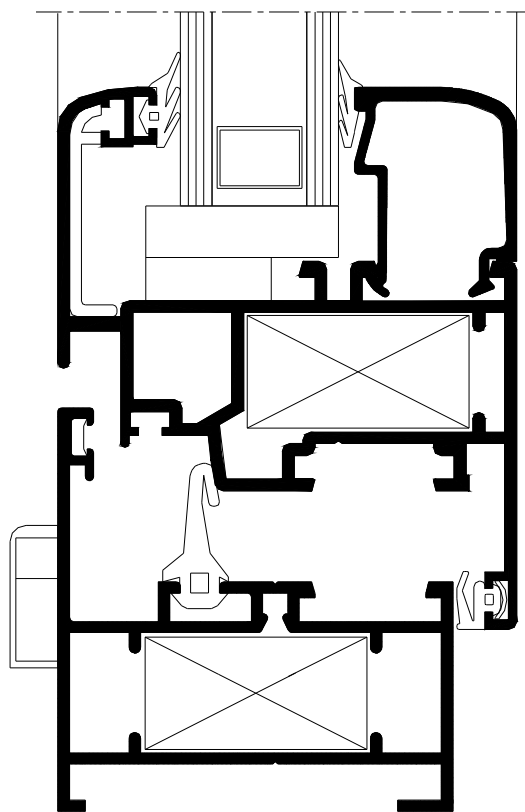
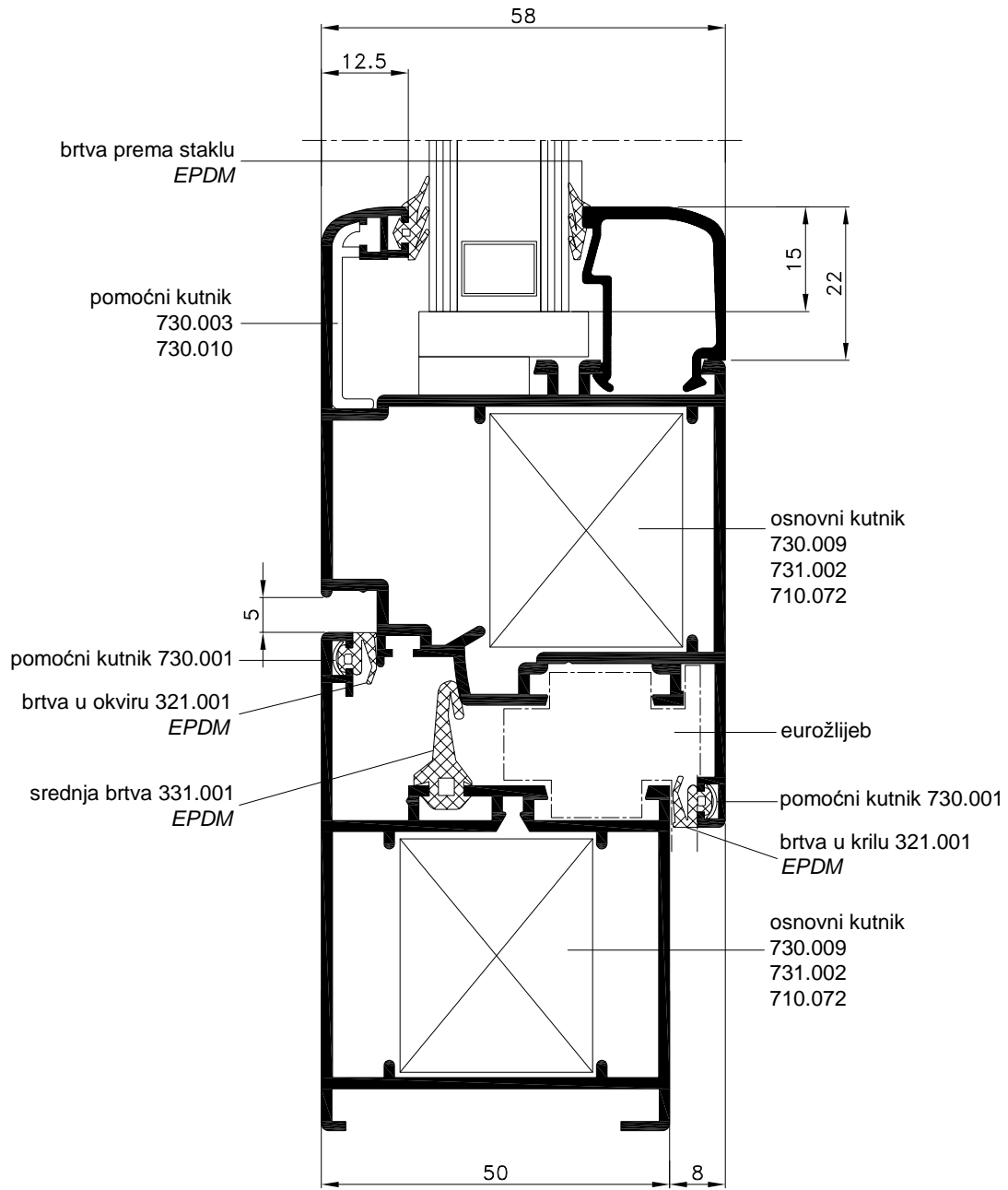


FEAL

FEAL-poduzeće za preradu aluminija-Široki Brijeg Trn b.b.



serija **Z 50**





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IZVJEŠTAJ O ISPITIVANJU BR. 2920-212/07

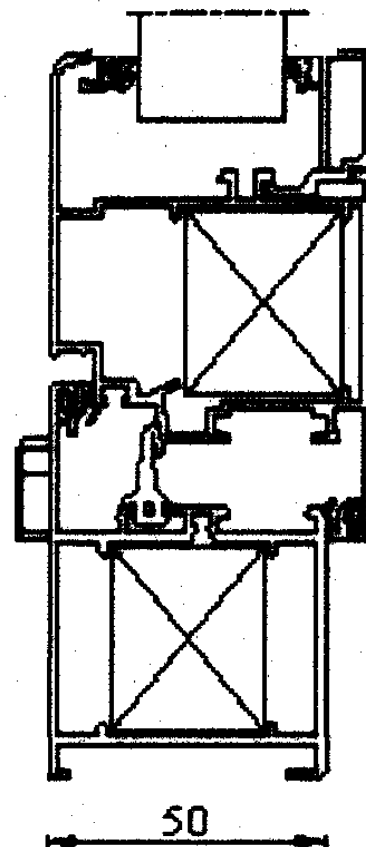
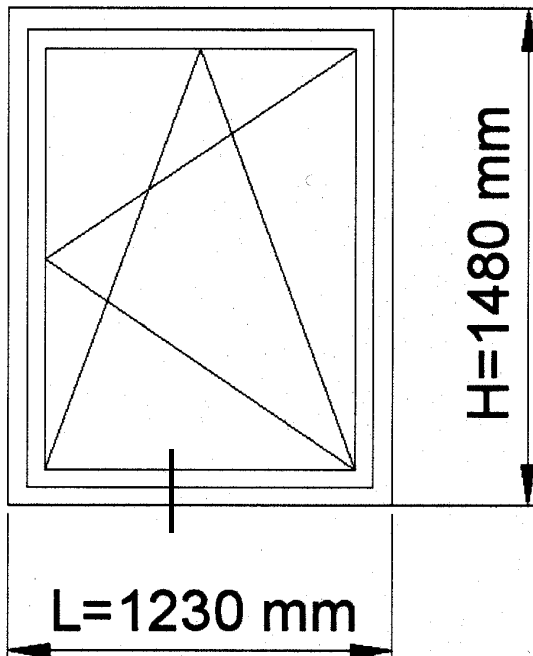
Opis ispitnog uzorka:

Ispitivanja zrakopropusnosti, vodonepropusnosti, otpornosti na opterećenje vjetrom i zvučne izolacije provedena su na jednokrillnom otklopno-zaokretnom prozoru izrađenom iz aluminijskih profila bez prekinutog toplinskog mosta serije **FEAL Z50**. Prozor je ostakljen IZO staklom debljine 28 mm (6 mm float staklo + 16 mm zrak + 6 mm float taklo).

Uzorak je prikazan skicom s presjecima i tehničkim opisom dostavljenim od strane naručitelja kako slijedi u nastavku:

Izmjere prozora:

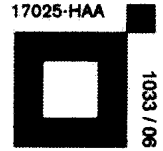
- širina: 1230 mm
- visina: 1480 mm



PROFILI		kom.	BRTVE		kom.
Z50-643	vodoravnica okvira	2	Z 101	srednja brtva	
Z50-643	okomica okvira	2	Z 106	brtva na spoju profila	
Z50-640	vodoravnica okvira	2	921 ili 918	brtva prema staklu	
Z50-640	okomica okvira	2	Z 111	brtva prema staklu	
F-0784	vodoravna lajsna	2	Z 901	kutni umetak	4
F-0784	okomita lajsna	2			
NC-1459	klizač				
OKOVI		kom.	STAKLO		kom.
4004	kutnik krila i rama	8	IZO 28 mm		1
G112	pomoćni kutnik	4	(6+16+6)		
G112/A	pomoćni kutnik	4			
0366	pomoćni kutnik	4			
komplet	DRY KIP mehanizam	1			
2328	maska za drenažni otvor	2			



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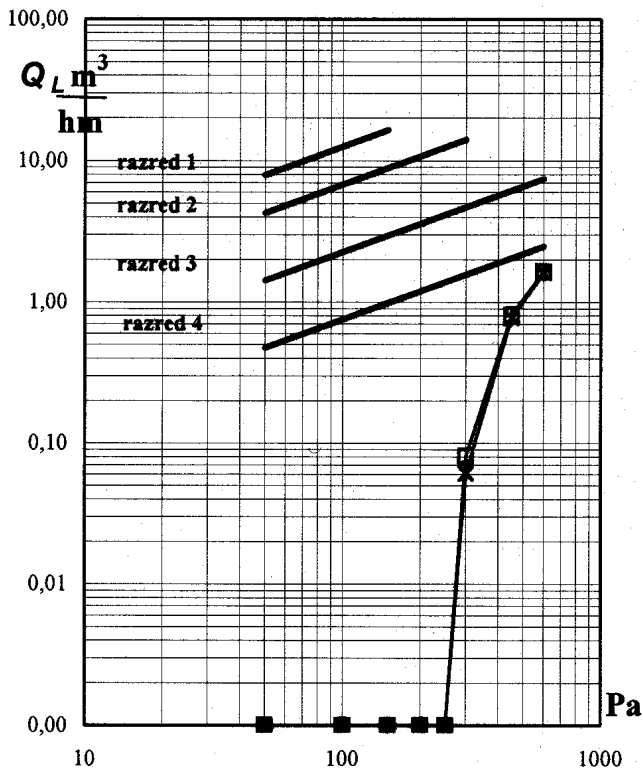


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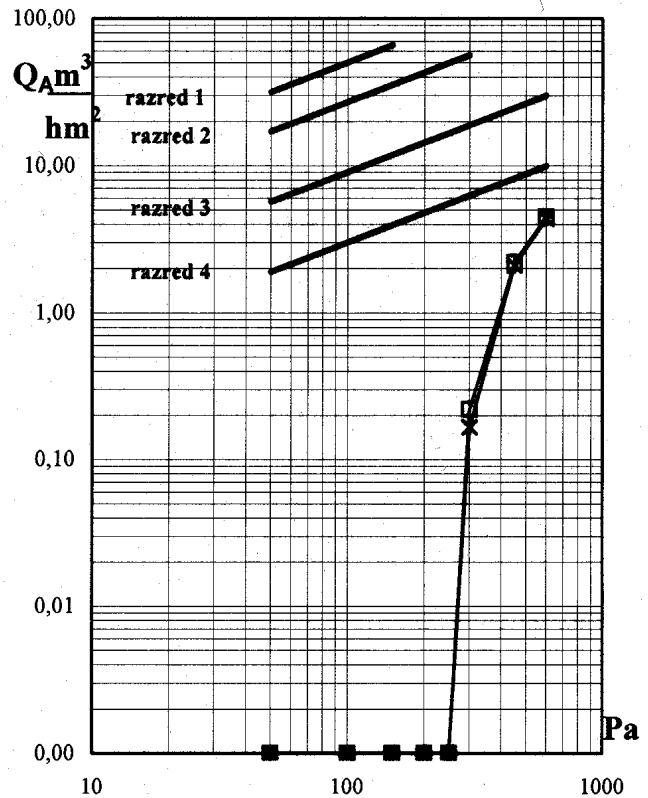
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A DIO: ZRAKOPROPUSNOST

Tablica izmjernih protoka zraka po jedinici duljine sljubnica uzorka i po jedinici ploštine uzorka, kao funkcija razlike tlakova:



—■— LGF 083/07 - prvo ispitivanje zrakopropusnosti
 —*— LGF 083/07 - ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom



—■— LGF 083/07 - prvo ispitivanje zrakopropusnosti
 —*— LGF 083/07 - ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom

S obzirom na zrakopropusnost, ispitani jednokrilni otklopno-zaokretni prozor izrađen iz aluminijskih profila bez prekinitog toplinskog mosta serije FEAL Z50, proizvođača FEAL d.o.o., može se svrstati u razred 4, u skladu s HRN EN 12207:2001.



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B DIO: VODONEPROPUSNOST

Rezultati ispitivanja prikazani su tablicom:

TLAK Δp (Pa)	VRIJEME τ (min)	LGF 083/07	RAZRED (HRN EN 12208:2001)
0	15	+	1 A
50	5	+	2 A
100	5	+	3 A
150	5	+	4 A
200	5	+	5 A
250	5	+	6 A
300	5	+	7 A
450	5	+	8 A
600	5	+	9 A

- + Znači da nije došlo do propuštanja vode.
- ▽ Znači da je došlo do propuštanja vode.

S obzirom na vodonepropusnost, ispitani jednokrlni otklopno-zaokretni prozor izrađen iz aluminijskih profila bez prekinitog toplinskog mosta serije FEAL Z50, proizvođača FEAL d.o.o., može se svrstati u razred 9A, u skladu s HRN EN 12208:2001.

C DIO: OTPORNOST NA OPTEREĆENJE VJETROM

REZULTATI ISPITIVANJA ČEONOG SAVIJANJA

Ispitivanje je provedeno na dijelu profila prozorskog krila gdje postoji najveći razmak između dva susjedna učvršćenja prozorskog krila za doprozornik.

B – mjesto mjesta na sredini između A i C mjesta (oznaka na crtežu),

A – mjesto mjesta na spoju gornjeg i bočnog profila prozorskog krila gdje se nalazi učvršćenje prozorskog krila za doprozornik (oznaka na crtežu),

C – mjesto mjesta na gornjem profilu prozorskog krila gdje se nalazi učvršćenje prozorskog krila za doprozornik (oznaka na crtežu),

A_0, B_0, C_0 , – početno stanje s obzirom na pomak koje je ugođeno tako da pokazuje 0 mm pri $\Delta p = 0$ (Pa),

A_P – čeonu pomak na mjernom mjestu A pri iskazanoj razlici tlakova P_1 ,

B_P – čeonu pomak na mjernom mjestu B pri iskazanoj razlici tlakova P_1 ,

C_P – čeonu pomak na mjernom mjestu C pri iskazanoj razlici tlakova P_1 ,

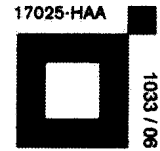
$F_P = (B_P) - ((A_P) + (C_P))/2$ - čeonu savijanje,

$L = 0,78$ m - razmak između točaka A i C,

$F_{rp} = F_P / L$ - relativno čeonu savijanje.



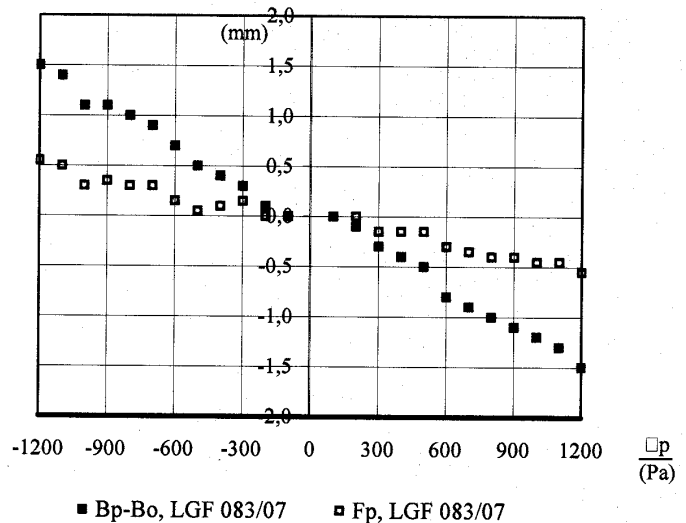
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TLAK Δp (Pa)	LGF 083/07				
	A_p (mm)	B_p (mm)	C_p (mm)	F_p (mm)	F_{rp} ($\times 10^{-4}$)
100	0,0	0,0	0,0	0,00	0,00
200	-0,1	-0,1	-0,1	0,00	0,00
300	-0,2	-0,3	-0,1	-0,15	-1,92
400	-0,3	-0,4	-0,2	-0,15	-1,92
500	-0,4	-0,5	-0,3	-0,15	-1,92
600	-0,5	-0,8	-0,5	-0,30	-3,85
700	-0,5	-0,9	-0,6	-0,35	-4,49
800	-0,6	-1,0	-0,6	-0,40	-5,13
900	-0,7	-1,1	-0,7	-0,40	-5,13
1000	-0,8	-1,2	-0,7	-0,45	-5,77
1100	-0,9	-1,3	-0,8	-0,45	-5,77
1200	0,0	0,0	0,0	-0,55	-7,05
-100	0,1	0,1	0,1	0,00	0,00
-200	0,2	0,3	0,1	0,00	0,00
-300	0,3	0,4	0,3	0,15	1,92
-400	0,5	0,5	0,4	0,10	1,28
-500	0,6	0,7	0,5	0,05	0,64
-600	0,6	0,9	0,6	0,15	1,92
-700	0,7	1,0	0,7	0,30	3,85
-800	0,7	1,1	0,8	0,30	3,85
-900	0,8	1,1	0,8	0,35	4,49
-1000	0,9	1,4	0,9	0,30	3,85
-1100	1,0	1,5	0,9	0,50	6,41



S obzirom na relativno čono savijanje, ispitani uzorak LGF 083/07, može se svrstati u razred C ($F_{rp} < 1/300$), u skladu s HRN EN 12210:2001, budući da je maksimalno relativno čono savijanje iznosilo 1/1418.

REZULTATI ISPITIVANJA OTPORNOSTI PROMJENJIVIM TLAKOM P2

Ispitivanje je provedeno s 50 impulsa promjenjivog tlaka P2 od ± 600 Pa, koji iznosi polovicu max. tlaka P1.

Nakon provedenog opterećenja na uzorku LGF 083/07 nije bilo vidljivih oštećenja niti promjena u funkcionalnosti prozora.

REZULTATI SIGURNOSNOG ISPITIVANJA

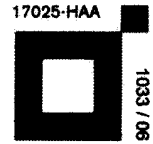
Ispitivanje sigurnosti je provedeno s jednim impulsom od -1800 Pa i s jednim impulsom od $+1800$ Pa.

Nakon provedenog opterećenja na uzorku LGF 083/07 nije bilo vidljivih napuknuća na bilo kojem dijelu uzorka (staklo, okvir i okovi), niti je došlo do otvaranja prozora.

S obzirom na ispitivanje otpornosti na opterećenje vjetrom i ponovljeno ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom, koje pokazuje da nije došlo do povećanja vrijednosti od 20 % u odnosu na prvo ispitivanje zrakopropusnosti, ispitani **jednokrilni otklopno-zaokretni prozor izrađen iz aluminijskih profila bez prekinitog toplinskog mosta serije FEAL Z50**, proizvođača FEAL d.o.o., može se svrstati u razred C 3, u skladu s HRN EN 12210:2001.



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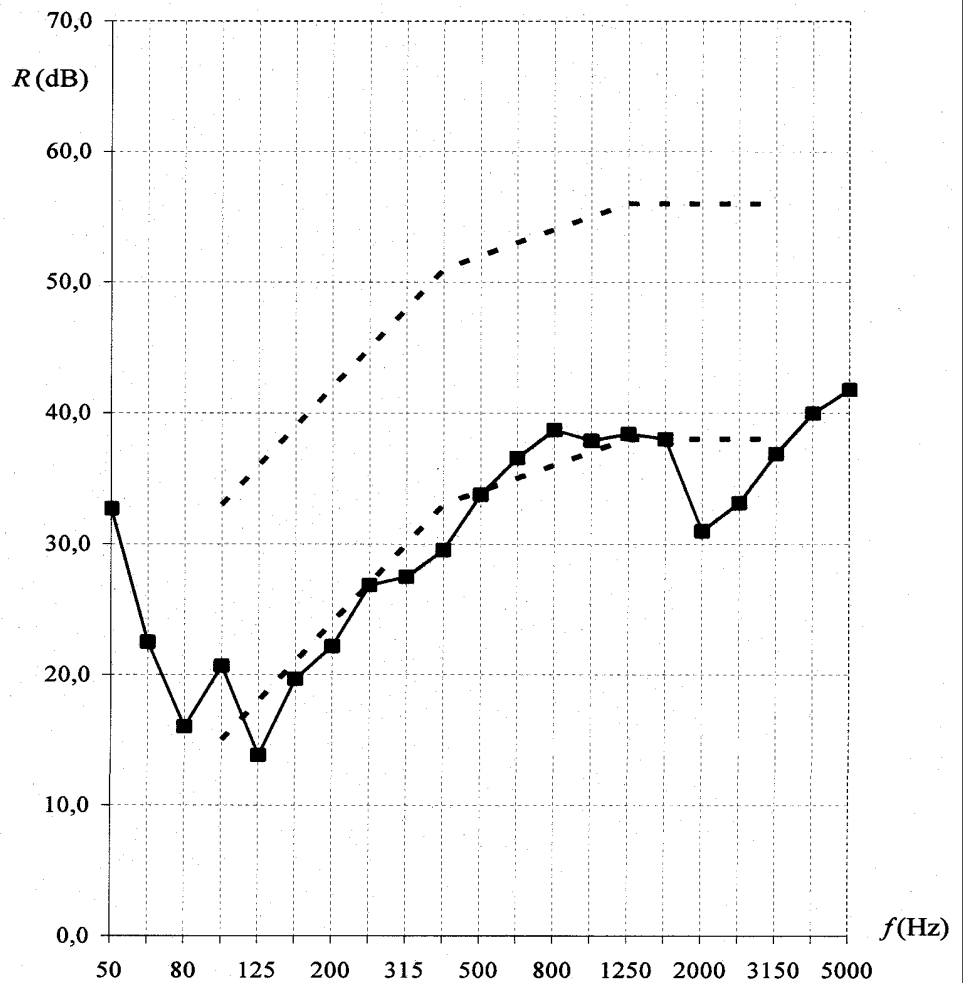
D DIO: ZVUČNA IZOLACIJA

Rezultati ispitivanja:

Indeks zvučne izolacije (R) ispitivanog uzorka prikazan je kao funkcija frekvencije tablicom i dijagramom. Pri iskazivanju rezultata ispitivanja rabljene su sljedeće oznake:

- f - središnja frekvencija terca (Hz),
- R - indeks zvučne izolacije (dB),
- R_w - vrednovani indeks zvučne izolacije (dB).

Frekvencija f (Hz)	terca R (dB)
50	32,7
63	22,5
80	16,0
100	20,7
125	13,8
160	19,6
200	22,2
250	26,9
315	27,5
400	29,5
500	33,7
630	36,6
800	38,7
1000	37,9
1250	38,4
1600	38,0
2000	31,0
2500	33,1
3150	36,9
4000	40,0
5000	41,8



Vrednovanje prema HRN EN ISO 717-1:1998: $R_w (C; C_{tr}; C_{50-5000}; C_{tr,50-5000}) = 34 (-2; -5; -1; -6)$ dB.

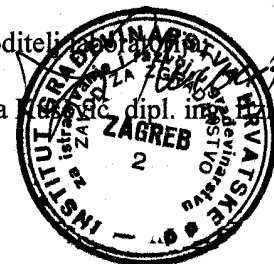
Voditelji ispitivanja:

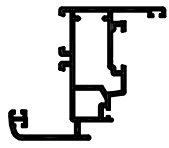
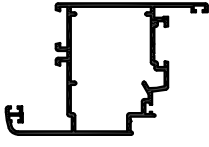
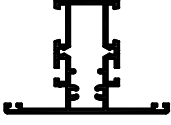
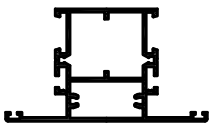
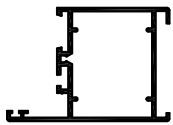
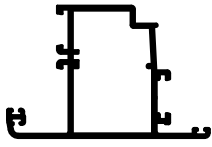
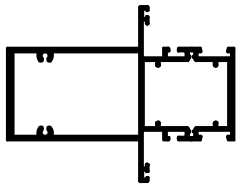

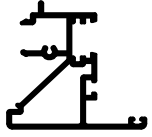
za A, B i C dio ispitivanja: Tomislav Vučić, dipl. ing. sig.

