.8 \text{ cm}^4$ $I_y=39.4 \text{ cm}^4$ KG special condition
E5396		748 g/m L=6.01 m $I_x=21.04 \text{ cm}^4$ $I_y=10.39 \text{ cm}^4$	E54555		254 g/m L=6.01 m KG special condition
E3011		1917.4 g/m L=6.01 m $I_x=6.31 \text{ cm}^4$ $I_y=38.3 \text{ cm}^4$ KG special condition	E70640		597 g/m L=6.01 m

L3000-01

sliding system with thermal break

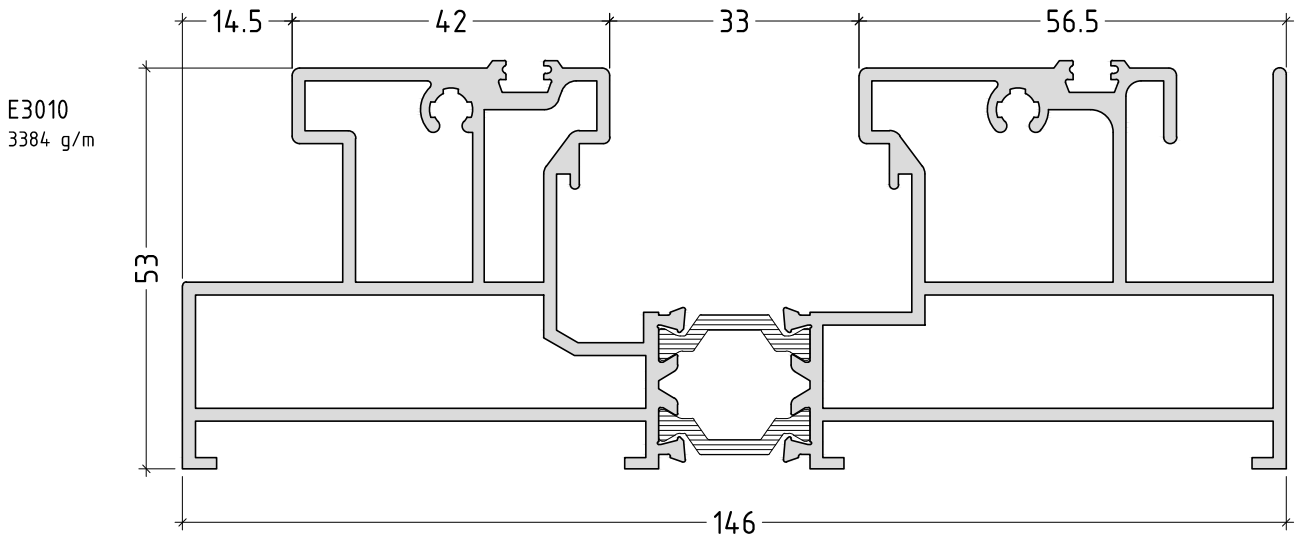
E3000

code		profile	weight length moment of inertia special condition	code		profile	weight length moment of inertia special condition
E19641			130 g/m L=6.01 m				
E22214			857 g/m L=6.01 m Ix=16.3 cm ⁴ Iy=2.7 cm ⁴				
E22215			590 g/m L=6.01 m Ix=6.93 cm ⁴ Iy=0.93 cm ⁴				

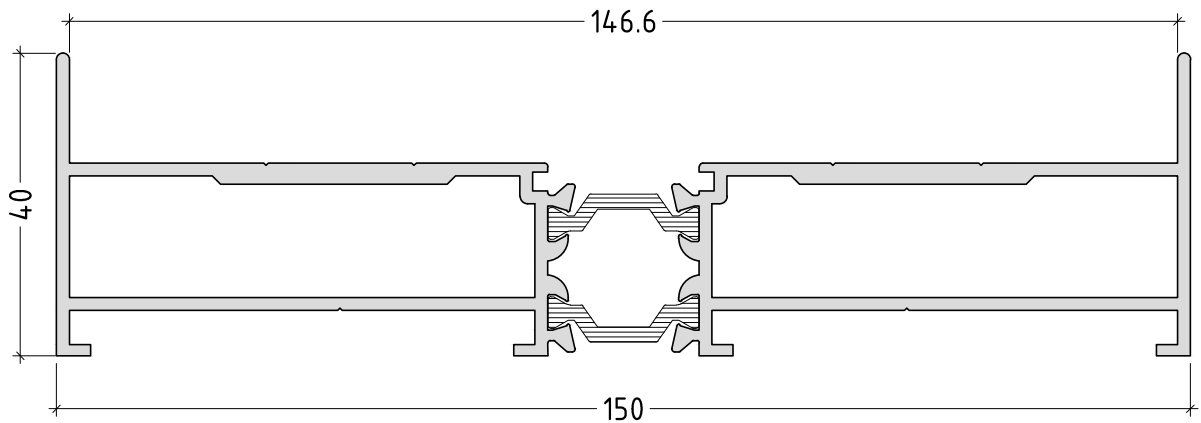
L3000-02

PROFILES

DRAWINGS / SCALE 1:1

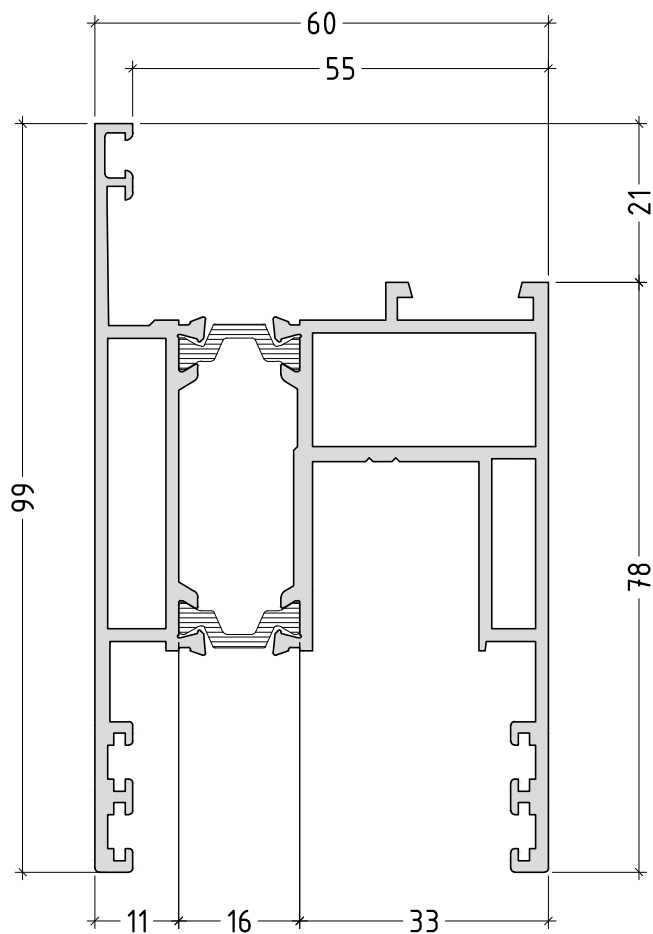


E3003
2260 g/m

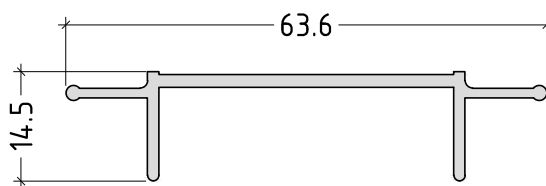


scale : 1:1

E54200
2226 g/m

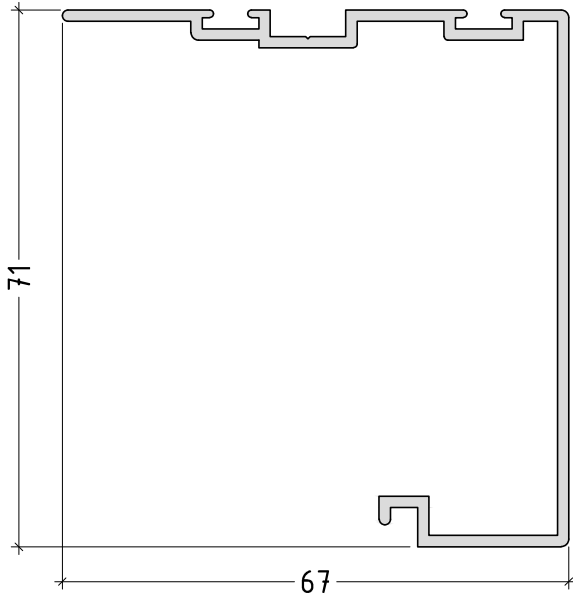


E5313
375.6 g/m

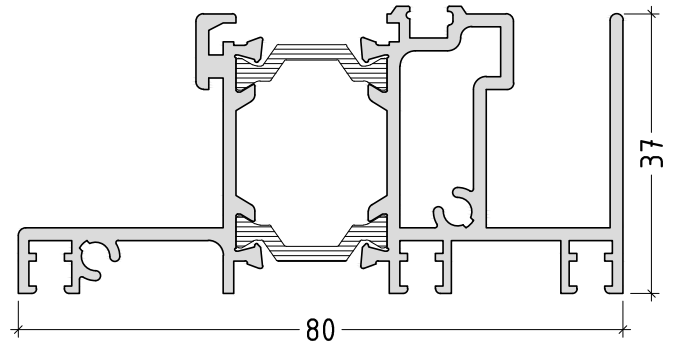


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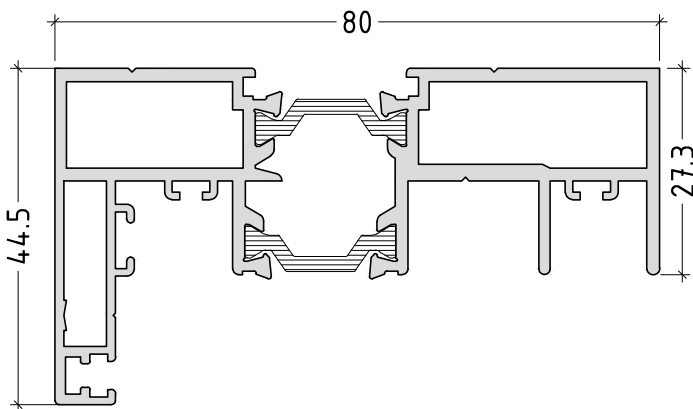
E5396
748 g/m



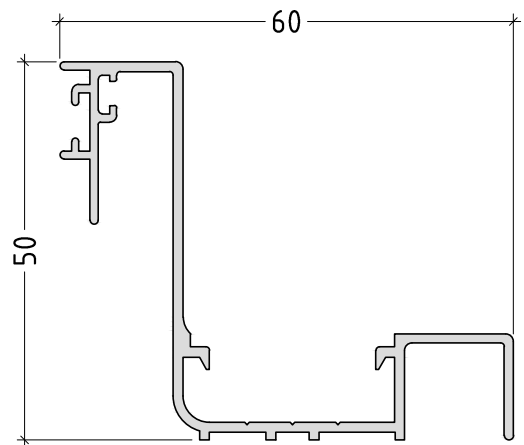
E3012
635.6 g/m



E3011
1917.4 g/m

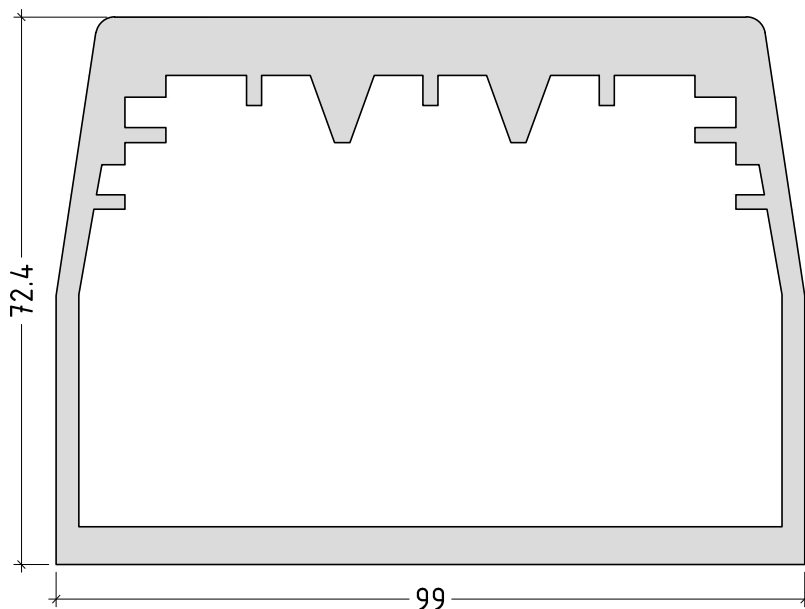


E70640
597 g/m

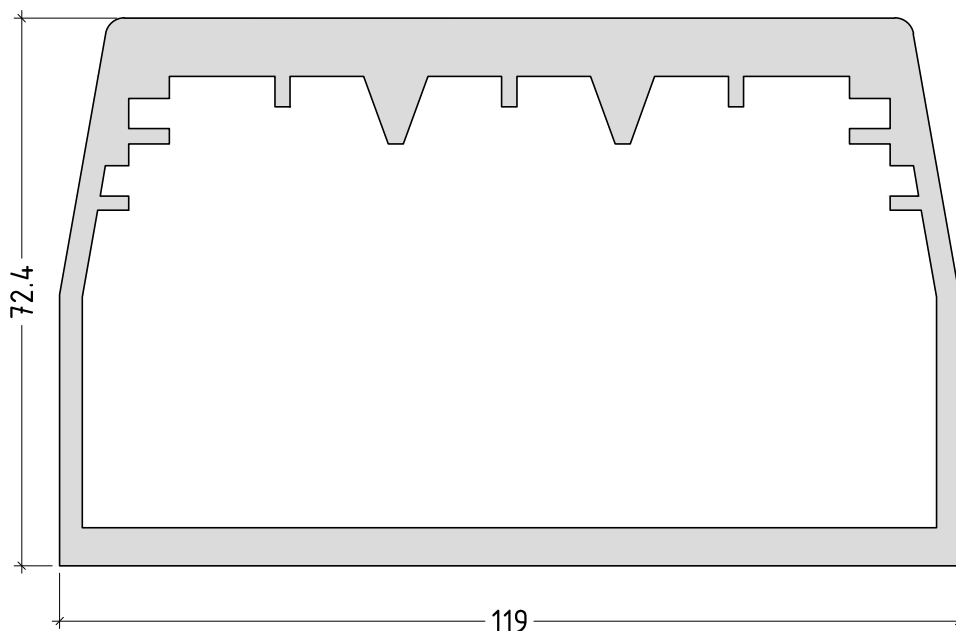


scale : 1:1

E5388
4835 g/m

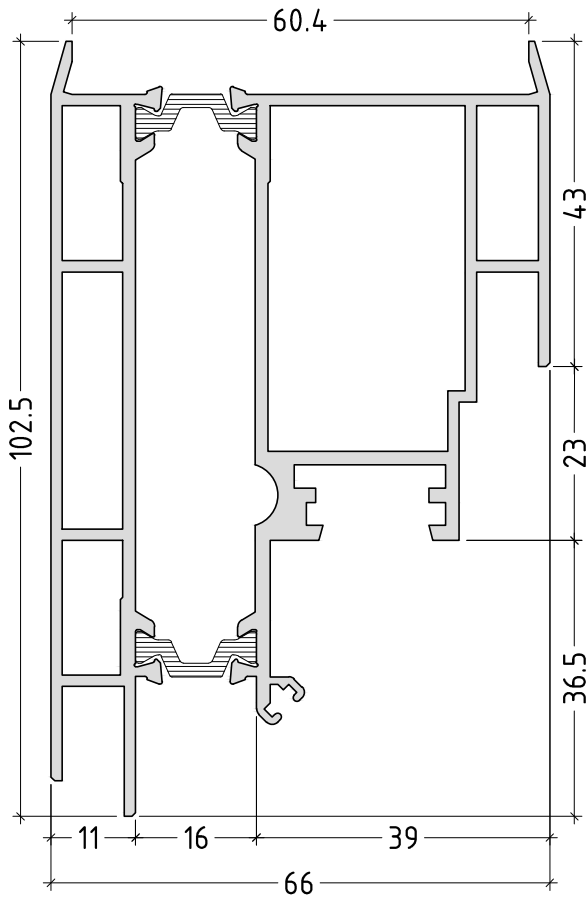


E5387
5443 g/m

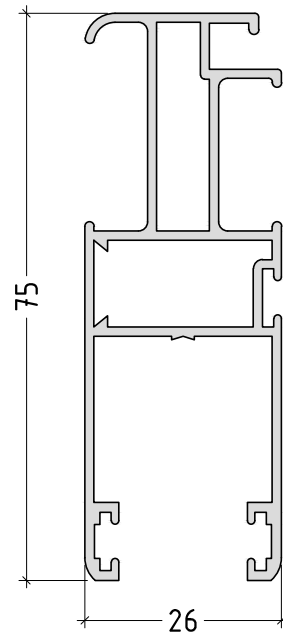


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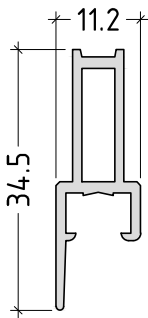
E54550
2467 g/m



