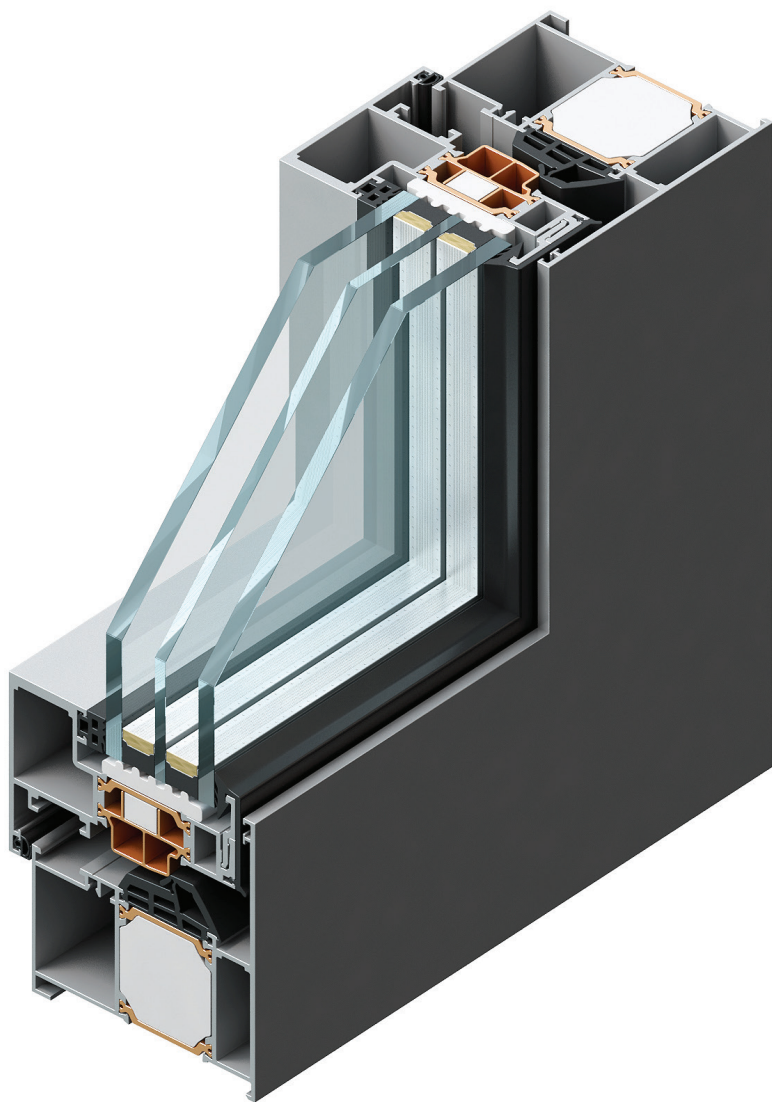


# FEAL



## TERMO 85 SK

PROZORI I VRATA  
*WINDOWS AND DOORS*



## SADRŽAJ - KAZALO

00	ZNAČAJKE SISTEMA	205.00.01
01	ISPITIVANJA I CERTIFIKATI	205.01.01
03	PROFILI	205.03.01
04	VEZNI ELEMENTI	205.04.01
05	PVC ELEMENTI	205.05.01
06	MEHANIZMI	205.06.01
07	BRTVILA	205.07.01
08	DODACI	205.08.01
09	PRIKAZ STAKLJENJA	205.09.01
10	PRESJECI	205.10.01
11	OBRADA I MONTAŽA	205.11.01
12	REZNE LISTE	205.12.01

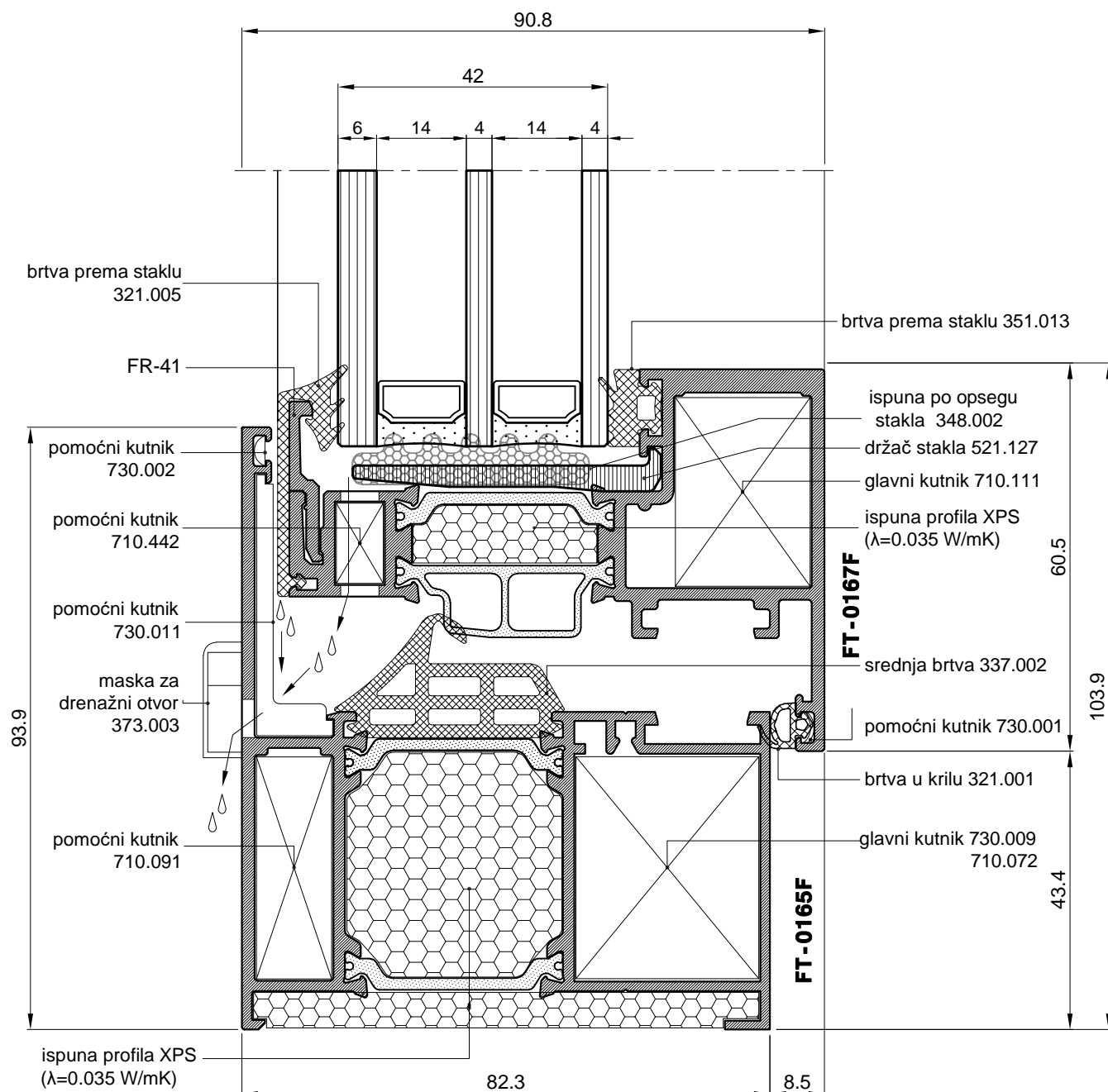


# Značajke sistema



Profili iz serije Termo 85 SK dodatno punjeni termoizolacijskim materijalom

- ispuna je od materijala s malim koeficijentom vodljivosti topline  $\lambda$  /veliki otpor prolaza topline/  
materijal: **XPS**,  $\lambda=0.035$  W/mK



