

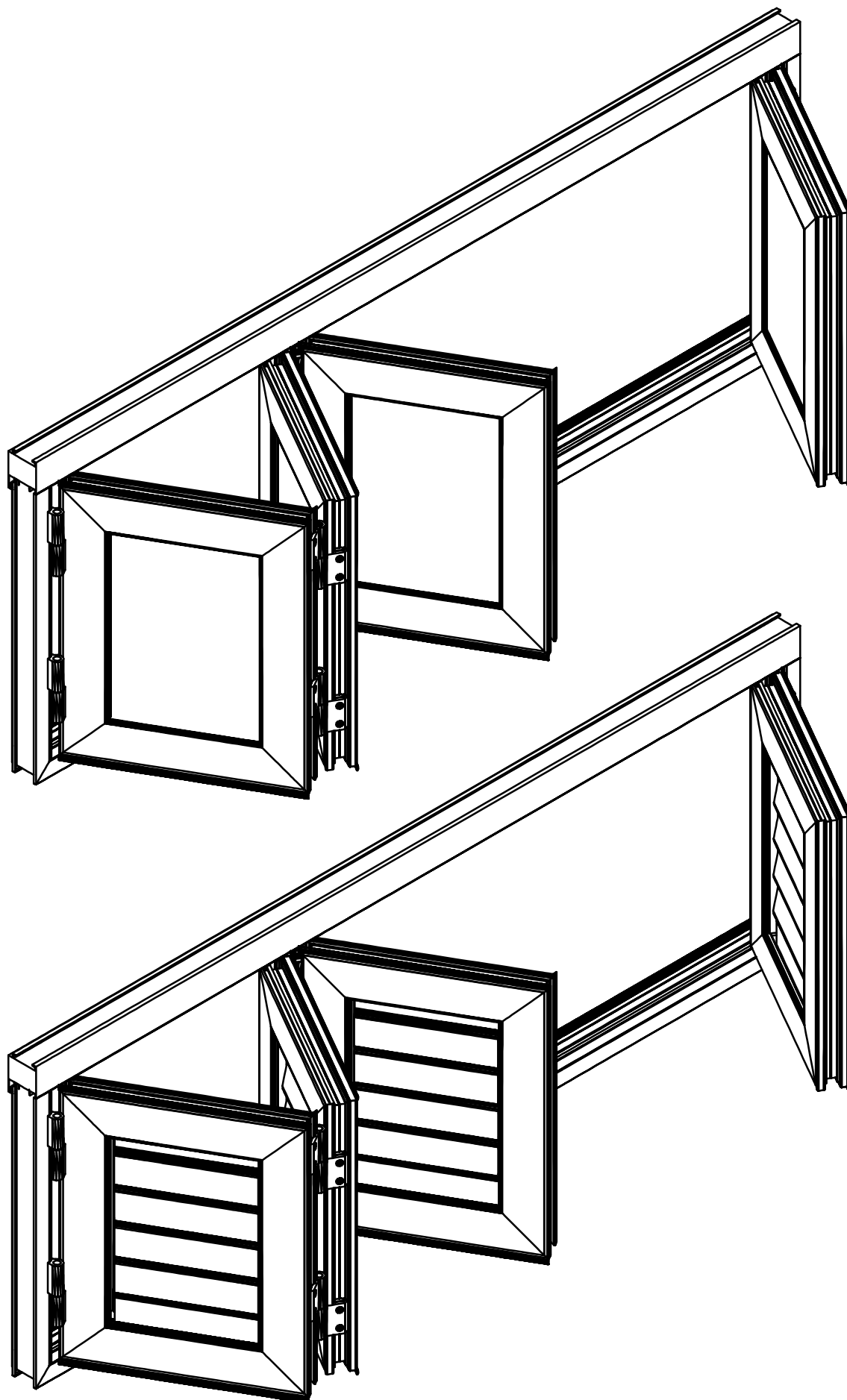
FEAL

FEAL d.o.o za preradu aluminija-Široki Brijeg, Trnska cesta 146



HARMONIKA OTVORI

GH-45





Akkreditierte Prüf- und Inspektionsstelle – gbd LAB GmbH

Auftraggeber	FEAL d.o.o	Adresse	Trnska cesta 146 88220 Siroki Brijeg Bosnien-Herzegowina
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Bauvorhaben		Identifikation	Halterung Verschattung
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Prüfkörper	Obere Rollenhalterung / untere Führungsschiene
Prüfprogramm	Zugversuche
Kurzbeurteilung	Die Rollenhalterung ist bei einer Montage lt. Montageanleitung der Firma FEAL für eine Belastung bis zu einer Windgeschwindigkeit von maximal 50 km/h ausreichend. Die größte Ausnutzung ist im Bolzenbereich der unteren Führungsschiene.



gbd LAB

Akkr. Prüf- und Inspektionsstelle
gbd LAB GmbH www.gbd-lab.at
Steinebach 13a A-6850 Dornbirn

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Akkreditierte Prüf- und Inspektionsstelle – gbd LAB GmbH FN2953101
Steinebach 13a A-6850 Dornbirn T ++43 (0)5572 394830 F ++43 (0)5572 394830.39 office@gbd-lab.at www.gbd-lab.at

Prüfbericht

Bauteilversuch im akkreditierten Bereich

Prüfstelle	gbd LAB GmbH akkreditierte Prüf- und Inspektionsstelle	Adresse	Steinebach 13a A-6850 Dornbirn
Akkreditierung	Bundesministerium für Wirtschaft und Arbeit Nr. 270	Akkreditiert nach	EN ISO/IEC 17025 EN ISO/IEC 17020 Typ A
Notified Body	Nr. 2065	Bauproduktenrichtlinie	89/106/EWG

Ort der Prüfung	Steinebach 13a	Probeneingang	05.10.2010
Probennummer	P10/267	Prüfdatum	12.10.2010
Prüfvorschrift	---	Klassifizierung	---
Prüfumfang	Druckversuche bis zum Bruch	Prüfanweisung	PA 101_06
Prüftemperatur	19°C – 23°C	Relative Luftfeuchtigkeit	---
Luftdruck	---	Normabweichung	---

1 Aufgabenstellung

Der auf Seite 1 genannte Auftraggeber beauftragte die Firma gbd LAB zur Durchführung von Bauteilversuchen an bereitgestellten Elementen. Ziel der Versuche ist es, die Bruchlast der Verbindungen zu ermitteln.

2 Verwendungshinweise

Dieser Prüfbericht dient zum Nachweis der oben genannten Eigenschaften.

Nach Angaben des Herstellers stammt das Elementmuster aus eigener Produktion und wurde vom Auftraggeber als repräsentatives Bauteil ausgewählt.

3 Mitgeltende Normen

/1/ Stand der Technik

4 Prüfgegenstand

Beschreibung siehe Anlagen

Anlage 1:

5 Durchgeführte Tätigkeiten

5.1 Allgemeines

Probekörperanlieferung durch den Auftraggeber

Prüfer Heinz Pfefferkorn gbd LAB GmbH

Der Probekörper wurde vor der Prüfung einer Sichtprüfung unterzogen. Es wurden keine sichtbaren Beschädigungen oder schadhafte Stellen festgestellt.

5.2 Versuchsaufbau

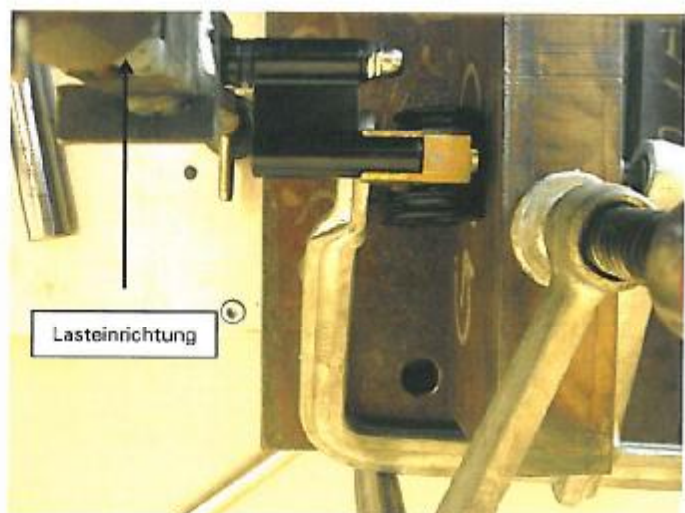
5.2.1 obere Halterung

Versuch 1

Die Belastung erfolgt in Richtung der Windlast bei geöffneter Stellung der Verschattung. Es wird die unter Punkt 5.5 angeführte Komponente H ermittelt.



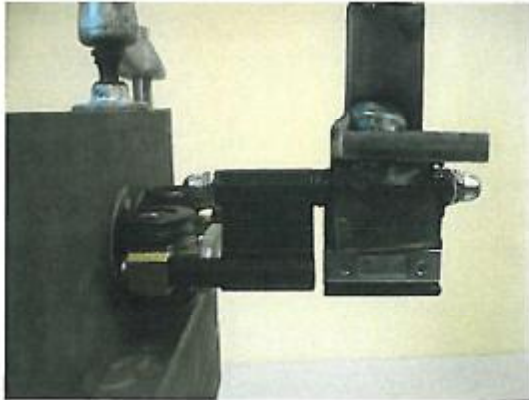
Prüfaufbau – Ansicht



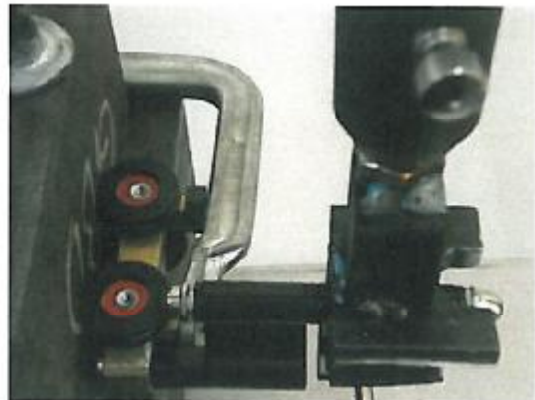
Prüfaufbau – Draufsicht

Versuch 2

Die Belastung erfolgt in der Gelenksachse. Es wird die unter Punkt 5.5 angeführte Komponente V ermittelt. Der Versuch 2 wird anschließend an den Versuch 1 durchgeführt.



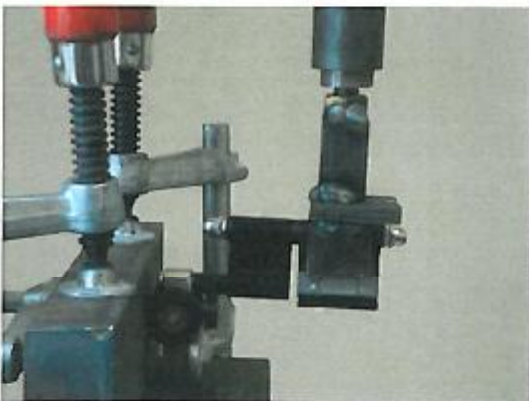
Prüfaufbau – Ansicht



Prüfaufbau – Draufsicht

Versuch 3

Die Belastung erfolgt in der Achse der Rollenhalterung. Der Versuch 3 wird anschließend an den Versuch 1 durchgeführt.



Prüfaufbau – Ansichten



5.2.2 untere Halterung

Versuch 1

Es wird die Abscherkraft der Bolzen ermittelt.



Prüfaufbau – Ansicht



Prüfaufbau – Draufsicht

Versuch 2

Die Belastung erfolgt in Richtung der Windlast bei geöffneter Stellung der Verschattung. Es wird die unter Punkt 5.5 angeführte Komponente H ermittelt.



Prüfaufbau – Ansicht



Prüfaufbau – Draufsicht

5.3 Prüfgeräte

Nr.	Prüfgeräte	Inventarnummer
1	Zugprüfmaschine PA 6110	1.080

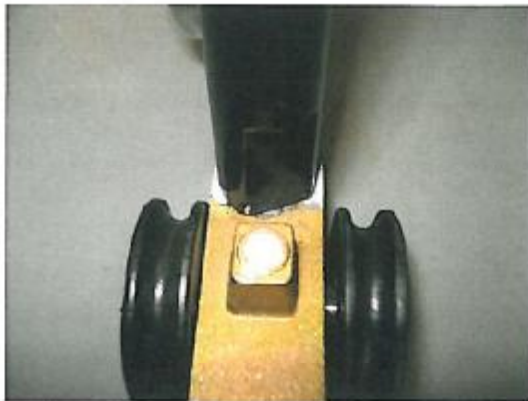
5.4 Prüfergebnisse

5.4.1 obere Halterung

Einzelergebnisse – Versuch 1

Der Bruch erfolgt in den Anschlusslaschen der Rollenhalterung.

Bruchlasten:	P10/267_01	550 N
	P10/267_02	555 N



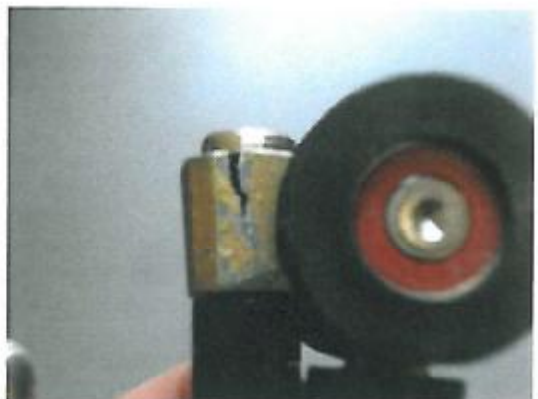
Versagensbilder

Bruchursache ist ein Versagen der Anschlusslaschen der Rollenhalterung.

Einzelergebnisse – Versuch 2

Der Bruch erfolgt in der Rollenhalterung im Bereich des Bolzens.

Bruchlasten:	P10/267_01	1.920 N
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Versagensbilder

Bruchursache ist ein Versagen der der Rollenhalterung.

Einzelergebnisse – Versuch 3

Es erfolgte kein Bruch. Der Versuch wurde bei 2200 N infolge großer Verformungen abgebrochen.

Maximallast:	P10/267_01	2.200 N
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5.4.2 untere Halterung

Einzelergebnisse – Versuch 1

Bruchlasten:	P10/267_03_01	1.470 N
	P10/267_03_02	1.480 N



Bruchbild

Bruchursache ist ein Versagen des Bolzens.

Einzelergebnisse – Versuch 2

Der Bruch erfolgt in den Anschlusslaschen der Rollenhalterung.

Bruchlasten:	P10/267_04	135 N
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Bruchbild

Bruchursache ist ein Versagen der Lasche im Bereich des Bolzens.

5.5 Windbelastung eines Verschattungselementes

Bei einer Windgeschwindigkeit von 50 km/h beträgt der Staudruck $0,12 \text{ kN/m}^2$. Unter Ansatz eines resultierenden Druckbeiwertes von $c_p = 1,4$ beträgt die Windlast auf die geöffneten Verschattungselemente $0,12 \times 1,4 = 0,168 \text{ kN/m}^2$.

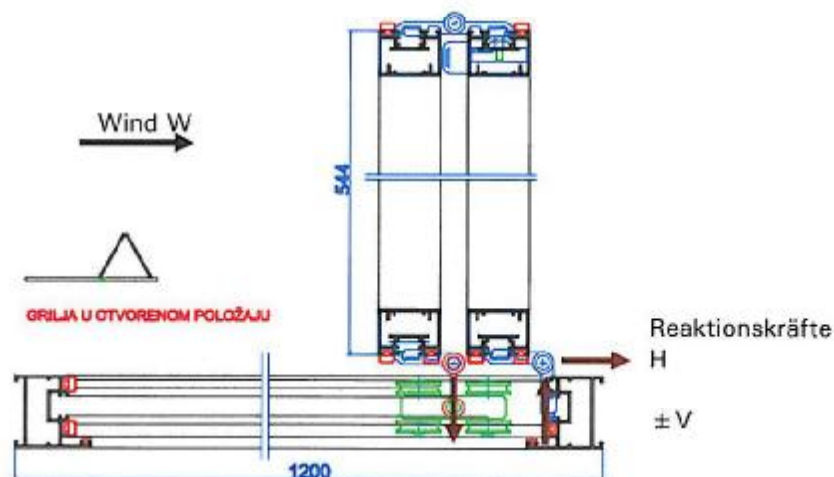
Belastung der Haltevorrichtung:

Windangriffsfläche $A = 2,1 \times 0,554 = 1,16 \text{ m}^2$

Windlast $W = 0,168 \times 1,16 = 0,195 \text{ kN} = 195 \text{ N}$

Auflagerkräfte $V = \pm \frac{1}{2} \times 195 \times 0,554^2 / 0,065 = 461 \text{ N} / \text{Lager}$

$H = \frac{1}{4} \times 195 = 49 \text{ N} / \text{Lager}$



6 Zusammenfassung

Die Rollenhalterung ist bei einer Montage lt. Montageanleitung der Firma FEAL für eine Belastung bis zu einer Windgeschwindigkeit von maximal 50 km/h ausreichend.

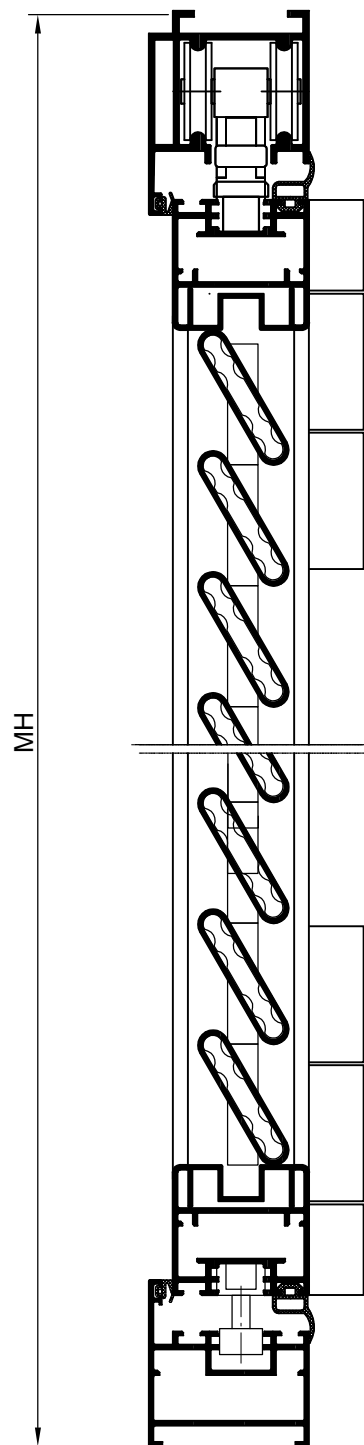
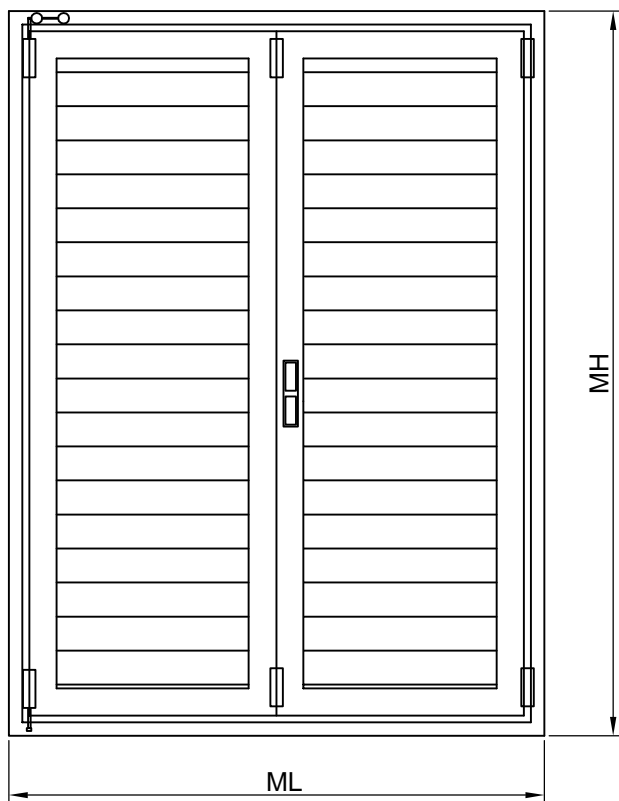
Die größte Ausnutzung ist im Bolzenbereich der unteren Führungsschiene.


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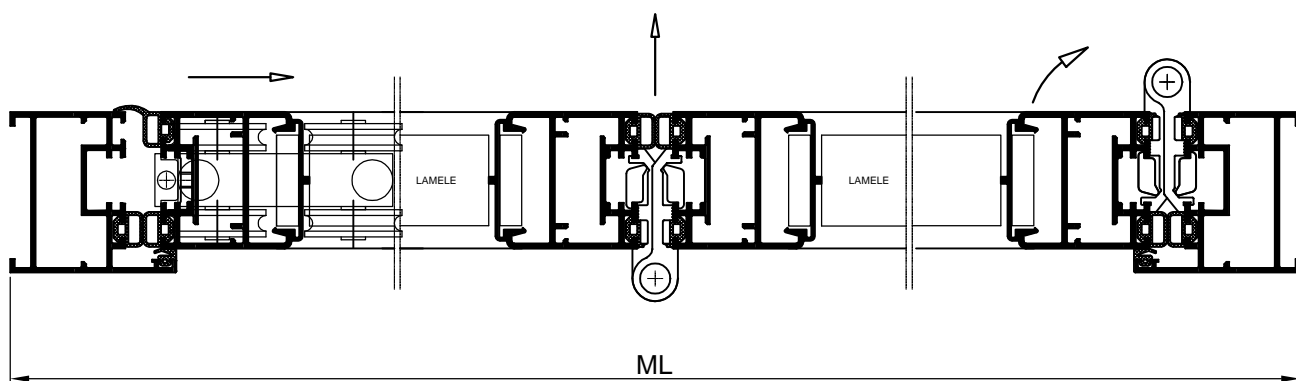
 Dipl.-Ing. Heinz Pfefferkorn

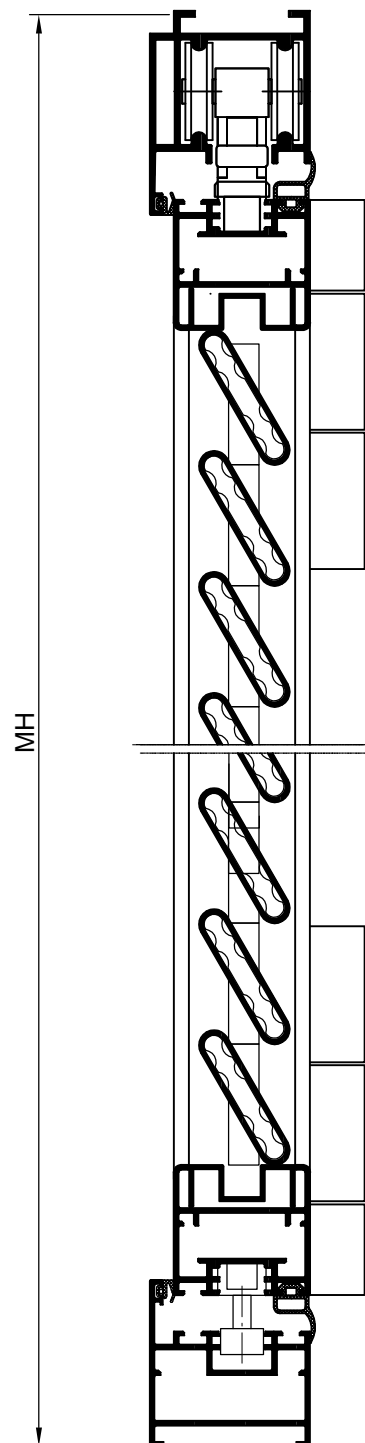
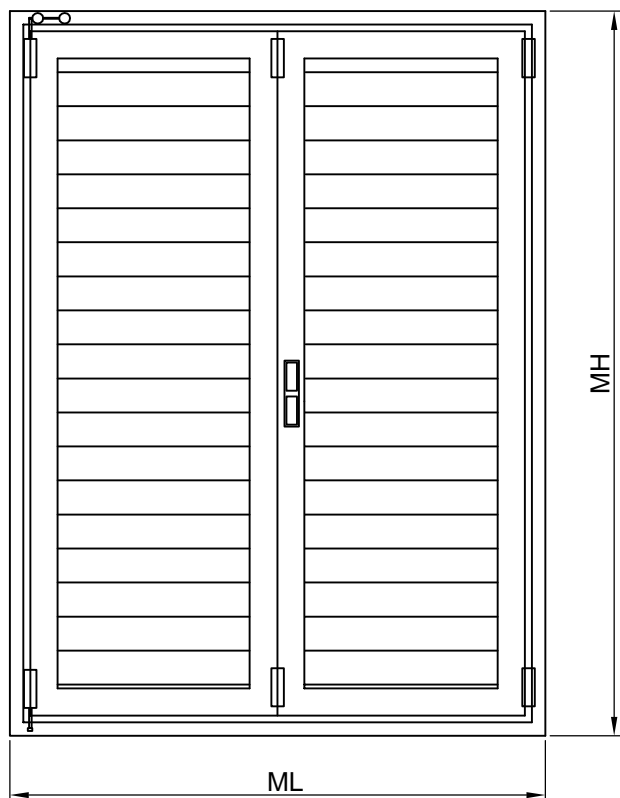
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Anlage -1- Pläne – 6 Seiten

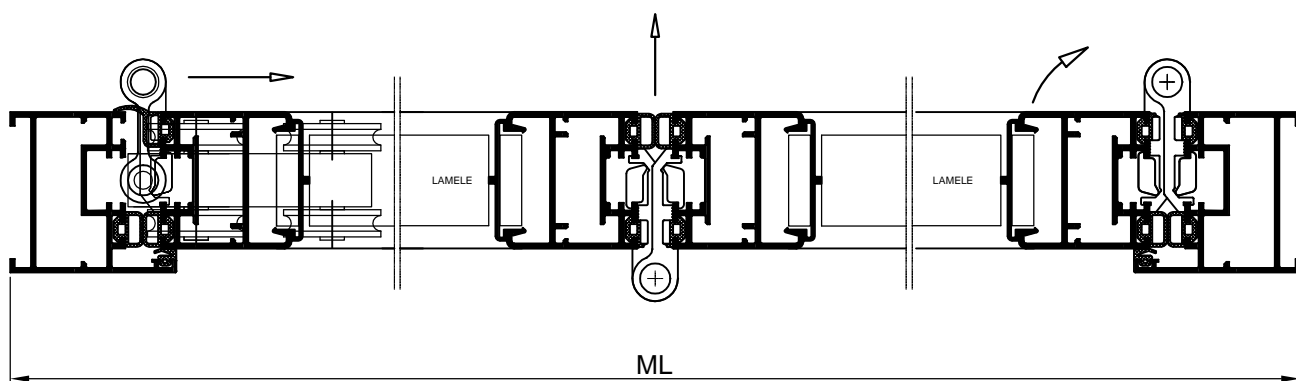


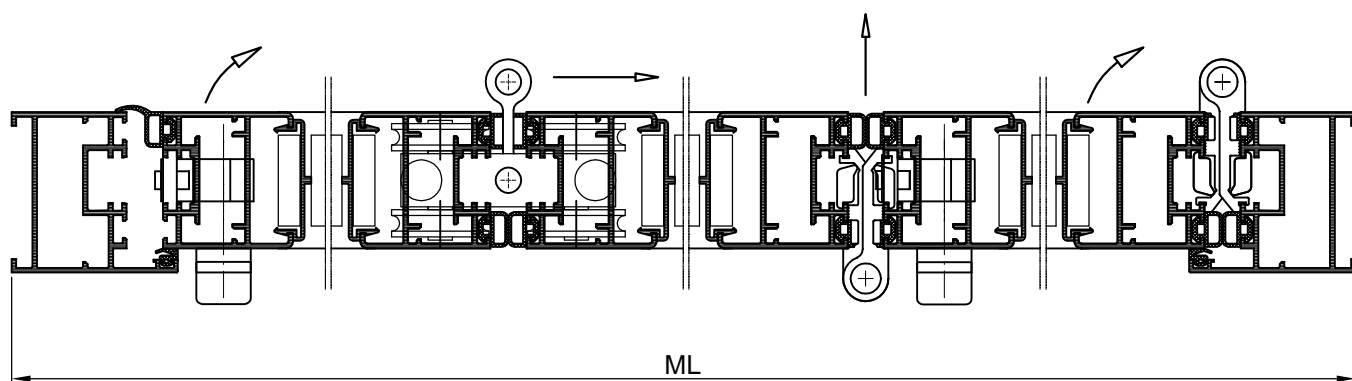
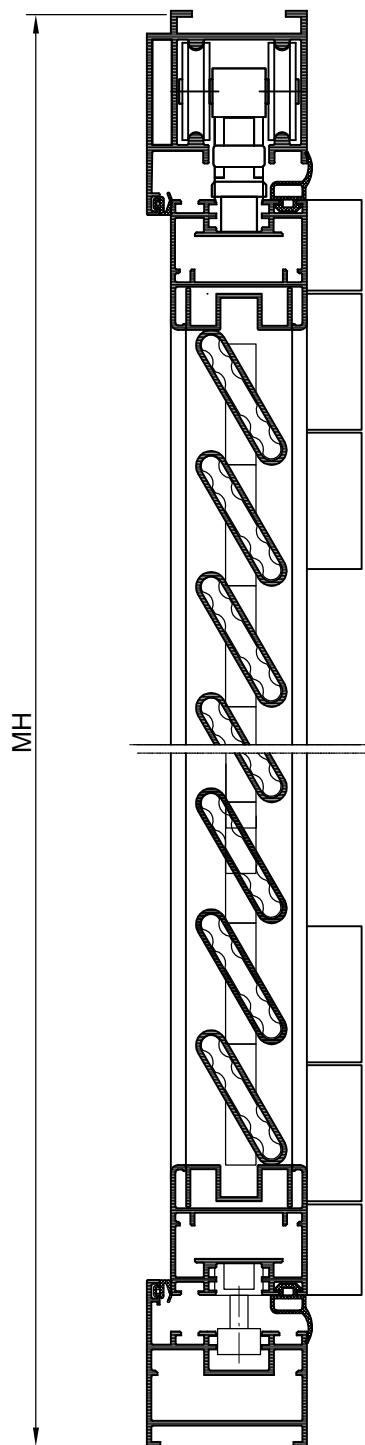
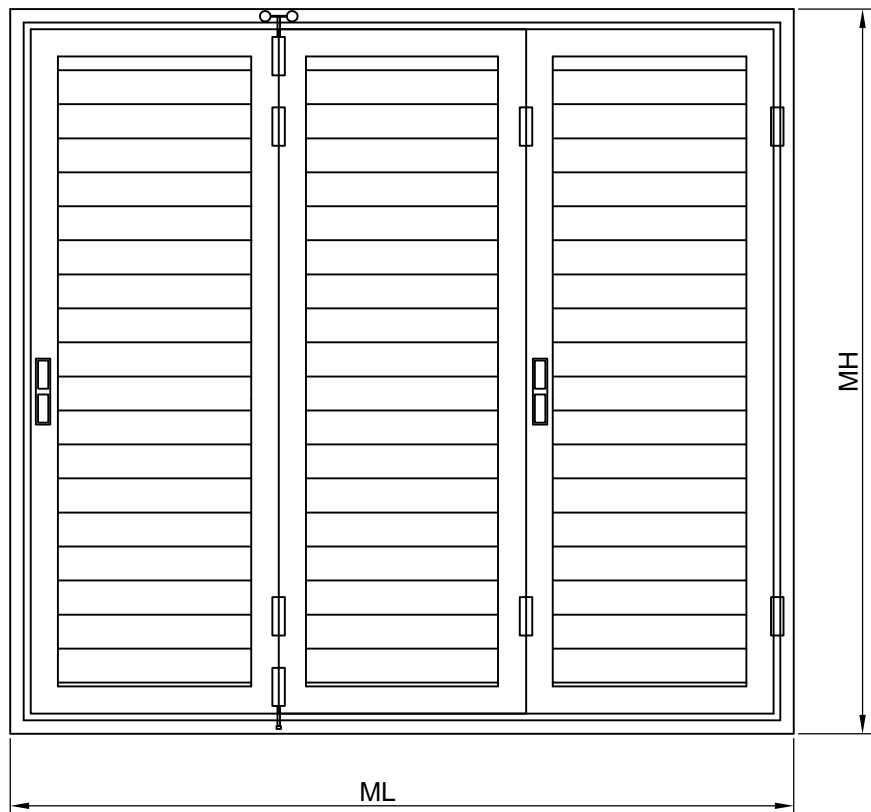
DVA KRILA NEJEDNAKE ŠIRINE
SLAGANJE 2 + 0
OKOVI 141.003; 141.004 SE KORISTI ZA PARNA KRILA
RAZLIČITIH DIMENZIJA
2+0;2+2;4+4;6+6 ...

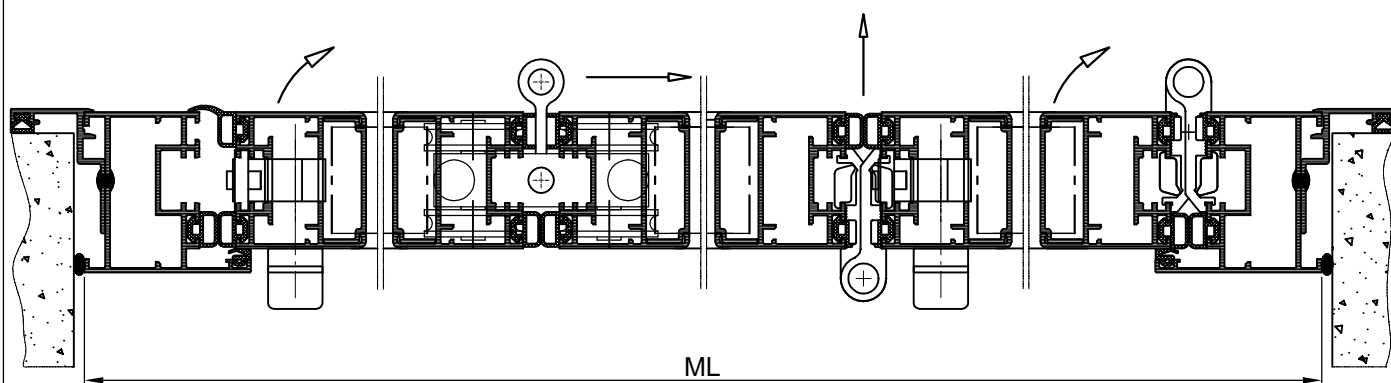
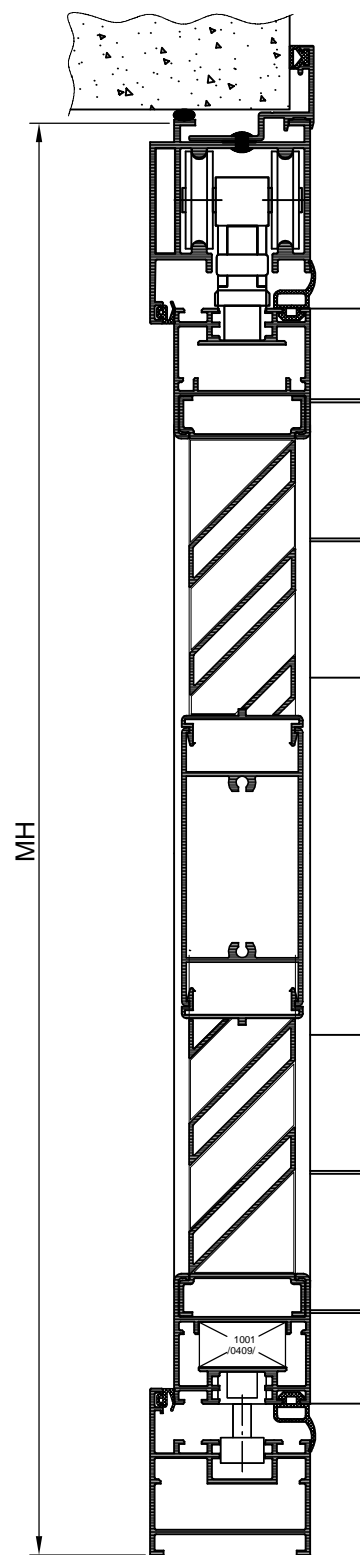
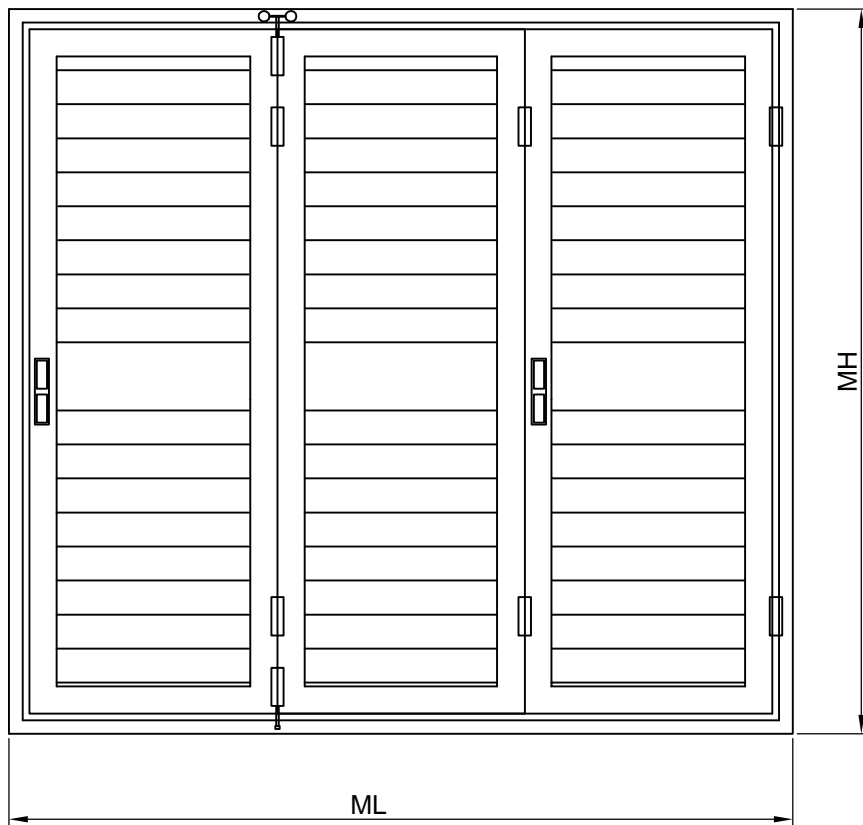


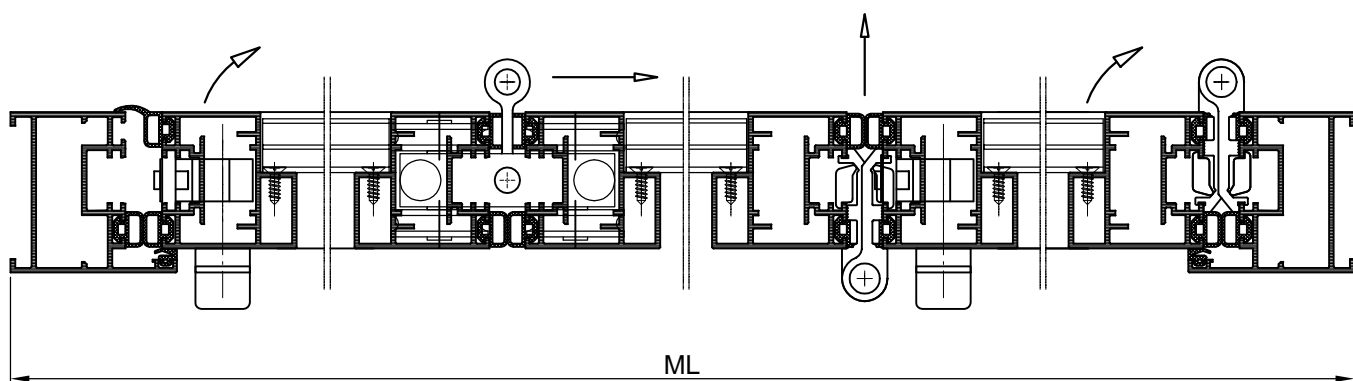
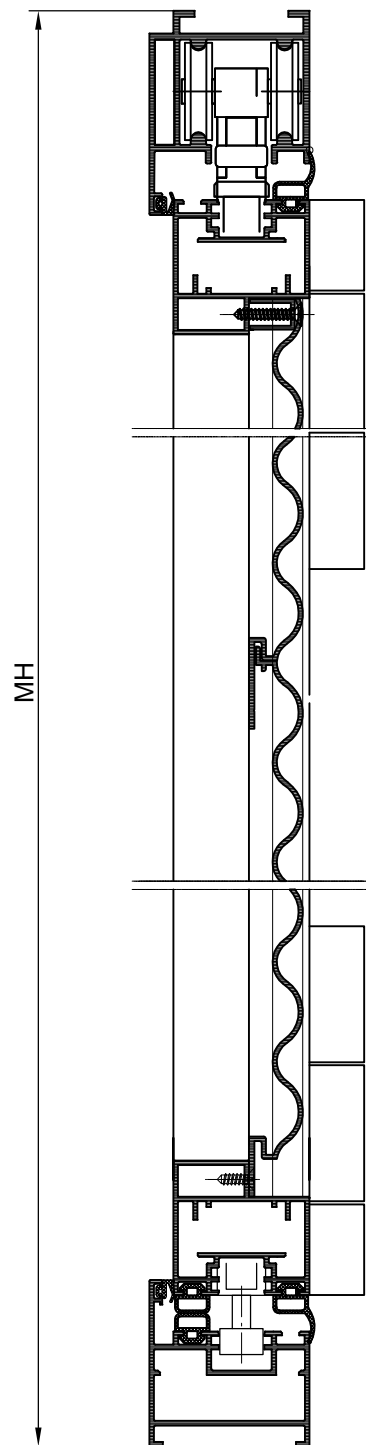
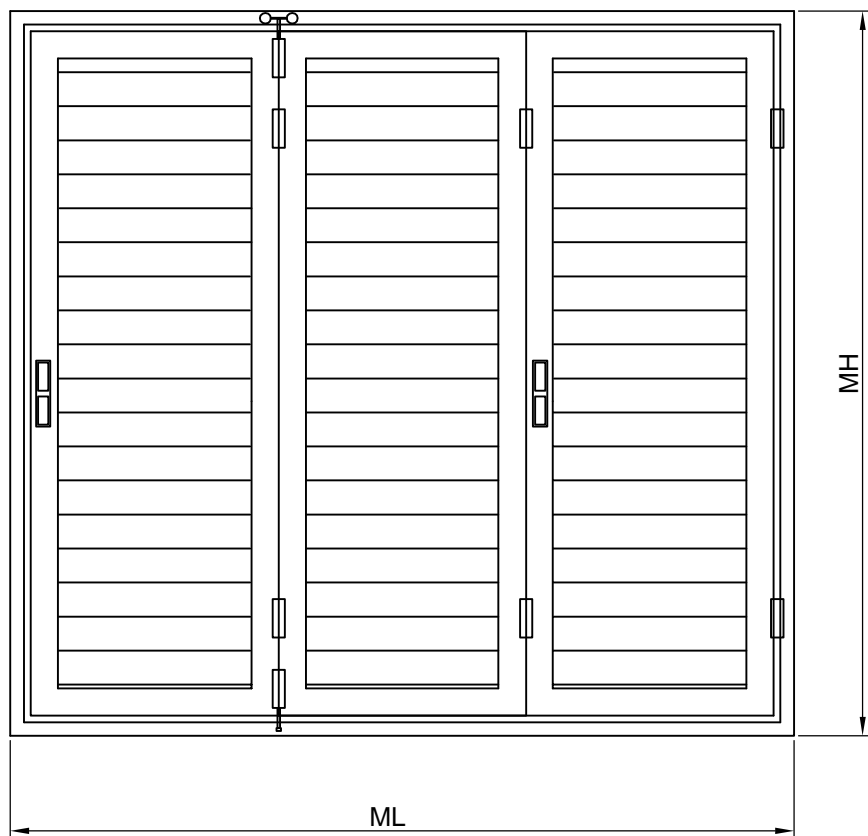


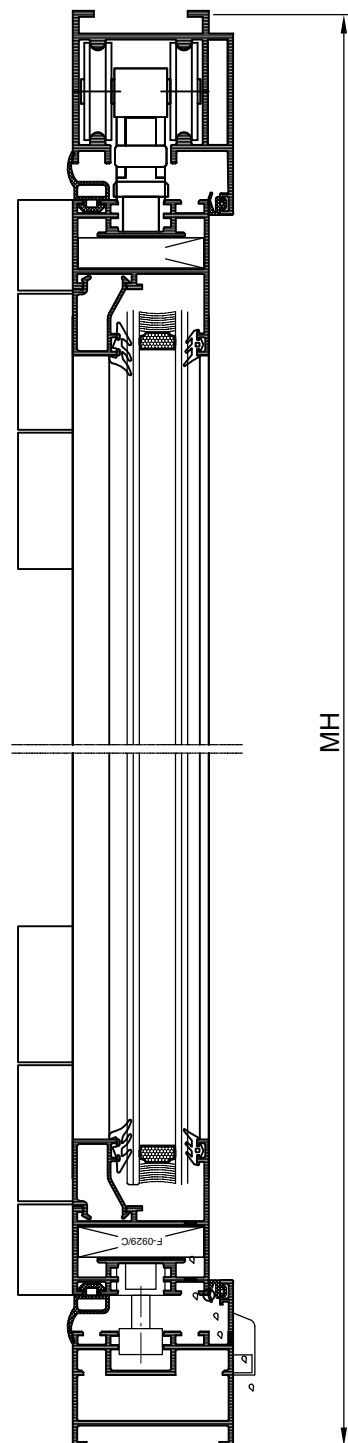
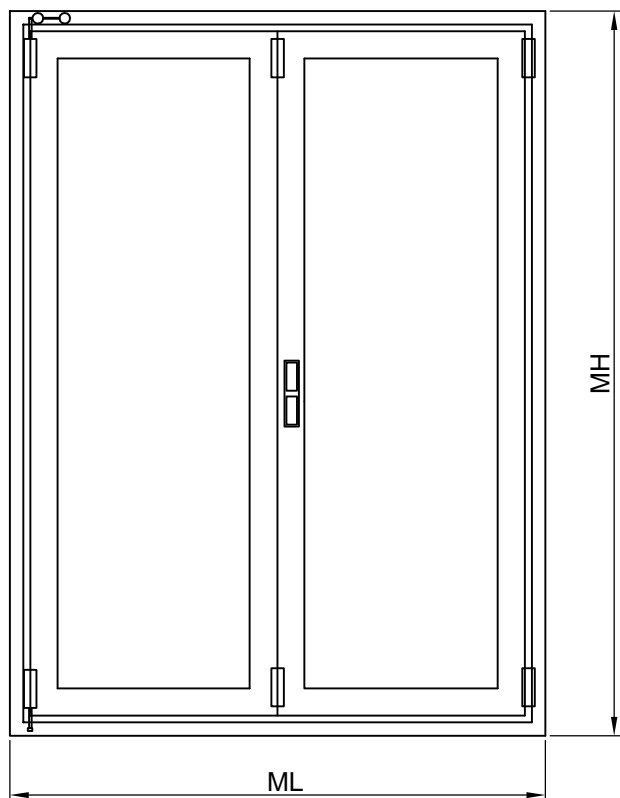
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 JEDNAKIH DIMENZIJA
 2+0;4+0;6+0 SLAGANJE



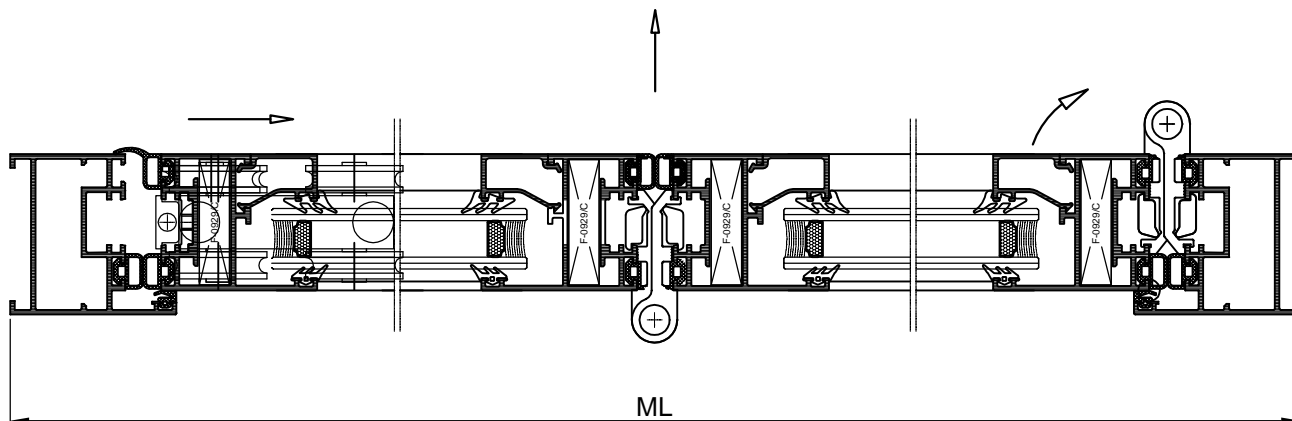


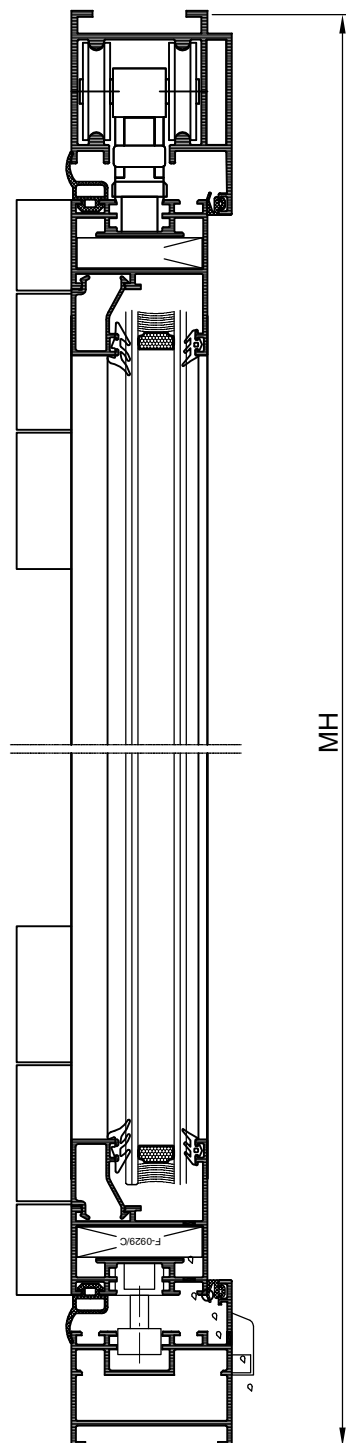
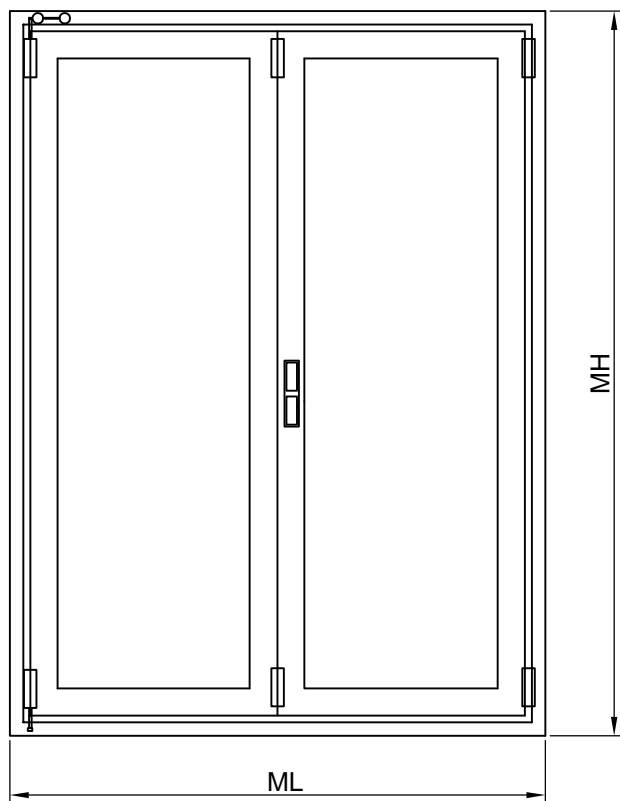




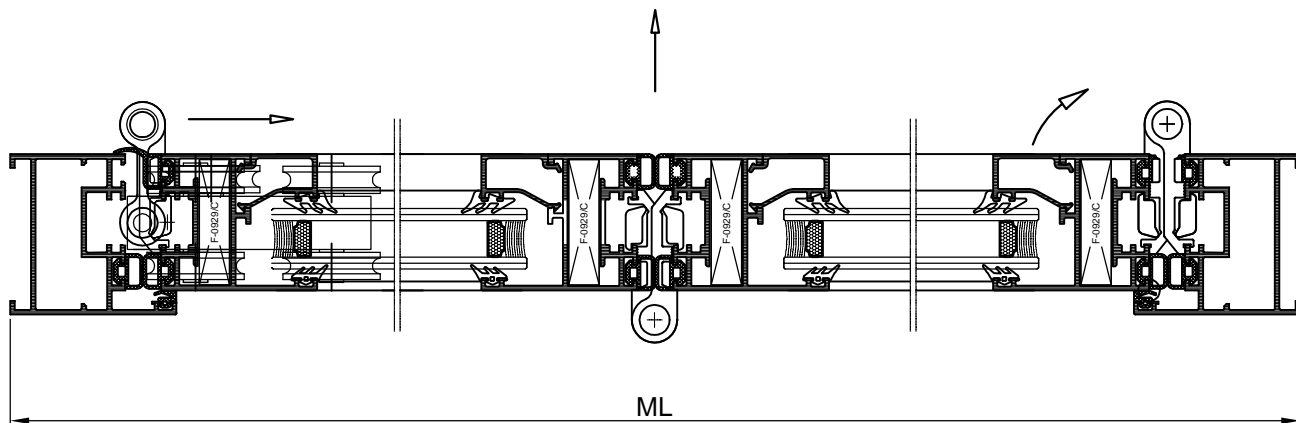


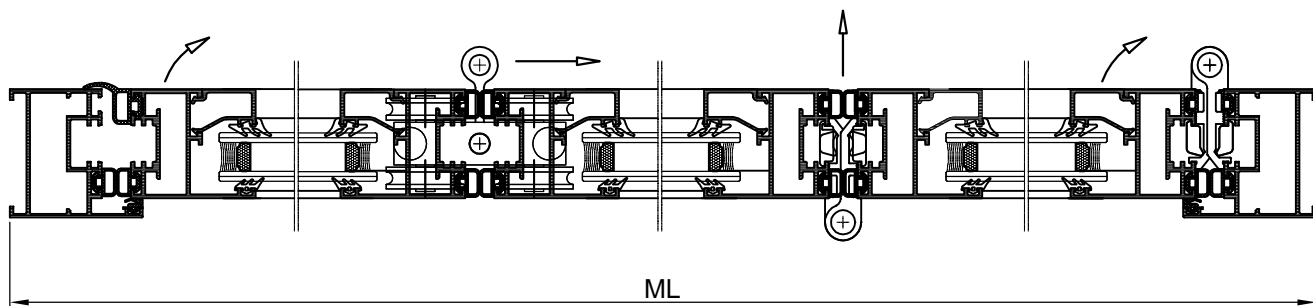
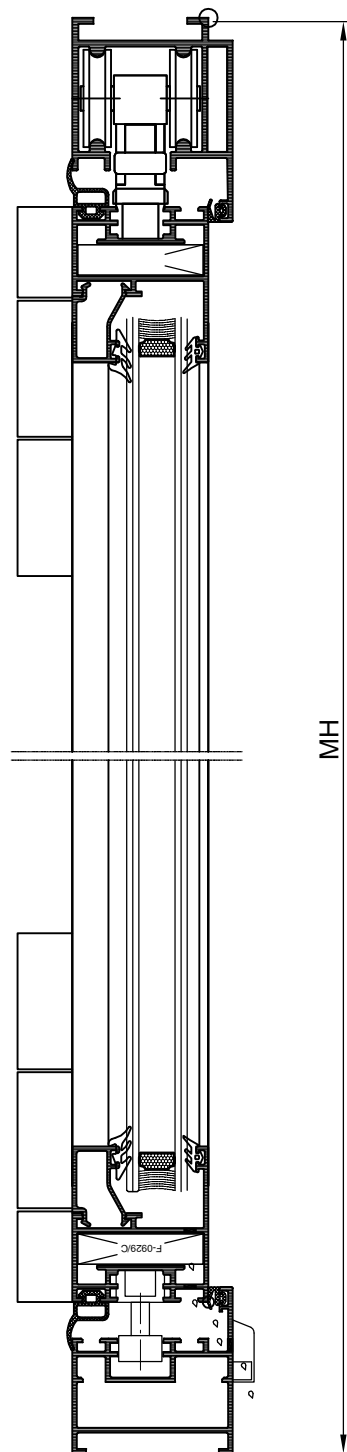
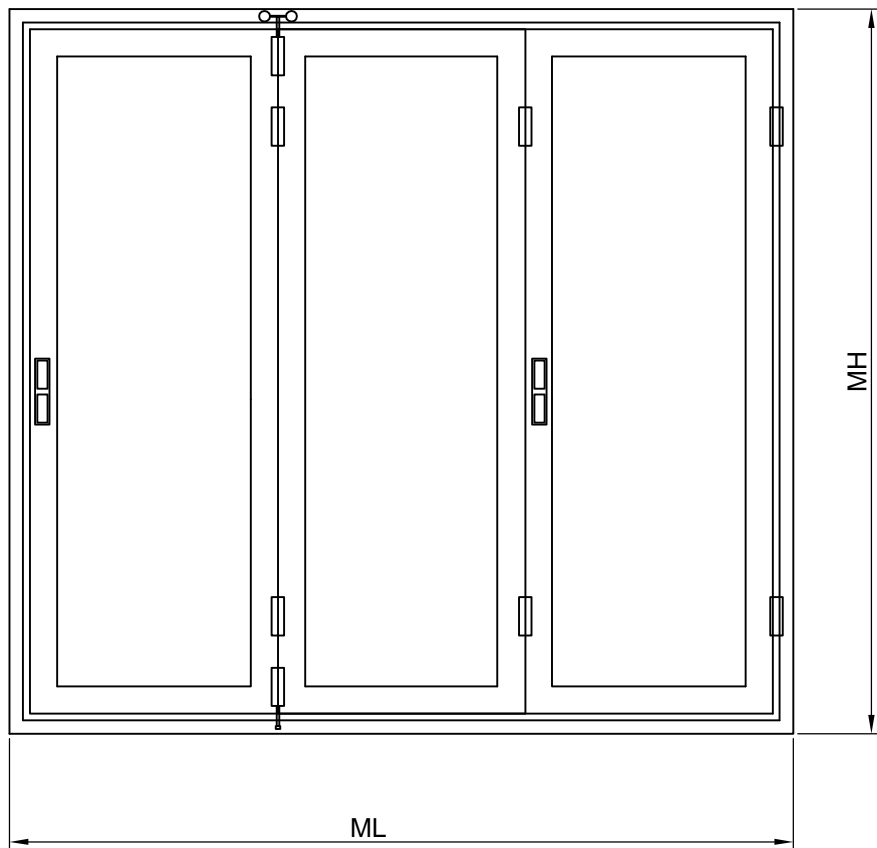
DVA KRILA NEJEDNAKE ŠIRINE
SLAGANJE 2 + 0
OKOVI 141.003; 141.004 SE KORISTI ZA PARNA KRILA
RAZLIČITIH DIMENZIJA
2+0;2+2;4+4;6+6 ...