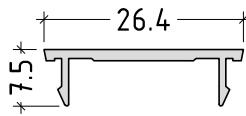
E22214
857 g/m



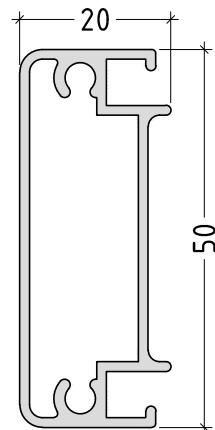
E54555
254 g/m



E19641
130 g/m



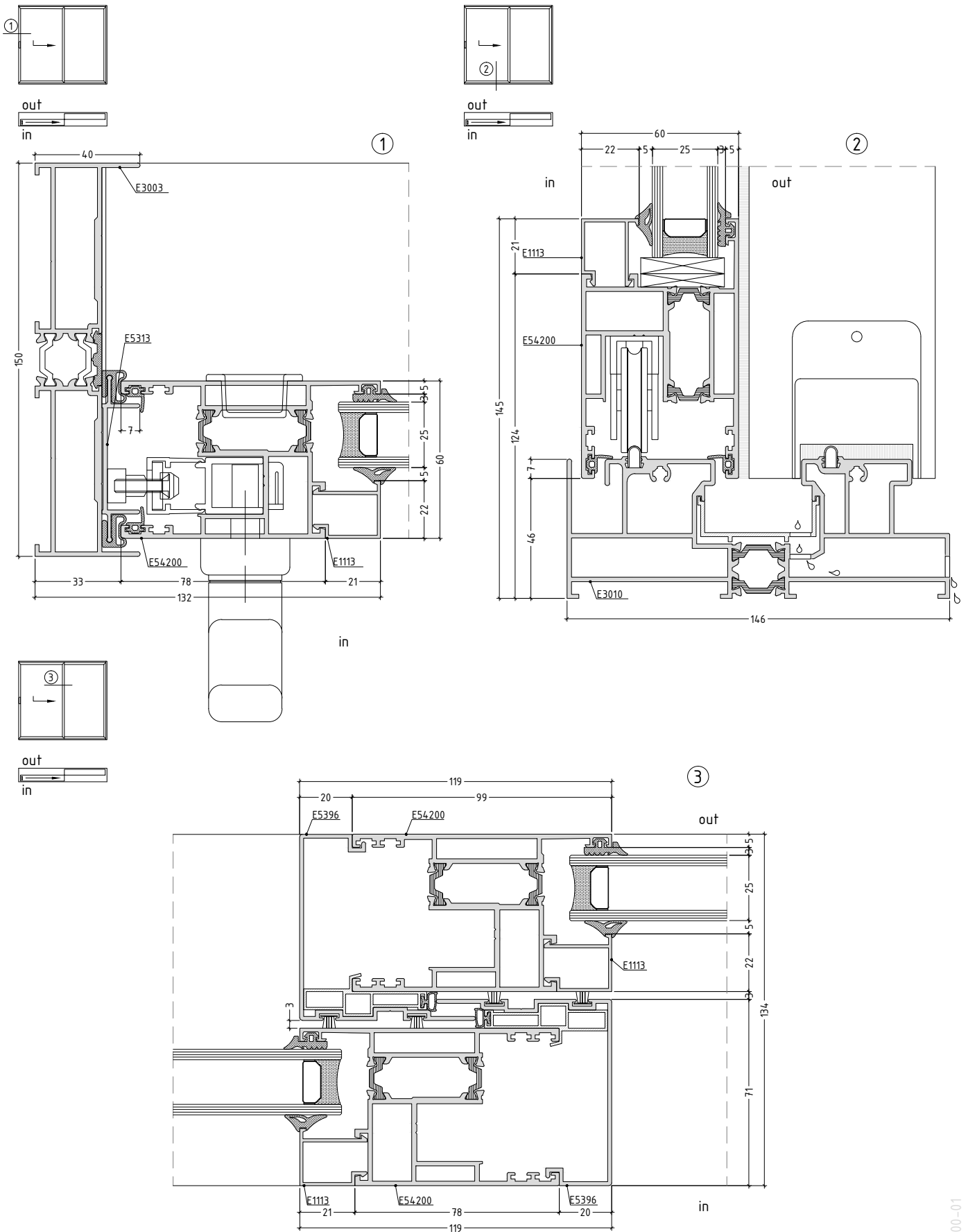
E22215
590 g/m



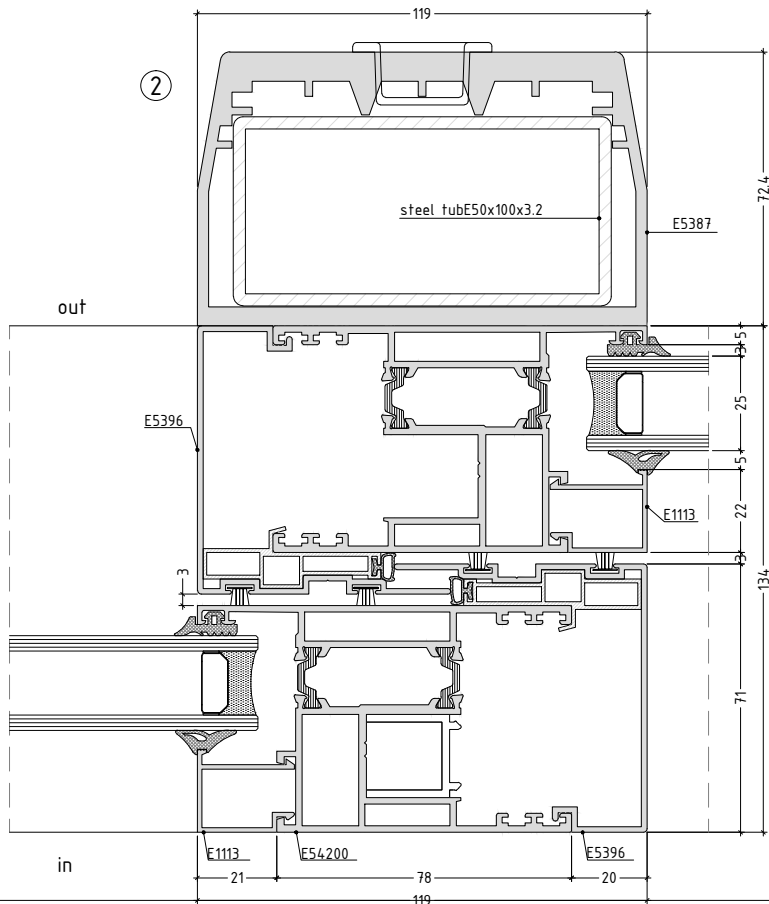
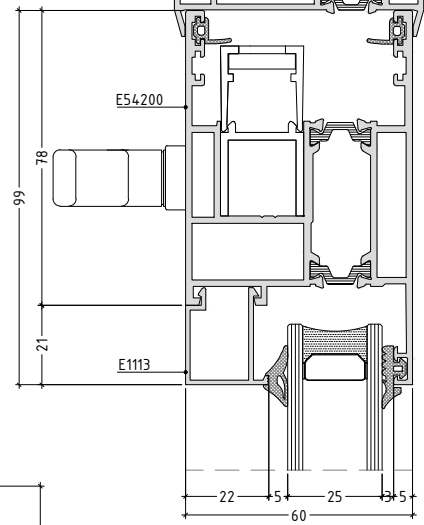
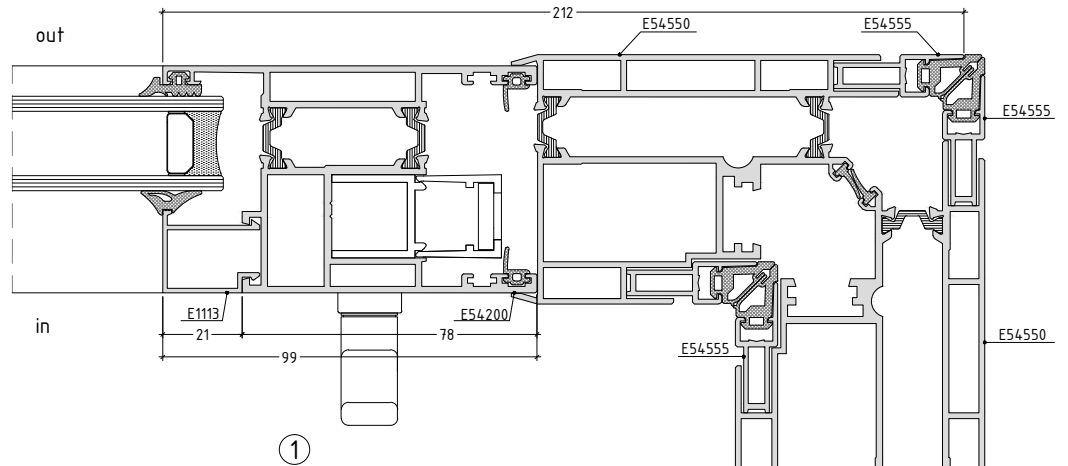
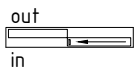
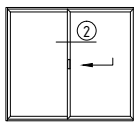
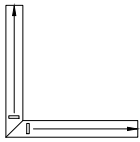
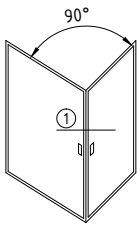
scale : 1:1

SECTIONS

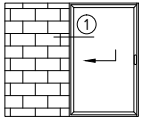
SECTIONS / DETAILS



D3000-01

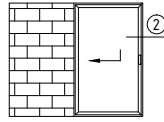


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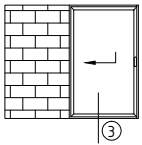
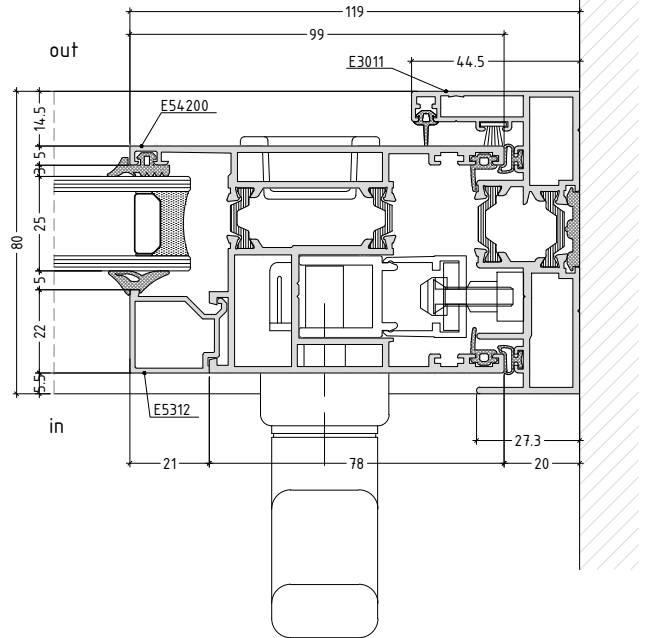
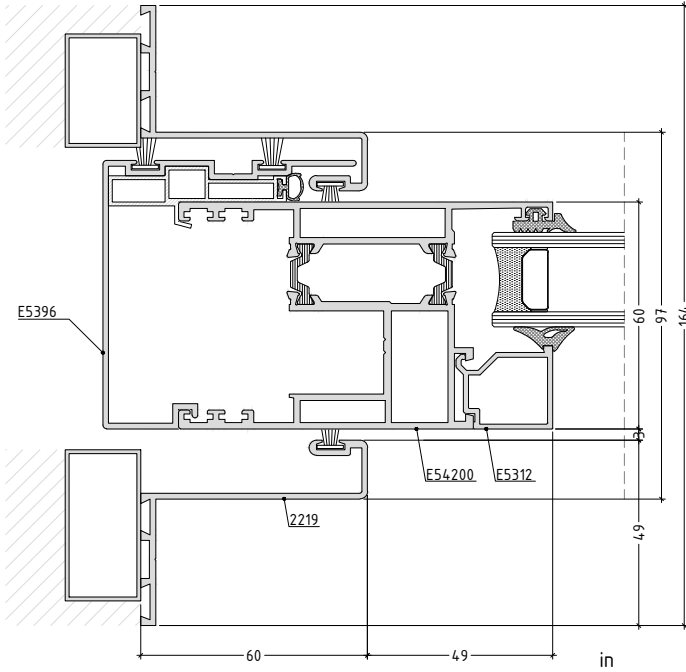


①

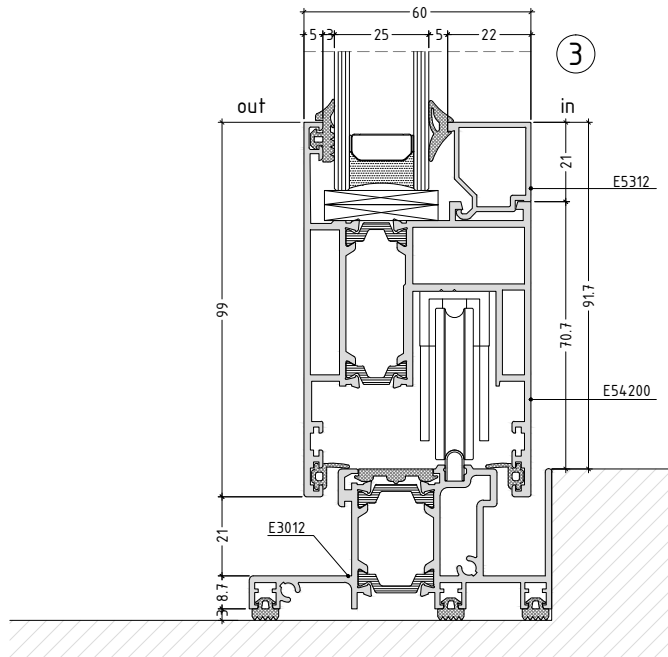
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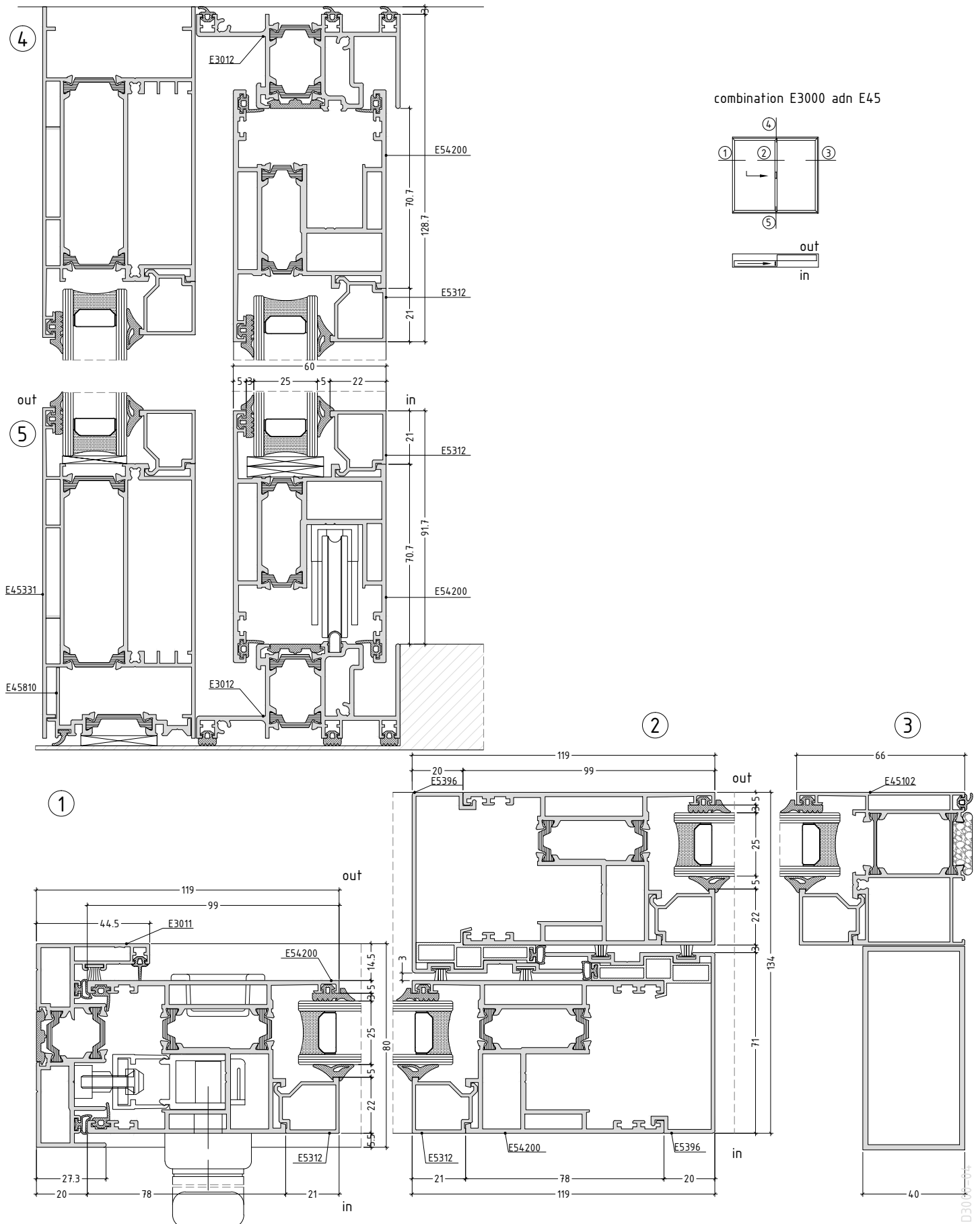


②





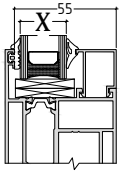








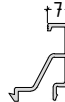

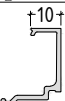
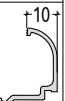

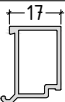

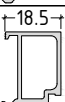

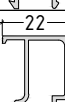
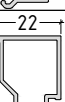

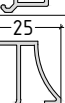
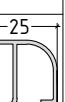
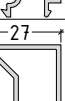
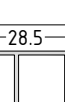
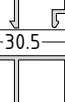

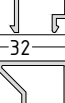
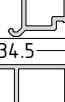
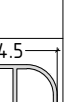
③





GLAZING OPTIONS

SECTIONS / DETAILS

GLAZING OPTIONS								
external gaskets	INTERNAL GASKETS					GLAZING BEADS		
		5 - 6 mm 130176		7 - 8 mm 130177				
 3 mm 130411								
 130402	5 mm 990619	6 mm 130207	7 mm 130207	8 mm 130208	10 mm 994412			
 4 mm 130153								
	X mm					1	2	3
130411 130402	40	39	38	37	35			
130153	39	38	37	36	34			
130411 130402	37	36	35	34	32			
130153	36	35	34	33	31			
130411 130402	33	32	31	30	28			
130153	32	31	30	29	27			
130411 130402	30	29	28	27	25			
130153	29	28	27	26	24			
130411 130402	28	27	26	25	23			
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130411 130402	25	24	23	22	20			
130153	24	23	22	21	19			
130411 130402	22	21	20	19	17			
130153	21	20	19	18	16			
130411 130402	20	19	18	17	15			
130153	19	18	17	16	14			
130411 130402	18	17	16	15	13			
130153	17	16	15	14	12			
130411 130402	16	15	14	13	11			
130153	15	14	13	12	10			
130411 130402	15	14	13	12	10			
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130411 130402	12	11	10	9	7			
130153	11	10	9	8	6			

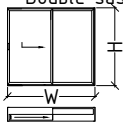
Note:
TolerancEin dimension chain ±0.5mm

