

FEAL



45 MILL

PROZORI I VRATA
WINDOWS AND DOORS

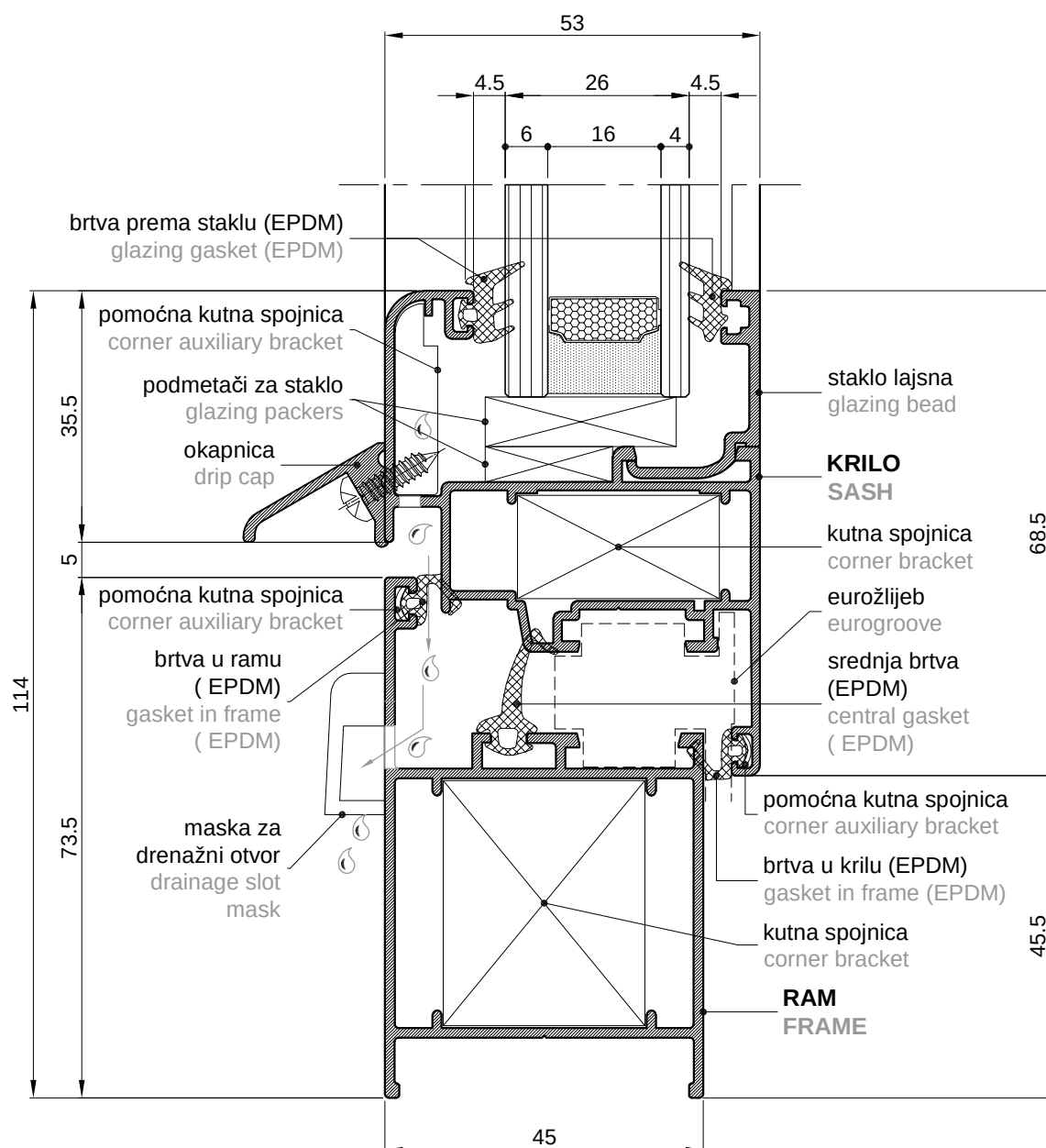
Knjiga A / *Book A*

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Značajke sistema

System characteristics



OPIS SISTEMA 45 MILL
SYSTEM DESCRIPTION 45 MILL

Sistem **45 MILL** je namijenjen za izradu prozora (otvaranje unutra i vani), vrata (otvaranje unutra i vani) i fiksnih stijena.

To je sistem profila bez prekinutog termičkog mosta, osnovne ugradbene dubine rama 45 mm.

Pored osnovne izvedbe ram/krilo sa ravnim linijama, moguće su izvedbe ram/krilo i sa zaobljenim vanjskim linijama.

Brtvljenje je izvedeno EPDM brtvama.

Mogući tipovi otvaranja prozora: otklopno, zaokretno, otklopno-zaokretno, zaokretno otvaranje vani,

otklopni oko gornje vodoravne ose - otvaranje vani,

zaokretno oko okomite ose - otvaranje vani,

otvaranje vrata: otvaranje prema unutra i vani, mimokretna vrata.

Okov koji se ugrađuje u sistem je standardni za eurožlijeb 15/20.

Karakteristike sistema:

- dubina rama..... 45 mm
- dubina krila..... 53 mm
- dubina ispune..... do 31 mm
- max.težina krila..... 130 kg
- zrakopropusnost..... EN 12207 (klasa 4)
- vodonepropusnost..... EN 12208 (klasa 9A)
- otpornost na udar vjetra..... EN 12210 (klasa C4/B4)
- zaštita od buke..... EN ISO 717-1 (Rw=34 dB)
- protuprovalnost..... EN 1627
- osnovni materijal..... EN AW-6060
- materijal brtvljenja..... EPDM
- površinska obrada..... DIN 17611
- kontrola kvalitete..... DIN EN ISO 9001

System **45 MILL** is used for production of windows (inside and outside opening), doors (inside and outside opening) and fixed glass wall.

45 MILL is a system without a thermal break, basic mounting frame depth of 45 mm.

In addition to the basic available of the frame/sash with flat lines, also available are frame/sash with the rounded outside lines.

The sealing are made with the EPDM gaskets.

Possible types of window opening: tilt, turn, tilt-turn, turn outside opening,

tilt around the top horizontally axis- outside opening,

turn around the vertical axis- outside opening,

door opening: inside and outside opening, push&pull doors.

The hardware which are installation in the this system is standard for euro groove 15/20 .

System characteristics:

- frame depth..... 45 mm
- sash depth..... 53 mm
- infill depth..... up to 31 mm
- max sash weight..... 130 kg
- air permeability..... EN 12207 (klasa 4)
- watertightness..... EN 12208 (klasa 9A)
- wind resistance..... EN 12210 (klasa C4/B4)
- airborne sound insulation..... EN ISO 717-1 (Rw=34 dB)
- burglary resistance..... EN 1627
- profile material..... EN AW-6060
- gasket material..... EPDM
- surface processing..... DIN 17611
- quality control..... DIN EN ISO 9001

Ispitivanja i certifikati

Testing and certificates

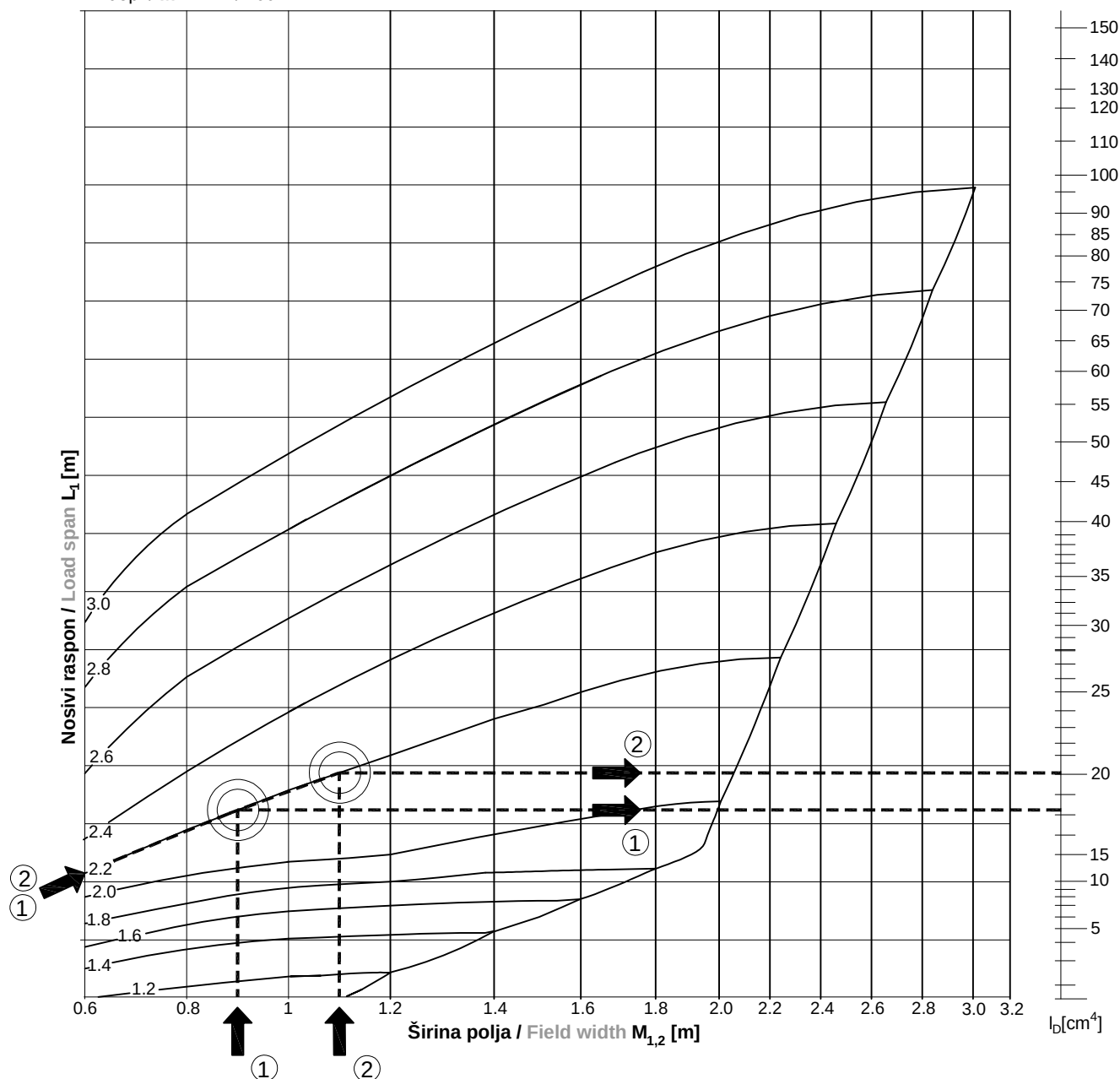
ISPITIVANJA I CERTIFIKATI TESTING AND CERTIFICATES					
Vrsta ispitivanja Type of test	Jednokrlni prozor Single casement window	Dvokrlni prozor Double casement window	Jednokrlna b.vrata Single balcony door	Dvokrlna b.vrata Double balcony door	Fiksna stijena Fixed al. wall
Zrakopropusnost Air permeability EN12207	3	4	4		4 *
Vodoneprpustnost Watertightness EN 12208	9A	9A	9A		9A *
Vjetronepropusnost Resistance to wind EN 12210	C3	C4/B4	C2/B2		C4/B4*
Buka Rw Airborne sound reduction EN ISO 717-1	34 dB				
Protuprovalnost Protection against burglary EN 1627					
Otpornost na istežanje, torziju... Resistance at strain, torsion...					
Pendl test Impact resistance test EN 13049					
Protupožarnost Fire resistance test DIN EN 1363-1					
* Feal interno ispitivanje * Feal internal testing					

Statički dijagram -opterećenje vjetrom **Structural diagram of wind load**
Trokutasto i trapezoidno opterećenje **Triangular and trapezoidal load**

Osnovni uvjeti

Basic assumptions:

Jed. opterećenje 1.0 kN/m² Unit load 1.0 kN/m²
 $f_{dop.} / adm. = L / 200$



Statički dijagram -opterećenje vjetrom Structural diagram of wind load

Trokutasto i trapezoidno opterećenje Triangular and trapezoidal load

Primjer primjene dijagrama opterećenja Example of load diagram application

1. Ulazni podaci / Input data:

Nosivi raspon / Load span:

$$L = 2.20 \text{ m}$$

Širina polja / Field width:

$$M_1 = 0.9 \text{ m}$$

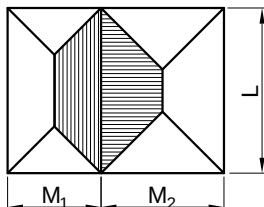
$$M_2 = 1.1 \text{ m}$$

Tlak vjetra*

Wind pressure* = 0.9 kN/m^2

Podtlak vjetra*

Wind suction* = -0.7 kN/m^2



2. Određivanje potrebnog momenta I_x pod jediničnim opt. 1.0 kN/m^2 Determination of required moment I_x under unit load 1.0 kN/m^2

Vrijednosti momenata inercije iz dijagrama

Values of moment of inertia from diagram :

$$I_{D1} = 18 \text{ cm}^4 \text{ (① dijagram / diagram)}$$

$$I_{D2} = 20 \text{ cm}^4 \text{ (② dijagram / diagram)}$$

Zbroj s obje strane

Sum of both sides: $I_D = 38 \text{ cm}^4$

3. Određivanje potrebnog momenta I_x pod opterećenjem na građevini Determination of required moment I_x under load on the building

Pretpostavljeni tlak vjetra* / Wind pressure assumed*

$$w_p = 0.9 \text{ kN/m}^2$$

$$\text{potrebni / required } I_x = w_p \cdot I_D = 0.9 \cdot 38 \text{ cm}^4 = \underline{34 \text{ cm}^4}$$

Pretpostavljeni podtlak vjetra* / Wind suction assumed*

$$w_s = -0.7 \text{ kN/m}^2$$

$$\text{potrebni / required } I_x = w_s \cdot I_D = (-0.7) \cdot 38 \text{ cm}^4 = \underline{-26.6 \text{ cm}^4}$$

4. Odabire se veća apsolutna vrijednost: 34 cm^4

Greater absolute value is selected: 34 cm^4

5. Odaberi profil iz tablice

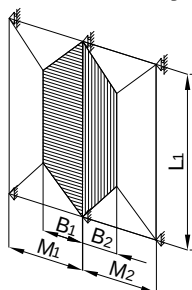
Select the profile from the table

*opterećenje vjetrom mora biti izračunato prema važećim standardima te poziciji i obliku građevine
*the wind load must be determined according to the valid standards and to the position and shape of the building.

Statičke jednadžbe Structural formulas

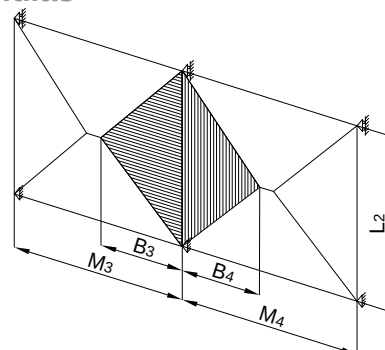
Trapezoidno opterećenje
Trapezoidal load

$$M_{1,2} < L_1$$



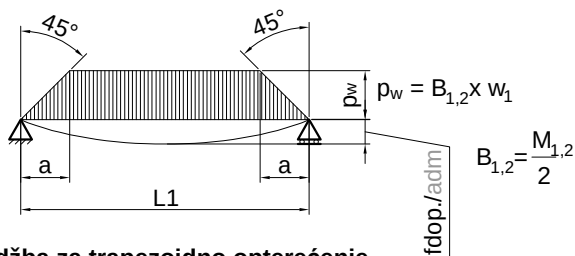
Trokutasto opterećenje
Triangular load

$$M_{3,4} \geq L_2$$



I_x (cm^4) = Moment inercije / Moment of inertia
 $L_{1,2}$ (cm) = Nosivi raspon opterećenja / Load span
 $B_{1,2}$ (cm) = Širina opterećenja trapezoidnog opterećenja / Load width of trapezoidal load $B_{1,2} = M_{1,2}/2$
 $B_{3,4}$ (cm) = Širina opterećenja trokutasto opterećenja / Load width of triangular load $B_{3,4} = L_2/2$
 w_p (kN/cm^2) = Tlak vjetra / Wind pressure
 w_s (kN/cm^2) = Podtlak vjetra / Wind suction
 p_w (kN/cm) = Linijsko opterećenje / Line load
 E (kN/cm^2) = Modul elastičnosti / Modulus of elasticity $7 \cdot 10^3$
 $f_{dop.} / \text{adm.}$ (cm) = dopušteni progib / adm. deflection

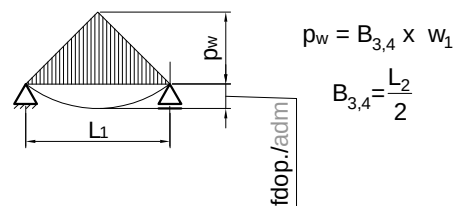
Statički sistem trapezoidnog opterećenja Structural system trapezoidal load



Jednadžba za trapezoidno opterećenje Calculation formula trapezoidal load

$$I_x = \frac{p_w \cdot L_1^4}{1920 \cdot E \cdot f_{dop.} / \text{adm.}} \cdot (25 - 40 \frac{a^2}{L_1^2} + 16 \frac{a^4}{L_1^4})$$

Statički sistem trokutastog opterećenja Statical system triangular load



Jednadžba za trokutasto opterećenje Calculation formula triangular load

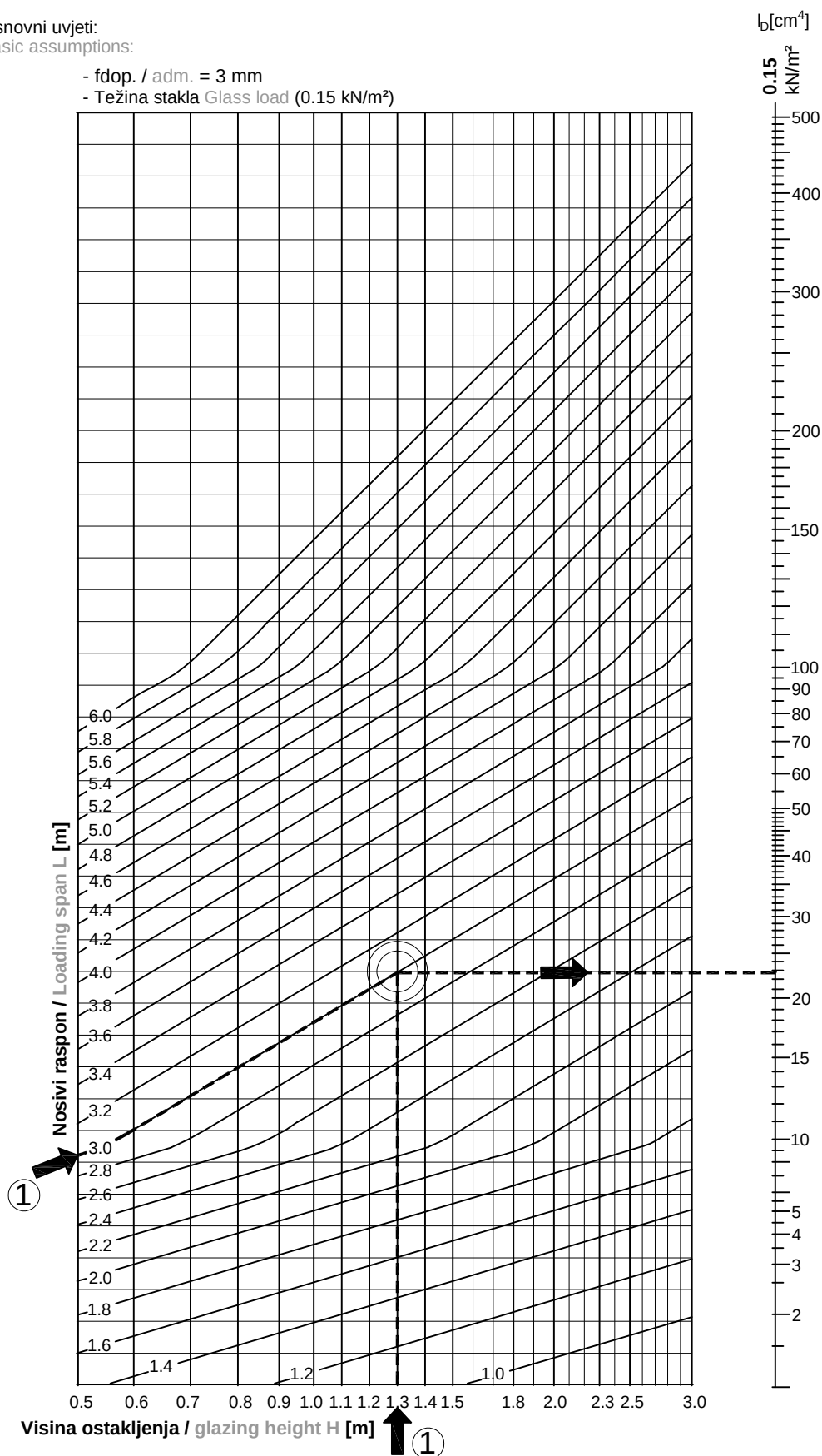
$$I_x = \frac{p_w \cdot L_2^4}{120 \cdot E \cdot f_{dop.} / \text{adm.}}$$

Statički dijagram težina stakla Structural diagram glass load

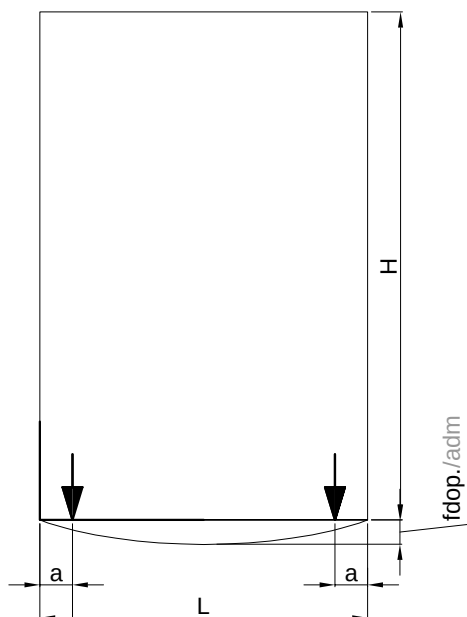
Osnovni uvjeti:

Basic assumptions:

- $f_{dop.} / adm. = 3 \text{ mm}$
- Težina stakla Glass load (0.15 kN/m^2)



Statički dijagram težina stakla Structural diagram glass load



1. Ulazni podaci / Input data:

Širina raspona / Load span:

L = 3.00 m

Visina ostakljenja / Glazing height:

H = 1.30 m

Debljina ostakljenja / Glazing thickness:

D = 20 mm*

* uzima se u obzir samo debljina staklenih ploha
* only glass pane thickness is calculated

2. Određivanje potrebnog momenta I_y pod jediničnim opt. 0.15 kN/m²
Determination of required moment I_y under unit load 0.15 kN/m²za / for q_s 0.15 kN/m² $I_{y0.15} = 23 \text{ cm}^4$ (① dijagram / diagram)3. Određivanje potrebnog momenta I_x pod opterećenjem na objektu
Determination of required moment I_x under load on the building

Debljina stakla Glass thickness D=20 mm ==> K=3.33

Potrebni / required $I_y = K_{20} \cdot I_{y0.15} = (3.33) \cdot 23 \text{ cm}^4 = 77 \text{ cm}^4$ 

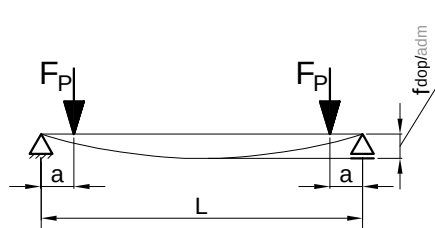
Vlastita težina profila nije uzeta u opterećenje !
The dead weight of the profile is not considered !

4. Odabrati profil iz tablice
Select the profile from the table

Statičke jednadžbe

Structural formulas

Nosac na dva oslonca / Beam on 2 supports



a = 150 mm fiksno / fixed

$$F = \frac{H \cdot L}{2} \cdot q_s$$

$$I_y = \frac{F \cdot a}{24 \cdot E \cdot f_{dop./adm.}} \cdot (3 \cdot L^2 - 4 a^2)$$

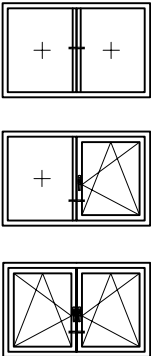
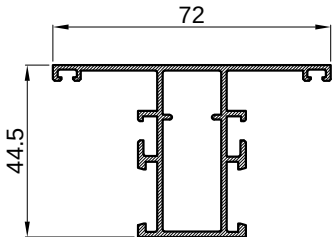
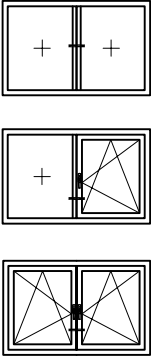
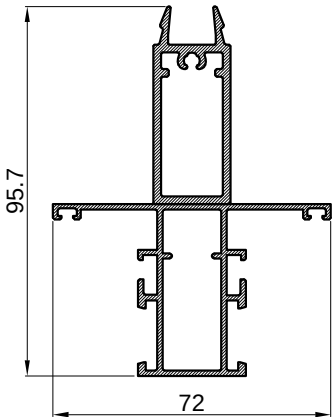
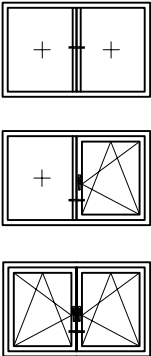
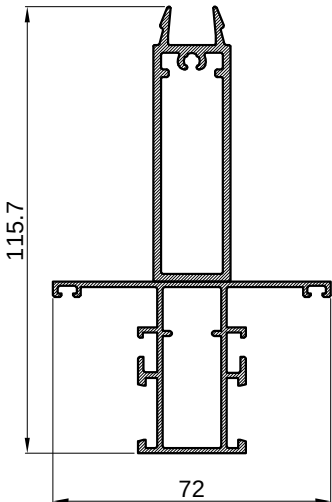
I_y (cm⁴) = Moment inercije / Moment of inertia
 F_p (kN) = Pojedinačno opterećenje / Single load
 a (cm) = Udaljenost oslonca / Support distance
 H (cm) = Visina stakla / Pane height
 L (cm) = Širina raspona / Load span
 q_s (kN/cm²) = Težina stakla / Glass weight
 $f_{dop./adm.}$ (cm) = dop.progib / adm. deflection

Tablica 1. Težina stakla
Table 1. Glass weight

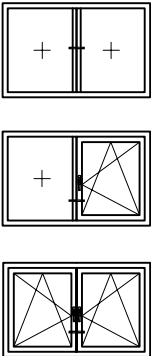
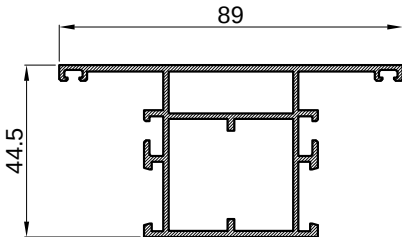
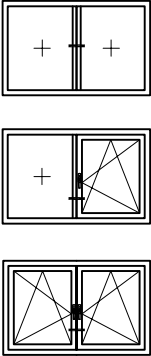
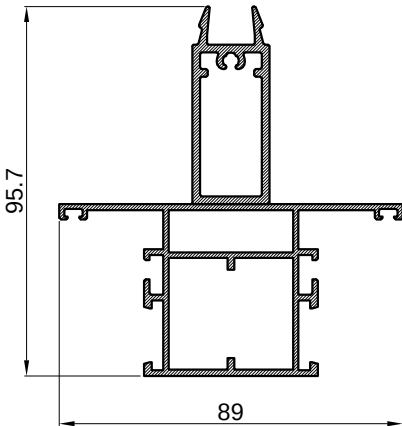
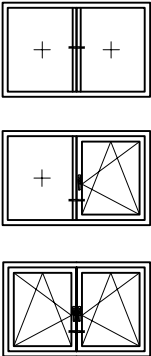
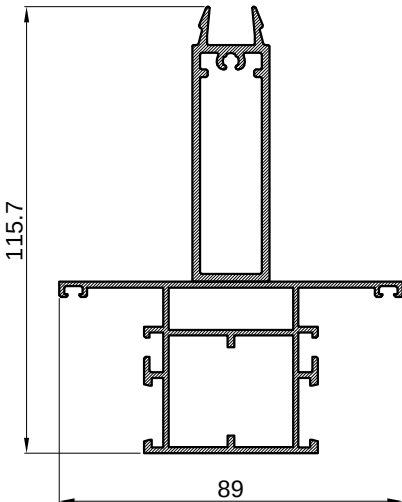
Koeficijent K Coefficient K	1	1.33	1.66	2	2.33	2.66	3	3.33	3.66	4	4.33	4.66	5	5.33	5.66	6	6.33	6.66	7	7.33	7.66	8
kN/m ²	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
kg/m ²	15	20	25	30	35	40	45	50	55	60	65	70	80	85	90	95	100	105	110	115	120	125
Deblj. stakla (mm) D Glass thick. (mm) D	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48



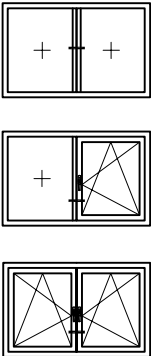
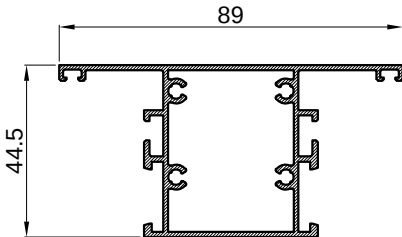
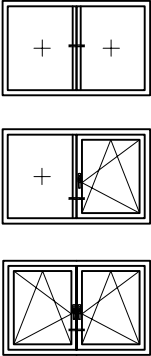
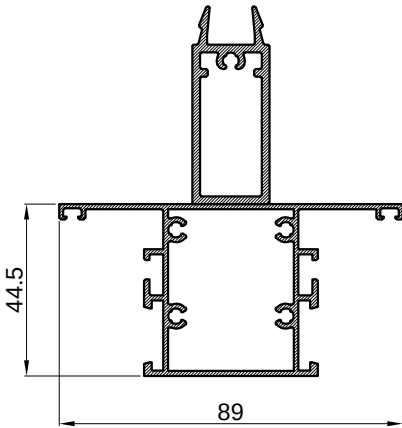
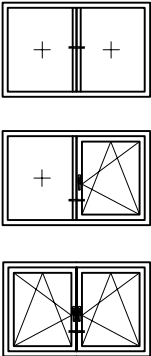
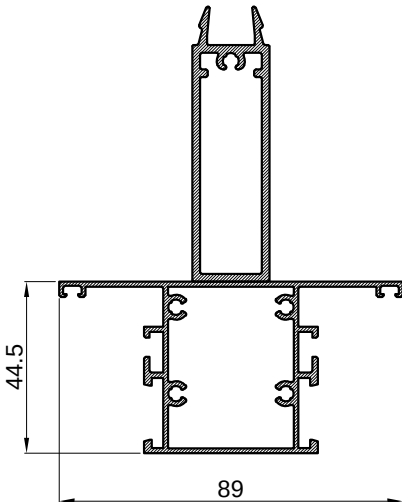
Vrijednosti momenta inercije
Moment of inertia values

Tip otvaranja Opening type	Profili Profiles	Izgled View	I_x (cm ⁴)	I_y (cm ⁴)
	M45-725		8.43	7.65
	M45-725 + F-1634		43.22	9.34
	M45-725 + NP-4183		75.78	9.99

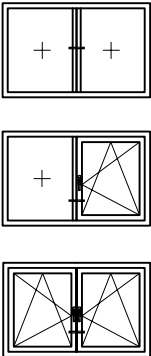
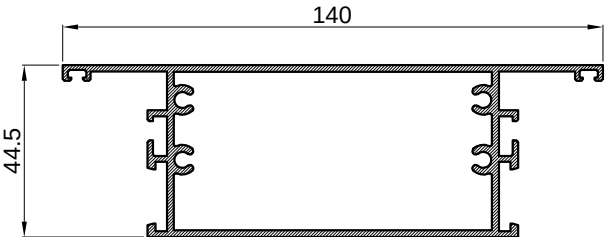
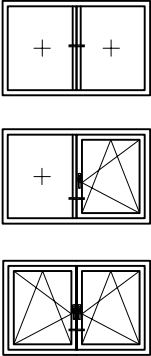
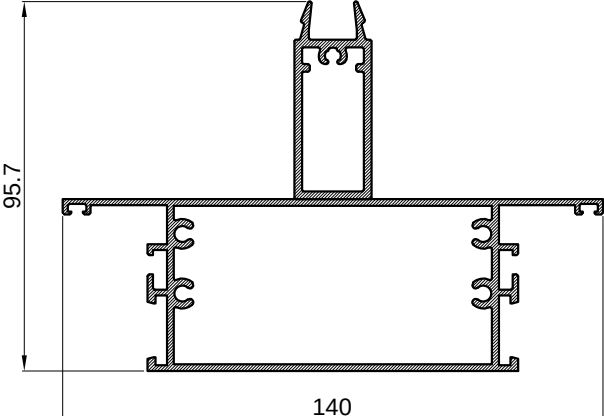
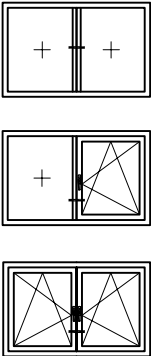
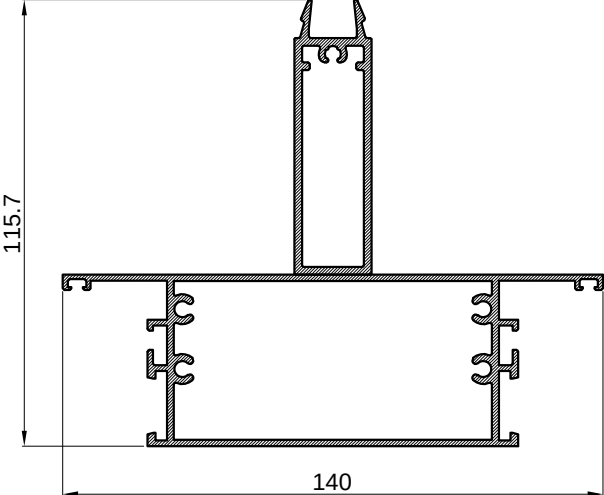
Vrijednosti momenta inercije
Moment of inertia values

Tip otvaranja Opening type	Profili Profiles	Izgled View	I_x (cm ⁴)	I_y (cm ⁴)
	M45-703		11.99	18.59
	M45-703 + F-1634		51.06	20.28
	M45-703 + NP-4183		87.89	20.93

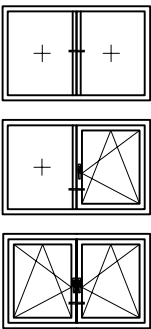
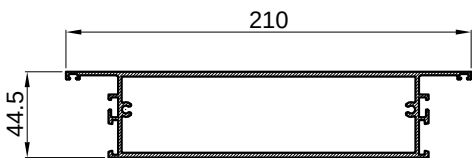
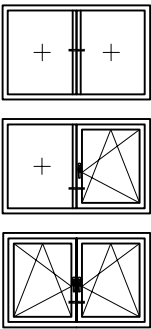
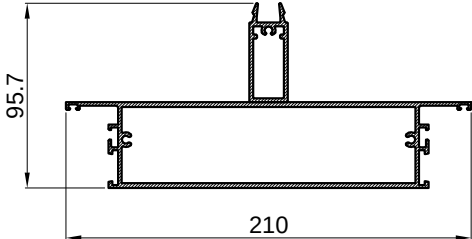
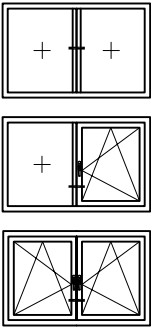
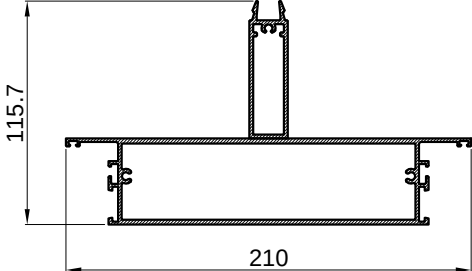
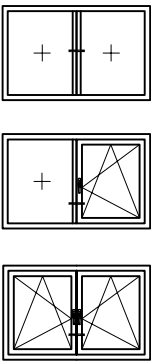
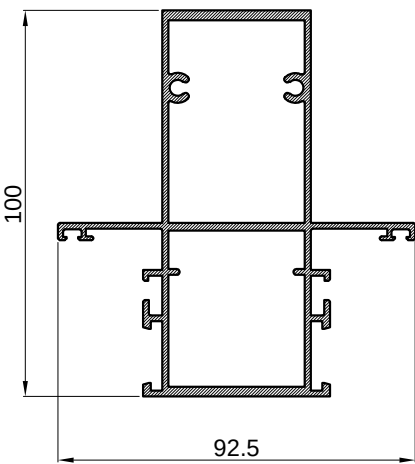
Vrijednosti momenta inercije
Moment of inertia values

Tip otvaranja Opening type	Profili Profiles	Izgled View	I_x (cm ⁴)	I_y (cm ⁴)
	M45-706		10.74	17.22
	M45-706 + F-1634		48.86	18.91
	M45-706 + NP-4183		84.33	19.56

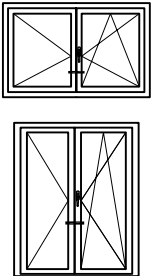
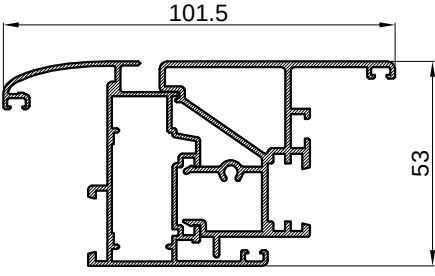
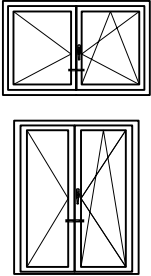
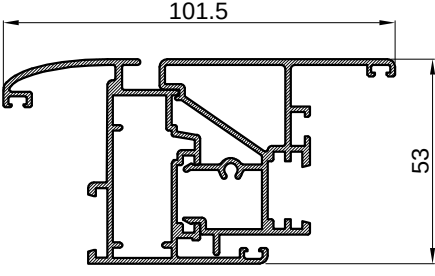
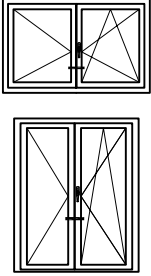
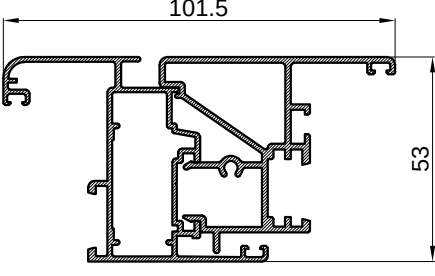
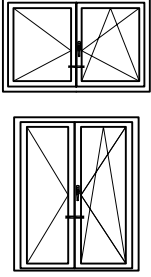
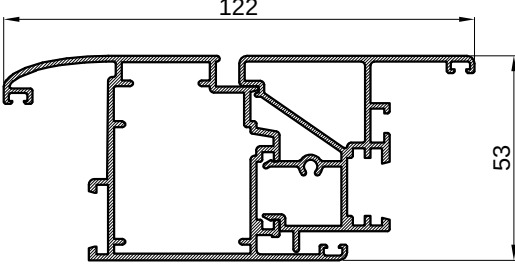
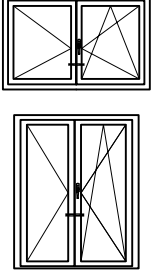
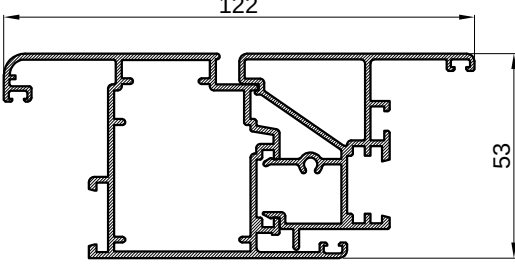
Vrijednosti momenta inercije
Moment of inertia values

Tip otvaranja Opening type	Profil Profiles	Izgled View	I_x (cm ⁴)	I_y (cm ⁴)
	M45-723		21.11	105.06
	M45-723 + F-1634		67.54	106.75
	M45-723 + NP-4183		111.05	107.40

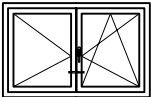
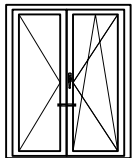
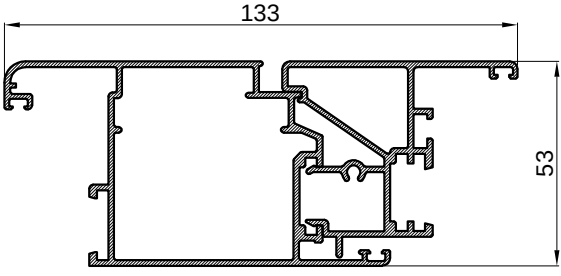
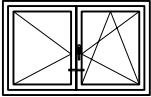
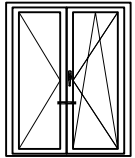
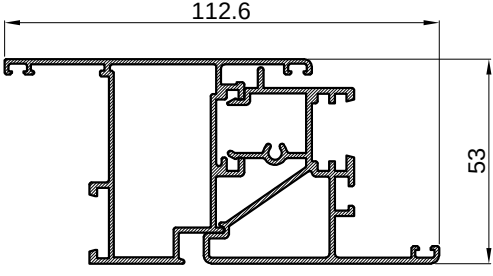
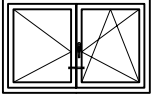
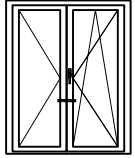
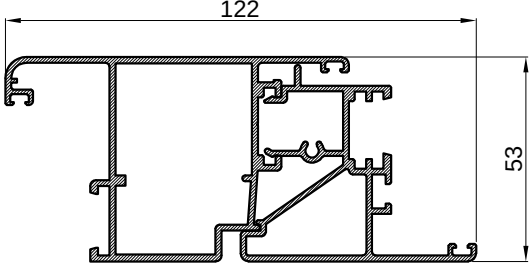
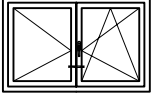
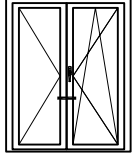
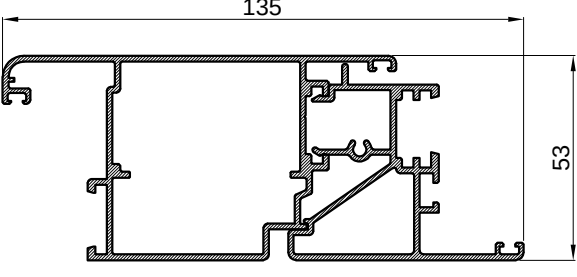
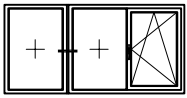
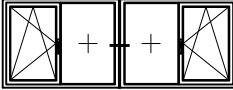
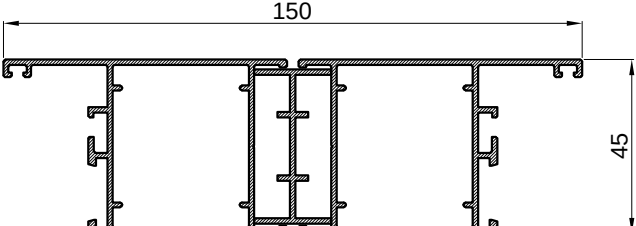
Vrijednosti momenta inercije
Moment of inertia values

Tip otvaranja Opening type	Profili Profiles	Izgled View	I_x (cm ⁴)	I_y (cm ⁴)
	M45-724	M 1:2 	41.87	403.86
	M45-724 + F-1634	M 1:2 	96.23	405.55
	M45-724 + NP-4183	M 1:2 	147.33	406.21
	M45-721		81.64	31.71

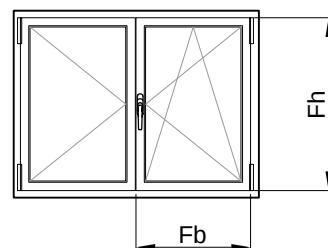
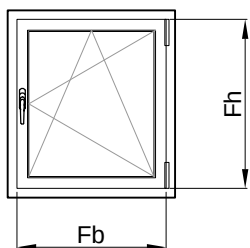
Vrijednosti momenta inercije
Moment of inertia values

Tip otvaranja Opening type	Profili Profiles	Izgled View	I_x (cm ⁴)	I_y (cm ⁴)
	M45-737 + M45-708		21.46	31.31
	M45-731 + M45-708		23.96	34.55
	M45-734 + M45-708		22.51	33.37
	M45-730 + M45-708		29.74	66.84
	M45-701 + M45-708		30.25	68.94

Vrijednosti momenta inercije
Moment of inertia values

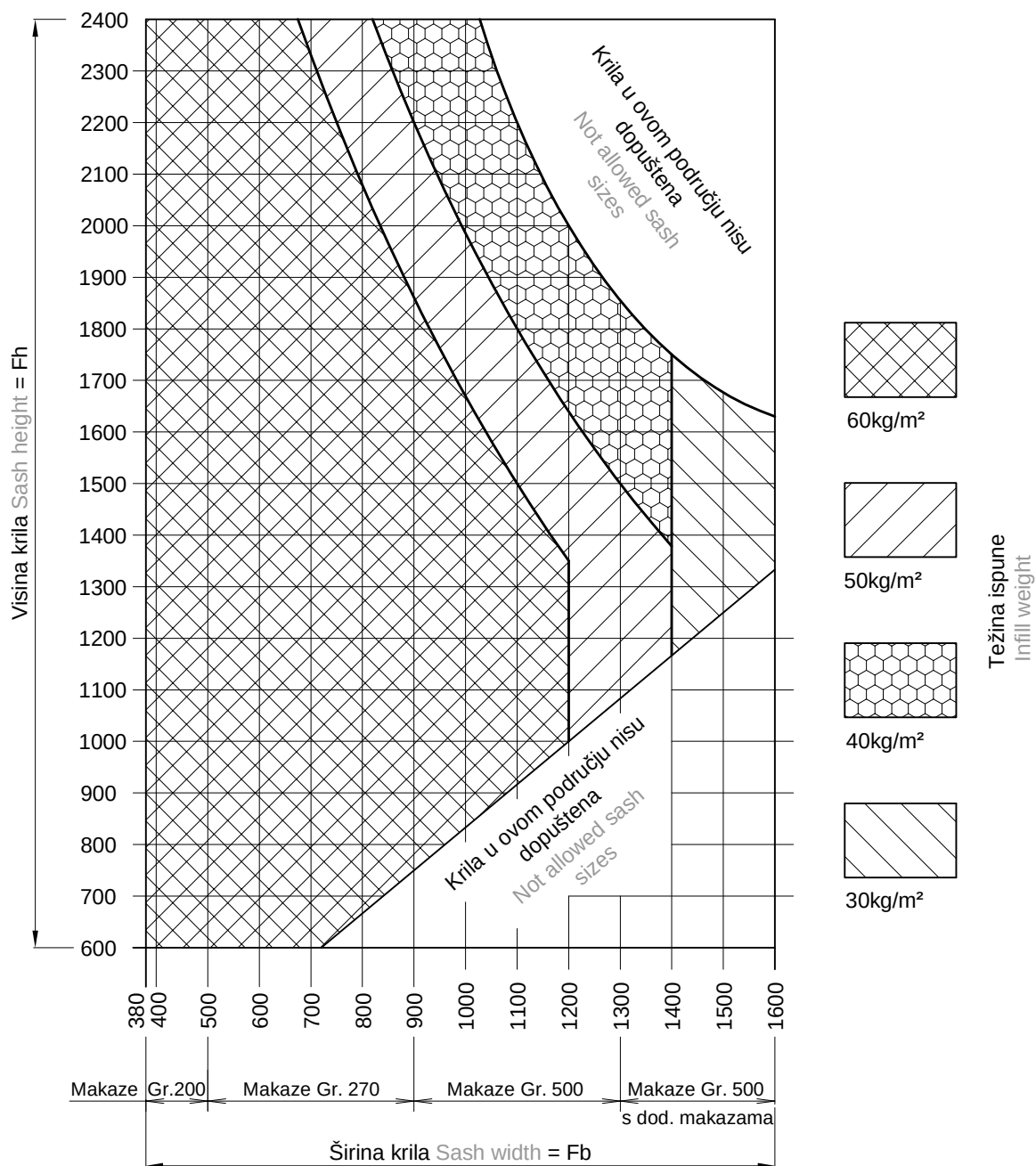
Tip otvaranja Opening type	Profili Profiles	Izgled View	I_x (cm ⁴)	I_y (cm ⁴)
 	M45-739 + M45-708		30.62	88.22
 	M45-736 + M45-708		25.94	43.05
 	M45-707 + M45-708		29.91	67.79
 	M45-738 + M45-708		31.24	94.04
 	M45-714 + M45-708 + M45-714		24.40	107.68

- DIJAGRAM ZA GLAVNO KRILLO OTKLOPNO-ZAKRETNOG MEHANIZAMA - "EUGEN NOTTER AL 2000"
- DIAGRAM FOR MAIN SASH OF TILT-TURN MECHANISM - "EUGEN NOTTER AL 2000"



Dijagram za izbor dopuštene veličine krila
za težinu od **100 Kg**

Diagram for selection of allowed sash size
for weight of **100 Kg**



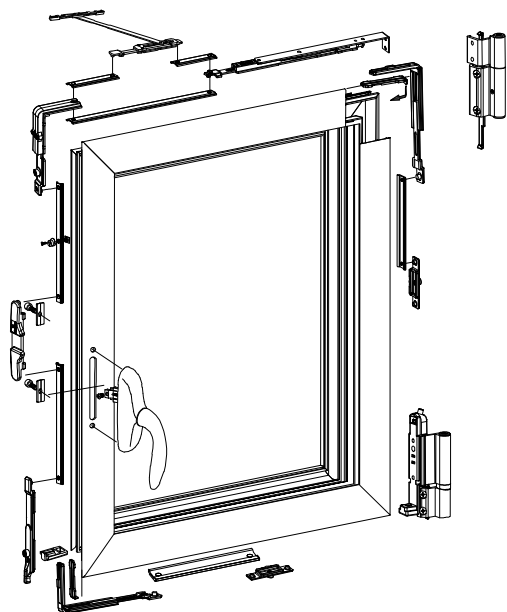
134.025.xx - OTKLOPNO-ZAOKRETNI MEHANIZAM - STUBLINA (4035)

134.025.xx - TILT-TURN MECHANISM - STUBLINA (4035)

Maksimalna težina krila 100 kg
Maximum sash weight 100 kg

Tabela nosivosti za:
Table of loads:

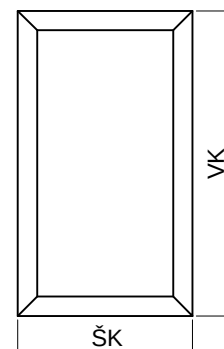
4030.00, 4035.00
4031.00, 4036.00
4032.00, 4037.00
4033.00, 4038.00



Debljina stakla (mm)
Glass thickness (mm)

2400	38	31	27	23	20	18	16	15	14	13	12	11	10
2300	38	34	28	25	21	19	17	15	14	13	12	11	10
2200	38	33	30	25	22	20	18	16	15	14	13	11	10
2100	38	35	31	23	23	21	19	17	16	14	13	12	11
2000	38	38	33	28	25	22	20	18	16	15	14	12	11
1900	38	38	34	30	26	23	20	19	17	16	15	14	13
1800	38	38	38	31	27	24	21	20	18	16	15	14	13
1700	38	38	38	33	29	26	23	21	18	17	16	16	14
1600	38	38	38	35	31	27	25	22	20	18	16	15	13
1500	38	38	38	38	33	29	26	24	21	18	17	15	13
1400	38	38	38	38	35	31	27	25	22	21	17	16	13
1300	38	38	38	38	38	34	31	25	25	21	18	15	13
1200	38	38	38	38	38	35	33	29	25	21	18	15	13
1100	38	38	38	38	38	38	33	29	25	21	18	15	12
1000	38	38	38	38	38	38	33	29	25	21	18	13	10
900	38	38	38	38	38	38	33	29	21	19	15	11	8
800	38	38	38	38	38	38	31	25	20	15	10	8	x
700	38	38	38	38	38	33	31	24	18	13	x	x	x
600	38	38	38	38	38	33	31	21	x	x	x	x	x
500	38	38	38	38	38	29	x	x	x	x	x	x	x
465	38	38	38	38	38	x	x	x	x	x	x	x	x
VK(mm) SK(mm)	425	535	600	700	800	900	1000	1100	1200	1300	1400	1500	1600

x Neizvedivo / Unfeasible



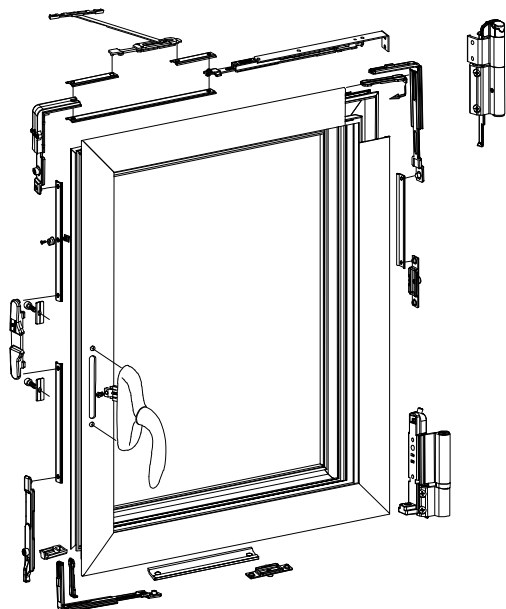
Debljina stakla
Glass thickness

mm	kg/m ²
6	15
8	20
10	25
12	30
14	35
16	40
18	45
20	50
22	55
24	60
26	65
28	70
30	80
32	85
34	90
36	95
38	100
40	105
42	110
44	115
46	120
48	125

Maksimalna težina krila 130 kg
Maximum sash weight 130 kg

Tabela nosivosti za:
Table of loads:

4030.00U, 4035.00U
4031.00U, 4036.00U
4032.00U, 4037.00U
4033.00U, 4038.00U

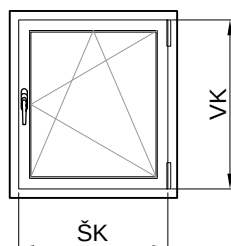


Debljina stakla (mm)
Glass thickness (mm)

2400	48	38	34	29	26	23	21	19	17	16	15	14	13
2300	48	40	36	31	27	24	21	20	18	17	15	14	13
2200	48	42	37	32	28	25	22	20	19	17	16	15	14
2100	48	44	39	34	29	26	24	21	20	18	17	16	15
2000	48	46	41	35	31	27	25	22	21	19	18	16	15
1900	48	48	43	37	33	29	26	24	22	20	19	17	16
1800	48	48	46	39	34	30	27	25	23	21	20	18	17
1700	48	48	48	42	36	32	29	26	24	22	21	19	18
1600	48	48	48	44	39	34	31	28	26	24	22	21	18
1500	48	48	48	47	41	37	33	30	27	25	24	21	18
1400	48	48	48	48	44	39	35	32	29	27	24	21	18
1300	48	48	48	48	48	42	38	35	32	27	24	21	18
1200	48	48	48	48	48	46	41	37	32	27	24	21	18
1100	48	48	48	48	48	48	45	37	32	27	24	20	16
1000	48	48	48	48	48	48	42	37	32	27	24	18	14
900	48	48	48	48	48	48	42	37	29	25	20	14	10
800	48	48	48	48	48	48	40	34	24	18	15	10	x
700	48	48	48	48	48	42	40	30	22	16	8	x	x
600	48	48	48	48	48	41	40	28	15	x	x	x	x
500	48	48	48	48	48	36	32	x	x	x	x	x	x
465	48	48	48	48	48	x	x	x	x	x	x	x	x
VK(mm) SK(mm)	425	535	600	700	800	900	1000	1100	1200	1300	1400	1500	1600

x Neizvedivo / Unfeasible

OTKLOPNO-ZAOKRETNI MEHANIZAM - GIESSE FUTURA 3D (130 micro)
TILT-TURN MECHANISM - GIESSE FUTURA 3D (130 micro)



Maksimalna
težina krila **130 kg**
Maximum
sash weight **130 kg**

Maksimalna težina krila (kg)
Maximum sash weight (kg)

	3000	130	130	130	130	130	130	130	130	130	130	130	130	130	130	x
	2900	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
	2800	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
	2700	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
	2600	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
	2500	140	140	140	140	140	140	140	140	140	140	140	140	140	130	
	2400	140	140	140	140	140	140	140	140	140	140	140	140	140	130	
	2300	140	140	140	140	140	140	140	140	140	140	140	140	140	130	
	2200	140	140	140	140	140	140	140	140	140	140	140	140	140	130	
	2100	140	140	140	140	140	140	140	140	140	140	140	140	140	130	
	2000	140	140	140	140	140	140	140	140	140	140	140	140	139	125	
	1900	140	140	140	140	140	140	140	140	140	140	140	140	132	118	
	1800	140	140	140	140	140	140	140	140	140	140	140	133	125	112	
	1700	140	140	140	140	140	140	140	140	140	134	126	118	118	118	
	1600	140	140	140	140	140	140	140	140	135	126	118	111	105		
	1500	140	140	140	140	140	140	140	137	127	118	111	104	99		
	1400	140	140	140	140	140	140	138	127	118	110	104	97	x		
	1300	140	140	140	140	140	140	128	118	110	103	96	x	x		
	1200	140	140	140	140	140	129	118	109	101	95	x	x	x		
	1100	140	140	140	140	140	130	118	108	100	93	x	x	x	x	
	1000	140	140	140	140	131	118	108	99	91	x	x	x	x	x	
	900	140	140	140	133	118	106	97	89	x	x	x	x	x	x	
	800	140	140	135	118	105	95	86	x	x	x	x	x	x	x	
600	700	140	138	118	104	92	83	x	x	x	x	x	x	x	x	
	V _{k(mm)} S _{k(mm)}	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	

350

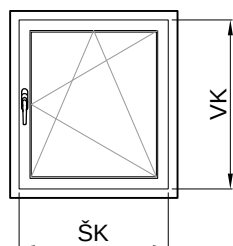
☒ **Neizvedivo / Unfeasible**

Maksimalna debljina stakla (mm)
Maximum glass thickness (mm)

3000	35	28	24	21	19	17	15	14	13	12	11	11	10	x
2900	35	29	25	22	20	18	16	15	14	13	12	11	10	10
2800	36	30	26	23	20	18	17	15	14	13	12	11	11	10
2700	38	31	27	24	21	19	17	16	15	13	13	12	11	10
2600	39	33	28	25	22	20	18	16	15	14	13	12	12	11
2500	44	37	31	27	24	22	20	18	17	16	15	14	13	11
2400	46	38	33	29	25	23	21	19	18	16	15	14	13	12
2300	48	40	34	30	27	24	22	20	18	17	16	15	14	12
2200	50	42	36	31	28	25	23	21	19	18	17	16	15	13
2100	50	44	37	33	29	26	24	22	20	19	17	16	15	13
2000	50	46	39	34	31	27	25	23	21	20	18	17	16	14
1900	50	48	41	36	32	29	26	24	22	21	19	18	16	14
1800	50	50	44	38	34	31	28	25	23	22	20	18	16	14
1700	50	50	46	40	36	32	29	27	25	23	21	18	16	14
1600	50	50	49	43	38	34	31	29	26	24	21	18	16	14
1500	50	50	50	46	41	37	33	31	27	24	21	18	16	14
1400	50	50	50	49	44	39	36	32	27	24	21	18	16	x
1300	50	50	50	50	47	42	38	32	27	24	21	18	x	x
1200	50	50	50	50	50	46	38	32	27	24	21	x	x	x
1100	50	50	50	50	50	46	38	32	27	24	x	x	x	x
1000	50	50	50	50	50	46	38	32	27	x	x	x	x	x
900	50	50	50	50	50	46	38	32	x	x	x	x	x	x
800	50	50	50	50	50	46	38	x	x	x	x	x	x	x
700	50	50	50	50	50	46	x	x	x	x	x	x	x	x
yk(mm) sk(mm)	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800

350

☒ **Neizvedivo / Unfeasible**

SKRIVENI OTKLOPNO-ZAOKRETNi MEHANIZAM - GIESSE CHIC 3D STANDARD
HIDDEN TILT-TURN MECHANISM - GIESSE CHIC 3D STANDARD

Maksimalna
težina krila **100 kg**
Maximum
sash weight **100 kg**

Maksimalna debljina stakla (mm) Maximum glass thickness (mm)													
600	2500	33	27	23	20	18	16	15	14	13	12	11	
	2400	33	27	23	20	18	16	15	14	13	12	11	
	2300	34	28	24	21	19	17	16	14	13	12	11	
	2200	36	30	25	22	20	18	16	15	14	13	12	
	2100	37	31	27	23	21	19	17	16	14	13	12	
	2000	39	33	28	25	22	20	18	16	15	14	13	
	1900	41	34	30	26	23	21	19	17	16	15	14	
	1800	44	36	31	27	24	22	20	18	17	16	15	
	1700	46	38	33	29	26	23	21	19	18	16	15	
	1600	49	41	35	31	27	25	22	20	19	17	15	
	1500	50	44	37	33	29	26	24	22	20	17	15	
	1400	50	47	40	35	31	28	25	23	20	17	15	
	1300	50	50	43	38	34	30	27	24	20	17	15	
	1200	50	50	47	41	36	33	28	24	20	17	15	
	1100	50	50	50	45	40	34	28	24	20	17	x	
	1000	50	50	50	49	42	34	28	24	20	x	x	
	900	50	50	50	50	42	34	28	24	x	x	x	
	800	50	50	50	50	42	34	28	x	x	x	x	
	700	50	50	50	50	42	34	x	x	x	x	x	
	Vk(mm) Šk(mm)		500	600	700	800	900	1000	1100	1200	1300	1400	1500
445		[X] Neizvedivo / Unfeasible											

Maksimalna težina krila (kg) Maximum sash weight (kg)														
600	2500	100	100	100	100	100	100	100	100	100	100	100	100	
	2400	100	100	100	100	100	100	100	100	100	100	100	100	
	2300	100	100	100	100	100	100	100	100	100	100	100	100	
	2200	100	100	100	100	100	100	100	100	100	100	100	100	
	2100	100	100	100	100	100	100	100	100	100	100	100	100	
	2000	100	100	100	100	100	100	100	100	100	100	100	100	
	1900	100	100	100	100	100	100	100	100	100	100	100	100	
	1800	100	100	100	100	100	100	100	100	100	100	100	100	
	1700	100	100	100	100	100	100	100	100	100	100	98		
	1600	100	100	100	100	100	100	100	100	100	99	92		
	1500	100	100	100	100	100	100	100	100	100	93	87		
	1400	100	100	100	100	100	100	100	100	93	87	81		
	1300	100	100	100	100	100	100	100	94	87	80	75		
	1200	100	100	100	100	100	100	95	87	80	74	69		
	1100	100	100	100	100	100	95	87	79	73	68	x	x	
	1000	100	100	100	100	96	87	79	72	67	x	x	x	
	900	100	100	100	98	87	78	71	65	x	x	x	x	
	800	100	100	99	87	77	69	63	x	x	x	x	x	
	700	100	100	87	76	67	61	x	x	x	x	x	x	
		Vk(mm) Šk(mm)	500	600	700	800	900	1000	1100	1200	1300	1400	1500	
		445	x Neizvedivo / Unfeasible											

Maksimalna debljina stakla (mm)
Maximum glass thickness (mm)

600	V_k(mm) S_k(mm)	2800	35	29	25	22	19	17	16	14	13	12	12	x
		2700	37	31	26	23	20	18	17	15	14	13	12	x
		2600	39	32	28	24	21	19	18	16	15	14	13	12
		2500	43	35	30	27	24	21	19	18	16	15	14	13
		2400	43	35	30	27	24	21	19	18	16	15	14	13
		2300	44	37	32	28	25	22	20	18	17	16	15	14
		2200	46	39	33	29	26	23	21	19	18	17	15	14
		2100	49	40	35	30	27	24	22	20	19	17	16	15
		2000	51	43	36	32	28	26	23	21	20	18	17	16
		1900	54	45	38	34	30	27	24	22	21	19	18	17
		1800	57	47	40	35	31	28	26	24	22	20	19	18
		1700	60	50	43	38	33	30	27	25	23	21	20	18
		1600	60	53	46	40	35	32	29	27	25	23	21	18
		1500	60	57	49	43	38	34	31	28	26	24	21	18
		1400	60	60	52	46	40	36	33	30	28	24	21	18
		1300	60	60	56	49	44	39	36	33	28	24	21	18
		1200	60	60	60	53	47	43	39	33	28	24	21	x
		1100	60	60	60	58	52	46	39	33	28	24	x	x
		1000	60	60	60	60	57	47	39	33	28	x	x	x
		900	60	60	60	60	58	47	39	33	x	x	x	x
		800	60	60	60	60	58	47	39	x	x	x	x	x
		700	60	60	60	60	58	47	x	x	x	x	x	x
				500	600	700	800	900	1000	1100	1200	1300	1400	1500
		x Neizvedivo / Unfeasible												

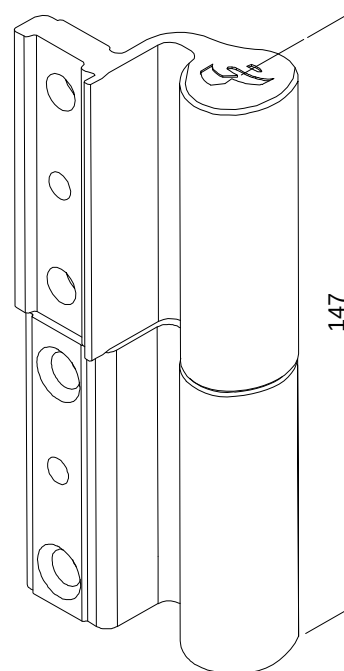
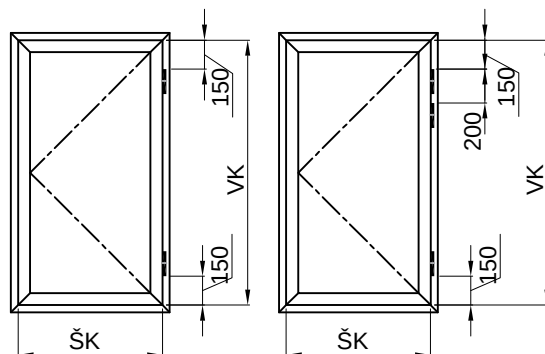
Maksimalna težina krila (kg)
Maximum sash weight (kg)

600	V_k(mm) S_k(mm)	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	
		2800	124	124	124	124	124	124	124	124	124	124	124	x
		2700	126	126	126	126	126	126	126	126	126	126	126	x
		2600	128	128	128	128	128	128	128	128	128	128	128	128
		2500	130	130	130	130	130	130	130	130	130	130	130	130
		2400	130	130	130	130	130	130	130	130	130	130	130	130
		2300	130	130	130	130	130	130	130	130	130	130	130	130
		2200	130	130	130	130	130	130	130	130	130	130	130	130
		2100	130	130	130	130	130	130	130	130	130	130	130	130
		2000	130	130	130	130	130	130	130	130	130	130	130	130
		1900	130	130	130	130	130	130	130	130	130	130	130	130
		1800	130	130	130	130	130	130	130	130	130	130	130	130
		1700	130	130	130	130	130	130	130	130	130	130	130	127
		1600	130	130	130	130	130	130	130	130	130	130	127	119
		1500	130	130	130	130	130	130	130	130	130	128	119	112
		1400	130	130	130	130	130	130	130	130	129	119	111	104
		1300	130	130	130	130	130	130	130	130	119	111	103	97
		1200	130	130	130	130	130	130	130	129	110	102	95	x
		1100	130	130	130	130	130	130	119	109	101	94	x	x
		1000	130	130	130	130	130	119	108	99	92	x	x	x
		900	130	130	130	130	119	107	98	90	x	x	x	x
		800	130	130	130	119	106	95	87	x	x	x	x	x
		700	130	130	119	104	93	84	x	x	x	x	x	x
x Neizvedivo / Unfeasible														

- TABLICE NOSIVOSTI ŠARKI
- TABLE OF LOADS FOR HINGESTablica nosivosti šarke 114.001.xx (Stublina 2006.00)
Table of loads for hinges 114.001.xx (Stublina 2006.00)

2800	90	90	90	90	90	90	90	90	90	80	71	67	62
	100	100	100	100	100	100	100	100	100	90	80	76	70
2700	90	90	90	90	90	90	90	90	90	76	67	62	58
	100	100	100	100	100	100	100	100	100	86	76	70	66
2600	90	90	90	90	90	90	90	90	80	71	67	58	57
	100	100	100	100	100	100	100	100	90	80	76	66	63
2500	90	90	90	90	90	90	90	76	67	62	58	55	
	100	100	100	100	100	100	100	86	76	70	66	61	
2400	90	90	90	90	90	90	80	71	65	58	56	54	
	100	100	100	100	100	100	90	80	72	66	62	60	
2300	90	90	90	90	90	90	74	67	62	57	54	52	
	100	100	100	100	100	100	82	76	70	64	60	59	
2200	90	90	90	90	90	80	71	62	58	56	51	49	
	100	100	100	100	100	90	80	70	66	62	58	56	
2100	90	90	90	90	90	74	65	58	56	51	49	47	
	100	100	100	100	100	82	72	66	62	58	56	52	
2000	90	90	90	90	80	69	62	56	54	50	47	45	
	100	100	100	100	90	78	70	62	60	57	52	50	
1900	90	90	90	90	71	62	58	54	49	47	45		
	100	100	100	100	80	70	66	60	56	52	50		
1800	90	90	90	80	67	58	54	51	49	47	45		
	100	100	100	90	76	66	60	58	56	52	50		
1700	90	90	90	71	62	57	51	49	47	45			
	100	100	100	80	70	64	58	56	52	50			
1600	90	90	76	65	58	54	49	47	45				
	100	100	85	72	66	60	56	52	50				
1500	90	90	70	58	54	50	48	45					
	100	100	79	66	60	57	53	50					
1400	90	76	62	56	51	47	45						
	100	86	70	62	58	52	50						
1300	90	68	58	54	49	46							
	100	75	66	60	55	50							
VK	ŠK	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800

Napomena: Ukoliko se ugrade tri šarke po preporuci, nosivost se uvećava za 10%.
Note: If three hinges are used as recommended, the load capability is increased 10%



114.001.xx

A (kg)



B (kg)

A - javna upotreba sa dvije šarke

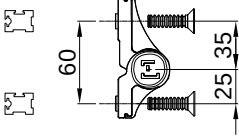
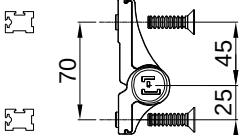
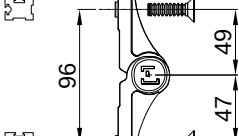
A - public use with two hinges