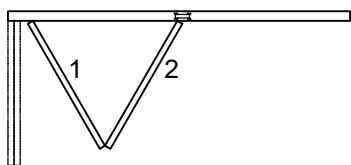


DVA KRILA JEDNAKE ŠIRINE
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 2+0;4+0;6+0 SLAGANJE

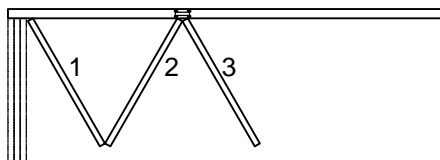




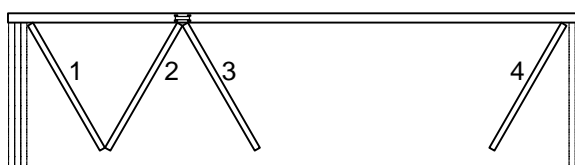
TIP:2-0



TIP:3-0



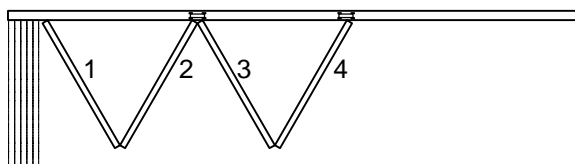
TIP:3-1



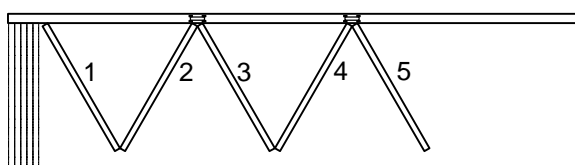
TIP:2-2



TIP:4-0



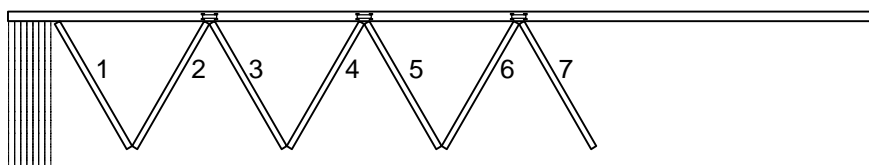
TIP:5-0



TIP:3-3

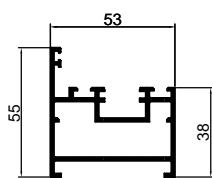


TIP:7-0

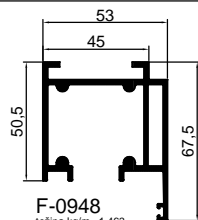


TIP:4-3

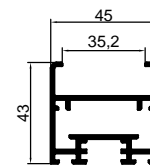




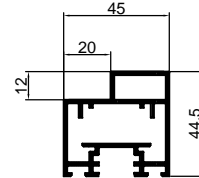
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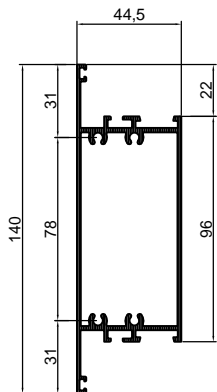
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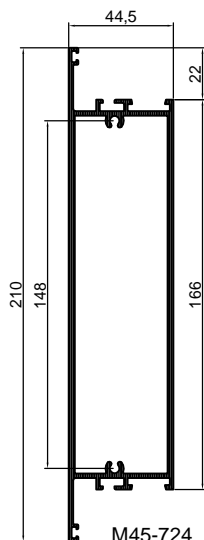
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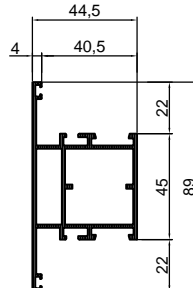
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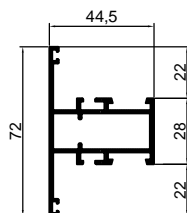
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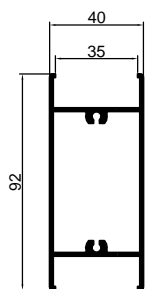
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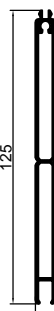
M45-703
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M45-704
težina: kg/ml 0.995



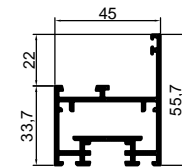
D45-079
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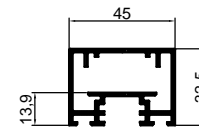
F-0714
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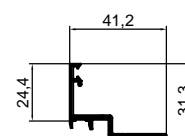
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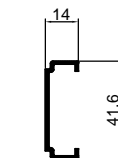
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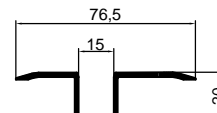
F-1094
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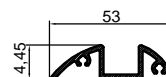
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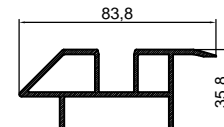
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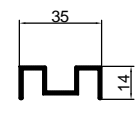
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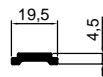
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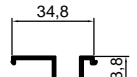
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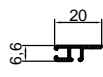
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težina kg/m 0,307



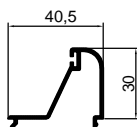
NC-1459
težina kg/m 0,156



D45-071
težina kg/m 0,229



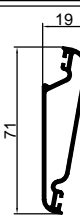
F-1003
težina kg/m 1,111



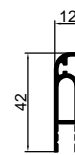
D45-077
težina kg/m 0,343



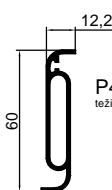
D45-075
težina kg/m 0,451



D45-074
težina kg/m 0,57



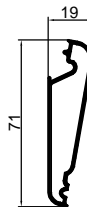
P45-641
težina kg/m 0,326



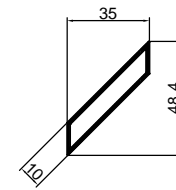
P45-631
težina kg/m 0,482



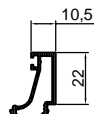
F-0187
težina kg/m 0,397



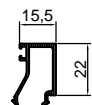
D45-081
težina kg/m 0,530



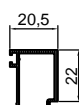
F-0983
težina kg/m 0.422



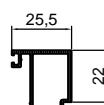
Z40-636
težina: kg/ml 0.261



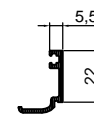
M45-709
težina: kg/ml 0.258



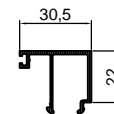
Z40-644
težina: kg/ml 0.275



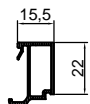
Z40-658
težina: kg/ml 0.318



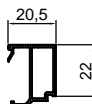
Z40-656
težina: kg/ml 0.215



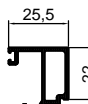
Z40-653
težina: kg/ml 0.347



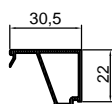
M40-665
težina: kg/ml 0.272



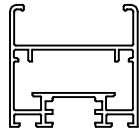
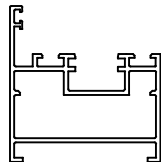
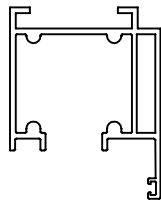
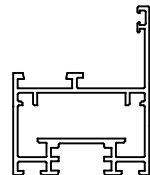
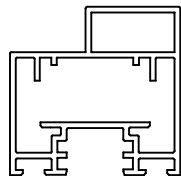
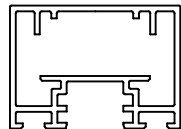
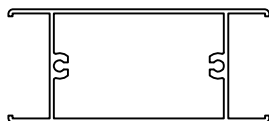


Z40-666
težina: kg/ml 0.289

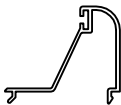


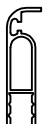







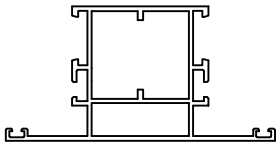
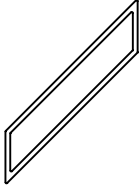

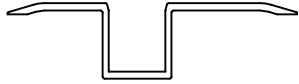
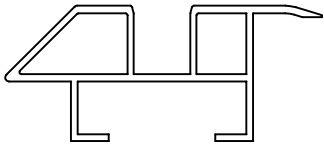

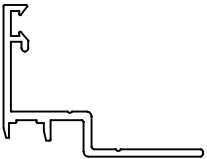
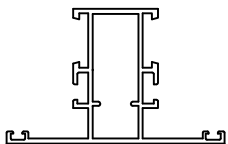

Z40-667
težina: kg/ml 0.358

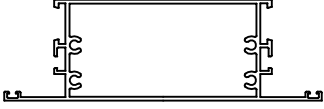
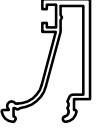

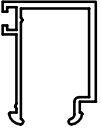
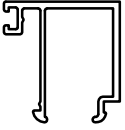
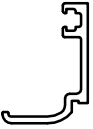
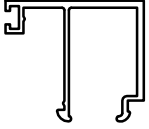
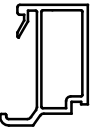
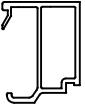


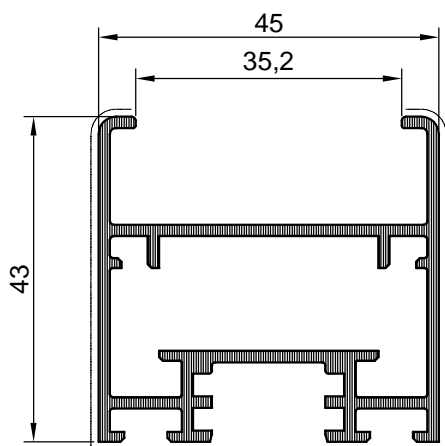
Z40-668
težina: kg/ml 0.326

Oznaka	Izgled-presjek	Težina / kg/ml /	Opseg / mm /	I_x / cm^4	W_x / cm^3
F-0946		0,937	282		
F-0947		1,036	341		
F-0948		1,463	448		
F-0949		1,036	318		
F-0999		1,055	253		
F-1094		0.871	229.15		
D45-079		1,202	327		
D45-076		0,307	164		
D45-071		0,229	133		

Oznaka	Izgled-presjek	Težina / kg/ml /	Opseg / mm /	I_x / cm / ⁴	W_x / cm / ³
D45-077		0,343	212		
F-0714		0,895	294		
D45-075		0,451	215		
P45-641		0,326	151		
F-0187		0,397	111		
D45-074		0,570	195		
P45-631		0,482	176		
D45-081		0,530	174		
NC-1459		0,156	51		

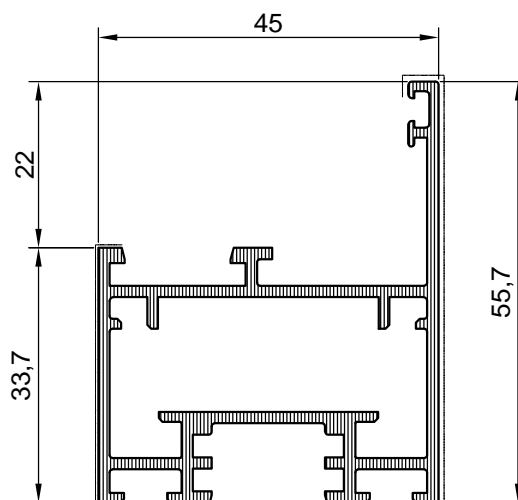
Oznaka	Izgled-presjek	Težina / kg/ml /	Opseg / mm /	I_x / cm^4	W_x / cm^3
M45-703		1.223	387		
F-0983		0.422	126		
F-0984		0.272	145		
F-0985		0.543	225		
F-1066		1.16	326.23		
F-1067		0.468	206.77		
F-0986		0.363	177		
M45-704		0.995	353		
F-0681		0.920	304		

Oznaka	Izgled-presjek	Težina / kg/ml /	Opseg / mm /	I_x / cm^4	W_x / cm^3
M45-723		1.869	489		
Z40-636		0.261	158		
M45-709		0.258	153		
Z40-644		0.275	166		
Z40-658		0.318	184		
Z40-656		0.215	107		
Z40-653		0.347	196		
Z40-665		0.272	172		
Z40-666		0.289	182		



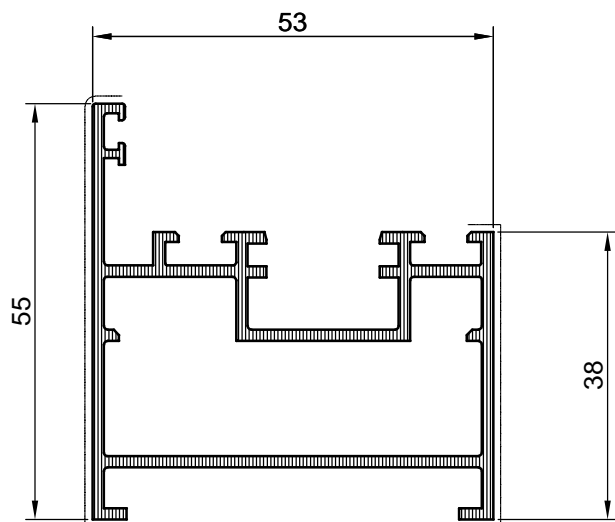
F-0946

težina kg/m 0,944
svj.povr. mm 90



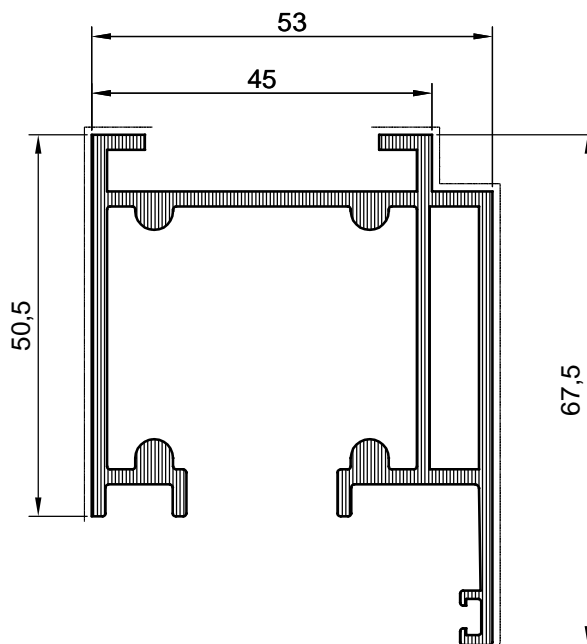
F-0949

težina kg/m 1,036
svj.povr. mm 90



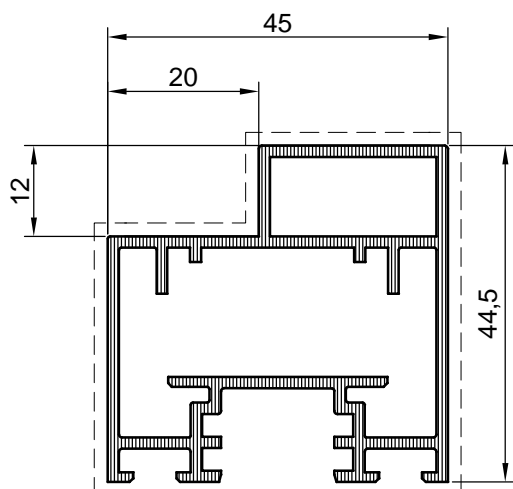
F-0947

težina kg/m 1,036
svj.povr. mm 100



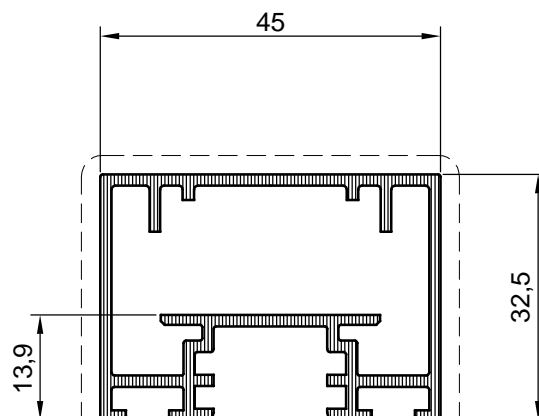
F-0948

težina kg/m 1,463
svj.povr. mm 125



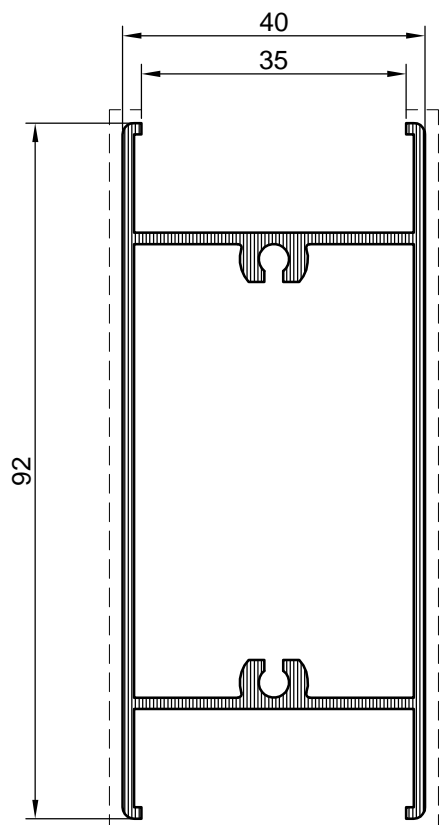
F-0999

težina kg/m 1,055
svj.povr. mm 134



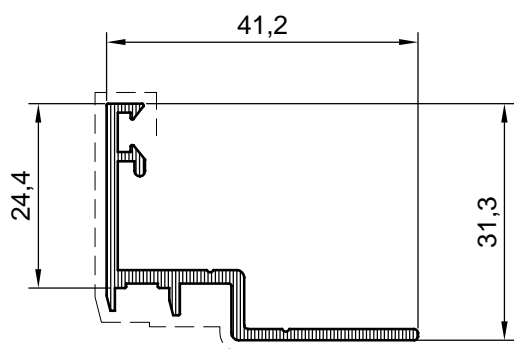
F-1094

težina kg/m 0,871
svj.povr. mm 120



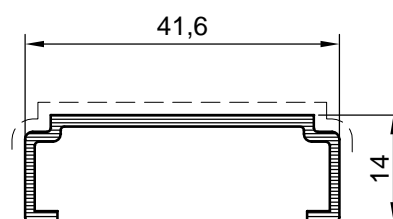
D45-079

težina kg/m 1,202
svj.povr. mm 190



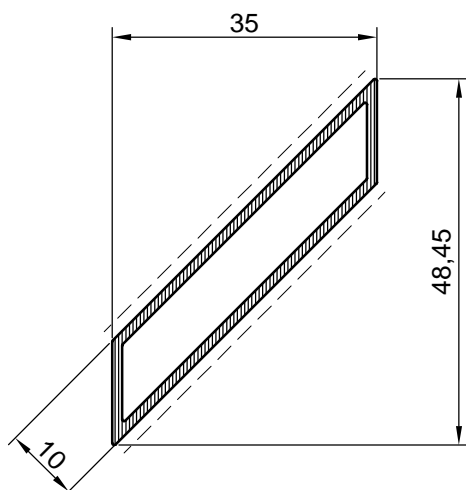
F- 0986

težina kg/m 0.363
svj.povr. mm 67



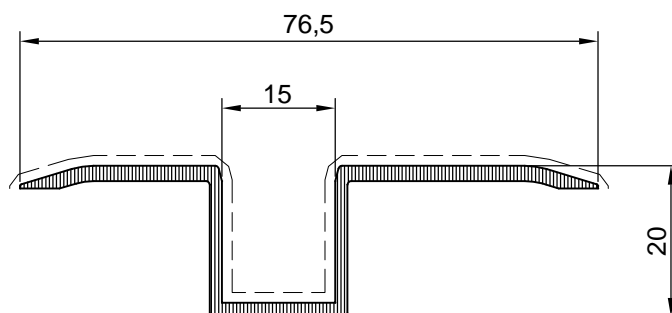
F- 0984

težina kg/m 0.272
svj.povr. mm 55



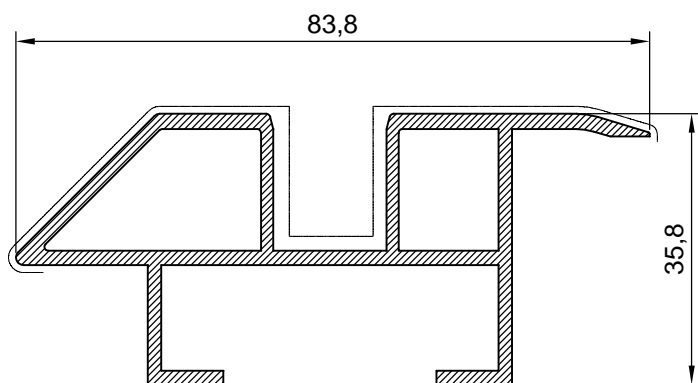
F- 0983

težina kg/m 0.422
svj.povr. mm 98



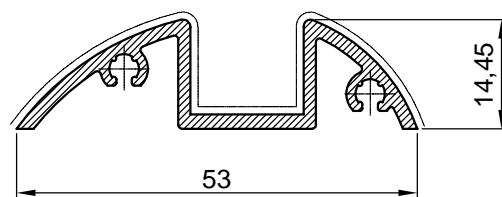
F-0985

težina kg/m 0,543
svj.povr. mm 116



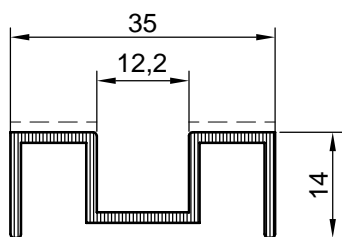
F- 1066

težina kg/m 1.16
svj.povr. mm 137



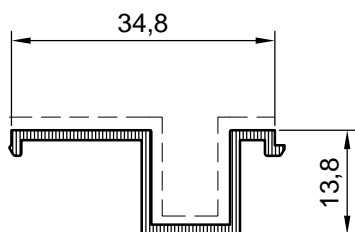
F-1067

težina kg/m 0,468
svj.povr. mm 91



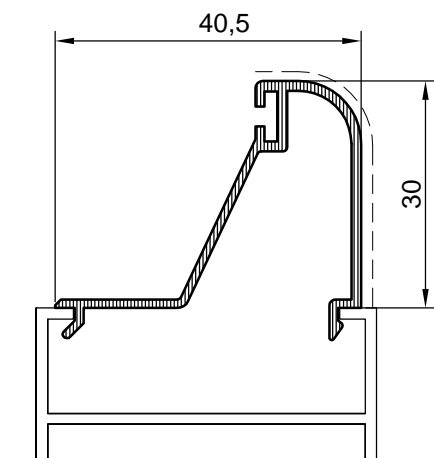
D45-076

težina kg/m 0,307
svj.povr. mm 22



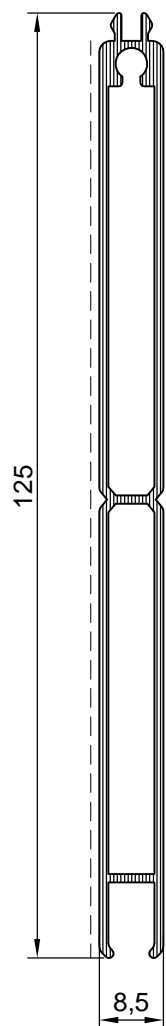
D45-071

težina kg/m 0,229
svj.povr. mm 24



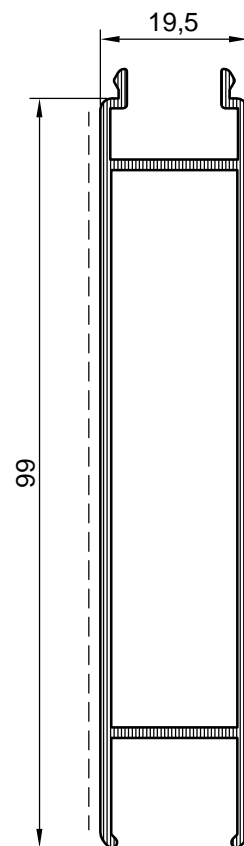
D45-077

težina kg/m 0,343
svj.povr. mm 42



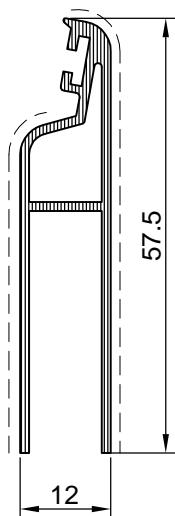
F-0714

težina kg/m 0,895
svj.povr. mm 85

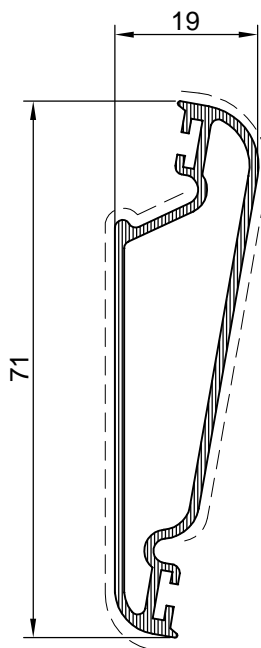


F-0681

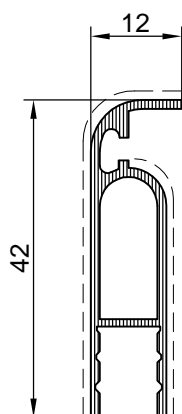
težina kg/m 0,920
svj.povr. mm 195



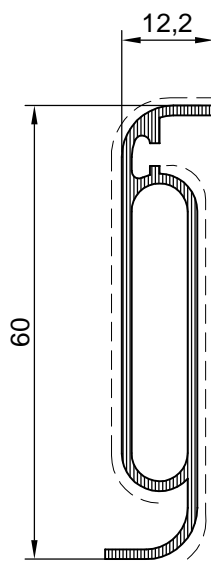
D45-075
težina kg/m 0,451
svj.povr. mm 109



D45-074
težina kg/m 0,57
svj.povr. mm 140



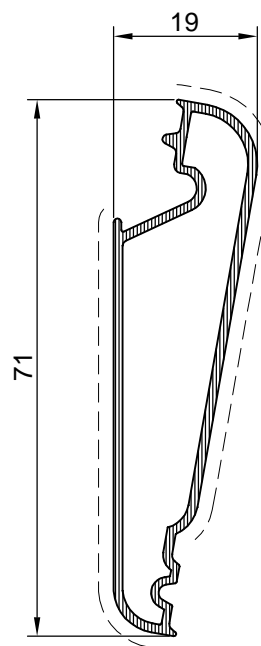
P45-641
težina kg/m 0,326
svj.povr. mm 85



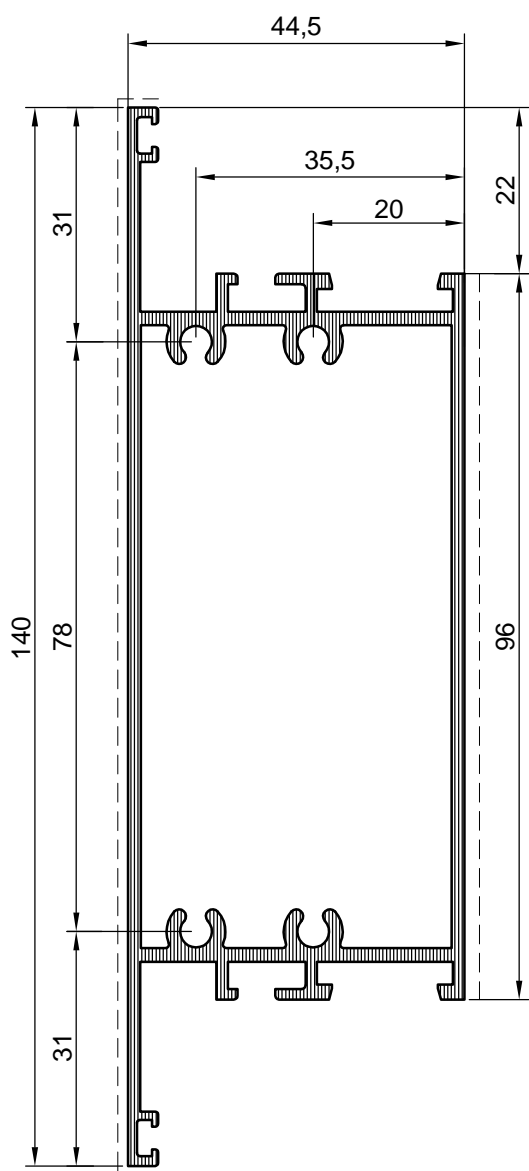
P45-631
težina kg/m 0,482
svj.povr. mm 122



F-0187
težina kg/m 0,397
svj.povr. mm 118

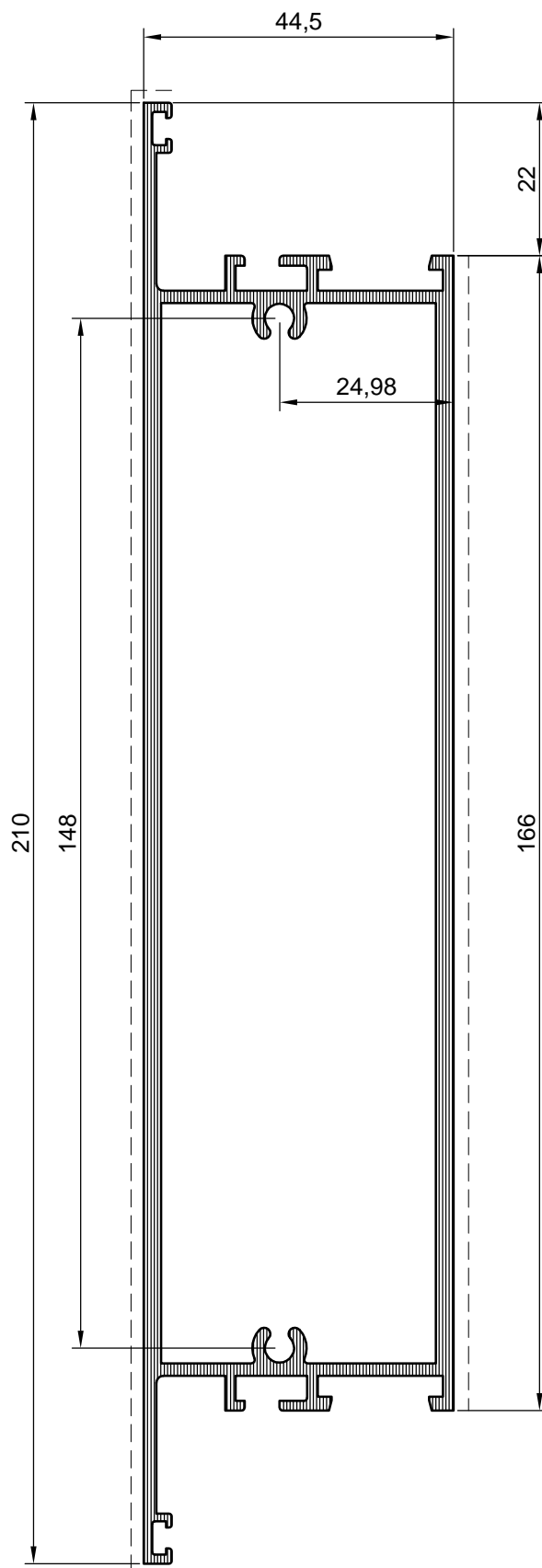


D45-081
težina kg/m 0,530
svj.povr. mm 129



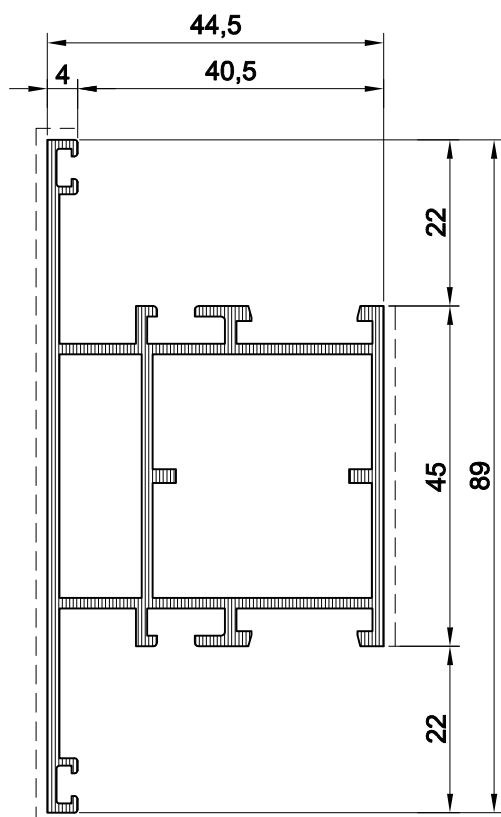
M45-723

težina kg/m 1,869
svj.povr. mm 244



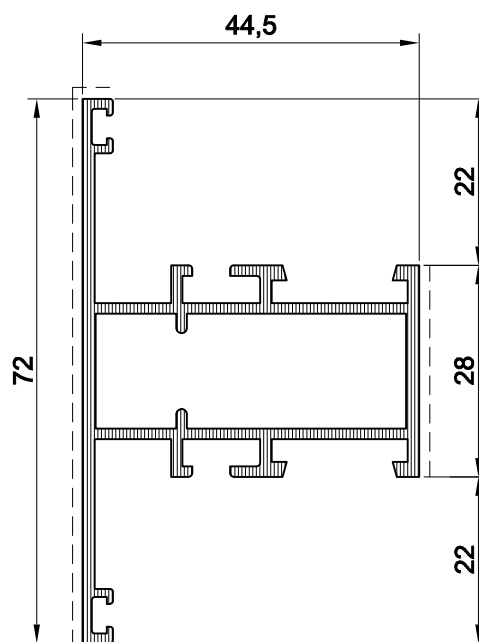
M45-724

težina kg/m 3,084
svj.povr. mm 384



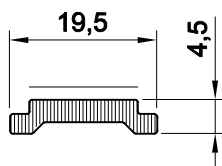
M45-703

težina: kg/ml 1.223
svj.povr. mm 142



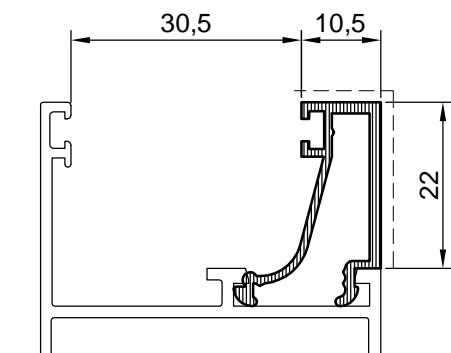
M45-704

težina: kg/ml 0.995
svj.povr. mm 108



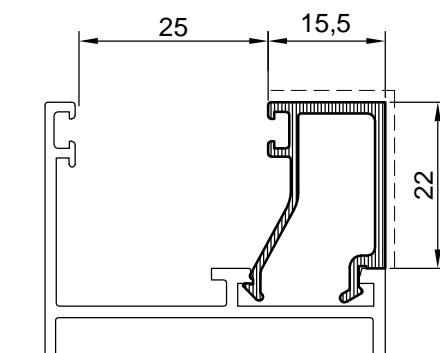
NC-1459

težina kg/m 0,156
svj.povr. mm 15



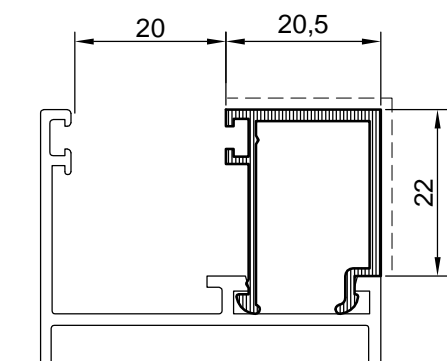
Z40-636

težina: kg/ml 0.261
svj.povr. mm 32



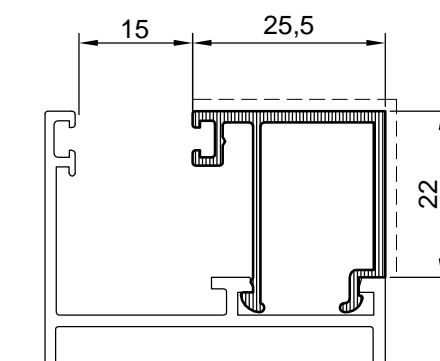
M45-709

težina: kg/ml 0.258
svj.povr. mm 37



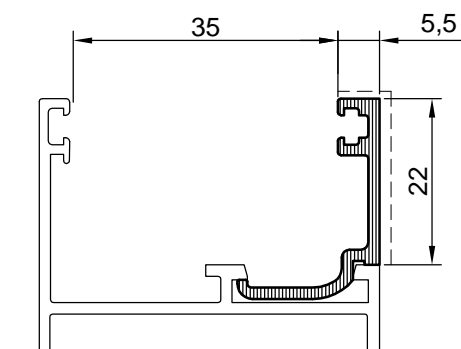
Z40-644

težina: kg/ml 0.275
svj.povr. mm 42



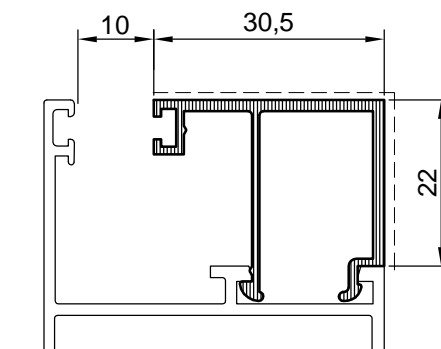
Z40-658

težina: kg/ml 0.318
svj.povr. mm 47



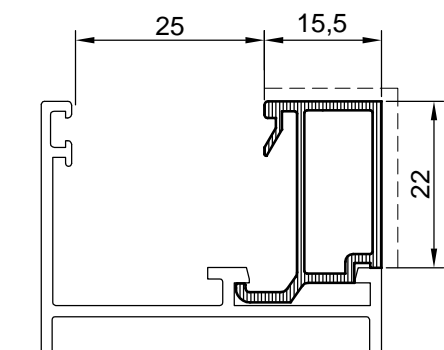
Z40-656

težina: kg/ml 0.215
svj.povr. mm 27



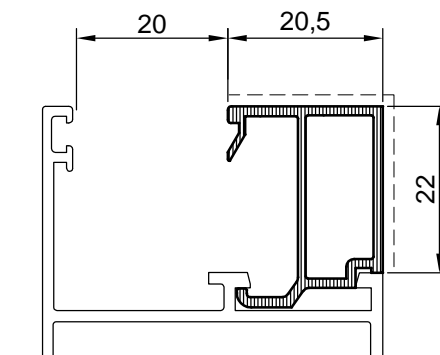
Z40-653

težina: kg/ml 0.347
svj.povr. mm 52



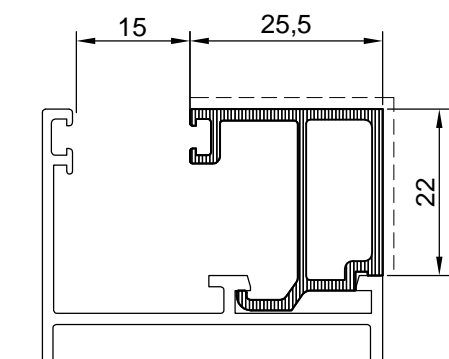
M40-665

težina: kg/ml 0.272
svj.povr. mm 37



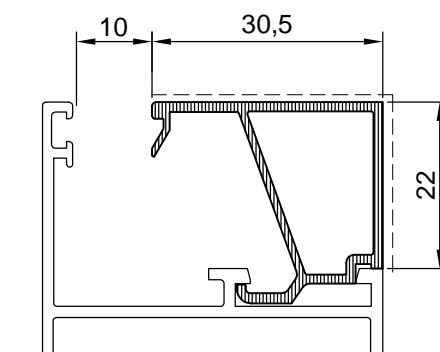
Z40-666

težina: kg/ml 0.289
svj.povr. mm 42



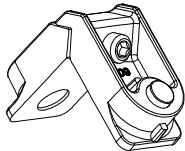
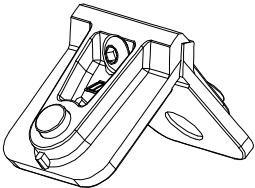
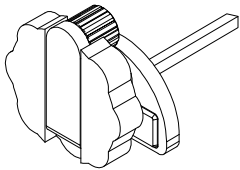
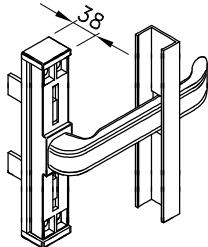
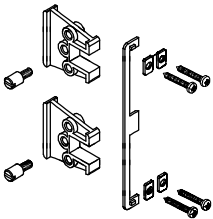
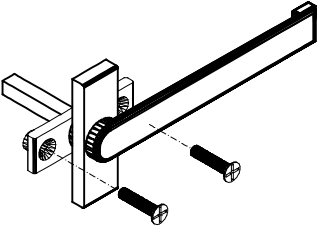
Z40-667

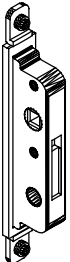
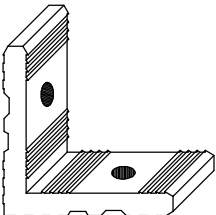
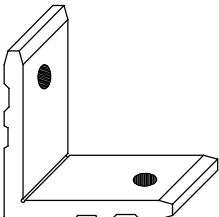
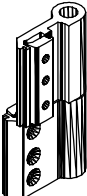
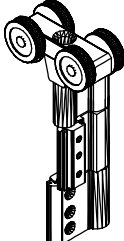

težina: kg/ml 0.358
svj.povr. mm 47

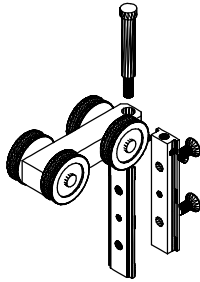
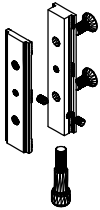
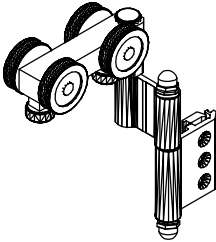
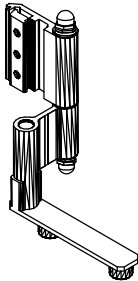
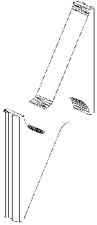
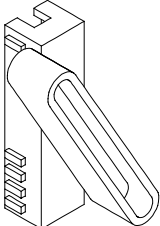


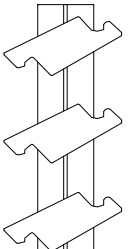
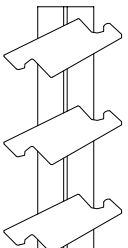
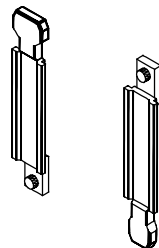
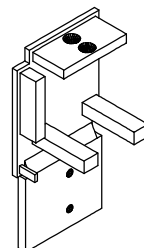
Z40-668


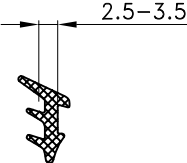
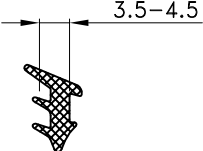
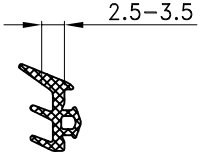
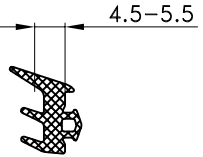
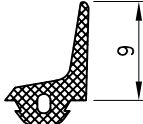
težina: kg/ml 0.326
svj.povr. mm 52




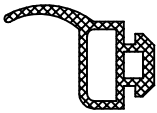
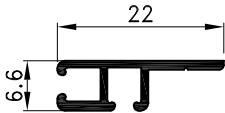
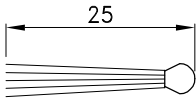
CODE	Izgled-presjek	Opis	Materijal	Nap.
730.008		<ul style="list-style-type: none"> - Kutna spojnica prozora-za komoru 29x15.2 - Stara oznaka: 0409 ,1001 	Zamak #3	
730.013		<ul style="list-style-type: none"> - Kutna spojnica grilje-za komoru 42x11 - Stara oznaka: 4001 ,0432 	Zamak #3	
106.000		<ul style="list-style-type: none"> - Ručica za pokretanje lamela grilje sa vijcima i mehanizmom -Jedna ručica pokreće 10 komada lamela (približno 600 mm) - Stara oznaka: BBC 		
100.000.01 02 03		<ul style="list-style-type: none"> - Ručka grilje-uska - Stara oznaka: 1056 		
143.013		<ul style="list-style-type: none"> - Vezni elementi ručke i klizača - Stara oznaka: 2377 		
106.001.01 02 03		<ul style="list-style-type: none"> - Ručka koja ide uz mehanizam Master - Stara oznaka: RHG 01 		

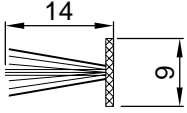
CODE	Izgled-presjek	Opis	Materijal	Nap.
140.017		<ul style="list-style-type: none"> - Mehanizam za klučanje (Master) - Stara oznaka: ERRE40 (3624) 		
710.036		<ul style="list-style-type: none"> - Kutna spojnica - Stara oznaka K-0868/D 	Al	
710.022		<ul style="list-style-type: none"> - Kutna spojnica - Stara oznaka K-0929/C 	Al	
111.006.01 02 03		<ul style="list-style-type: none"> - Šarka - Stara oznaka: EH-2 		
111.007		<ul style="list-style-type: none"> - Šarka s kolicima - Stara oznaka: EH-3G 		
111.008		<ul style="list-style-type: none"> - Šarka s pratilicom - Stara oznaka: EH-3D 		

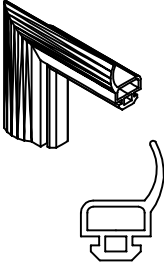
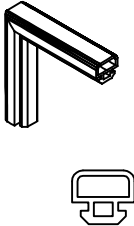
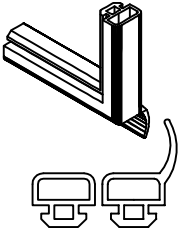
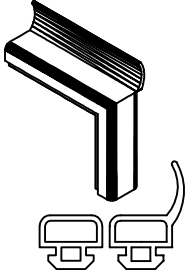
CODE	Izgled-presjek	Opis	Materijal	Nap.
141.003		<ul style="list-style-type: none"> - Kolica za 2+2 krila - Stara oznaka: EH-GS 		
141.004		<ul style="list-style-type: none"> - Pratilica za 2+2 krila - Stara oznaka: EH-DS 		
141.005		<ul style="list-style-type: none"> - Kolica za 2+0 krila jednakih mjera - Stara oznaka: EH-2G - EH-2G/D-otvaranje u desno - EH-2G/D-otvaranje u lijevo 		
141.006		<ul style="list-style-type: none"> - Pratilica za 2+0 krila jednakih mjera - Stara oznaka: EH-2D - EH-2G/D-otvaranje u desno - EH-2G/D-otvaranje u lijevo 		
370.012		<ul style="list-style-type: none"> - Element za fiksnu grilju - umeće se u profil krila grilje - prihvaća lamele P45-631 - Stara oznaka 698 001 	PVC	
373.005		<ul style="list-style-type: none"> - Umetak za fiksnu grilju - umeće se u profil P45-649 i D45-076 - prihvaća profil lamele F-0187 - Stara oznaka: 2101-PR 	PVC	

CODE	Izgled-presjek	Opis	Materijal	Nap.
140.018		<ul style="list-style-type: none"> - stara oznaka SP-X za lamele D45-074 Element za pokretnu grilju- -umeće se u profil krila grilje -prihvaća lamele D45-074 <p style="text-align: center;">Mehanizam za utor 35 mm</p>		
140.019		<ul style="list-style-type: none"> - stara oznaka SP-X za lamele P45-631 Element za pokretnu grilju- -umeće se u profil krila grilje -prihvaća lamele P45-631 <p style="text-align: center;">Mehanizam za utor 35 mm</p>		
385.003		<ul style="list-style-type: none"> - Zapinjač krila-PAR (donji + gornji) - Stara oznaka: EHZ-G/D <p>-Kрила koja prelaze visinu 1500 mm koriste zapinjače od zamka</p>	PVC	
385.004		<ul style="list-style-type: none"> - Gornja spojnica rama - PAR (lijeva + desna) - Stara oznaka: KH-3003 	Zamak	

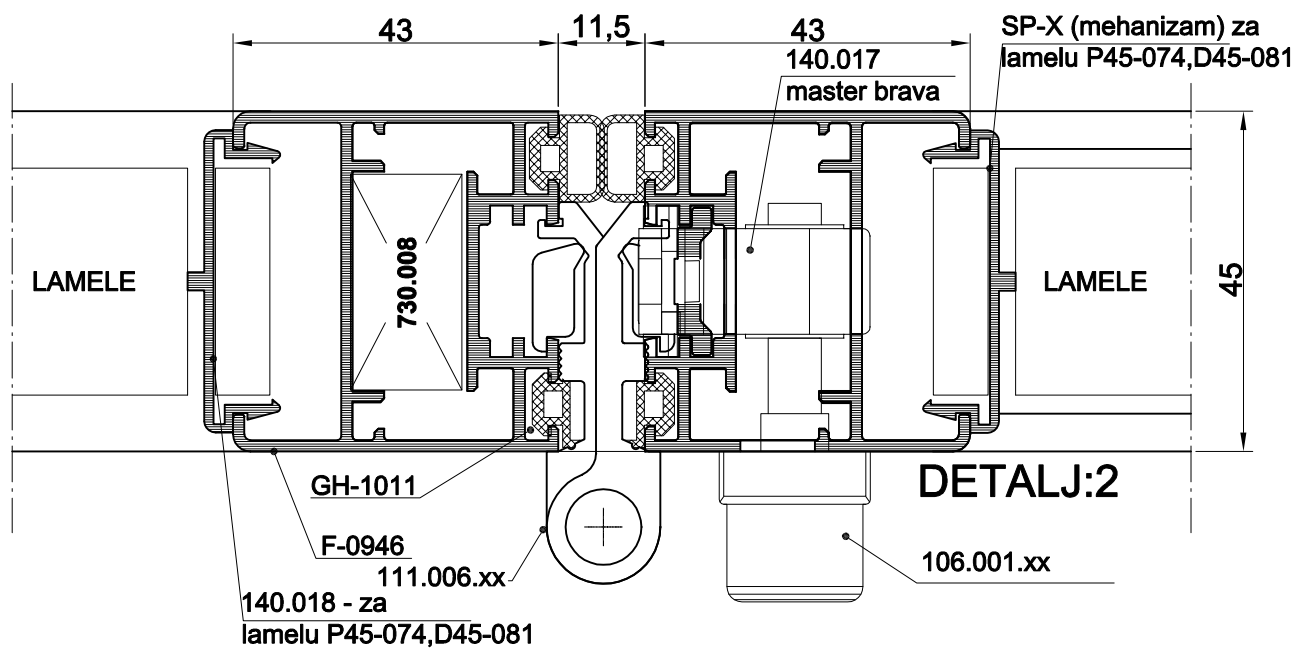
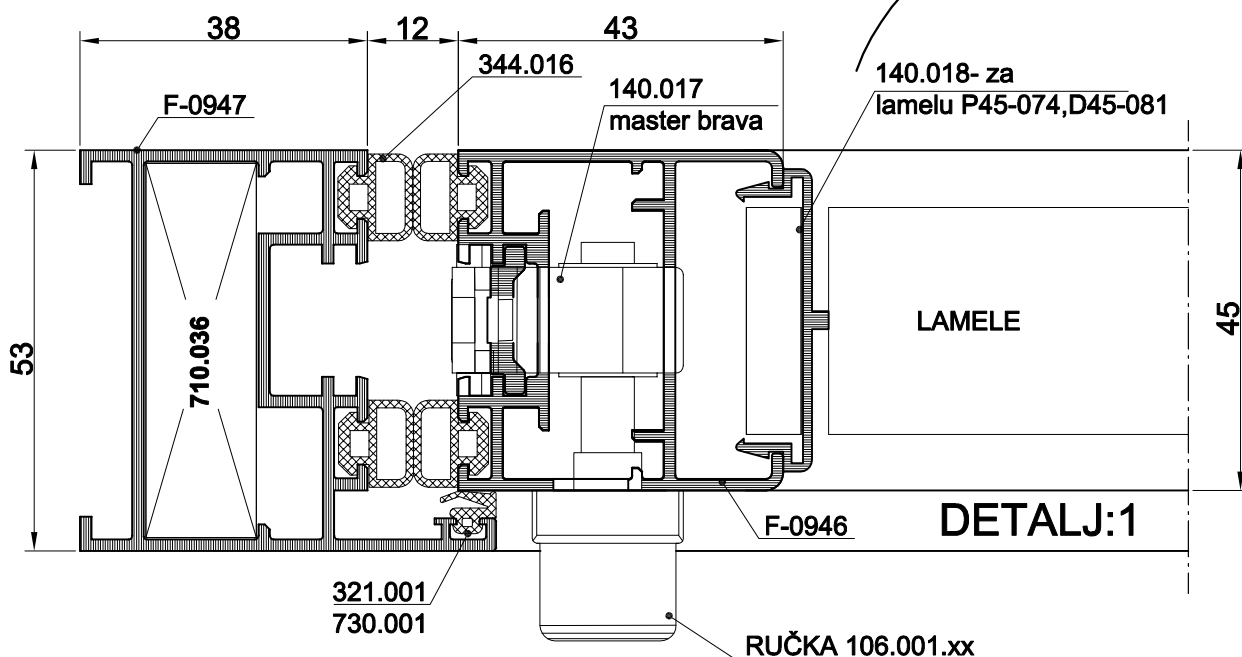
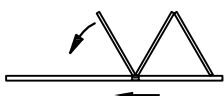
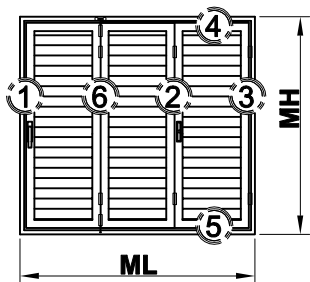
CODE	Izgled-presjek	Opis	Materijal	Nap.
321.001		- Brtva u krilu - Stara oznaka - (Z106)	EPDM	61
311.001		- Brtva prema staklu /unutarnja/ - Stara oznaka - (921)	EPDM	71
311.002		-Brtva prema staklu /unutarnja/ - Stara oznaka - (918)	EPDM	71
321.002		- Brtva prema staklu /vanjska/ - Stara oznaka - (Z111)	EPDM	61
321.003		- Brtva prema staklu /vanjska/ - Stara oznaka - (Z113)	EPDM	61
332.001		- Brtva prema pragu - Stara oznaka G114.1.042	EPDM	65

CODE	Izgled-presjek	Opis	Materijal	Nap.
344.014		- Brtva na spoju lamela - Stara oznaka: C781-M	TPE	65
344.010		-Brtva na spoju lamela -Stara oznaka: 01104-M	TPE	65
344.016		-Brtva krila i rama - Stara oznaka: GH 1011	TPE	65
344.017		-Brtva krila i rama - Stara oznaka: GH 1012	TPE	65
521.001		- Držać četkaste brtve L=2500 mm - Stara oznaka Z 801	Al.	
347.001		- Četkasta brtva L=2500 mm - Stara oznaka Z 802		

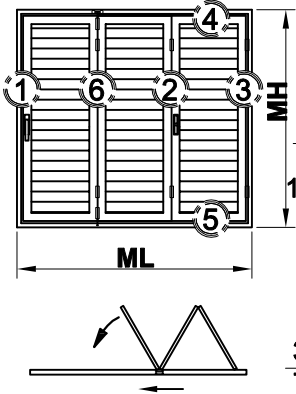
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347.002		<ul style="list-style-type: none"> - Četkasta brtva 9x14 - Stara oznaka 340.002 	PP	

CODE	Izgled-presjek	Opis	Materijal	Nap.
364.006		<p>-Kutna brtva krila-Stara oznaka: K 1012</p>	el.G	
364.005		<p>-Kutna brtva krila -Stara oznaka: K 1011</p>	el.G	
364.007		<p>-Kutna brtva krila - desna GH 1011 + GH 1012 -Stara oznaka: K1011/1012 D</p>	el.G	
364.008		<p>-Kutna brtva krila - lijeva GH 1011 + GH 1012 -Stara oznaka: K 1011/1012 L</p>	el.G	

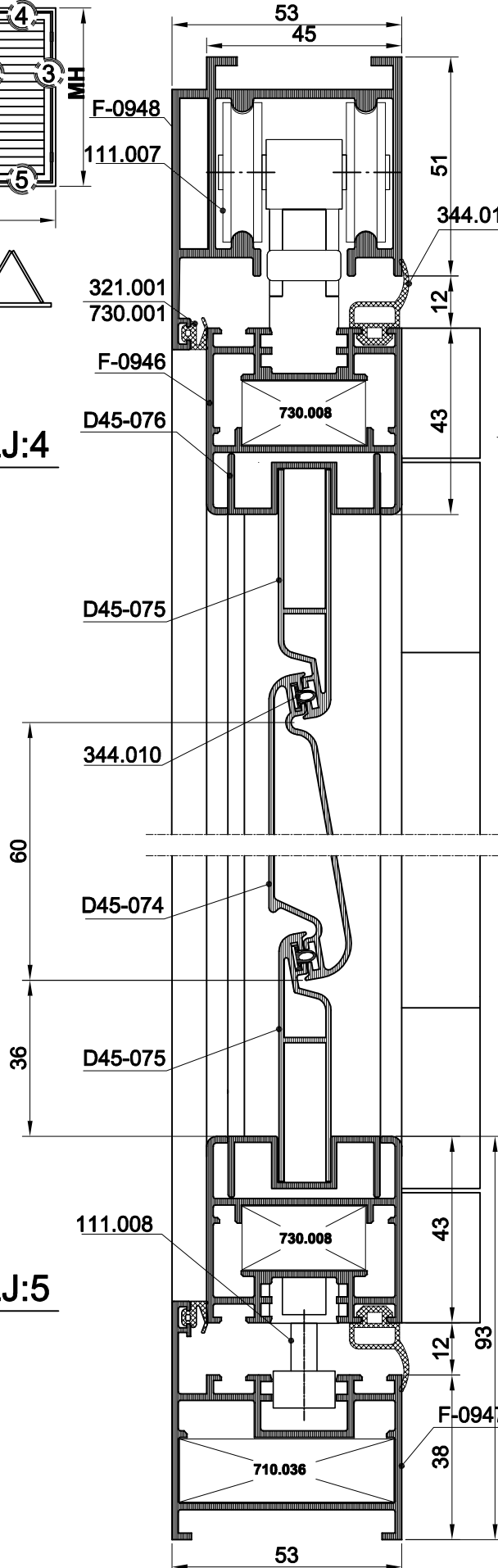
GRILJA S POKRETNIM LAMELAMA - TIP 1, TIP 2



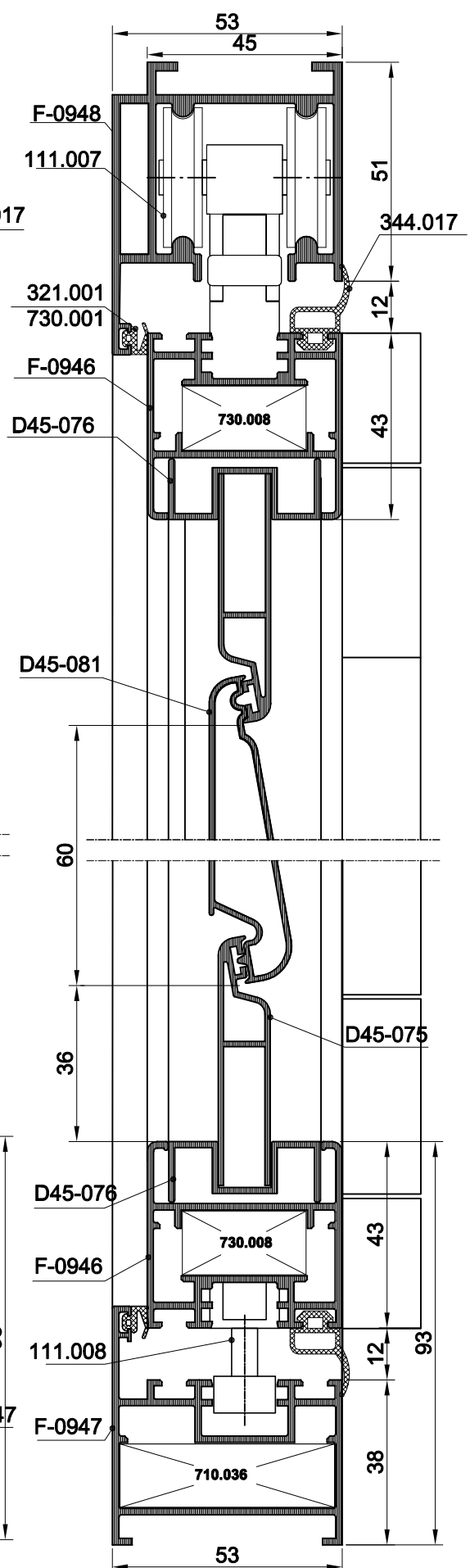
GRILJA S POKRETNIM LAMELAMA - TIP 1, TIP 2



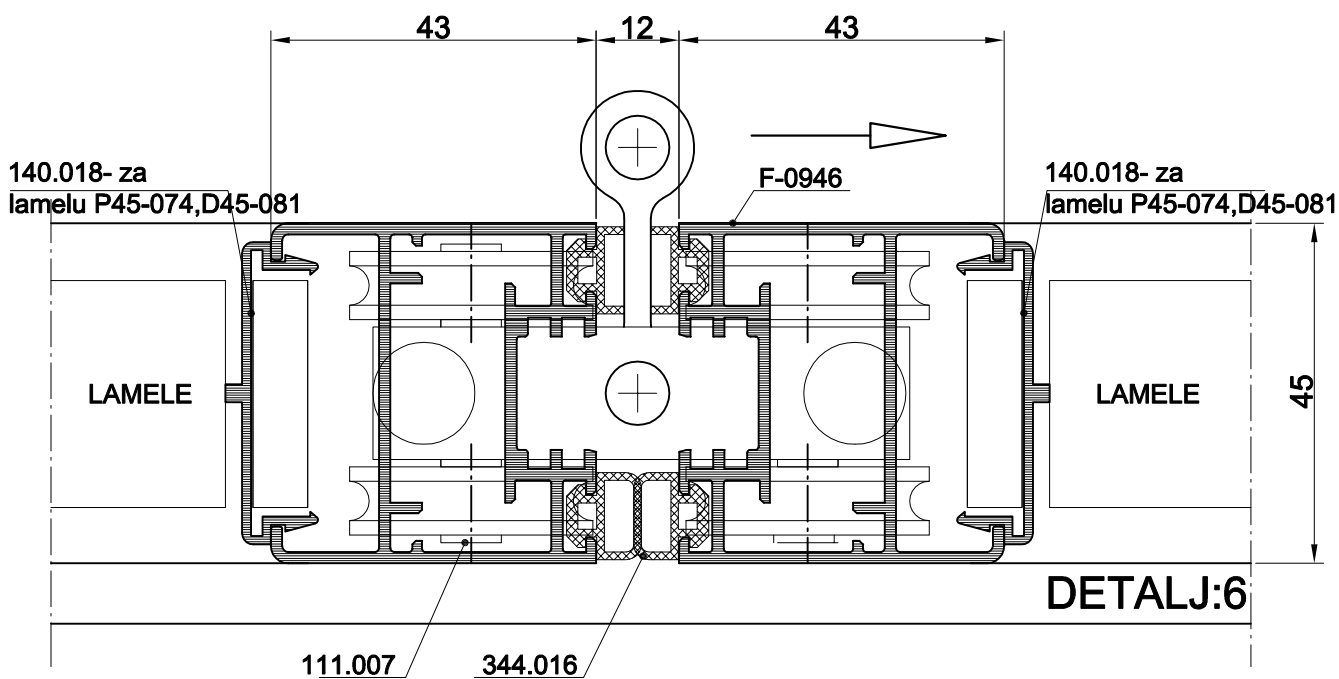
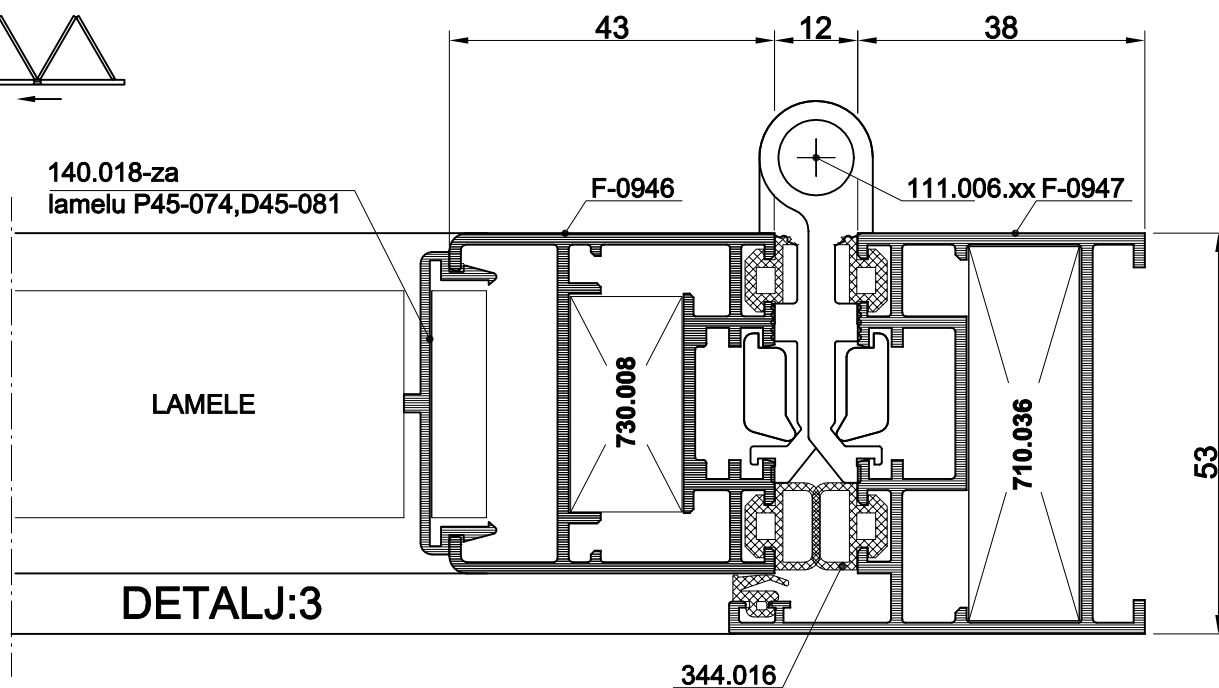
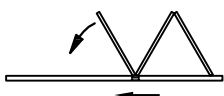
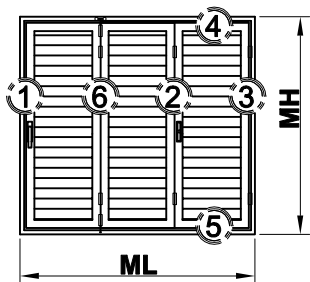
DETALJ:4



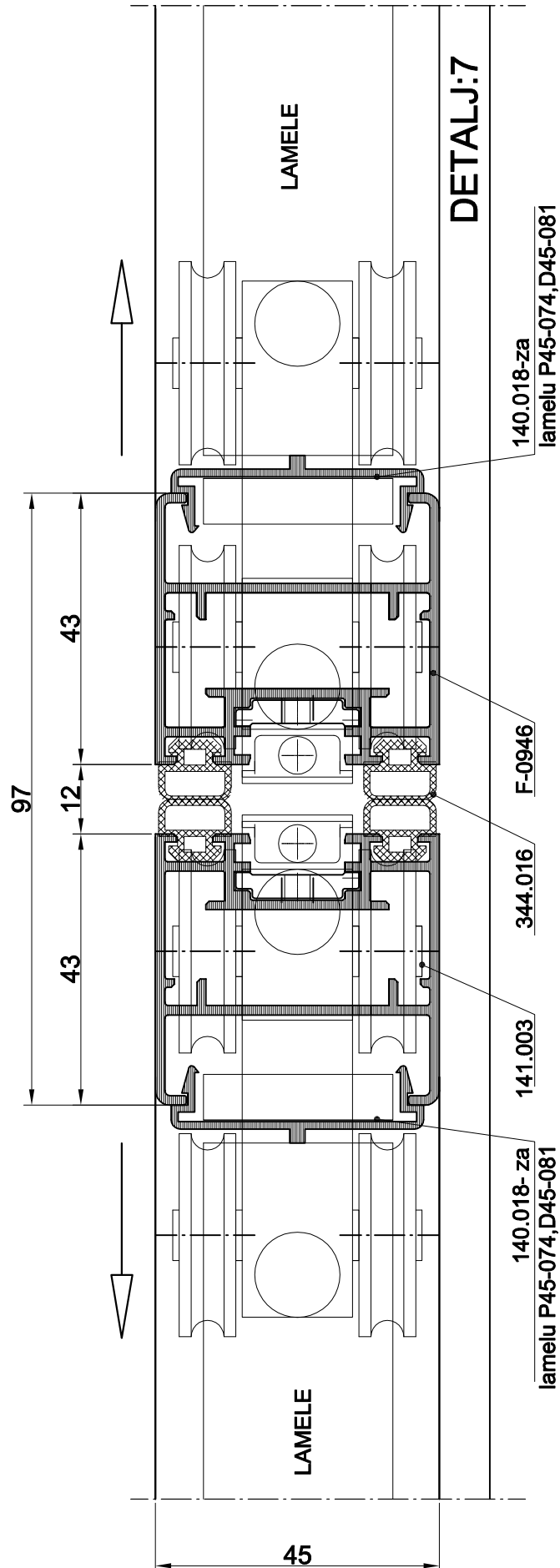
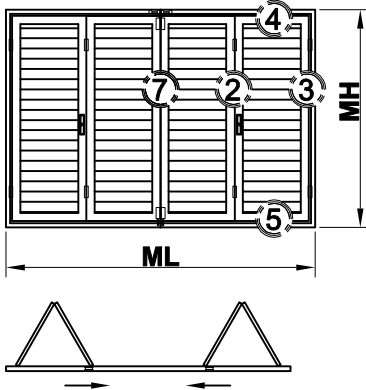
DETALJ:5



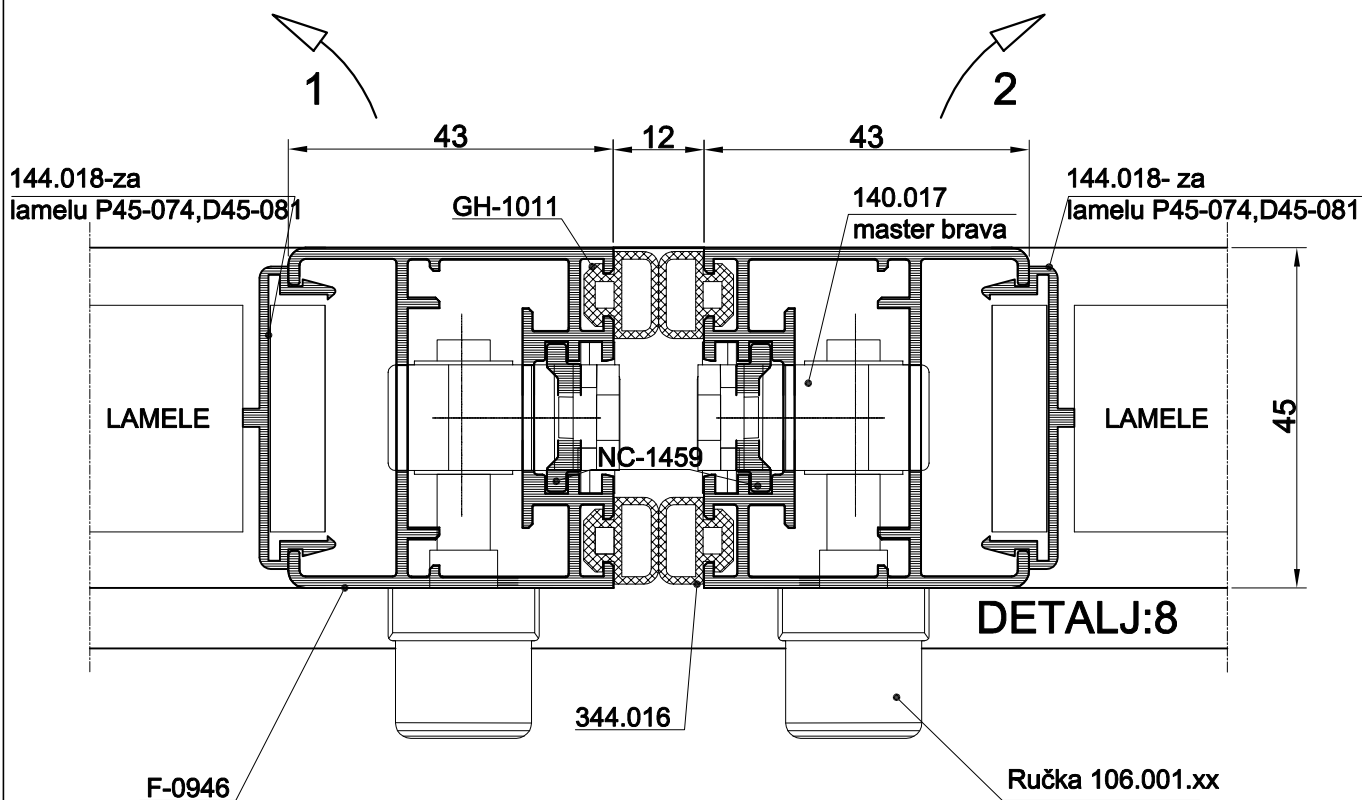
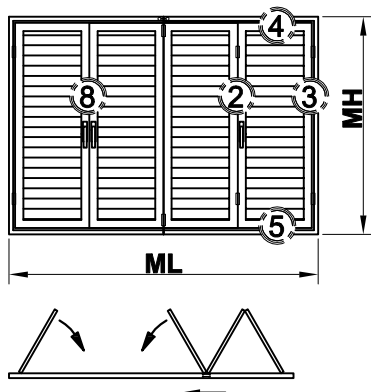
GRILJA S POKRETNIM LAMELAMA - TIP 1, TIP 2



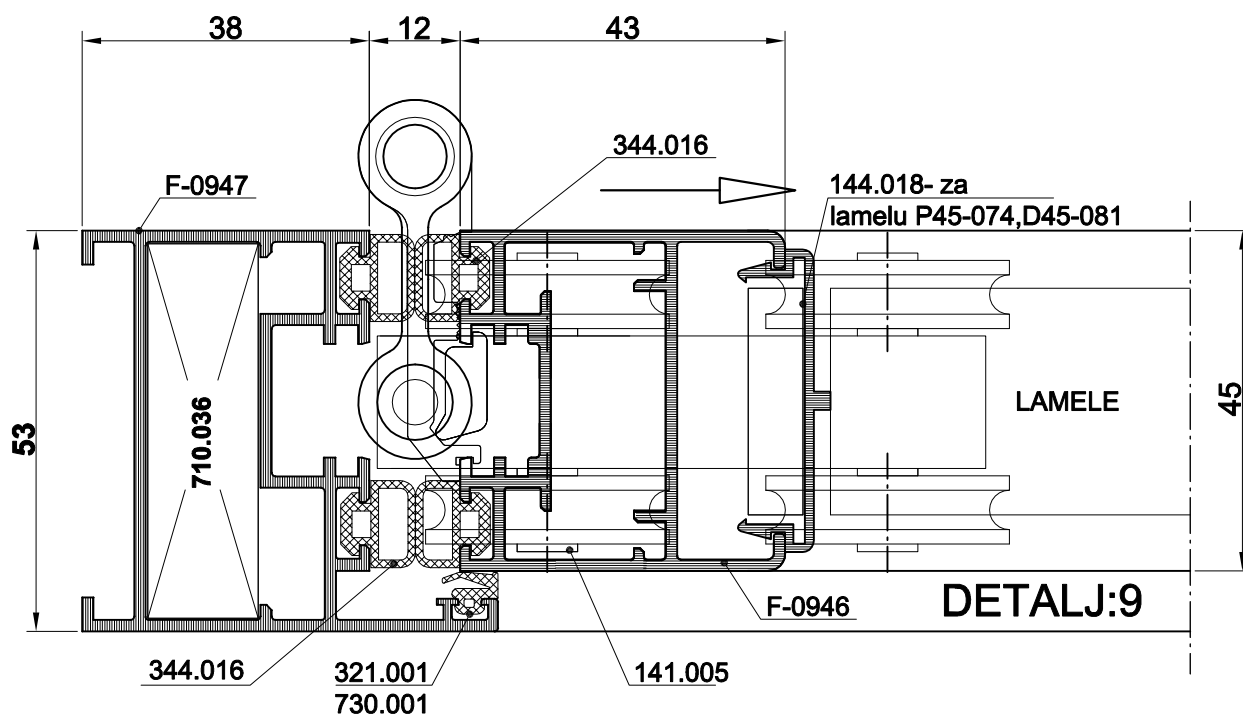
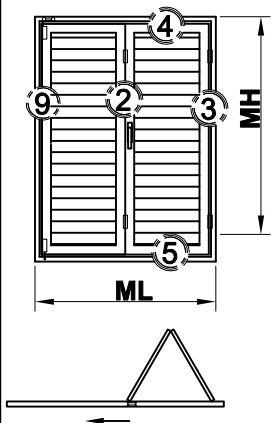
GRILJA S POKRETNIM LAMELAMA - TIP 1, TIP 2