T3000-01

MACHINING

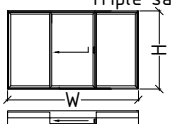
SECTIONS / DETAILS

Double sash window



frame E 3003	2pc	H	2x90°
frame E 3010	2pc	W-54	2x90°
sash E 54200	4pc	H-86	2x45°
sash E 54200	4pc	$\frac{(W + 13)}{2}$	2x45°
cover cap sash E 5396	2pc	H-86	2x90°
additional profile E 5313	2pc	H-106	2x90°
polyamide 29.ETE080168	2pc	H-86	2x90°
polyamide 29.ETE080169	2pc	W-51	2x90°
corner joint bracket 053304	8pc		
alignment square 055503	16pc		
cutting of glazing		H-250	$\frac{(W - 320)}{2}$

Triple sash window

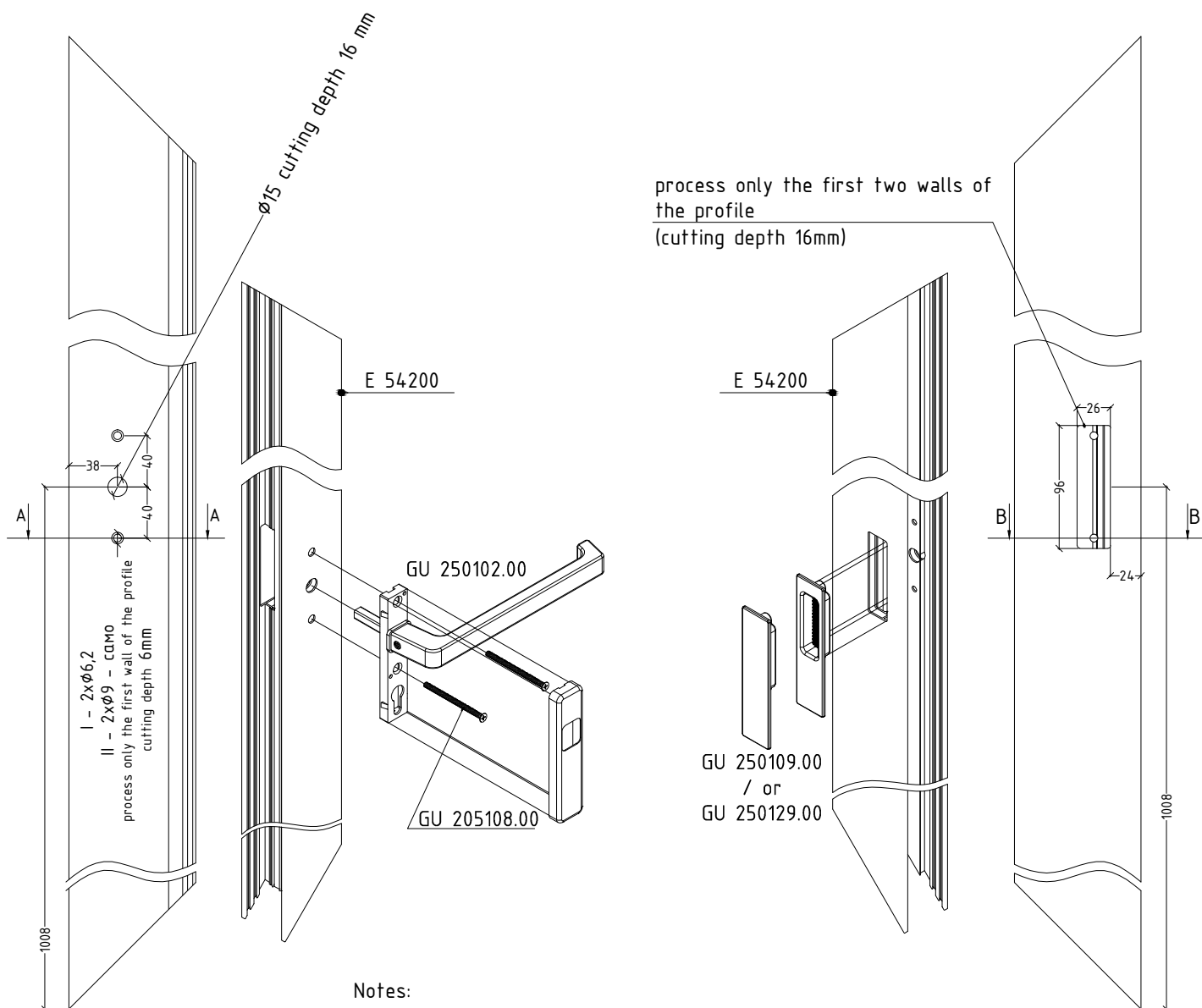
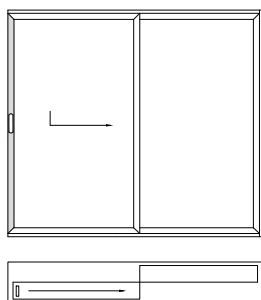


frame E 3003	2pc	H	2x90°
frame E 3010	2pc	W-54	2x90°
sash E 54200	6pc	H-86	2x45°
sash E 54200	4pc	$\frac{(W + 8)}{3}$	2x45°
cover cap sash E 5396	2pc	H-86	2x90°
additional profile E 5389	1pc	H-86	2x90°
additional profile E 5313	2pc	H-106	2x90°
polyamide 29.ETE080168	2pc	H-86	2x90°
polyamide 29.ETE080169	2pc	W-51	2x90°
corner joint bracket 053304	12pc		
alignment square 055503	24pc		
cutting of glazing		H-250	$\frac{(W - 495)}{3}$

Notes:

Accessory 240702 is prescribed according to the type of opening scheme used.

Processing of sash E 54200



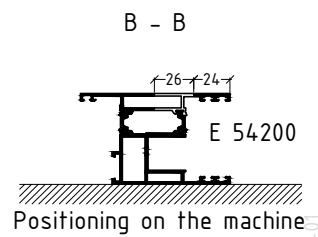
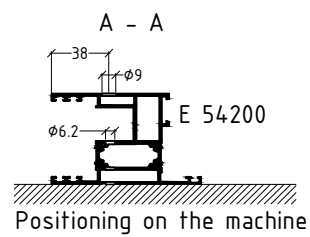
process only the first two walls of the profile
(cutting depth 16mm)

Notes:

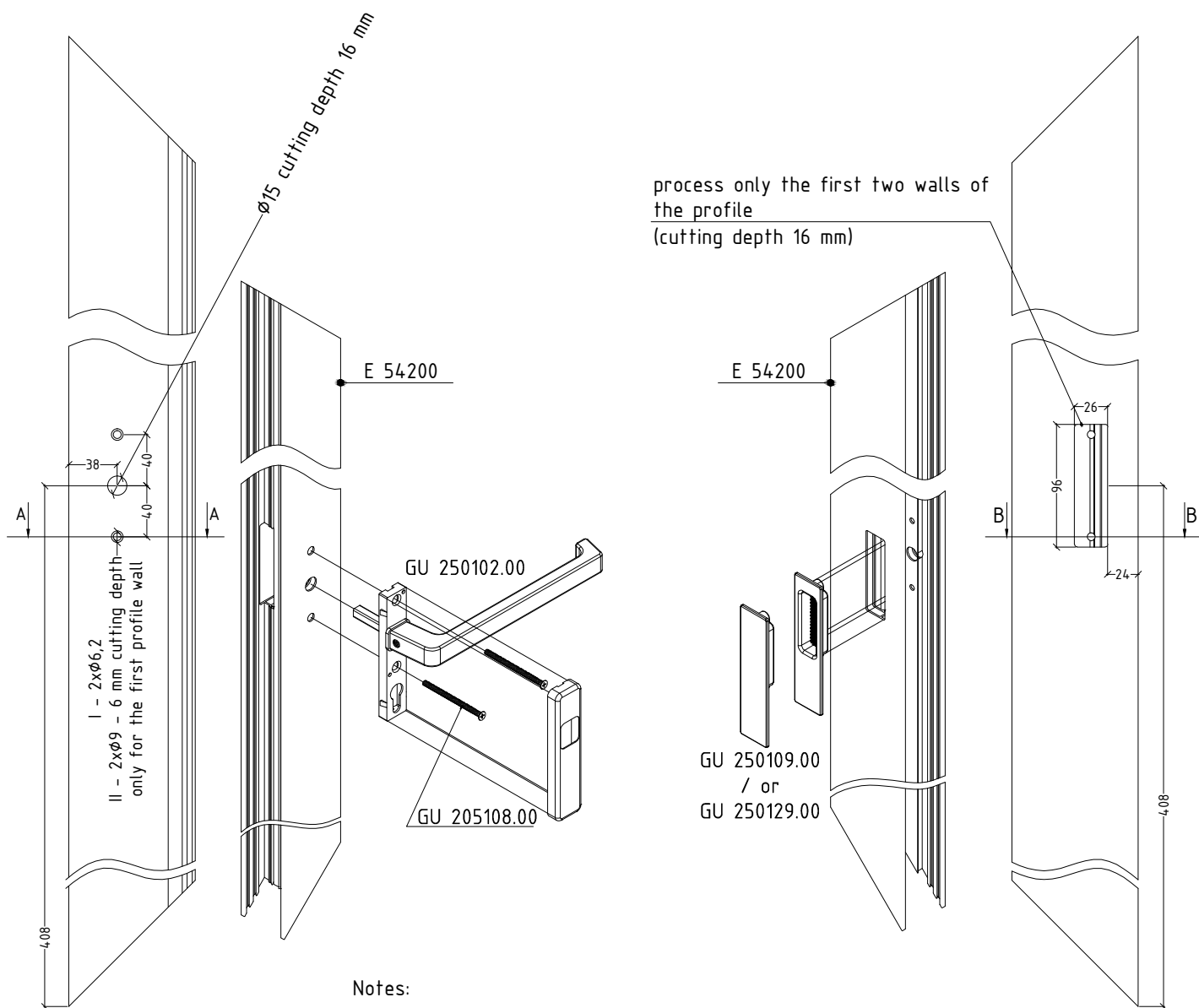
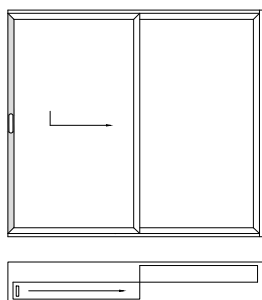
- The processing shown is for locking mechanism:

GU 250105
(sash height: from 1820 mm to 2145 mm)

GU 250106
(sash height: from 1955 mm to 2280 mm)



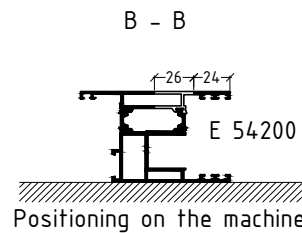
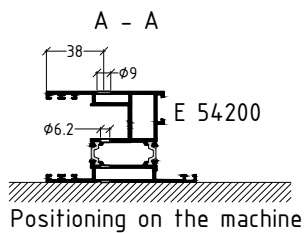
Processing of sash E 54200



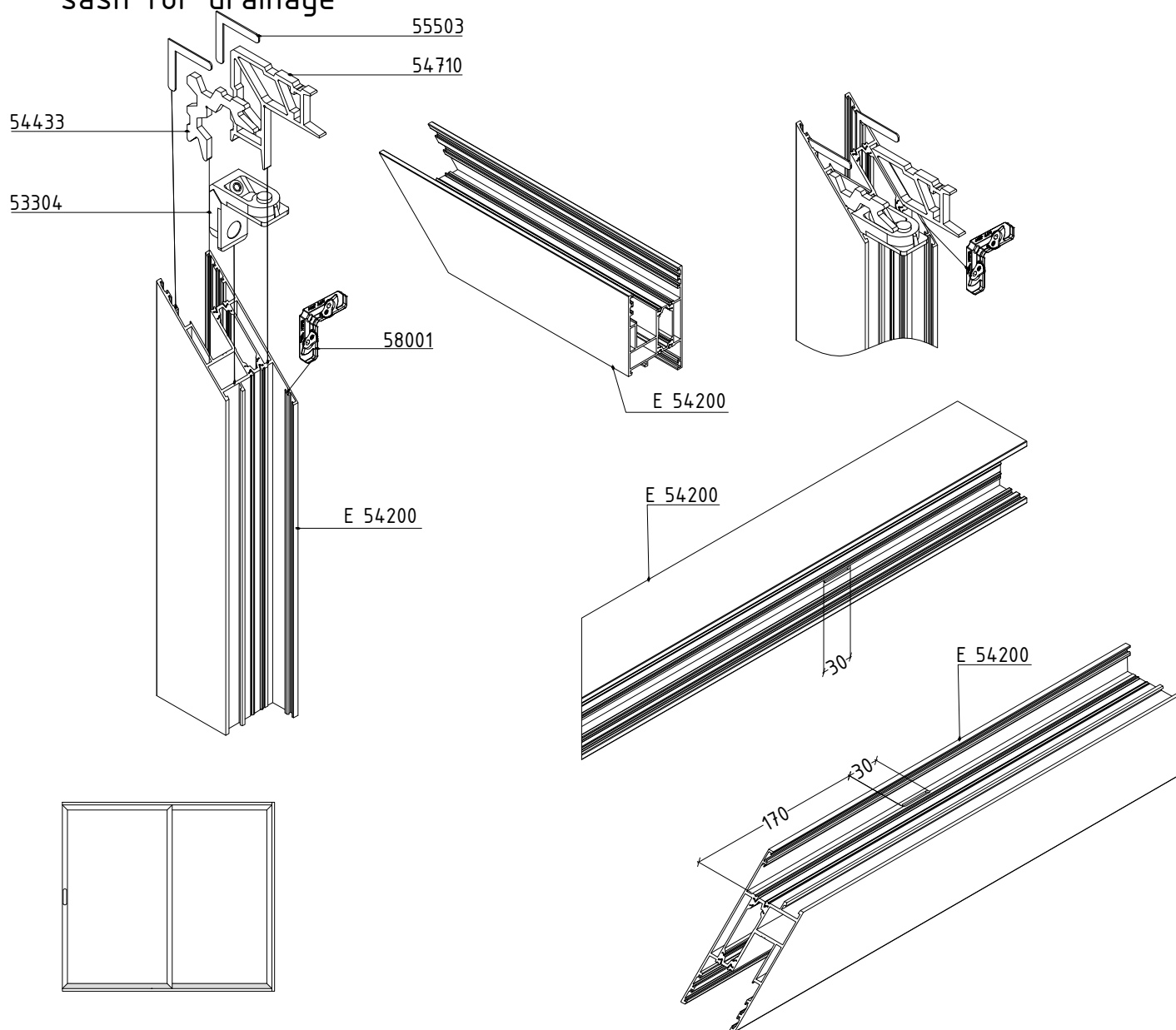
Notes:

- The processing shown is for locking mechanism

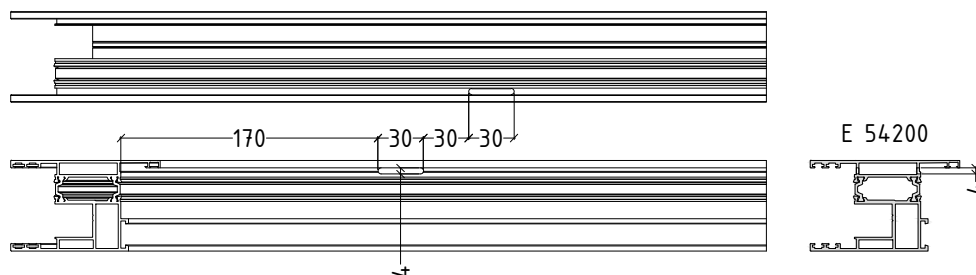
GU 250104
(sash height: from 1220 mm to 1745 mm)



Scheme for placing the corner joint brackets and processing of the sash for drainage



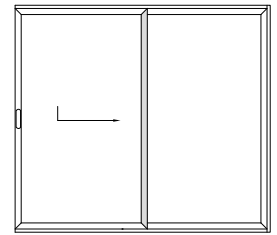
Processing of the sash for drainage



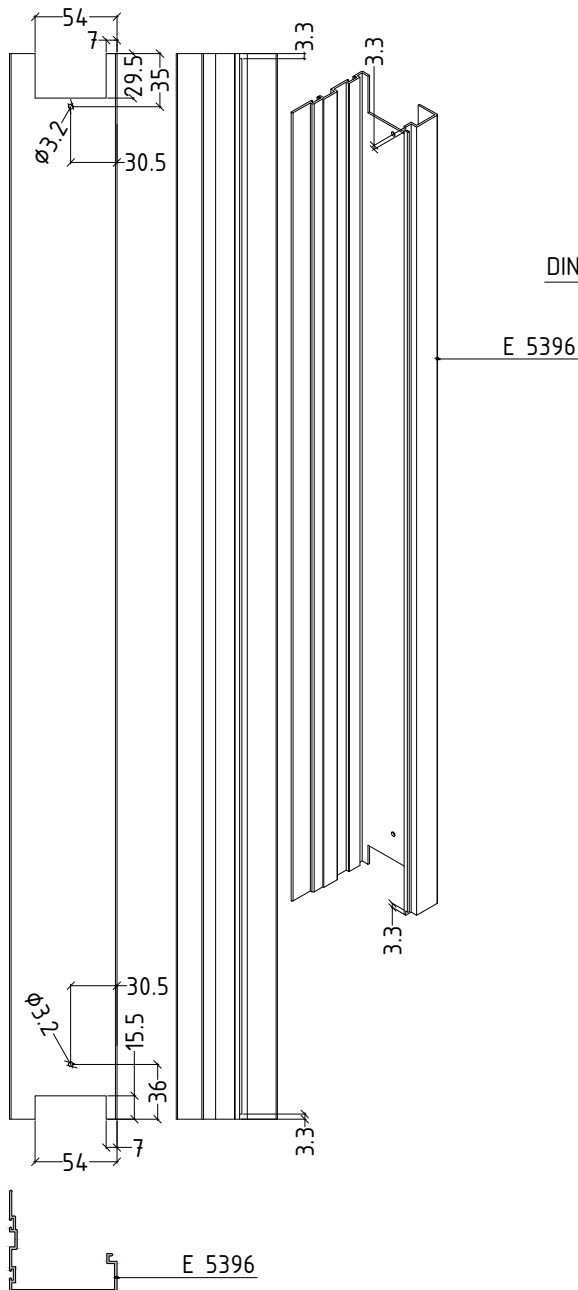
Notes:

- The openings have to be made as per the scheme above
- Observe the distances shown when making the drainage openings