B - privatna upotreba sa dvije šarke

B - private use with two hinge

- TABLICE NOSIVOSTI ŠARKI
- TABLE OF LOADS FOR HINGES

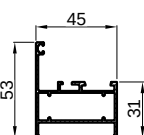
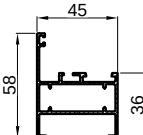
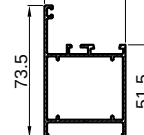
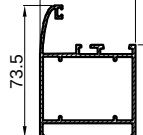
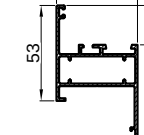
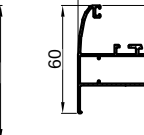
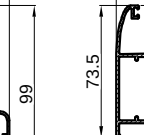
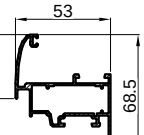
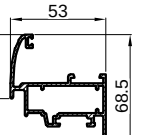
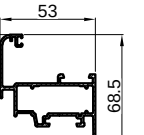
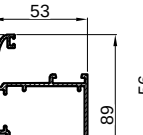
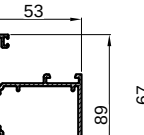
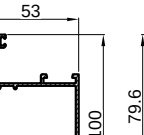
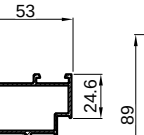
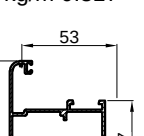
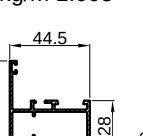
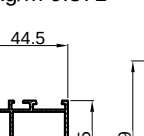
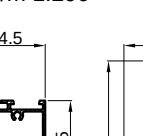
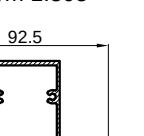
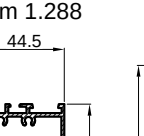
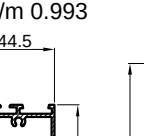
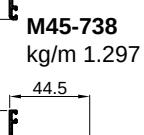
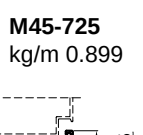
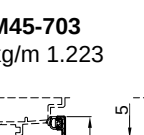
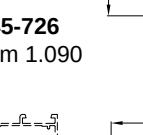
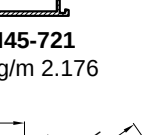
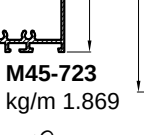
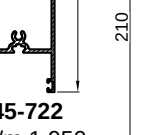
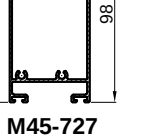
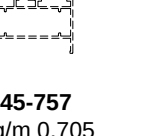
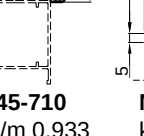
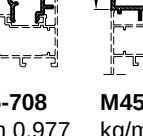
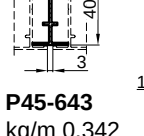
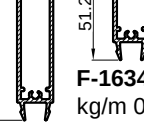
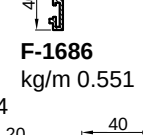
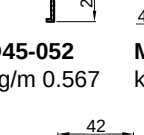
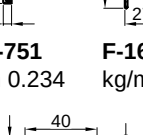
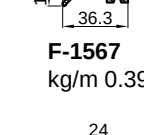
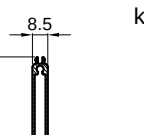
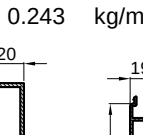
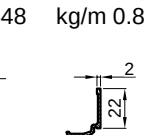
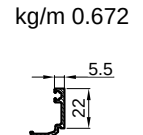
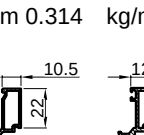
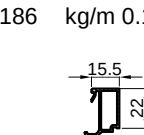
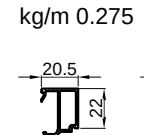
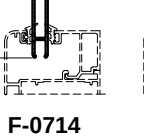
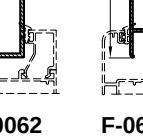
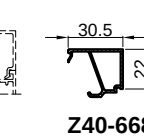
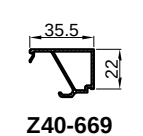
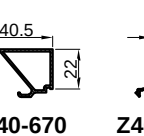
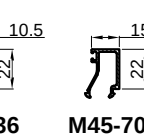
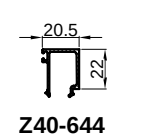
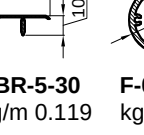
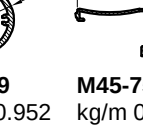
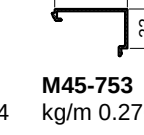
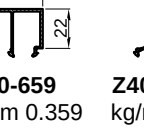
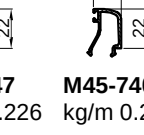
Tablica nosivosti šarke 113.008.xx ; 113.009.xx i 113.011.xx (ALU-B)
Table of loads for hinges 113.008.xx ; 113.009.xx and 113.011.xx (ALU-B)

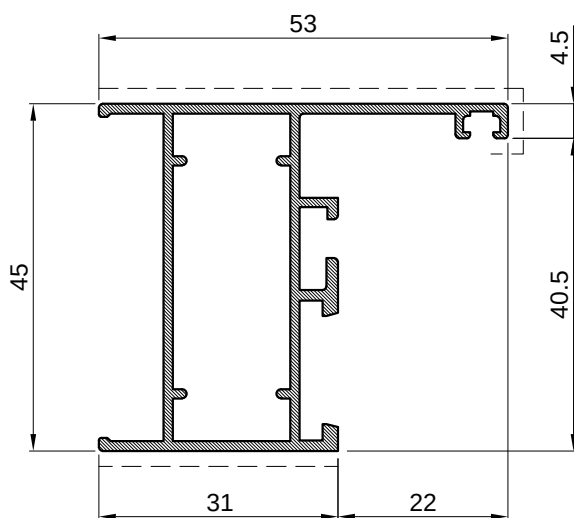
Oznaka Code	Izgled-presjek View-cross section	Opis Description	Nosivost Load	
			2 šarke 2 hinges	3 šarke 3 hinges
113.008.01 02 03		- Dvodijelna šarka OSNO 60 - Oznaka proizvođača ALU-B: Max3D 60 - Boje: 01- bijela; 02 - siva;03 - crna - Two-part hinge OSNO 60 - Manufacturer code ALU-B: Max3D 60 - Color: 01- white; 02 - gray;03 - black	120 kg	160 kg
113.009.01 02 03		- Dvodijelna šarka OSNO 70 - Oznaka proizvođača ALU-B: Max3D 70 - Boje: 01- bijela; 02 - siva;03 - crna - Two-part hinge OSNO 70 - Manufacturer code ALU-B: Max3D 70 - Color: 01- white; 02 - gray;03 - black	120 kg	160 kg
113.011.01 02 03		- Dvodijelna šarka OSNO 96 - Oznaka proizvođača ALU-B: Max3D 96 - Boje: 01- bijela; 02 - siva;03 - crna - Two-part hinge OSNO 96 - Manufacturer code ALU-B: Max3D 96 - Color: 01- white; 02 - gray;03 - black	120 kg	160 kg

Tablica nosivosti šarke 110.008 (Glasmarte)
Table of loads for hinge 110.008 (Glasmarte)

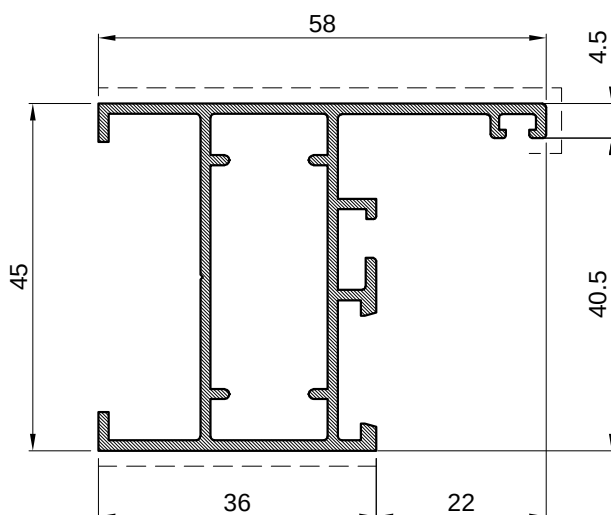
Oznaka Code	Izgled-presjek View-cross section	Opis Description	Nosivost Load	
			2 šarke 2 hinges	3 šarke 3 hinges
110.008		- Šarka za staklena vrata sa jednostrukim staklom - Oznaka proizvođača Glasmarte: (Art.-Nr.963709) - Hinge for glass door with single pane glass - Manufacturer code Glasmarte: (Art.-Nr.963709)	40 kg	55 kg

Profili Profiles

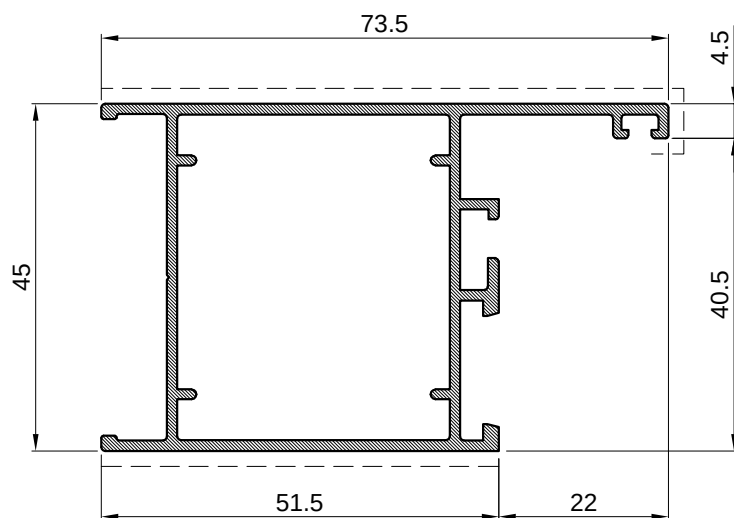
						
M45-717 kg/m 0.692	M45-713 kg/m 0.805	M45-714 kg/m 0.920	M45-712 kg/m 1.139	M45-715 kg/m 0.870	M45-718 kg/m 0.961	M45-716 kg/m 1.469
						
M45-737 kg/m 0.817	M45-731 kg/m 1.005	M45-734 kg/m 0.871	M45-730 kg/m 1.290	M45-701 kg/m 1.305	M45-739 kg/m 1.288	M45-736 kg/m 0.993
						
M45-738 kg/m 1.297	M45-725 kg/m 0.899	M45-703 kg/m 1.223	M45-726 kg/m 1.090	M45-721 kg/m 2.176	M45-723 kg/m 1.869	M45-722 kg/m 1.950
						
M45-727 kg/m 1.407	M45-757 kg/m 0.705	M45-710 kg/m 0.933	M45-708 kg/m 0.977	M45-754 kg/m 0.932	M45-752 kg/m 0.510	F-0352/A kg/m 1.441
						
F-1634 kg/m 0.774	F-1686 kg/m 0.551	D45-052 kg/m 0.567	M45-751 kg/m 0.234	F-1675 kg/m 0.337	P45-648 kg/m 0.257	F-1567 kg/m 0.397
						
NP-4183 kg/m 0.990	NP-4184 kg/m 0.243	F-0181 kg/m 0.548	060353 kg/m 0.830	M45-759 kg/m 0.672	F-1483 kg/m 0.314	Z40-657 kg/m 0.186
						
F-0714 kg/m 0.895	F-0062 kg/m 1.45	F-0681 kg/m 0.911	Z40-660 kg/m 0.179	Z40-656 kg/m 0.215	Z40-664 kg/m 0.243	F-0784 kg/m 0.330
						
PBR-5-30 kg/m 0.119	F-0829 kg/m 0.952	M45-755 kg/m 0.274	M45-753 kg/m 0.276	Z40-653 kg/m 0.348	Z40-659 kg/m 0.359	Z40-647 kg/m 0.226
						
M45-756 kg/m 0.225	M45-756 kg/m 0.225	M45-756 kg/m 0.225	M45-756 kg/m 0.225	M45-756 kg/m 0.225	M45-756 kg/m 0.225	M45-756 kg/m 0.225
						
P45-644 kg/m 0.323	P45-644 kg/m 0.323	P45-644 kg/m 0.323	P45-644 kg/m 0.323	P45-644 kg/m 0.323	P45-644 kg/m 0.323	P45-644 kg/m 0.323



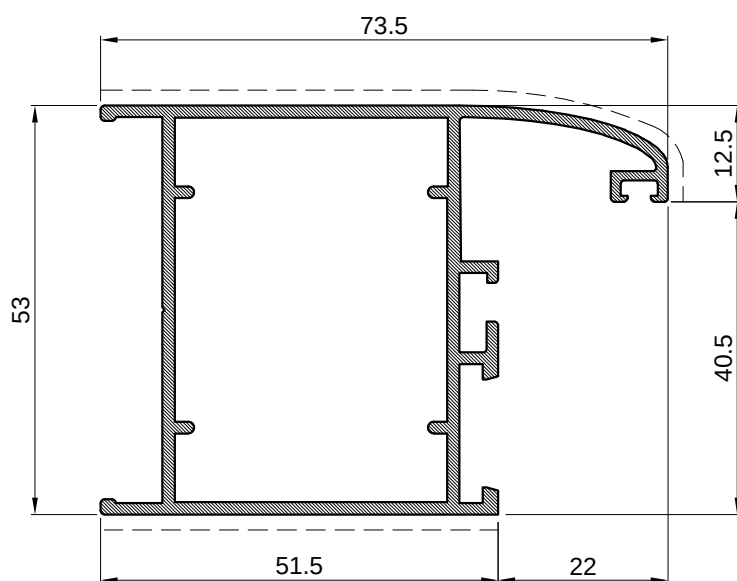
Profil rama Frame profile		
Art.Br. Art.Nr.	M45-717	
Težina Weight	kg/m'	0.692
Opseg Perimeter	mm	277
Moment inerције Moments of inertia	I _x (cm ⁴)	7.28
	I _y (cm ⁴)	3.99
	W _x (cm ³)	2.87
	W _y (cm ³)	1.27
L	mm	6500



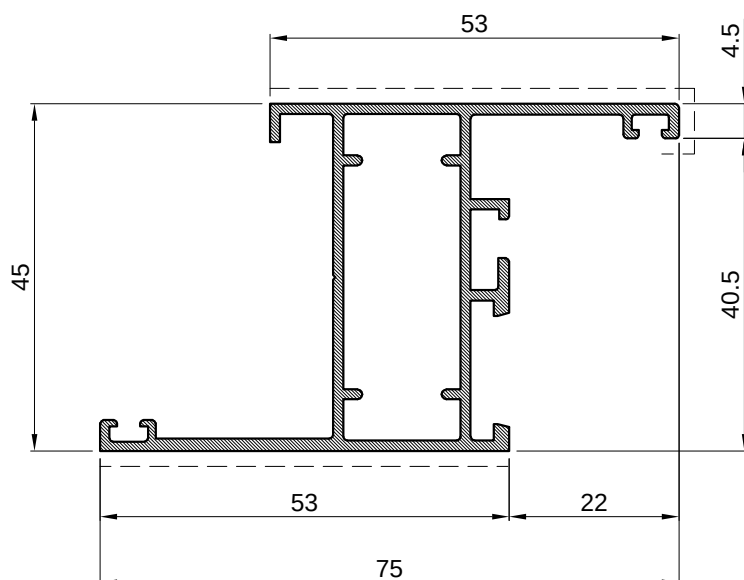
Profil rama Frame profile		
Art.Br. Art.Nr.	M45-713	
Težina Weight	kg/m'	0.805
Opseg Perimeter	mm	309
Moment inercije Moments of inertia	I _x (cm ⁴)	8.77
	I _y (cm ⁴)	5.69
	W _x (cm ³)	3.47
	W _y (cm ³)	1.72
L	mm	6500



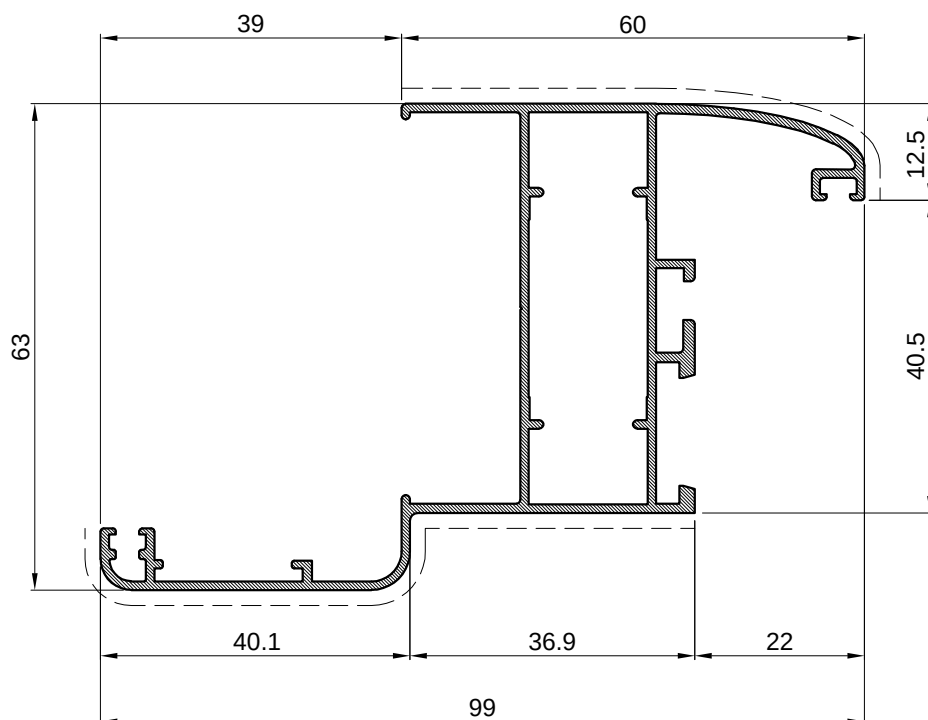
Profil rama Frame profile		
Art.Br. Art.Nr.	M45-714	
Težina Weight	kg/m'	0.920
Opseg Perimeter	mm	317
Moment inerције Moments of inertia	I _x (cm ⁴)	10.76
	I _y (cm ⁴)	13.58
	W _x (cm ³)	4.32
	W _y (cm ³)	3.34
L	mm	6500



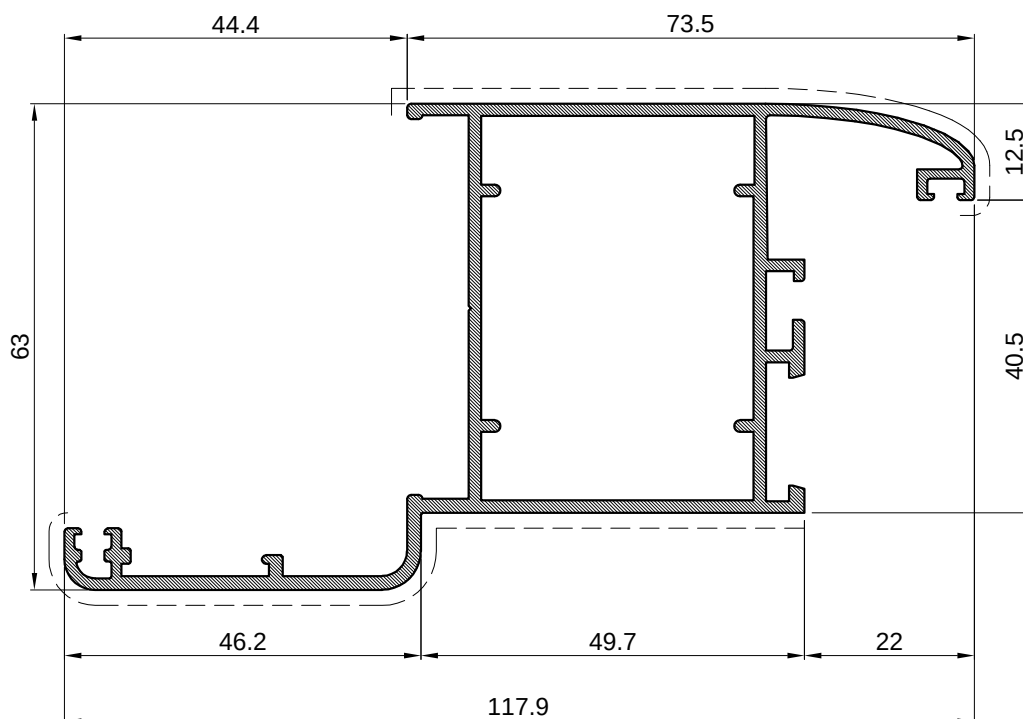
Profil rama Frame profile		
Art.Br. Art.Nr.	M45-712	
Težina Weight	kg/m'	1.139
Opseg Perimeter	mm	348
Moment inercije Moments of inertia	I _x (cm ⁴)	16.96
	I _y (cm ⁴)	17.56
	W _x (cm ³)	5.88
	W _y (cm ³)	4.34
L	mm	6500



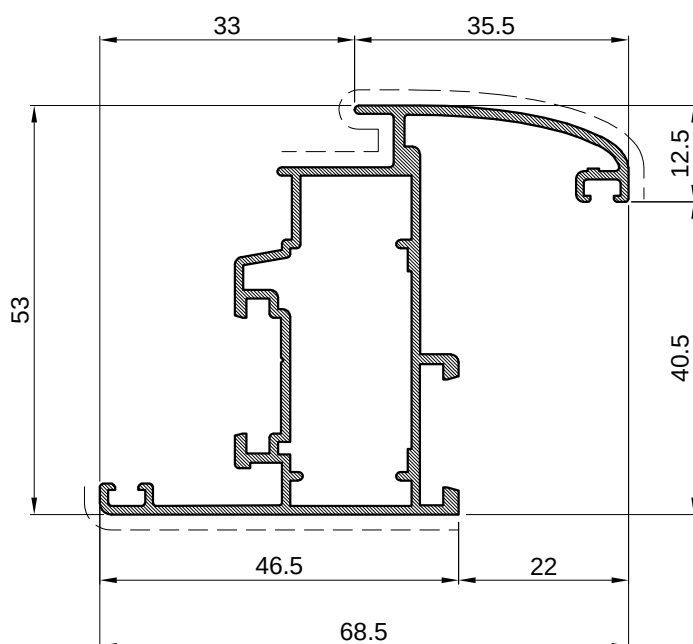
Profil rama Frame profile		
Art.Br. Art.Nr.	M45-715	
Težina Weight	kg/m'	0.870
Opseg Perimeter	mm	339
Moment inercije Moments of inertia	I _x (cm ⁴)	10.10
	I _y (cm ⁴)	8.66
	W _x (cm ³)	4.48
	W _y (cm ³)	2.21
L	mm	6500



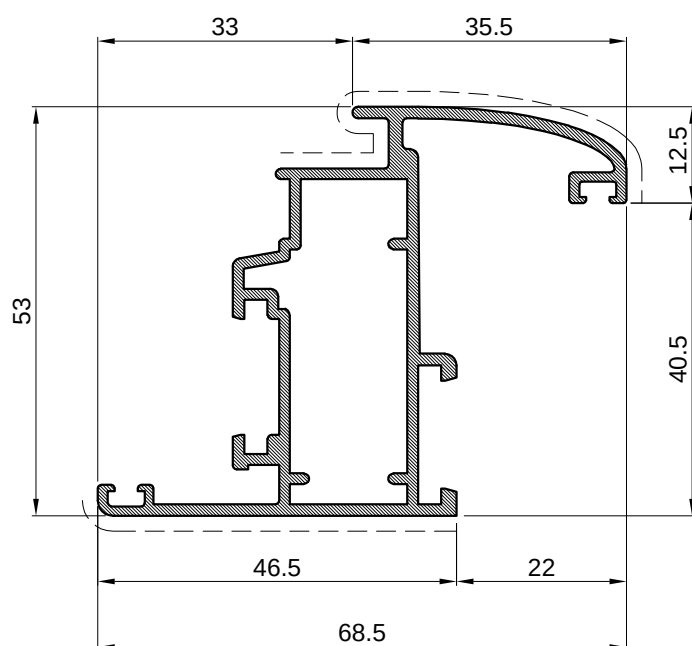
Profil rama Frame profile		
Art.Br. Art.Nr.	M45-718	
Težina Weight	kg/m'	0.961
Opseg Perimeter	mm	474
Moment inercije Moments of inertia	I _x (cm ⁴)	18.63
	I _y (cm ⁴)	21.00
	W _x (cm ³)	5.89
	W _y (cm ³)	3.70
L	mm	6500



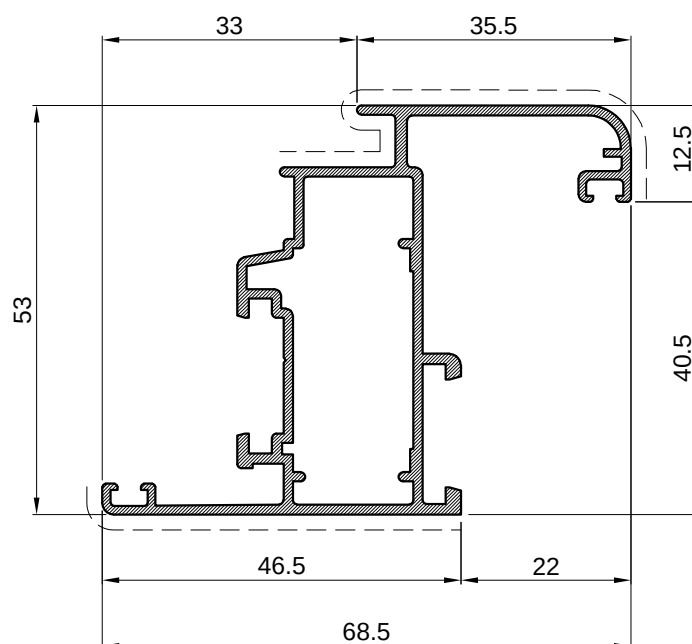
Profil rama Frame profile		
Art.Br. Art.Nr.	M45-716	
Težina Weight	kg/m'	1.469
Opseg Perimeter	mm	490.26
Moment inerције Moments of inertia	Ix (cm ⁴)	29.51
	Iy (cm ⁴)	48.68
	Wx (cm ³)	9.14
	Wy (cm ³)	7.46
L	mm	6500



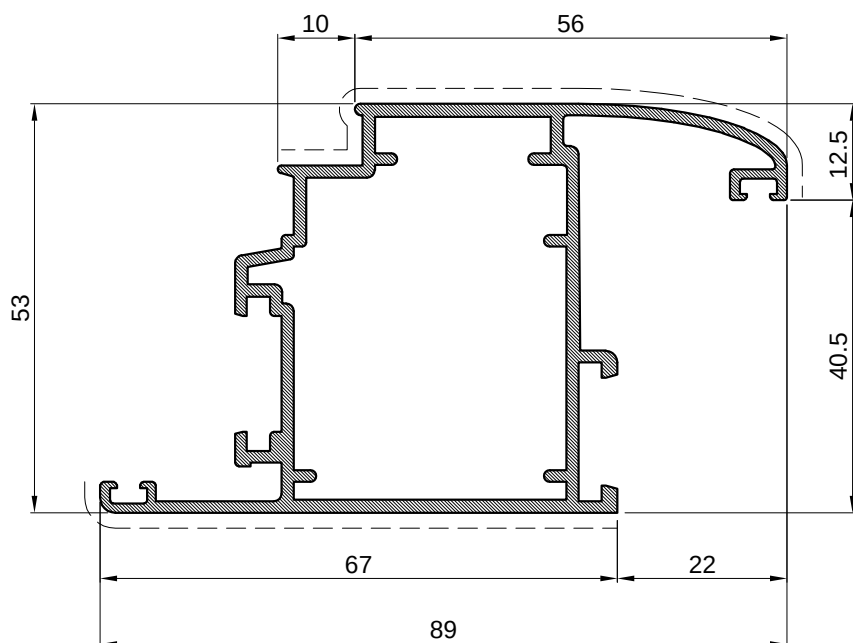
Profil krila Sash profile		
Art.Br. Art.Nr.	M45-737	
Težina Weight	kg/m'	0.817
Opseg Perimeter	mm	365
Moment inercije Moments of inertia	Ix (cm ⁴)	10.92
	Iy (cm ⁴)	7.19
	Wx (cm ³)	3.94
	Wy (cm ³)	2.09
L	mm	6500



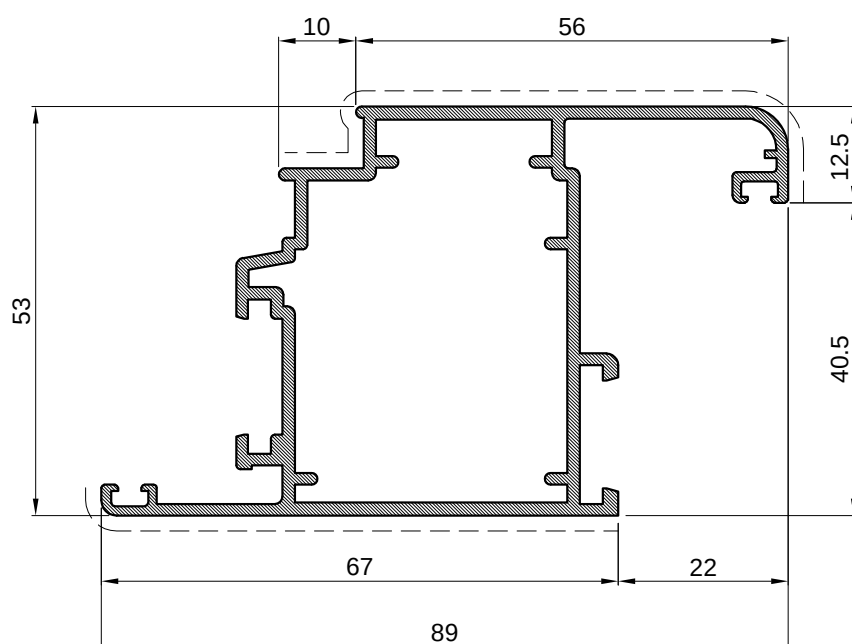
Profil krila Sash profile		
Art.Br. Art.Nr.	M45-731	
Težina Weight	kg/m'	1.005
Opseg Perimeter	mm	360
Moment inercije Moments of inertia	Ix (cm4)	13.33
	Iy (cm4)	8.46
	Wx (cm3)	4.82
	Wy (cm3)	2.46
L	mm	6500



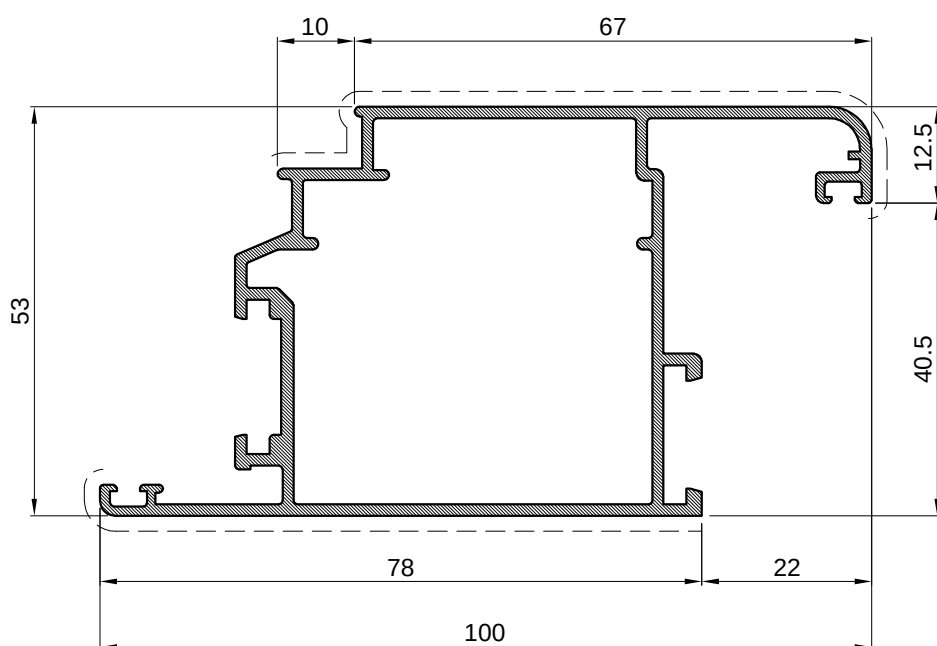
Profil krila Sash profile		
Art.Br. Art.Nr.	M45-734	
Težina Weight	kg/m'	0.871
Opseg Perimeter	mm	373
Moment inercije Moments of inertia	Ix (cm4)	11.99
	Iy (cm4)	8.07
	Wx (cm3)	4.36
	Wy (cm3)	2.32
L	mm	6500



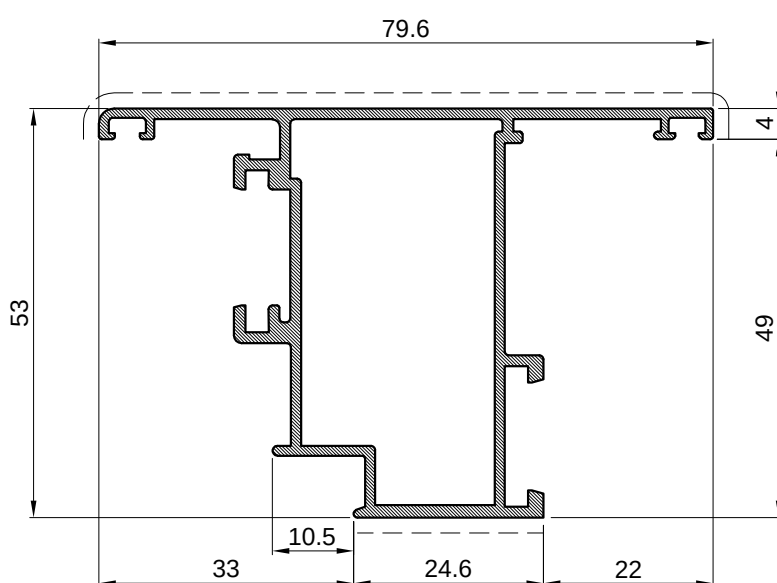
Profil krila Sash profile		
Art.Br. Art.Nr.	M45-730	
Težina Weight	kg/m'	1.290
Opseg Perimeter	mm	394
Moment inerције Moments of inertia	I _x (cm ⁴)	19.12
	I _y (cm ⁴)	22.86
	W _x (cm ³)	7.03
	W _y (cm ³)	5.13
L	mm	6500



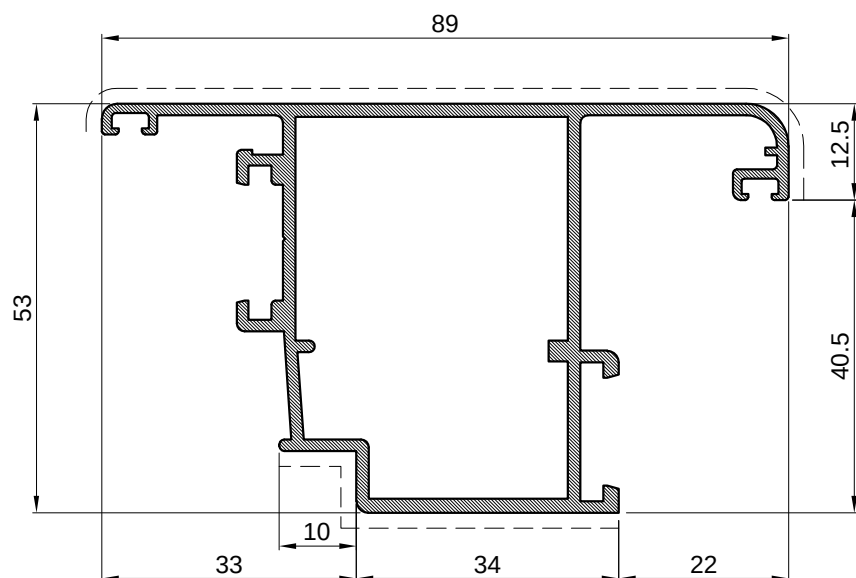
Profil krila Sash profile		
Art.Br. Art.Nr.	M45-701	
Težina Weight	kg/m'	1.305
Opseg Perimeter	mm	403
Moment inercije Moments of inertia	I _x (cm ⁴)	19.75
	I _y (cm ⁴)	24.01
	W _x (cm ³)	7.38
	W _y (cm ³)	5.35
L	mm	6500



Profil krila Leaf profile		
Art.Br. Art.Nr.	M45-739	
Težina Weight	kg/m'	1.288
Opseg Perimeter	mm	425.9
Moment inerције Moments of inertia	I _x (cm ⁴)	20.13
	I _y (cm ⁴)	34.61
	W _x (cm ³)	7.53
	W _y (cm ³)	6.88
L	mm	6500

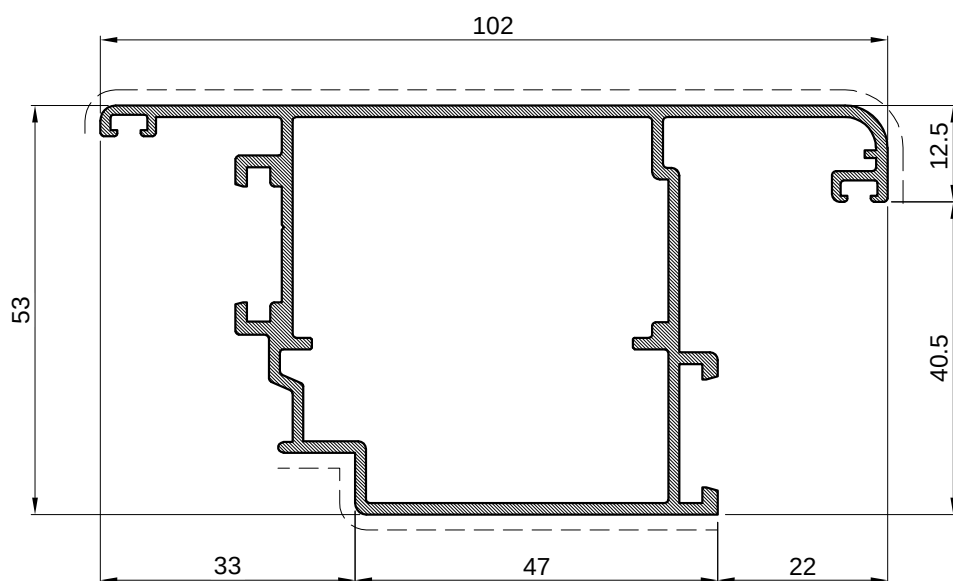


Profil krila-otvaranje vani Sash profile-outside opening		
Art.Br. Art.Nr.	M45-736	
Težina Weight	kg/m'	0.993
Opseg Perimeter	mm	369
Moment inercije Moments of inertia	I _x (cm ⁴)	13.63
	I _y (cm ⁴)	12.00
	W _x (cm ³)	4.21
	W _y (cm ³)	2.91
L	mm	6500



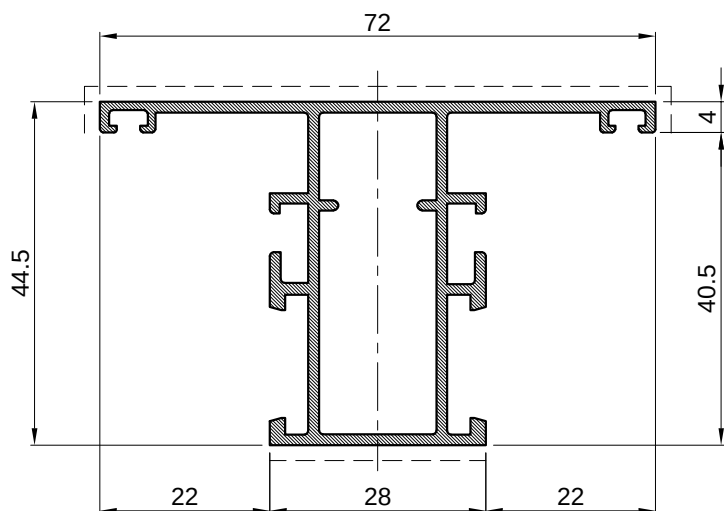
Profil krila-otvaranje vani
Sash profile-outside opening

Art.Br. Art.Nr.	M45-707	
Težina Weight	kg/m'	1.261
Opseg Perimeter	mm	396
Moment inerције Moments of inertia	Ix (cm4)	17.49
	Iy (cm4)	23.12
	Wx (cm3)	5.48
	Wy (cm3)	5.11
L	mm	6500

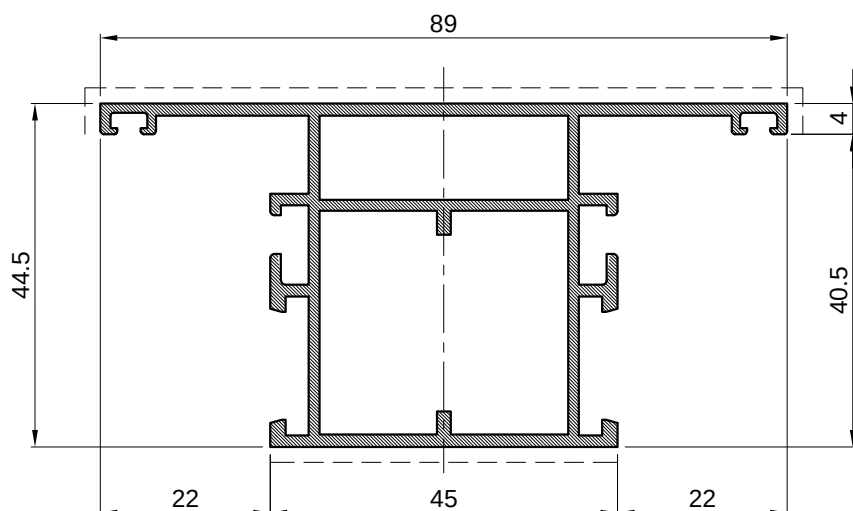


Profil krila-otvaranje vani
Leaf profile-outside opening

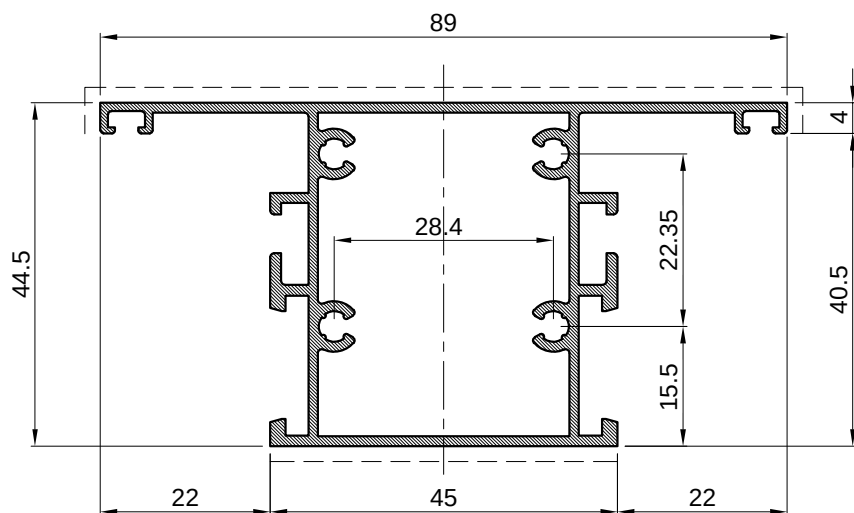
Art.Br. Art.Nr.	M45-738	
Težina Weight	kg/m'	1.297
Opseg Perimeter	mm	426.2
Moment inerције Moments of inertia	Ix (cm4)	18.88
	Iy (cm4)	36.40
	Wx (cm3)	5.95
	Wy (cm3)	7.05
L	mm	6500



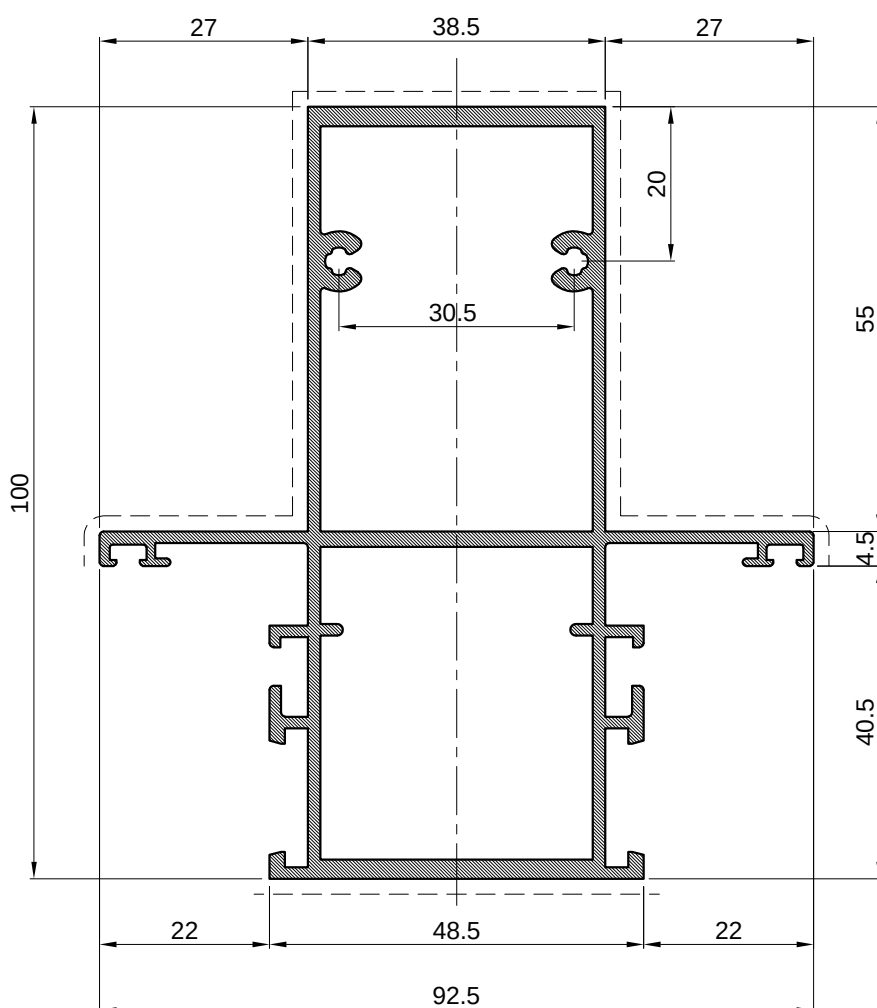
Profil prečke Crossbar profile		
Art.Br. Art.Nr.	M45-725	
Težina Weight	kg/m'	0.899
Opseg Perimeter	mm	355
Moment inercije Moments of inertia	I _x (cm ⁴)	8.43
	I _y (cm ⁴)	7.65
	W _x (cm ³)	3.12
	W _y (cm ³)	2.12
L	mm	6500



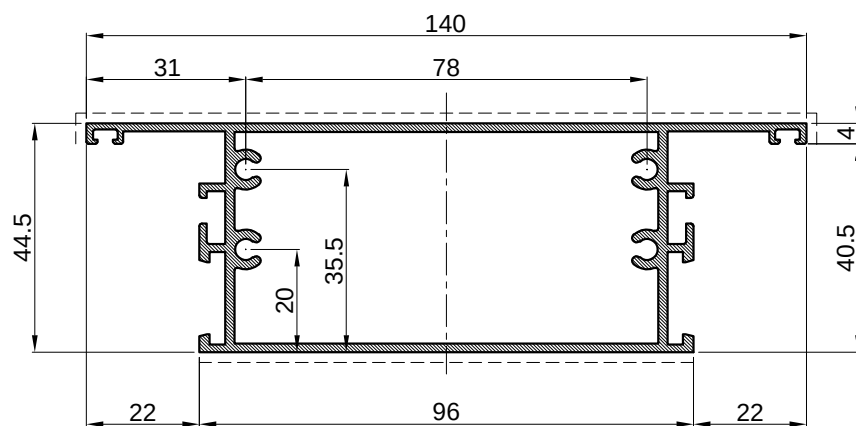
Profil prečke Crossbar profile		
Art.Br. Art.Nr.	M45-703	
Težina Weight	kg/m'	1.223
Opseg Perimeter	mm	387
Moment inercije Moments of inertia	I _x (cm ⁴)	11.99
	I _y (cm ⁴)	18.59
	W _x (cm ³)	4.48
	W _y (cm ³)	4.18
L	mm	6500



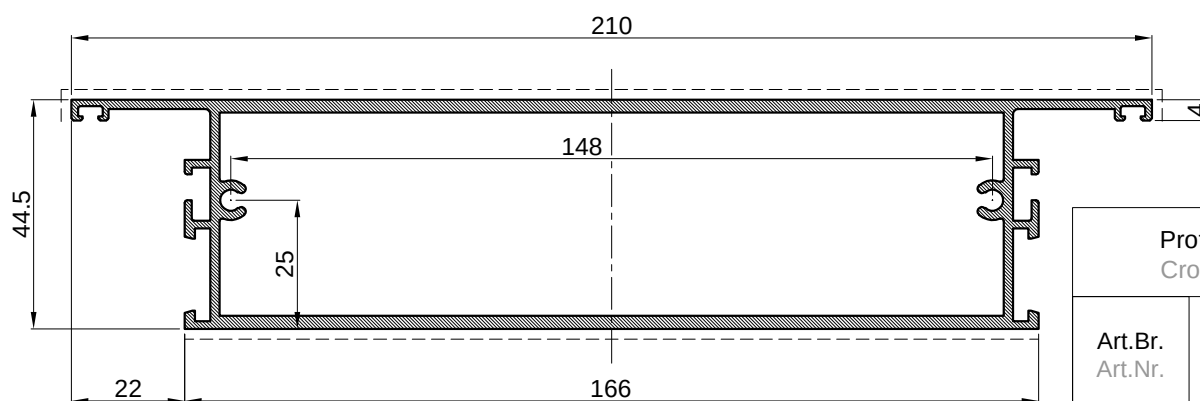
Profil prečke Crossbar profile		
Art.Br. Art.Nr.	M45-726	
Težina Weight	kg/m'	1.090
Opseg Perimeter	mm	390.42
Moment inerције Moments of inertia	I _x (cm ⁴)	10.74
	I _y (cm ⁴)	17.22
	W _x (cm ³)	4.07
	W _y (cm ³)	3.87
L	mm	6500



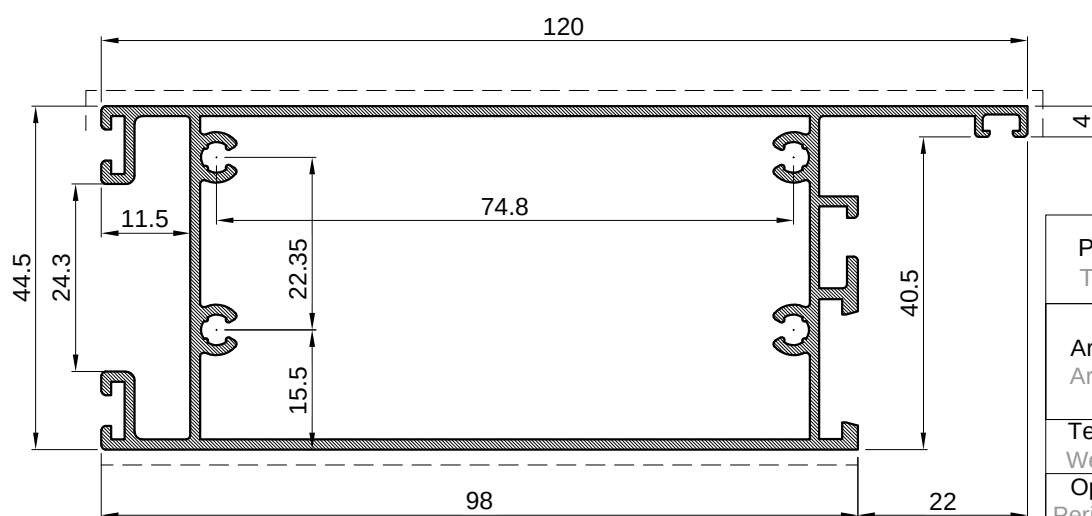
Profil ojačane prečke Reinforcement crossbar profile		
Art.Br. Art.Nr.	M45-721	
Težina Weight	kg/m'	2.176
Opseg Perimeter	mm	514.5
Moment inerције Moments of inertia	I _x (cm ⁴)	82.53
	I _y (cm ⁴)	31.91
	W _x (cm ³)	15.68
	W _y (cm ³)	6.90
L	mm	6500



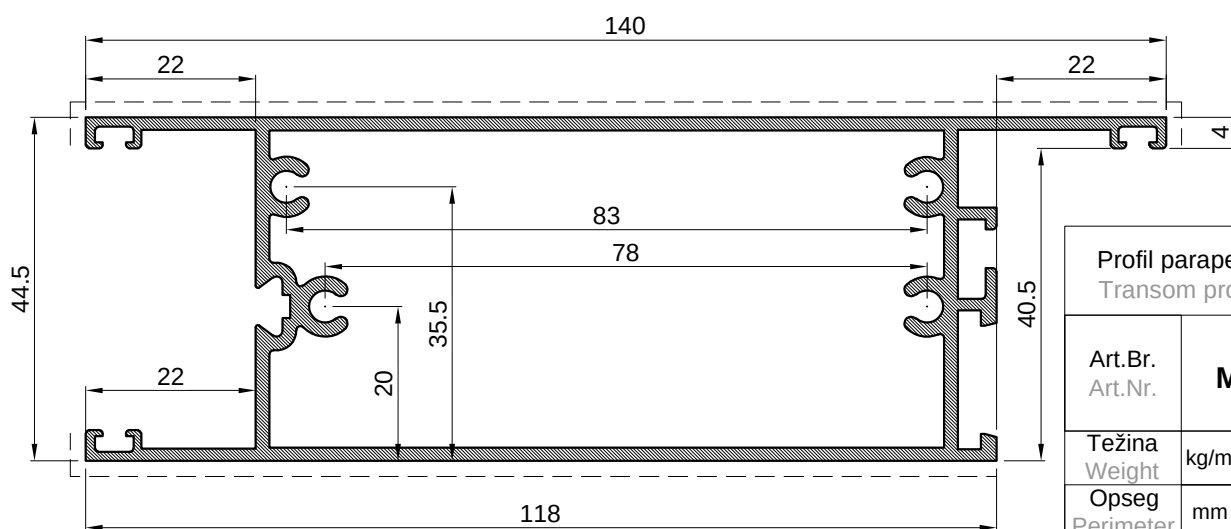
Profil prečke Crossbar profile		
Art.Br. Art.Nr.	M45-723	
Težina Weight	kg/m'	1.869
Opseg Perimeter	mm	489
Moment inercije Moments of inertia	I _x (cm ⁴)	21.11
	I _y (cm ⁴)	105.06
	W _x (cm ³)	8.33
	W _y (cm ³)	15.01
L	mm	6500



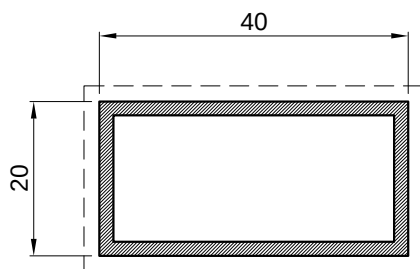
Profil prečke Crossbar profile		
Art.Br. Art.Nr.	M45-724	
Težina Weight	kg/m'	3.084
Opseg Perimeter	mm	628
Moment inercije Moments of inertia	I _x (cm ⁴)	41.87
	I _y (cm ⁴)	403.86
	W _x (cm ³)	17.45
	W _y (cm ³)	38.46
L	mm	6500



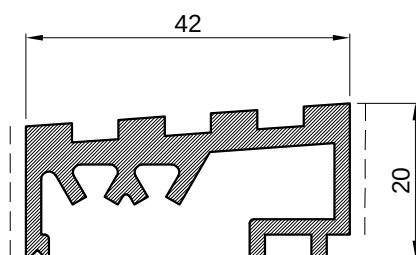
Profil parapetne prečke Transom profile		
Art.Br. Art.Nr.	M45-727	
Težina Weight	kg/m'	1.407
Opseg Perimeter	mm	471
Moment inercije Moments of inertia	I _x (cm ⁴)	16.97
	I _y (cm ⁴)	72.79
	W _x (cm ³)	7.04
	W _y (cm ³)	10.86
L	mm	6500



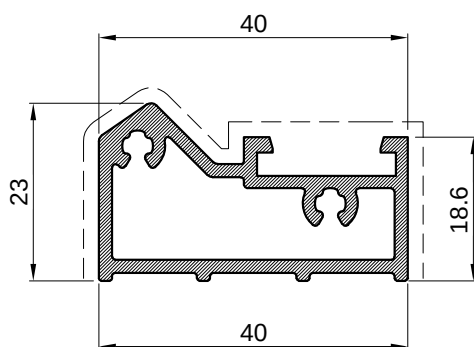
Profil parapetne prečke Transom profile		
Art.Br. Art.Nr.	M45-722	
Težina Weight	kg/m'	1.950
Opseg Perimeter	mm	512
Moment inercije Moments of inertia	I _x (cm ⁴)	23.19
	I _y (cm ⁴)	119.91
	W _x (cm ³)	9.67
	W _y (cm ³)	16.37
L	mm	6500



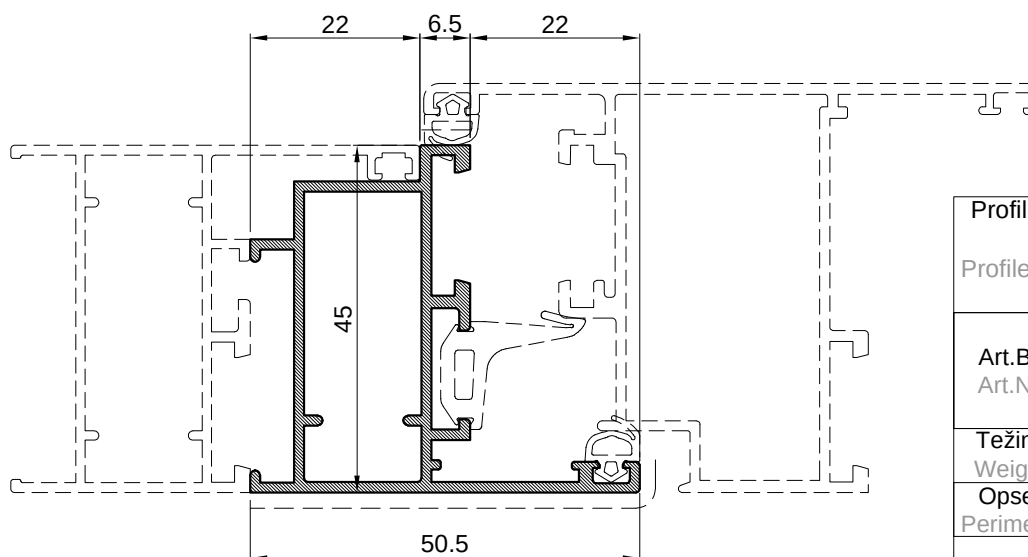
Profil Profiles		
Art.Br. Art.Nr.	F-0181	
Težina Weight	kg/m'	0.548
Opseg Perimeter	mm	120
L	mm	6500



Profil praga Threshold profile		
Art.Br. Art.Nr.	060353	
Težina Weight	kg/m'	0.830
Opseg Perimeter	mm	225
L	mm	6500

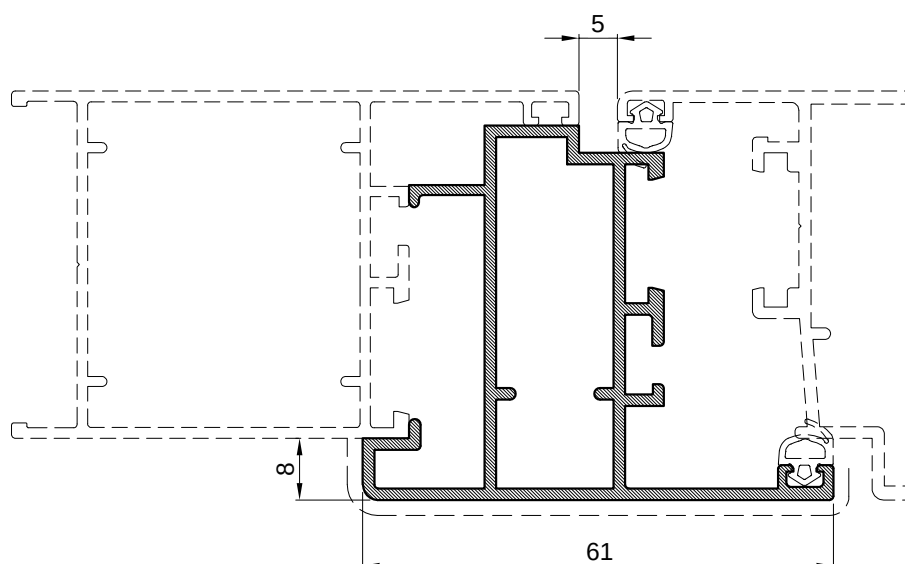


Profil praga Threshold profile		
Art.Br. Art.Nr.	M45-759	
Težina Weight	kg/m'	0.672
Opseg Perimeter	mm	146.5
L	mm	6500



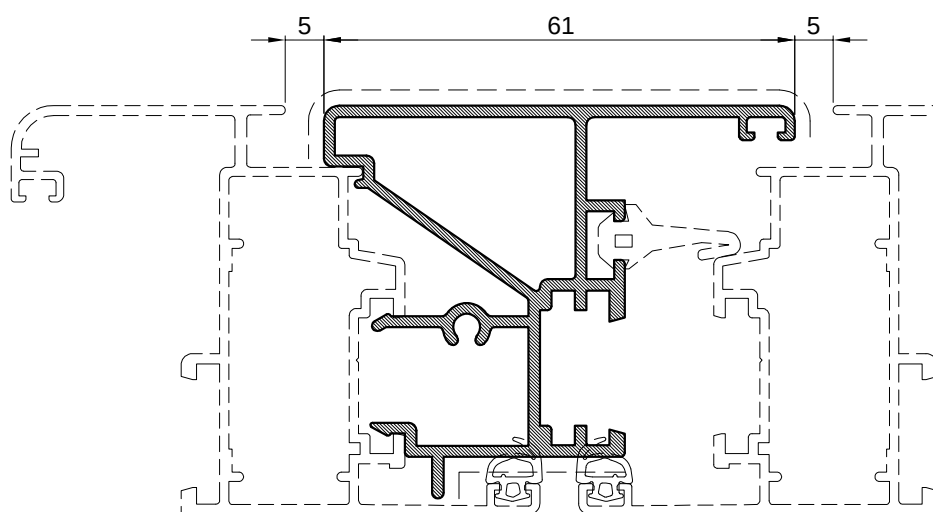
Profil za promjenu smjera okretanja
Profile for opening direction change

Art.Br. Art.Nr.	M45-757	
Težina Weight	kg/m'	0.705
Opseg Perimeter	mm	270
Moment inercije Moments of inertia	I _x (cm ⁴)	6.18
	I _y (cm ⁴)	3.96
	W _x (cm ³)	2.24
	W _y (cm ³)	1.30
L	mm	6500

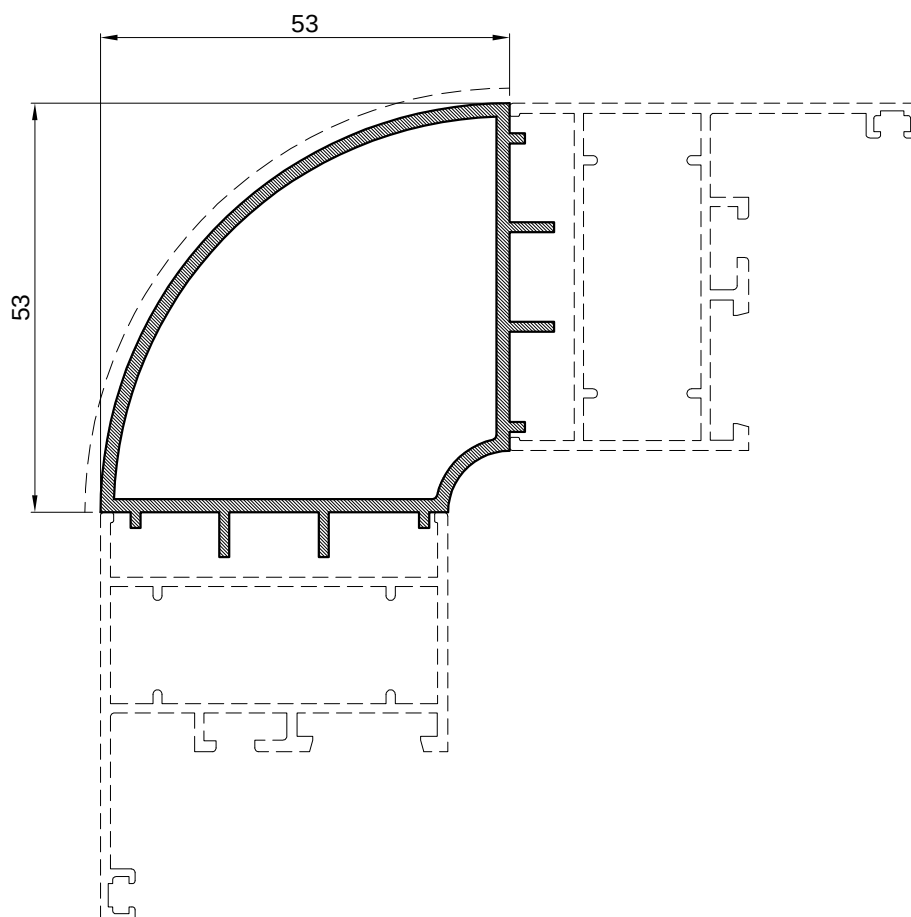


Profil za promjenu smjera okretanja
Profile for opening direction change

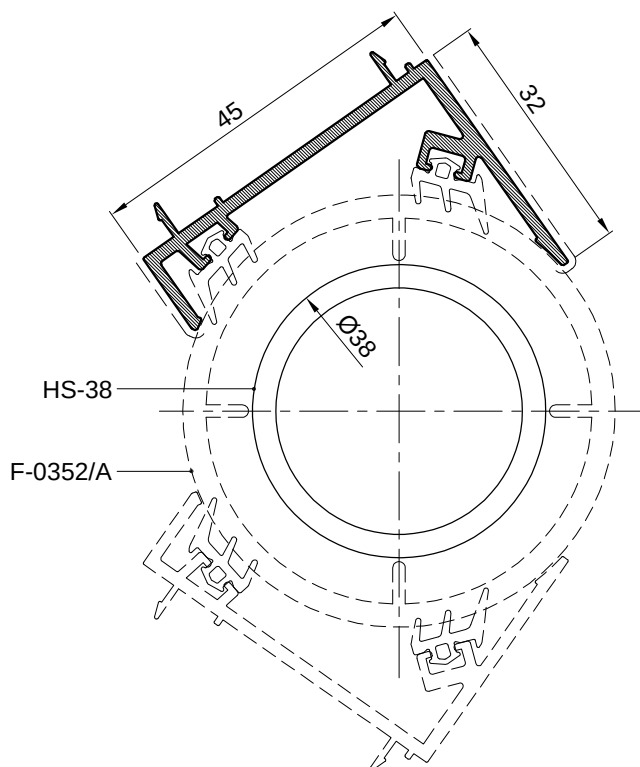
Art.Br. Art.Nr.	M45-710	
Težina Weight	kg/m'	0.933
Opseg Perimeter	mm	330
Moment inercije Moments of inertia	I _x (cm ⁴)	9.88
	I _y (cm ⁴)	6.98
	W _x (cm ³)	3.34
	W _y (cm ³)	2.03
L	mm	6500



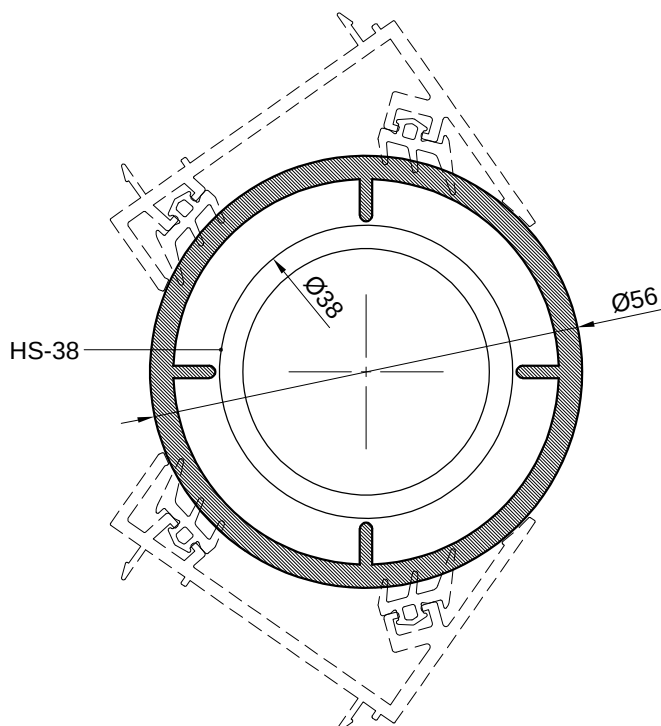
Profil kombatute Flying mullion		
Art.Br. Art.Nr.	M45-708	
Težina Weight	kg/m'	0.977
Opseg Perimeter	mm	395
Moment inerције Moments of inertia	I _x (cm ⁴)	9.58
	I _y (cm ⁴)	6.94
	W _x (cm ³)	3.11
	W _y (cm ³)	1.98
L	mm	6500



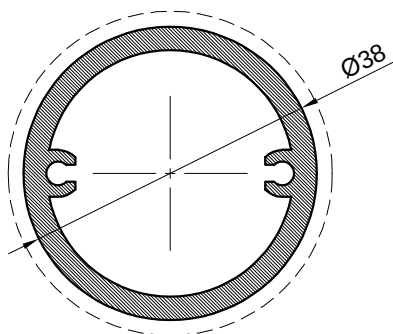
Profil za spoj pod kutem Profile for angle joint		
Art.Br. Art.Nr.	M45-754	
Težina Weight	kg/m'	0.932
Opseg Perimeter	mm	248
Moment inercije Moments of inertia	I _x (cm ⁴)	12.28
	I _y (cm ⁴)	12.28
	W _x (cm ³)	3.94
	W _y (cm ³)	3.94
L	mm	6500



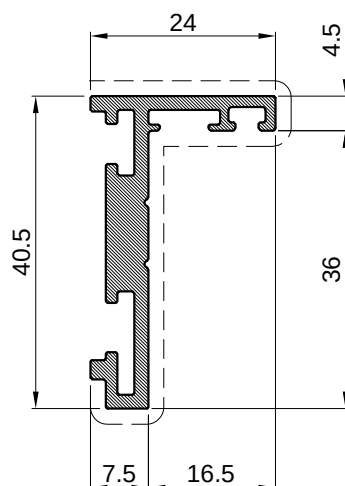
Profil Profiles		
Art.Br. Art.Nr.	M45-752	
Težina Weight	kg/m'	0.510
Opseg Perimeter	mm	230
L	mm	6500



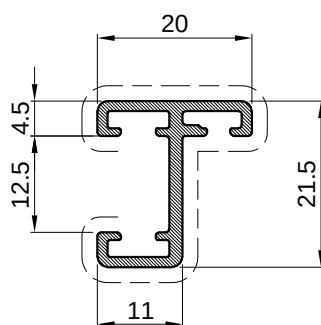
Vezni profil Connection profile		
Art.Br. Art.Nr.	F-0352/A	
Težina Weight	kg/m'	1.441
Opseg Perimeter	mm	119
L	mm	6500