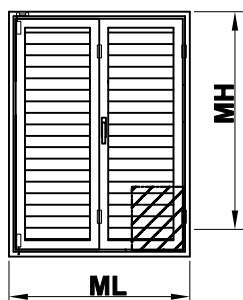


GRILJA S POKRETNIM LAMELAMA - TIP 1, TIP 2



GRILJA S POKRETNIM LAMELAMA - TIP 1, TIP 2



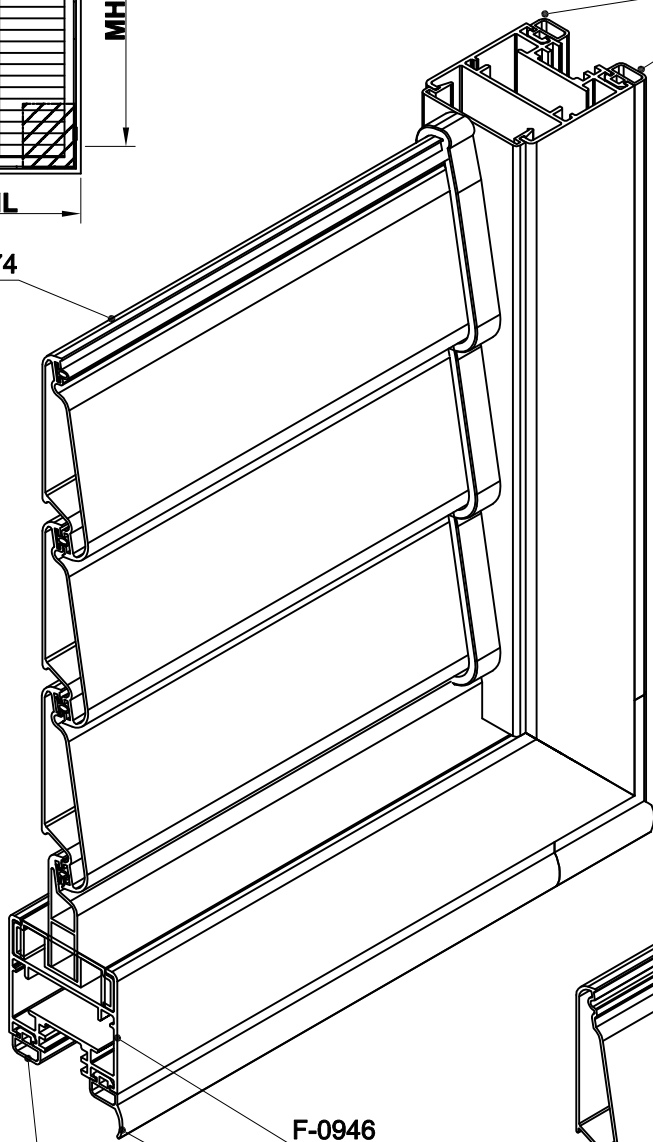


GRILJA S POKRETNIM LAMELAMA - TIP 1

344.016

D45-074

NAPOMENA :
LAMELE D45-074 (SA BRTVOM) , D45-081(BEZ BRTVE)
KORISTE ISTI TIP MEHANIZMA 140.018

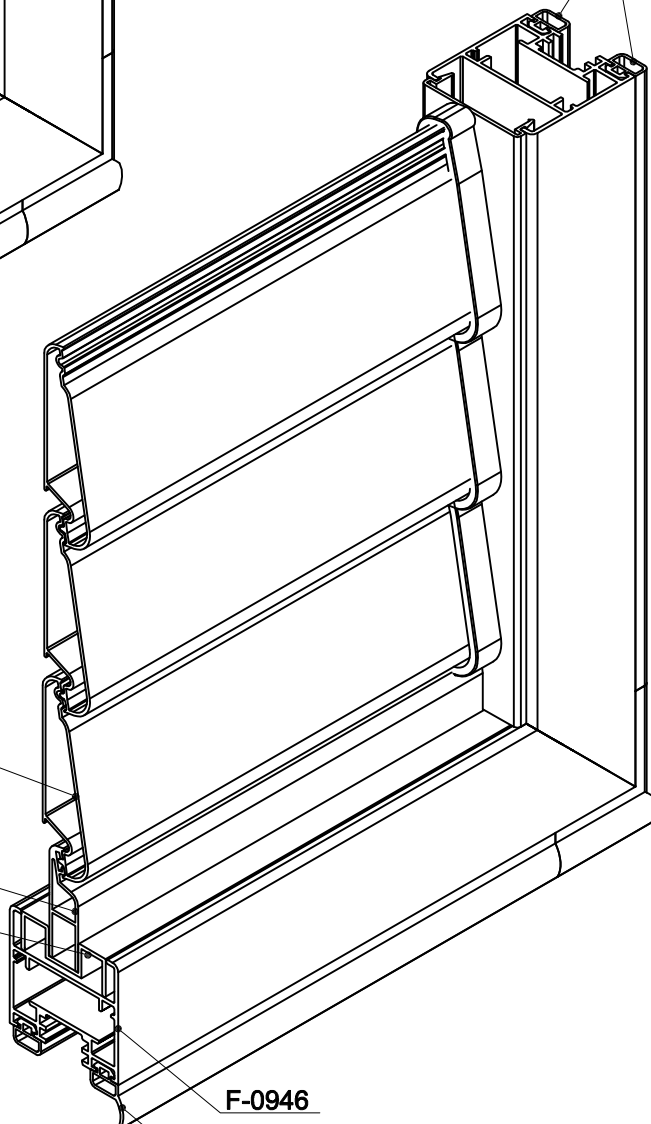


F-0946

344.016

344.017

344.016



D45-081

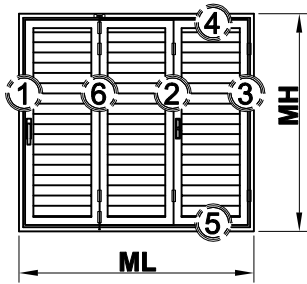
D45-075

D45-076

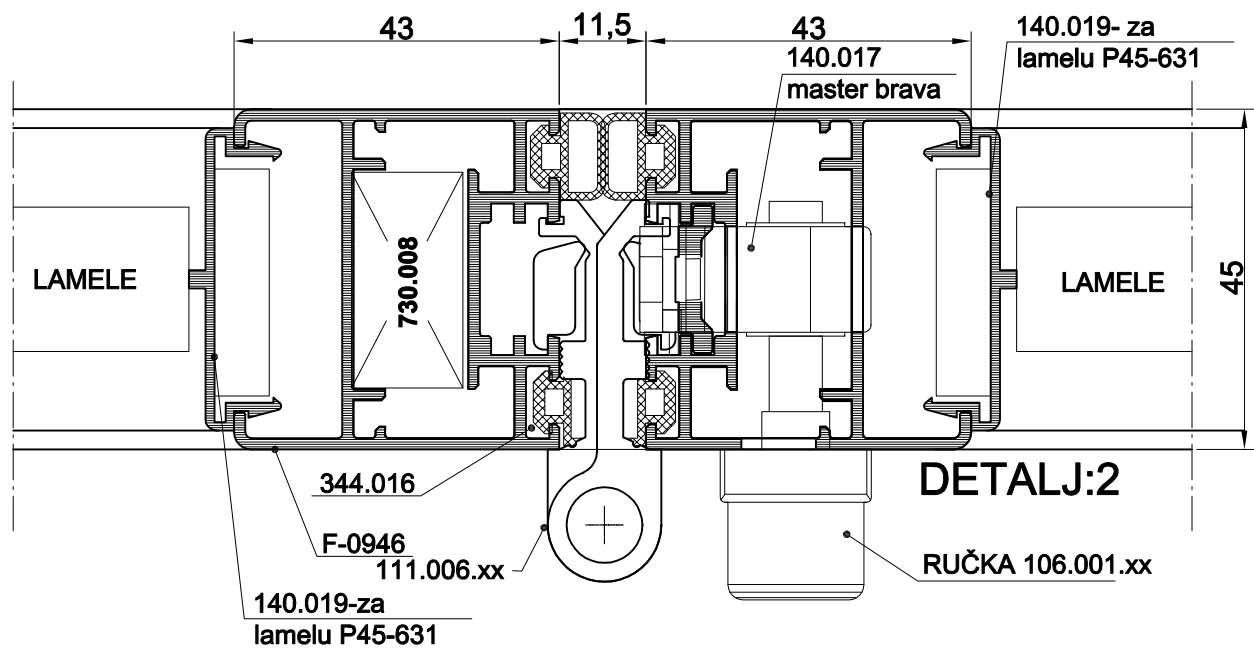
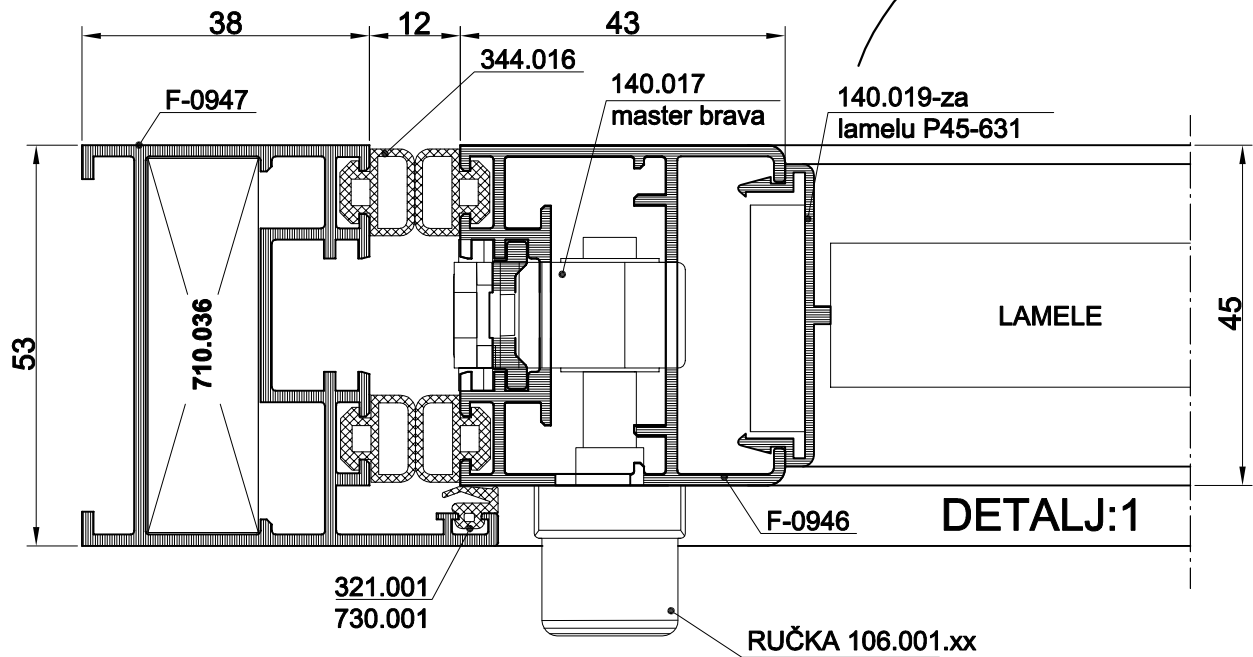
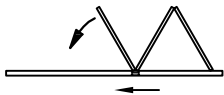
F-0946

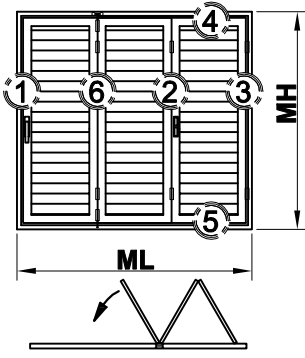
GRILJA S POKRETNIM LAMELAMA - TIP 2

344.017

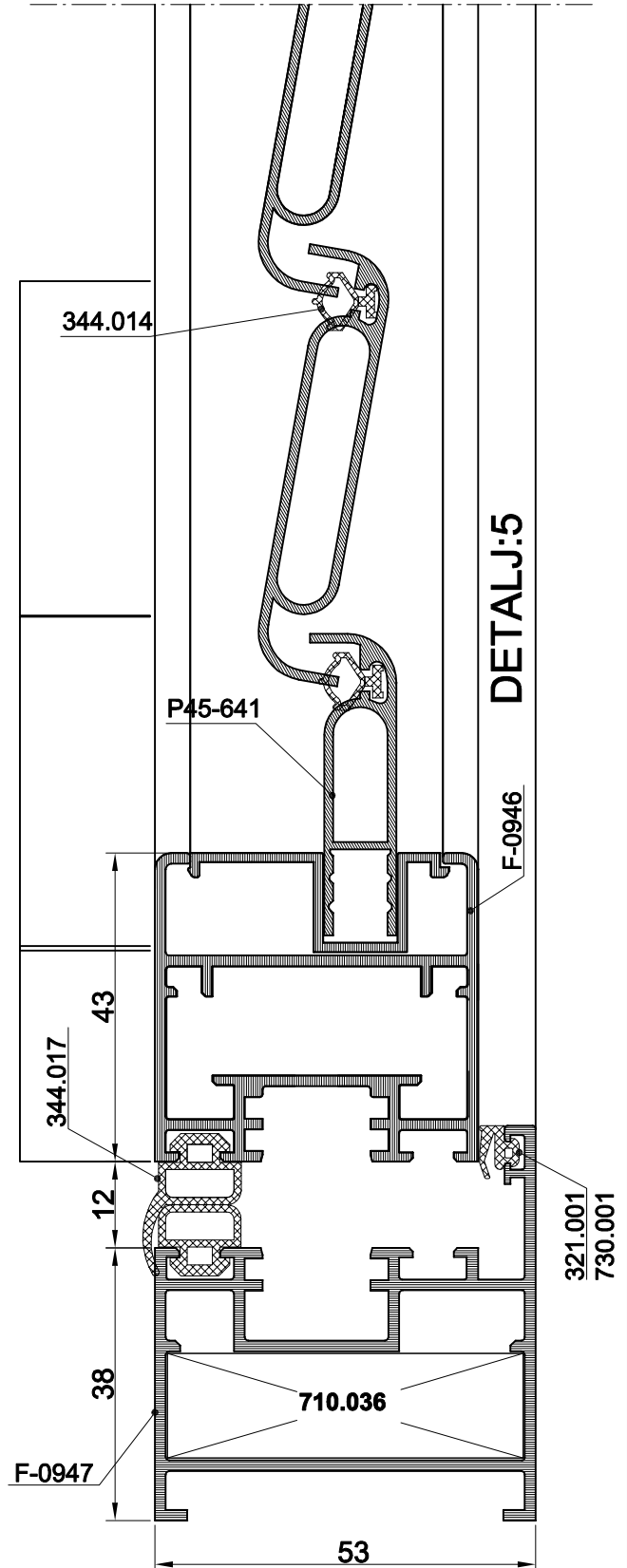
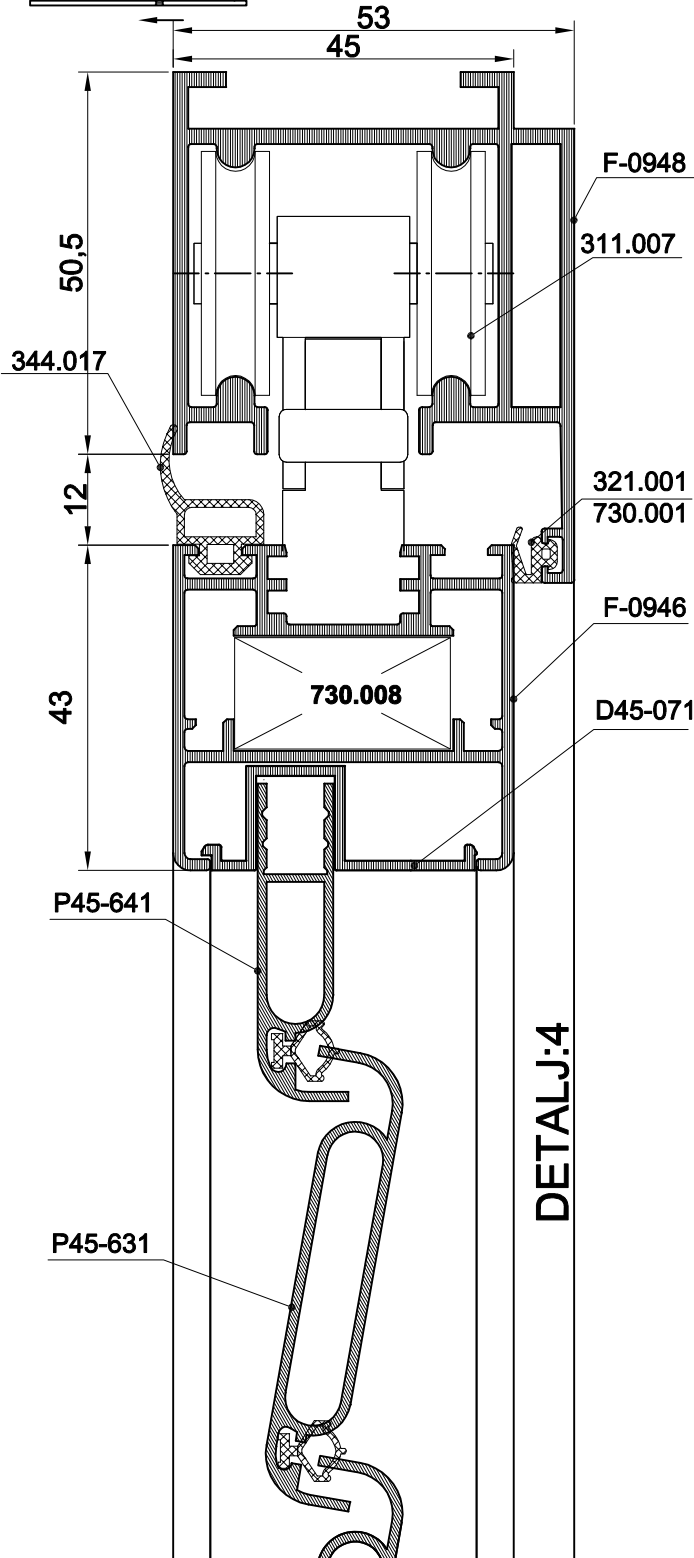


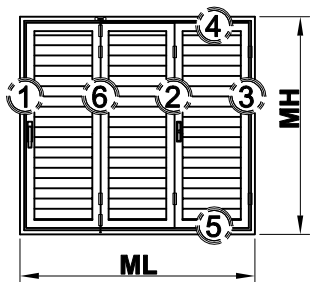
GRILJA S POKRETNIM LAMELAMA - TIP 3



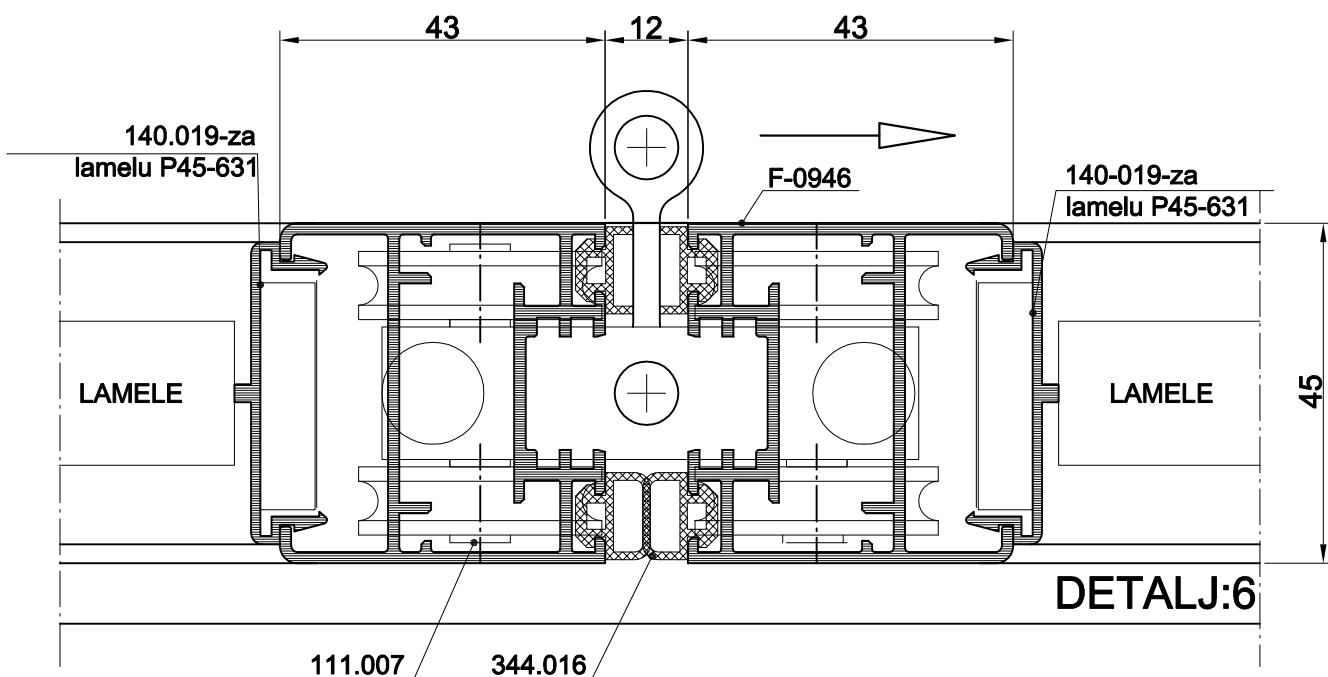
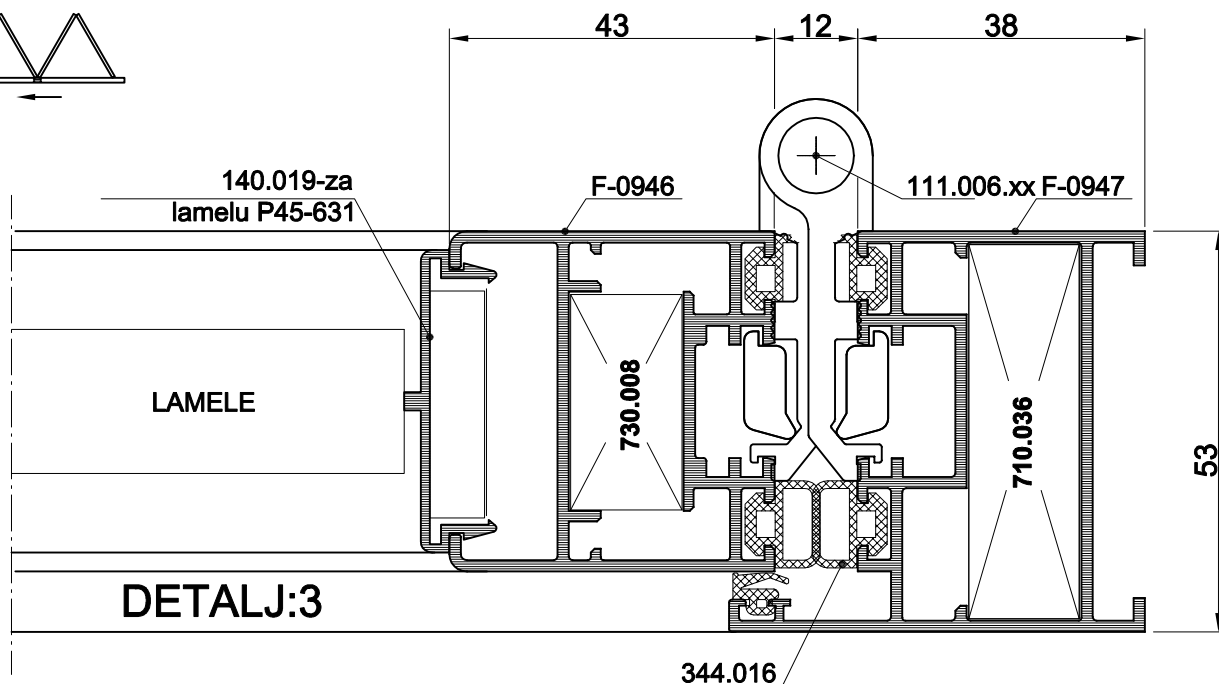
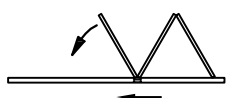


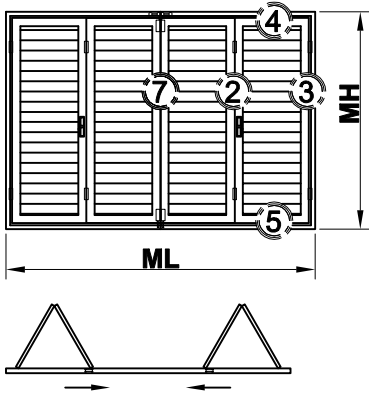
GRILJA S POKRETNIM LAMELAMA - TIP 3



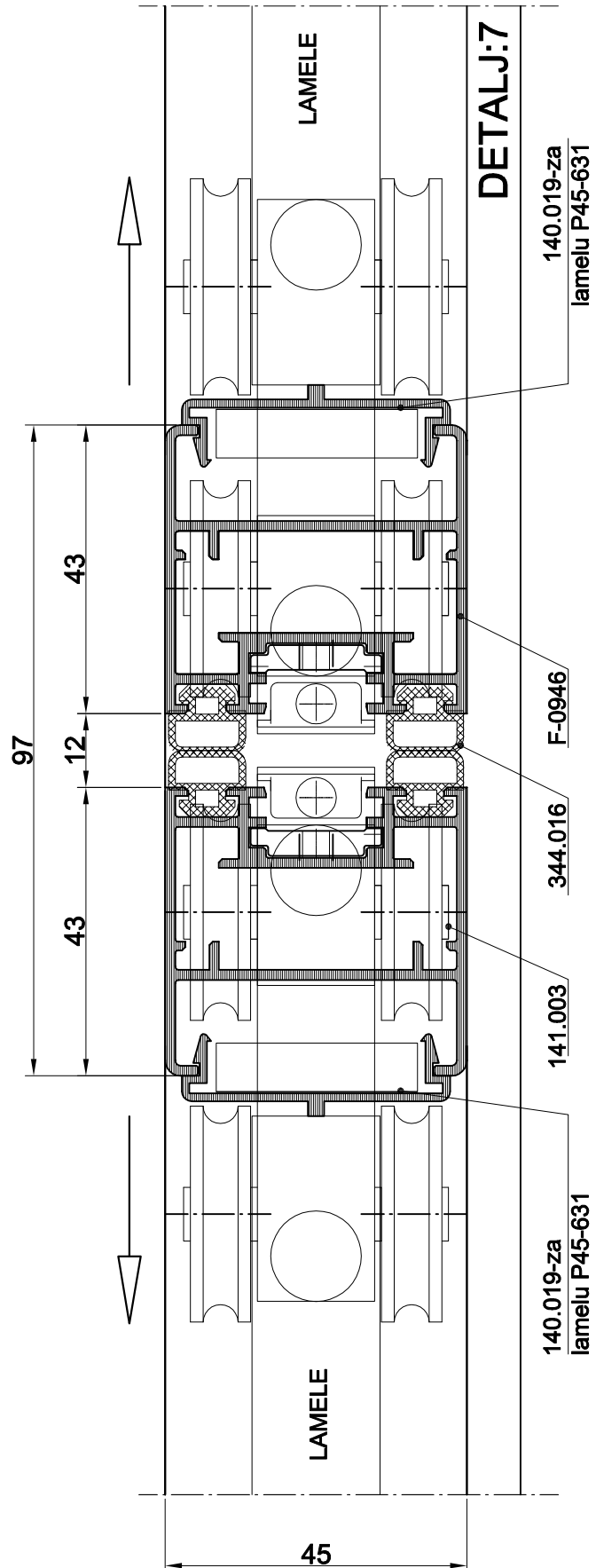


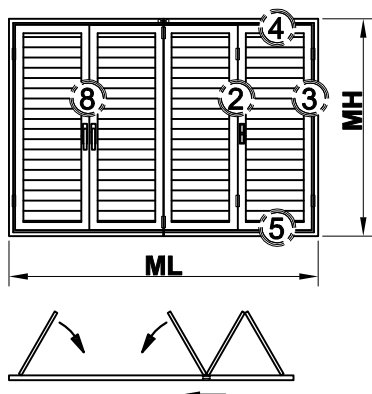
GRILJA S POKRETNIM LAMELAMA - TIP 3



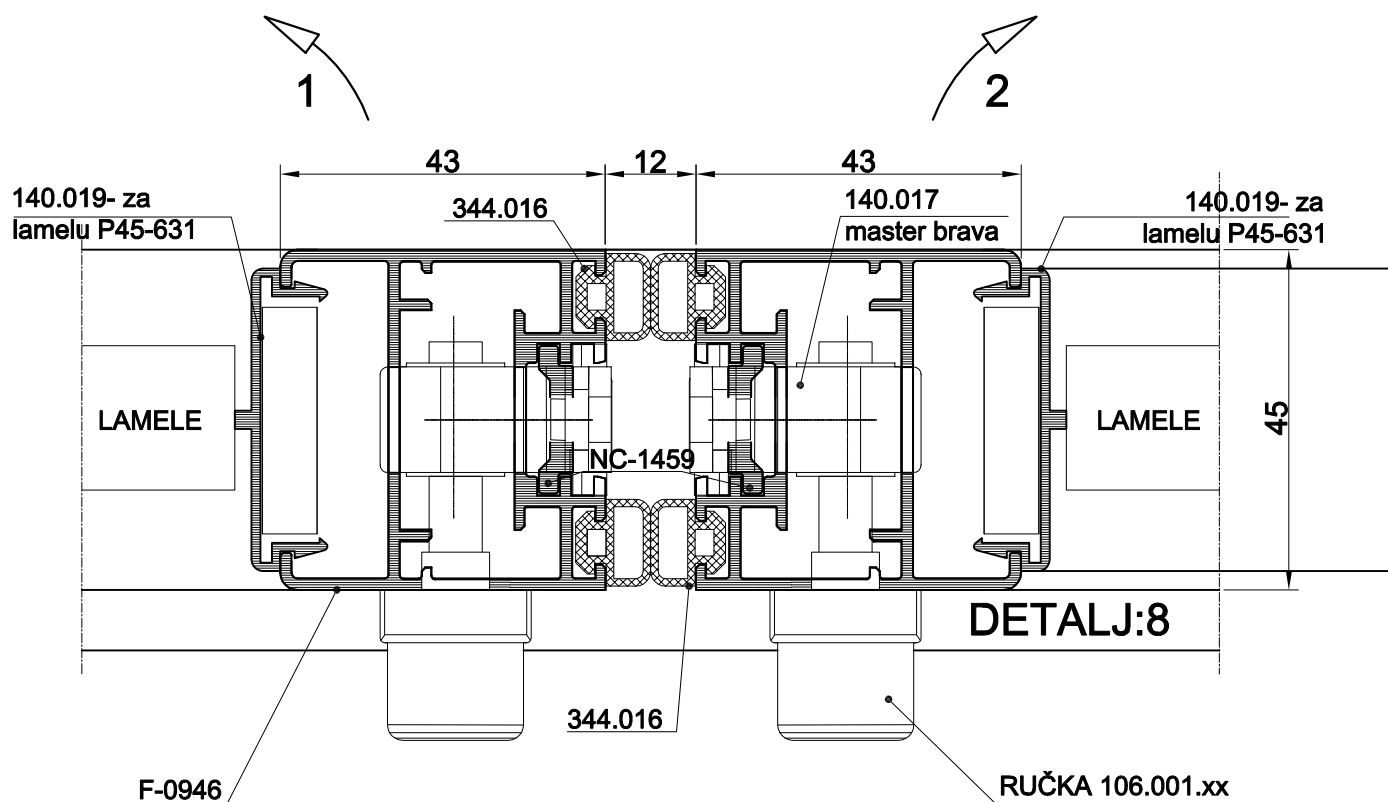


GRILJA S POKRETNIM LAMELAMA - TIP 3

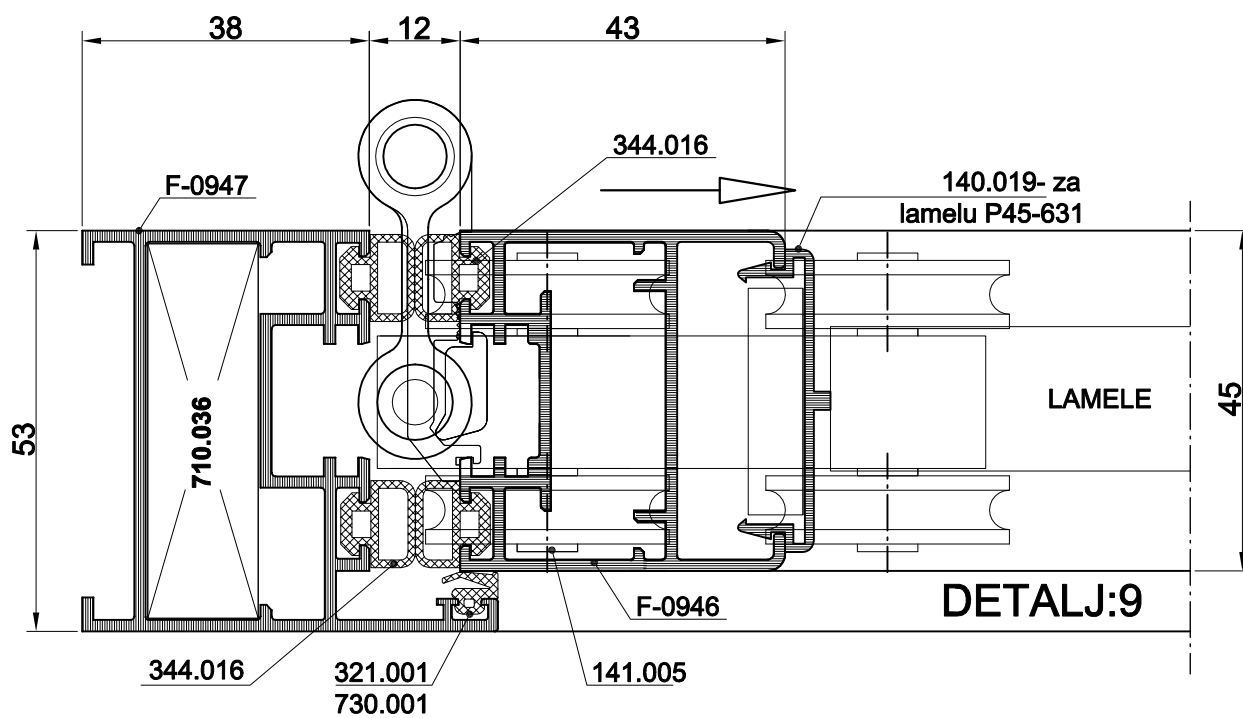
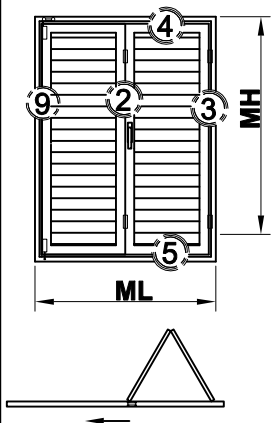


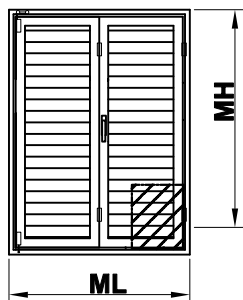
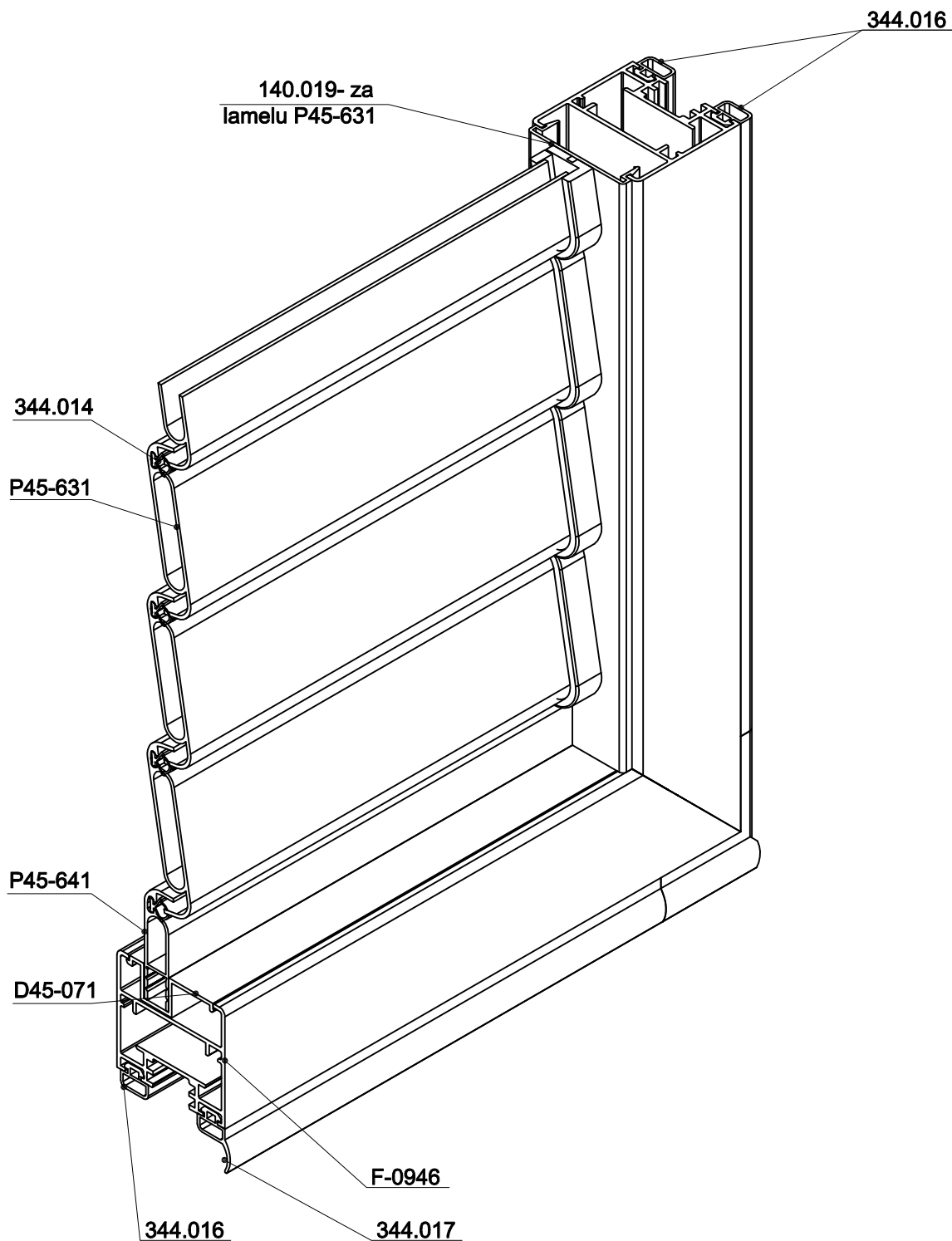


GRILJA S POKRETNIM LAMELAMA - TIP 3

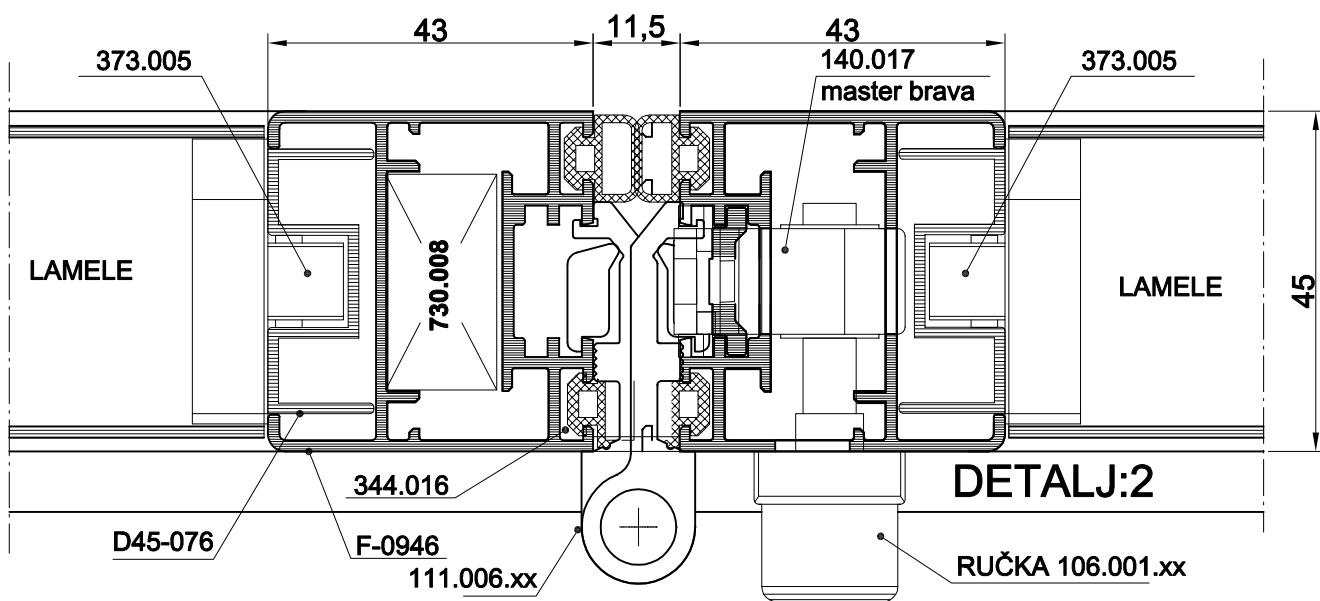
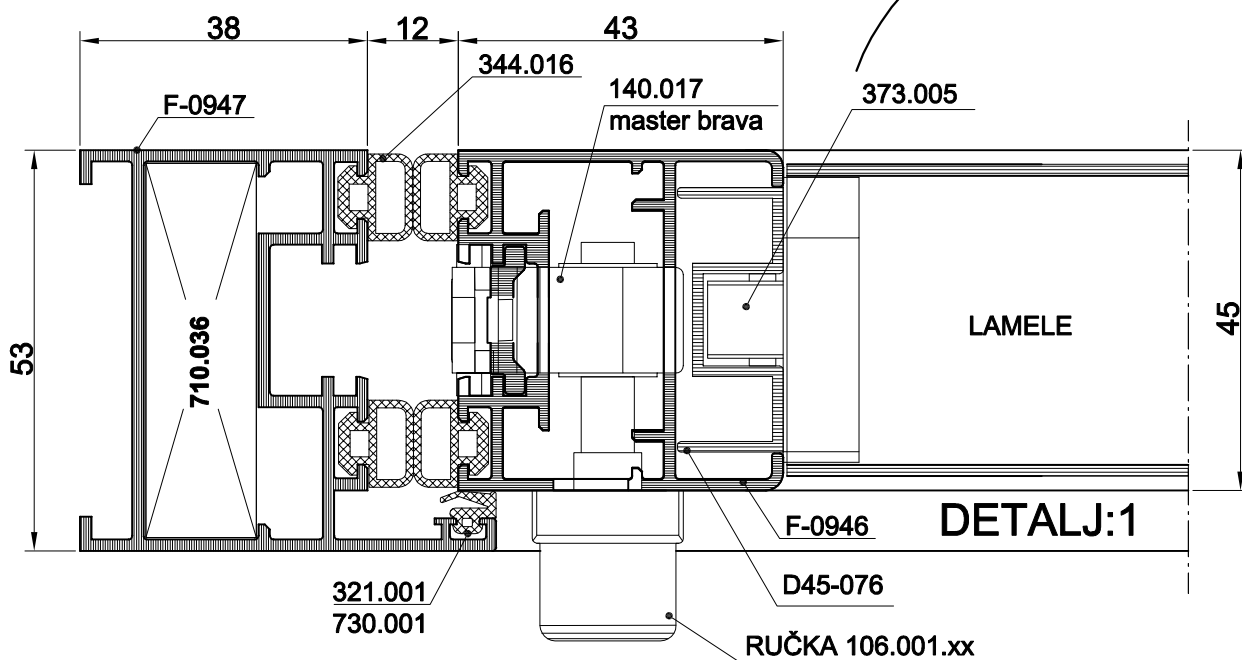
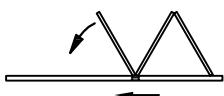
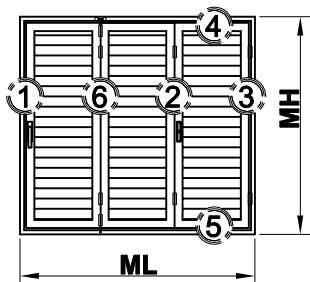


GRILJA S POKRETNIM LAMELAMA - TIP 3

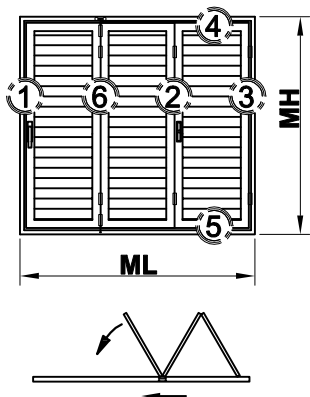


**GRILJA S POKRETNIM LAMELAMA - TIP 3**

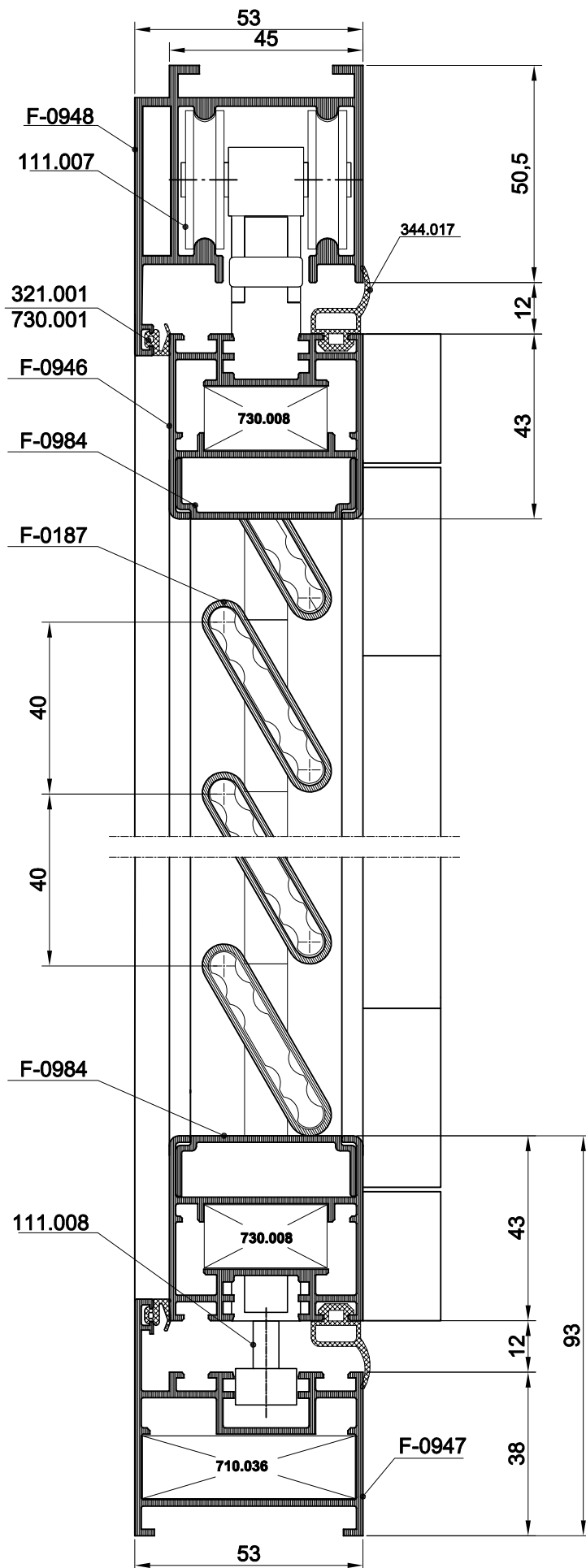
GRILJA S FIKSNIM LAMELAMA - TIP 1



GRILJA S FIKSNIM LAMELAMA - TIP 1

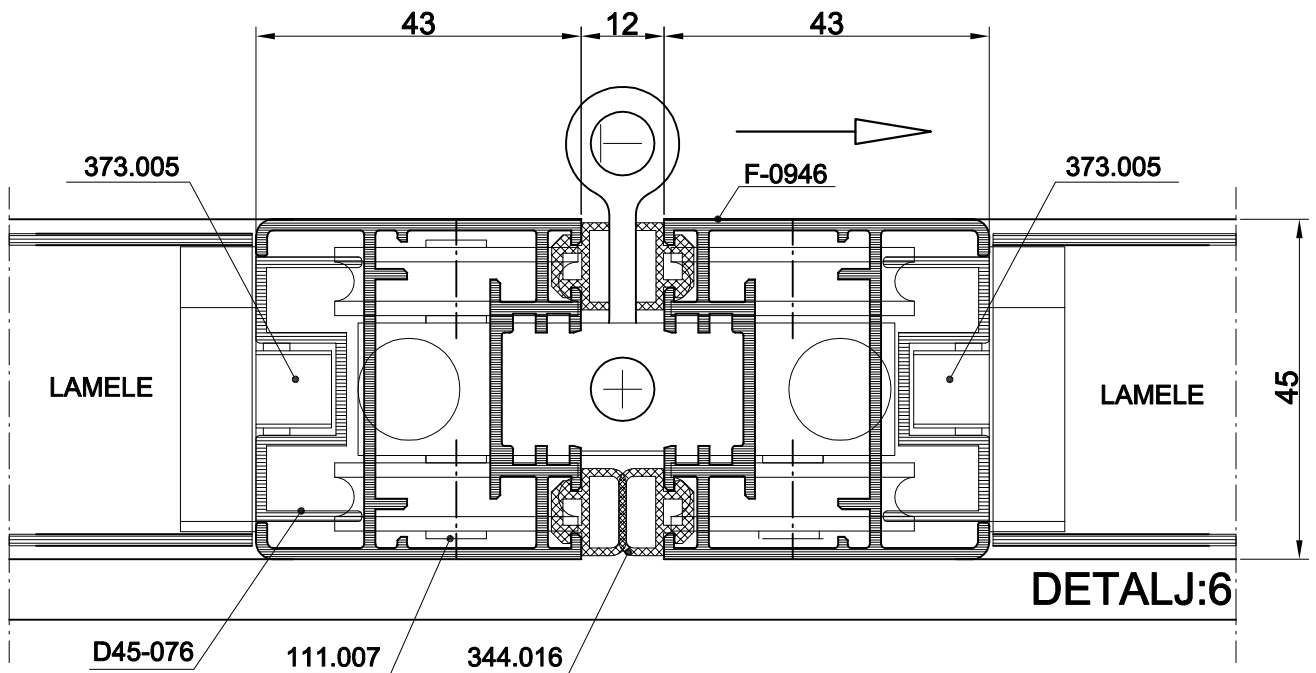
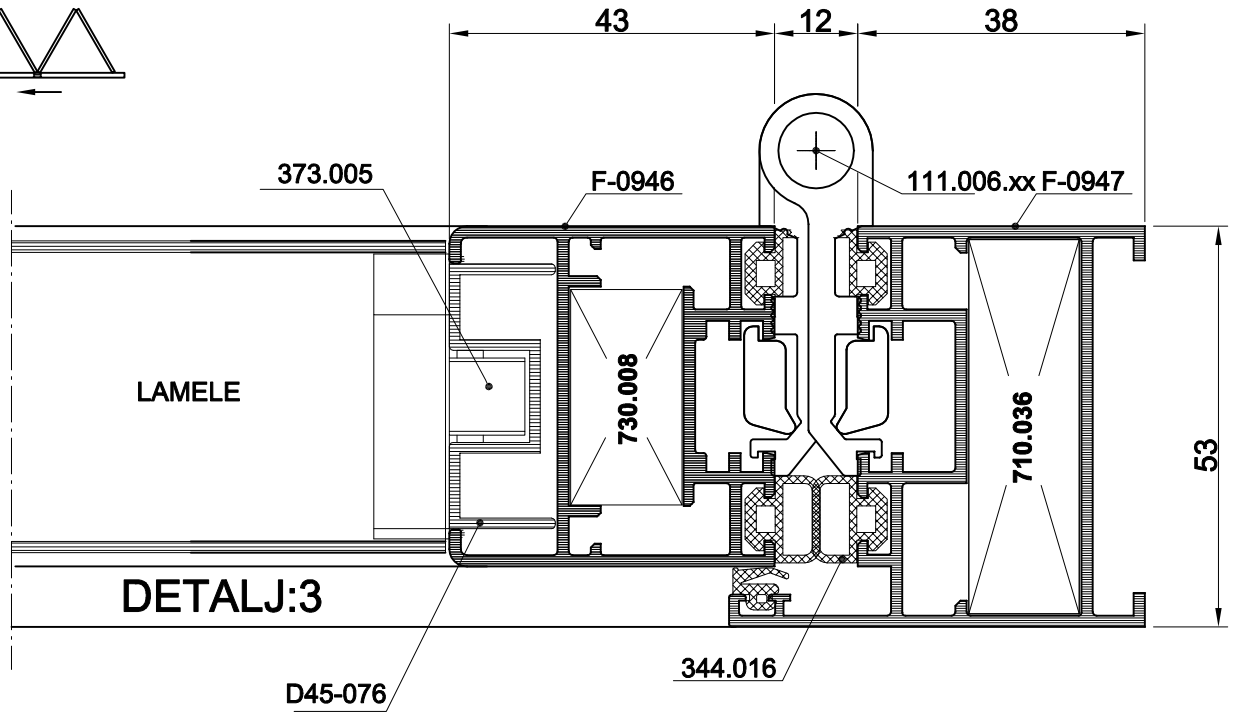
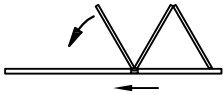
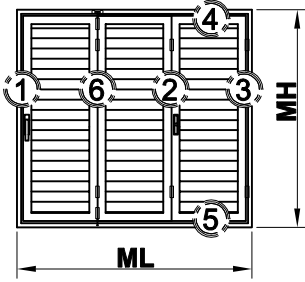


DETALJ:4

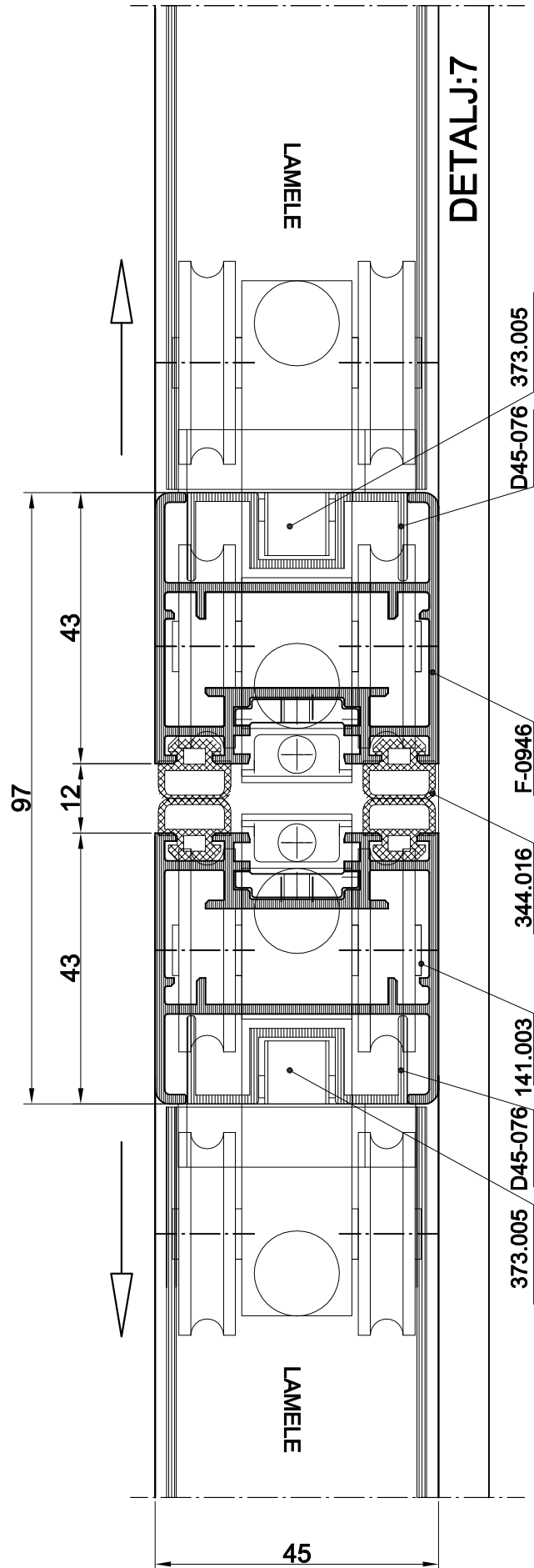
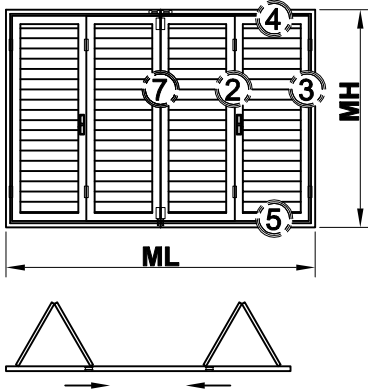


DETALJ:5

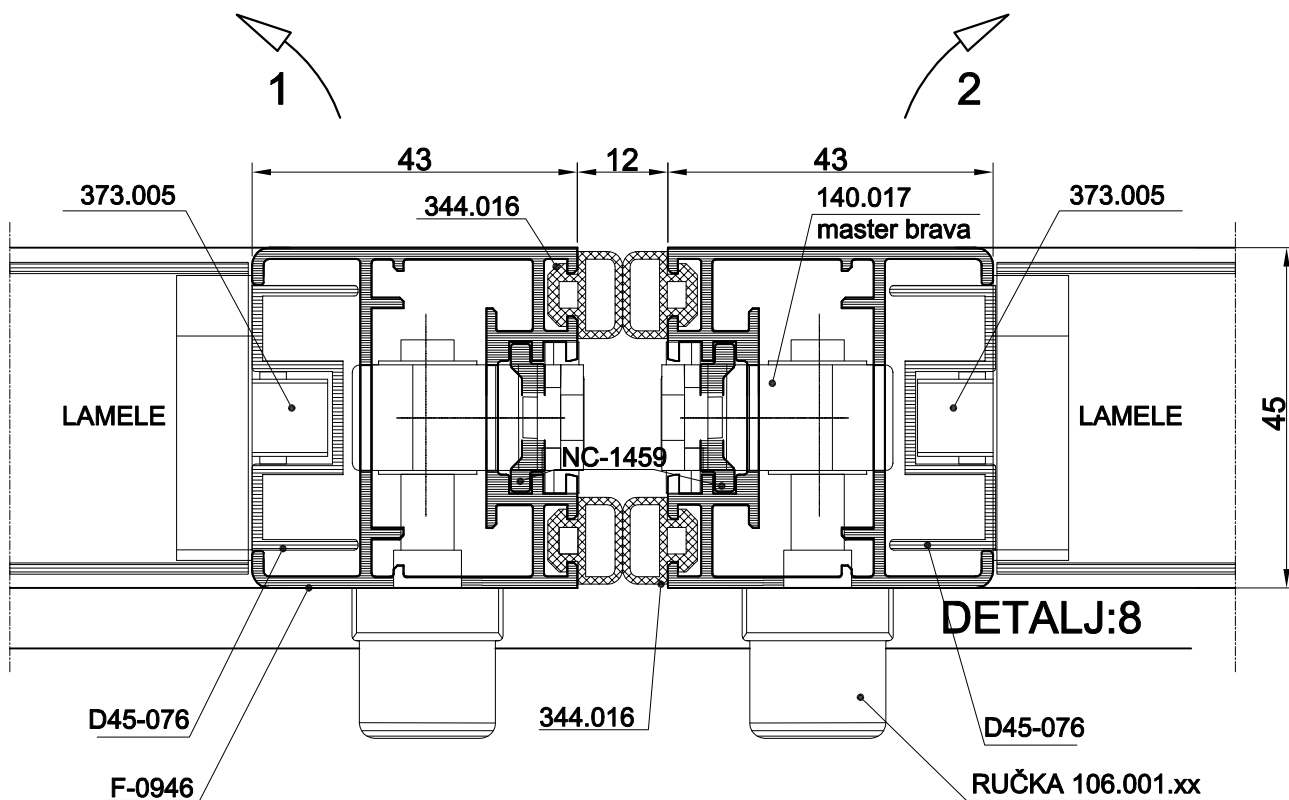
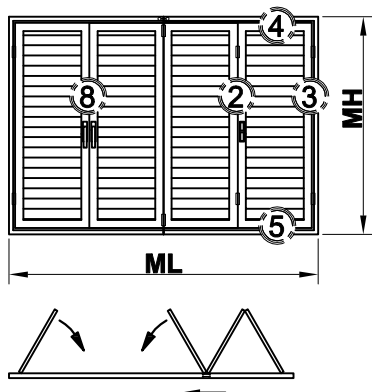
GRILJA S FIKSNIM LAMELAMA - TIP 1



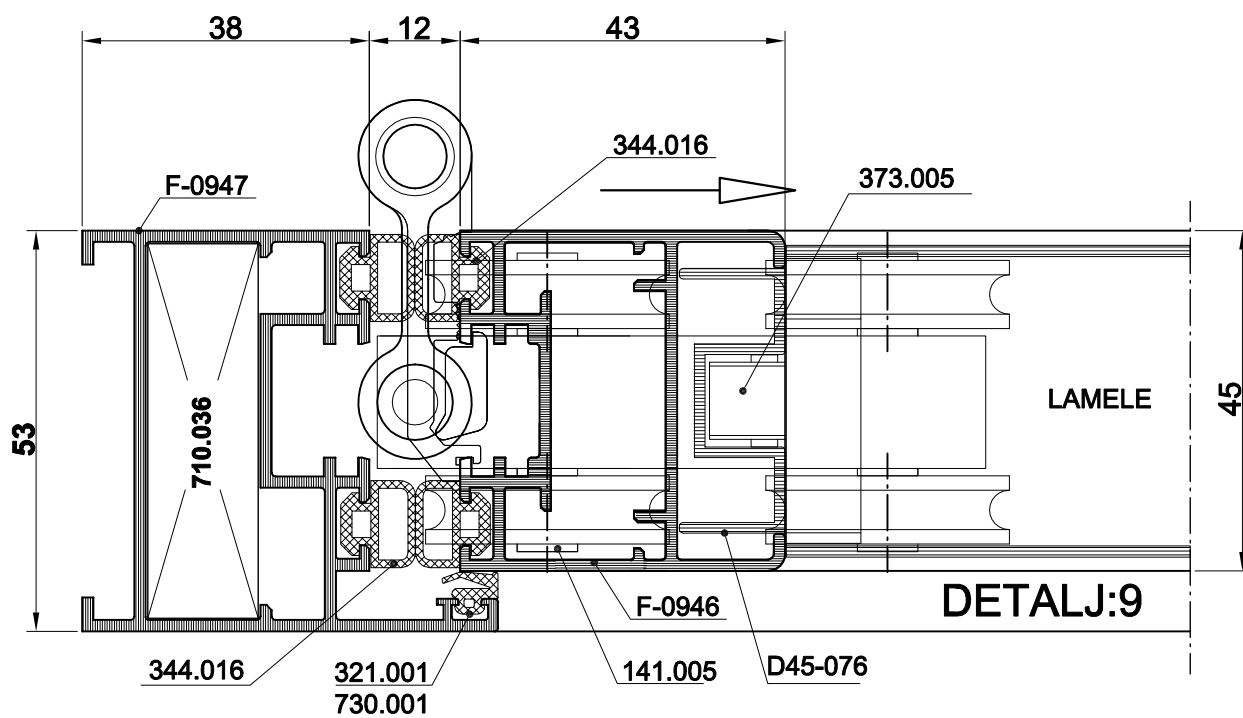
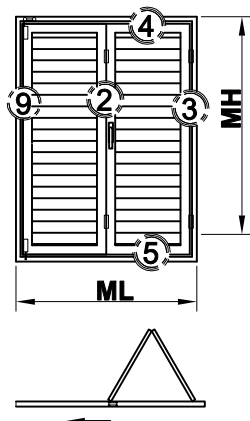
GRILJA S FIKSNIM LAMELAMA - TIP 1



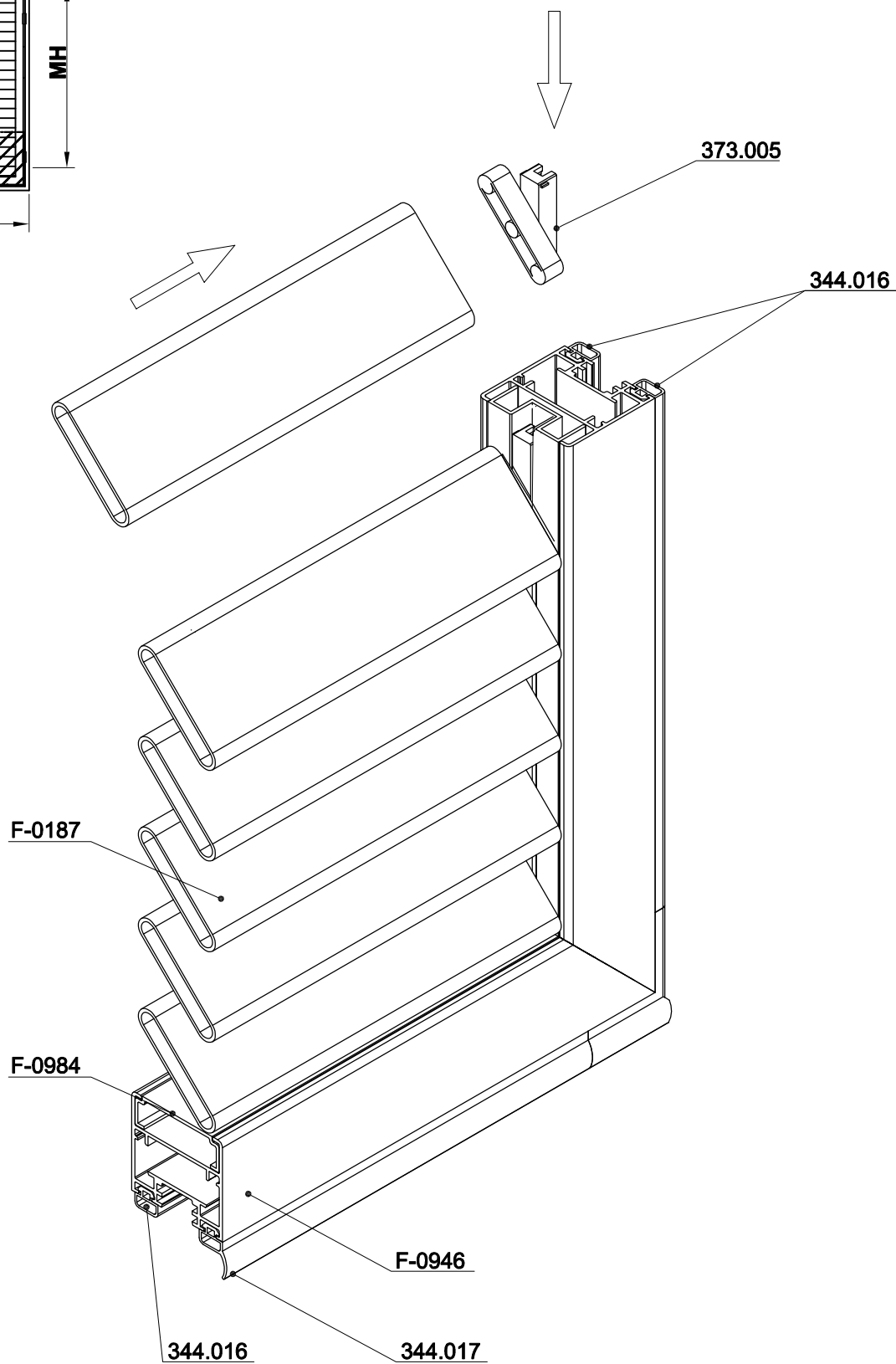
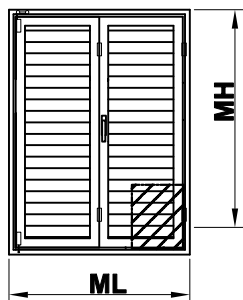
GRILJA S FIKSNIM LAMELAMA - TIP 1