Processing and mounting scheme of profile E 5396

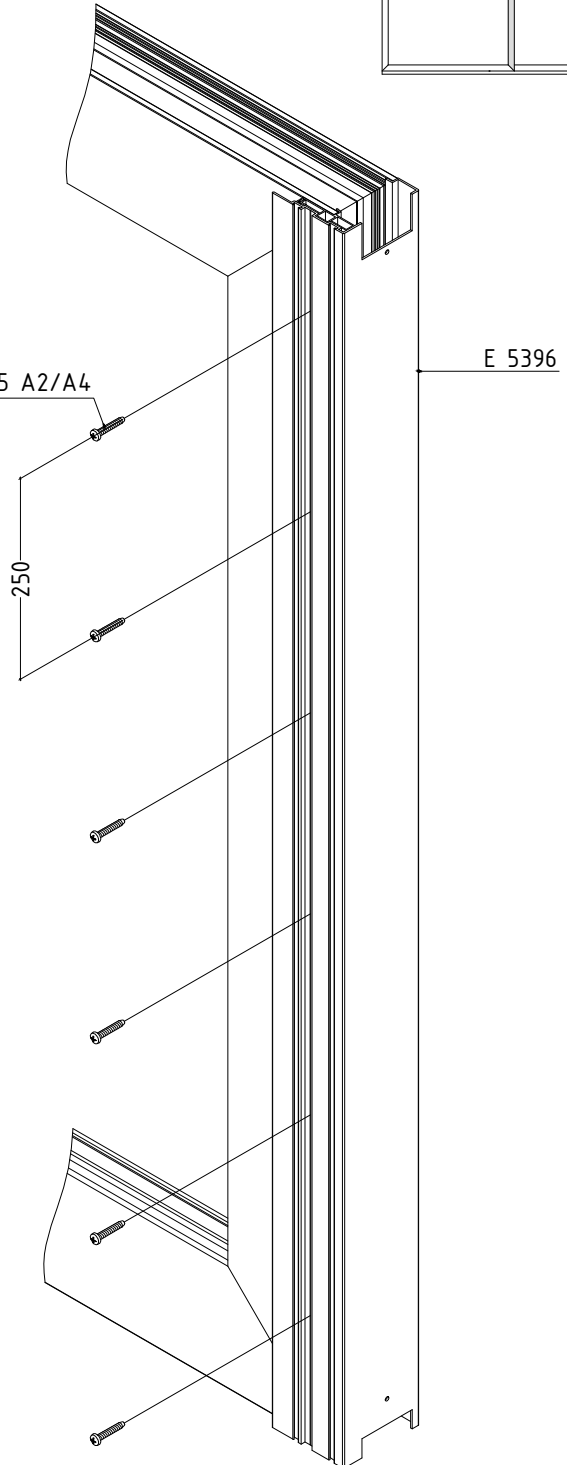


Upper part of the profile



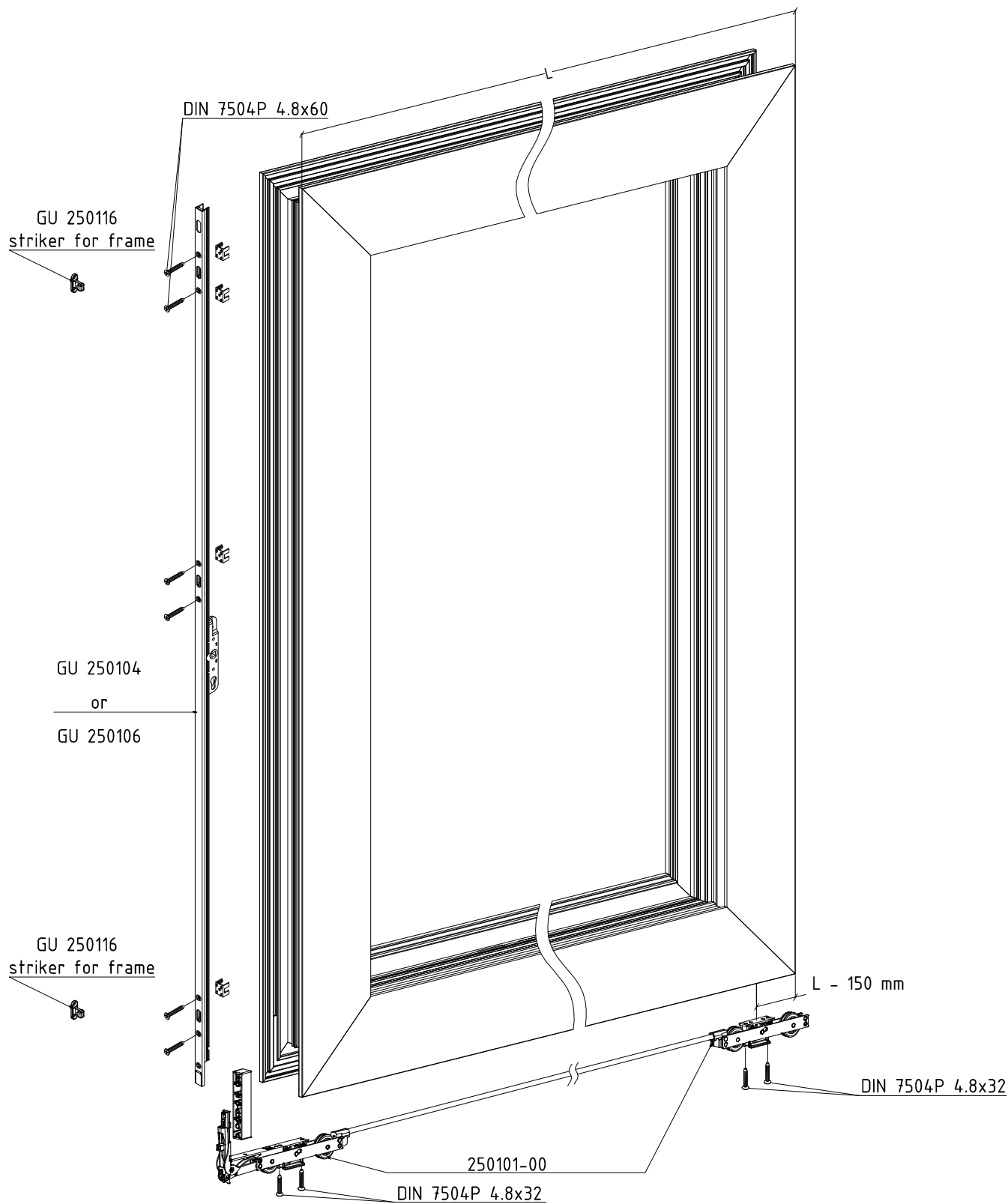
DIN 7504P 4,2x25 A2/A4

E 5396



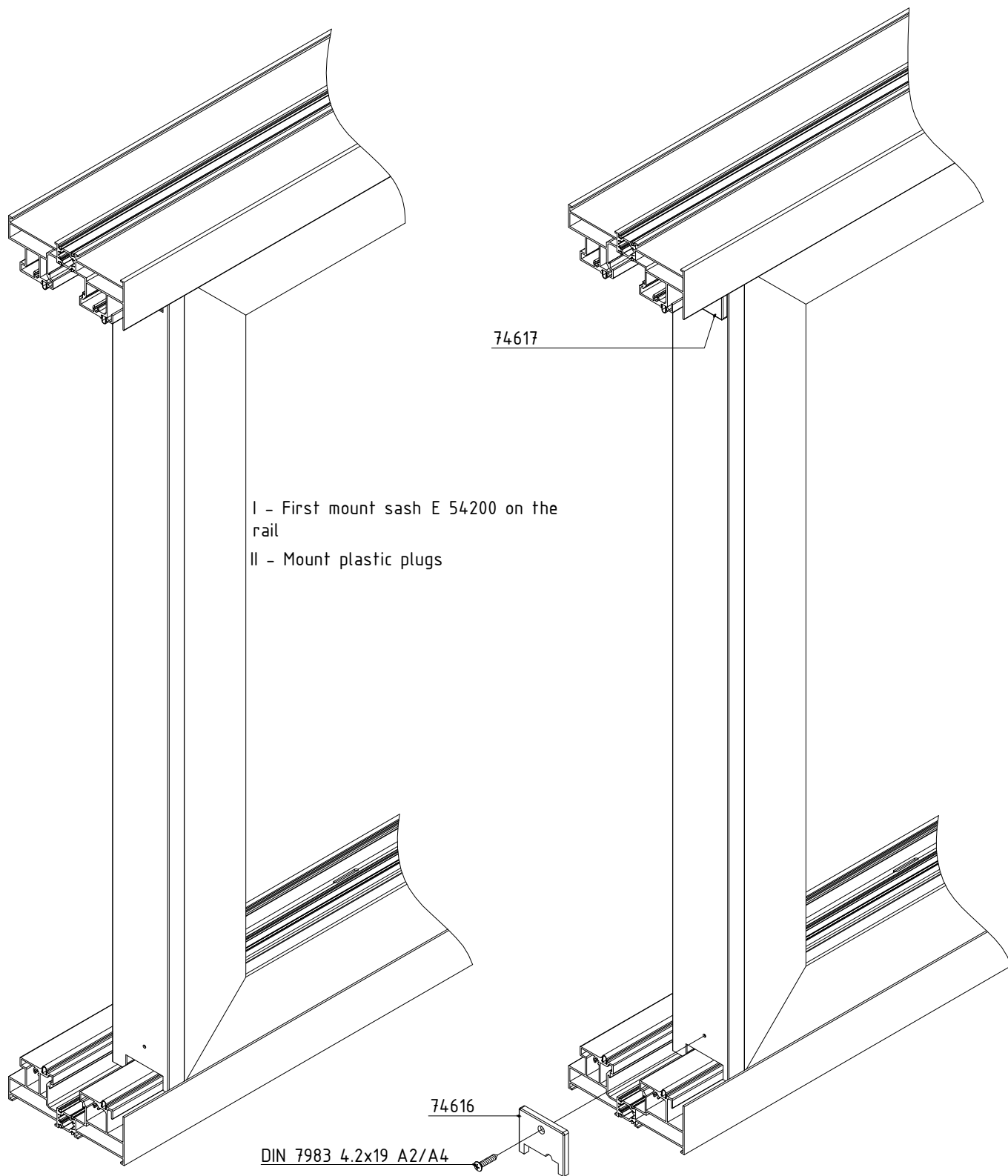
Bottom part of the profile

Hardware mounting scheme



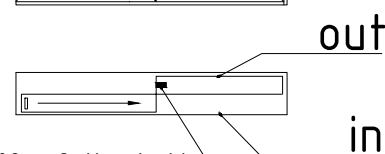
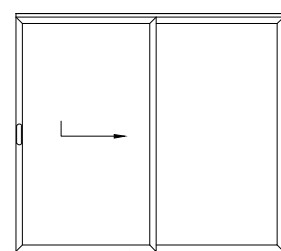
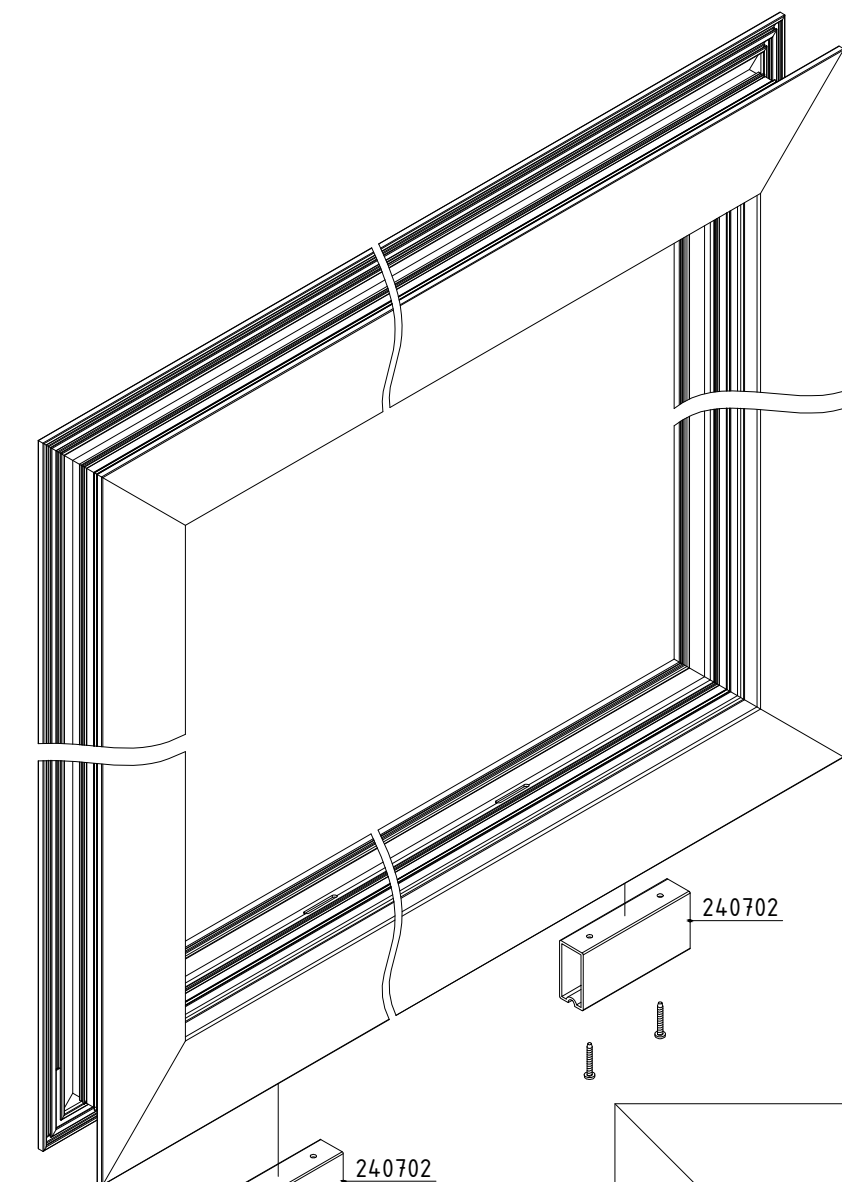
M3000-05

Sequence for mounting of sash E 54200 and plastic plugs

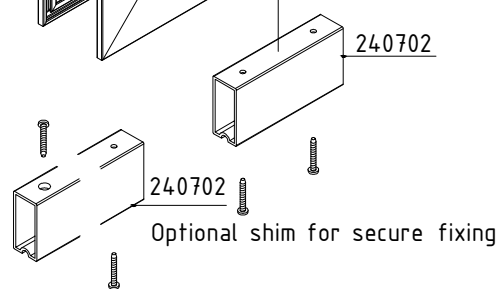


M3000-06

Sequence for mounting of fixed sash E 54200

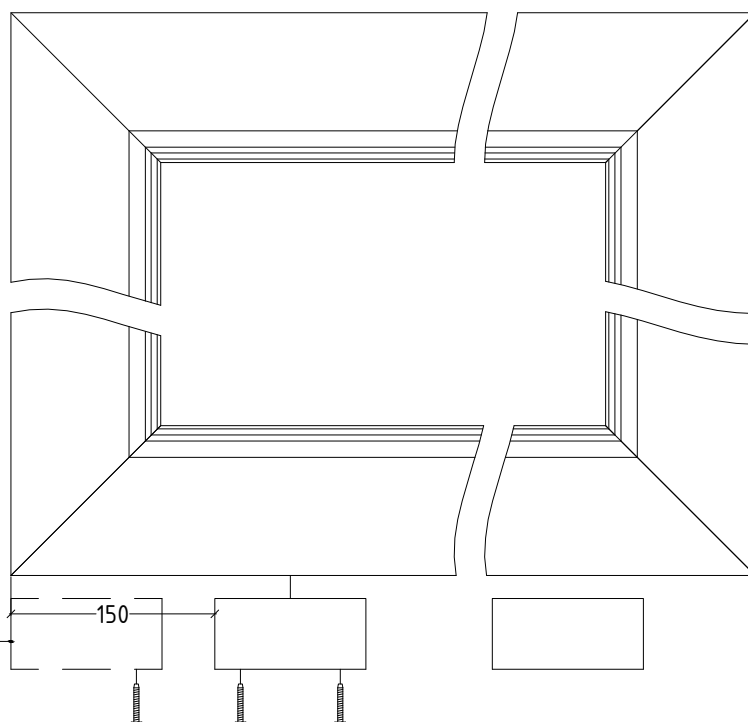


240702 - Optional shim for secure fixing



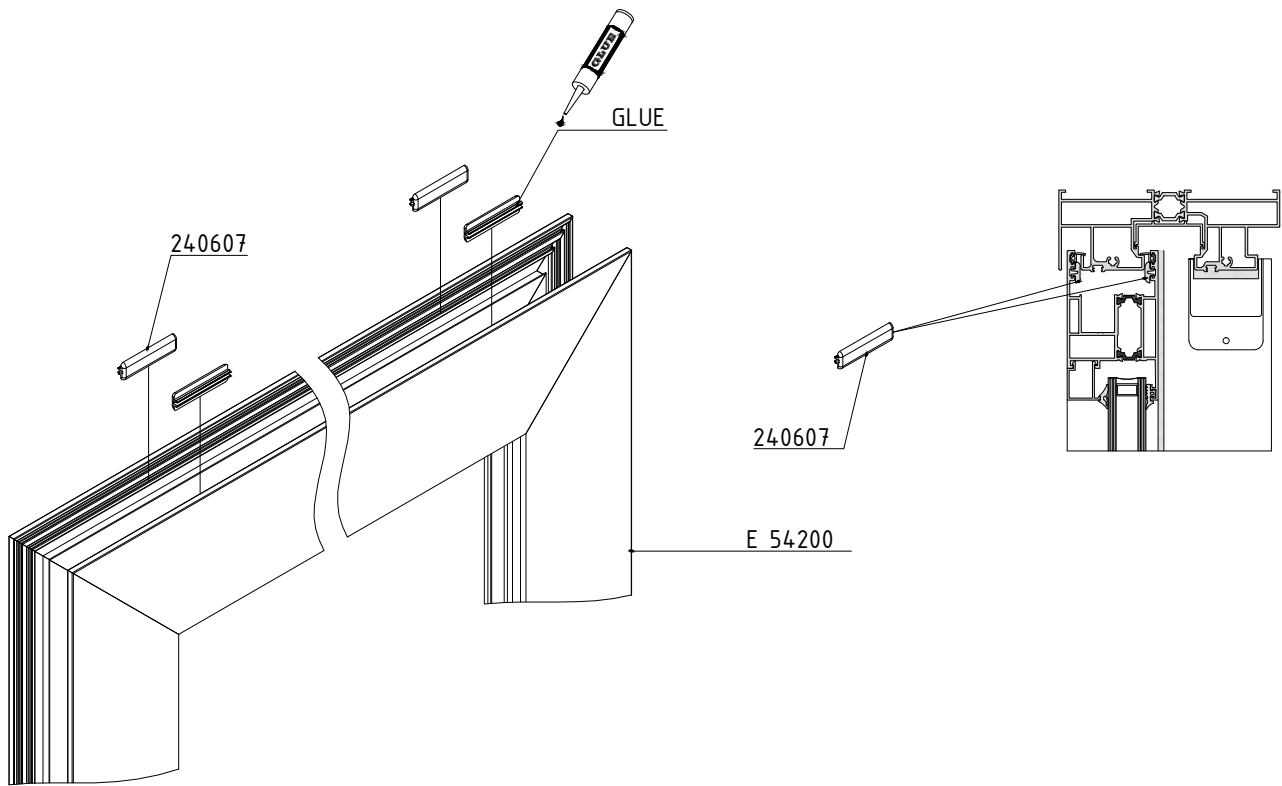
Fix shim 240702 on the fixed sash by using two fixings (included in the kit) observing the shown distances.