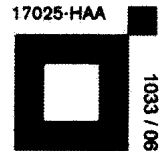


# Ispitivanja i certifikati





INSTITUT GRAĐEVINARSTVA HRVATSKE d.d.  
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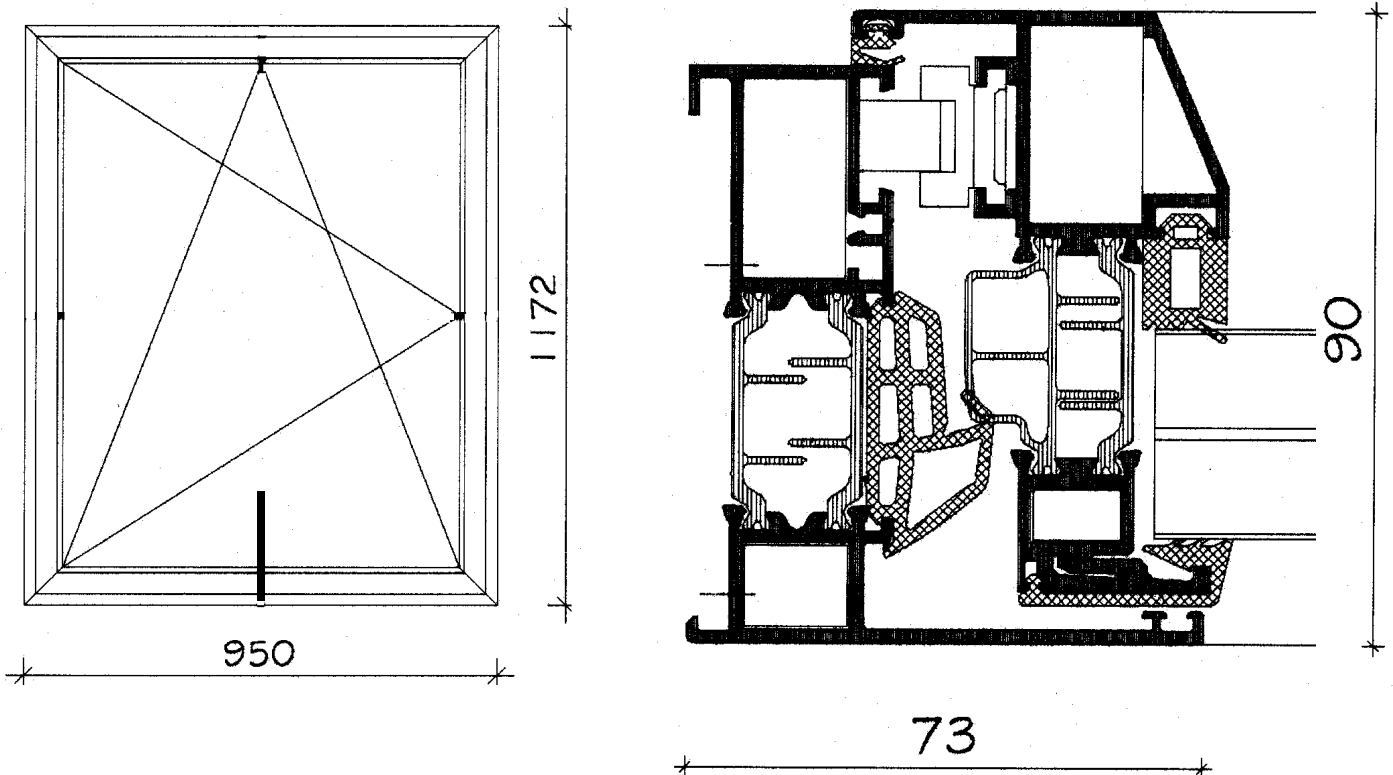
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## IZVJEŠTAJ O ISPITIVANJU BR. 2920-541/07

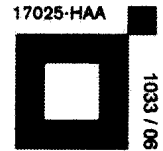
### Opis ispitnog uzorka:

Ispitivanja zrakopropusnosti, vodonepropusnosti i otpornosti na opterećenje vjetrom provedena su na jednokrillnom aluminijskom otklopno-zaokretnom prozoru serije TERMO 85 SK, izmjera 0,90 m x 1,15 m. Prozor je ostakljen IZO staklom debljine 30 mm (8mm float staklo + 16mm zrak + 6mm float staklo). Upotrijebljene su brtve EPDM proizvođača COMPLASTEX (Italija) i okovi proizvođača Wurth. Uzorak je prikazan skicom s presjecima i detaljima dostavljenim od strane naručitelja kako slijedi u nastavku:





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## DIO: ZRAKOPROPUSNOST

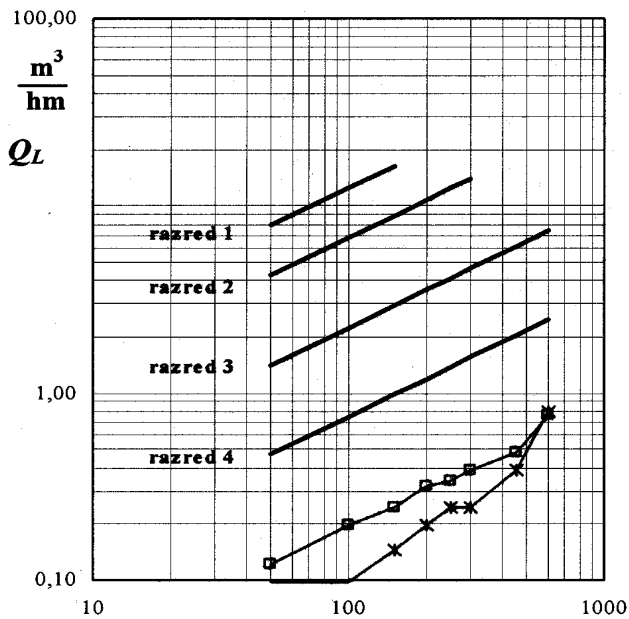
Ispitivanje uzorka, označenog kao LGF 060/07, provedeno je u skladu s HRN EN 1026:2000, pozitivnim opterećenjem na tlak.

Ploština ispitivanog uzorka:  $A = 1,04 \text{ m}^2$ .

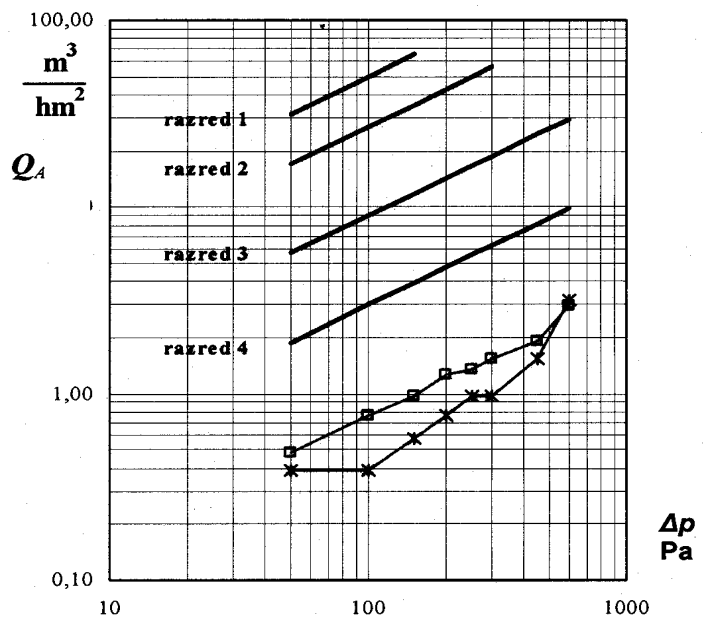
Duljina sljubnica ispitivanog uzorka:  $l = 4,10 \text{ m}$ .

Protok zraka po jedinici duljine sljubnica  $Q_L$  i po jedinici ploštine uzorka  $Q_A$  prikazan je, kao funkcija razlike tlakova, dijagramima i tablicom.

Dijagrami protoka zraka po jedinici duljine sljubnica  $Q_L$  i po jedinici ploštine prozora  $Q_A$ :



—□— LGF 060/07-o - prvo ispitivanje zrakopropusnosti  
—\*— LGF 060/07-o - ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom

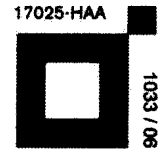


—□— LGF 060/07-o - prvo ispitivanje zrakopropusnosti  
—\*— LGF 060/07-o - ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom

S obzirom na **zrakopropusnost**, ispitani jednokrilni aluminijski otklopno-zaokretni prozor serije TERMO 85 SK, (laboratorijske oznake LGF 060/07-o), proizvođača FEAL d.o.o., može se svrstati u **razred 4**, u skladu s HRN EN 12207:2001



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## DIO: VODONEPROPUSNOST

TLAK $\Delta p$ (Pa)	VRIJEME $\tau$ (min)	LGF 060/07	RAZRED (HRN EN 12208:2001)
0	15	+	1 A
50	5	+	2 A
100	5	+	3 A
150	5	+	4 A
200	5	+	5 A
250	5	+	6 A
300	5	+	7 A
450	5	+	8 A
600	5	+	9 A

+ ..... Znači da nije došlo do propuštanja vode.