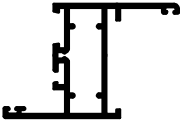
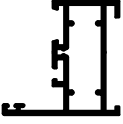
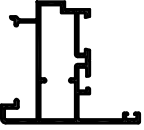

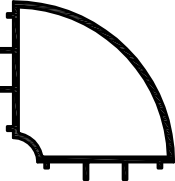
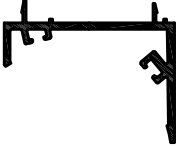



za D dio ispitivanja: Zlatko Frančić



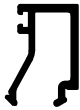






Voditelj


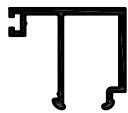







dr. sc. Ivica [signature]

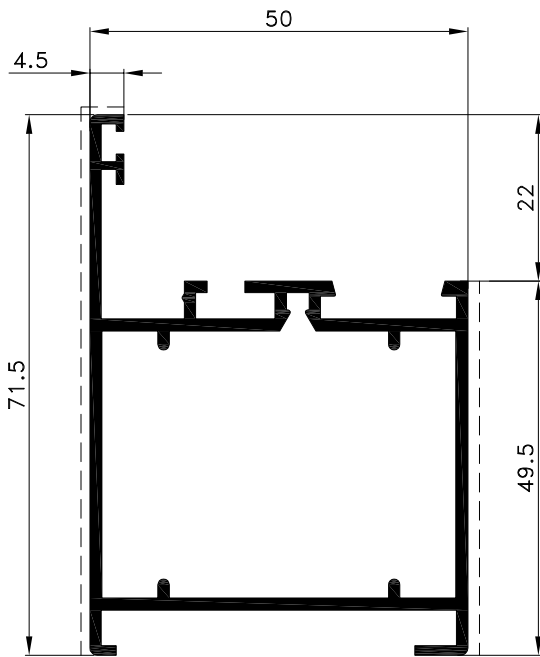


		Z50	PROFILI M 1:1			601-01
Oznaka	Izgled-presjek	Težina /kg/ml/	Opseg /mm/	I_x /cm ⁴ /	W_x /cm ³ /	
Z50-639		1.160	413			
Z50-640		1.368	433			
Z50-641		1.089	368			
Z50-642		1.352	403			
Z50-643		1.110	337			
Z50-651		1.342	425			
Z50-652		2.685	555			
Z50-653		2.281	560			
Z50-654		1.019	315			

		Z50	PROFILI M 1:1			601-02
Oznaka	Izgled-presjek	Težina /kg/ml/	Opseg /mm/	I_x /cm ⁴ /	W_x /cm ³ /	
Z50-655		0.993	360			
Z50-656		0.874	295			
Z50-657		0.972	346			
Z50-658		1.833	473			
M45-754		0.932	248			
M45-752		0.510	242			
060 353		0.825	225			
F-0228		0.153	68			
060 350		0.285	107			

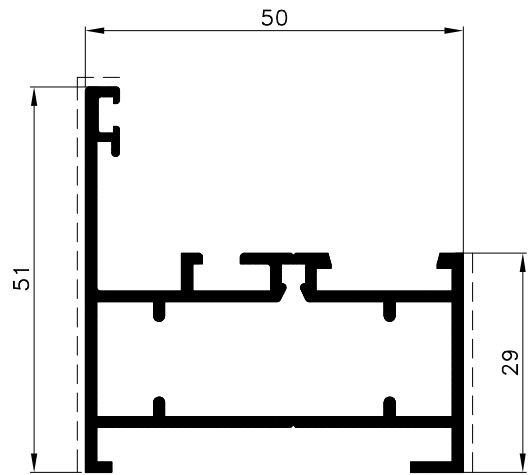
Oznaka	Izgled-presjek	Težina /kg/ml/	Opseg /mm/	I_x /cm ⁴ /	W_x /cm ³ /
F-0714		0.895	294		
F-0681		0.920	304		
M45-709		0.258	153		
M45-740		0.258	148		
Z40-636		0.261	141		
Z40-644		0.275	166		
Z40-646		0.286	157		
Z40-647		0.226	137		
Z40-648		0.268	125		

		Z50	PROFILI M 1:1			601-04
Oznaka	Izgled-presjek	Težina /kg/ml/	Opseg /mm/	I_x /cm ⁴ /	W_x /cm ³ /	
Z40-649		0.221	105			
Z40-653		0.348	196			
Z40-653/B		0.356	197			
Z40-656		0.215	107			
Z40-657		0.186	73			
Z40-658		0.318	184			
Z40-659		0.359	204			
Z40-660		0.179	89			
Z40-661		0.314	146			



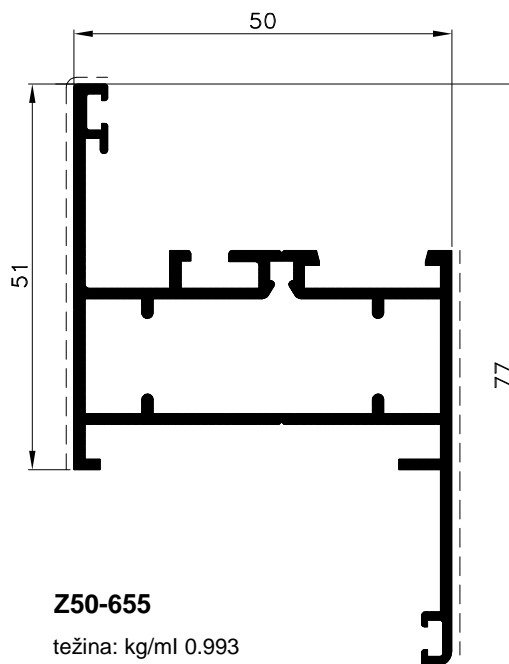
Z50-643

težina: kg/ml 1.110
svj.povr. mm 125



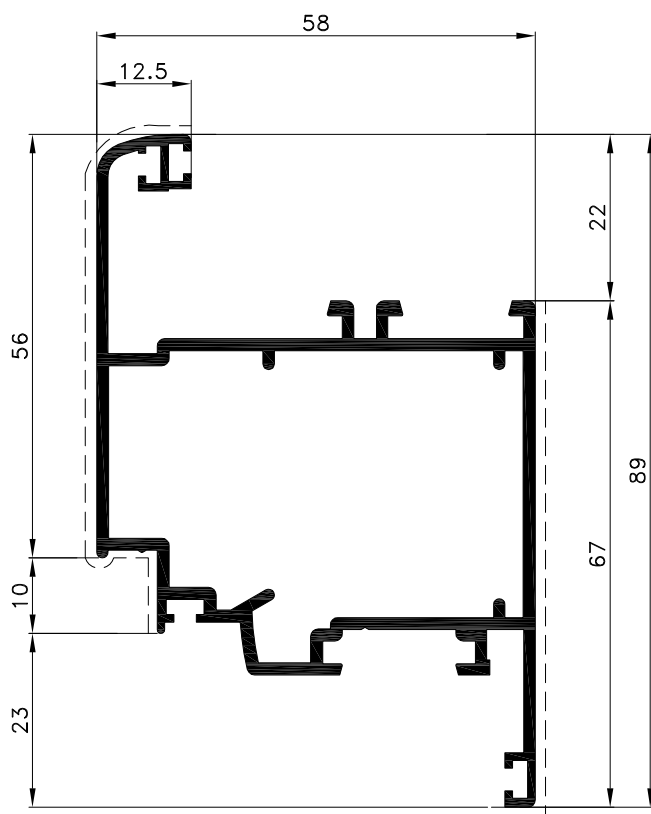
Z50-656

težina: kg/ml 0.874
svj.povr. mm 84



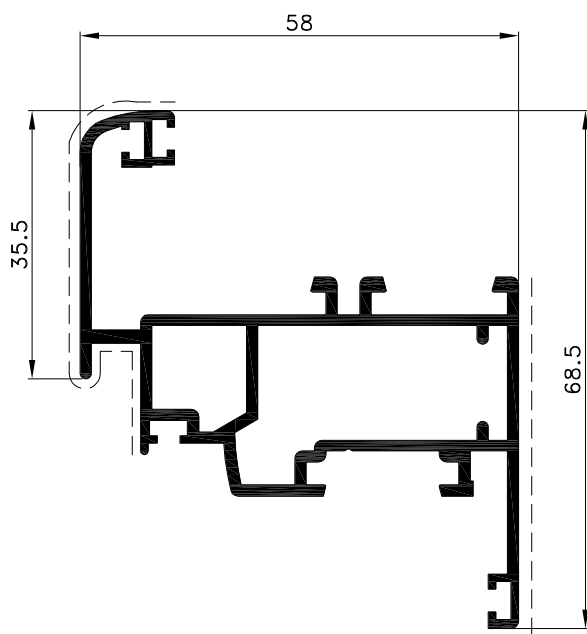
Z50-655

težina: kg/ml 0.993
svj.povr. mm 115



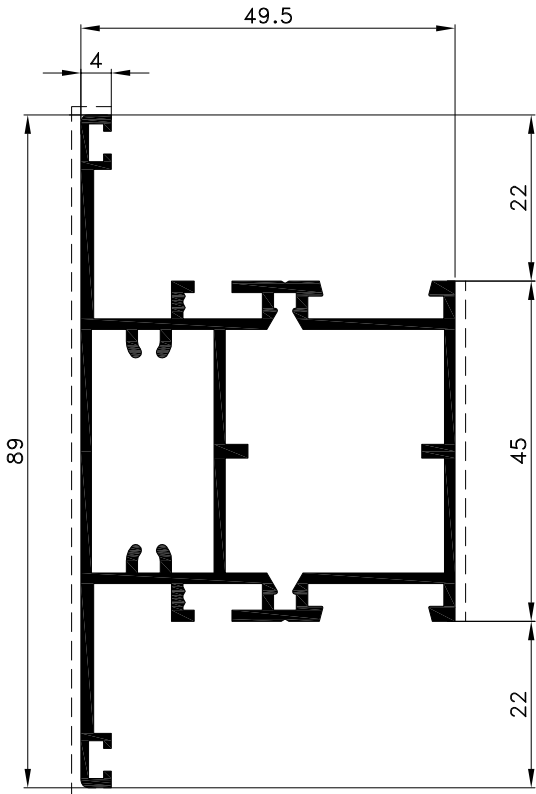
Z50-640

težina: kg/ml 1.368
svj.povr. mm 140



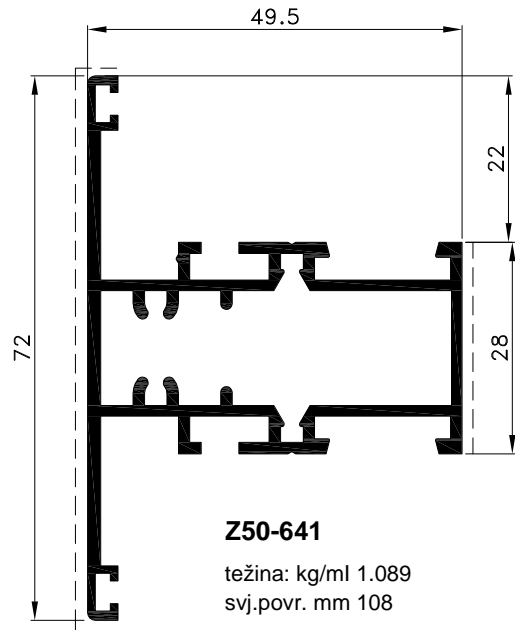
Z50-639

težina: kg/ml 1.160
svj.povr. mm 121



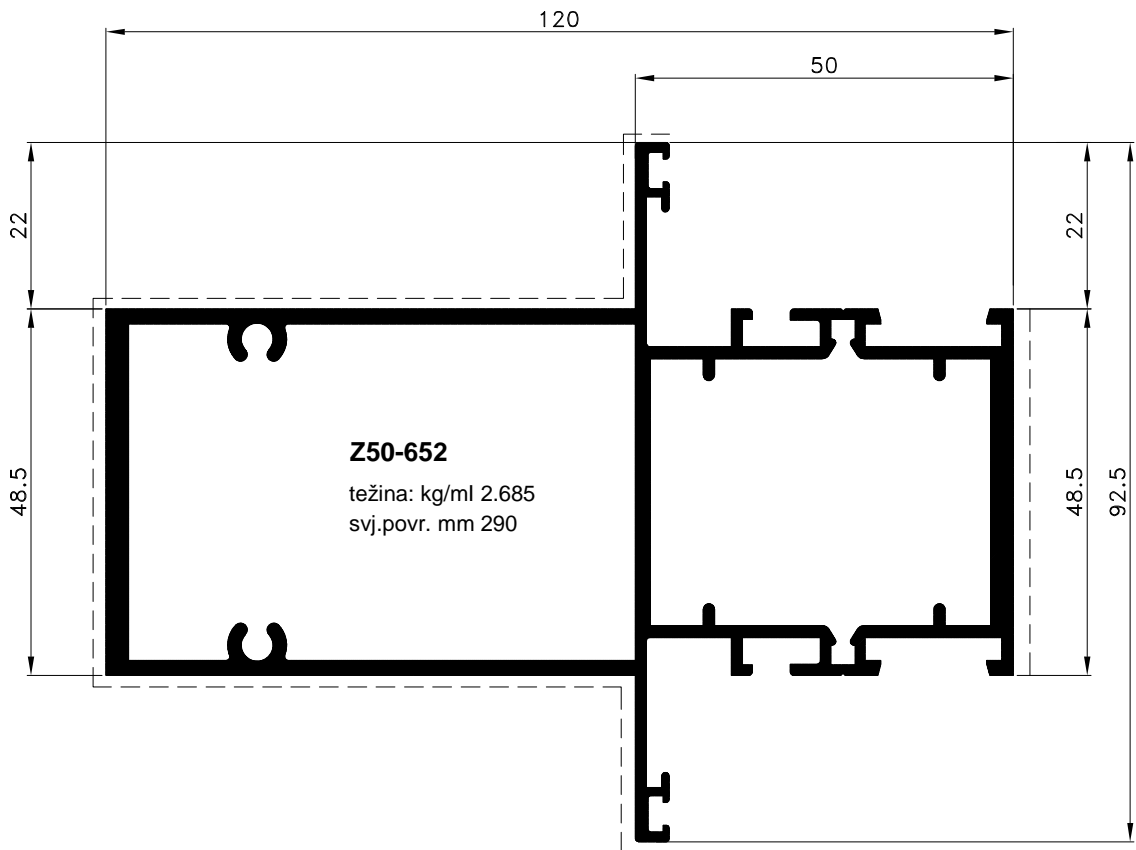
Z50-642

težina: kg/ml 1.352
svj.povr. mm 142



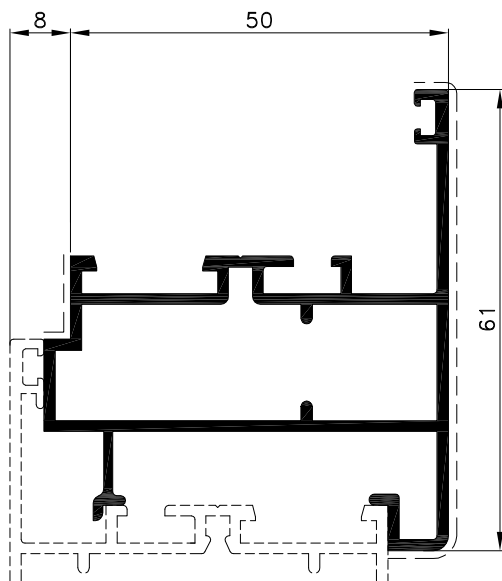
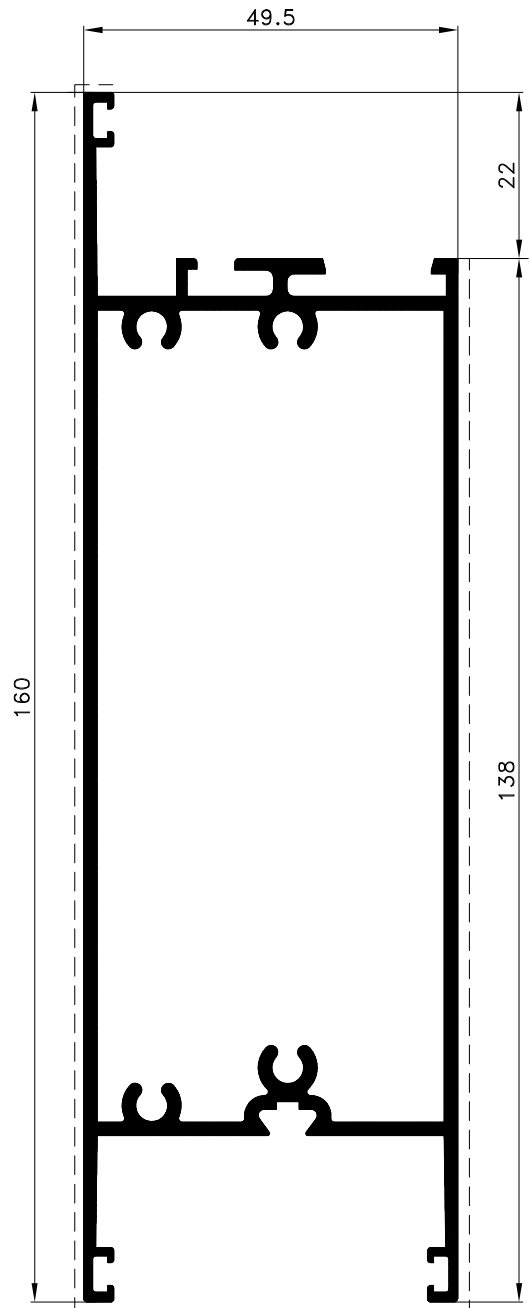
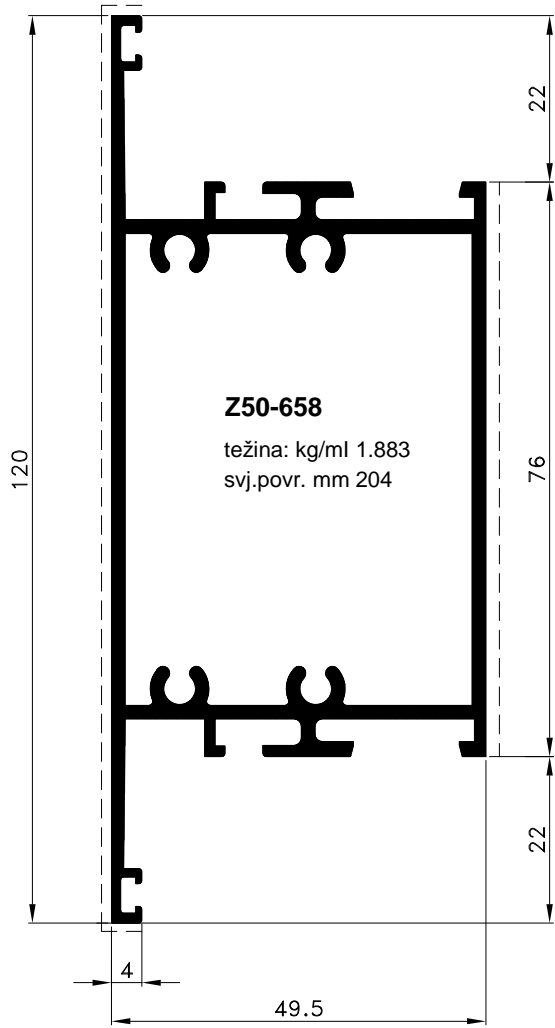
Z50-641