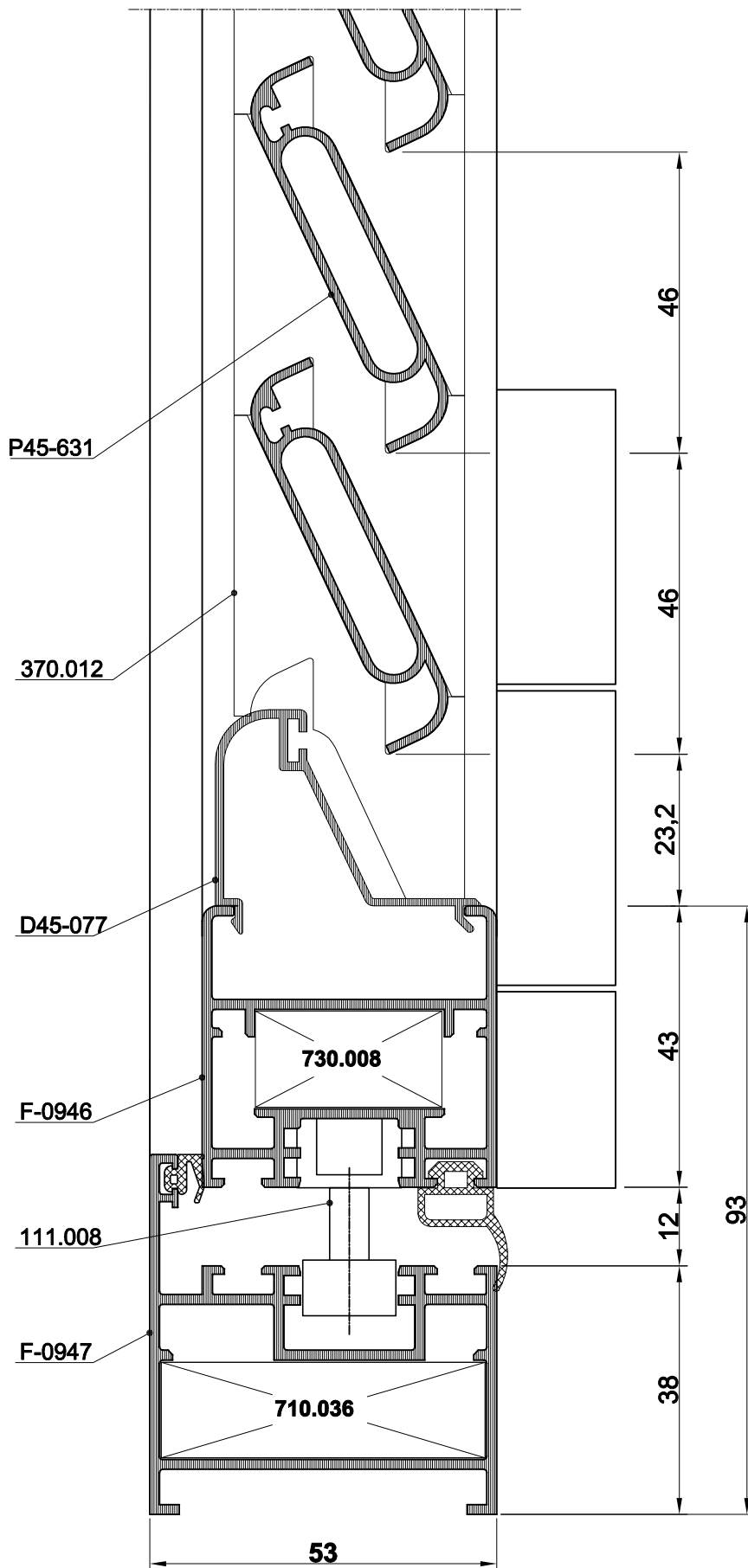
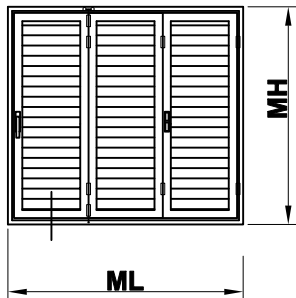
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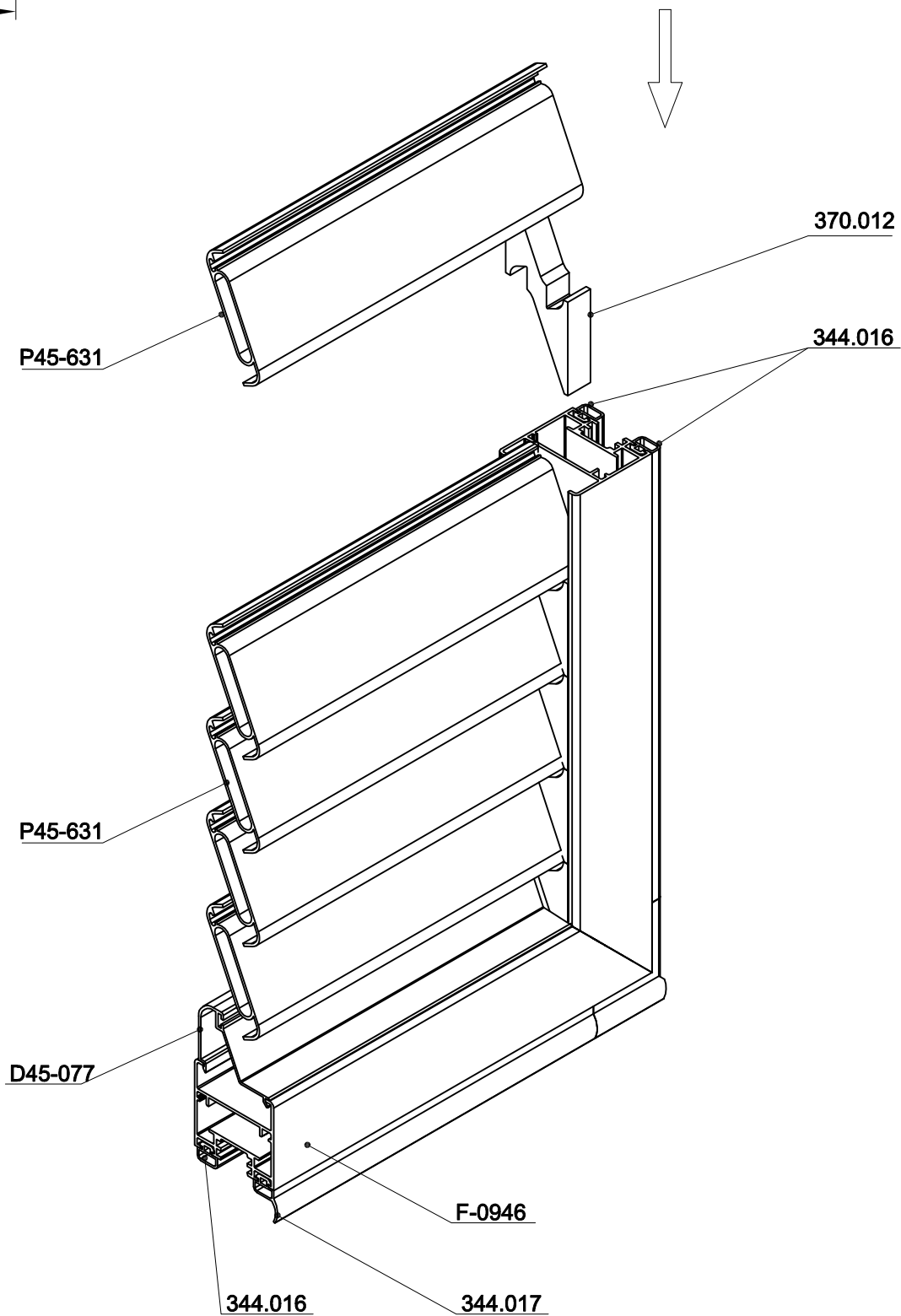
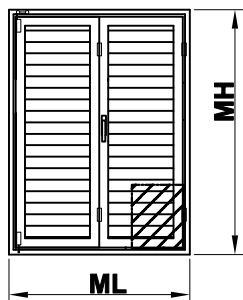


GRILJA S FIKSNIM LAMELAMA - TIP 1

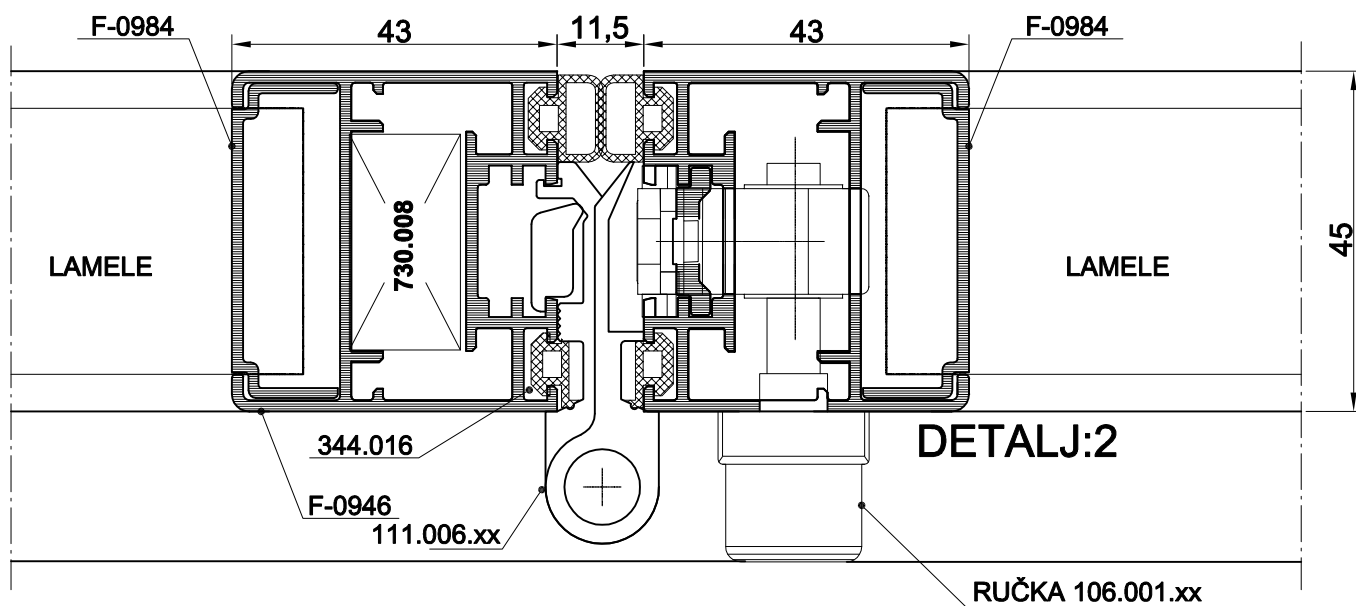
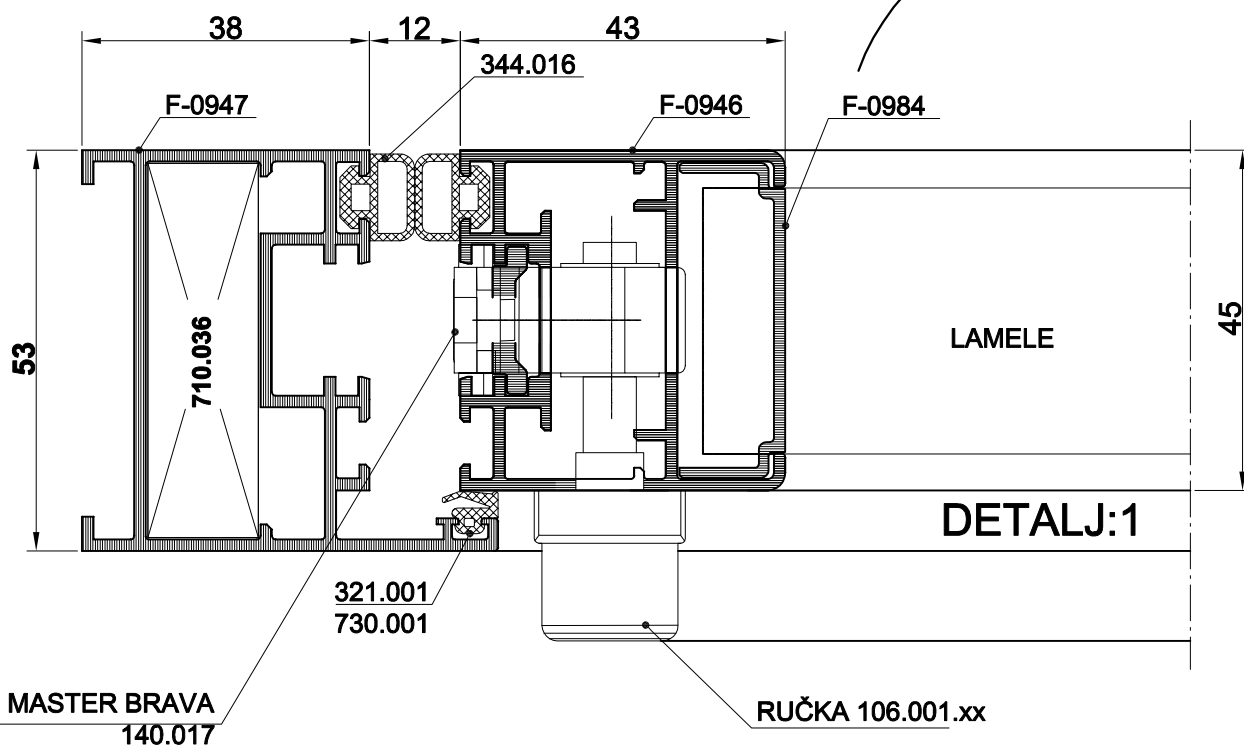
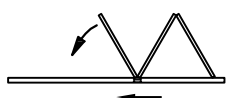
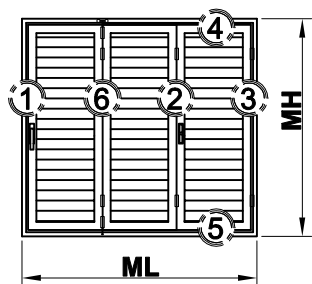


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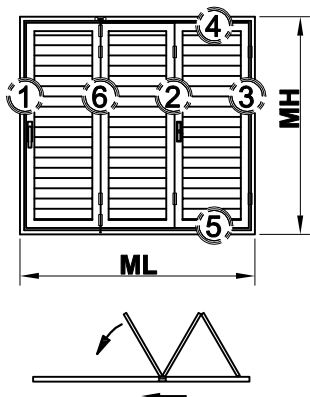


GRILJA S FIKSNIM LAMELAMA - TIP 2

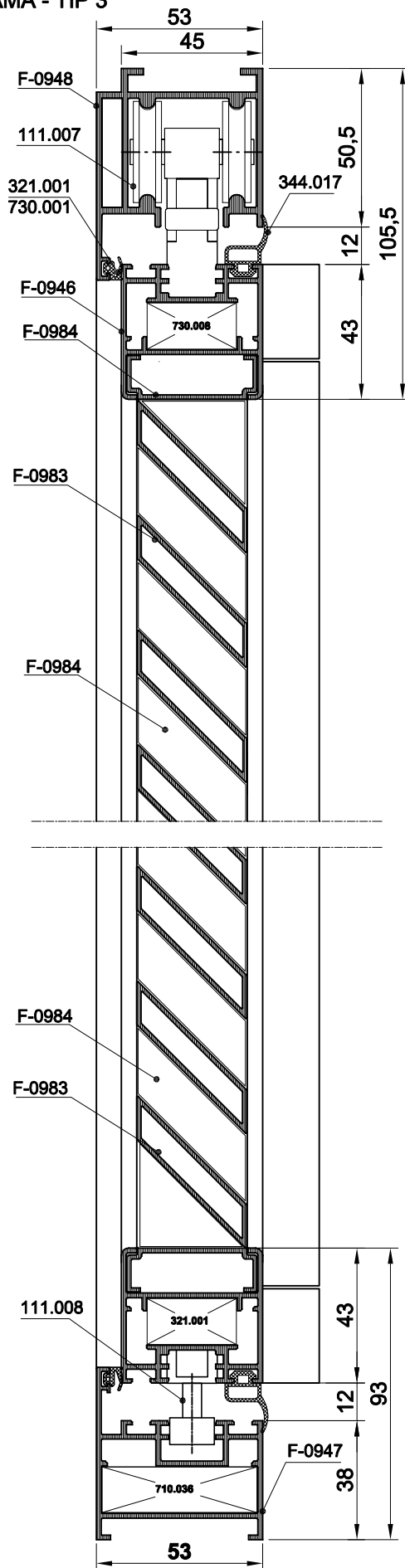
GRILJA S FIKSNIM LAMELAMA - TIP 3



GRILJA S FIKSNIM LAMELAMA - TIP 3

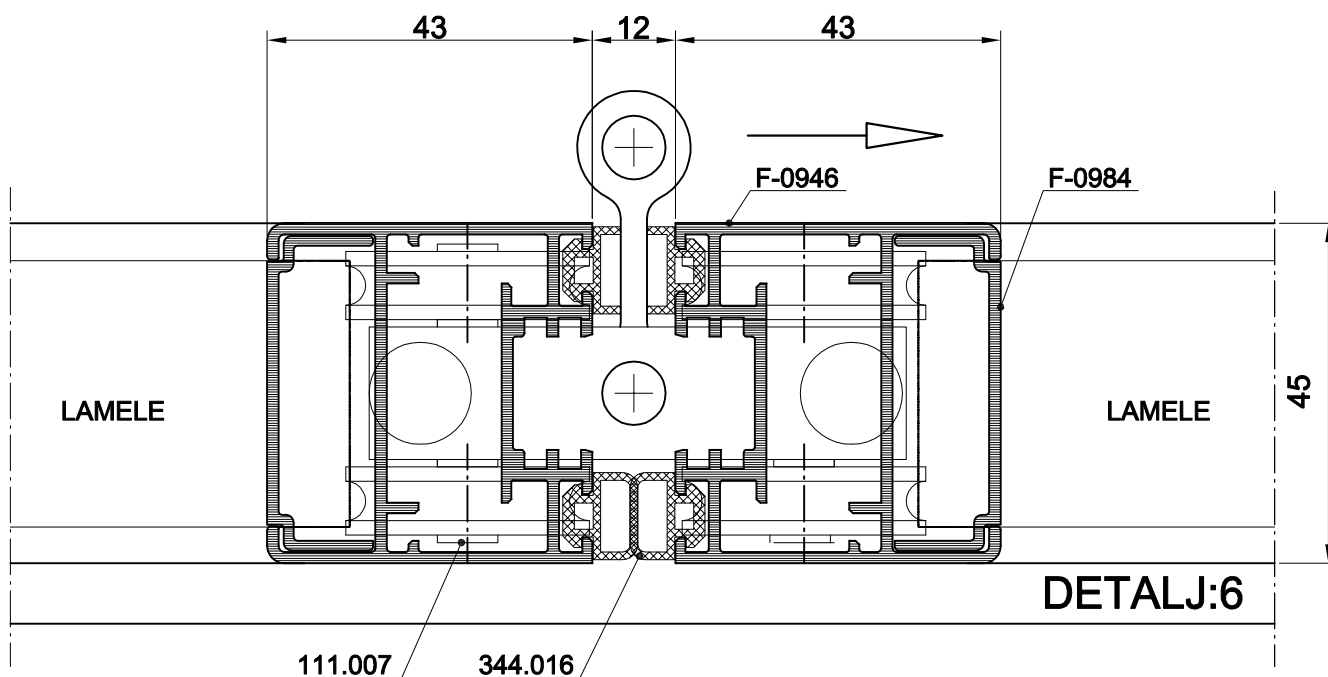
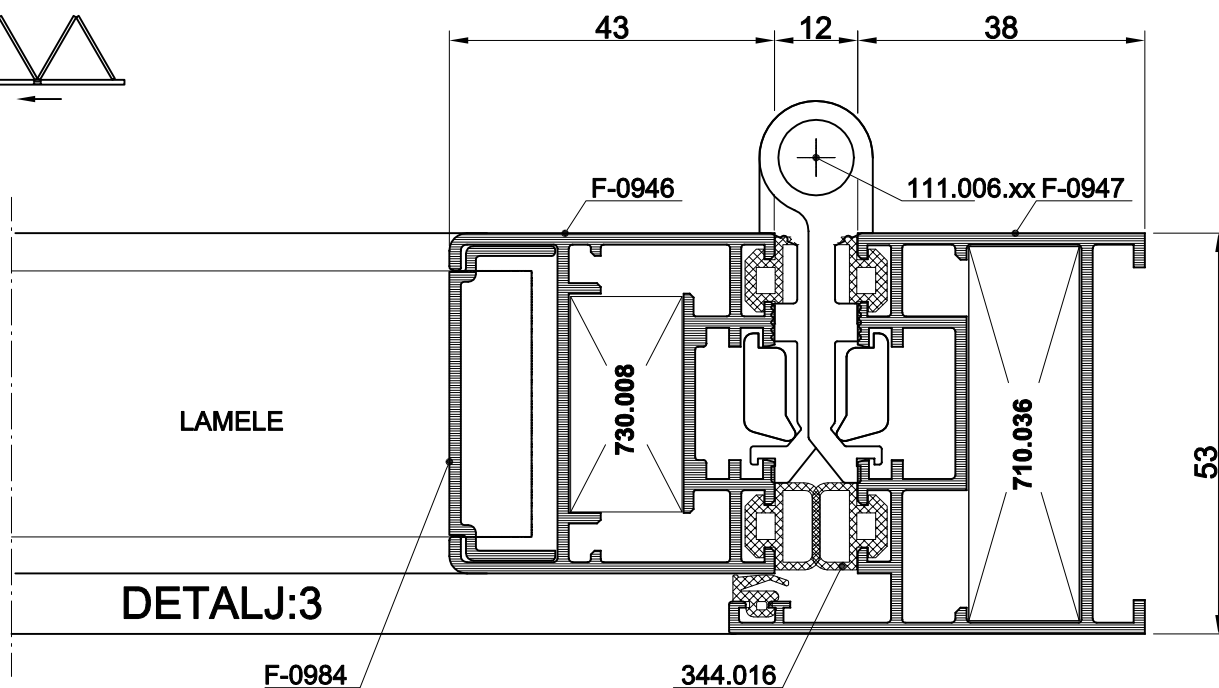
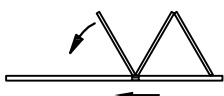
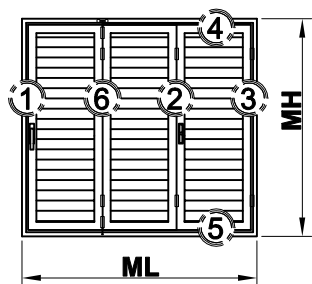


DETALJ:4

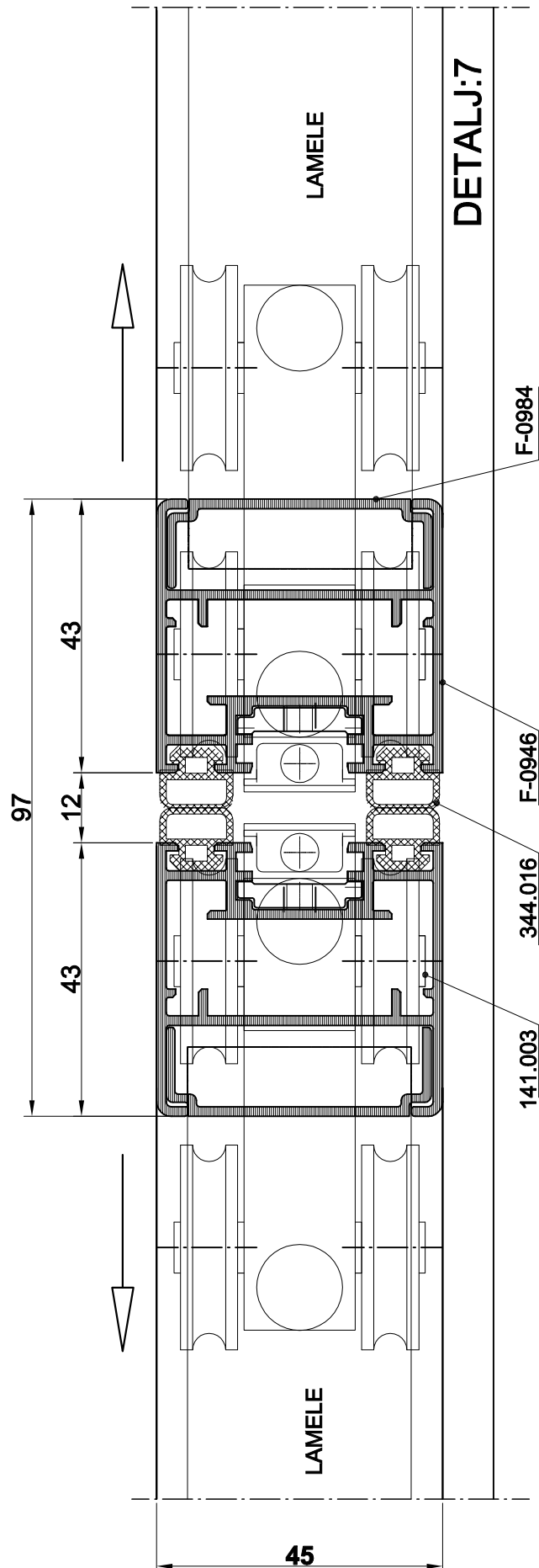
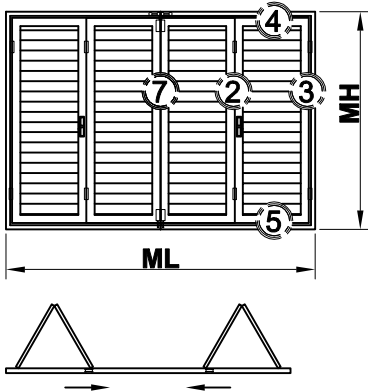


DETALJ:5

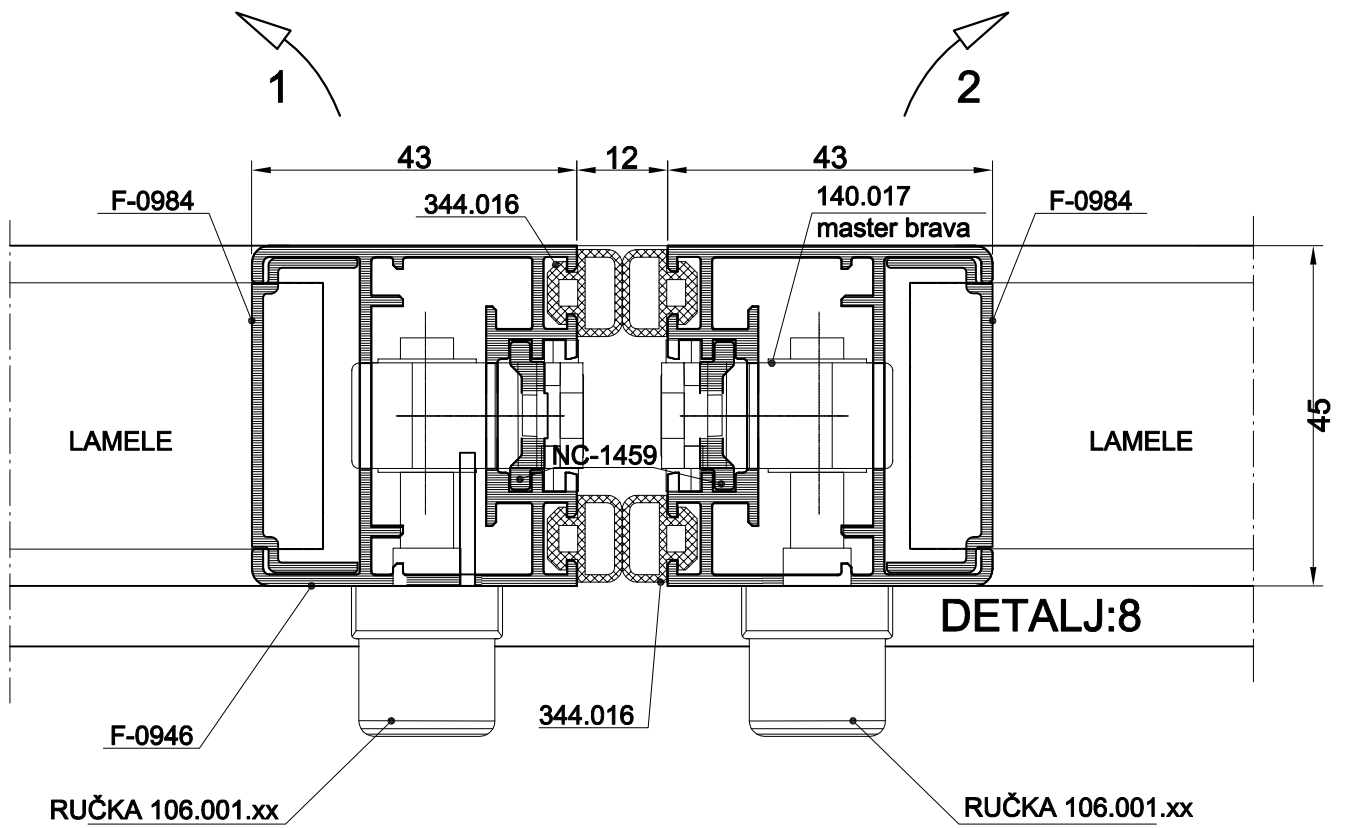
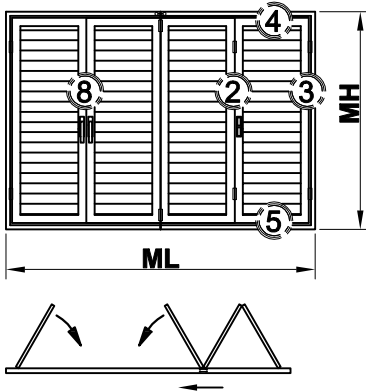
GRILJA S FIKSNIM LAMELAMA - TIP 3



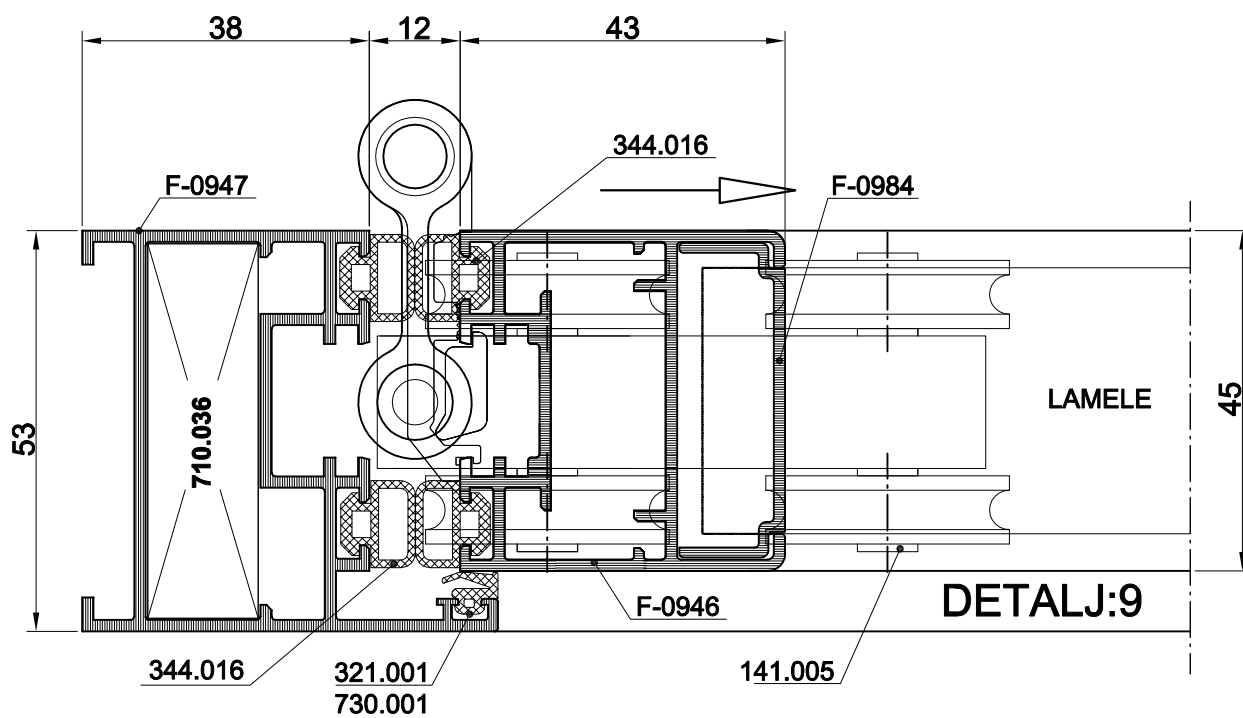
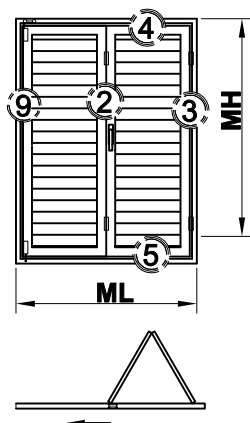
GRILJA S FIKSNIM LAMELAMA - TIP 3



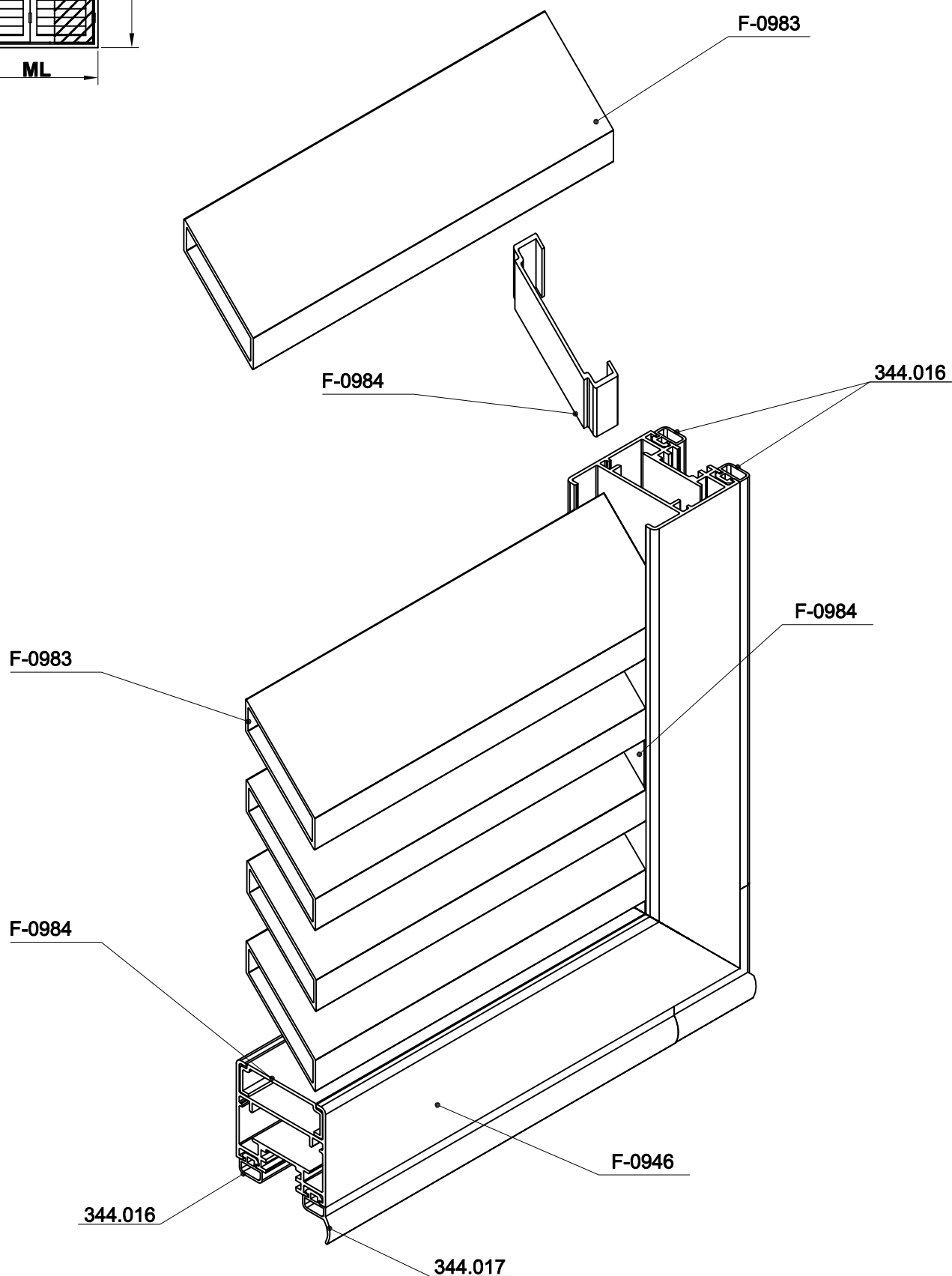
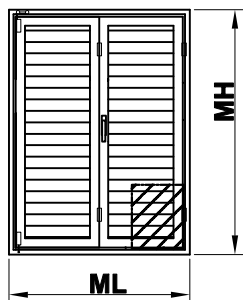
GRILJA S FIKSNIM LAMELAMA - TIP 3

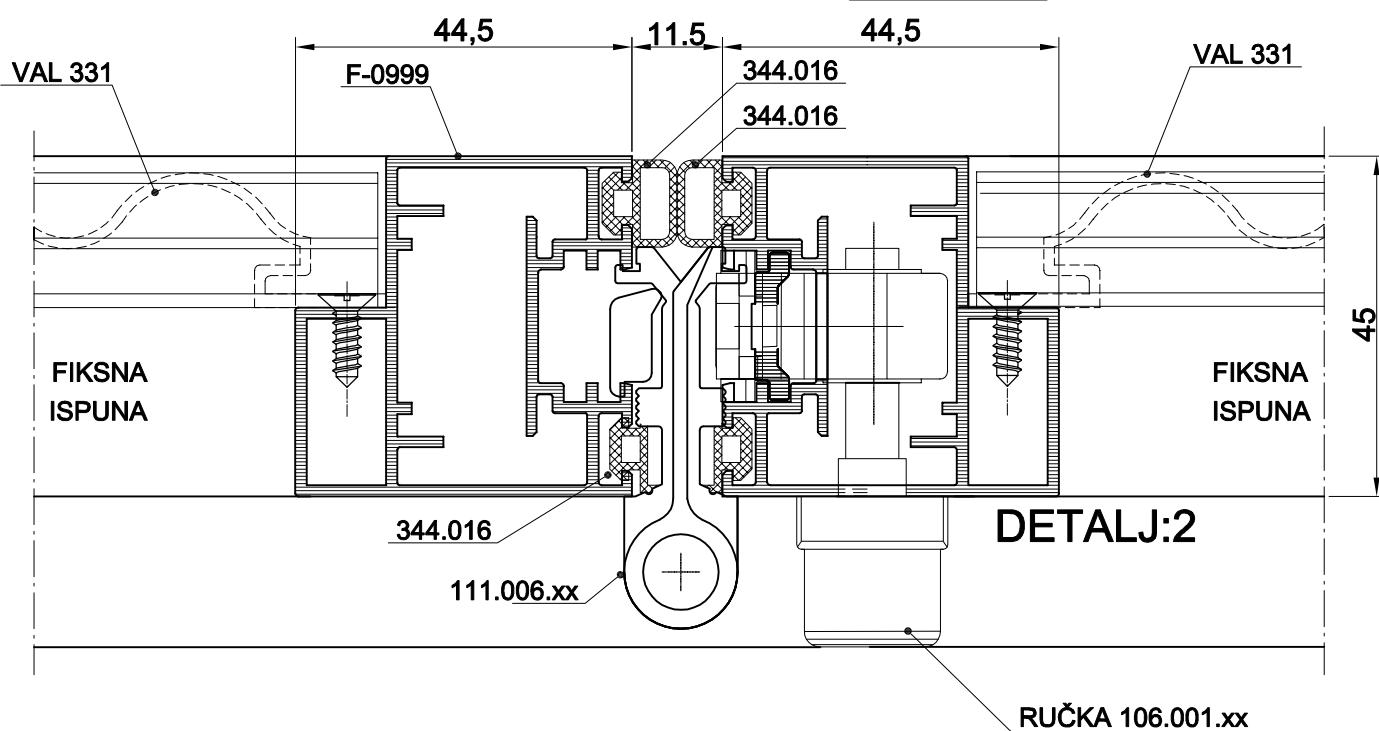
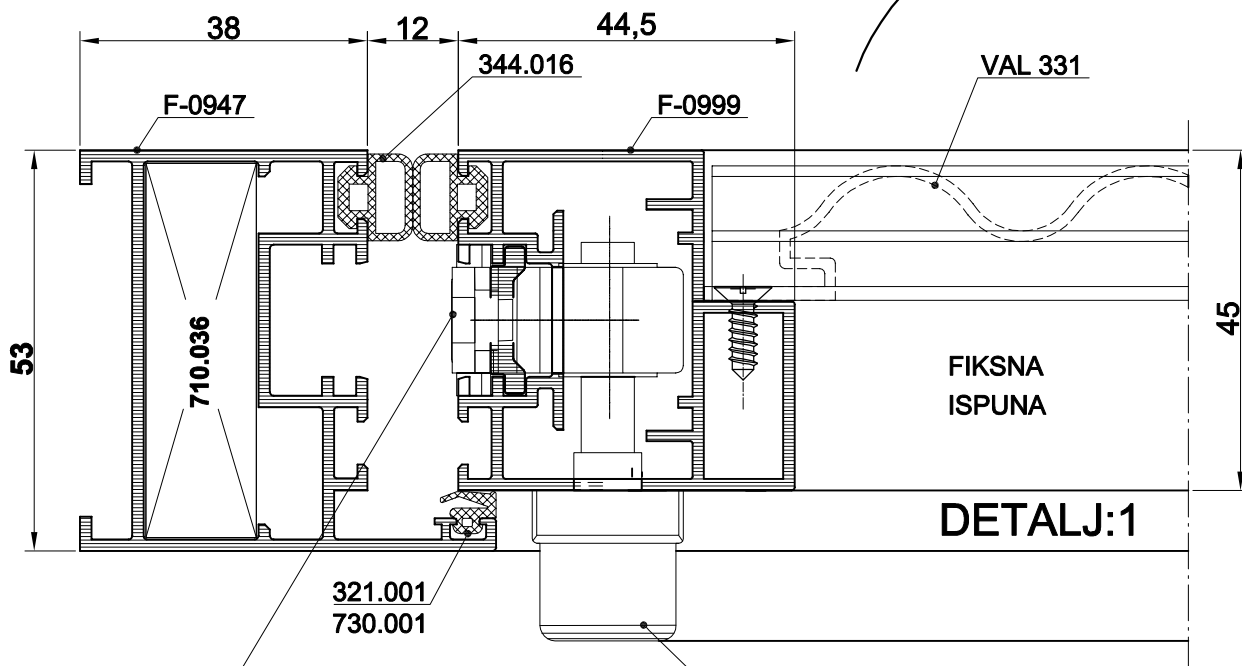
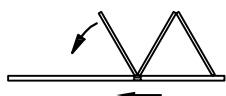
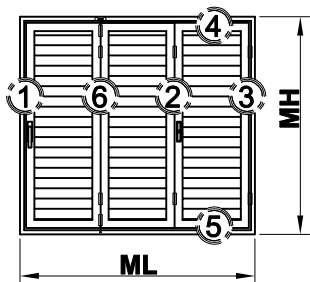


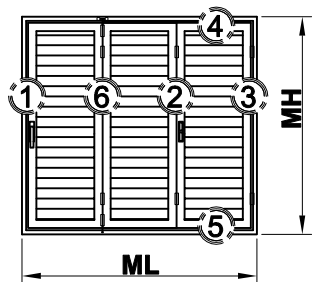
GRILJA S FIKSNIM LAMELAMA - TIP 3



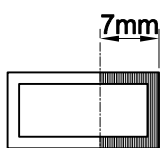
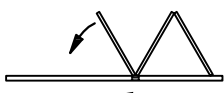
GRILJA S FIKSNIM LAMELAMA - TIP 3



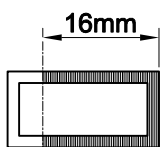
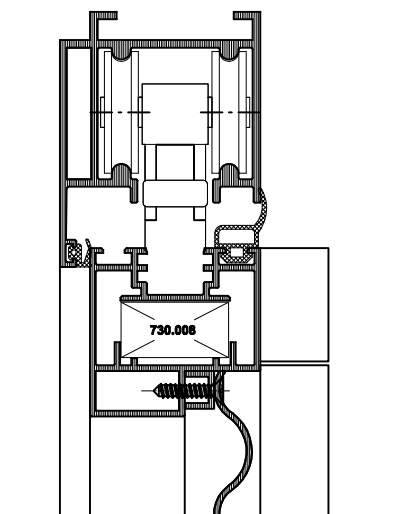




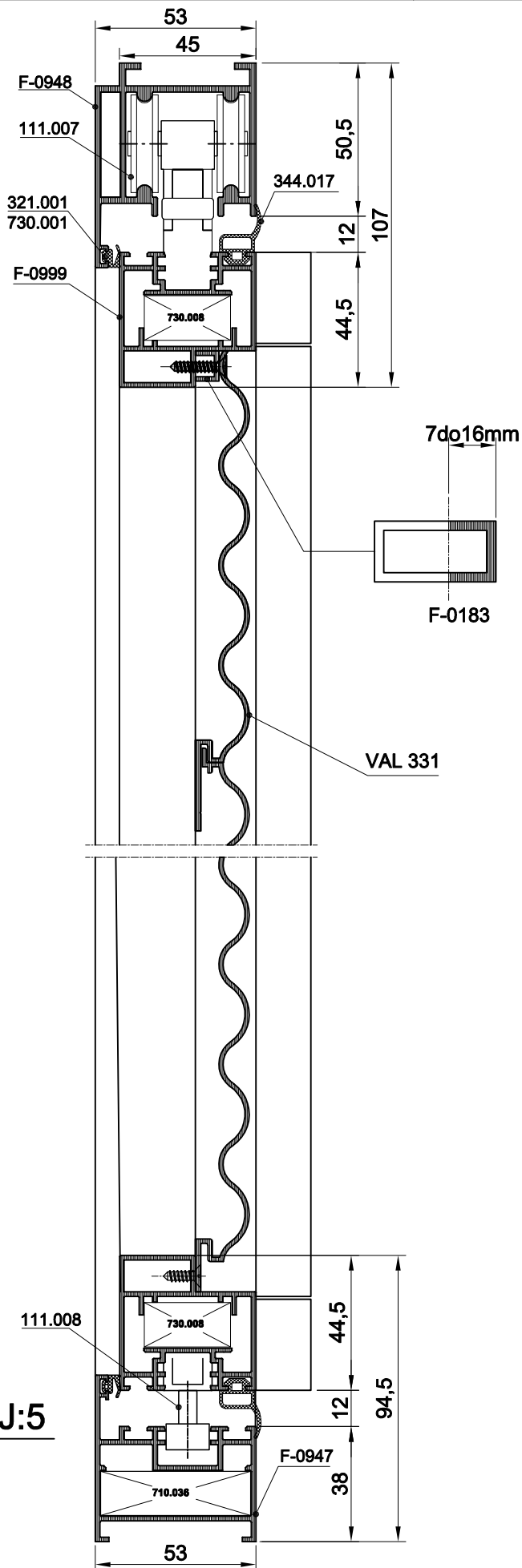
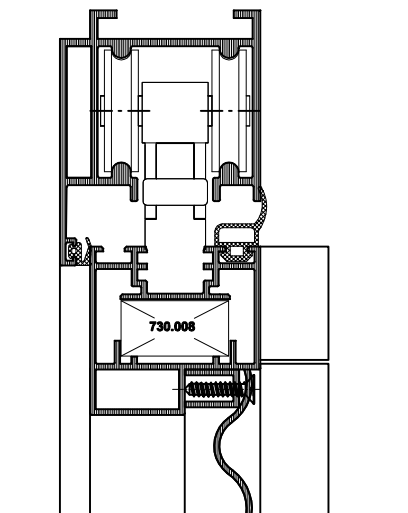
DETALJ:4



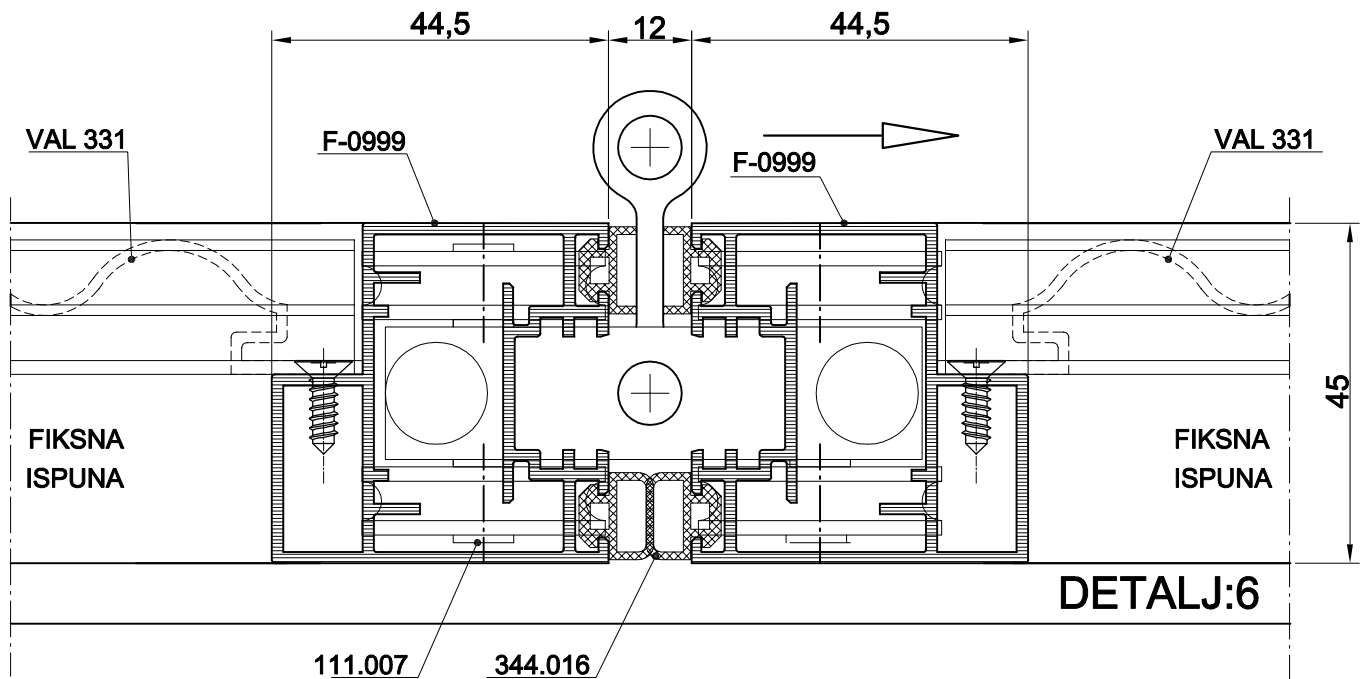
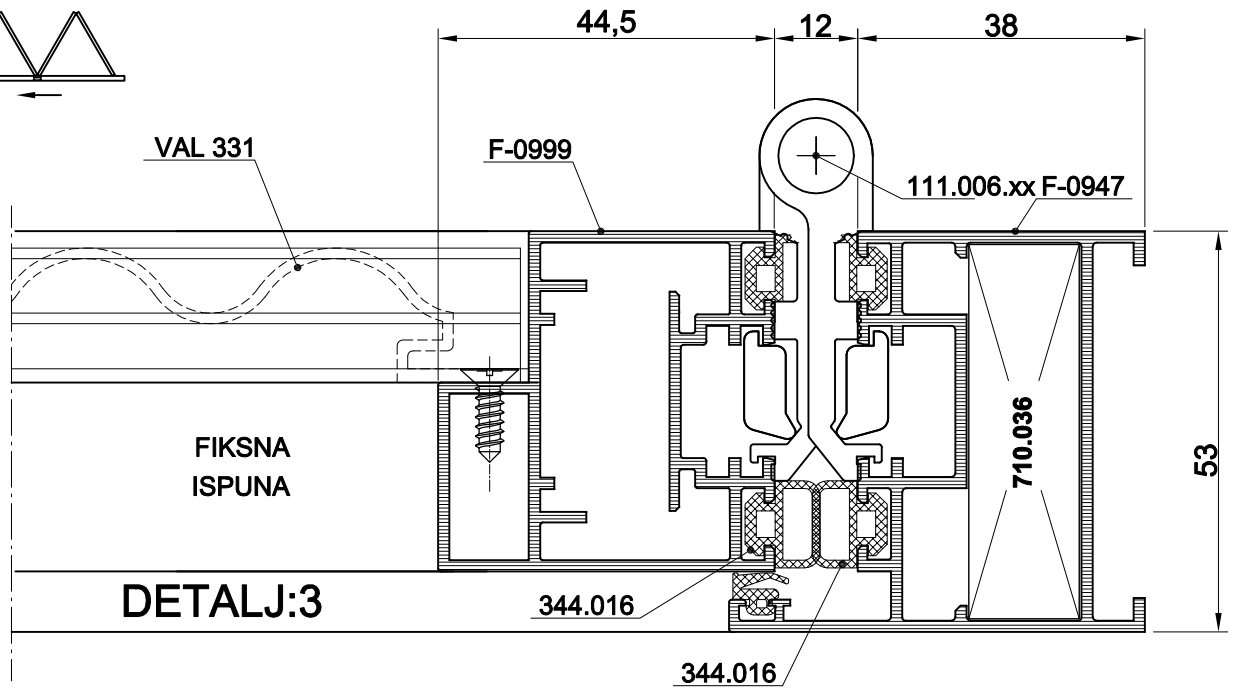
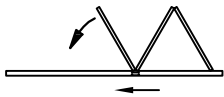
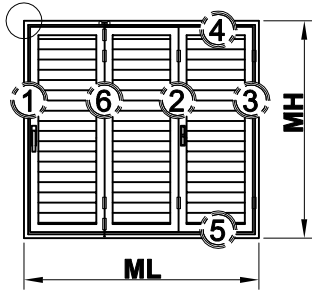
F-0183

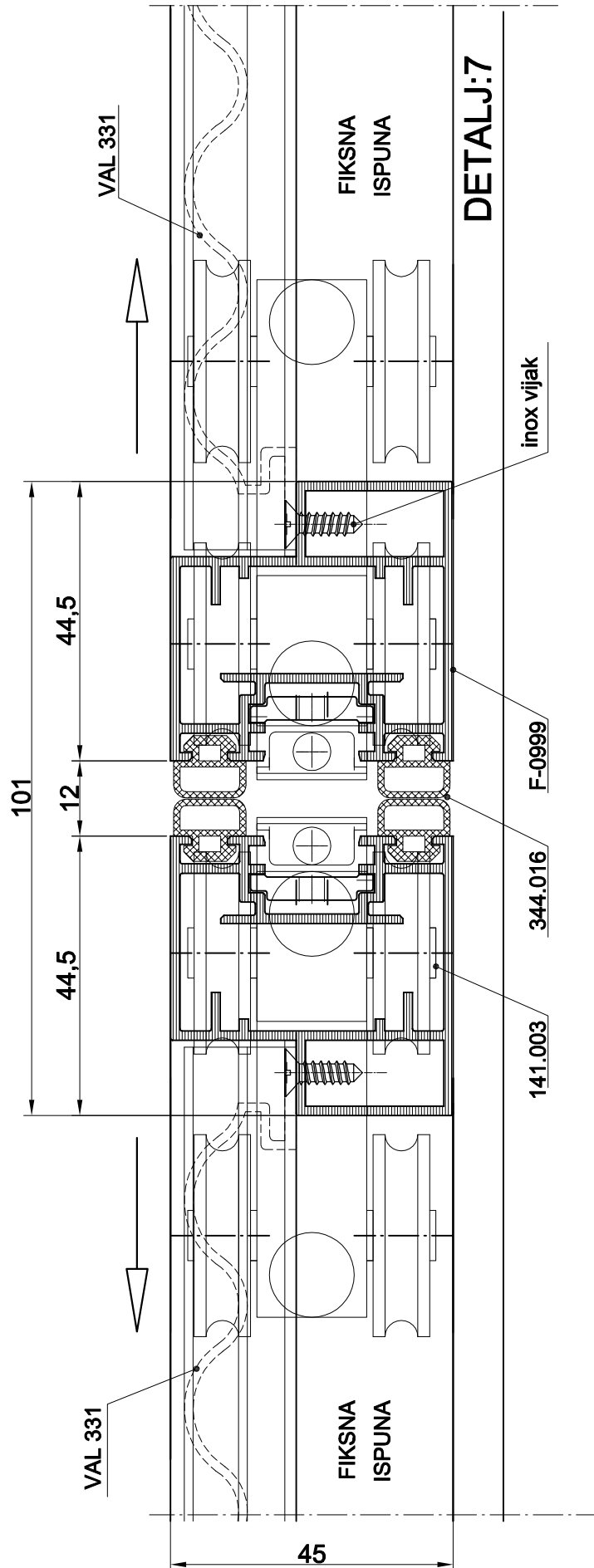
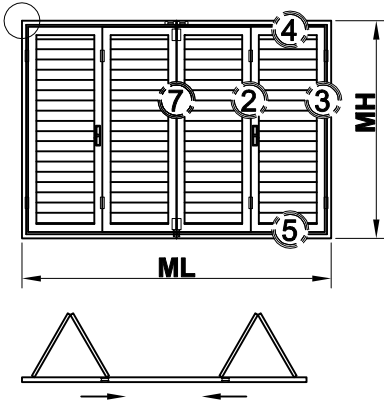


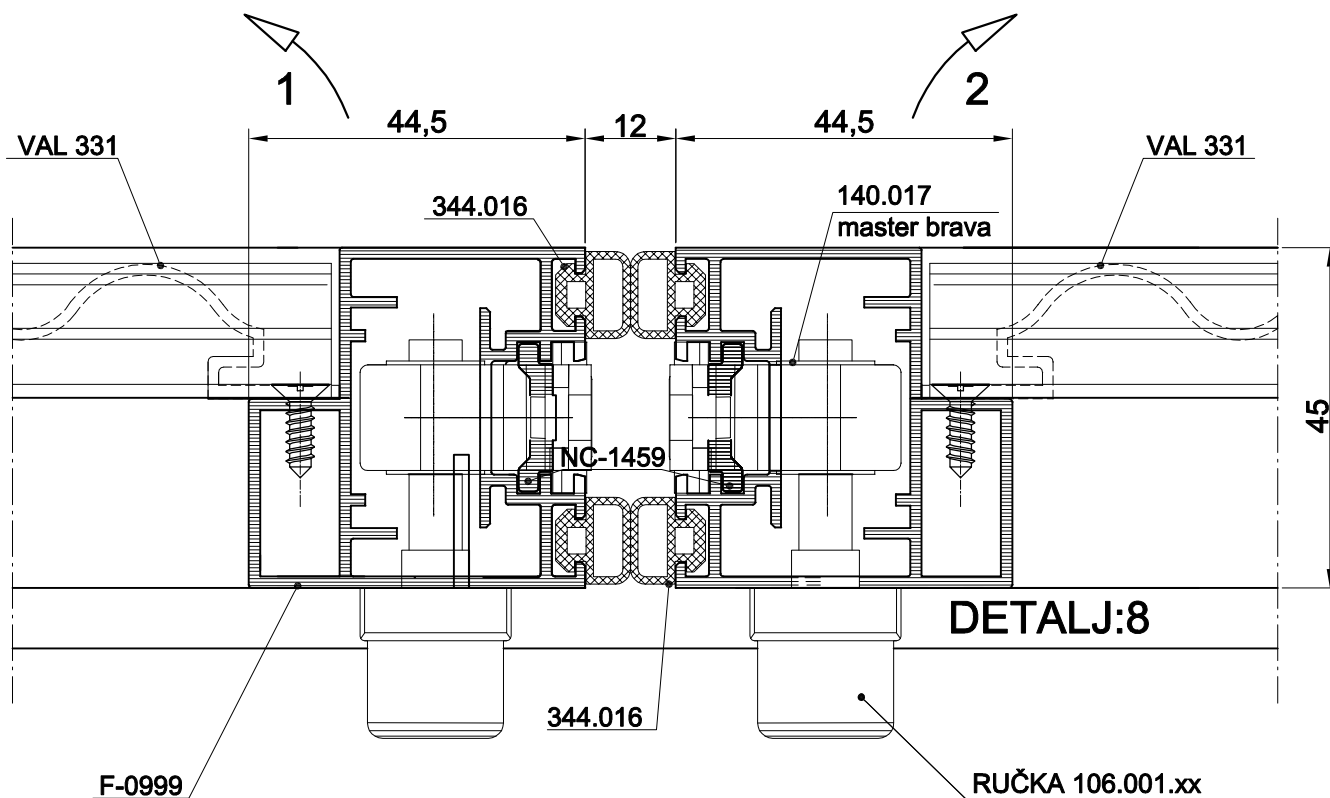
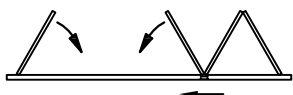
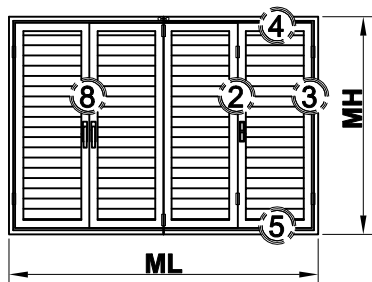
F-0183

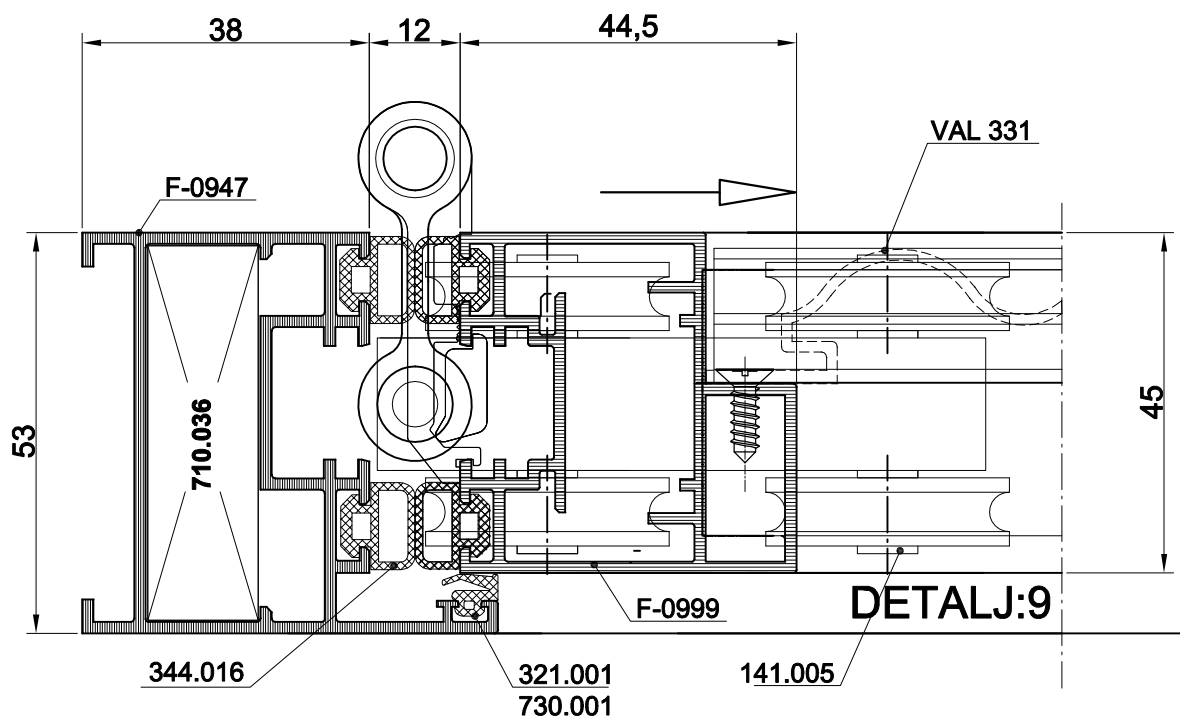
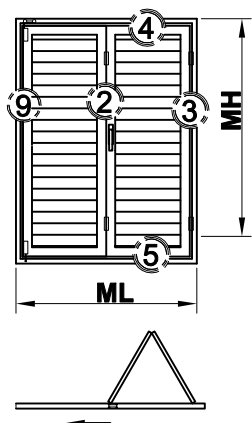


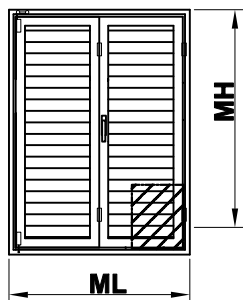
DETALJ:5



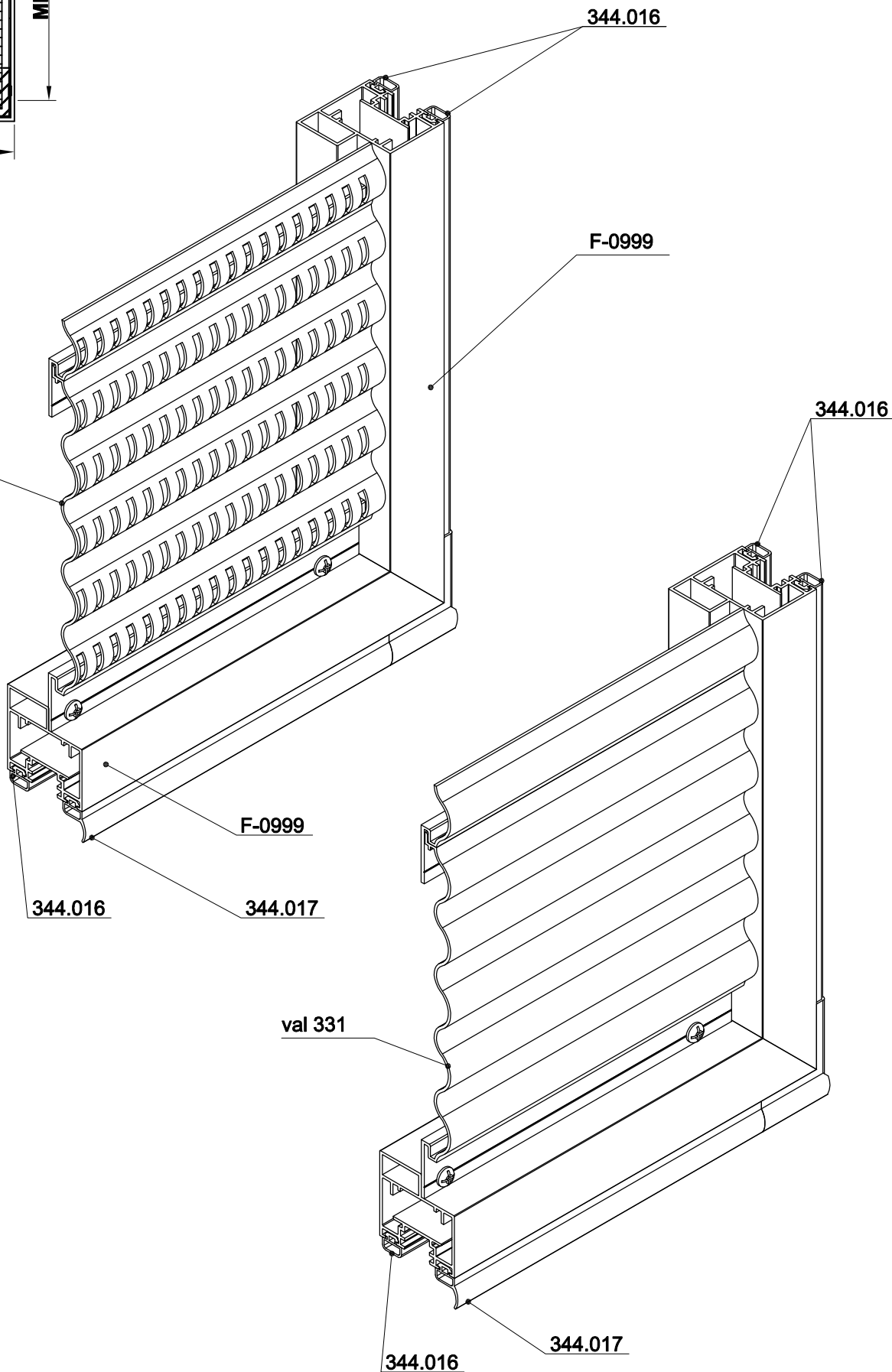


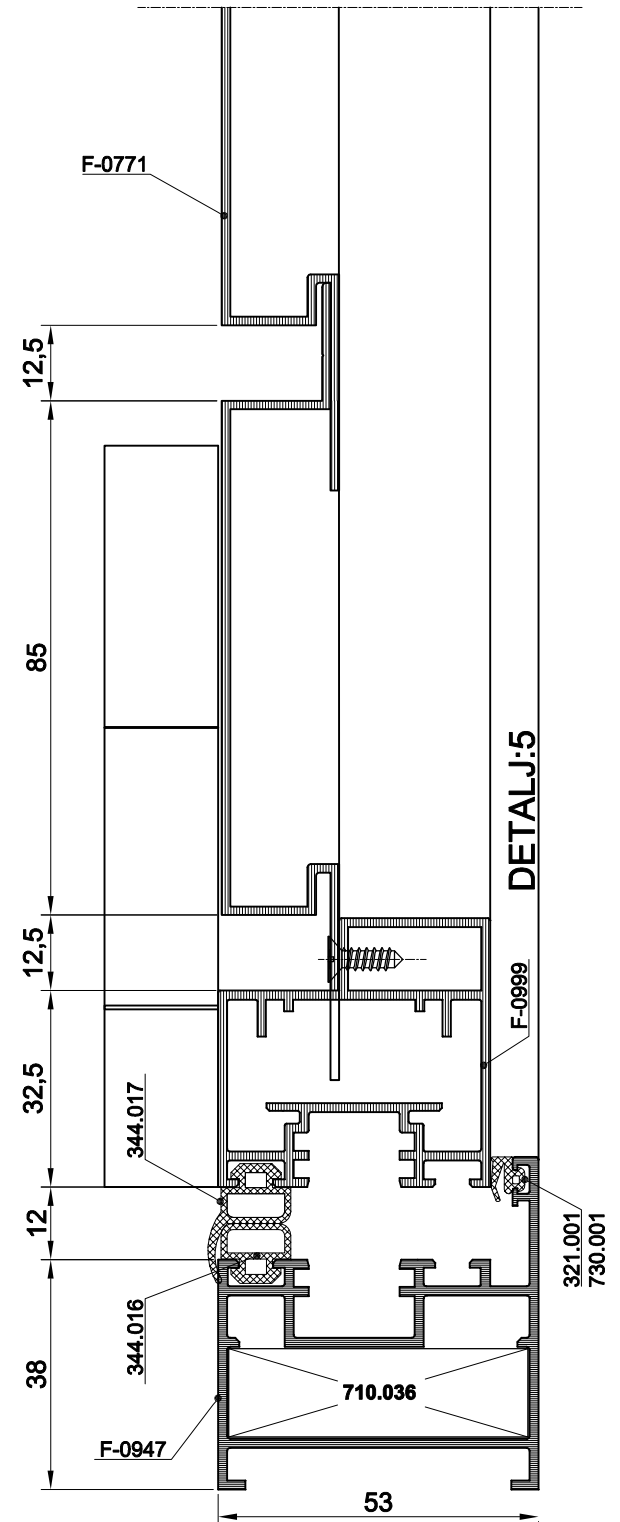
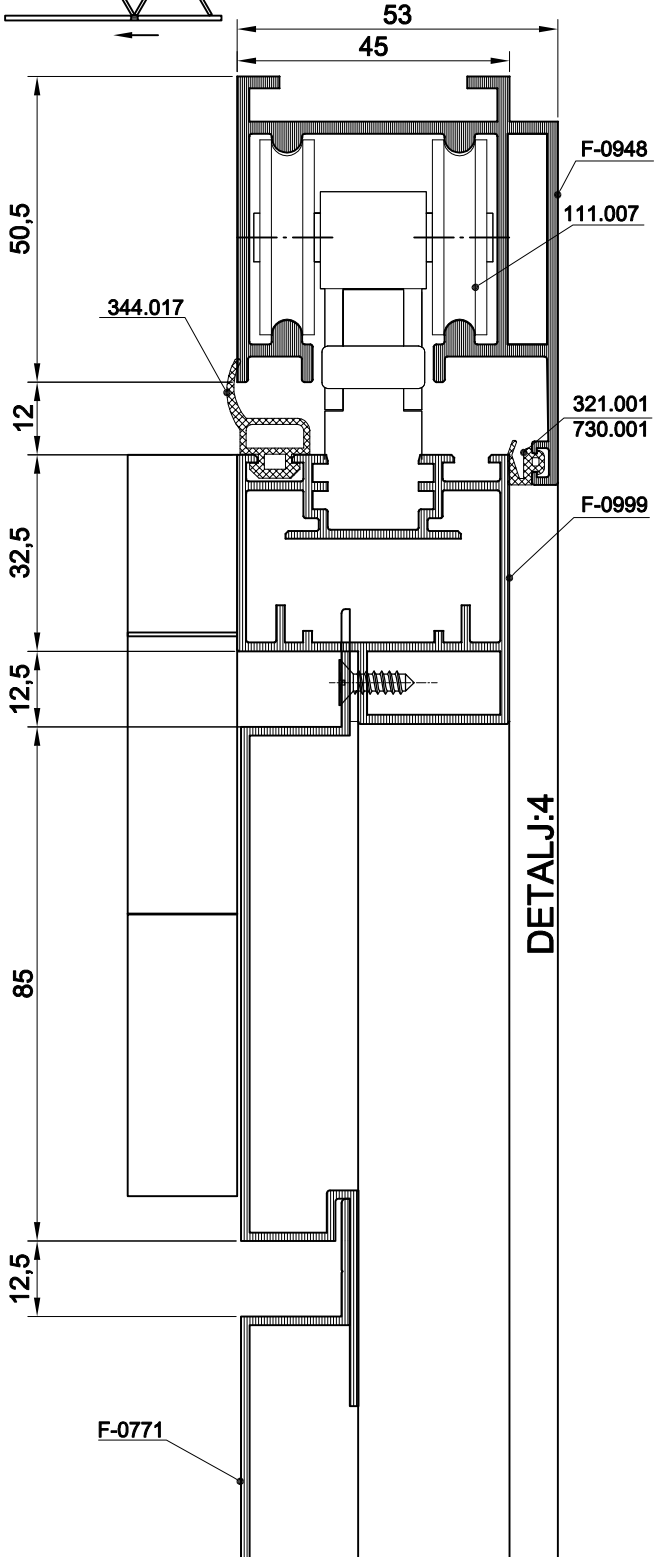
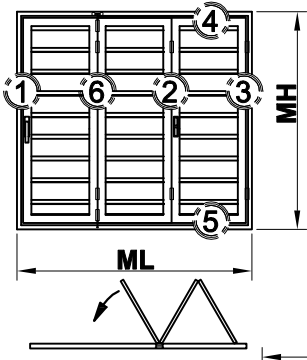