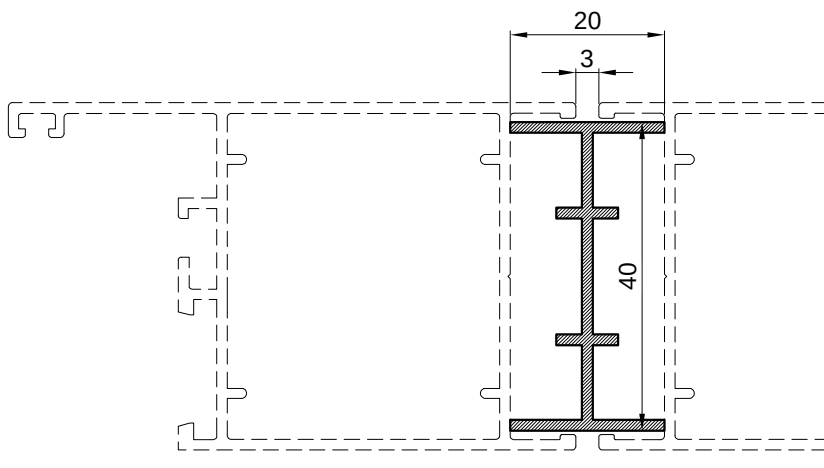
Profil rukohvata vrata Door handle profile		
Art.Br. Art.Nr.	F-0829	
Težina Weight	kg/m'	0.953
Opseg Perimeter	mm	119
L	mm	6500



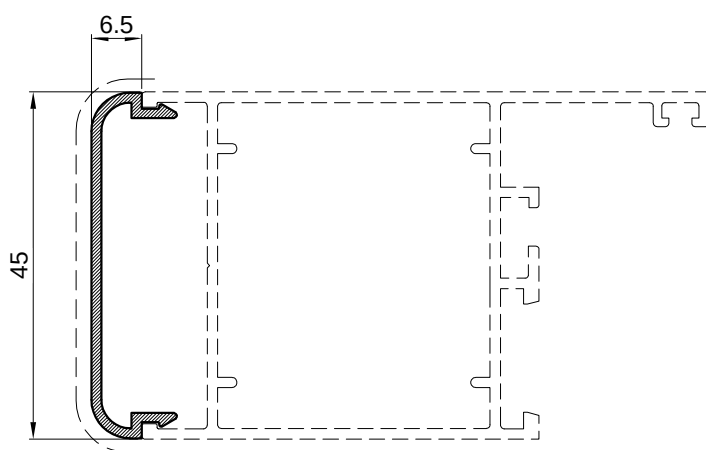
Profil rama staklenog krila Frame profile glass leaf		
Art.Br. Art.Nr.	F-1686	
Težina Weight	kg/m'	0.551
Opseg Perimeter	mm	226.3
Moment inercije Moments of inertia	I _x (cm ⁴)	3.27
	I _y (cm ⁴)	0.57
	W _x (cm ³)	1.36
	W _y (cm ³)	0.34
L	mm	6500



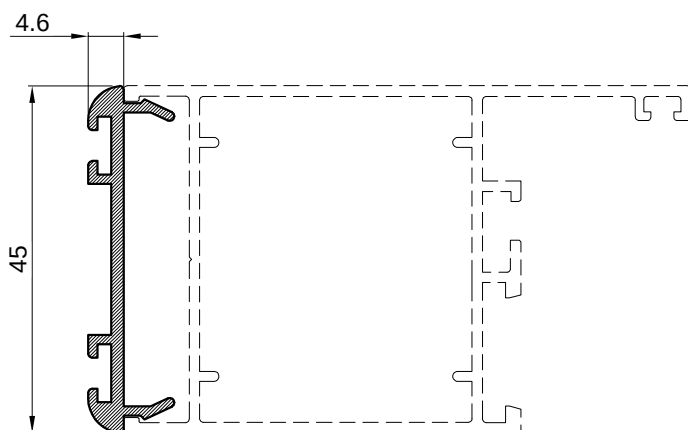
Profil za stakleno krilo Profile for glass leaf		
Art.Br. Art.Nr.	F-1691	
Težina Weight	kg/m'	0.259
Opseg Perimeter	mm	137.85
L	mm	6500



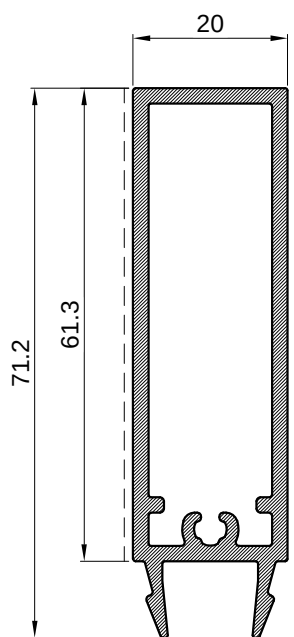
Vezni profil Connection profile		
Art.Br. Art.Nr.	P45-643	
Težina Weight	kg/m'	0.342
Opseg Perimeter	mm	184
L	mm	6500



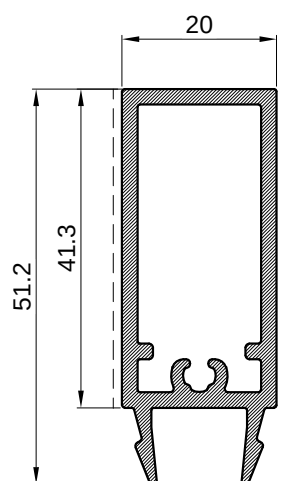
Profil Profiles		
Art.Br. Art.Nr.	M45-756	
Težina Weight	kg/m'	0.225
Opseg Perimeter	mm	132
L	mm	6500



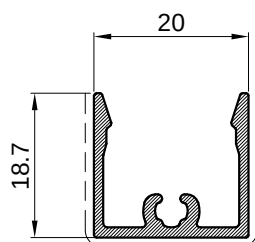
Nosáč četkice Support brush		
Art.Br. Art.Nr.	P45-644	
Težina Weight	kg/m'	0.323
Opseg Perimeter	mm	153
L	mm	6500



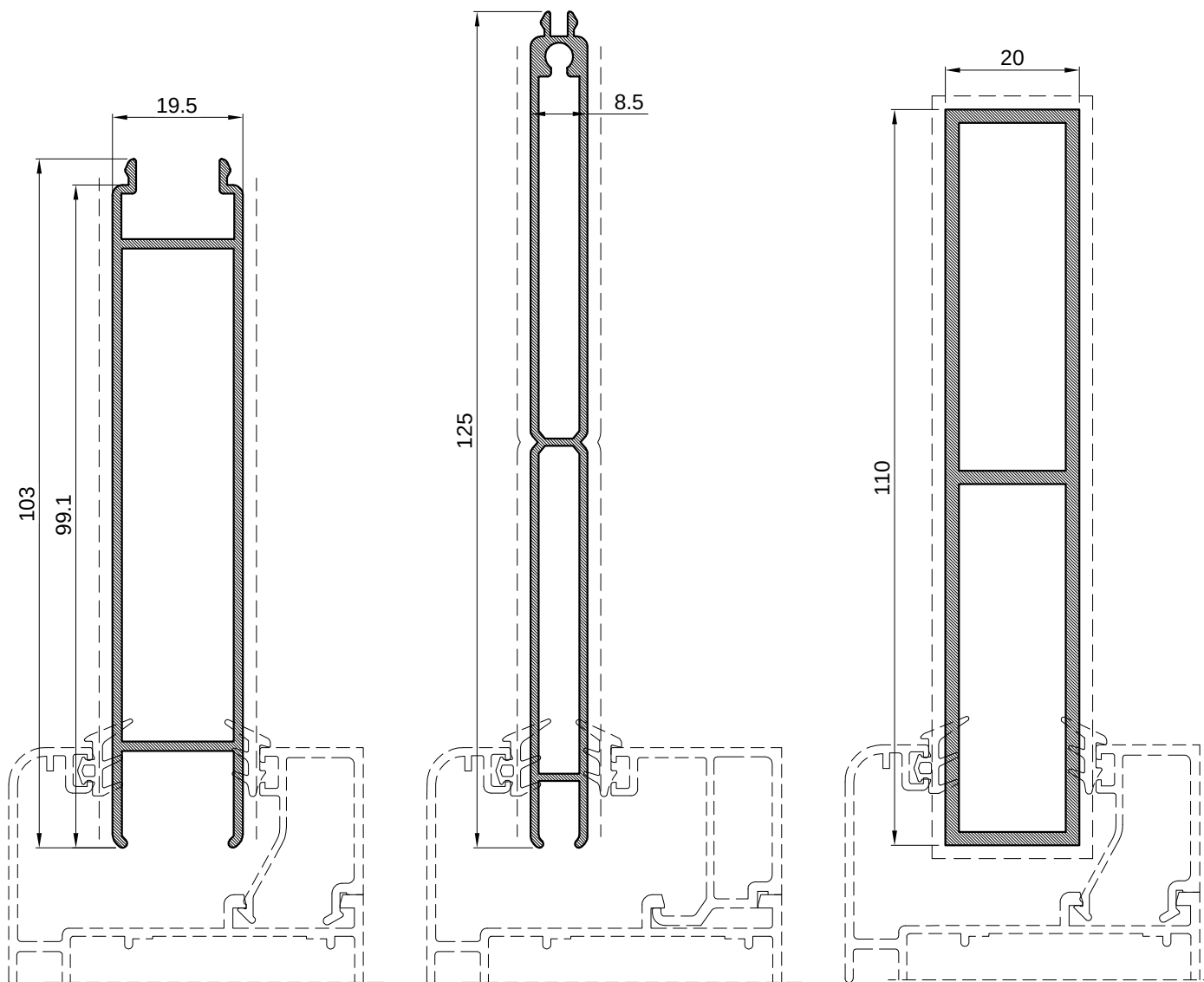
Profil ojačanja prečke Reinforcement crossbar profile		
Art.Br. Art.Nr.	NP- 4183	
Težina Weight	kg/m'	0.990
Opseg Perimeter	mm	200
Moment inercije Moments of inertia	Ix (cm4)	18.21
	Iy (cm4)	2.34
	Wx (cm3)	5.11
	Wy (cm3)	2.34
L	mm	6500



Profil ojačanja prečke Reinforcement crossbar profile		
Art.Br. Art.Nr.	F- 1634	
Težina Weight	kg/m'	0.774
Opseg Perimeter	mm	159.9
Moment inercije Moments of inertia	Ix (cm4)	7,06
	Iy (cm4)	1,69
	Wx (cm3)	2,69
	Wy (cm3)	1,69
L	mm	6500



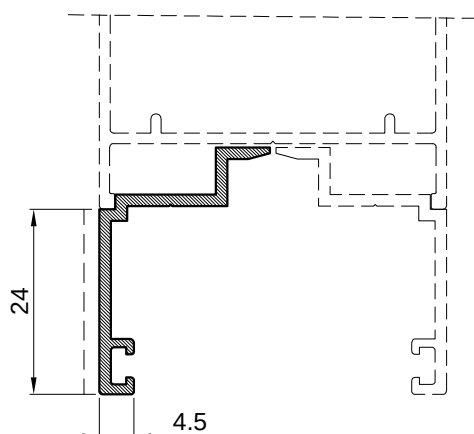
Maska profila ojačanja Reinforcement profile mask		
Art.Br. Art.Nr.	NP-4184	
Težina Weight	kg/m'	0.243
Opseg Perimeter	mm	129
L	mm	6500



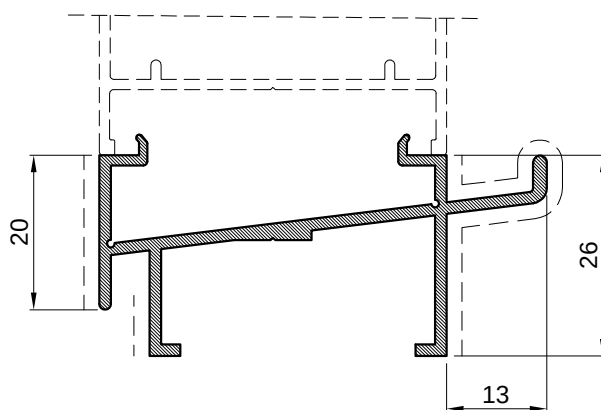
Profil ispunje Infill profile		
Art.Br. Art.Nr.	F-0681	
Težina Weight	kg/m'	0.911
Opseg Perimeter	mm	305
Moment inercije Moments of inertia	Ix (cm4)	32.59
	Iy (cm4)	2.44
	Wx (cm3)	6.28
	Wy (cm3)	2.50
L	mm	6500

Profil ispunje Infill profile		
Art.Br. Art.Nr.	F-0714	
Težina Weight	kg/m'	0.895
Opseg Perimeter	mm	294
Moment inercije Moments of inertia	Ix (cm4)	46.51
	Iy (cm4)	0.40
	Wx (cm3)	7.22
	Wy (cm3)	0.95
L	mm	6500

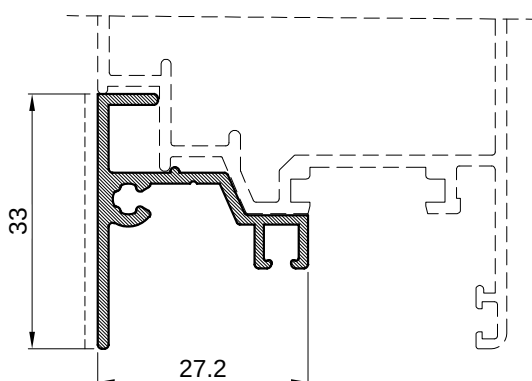
Profil ispunje Infill profile		
Art.Br. Art.Nr.	F-0062	
Težina Weight	kg/m'	1,45
Opseg Perimeter	mm	260
Moment inercije Moments of inertia	Ix (cm4)	63.03
	Iy (cm4)	3.78
	Wx (cm3)	11.46
	Wy (cm3)	3.78
L	mm	6500



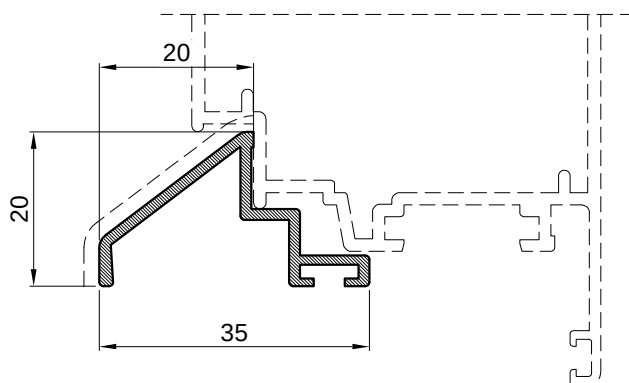
Profil Profiles		
Art.Br. Art.Nr.	M45-751	
Težina Weight	kg/m'	0.234
Opseg Perimeter	mm	122
L	mm	6500



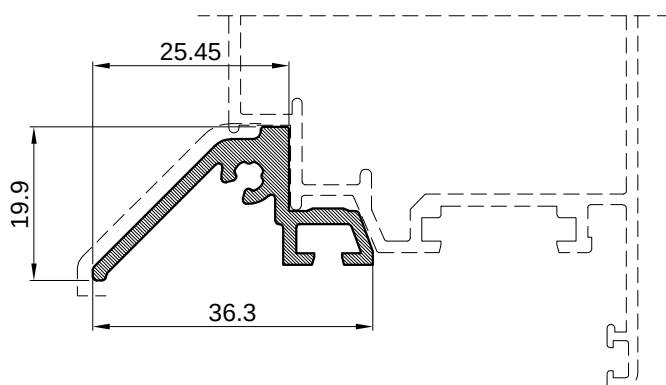
Profil Profiles		
Art.Br. Art.Nr.	D45-052	
Težina Weight	kg/m'	0.567
Opseg Perimeter	mm	283
L	mm	6500



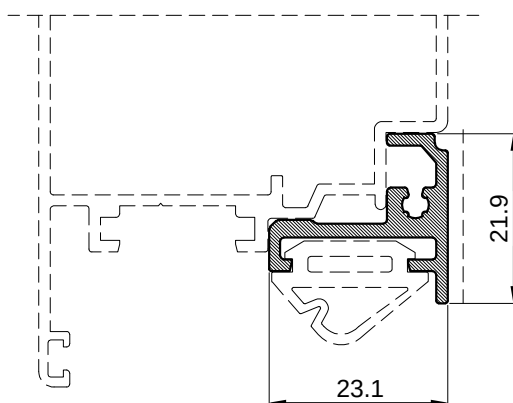
Profil Profiles		
Art.Br. Art.Nr.	F-1675	
Težina Weight	kg/m'	0.337
Opseg Perimeter	mm	175.63
L	mm	6500



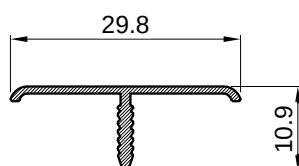
Profil okapnice Drip cap profile		
Art.Br. Art.Nr.	P45-648	
Težina Weight	kg/m'	0.257
Opseg Perimeter	mm	140
L	mm	6500



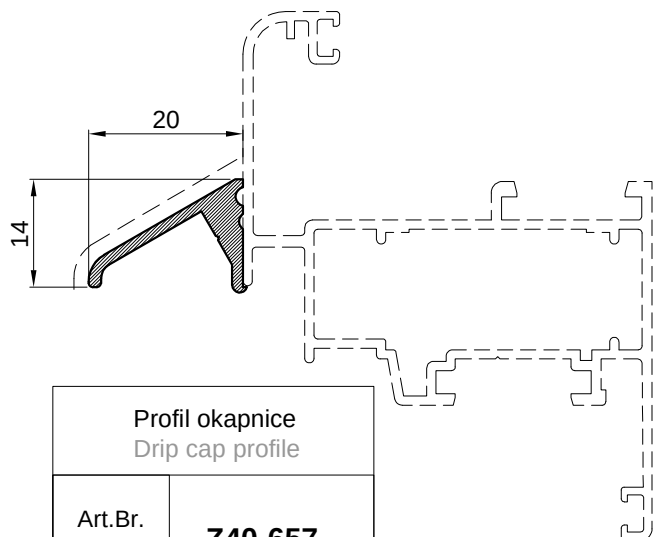
Profil okapnice Drip cap profile		
Art.Br. Art.Nr.	F-1567	
Težina Weight	kg/m'	0.397
Opseg Perimeter	mm	145.5
L	mm	6500



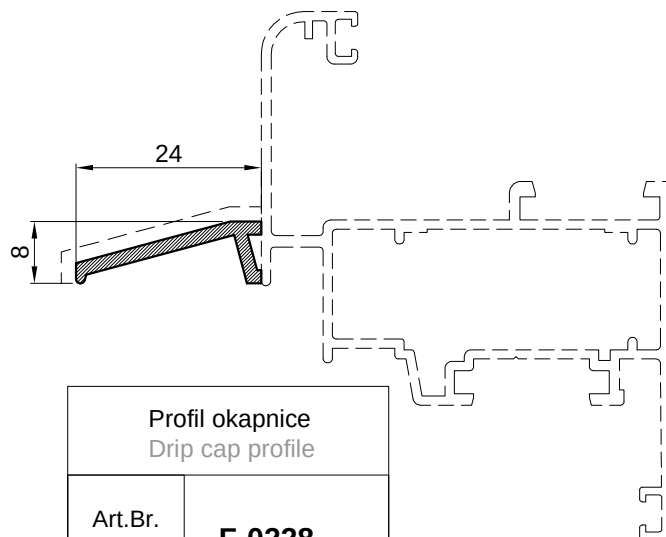
Profil Profiles		
Art.Br. Art.Nr.	F-1483	
Težina Weight	kg/m'	0.314
Opseg Perimeter	mm	127
L	mm	6500



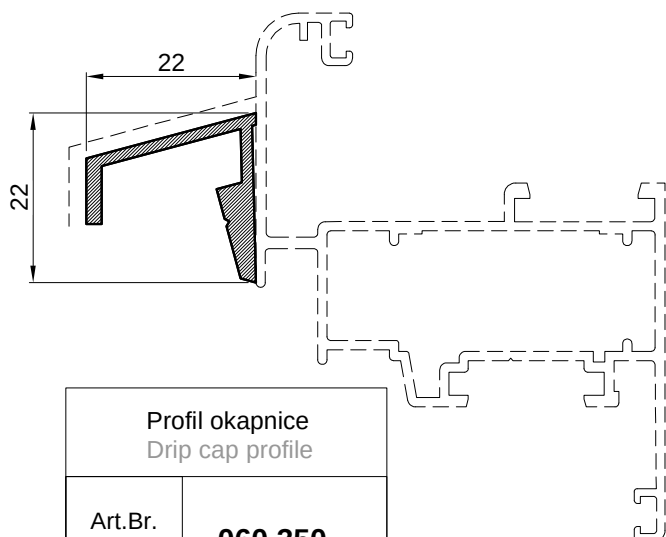
Profil Profiles		
Art.Br. Art.Nr.	PBR-5-30	
Težina Weight	kg/m'	0.119
Opseg Perimeter	mm	85.4
L	mm	6500



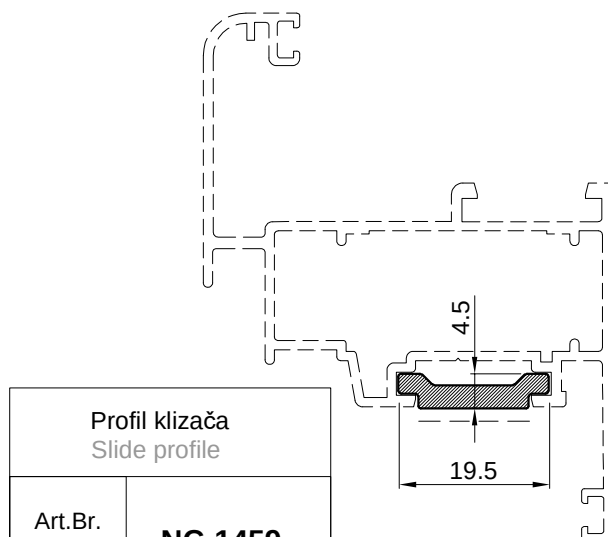
Profil okapnice Drip cap profile		
Art.Br. Art.Nr.	Z40-657	
Težina Weight	kg/m'	0.186
Opseg Perimeter	mm	73
L	mm	6500



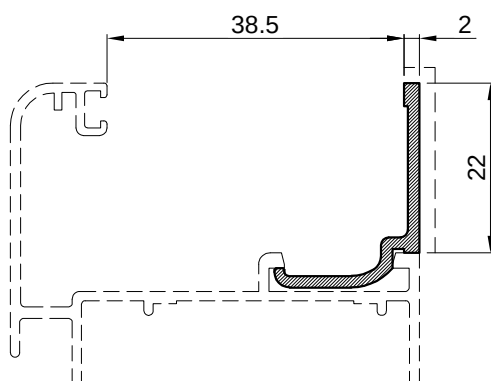
Profil okapnice Drip cap profile		
Art.Br. Art.Nr.	F-0228	
Težina Weight	kg/m'	0.153
Opseg Perimeter	mm	68
L	mm	6500



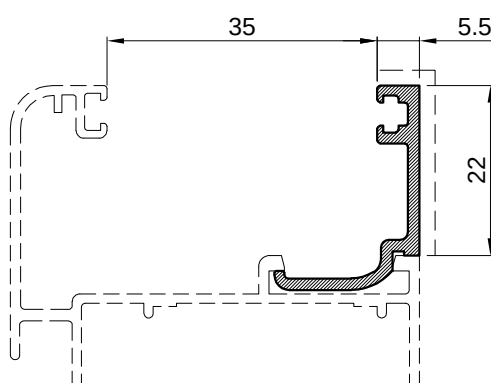
Profil okapnice Drip cap profile		
Art.Br. Art.Nr.	060 350	
Težina Weight	kg/m'	0.275
Opseg Perimeter	mm	107
L	mm	6500



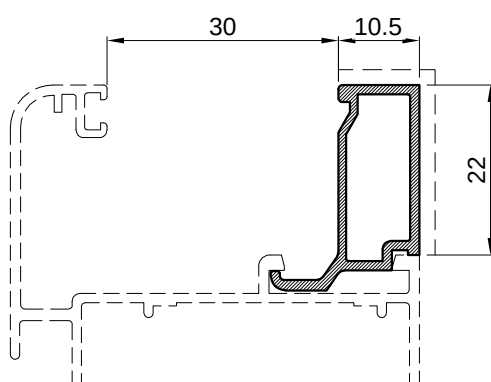
Profil klizača Slide profile		
Art.Br. Art.Nr.	NC-1459	
Težina Weight	kg/m'	0.161
Opseg Perimeter	mm	48
L	mm	6500



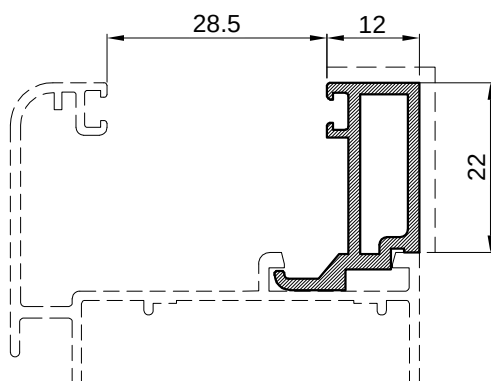
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-660	
Težina Weight	kg/m'	0.179
Opseg Perimeter	mm	89
L	mm	6500



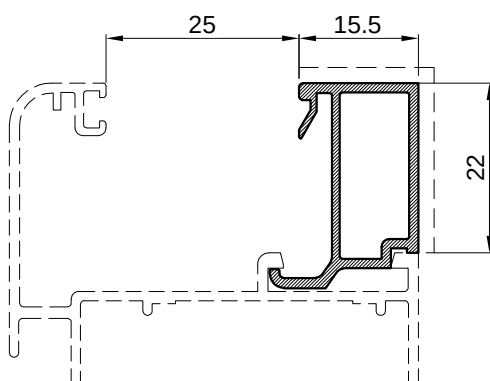
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-656	
Težina Weight	kg/m'	0.215
Opseg Perimeter	mm	107
L	mm	6500



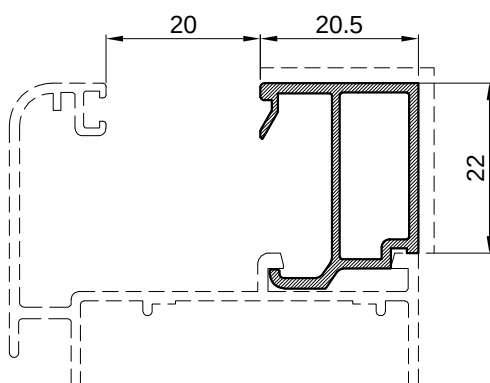
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-664	
Težina Weight	kg/m'	0.243
Opseg Perimeter	mm	93
L	mm	6500



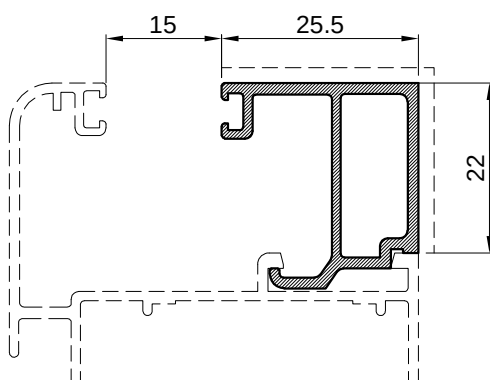
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	F-0784	
Težina Weight	kg/m'	0.330
Opseg Perimeter	mm	105
L	mm	6500



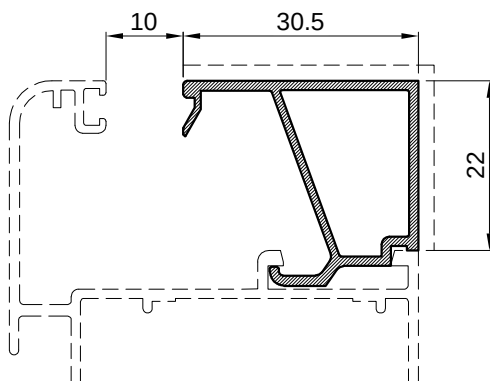
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-665	
Težina Weight	kg/m'	0.272
Opseg Perimeter	mm	112
L	mm	6500



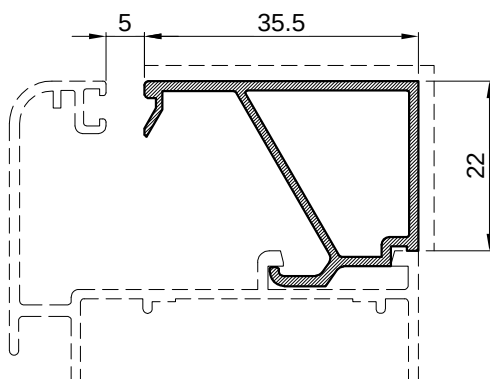
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-666	
Težina Weight	kg/m'	0.289
Opseg Perimeter	mm	122
L	mm	6500



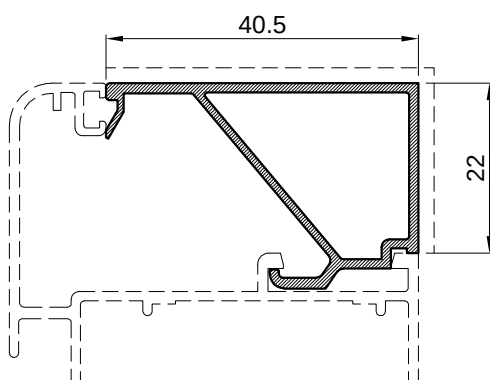
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-667	
Težina Weight	kg/m'	0.358
Opseg Perimeter	mm	139
L	mm	6500



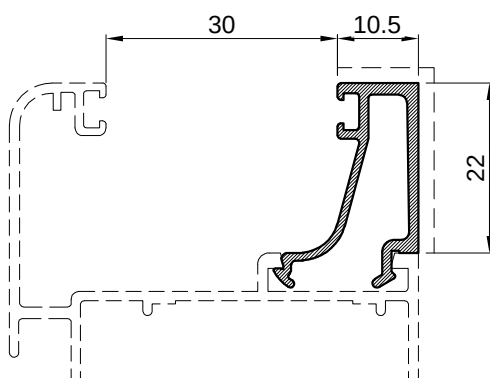
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-668	
Težina Weight	kg/m'	0.326
Opseg Perimeter	mm	135
L	mm	6500



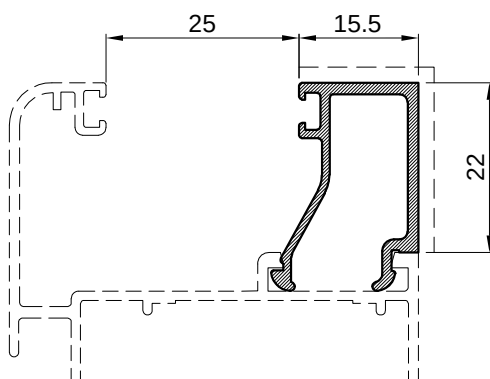
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-669	
Težina Weight	kg/m'	0.347
Opseg Perimeter	mm	143
L	mm	6500



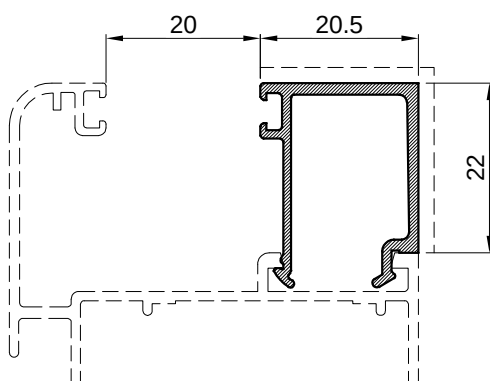
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-670	
Težina Weight	kg/m'	0.373
Opseg Perimeter	mm	150
L	mm	6500



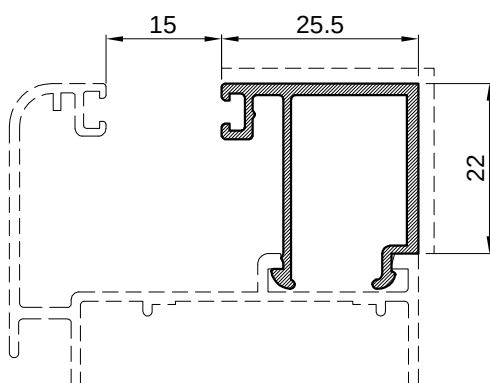
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-636	
Težina Weight	kg/m'	0.261
Opseg Perimeter	mm	151
L	mm	6500



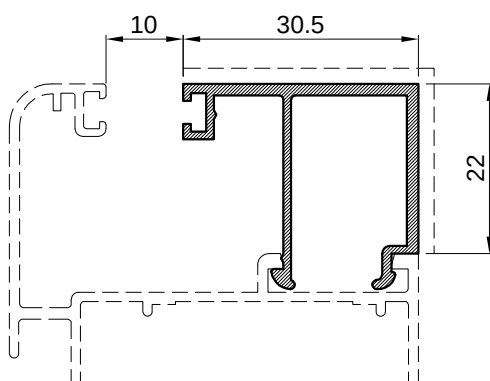
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	M45-709	
Težina Weight	kg/m'	0.270
Opseg Perimeter	mm	156
L	mm	6500



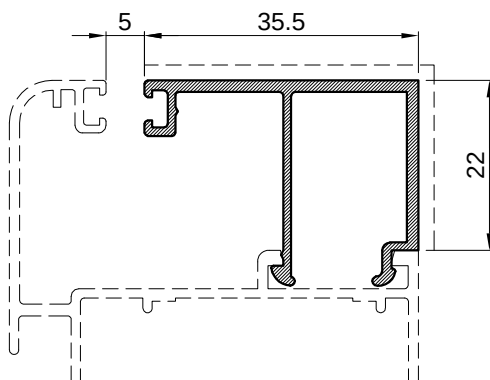
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-644	
Težina Weight	kg/m'	0.275
Opseg Perimeter	mm	162
L	mm	6500



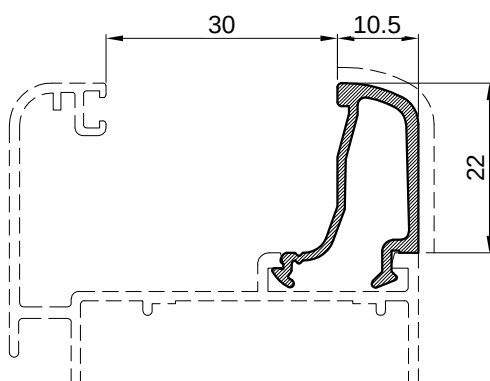
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-658	
Težina Weight	kg/m'	0.318
Opseg Perimeter	mm	184
L	mm	6500



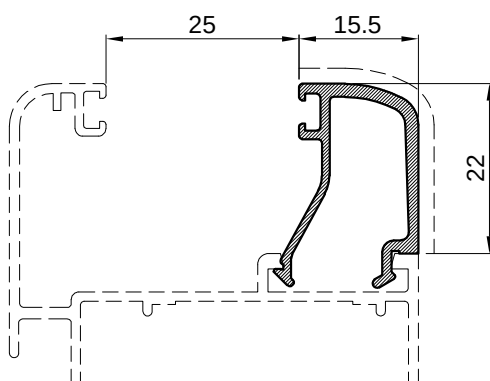
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-653	
Težina Weight	kg/m'	0.348
Opseg Perimeter	mm	196
L	mm	6500



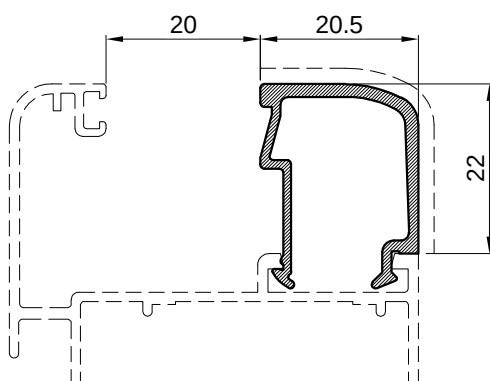
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-659	
Težina Weight	kg/m'	0.359
Opseg Perimeter	mm	204
L	mm	6500



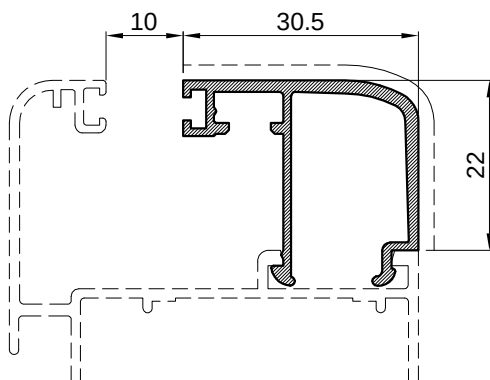
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-647	
Težina Weight	kg/m'	0.226
Opseg Perimeter	mm	138
L	mm	6500



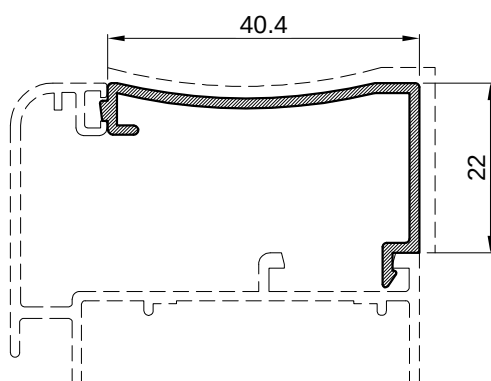
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	M45-740	
Težina Weight	kg/m'	0.258
Opseg Perimeter	mm	148
L	mm	6500



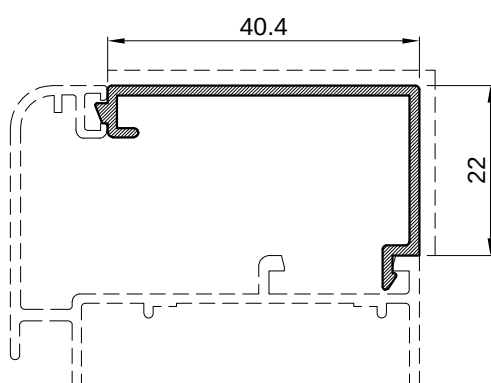
Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-646	
Težina Weight	kg/m'	0.286
Opseg Perimeter	mm	154
L	mm	6500



Staklo lajsna Glazing bead		
Art.Br. Art.Nr.	Z40-653/B	
Težina Weight	kg/m'	0.347
Opseg Perimeter	mm	197
L	mm	6500

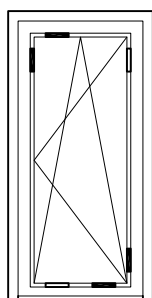
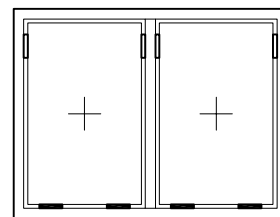
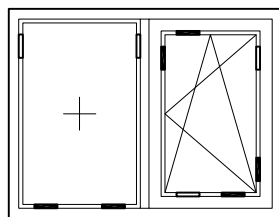
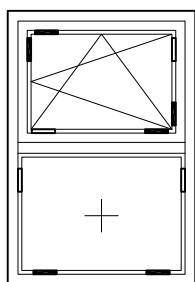
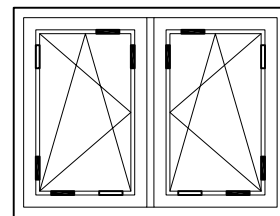
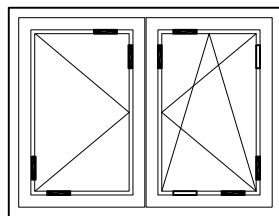
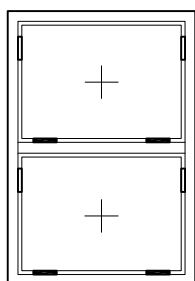
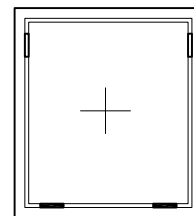
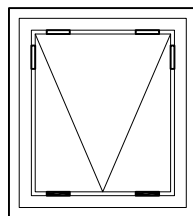
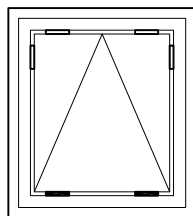
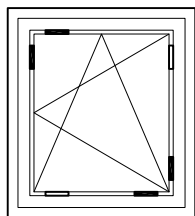


Profil Profile		
Art.Br. Art.Nr.	M45-755	
Težina Weight	kg/m'	0.274
Opseg Perimeter	mm	158
L	mm	6500



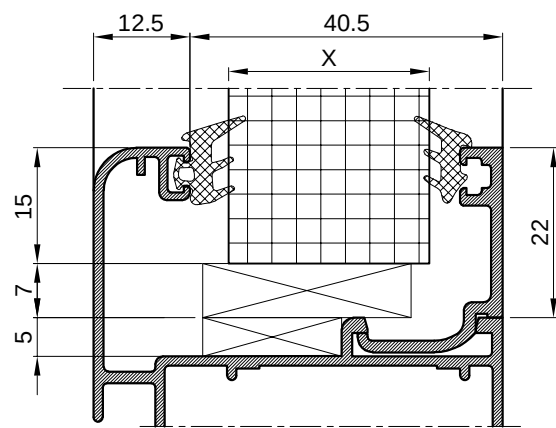
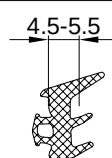
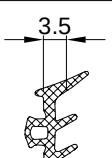
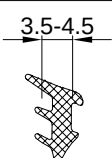
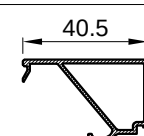
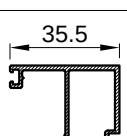
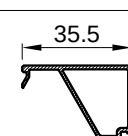
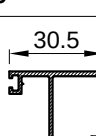
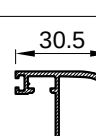
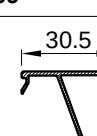
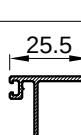
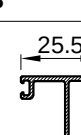
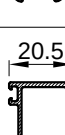
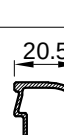
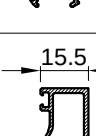
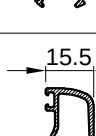
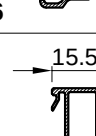
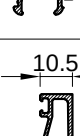
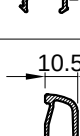
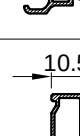
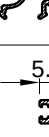
Profil Profile		
Art.Br. Art.Nr.	M45-753	
Težina Weight	kg/m'	0.276
Opseg Perimeter	mm	158
L	mm	6500

Prikaz stakljenja Glazing

PREPORUKE ZA RASPORED PODMETAČA KOD UGRADNJE ELEMENATA ZA ISPUNU
RECOMMENDATION FOR PACKERS PLACEMENT BY INSTALLATION OF FILLINGS

-  nosivi podmetač
support packer
-  odstojni podmetač
distance packer

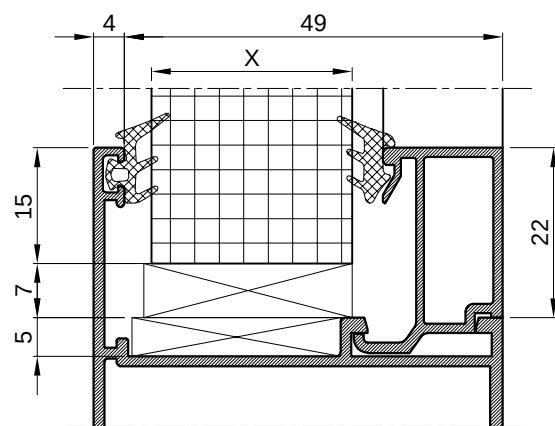
Materijal podmetača: PVC
Material packers: PVC

M 2.5:1					
Vanjske brtve Exterior gasket		Unutarnja brtva Interior gasket			
321.003 (Z113)	321.002 (Z111)	311.002 (918)			
					
Ispuna X Fillings X	Vanjska brtva Exterior gasket	Unutarnja brtva Interior gasket	STAKLO LAJSNE GLAZING BEAD		
-	-	-			
-	-	-			Z40-670
-	-	-			
-	-	-	Z40-659		Z40-669
-	-	-			
-	-	-	Z40-653	Z40-653/B	Z40-668
5-6	321.003	311.002			
7	321.002	311.002	Z40-658		Z40-667
10-11	321.003	311.002			
12	321.002	311.002	Z40-644	Z40-646	Z40-666
15-16	321.003	311.002			
17	321.002	311.002	M45-709	M45-740	Z40-665
20-21	321.003	311.002			
22	321.002	311.002	Z40-636	Z40-647	Z40-664
25-26	321.003	311.002			
27	321.002	311.002	Z40-656		
29-30	321.003	311.002			
31	321.002	311.002	Z40-660		

M 2.5:1

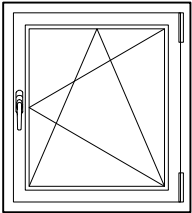
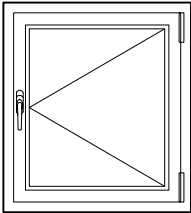
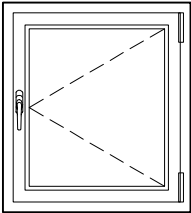
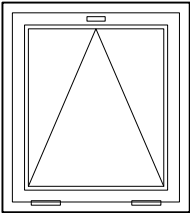
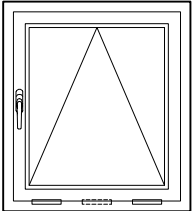
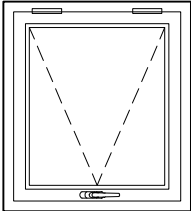
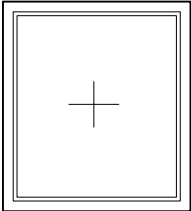
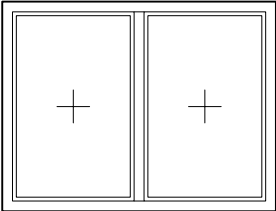
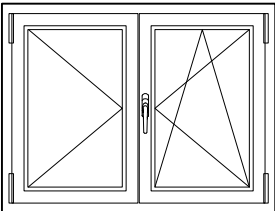
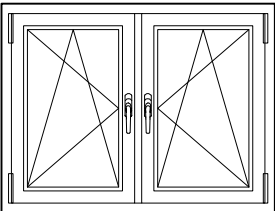
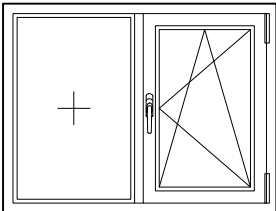
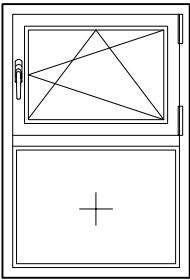
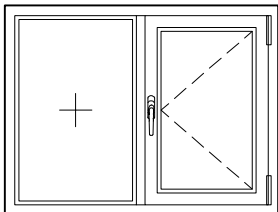
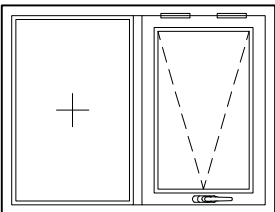
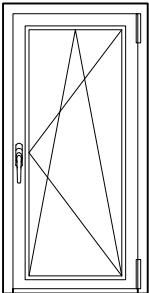
M 2.5:1

Vanjske brtve Exterior gasket		Unutarnja brtva Interior gasket
321.003 (Z113)	321.002 (Z111)	311.002 (918)
4.5-5.5	3.5	3.5-4.5

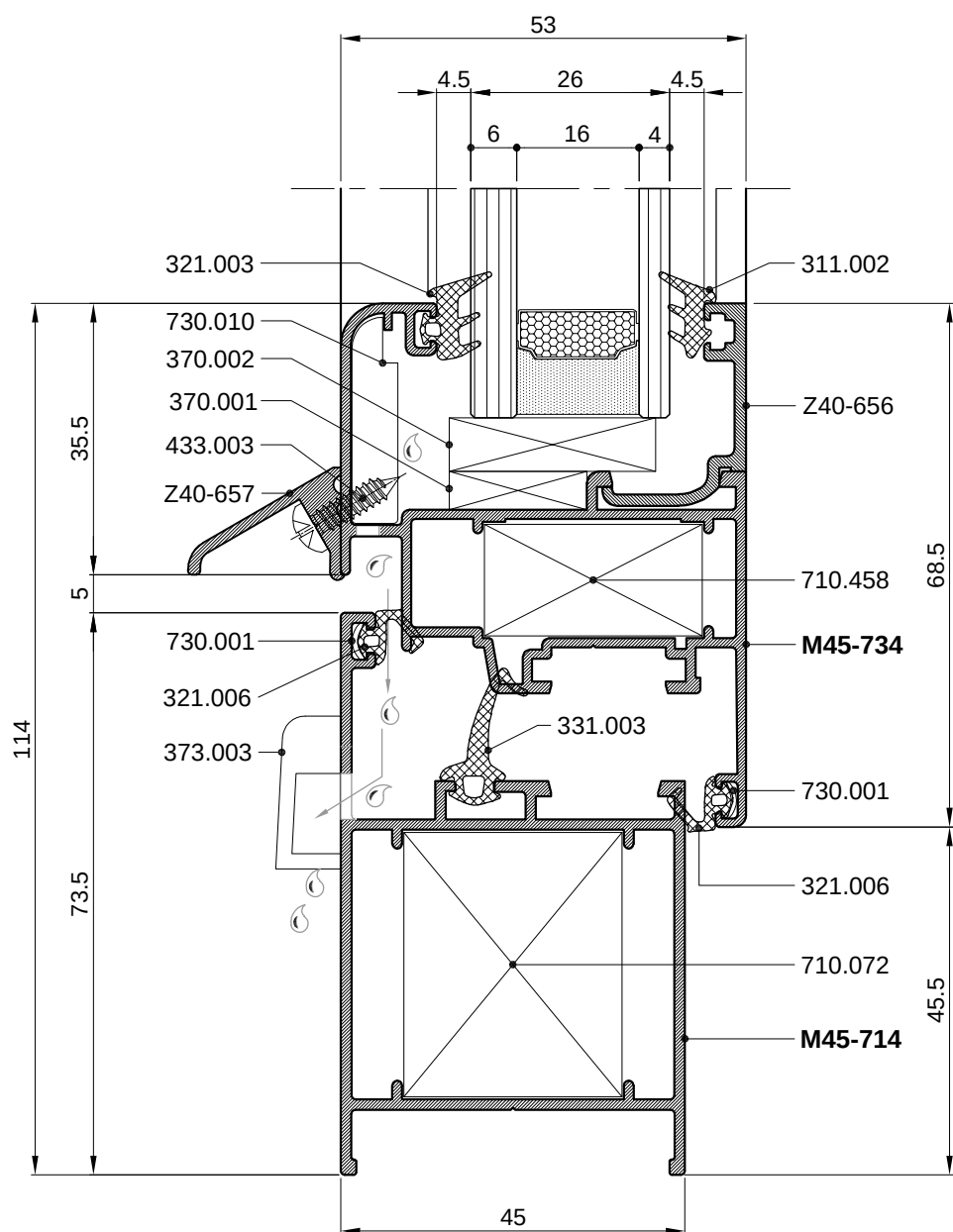
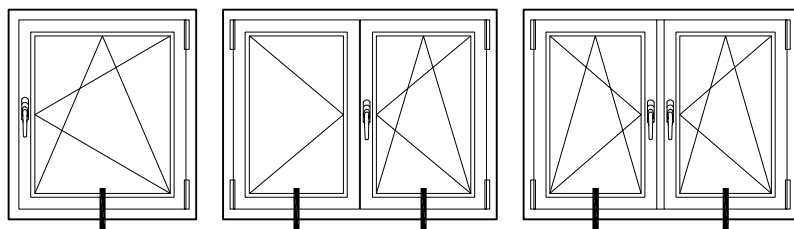


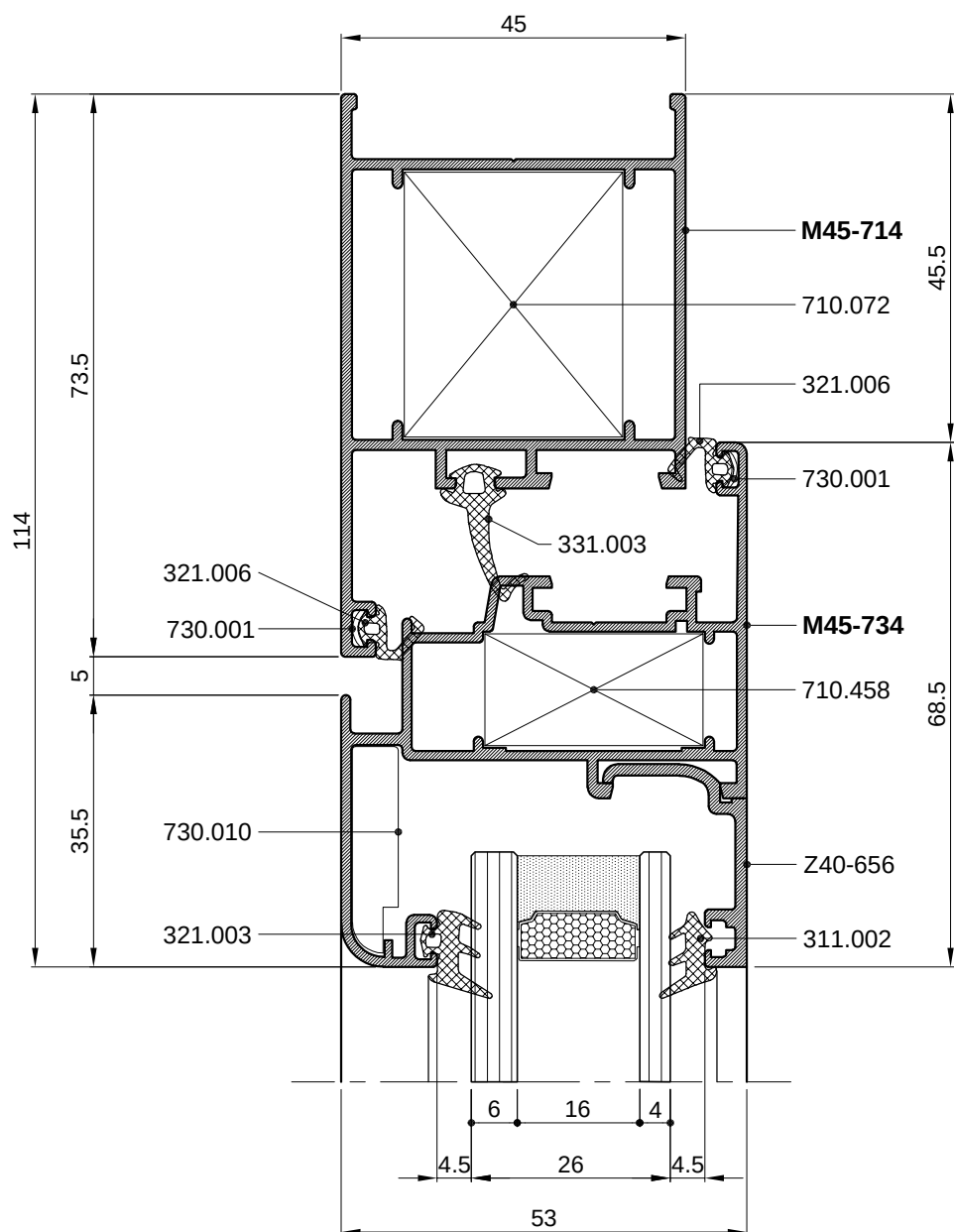
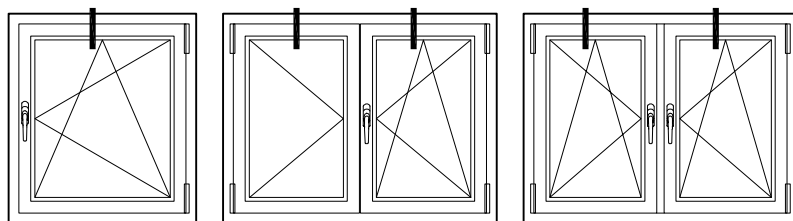
Ispuna X Fillings X	Vanjska brtva Exterior gasket	Unutarnja brtva Interior gasket	STAKLO LAJSNE GLAZING BEAD		
-	-	-			
-	-	-			Z40-670
5	321.003	311.002			
6	321.002	311.002	Z40-659		Z40-669
9-10	321.003	311.002			
11	321.002	311.002	Z40-653	Z40-653/B	Z40-668
14-15	321.003	311.002			
16	321.002	311.002	Z40-658		Z40-667
19-20	321.003	311.002			
21	321.002	311.002	Z40-644	Z40-646	Z40-666
24-25	321.003	311.002			
26	321.002	311.002	M45-709	M45-740	Z40-665
29-30	321.003	311.002			
31	321.002	311.002	Z40-636	Z40-647	Z40-664
34-35	321.003	311.002			
36	321.002	311.002	Z40-656		
37-38	321.003	311.002			
39-40	321.002	311.002	Z40-660		

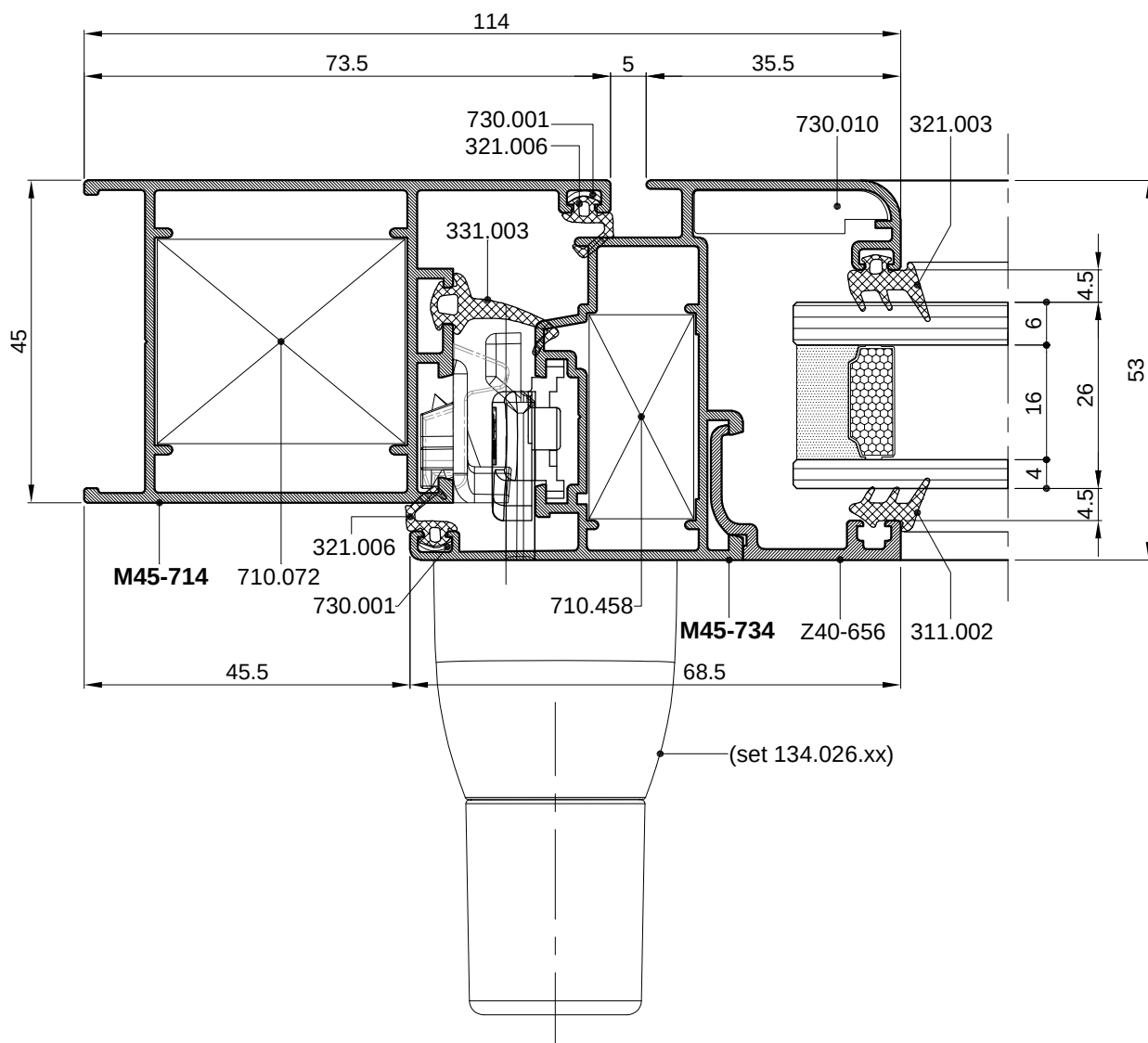
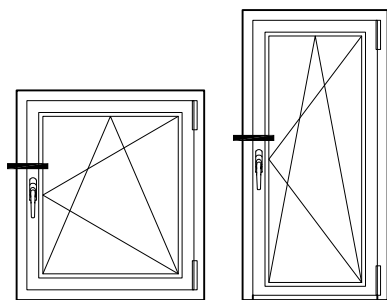
Presjeci Cross sections

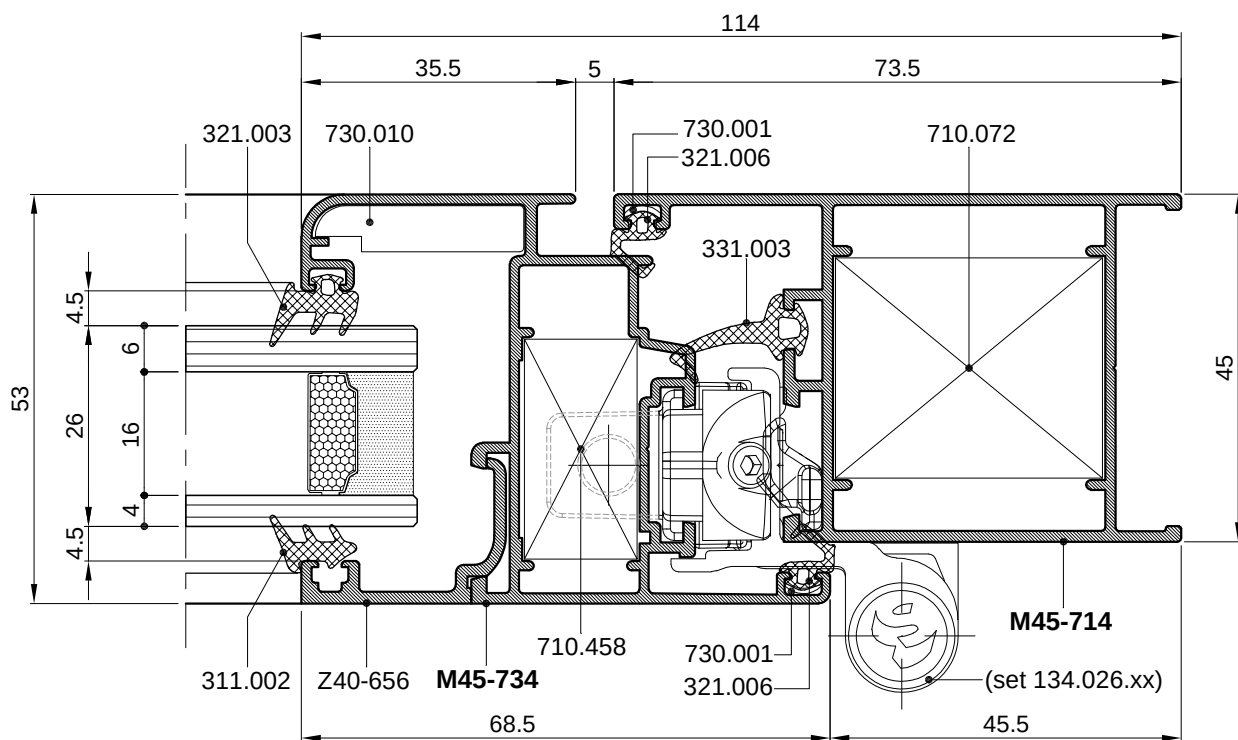
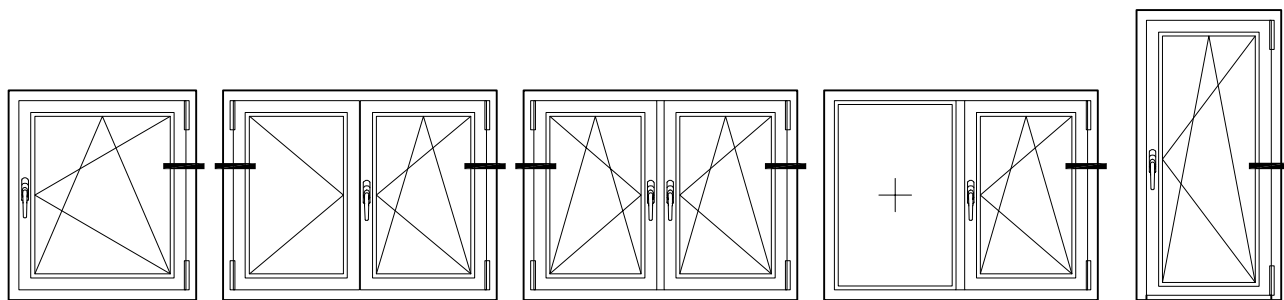
			
			
			
			

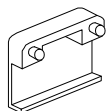
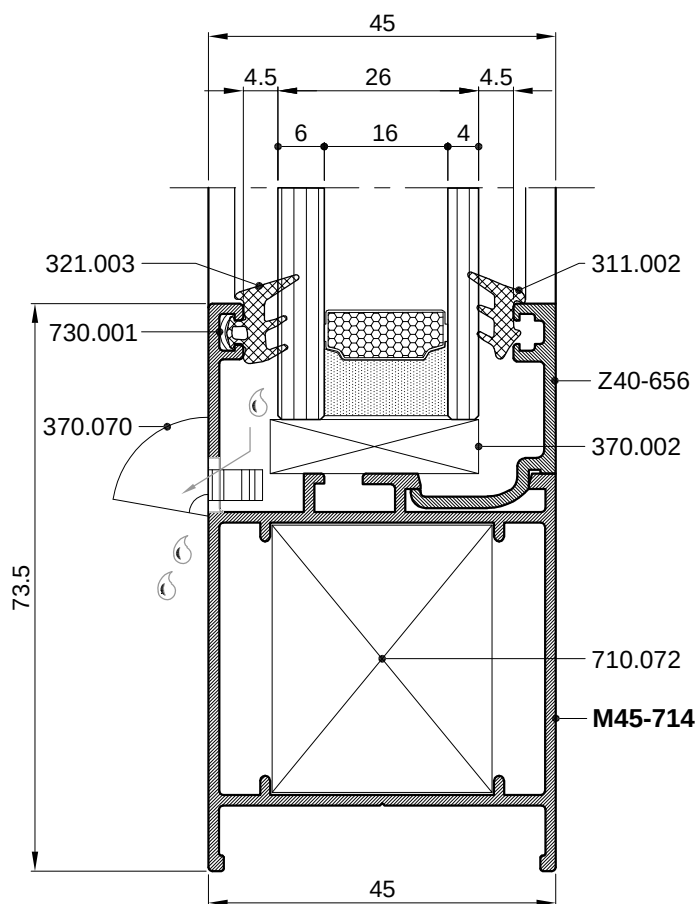
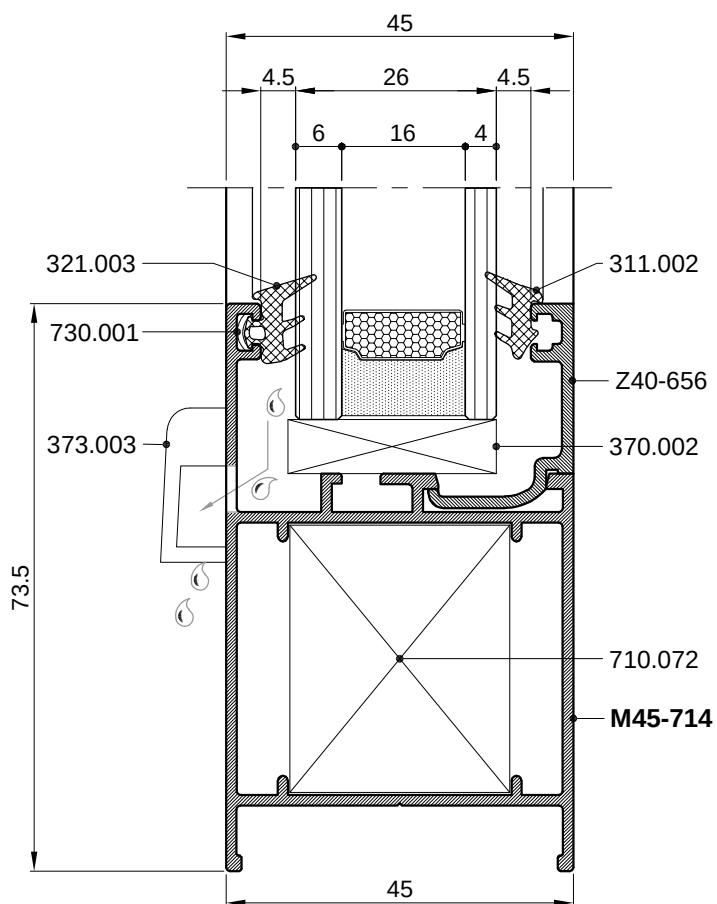
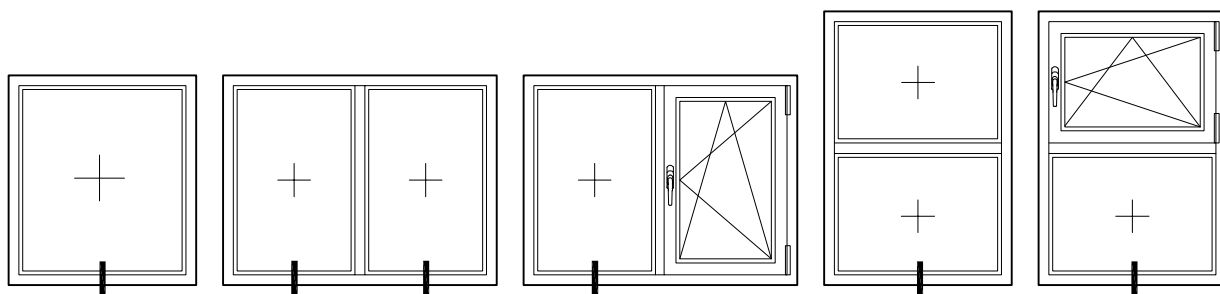
* Otvaranje vani / Outside opening



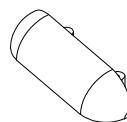




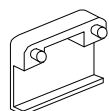
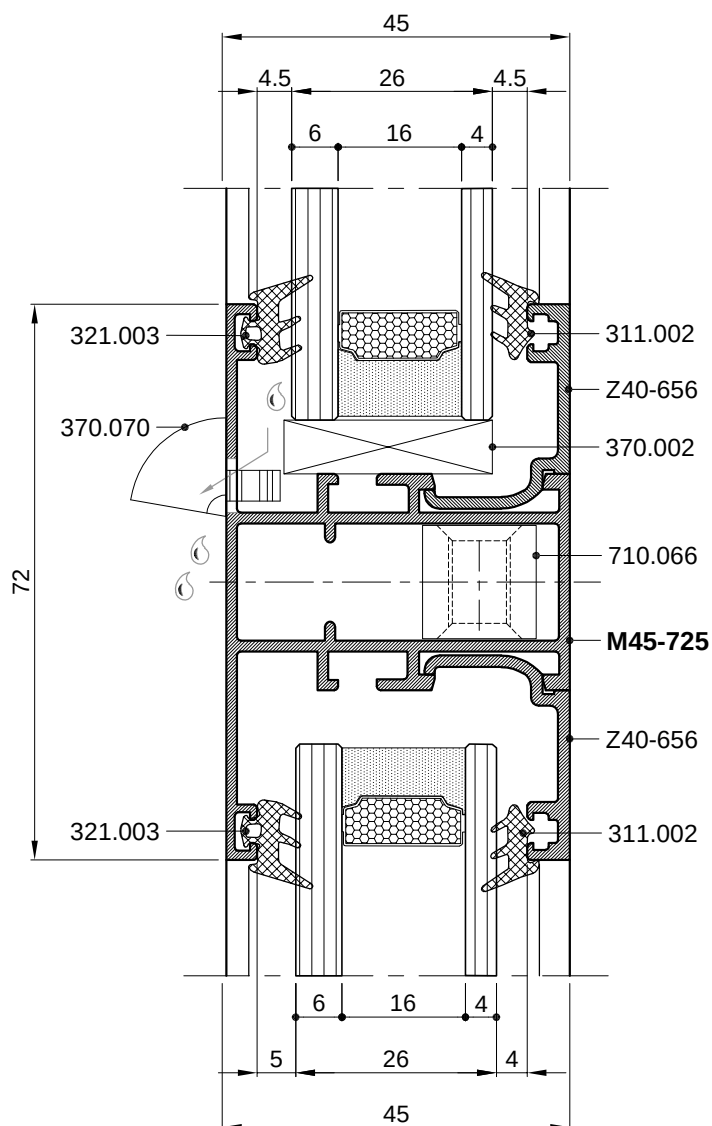
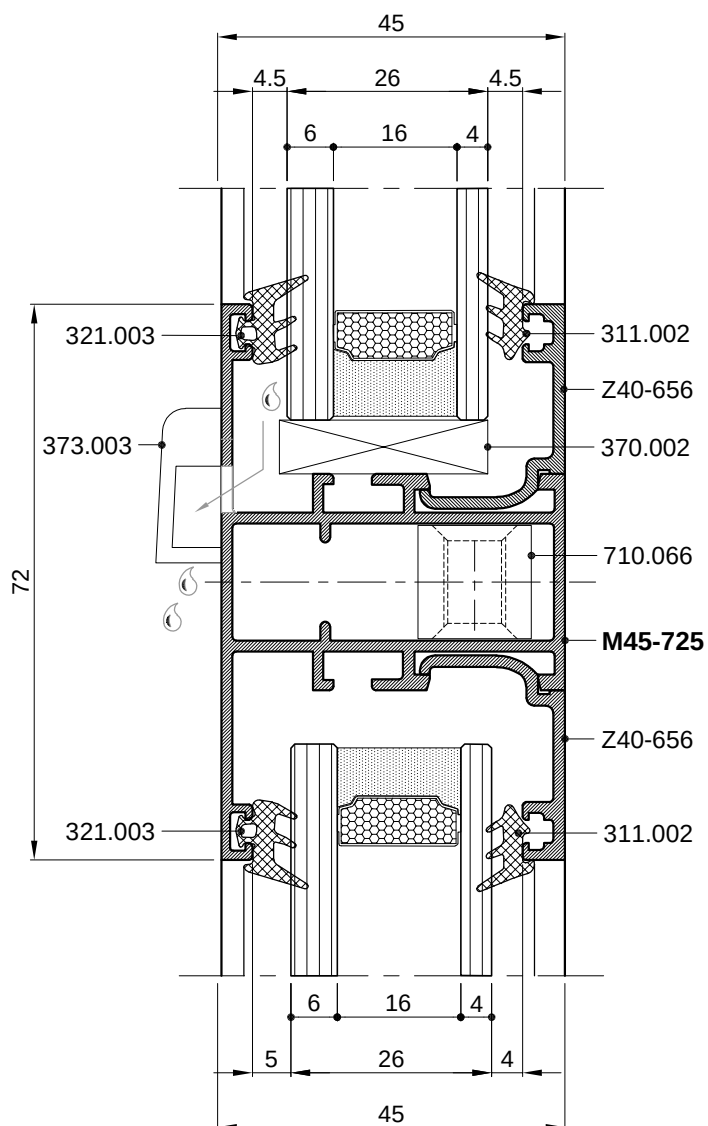
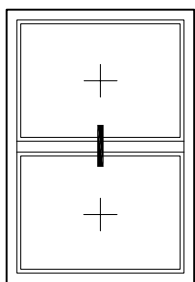




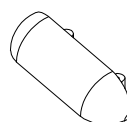
373.003
Maska za drenazni otvor.
Drainage slot mask.