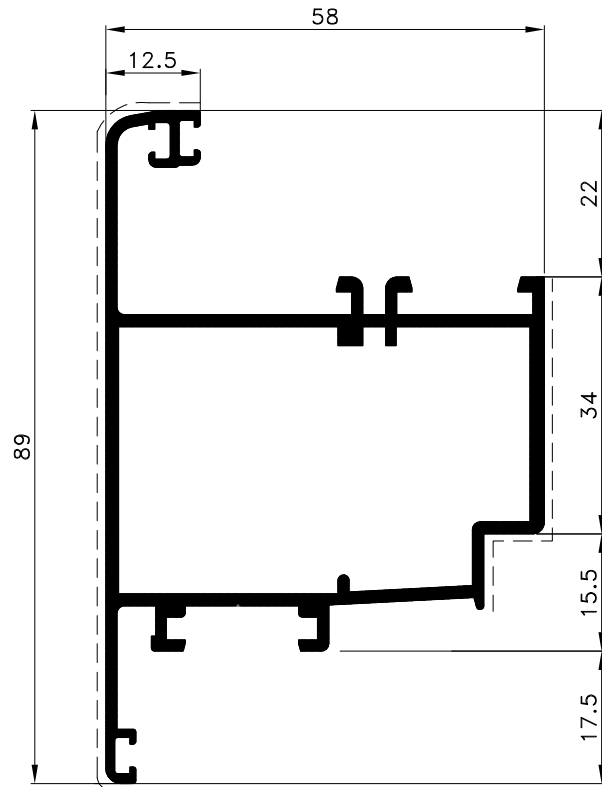
težina: kg/ml 1.089
svj.povr. mm 108



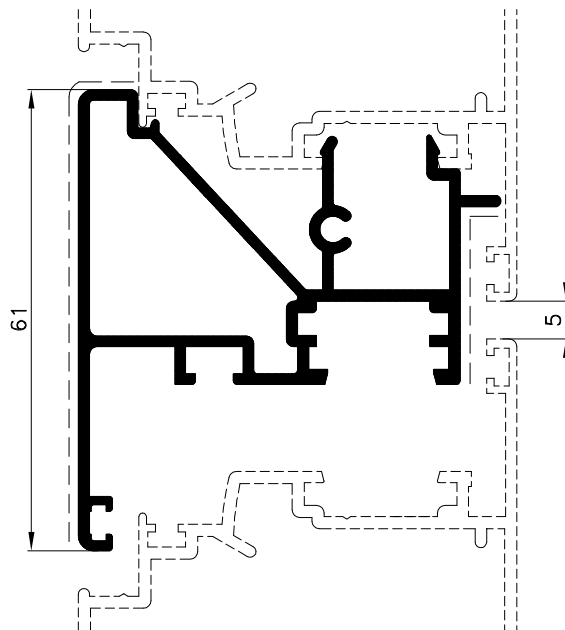
Z50-652

težina: kg/ml 2.685
svj.povr. mm 290

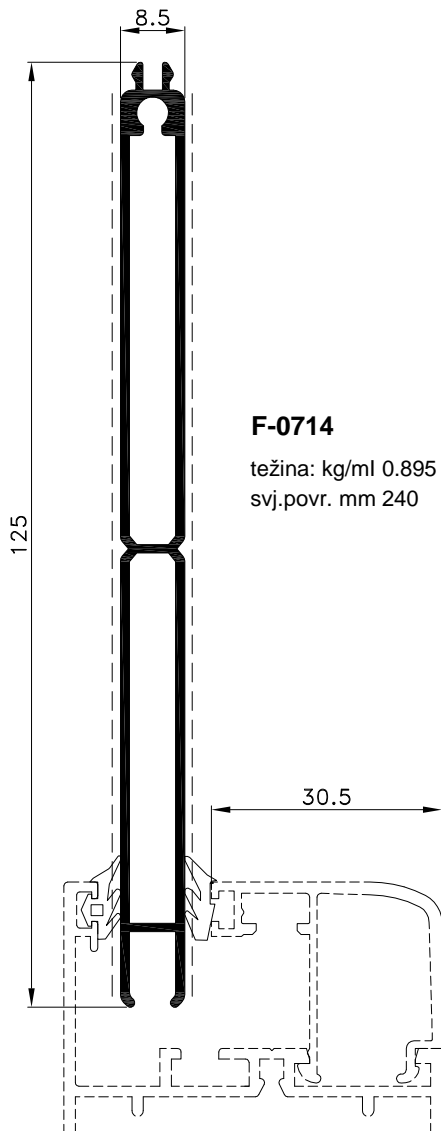




Z50-651
 težiina: kg/ml 1.348
 svj.povr. mm 158

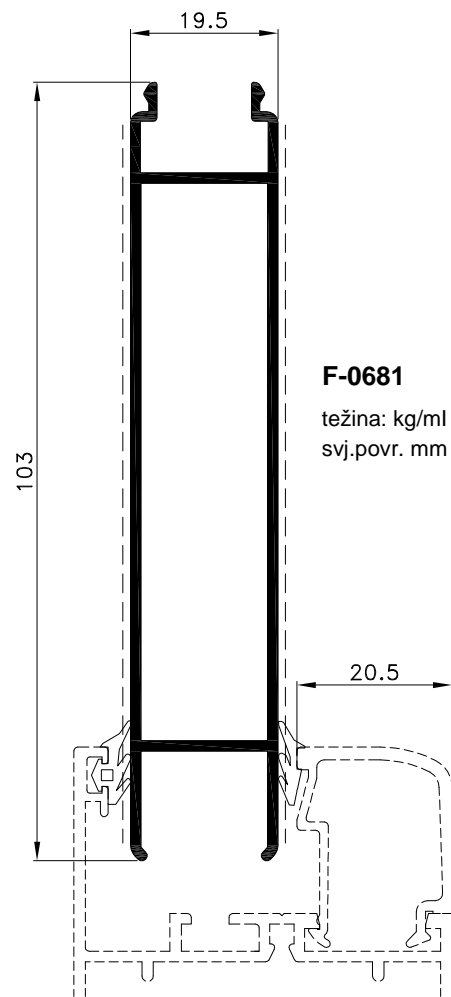


Z50-654
 težiina: kg/ml 1.019
 svj.povr. mm 103



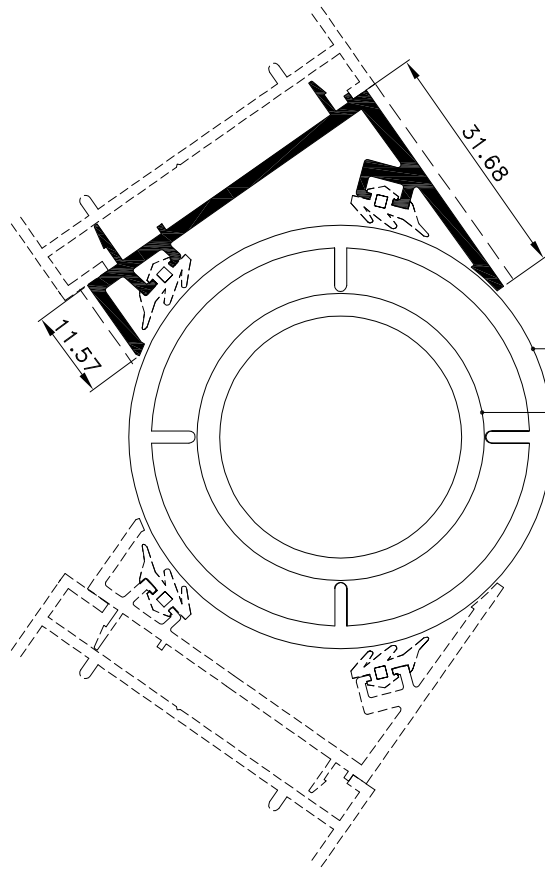
F-0714

težina: kg/ml 0.895
svj.povr. mm 240



F-0681

težina: kg/ml 0.920
svj.povr. mm 195

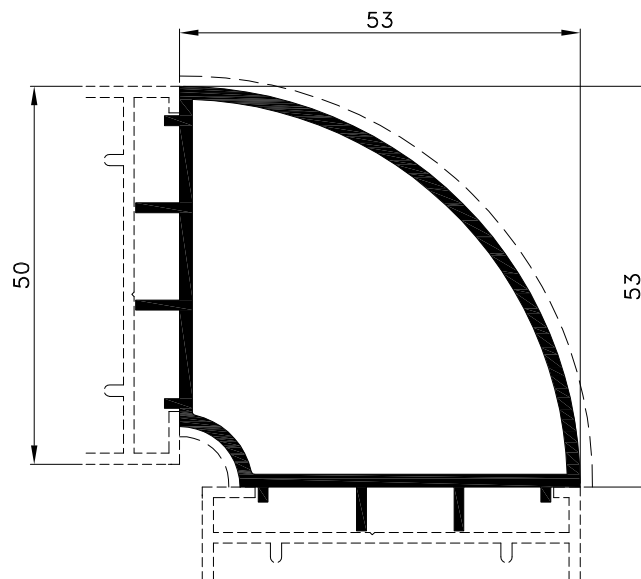


M45-752

težina: kg/ml 0.510
svj.povr. mm 43

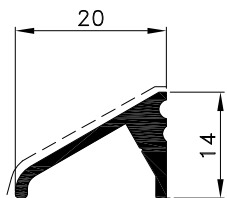
F-0352/A

HS-38-nosač za profil F-0352/A



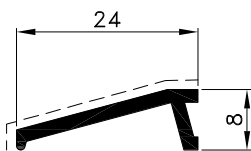
M45-754

težina: kg/ml 0.932
svj.povr. mm 95



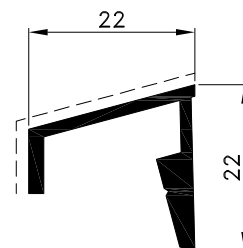
Z40-657

težina: kg/ml 0.186
svj.povr. mm 23



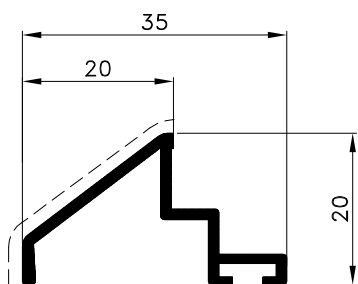
F-0228

težina: kg/ml 0.153
svj.povr. mm 27



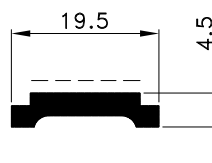
060 350

težina: kg/ml 0.285
svj.povr. mm 31



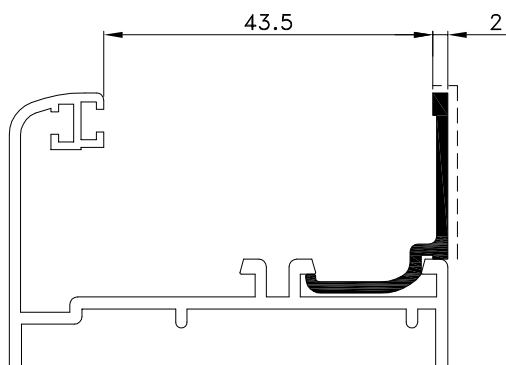
P45-648

težina: kg/ml 0.257
svj.povr. mm 33



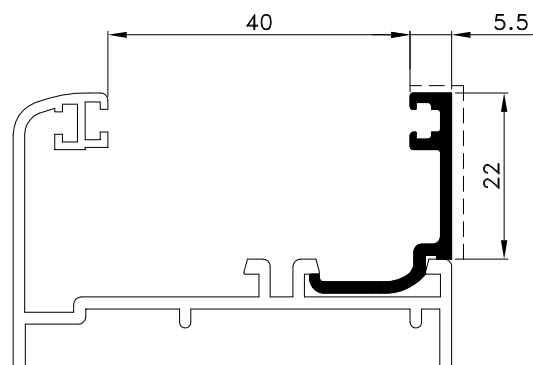
NC-1459

težina: kg/ml 0.156
svj.povr. mm 15



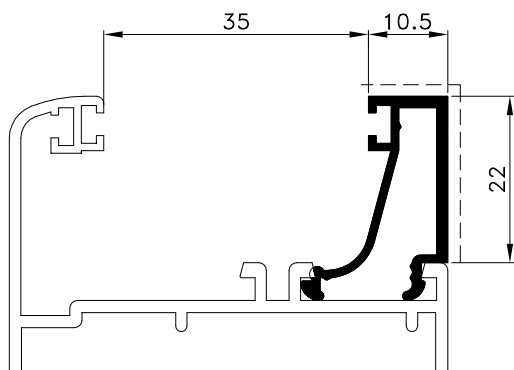
Z40-660

težina: kg/ml 0.179
svj.povr. mm 24



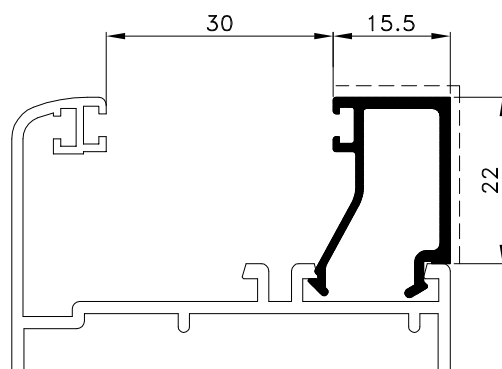
Z40-656

težina: kg/ml 0.215
svj.povr. mm 27



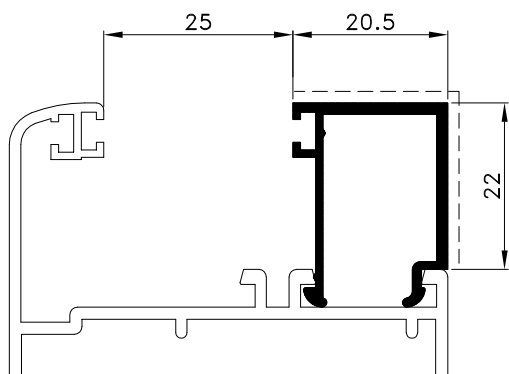
Z40-636

težina: kg/ml 0.261
svj.povr. mm 32



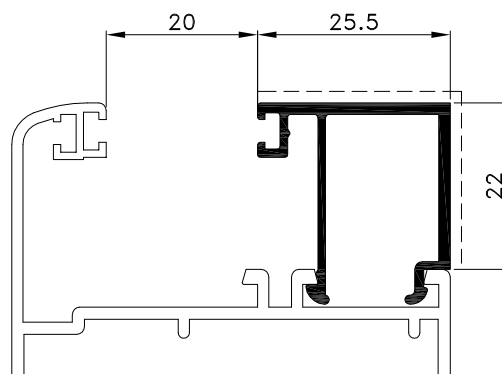
M45-709

težina: kg/ml 0.258
svj.povr. mm 37



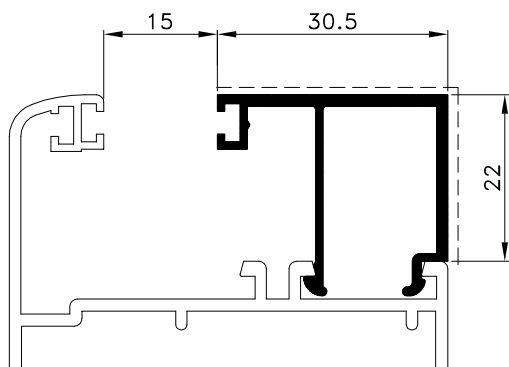
Z40-644

težina: kg/ml 0.275
svj.povr. mm 42



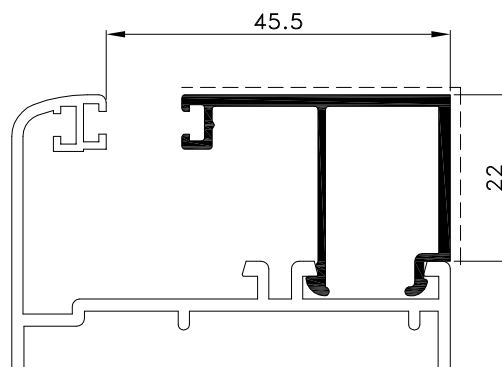
Z40-658

težina: kg/ml 0.318
svj.povr. mm 47



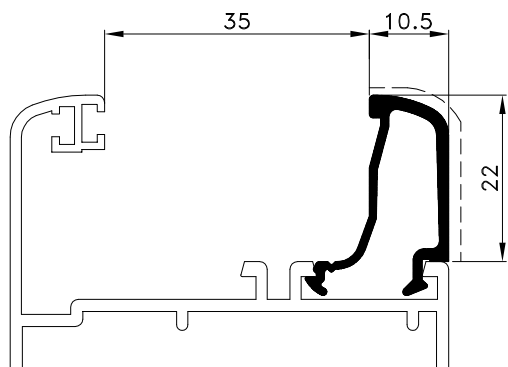
Z40-653

težina: kg/ml 0.347
svj.povr. mm 52



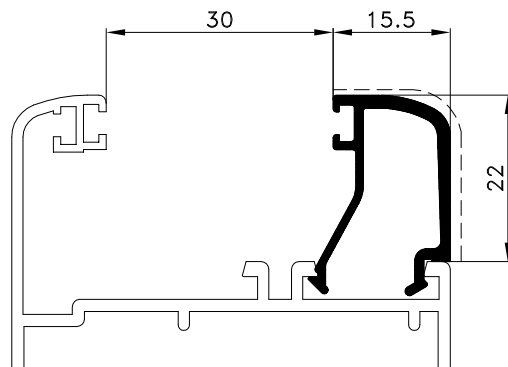
Z40-659

težina: kg/ml 0.359
svj.povr. mm 57



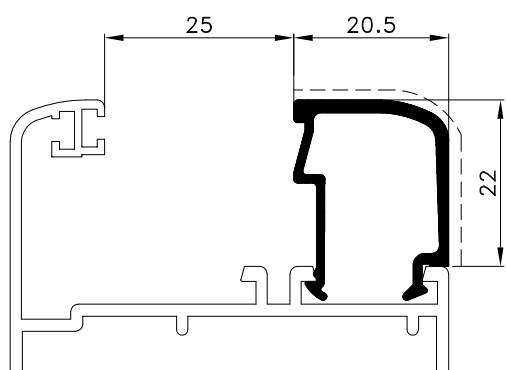
Z40-647

težina: kg/ml 0.226
svj.povr. mm 30



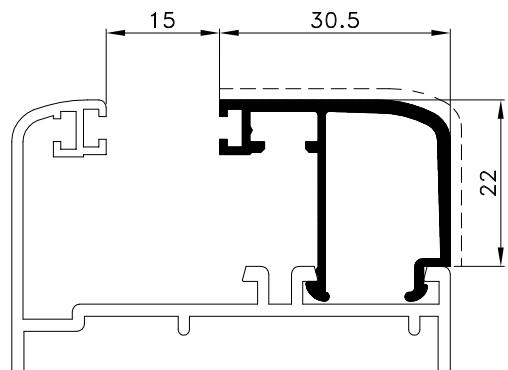
M45-740

težina: kg/ml 0.258
svj.povr. mm 35



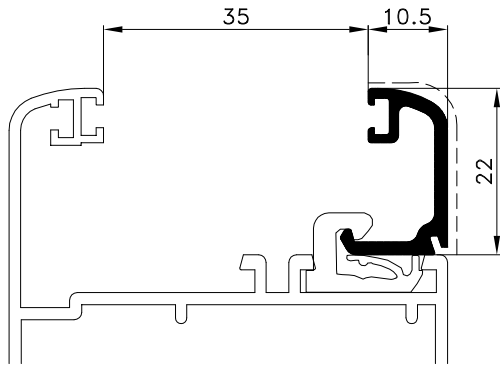
Z40-646

težina: kg/ml 0.286
svj.povr. mm 40



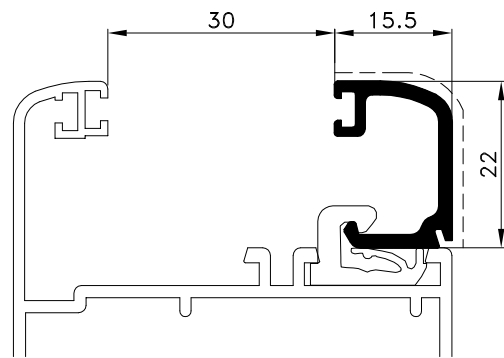
Z40-653/B

težina: kg/ml 0.356
svj.povr. mm 53



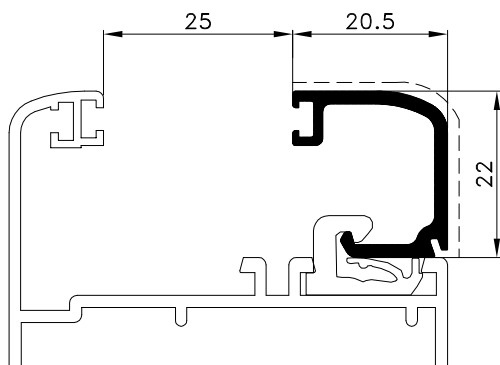
Z40-649

težina: kg/ml 0.221
svj.povr. mm 30



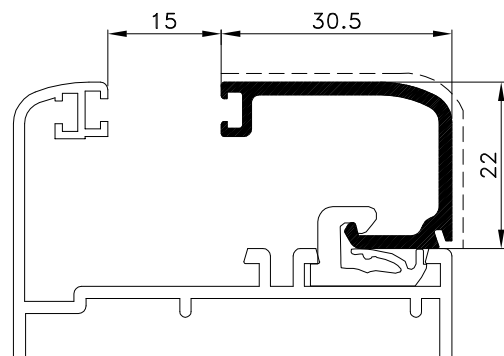
Z40-662

težina: kg/ml 0.245
svj.povr. mm 35



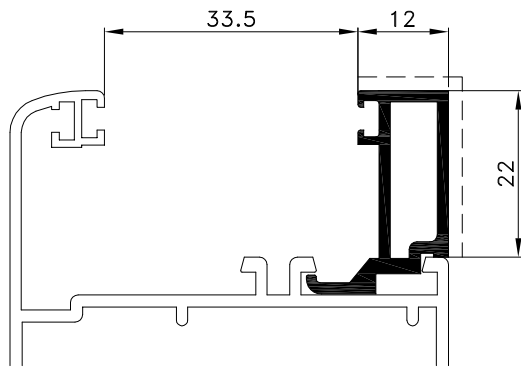
Z40-648

težina: kg/ml 0.268
svj.povr. mm 40

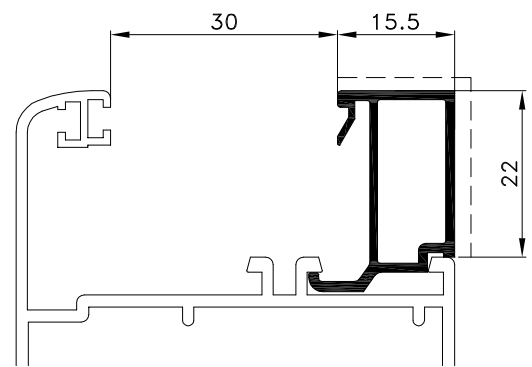


Z40-661

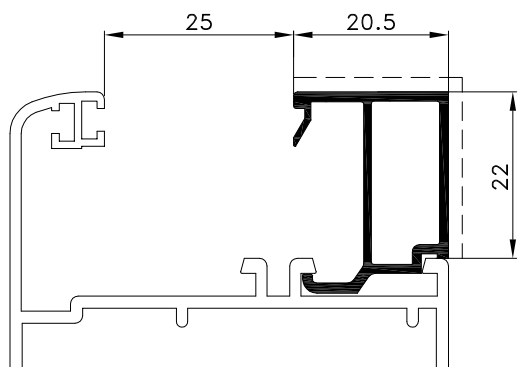
težina: kg/ml 0.268
svj.povr. mm 50



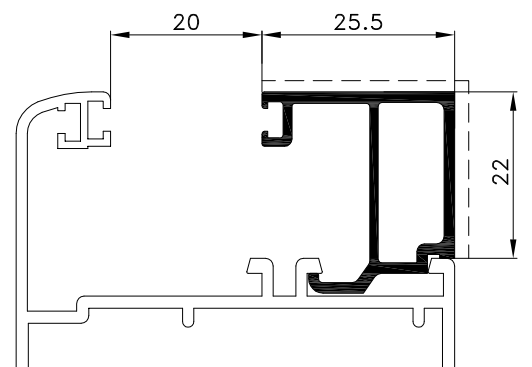
F-0784
težina kg/m 0.330
svj. povr.mm 34



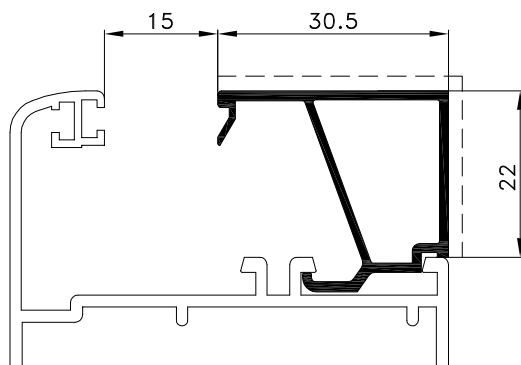
Z40-665
težina kg/m 0.272
svj. povr.mm 37



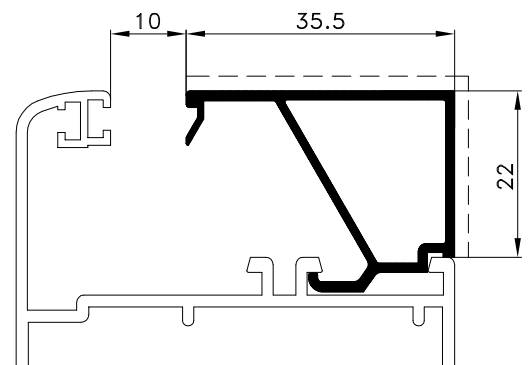
Z40-666
težina kg/m 0.289
svj. povr.mm 42



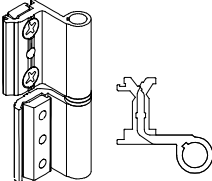
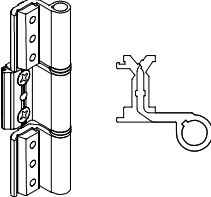
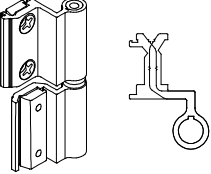
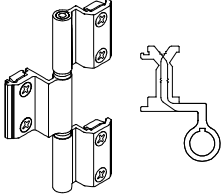
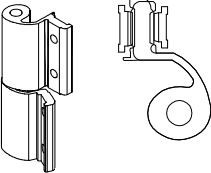
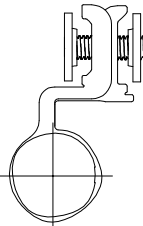
Z40-667
težina kg/m 0.358
svj. povr.mm 47

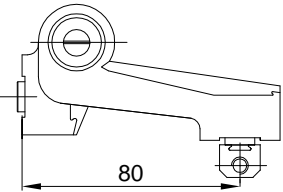
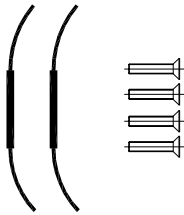
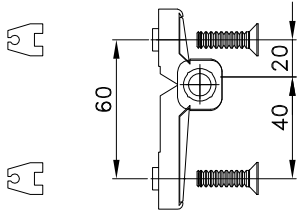
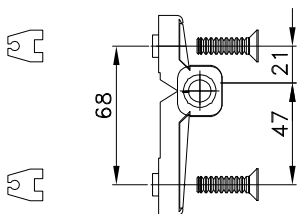
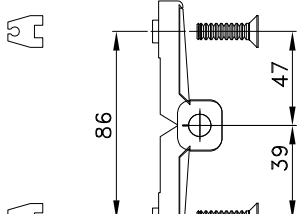
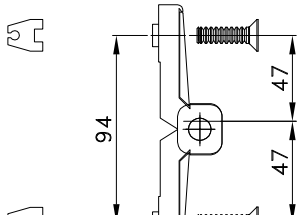


Z40-668
težina kg/m 0.326
svj. povr.mm 52

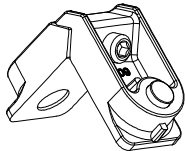
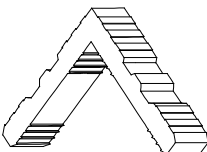
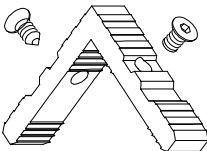
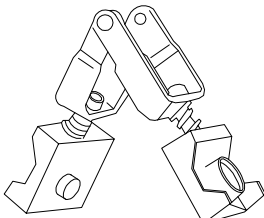
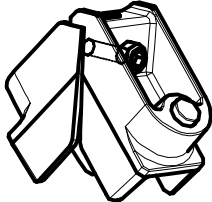
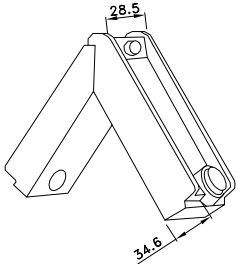


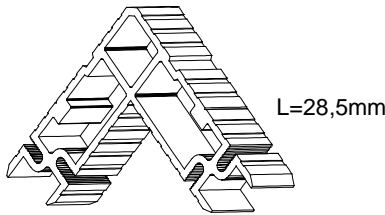
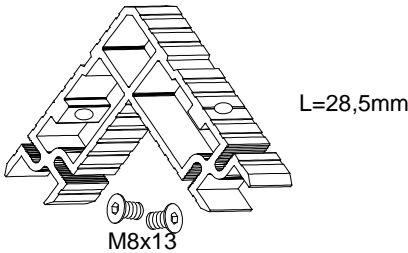
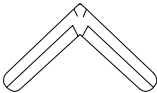

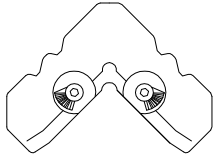
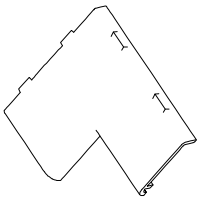
Z40-669
težina kg/m 0.347
svj. povr.mm 57

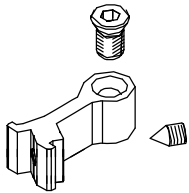
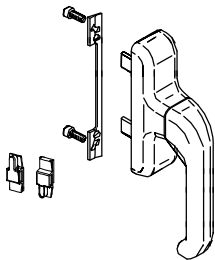
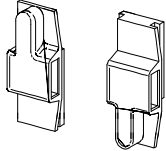


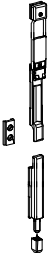
CODE	Izgled-presjek	Opis	Materijal	Nap.
111.001.01 02 03		- Dvodijelna šarka <i>EURO ŽLIJEB</i> - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva;03 - crna		
111.002.01 02 03		- Trodjelna šarka <i>EURO ŽLIJEB</i> - Stara oznaka E-120 - Boje: 01- bijela; 02 - siva;03 - crna		
111.003.01 02 03		- Dvodijelna šarka-vani <i>EURO ŽLIJEB</i> - Stara oznaka EV-110 - Boje: 01- bijela; 02 - siva;03 - crna		
111.004.01 02 03		- Trodjelna šarka-vani <i>EURO ŽLIJEB</i> - Stara oznaka EV-130 - Boje: 01- bijela; 02 - siva;03 - crna		
114.001.01 02 03		- Dvodijelna šarka- <i>EURO ŽLIJEB</i> - Stara oznaka 2006.00.305-s 310-b 313-c		
113.003.01 02 03		- Dvodijelna šarka- <i>EURO ŽLIJEB</i> - Stara oznaka: VENUS - Boje: 01- bijela; 02 - siva;03 - crna		

CODE	Izgled-presjek	Opis	Materijal	Nap.
110.003.01 02 03		<ul style="list-style-type: none"> - Dvodijelna usadna šarka 90°- vanjsko otvaranje - Stara oznaka FAPIM-D ANGOLO ART 6492 - Boje: 01- bijela; 02 - siva;03 - crna 		
110.004		<ul style="list-style-type: none"> - Set za ART 6492 - Stara oznaka: 6620I 		
113.006.01 02 03		<ul style="list-style-type: none"> - Dvodijelna šarka OSNO 60 - Stara oznaka: Osno 60 - Boje: 01- bijela; 02 - siva;03 - crna 	Al. Čelik	
113.002.01 02 03		<ul style="list-style-type: none"> - Dvodijelna šarka OSNO 68 - Stara oznaka: Osno 68 - Boje: 01- bijela; 02 - siva;03 - crna 	Al. Čelik	
113.007.01 02 03		<ul style="list-style-type: none"> - Dvodijelna šarka OSNO 86 - Stara oznaka: Osno 86 - Boje: 01- bijela; 02 - siva;03 - crna 	Al. Čelik	
113.001.01 02 03		<ul style="list-style-type: none"> - Dvodijelna šarka OSNO 94 - Stara oznaka: Osno 94 - Boje: 01- bijela; 02 - siva;03 - crna 	Al. Čelik	