Optional shim for secure fixing

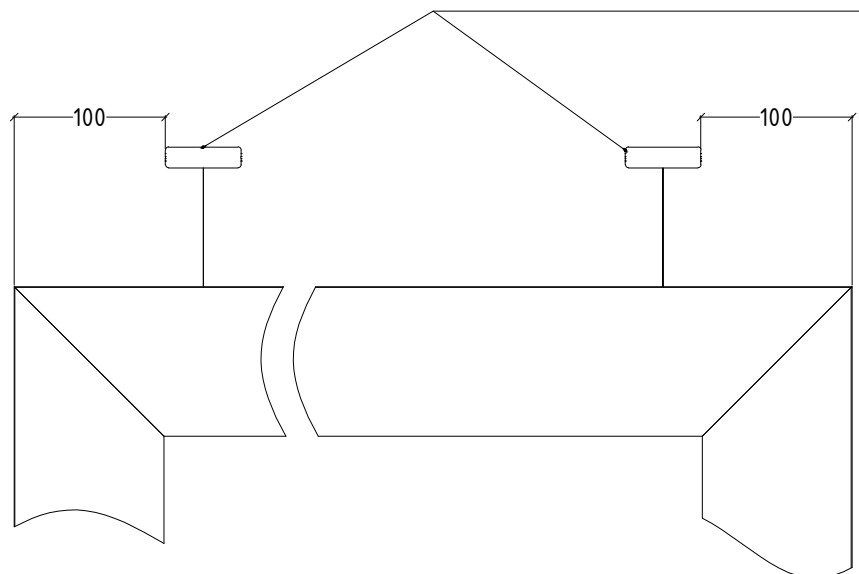


M3000-07

Mounting scheme of anti-vibration buffers 240607



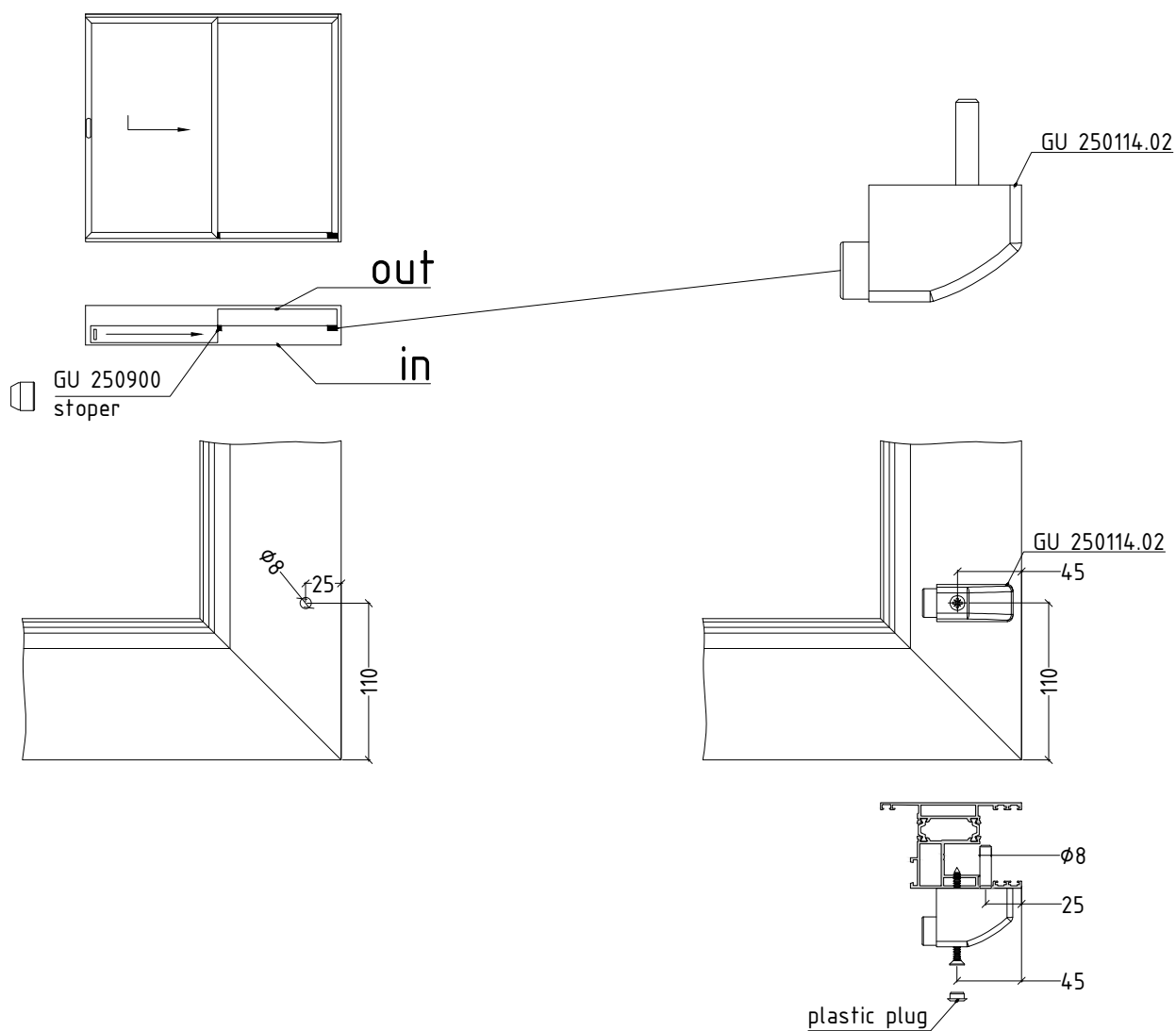
Mount 4 pieces per sash from buffer 240607 whilst observing the shown distances.



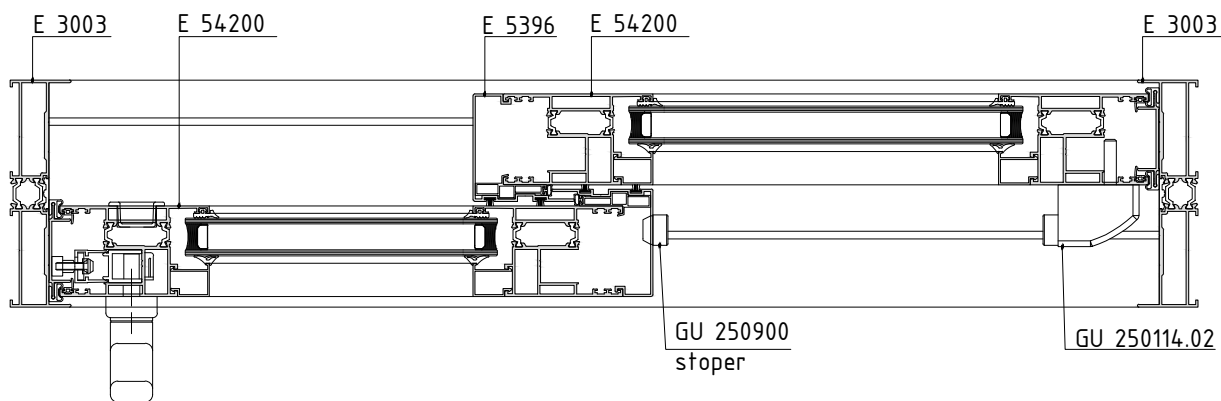
Notes:

- Mount anti-vibration buffers 240607 on every sash.

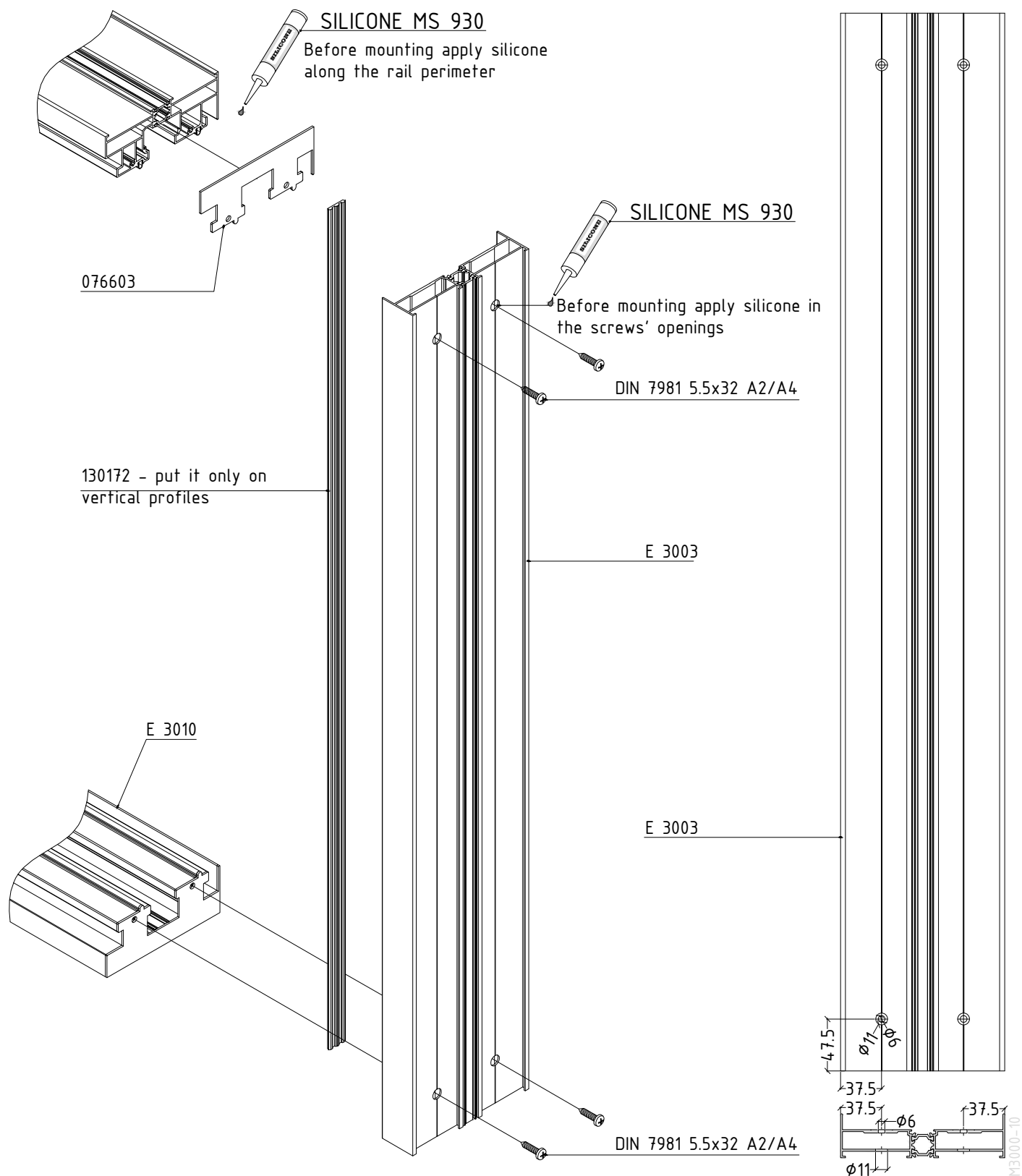
Mounting scheme of stopper GU 250114.02



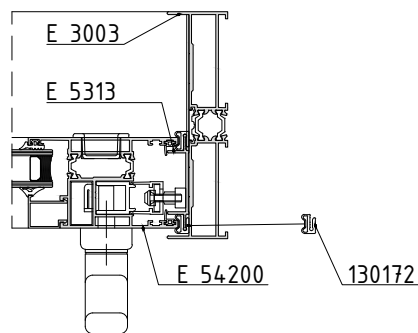
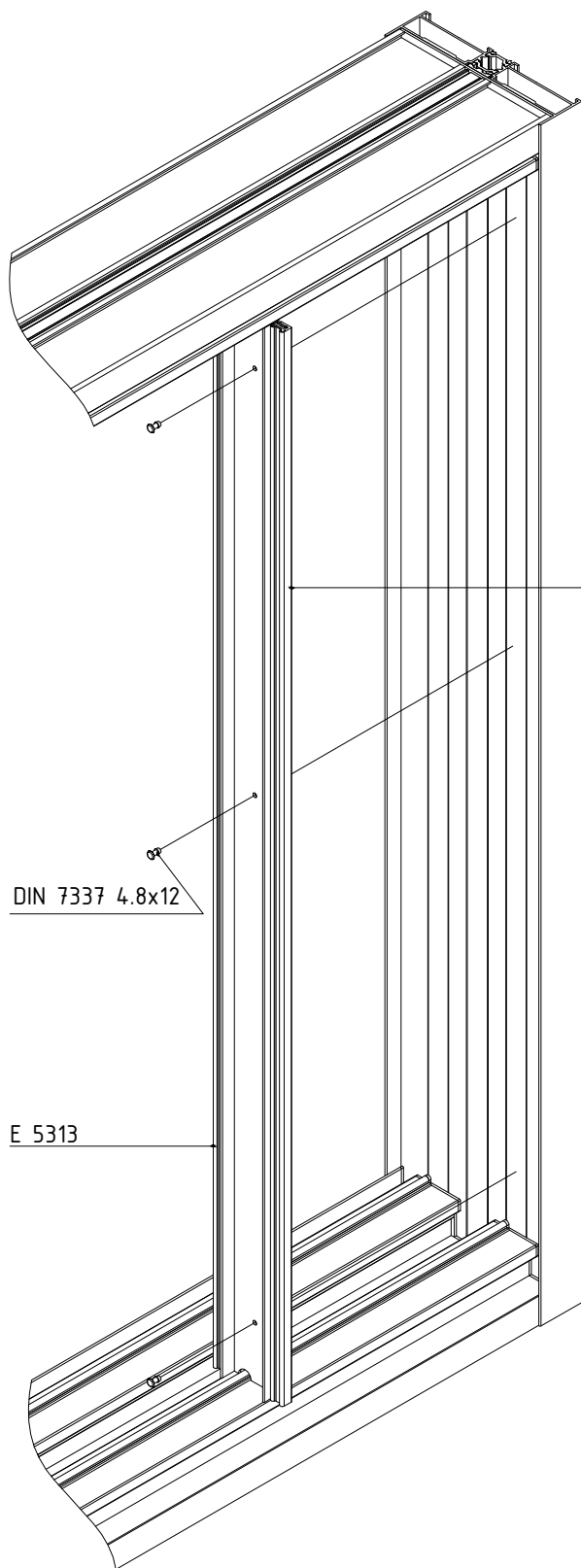
Mount stopper GU 250114.02 on the inner side of the outer sash