∇ ..... Znači da je došlo do propuštanja vode.

S obzirom na **vodonepropusnost**, ispitani jednokrlni aluminijski otklopno-zaokretni prozor serije TERMO 85 SK (laboratorijska oznaka uzorka LGF 060/07), proizvođača FEAL d.o.o., može se svrstati u **razred 9A**, u skladu s HRN EN 12208:2001

## DIO: OTPORNOST NA OPTEREĆENJE VJETROM

### REZULTATI ISPITIVANJA ČEONOG SAVIJANJA

Ispitivanje je provedeno na otklopno-zaokretnom otvarajućem središnjem dijelu elementa aluminijske fasade oznake TERMO 85 SK gdje postoji najveći razmak između dva susjedna učvršćenja prozorskog krila za doprozornik.

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

**A** – mjerno mjesto u gornjem lijevom kutu bočnog prozorskog profila gdje se nalaze okovi za učvršćenje prozorskog krila za doprozornik (oznaka na crtežu),

**C** – mjerno mjesto u donjem lijevom kutu bočnog prozorskog profila gdje se nalaze okovi za učvršćenje prozorskog krila za doprozornik (oznaka na crtežu),

**A<sub>0</sub>, B<sub>0</sub>, C<sub>0</sub>** – početno stanje s obzirom na pomak - ugođeno tako da pokazuje 0 mm pri  $\Delta p = 0$  (Pa),

**A<sub>P</sub>** – čeonu pomak na mjernom mjestu A pri iskazanoj razlici tlakova P1,

**B<sub>P</sub>** – čeonu pomak na mjernom mjestu B pri iskazanoj razlici tlakova P1,

**C<sub>P</sub>** – čeonu pomak na mjernom mjestu C pri iskazanoj razlici tlakova P1,

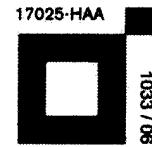
**F<sub>P</sub>** = (**B<sub>P</sub>**) - ((**A<sub>P</sub>**) + (**C<sub>P</sub>**))/2 - čeonu savijanje,

**L** = 0,98 m - razmak između točaka A i C,

**F<sub>rp</sub>** = **F<sub>P</sub>** / **L** - relativno čeonu savijanje.



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TLAK $\Delta p$ (Pa)	LGF 060/07-o					TLAK $\Delta p$ (Pa)	LGF 060/07-o				
	$A_P$ (mm)	$B_P$ (mm)	$C_P$ (mm)	$F_P$ (mm)	$F_{rp}$ ( $\times 10^{-4}$ )		$A_P$ (mm)	$B_P$ (mm)	$C_P$ (mm)	$F_P$ (mm)	$F_{rp}$ ( $\times 10^{-4}$ )
100	-0,2	-0,2	-0,1	-0,05	-0,51	-100	-0,1	0,0	-0,2	0,15	1,53
200	-0,3	-0,4	-0,2	-0,15	-1,53	-200	0,0	0,1	0,0	0,10	1,02
300	-0,5	-0,6	-0,5	-0,10	-1,02	-300	0,1	0,3	0,1	0,20	2,04
400	-0,7	-0,8	-0,7	-0,10	-1,02	-400	0,3	0,6	0,3	0,30	3,06
500	-0,8	-0,8	-0,7	-0,05	-0,51	-500	0,5	0,6	0,3	0,23	2,30
600	-1,0	-1,0	-0,8	-0,10	-1,02	-600	0,6	0,8	0,4	0,33	3,32
700	-1,2	-1,2	-1,0	-0,10	-1,02	-700	0,7	0,9	0,6	0,28	2,81
800	-1,3	-1,4	-1,1	-0,20	-2,04	-800	0,8	1,2	0,9	0,38	3,83
900	-1,9	-1,8	-1,6	-0,05	-0,51	-900	0,9	1,3	1,0	0,35	3,57
1000	-2,1	-2,0	-2,0	0,05	0,51	-1000	1,1	1,5	1,2	0,35	3,57
1100	-2,3	-2,2	-2,3	0,10	1,02	-1100	1,3	1,8	1,4	0,45	4,59
1200	-2,6	-2,4	-2,6	0,20	2,04	-1200	1,5	1,9	1,6	0,35	3,57

S obzirom na **relativno čeonno savijanje**, ispitani jednokrlni aluminijski otklopno-zaokretni prozor serije TERMO 85 SK (laboratorijska oznaka uzorka LGF 060/07), proizvođača FEAL d.o.o., može se svrstati u **razred C** ( $F_{rp} < 1/300$ ), u skladu s HRN EN 12210:2001, budući da je maksimalno relativno čeonno savijanje iznosilo 1/2180.

### REZULTATI ISPITIVANJA OTPORNOSTI S PROMJENJIVIM TLAKOM P2

Ispitivanje je provedeno s 50 impulsa promjenjivog tlaka P2 od  $\pm 600$  Pa, a iznosi polovicu maksimalnog tlaka P1.

Nakon provedenog opterećenja na ispitanom jednokrlnom aluminijskom otklopno-zaokretnom prozoru serije TERMO 85 SK (laboratorijska oznaka uzorka LGF 060/07), proizvođača FEAL d.o.o., nije bilo vidljivih oštećenja niti promjena na cijelom uzorku, kao niti promjena u funkcionalnosti ili oštećenja otvarajućeg dijela.

### REZULTATI SIGURNOSNOG ISPITIVANJA

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

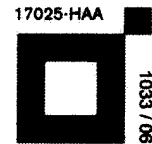
Nakon provedenog opterećenja na ispitanom jednokrlnom aluminijskom otklopno-zaokretnom prozoru serije TERMO 85 SK (laboratorijska oznaka uzorka LGF 060/07), proizvođača FEAL d.o.o., nije bilo vidljivih napuknuća na bilo kojem dijelu uzorka (staklo, okvir i okovi), niti je došlo do otvaranja otvarajućeg dijela.

Ponovljeno ispitivanje zrakopropusnosti (A dio izvještaja) jednokrlnog aluminijskog otklopno-zaokretnog prozora serije TERMO 85 SK (laboratorijska oznaka uzorka LGF 060/07), proizvođača FEAL d.o.o., nije bilo vidljivih oštećenja niti promjena na cijelom uzorku nakon ispitivanja otpornosti na opterećenje vjetrom, pokazuje da nije došlo do povećanja vrijednosti od 20 %, već je došlo do smanjenja propusnosti zraka u odnosu na prvo ispitivanje zrakopropusnosti.

S obzirom na ispitivanje otpornosti na opterećenje vjetrom, ispitani jednokrlni aluminijski otklopno-zaokretni prozor serije TERMO 85 SK (laboratorijska oznaka uzorka LGF 060/07), proizvođača FEAL d.o.o., može se svrstati u **razred C 3**, u skladu s HRN EN 12210:2001.



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## KOEFICIJENT PROLASKA TOPLINE $U$

Ispitivanje koeficijenta prolaska topline  $U$  aluminijskih profila za izradu krila i doprozornika s prekinutim toplinskim mostom serije TERMO 85 SK provedeno je na uzorku prozora (bez ostakljenja s referentnim uzorkom), izmjera 1,22 m x 1,47 m.

IZRAČUN KOEFICIJENTA PROLAZA TOPLINE PROZORSKIH PROFILA		
$\theta_{me,sur}$	(srednja temp. zaštitni panel) °C	10,27
$R_{sur}$	m <sup>2</sup> ·K/W	5,216
$\lambda_{sur}$	W/(K·m)	0,038
$\psi_{ed}$	W/(K·m)	0,0199
$\Delta\theta_{s,sur}$	(temperaturna razlika zaštitni panel) K	19,19
$\Delta\theta_c$	(temperaturna razlika zrak) K	19,98
$\Phi_{in}$	(ulazna snaga hot box) W	66,21
$\Phi_{sur}$	(zaštitni panel toplinski tok) W	10,96
$\Phi_{ed}$	(rubni dio toplinski tok) W	2,16
$q_t$	gustoća toplinskog toka kroz ispunu i profile prozora W/m <sup>2</sup>	29,60
$U_{m,t}$	(izmj. koeficijent prol. topline ispune i profila) W/(m <sup>2</sup> ·K)	1,53
$F_{cl}$	(konvekcijski dio-topli)	0,443
$F_{ce}$	(konvekcijski dio-hladni)	0,802
$R_{s,t}$	(ukupni površinski otpor) m <sup>2</sup> ·kW	0,182
$\theta_{ri}$	(temperatura zračenja-topla) °C	19,45
$\theta_{re}$	(temperatura zračenja-topla) °C	2,03
$\theta_{ni}$	(temperatura zraka-topla) °C	19,89
$\theta_{ne}$	(temperatura zraka-hladna) °C	0,56
$\Delta\theta_n$	(razlika temperature zraka) K	19,33
$U_f$	(izmj. koeficijent prol. topline profila) W/(m <sup>2</sup> ·K)	2,38