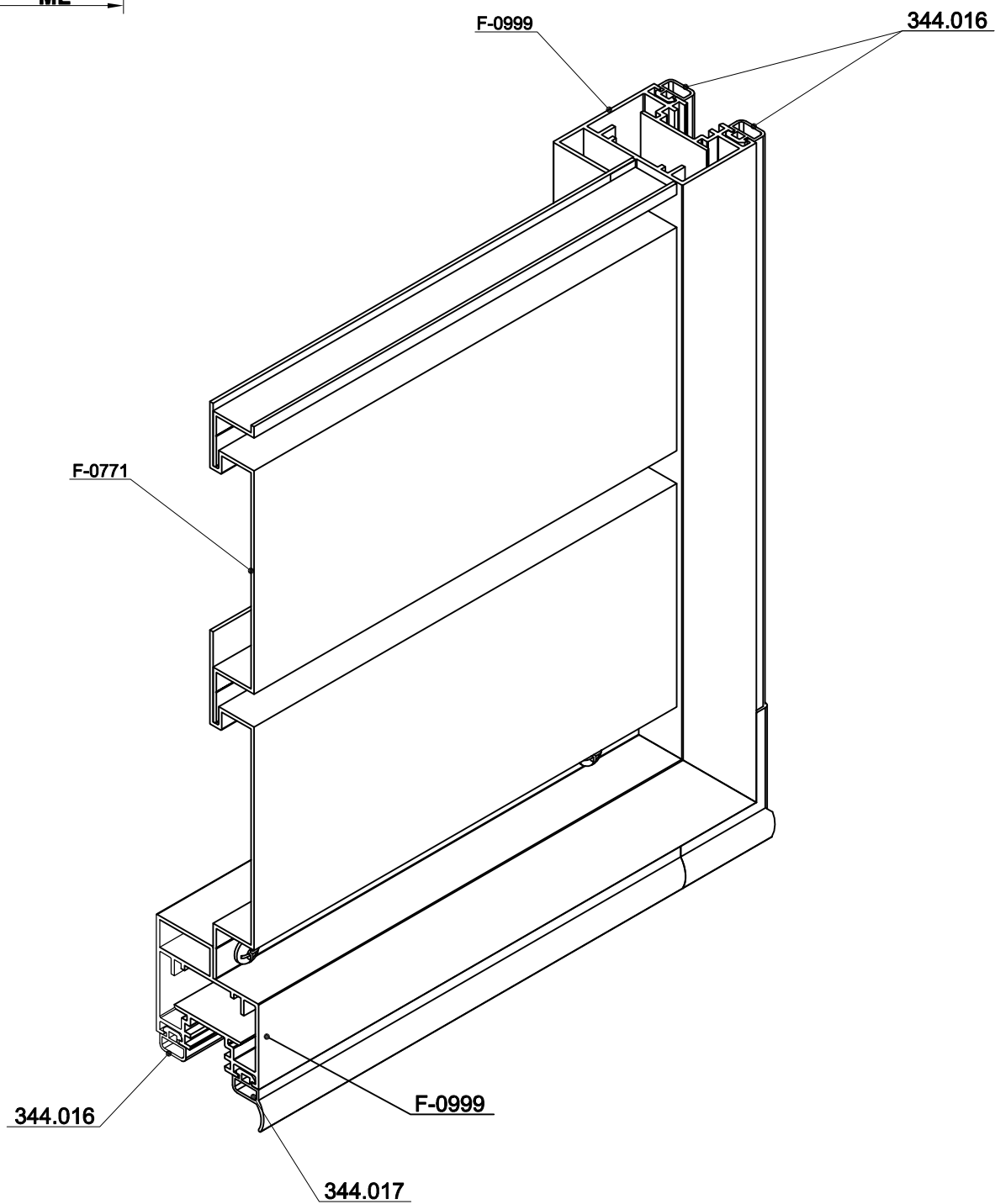
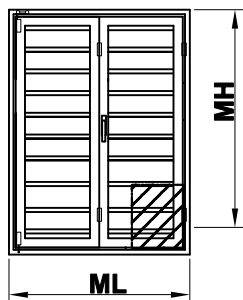


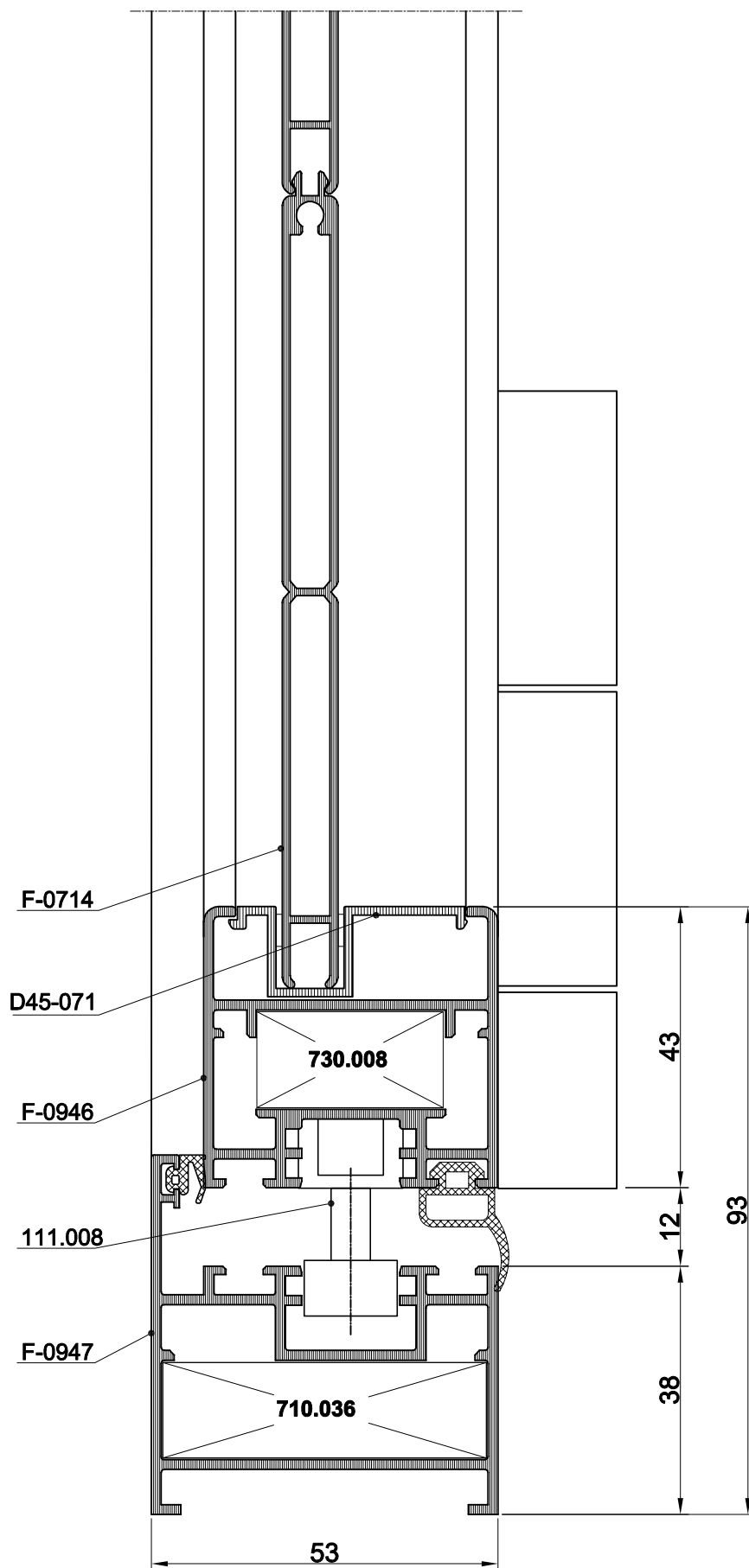
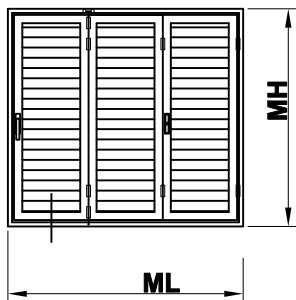


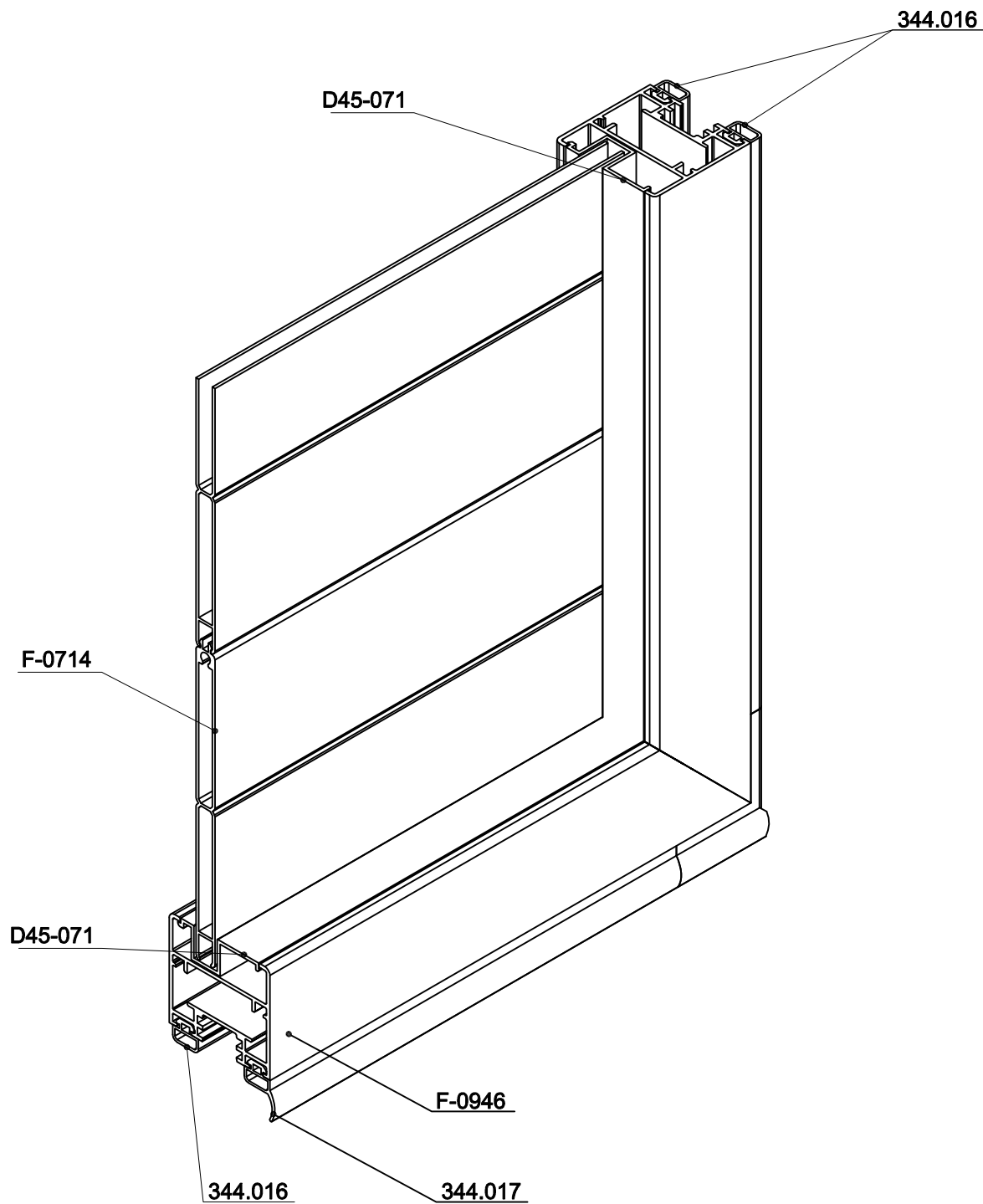
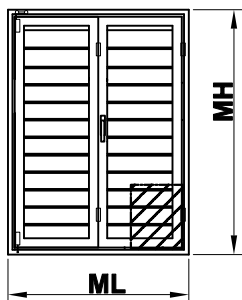
Perforiran
val 331

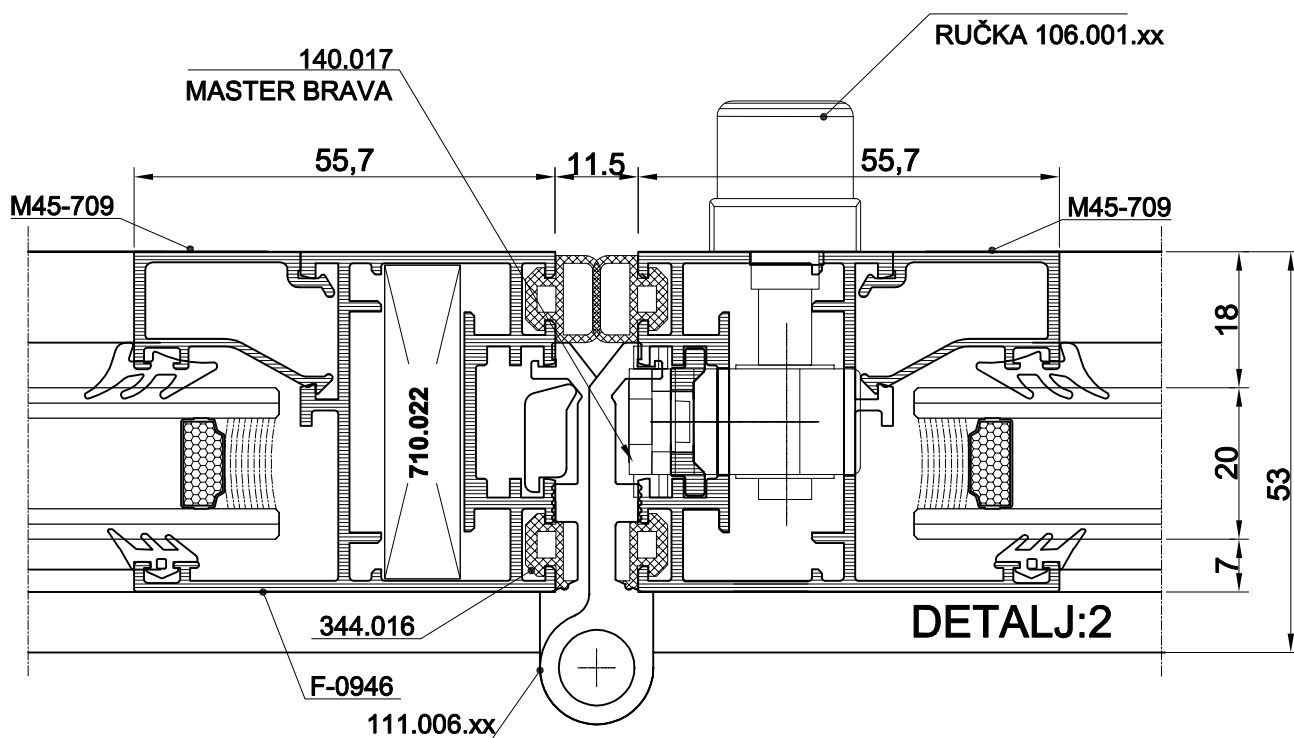
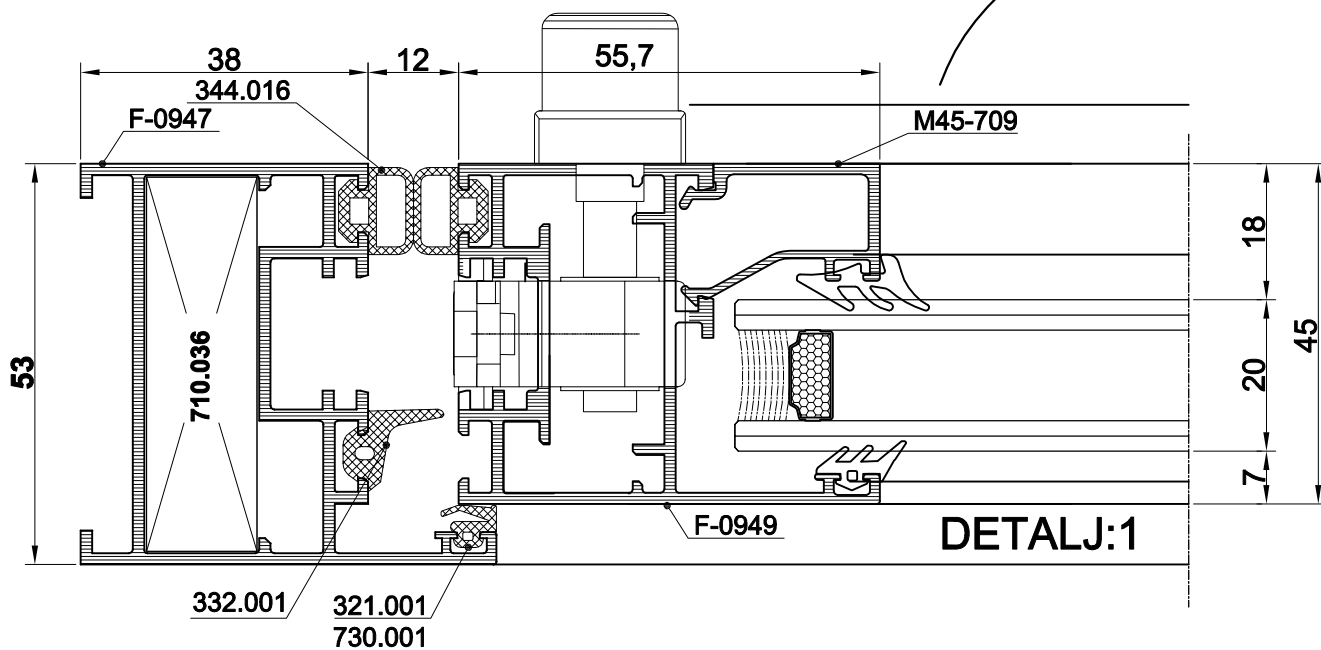
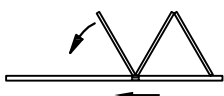
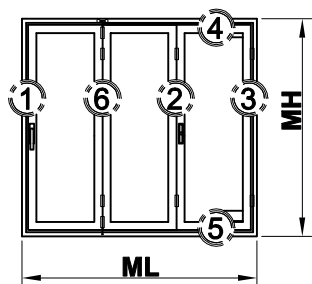


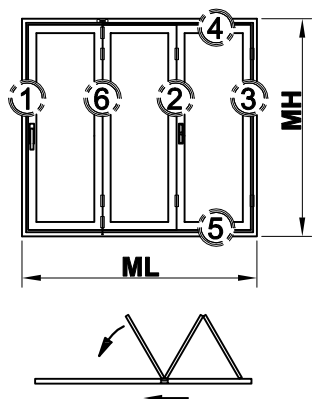




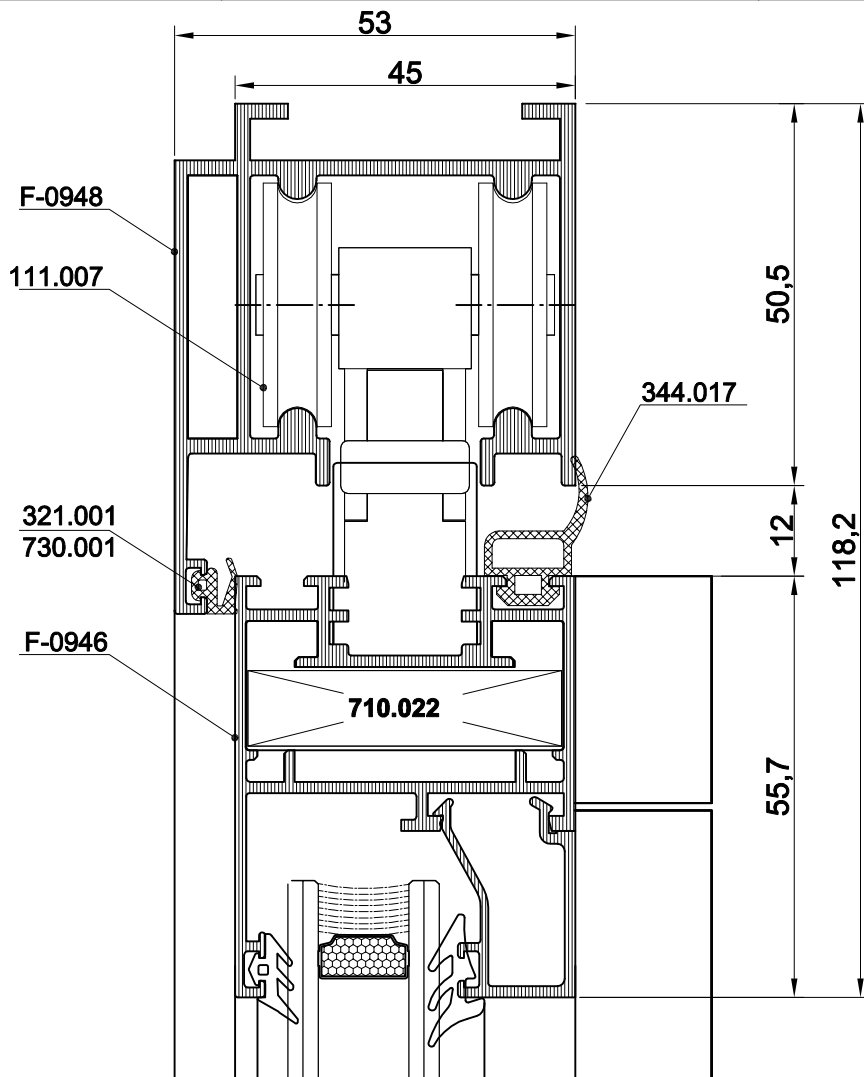




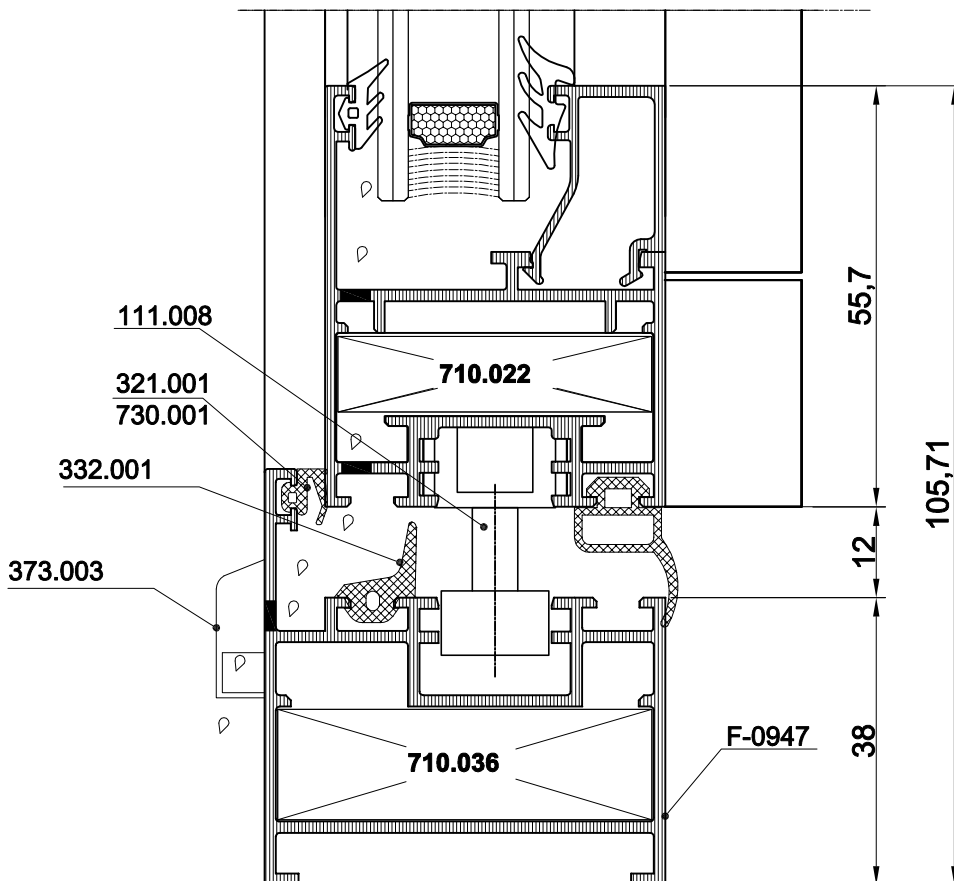


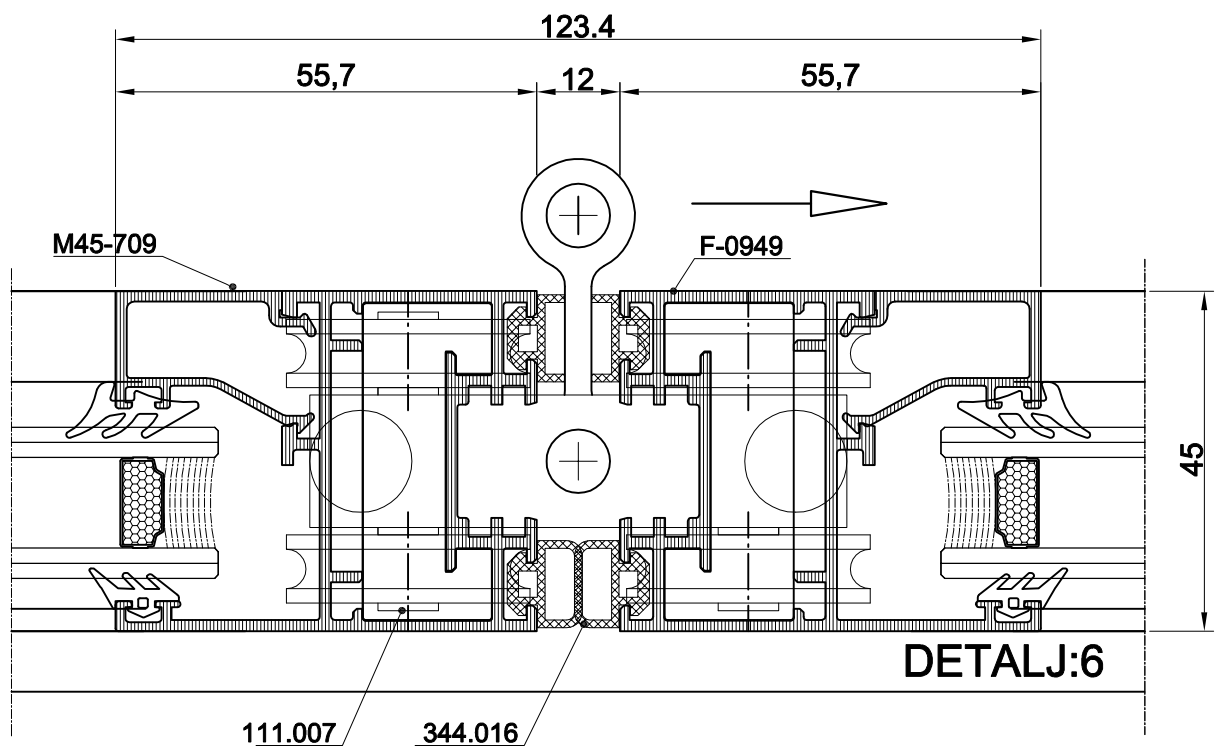
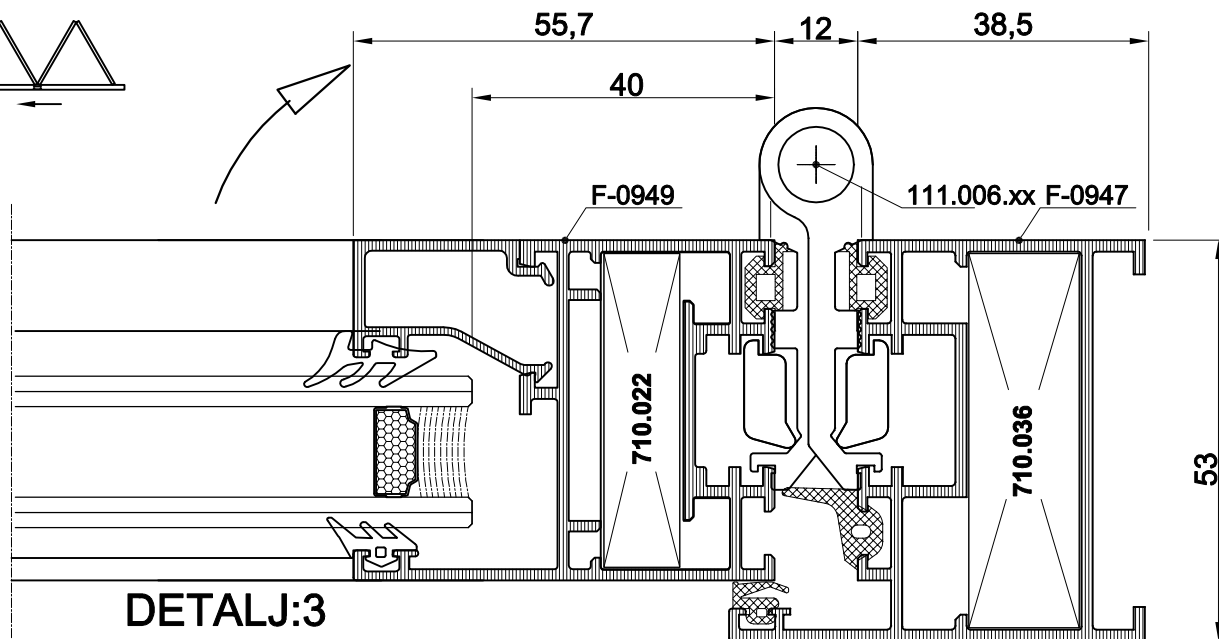
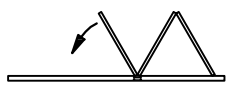
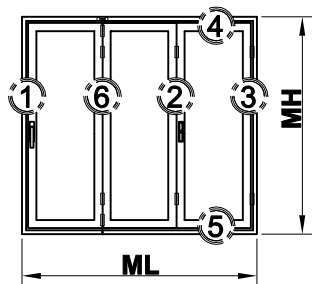


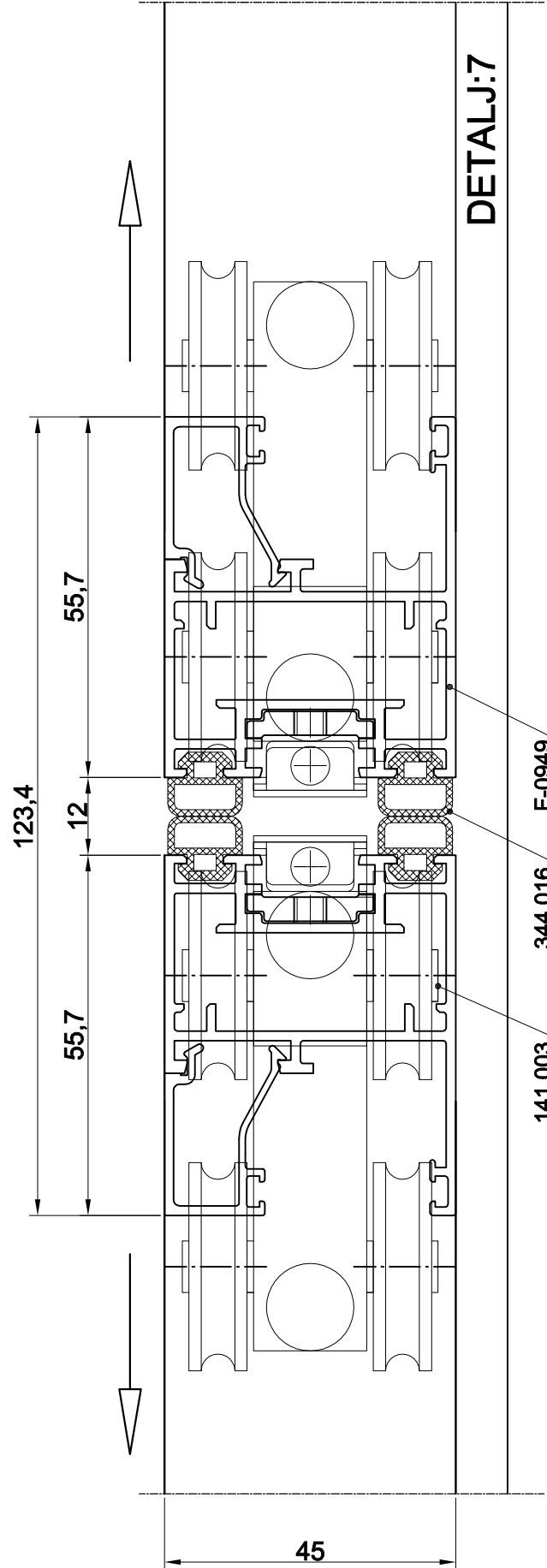
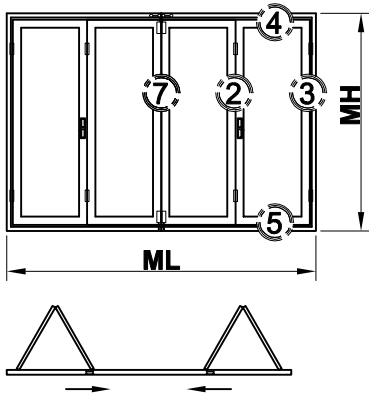
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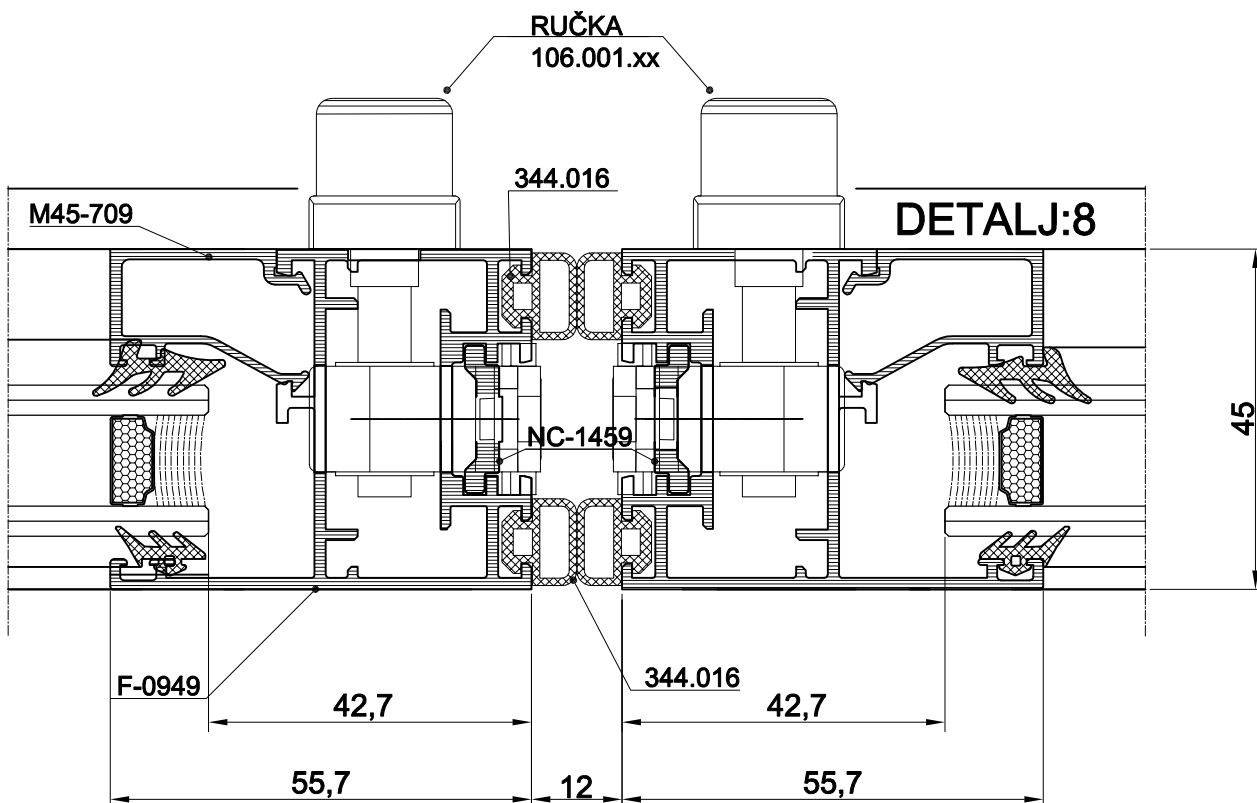
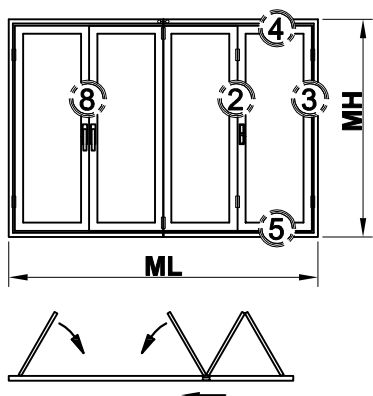


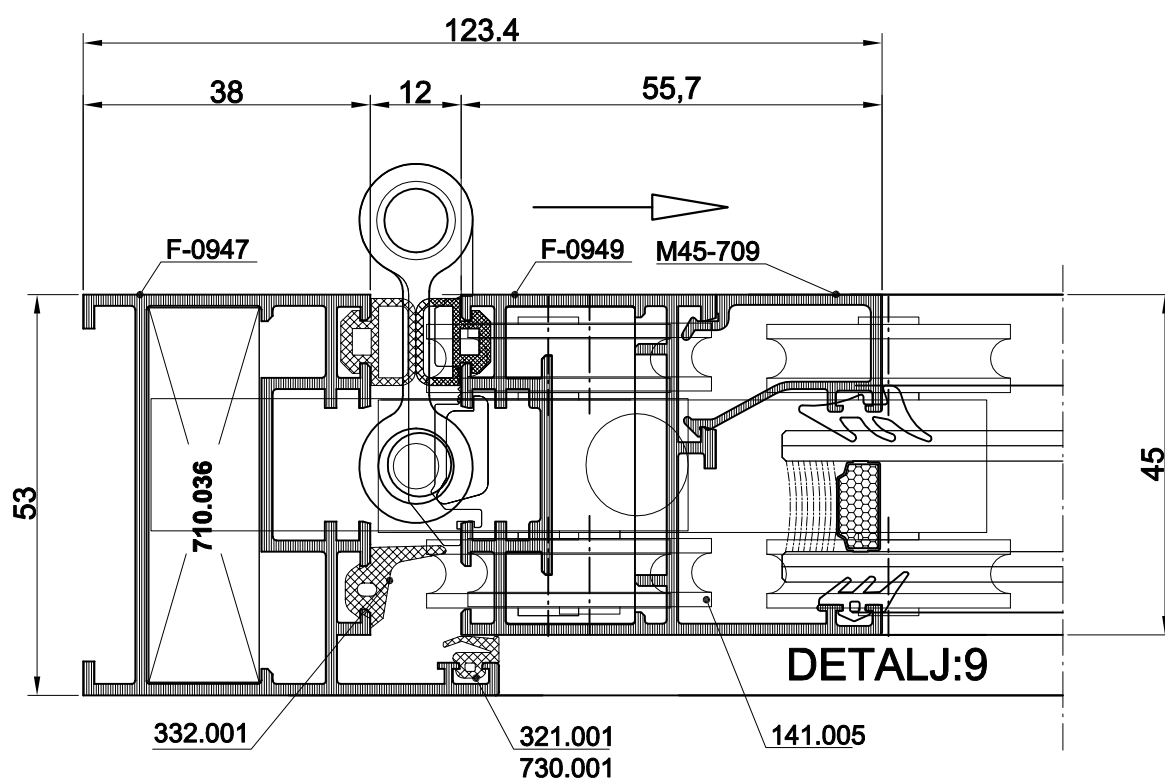
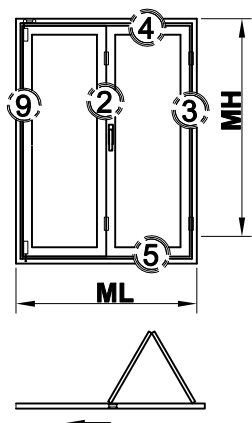
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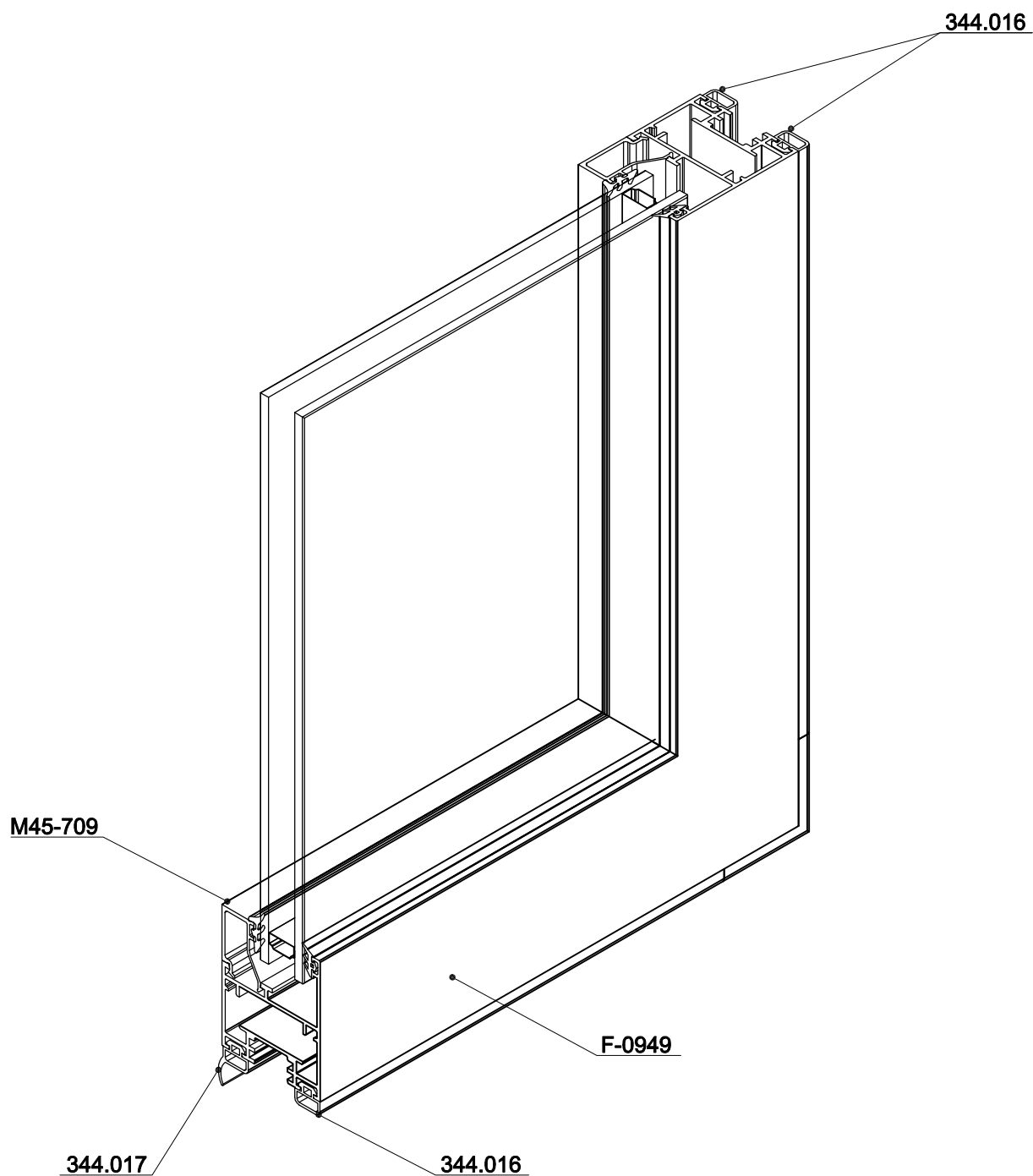
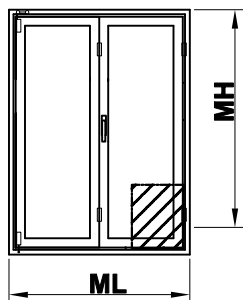




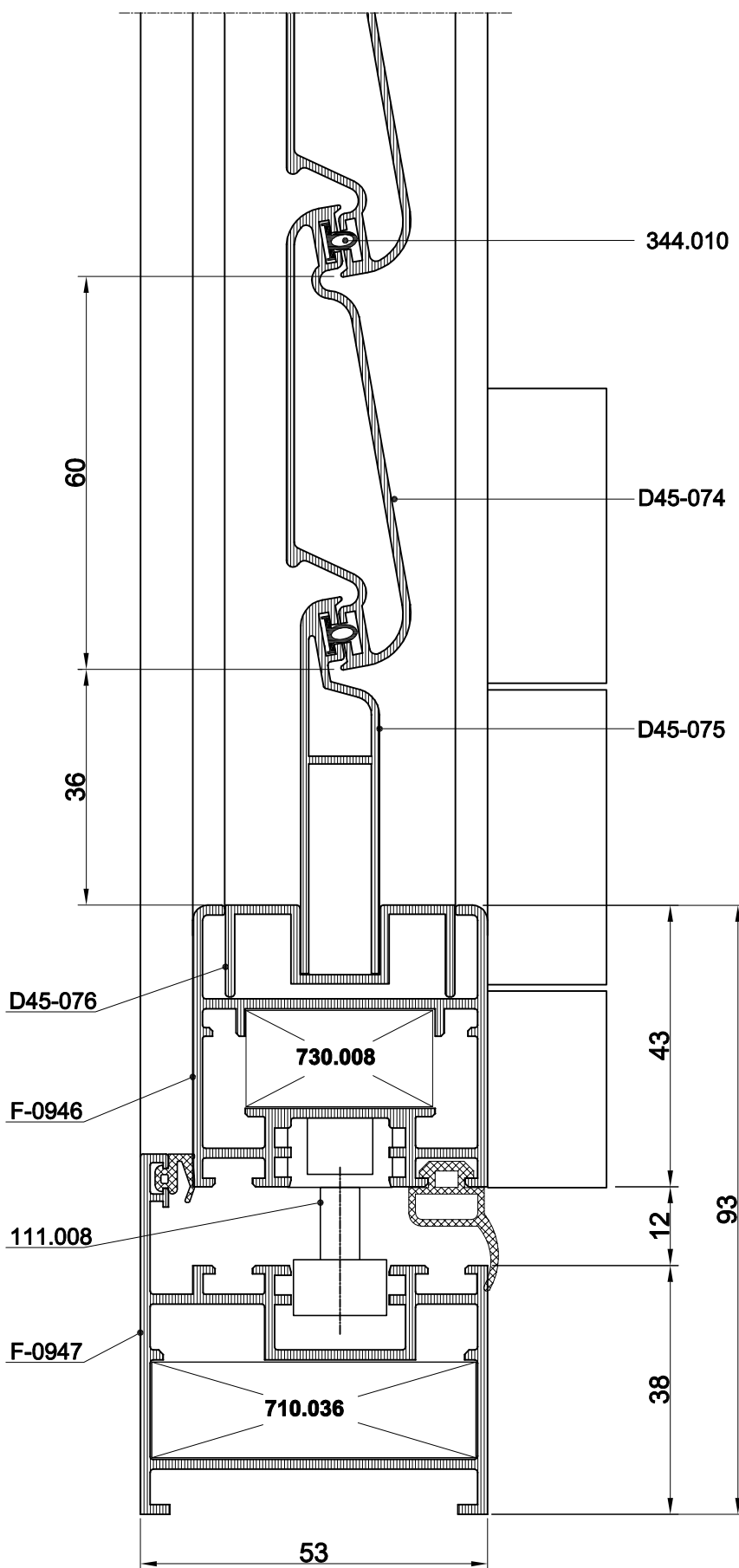
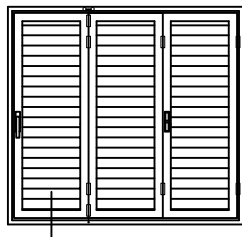


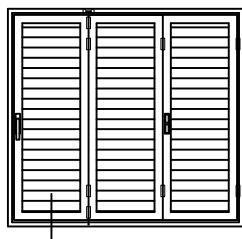




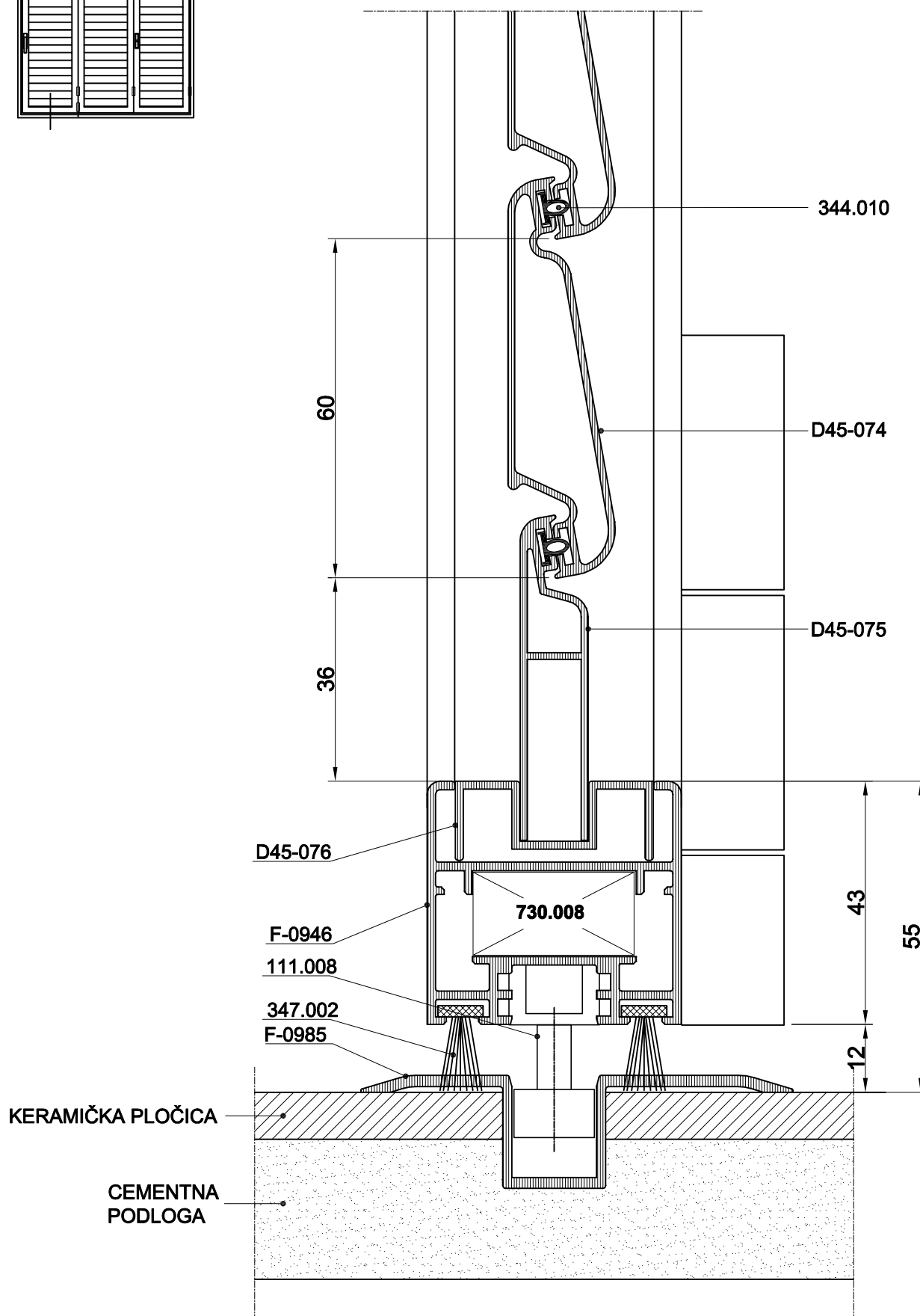


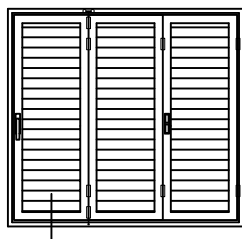
-TIP 1-



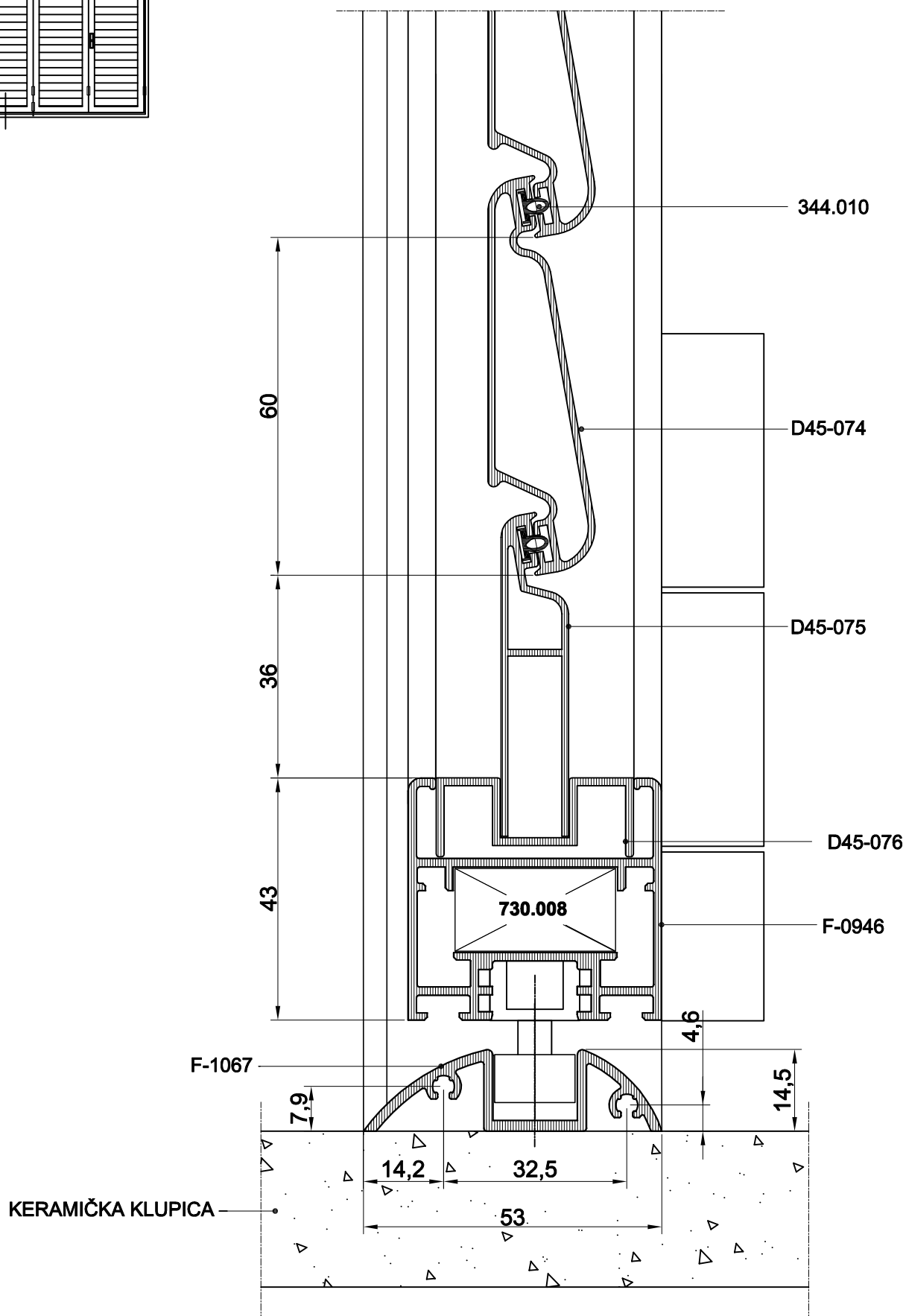


-TIP 2-

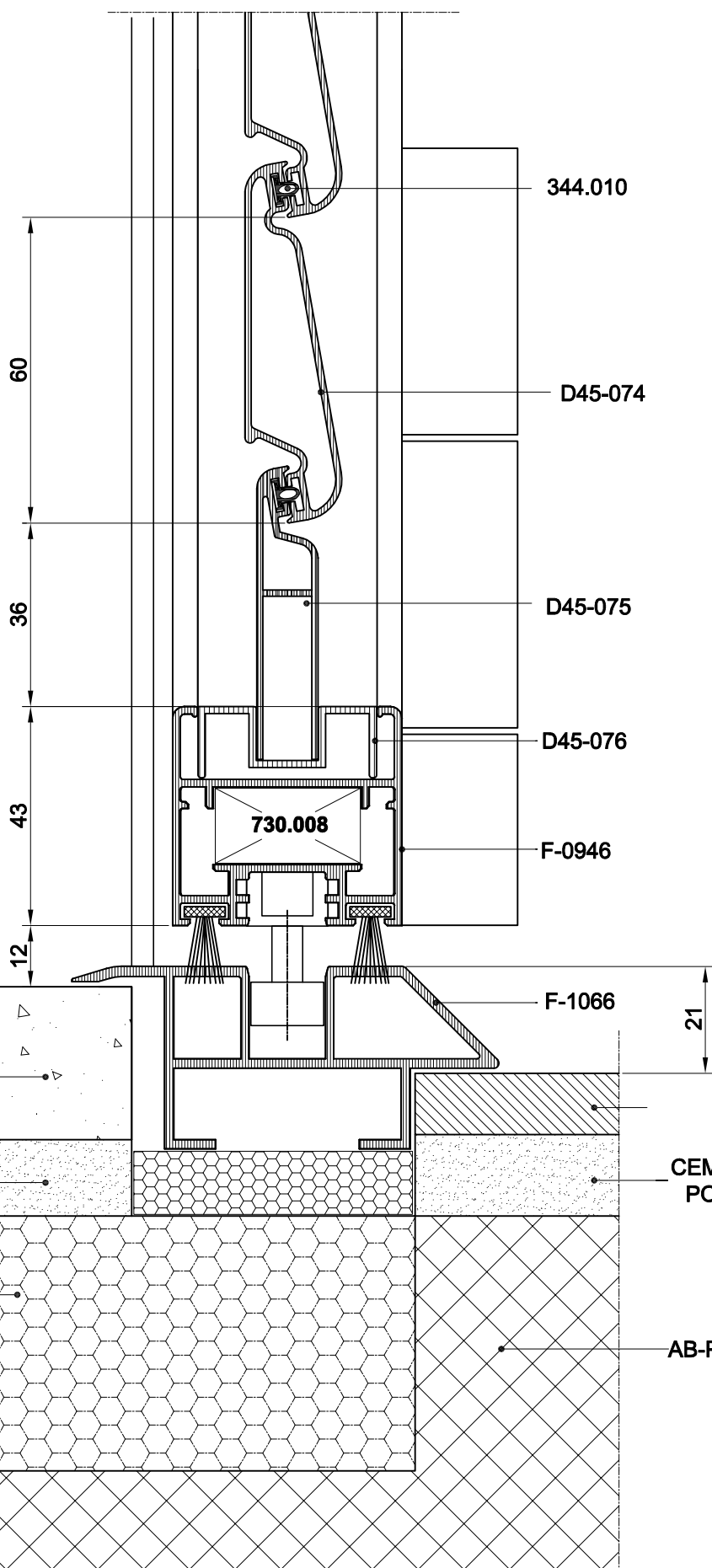
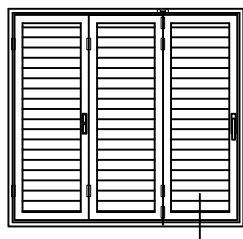




-TIP 3-



-TIP 4-



KAMENA
KLUPICA

CEMENTNA
PODLOGA

TERMOIZOLACIJA

344.010

D45-074

D45-075

D45-076

F-0946

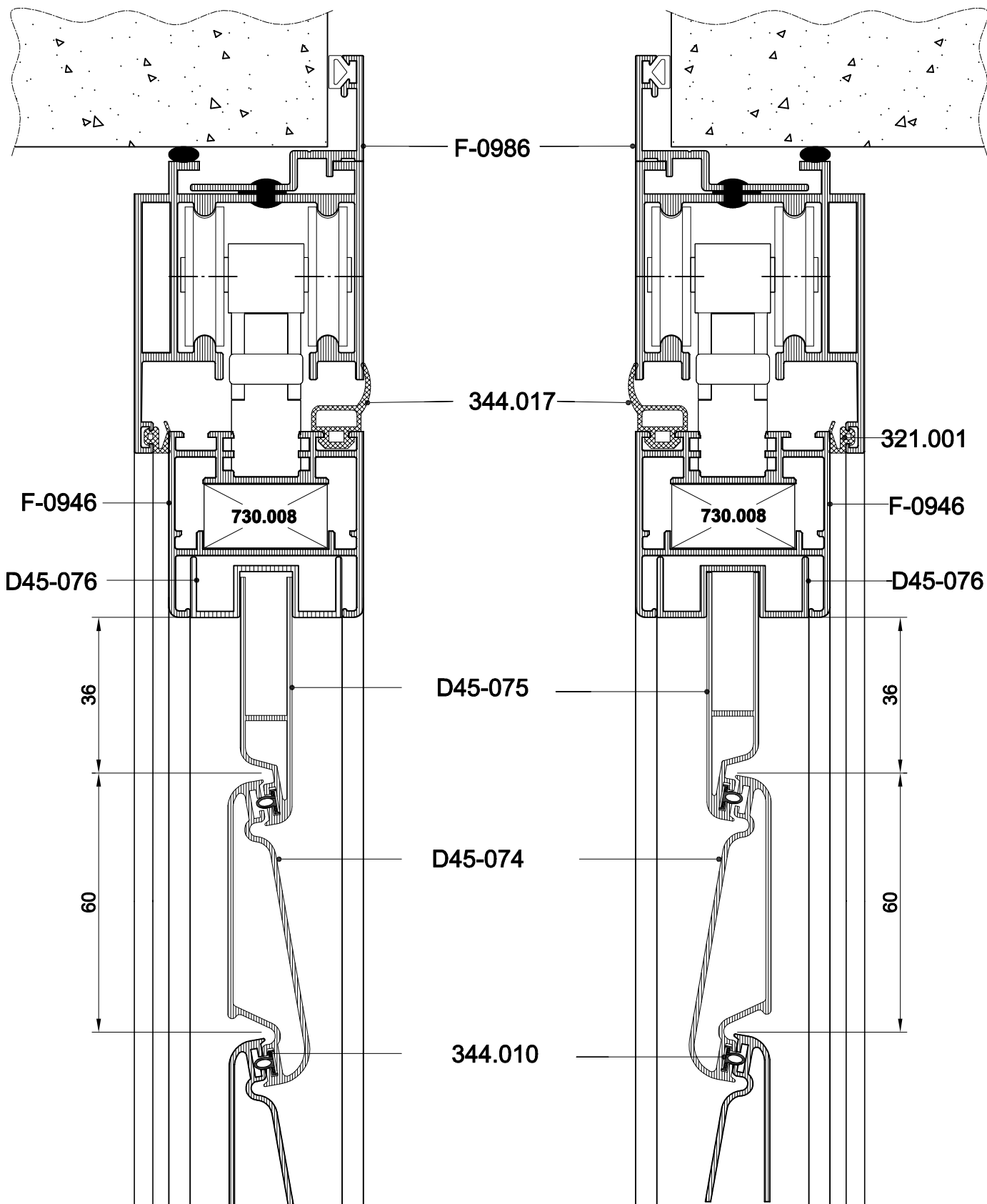
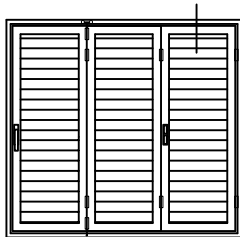
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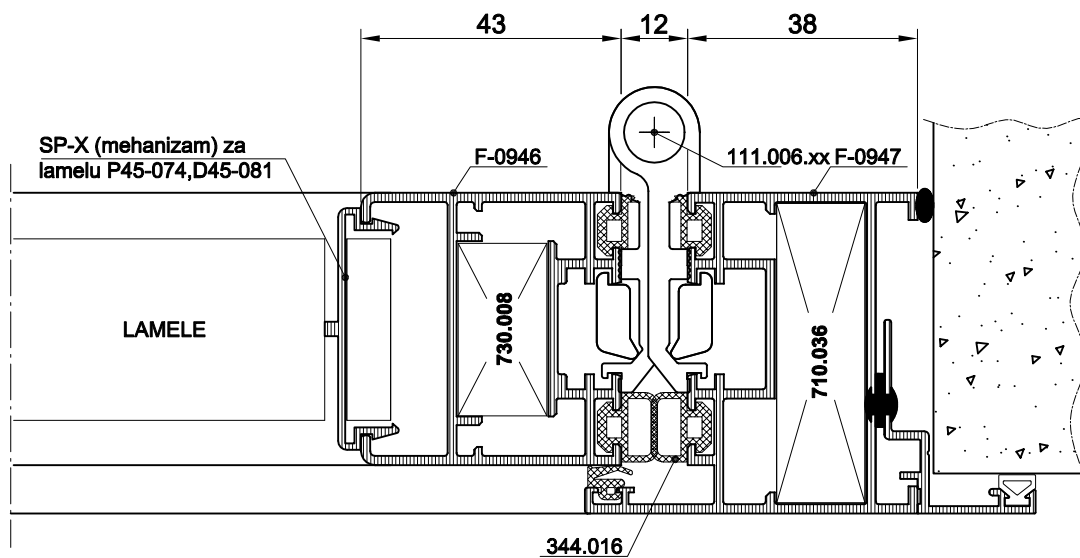
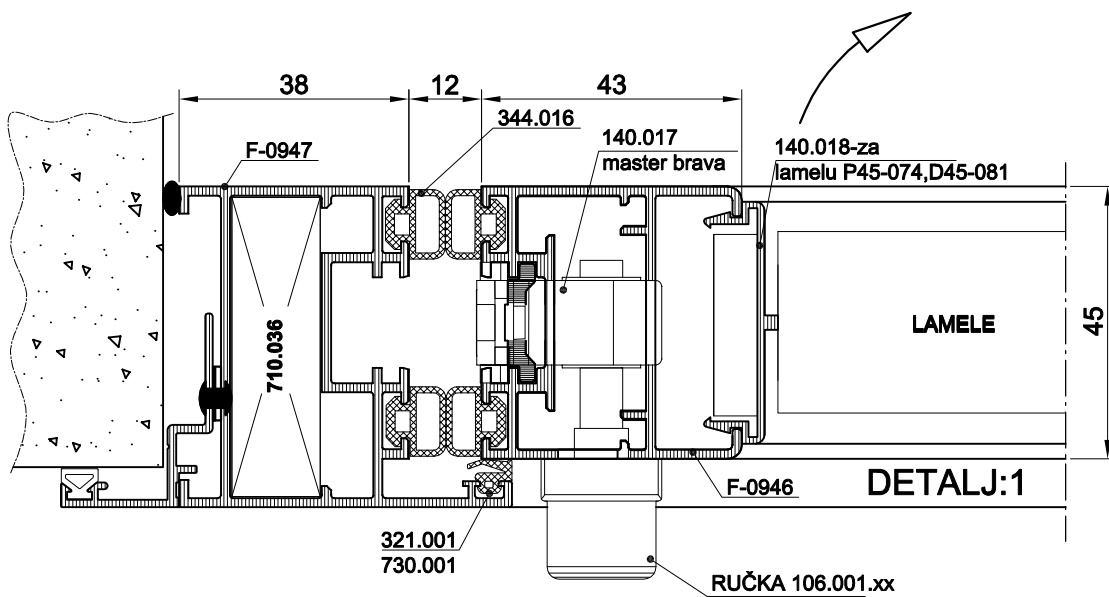
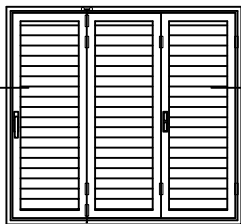
F-1066

21

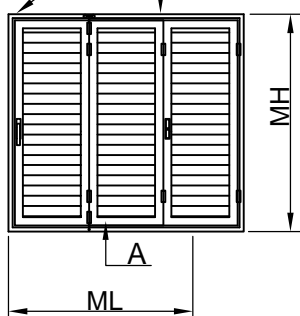
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PODLOGA