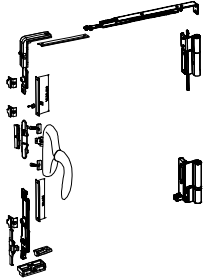
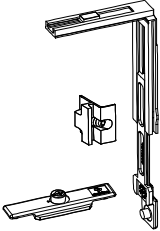
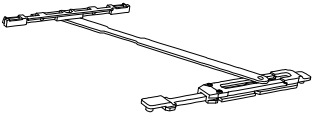
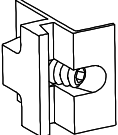


CODE	Izgled-presjek	Opis	Materijal	Nap.
113.008.01 02 03		- Dvodijelna šarka OSNO 60 - Stara oznaka: Max3D 60 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.009.01 02 03		- Dvodijelna šarka OSNO 70 - Stara oznaka: Max3D 68 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.010.01 02 03		- Dvodijelna šarka OSNO 86 - Stara oznaka: Max3D 86 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.011.01 02 03		- Dvodijelna šarka OSNO 96 - Stara oznaka: Max3D 94 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.012		- Set za TERMO 65 - Stara oznaka: Set za Termo 65		

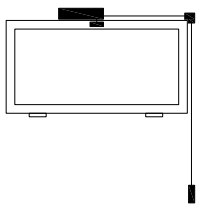
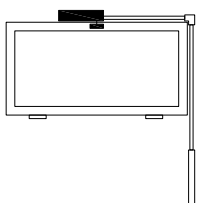
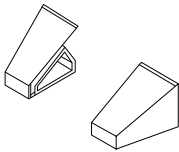
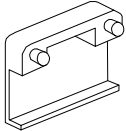
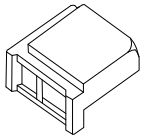
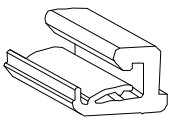
CODE	Izgled-presjek	Opis	Materijal	Nap.
730.008		- Kutna spojnica prozora-za komoru 29x15.2 - Stara oznaka: 0409 ,1001	Zamak #3	
710.035		- Kutna spojnica za komoru 29x15,2 - Stara oznaka K-0868-A l=28,5mm	Al.	
710.075		- Kutna spojnica za komoru 29x15,2 - Stara oznaka K-0868 l=28,5mm M8x13	Al.	
731.001		- Kutna spojnica za promjenjiv kut za komoru 29x15.2 - Stara oznaka: 0909	Zamak #3	
730.009		- Kutna spojnica prozora -za komoru 29x35.5 - Stara oznaka: 4004 ,2001	Zamak #3	
731.002		- Kutna spojnica za komoru 29x35.5 - Stara oznaka: 1007	Zamak #3	

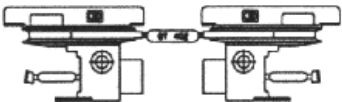
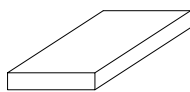
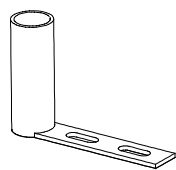
CODE	Izgled-presjek	Opis	Materijal	Nap.
710.059	 <p>L=28,5mm</p>	- Kutna spojnica za komoru 29x35,5 - Stara oznaka K-0795	Al.	
710.072	 <p>L=28,5mm M8x13</p>	- Kutna spojnica za komoru 29x35,5 - Stara oznaka K-0795	Al.	
730.001		- Kutna spojnica za komoru 1.7x4.7 - Stara oznaka: G112	Inox	
730.002		- Kutna spojnica za komoru 1.7x4.7 - Stara oznaka: G112/A	Inox	
730.010		- Kutna spojnica za komoru 6.5x27 - Stara oznaka: 5001	Inox	
730.003		- Kutna spojnica za komoru 6.5x27 - Stara oznaka: 0366	PVC	

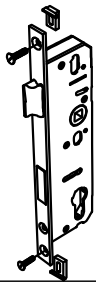
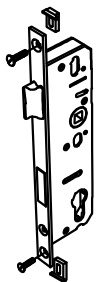
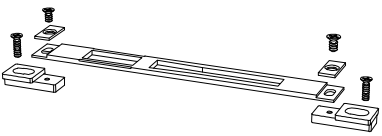
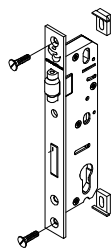
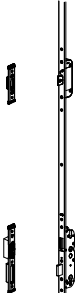
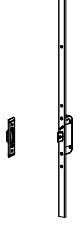
CODE	Izgled-presjek	Opis	Materijal	Nap.
710.066	 <p>M8x13 M6x10</p>	<ul style="list-style-type: none"> - Veznik (L=14.7mm) - Stara oznaka E-200 	Al.	
104.002.01 02 03		<ul style="list-style-type: none"> - Ručka za prozor - Stara oznaka: 1004.00.3xx - Boje: 01- bijela; 02 - siva; 03 - crna 	AlSi Zamak	
140.035		<ul style="list-style-type: none"> - Elementi za povezivanje ručke i klizača - Stara oznaka: 28002955 (alutec) 	PVC	
143.001		<ul style="list-style-type: none"> - Zapinjač - Stara oznaka: GS 2114 		
143.002		<ul style="list-style-type: none"> - Zapinjač-krakun za pasivno krilo - Stara oznaka: GS 2111 		
143.005		<ul style="list-style-type: none"> - Fiksni zapinjač-krakun za vrata - Stara oznaka: GS 2172 		

CODE	Izgled-presjek	Opis	Materijal	Nap.
144.000		<ul style="list-style-type: none"> - Zapinjač-krakun za vrata - Stara oznaka:3006.00 		
143.006		<ul style="list-style-type: none"> - Zapinjač vanjski - Stara oznaka: GS 2170 		
143.003		<ul style="list-style-type: none"> - Jednostrani prihvata zapinjača - Stara oznaka GS 1314 		
131.002		<ul style="list-style-type: none"> - Škare za <i>ventus</i> prozor - Stara oznaka E-350 		
124.005.01 02 03		<ul style="list-style-type: none"> - Mehanizam-"škljoca" otklopnog prozora - Stara oznaka: 1014.00.305-s. .310-b. .313-c) - Boje: 01- bijela; 02 - siva;03 - crna 		

CODE	Izgled-presjek	Opis	Materijal	Nap.
134.000.01 02 03		<ul style="list-style-type: none"> - Otklopno-zaokretni mehanizam -(dry-clip) - Stara oznaka 4030.00 - Boje: 01- bijela; 02 - siva;03 - crna 	AISi Zamak	
134.002		<ul style="list-style-type: none"> -Komplet za bočno zatvaranje krila kod dry kipa (dodatno ključanje) -Stara oznaka 4010.40 	AISi Zamak	
134.003		<ul style="list-style-type: none"> -Pomoćne škare kod dry kipa- za krila veća od L=1200 mm -Stara oznaka 4010.50 		
134.004		<ul style="list-style-type: none"> - Dodatno ključanje-prihvatnik tuljca - Stara oznaka 4010.03 		
134.005		<ul style="list-style-type: none"> - Dodatno ključanje-tuljac - Stara oznaka 4010.27 		
134.001		<ul style="list-style-type: none"> - Komplet okova za fiksiranje pomoćnog krila - Stara oznaka: 4001.00.301 	AISi Zamak	

CODE	Izgled-presjek	Opis	Materijal	Nap.
145.001		- Mehanizam za otklopno na visini sa špagom - Stara oznaka: Ragno		
146.001.01 .02 .03		- Mehanizam za otklopno na visini sa šipkom - Stara oznaka: OL90 (Geze) - Boje: 01- bijela; 02 - siva; 03 - crna 1. Škare 2. Ručica 3. Šipka Ø8 4. Pokrovni profil		
373.002		- Umetak za profil okapnice Z40-657 - Stara oznaka PRO 23	PVC	
373.003		- Maska za drenažni otvor - Stara oznaka: 2328	PVC	
385.002		- Kutni umetak za zaobljene lajsne - Stara oznaka: G2311	ZAMAK	
374.002		- umetak za profil rama FT-0201 - Stara oznaka: GT 134	PVC	

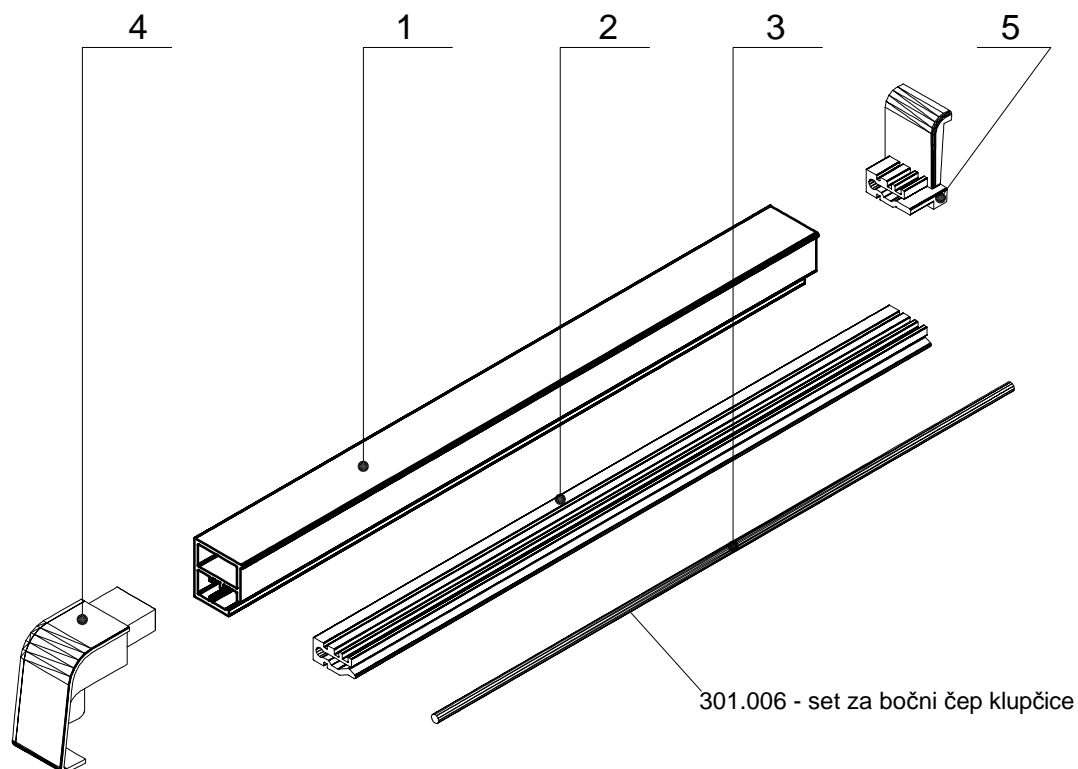
CODE	Izgled-presjek	Opis	Materijal	Nap.						
364.014		<ul style="list-style-type: none"> - Umetak profila za okretanje Z50-654-otvaranje unutra - Stara oznaka: GT 502 	PVC							
<p>370.000 370.001 370.002</p>		<ul style="list-style-type: none"> - Podmetači za staklo <table style="margin-left: 100px; border: none;"> <tr> <td style="padding-right: 20px;">3 mm</td> <td>370.000</td> </tr> <tr> <td>5 mm</td> <td>370.001</td> </tr> <tr> <td>7 mm</td> <td>370.002</td> </tr> </table>	3 mm	370.000	5 mm	370.001	7 mm	370.002	PVC	
3 mm	370.000									
5 mm	370.001									
7 mm	370.002									
xxx		<ul style="list-style-type: none"> - Nosač za profil F-0352/A - Stara oznaka: HS-38 	PVC							

CODE	Izgled-presjek	Opis	Materijal	Nap.
124.016		<ul style="list-style-type: none"> - Brava 25 mm sa jezičkom - Stara oznaka: 3020.00 	Inox Čelik	
124.001		<ul style="list-style-type: none"> - Brava 35 mm sa jezičkom - Stara oznaka: 3022.00 	Inox Čelik	
124.003		<ul style="list-style-type: none"> -Prihvatnik jezička brave (šild) - Stara oznaka: 3016.00 	Prokrom Čelik	
124.010		<ul style="list-style-type: none"> - Brava 35 mm sa valjkom - Stara oznaka: 3032 	Inox Čelik	
126.001		<ul style="list-style-type: none"> -Sigurnosna brava 35 mm <u>sa jezičkom</u> (ISEO) -Ključanje u tri točke -Prihvatnik za bravu-šild -Stara oznaka brave: 785111352 -Stara oznaka šilda: 6862/1 	Inox Čelik	
126.002		<ul style="list-style-type: none"> -Sigurnosna brava 35 mm <u>sa valjkom</u> (ISEO) -Ključanje u tri točke -Prihvatnik za bravu-šild -Stara oznaka brave: 785211352 -Stara oznaka šilda: 6862/1 	Inox Čelik	

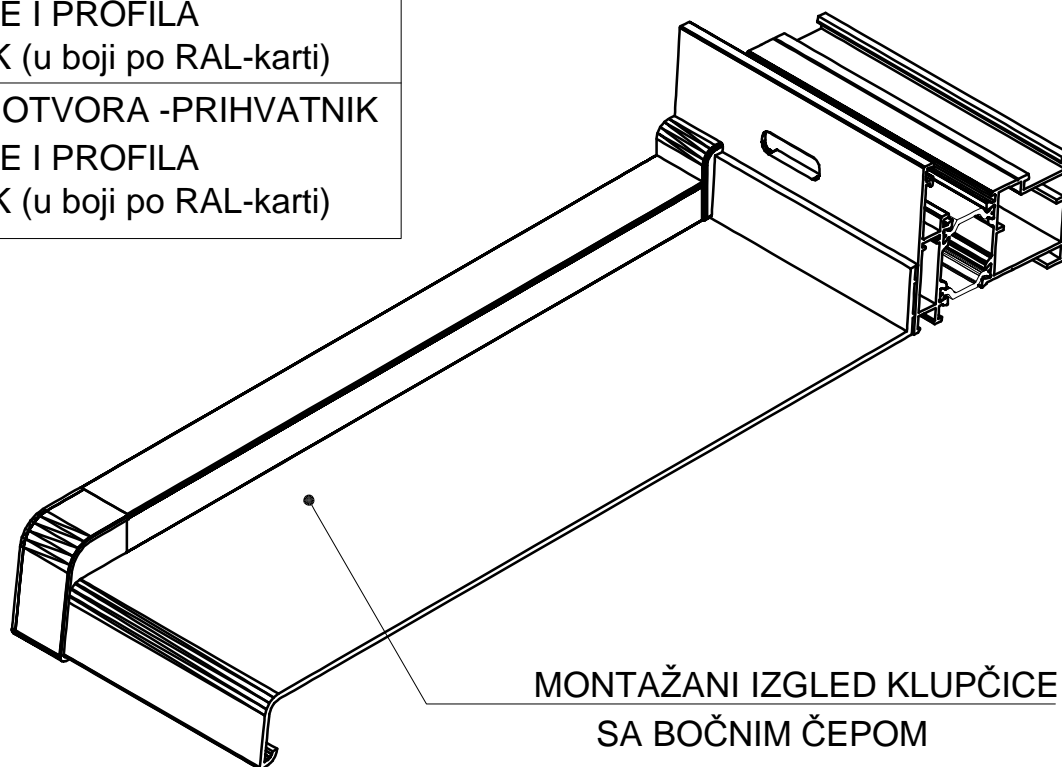
CODE	Izgled-presjek	Opis	Materijal	Nap.
125.001		- Prihvatnik jezička brave (šild) - Stara oznaka: 6862/25	Prokrom Čelik	
123.001.01 02 03		- Štitnik cilindra za bravu (par) - Stara oznaka: 149.805 - Boje: 01- bijela; 02 - siva; 03 - crna	PVC	
124.004.01 02 03		- Štitnik cilindra za bravu (par) - Stara oznaka: 1016.00 - Boje: 01- bijela; 02 - siva; 03 - crna	Zn Čelik	
124.014		- Uložak za bravu 31/45 - Stara oznaka: 5055.00.520	Čelik	
103.001.01 02 03		- Ručke za vrata (par) - Stara oznaka: 890 - Boje: 01- bijela; 02 - siva; 03 - crna	AlSi Zamak	
104.001.01 02 03		- Ručke za vrata (par) - Stara oznaka: 1032.00 - Boje: 01- bijela; 02 - siva; 03 - crna	AlSi Zamak	

CODE	Izgled-presjek	Opis	Materijal	Nap.
220.005		<ul style="list-style-type: none"> - Grupa glodala za obradu prečki prema profilu krila i okvira (Z50) - Stara oznaka: Grupa glodala Z50 	Čelik	
210.000		<ul style="list-style-type: none"> - Štanca za otklopno zaokretne sisteme prozora i vrata - Stara oznaka S1 		
210.001		<ul style="list-style-type: none"> - Kliješta za kutne spojnice - Stara oznaka :kliješta -83064 		
210.002		<ul style="list-style-type: none"> - Noževi za kliješta kutnih spojnica - Stara oznaka :noževi 		
301.006		Set za bočni čep klupice	PVC, TPE Al	

MONTAŽA KLUPČICE VRATA



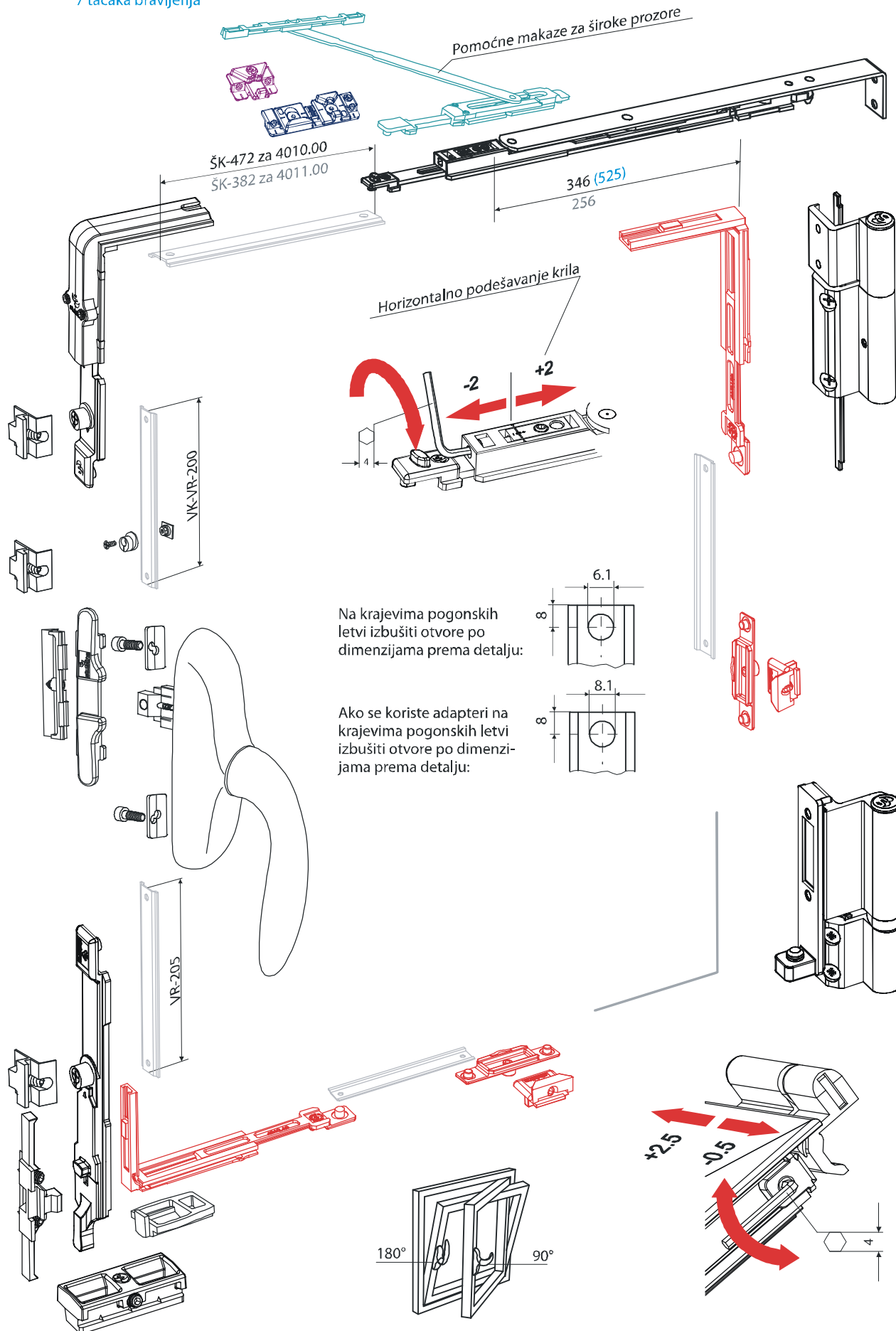
1 - OSNOVNI PROFIL KLUPČICE
2 - PVC PRIHVATNIK KLUPČICE
3 - GUMENI DISTANCER
4 - VANJSKI ČEP -PRIHVATNIK KLUPČICE I PROFILA mat:ZAMK (u boji po RAL-karti)
5 - ČEP DO OTVORA -PRIHVATNIK KLUPČICE I PROFILA mat:ZAMK (u boji po RAL-karti)



MONTAŽANI IZGLED KLUPČICE
SA BOČNIM ČEPOM

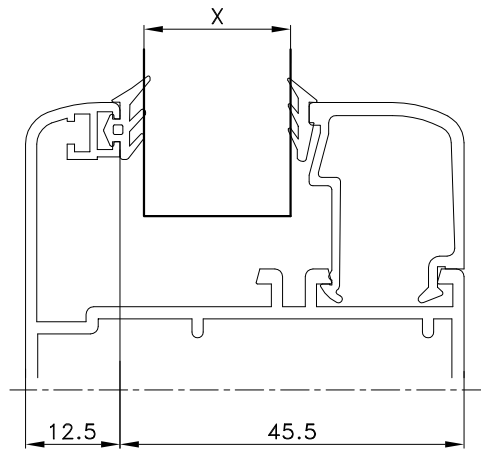
134.000.xx-OTKLOPNO-ZAOKRETNI MEHANIZAM-Stublina

G=80 kg
7 tačaka bravljenja



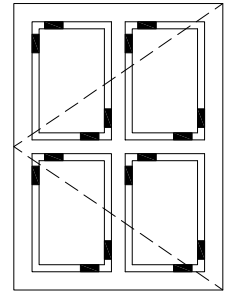
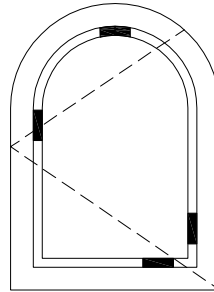
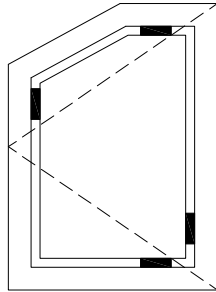
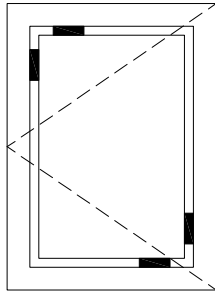
CODE	Izgled-presjek	Opis	Materijal	Nap.
331.001		- Srednja brtva - Stara oznaka: Z101	EPDM	80
321.001		- Brtva u krilu - Stara oznaka 210.001.090 (Z106)	EPDM	61
311.001		- Brtva prema staklu /unutarnja/ - Stara oznaka 210.001.125 (921)	EPDM	71
311.002		-Brtva prema staklu /unutarnja/ - Stara oznaka 210.001.123 (918)	EPDM	71
321.002		- Brtva prema staklu /vanjska/ - Stara oznaka 210.001.140 (Z111)	EPDM	61
321.003		- Brtva prema staklu /vanjska/ - Stara oznaka 210.001.142 (Z113)	EPDM	61

CODE	Izgled-presjek	Opis	Materijal	Nap.
311.007 311.008 311.009 311.010		-Brtva prema staklu /unutarnja/ - Stare oznake UP-5 nove oznake UP-6 UP-7 UP-8	311.007 311.008 311.009 311.010	EPDM 71
521.001		- Držać četkaste brtve L=2500 mm - Stara oznaka Z 801	Al.	
347.001		- Četkasta brtva L=2500 mm - Stara oznaka Z 802		
366.001		Kutni umetak za brtvu 331.001-otvaranje unutra L=50x50 -Stara oznaka: Z901	EPDM	
347.003		Četkasta brtva 7x9 -Stara oznaka: PB*HFC	EPDM	

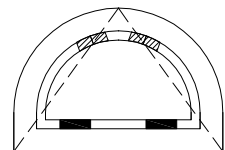
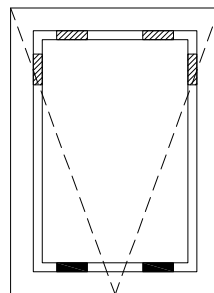
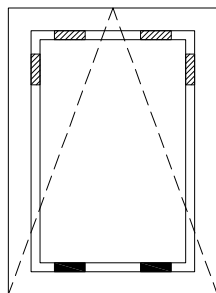
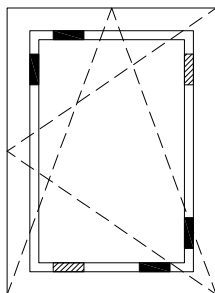


Ispuna X	Vanjska brtva	Unutarnja brtva	Lajsna			
	321.003	311.002	 Z40-659			 Z40-669
	321.002	311.001				
7-8	321.003	311.002	 Z40-653	 Z40-653/B	 Z40-661	 Z40-668
9-11	321.002	311.001				
11-20	321.003	311.002	 Z40-658			 Z40-667
13-15	321.002	311.001				
16-17	321.003	311.002	 Z40-644	 Z40-646	 Z40-648	 Z40-666
18-20	321.002	311.001				
21-22	321.003	311.002	 M45-709	 M45-740	 Z40-662	 Z40-665
23-25	321.002	311.001				
26-27	321.003	311.002	 Z40-636	 Z40-647	 Z40-649	 F-784
28-30	321.002	311.001				
31-32	321.003	311.002	 Z40-656			
33-35	321.002	311.001				
34-36	321.003	311.002	 Z40-660			
37-39	321.002	311.001				