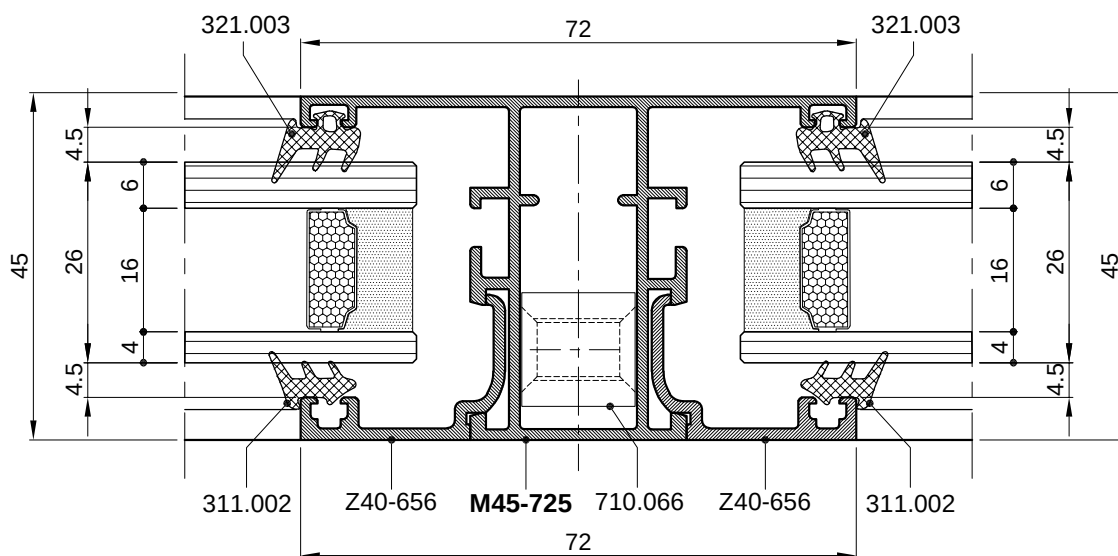
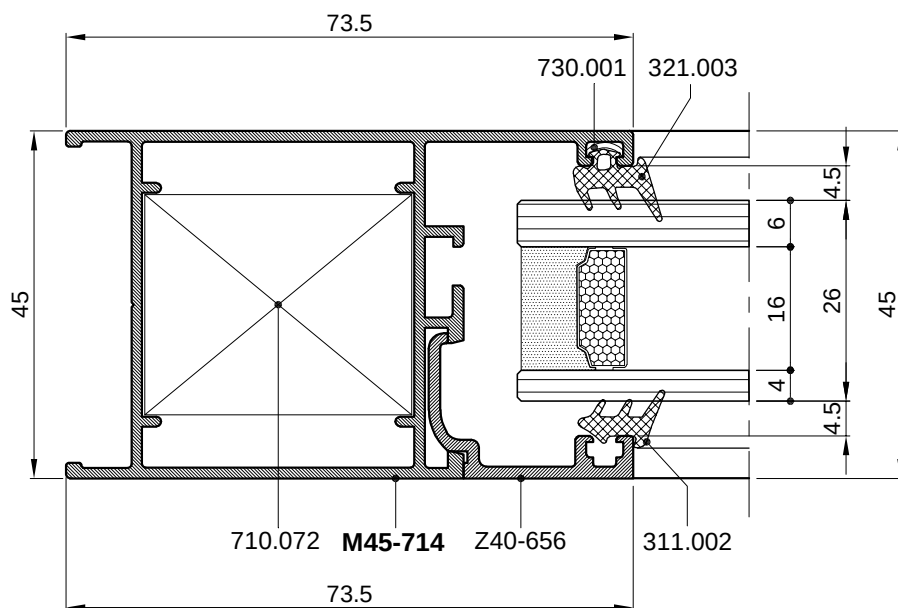
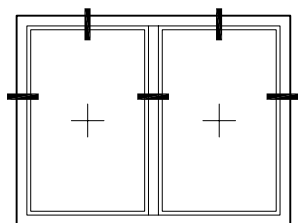
370.070
Maska sa klapnom za
drenazni otvor.
Drainage slot mask
with a flap.

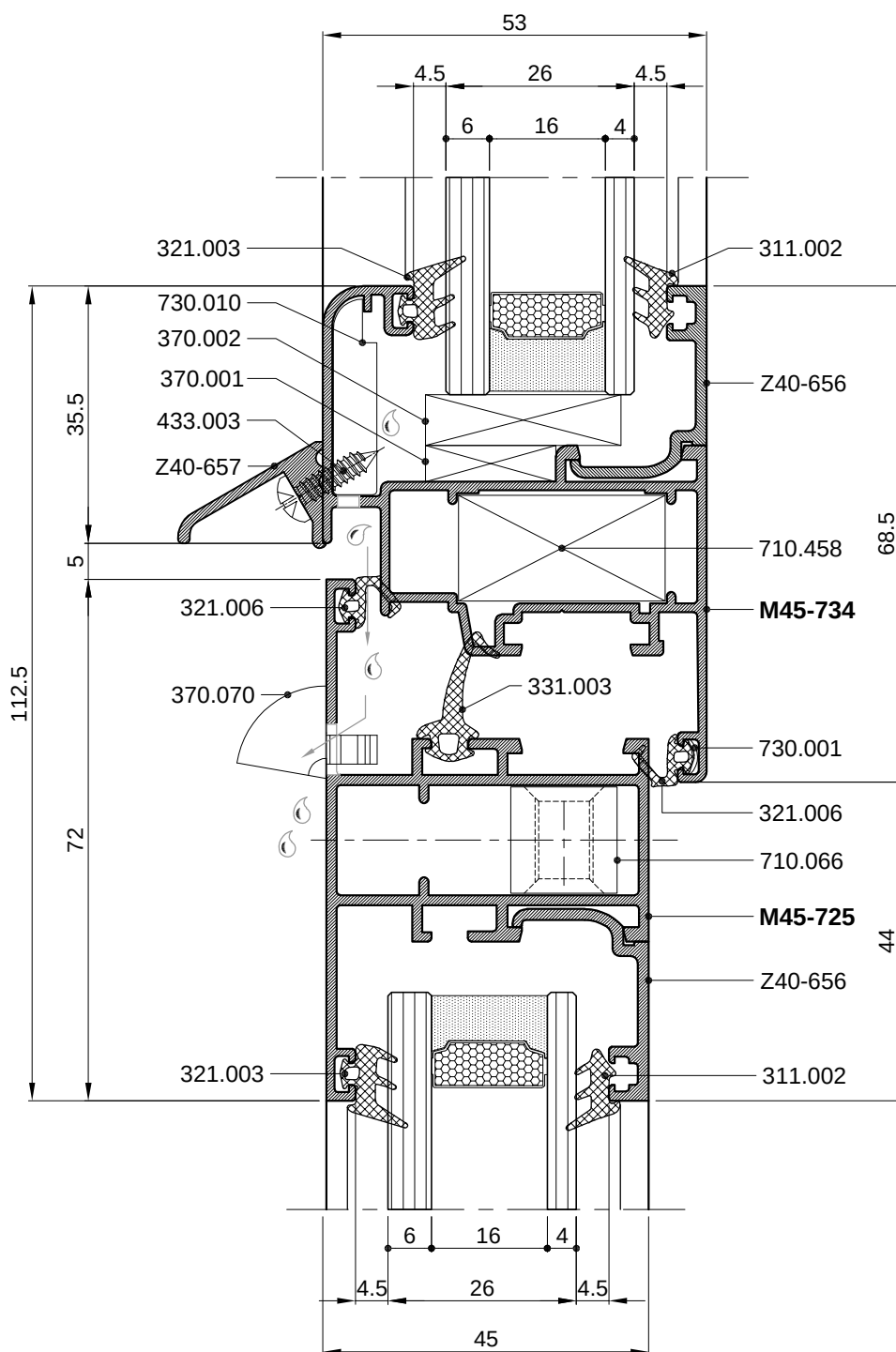
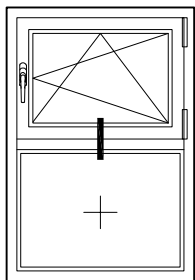


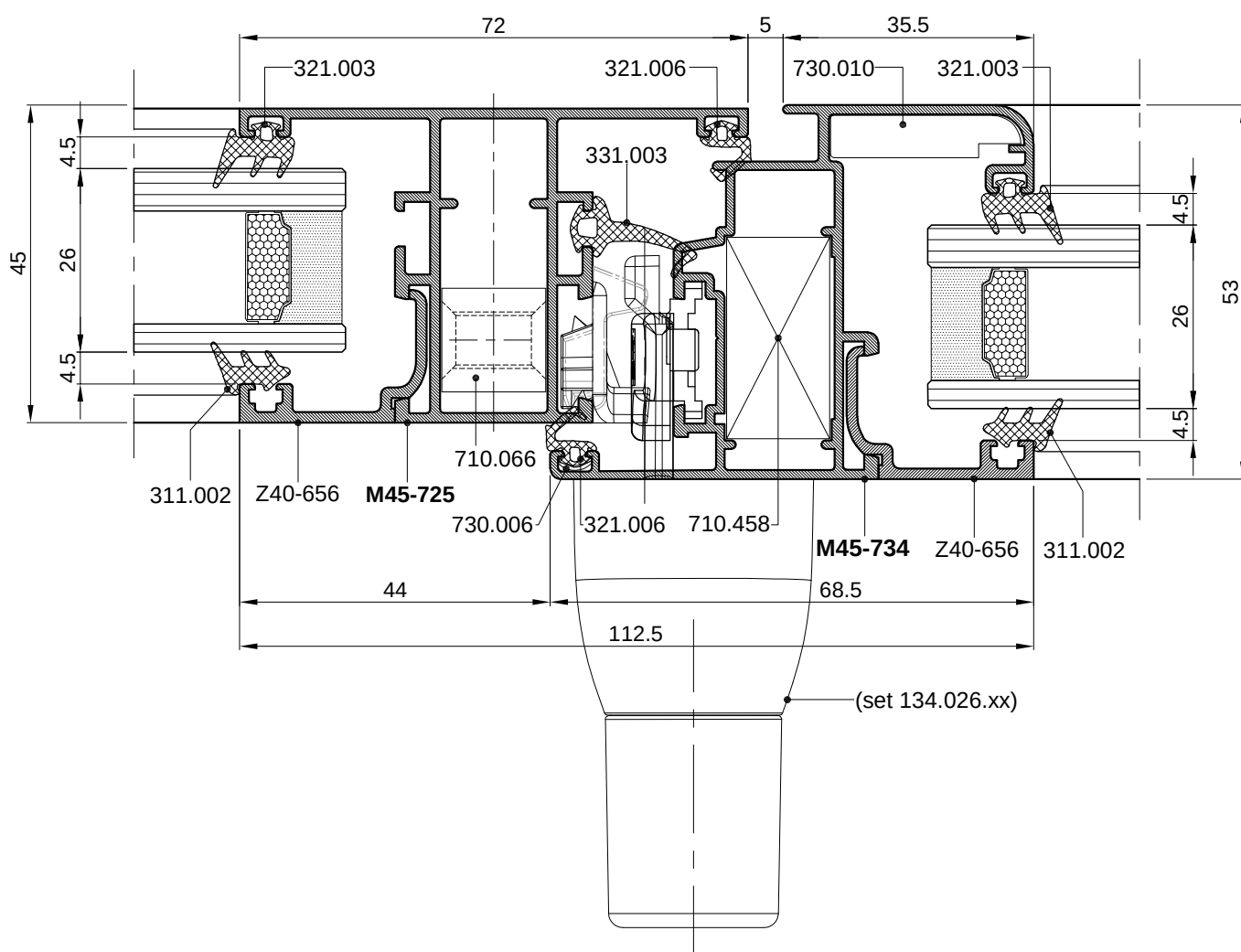
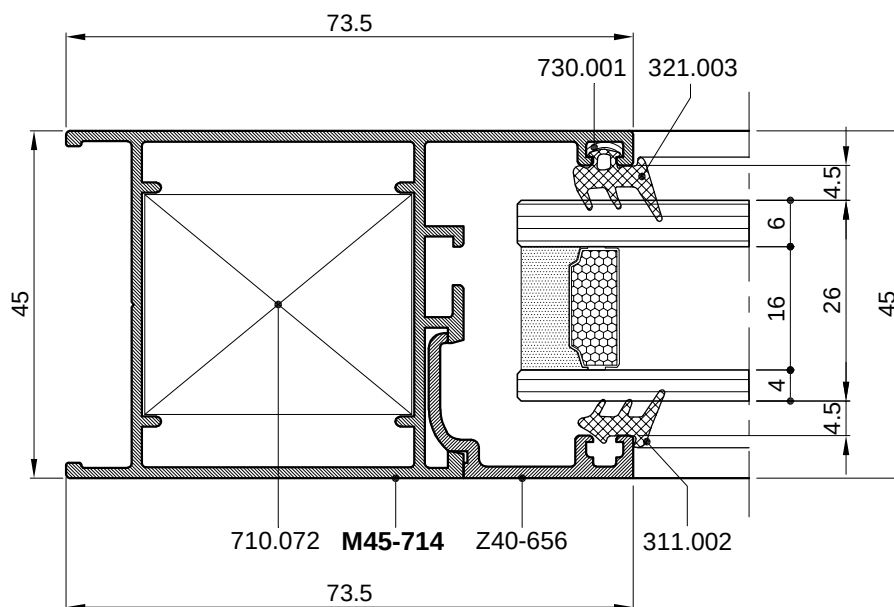
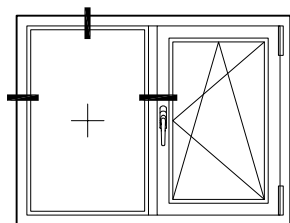
373.003
Maska za drenazni otvor.
Drainage slot mask.

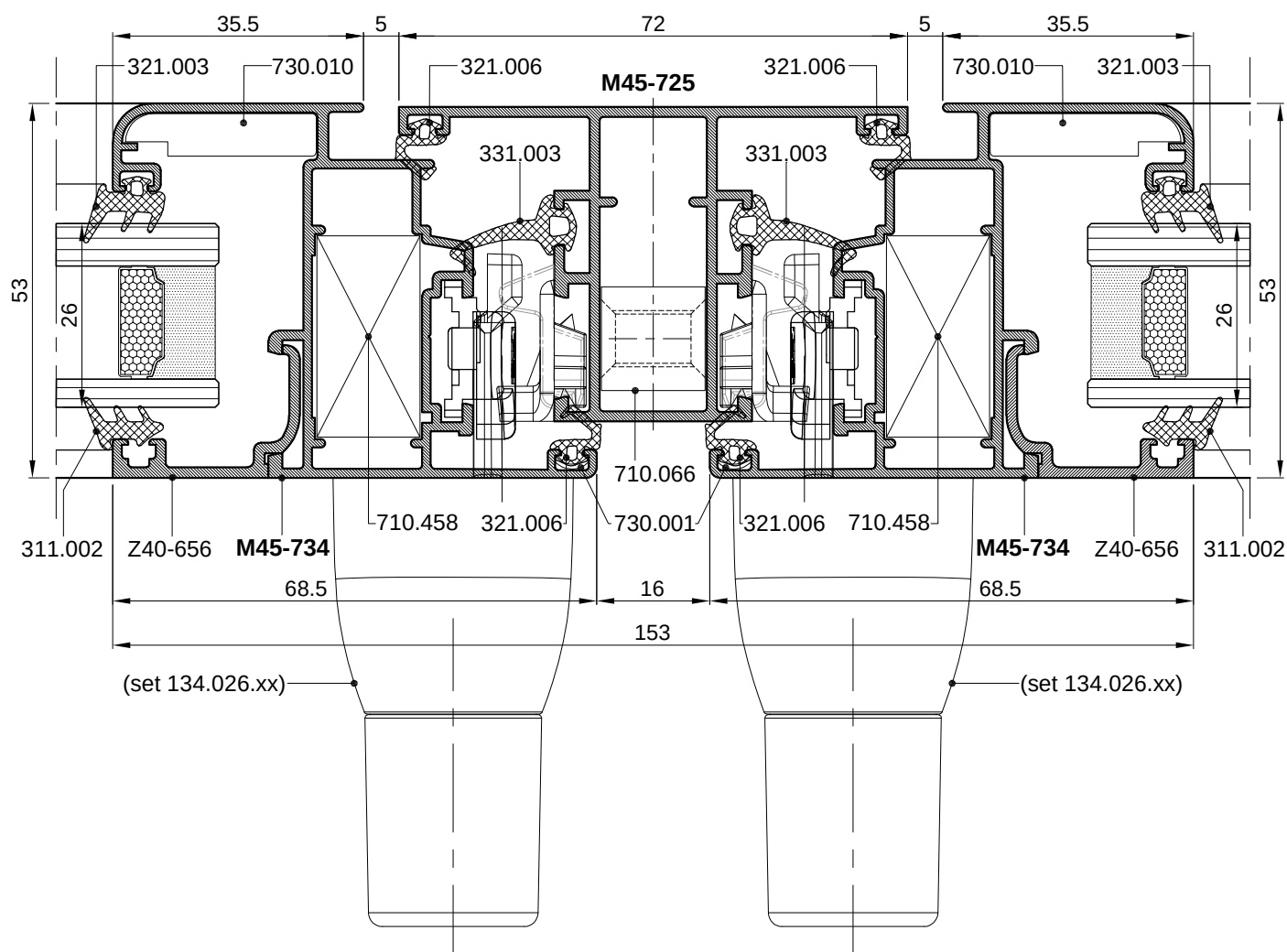
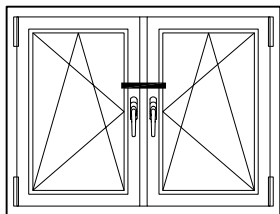


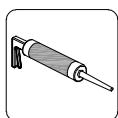
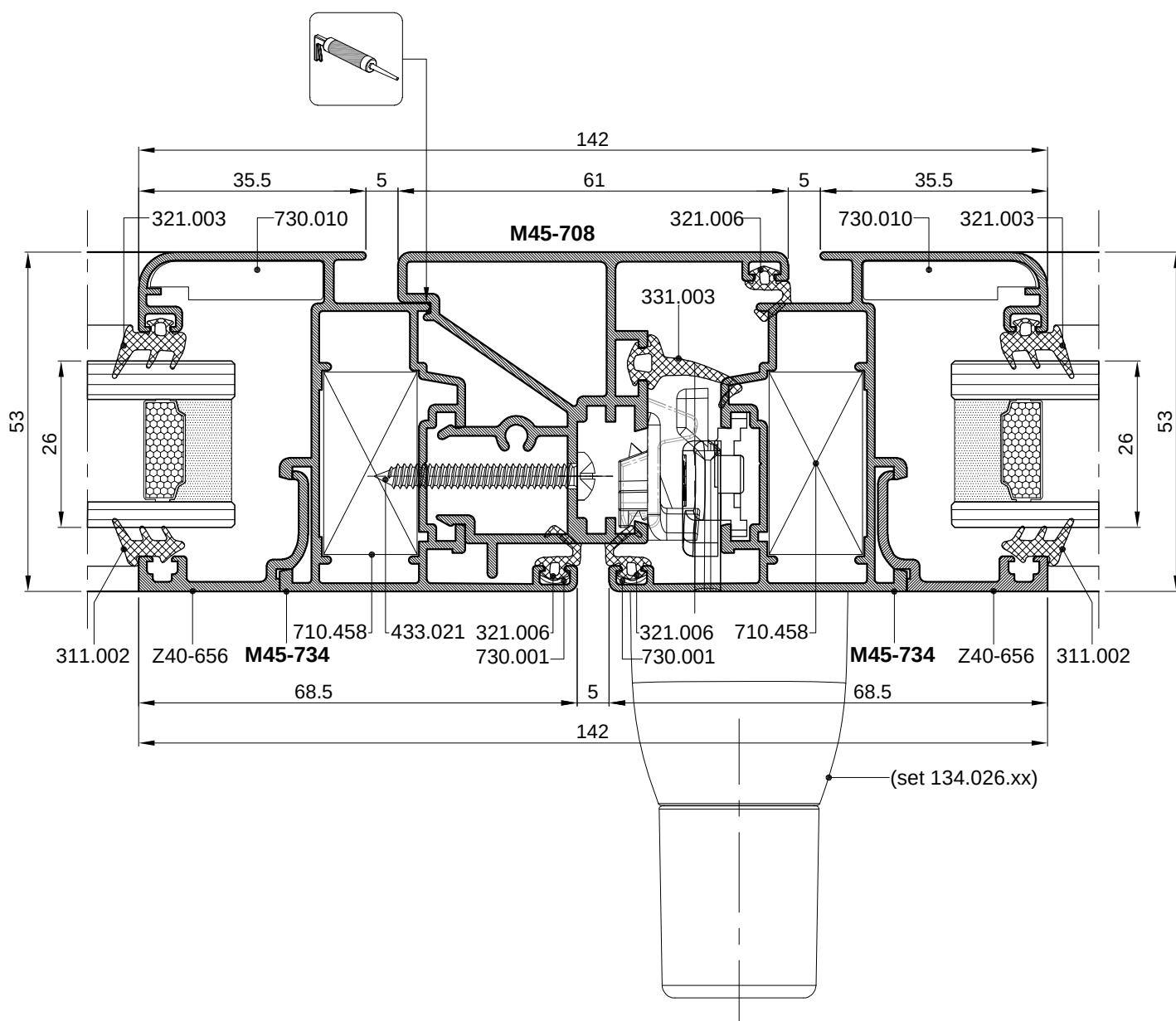
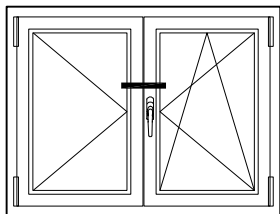
370.070
Maska sa klapnom za
drenazni otvor.
Drainage slot mask
with a flap.



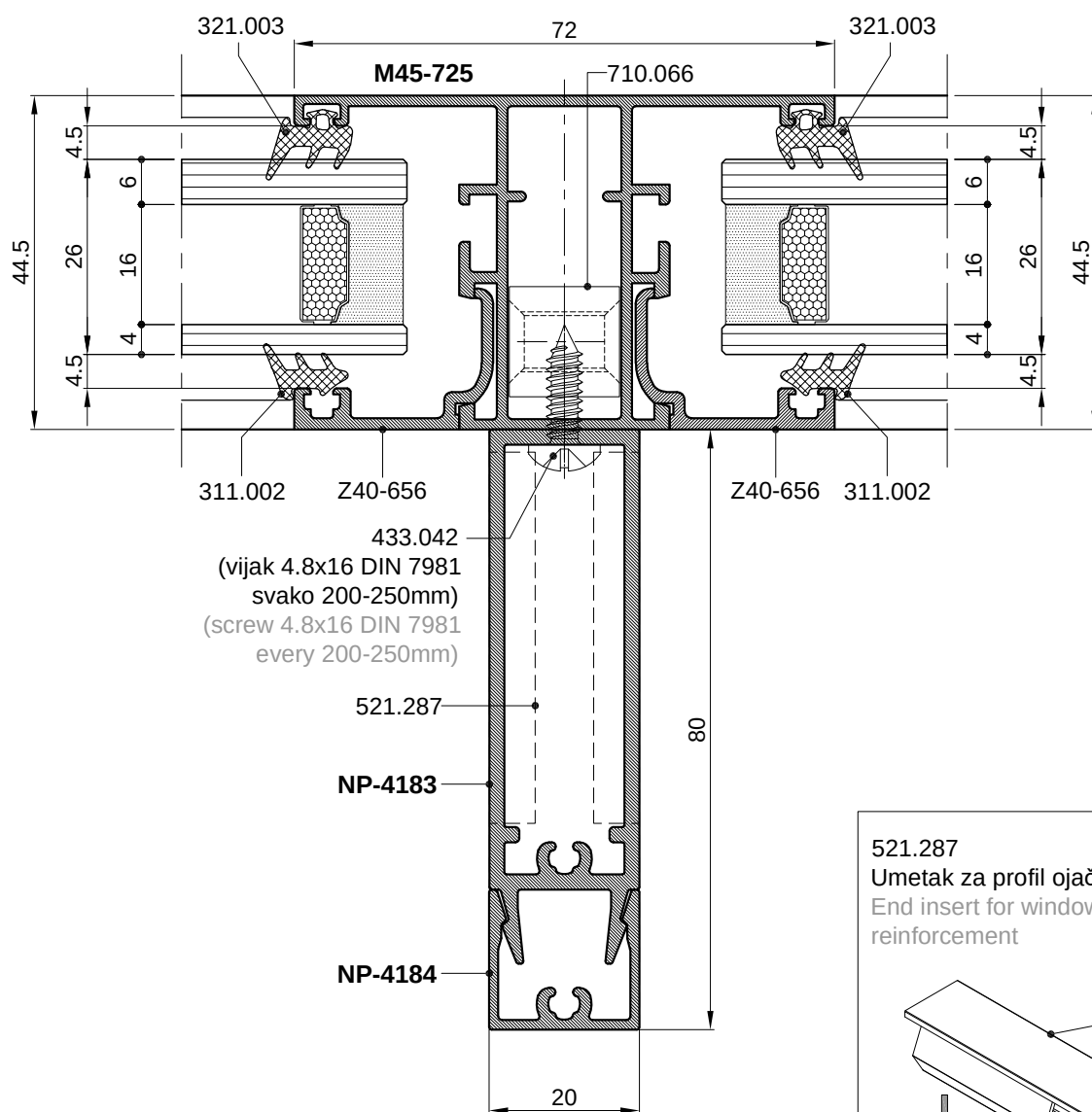
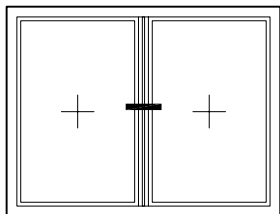




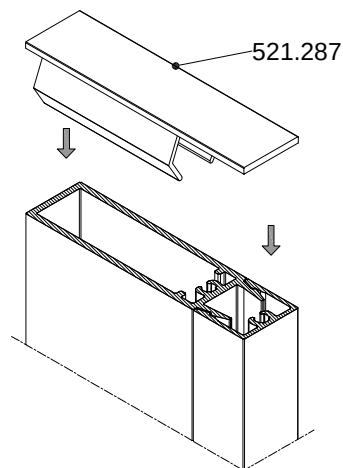




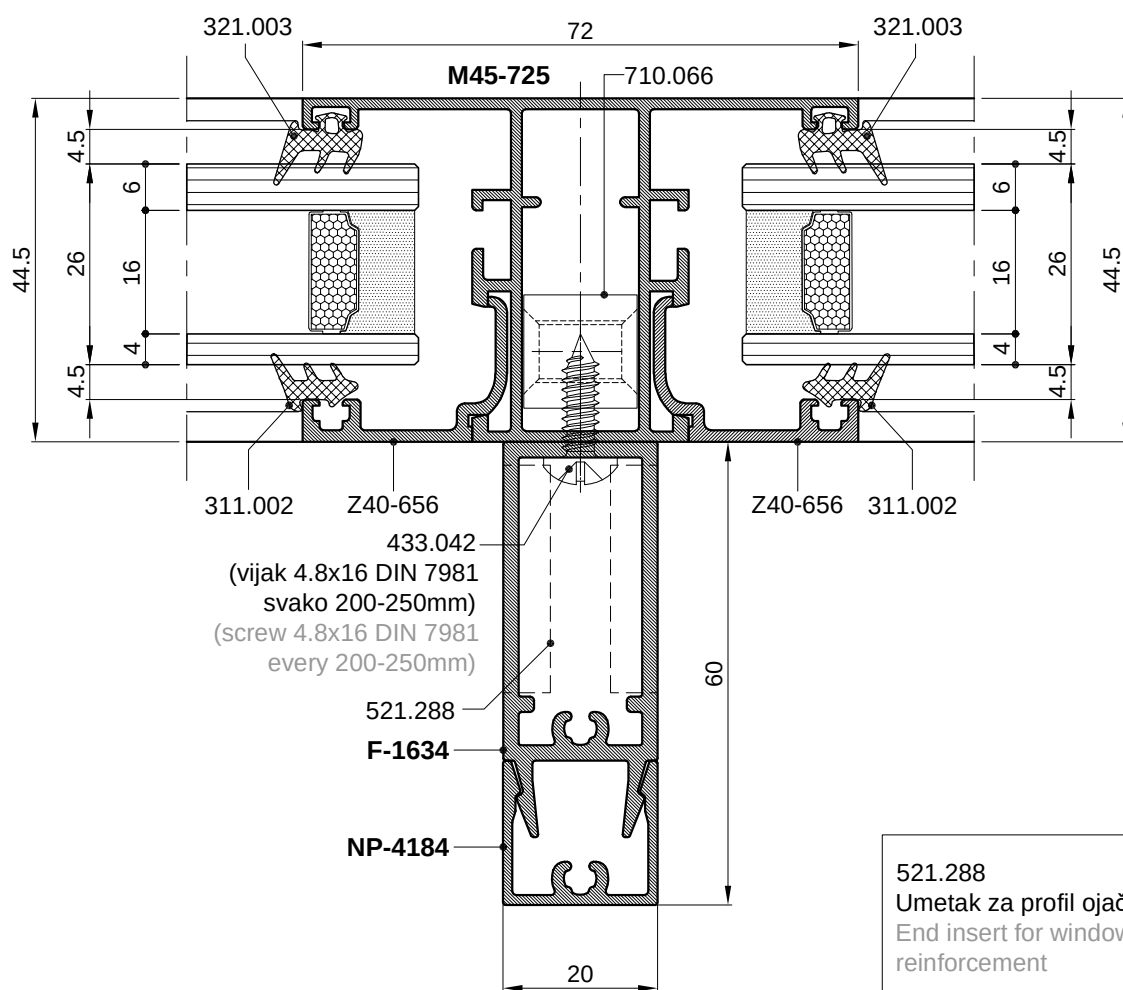
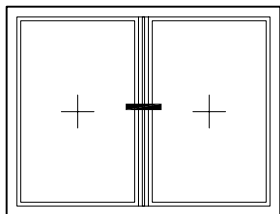
ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)



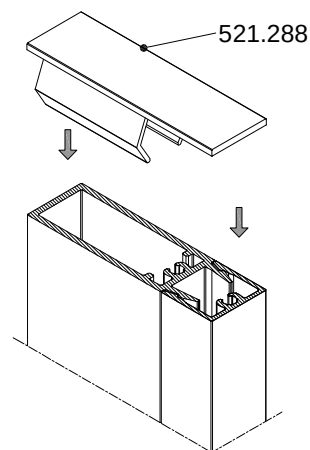
521.287
Umetak za profil ojačanja prečke
End insert for window crossbar
reinforcement



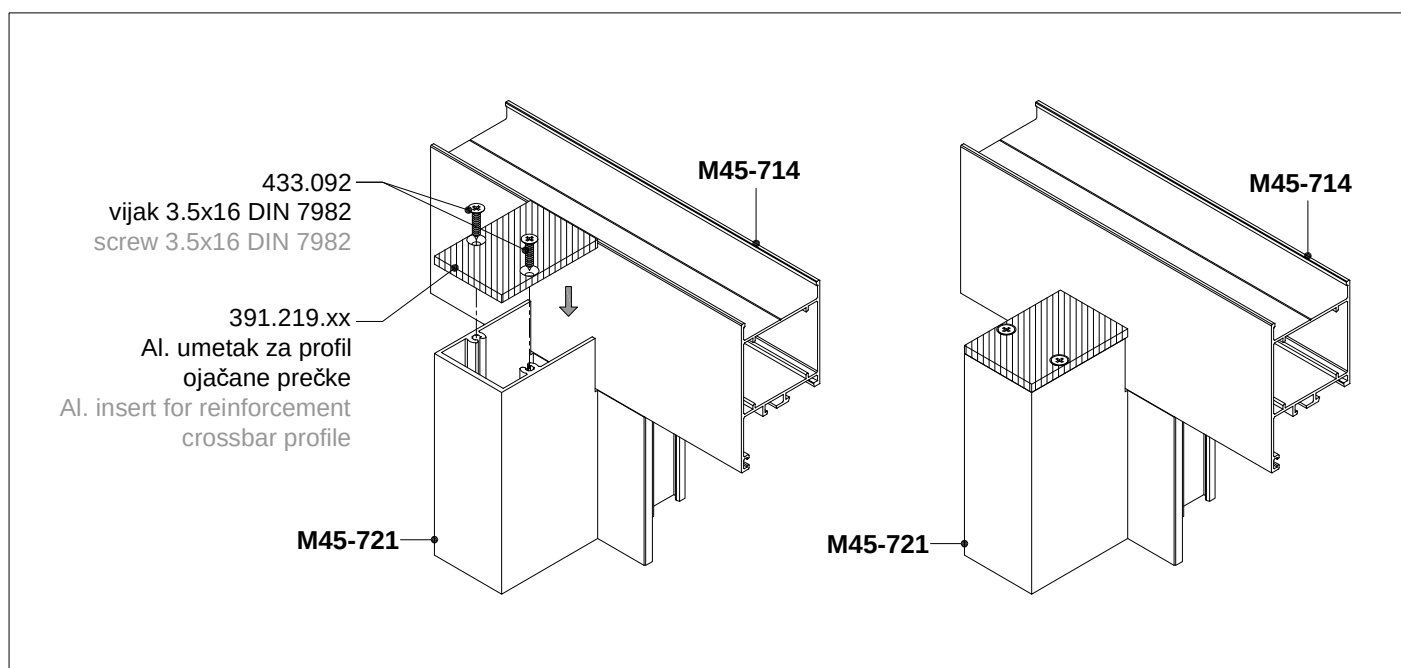
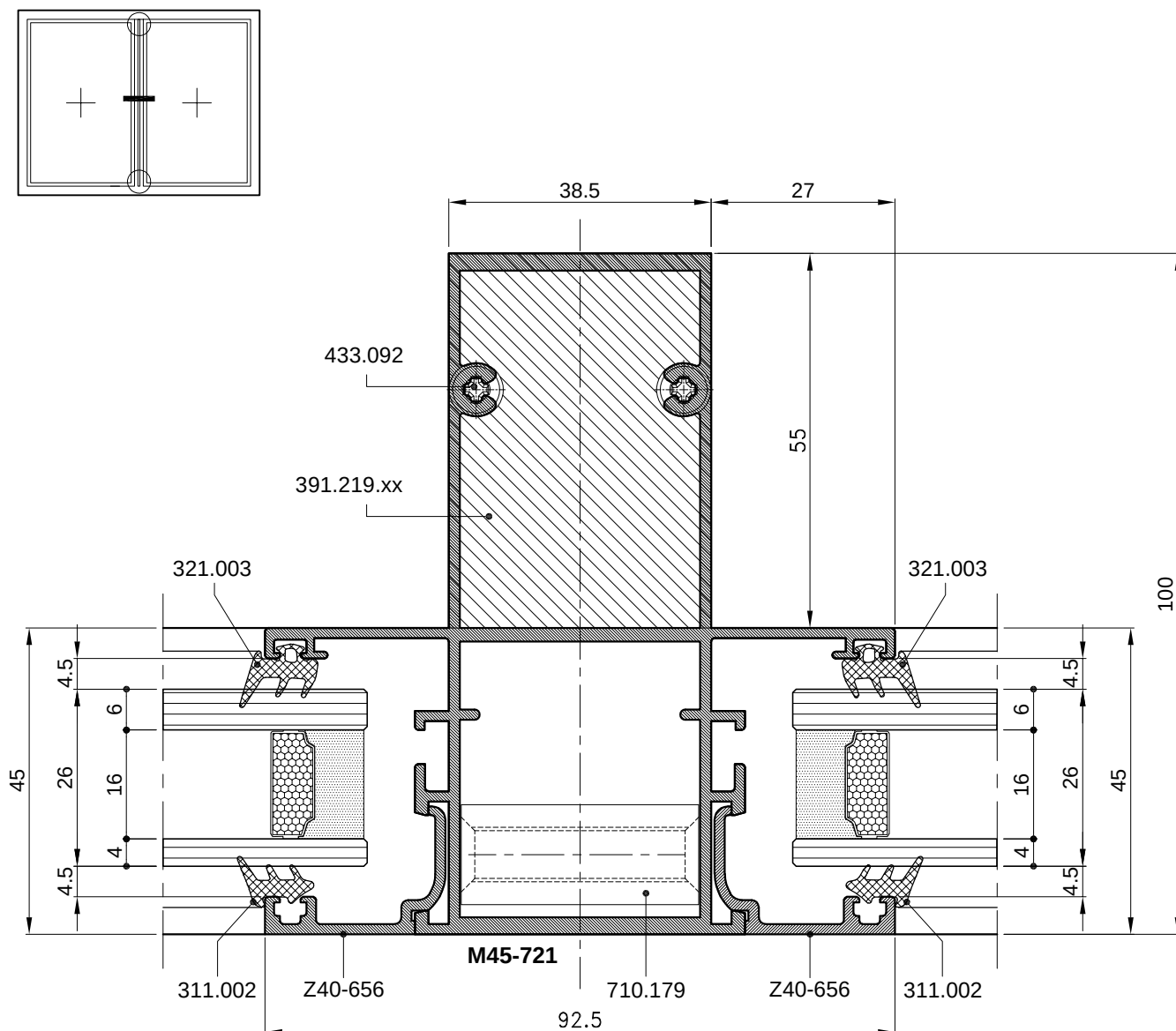
*Profil ojačanja može biti sa
unutarne ili vanjske strane.
The reinforcement profile can be place
on the inside or on the outside.

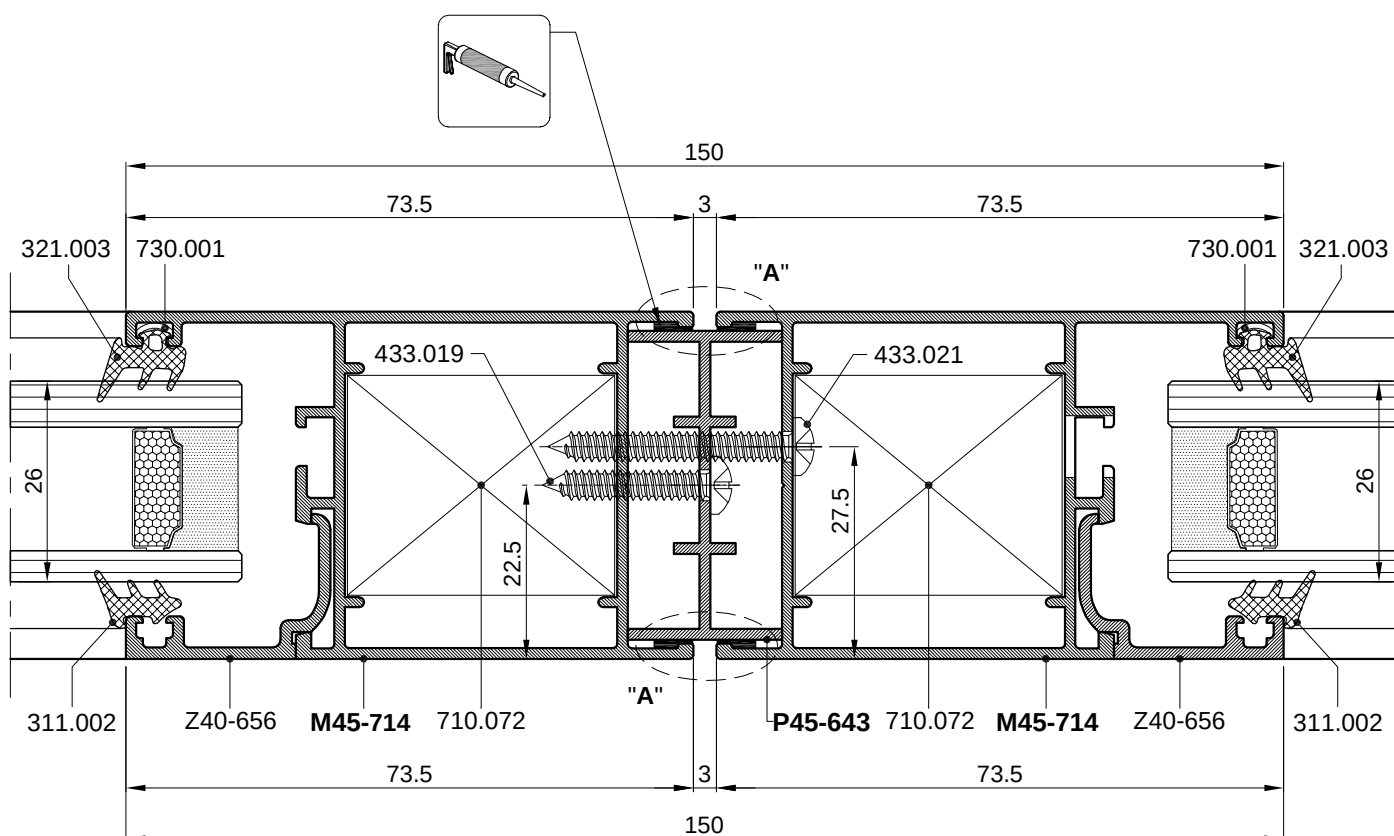
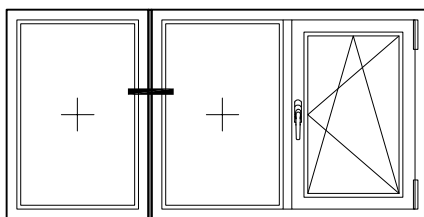


521.288
Umetak za profil ojačanja prečke
End insert for window crossbar
reinforcement



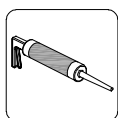
*Profil ojačanja može biti sa
unutarne ili vanjske strane.
The reinforcement profile can be place
on the inside or on the outside.



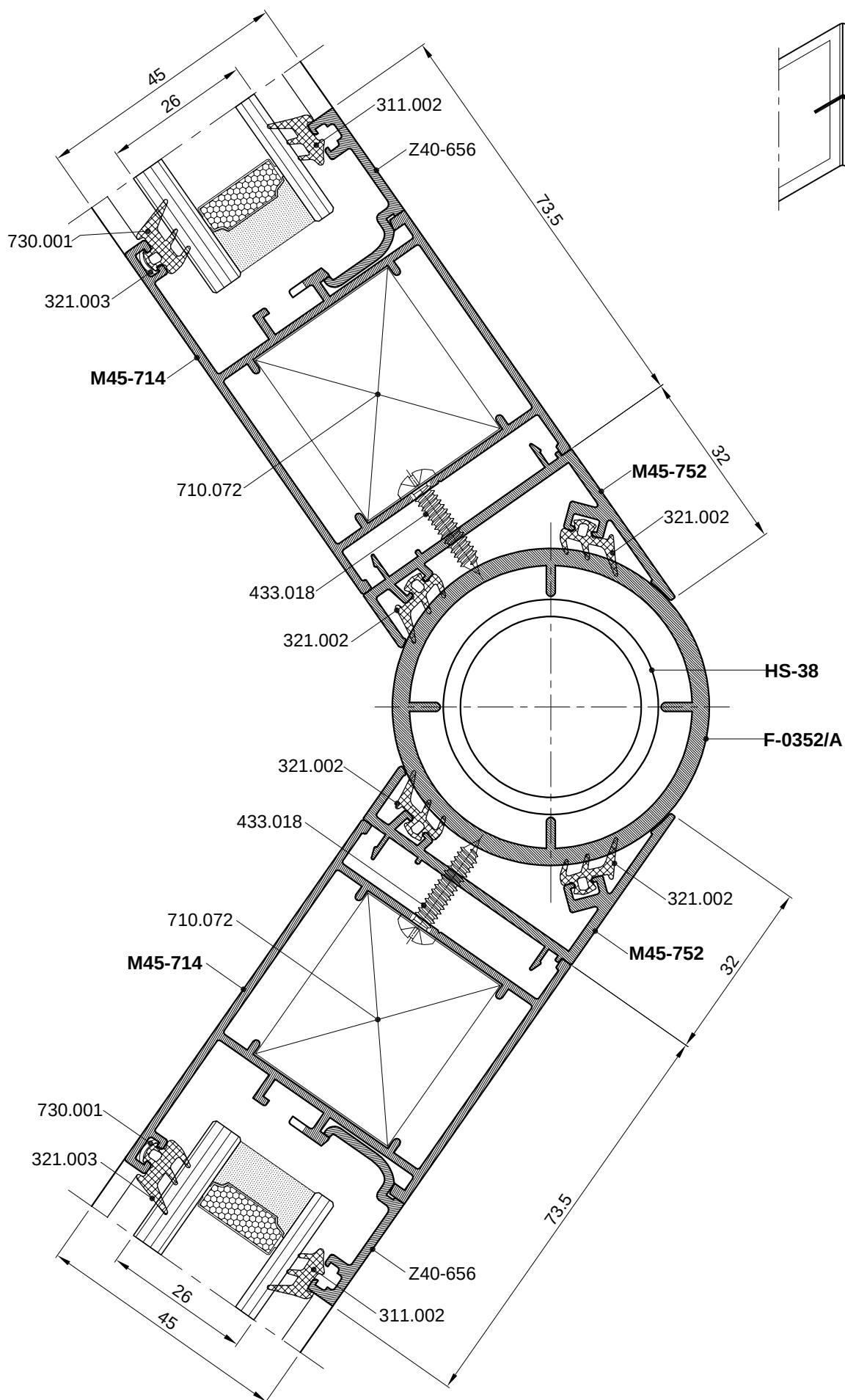


"A" - ispuniti ljepilom za metal
(cijelom dužinom profila)

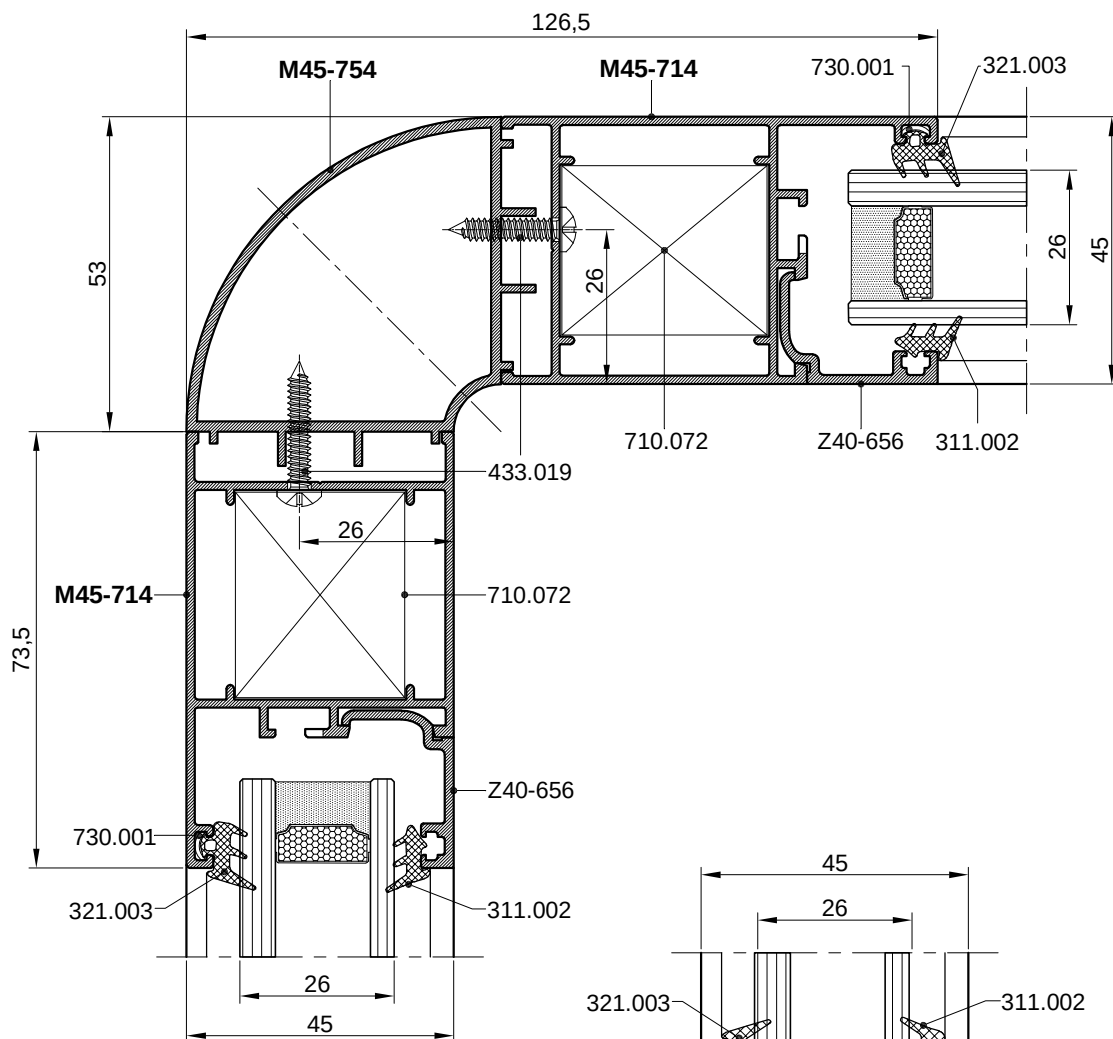
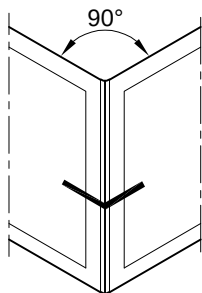
"A" - to be filled with metal glue
(throughout the length of the profile)



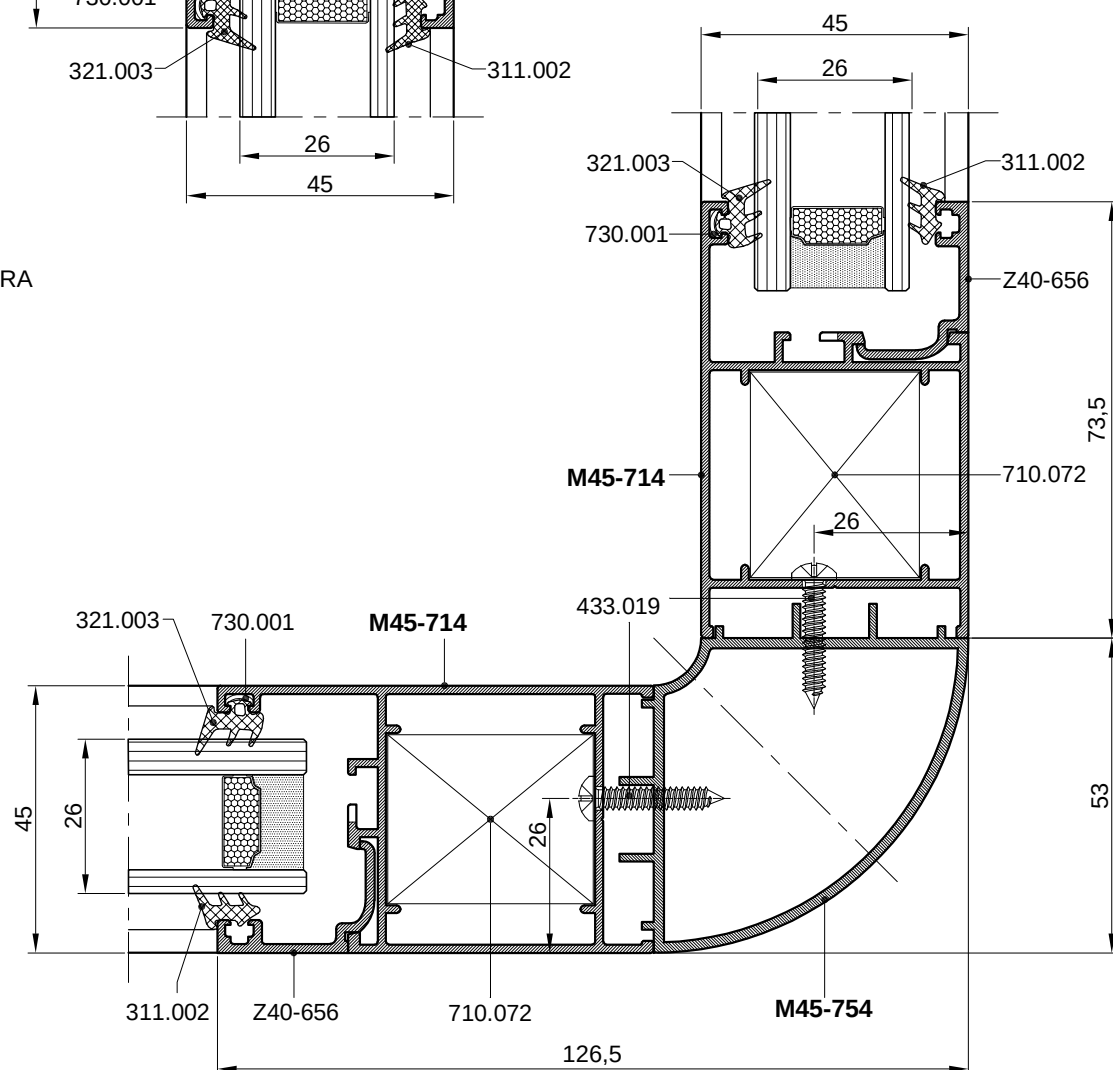
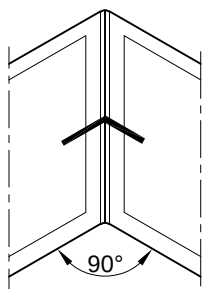
ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)

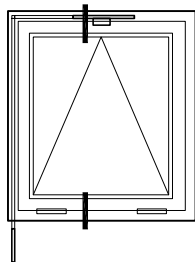


KUT PREMA VANI
OUTSIDE CORNER

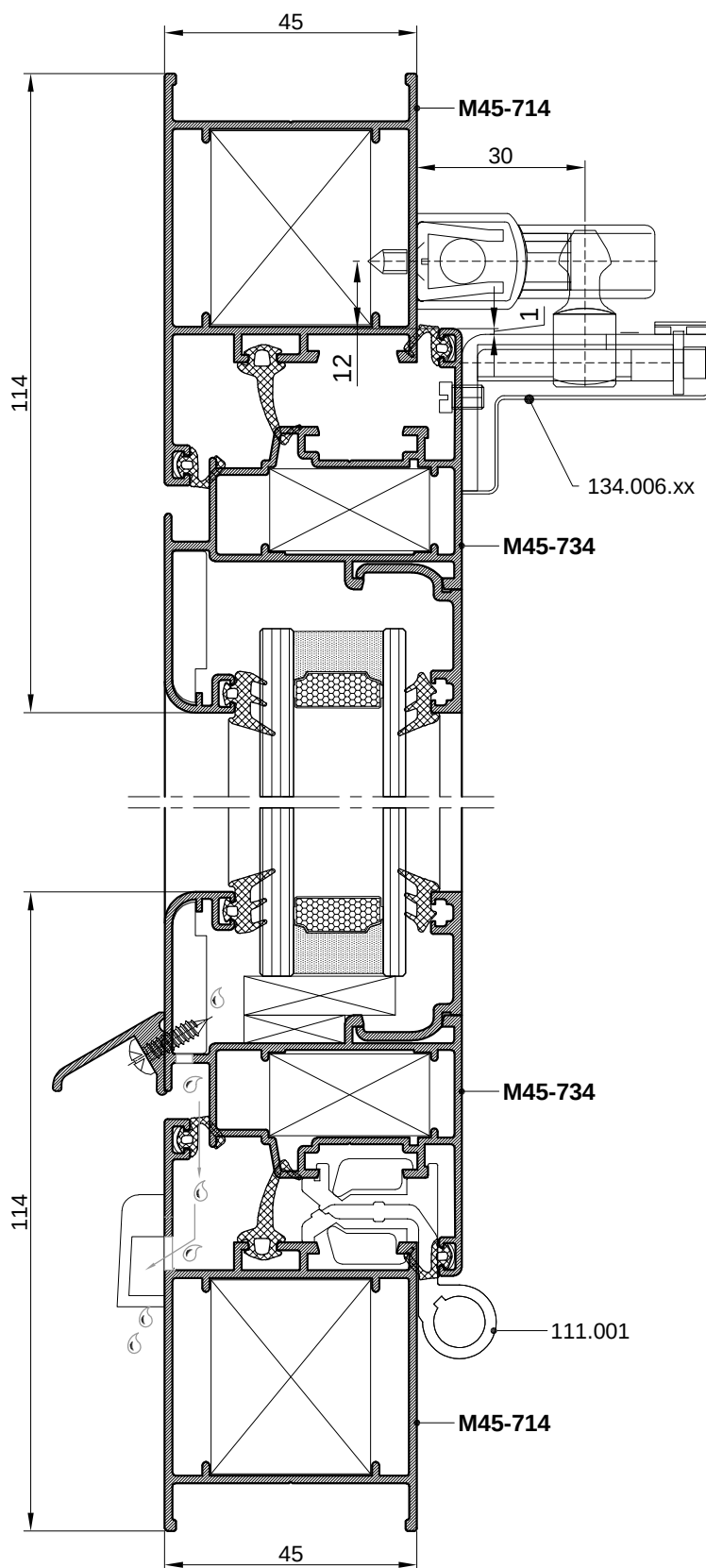
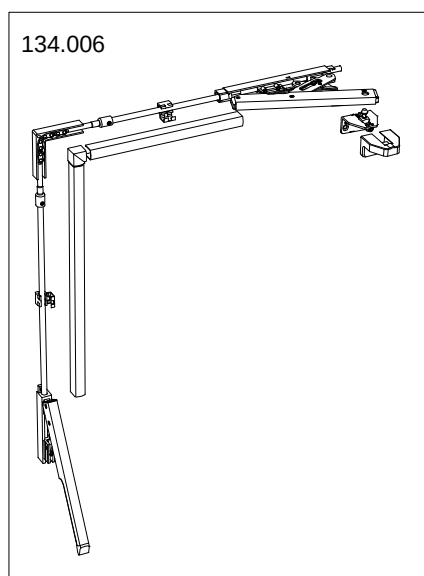


KUT PREMA UNUTRA
INSIDE CORNER

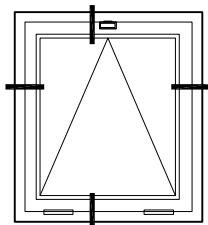




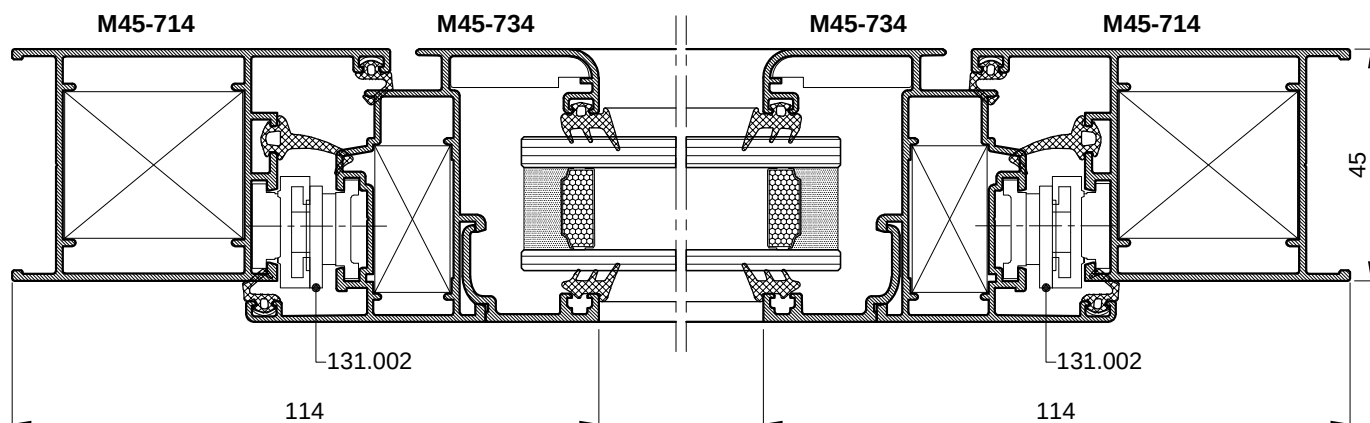
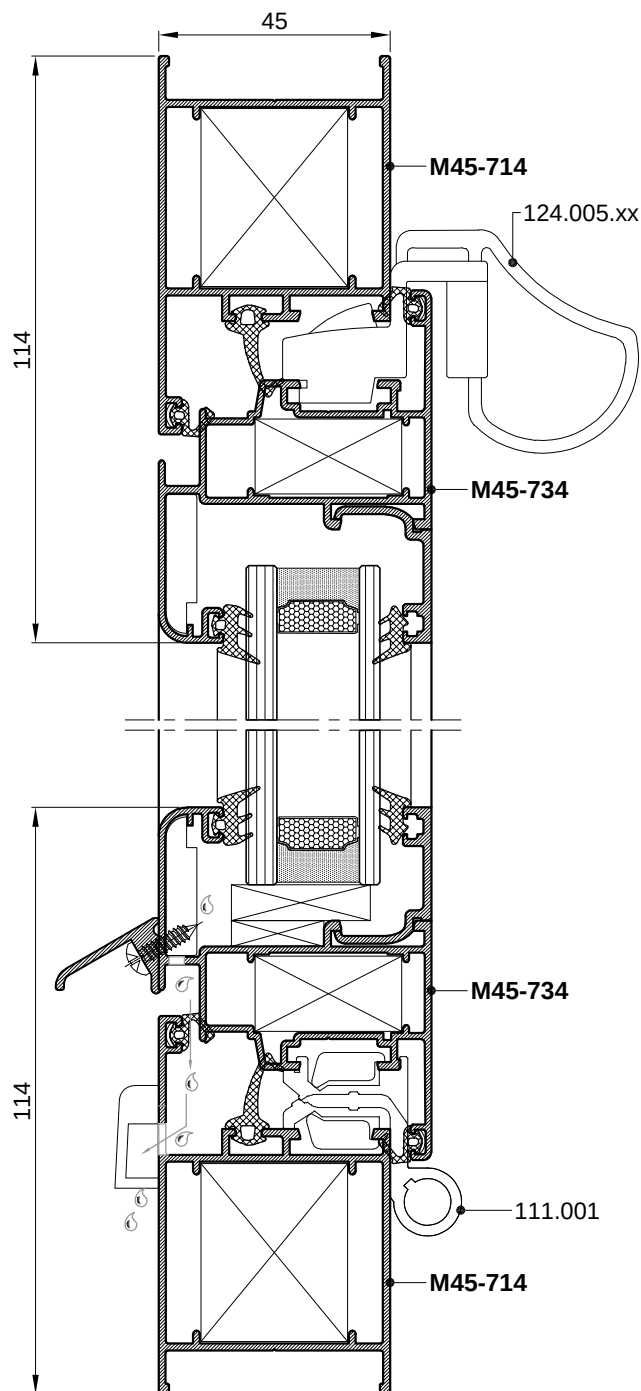
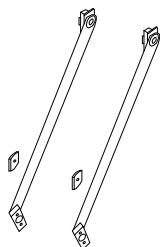
OTKLOPNI PROZOR - VENTUS sa ručkom za visinu - (134.006.xx)
TILT WINDOW - VENTUS with handle for height - (134.006.xx)



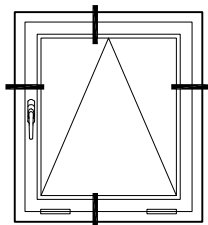
OTKLOPNI PROZOR - VENTUS
sa bravicom za zatvaranje (124.005.xx) i škarama (131.002)
TILT WINDOW - VENTUS
with lock for closing (124.005.xx) and friction stays (131.002)



131.002

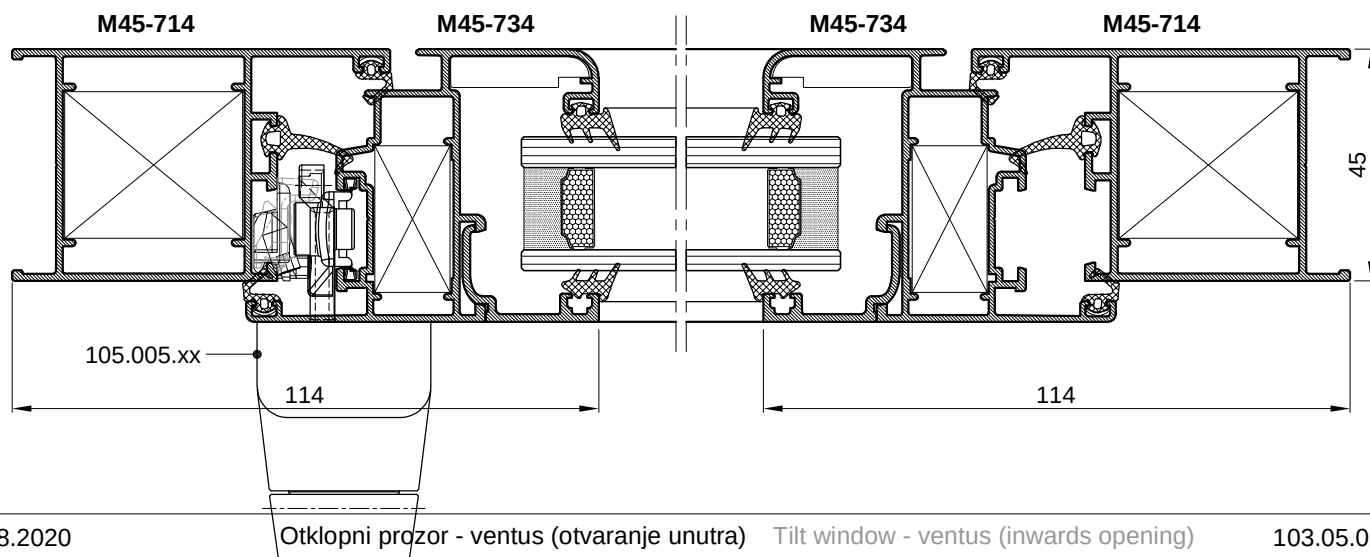
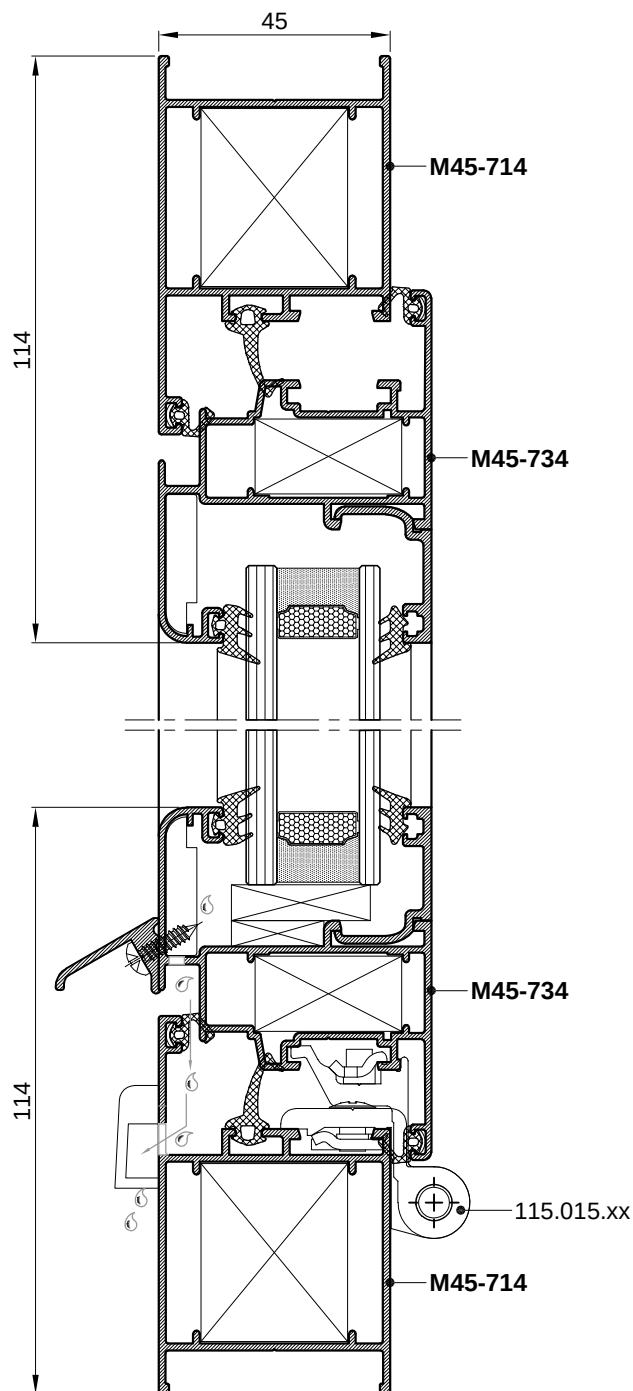
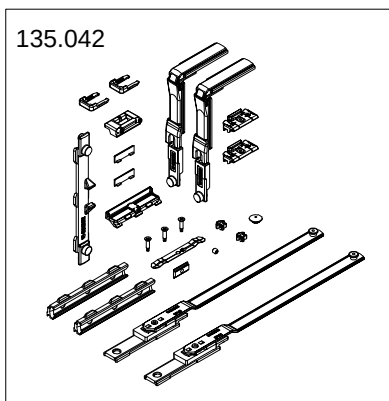