AB-PLOČA

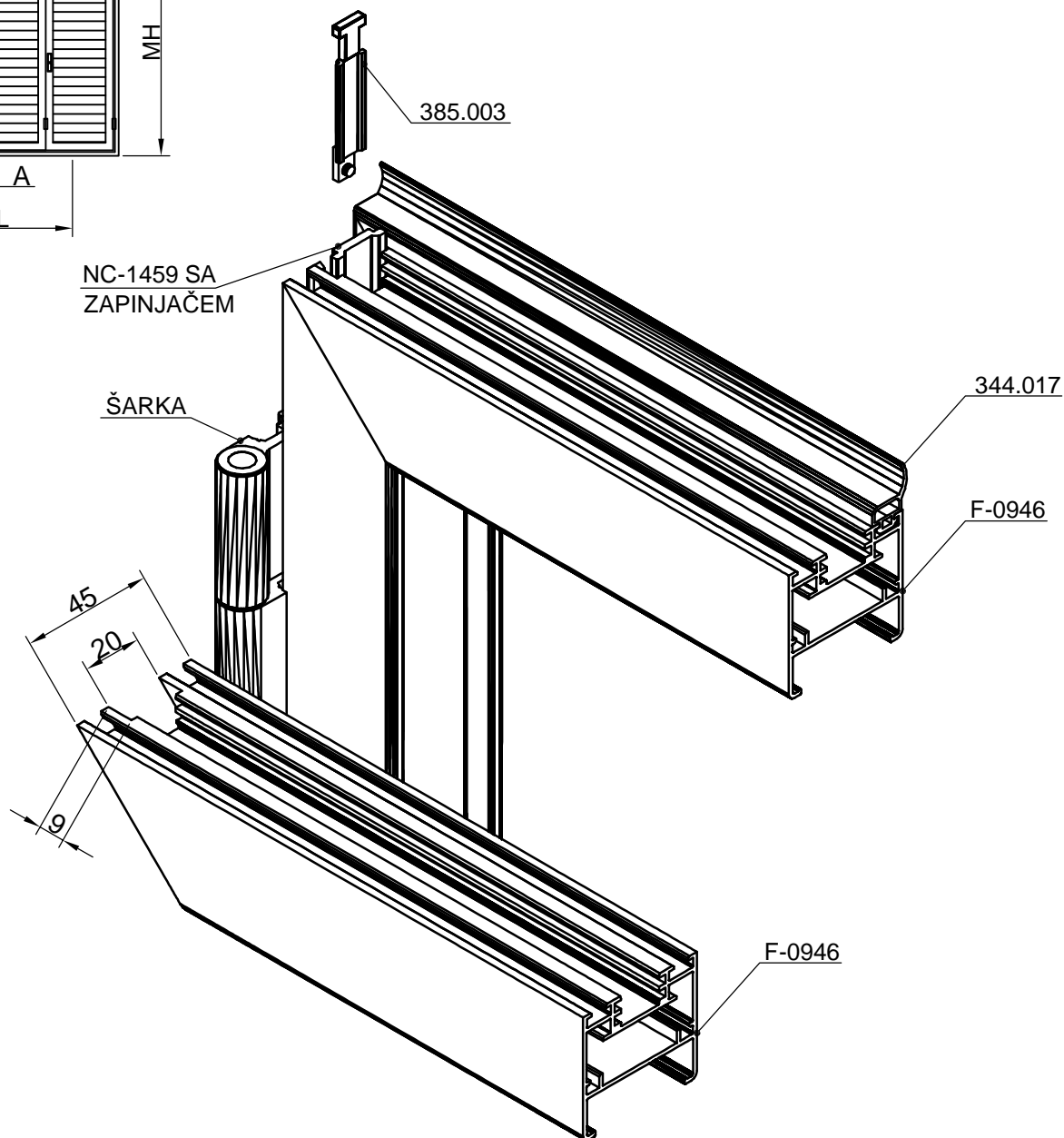




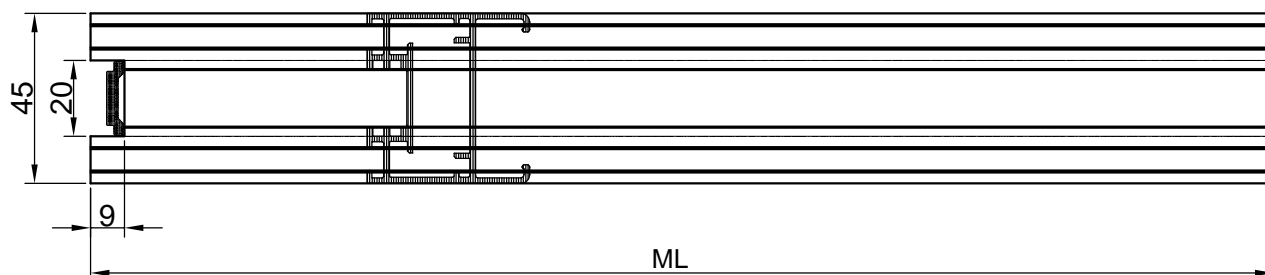
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klizačem NC-1459

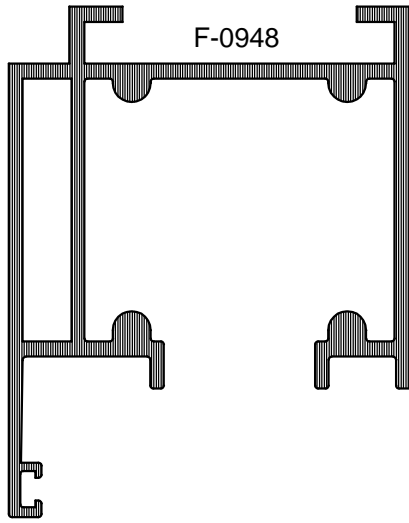


DETALJ - A

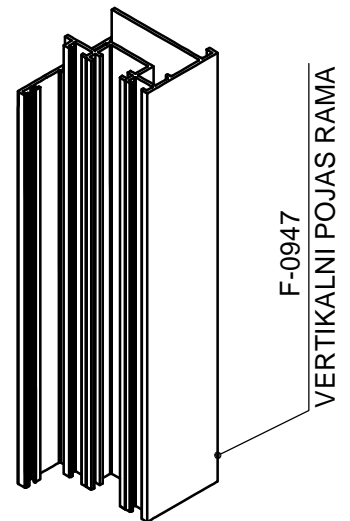
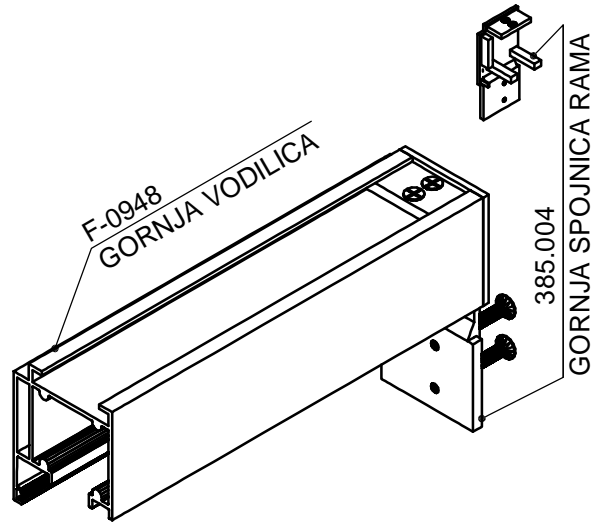
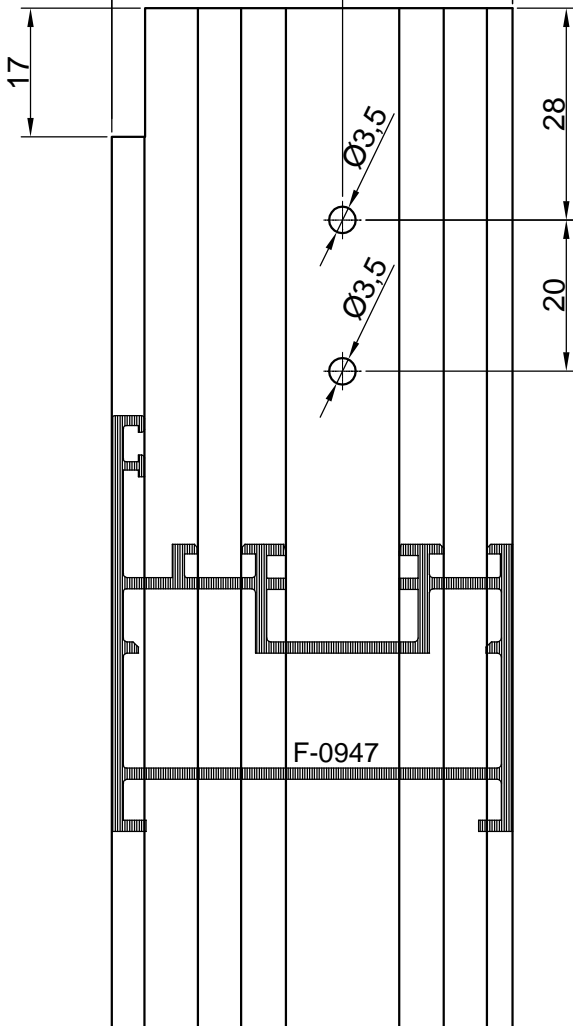
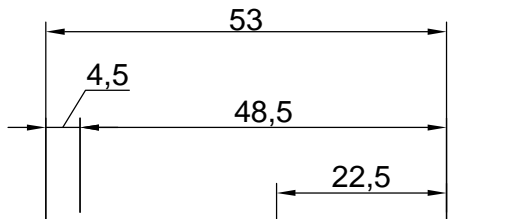
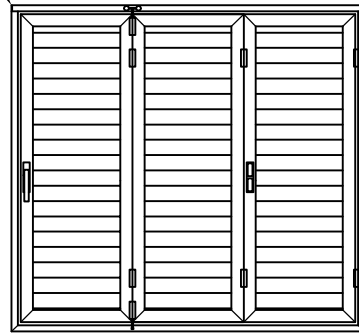


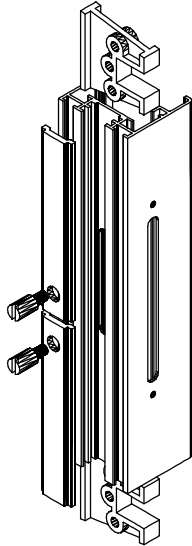
F-0946 GORNJI POJAS KRILA



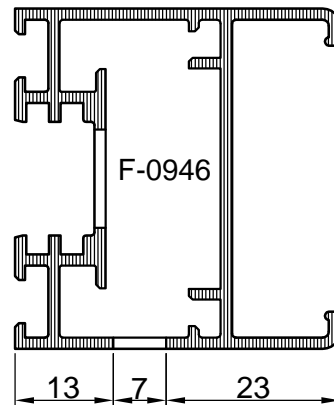
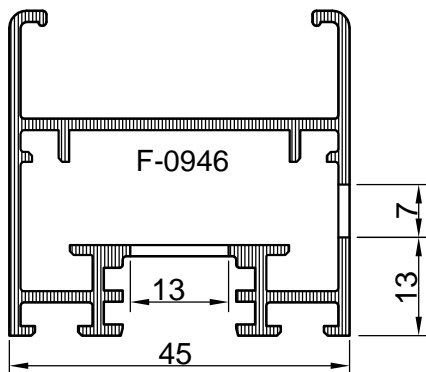
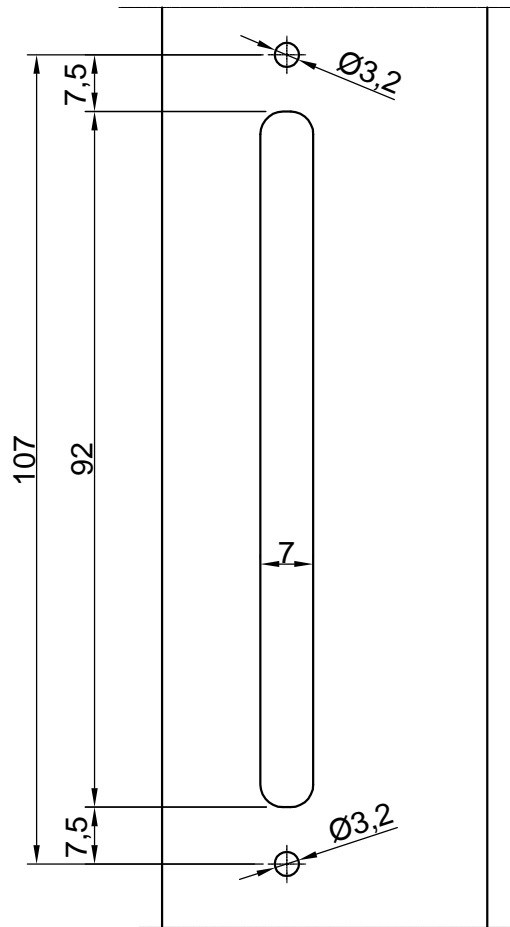
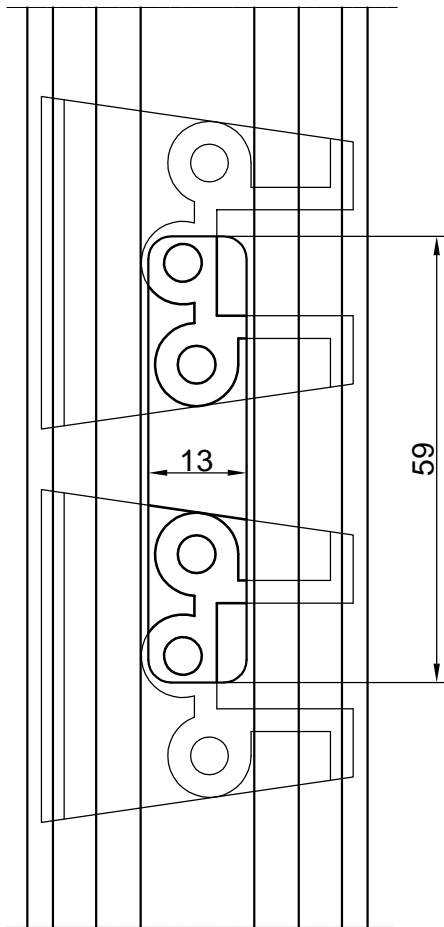


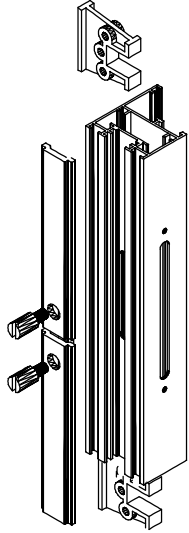
A - spajanje gornje vodilice
i vertikalnog pojasa rama



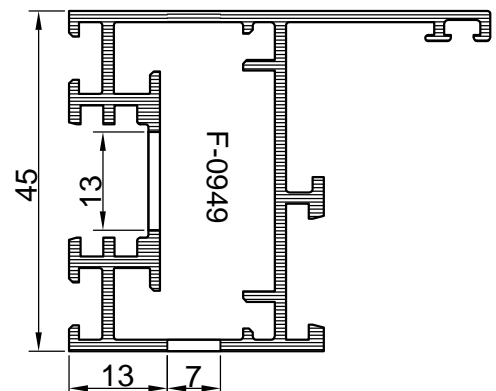
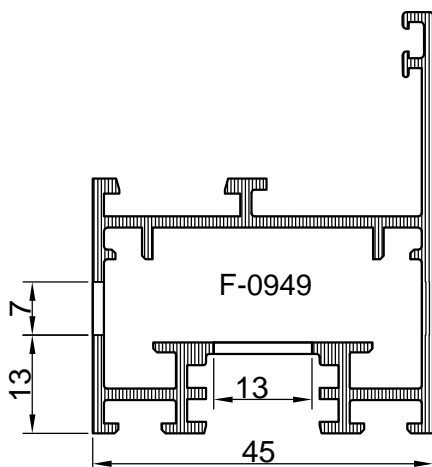
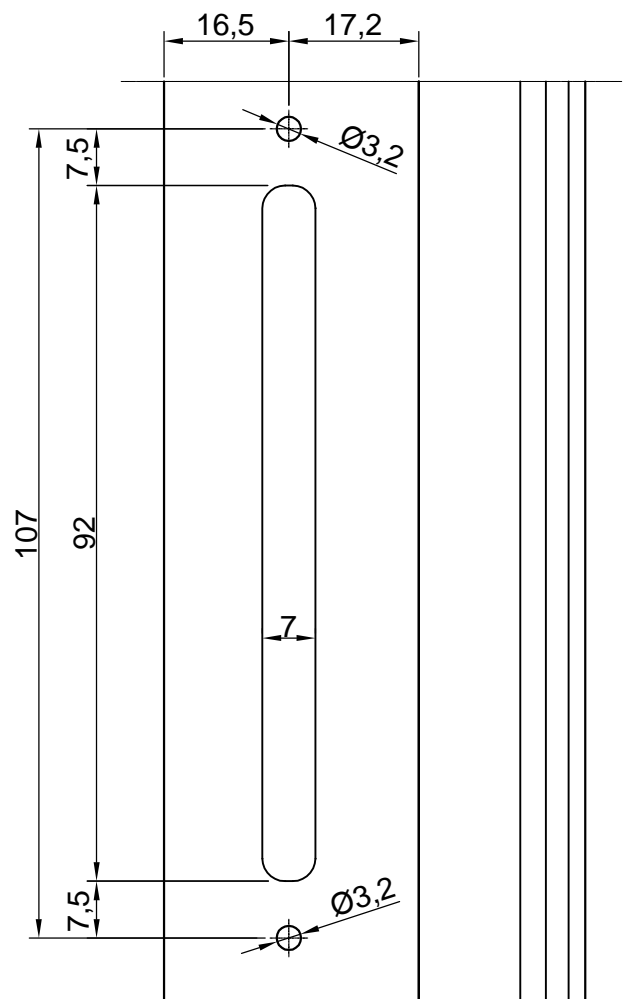
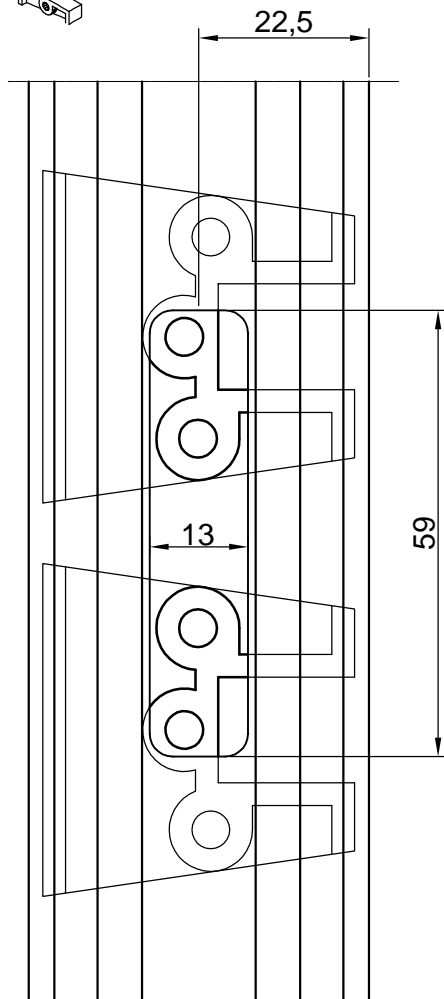


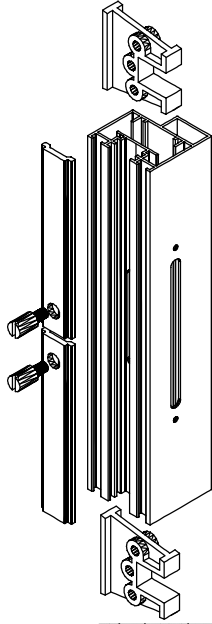
OBRADA PROFILA F-0946
ZA BRAVU 100.000.xx



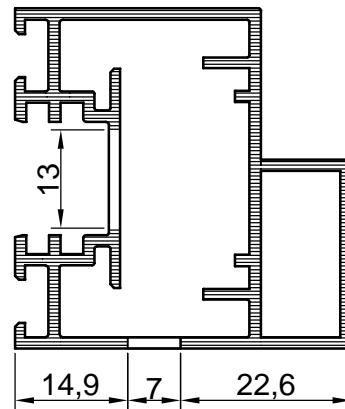
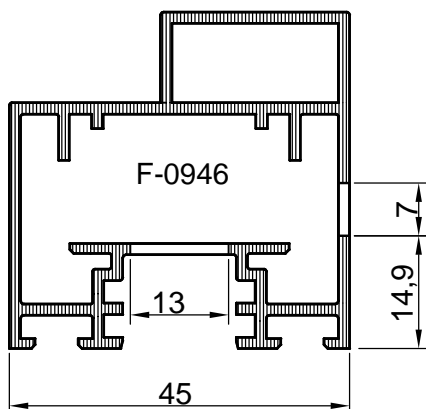
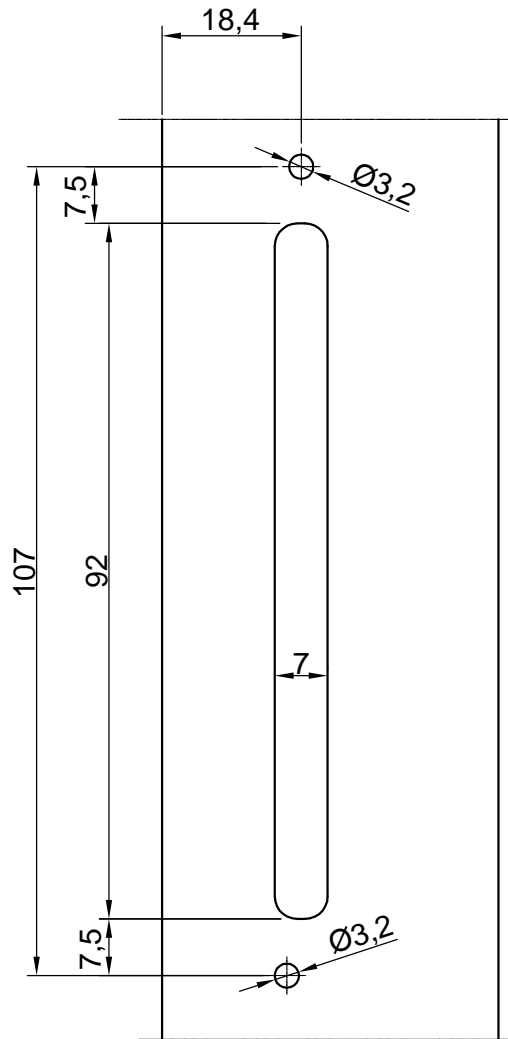
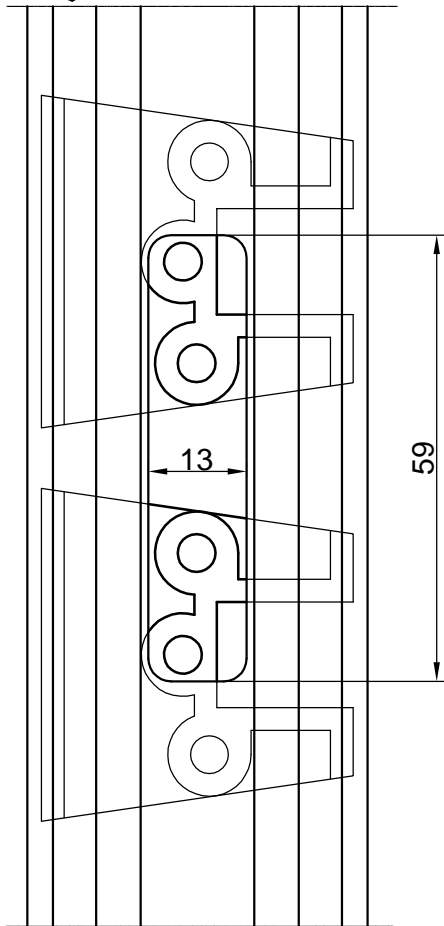


OBRADA PROFILA F-0949
ZA BRAVU 100.000.xx



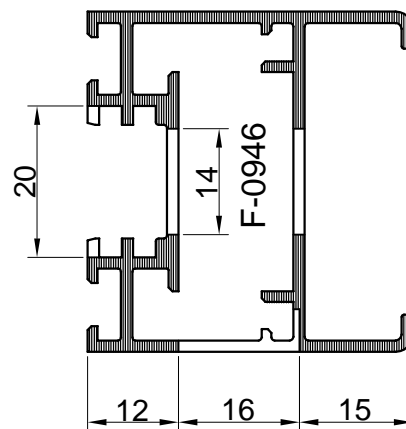
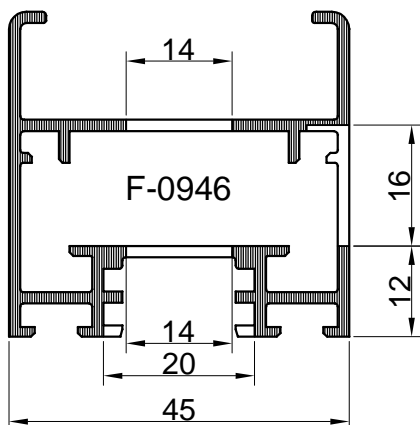
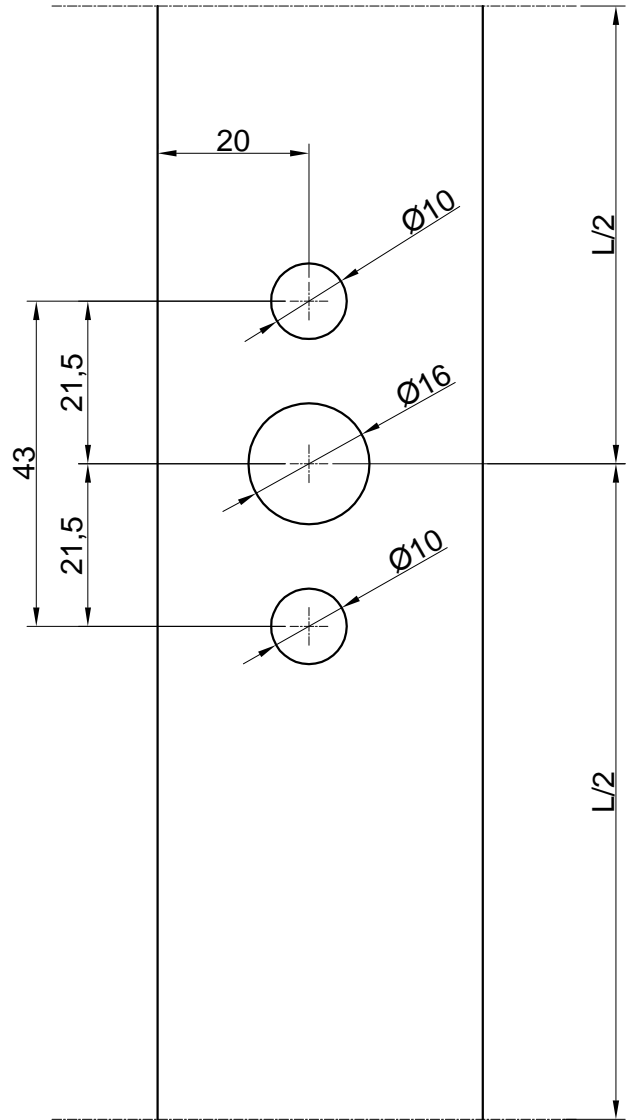
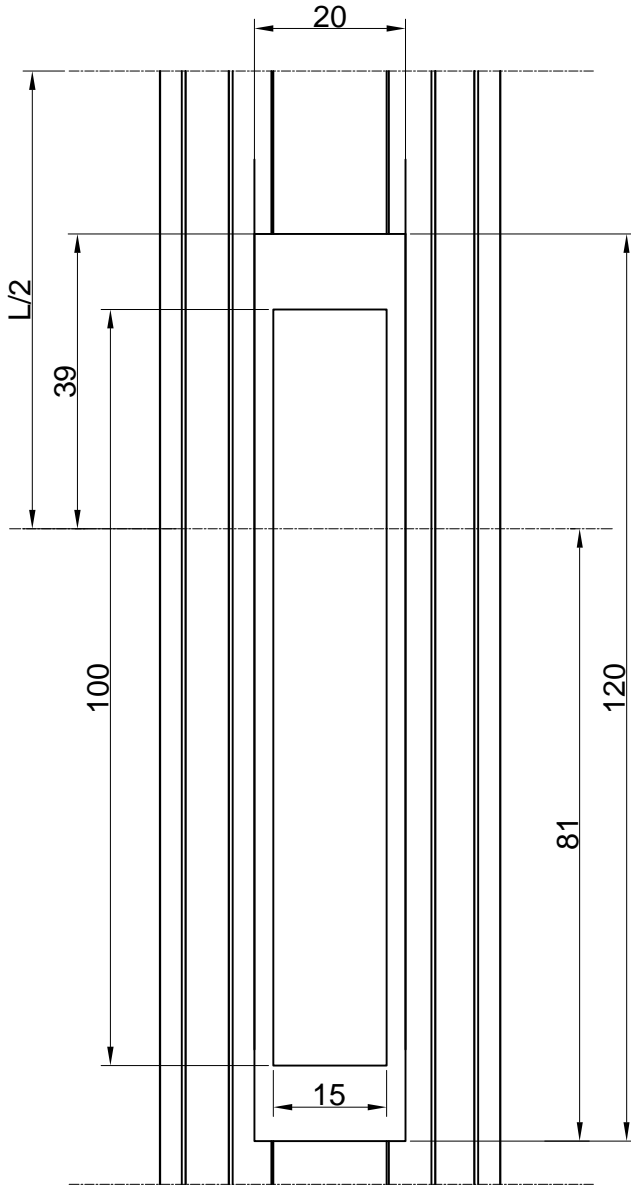


OBRADA PROFILA F-0999
ZA BRAVU 100.000.xx

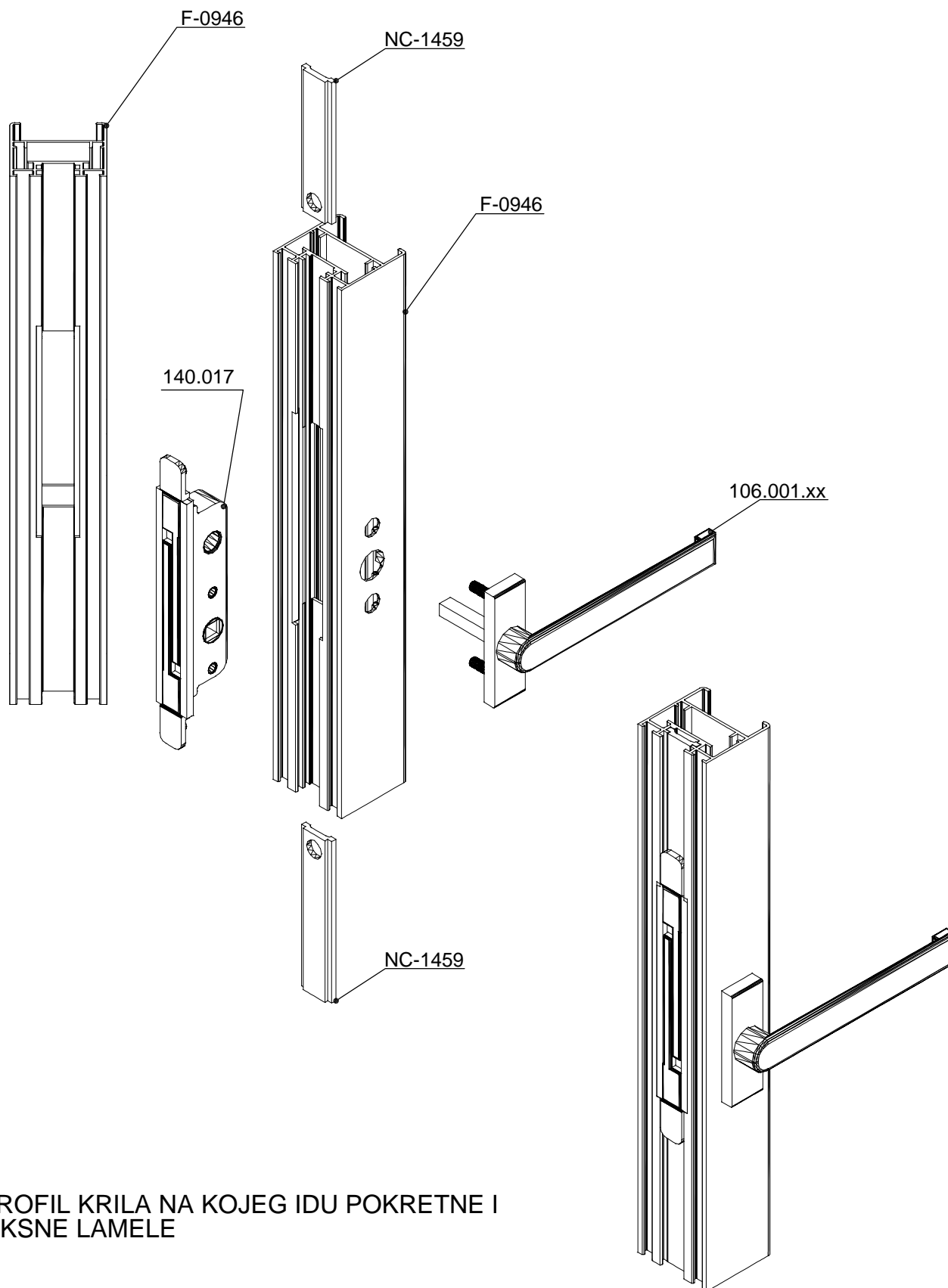


OBRADA PROFILA F-0946
ZA BRAVU MASTER

OBRADA PROFILA F-0946
ZA RUČKU 106.001.xx

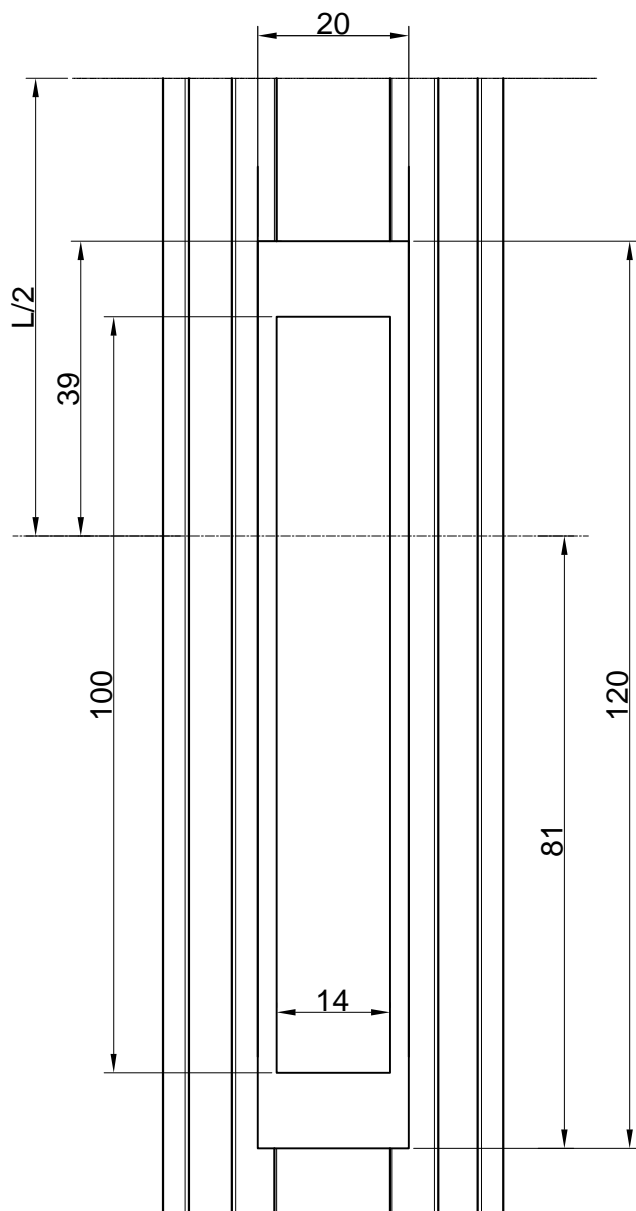


OBRADA PROFILA F- 0946
ZA RUČKU 106.001.xx UZ KOJU
IDE MEHANIZAM ZA KLJUČANJE MASTER 140.017

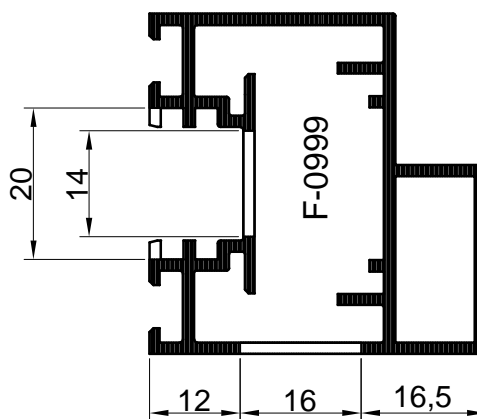
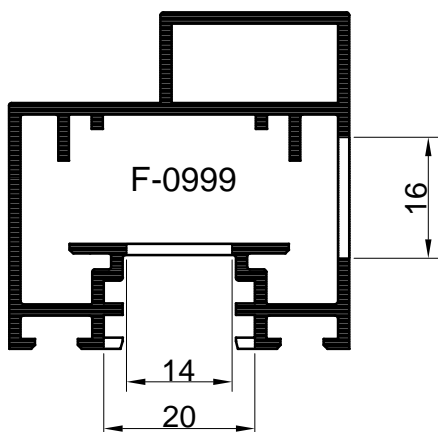
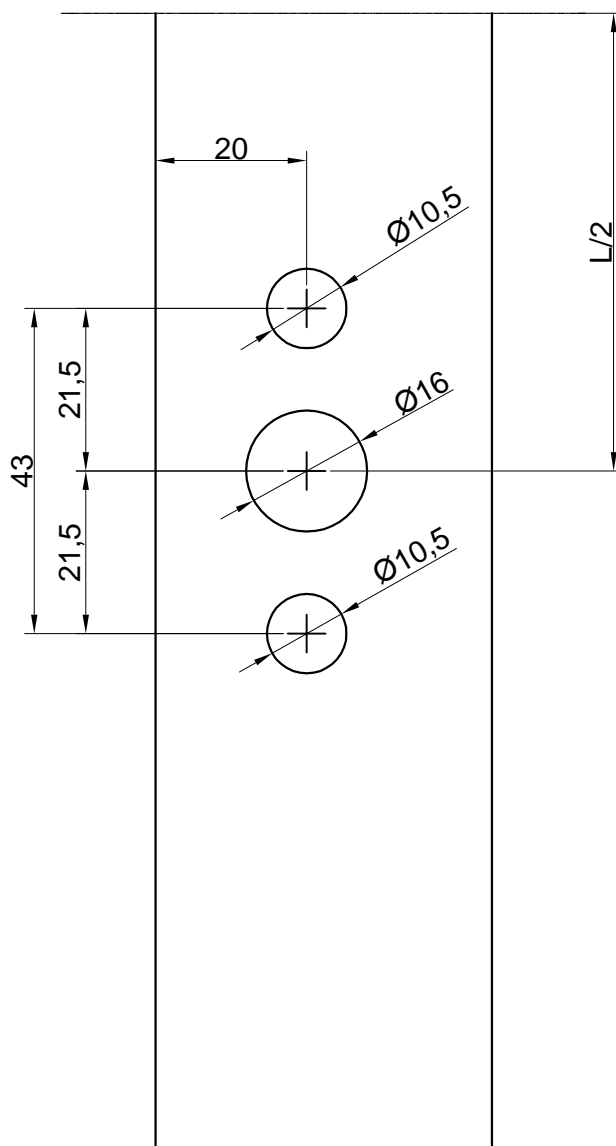


-PROFIL KRILA NA KOJEG IDU POKRETNE I
FIKSNE LAMELE

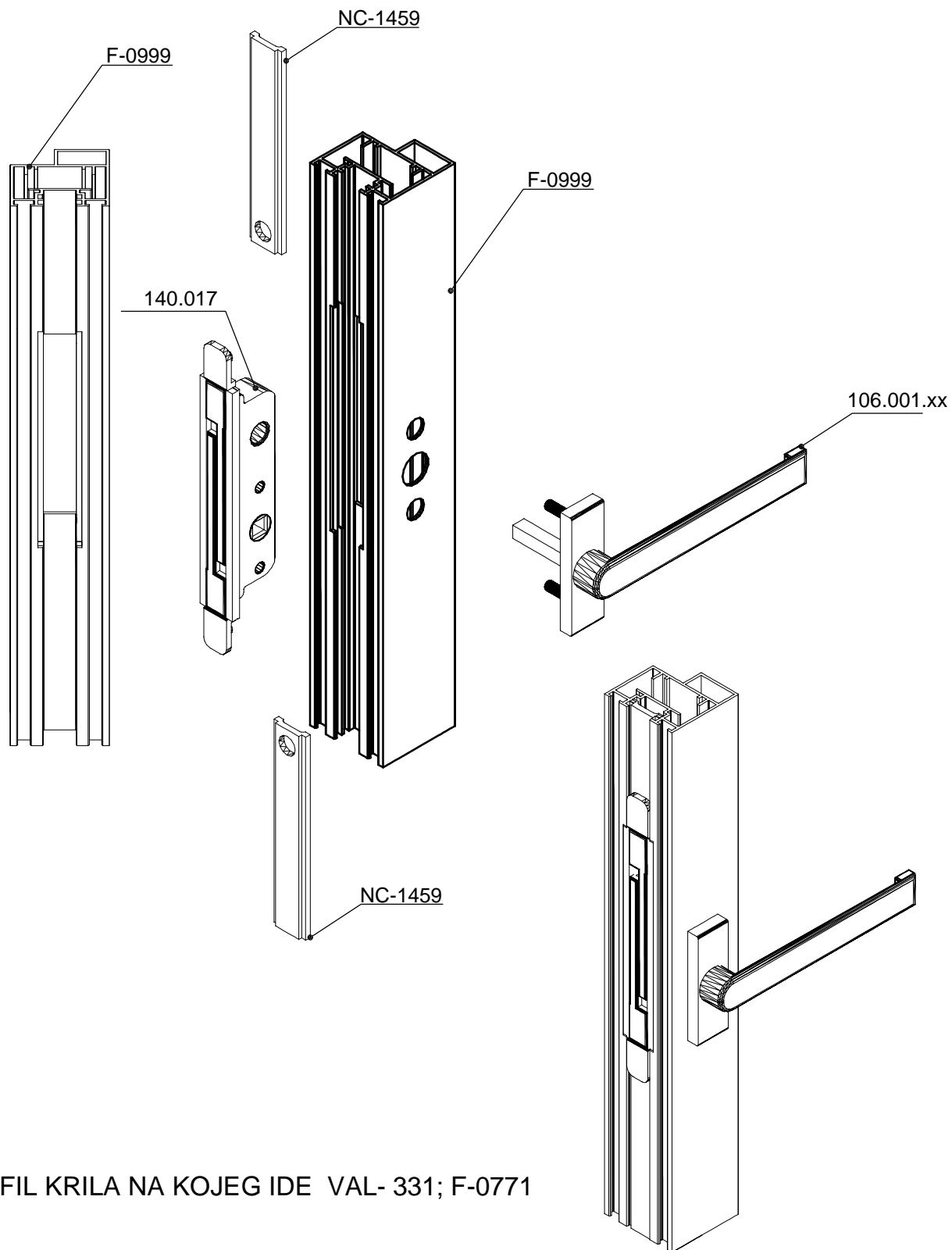
OBRADA PROFILA F-0999
ZA BRAVU MASTER



OBRADA PROFILA F- 0999
ZA RUČKU 106.001.xx



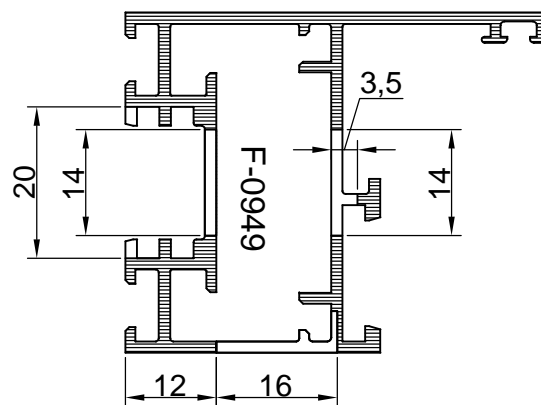
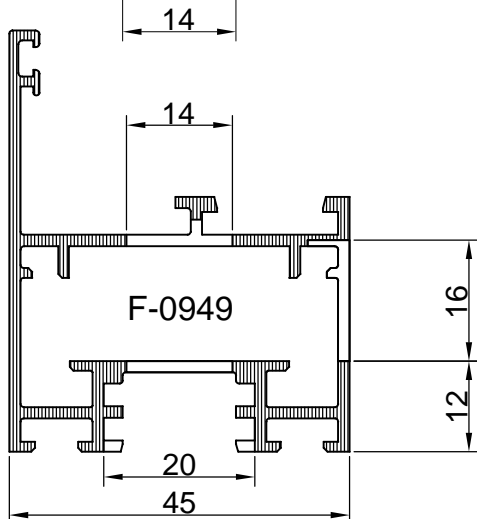
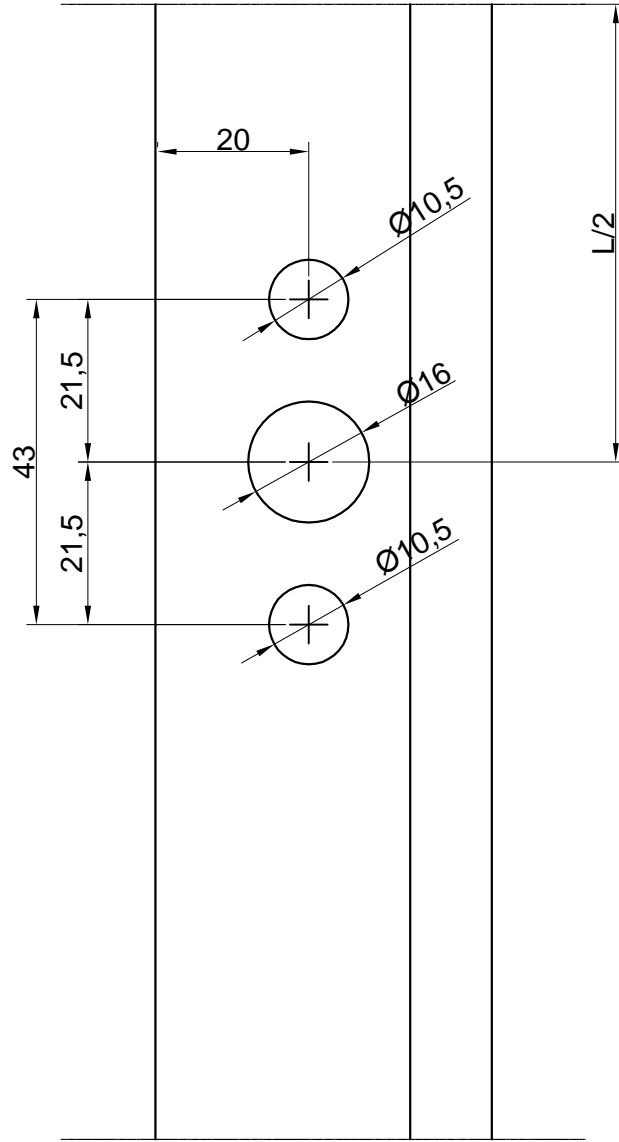
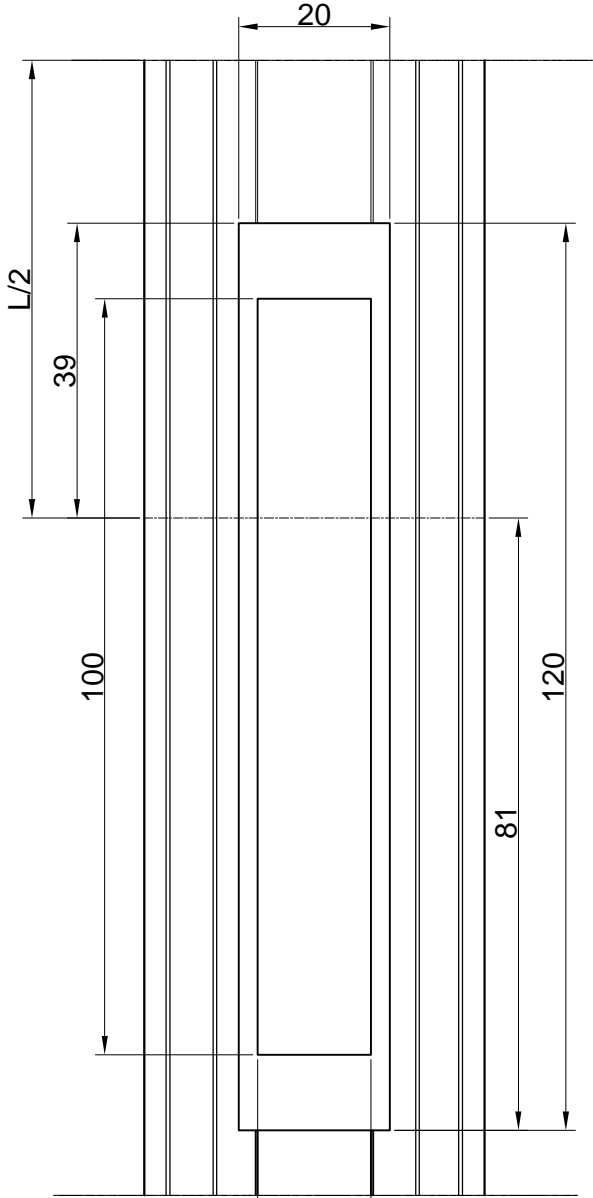
OBRADA PROFILA F- 0999
ZA RUČKU 106.001.xx UZ KOJU
IDE MEHANIZAM ZA KLJUČANJE MASTER 140.017



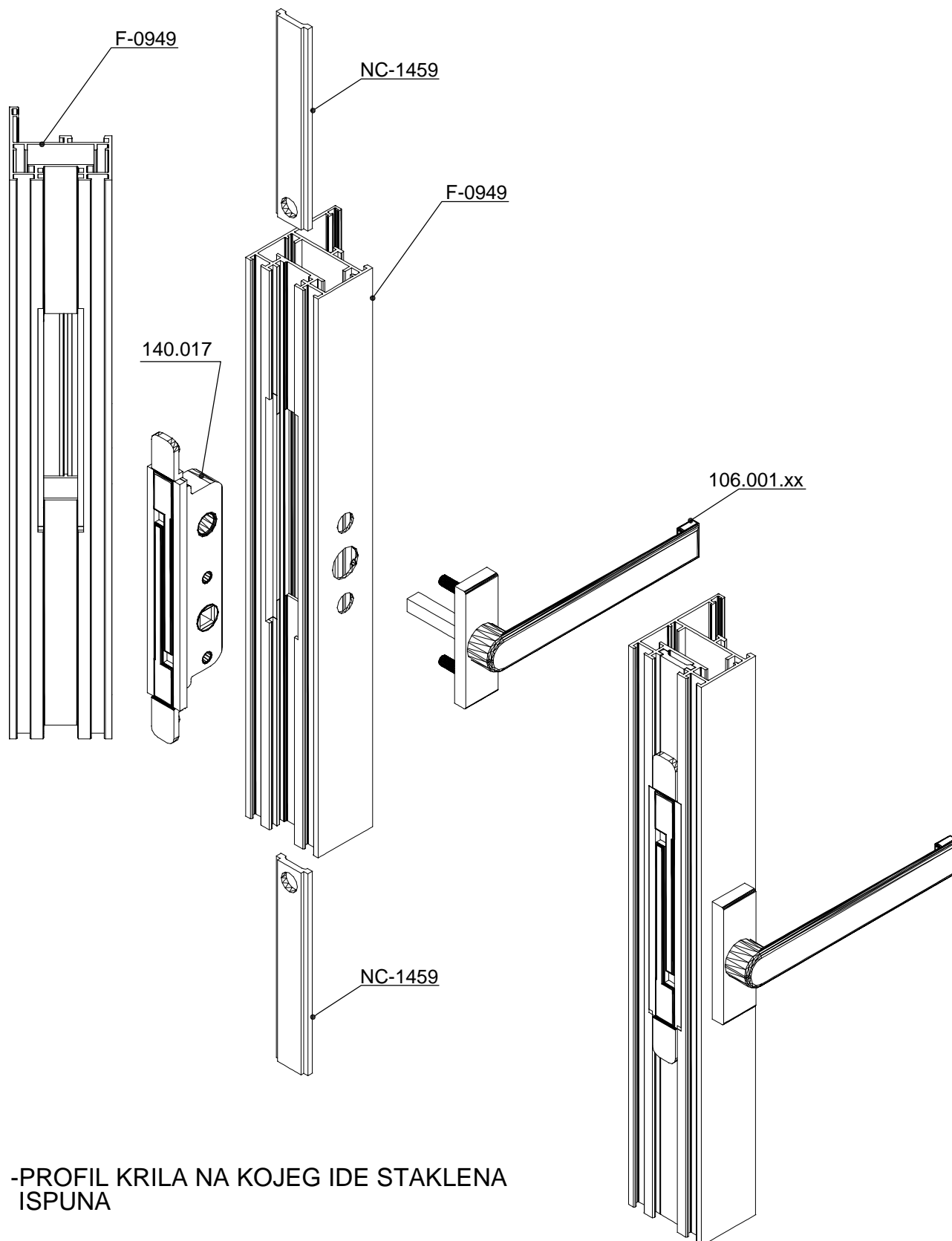
-PROFIL KRILA NA KOJEG IDE VAL- 331; F-0771

OBRADA PROFILA F-0949
ZA BRAVU MASTER

OBRADA PROFILA F- 0949
ZA RUČKU 106.001.xx



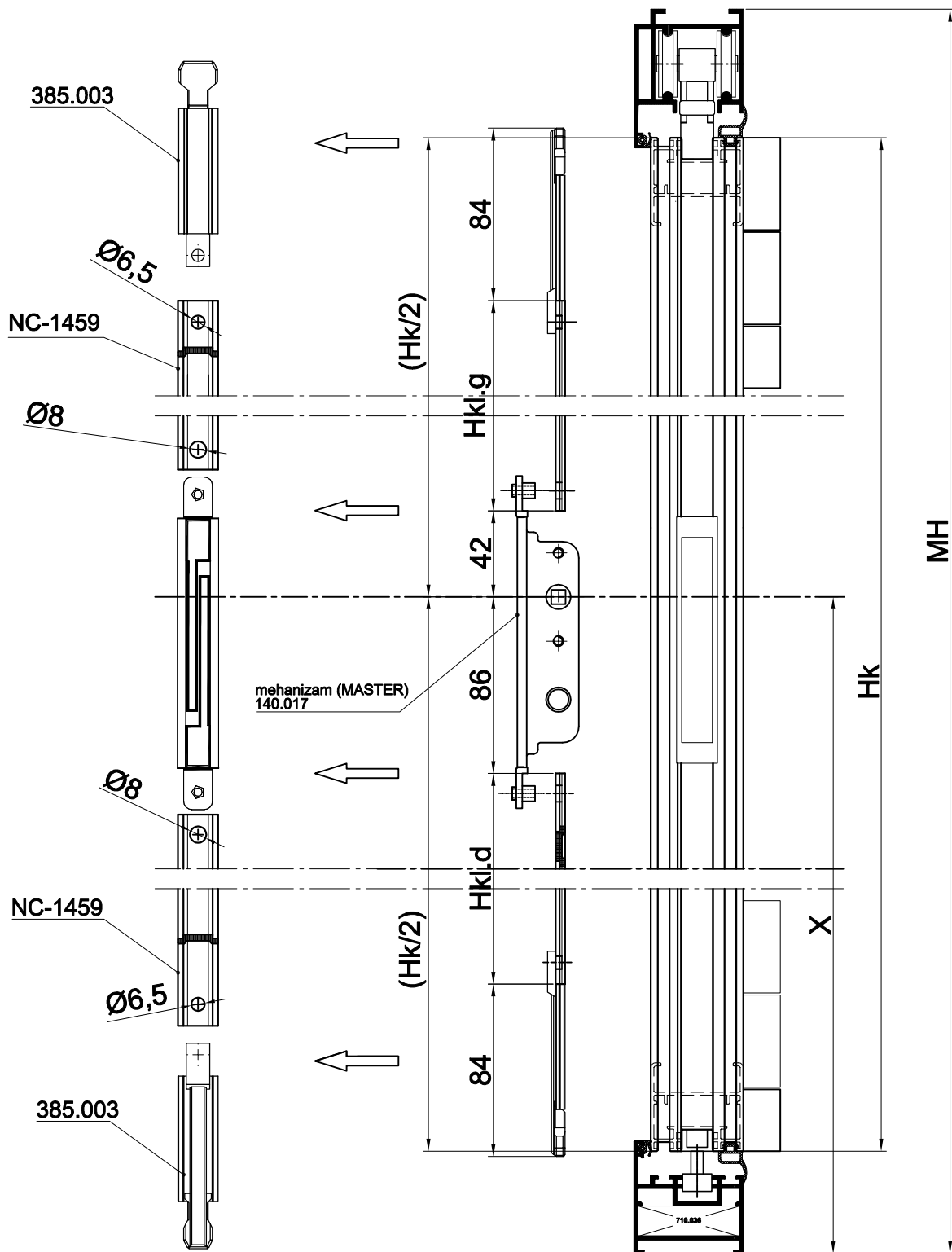
OBRADA PROFILA F- 0949
ZA RUČKU 106.001.xx UZ KOJU
IDE MEHANIZAM ZA KLJUČANJE MASTER 140.017

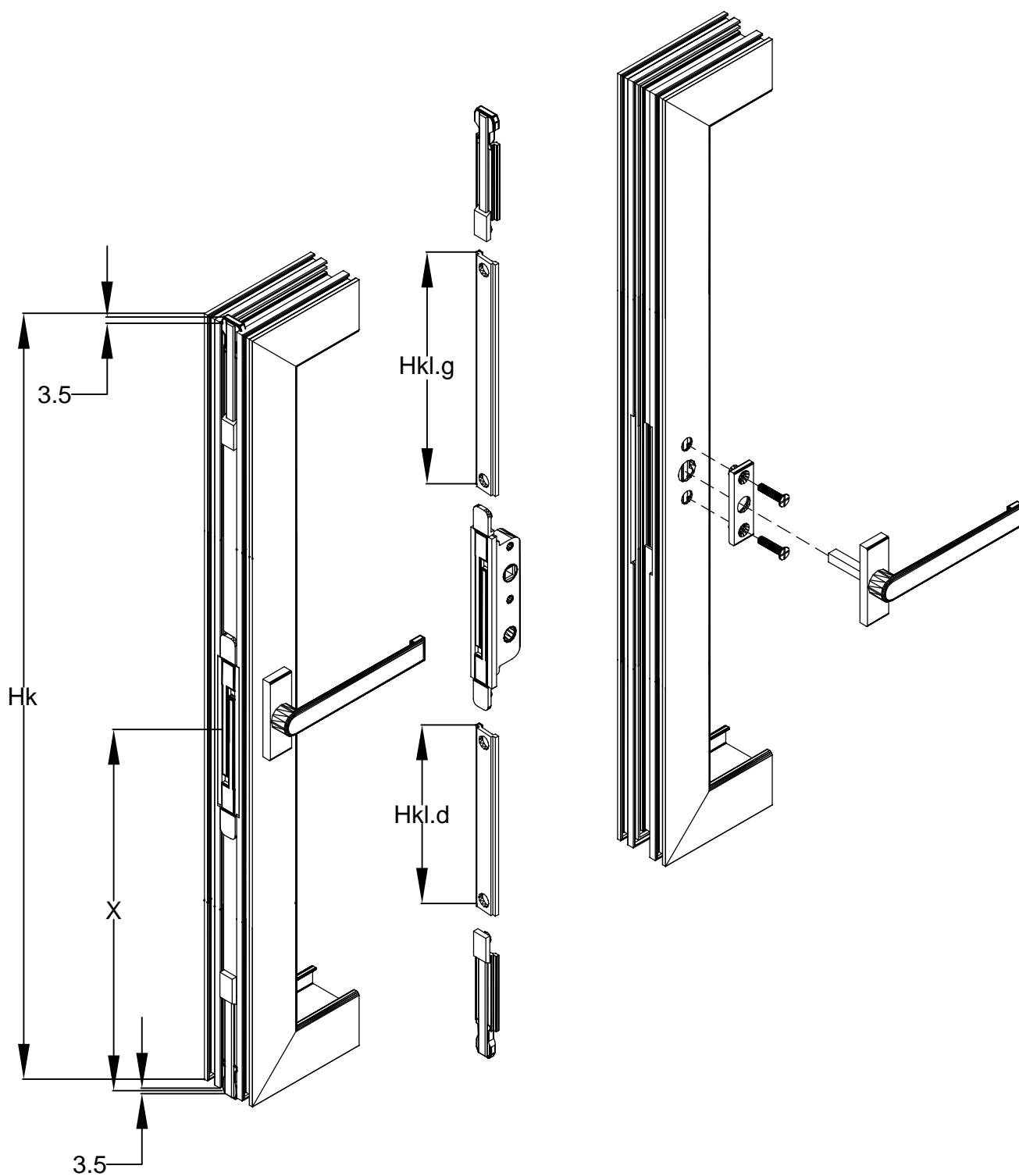


-PROFIL KRILA NA KOJEG IDE STAKLENA
ISPUNA

-Dužina gornjeg klizača
 $Hkl.g = (Hk/2 + 3.5) - 126$

-Dužina donjeg klizača
 $Hkl.d = (Hk/2 + 3.5) - 170$

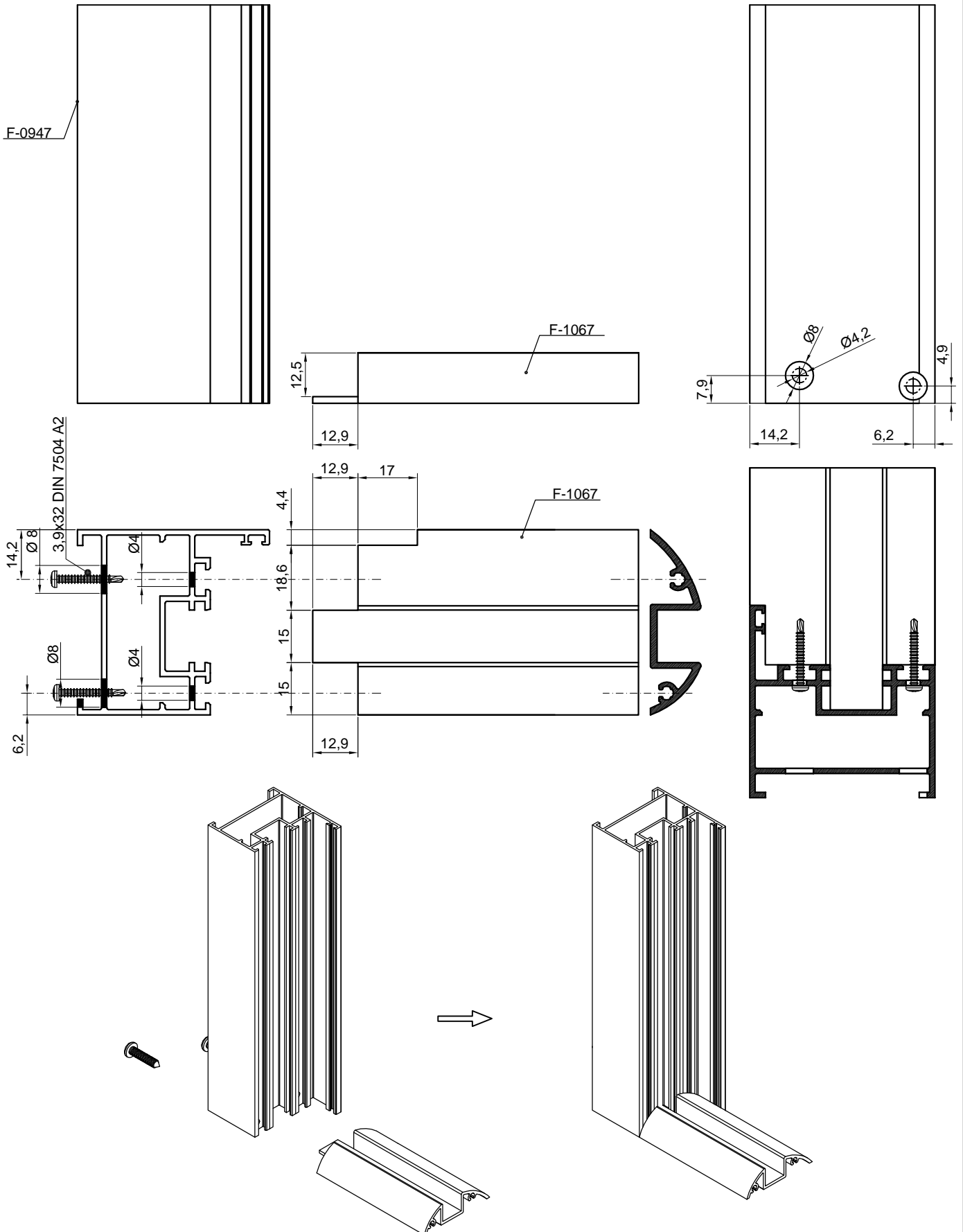


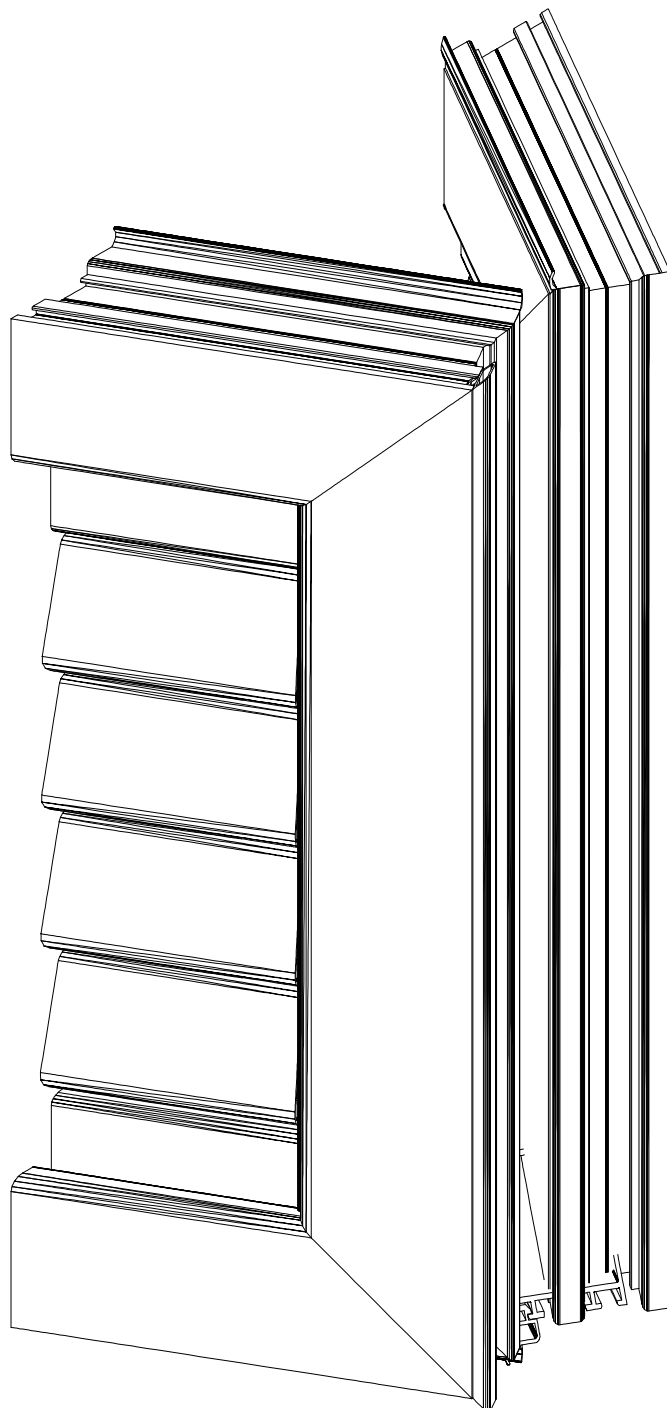
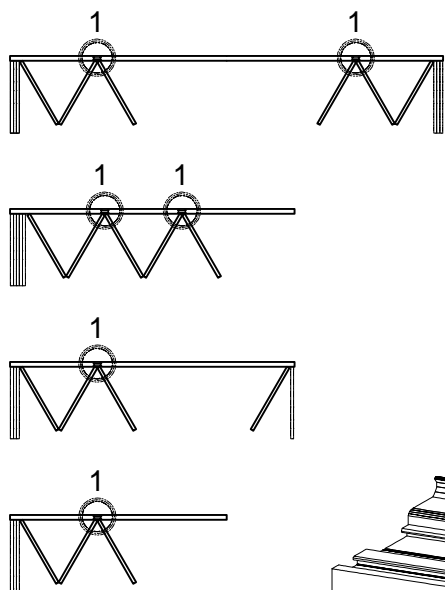


- $H_{kl.g} = X - 170$ mm

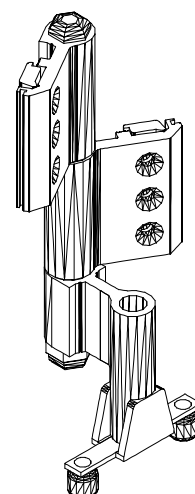
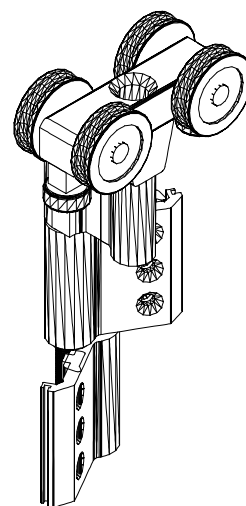
- $H_{kl.d} = (H_k + 3.5 - X) - 126$ mm

- OBRADA PRAGA F- 1067 i
OBRADA RAMA F-0947





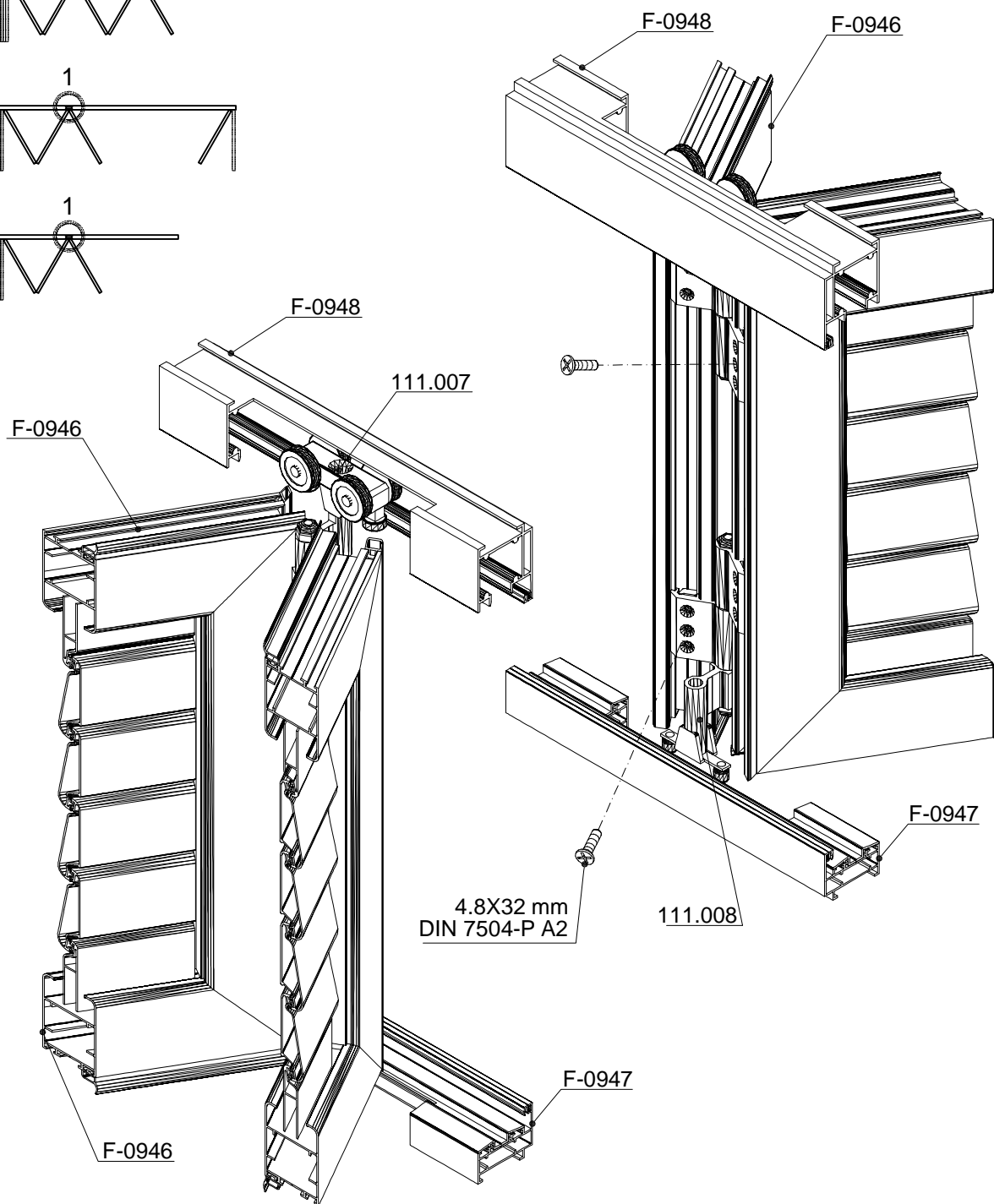
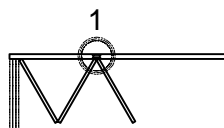
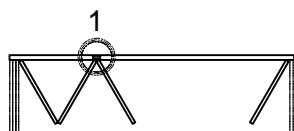
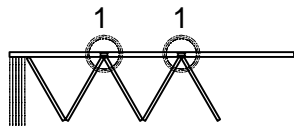
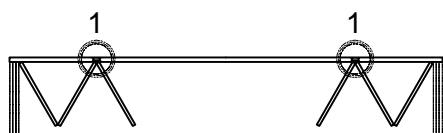
111.007-
ŠARKA SA KOLICIMA



Napomena!