PREPORUKE ZA RASPORED PODMETAČA KOD UGRADNJE ELEMENATA ZA ISPUNU

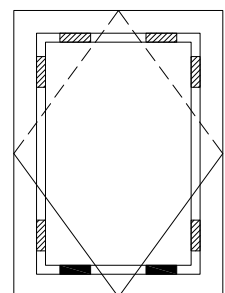
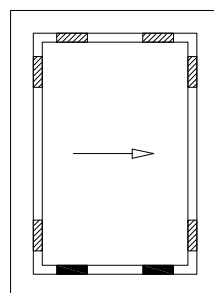
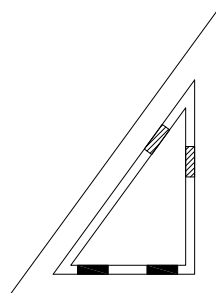
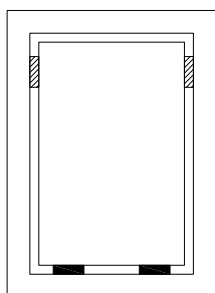


zaokretno



otklopno-zaokretno



otklopno



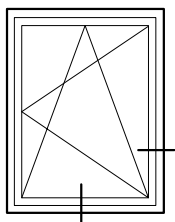
fiksno

klizno

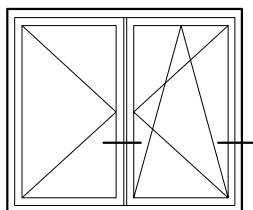
oko srednje ose

-  nosivi podmetač
-  odstojni podmetač

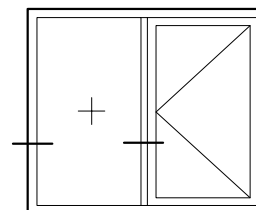
Materijal podmetača: pvc



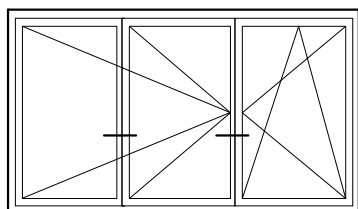
str. 1



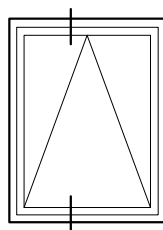
str. 2



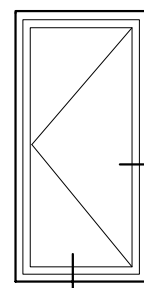
str. 3



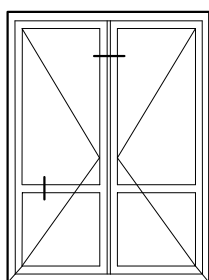
str. 4



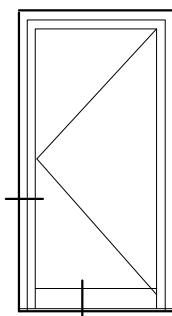
str. 5



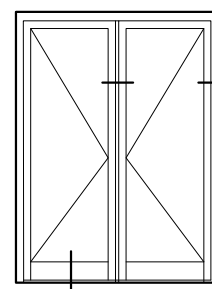
str. 6



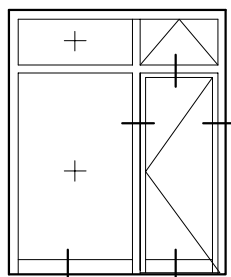
str. 7



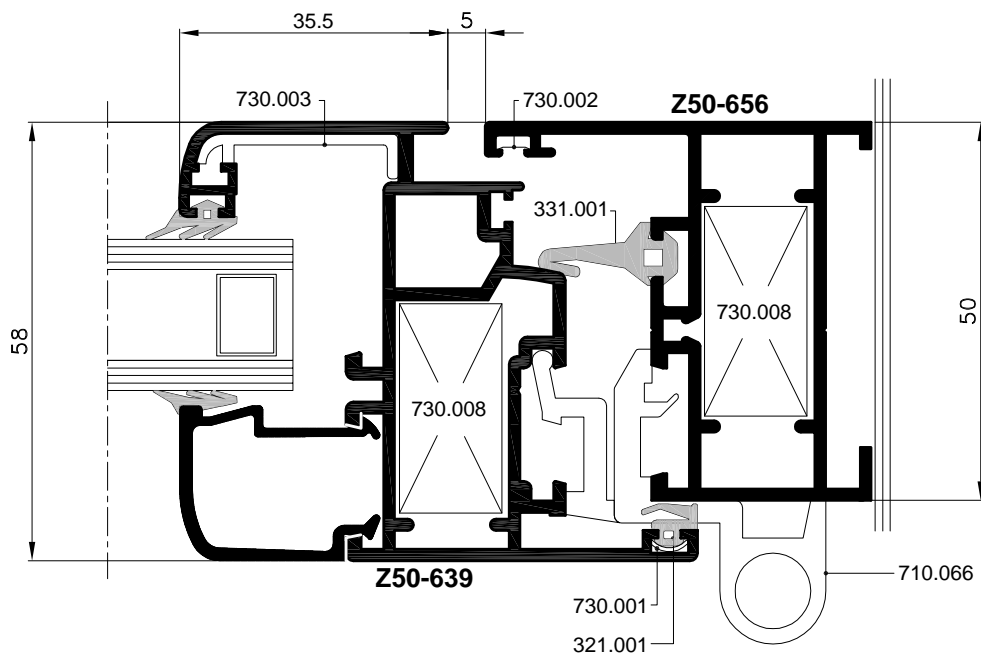
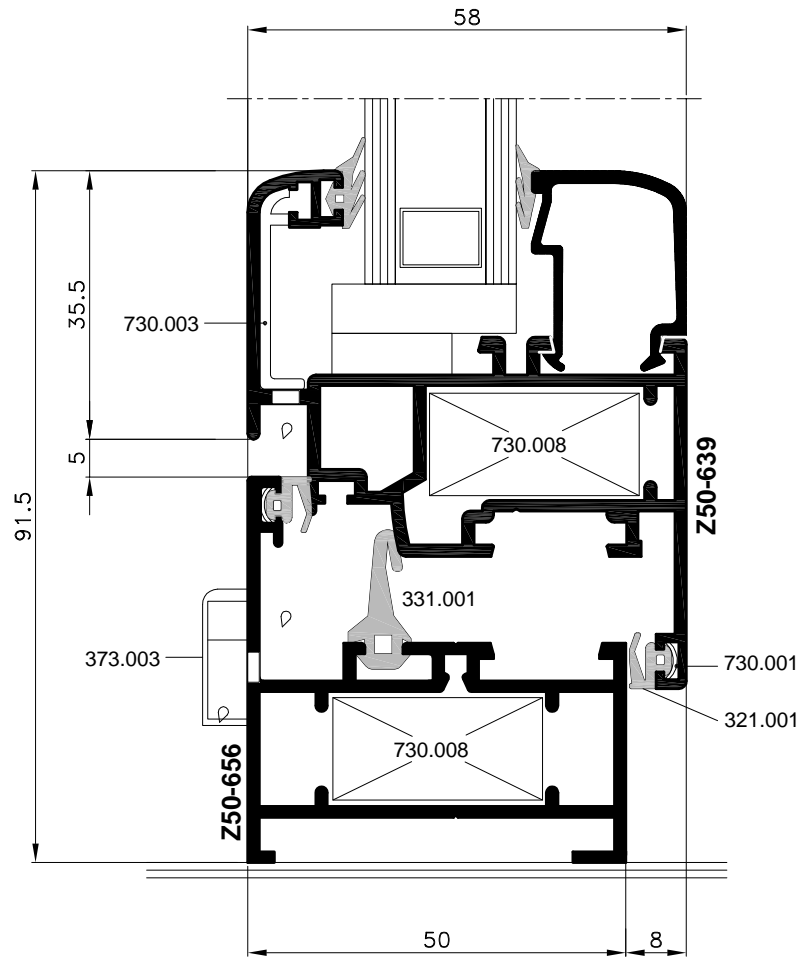
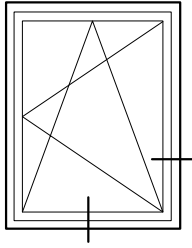
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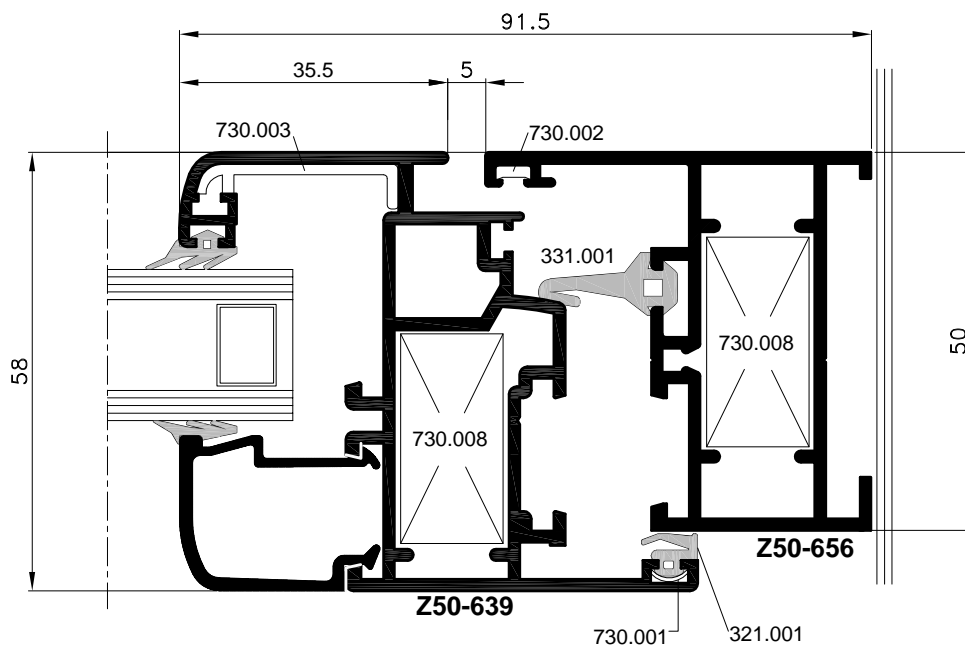
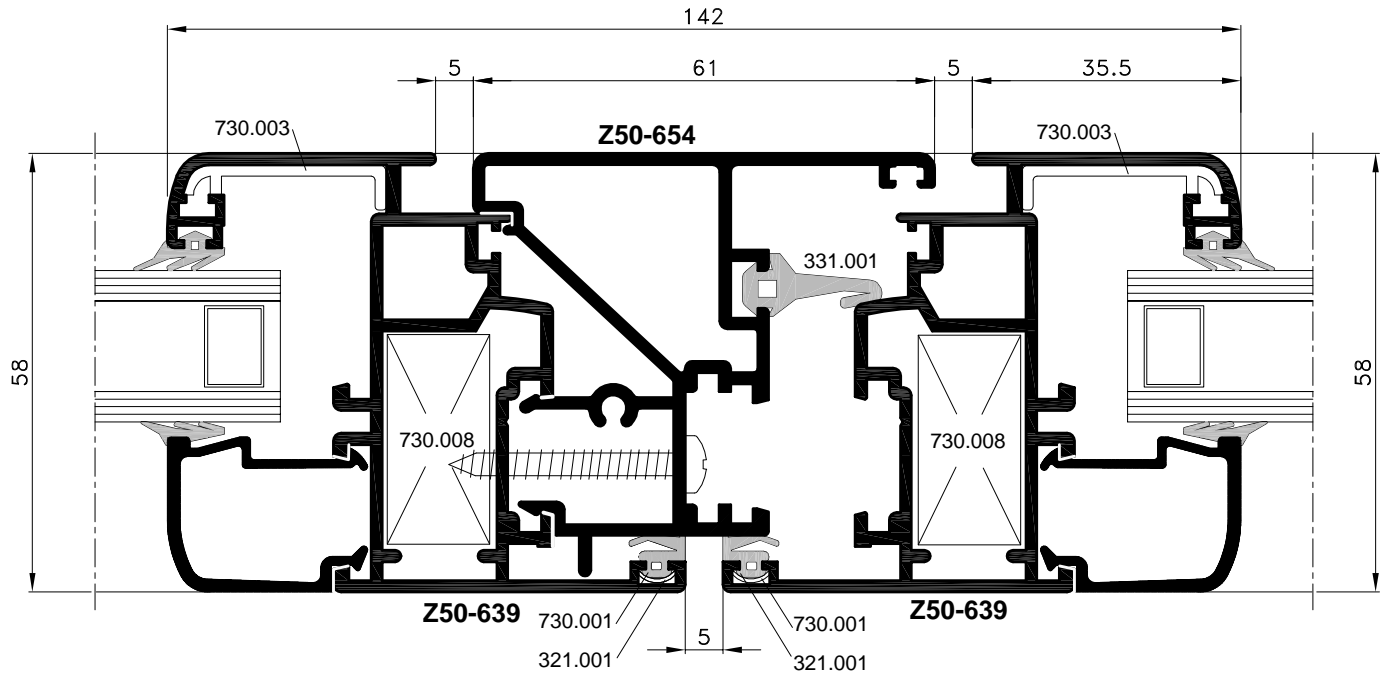
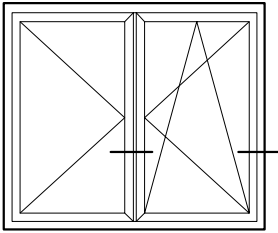


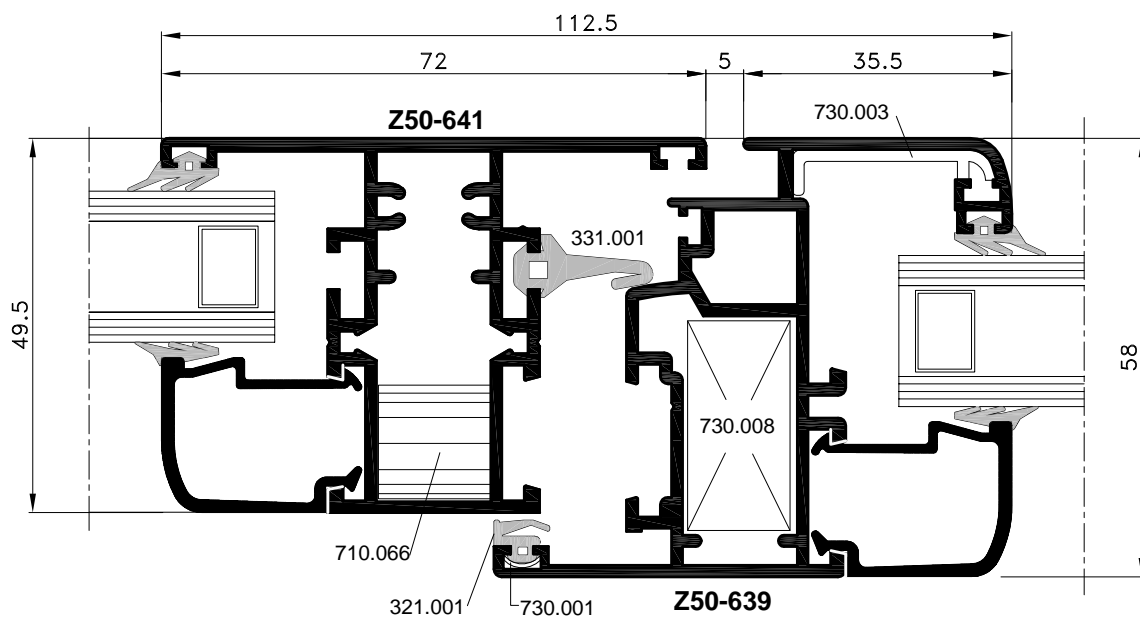
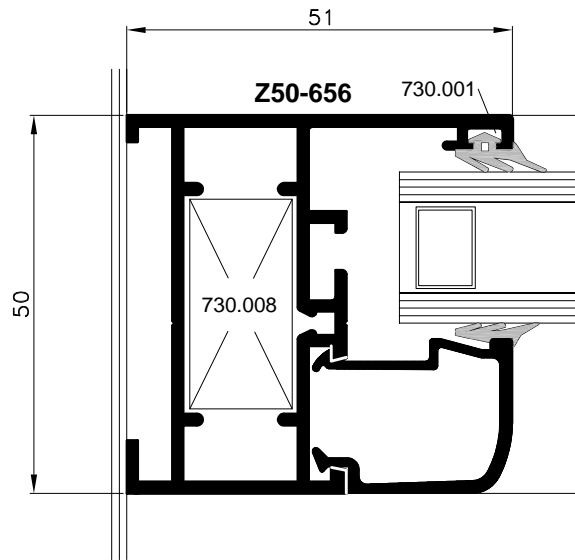
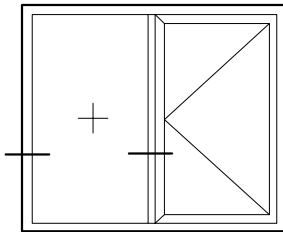
str. 9

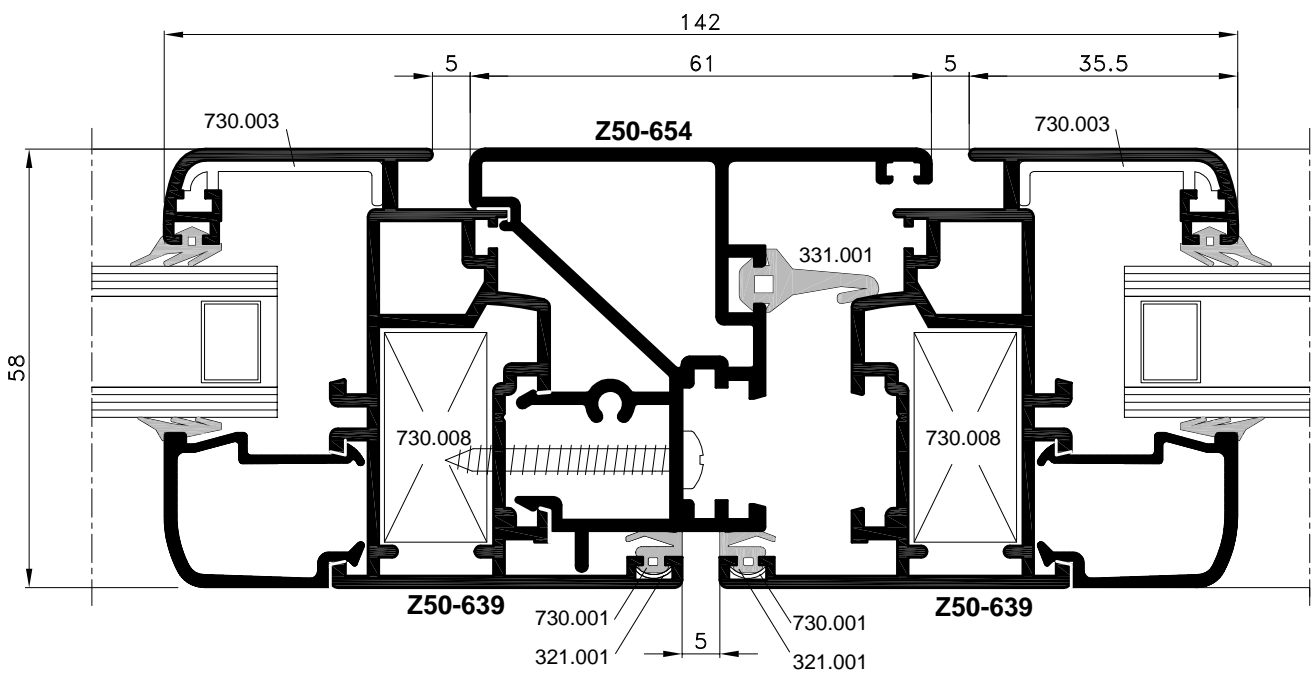
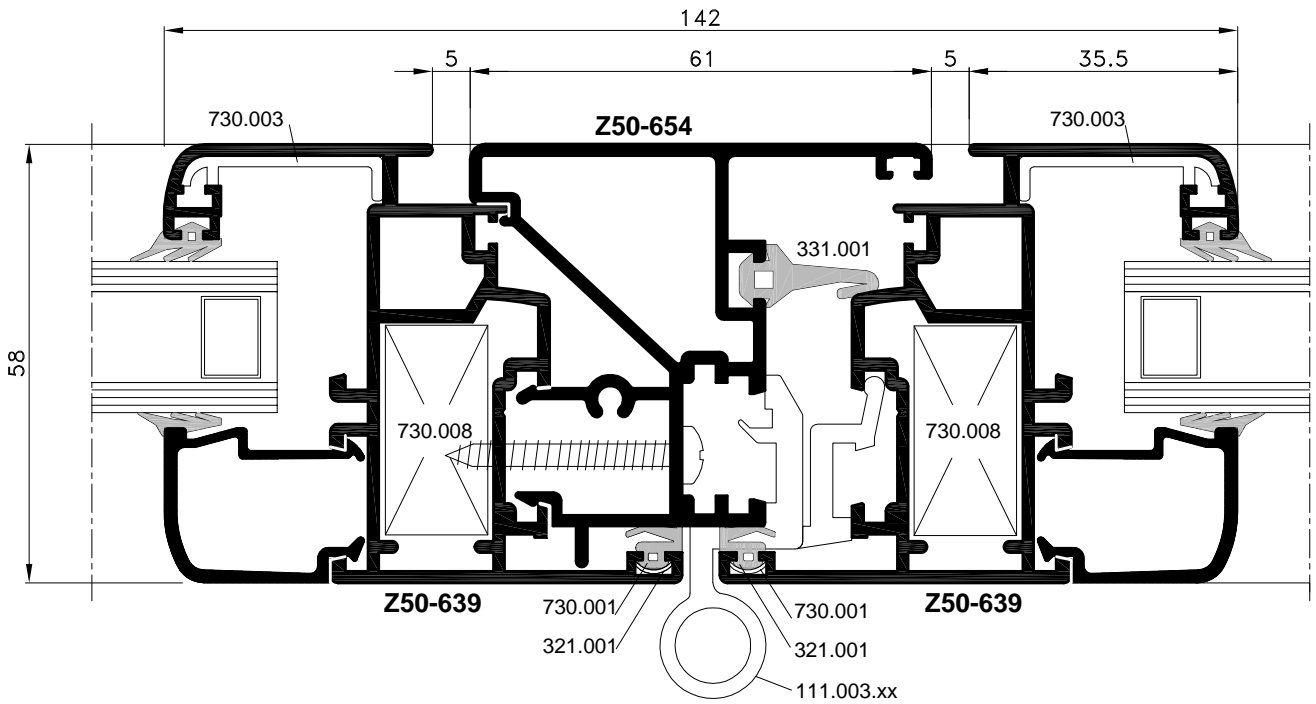
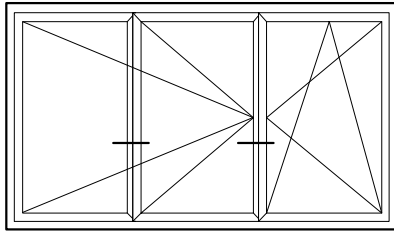


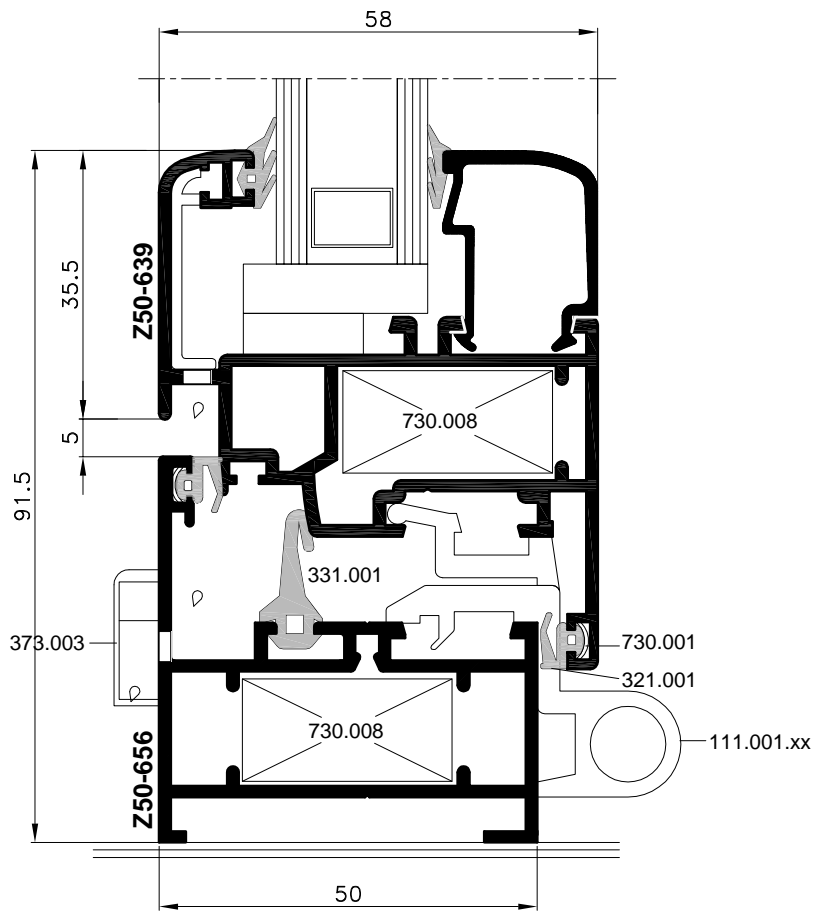
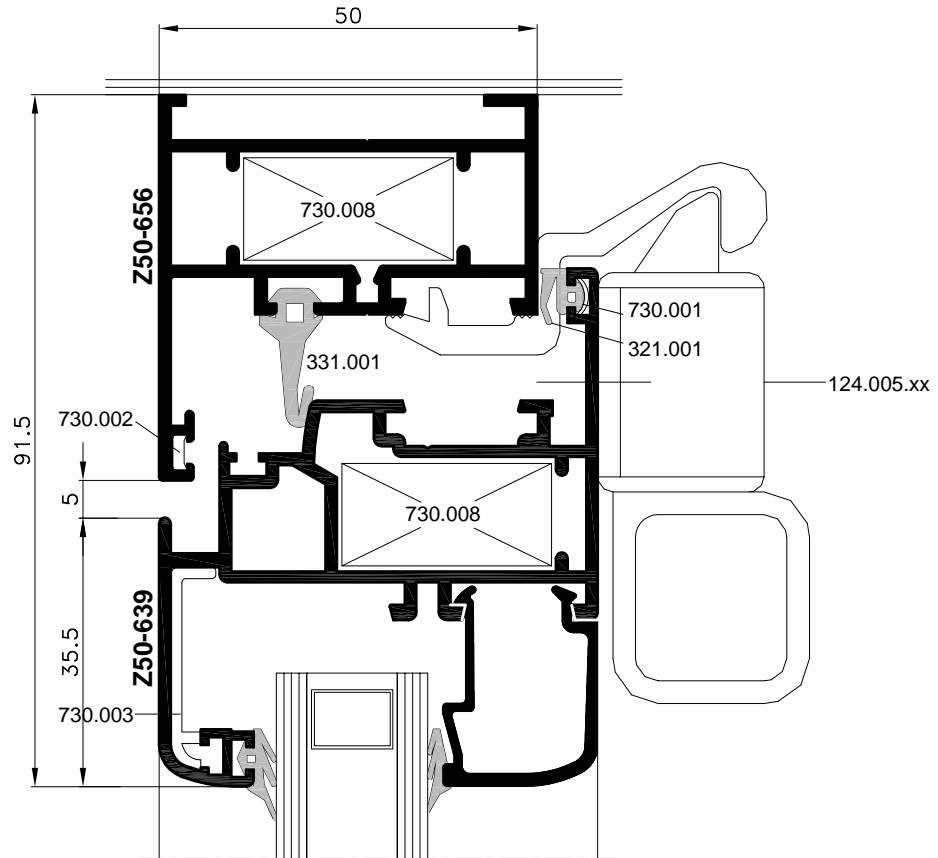
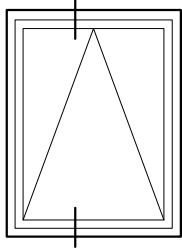
str. 10-11