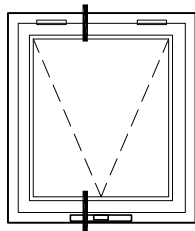
OTKLOPNI PROZOR - VENTUS
sa ručkom na vertikali
TILT WINDOW - VENTUS
with the handle on the side



(Mehanizam za otklopni prozor - ventus
sa ručkom na vertikali - Giesse)
(Mechanism for tilt window (ventus)
with the handle on the side - Giesse)

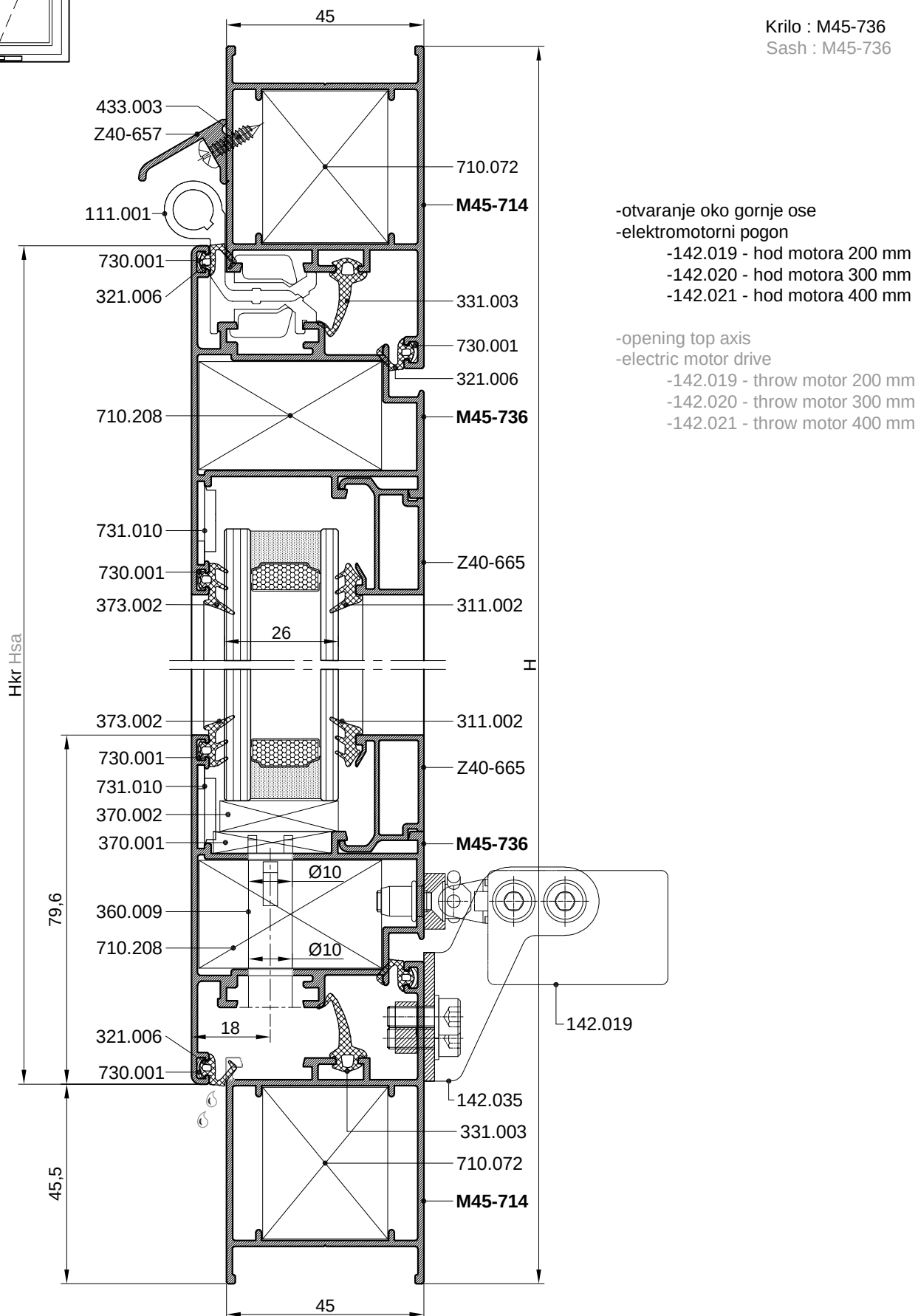
135.042

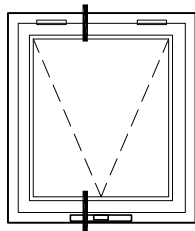




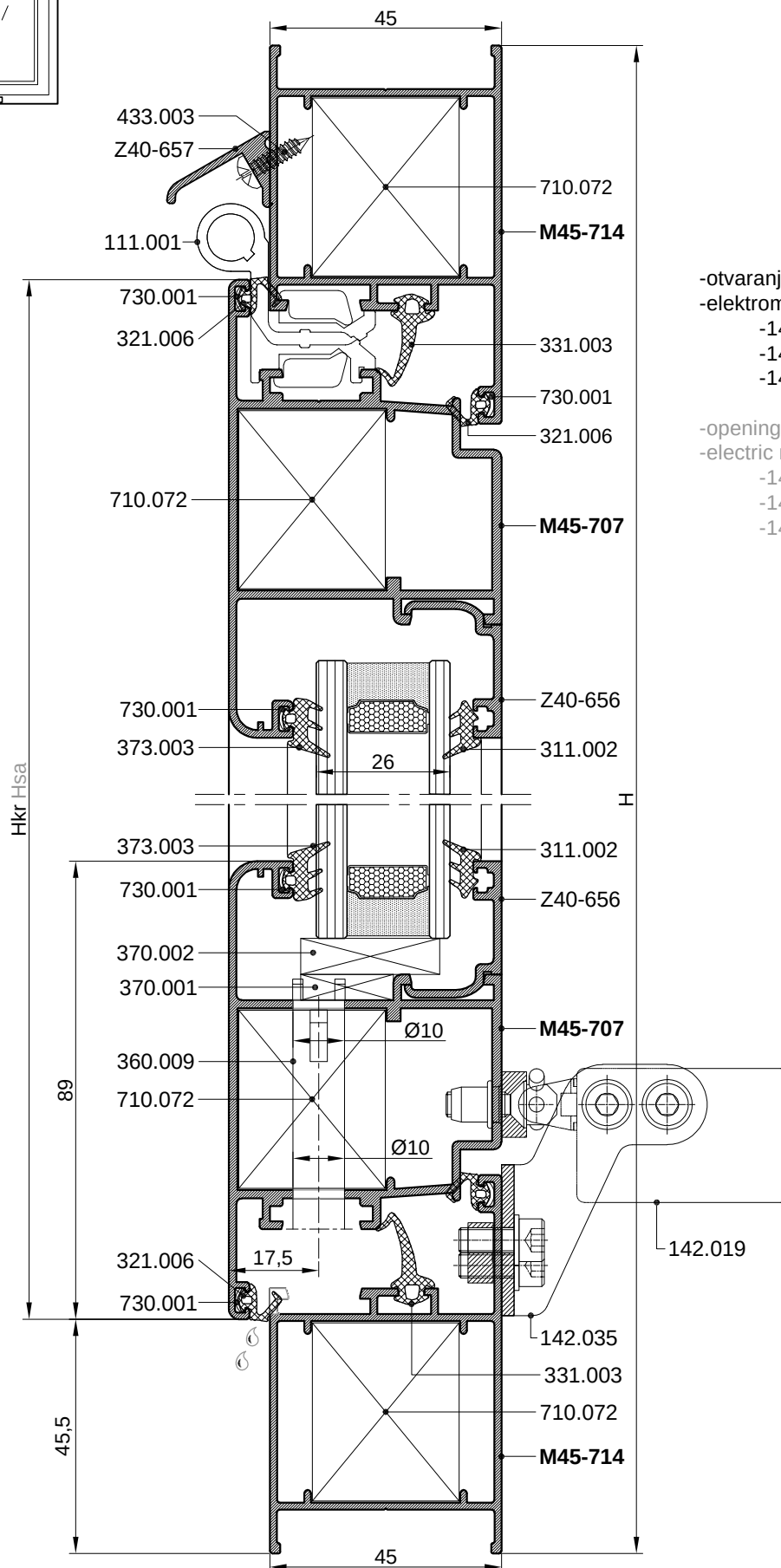
OTKLOPNI PROZOR - VENTUS sa elektromotorom - otvaranje vani
TILT WINDOW - VENTUS with electric motor - outside opening

Krilo : M45-736
Sash : M45-736





OTKLOPNI PROZOR - VENTUS sa elektromotorom - otvaranje vani
TILT WINDOW - VENTUS with electric motor - outside opening



Krilo : M45-707
Sash : M45-707

-otvaranje oko gornje ose
-elektromotorni pogon
-142.019 - hod motora 200 mm
-142.020 - hod motora 300 mm
-142.021 - hod motora 400 mm

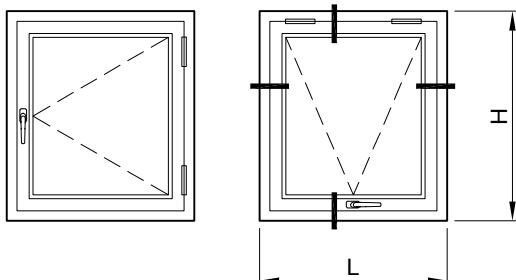
-opening top axis
-electric motor drive
-142.019 - throw motor 200 mm
-142.020 - throw motor 300 mm
-142.021 - throw motor 400 mm

Jednokrilni prozor:

- otvaranje vani oko gornje vodoravne ose
- otvaranje vani, zaokretno oko okomite ose

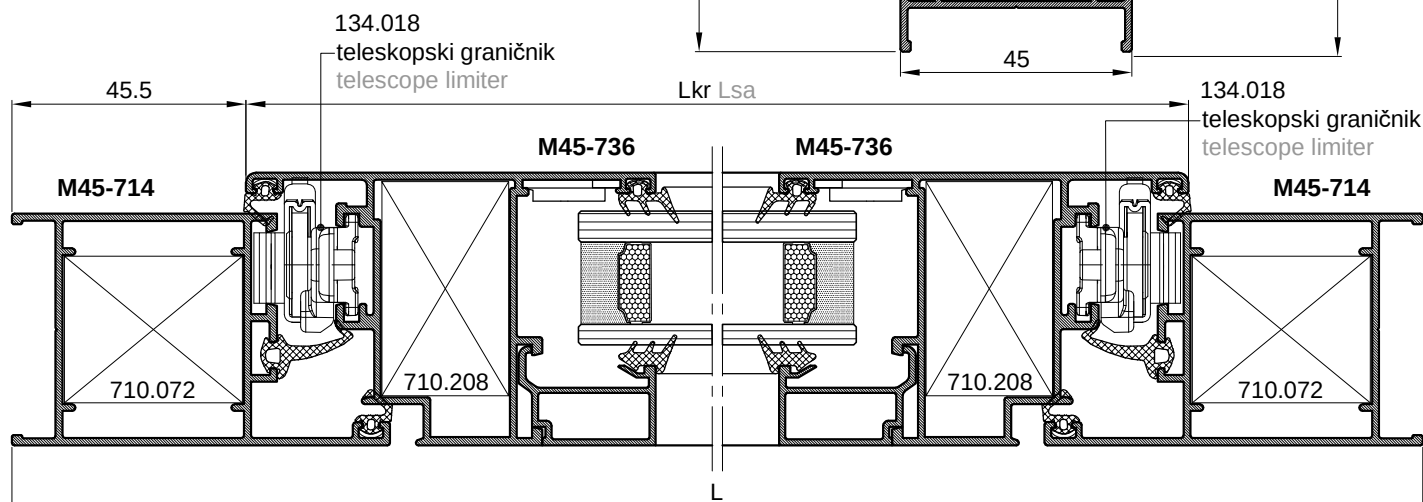
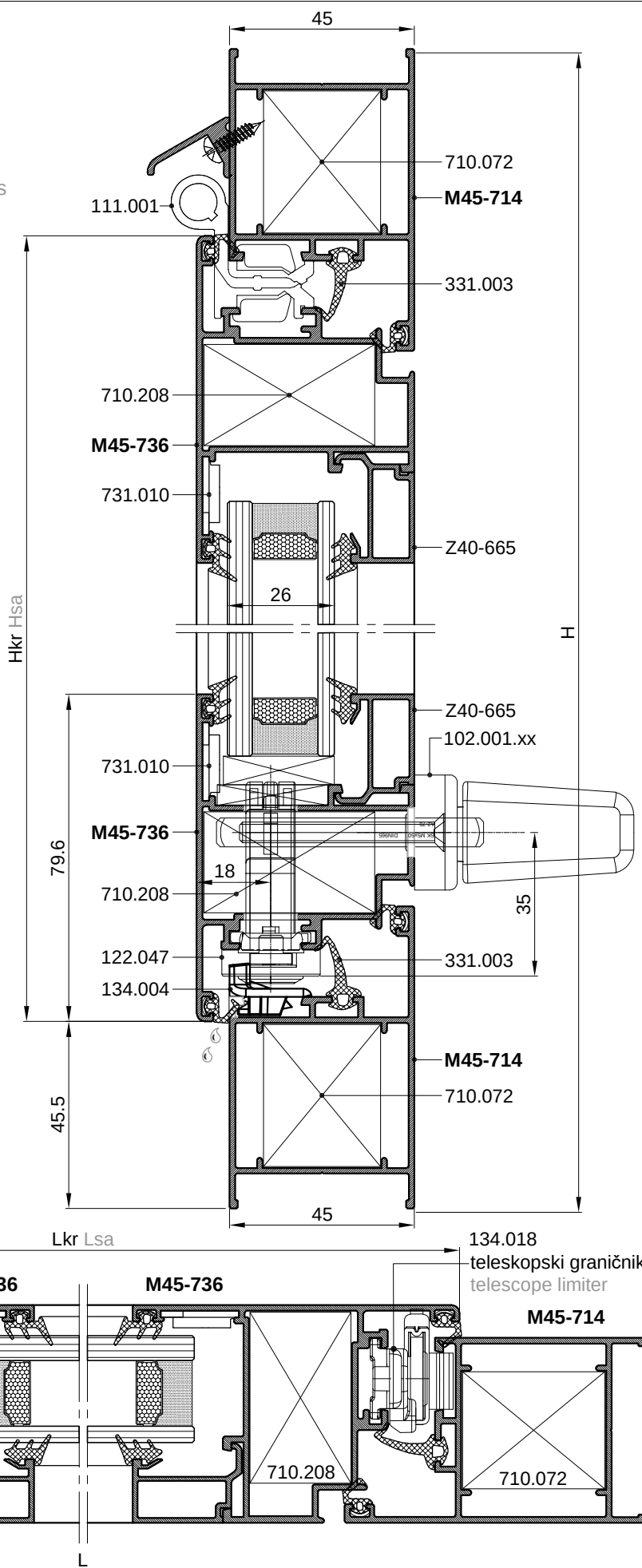
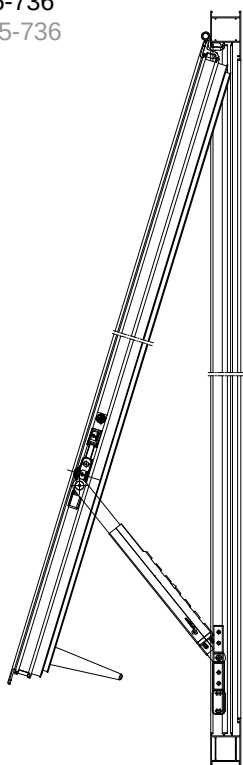
Single casement window:

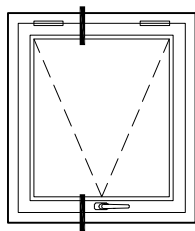
- outside opening around the top horizontal axis
- outside opening, turn around the vertical axis



Krilo : M45-736

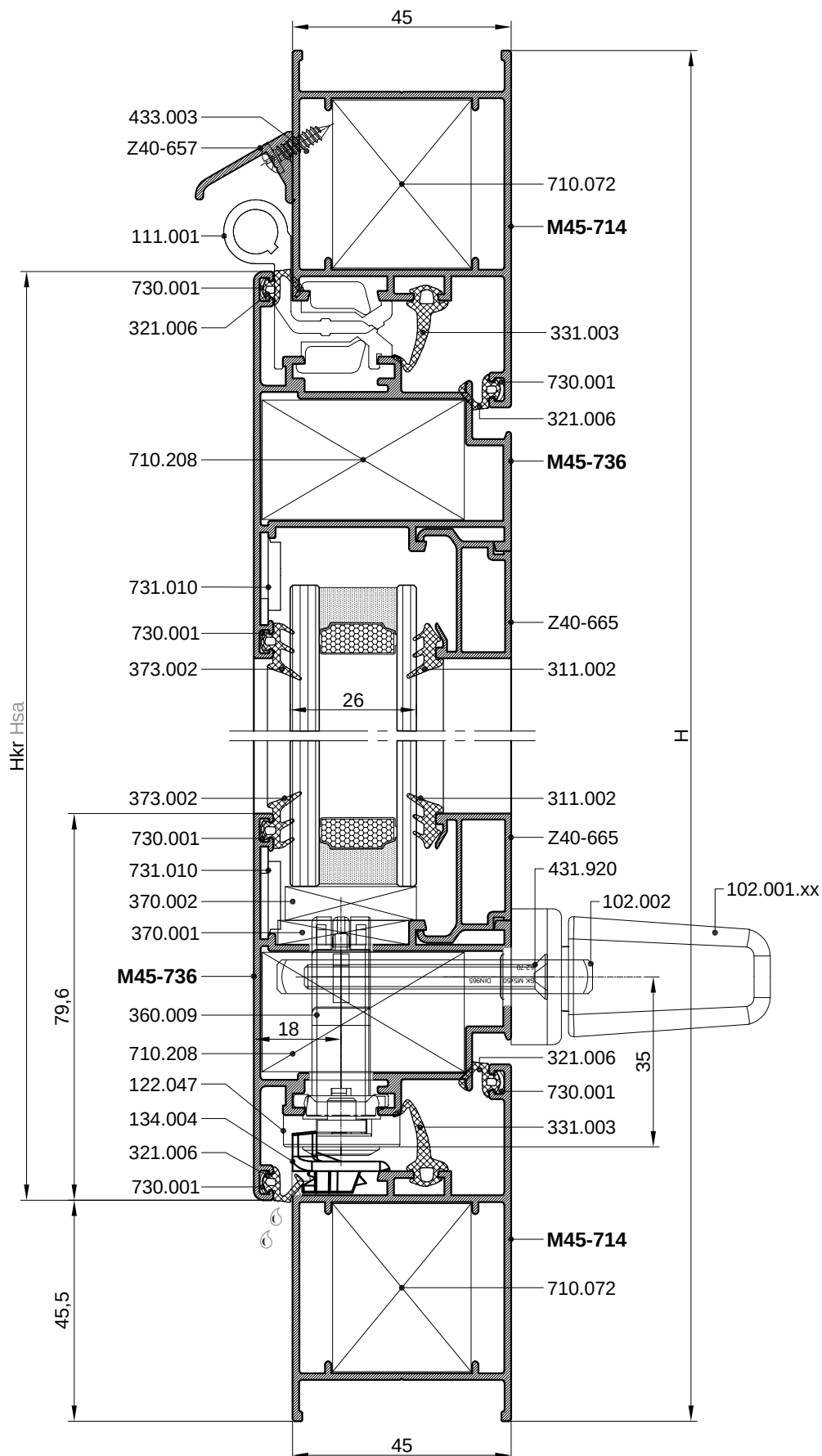
Sash : M45-736



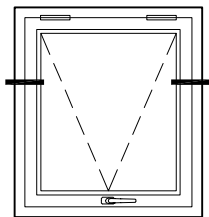


Krilo : M45-736
Sash : M45-736

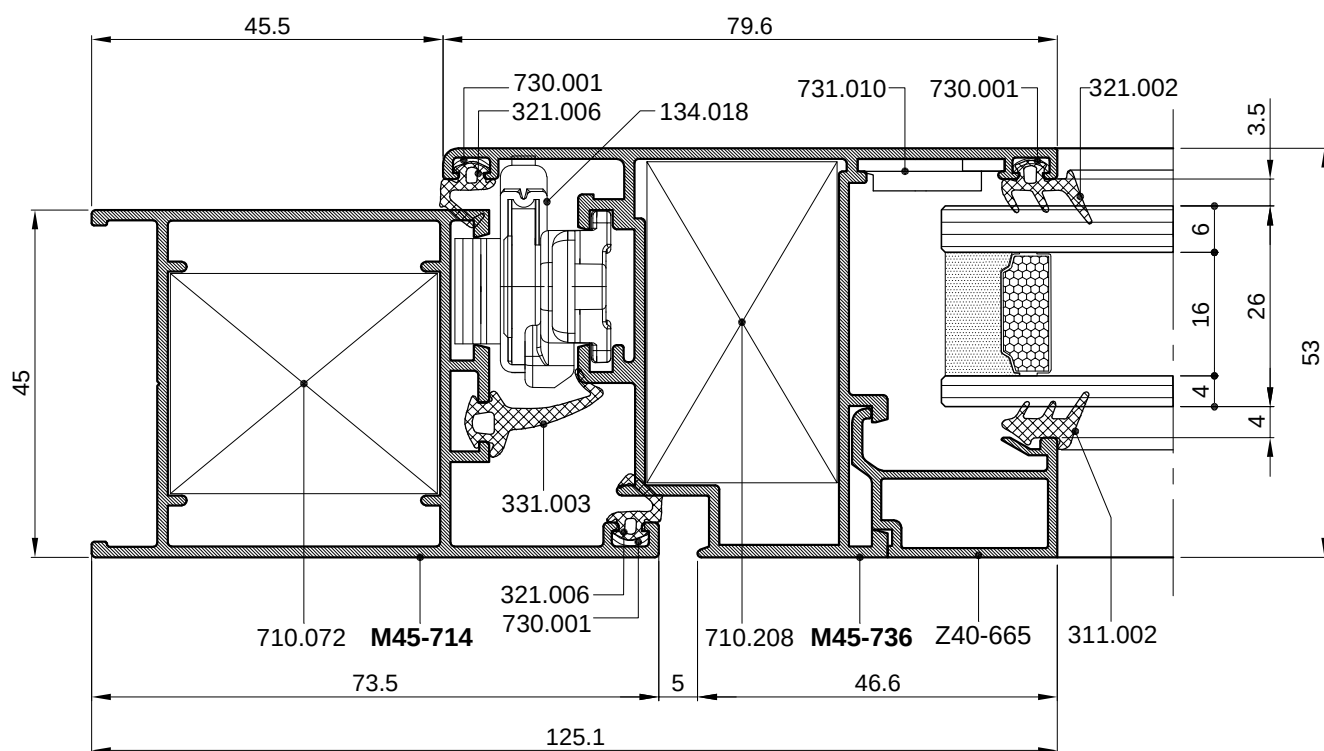
OTKLOPNI PROZOR - VENTUS - otvaranje vani oko gornje vodoravne ose
TILT WINDOW - VENTUS - outside opening around the top horizontally axis

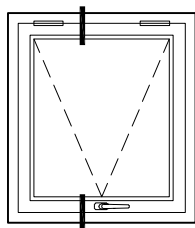


OTKLOPNI PROZOR - VENTUS - otvaranje vani oko gornje vodoravne ose
TILT WINDOW - VENTUS - outside opening around the top horizontally axis

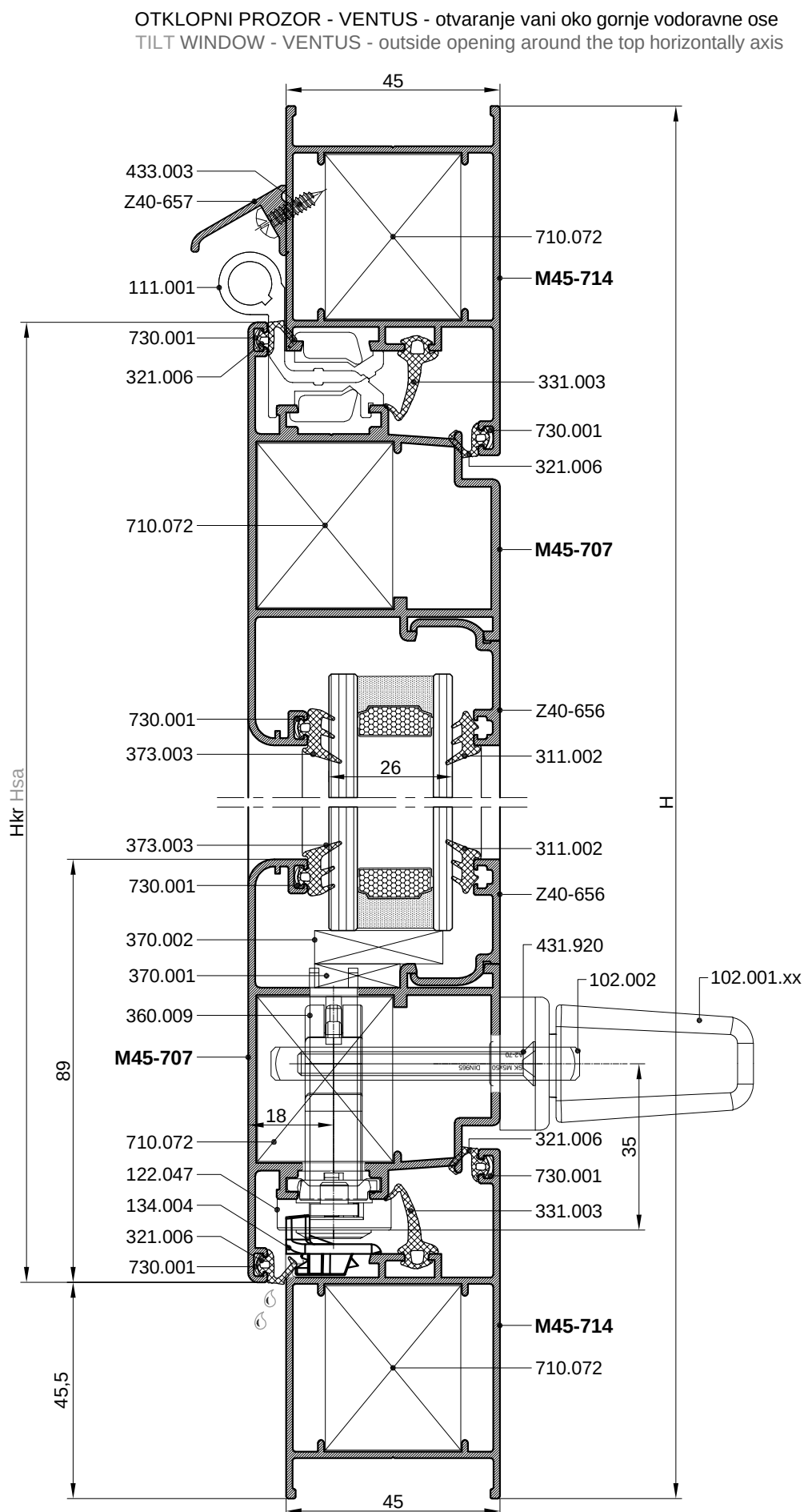


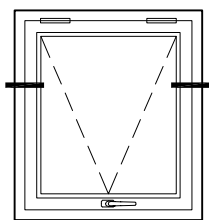
Krilo : M45-736
Sash : M45-736



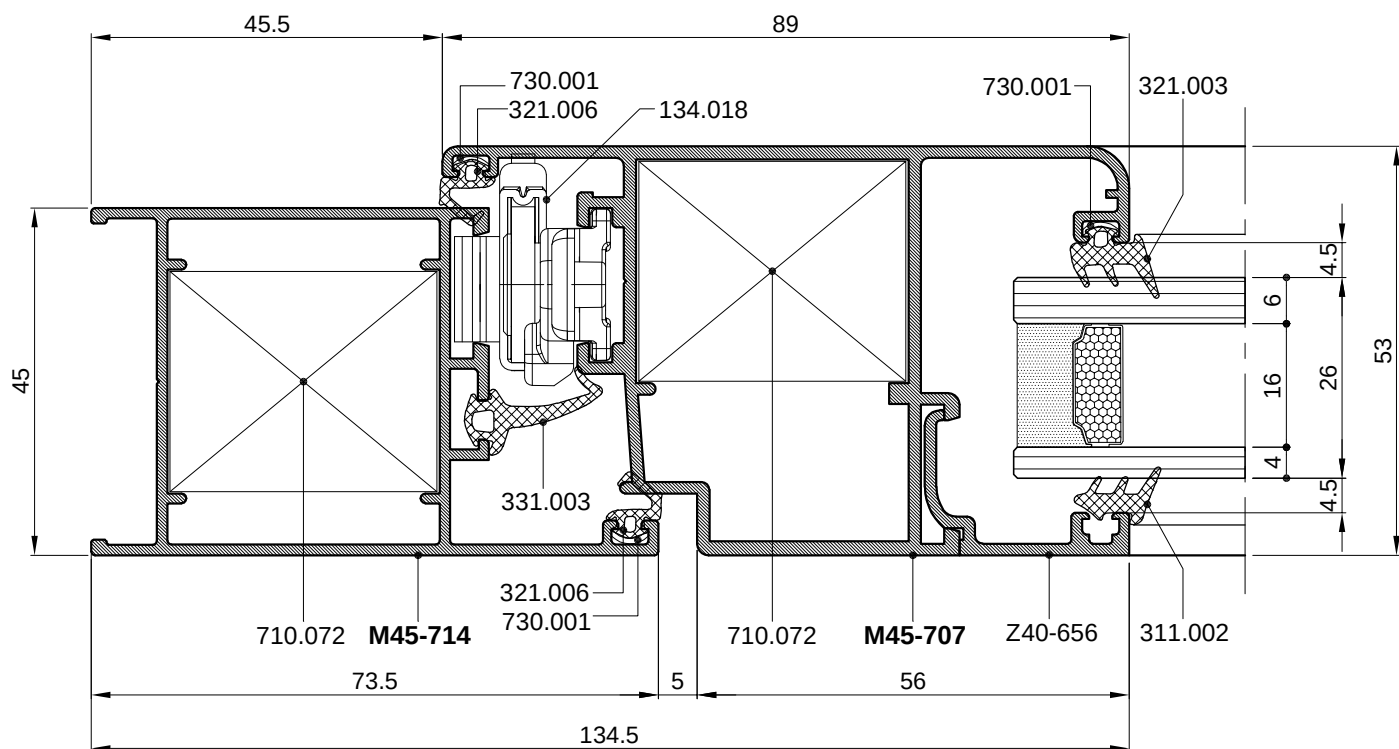


Krilo : M45-707
Sash : M45-707

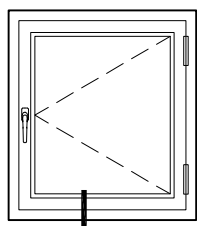


OTKLOPNI PROZOR - VENTUS - otvaranje vani oko gornje vodoravne ose
TILT WINDOW - VENTUS - outside opening around the top horizontally axis

Krilo : M45-707
Sash : M45-707

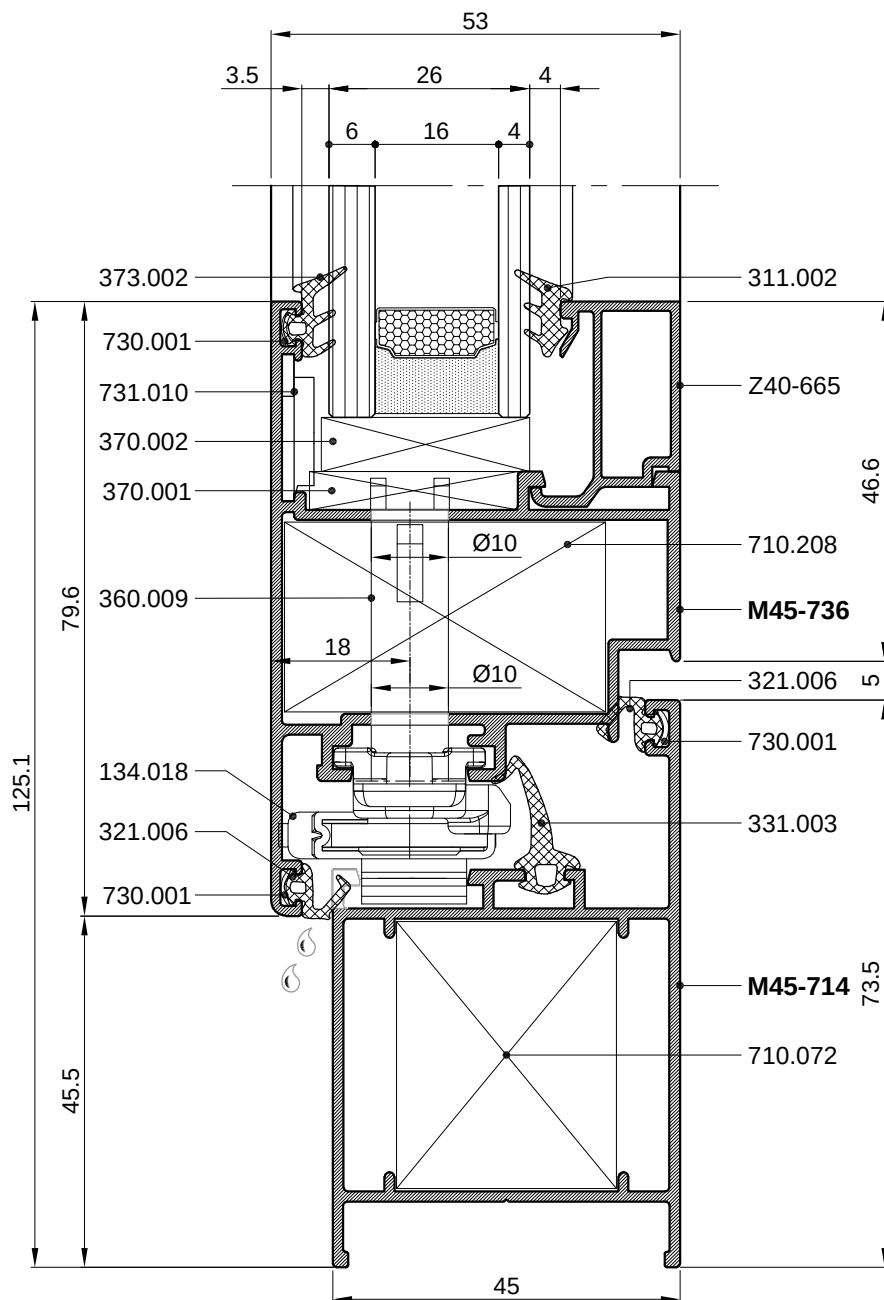


ZAOKRETNI PROZOR - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW - outside opening, turn around the vertical axis



Krilo : M45-736
Sash : M45-736

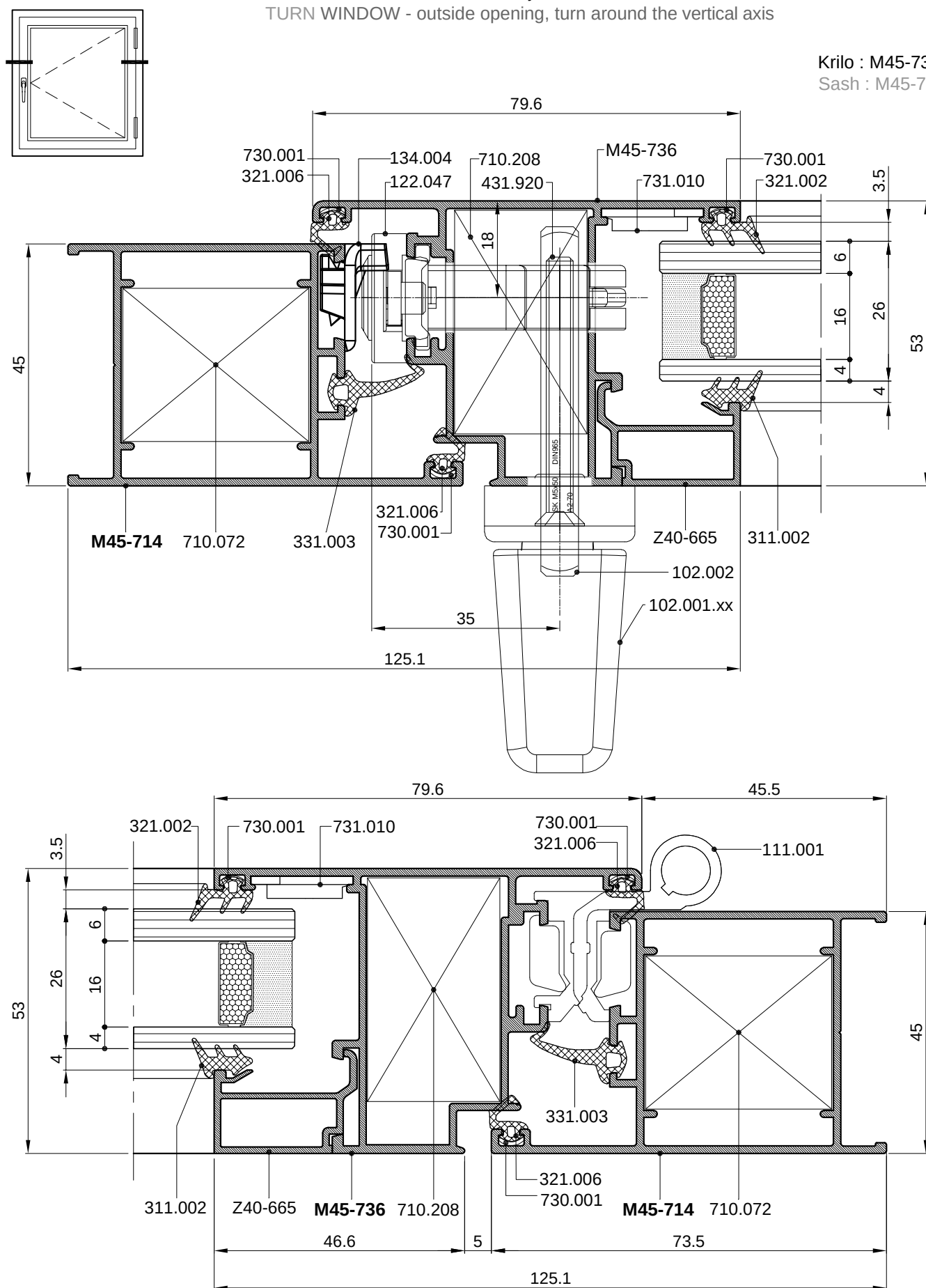
134.018
Teleskopske škarje, graničnik otvaranja
Telescope stays, opening limiter



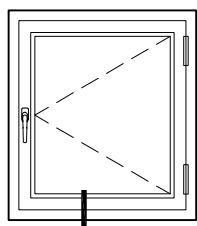
Zaokretni prozor - otvaranje vani Turn window - outside opening		
Oznaka Code	Opis Description	kom pcs
122.047	brava 35 mm lock 35mm 6-25916-35-0 (GU)	1
102.001.xx	ručka dirigent-F handle dirigent-F 6-28072-00-0-xx (GU)	1
102.002	firkant 7x7x143 square 7x7x143 9-26874-81-0-1 (GU)	1
431.920	vijak M5x50 DIN 965 screw M5x50 DIN 965	2
134.005	tuljac eccentric pin 4010.27 (Stub.)	2
134.004	prihvatač tuljca eccentric pin guide 4010.03 (Stub.)	2
111.001.xx	dvodijelna šarka two-part hinge	2
134.018	teleskopski graničnik telescope limiter 4066.00 (Stub.)	1

ZAOKRETNI PROZOR - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW - outside opening, turn around the vertical axis

Krilo : M45-736
Sash : M45-736



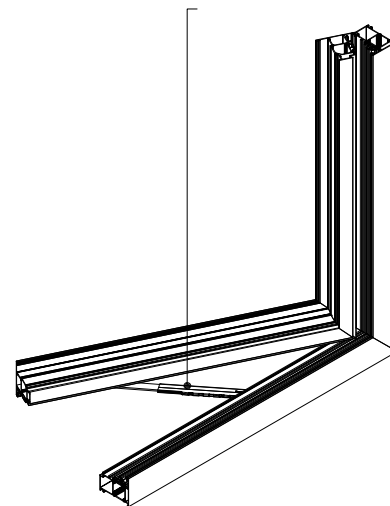
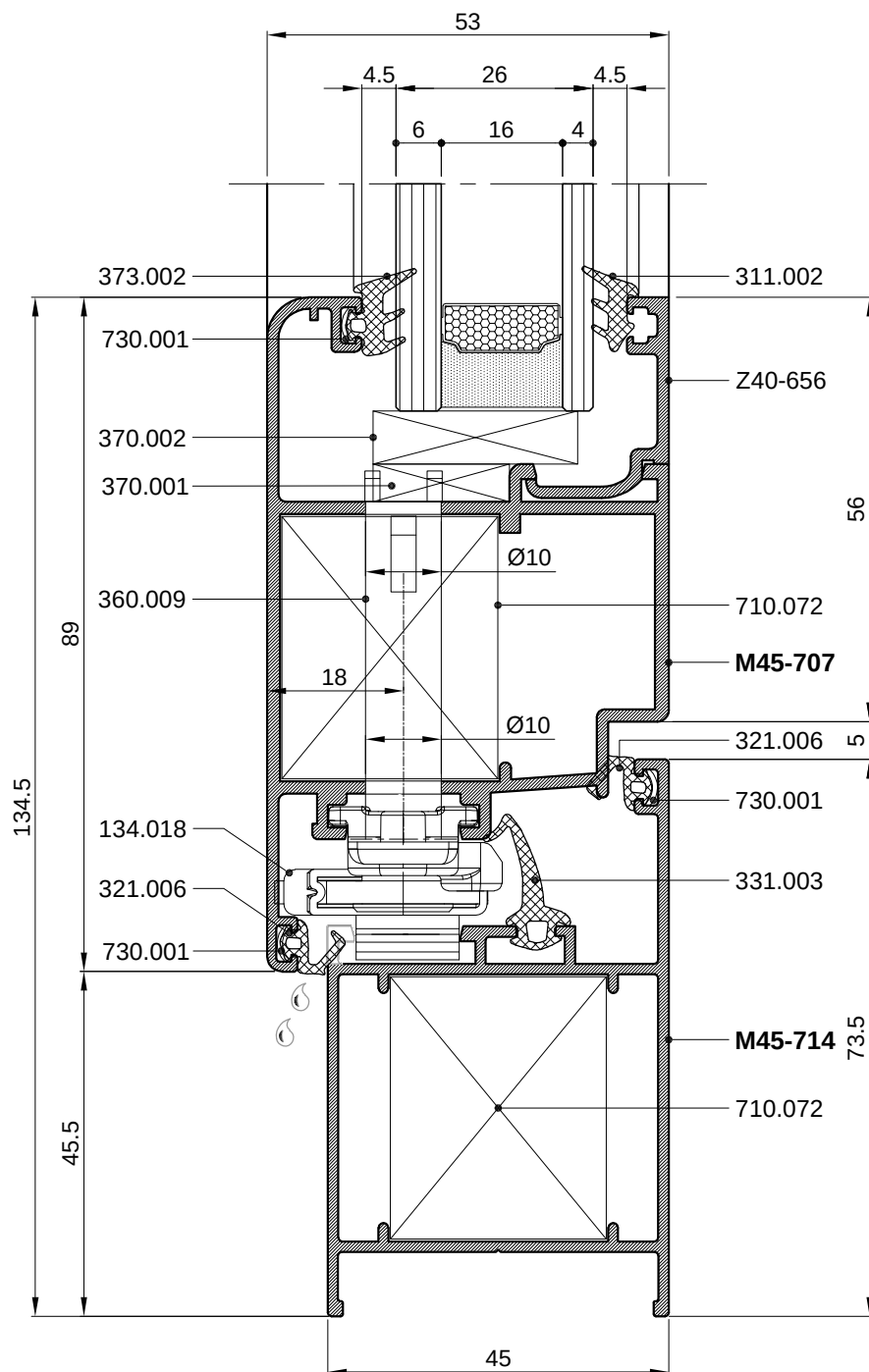
ZAOKRETNI PROZOR - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW - outside opening, turn around the vertical axis



Krilo : M45-707
Sash : M45-707

134.018

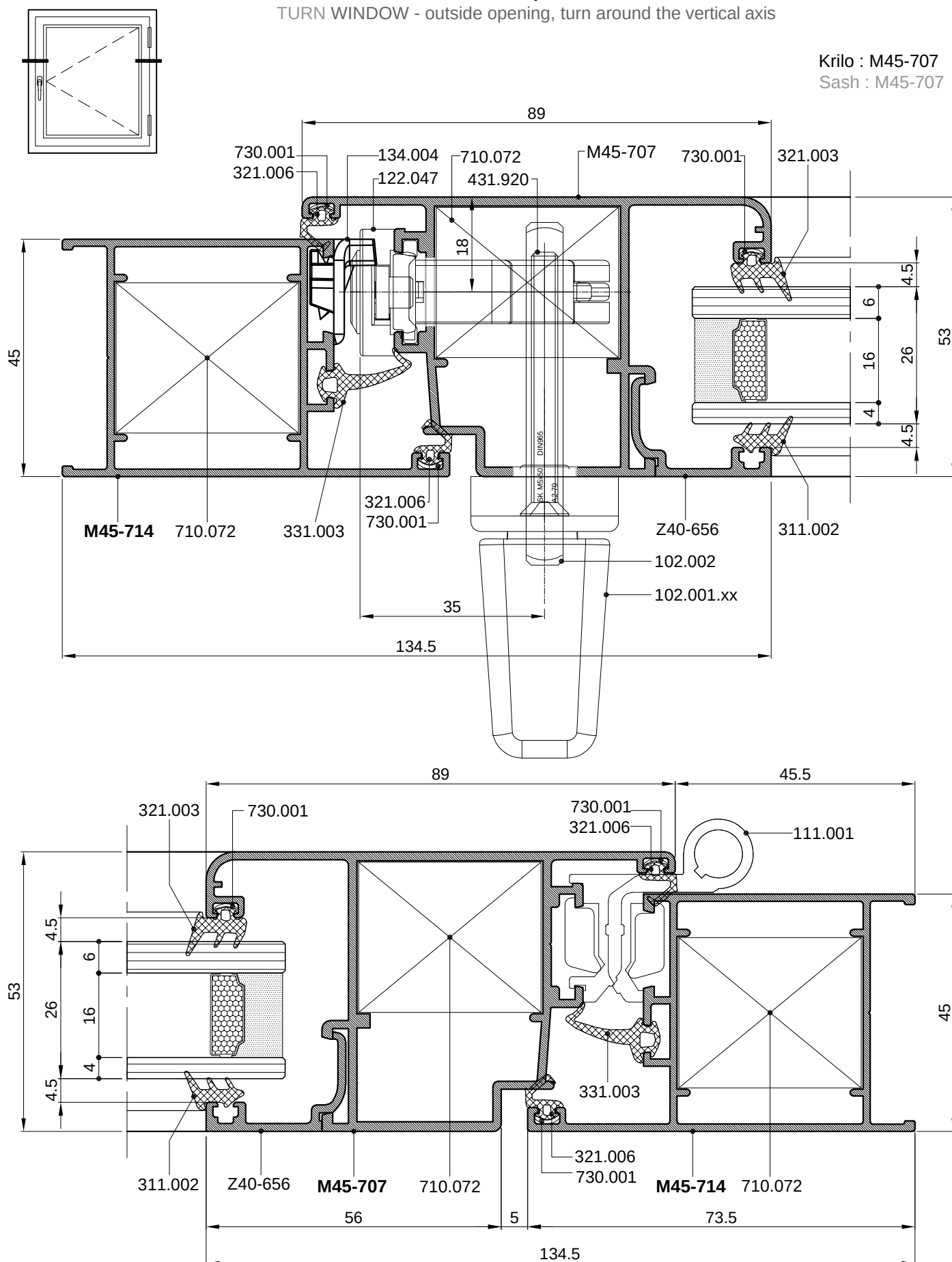
Teleskopske škar, graničnik otvaranja
Telescope stays, opening limiter



Zaokretni prozor - otvaranje vani Turn window - outside opening		
Oznaka Code	Opis Description	kom pcs
122.047	brava 35 mm lock 35mm 6-25916-35-0 (GU)	1
102.001.xx	ručka dirigent-F handle dirigent-F 6-28072-00-0-xx (GU)	1
102.002	firkant 7x7x143 square 7x7x143 9-26874-81-0-1 (GU)	1
431.920	vijak M5x50 DIN 965 screw M5x50 DIN 965	2
134.005	tuljac eccentric pin 4010.27 (Stub.)	2
134.004	prihvatnik tuljca eccentric pin guide 4010.03 (Stub.)	2
111.001.xx	dvodijelna šarka two-part hinge	2
134.018	teleskopski graničnik telescope limiter 4066.00 (Stub.)	1

ZAOKRETNI PROZOR - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW - outside opening, turn around the vertical axis

Krilo : M45-707
Sash : M45-707

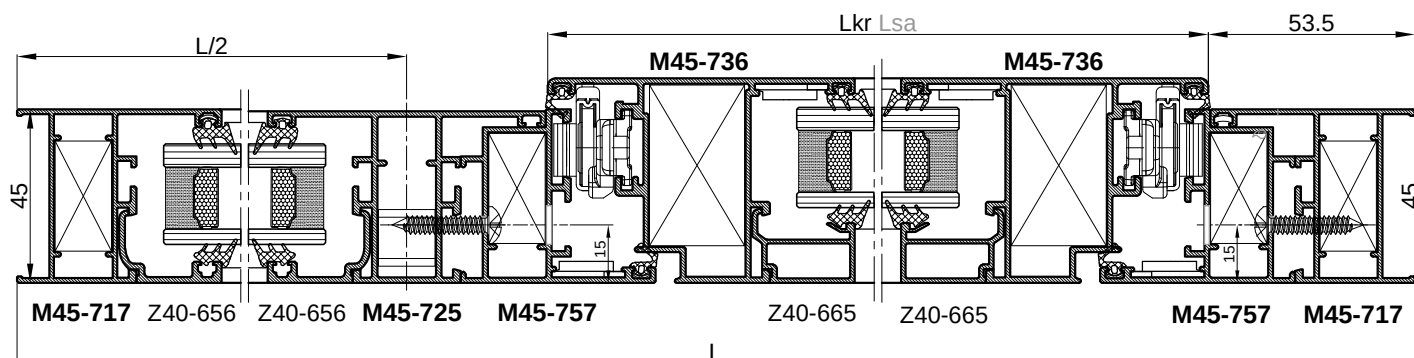
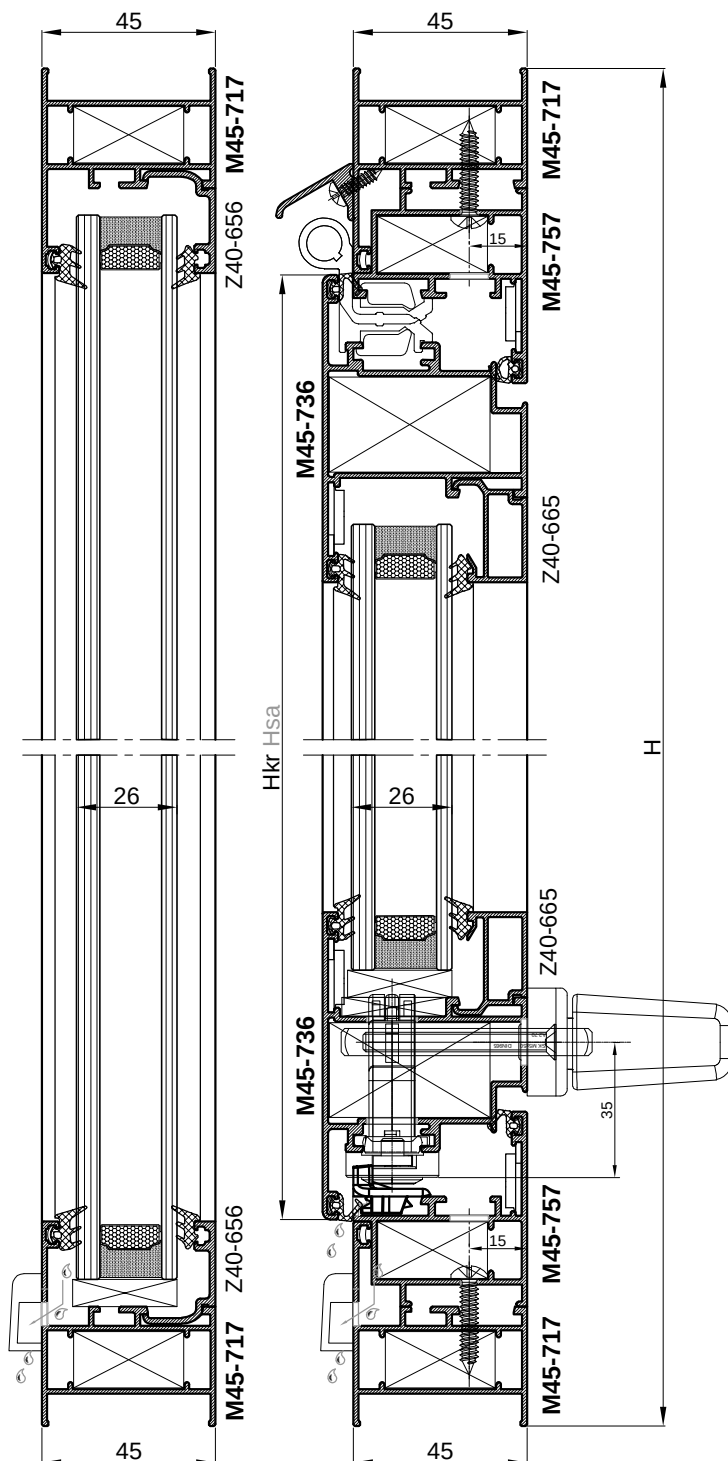
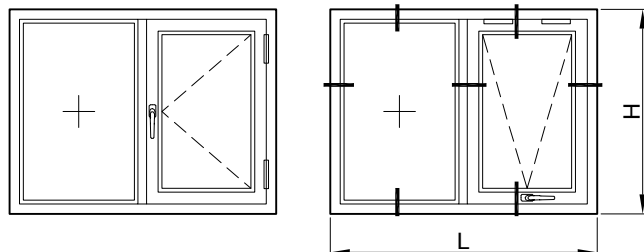


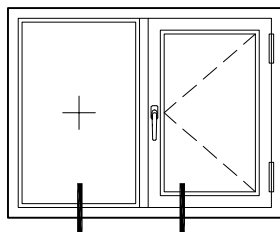
Jednokrilni prozor sa fiksnim dijelom:

- otvaranje vani oko gornje vodoravne ose
- otvaranje vani, zaokretno oko okomite ose

Single casement window with fixed part:

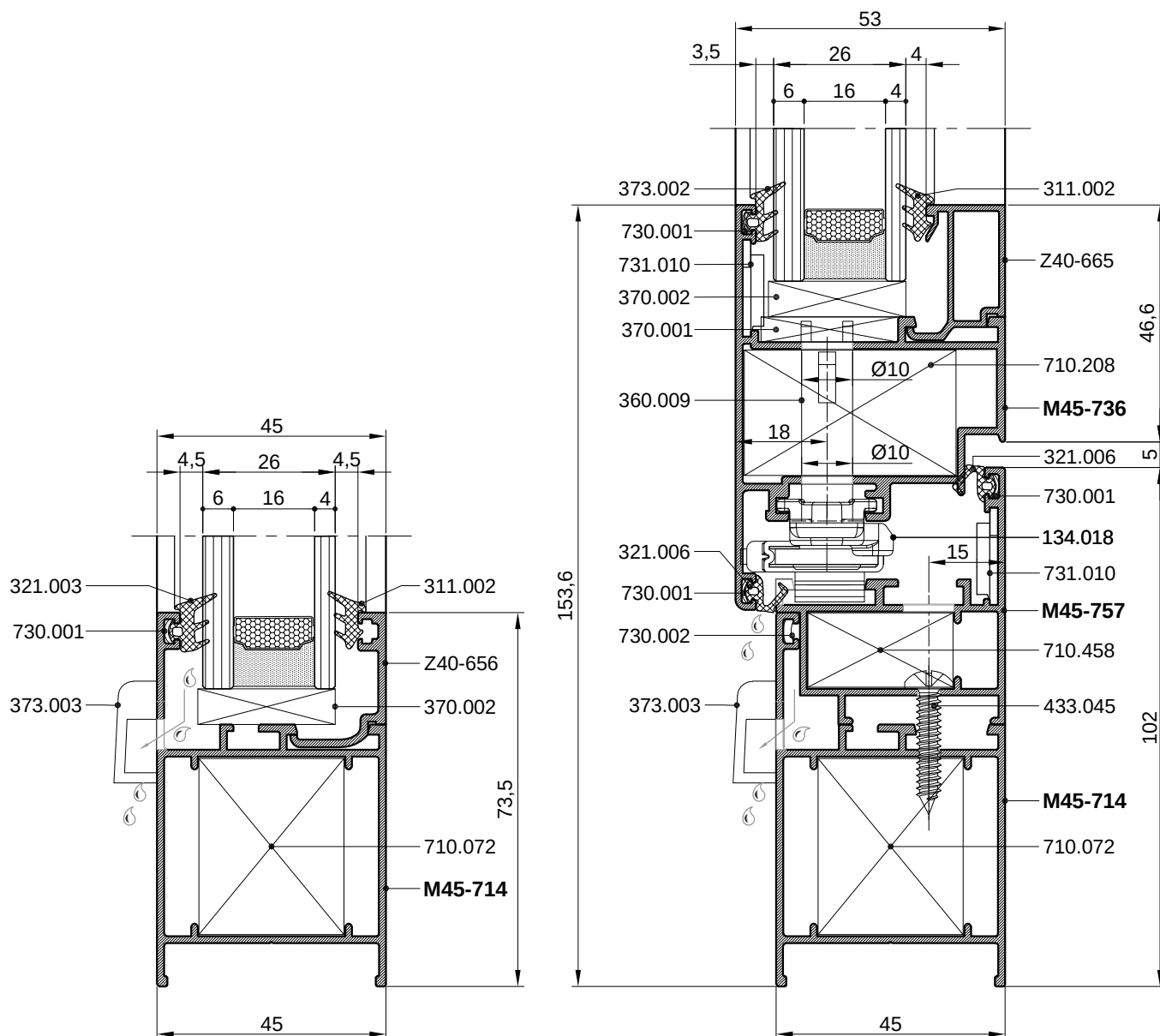
- outside opening around the top horizontal axis
- outside opening, turn around the vertical axis

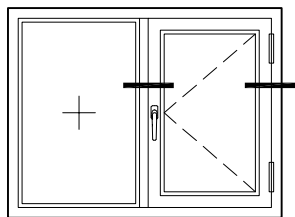




ZAOKRETNI PROZOR S FIKSNIM DIJELOM - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW WITH FIXED PART - outside opening, turn around the vertical axis

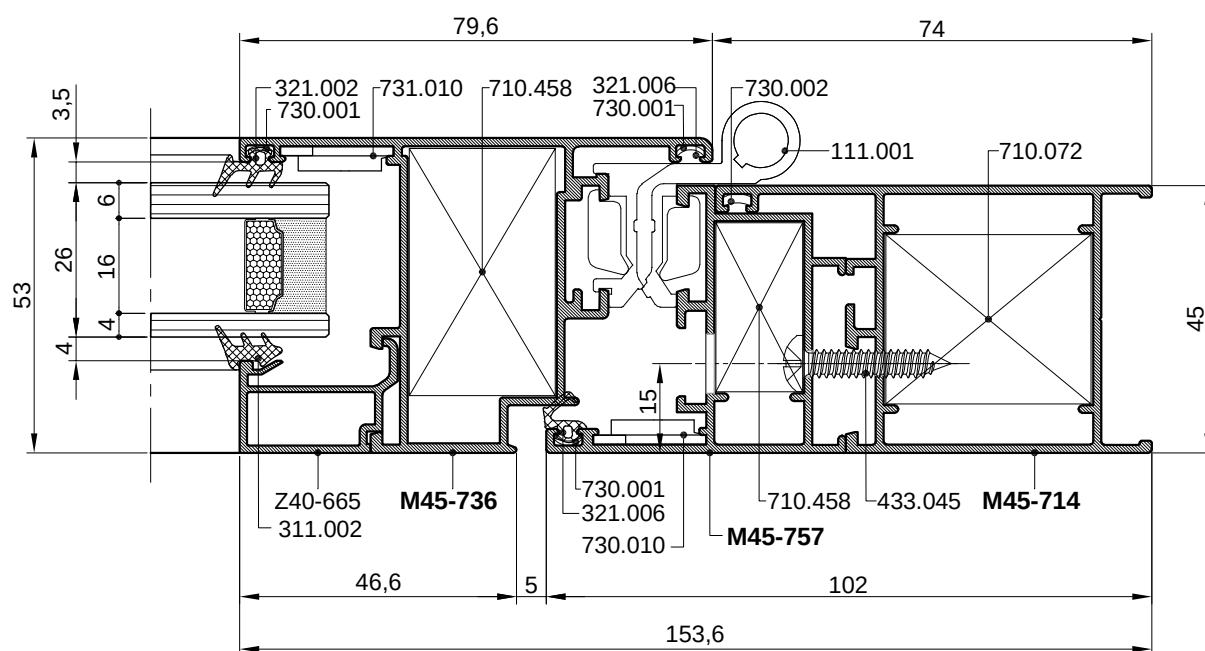
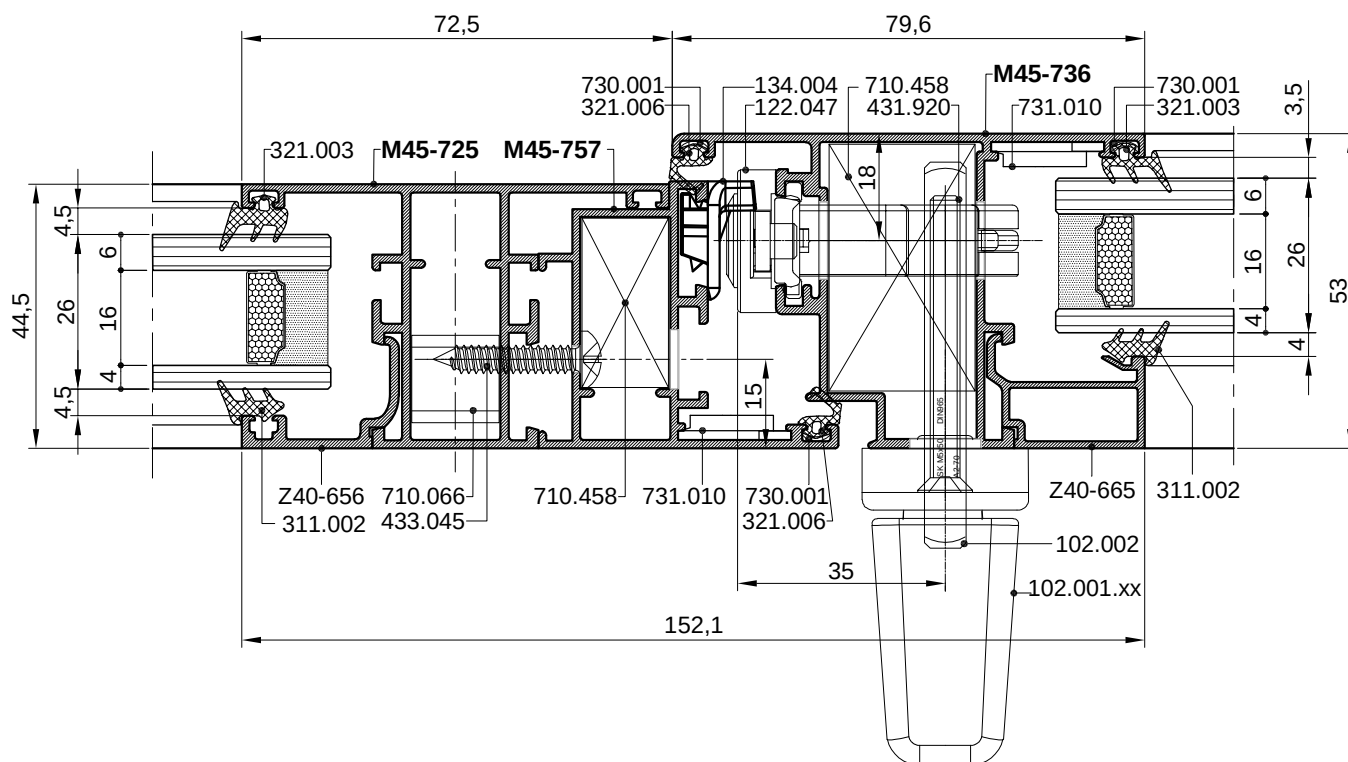
Krilo : M45-736
Sash : M45-736

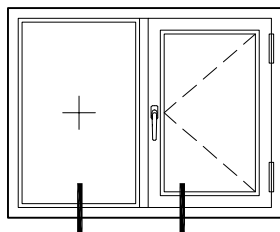




ZAOKRETNI PROZOR S FIKSNIM DIJELOM - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW WITH FIXED PART - outside opening, turn around the vertical axis

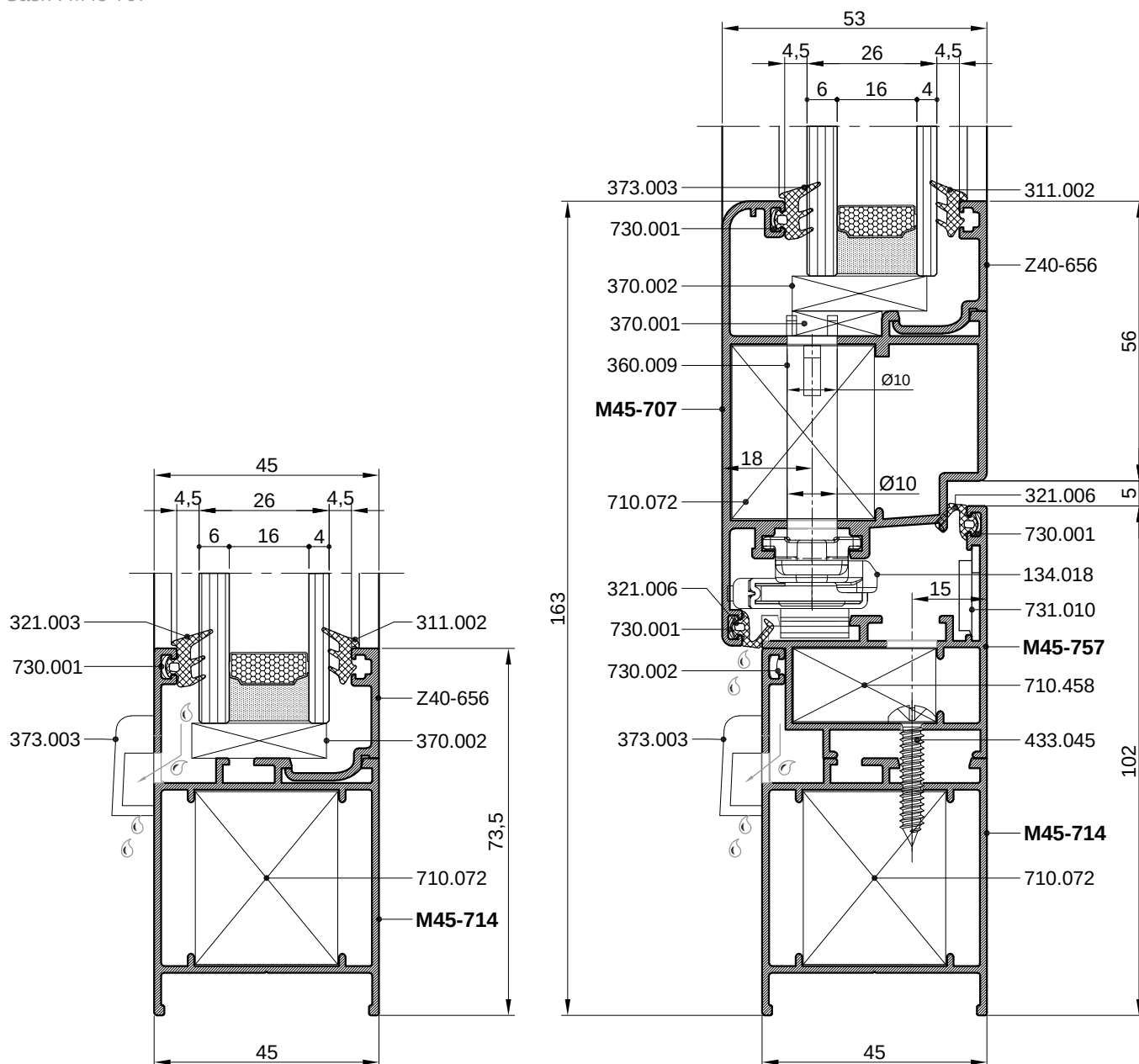
Krilo : M45-736
Sash : M45-736

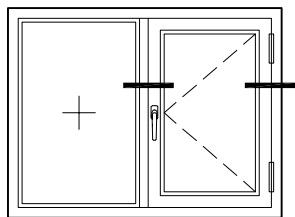




ZAOKRETNI PROZOR S FIKSNIM DIJELOM - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW WITH FIXED PART - outside opening, turn around the vertical axis