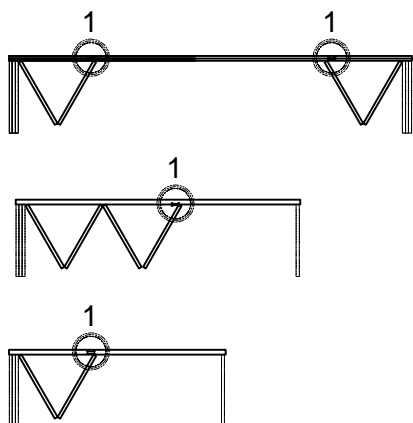
Nakon završene montaže harmonika grilje i podešavanja kolica i pratilice vijkom 4,8x32mm DIN 7504-P dodatno osigurati krila prema crtežu

111.003-
ŠARKA SA PRATILICOM

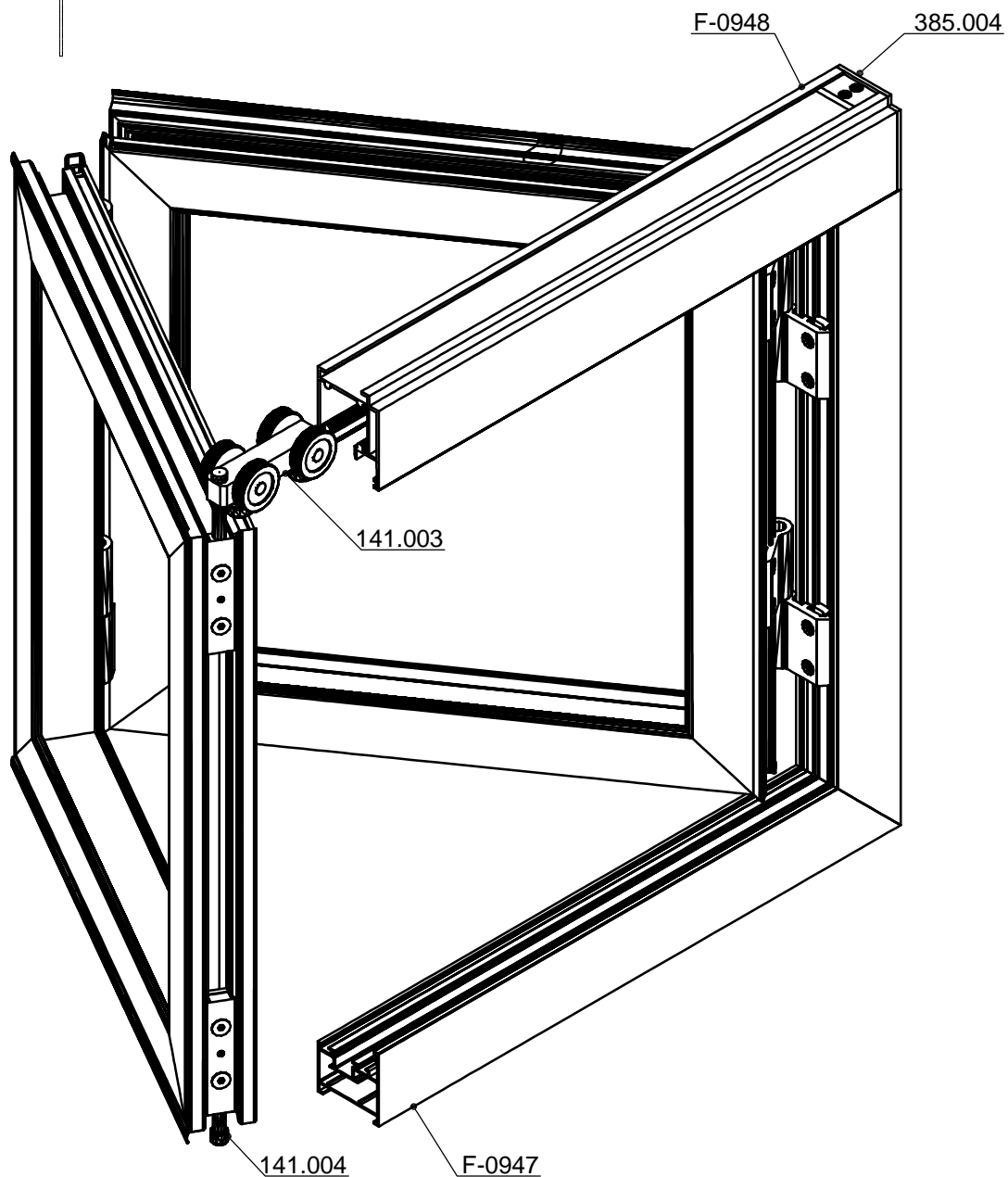


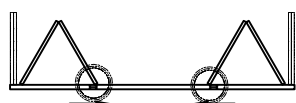
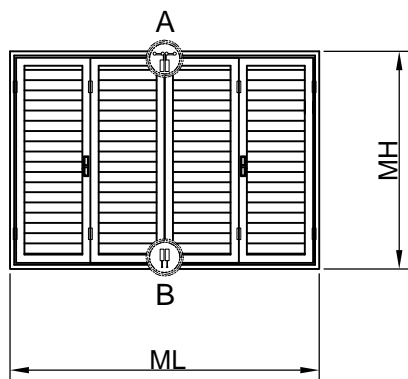
Napomena!

Nakon završene montaže harmonika grilje i podešavanja kolica i pratilice vijkom 4,8x32mm DIN 7504-P dodatno osigurati krila prema crtežu

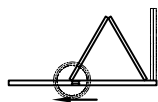


OKOVI ZA KRILA
NEJEDNAKIH DIMENZIJA



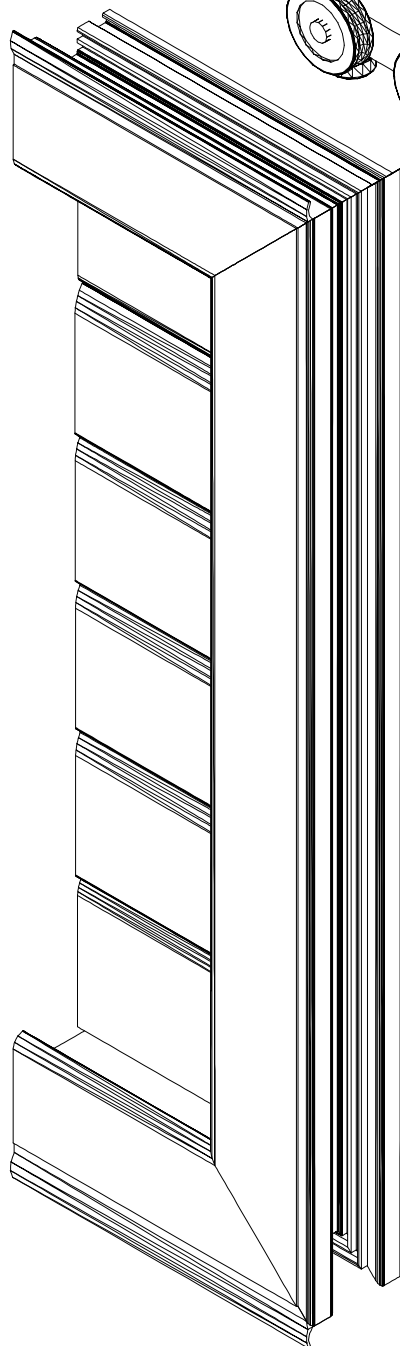


ZA 2+2 KRILA

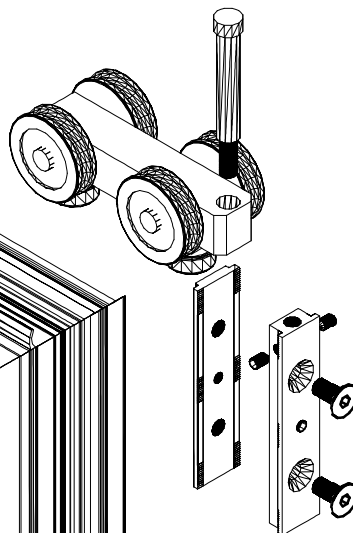


ZA 2+0 KRILA

OKOVI ZA KRILA
NEJEDNAKIH DIMENZIJA

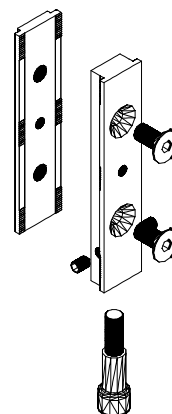


DETALJ A

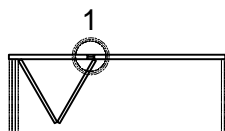


141.003
KOLICA
ZA 2+2 KRILA

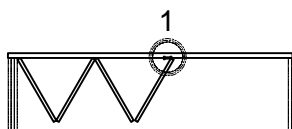
DETALJ B



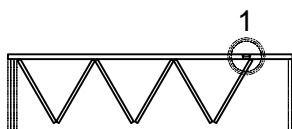
141.004
PRATILICA
ZA 2+2 KRILA



ZA 2+0 KRILA

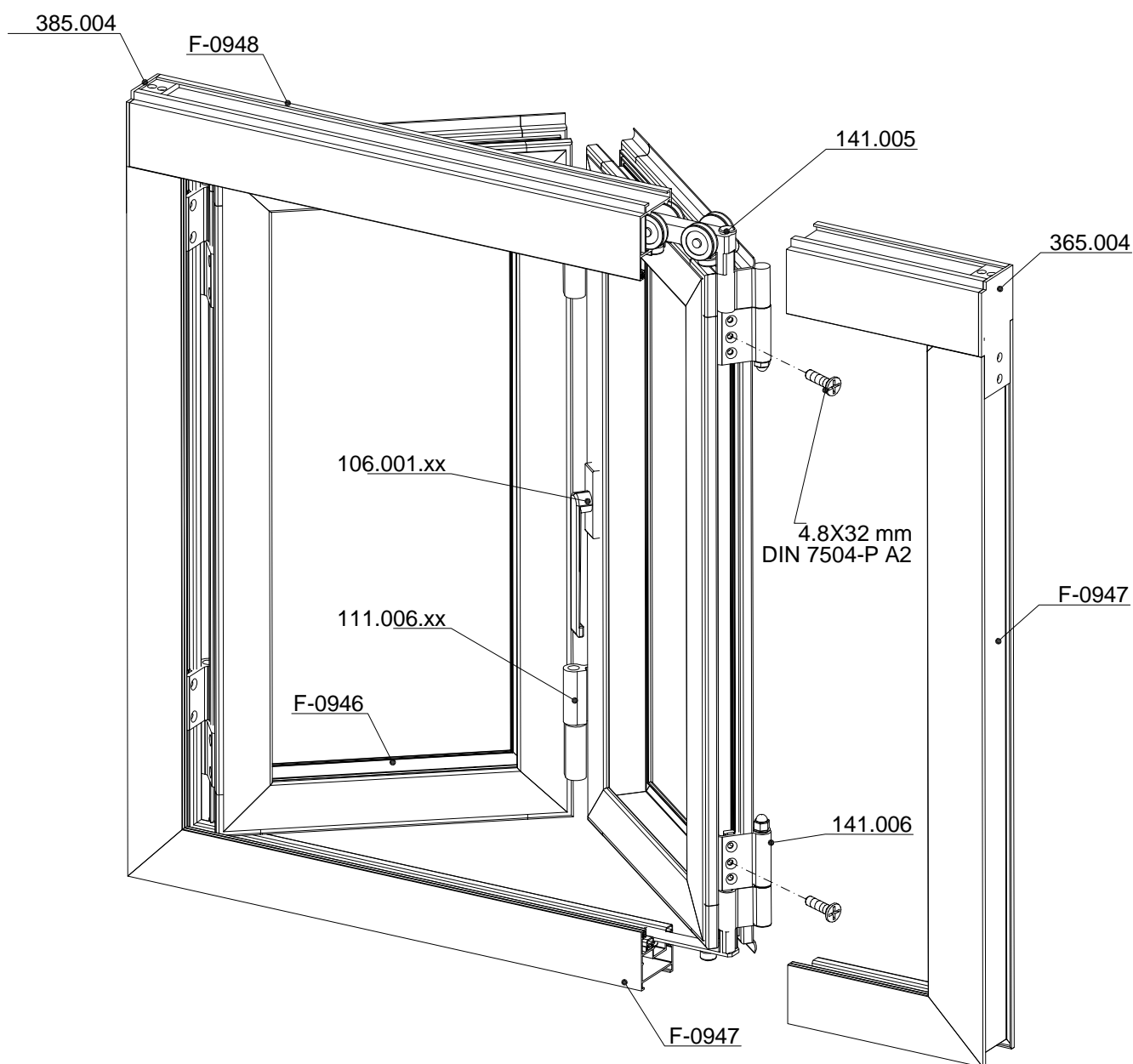


ZA 4+0 KRILA



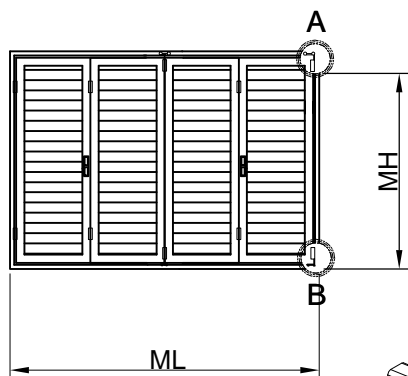
ZA 6+0 KRILA

OKOVI SE KORISTE SAMO ZA KRILA
JEDNAKIH DIMENZIJA :
/D otvaranje u desnu stranu
/L otvaranje u lijevu stranu

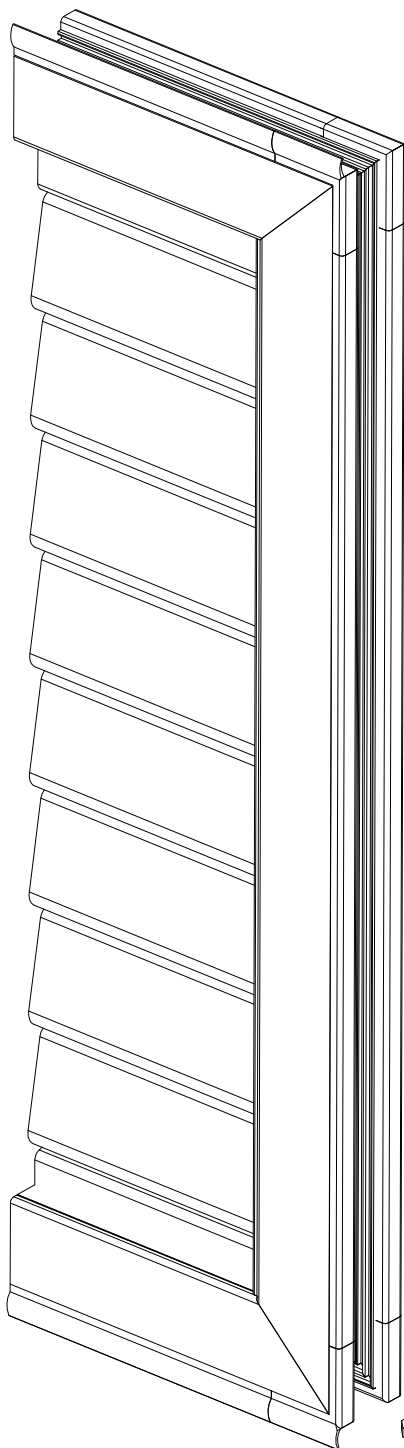


Napomena:

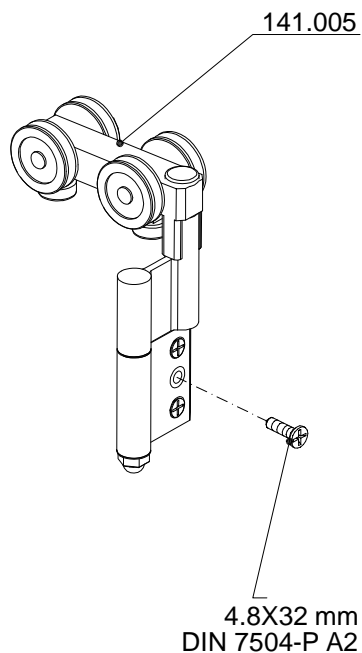
Nakon završene montaže harmonika grilje i podešavanja kolica i pratilice vijkom 4,8x32mm DIN 7504-P dodatno osigurati krila prema crtežu



- OKOVI SE KORISTE SAMO
ZA KRILA JEDNAKIH DIMENZIJA



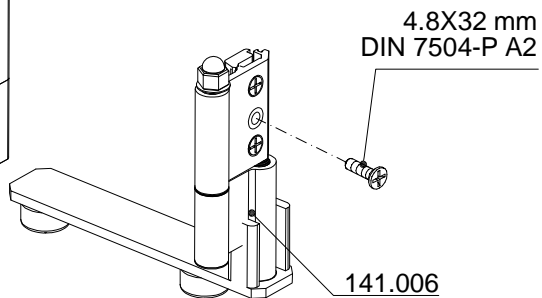
DETALJ A



Napomena!

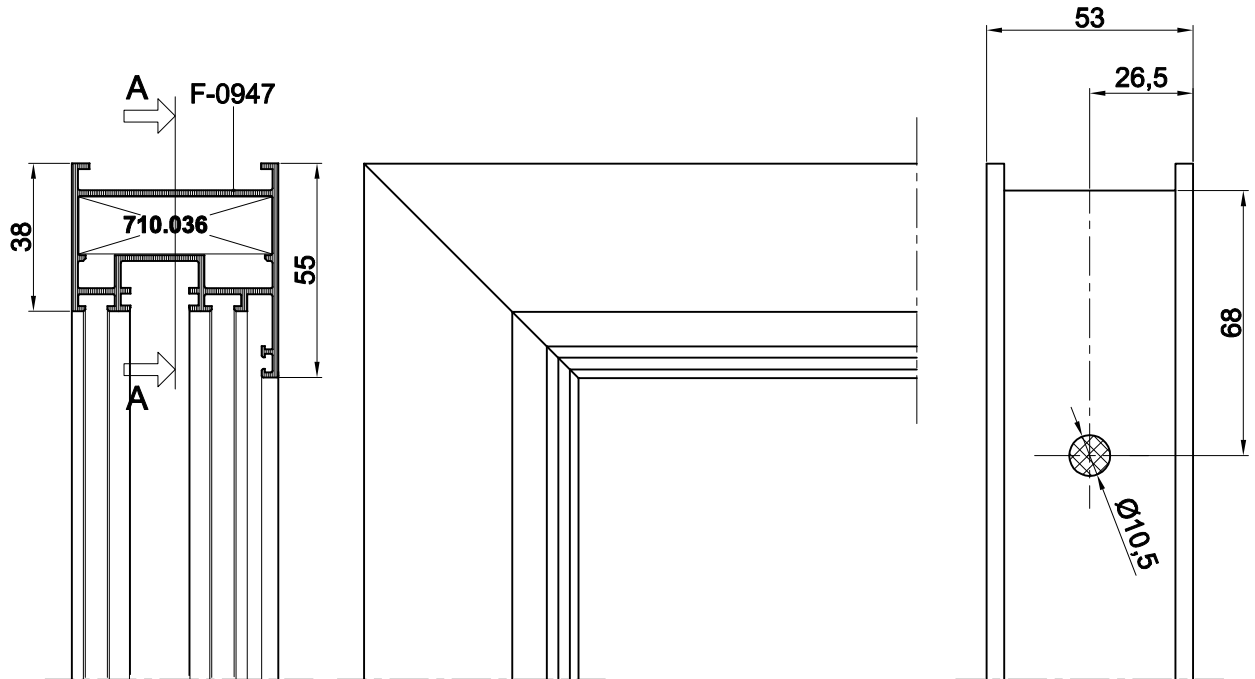
Nakon završene montaže harmonika grilje i podešavanja kolica i pratilice vijkom 4,8x32mm DIN 7504-P dodatno osigurati krila prema crtežu

DETALJ B

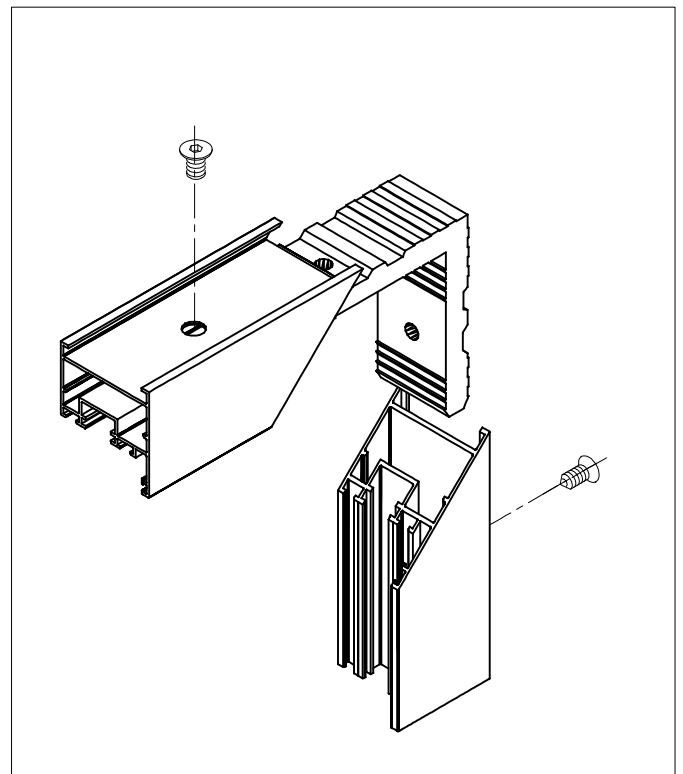
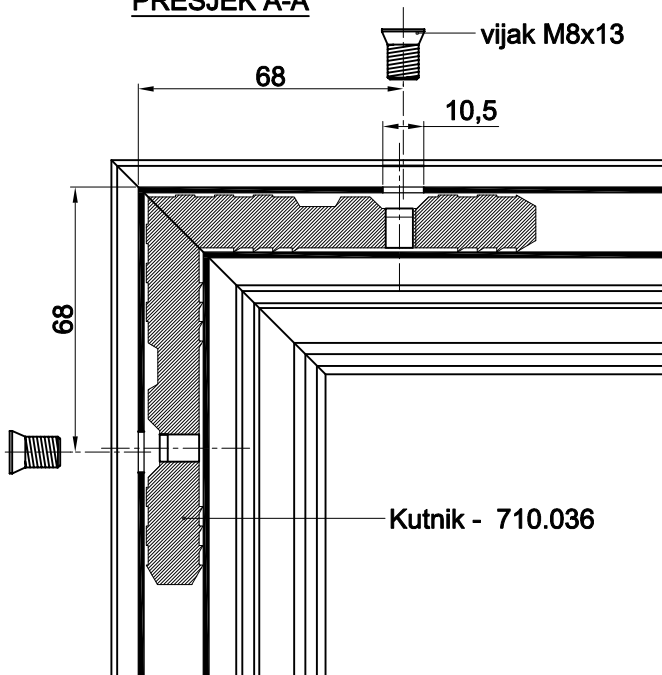


- VIJČANA VEZA

obrada profila F-0947 za kutnik 710.036

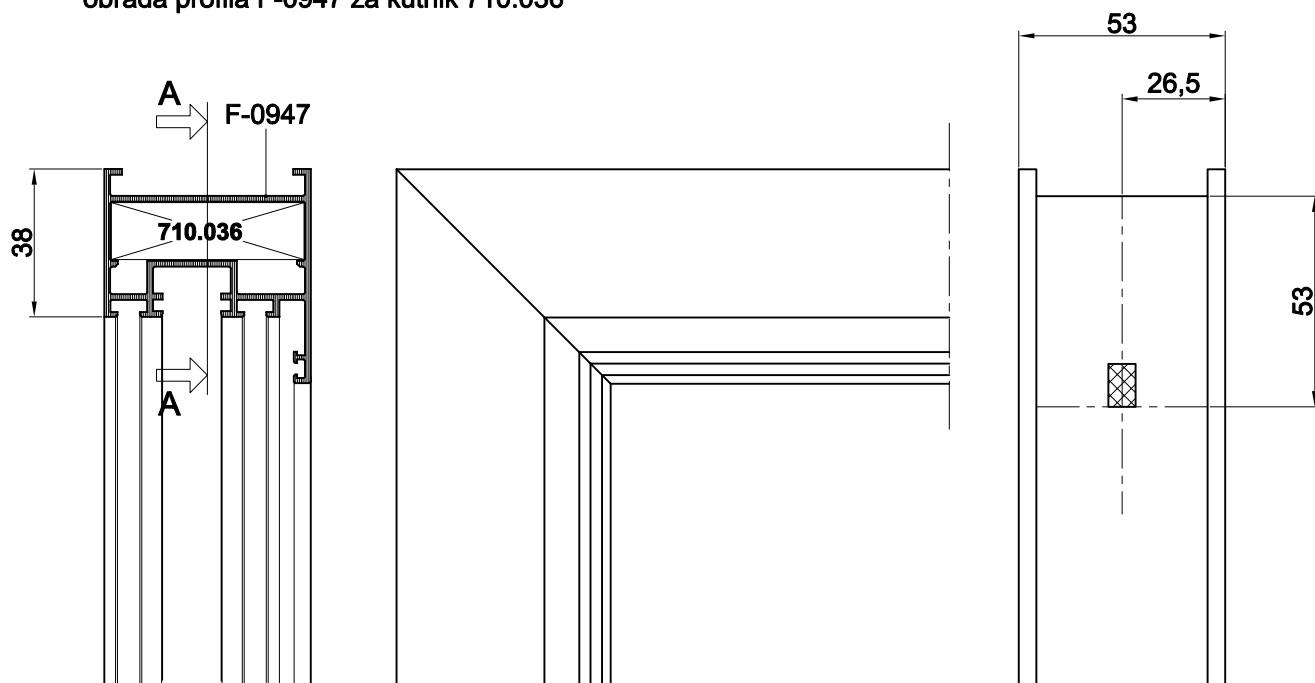


PRESJEK A-A

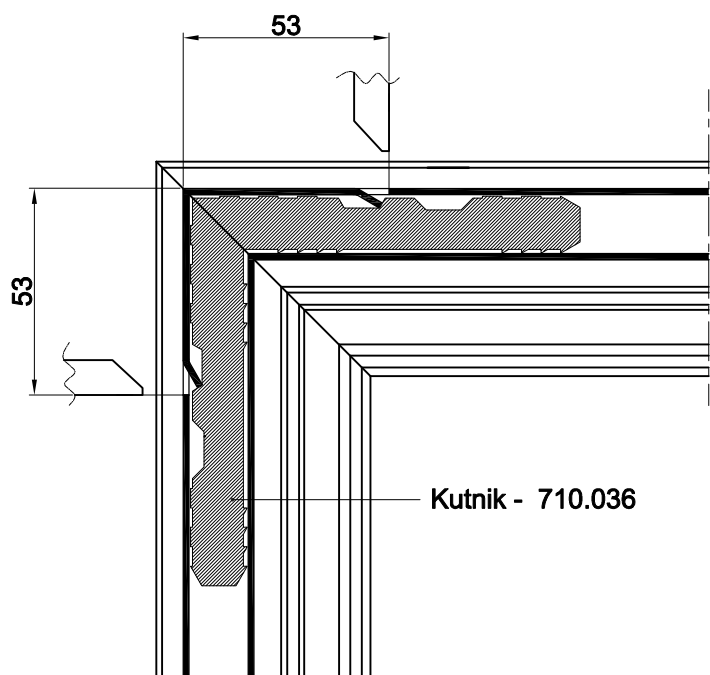


- UPREŠAVANJE STJENKE PROFILA PREMA KUTNIKU

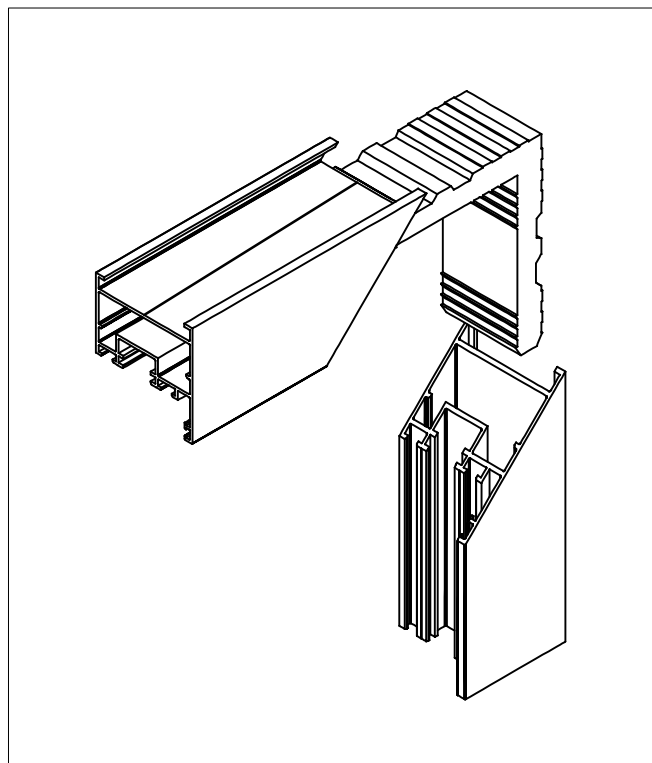
obrada profila F-0947 za kutnik 710.036



PRESJEK A-A

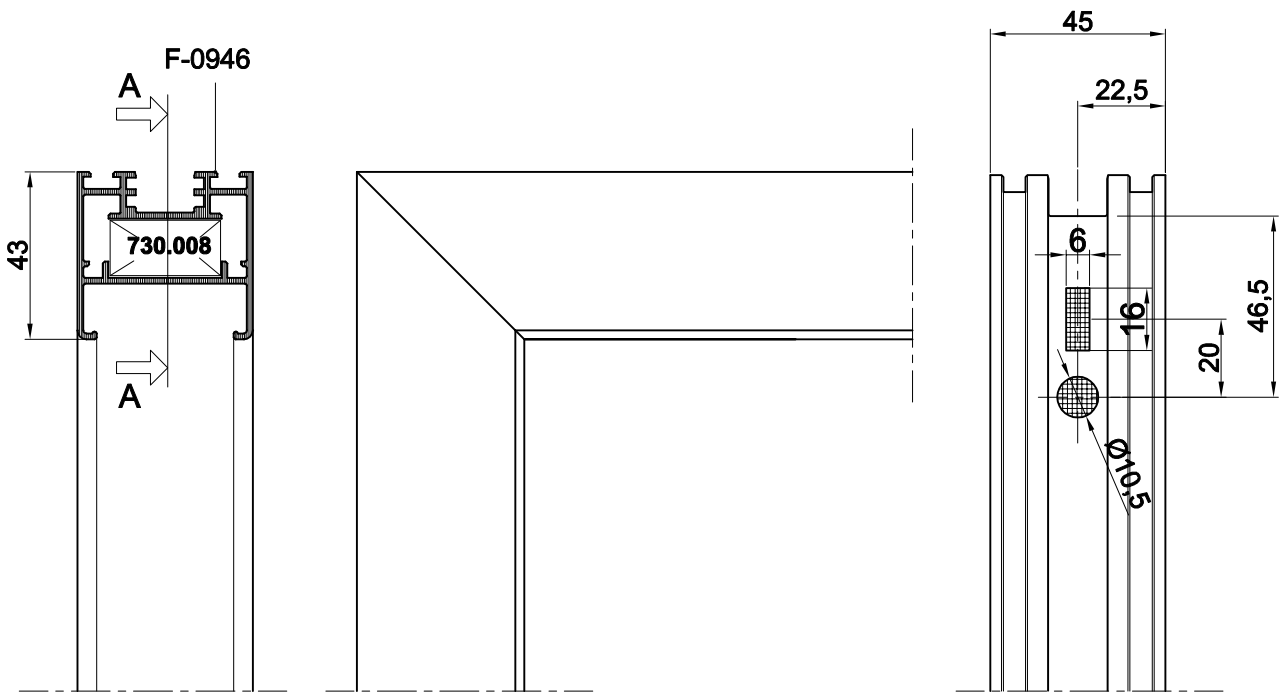


Kutnik - 710.036

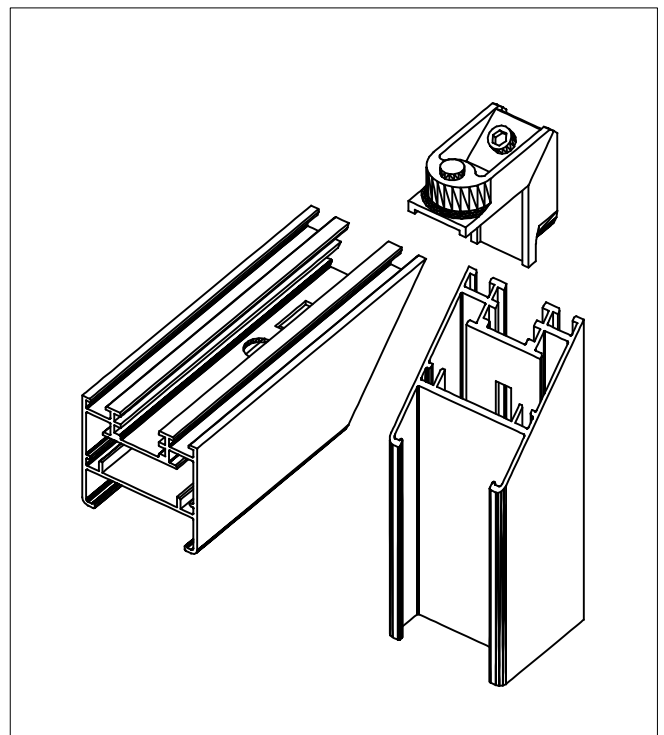
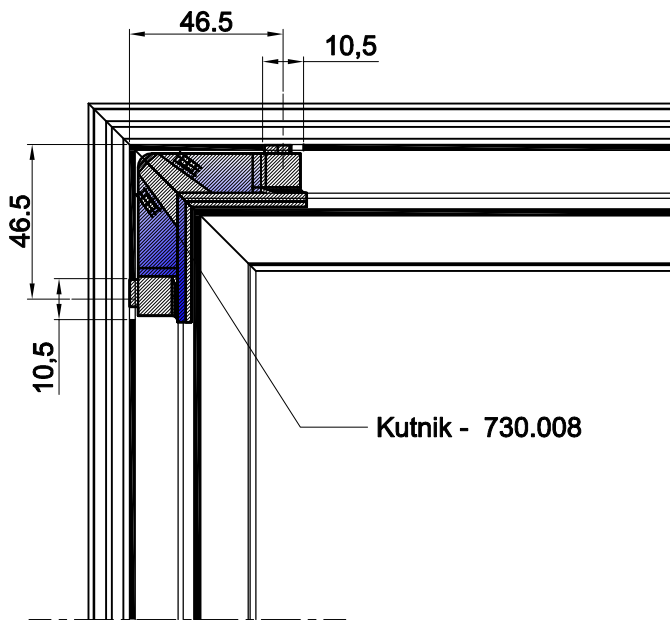


- VIJČANA VEZA

obrađa profila F-0946 za kutnik - 730.008

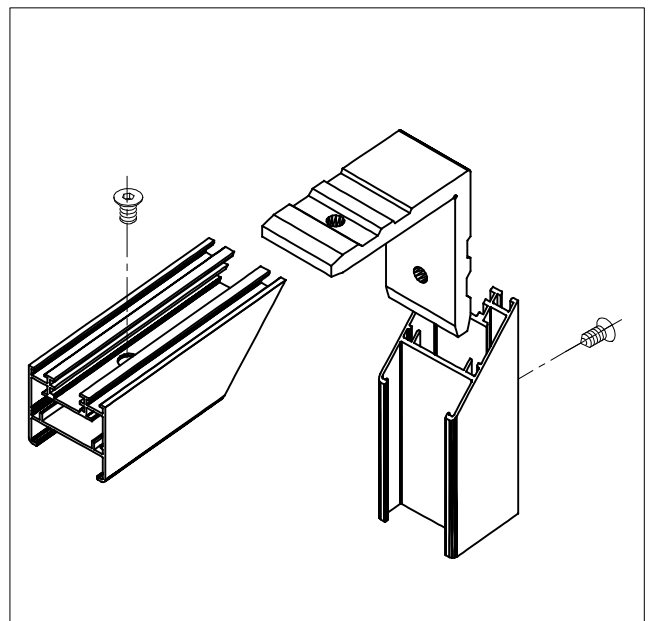
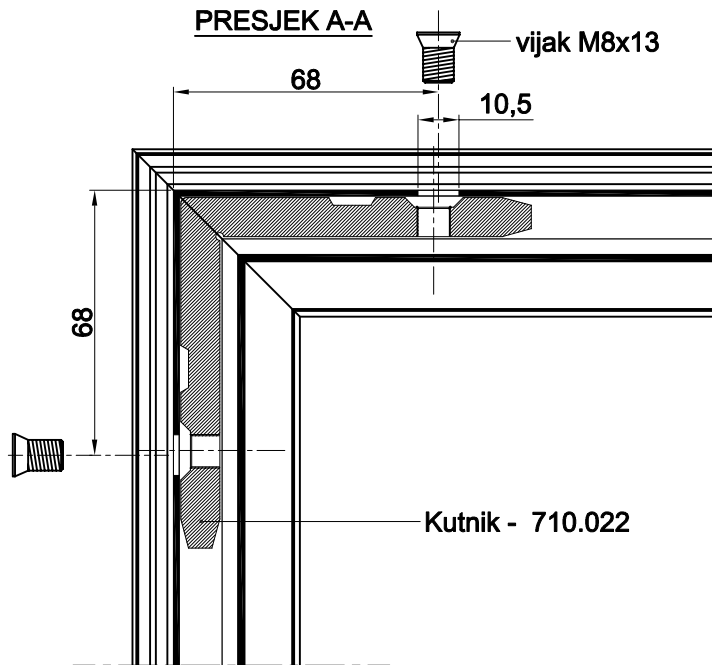
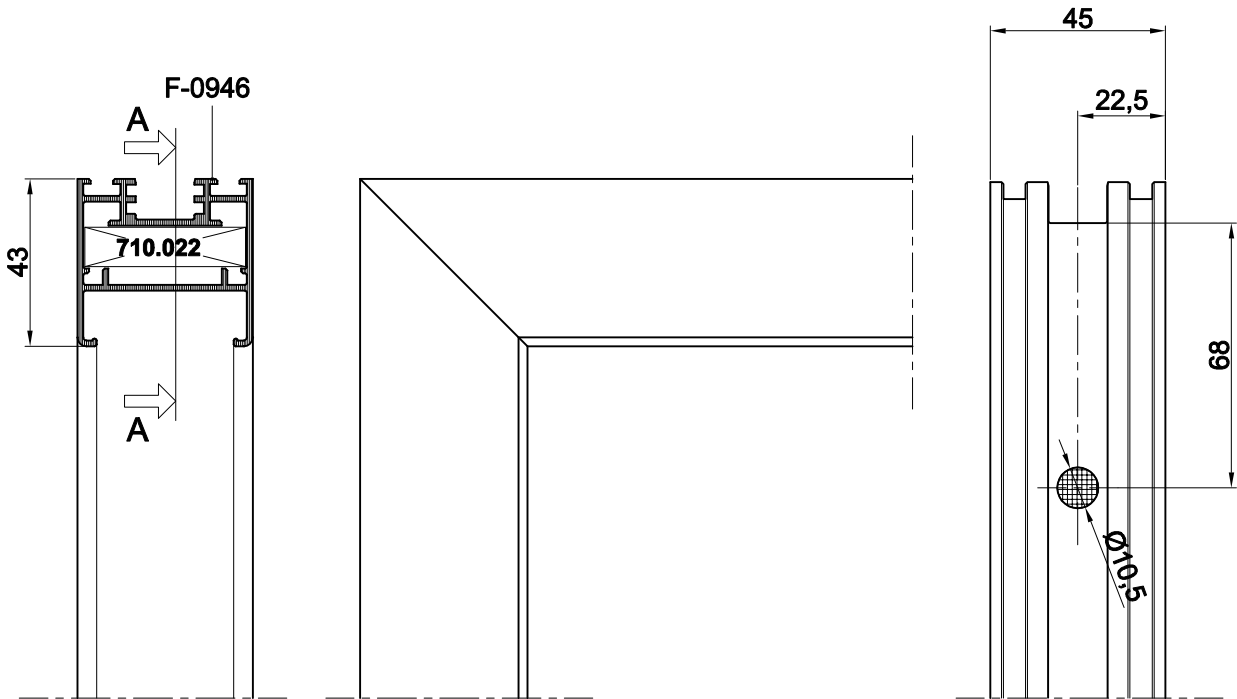


PRESJEK A-A



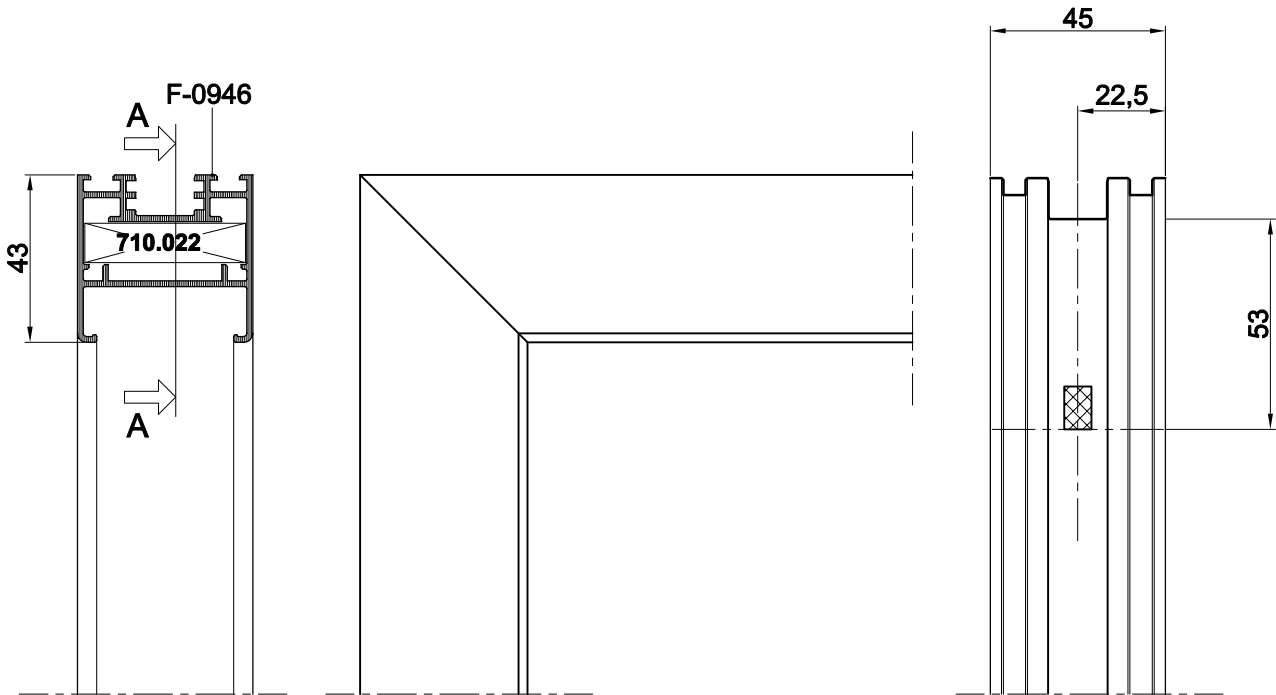
- VIJČANA VEZA

obrada profila F-0946 za kutnik 710.022

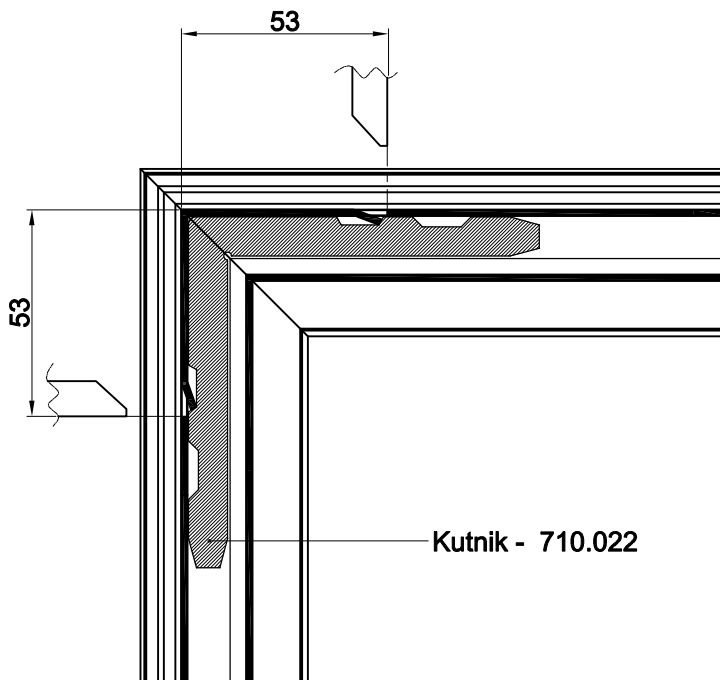


- UPREŠAVANJE STJENKE PROFILA PREMA KUTNIKU

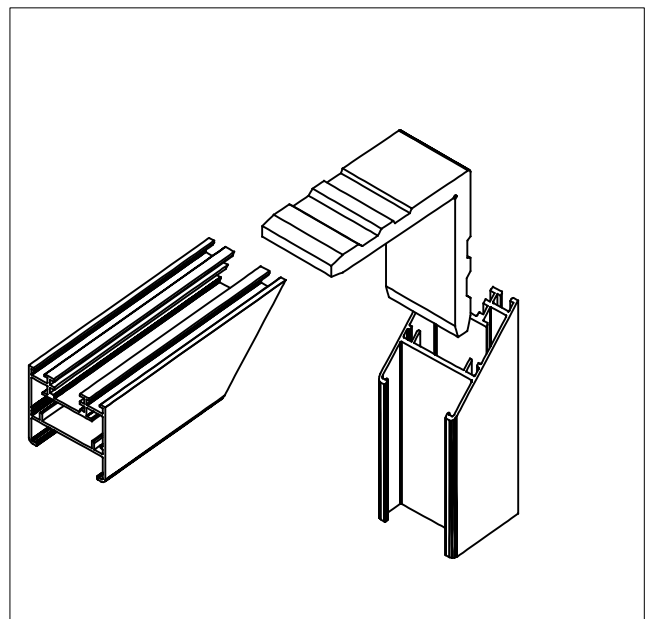
obrada profila F-0946 za kutnik 710.022



PRESJEK A-A

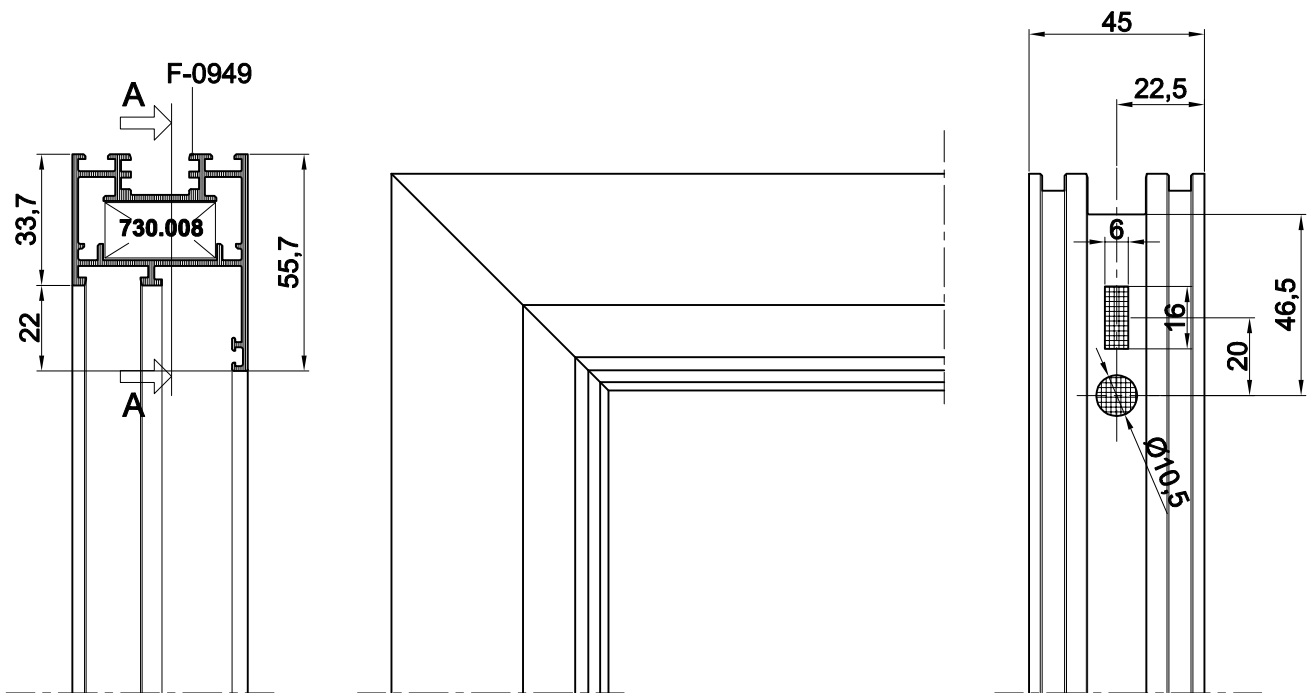


Kutnik - 710.022

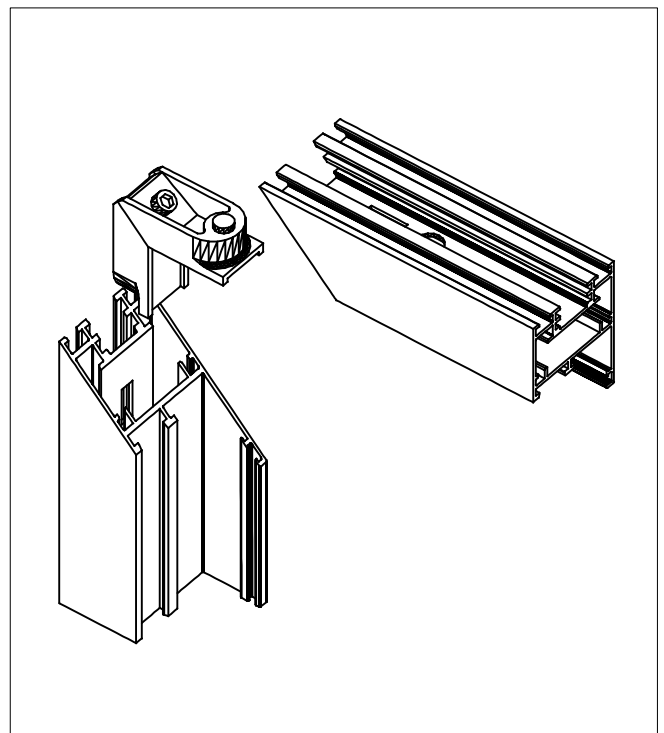
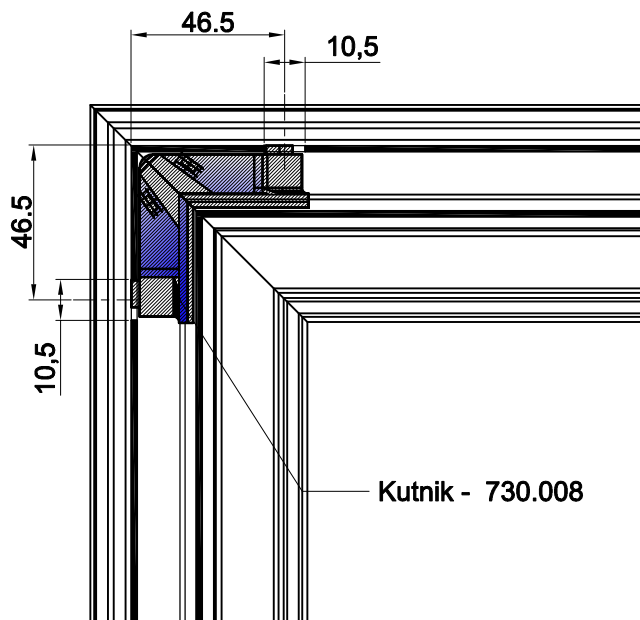


- VIJČANA VEZA

obrada profila F-0949 za kutnik 730.008

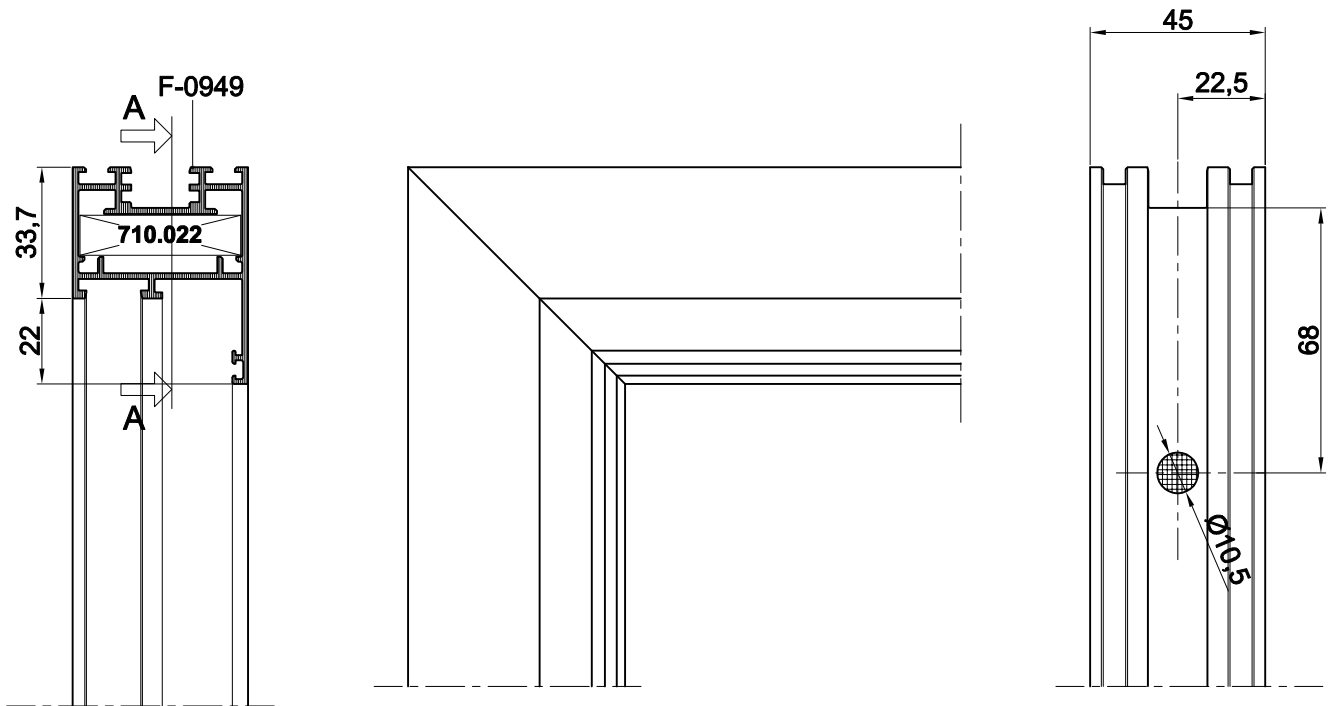


PRESJEK A-A

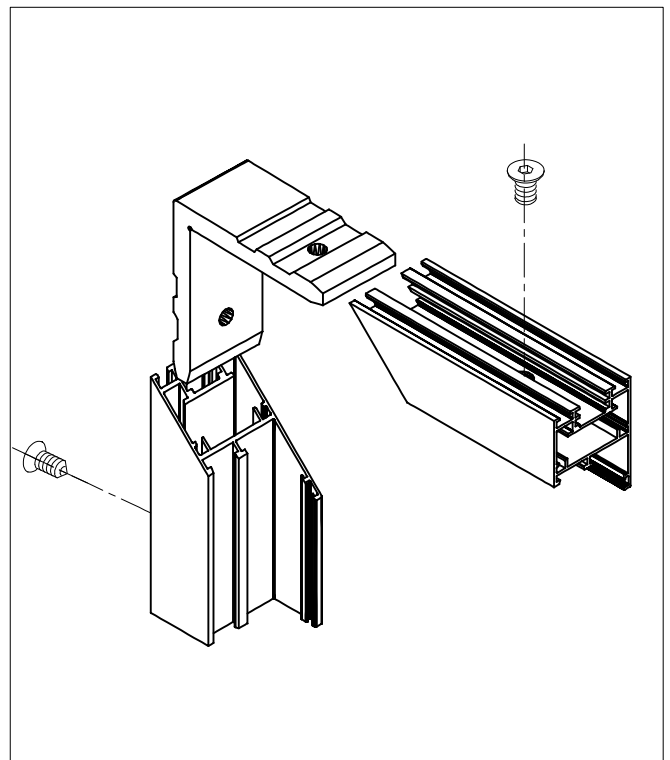
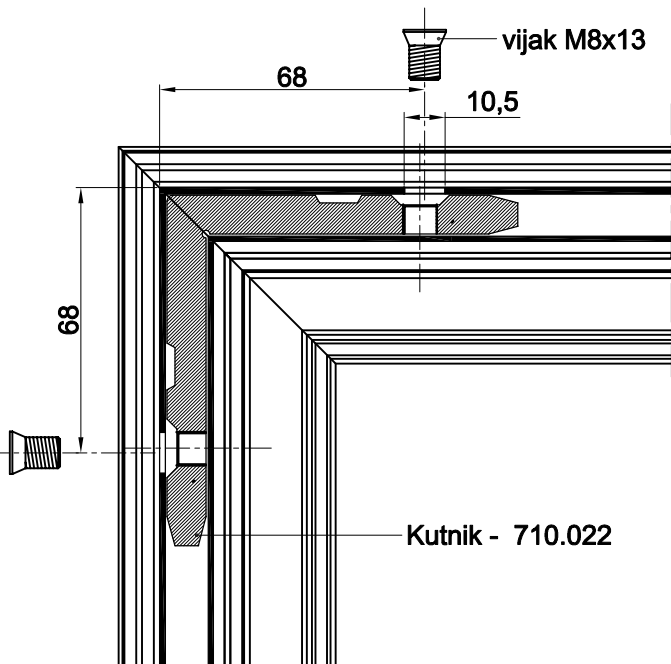


- VIJČANA VEZA

obrada profila F-0949 za kutnik 710.022

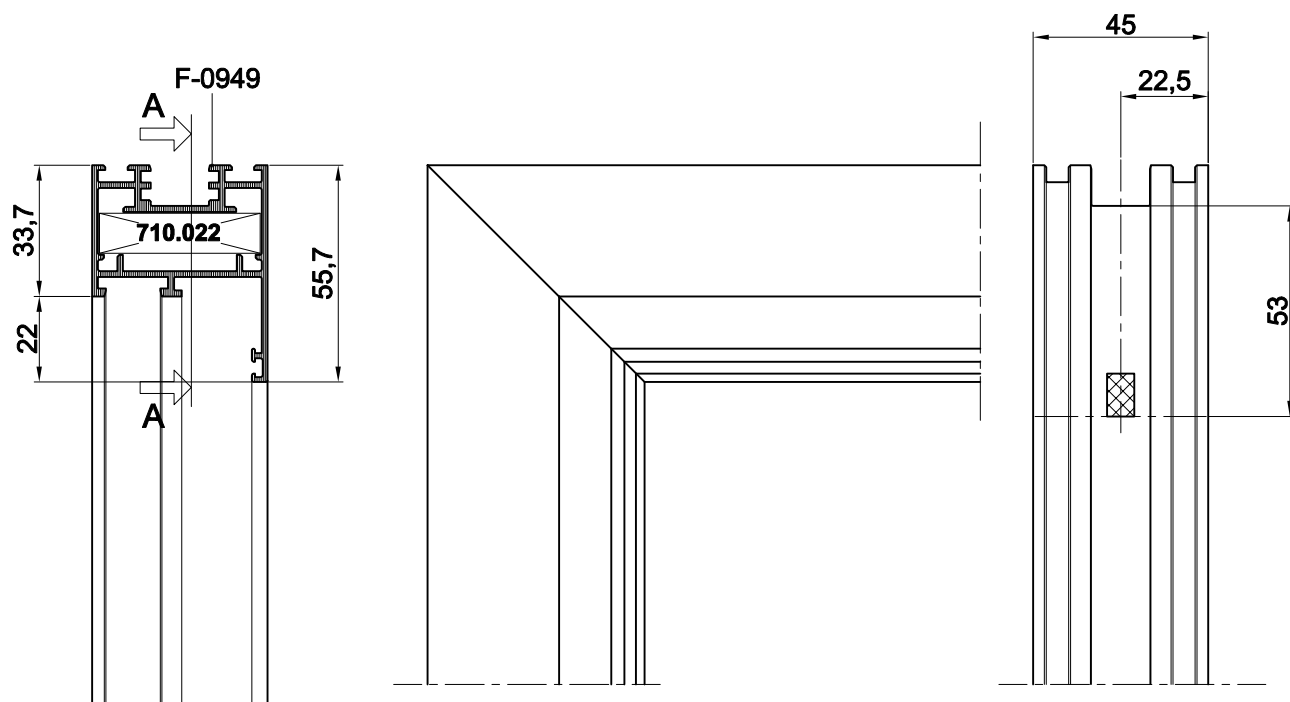


PRESJEK A-A

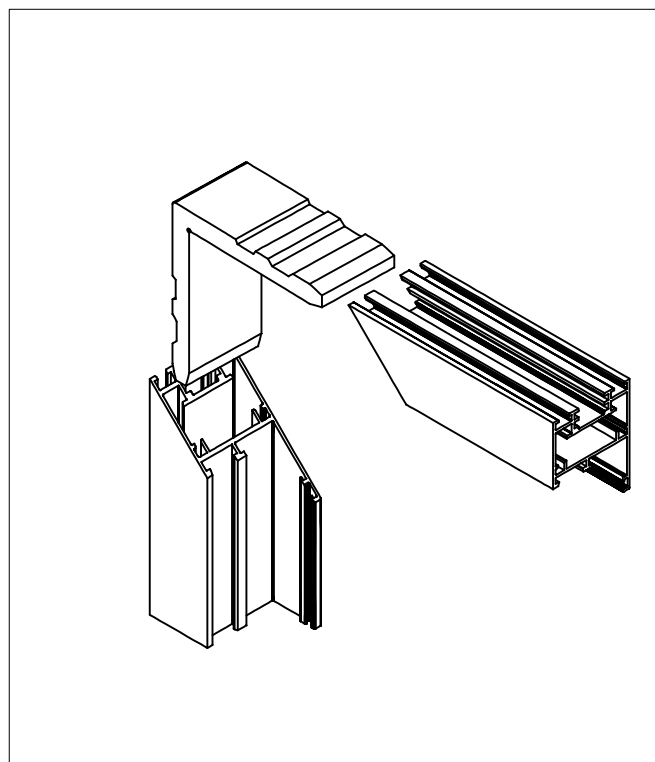
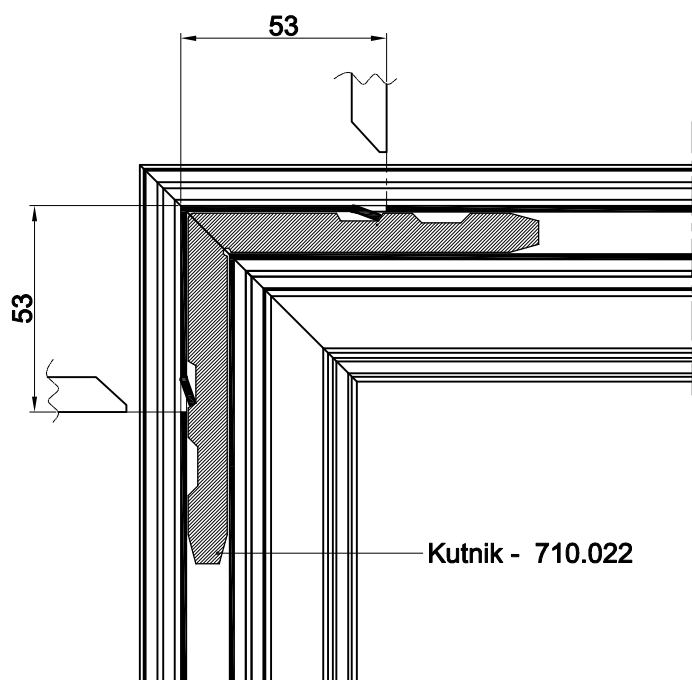