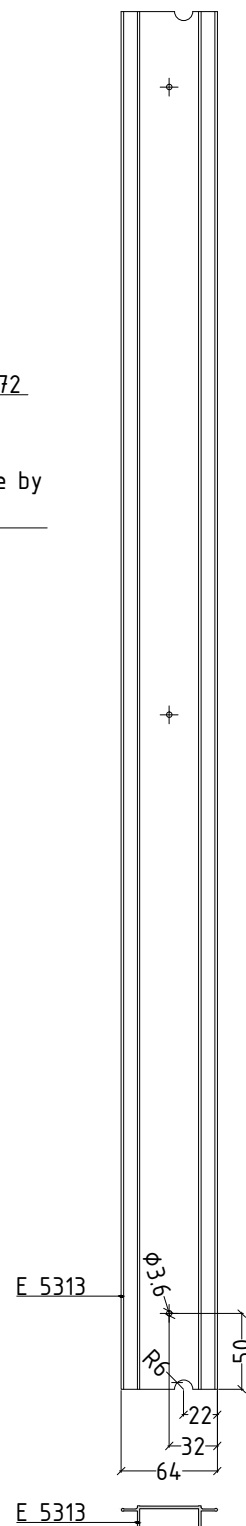
Sequence for mounting of frame

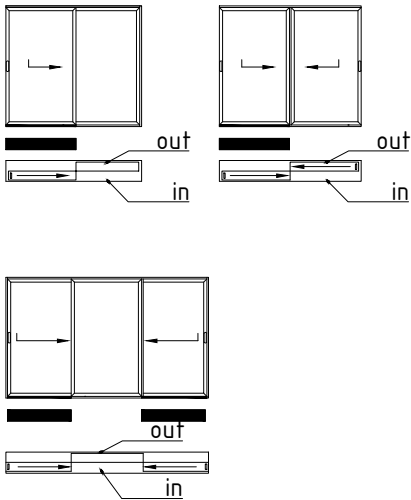


Processing and sequence for mounting of E 5313

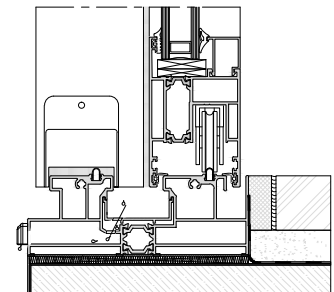
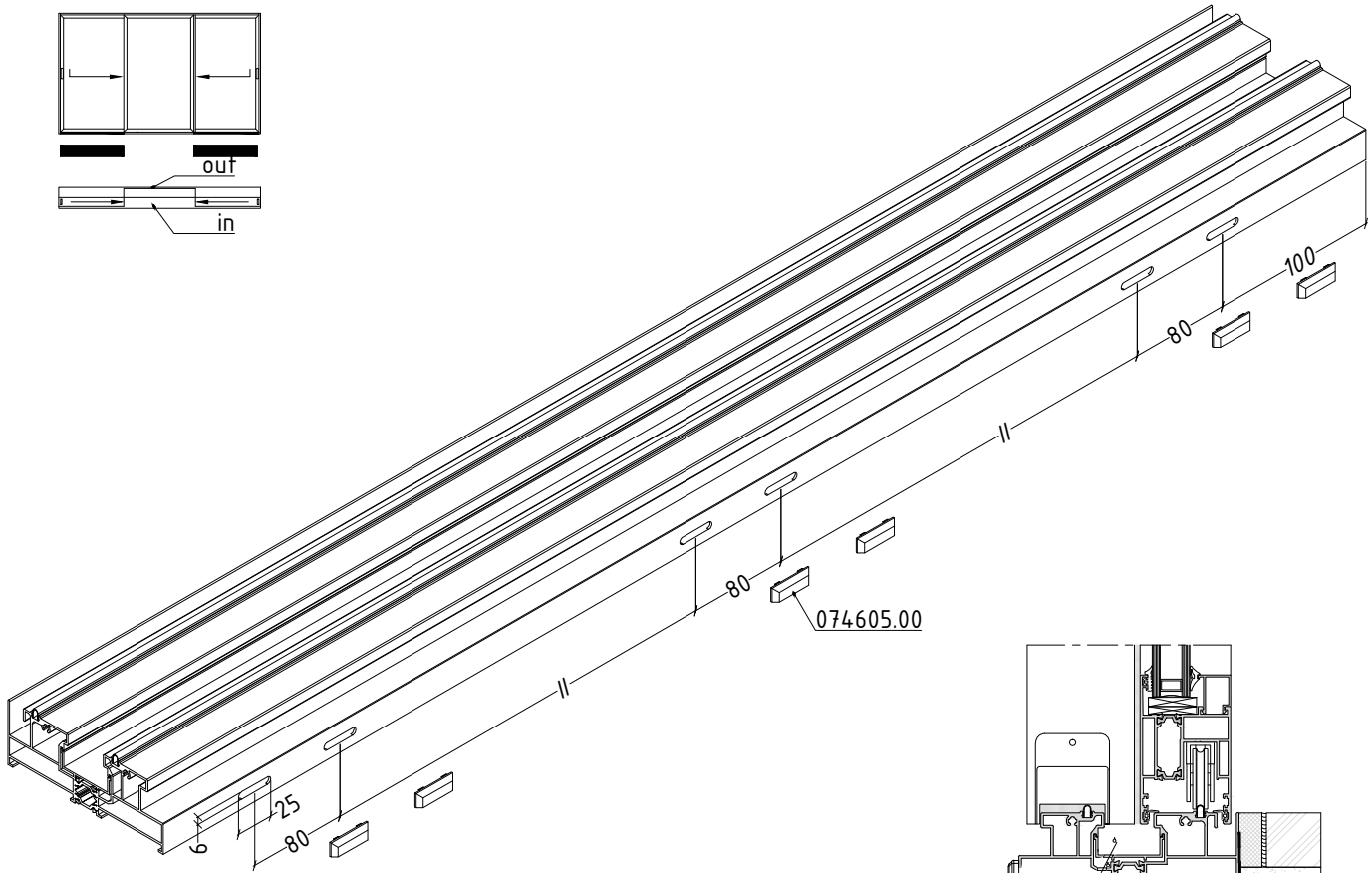


Mount E 5313 on the vertical frame by using rivets on three points

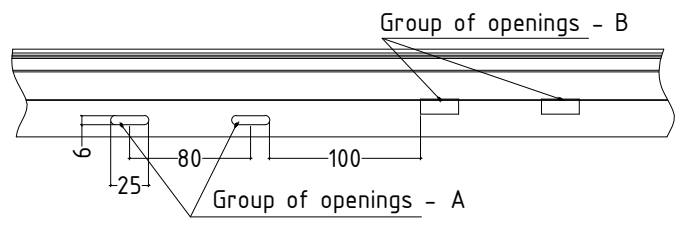
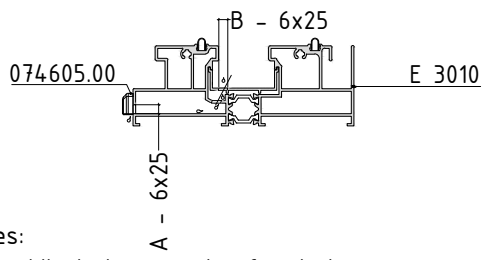




Processing and schemes for drainage of frame
█ - Process only at the pointed place (on the outside part of the inner sash)



Interface shown on the drawing is an example ONLY!
 Connection between backing wall and frame is specific for each single project. It is obligatory to observe different projects' features. All final decisions about materials used, interface finishing, etc. should be approved by the structural / façade engineer responsible for the specific project.

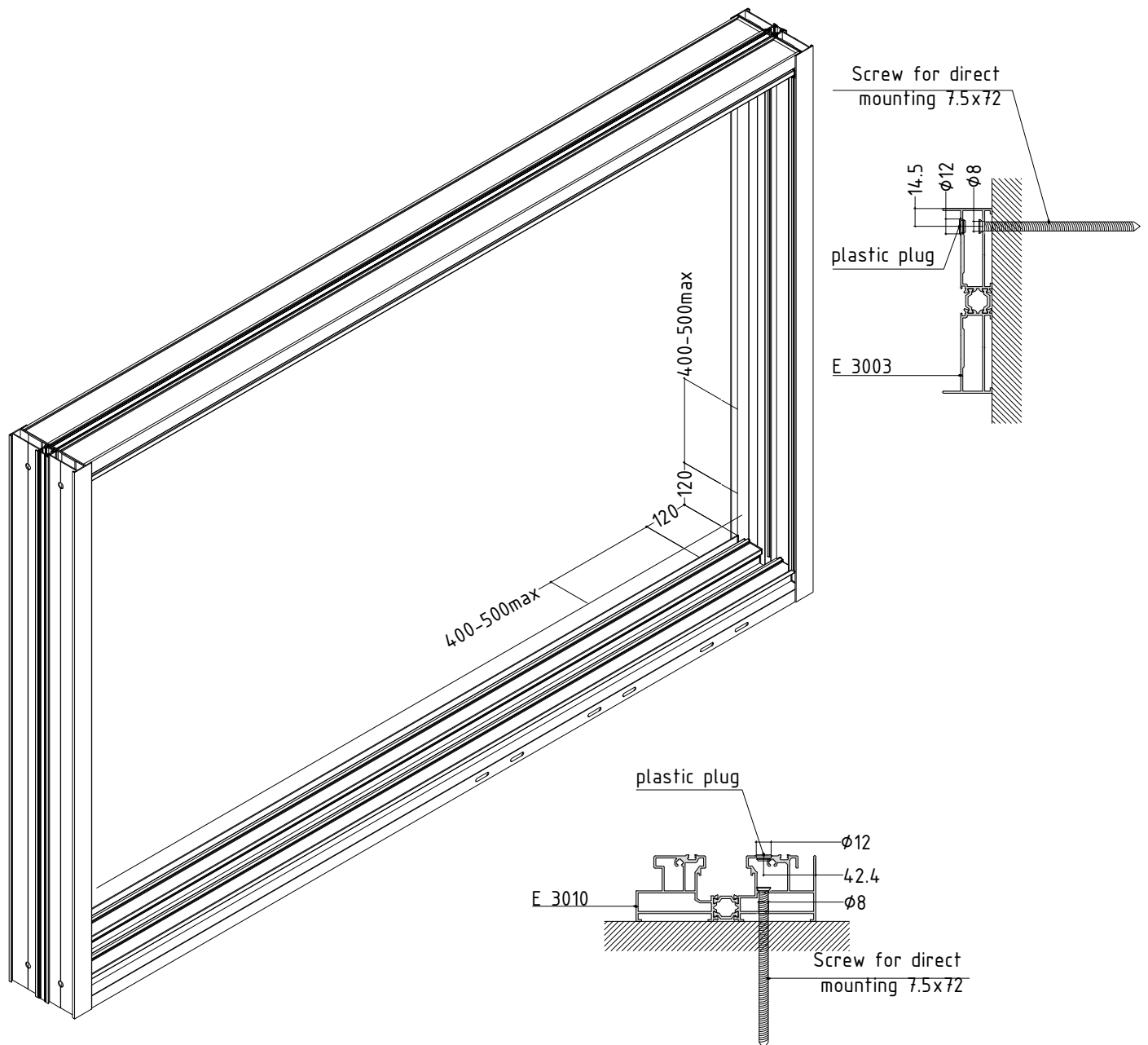


Notes:

- The indicated processing for drainage concerns only the bottom rail
- The indicated processing concerns only the outside part of the inner sash, which is on the second rail (inner side)
- The drainage openings A and B should be made as per the scheme above

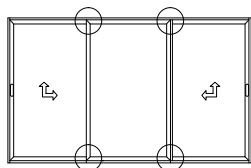
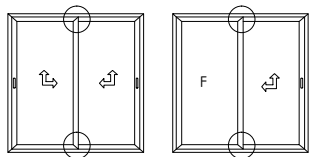
M3000-12

Mounting of frame onto the backing wall

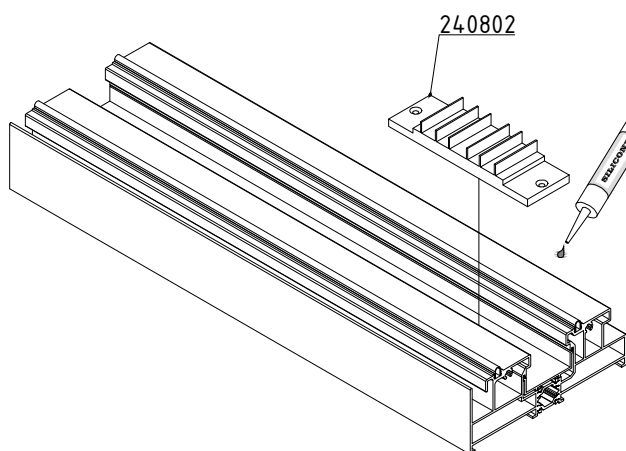
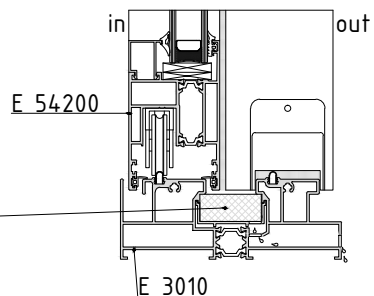
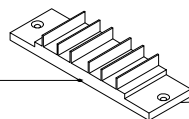


M3000-13

Sequence for mounting of accessory 240802

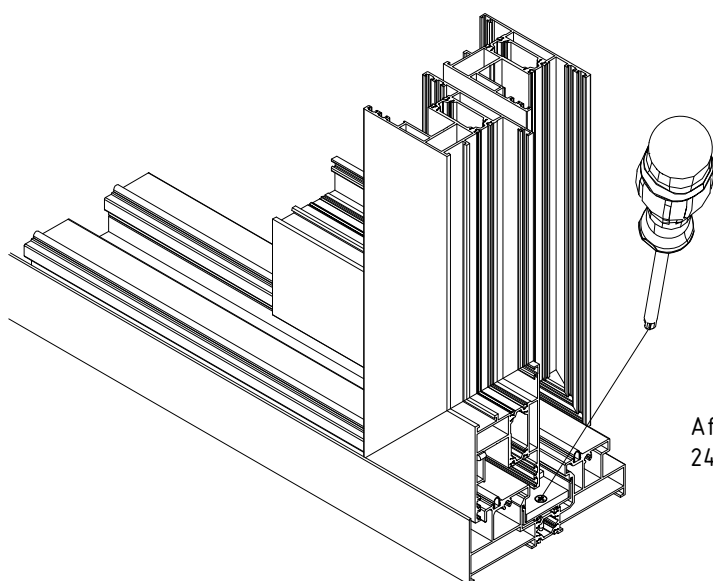


240802

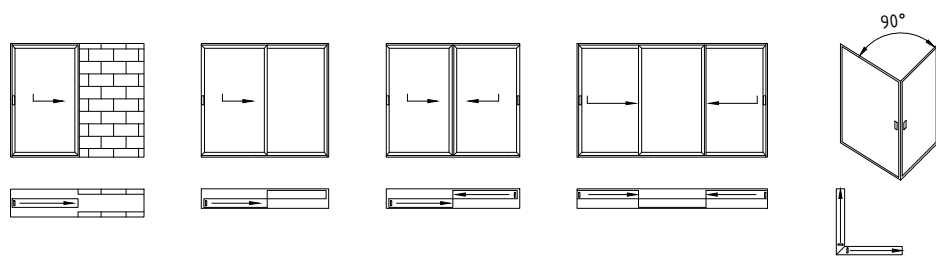


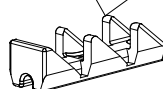
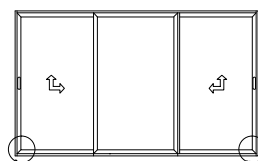
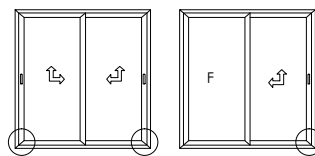
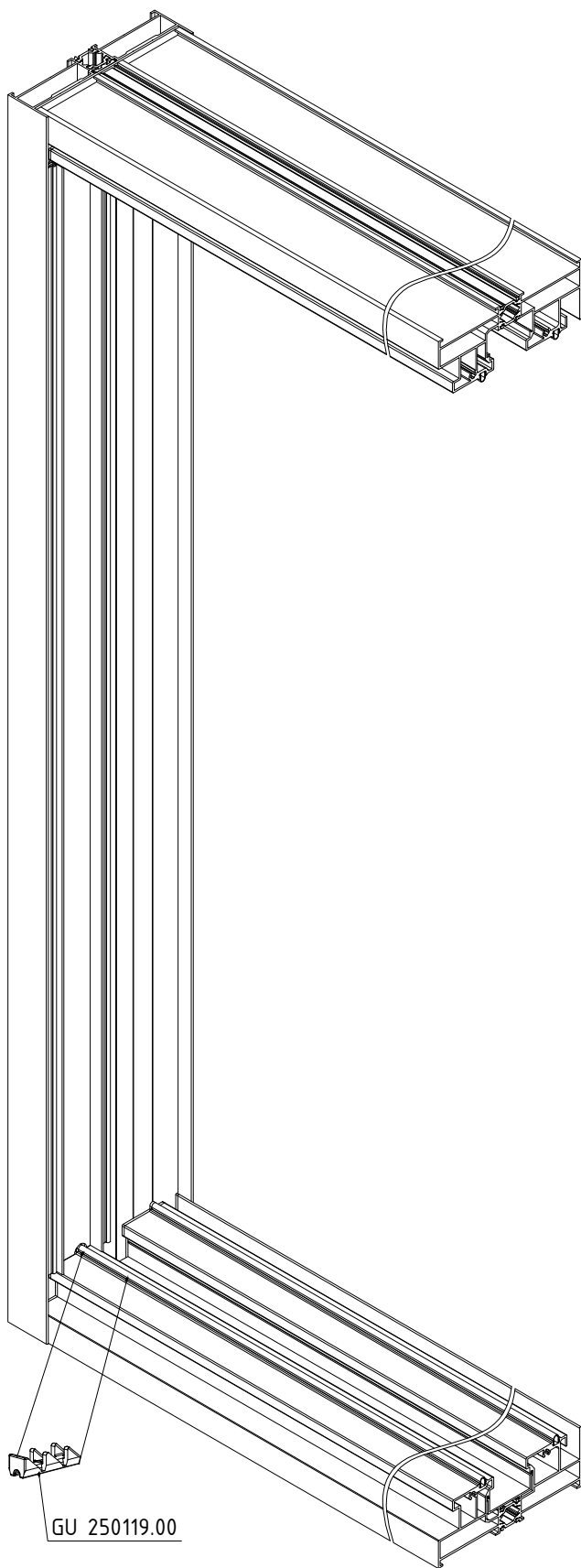
SILICONE MS 930

Before mounting apply silicone on the place where accessory 240802 should be positioned



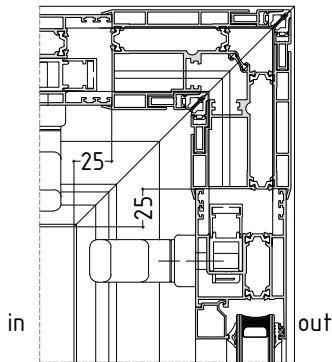
After fusing the two sashes, fix accessory 240802 with DIN 7982 4.2x19 - A2/A4



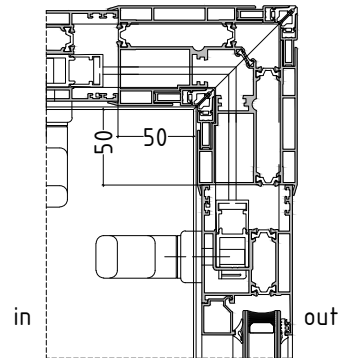


GU 250119.00
bag of bottom keeper with hexagonal
screw for slit ventilation

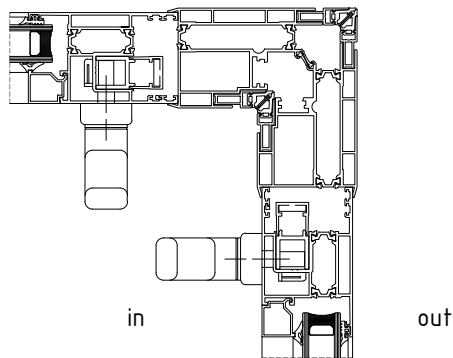
GU 250119.00



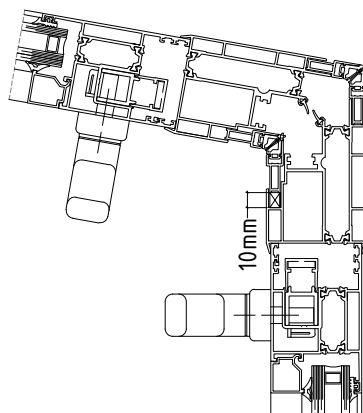
moving sash at outer track
we always measure from the
inner face of rail



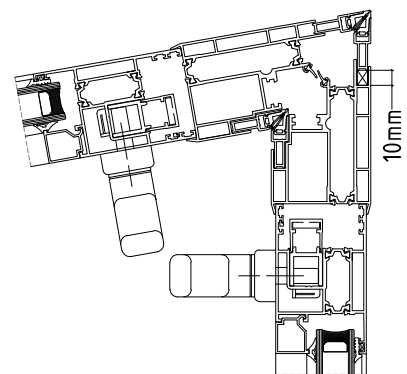
moving sash at inner track we
always measure from the inner
face of rail