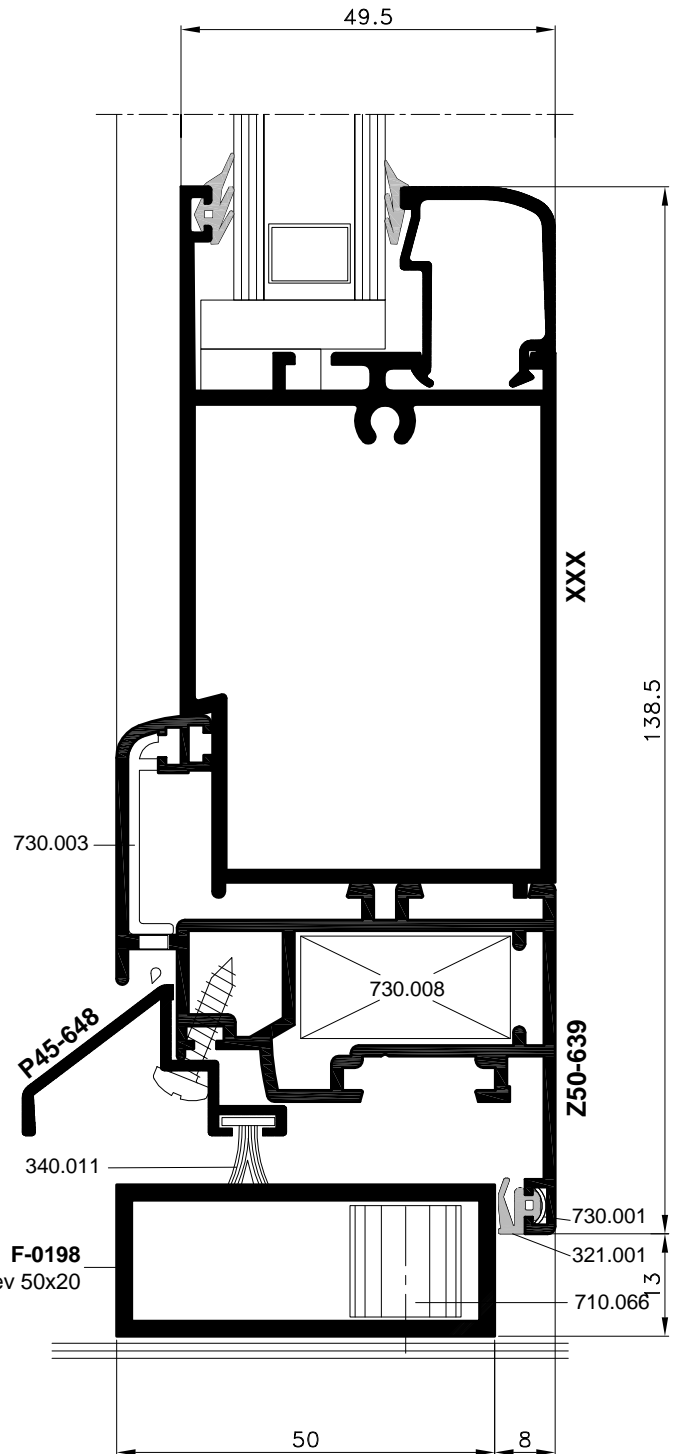
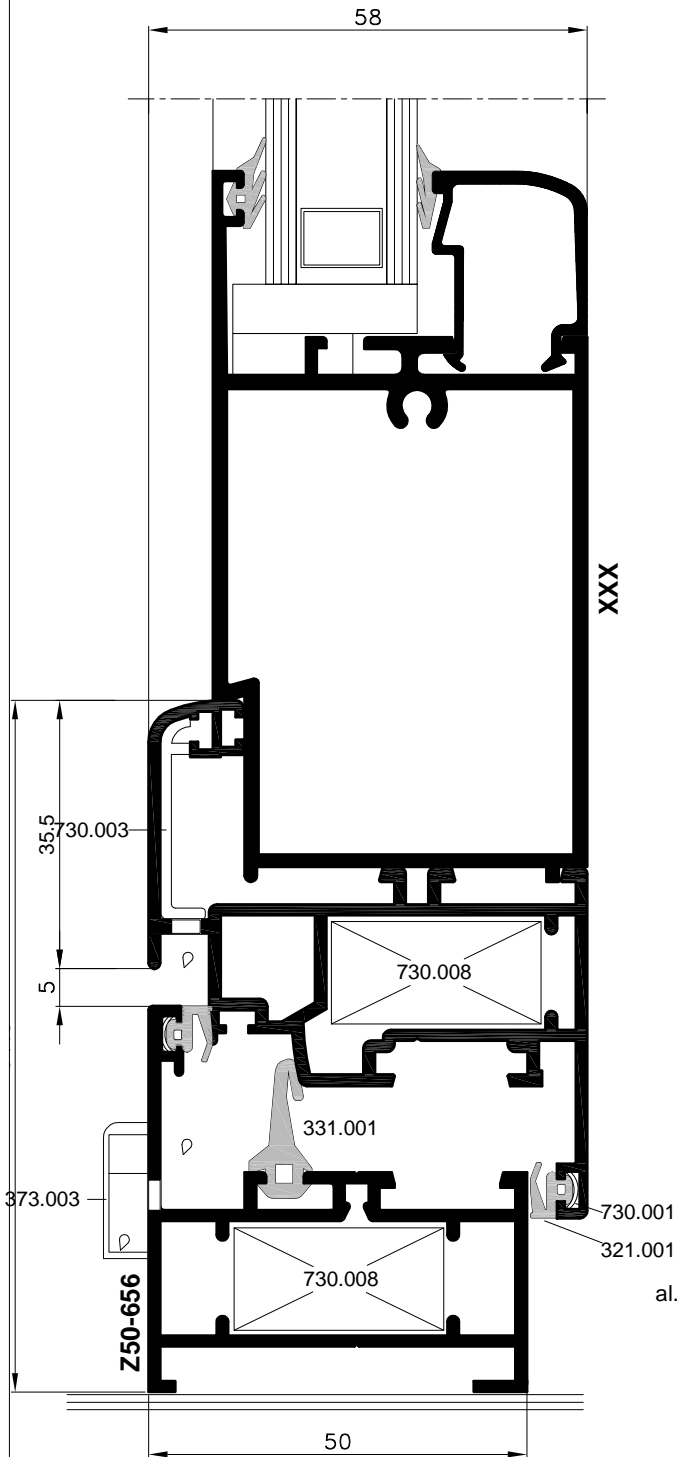
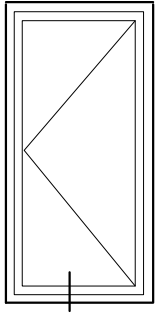


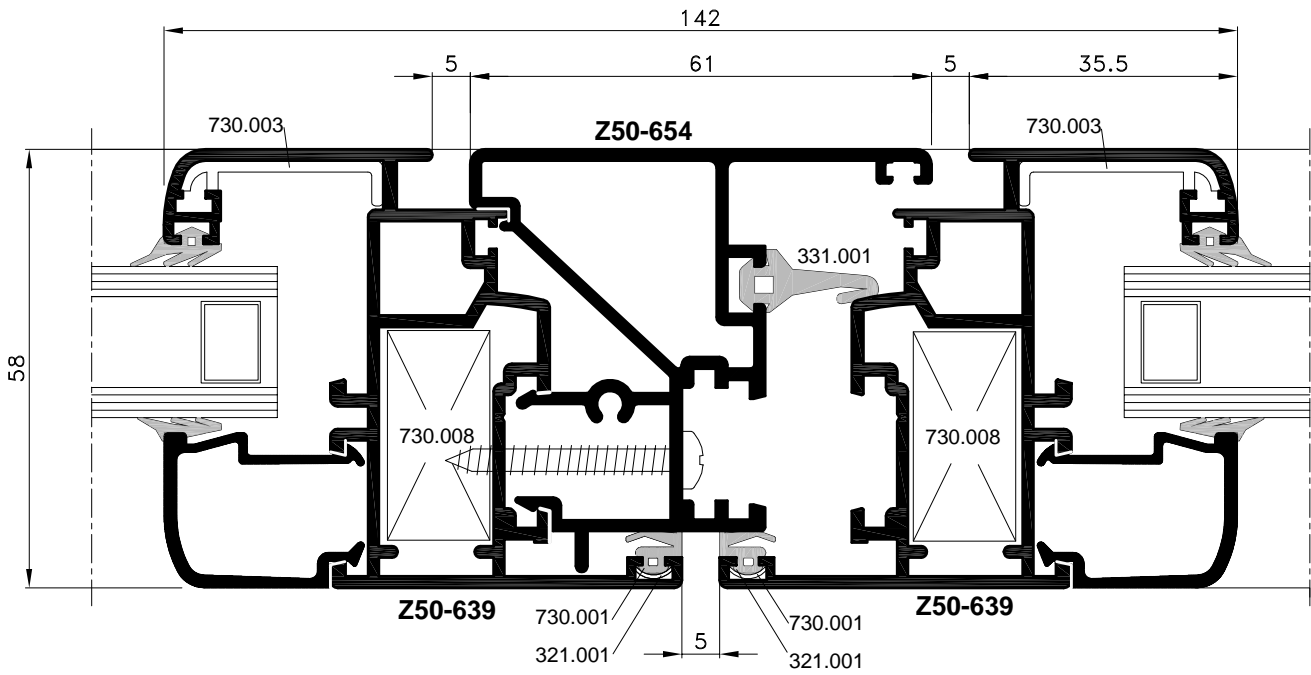
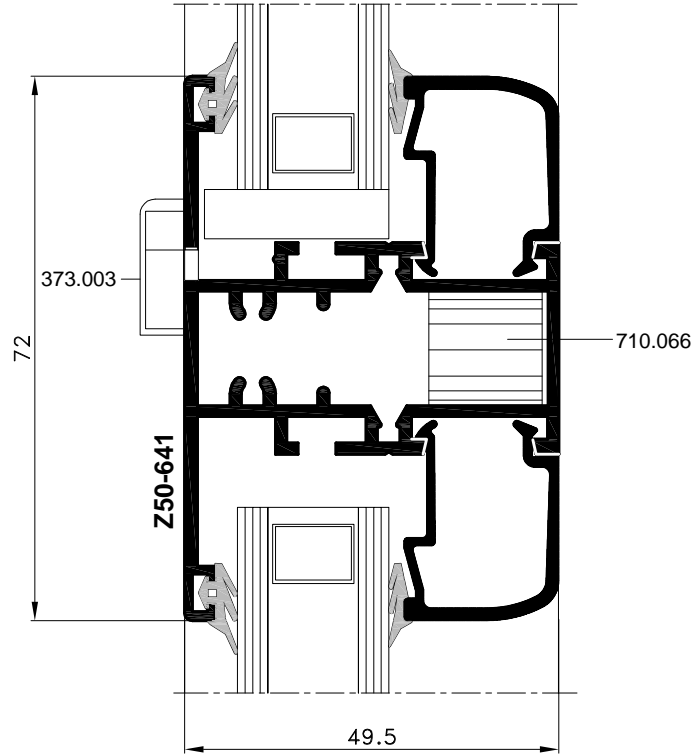
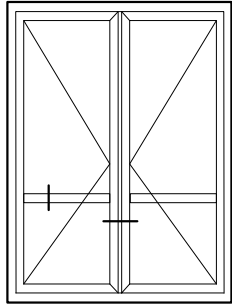


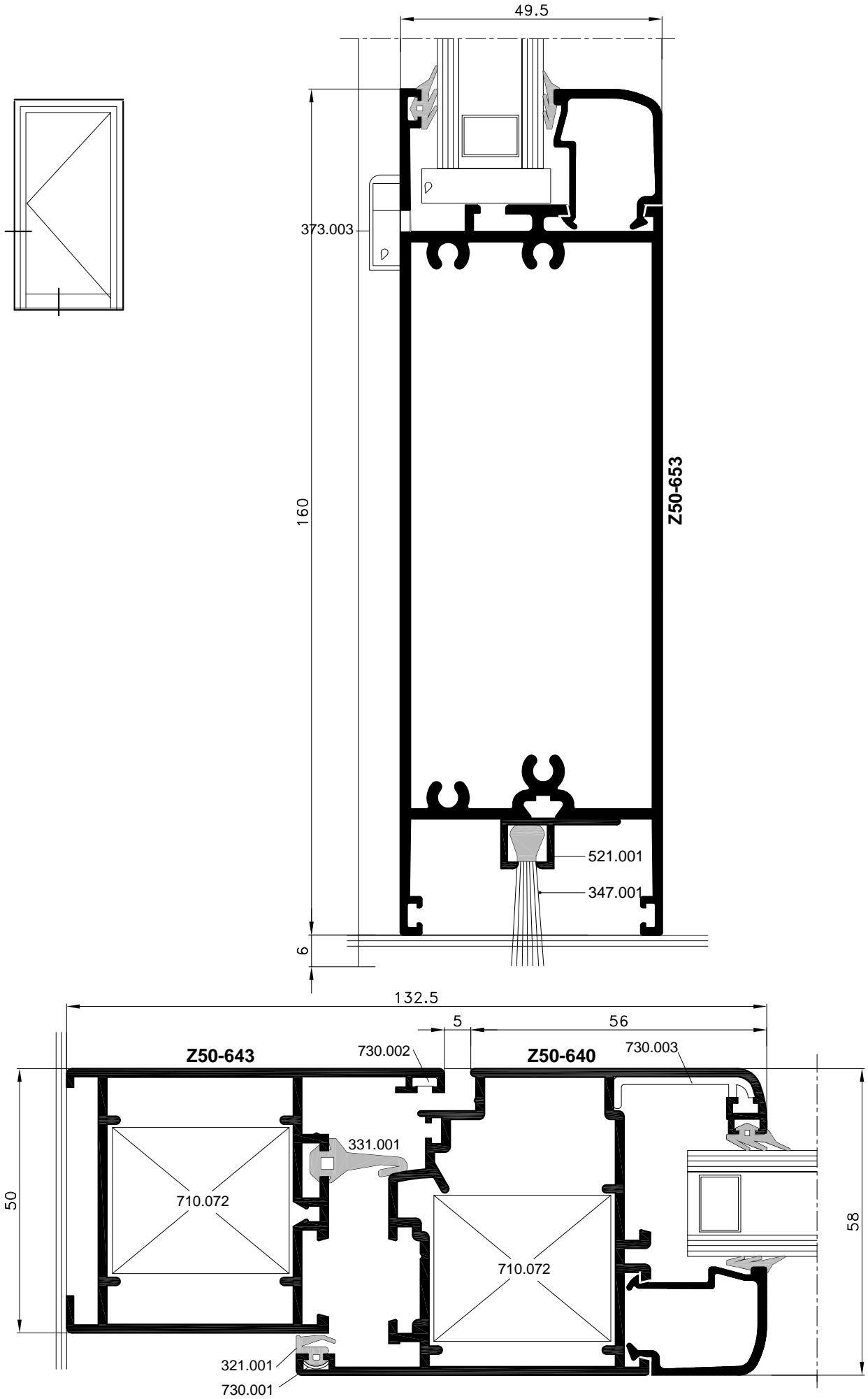


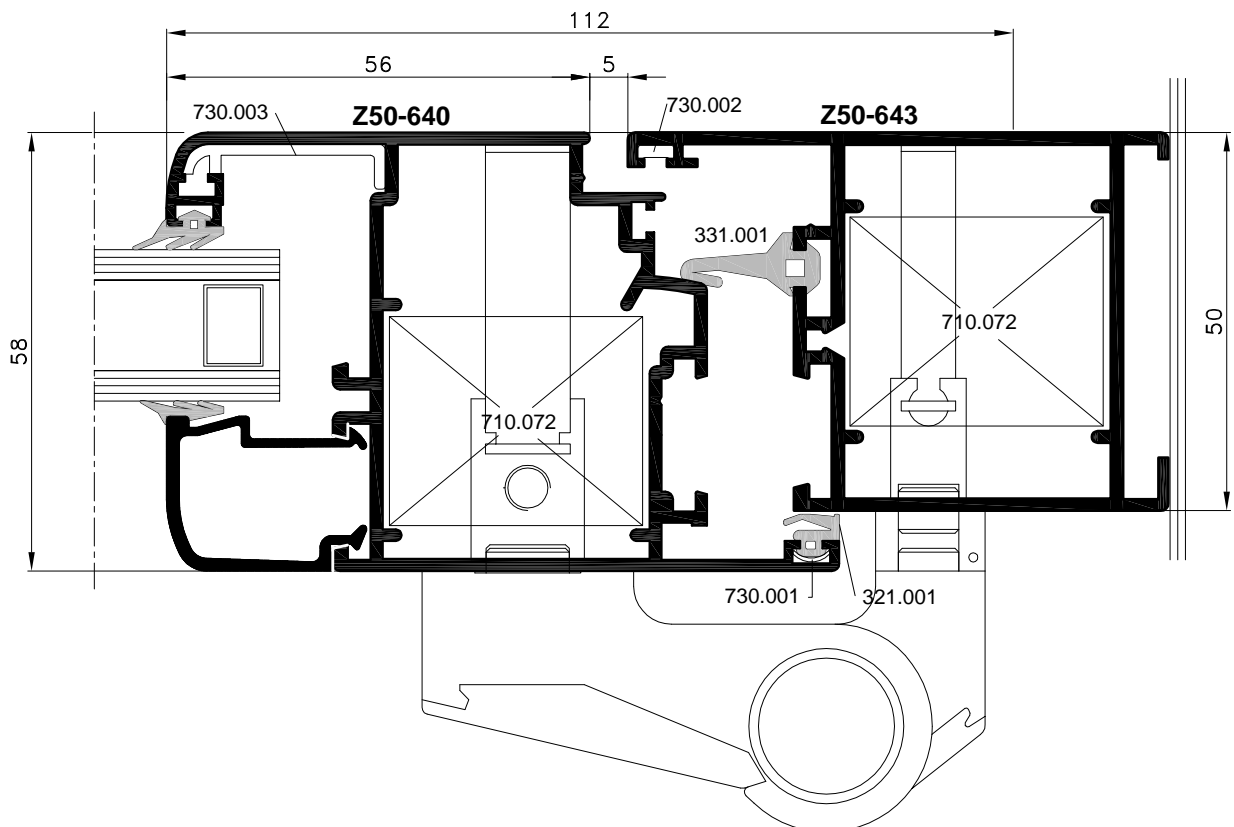
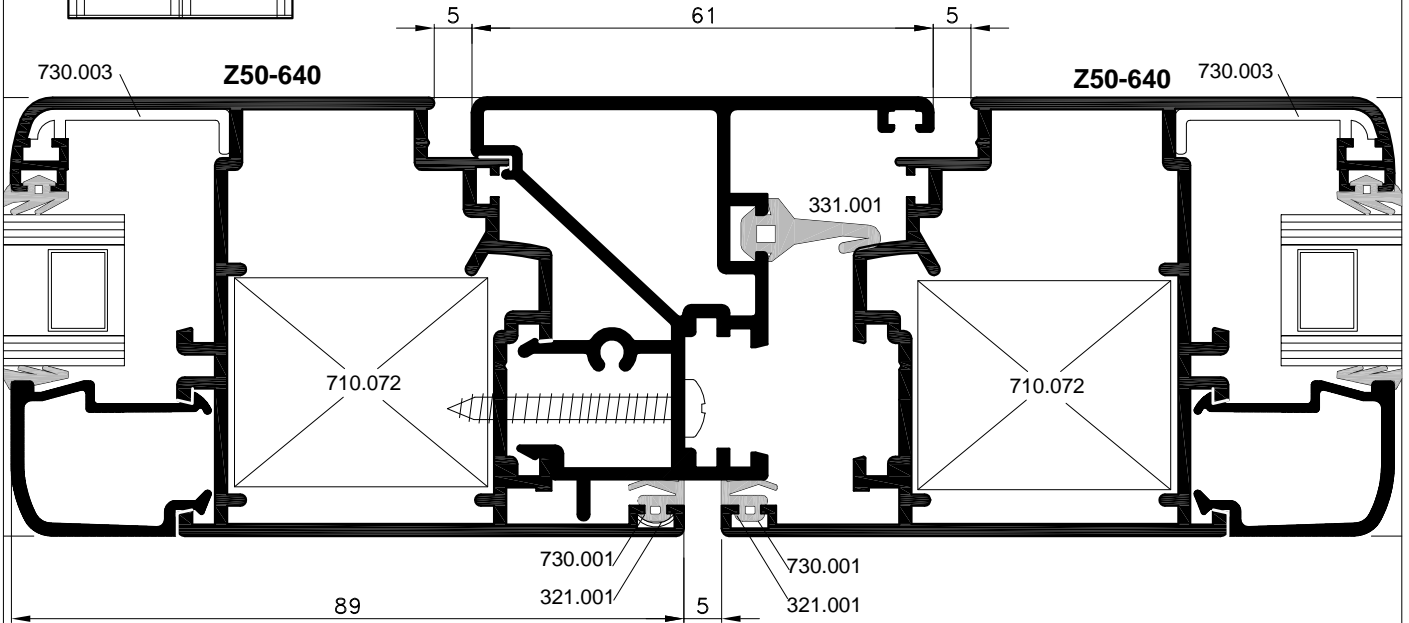
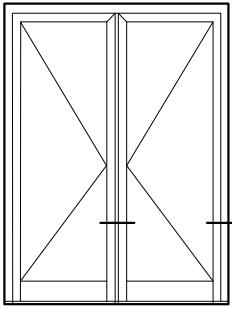