Aluminijski profili s prekinutim toplinskim mostom serije TERMO 85 SK koji služe za izradu krila i doprozornika prozora imaju koeficijent prolaza topline:

$$U_f = 2,4 \text{ W/(m}^2\cdot\text{K)}$$

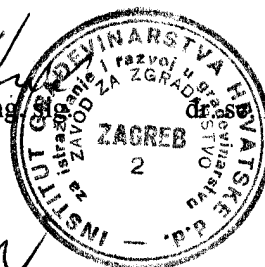
Voditelji ispitivanja:

Voditelj laboratorija:

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

za D dio ispitivanja: Zlatko Franolić

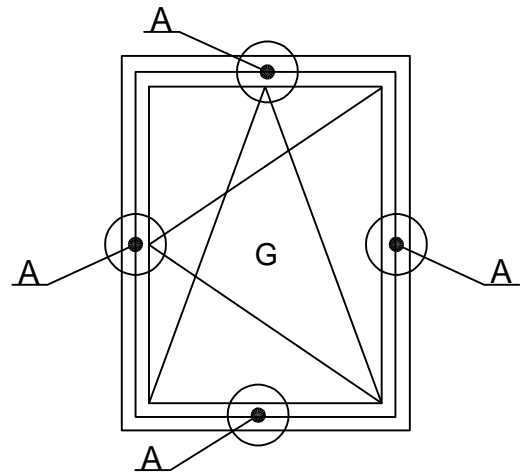
za D dio ispitivanja: Zlatko Franolić



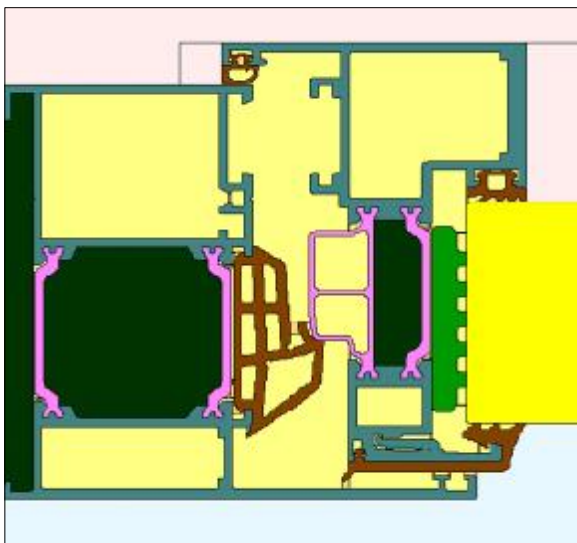
## TOPLINSKE ZNAČAJKE TERMO 85 SK

Proračun koeficijenta prolaska topline počiva na dvodimensionalnoj numeričkoj metodi konačnih elemenata određene prema prEN ISO 10077-2.

DIMENZIJE	L	(m)	1.23
	H	(m)	1.48
A-ram + krilo	$U_A$	(W/m <sup>2</sup> K)	1.7
G-glass (staklo)	$U_g$	(W/m <sup>2</sup> K)	0.6
Kombinacija stakla i profila	$U_w$	(W/m <sup>2</sup> K)	1



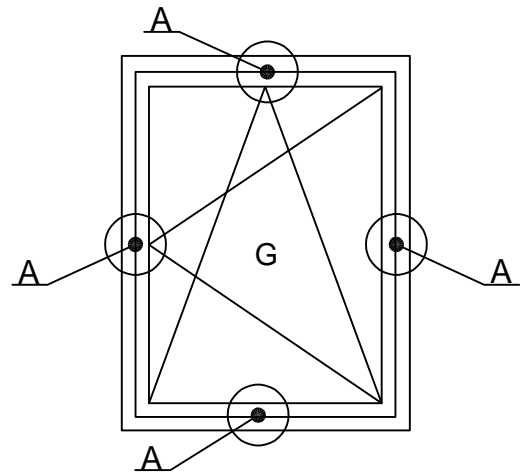
### Temperaturni dijagram za A



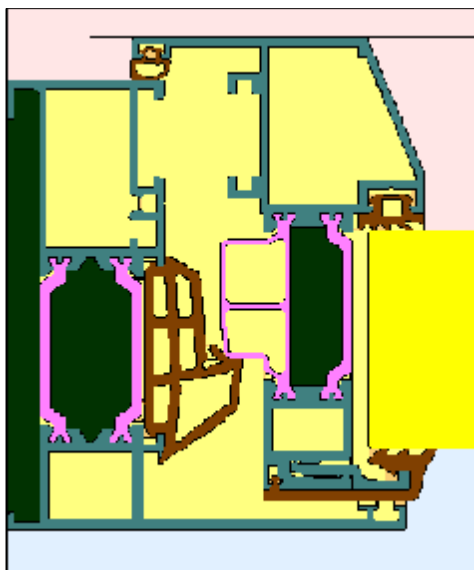
## TOPLINSKE ZNAČAJKE TERMO 85 SK

Proračun koeficijenta prolaska topline počiva na dvodimenzionalnoj numeričkoj metodi konačnih elemenata određene prema prEN ISO 10077-2.

DIMENZIJE	L	(m)	1.23
	H	(m)	1.48
A-ram + krilo	$U_A$	(W/m <sup>2</sup> K)	1.9
G-glass (staklo)	$U_g$	(W/m <sup>2</sup> K)	0.6
Kombinacija stakla i profila	$U_w$	(W/m <sup>2</sup> K)	1



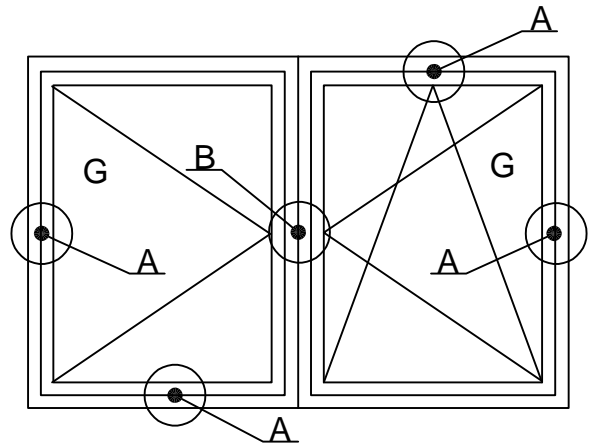
### Temperaturni dijagram za A



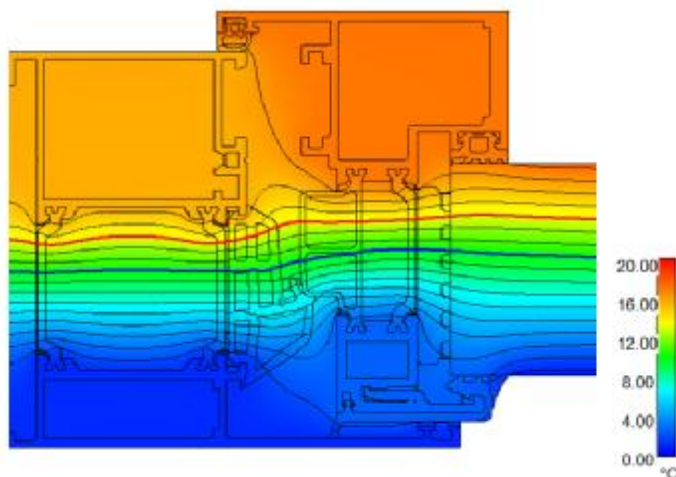
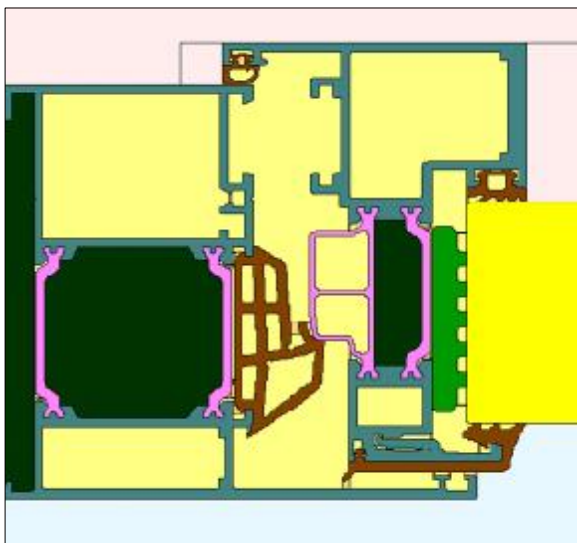
### TOPLINSKE ZNAČAJKE TERMO 85 SK