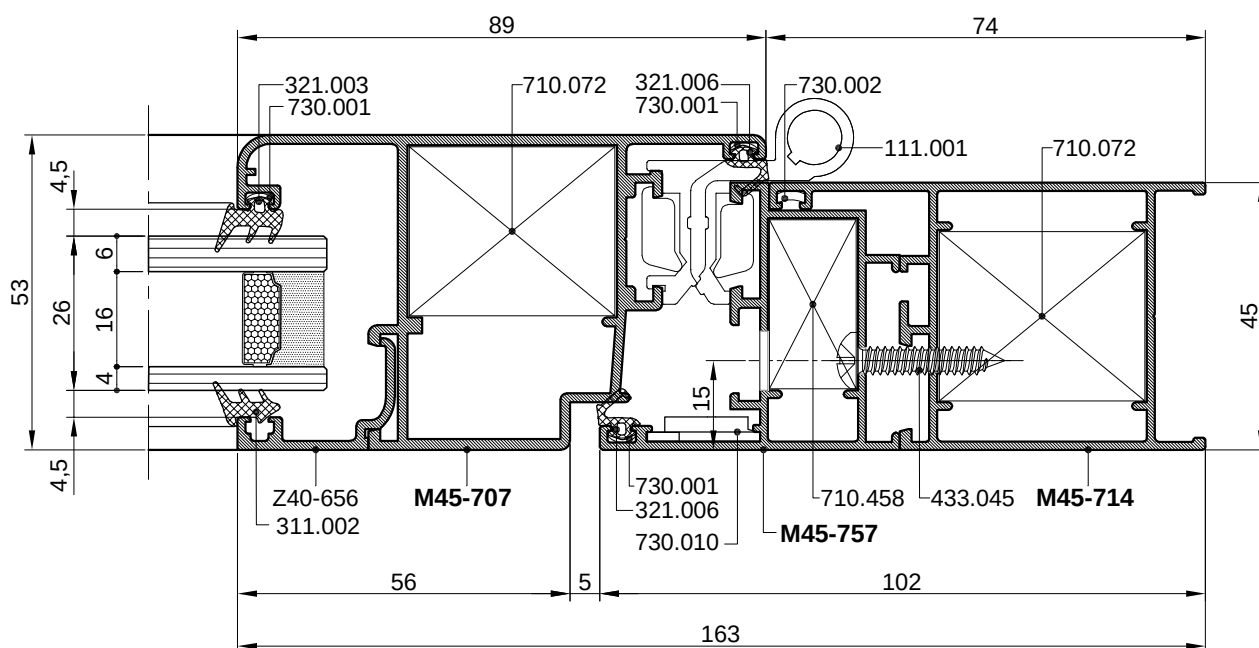
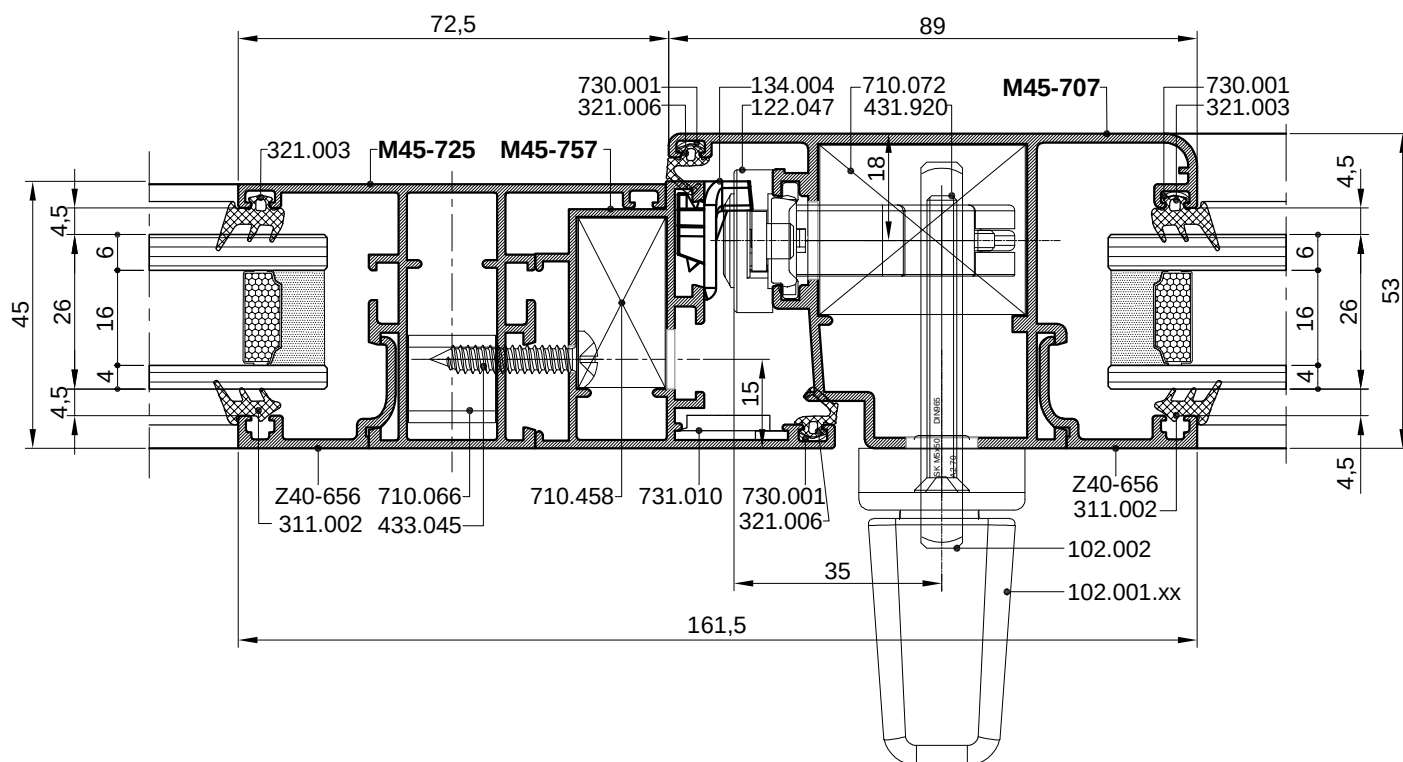
Krilo : M45-707
Sash : M45-707



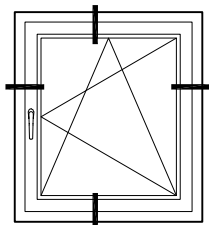


ZAOKRETNI PROZOR S FIKSNIM DIJELOM - otvaranje vani, zaokretno oko okomite ose
TURN WINDOW WITH FIXED PART - outside opening, turn around the vertical axis

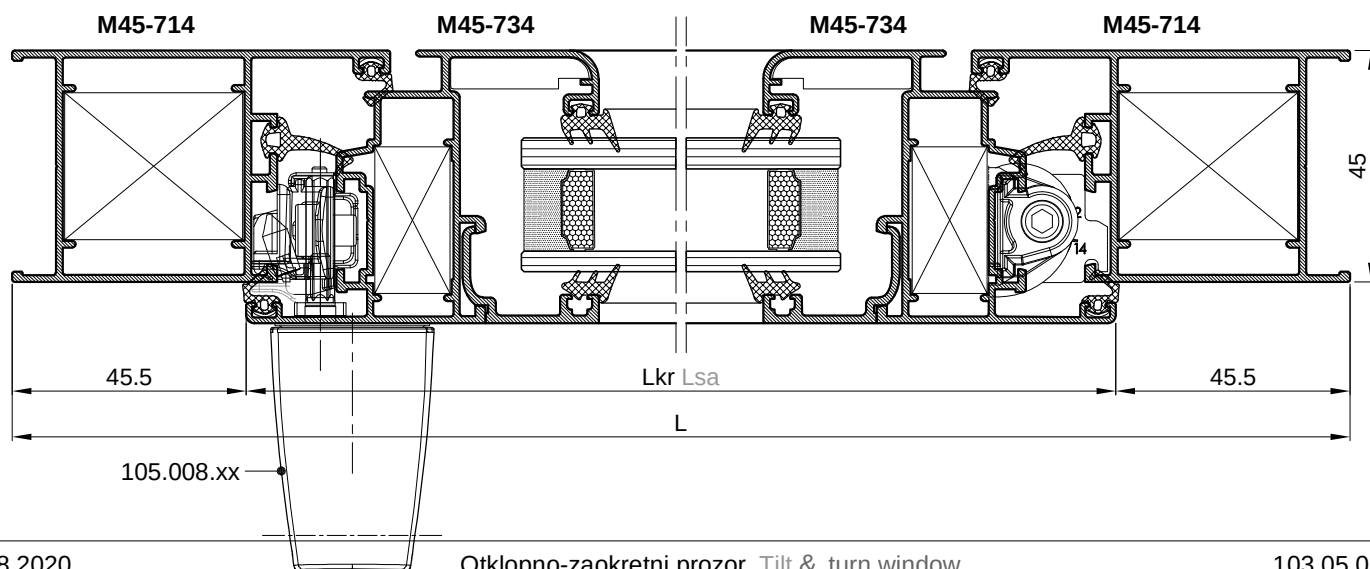
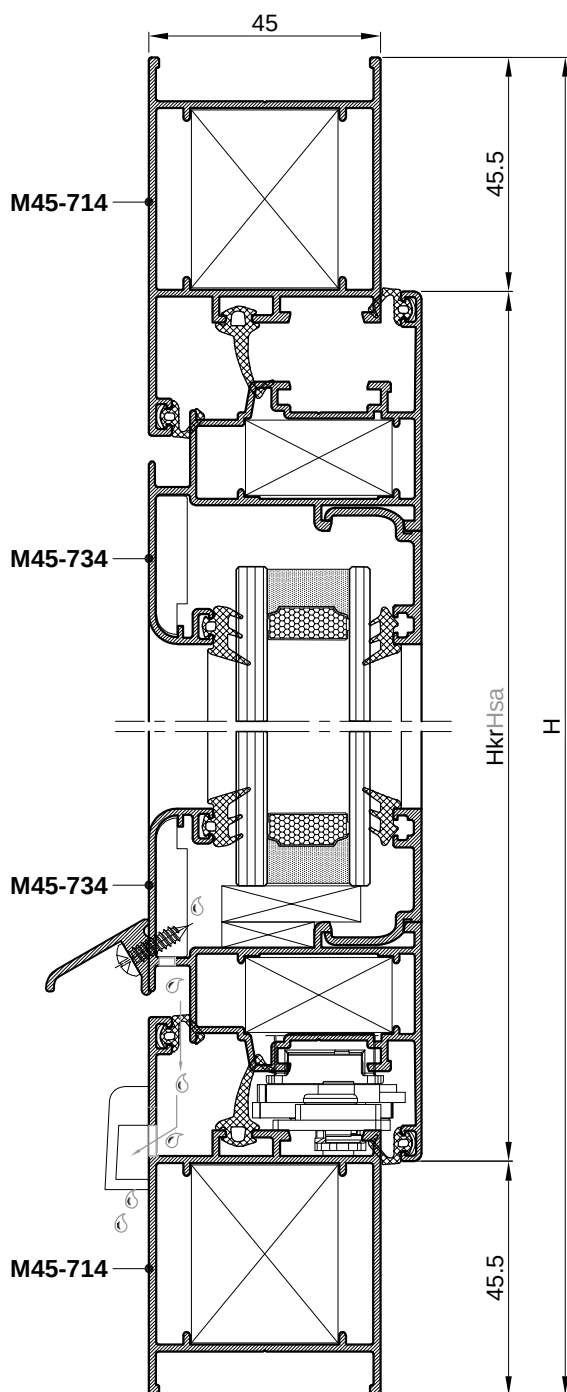
Krilo : M45-707
Sash : M45-707



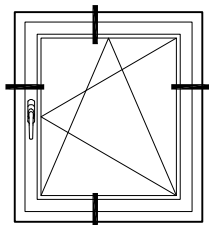
OTKLOPNO ZAOKRETNi PROZOR
TILT & TURN WINDOW



(Skriveni otklopno-zaokretni mehanizam- Giese)
(Hidden tilt & turn mechanism- Giese)

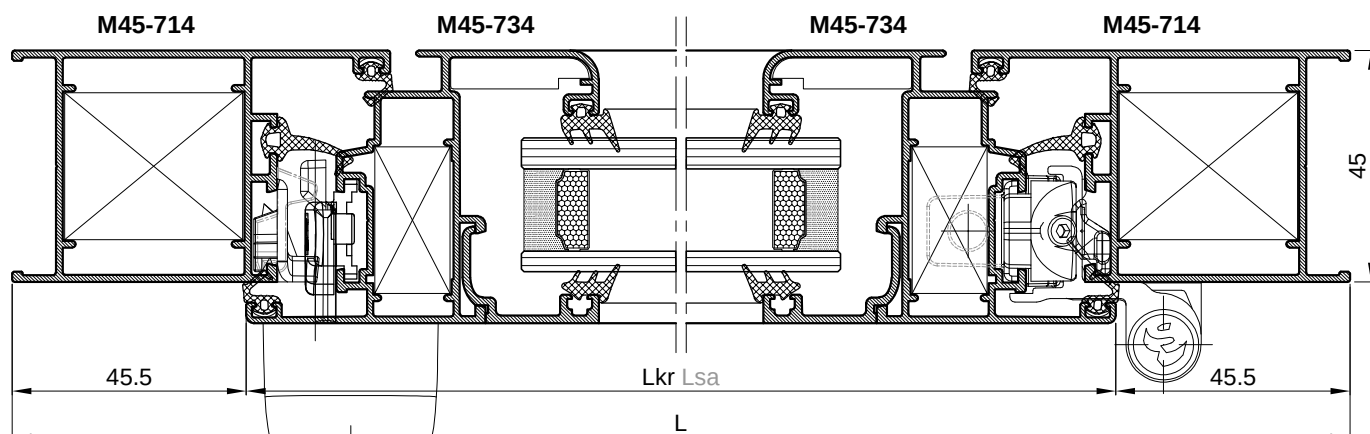
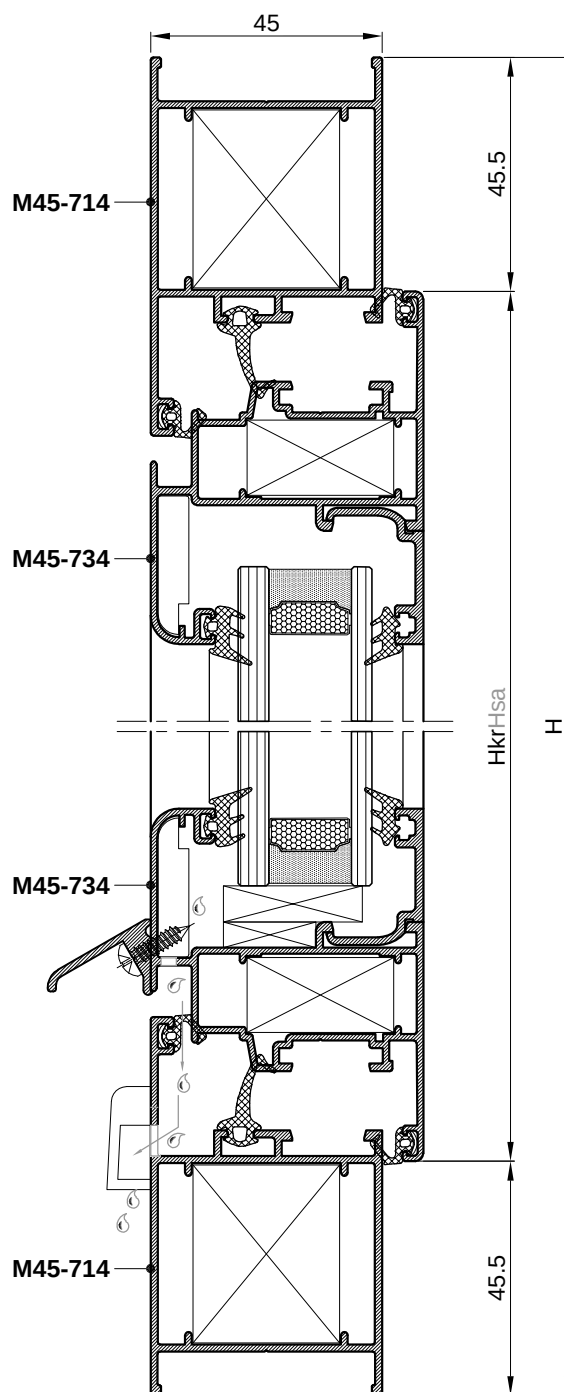
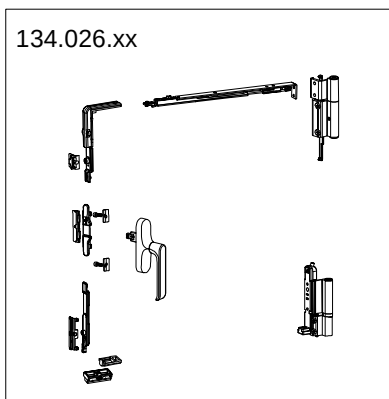


OTKLOPNO ZAOKRETNI PROZOR
TILT & TURN WINDOW

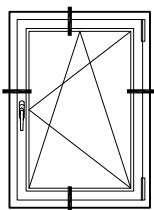


(Otklopno-zaokretni mehanizam- Stublina)
(Tilt & turn mechanism- Stublina)

134.026.xx

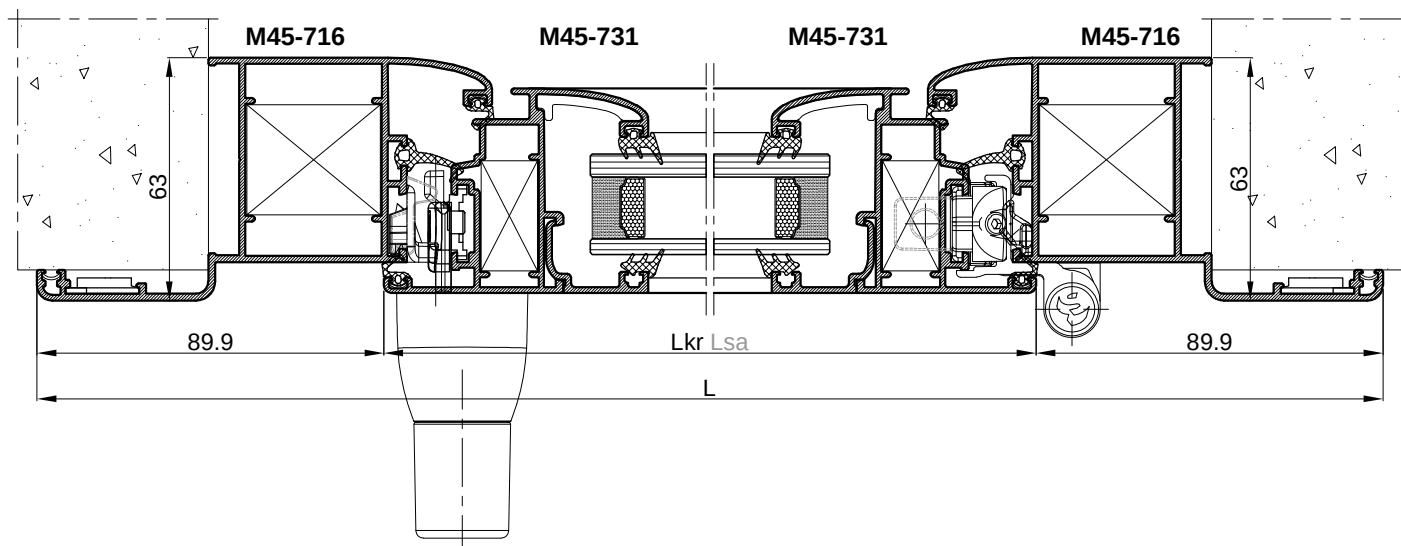
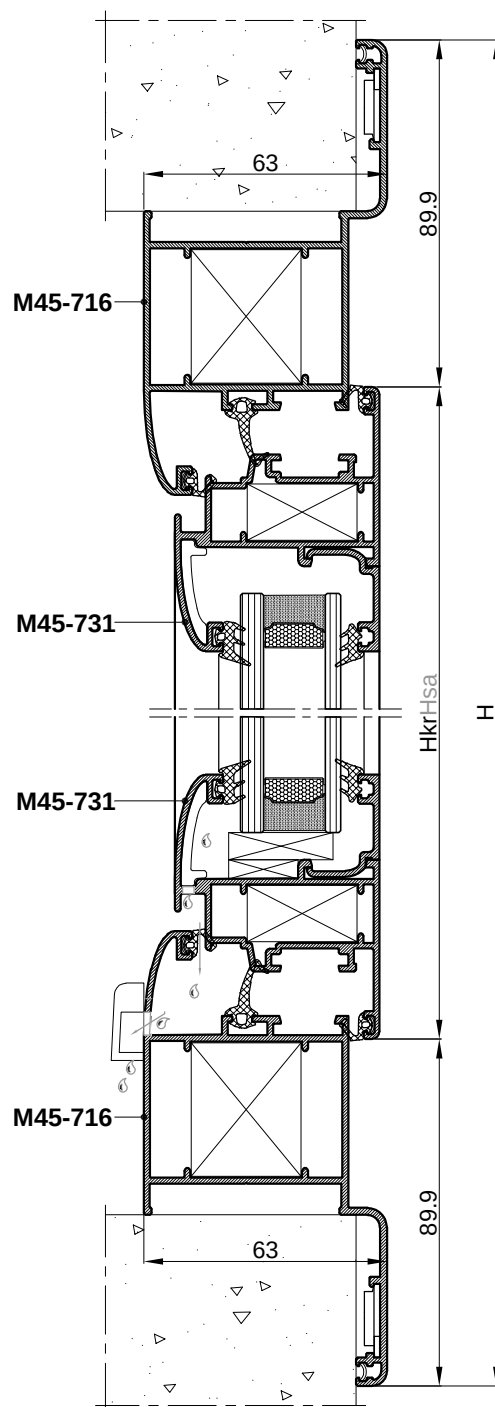
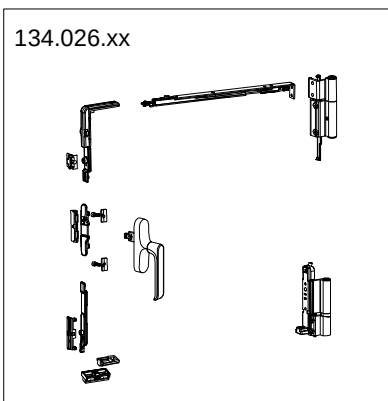


OTKLOPNO ZAOKRETNI PROZOR
TILT & TURN WINDOW

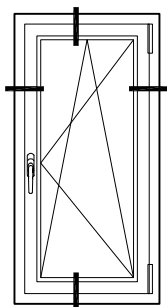


(Otklopno-zaokretni mehanizam- Stublina)
(Tilt & turn mechanism- Stublina)

134.026.xx

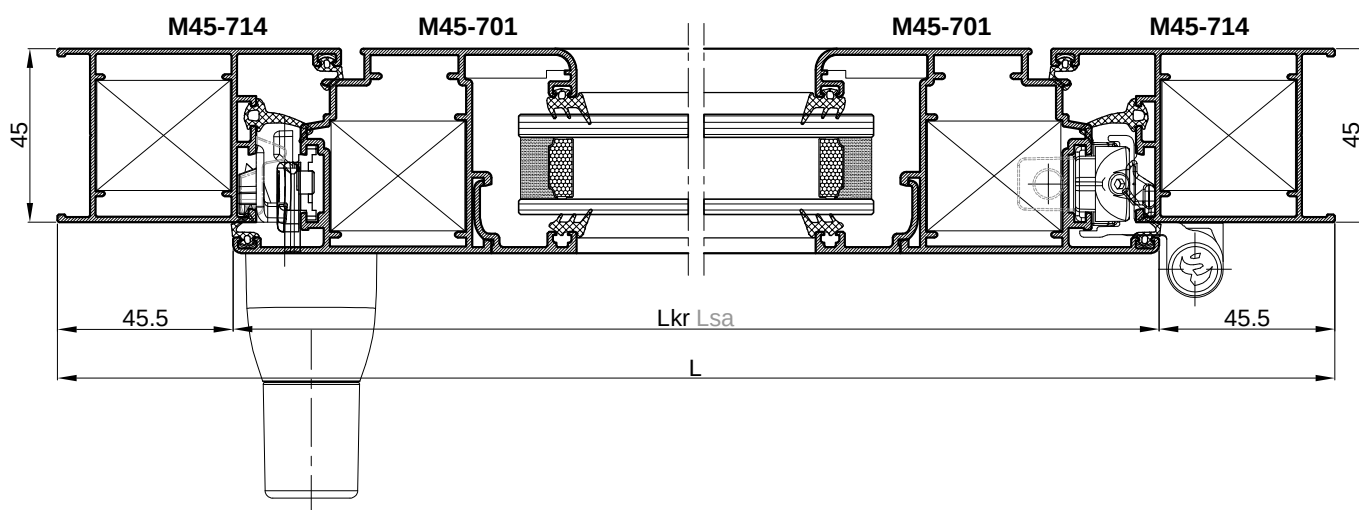
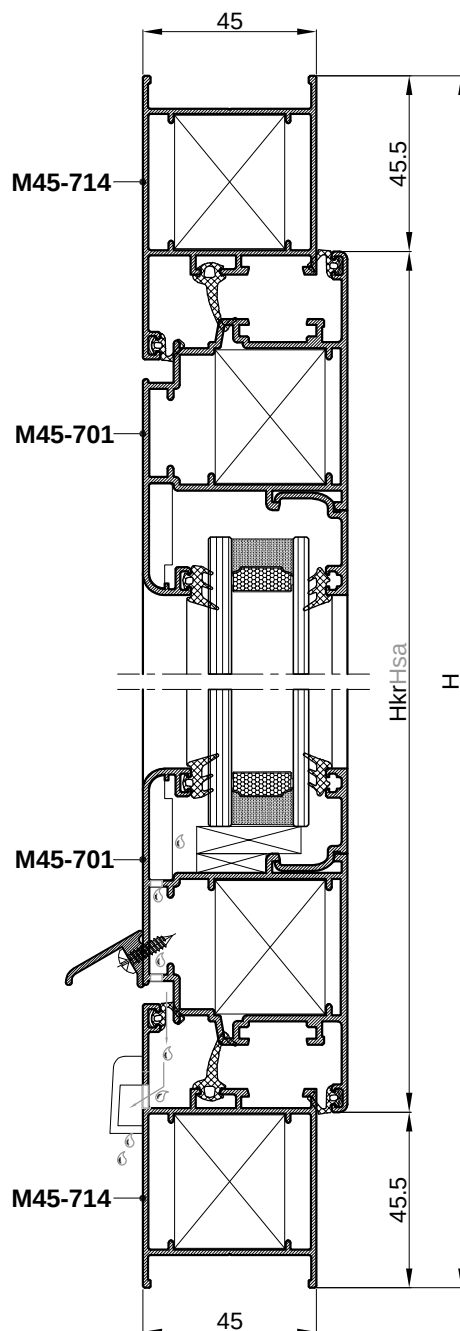
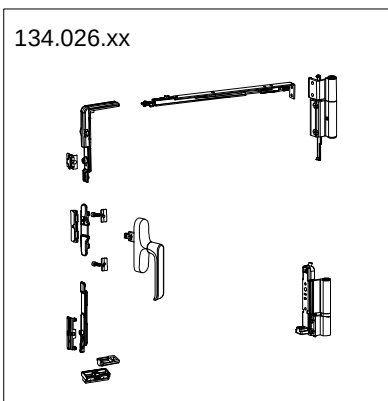


JEDNOKRILNA BALKONSKA VRATA
ONE-SASH BALCONY DOOR

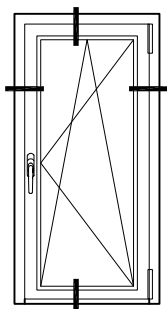


(Otklopno-zaokretni mehanizam- Stublina)
(Tilt & turn mechanism- Stublina)

134.026.xx

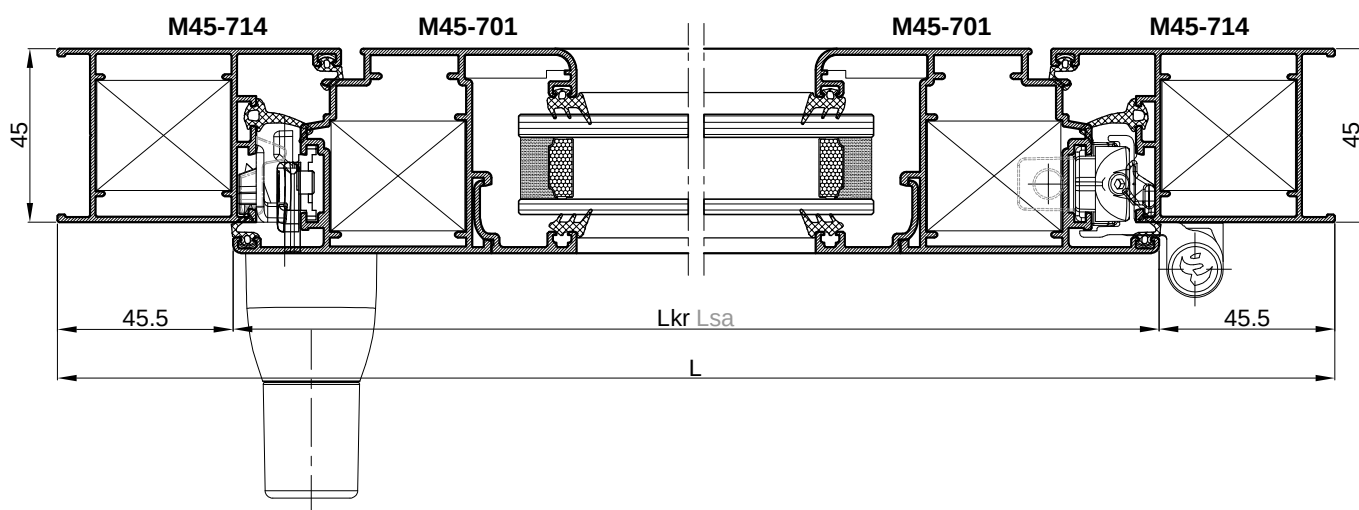
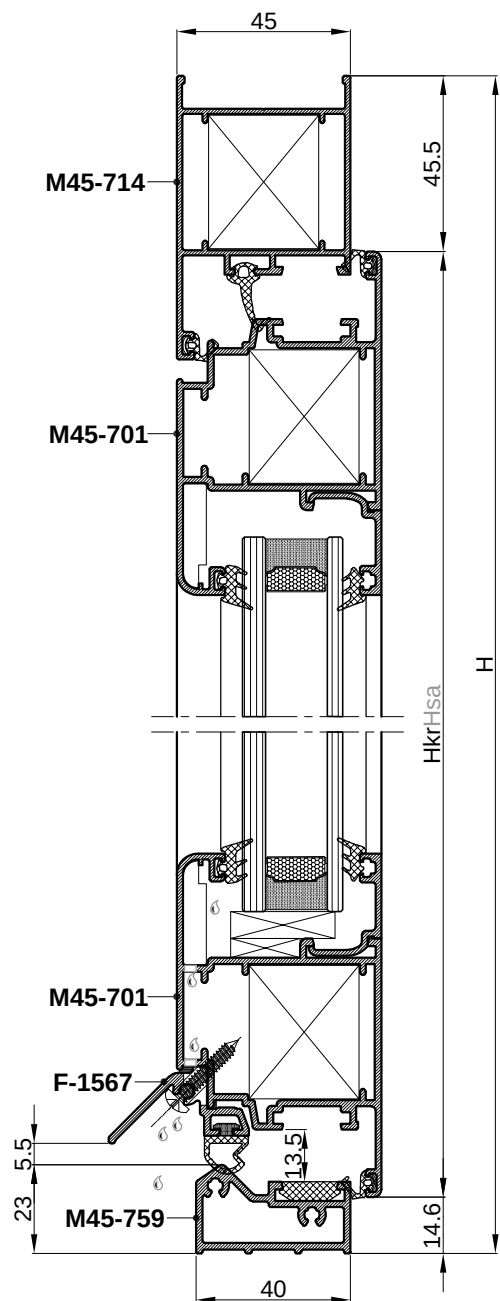
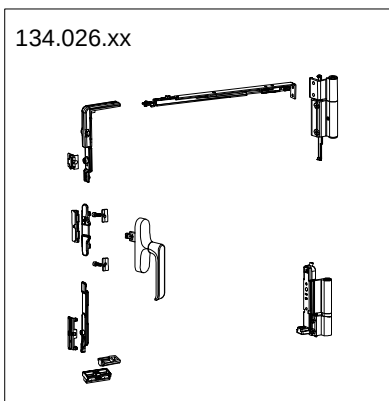


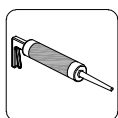
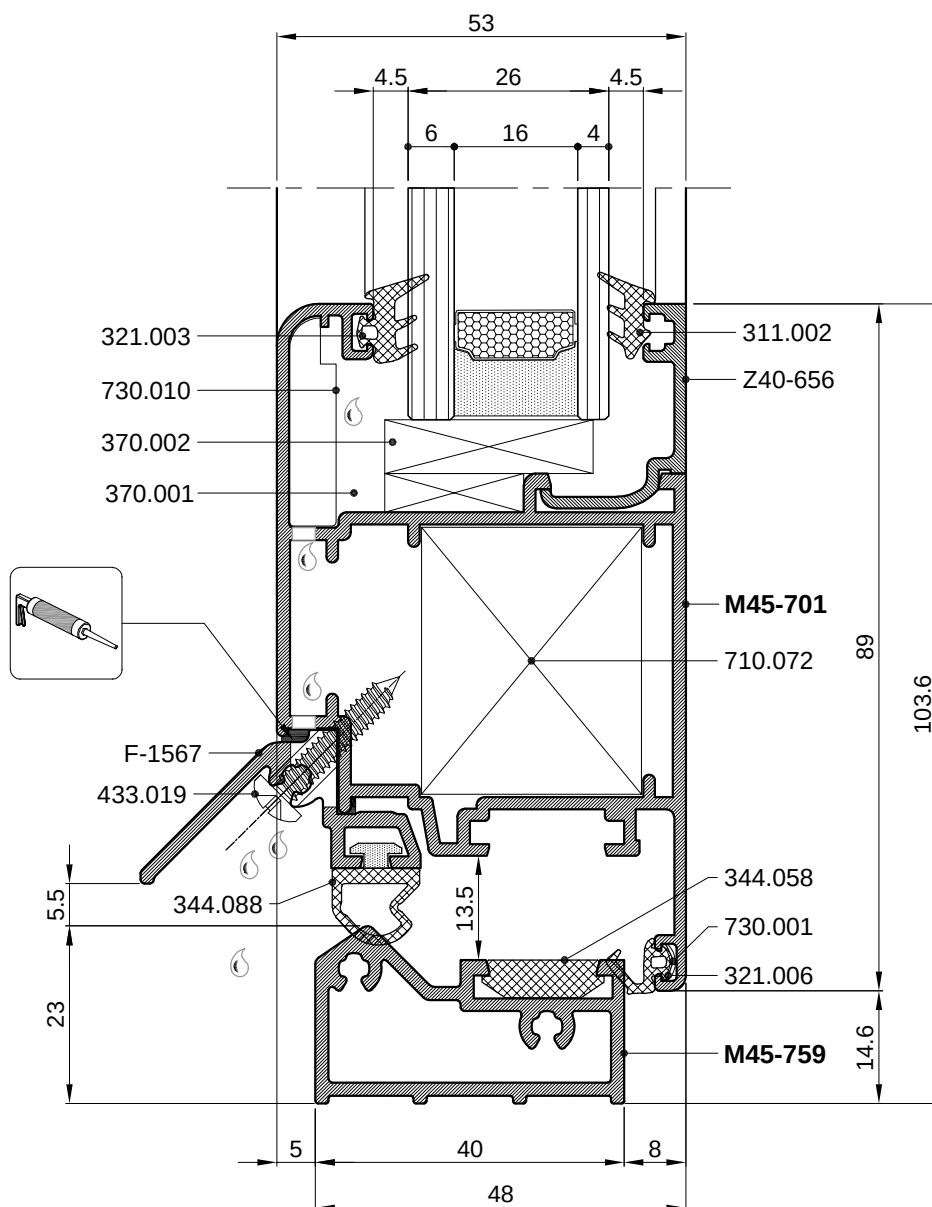
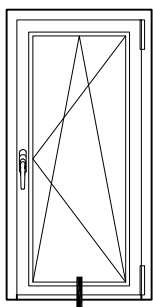
JEDNOKRILNA BALKONSKA VRATA - NISKI PRAG
ONE-SASH BALCONY DOOR - LOW THRESHOLD



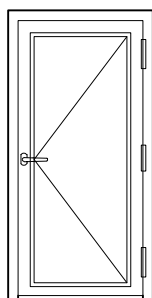
(Otklopno-zaokretni mehanizam- Stublina)
(Tilt & turn mechanism- Stublina)

134.026.xx

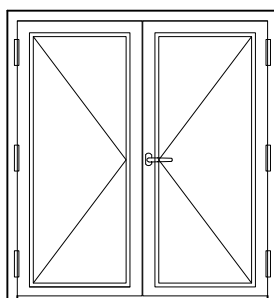




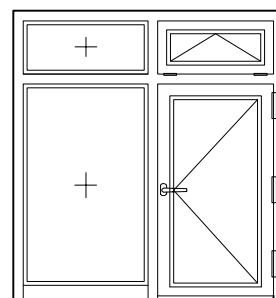
ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)



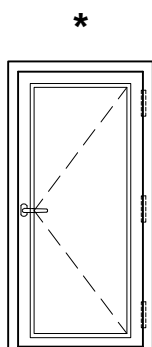
ulazna vrata
entrance door



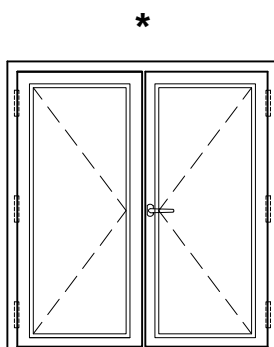
ulazna vrata
entrance door



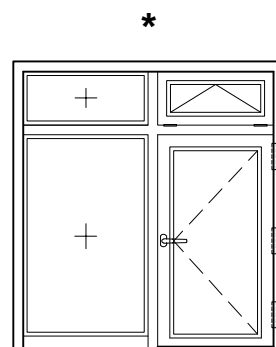
ulazna vrata
entrance door



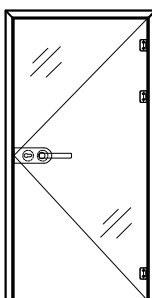
ulazna vrata
entrance door



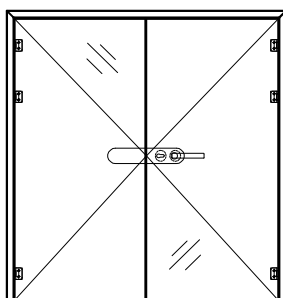
ulazna vrata
entrance door



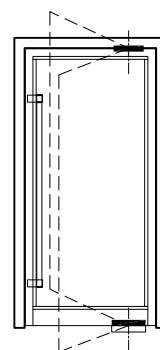
ulazna vrata
entrance door



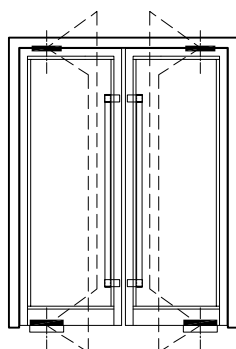
vrata sa staklenim krilom
door with glass leaf



vrata sa staklenim krilom
door with glass leaf



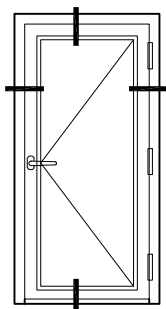
mimokretna vrata
push and pull doors



mimokretna vrata
push and pull doors

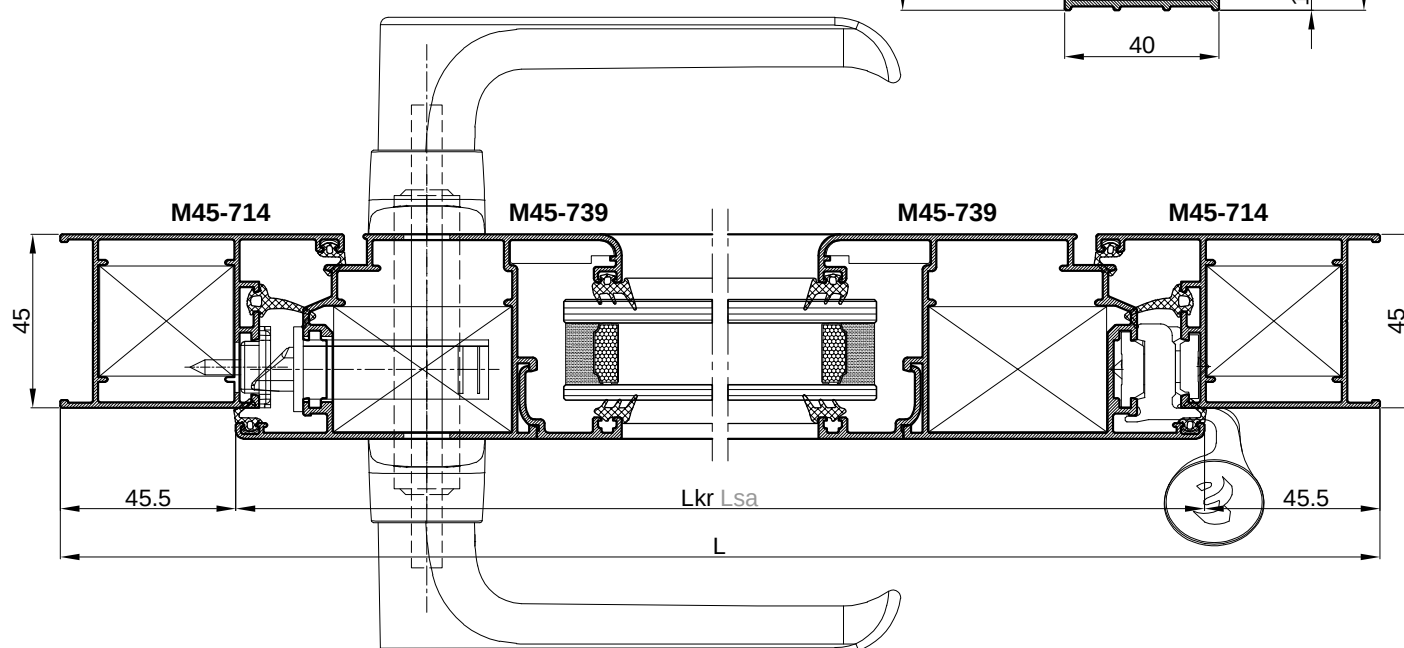
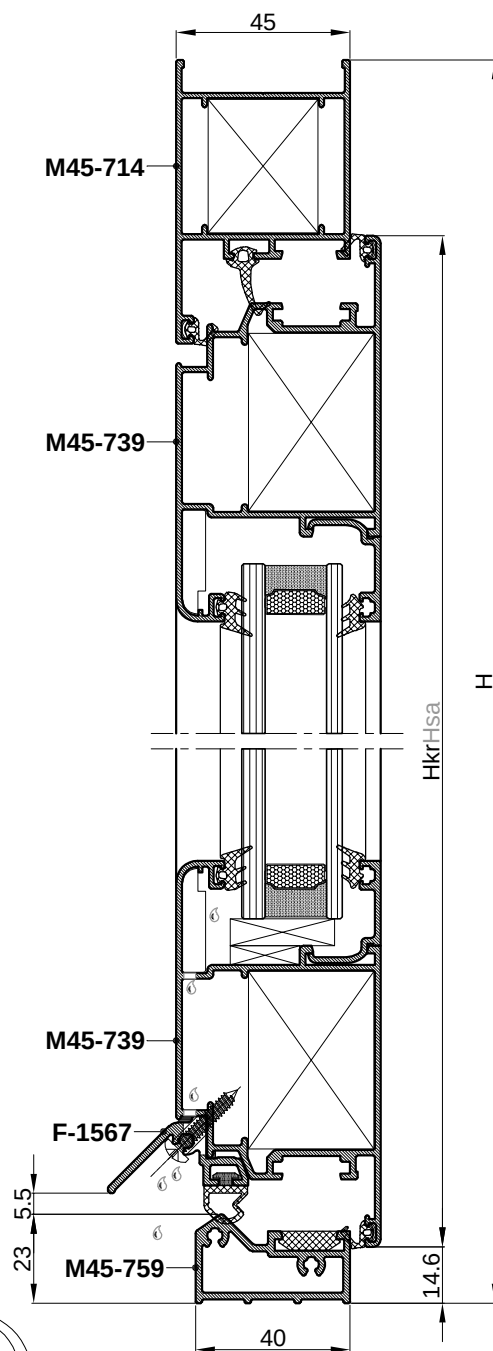
* Otvaranje vani / Outside opening

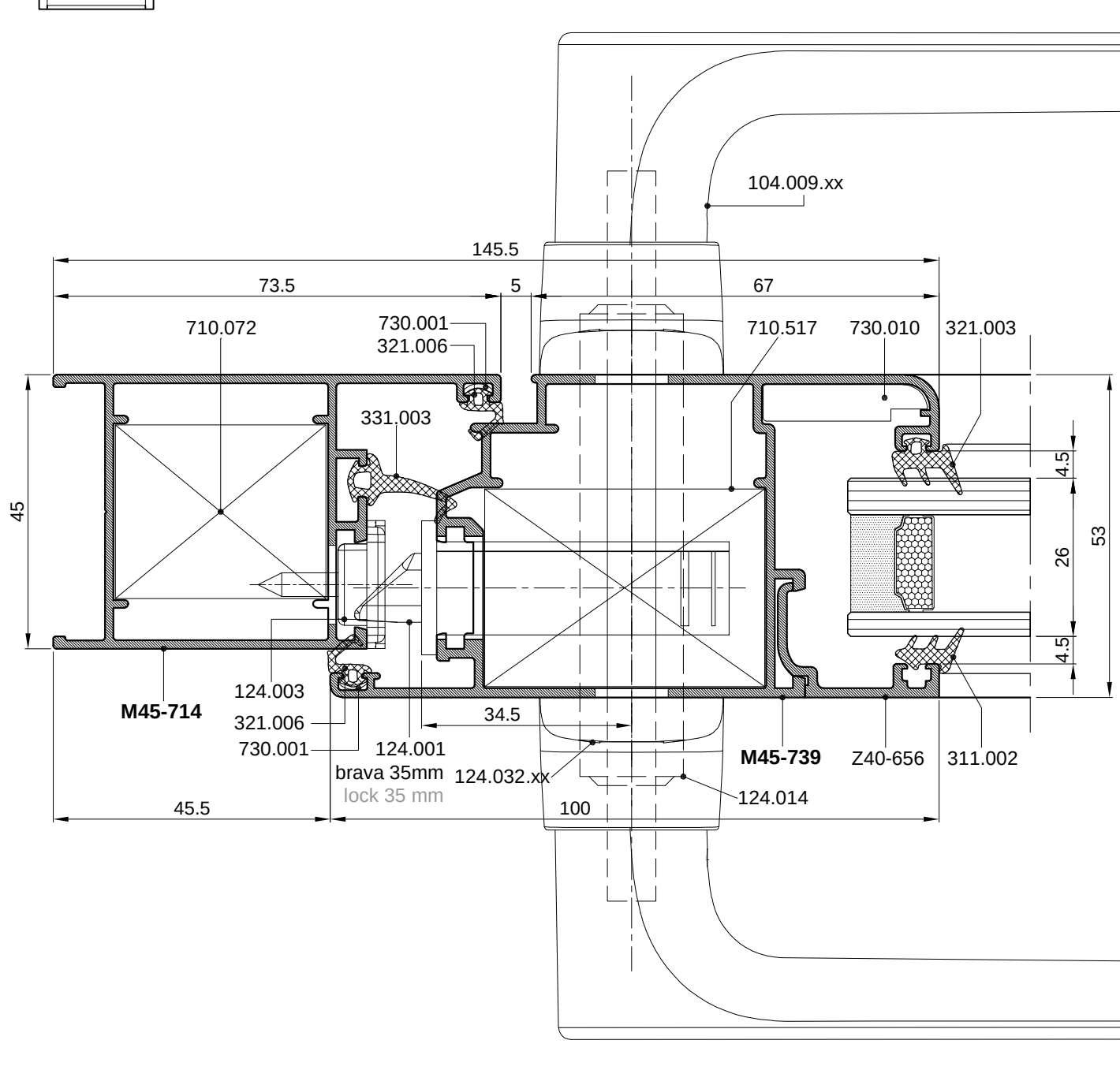
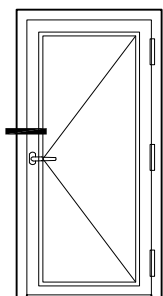
JEDNOKRILNA ULAZNA VRATA, OTVARANJE UNUTRA
ONE-SASH ENTRANCE DOOR, INWARDS OPENING



Napomena /Remark:

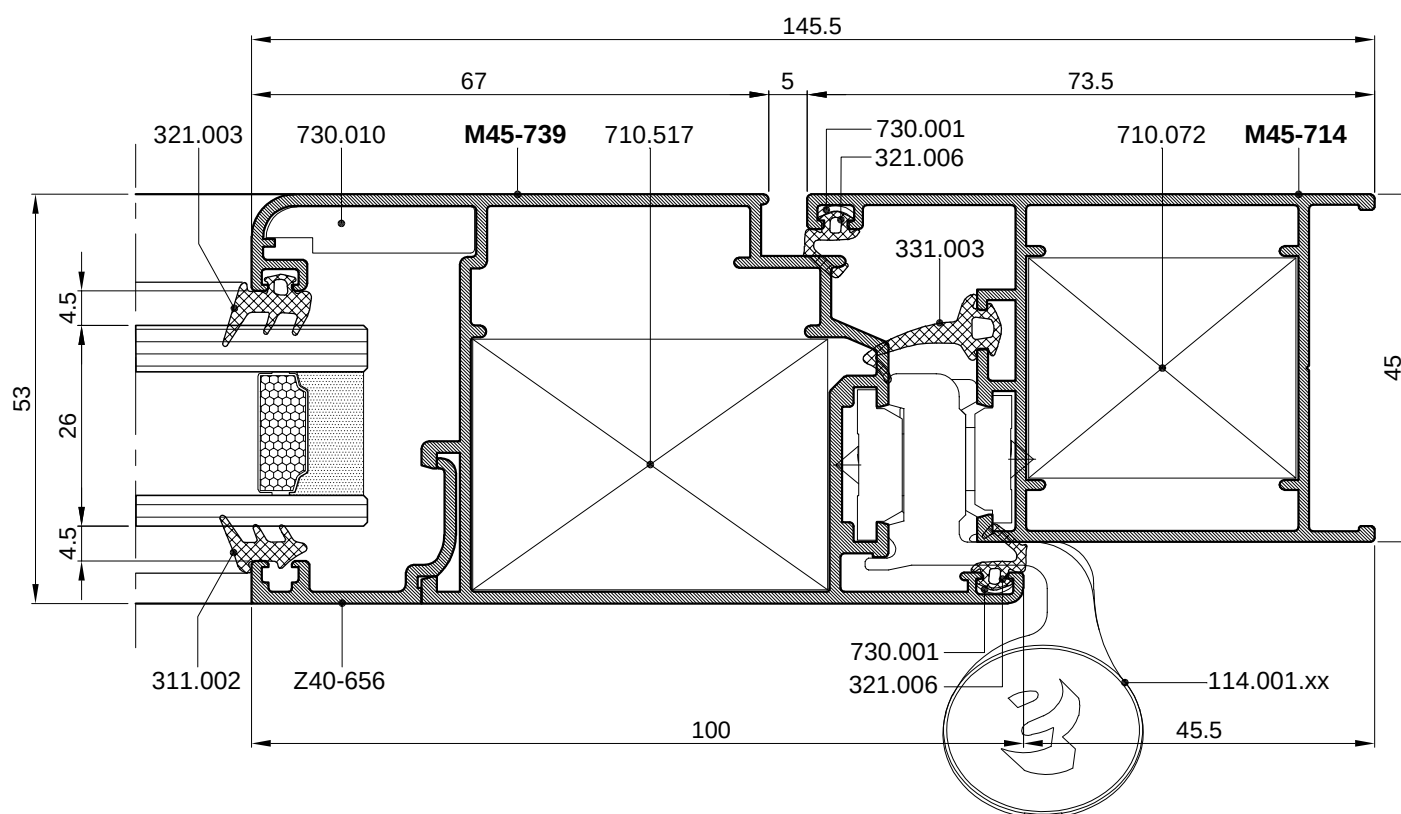
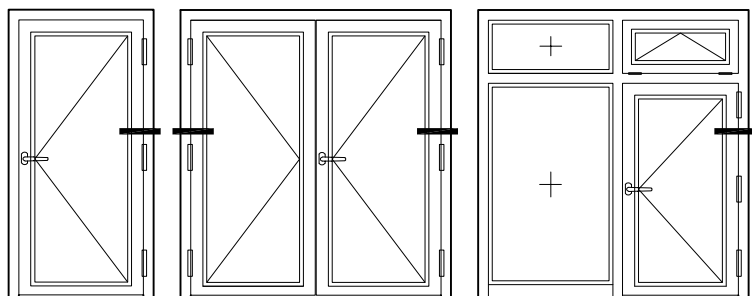
- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)



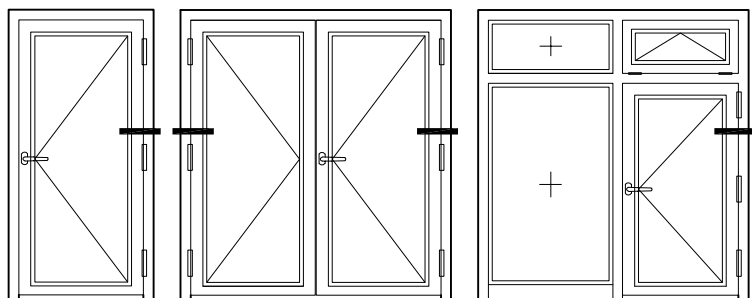


Napomena /Remark:

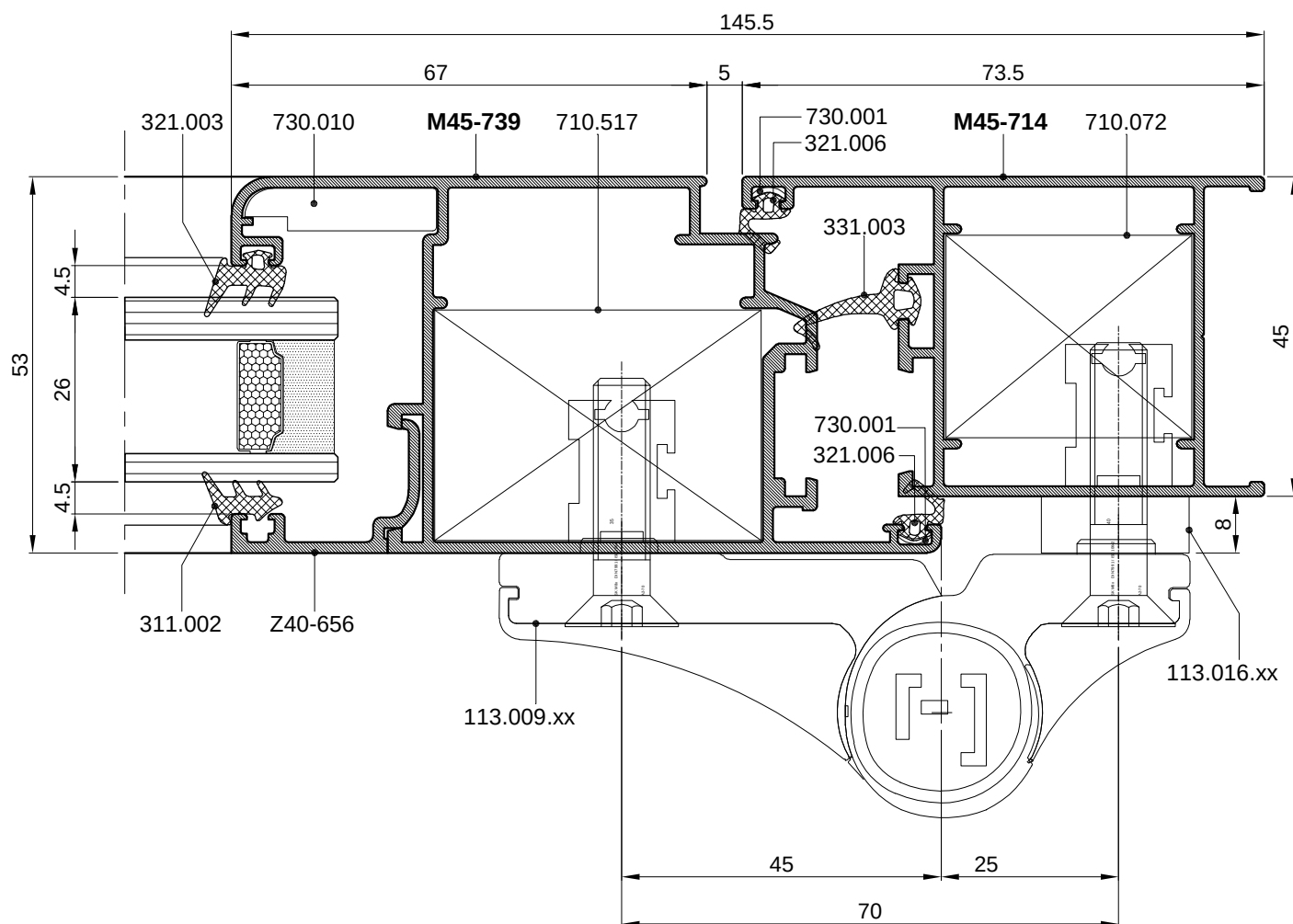
- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)



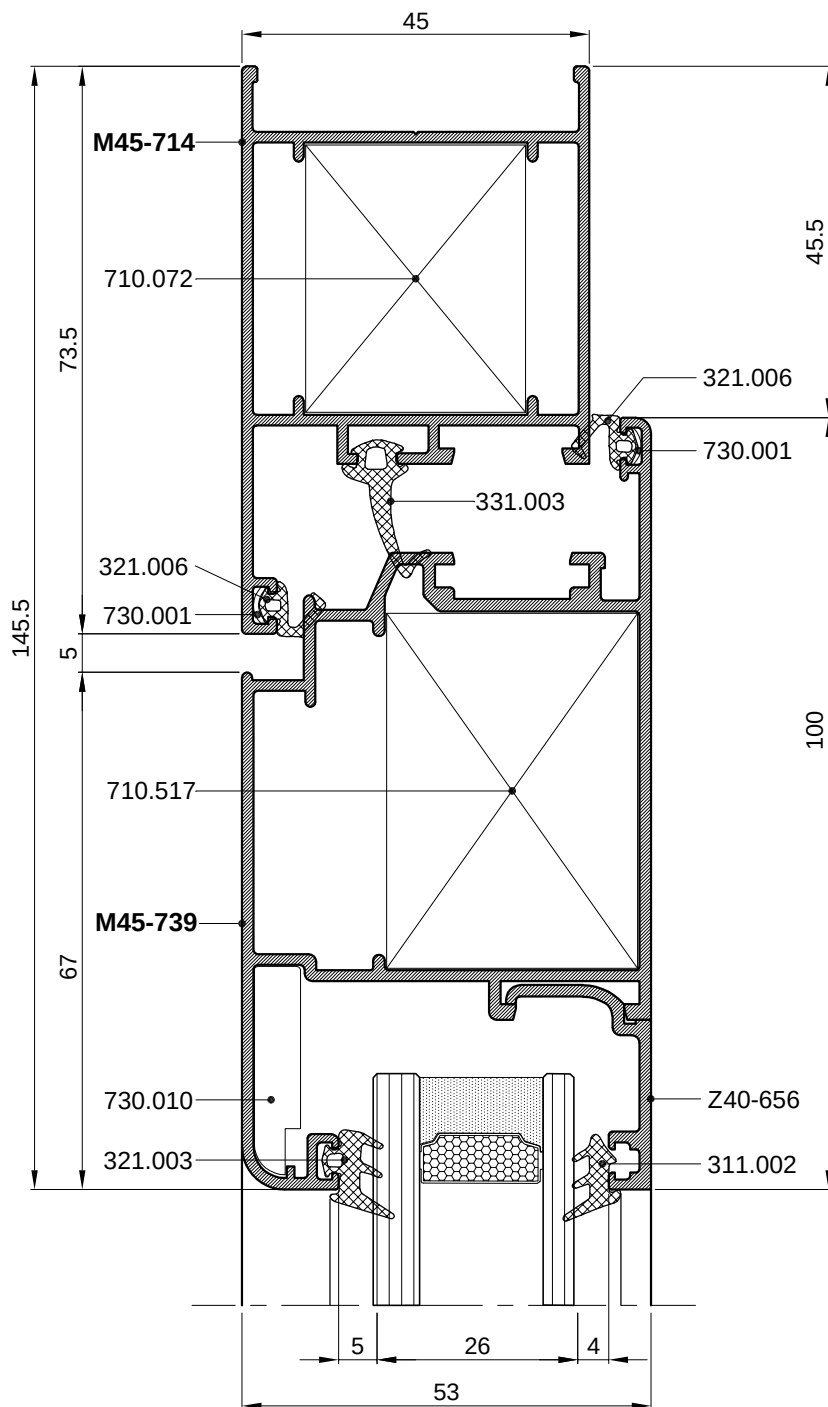
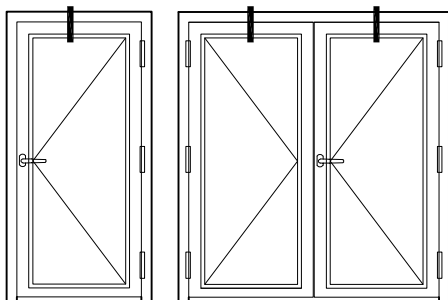
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm



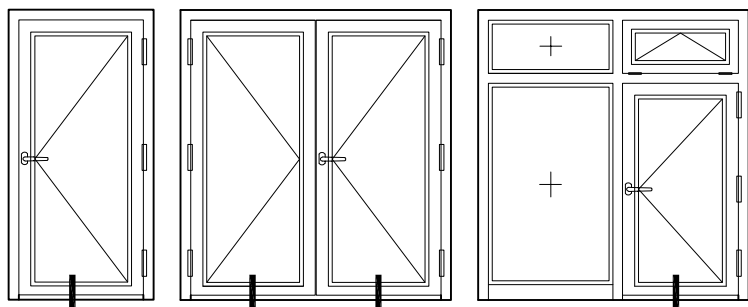
SET USADNIH BAGLAMA - OSNO 70 mm
UGRAĐUJE SE U KRILU VRATA M45-739 (OTVARANJE UNUTRA)
SET OF SCREW-IN HINGES - AXIAL DISTANCE 70 mm
INSTALLED IN DOOR LEAF M45-739 (INWARDS OPENING)



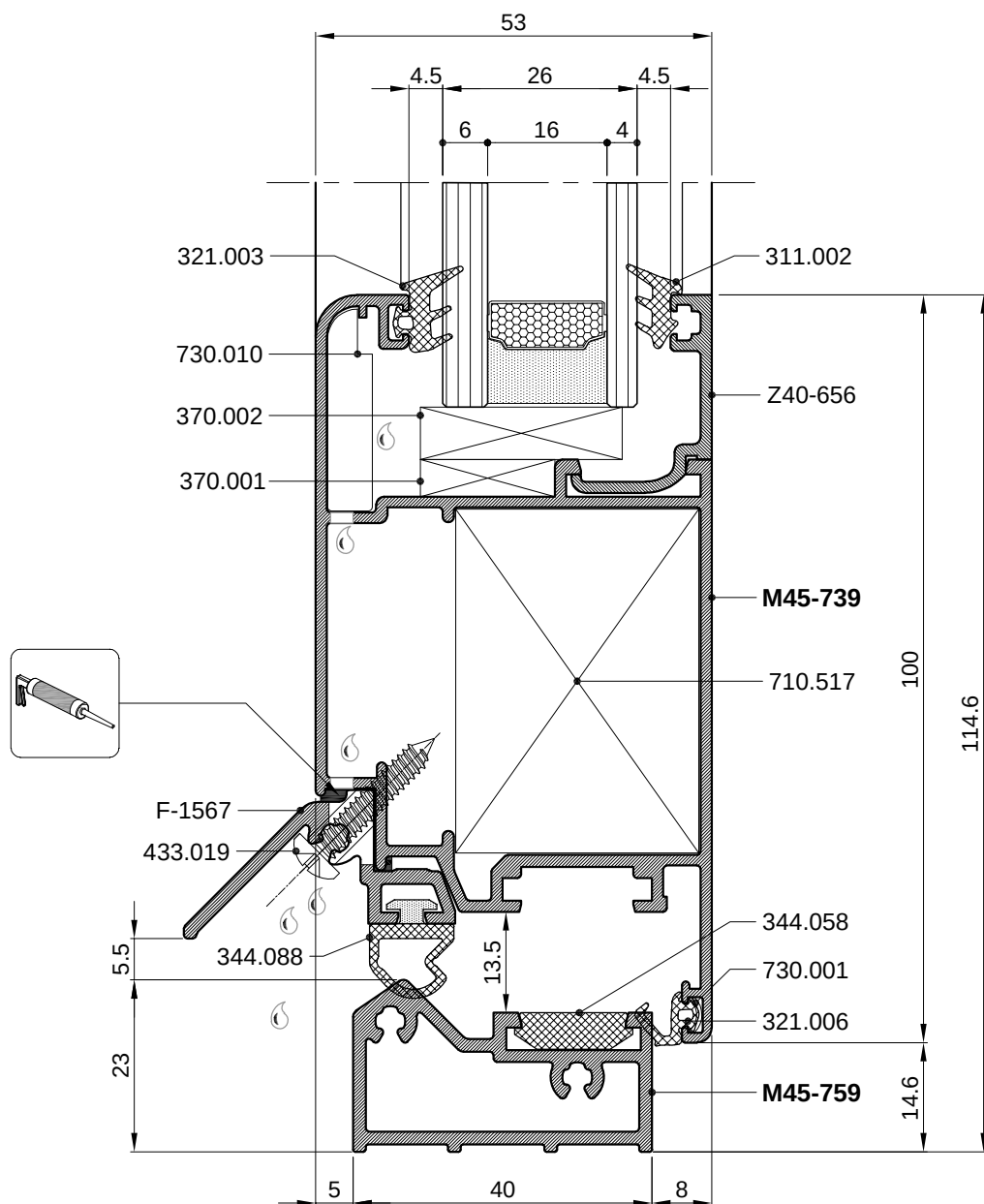
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm



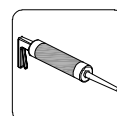
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm



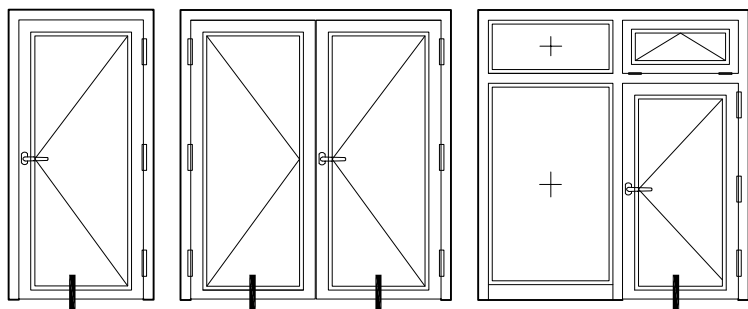
VRATA S PRAGOM
(OTVARANJE UNUTRA)
DOOR WITH THRESHOLD
(INWARDS OPENING)



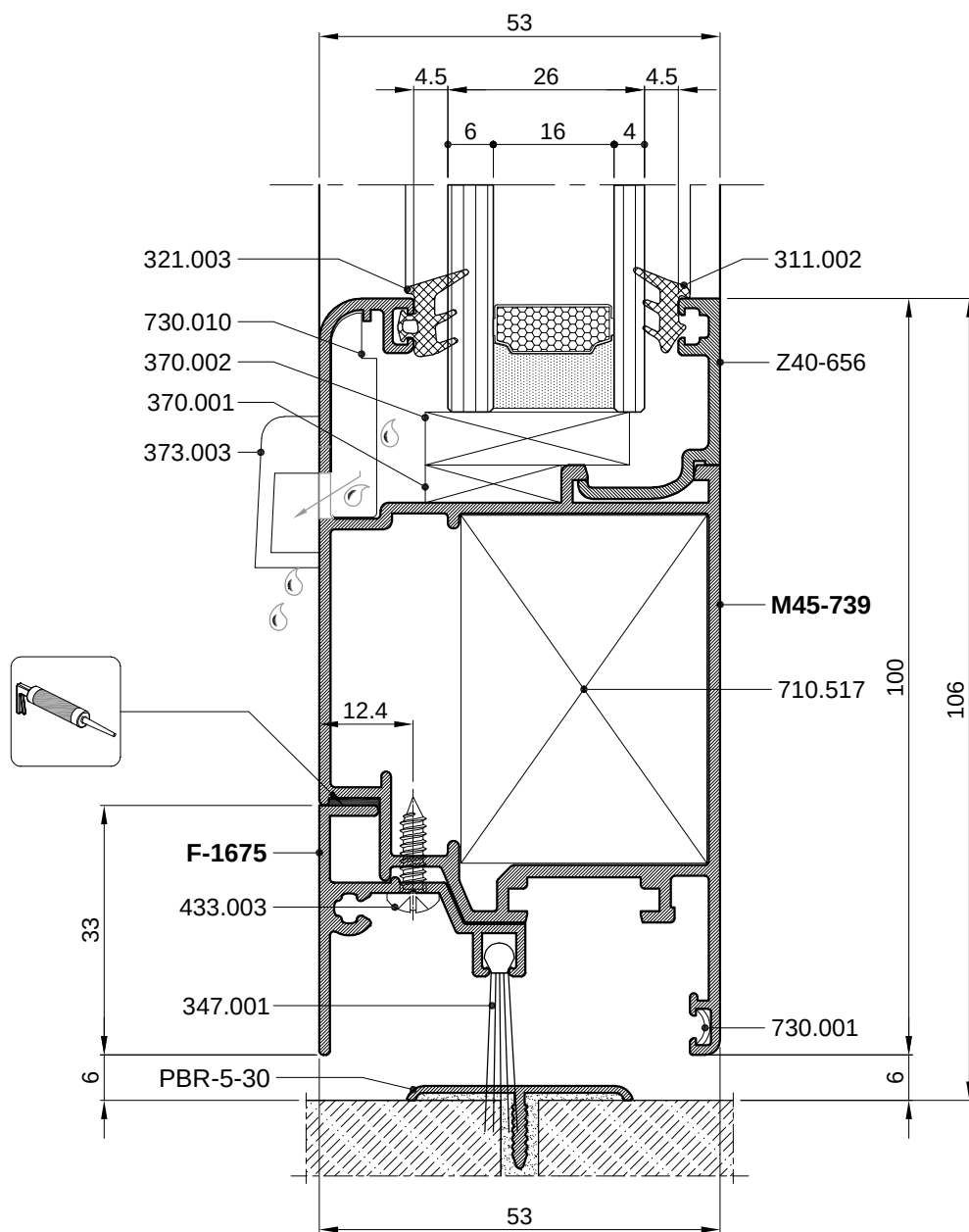
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm