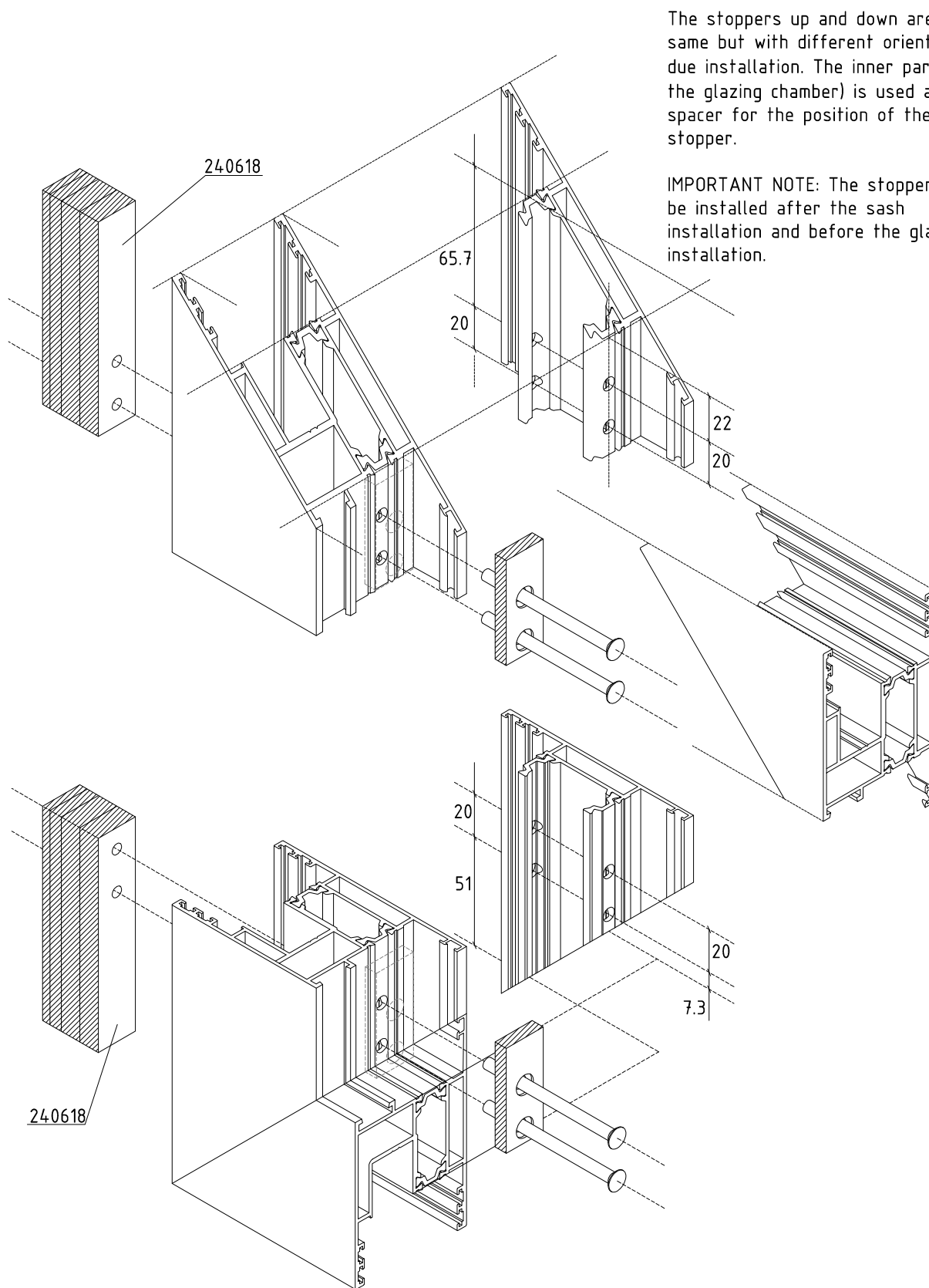
typical construction 45°



max construction 45° + 5°

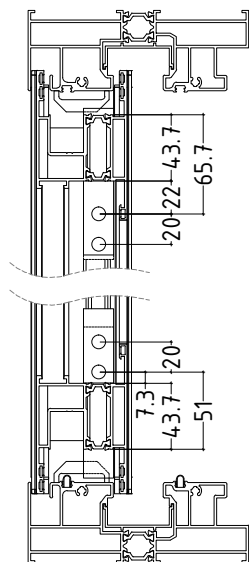


min construction 45° - 5°

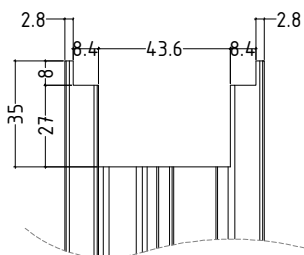


The stoppers up and down are the same but with different orientation due installation. The inner part (into the glazing chamber) is used also as spacer for the position of the outer stopper.

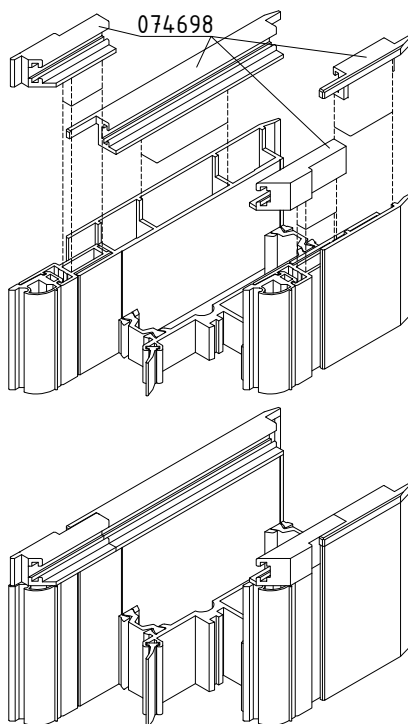
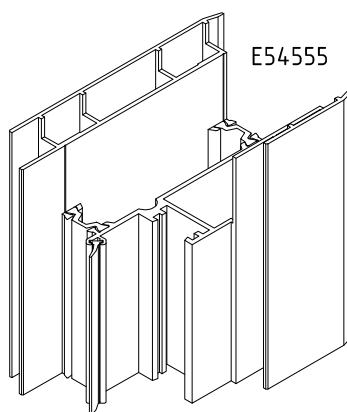
IMPORTANT NOTE: The stoppers must be installed after the sash installation and before the glazing installation.



Positioning of the stoppers.



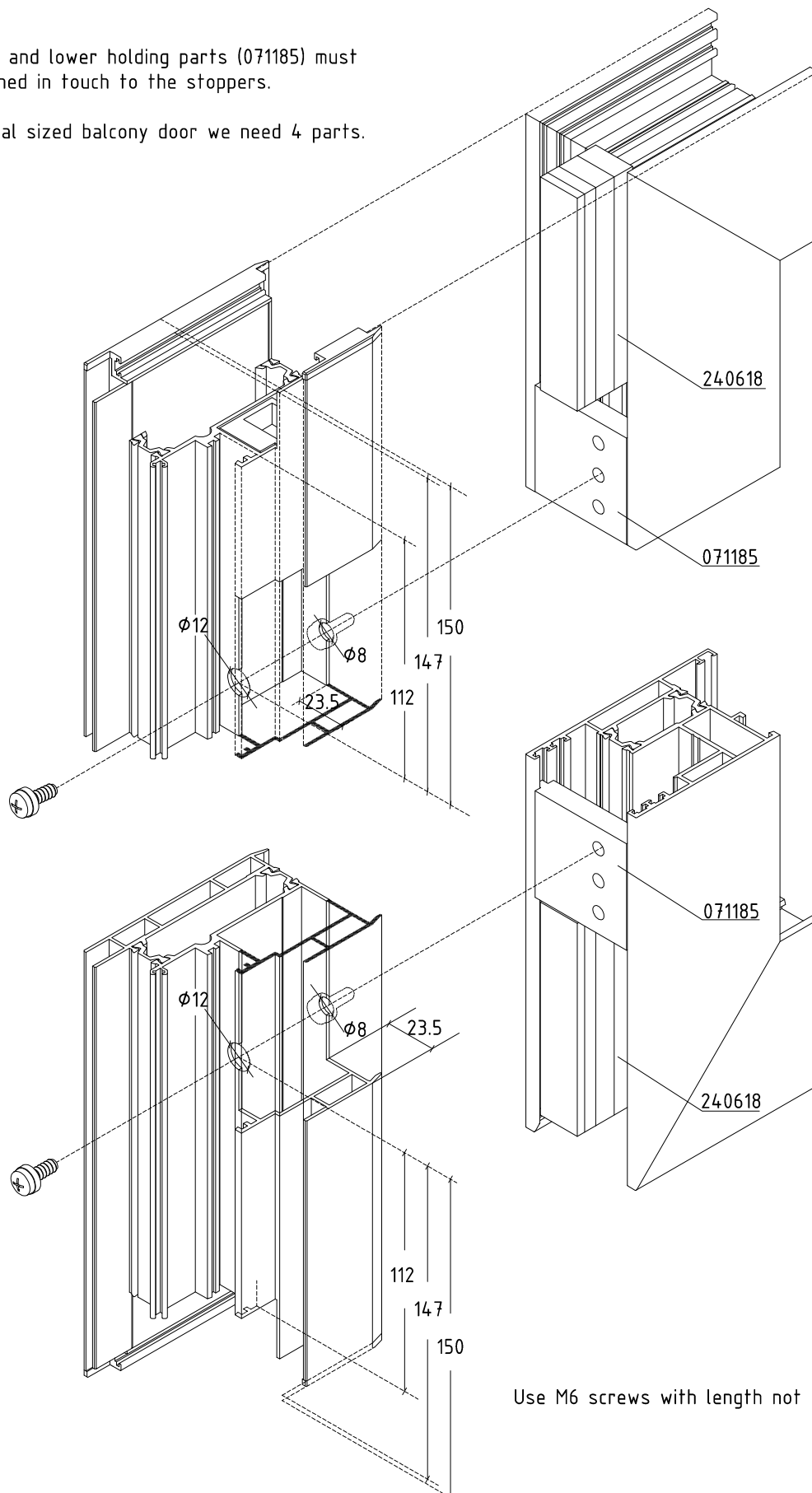
The machining is the same for the upper and lower part. The additional profile E54550 must be 6mm less than the sash and the E54555 22mm less than the sash.



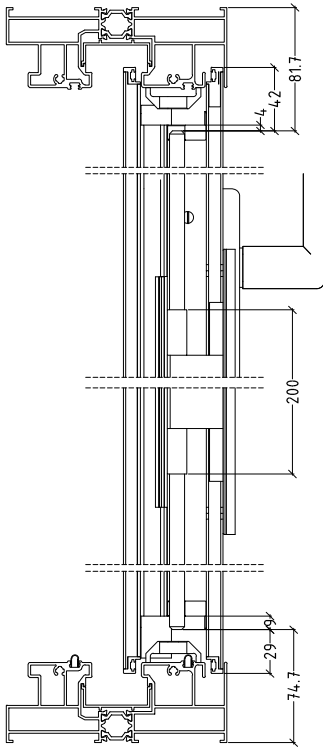
At every edge we put 4 PVC cups. There are 2 pairs of 8 different cups (4 mirrored). As a result the left upper is symmetric to the right lower and vice versa.

The upper and lower holding parts (071185) must be positioned in touch to the stoppers.

At a normal sized balcony door we need 4 parts.

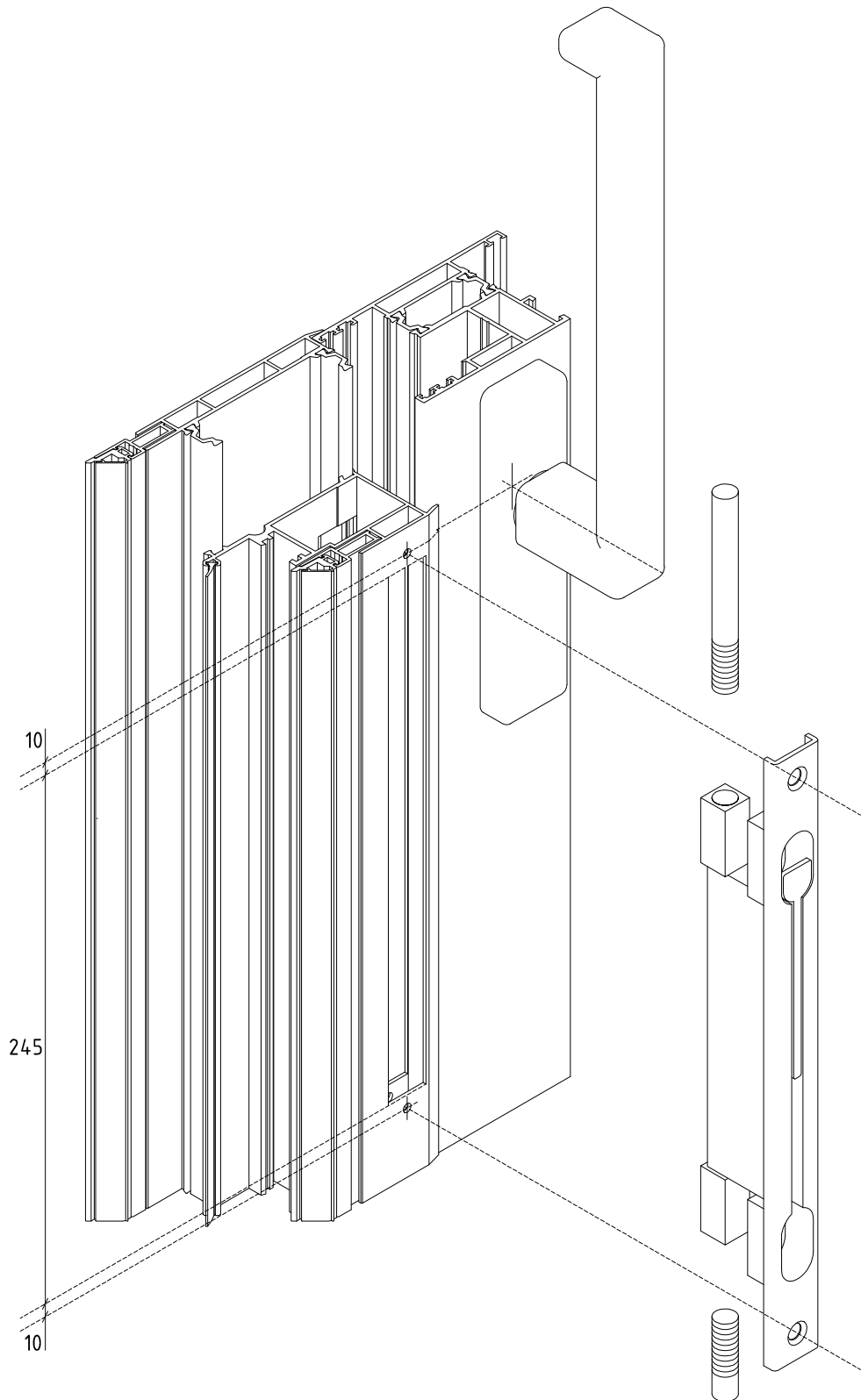


Use M6 screws with length not more than 11mm.