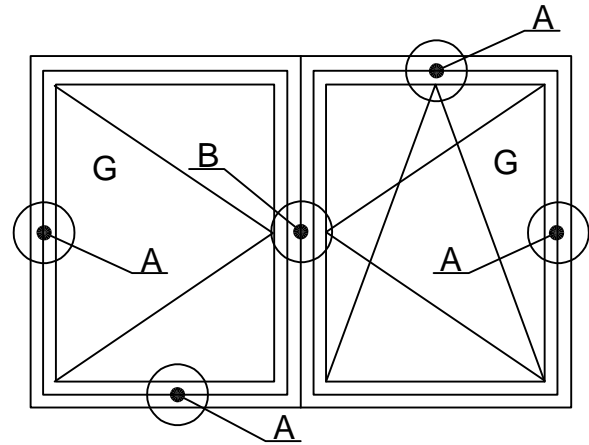
Proračun koeficijenta prolaska topline počiva na dvodimenzionalnoj numeričkoj metodi konačnih elemenata određene prema prEN ISO 10077-2.

DIMENZIJE	L	(m)	1.6
	H	(m)	1.48
A-ram + krilo	$U_A$	(W/m <sup>2</sup> K)	1,7
B-kombatuta	$U_B$	(W/m <sup>2</sup> K)	1.9
G-glass (staklo)	$U_g$	(W/m <sup>2</sup> K)	0.6
Kombinacija stakla i profila	$U_w$	(W/m <sup>2</sup> K)	1.1

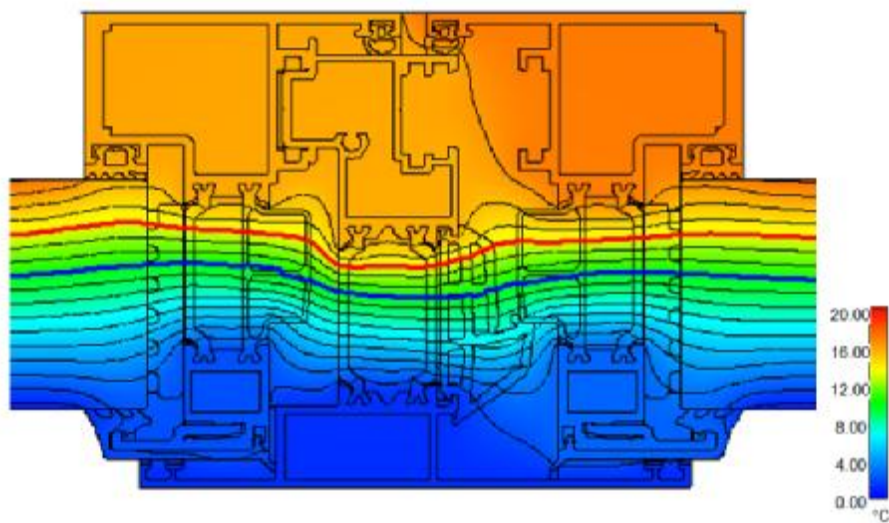
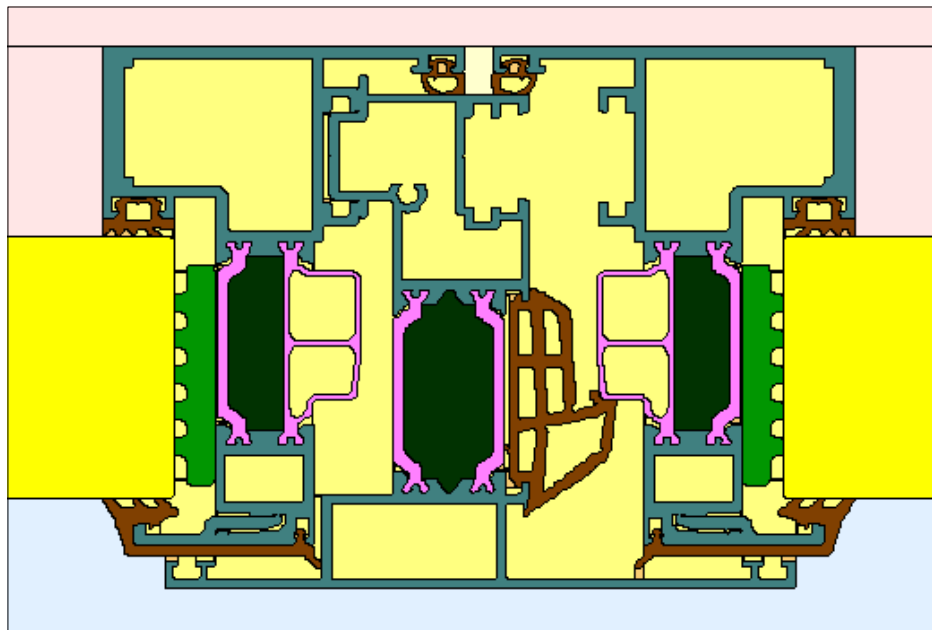


### Temperaturni dijagram za A





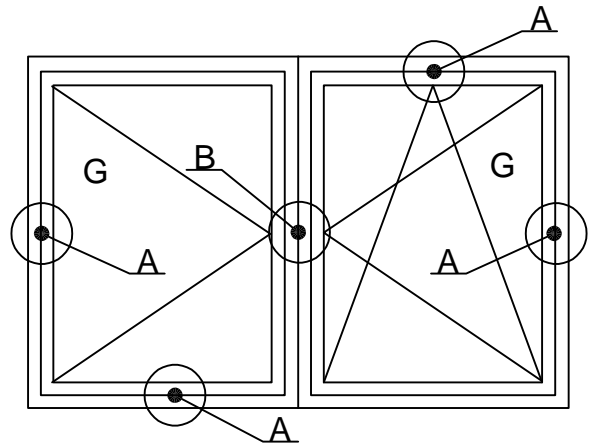
Temperaturni dijagram za B



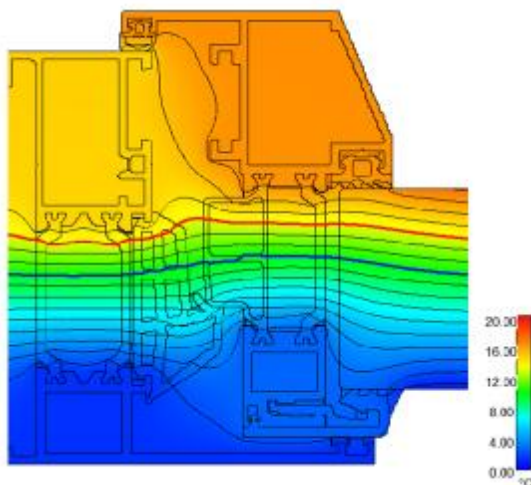
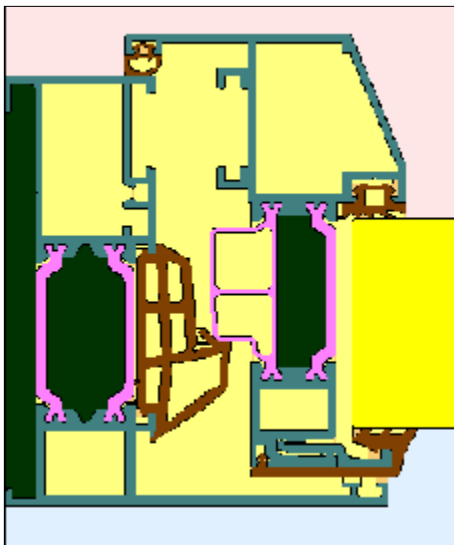
## TOPLINSKE ZNAČAJKE TERMO 85 SK

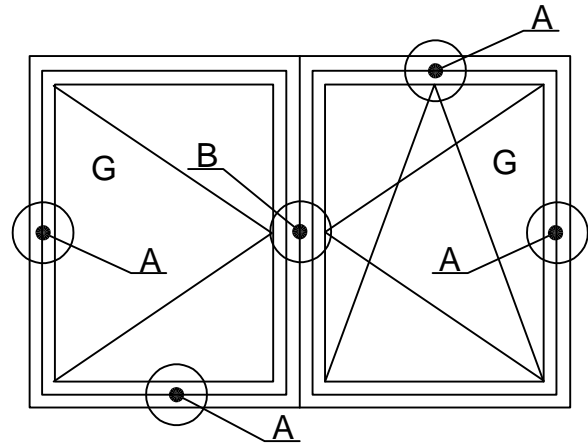
Proračun koeficijenta prolaska topline počiva na dvodimenzionalnoj numeričkoj metodi konačnih elemenata određene prema prEN ISO 10077-2.