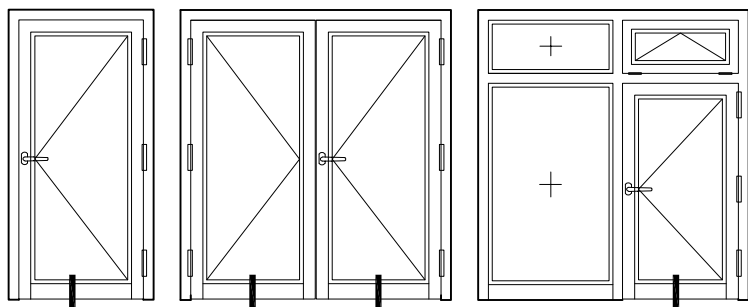


ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)

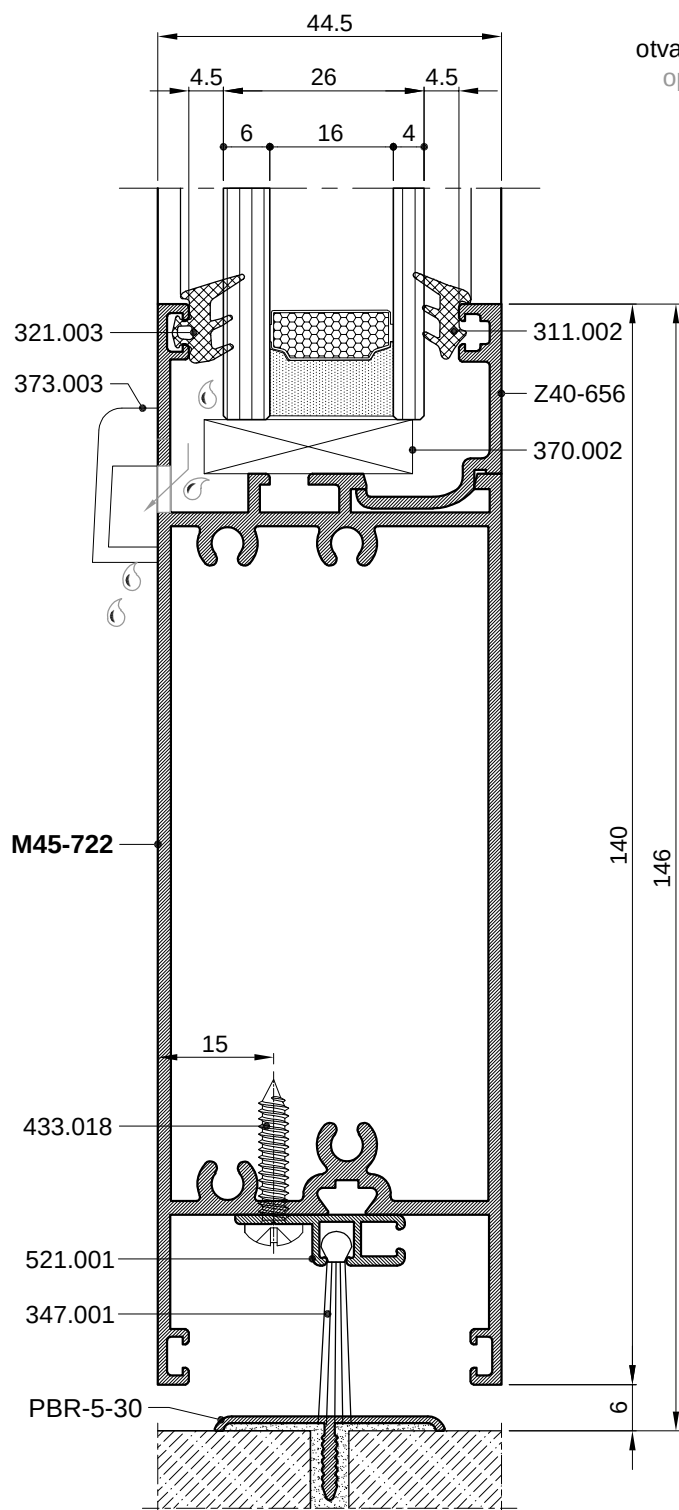


VRATA BEZ PRAGA
(OTVARANJE UNUTRA)
DOOR WITHOUT THRESHOLD
(INWARDS OPENING)

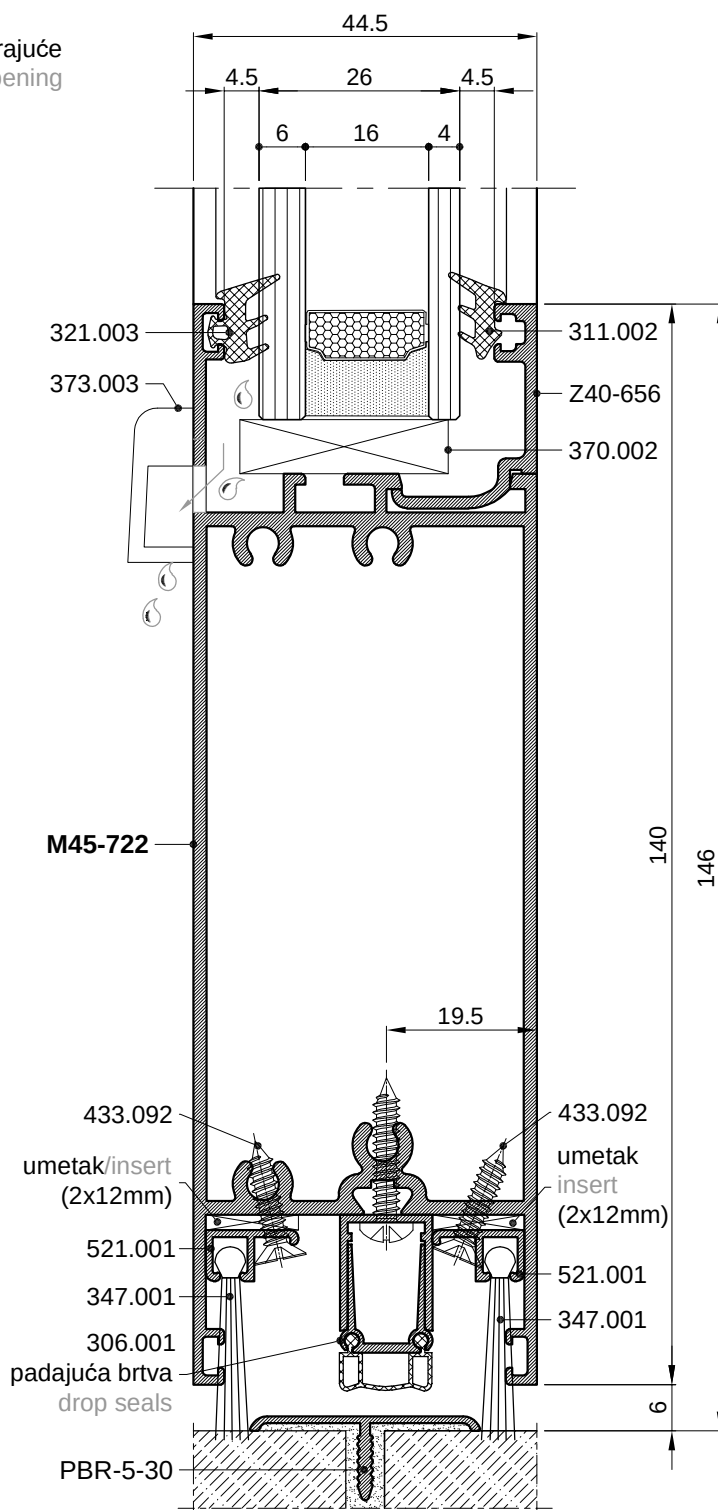


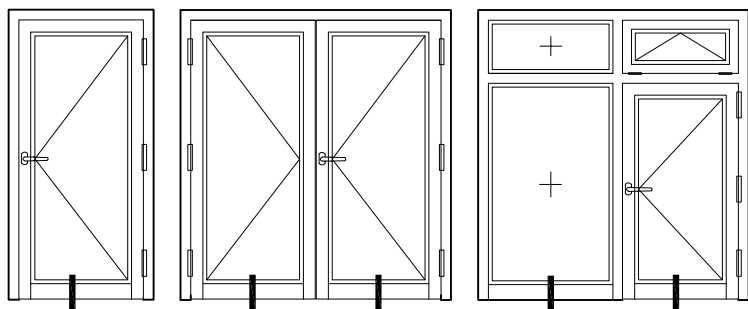


VRATA BEZ PRAGA
(OTVARANJE UNUTRA I VANI)
DOOR WITHOUT THRESHOLD
(INWARDS AND OUTSIDE OPENING)



otvarajuće
opening

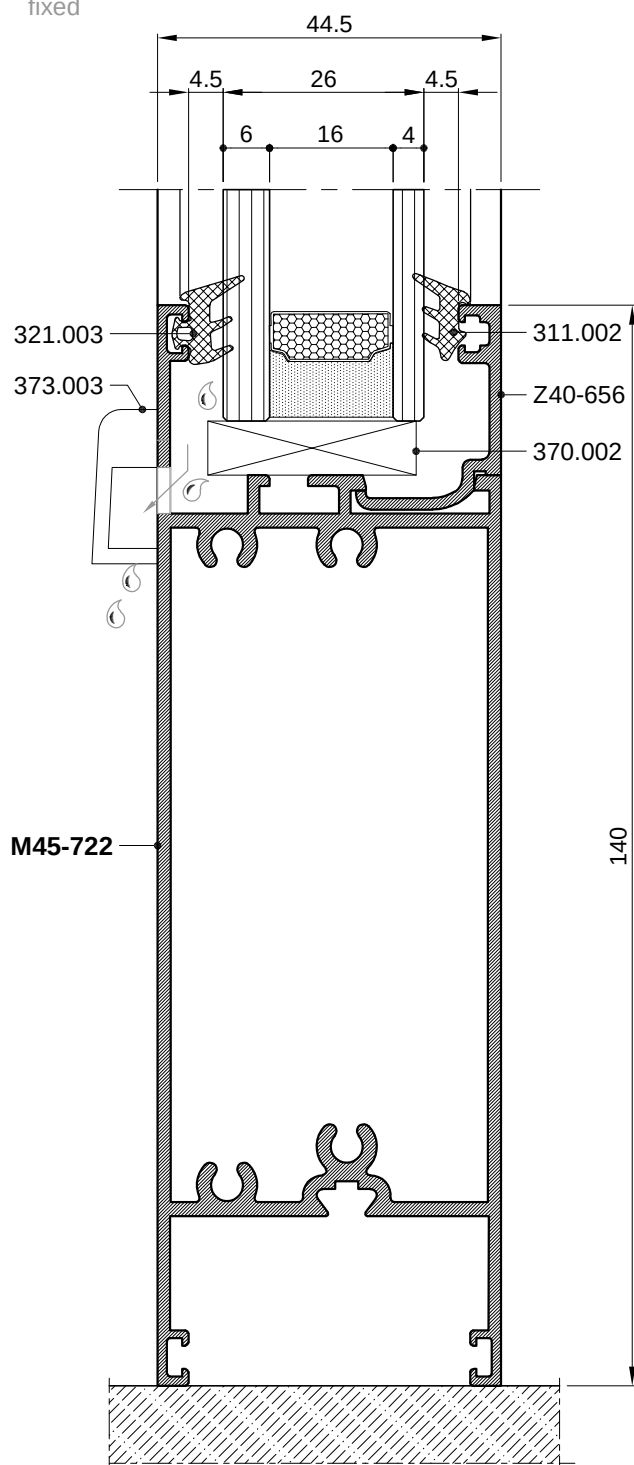
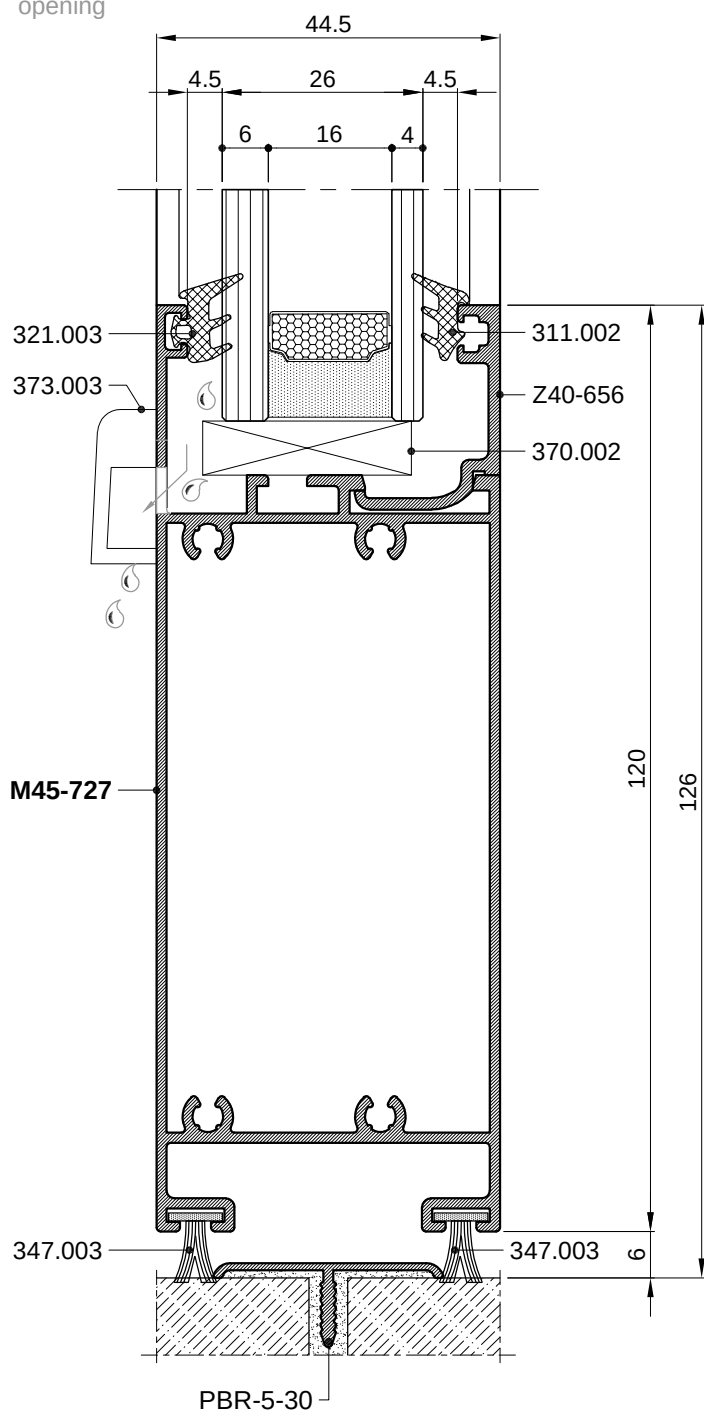


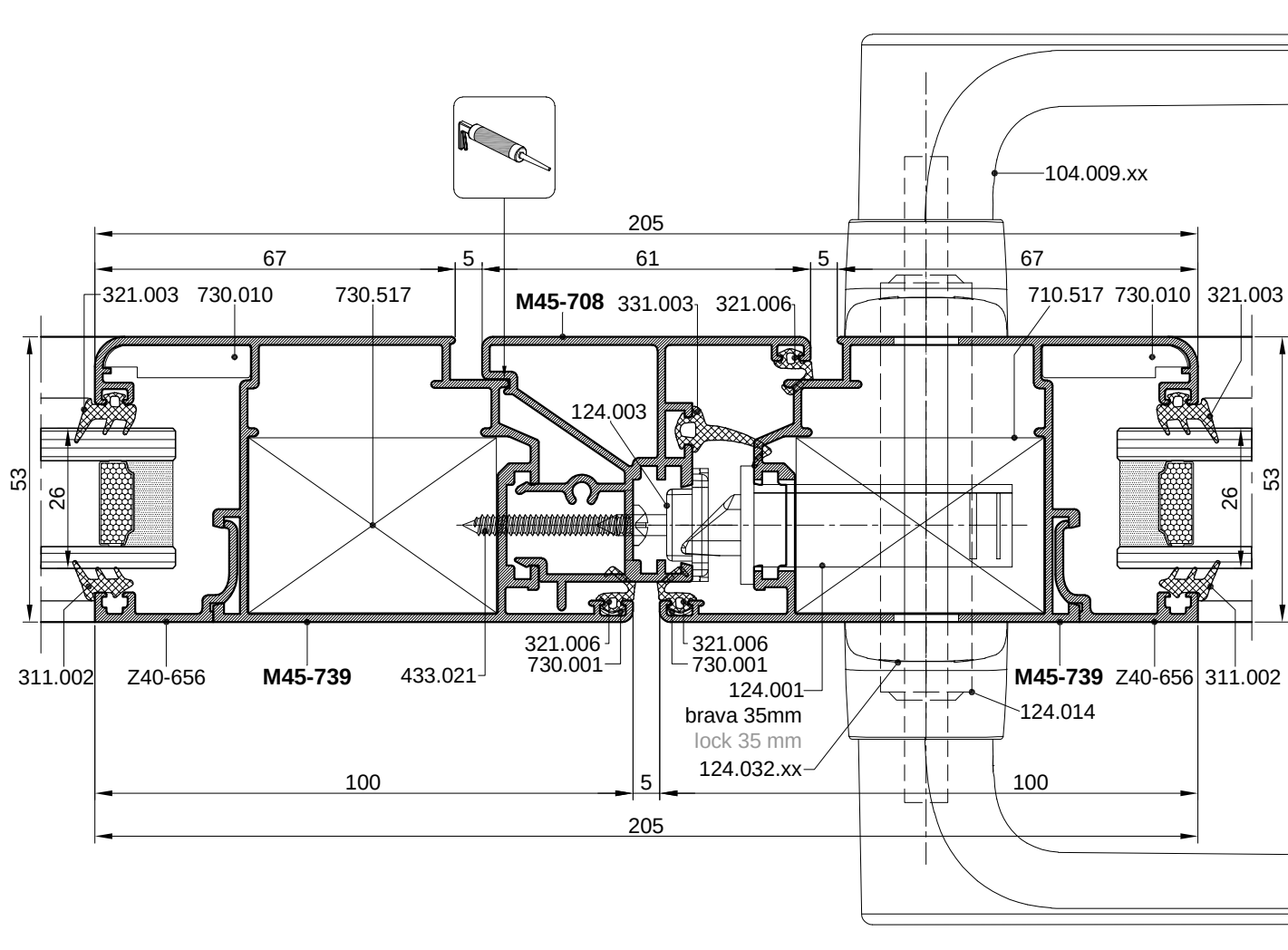
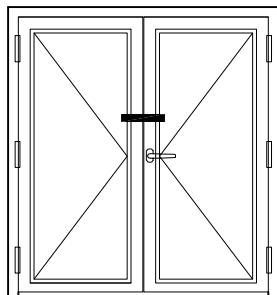


VRATA BEZ PRAGA
(OTVARANJE UNUTRA I VANI)
DOOR WITHOUT THRESHOLD
(INWARDS AND OUTSIDE OPENING)

otvarajuće
opening

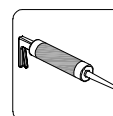
fiksno
fixed



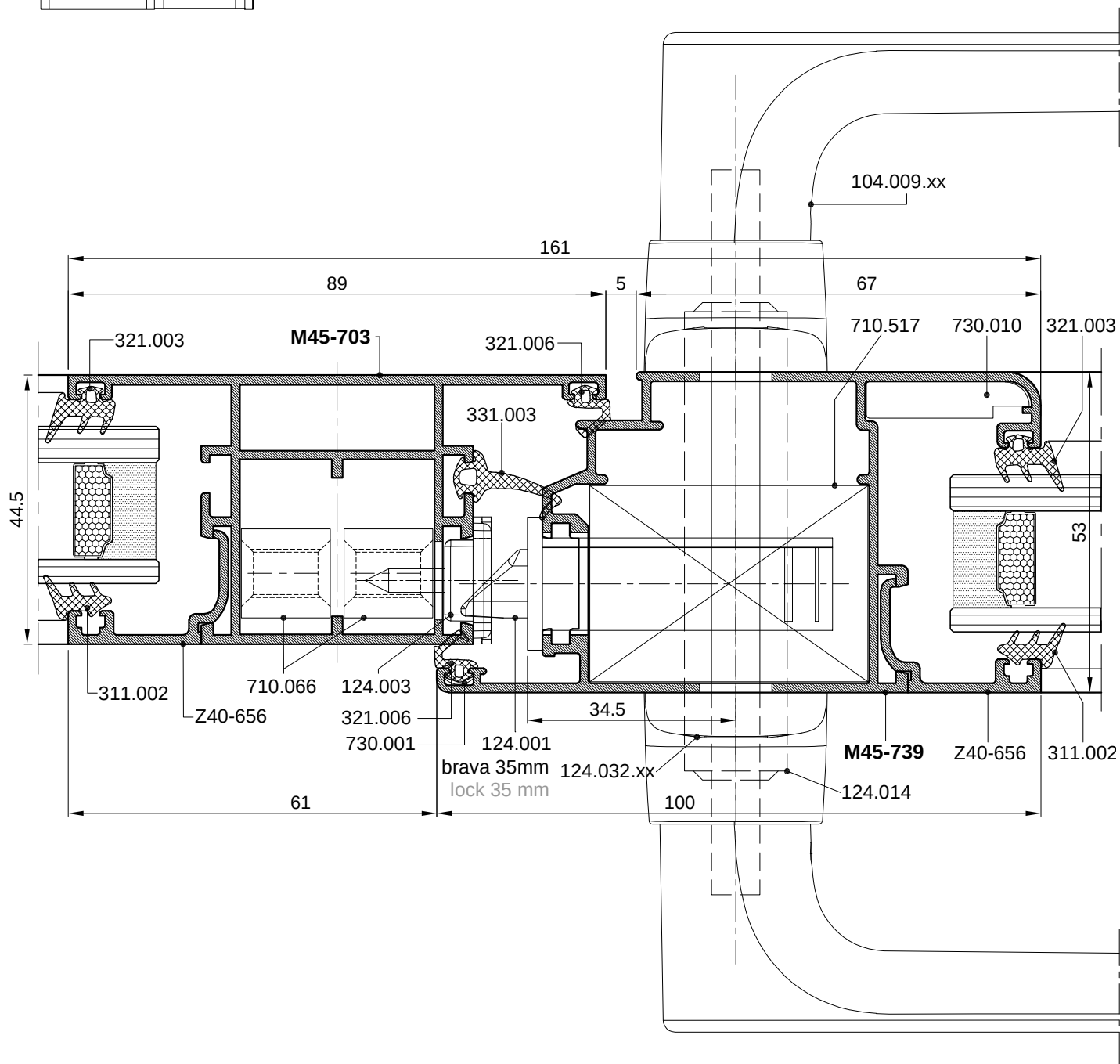
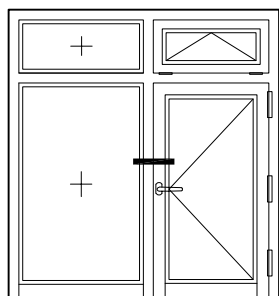


Napomena /Remark:

- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)

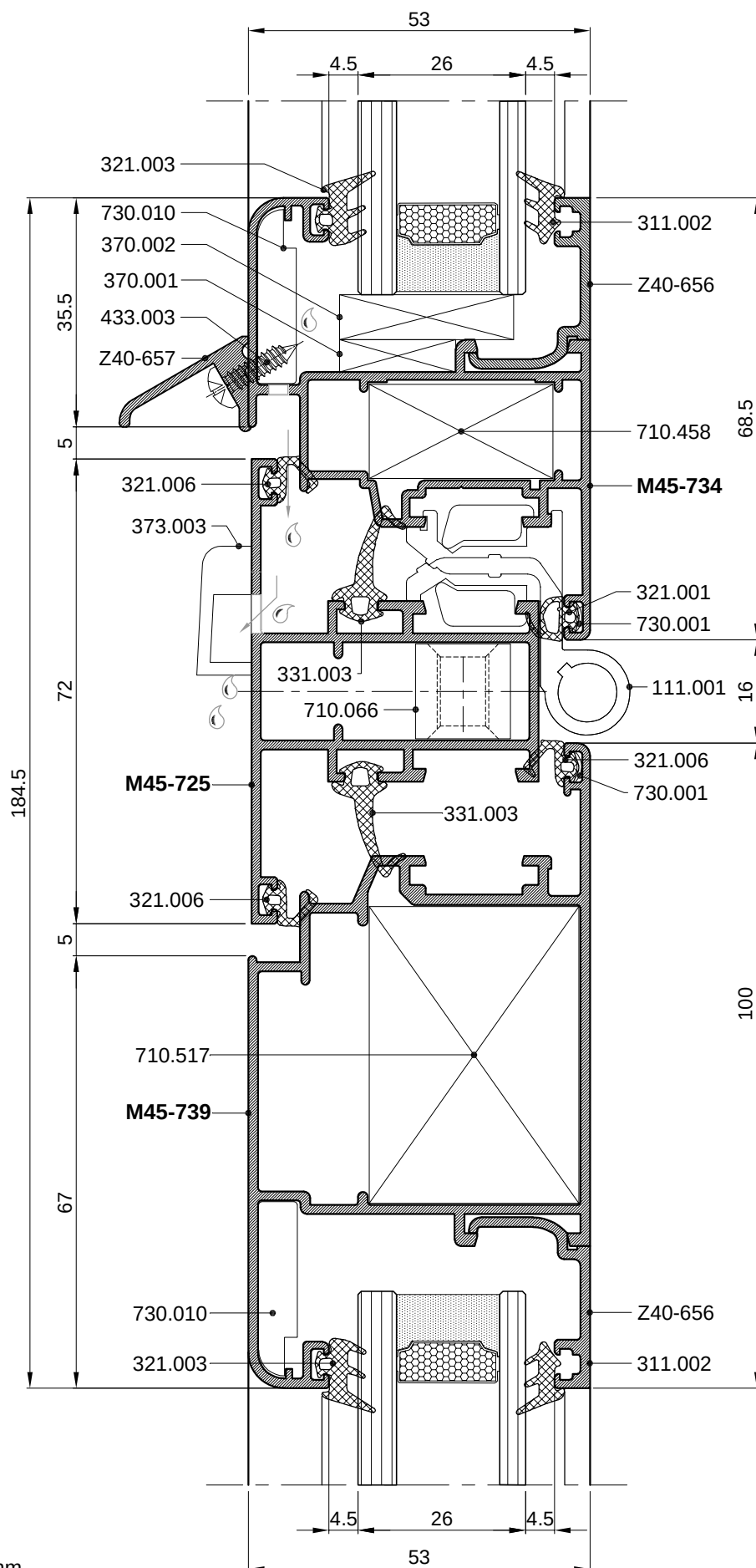
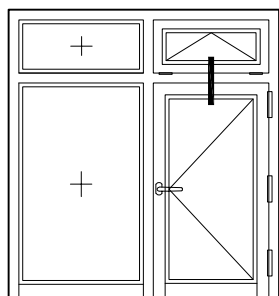


ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)

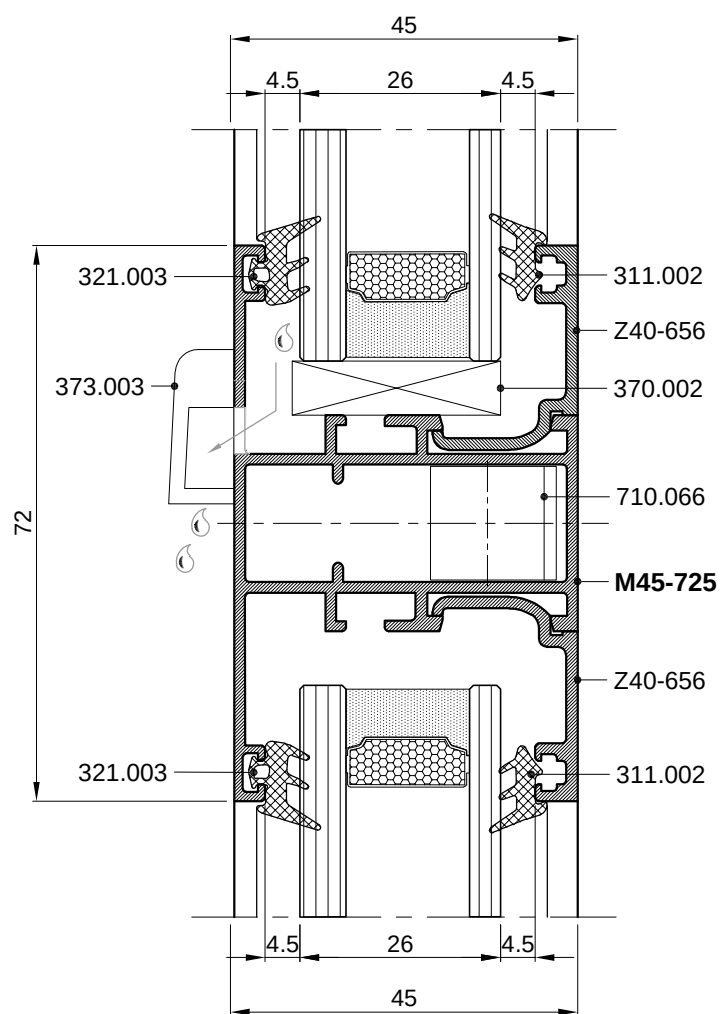
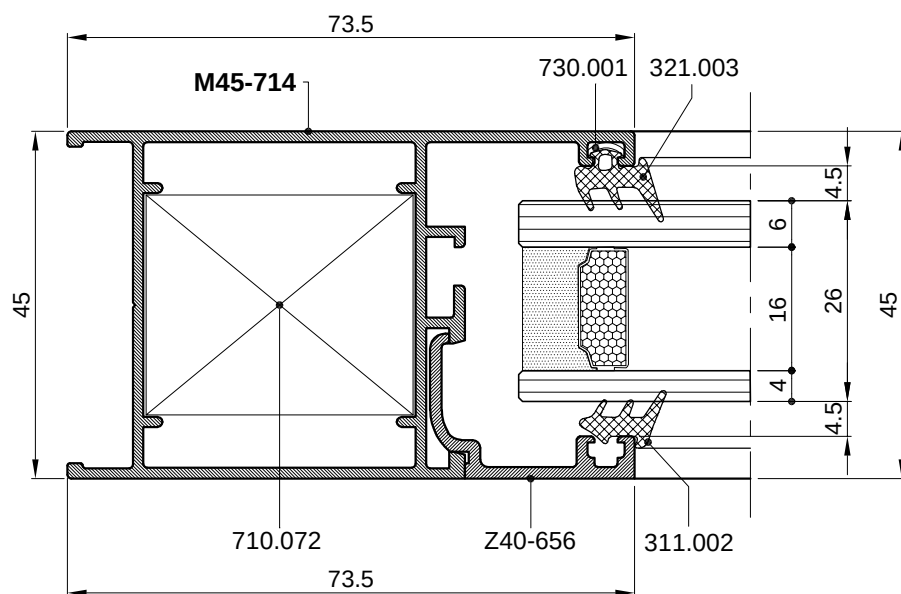
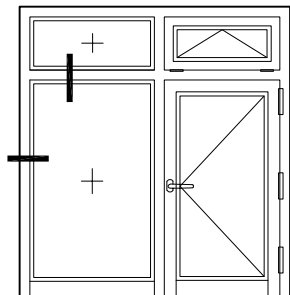


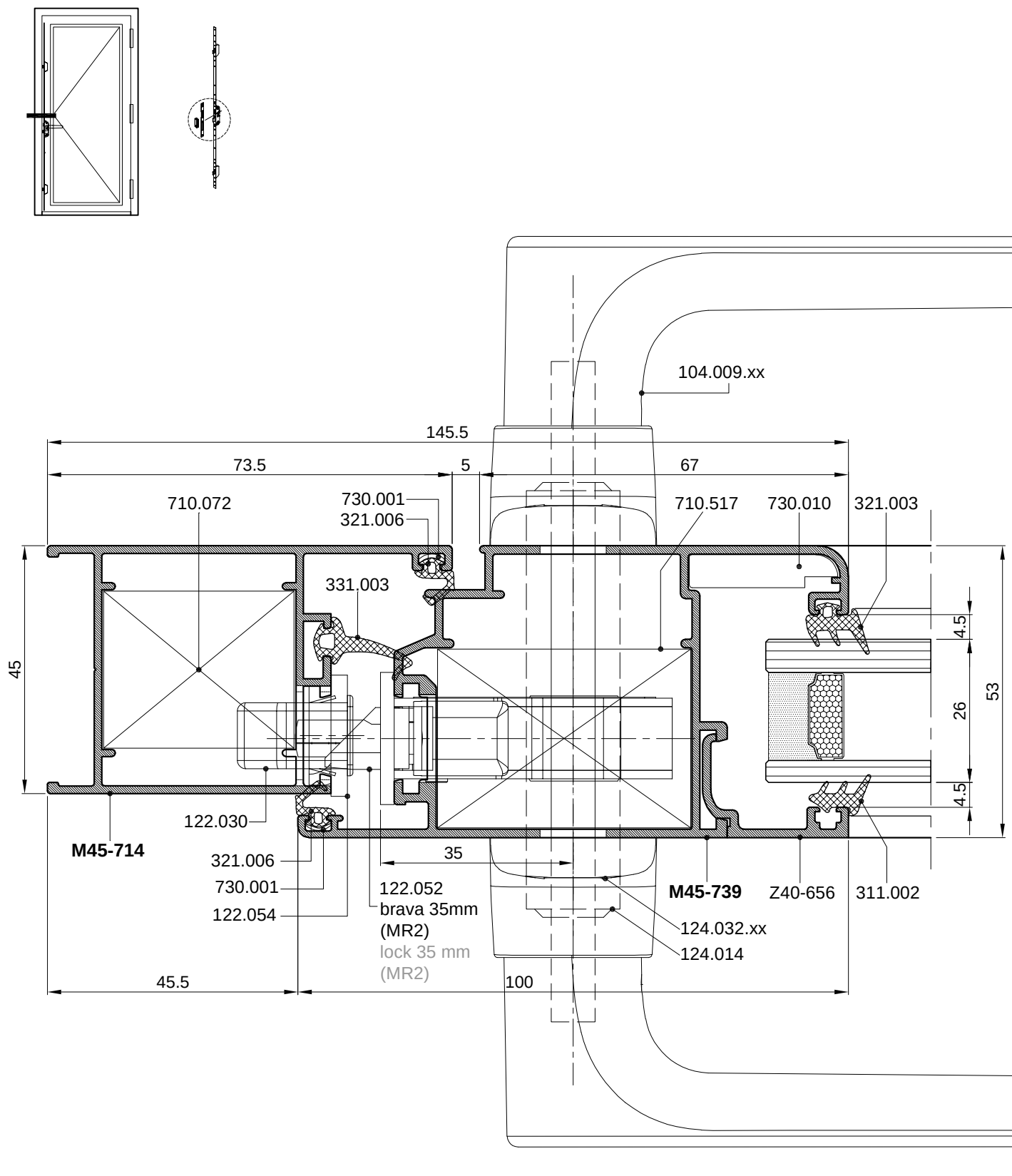
Napomena /Remark:

- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)



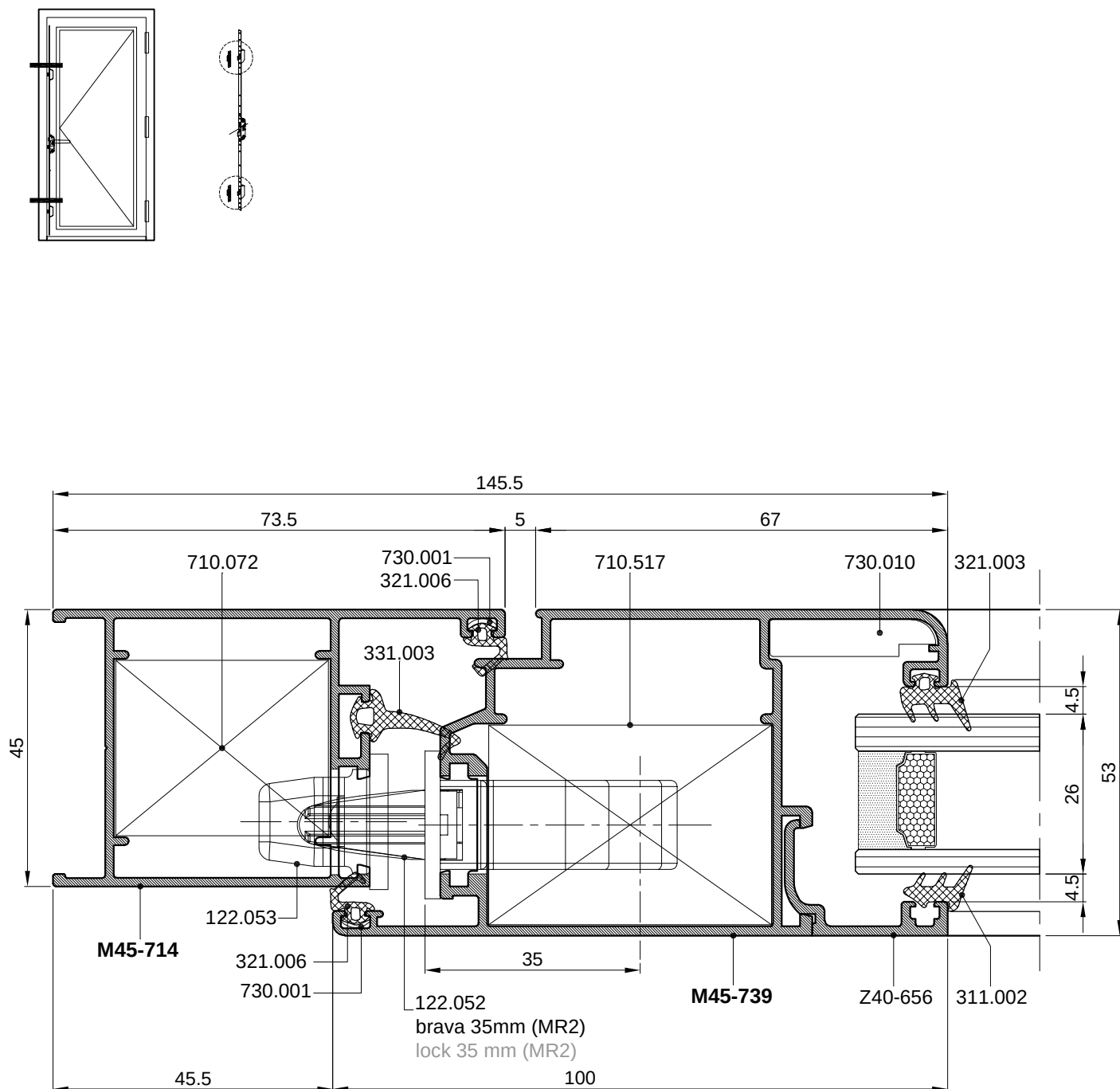
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm





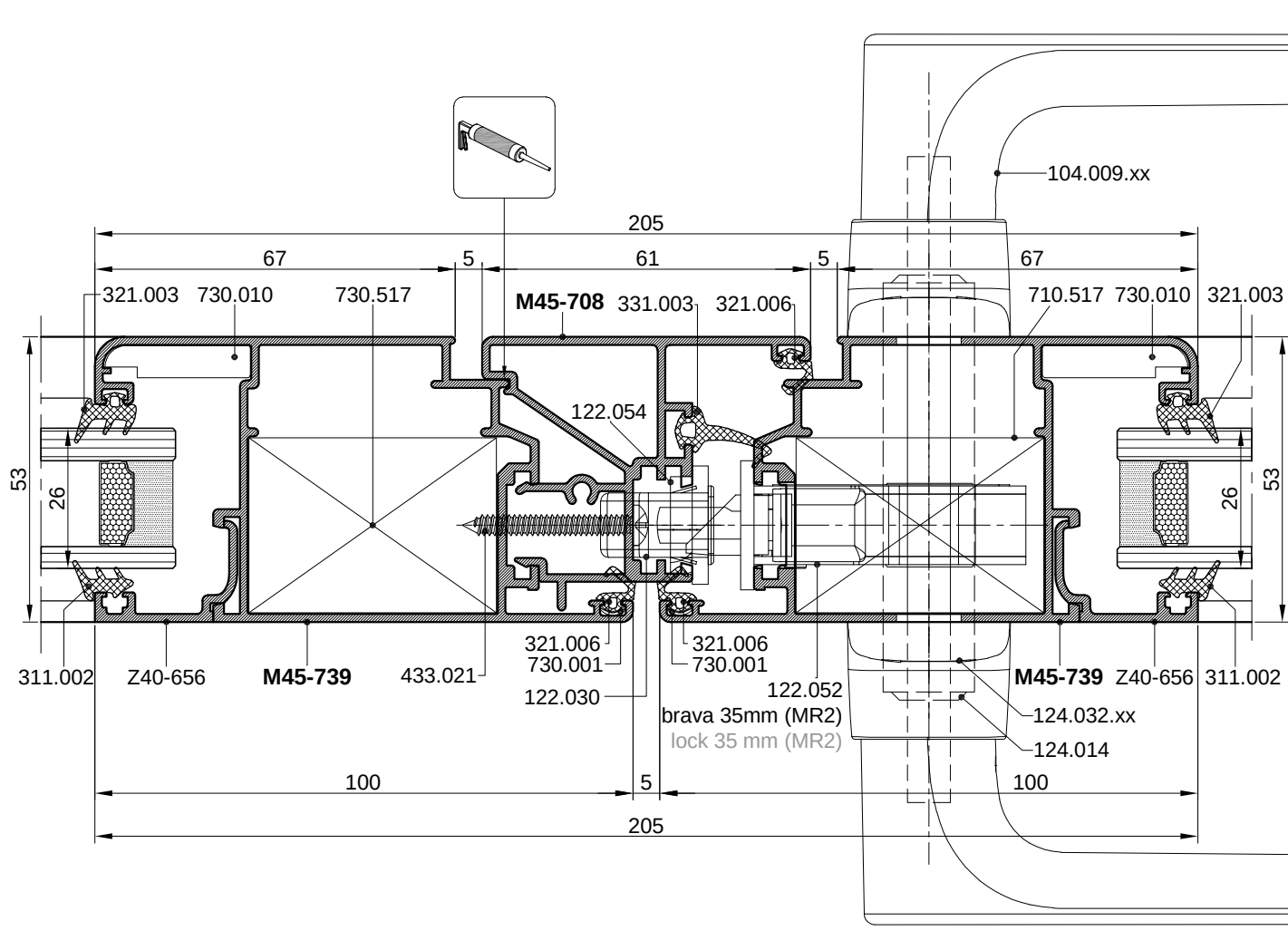
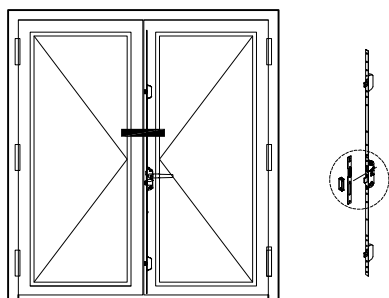
Napomena /Remark:

- Krilo vrata za bravu 35mm
- Sigurnosna brava 35mm sa 3 mjesta ključanja -(MR2)...(122.052)
- Door leaf for lock 35mm
- Safety lock 35mm with 3 locking point -(MR2)...(122.052)



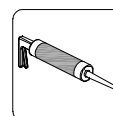
Napomena /Remark:

- Krilo vrata za bravu 35mm
- Sigurnosna brava 35mm sa 3 mjesta ključanja -(MR2)...(122.052)
- Door leaf for lock 35mm
- Safety lock 35mm with 3 locking point -(MR2)...(122.052)

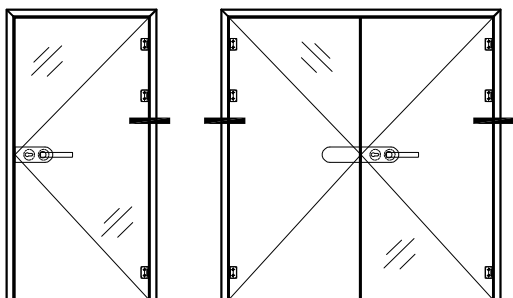


Napomena /Remark:

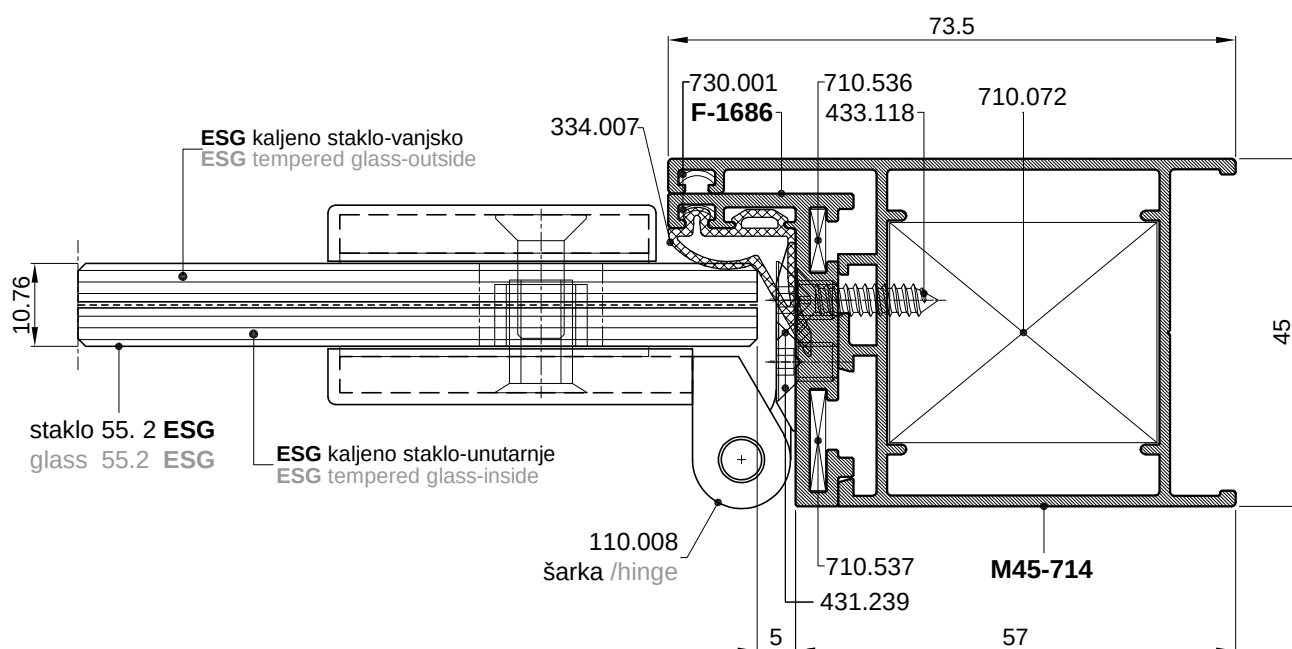
- Sigurnosna brava 35mm
- Sigurnosna brava 35mm sa 3 mjesta ključanja -(MR2)...(122.052)
- Door leaf for lock 35mm
- Safety lock 35mm with 3 locking point -(MR2)...(122.052)



ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)



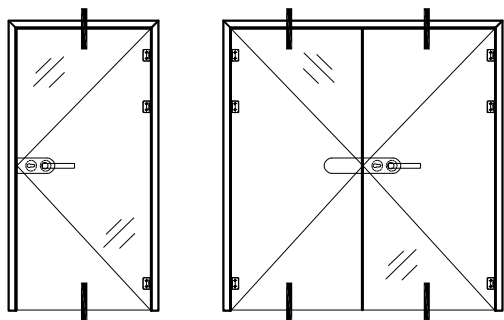
VRATA SA STAKLENIM KRILOM
(OTVARANJE UNUTRA)
DOOR WITH GLASS LEAF
(INWARDS OPENING)



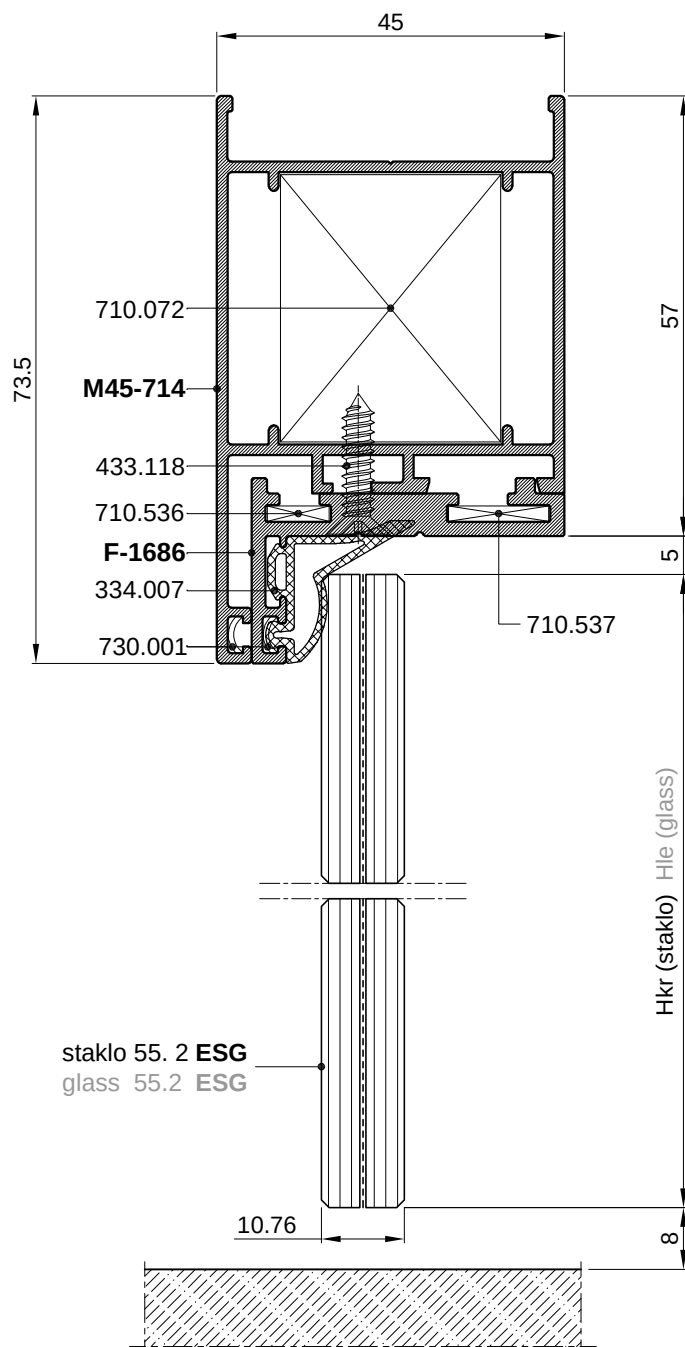
Napomena /Remark:

Krilo vrata / Leaf door :

- Staklo 55.2 **ESG** / Glass 55.2 **ESG**



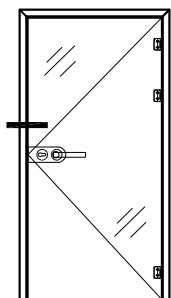
VRATA SA STAKLENIM KRILOM
(OTVARANJE UNUTRA)
DOOR WITH GLASS LEAF
(INWARDS OPENING)



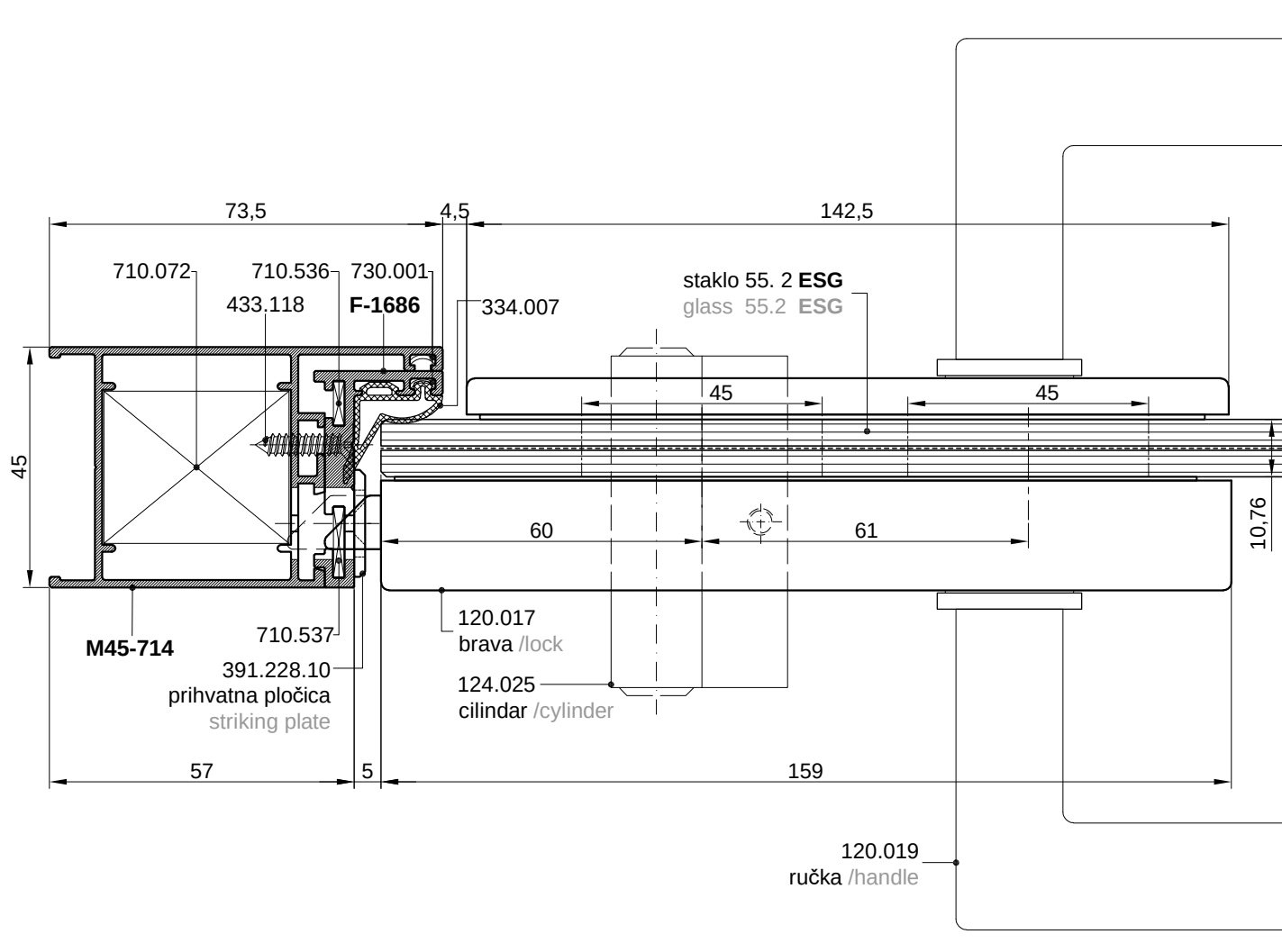
Napomena /Remark:

Krilo vrata / Leaf door :

- Staklo 55.2 **ESG** / Glass 55.2 **ESG**



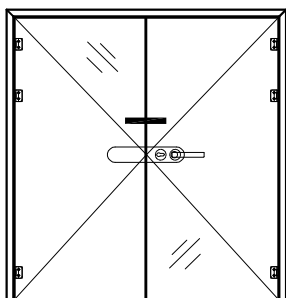
VRATA SA STAKLENIM KRILOM
(OTVARANJE UNUTRA)
DOOR WITH GLASS LEAF
(INWARDS OPENING)



Napomena /Remark:

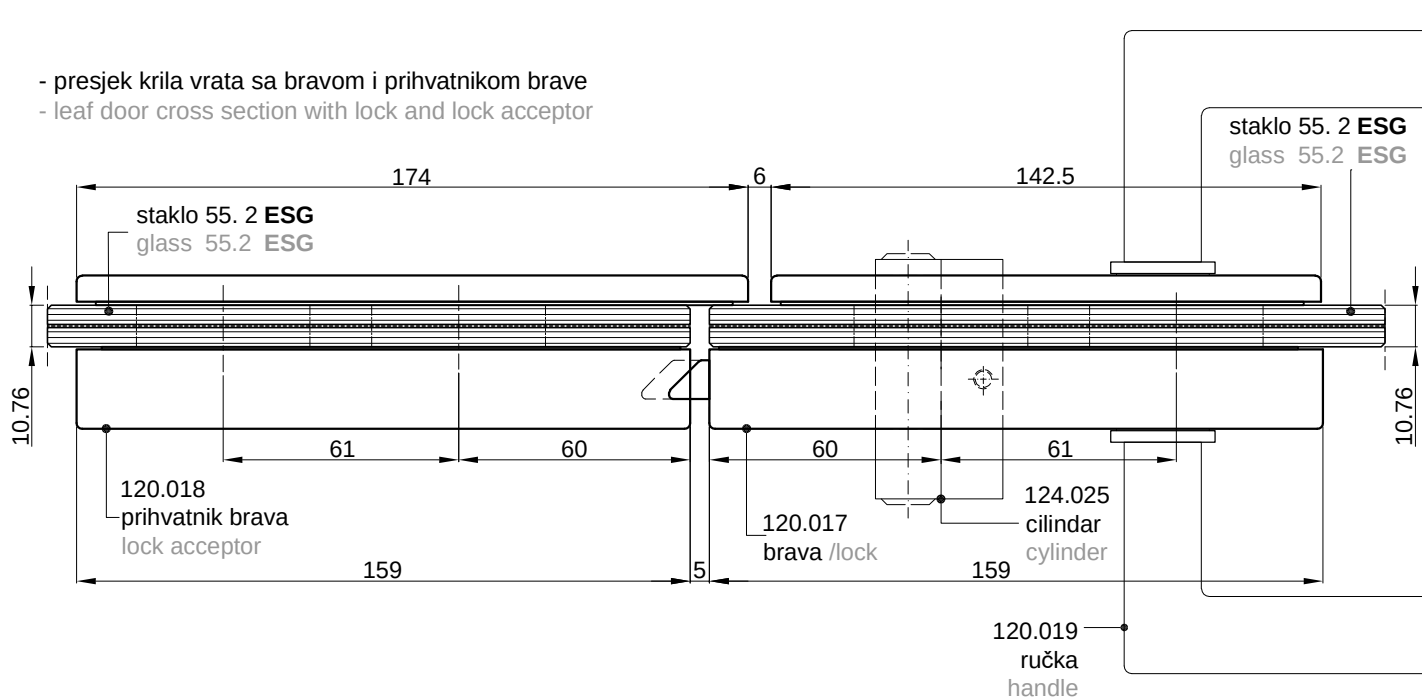
Krilo vrata / Leaf door :

- Staklo 55.2 **ESG** / Glass 55.2 **ESG**

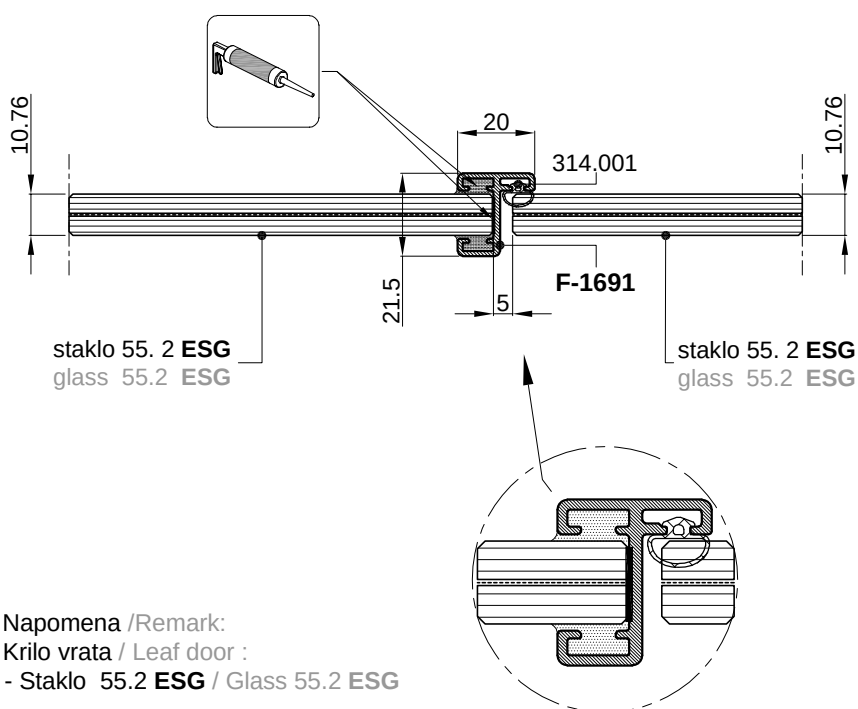


VRATA SA STAKLENIM KRILOM
(OTVARANJE UNUTRA)
DOOR WITH GLASS LEAF
(INWARDS OPENING)

- presjek krila vrata sa bravom i prihvatom brave
- leaf door cross section with lock and lock acceptor



- presjek krila vrata sa profilom F-1691 na pomoćnom krilu
- leaf door cross section with profile F-1691 on auxiliary leaf

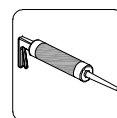
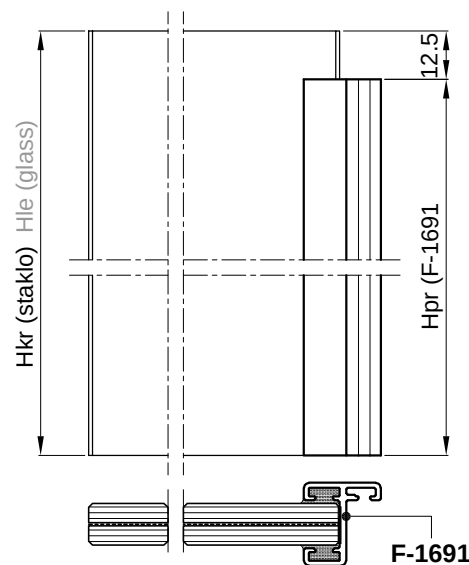


Mjera pilanja profila **F-1691**:

Hpr = Hkr (staklo) -12.5 mm

Sawing length of profile **F-1691**:

Hpr = Hle (glass) -12.5 mm



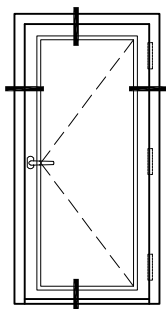
Jednokomponentno ljepilo
TEROSON MS 939
One-component glue
TEROSON MS 939

Napomena /Remark:

Krilo vrata / Leaf door :

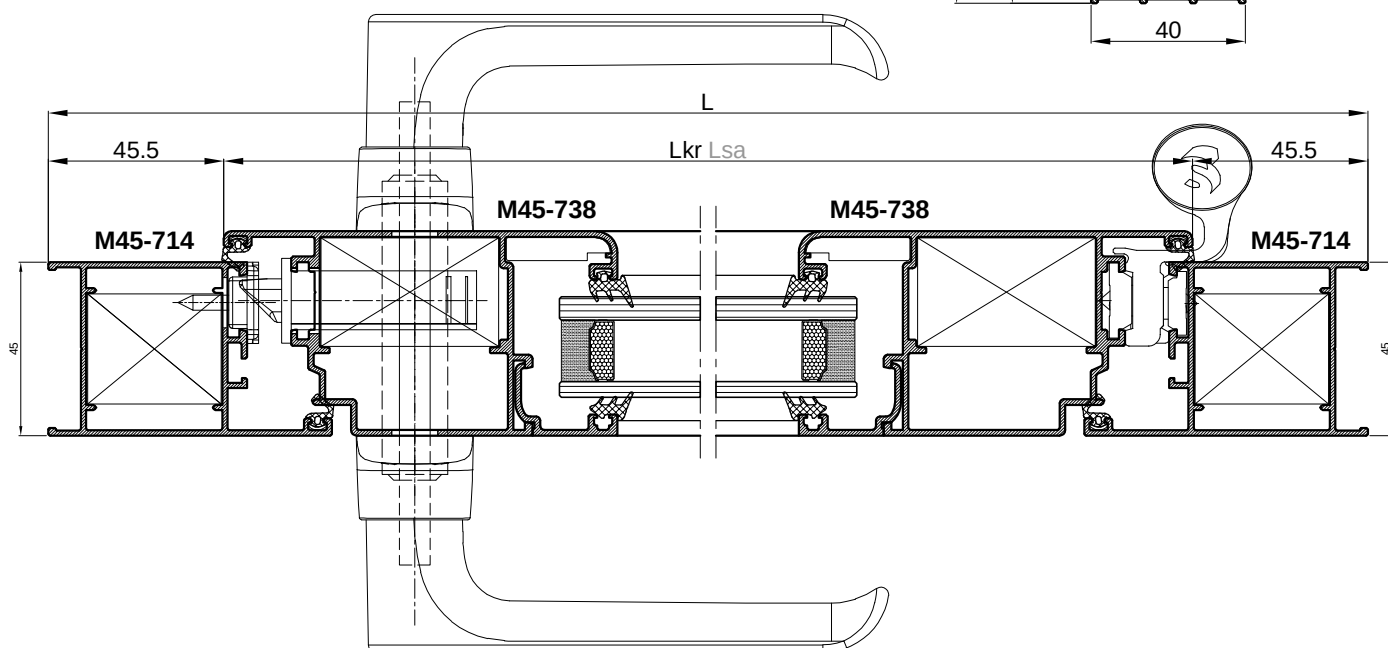
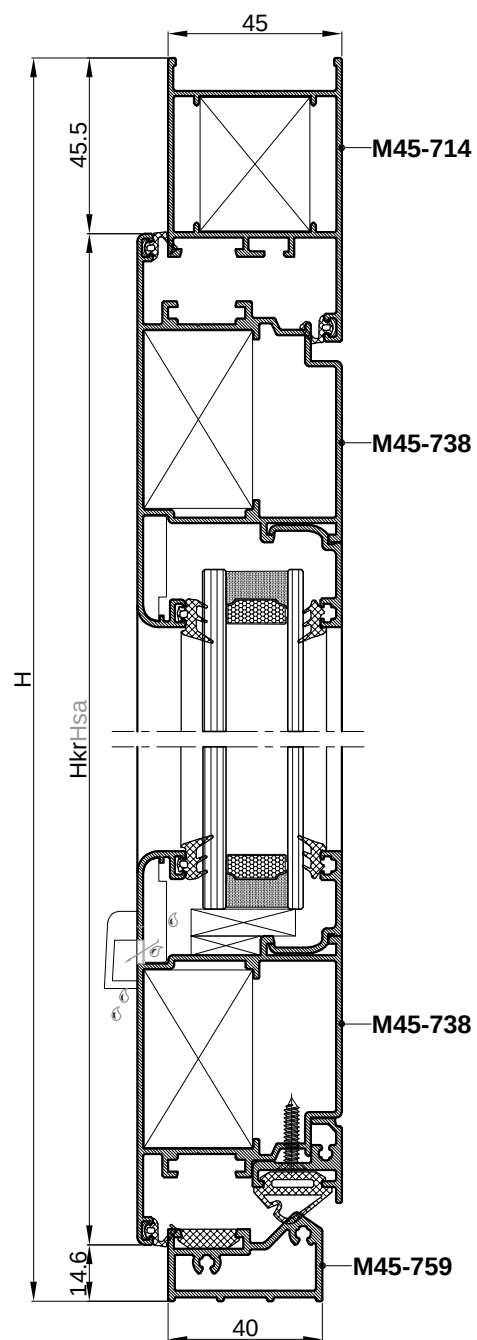
- Staklo 55.2 ESG / Glass 55.2 ESG

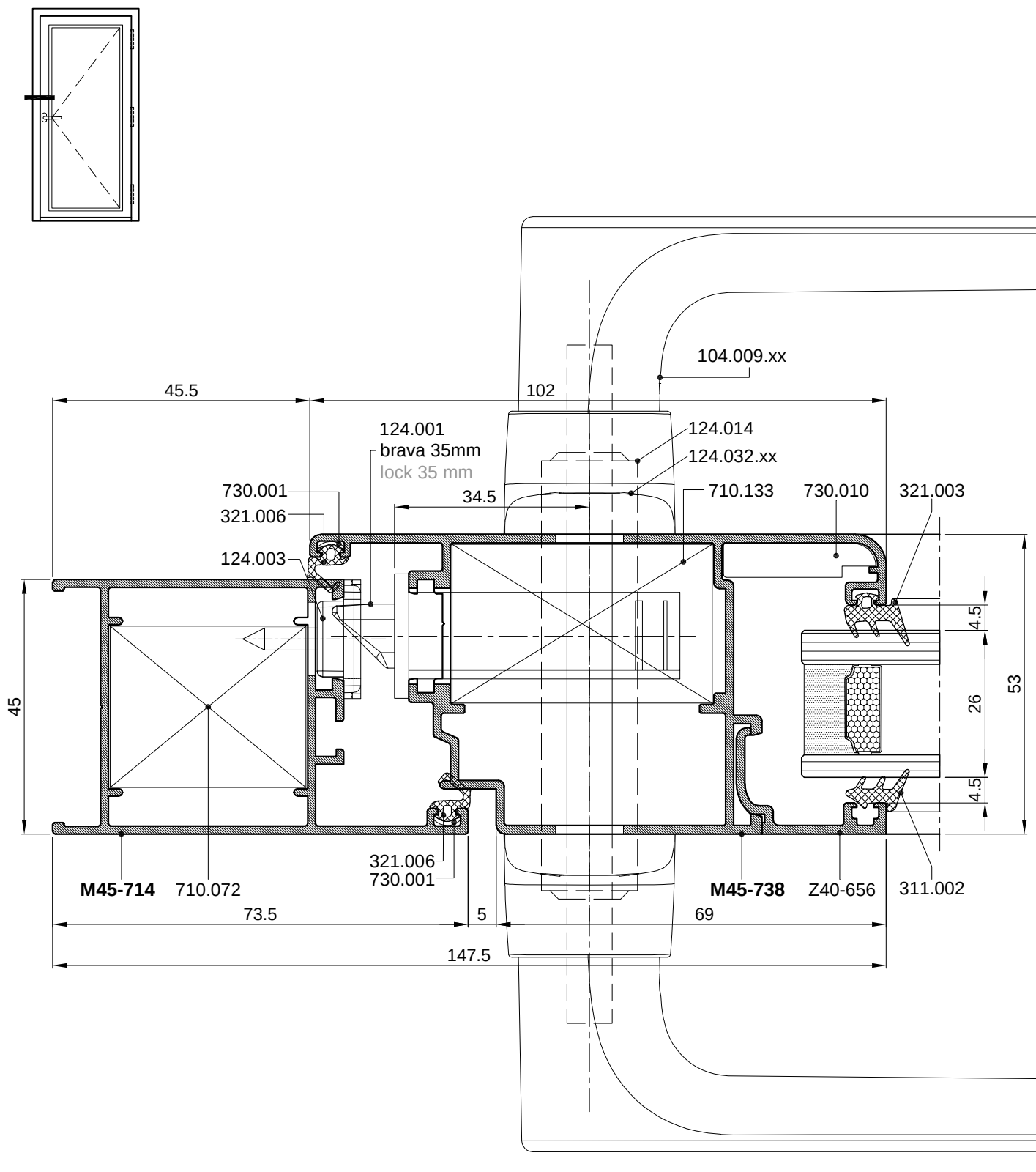
JEDNOKRILNA ULAZNA VRATA, OTVARANJE VANI
ONE-SASH ENTRANCE DOOR, OUTSIDE OPENING



Napomena /Remark:

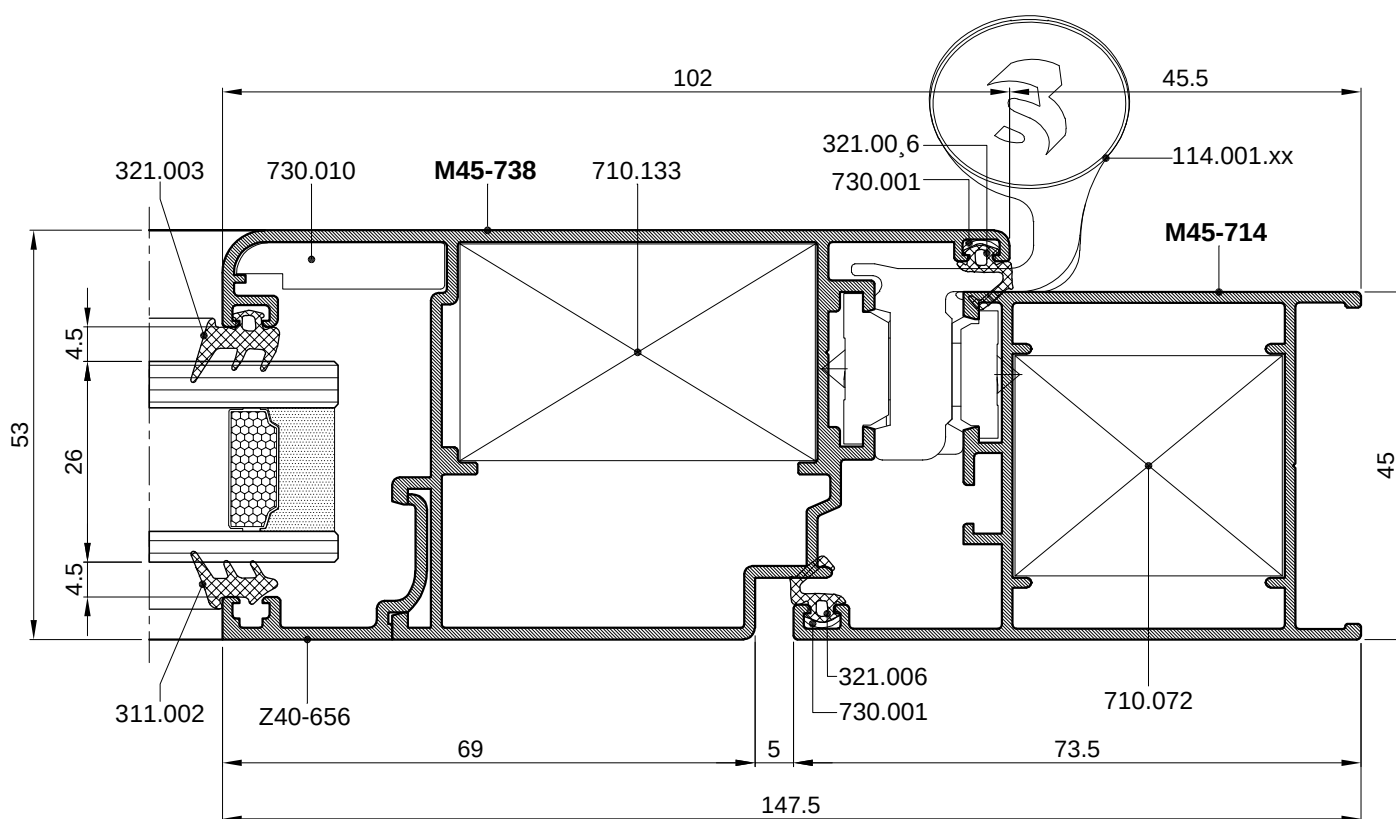
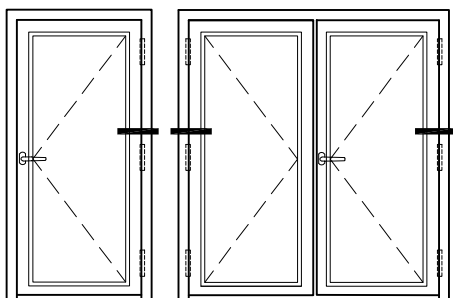
- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)



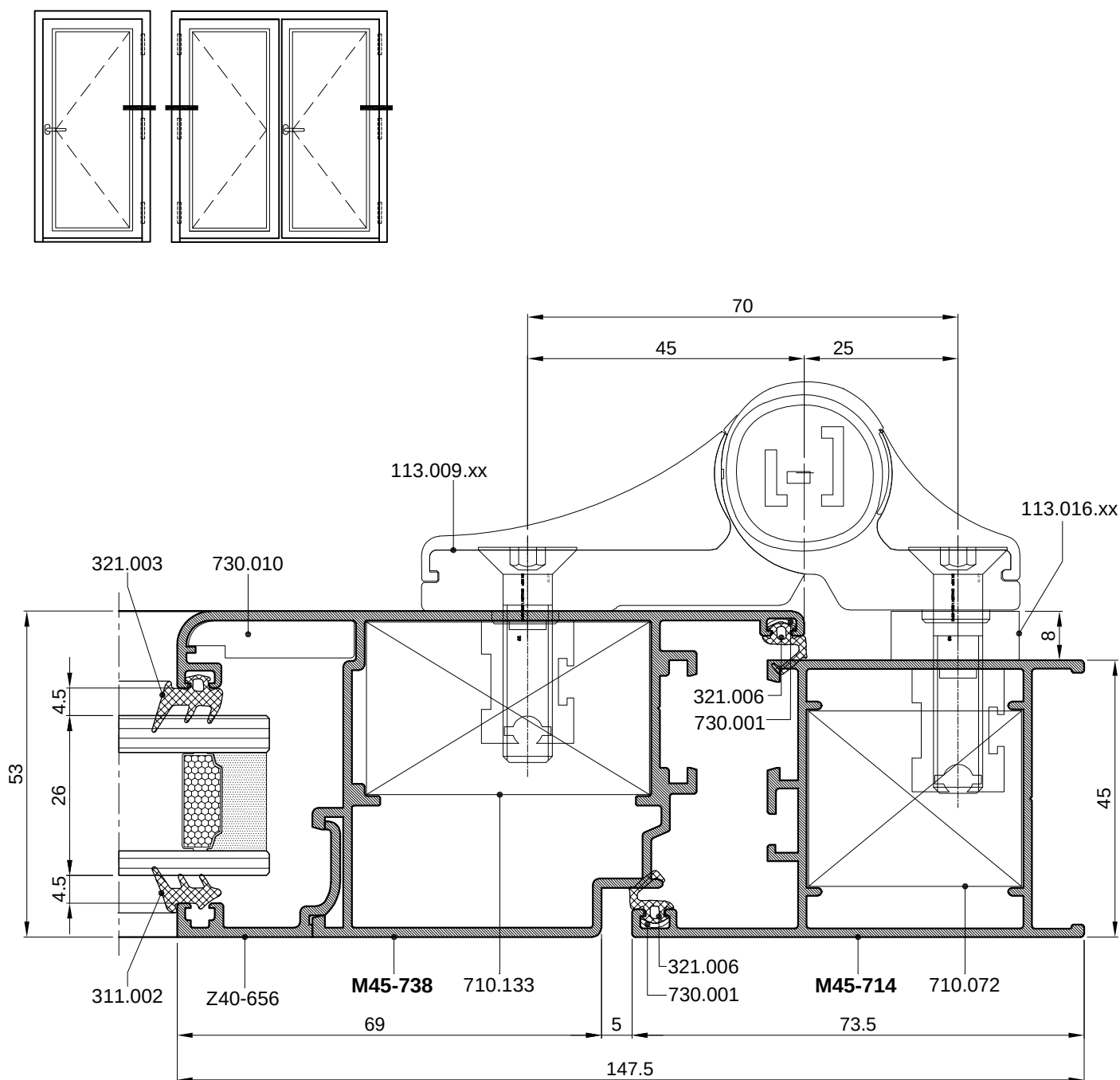


Napomena /Remark:

- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)

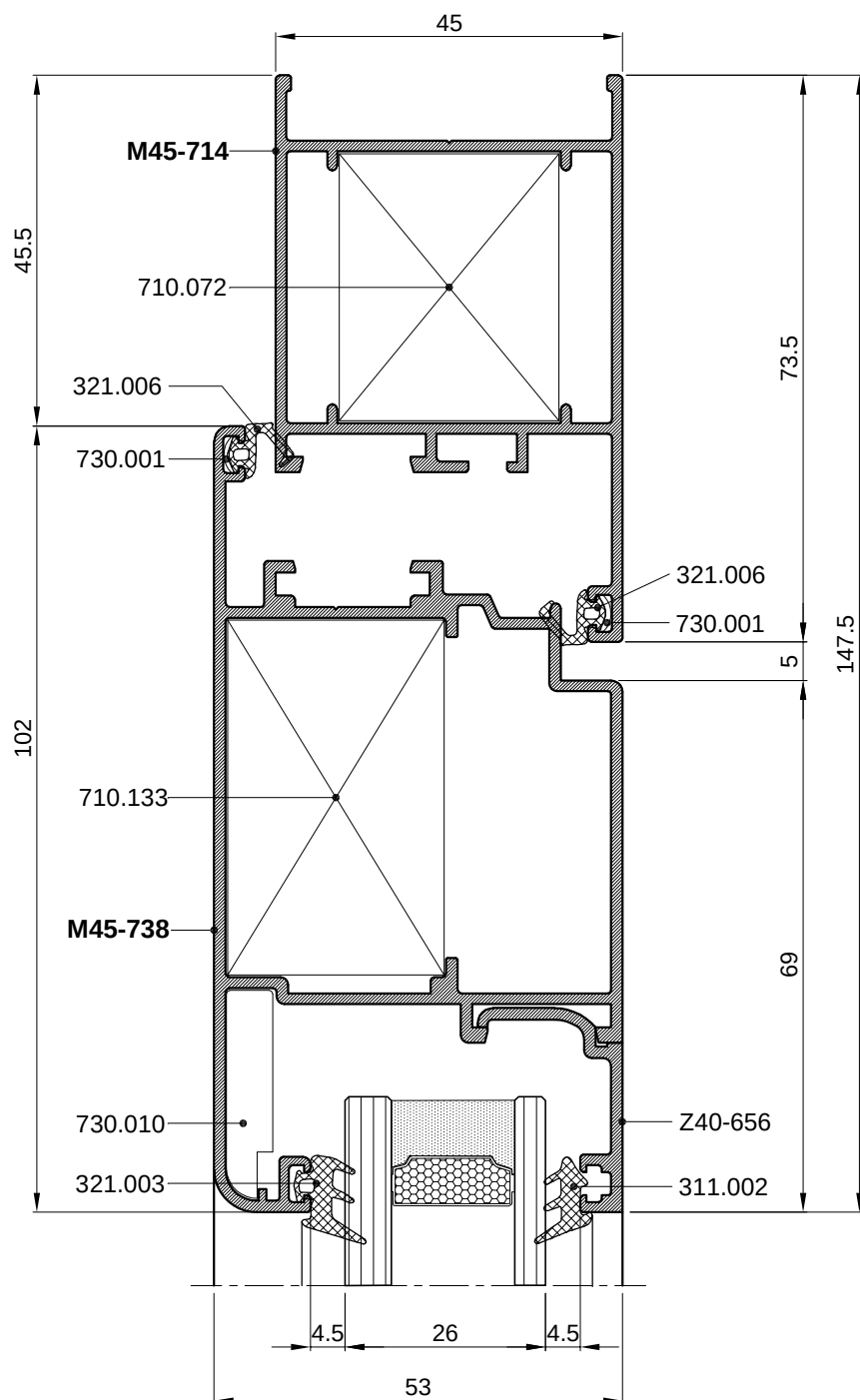
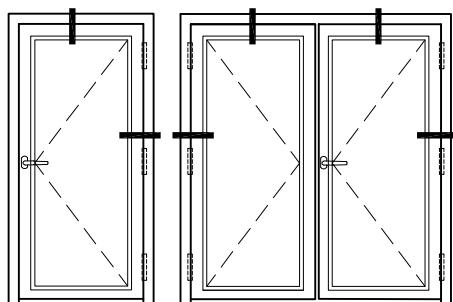


Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm

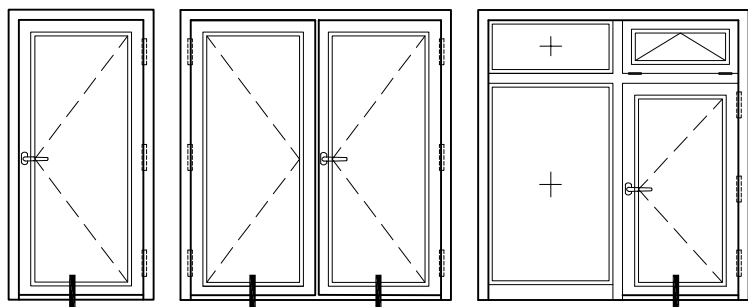


SET USADNIH BAGLAMA - OSNO 70 mm
UGRAĐUJE SE U KRILU VRATA M45-738 (OTVARANJE VANI)
SET OF SCREW-IN HINGES - AXIAL DISTANCE 70 mm
INSTALLED IN DOOR LEAF M45-738 (OUTSIDE OPENING)

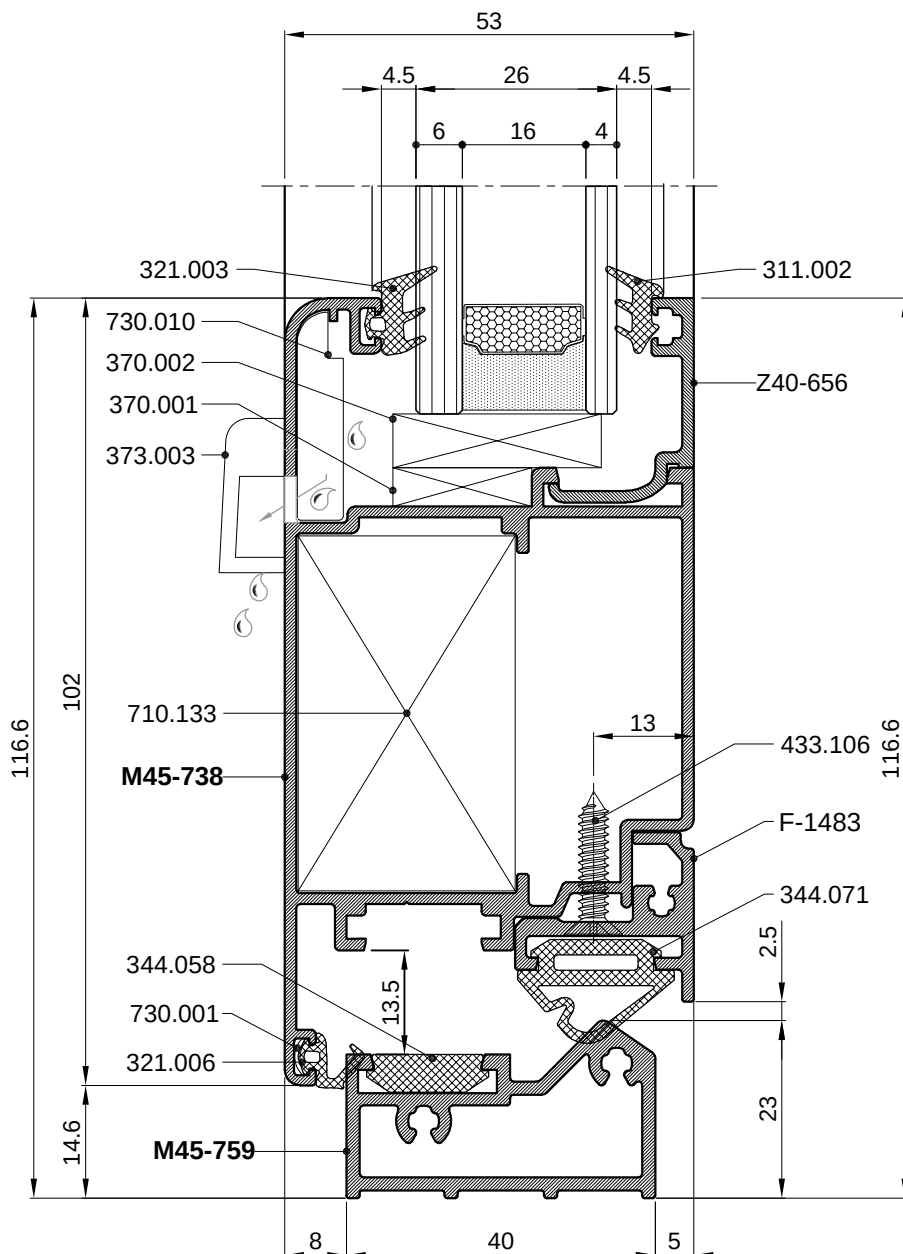
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm



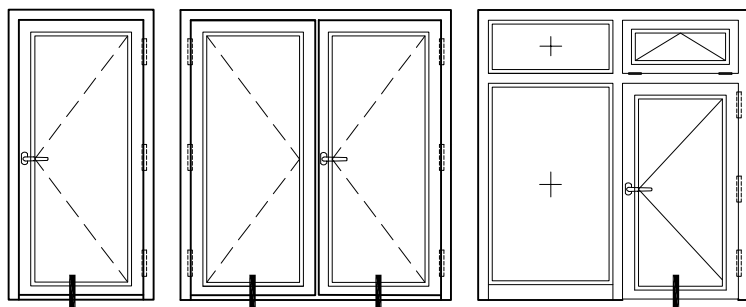
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm



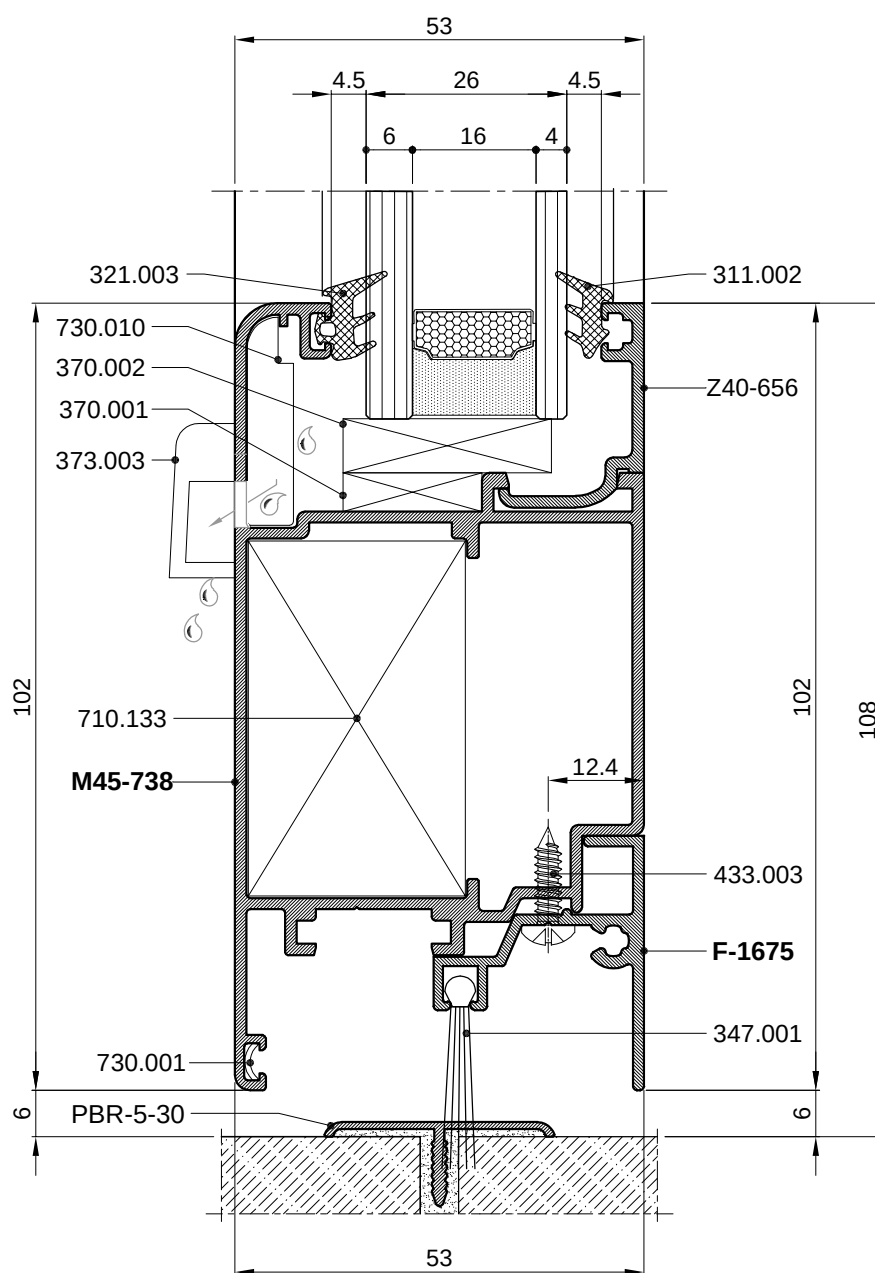
VRATA S PRAGOM
(OTVARANJE VANI)
DOOR WITH THRESHOLD
(OUTSIDE OPENING)



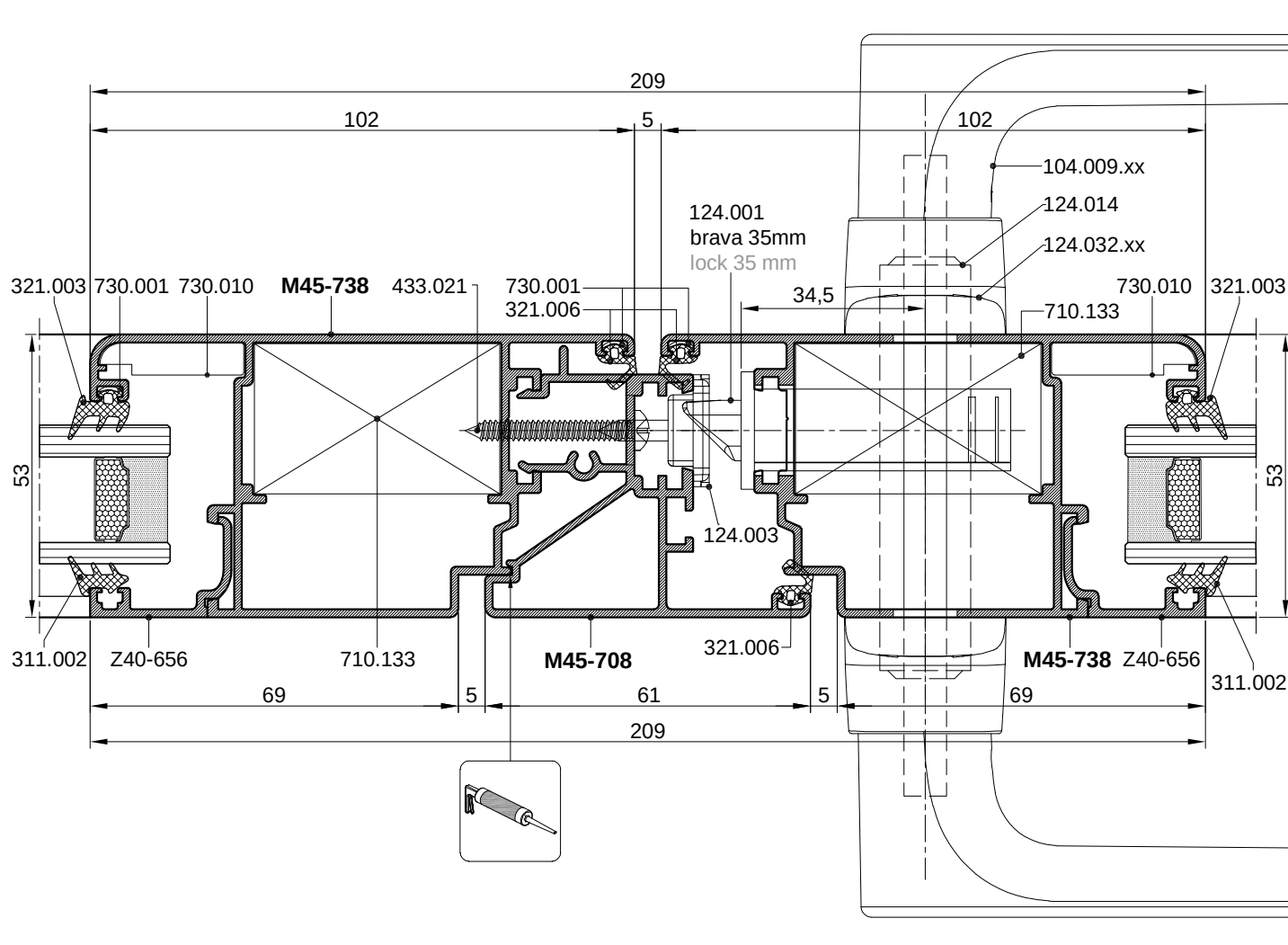
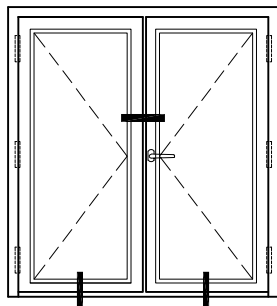
Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm



VRATA BEZ PRAGA
(OTVARANJE VANI)
DOOR WITHOUT THRESHOLD
(OUTSIDE OPENING)

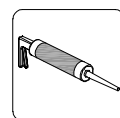


Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm

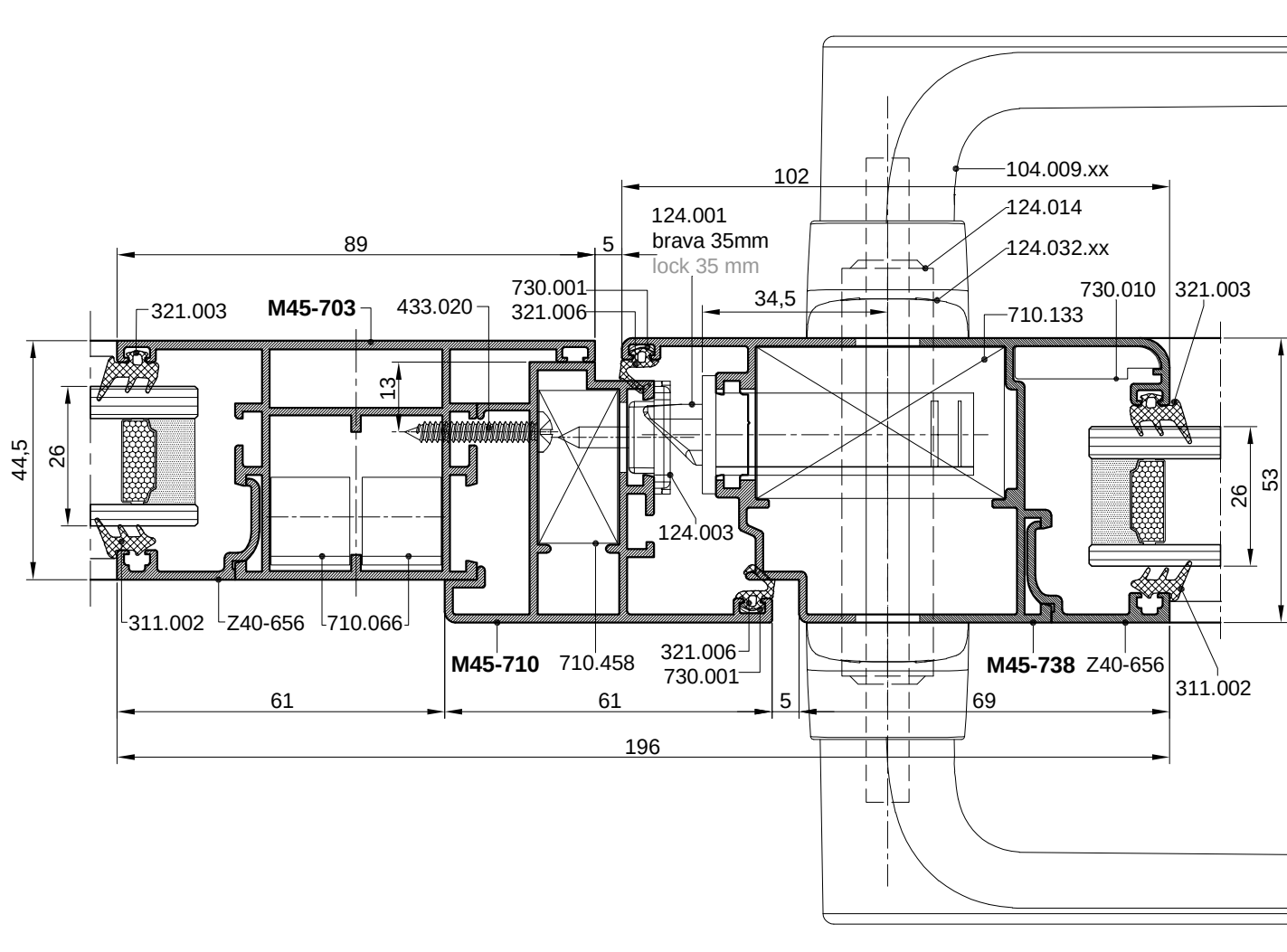
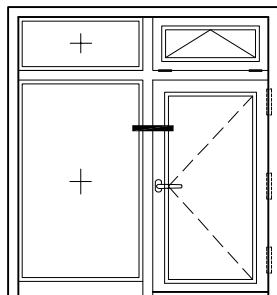


Napomena /Remark:

- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)



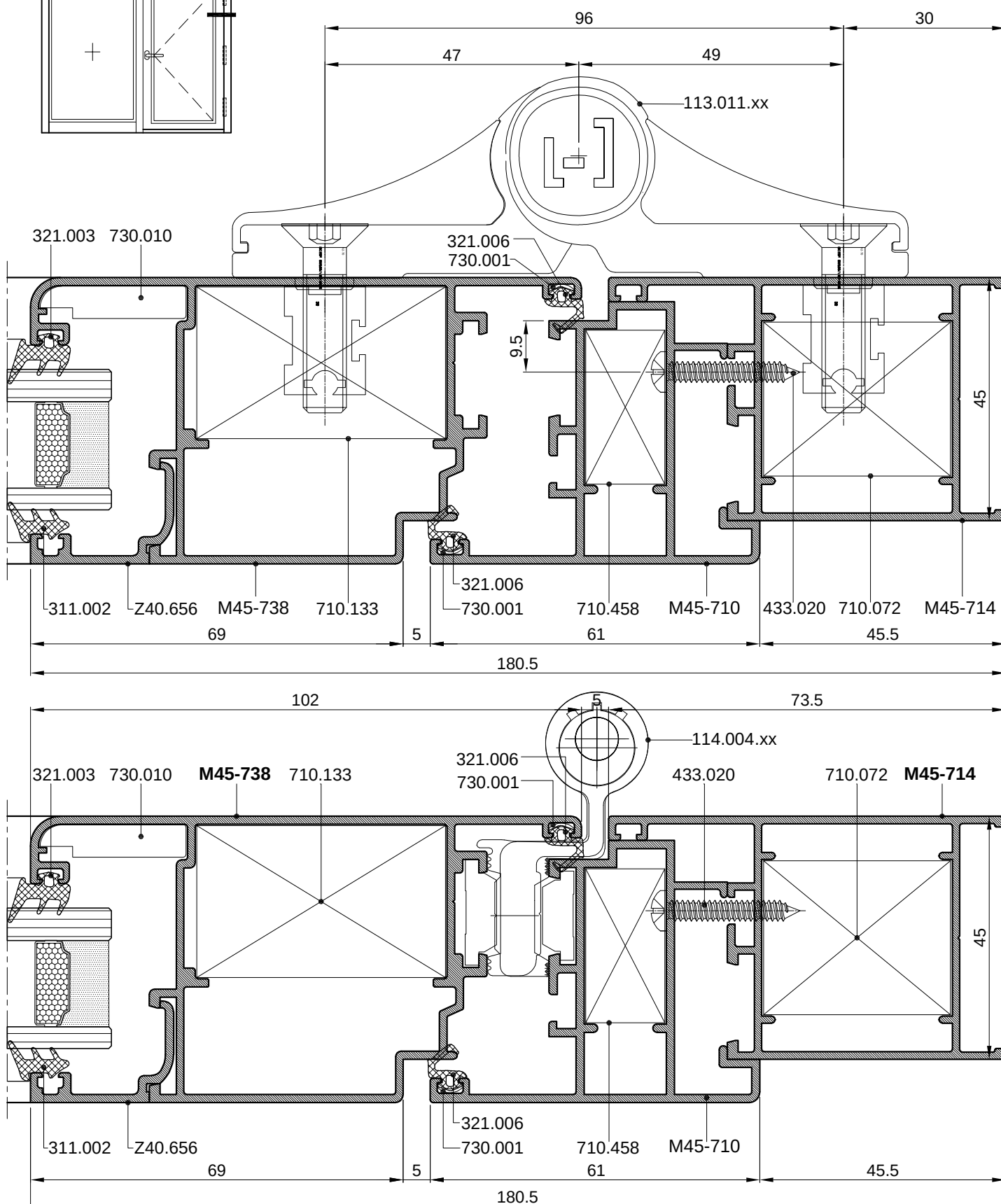
ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)



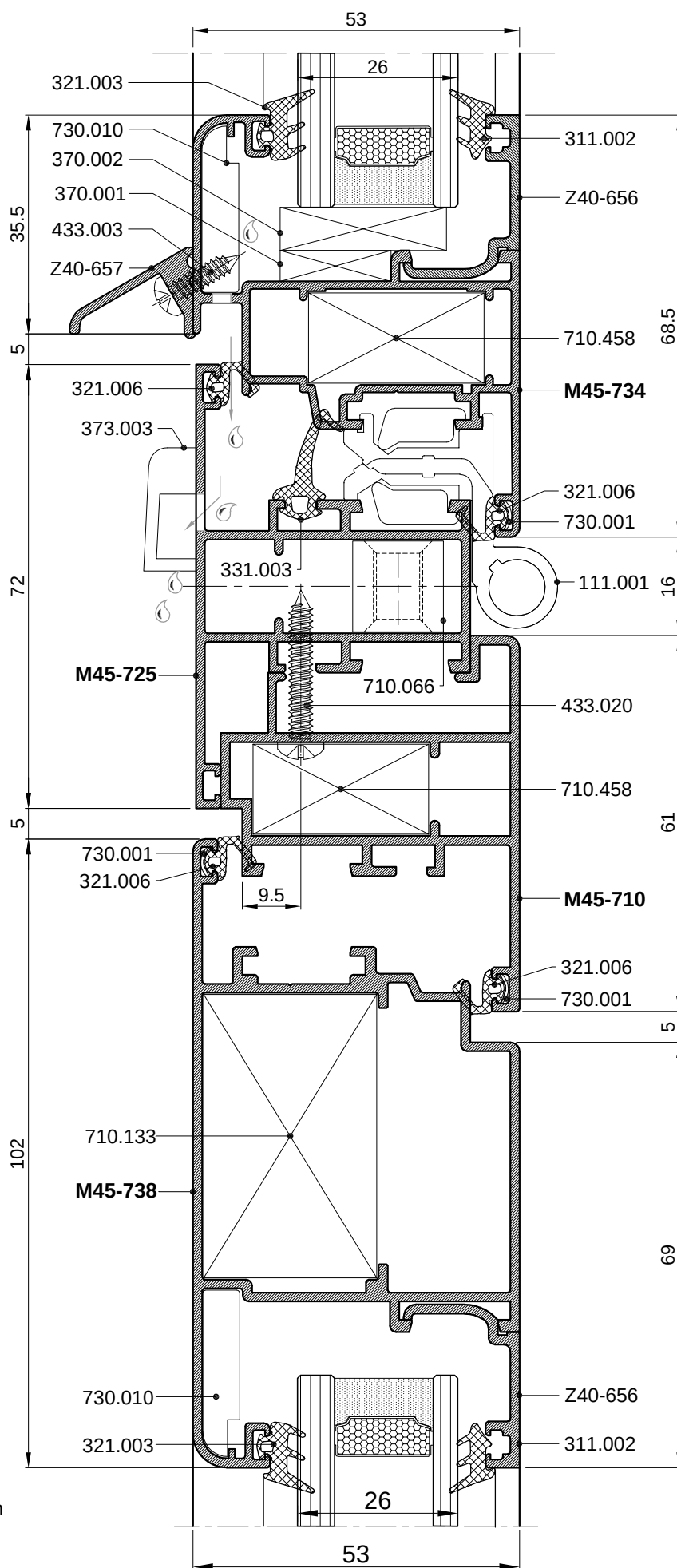
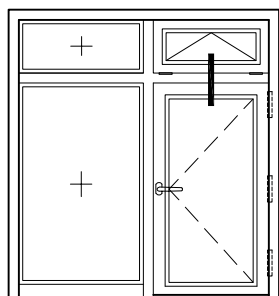
Napomena /Remark:

- Krilo vrata za bravu 35mm
- Brava 35mm sa jezičkom...(124.001)
- Door leaf for lock 35mm
- Lock 35mm with latchbolt...(124.001)

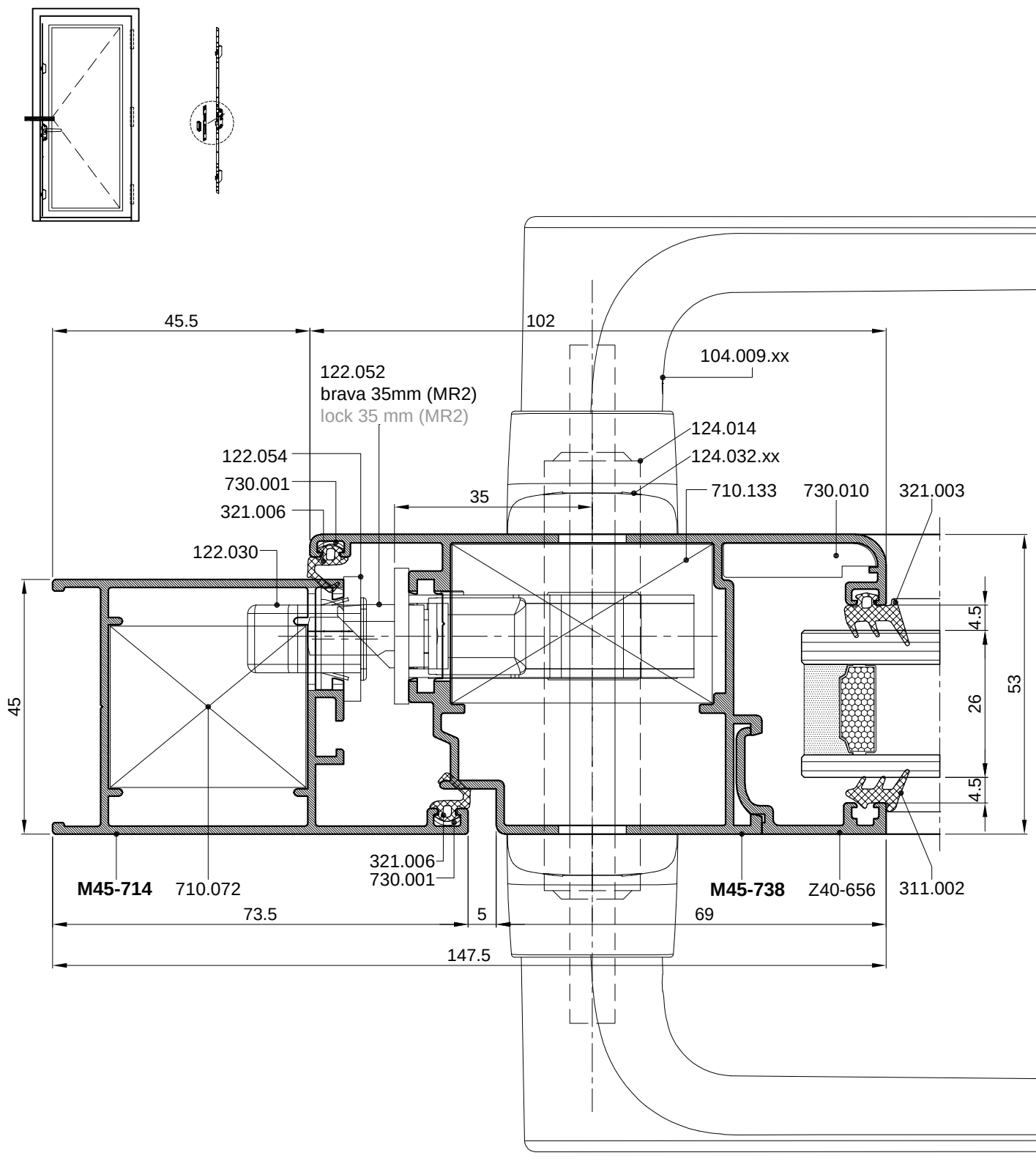
SET USADNIH BAGLAMA - OSNO 96 mm
UGRAĐUJE SE U KRILO VRATA M45-738 (OTVARANJE VANI)
SET OF SCREW-IN HINGES - AXIAL DISTANCE 96 mm
INSTALLED IN DOOR SASH M45-738 (OUTSIDE OPENING)



Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm

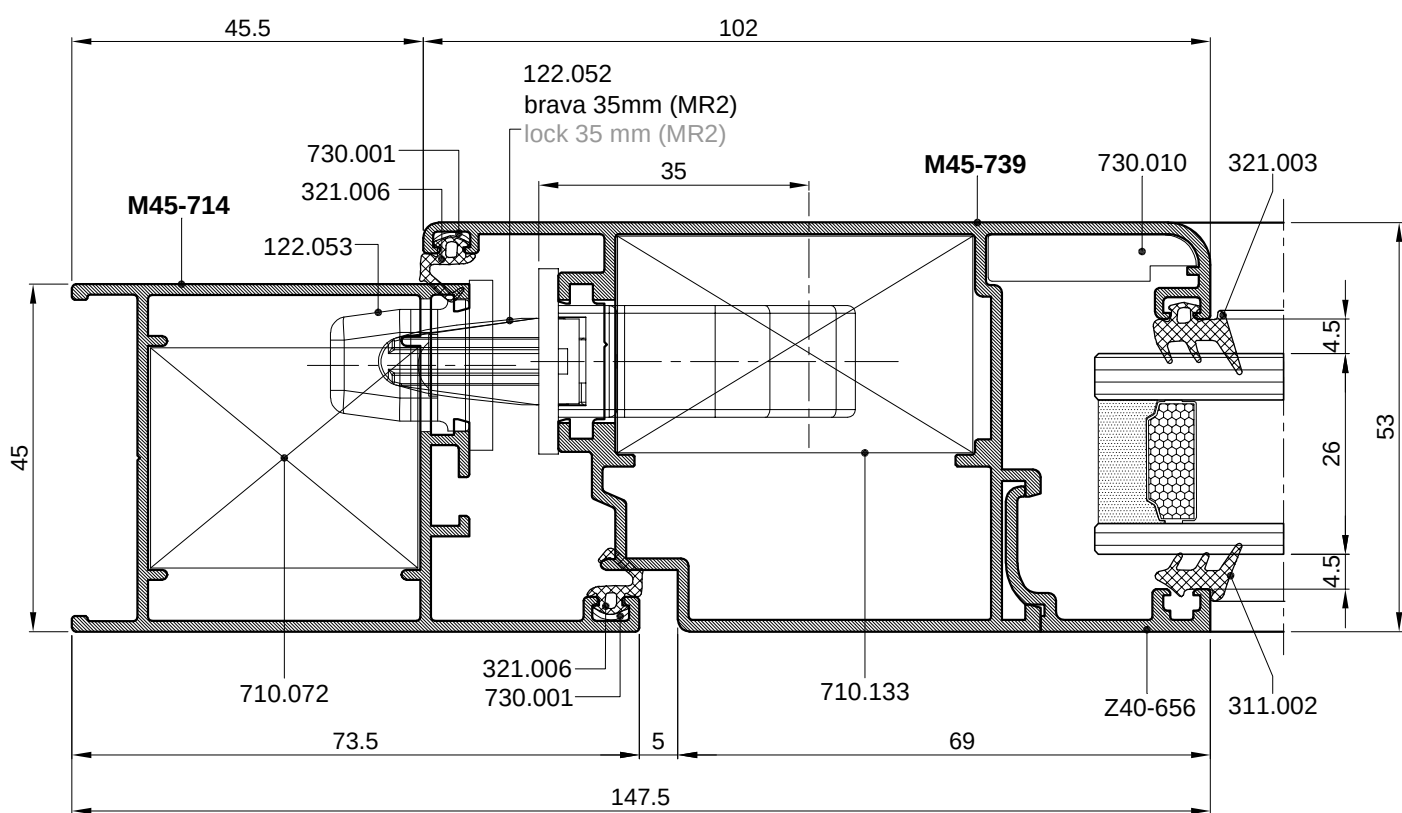
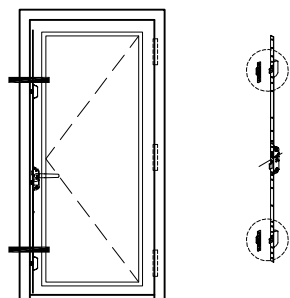


Napomena: Krilo vrata za bravu 35mm
Remark: Door leaf for lock 35mm



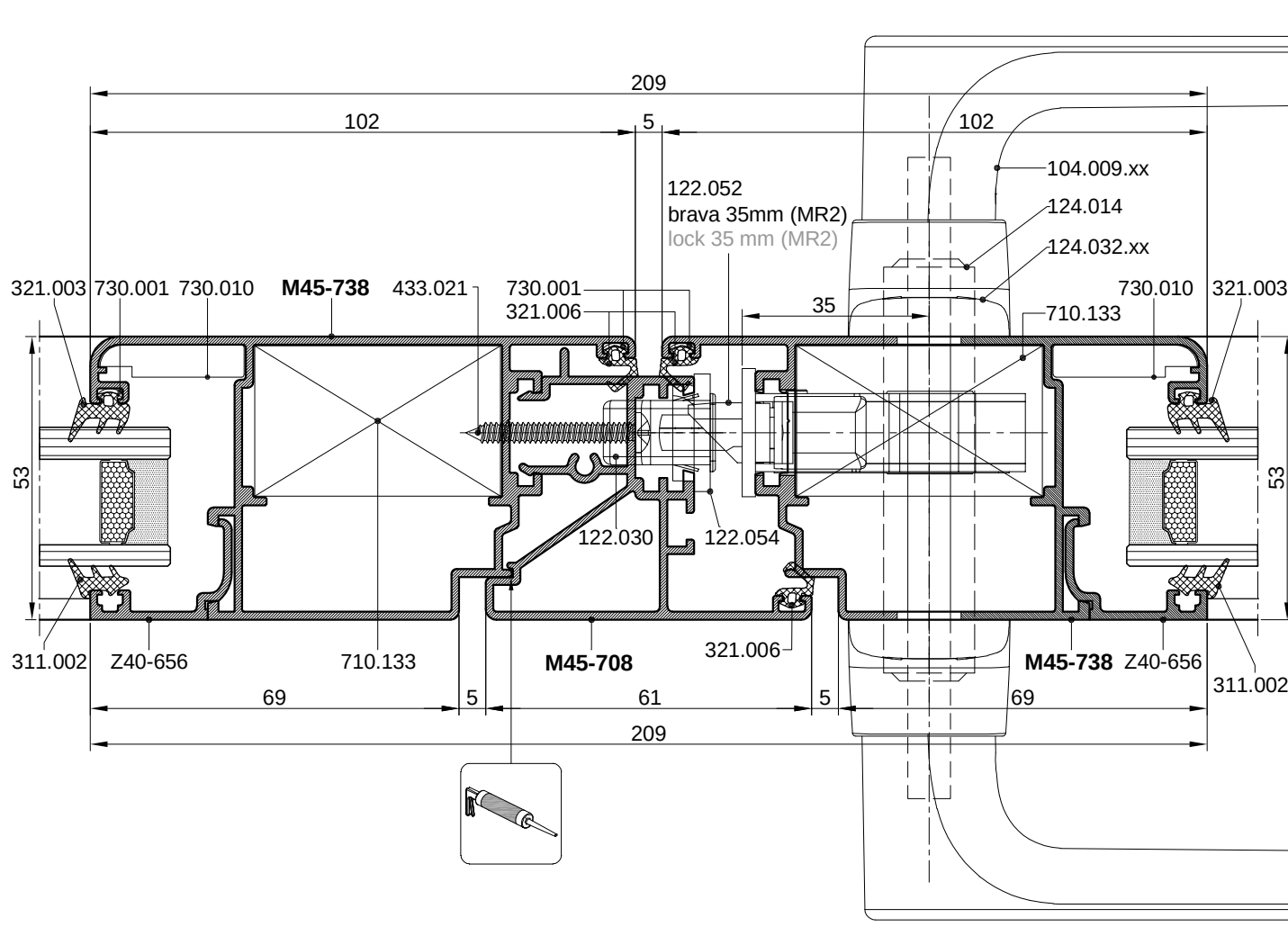
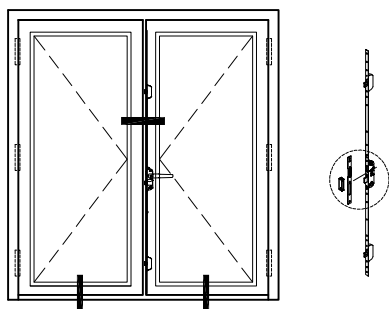
Napomena /Remark:

- Krilo vrata za bravu 35mm
- Sigurnosna brava 35mm sa 3 mjesta ključanja -(MR2)...(122.052)
- Door leaf for lock 35mm
- Safety lock 35mm with 3 locking point -(MR2)...(122.052)



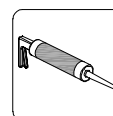
Napomena /Remark:

- Krilo vrata za bravu 35mm
- Sigurnosna brava 35mm sa 3 mjesta ključanja -(MR2)...(122.052)
- Door leaf for lock 35mm
- Safety lock 35mm with 3 locking point -(MR2)...(122.052)

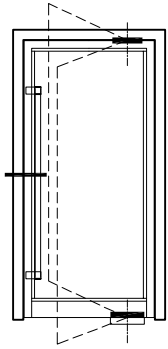


Napomena /Remark:

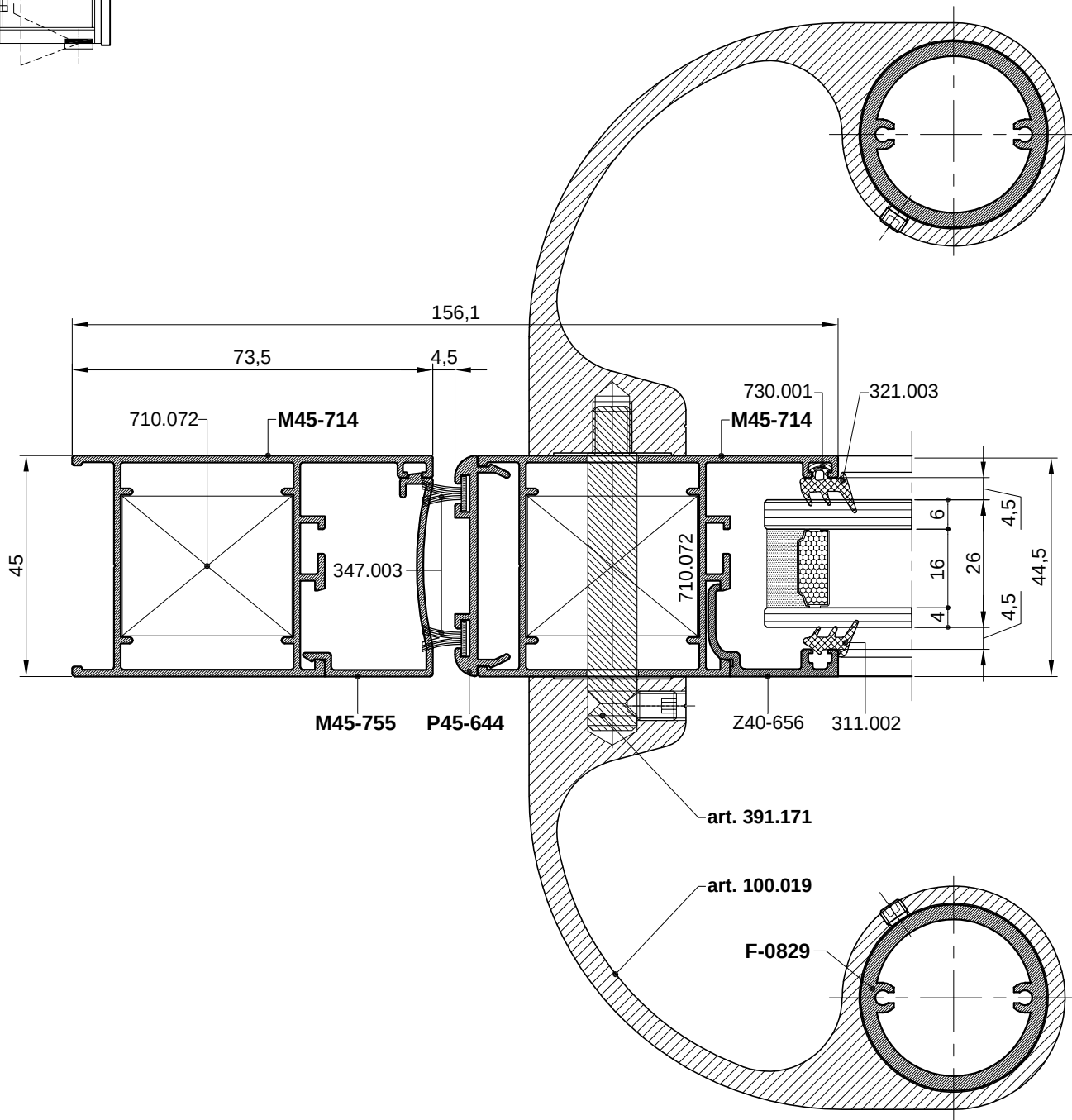
- Krilo vrata za bravu 35mm
- Sigurnosna brava 35mm sa 3 mjesta ključanja -(MR2)...(122.052)
- Door leaf for lock 35mm
- Safety lock 35mm with 3 locking point -(MR2)...(122.052)

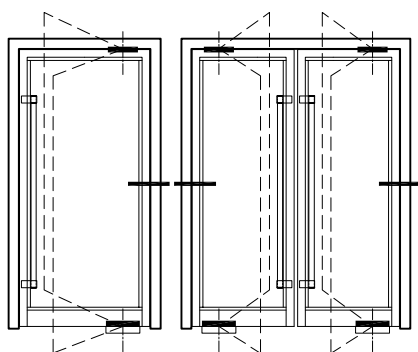


ljepilo za metal
(npr. Teroson MS 939)
metal glue
(eg. Teroson MS 939)

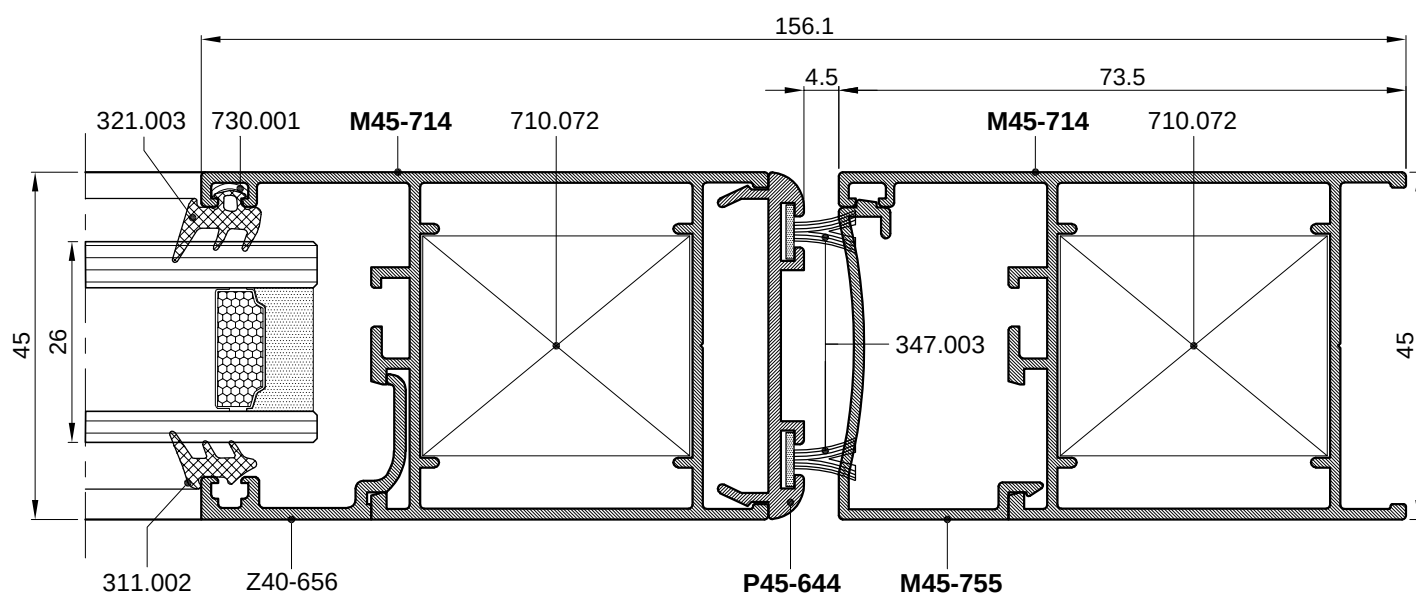


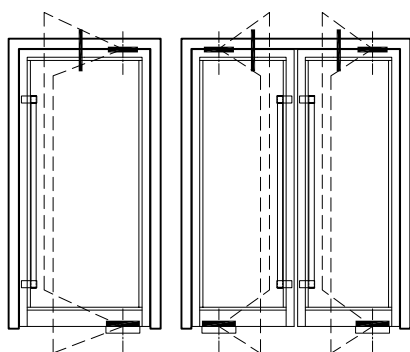
MIMOKRETNÁ VRATA
PUSH AND PULL DOORS





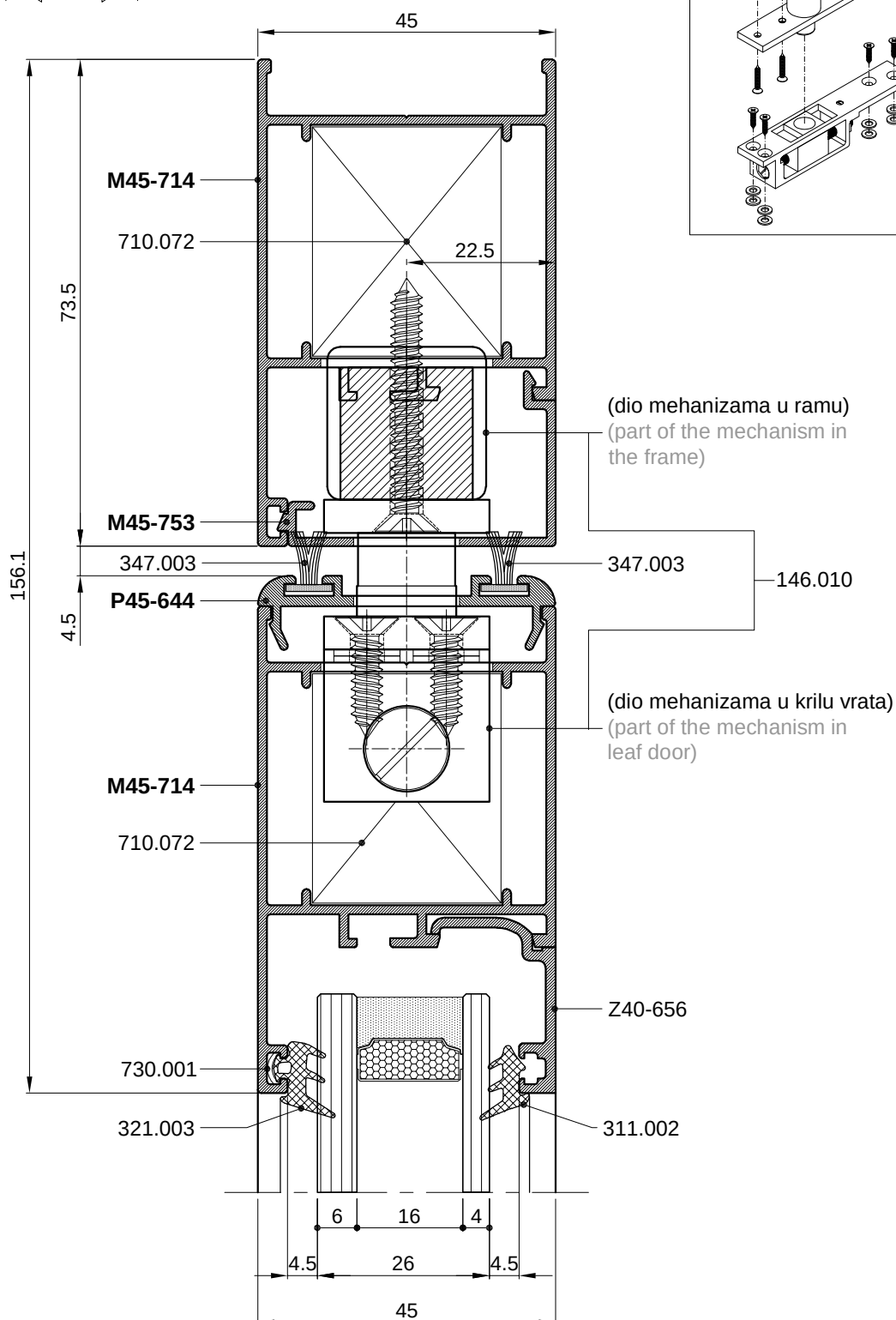
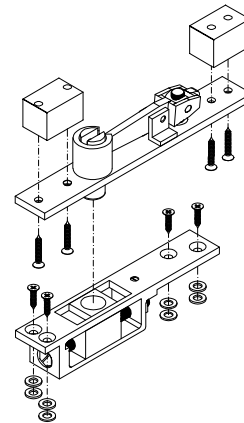
MIMOKRETNNA VRATA
PUSH AND PULL DOORS

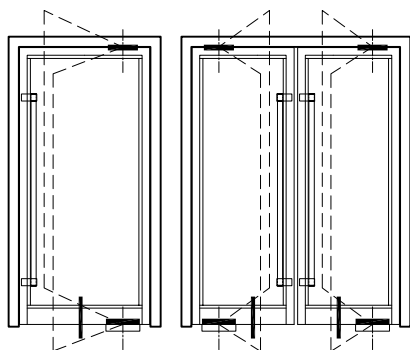




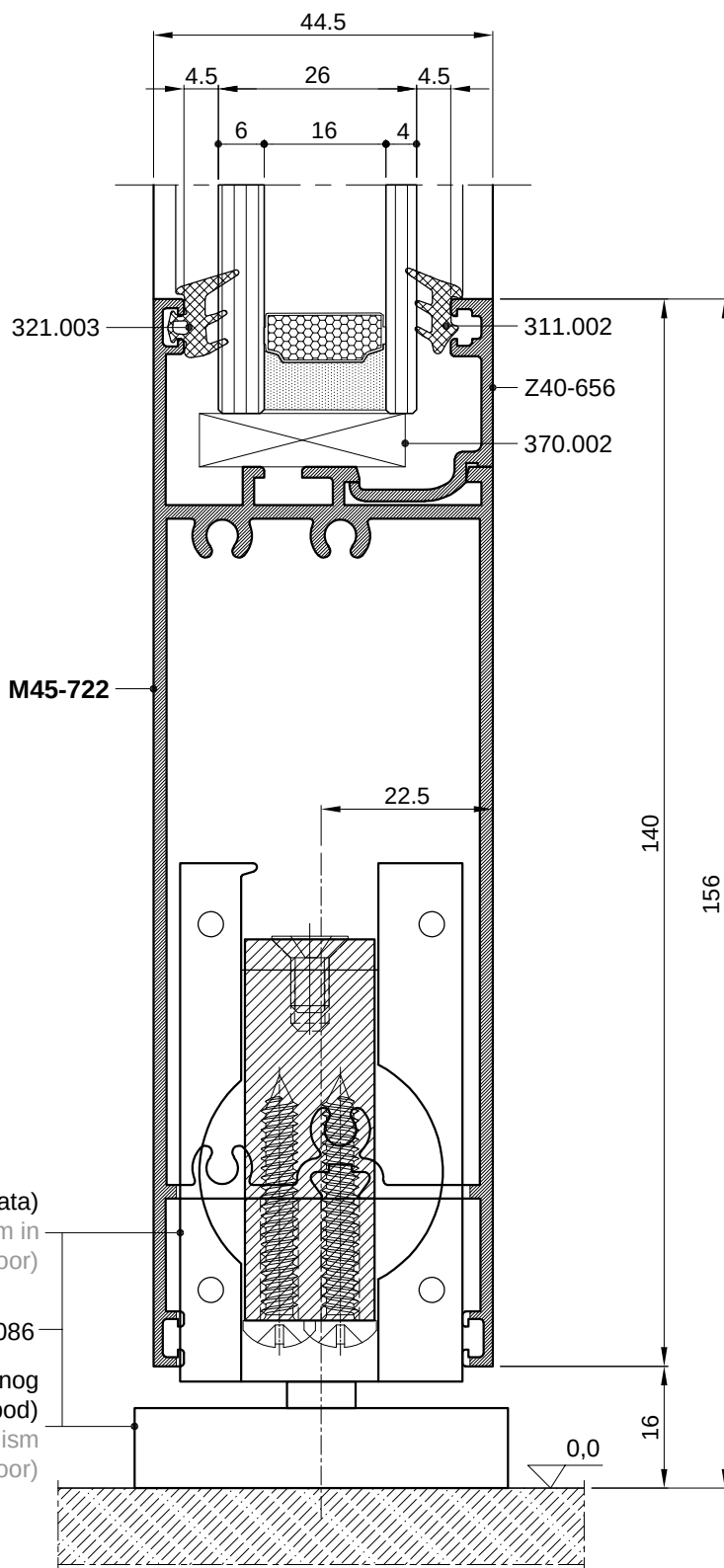
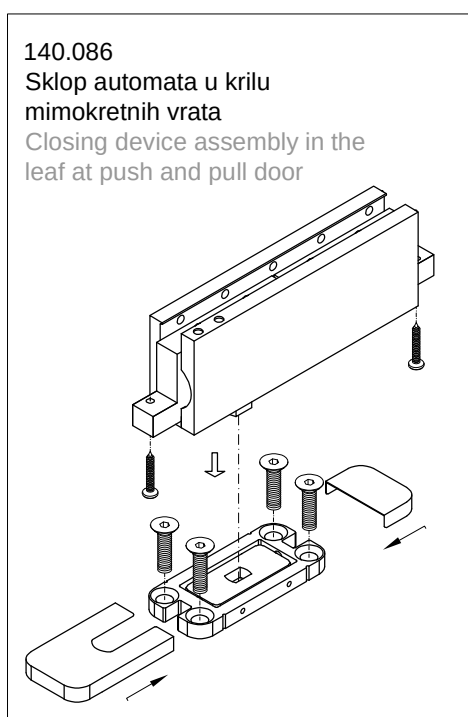
MIMOKRETNNA VRATA
PUSH AND PULL DOORS

146.010
Sklop gornjeg mehanizma
mimokretnih vrata
Upper mechanism
assembly at push and pull
door





MIMOKRETNNA VRATA PUSH AND PULL DOORS

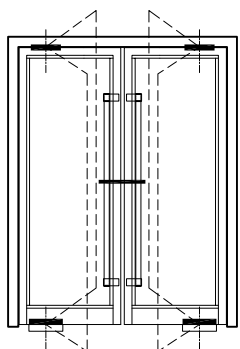


(dio mehanizama u krilu vrata)
(part of the mechanism in
leaf door)

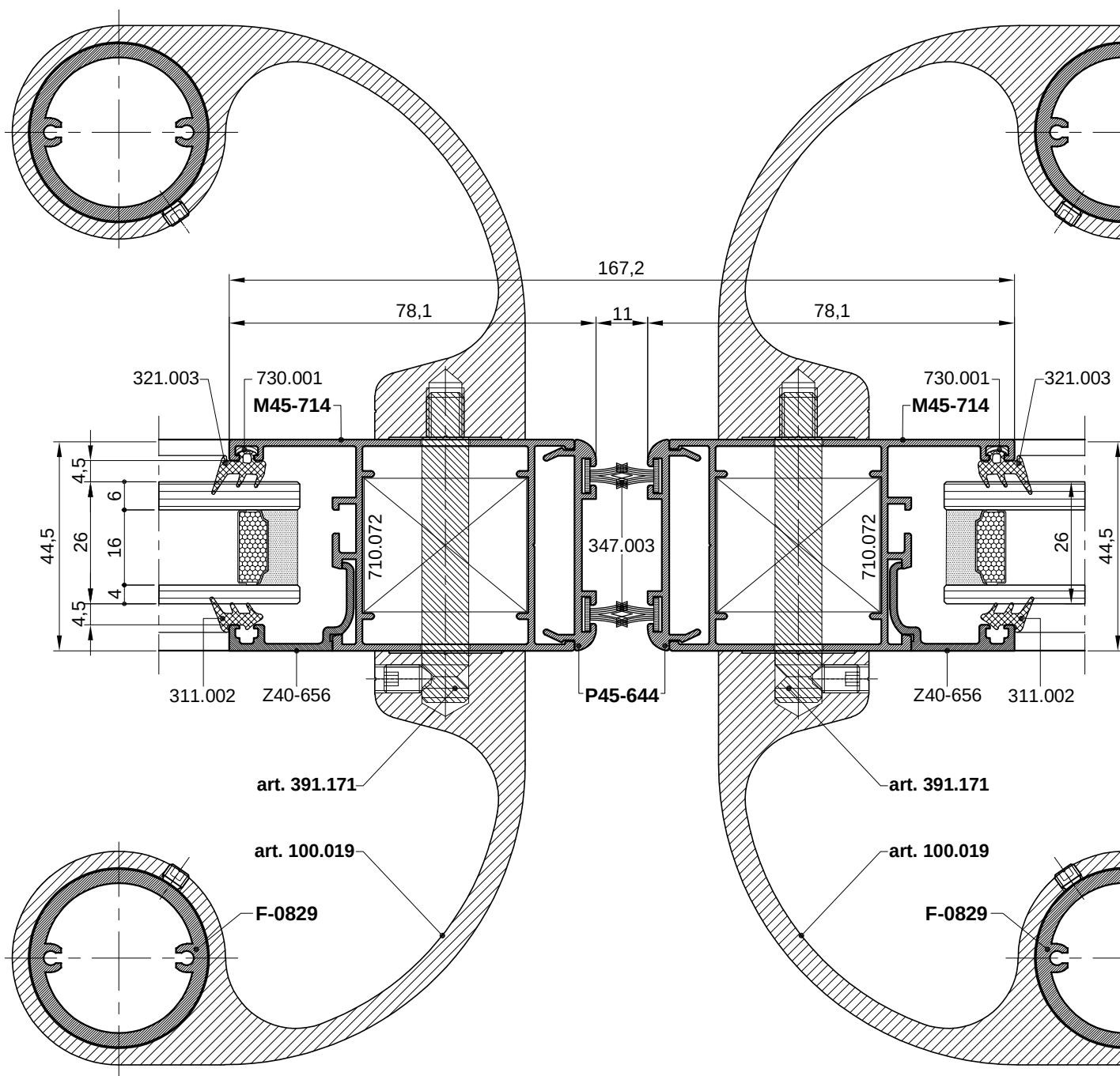
140.086

(dio mehanizama ugrađenog
na gotov pod)
(part of the mechanism
installed on the finished floor)

0,0 kota gotovog poda
0,0 height of the finished floor



MIMOKRETNNA VRATA
PUSH AND PULL DOORS



FEAL

45 MILL

Knjiga A / *Book A*
Rujan 2020. / *September 2020*

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