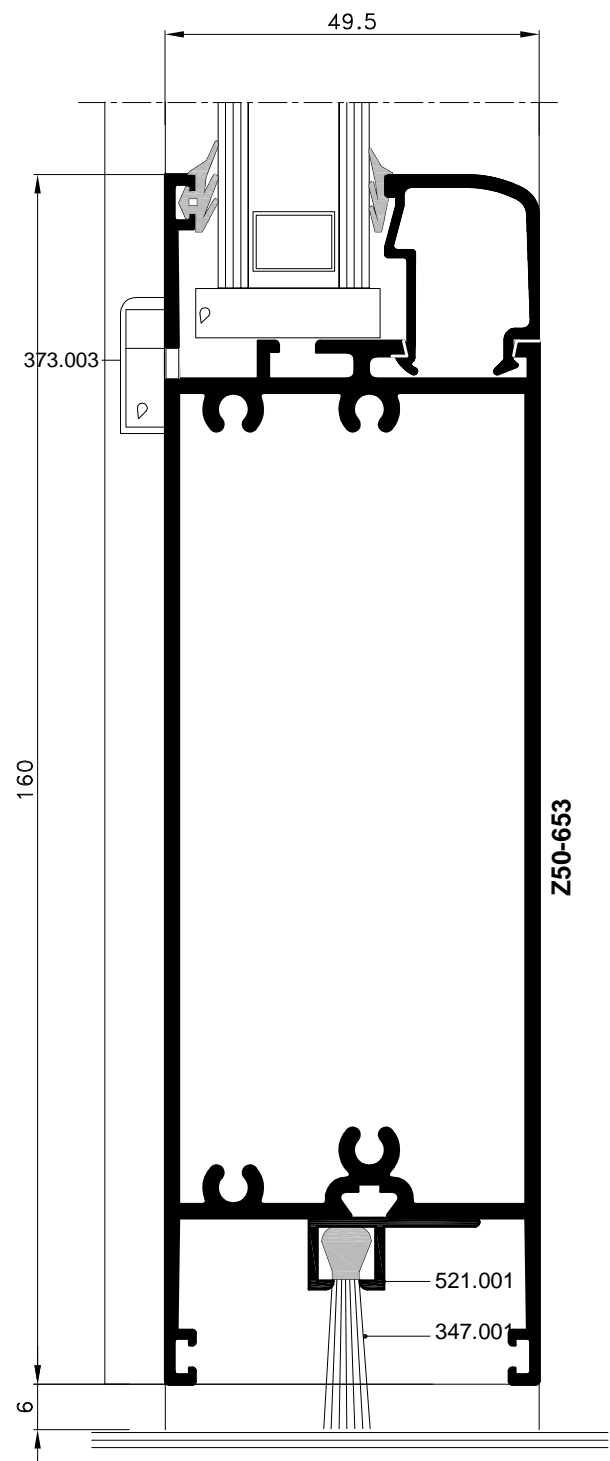
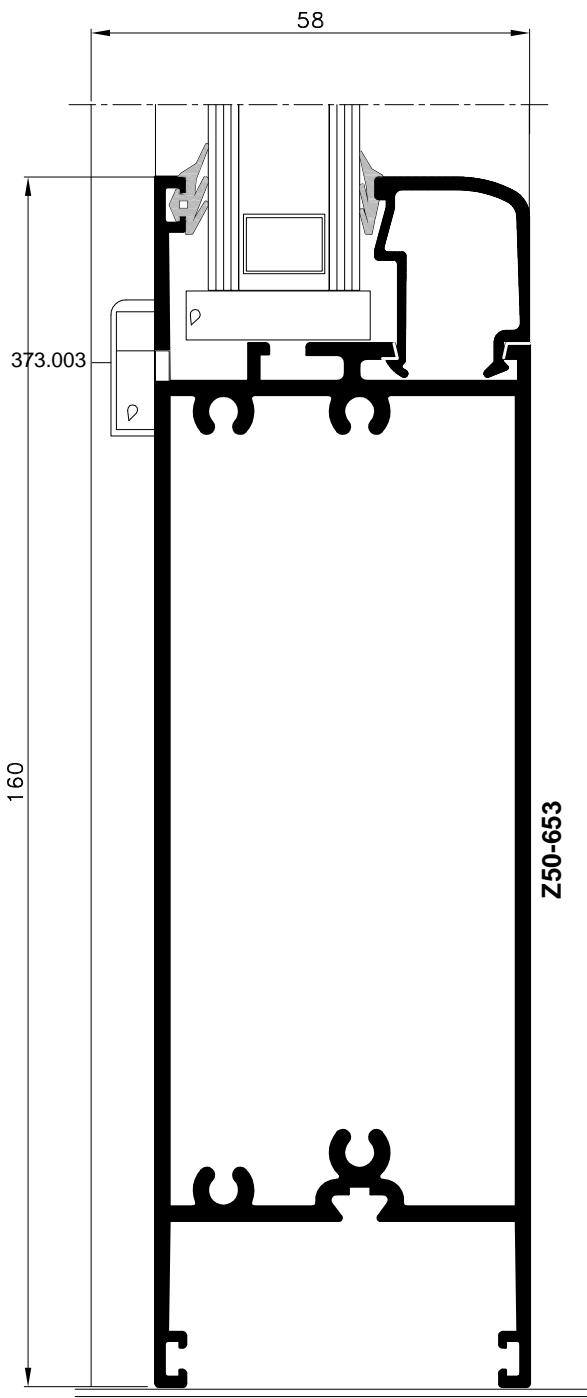
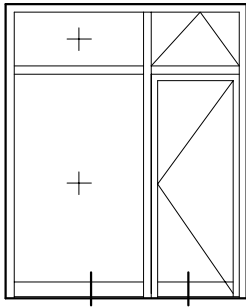


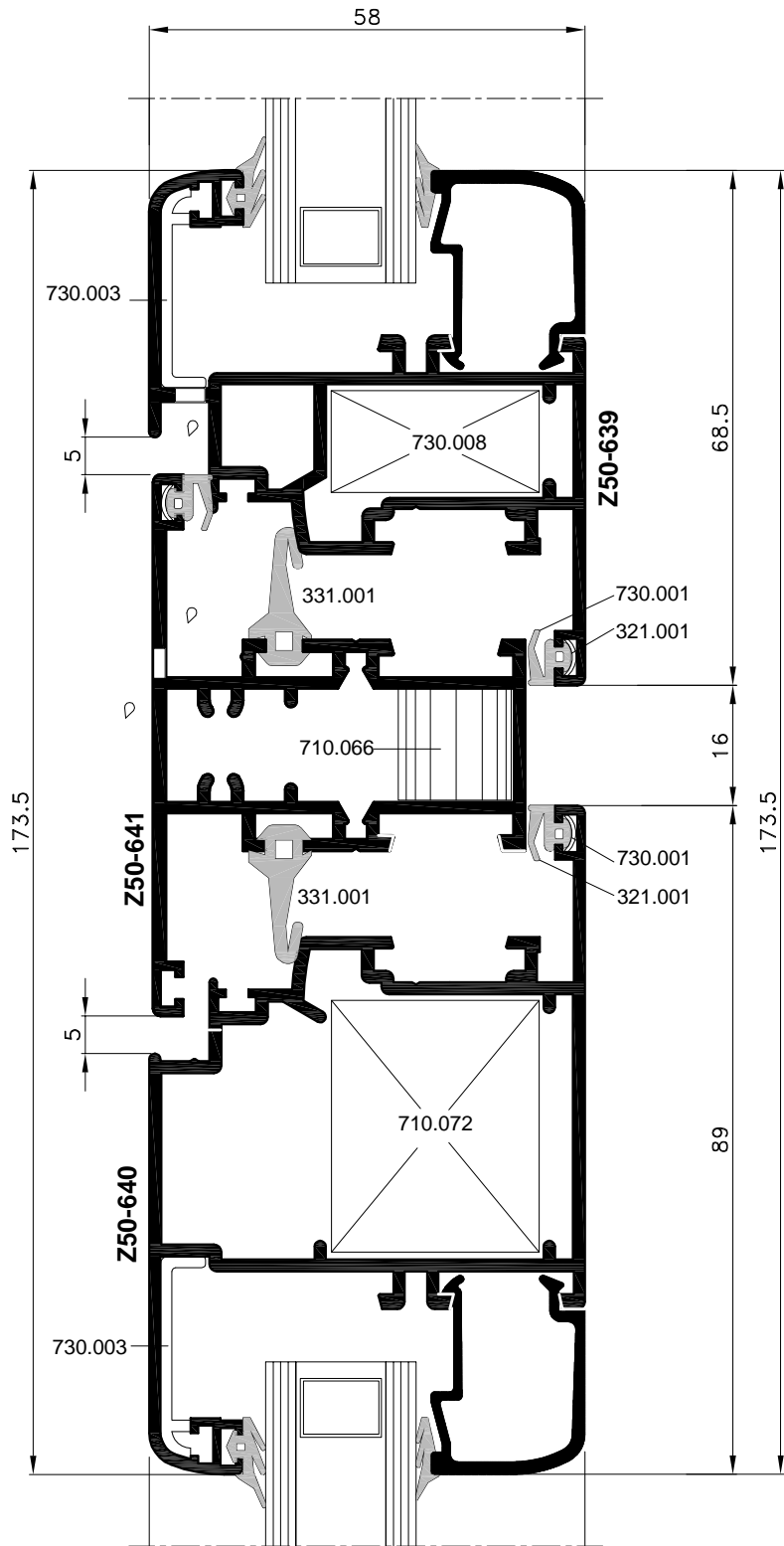
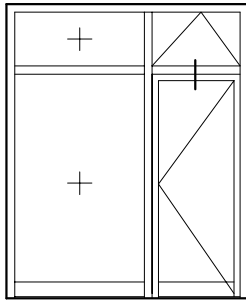


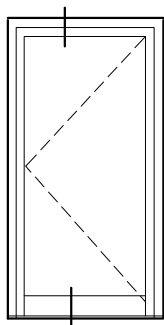




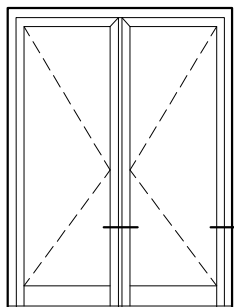




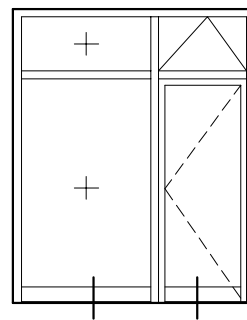




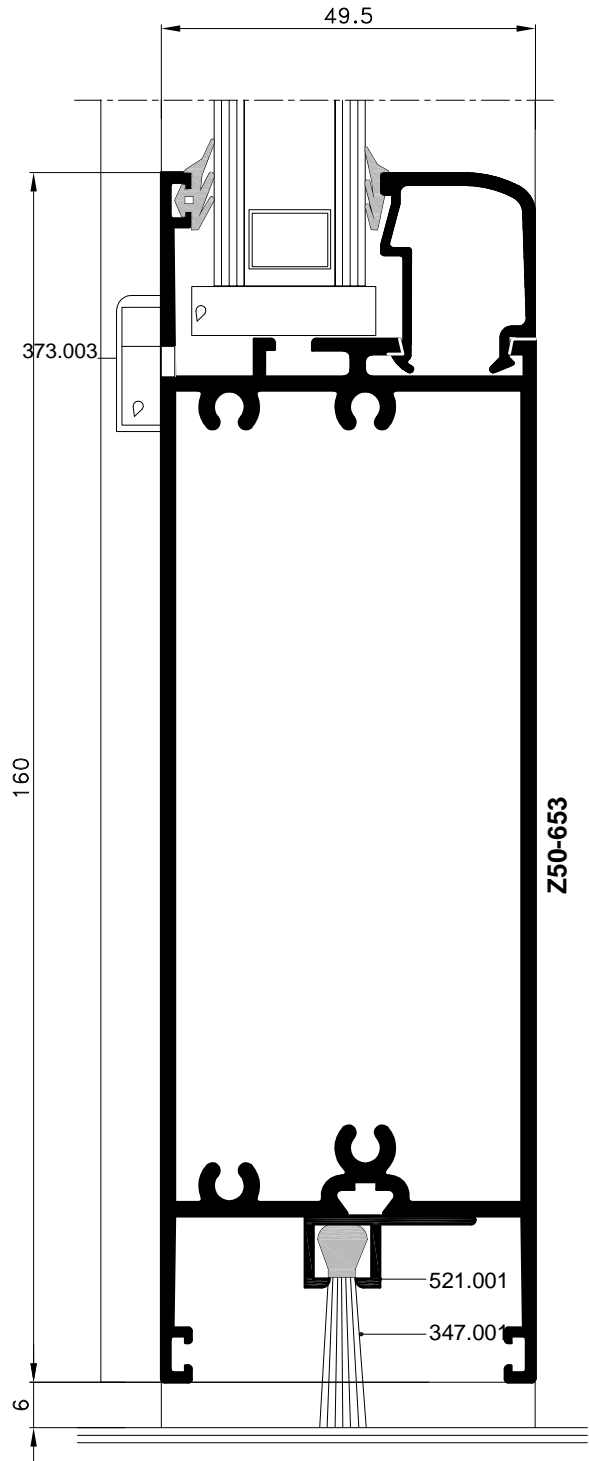
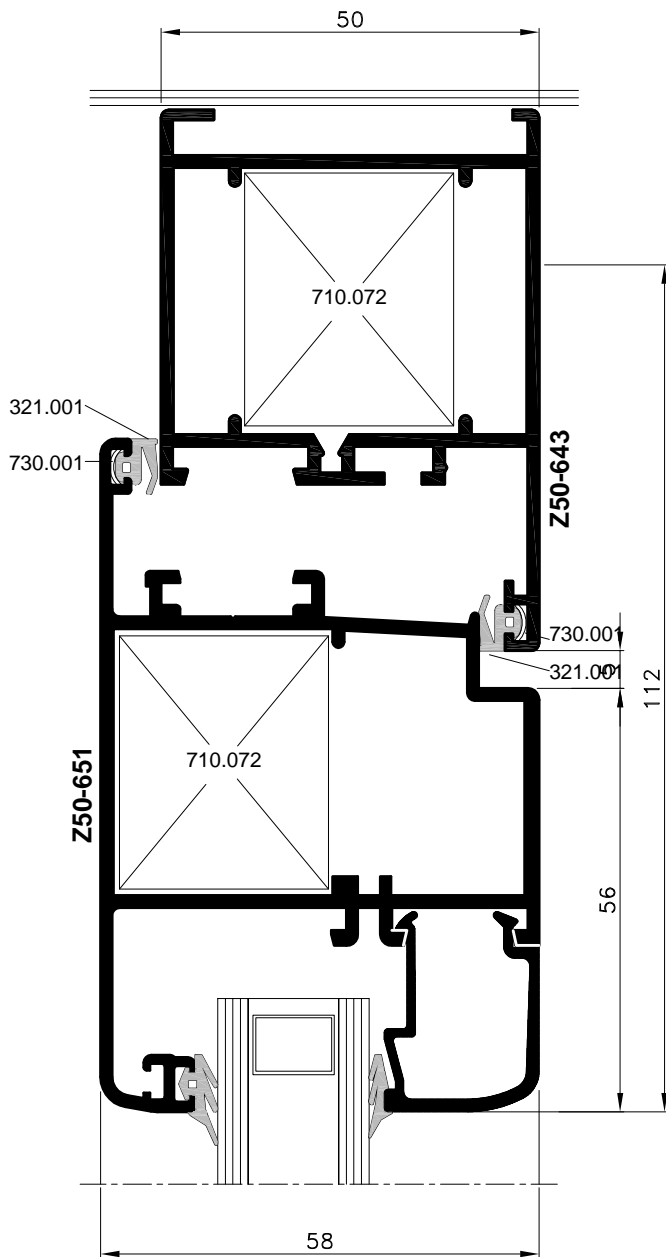
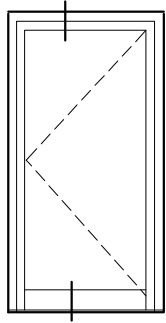
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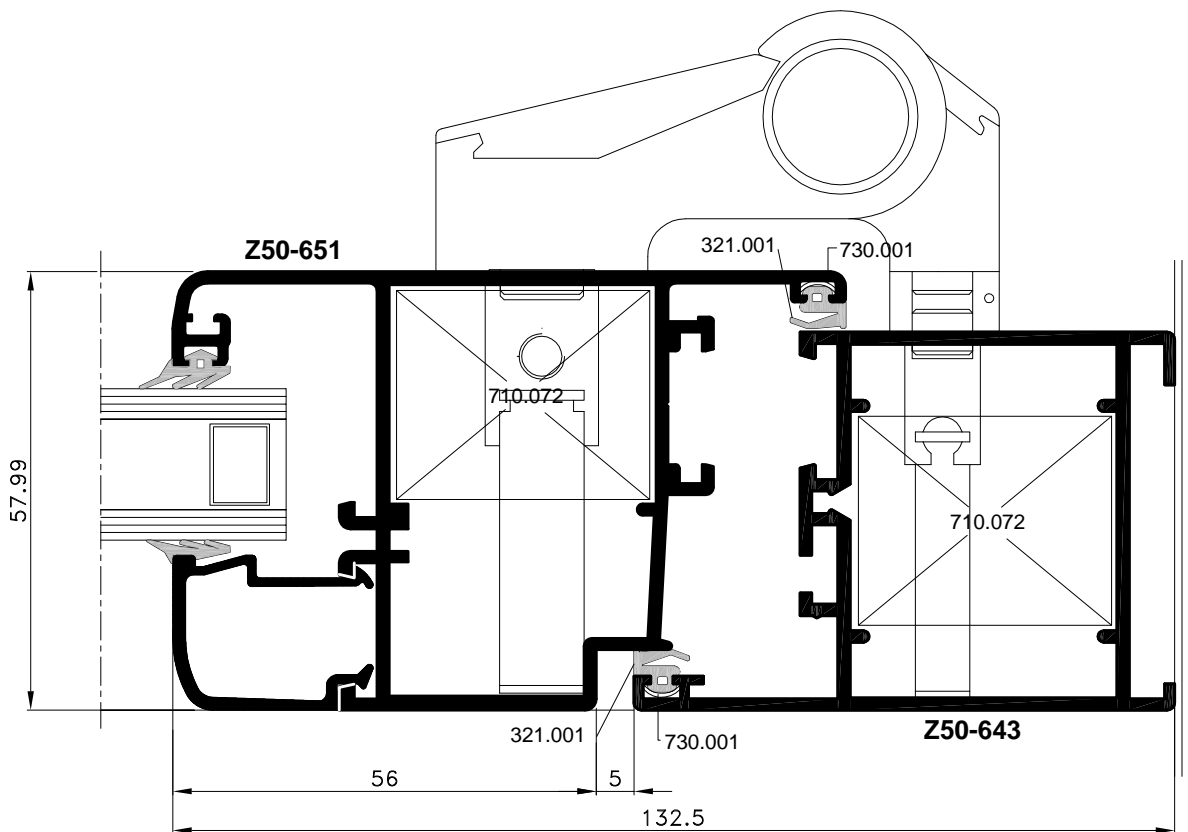
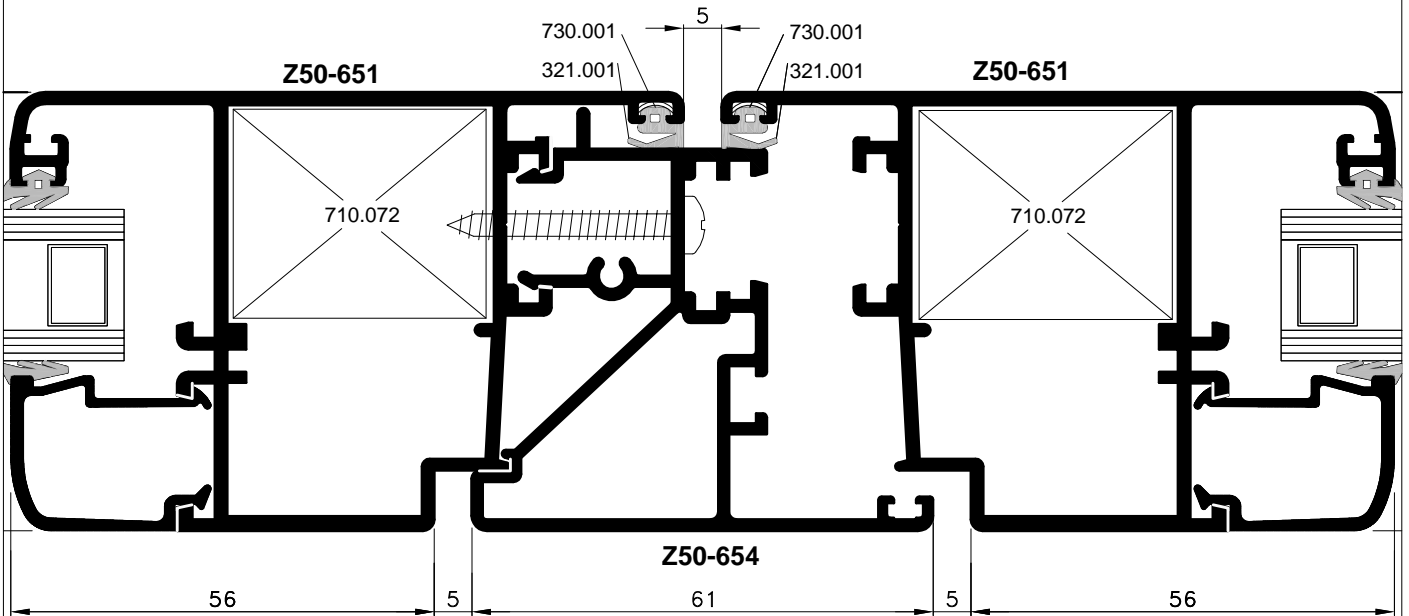
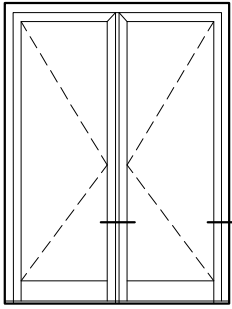


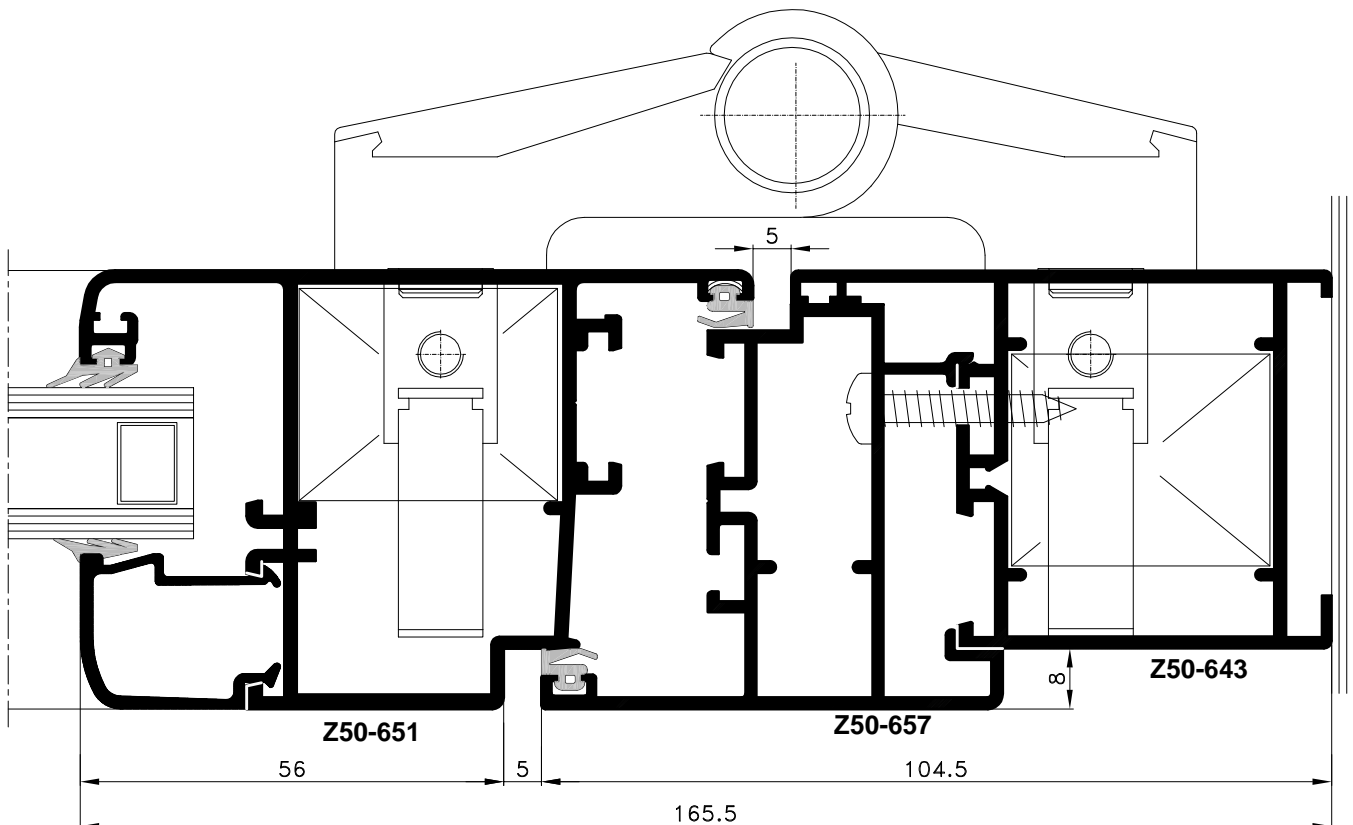
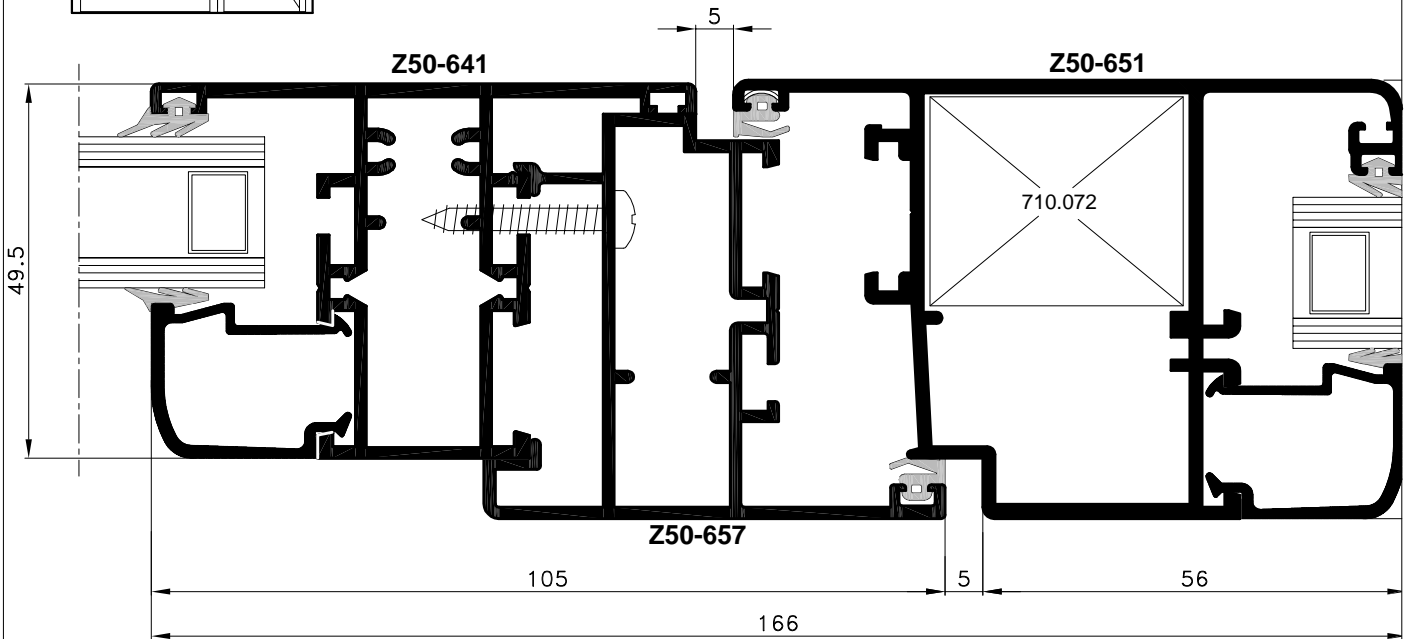
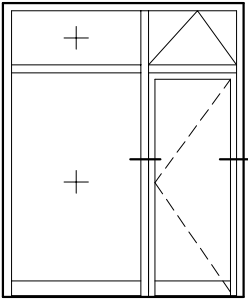
str. 13