DIMENZIJE	L	(m)	1.6
	H	(m)	1.48
A-ram + krilo	$U_A$	( $W/m^2K$ )	1,9
B-kombatuta	$U_B$	( $W/m^2K$ )	2.1
G-glass (staklo)	$U_g$	( $W/m^2K$ )	0.6
Kombinacija stakla i profila	$U_w$	( $W/m^2K$ )	1.1

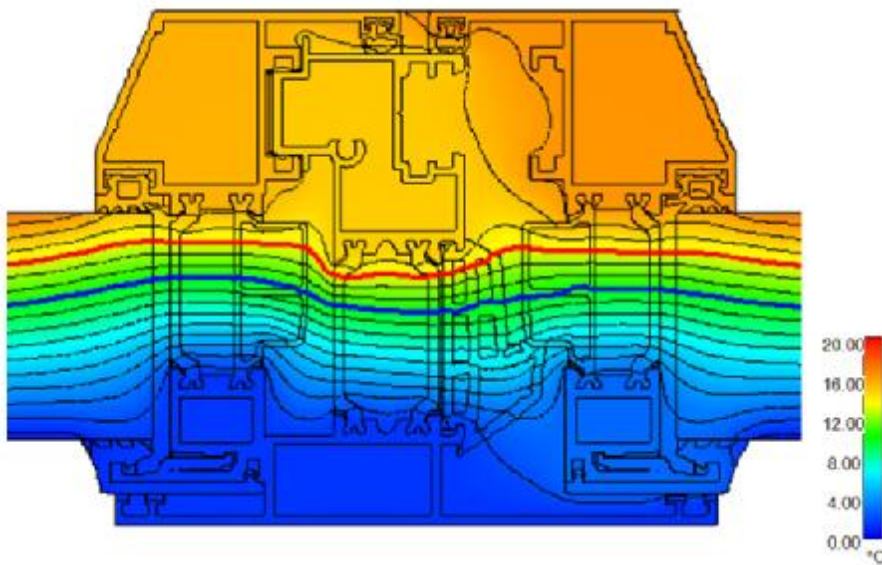
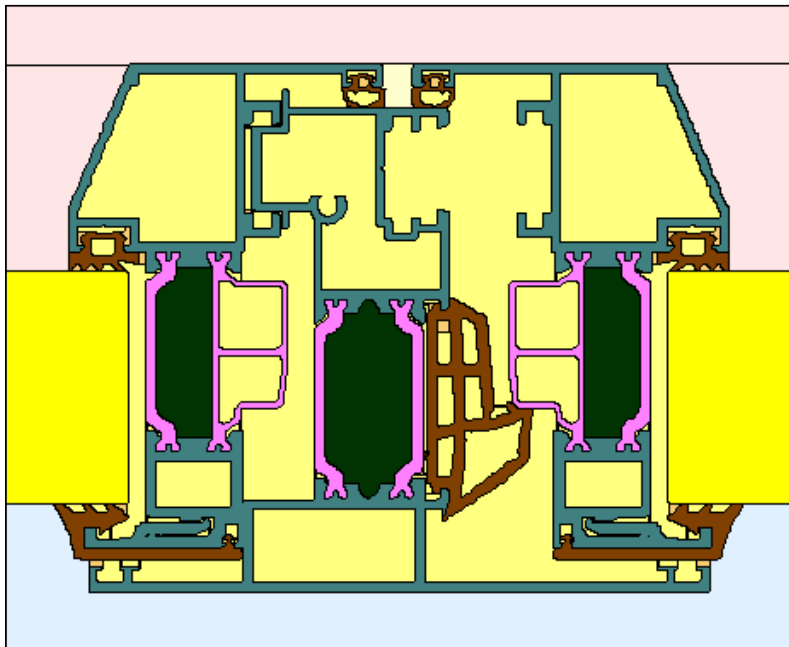


Temperaturni dijagram za A





Temperaturni dijagram za B



### Nachweis

#### Berechnung des Wärmedurchgangskoeffizienten

#### Prüfbericht

Nr. 15-001425-PR12

(PB-K20-06-de-01)

Auftraggeber	FEAL d.o.o. Trnska cesta 146 88220 Siroki Brijeg Bosnia-Herzegovina
Produkt	Flügelrahmen-Blendrahmen Metall
Bezeichnung	System: <b>TERMO 85 SK</b> Lieferbezeichnung: <b>FT-0165F ; FT-0167F</b>
Leistungsrelevante Produktdetails	Ansichtsbreite B in mm <b>104</b> ; Material <b>Aluminiumlegierung</b> ; Oberflächenbehandlung <b>eloxiert, lackiert, pulverbeschichtet</b> ; Dämmstege; Material <b>Polyamid 6.6 mit 25 % Glasfasern</b> ; Einlageschaum in der Dämmzone; Material <b>„XPS (Dicke bis 60 mm)“</b> ; Wärmeleitfähigkeit $\lambda$ in $W/(m \cdot K)$ <b>0,034</b> ; Einlageschaum zum Glasfalz; Material <b>„XPE“</b> ; Wärmeleitfähigkeit in $W/(m \cdot K)$ ; <b>0,038</b> ; Flügelrahmen; Breite in mm <b>60,5</b> ; Dicke in mm <b>85</b> ; Blendrahmen; Breite in mm <b>94</b> ; Dicke in mm <b>82</b> ; Einlageschaum zum Baukörperanschluss; Material <b>„XPS (Dicke bis 60 mm)“</b> ; Wärmeleitfähigkeit in $W/(m \cdot K)$ ; <b>0,034</b> ; Ersatzpaneel; Dicke in mm <b>44</b> ; Einstand in mm <b>12</b>
Besonderheiten	-

#### Ergebnis

Berechnung des Wärmedurchgangskoeffizienten nach EN ISO 10077-2:2012-02



$$U_f = 1,7 \text{ W}/(\text{m}^2\text{K})$$



#### Grundlagen \*

EN ISO 10077-2:2012-02

SC 06-verpflichtend

NB-CPD/SG06/11/083 2011-09  
\* und entsprechende nationale Festsetzungen  
(z.B. DIN EN)

#### Darstellung



#### Verwendungshinweise

Die ermittelten Ergebnisse können für den Nachweis entsprechend den oben angegebenen Grundlagen verwendet werden.

#### Gültigkeit

Die genannten Daten und Ergebnisse beziehen sich ausschließlich auf den geprüften und beschriebenen Probekörper.

Diese Prüfung ermöglicht keine Aussage über weitere leistungs- und qualitätsbestimmende Eigenschaften der vorliegenden Konstruktion.

#### Veröffentlichungshinweise

Es gilt das Deckblatt zur Benutzung von ift-Prüfdokumentationen". Das Deckblatt kann als Kurzfassung verwendet werden.

#### Inhalt

Der Nachweis umfasst insgesamt 7 Seiten und Anlage (1 Seite).

ift Rosenheim

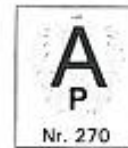
11.12.2015

Konrad Huber, Dipl.-Ing. (FH)  
Prüfstellenleiter  
Bauphysik

Maurice Mayer, Dipl.-Ing. (FH)  
Prüfingenieur  
Bauphysik

Fenster / Fensterprüfung

07.07.2010 | Auftragsnr. 10/562\_02 | Kundennr. 0320 | Zeichen hp/dp | Seite 1/8



<b>Auftraggeber</b>	Feal d.o.o.	<b>Adresse</b>	Trn bb BA-88220 Siroki Brijeg
---------------------	-------------	----------------	----------------------------------

<b>Bezeichnung</b>	Dreh-Kipp Element	<b>Rahmenmaterial</b>	Aluminium
<b>Identifikation</b>	Thermo 85 SK	<b>Abmessungen</b>	Breite 1230 mm Höhe 1480 mm

<b>Produktnorm</b>	Fenster und Türen	ON EN 14351-1
<b>Klassifizierung</b>	Luftdurchlässigkeit	ON EN 12207 <b>4</b>
	Schlagregendichtheit	ON EN 12208 <b>E1050</b>
	Widerstandsfähigkeit bei Windlast	ON EN 12210 <b>C4</b>



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gbd LAB GmbH www.gbd-lab.at  
Steinebach 13a A-6850 Dornbirn

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## 6 Einzelergebnisse

### 6.1 Luftdurchlässigkeit

Vor Beginn der Prüfung wurde über das eingebaute Element eine Folie gespannt, sodass alle Undichtigkeiten des Elements abgedeckt sind. Durch eine Nullmessung wurden die Undichtigkeiten des Prüfstandsystems ermittelt.