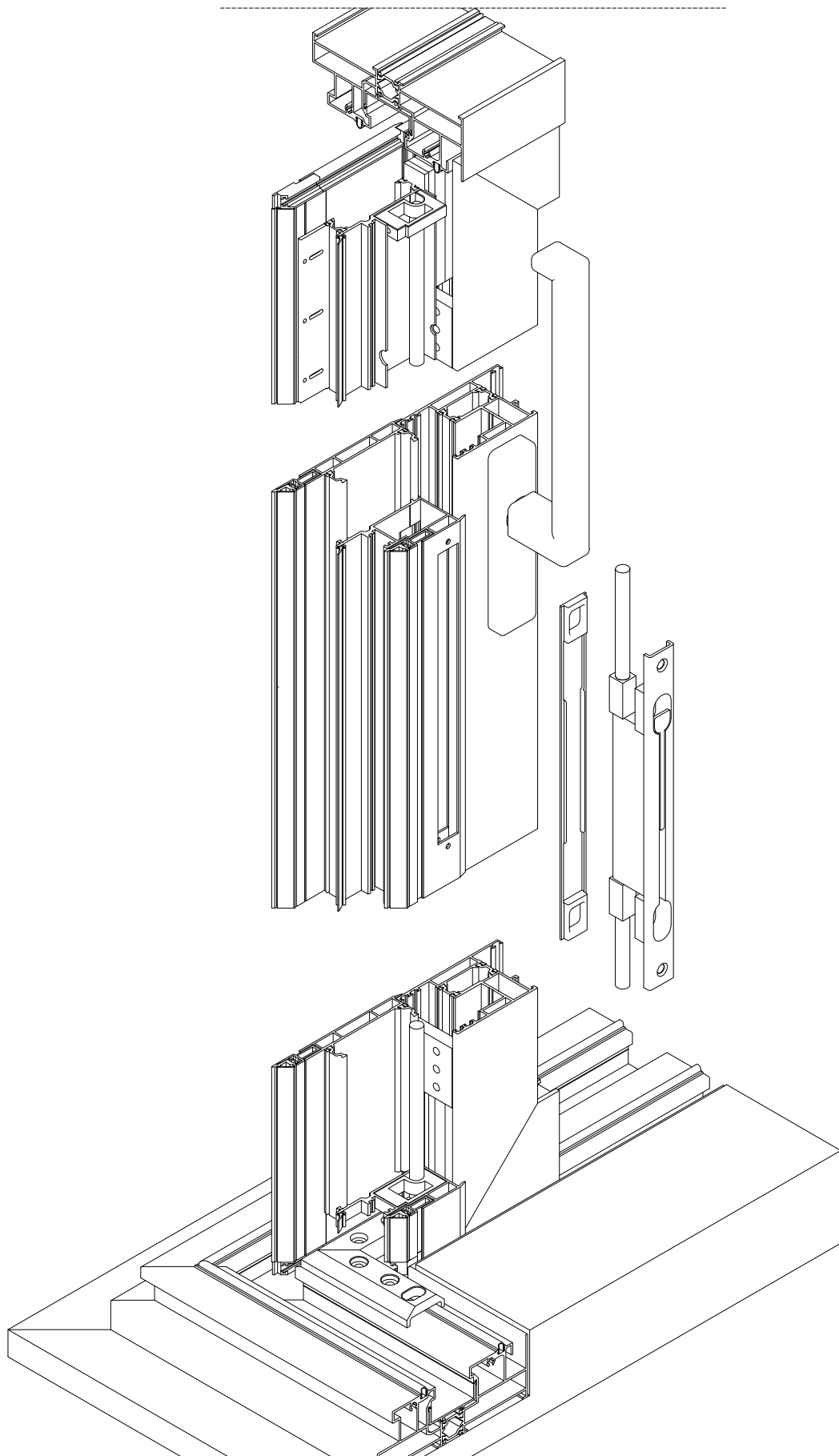


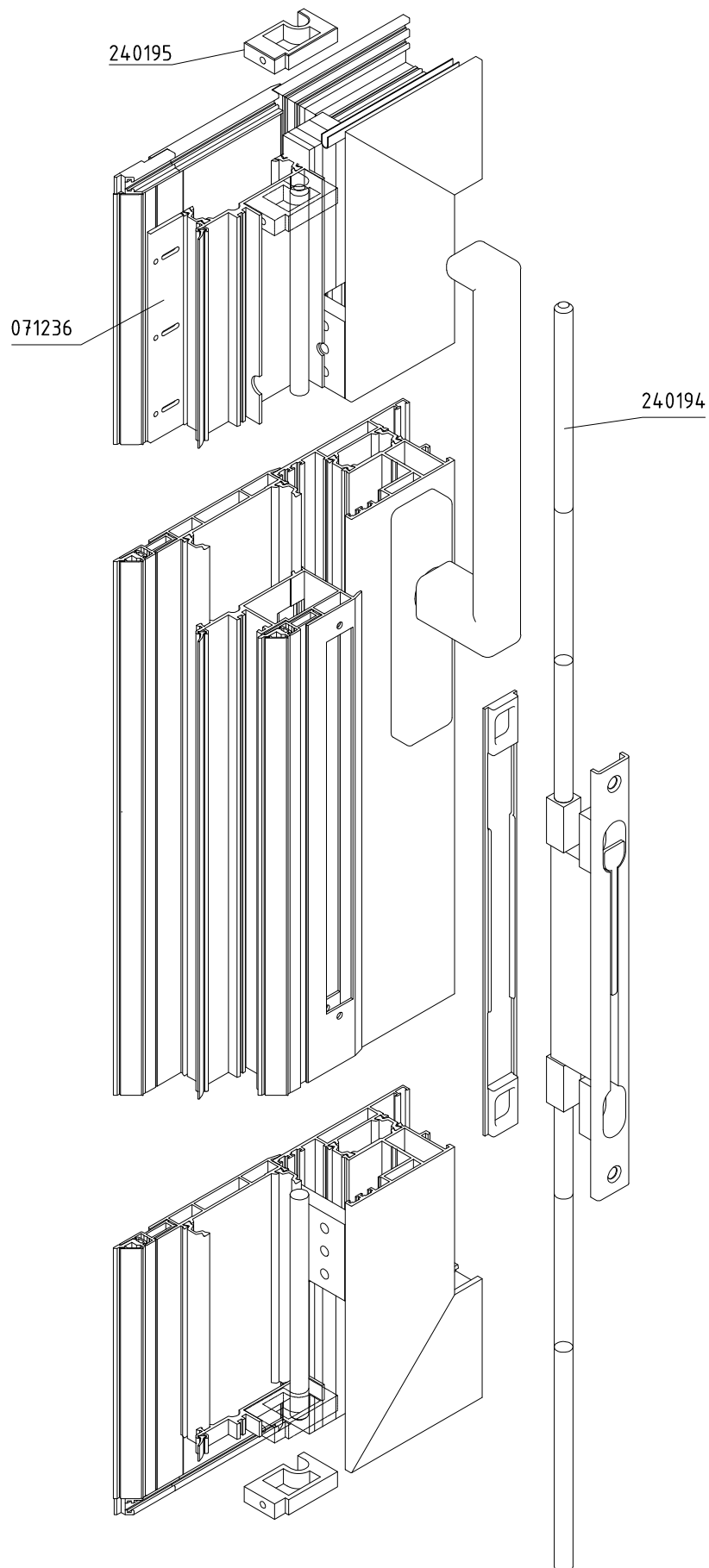
Dimension of the moving rod.

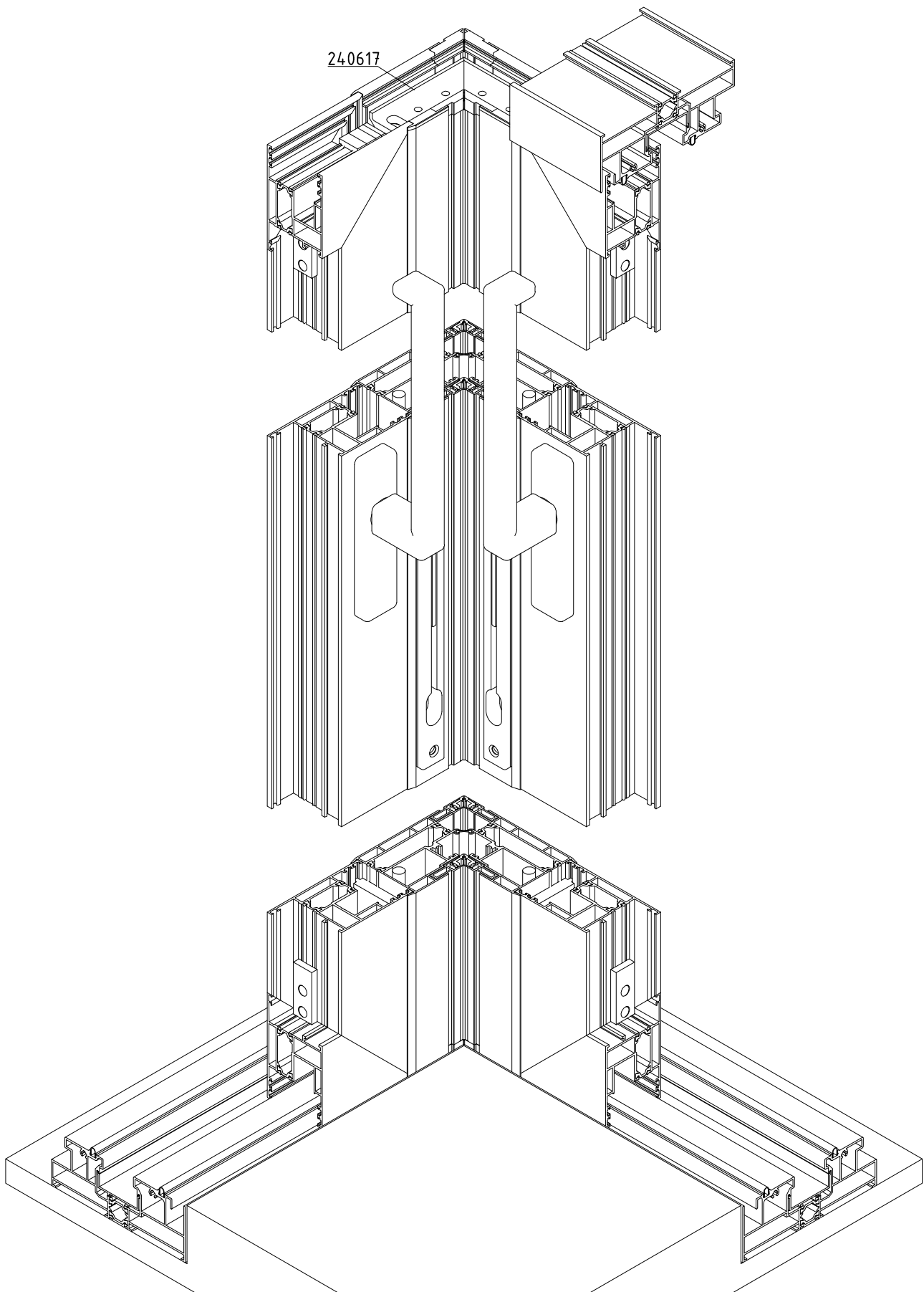
IMPORTANT NOTE:
The rod size must be calculated with the locker at position "open".



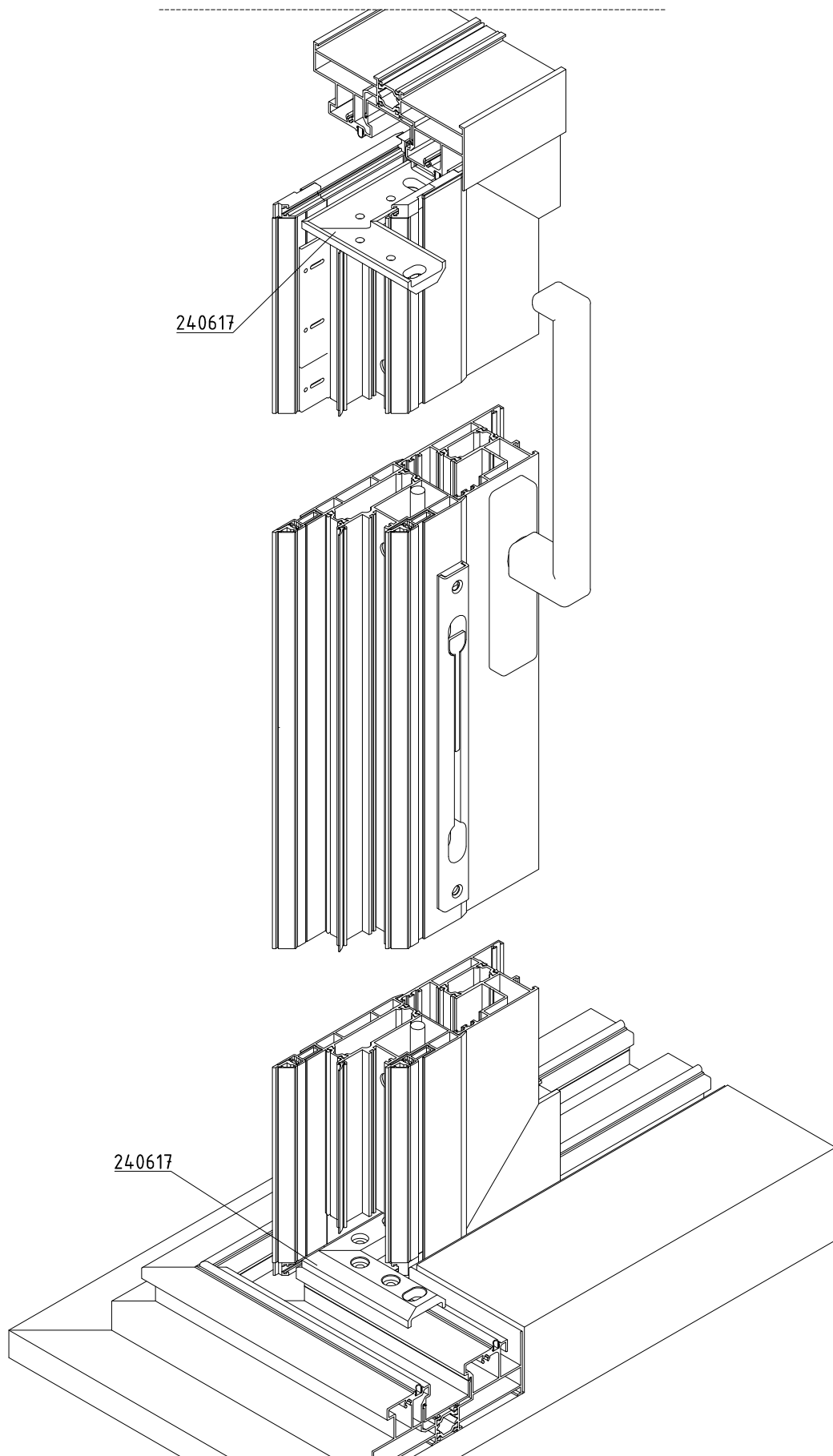
M3000-20







M3000-23



ACCESSORIES

SECTIONS / DETAILS

sliding system with thermo break

E 3000

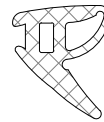
code/description	package/pcs	colour
ET 130175.00	80	●

glazing EPDM gasket
press-in 5-6 mm



ET 130177.00	60	●
--------------	----	---

glazing EPDM gasket
press-in 7-8 mm



ET 130153.00	150	●
--------------	-----	---

glazing EPDM gasket 4 mm



ET 130171.00	275	●
--------------	-----	---

EPDM gasket



sliding system with thermo break

E 3000

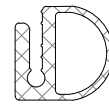
code/description	package/pcs	colour
ET 130131.00	200	●
ET 130174.00	160	●



EPDM on rabbet and glass beading

ET 130723.00	90	●
--------------	----	---

EPDM gasket



ET 130404.00	180	●
--------------	-----	---

EPDM gasket



ET 130172.00	150	●
--------------	-----	---

EPDM gasket for E 3000

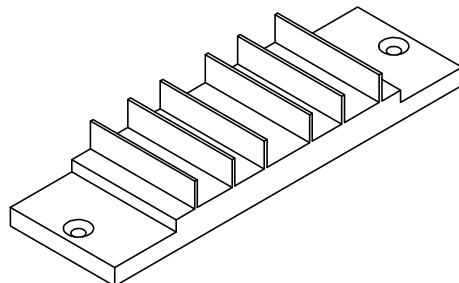


sliding system with thermo break

E 3000

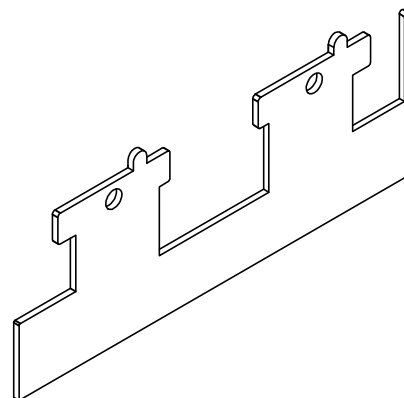
code/description	package/pcs	colour
ET 240802.00	20	●

epdm brushes for E 3000



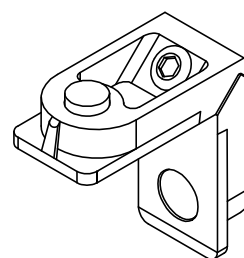
ET 076603.00	20	●
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EPDM gasket for frame insulation E3010



ET 053304.00	250	MF
ET 052203.00	250	MF

corner joint bracket for E3005

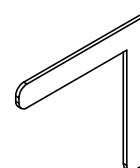


ET 055503.00	100	MF
ET 056602.00	100	MF
ET 057701.00	100	●

metal alignment square

stainless steel alignment square

plastic 6-6 alignment square



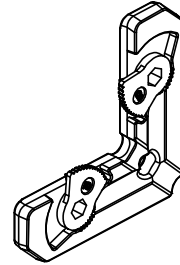
A3000-03

sliding system with thermo break

E 3000

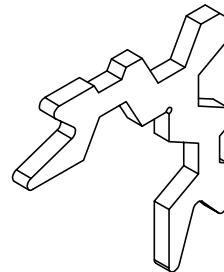
code/description	package/pcs	colour
ET 058001.00	250	MF

alignment square with locking function



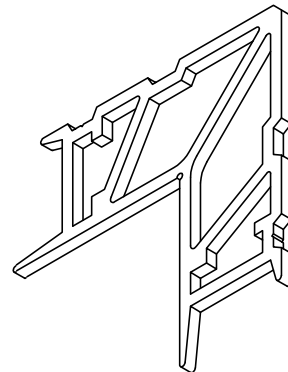
ET 54433.00	200	MF
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extruded aluminium corner bracket for E 54200



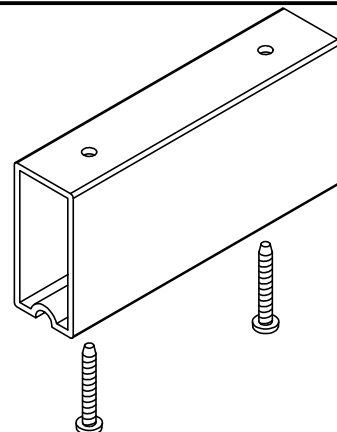
ET 54710.00	200	MF
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extruded aluminium corner bracket for E 54200



ET 240702.00	10	●
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aluminium spacer

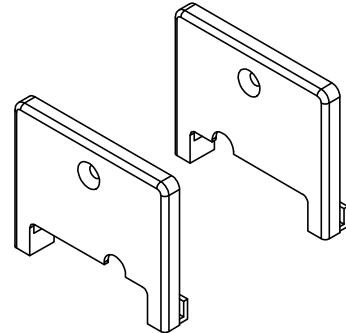


sliding system with thermo break

E 3000

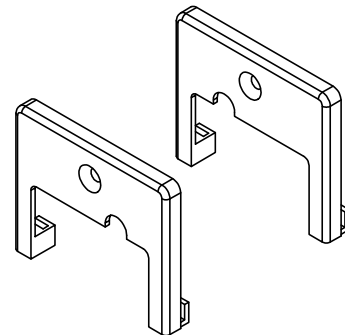
code/description	package/pcs	colour
ET 074616.00	10	●

bottom - plastic plug for interlock profile



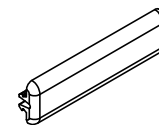
ET 074617.00	10	●
--------------	----	---

top - plastic plug for interlock profile



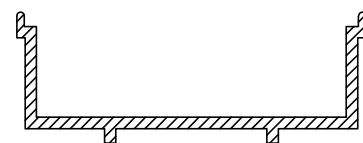
ET 240607.00	100	●
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plastic anti-vibration buffer



ET 080169.00	3	●
--------------	---	---

special plastic profile

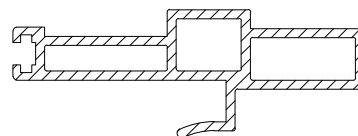


sliding system with thermo break

E 3000

code/description	package/pcs	colour
ET 080168.00	3	●

plastic profile for central section E 3000



ET 135508.01	225	●
ET 135508.02	225	●
ET 135508.04	225	●

brush - FP



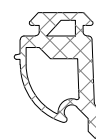
ET 130412.00	200	●
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EPDM gasket



ET 130729.00	-	●
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EPDM gasket



LIABILITY

The stated data and calculating methods are provided by ETEM as a guideline only. The information given in this catalogue does not substitute of all applicable regulations Eurocodes harmonized European standards national or regional building codes.

The specific conditions and technical details of every particular project have to be taken into consideration.

The right choice of all elements as well as any special requirements regarding stability of the structure must always be considered by the structural/facade engineer responsible for the project.

The solutions presented in these pages are indicative and can not cover all possible project cases. Because of that every single project has to be evaluated by the structural/facade engineer in charge taking into consideration the specific features such as climate conditions, location, orientation etc.

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