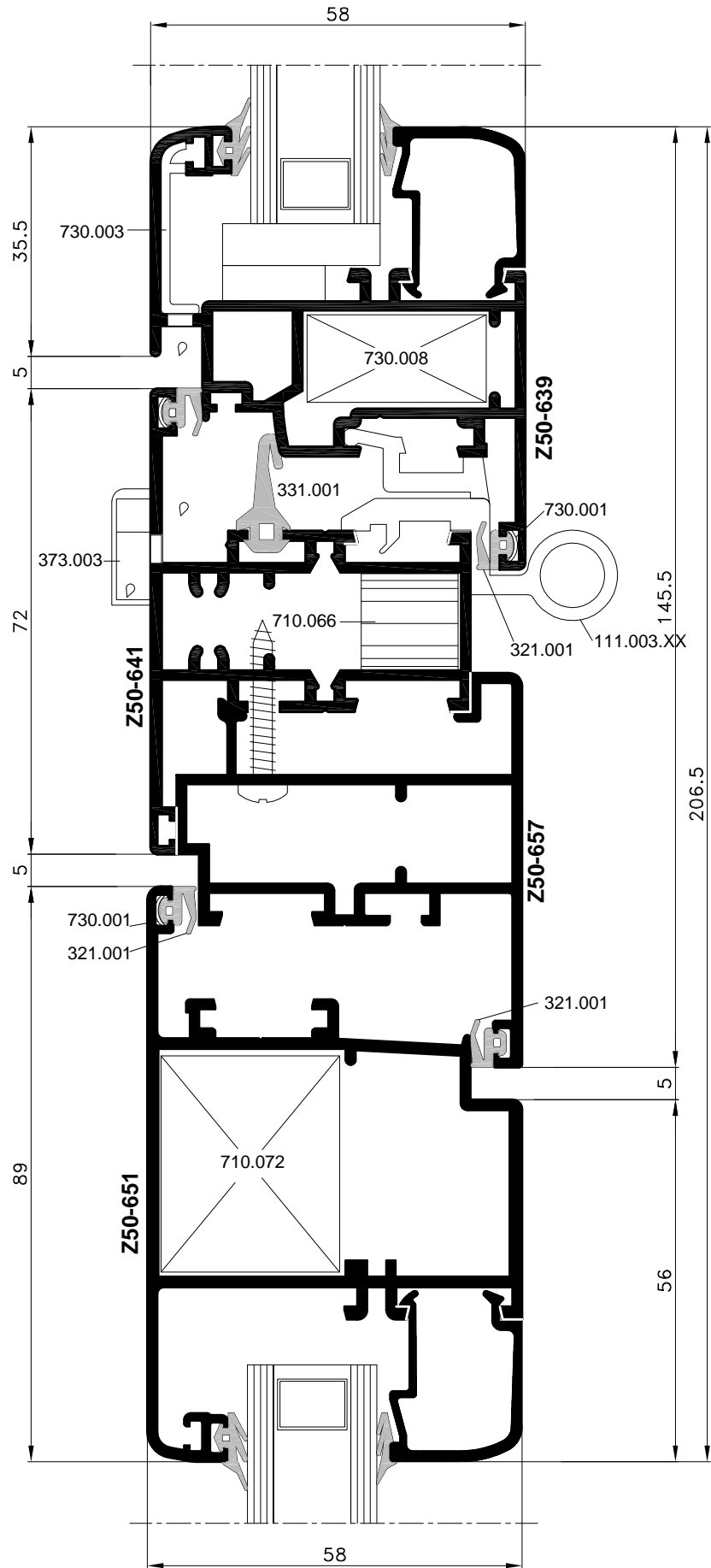
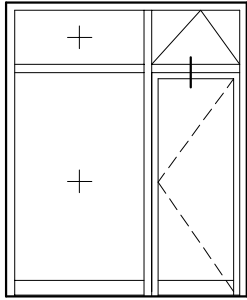


str. 14-15

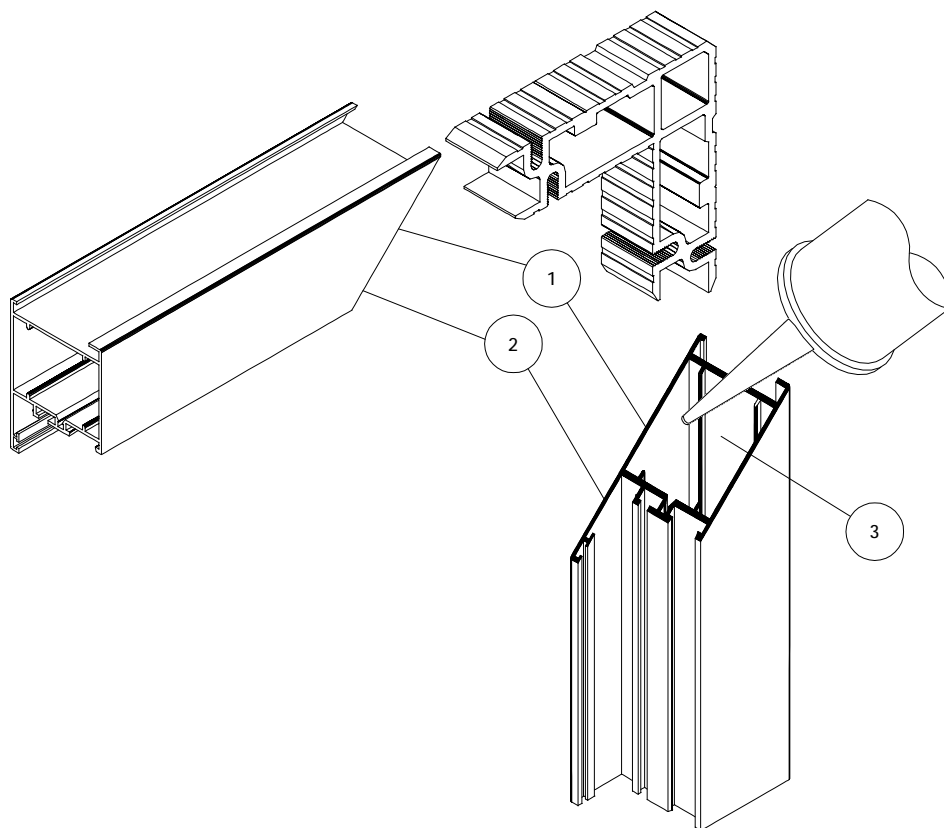








SPAJANJE PROFILA KUTNICIMA POD 90°



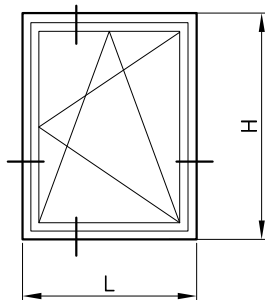
POSTUPAK SPAJANJA PROFILA:

1. Površine koje se spajaju-rezove očistiti i odmastiti prikladnim sredstvom /npr. *Sika Remover 208*; *Wurth-kat.br.:892 130 30/*.
2. Premazati površine koje se spajaju ljepilom za metal /npr. *Sika Force 7851*; *Wurth-kat.br.:892 130 010/*.
3. Ljepilo za metal ušpricati u komoru za kutnik - po opsegu komore
4. Profile s kutnikom izravnati i spojiti
5. Dio ljepila koji iscuri između rezova očistiti sredstvom za čišćenje i odmašćivanje /npr. *Sika Remover 208*; *Wurth-kat.br.:892 130 30/*.

NAPOMENA:

Ovaj postupak spajanja profila primjenjiv je za sve *Feal-ove* kutnike i njima odgovarajuće komore:

Lijepljenjem rezova i kutnika ljepilima za metal osigurava se potrebna zrako- i vodonepropusnosti spoja kao i dodatna mehanička čvrstoća spoja.

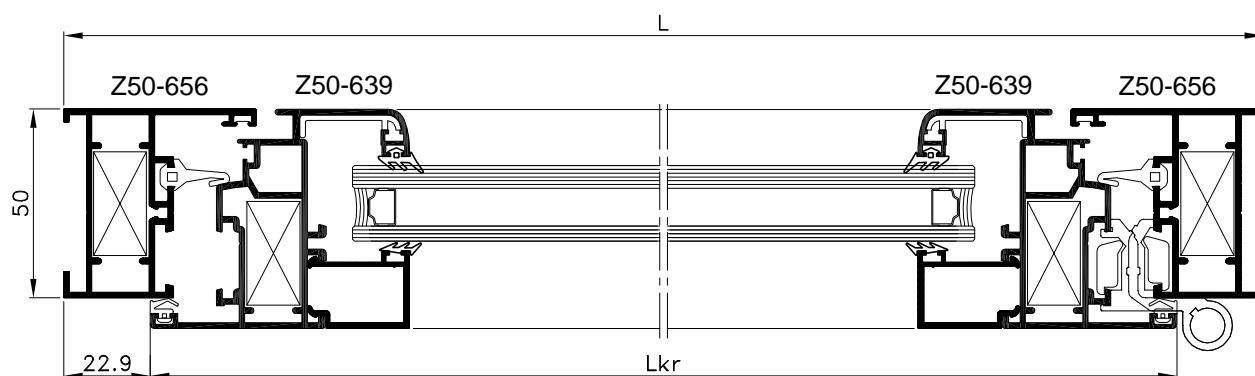
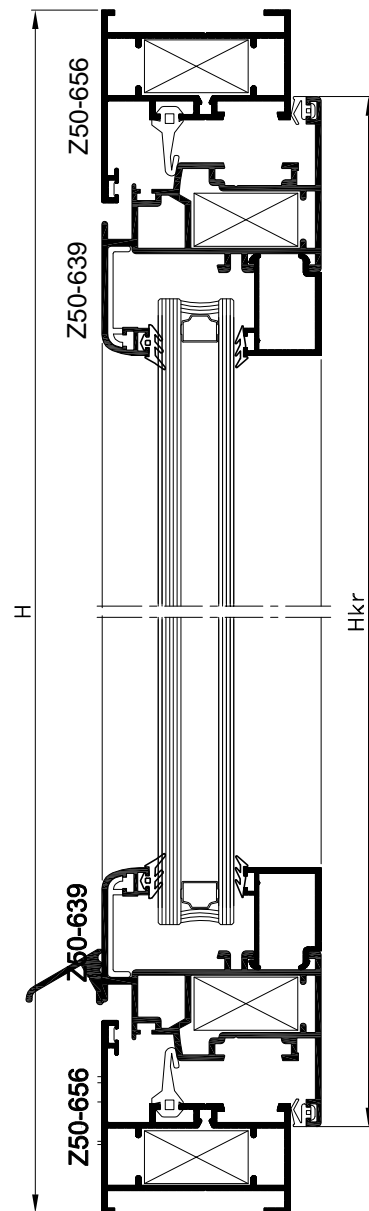


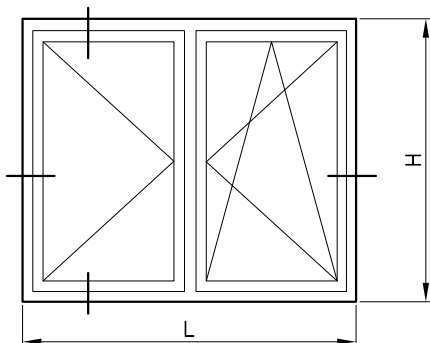
PROFILI		kom	mjera	pilanje
Z50-656	vodoravnica okvira	2	L	45-45
Z50-656	okomica okvira	2	H	45-45
Z50-639	vodoravnica krila	2	Lkr=L-46	45-45
Z50-633	okomica krila	2	Hkr=H-46	45-45
Z40-644	vodoravna lajsna	2	Lkr=93	90-90
Z40-644	okomita lajsna	2	Hkr=137	90-90
NC-1459	klizač			90-90
Z40-657	okapnica			90-90

OKOVI		kom	
730.008	središnji kutnik	8	
730.010	pomoćni kutnik	4	
730.001	pomoćni kutnik	4	
730.002	pomoćni kutnik	4	
134.000.XX	dry kip mehanizam	1	
373.003	maska za drenažni otvor	2	

BRTVE		kom	mjera
331.001	srednja brtva		2L+2H
321.001	brtva u krilu prema ramu		2L+2H
321.002	brtva prema staklu -vani		2L+2H
311.001	brtva prema staklu -unutra		2L+2H
366.001	kutni umetak brtve Z101	4	

STAKLO		kom	mjera
20 mm		1	Lkr-107 x Hkr-107



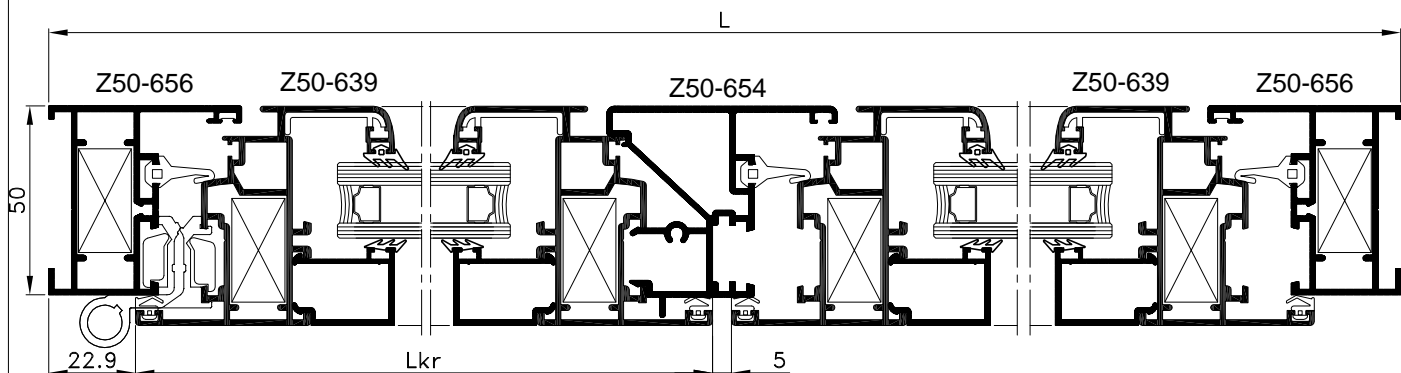
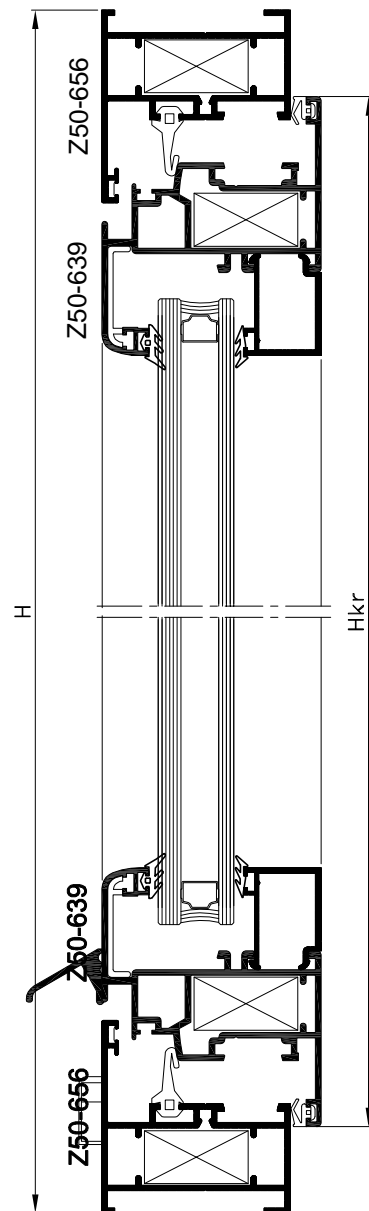


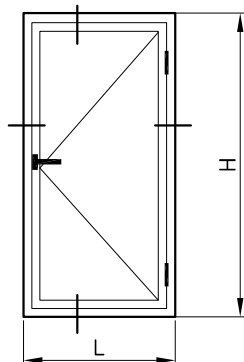
PROFILI		kom	mjera	pilanje
Z50-656	vodoravnica okvira	2	L	45-45
Z50-656	okomica okvira	2	H	45-45
Z50-639	vodoravnica krila	2	Lkr=L/2-25.5	45-45
Z50-639	okomica krila	2	Hkr=H-46	45-45
Z50-654	kombatuta	1	Hkr-68	90-90
Z40-644	vodoravna lajsna	2	Lkr-93	90-90
Z40-644	okomita lajsna	2	Hkr=137	90-90
NC-1459	klizač			90-90
Z40-657	okapnica			90-90
OKOVI		kom		

730.008	središnji kutnik	12	
730.010	pomoćni kutnik krila	8	
730.001	pomoćni kutnik rama	4	
730.002	pomoćni kutnik krila	8	
143.002	zapinjač za pasivno krilo	2	
143.003	jednostrani prihvatač zapinjača	2	
111.001.XX	šarka	2	
134.000.XX	dry kip	1	
373.003	maska za drenažni otvor	2	
364.014	umetak za profil Z40-652	2	

BRTVE		kom	mjera
331.001	srednja brtva		2L+3H
321.001	brtva u krilu prema ramu		2L+4H
321.002	brtva prema staklu -vani		2L+4H
311.001	brtva prema staklu -unutra		2L+4H
366.001	kutni umetak brtve Z101	4	

STAKLO		kom	mjera
20 mm		1	Lkr-107 x Hkr-107



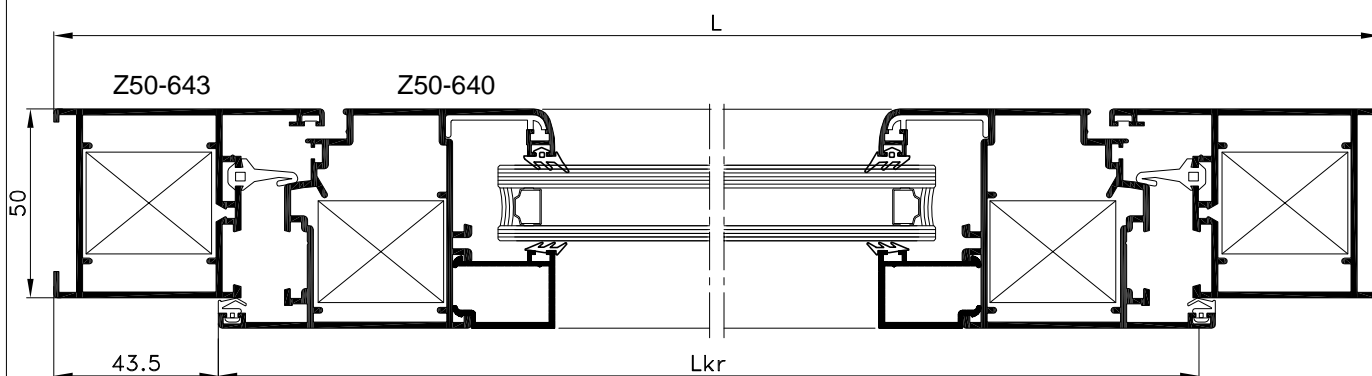
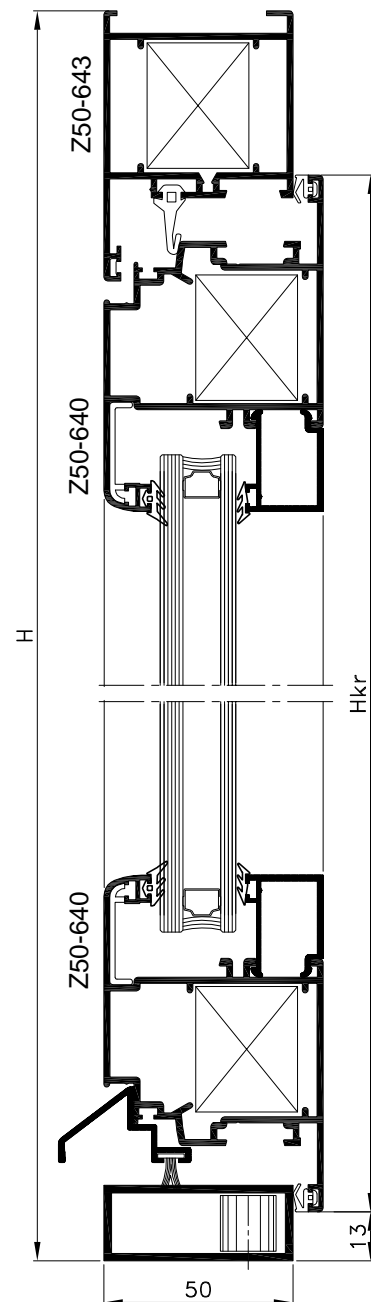


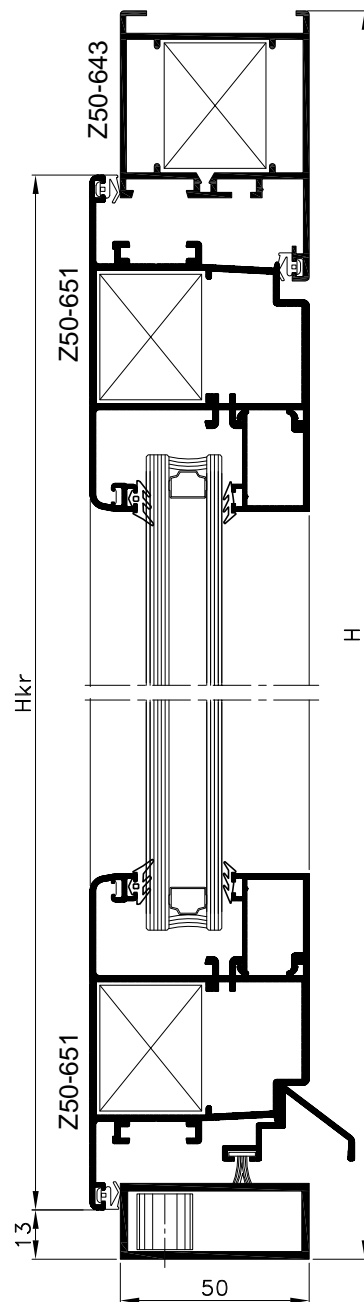
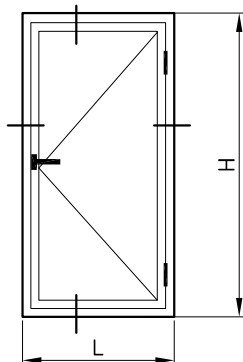
PROFILI		kom	mjera	pilanje
Z50-643	vodoravnica okvira	2	L	45-45
Z50-643	okomica okvira	2	H	45-45
Z50-640	vodoravnica krila	2	Lkr=L-87	45-45
Z50-640	okomica krila	2	Hkr=H-57	45-45
Z40-644	vodoravna lajsna	2	Lkr=134	90-90
Z40-644	okomita lajsna	2	Hkr=178	90-90
P45-648	okapnica	1	Lkr=35	90-90
F-0198	al profil	1	L-89	90-90

OKOVI		kom	
730.009	središnji kutnik	6	
730.010	pomoćni kutnik	4	
730.001	pomoćni kutnik	4	
730.002	pomoćni kutnik	2	
113.006.xx	šarka za vrata 60 mm	2	
124.001	brava za vrata	1	
124.003	šild	1	
104.001.xx	ručka za vrata	1	
124.014	uložak za bravu-75 mm	1	
710.066	veznik	2	

BRTVE		kom	mjera
331.001	srednja brtva		L+2H
321.001	brtva u krilu prema ramu		2L+2H
321.002	brtva prema staklu -vani		2L+2H
311.001	brtva prema staklu -unutra		2L+2H
366.001	kutni umetak brtve Z101	2	
340.011	četkasta brtva 7x9		L

STAKLO		kom	mjera
20 mm		1	Lkr-148 x Hkr-148





PROFILI		kom	mjera	pilanje
Z50-643	vodoravnica okvira	2	L	45-45
Z50-643	okomica okvira	2	H	45-45
Z50-651	vodoravnica krila	2	Lkr=L-87	45-45
Z50-651	okomica krila	2	Hkr=H-57	45-45
Z40-644	vodoravna lajsna	2	Lkr=134	90-90
Z40-644	okomita lajsna	2	Hkr=178	90-90
P45-648	okapnica	1	Lkr=35	90-90
F-0198	al profil	1	L-89	90-90

OKOVI		kom	
730.009	središnji kutnik	6	
730.001	pomoćni kutnik	4	
730.002	pomoćni kutnik	6	
113.006.xx	šarka za vrata	2	
124.001	brava za vrata	1	
124.003	šild	1	
104.001.xx	ručka za vrata	1	
124.014	uložak za bravu-75 mm	1	
710.066	veznik	2	

BRTVE		kom	mjera
321.001	brtva u krilu prema ramu		4L+3H
321.002	brtva prema staklu -vani		2L+2H
311.001	brtva prema staklu -unutra		2L+2H
340.011	četkasta brtva 7x9		L

STAKLO		kom	mjera
20 mm		1	Lkr-148 x Hkr-148