Anschließend wurde die Folie entfernt und das Prüfelement durch drei Druckstöße belastet / gelockert und die Luftdurchlässigkeit gemessen.

Die Luftdurchlässigkeit wurde bis zu einer Prüfdruckdifferenz von 600 Pa geprüft. Die Messwerte sind in den Messprotokollen ersichtlich. Dabei handelt es sich um die im Differenzverfahren ermittelten Werte, in dem die gemessene Luftdurchlässigkeit der Nullmessung von der gemessenen Luftdurchlässigkeit des Prüfelementes abgezogen wurde.

Messprotokolle 1, 2

**Die Luftdurchlässigkeit entspricht der Klasse 4.**

### 6.2 Schlagregendichtheit

Die Schlagregendichtheit bei statischem Druck wurde bis zu einer Prüfdruckdifferenz von 1050 Pa geprüft.

Es wurde kein Wassereintritt festgestellt.

**Die Schlagregendichtheit entspricht der Klasse E1050.**

### 6.3 Widerstandsfähigkeit bei Windlast

#### 6.3.1 Durchbiegung

Für die Einstufung in die Klasse C darf die Frontdurchbiegung unter positiven und negativen Druck ( $P_1$ ) 1/300 der Stützlänge des Rahmenelements nicht überschreiten. Die Messung der Stützweite erfolgt zwischen den Auflagepunkten.

Prüffolge: 3 Druckstöße  $\pm 1760$  Pa  
maximaler Prüfdruck  $P_1$   $\pm 1600$  Pa

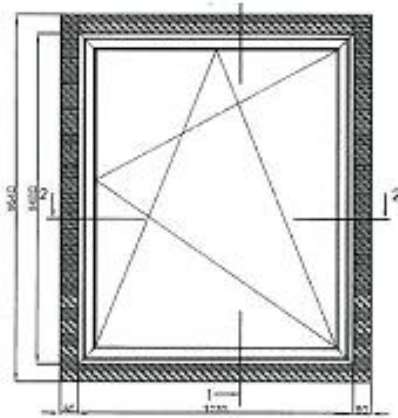
Die Prüfung wird für Druck und Sog durchgeführt.

## Fenster / Fensterprüfung

07.07.2010 | Auftragsnr. 10/562\_02 | Kundennr. 0320 | Zeichen hp/dp | Seite 7/8



Aufgrund der Anzahl der Verriegelungspunkte kann davon ausgegangen werden, dass nur eine geringe Rahmendurchbiegung erfolgt. Die Durchbiegung wurde nicht gemessen.



Darstellung des Elementes

Messprotokoll 3

**Die Durchbiegung unter Windlast entspricht der Klasse C4.**

### 6.3.2 Wiederholter Druck

Es werden 50 Zyklen bei einem maximalen Druck von  $P_2 = 800$  Pa durchgeführt. Die Prüfung wird für Druck und Sog durchgeführt.

Es sind keine Mängel und keine Funktionsstörungen festzustellen.

**Die wiederholte Prüfung unter Windlast entspricht der Klasse 4.**

### 6.3.3 Luftdurchlässigkeit - Wiederholung

Die Luftdurchlässigkeit darf nach den Prüfungen des Widerstandes bei Windlast mit den Prüfdrücken  $P_1$  und  $P_2$  die Obergrenze der angegebenen Klasse nach EN 12207 (siehe 6.1 des Protokolls) um nicht mehr als 20% überschreiten.

Die Prüfung erfolgt analog 6.1 des Protokolls.

Messprotokolle 4, 5

**Die Überschreitung der Obergrenze der Klasse 4 ist  $\leq 20\%$ .**

### 6.3.4 Sicherheitsprüfung

Die Sicherheitsprüfung erfolgt bei  $P_3 = 2400$  Pa. Die Prüfung wird für Druck und Sog durchgeführt.

**Der Prüfkörper bleibt geschlossen und keine Teile brechen auseinander.**

## Fenster / Fensterprüfung

07.07.2010 | Auftragsnr. 10/562\_02 | Kundennr. 0320 | Zeichen hp/dp | Seite 8/8



## 7 Demontage und Kontrolle

Nach Beendigung der Prüfung wurde das Element demontiert. Im Fensterfalz wurde kein unzulässiger Wassereintritt festgestellt.

Die Ausführung der Konstruktion entspricht den Vorgaben der Systembeschreibung und den vorgelegten Zeichnungen.

## 8 Zusammenstellungen der Ergebnisse der Einzelprüfungen

Prüfung	Art der Prüfung	Klassifizierungsnorm	Ergebnis/Klasse
1	Luftdurchlässigkeit	ON EN 12207	4
2	Schlagregendichtheit bei statischem Druck	ON EN 12208	E1050
3	Durchbiegung unter Windlast	ON EN 12210	C4
4	Widerstandsfähigkeit bei Windlast	ON EN 12210	4
5	Wiederholung der Prüfung der Luftdurchlässigkeit	ON EN 12207	eingehalten
6	Widerstandsfähigkeit bei Windlast - Sicherheitsprüfung	ON EN 12210	4
7	Demontage und Kontrolle		keine Mängel

## 9 Zusammenfassung

Die Ausführung der Konstruktion entspricht den Vorgaben der Systembeschreibung und den vorgelegten Zeichnungen.

Das Prüfelement wurde im geschlossenen und verriegelten Zustand geprüft.

Es wurde kein unzulässiger Wassereintritt festgestellt.

Prüfer  Akkr. Prüf- und Inspektionsstelle gbd Lab GmbH www.gbd-lab.at Steinebach 13a A-8850 Dornbirn

Volkhard Hammerer  Zeichnungsberechtigter Dipl.-Ing. Heinz Pfefferkorn

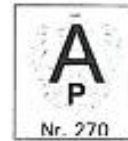
Anlagen:

Anlage -1- Messprotokolle – 4 Seiten

Anlage -2- Prüfelementspezifikationen – 9 Seiten

Dreh-Kipp Element / Luftschalldämmung

07.07.2010 | Auftragsnr. 10/078\_02 | Kundennr. 0320 | Zeichen hp/dp | Seite 1/7



<b>Auftraggeber</b>	Feal d.o.o.	<b>Adresse</b>	Trn bb BA-88220 Siroki Brijeg
---------------------	-------------	----------------	----------------------------------

<b>Bezeichnung</b>	Dreh-Kipp Element	<b>Rahmenmaterial</b>	Aluminium
<b>Identifikation</b>	Thermo 85 SK	<b>Abmessungen</b>	Breite 1230 mm Höhe 1480 mm

<b>Prüfvorschrift</b>	ON EN ISO 140-3	<b>Klassifizierungsnorm</b>	ON EN ISO 717-1
-----------------------	-----------------	-----------------------------	-----------------

Typ	Füllung [mm]	R <sub>w</sub> (C,C <sub>tr</sub> ) [dB]
2-fach Isolierglas	Float 8 mm SZR 20 mm VSG ESG 4_4/2	44(-1;-5)

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

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 Steinebach 13a A-6850 Dornbirn T ++43 (0)5572 394830 F ++43 (0)5572 394830-39 office@gbd-lab.at www.gbd-lab.at

## Dreh-Kipp Element / Luftschalldämmung

07.07.2010 | Auftragsnr. 10/078\_02 | Kundenr. 0320 | Zeichen hp/dp | Seite 7/7



## 7 Ergebnisse

Die Messwerte des gemessenen Luftschalldämmmaßes des geprüften Elementes sind in den Messprotokollen dargestellt. Die Darstellung erfolgt frequenzabhängig in tabellarischer Form und als Diagramm.