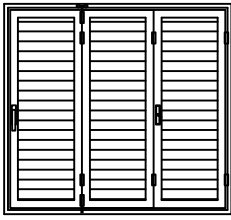
- UPREŠAVANJE STJENKE PROFILA PREMA KUTNIKU

obrada profila F-0949 za kutnik 710.022



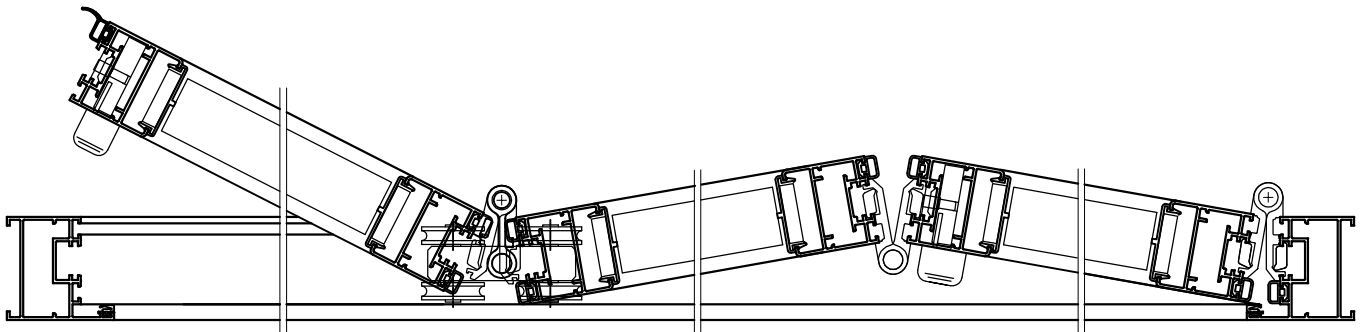
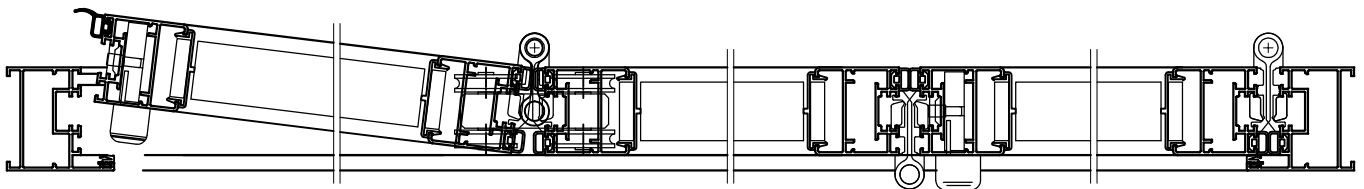
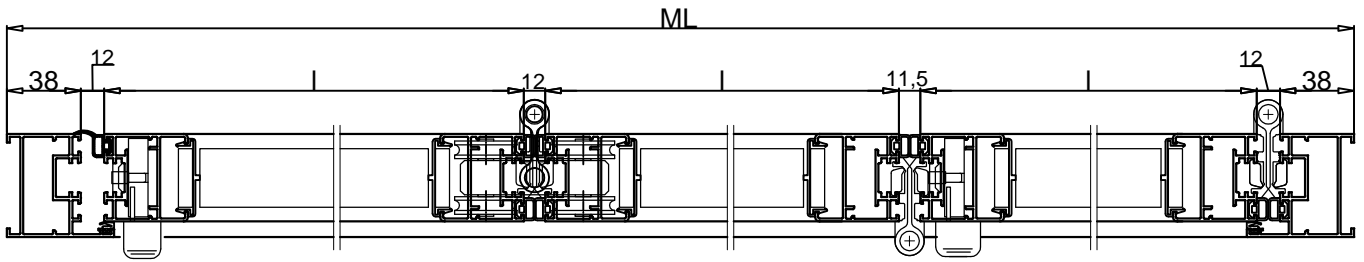
PRESJEK A-A





TRI (5;7..)KRILA JEDNAKE ŠIRINE
SLAGANJE NA JEDNU STRANU

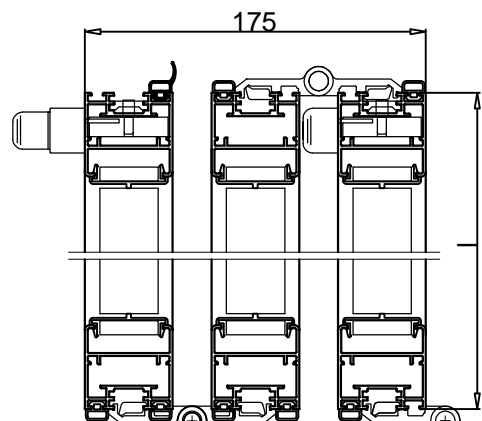
tri krila I=ML-123.5/3
pet krila I=ML-147/5
sedam krila I=ML-170.5/7

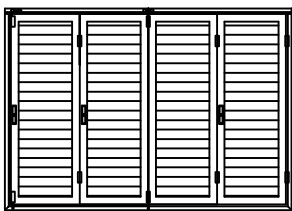


111.007



111.008

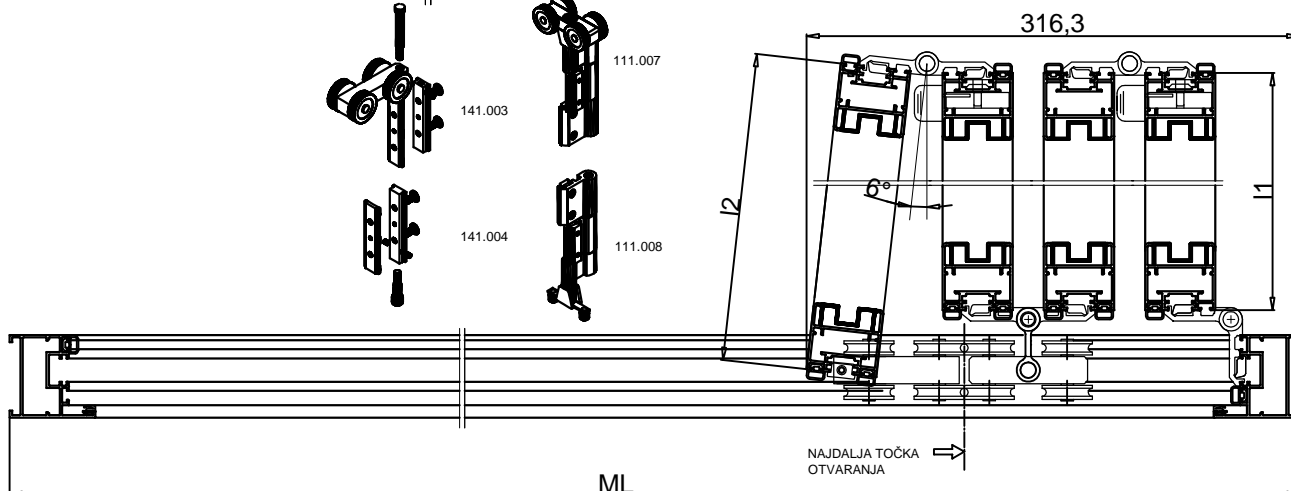
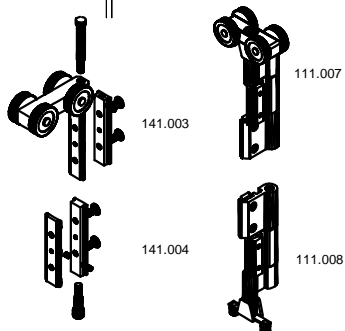
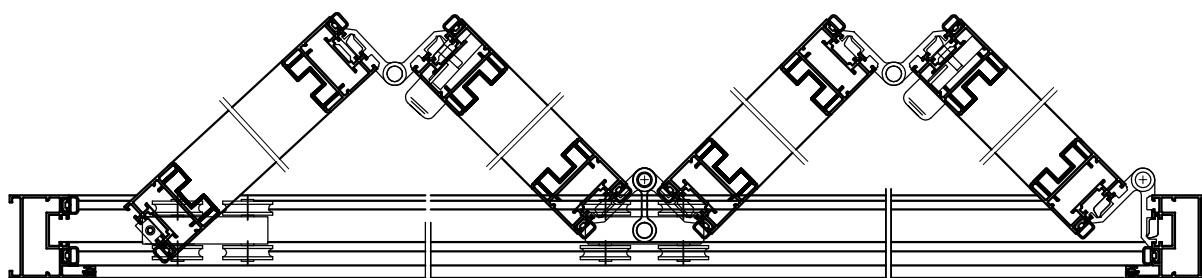
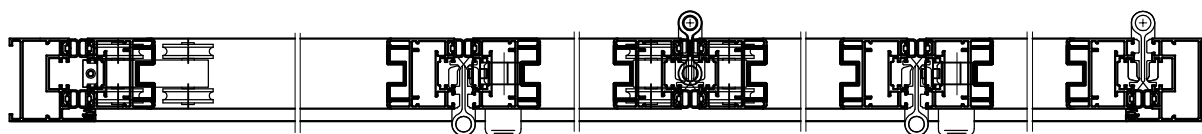
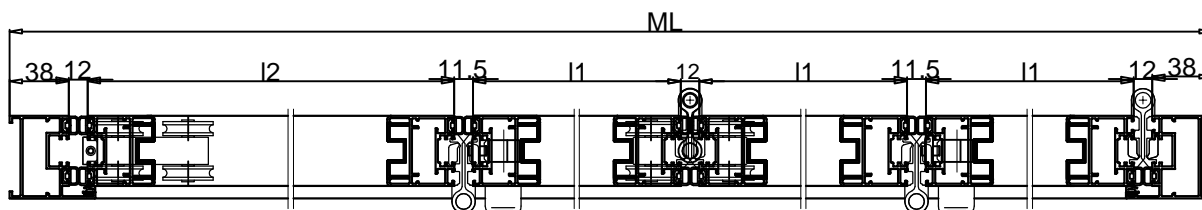


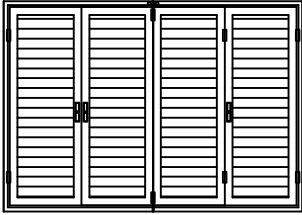


KRILA NEJEDNAKE ŠIRINE
SLAGANJE 0 + 4 ; 0 + 6

četiri krila $l_1 = Ml - 135/4 - 10$
 $l_2 = l_1 + 40$

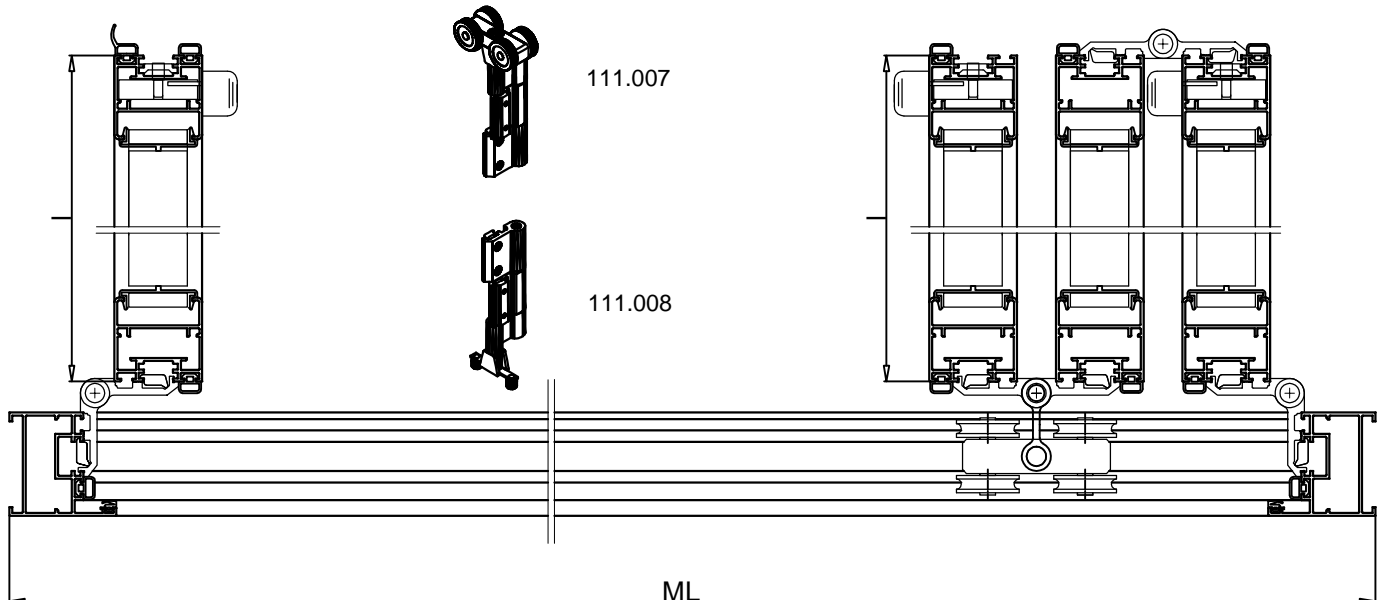
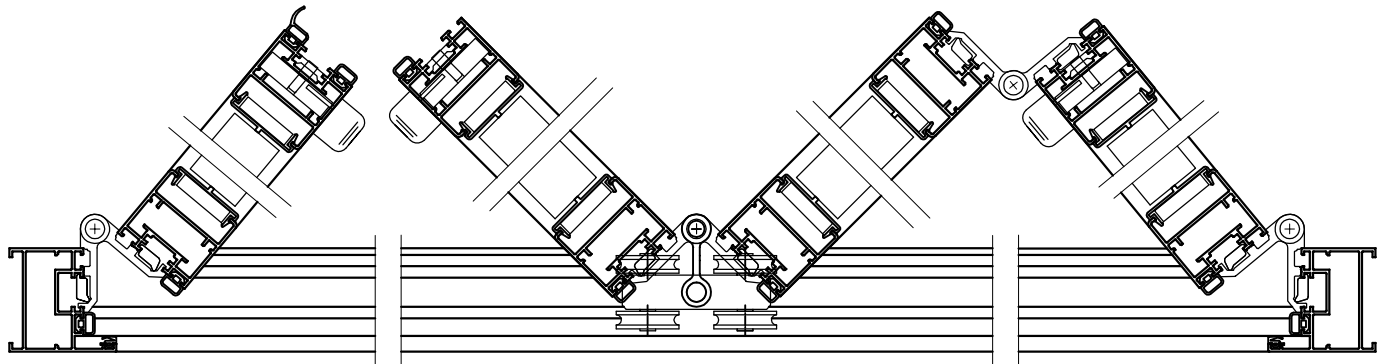
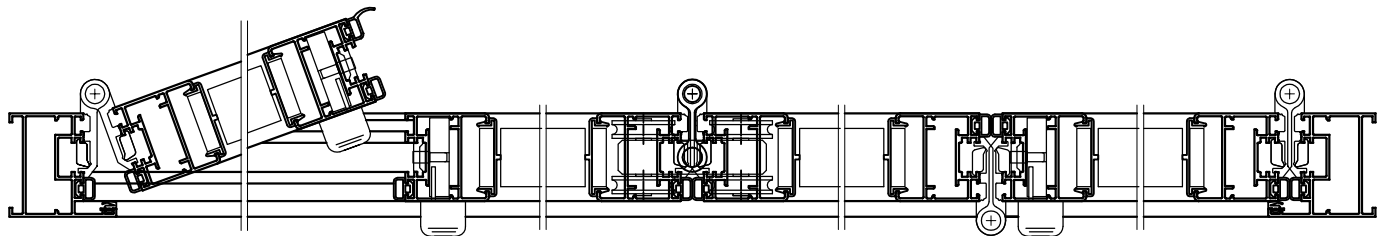
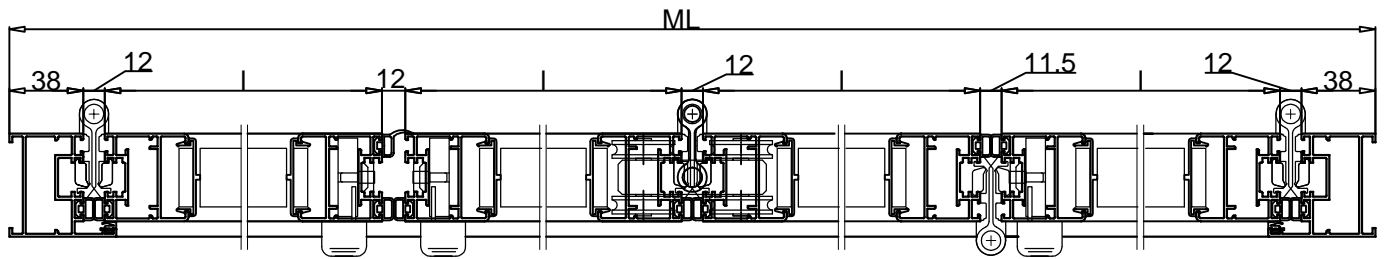
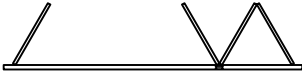
šest krila $l_1 = Ml - 158.5/6 - 10$
 $l_2 = l_1 + 40$

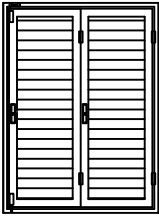




ČETIRI KRILA JEDNAKE ŠIRINE
SLAGANJE 3 + 1

l=ML-135.5/4

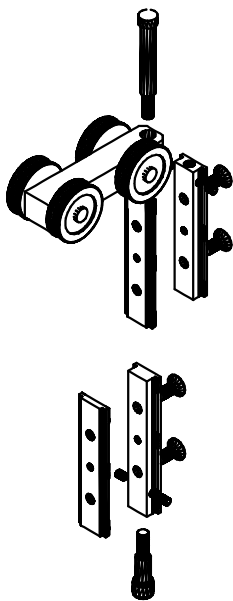
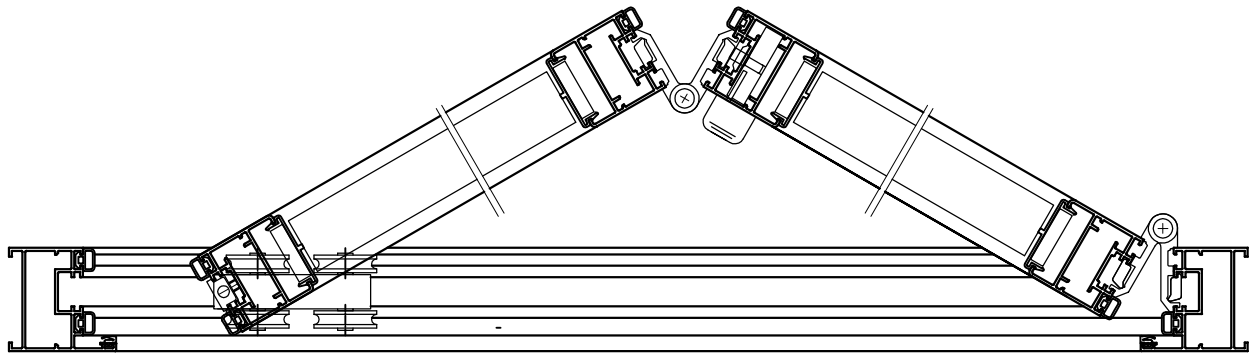
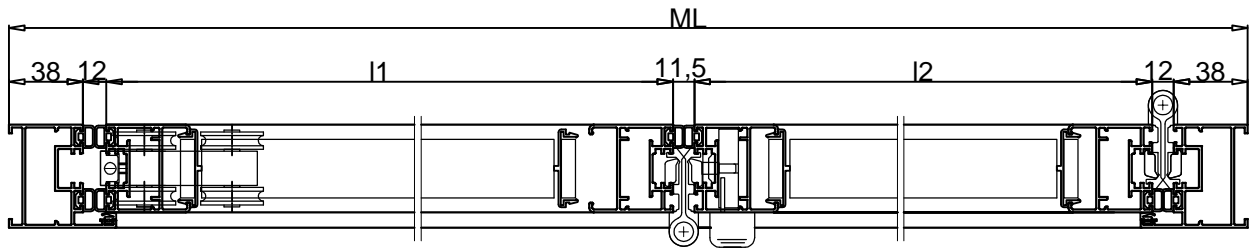




DVA KRILA NEJEDNAKE ŠIRINE

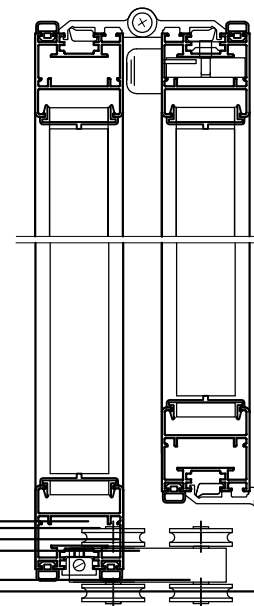
$$l_1 = ML - 111,5/2 + 20$$

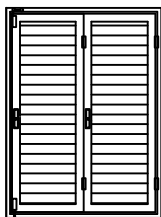
$$l_2 = ML - 111,5/2 - 20$$



141.003

141.004



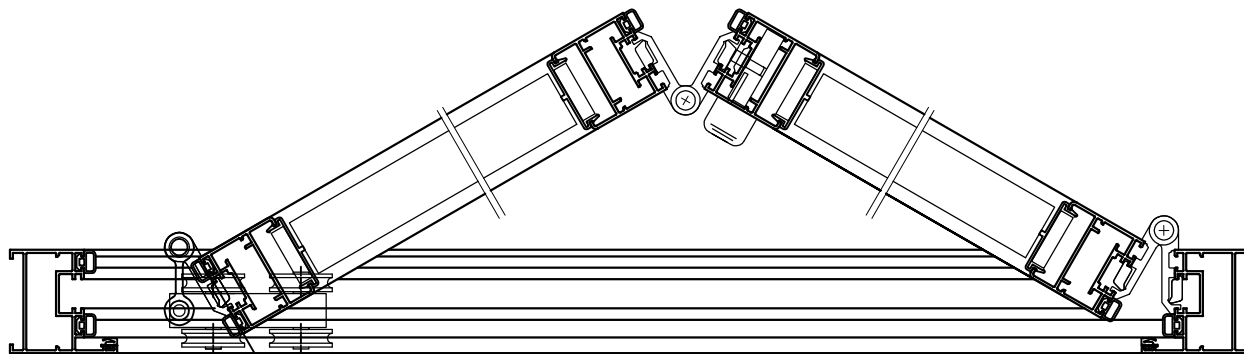
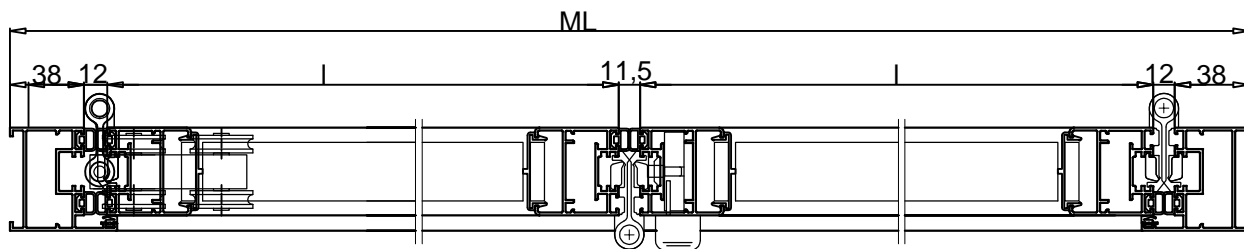


DVA KRILA JEDNAKE ŠIRINE SLAGANJE
0+2 ; 0+4 ; 0+6

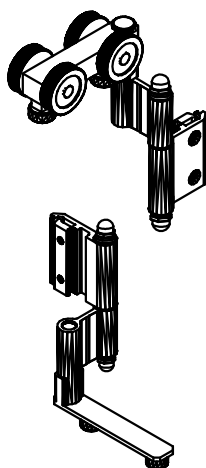
dva krila I=ML-111,5/2

četiri krila I=ML-135/4

šest krila I=ML-158,5/6

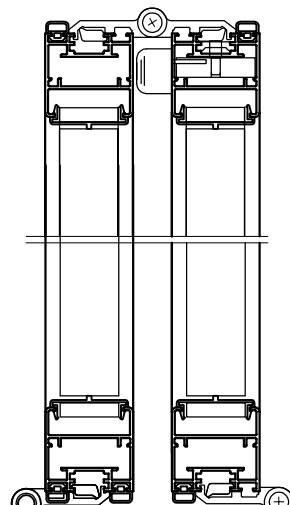


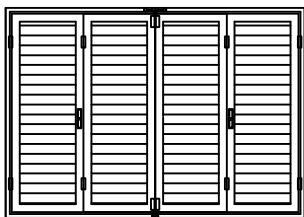
POGLED IZVANA
OTVARANJE U LIJEVU STRANU



141.005

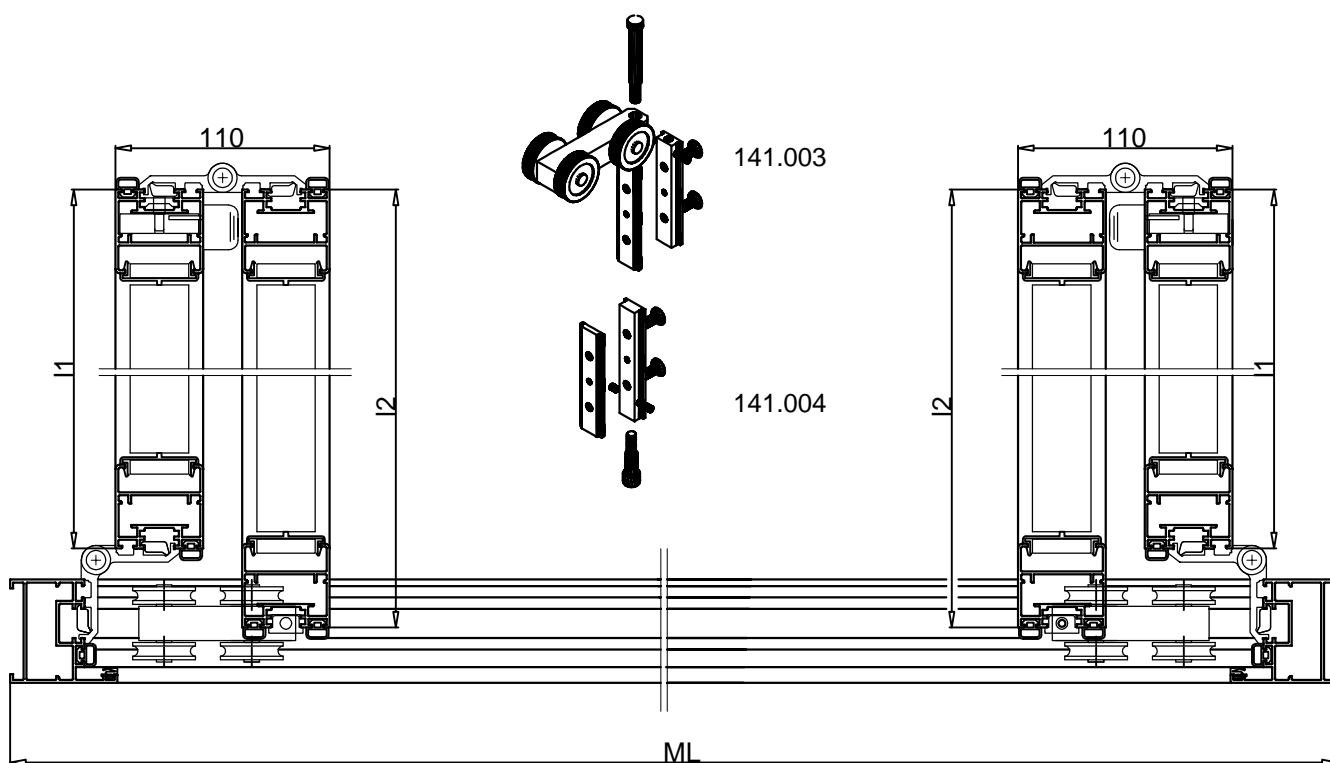
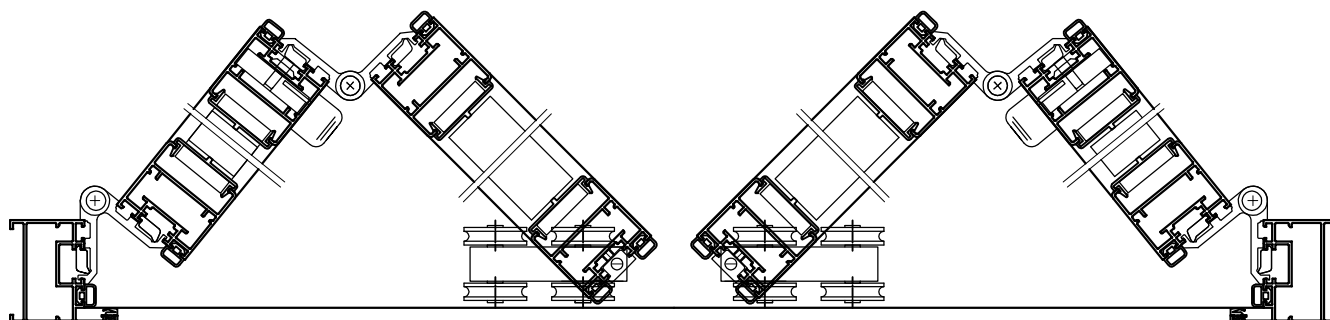
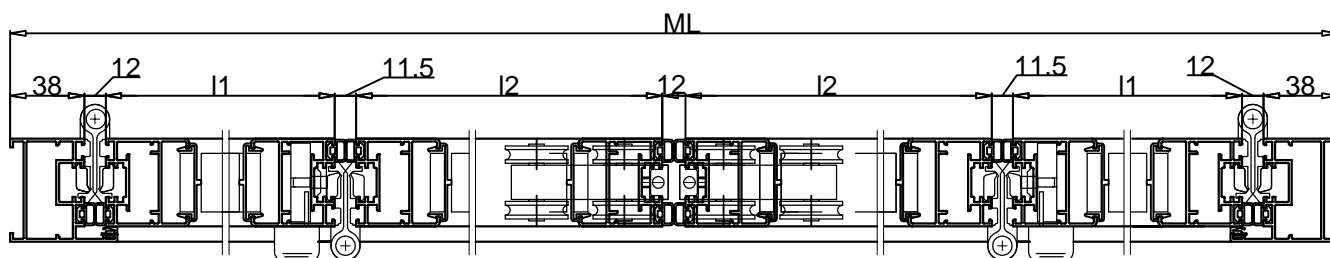
141.006

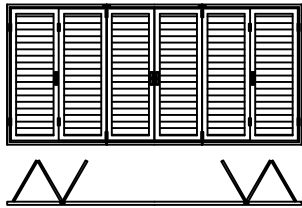




ČETIRI KRILA NEJEDNAKE ŠIRINE
SLAGANJE PO DVA KRILA

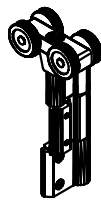
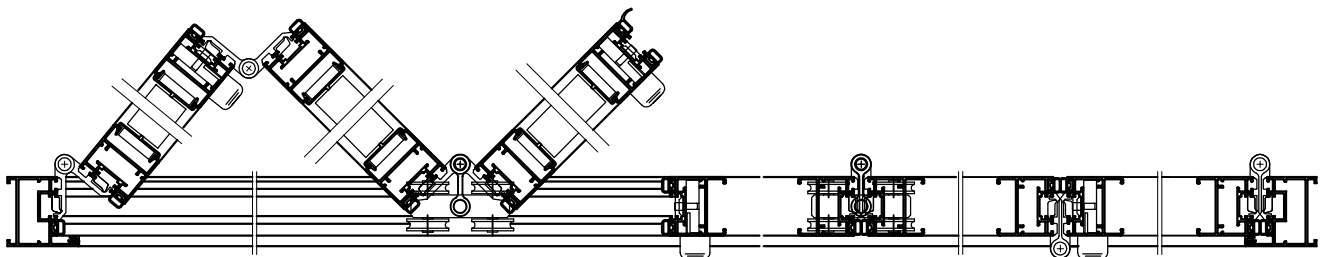
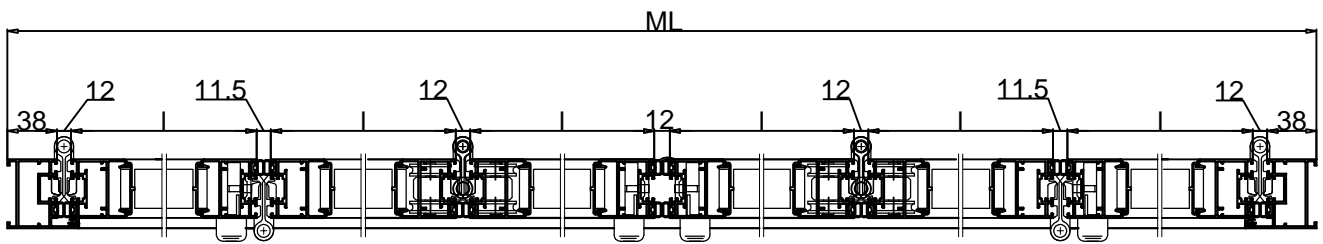
I1=MI-135/4 - 20
I2=ML-135/4 + 20





ŠEST KRILA JEDNAKE ŠIRINE
SLAGANJE 3 + 3

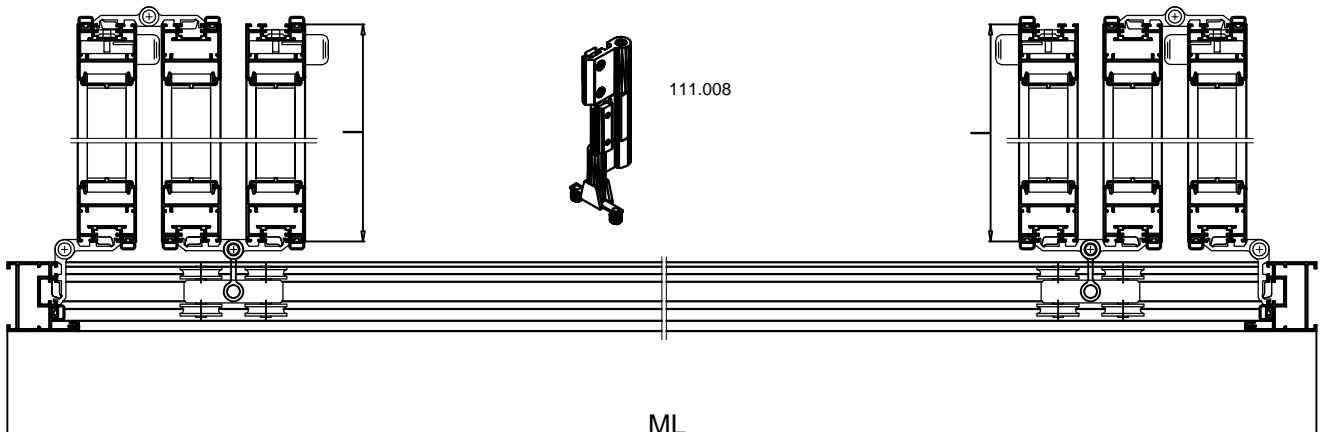
I=ML-159/6

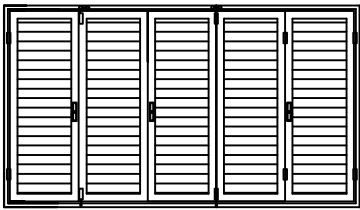


111.007



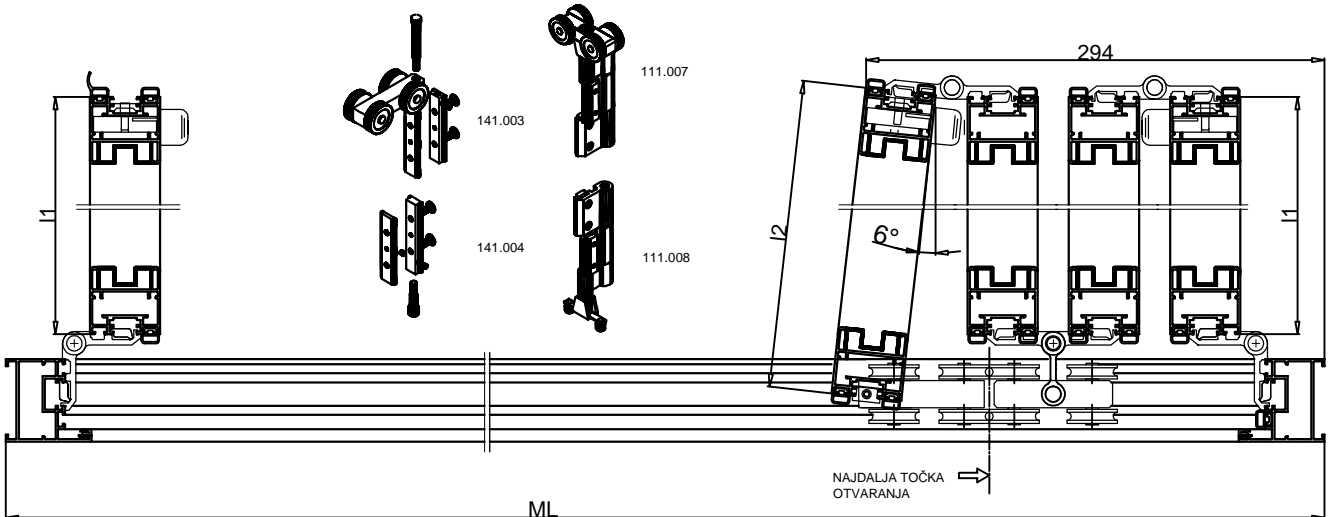
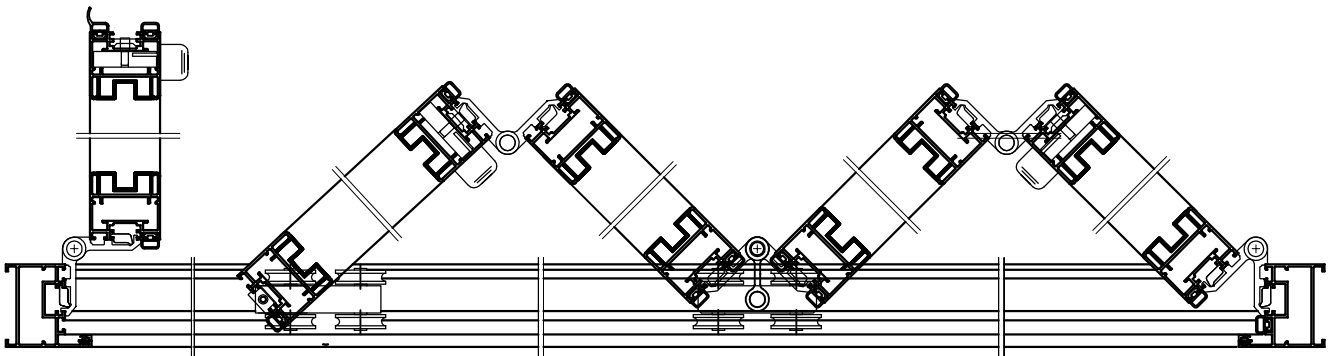
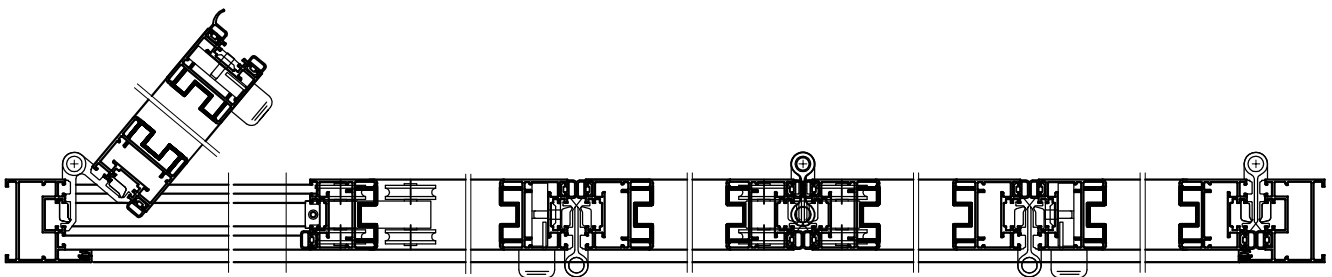
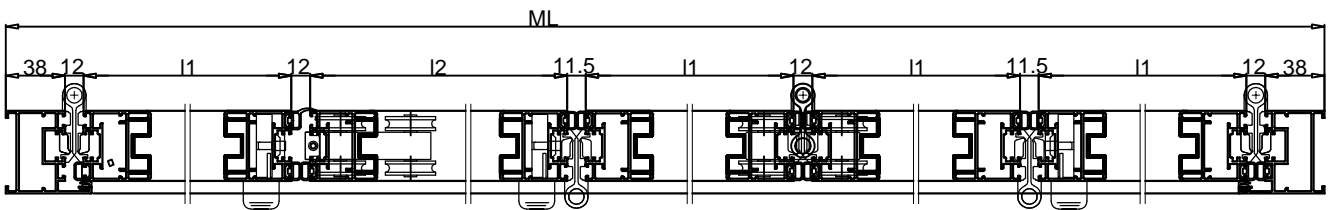
111.008





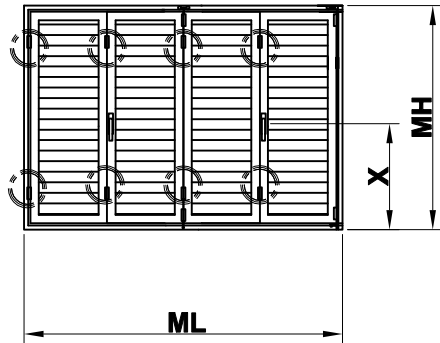
KRILA NEJEDNAKE ŠIRINE
SLAGANJE 1 + 4

l1=MI-147/5
l2=l1+40



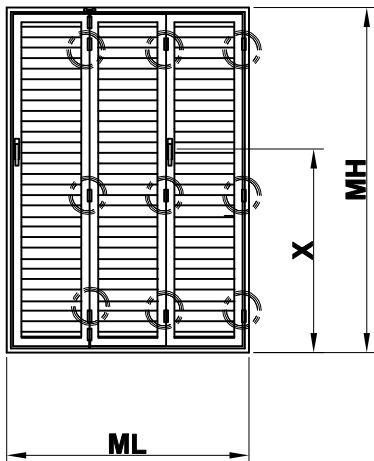
- ODABIR BROJA BAGLAMA EH-2 U ODNOSU NA VISINU
- ODABIR VRIJEDI ZA SVE KOMBINACIJE

SLAGANJE 0+4



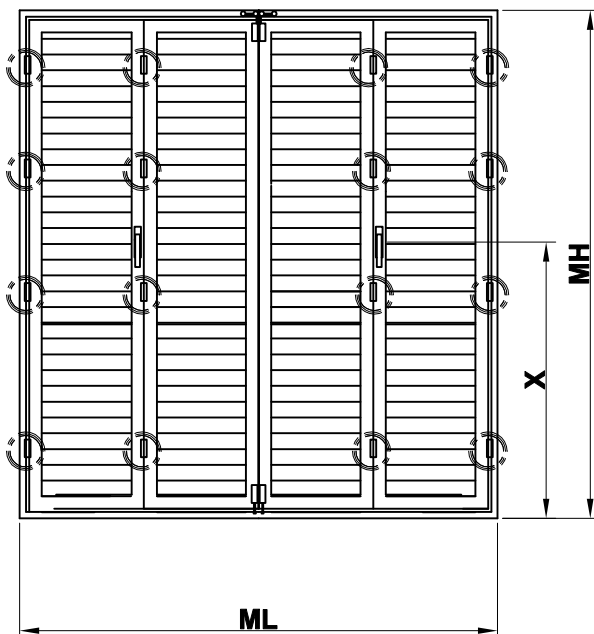
$MH < 1600\text{mm}$ DVIJE ŠARKE
EH-2 NA SASTAVIMA KRILA

SLAGANJE 0+3



$1600\text{mm} < MH < 2200\text{ mm}$
TRI ŠARKE EH-2 NA SASTAVIMA KRILA

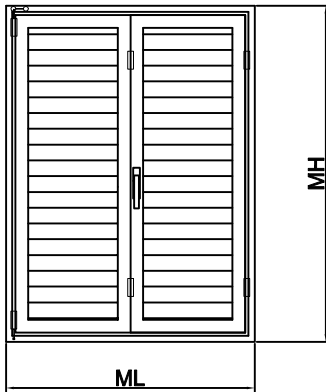
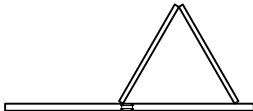
SLAGANJE 2+2



$2200\text{mm} < MH < 2600\text{mm}$
ČETIRI ŠARKE EH-2 NA SASTAVIMA KRILA

Napomena!

Prilikom montaže na visinama većim od 8 m i gdje su udari vjetrova veći od 40 Km/h ,**OBAVEZNO** grilje se moraju dovesti u zatvoren položaj .


DVA KRILA NEJEDNAKE ŠIRINE
SLAGANJE 2 + 0
I1= ML-112/2+20
I2= ML-112/2-20


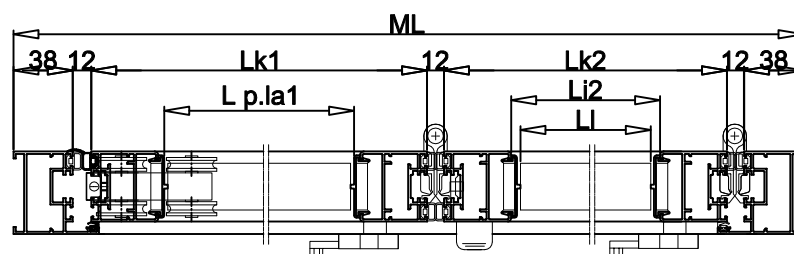
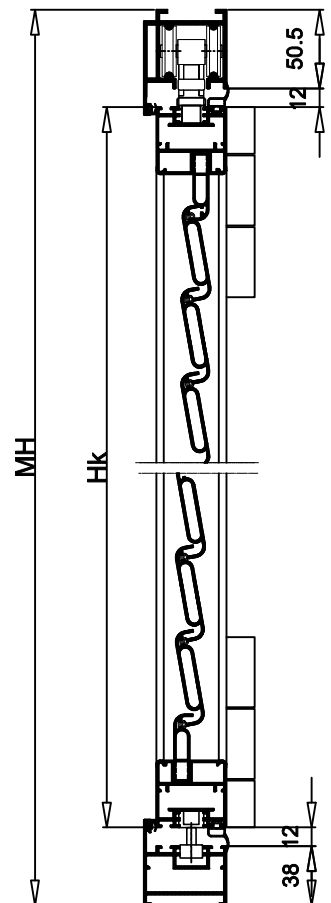
PROFILI		kom	mjera	pilanje
F-0948	vodilica okvira	1	Lo=ML-6=mm	90-90
F-0947	okomica okvira	1L-1D	Ho=MH-50,5=mm	45-90
F-0947	vodoravnica okvira	1	L=mm	45-45
F-0946	okomica krila	4	Hk=HM-112,5=mm	45-45
F-0946	vodoravnica krila	2	L1=LM-112/2+20=mm	45-45
F-0946	vodoravnica krila	2	L2=LM-112/2-20 =mm	45-45
P45-631	pokretna lamela	-	LI1=L1-105=mm	90-90
P45-631	pokretna lamela	-	LI2=L1-105=mm	90-90
D45-071	ispuna u krilu	1G-1D	Li1=L1-86=mm	90-90
D45-071	ispuna u krilu	1G-1D	Li2=L2-86=mm	90-90
P45-641	početna lamela	1G-1D	Lp.la1=L1-93,6=mm	90-90
P45-641	početna lamela	1G-1D	Lp.la2=L2-93,6=mm	90-90
NC-1459	klizač gornji	1G	Hkl.g=(Hk/2+3,5)-126	90-90
NC-1459	klizač donji	1D	Hkl.g=(Hk/2+3,5)-170	90-90

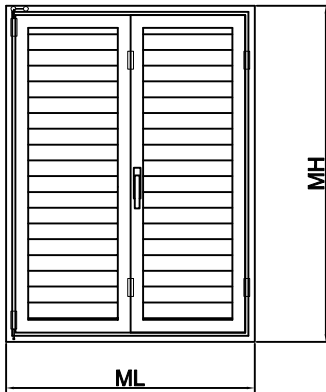
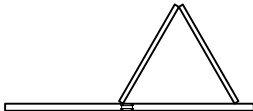
OKOVI

		kom
385.004	spojnica rama sa pratilicom	1L-1D
730.008	kutnik krila	8
710.036	kutnik rama	2
111.006.xx	šarka	4
141.003	šarka sa kolicima	1
141.004	šarka sa pratilicom	1
140.017	bravica-mehanizam (MASTER)	1
106.001.xx	ručka za pogon krila	1
385.003	zapinjač krila gornji	1
385.003	zapinjač krila donji	1
140.018	mehanizam za pokretne lamele 35mm	4
106.000	ručica za pokretanje lamela sa mehanizmom	2

BRTVE

		kom	mjera
344.016	brtva krila i rama		
344.017	brtvai krila i rama		
364.006	kutna guma krila	2	
364.005	kutna guma krila	8	
364.007	kutna guma krila desna	4	
364.008	kutna guma krila lijeva	4	
321.001	brtvai rama		




DVA KRILA JEDNAKE ŠIRINE
SLAGANJE 2 + 0
Ik= ML-112/2


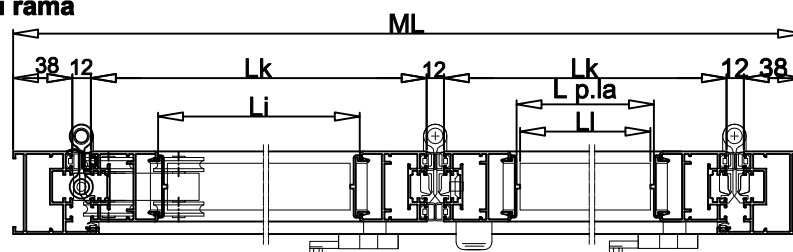
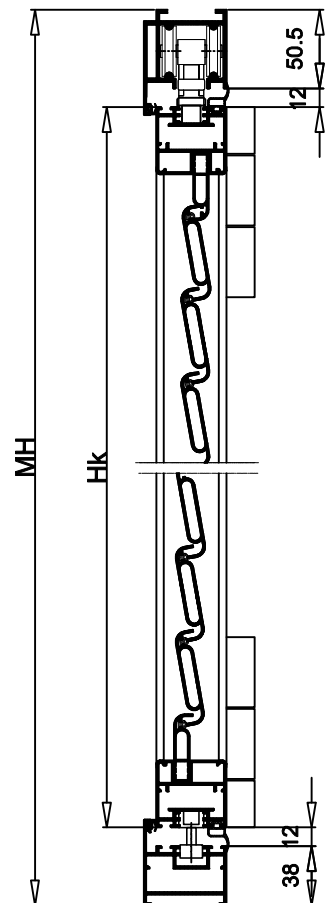
PROFILI		kom	mjera	pilanje
F-0948	vodilica okvira	1	Lo=ML-6=mm	90-90
F-0947	okomica okvira	1L-1D	Ho=MH-50,5=mm	45-90
F-0947	vodoravnica okvira	1	L=mm	45-45
F-0946	okomica krila	4	Hk=HM-112,5=mm	45-45
F-0946	vodoravnica krila	4	Lk=LM-112=mm	45-45
P45-631	pokretna lamela	-	Li=Lk-105=mm	90-90
D45-071	ispuna u krilu	1G-1D	Li=Lk-86=mm	90-90
P45-641	početna lamela	1G-1D	L p.la=Lk-93,6=mm	90-90
NC-1459	klizač gornji	1G	Hkl.g=(Hk/2+3,5)-126	90-90
NC-1459	klizač donji	1D	Hkl.g=(Hk/2+3,5)-170	90-90

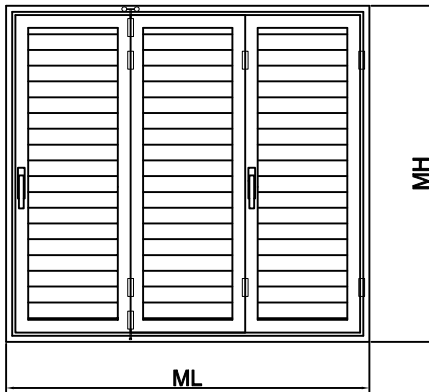
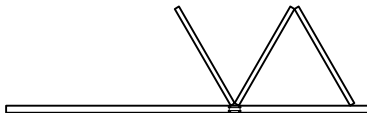
OKOVI

		kom
385.004	spojnica rama sa pratilicom	1L-1D
730.008	kutnik krila	8
710.036	kutnik rama	2
111.006.xx	šarka	4
141.005	šarka sa kolicima	1
141.006	šarka sa pratilicom	1
140.017	bravica-mehanizam (MASTER)	1
106.001.xx	ručka za pogon krila	1
385.003	zapinjač krila gornji	1
385.003	zapinjač krila donji	1
140.018	mehanizam za pokretne lamele 35mm	4
106.000	ručica za pokretanje lamela sa mehanizmom	2

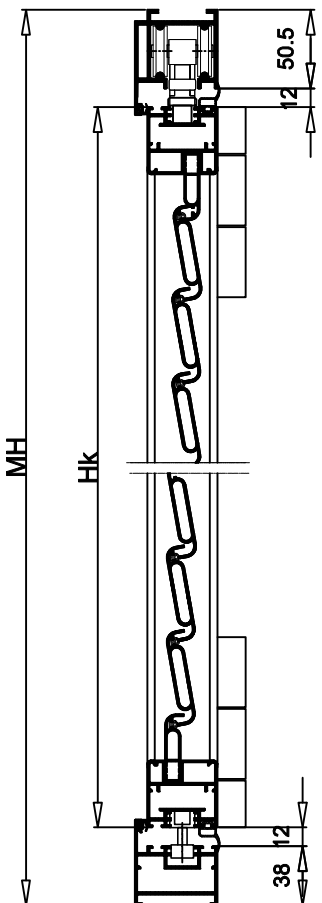
BRTVE

		kom	mjera
344.016	brtva krila i rama		
344.017	brtvai krila i rama		
364.006	kutna guma krila	2	
364.005	kutna guma krila	8	
364.007	kutna guma krila desna	4	
364.008	kutna guma krila lijeva	4	
321.001	brtvai rama		



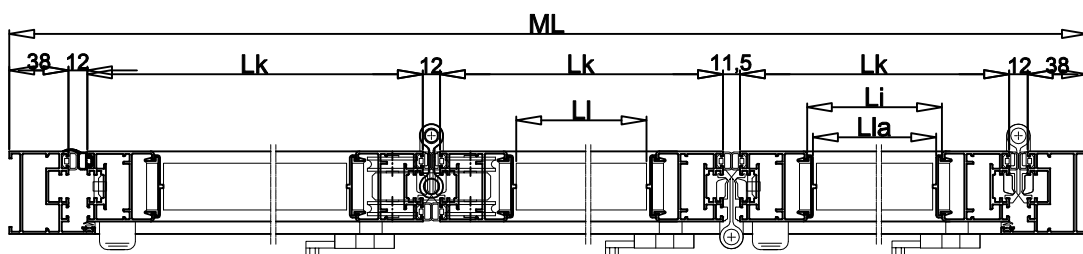

TRI KRILA JEDNAKE ŠIRINE
SLAGANJE 3 + 0
Ik= ML-123,5/3


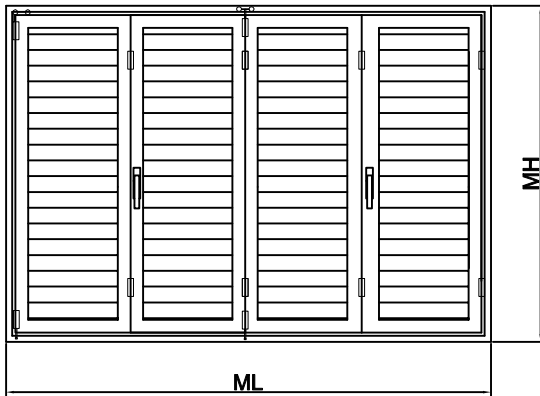
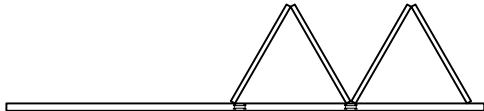
PROFILI		kom	mjera	pilanje
F-0948	vodilica okvira	1	Lo=ML-6=mm	90-90
F-0947	okomica okvira	1L-1D	Ho=MH-50,5=mm	45-90
F-0947	vodoravnica okvira	1	L=mm	45-45
F-0946	okomica krila	6	Hk=HM-112.5=mm	45-45
F-0946	vodoravnica krila	6	Lk=LM-123.5/3=mm	45-45
P45-631	pokretna lamela	-	Li=Lk-105=mm	90-90
D45-071	ispuna u krilu	1G-1D	Li=Lk-86=mm	90-90
P45-641	početna lamela	1G-1D	Lp.la=Lk-93.6=mm	90-90
NC-1459	klizač gornji	1G	Hkl.g=(Hk/2+3.5)-126	90-90
NC-1459	klizač donji	1D	Hkl.g=(Hk/2+3.5)-170	90-90



OKOVI		kom
385.004	spojnica rama sa pratilicom	1L-1D
730.008	kutnik krila	12
710.036	kutnik rama	2
111.006.xx	šarka	4
111.007	šarka sa kolicima	1
111.008	šarka sa pratilicom	1
140.017	bravica-mehanizam (MASTER)	2
106.001.xx	ručka za pogon krila	2
385.003	zapinjač krila gornji	2
385.003	zapinjač krila donji	2
140.018	mehanizam za pokretne lamele 35mm	6
106.000	ručica za pokretanje lamela sa mehanizmom	3

BRTVE		kom	mjera
344.016	brtva krila i rama		
344.017	brtvai krila i rama	2	
364.006	kutna guma krila	12	
364.005	kutna guma krila	6	
364.007	kutna guma krila desna	6	
364.008	kutna guma krila lijeva	6	
321.001	brtvai rama		



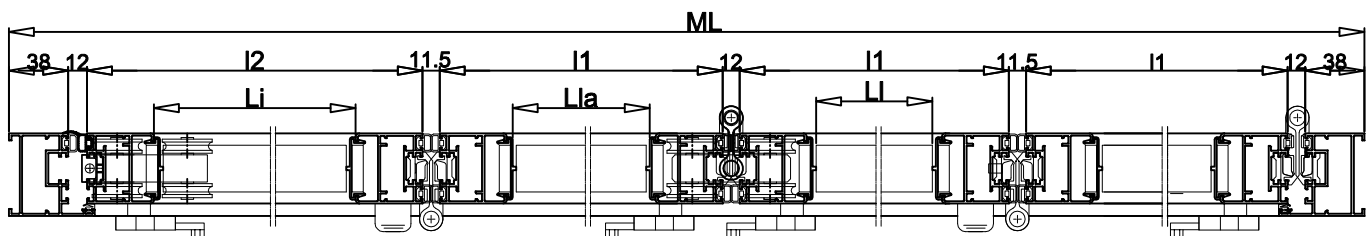
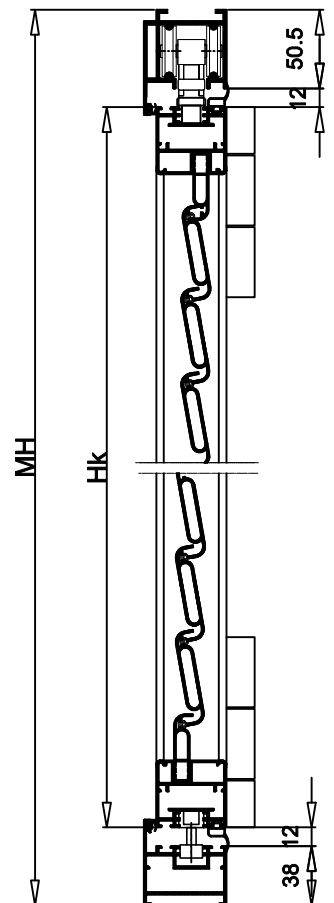

ČETIRI KRILA NEJEDNAKE ŠIRINE
SLAGANJE 4 + 0
 $I1 = ML - 135/4 - 10$
 $I2 = I1 + 40$


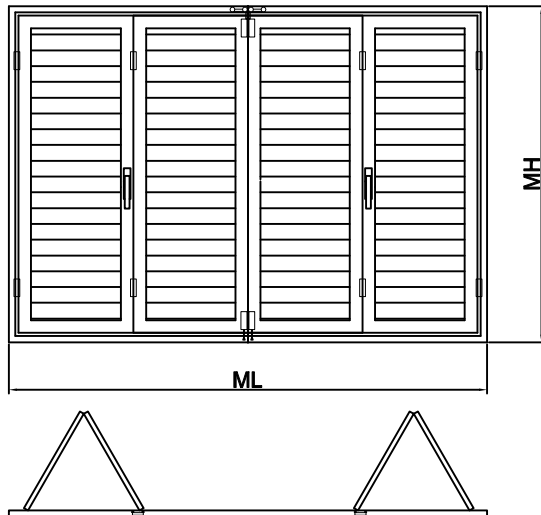
PROFILI		kom	mjera	pilanje
F-0948	vodilica okvira	1	$Lo = ML - 6 = \text{mm}$	90-90
F-0947	okomica okvira	1L-1D	$Ho = MH - 50,5 = \text{mm}$	45-90
F-0947	vodoravnica okvira	1	$L = \text{mm}$	45-45
F-0946	okomica krila	8	$Hk = HM - 112,5 = \text{mm}$	45-45
F-0946	vodoravnica krila I1	6	$I1 = ML - 135/4 - 10 = \text{mm}$	45-45
F-0946	vodoravnica krila I2	2	$I2 = I1 + 40 = \text{mm}$	45-45
P45-631	pokretna lamela I1	-	$LI1 = I1 - 105 = \text{mm}$	90-90
P45-631	pokretna lamela I2	-	$LI2 = I2 - 105 = \text{mm}$	90-90
D45-071	ispuna u krilu	1G-1D	$Li1 = Lk - 86 = \text{mm}$	90-90
P45-641	početna lamela	1G-1D	$Lp.la1 = Lk - 93,6 = \text{mm}$	90-90
D45-071	ispuna u krilu	1G-1D	$Li2 = Lk - 86 = \text{mm}$	90-90
P45-641	početna lamela	1G-1D	$Lp.la2 = Lk - 93,6 = \text{mm}$	90-90
NC-1459	klizač gornji	1G	$Hkl.g = (Hk/2 + 3,5) - 126$	90-90
NC-1459	klizač donji	1D	$Hkl.g = (Hk/2 + 3,5) - 170$	90-90
OKOVI	bravom		kom	

385.004	spojnica rama sa pratilicom	1L-1D	
730.008	kutnik krila	16	
710.036	kutnik rama	2	
111.006.xx	šarka	6	
111.007	šarka sa kolicima	1	
111.008	šarka sa pratilicom	1	
141.003	kolica za 2+2 krila	1	
141.004	pratilica za 2+2 krila	1	
140.017	bravica-mehanizam (MASTER)	2	
106.001.xx	ručka za pogon krila	2	
385.003	zapinjač krila gornji	2	
385.003	zapinjač krila donji	2	
140.018	mehanizam za pokretne lamele 35mm	8	
106.000	ručica za pokretanje lamela sa mehanizmom	4	

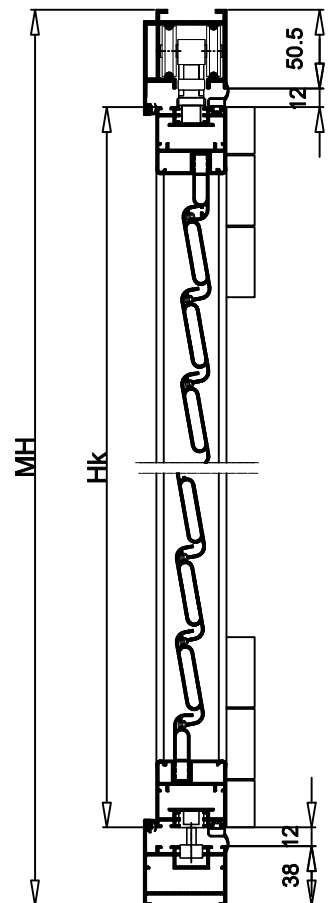
BRTVE		kom	mjera
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344.016	brtva krila i rama		
344.017	brtvai krila i rama		
364.006	kutna guma krila	2	
364.005	kutna guma krila	16	
364.007	kutna guma krila desna	8	
364.008	kutna guma krila lijeva	8	
321.001	brtvai rama		



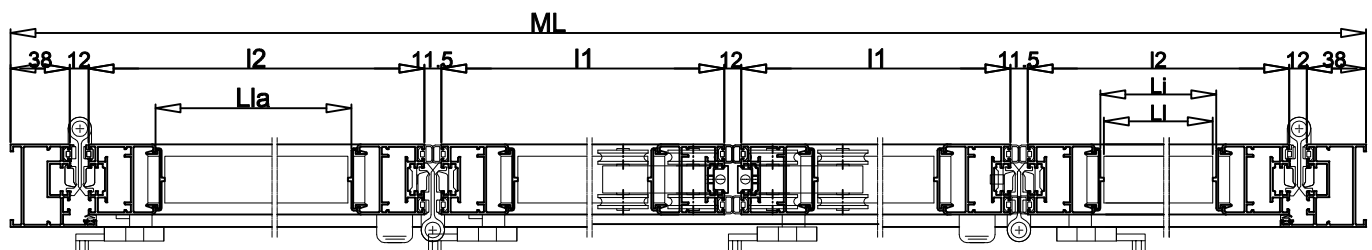

ČETIRI KRILA NEJEDNAKE ŠIRINE
SLAGANJE PO DVA KRILA 2+2
 $I1=MI -135/4-20$
 $I1=MI - 135/4+20$

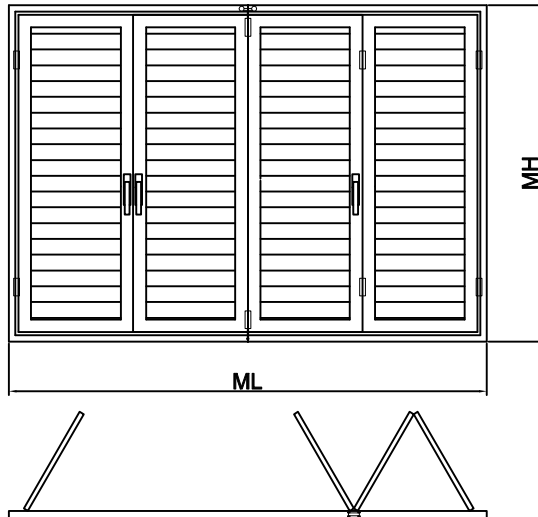
PROFILI		kom	mjera	pilanje
F-0948	vodilica okvira	1	$Lo=L-6=mm$	90-90
F-0947	okomica okvira	1L-1D	$Ho=H-50,5=mm$	45-90
F-0947	vodoravnica okvira	1	$L=mm$	45-45
F-0946	okomica krila	8	$Hk=HM-112,5=mm$	45-45
F-0946	vodoravnica krila I1	6	$I1=ML-135/4-20=mm$	45-45
F-0946	vodoravnica krila I2	2	$I1=ML-135/4+20=mm$	45-45
P45-631	pokretna lamela I1	-	$LI1=I1-105=mm$	90-90
P45-631	pokretna lamela I2	- II -	$LI2=I2-105=mm$	90-90
D45-071	ispuna u krilu	1G-1D	$Li1=Lk-86=mm$	90-90
P45-641	početna lamela	1G-1D	$Lp.la1=Lk-93,6=mm$	90-90
D45-071	ispuna u krilu	1G-1D	$Li2=Lk-86=mm$	90-90
P45-641	početna lamela	1G-1D	$Lp.la2=Lk-93,6=mm$	90-90
NC-1459	klizač gornji	1G	$Hkl.g=(Hk/2+3,5)-126$	90-90
NC-1459	klizač donji	1D	$Hkl.g=(Hk/2+3,5)-170$	90-90



OKOVI		kom
385.004	spojnica rama sa pratilicom	1L-1D
730.008	kutnik krila	16
710.036	kutnik rama	2
111.006.xx	šarka	8
141.003	kolica za 2+2 krila	2
141.004	pratilica za 2+2 kolica	2
140.017	bravica-mehanizam (MASTER)	2
106.001.xx	ručka za pogon krila	2
385.003	zapinjač krila gornji	2
385.003	zapinjač krila donji	2
140.018	mehanizam za pokretne lamele 35mm	8
106.000	ručica za pokretanje lamela sa mehanizmom	4

BRTVE		kom	mjera
344.016	brtva krila i rama		
344.017	brtvai krila i rama		
364.006	kutna guma krila	16	
364.005	kutna guma krila	8	
364.007	kutna guma krila desna	8	
364.008	kutna guma krila lijeva	8	
321.001	brtvai rama		





ČETIRI KRILA JEDNAKE ŠIRINE
SLAGANJE 3 + 1

Ik=ML-135.5/4

PROFILI		kom	mjera	pilanje
F-0948	vodilica okvira	1	Lo=L-6=mm	90-90
F-0947	okomica okvira	1L-1D	Ho=H-50,5=mm	45-90
F-0947	vodoravnica okvira	1	L=mm	45-45
F-0946	okomica krila	8	Hk=HM-112.5=mm	45-45
F-0946	vodoravnica krila	8	Lk=L-135.5=mm	45-45
P45-631	pokretna lamela	-	Li=Lk-105=mm	90-90
D45-071	ispuna u krilu	1G-1D	Li=Lk-86=mm	90-90
P45-641	početna lamela	1G-1D	Lp.la=Lk-93.6=mm	90-90

NC-1459	klizač gornji	ručka je na sradini	1G	Hkl.g=(Hk/2+3.5)-126	90-90
NC-1459	klizač donji		1D	Hkl.g=(Hk/2+3.5)-170	90-90

OKOVI		kom
385.004	spojnica rama sa pratilicom	1L-1D
730.008	kutnik krila	16
710.036	kutnik rama	2
111.006.xx	šarka	6
111.007	šarka sa kolicima	1
111.008	šarka sa pratilicom	1
140.017	bravica-mehanizam (MASTER)	3
106.001.xx	ručka za pogon krila	3
385.003	zapinjač krila gornji	3
385.003	zapinjač krila donji	3
140.018	mehanizam za pokretne lamele 35mm	8
106.000	ručica za pokretanje lamela sa mehanizmom	4

BRTVE		kom	mjera
344.016	brtva krila i rama		
344.017	brtvai krila i rama		
364.006	kutna guma krila	16	
364.005	kutna guma krila	8	
364.007	kutna guma krila desna	8	
364.008	kutna guma krila lijeva	8	
321.001	brtvai rama		