Das bewertete Schalldämmmaß  $R_w$  und die Spektrumsanpassungswerte  $C$  (A-bewertetes rosa Rauschen) und  $C_{tr}$  (A-bewerteter städtischer Straßenverkehrslärm)

Das bewertete Schalldämmmaß  $R_w(C,C_{tr})$  beträgt 44(-1;-5) dB.

Messprotokoll

## 8 Zusammenfassung

Die Ausführung der Konstruktion entspricht den Vorgaben der Systembeschreibung und den vorgelegten Zeichnungen.

Prüfer

Akkr. Prüf- und Inspektionsstelle  
gbd Lab GmbH www.gbd-lab.at  
Steinebach 13a A-6950 Dornbirn

Dipl.-Ing. Josef Kuster

Zeichnungsberechtigter

Dipl.-Ing. Heinz Pfefferkorn

Anlagen:

Anlage -1-	Messprotokolle	1 Seite
Anlage -2-	Prüfelementspezifikationen	9 Seiten

Fenster Window / Einbruchhemmende Prüfung Burglar resistance RC 2

24.06.2014 | Auftragnr. 14/0286\_01 | Kundenr. 0320 | Zeichen bh/hi | Seite 1/15  
 Order no. | Client no. | Sign Page



## Prüfbericht / Test report

**Ermittlung der Widerstandsfähigkeit gegen:**

Determination of resistance under:

**Statische Belastung nach EN 1628**

Static loading according to EN 1628

**Dynamische Belastung nach EN 1629**

Dynamic loading according to EN 1629

**Manuelle Einbruchversuche nach EN 1630**

Manual burglary attempts according to EN 1630

<b>Auftraggeber</b> Client	FEAL d.o.o	<b>Adresse</b> Address	Trn bb BIH - 88220 Siroki Brijeg
-------------------------------	------------	---------------------------	-------------------------------------

<b>Bezeichnung</b> Designation	1-flg. Dreh-/Kipp-Fenster Single-winged tilt-and turn window	<b>Identifikation</b> Identification	Termo 85 SK
<b>Rahmenmaterial</b> Frame material	Aluminium Aluminium	<b>Abmessungen</b> Dimensions	Breite / Width 1200 mm Höhe / Height 1500 mm

<b>Produktnorm</b> Product standard	Fenster und Türen Windows and doors	EN 14351-1
<b>Einstufung</b> Grading	Statische Belastung Static loading	RC 2
	Dynamische Belastung Dynamic loading	EN 1627 RC 2
	Manueller Einbruchversuch Manual burglary attempts	RC 2

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

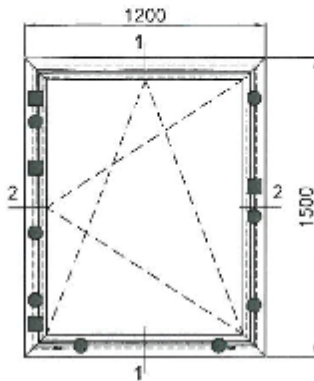
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Vorlage 01 / Template 01

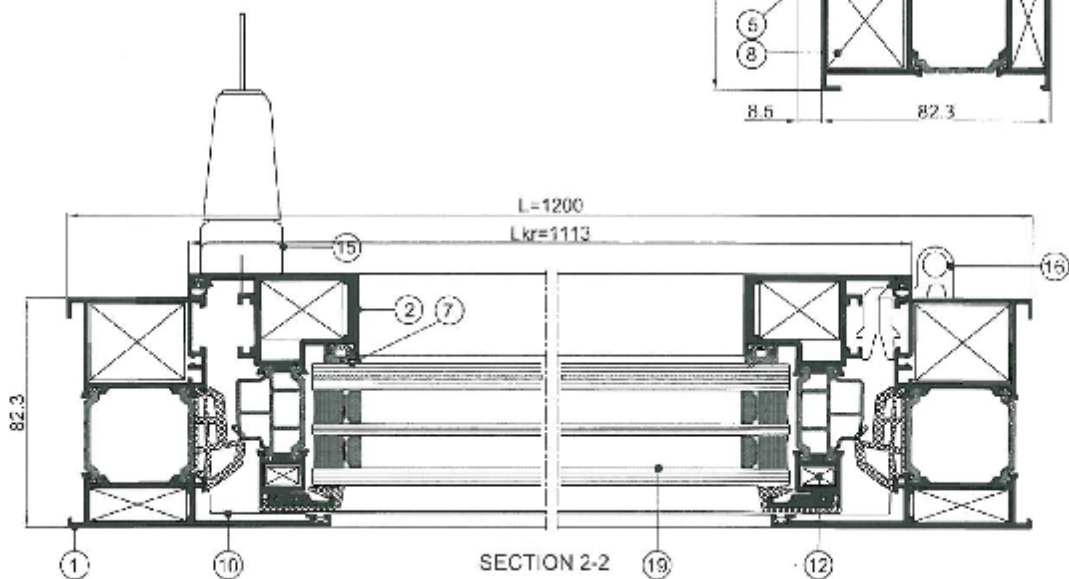
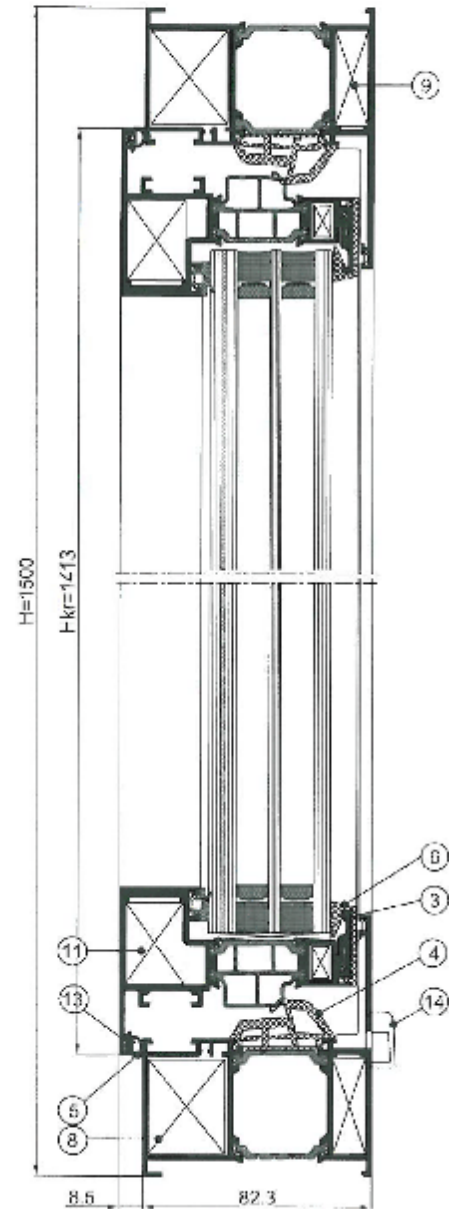


SAMPLE TESTING  
TERMO 85 SK - open in

gbd LAB 14/0286-01  
Mide - ja I. Seferi  
Akkr. Prüf- und Inspektionsstelle  
gbd Lab GmbH www.gbd.at  
Steinbach 13a A-6850 Dornbirn  
SECTION 1-1



Poz.	profile / gaskets / accessories / glass	producer
1	al. profile (frame) FT-0165	FEAL
2	al. profile (wing) FT-0167	FEAL
3	al. profile FR-4'	FEAL
4	gasket 331.004 (EPDM)	Isec Gomma
5	gasket 321.001 (EPDM)	Isec Gomma
6	gasket 321.005 (EPDM)	Isec Gomma
7	gasket 351.011 (LPDM)	Isec Gomma
8	al. angled connector 710.072	FEAL
9	al. angled connector 710.091	FEAL
10	al. angled connector 730.011	FEAL
11	al. angled connector 710.111	FEAL
12	al. angled connector 710.025	FEAL
13	al. angled connector 730.001	FEAL
14	water drain cap 373.003	Metaltgovina
15	handle window WK 2	Notlar
16	window fittings WK 2	Notlar
17	silicone DC 695	Dow corning
18	glue OT-15	Illbruck
19	glass 43.5 mm (6+12+6+12+44.4)	Kristal







Bauaufsichtlich anerkannte Prüf-, Überwachungs- und Zertifizierungsstelle  
 Prüfstelle für Feuerlöschmittel und -geräte  
 DIN EN ISO/IEC 17025: D-PL-17819-01-00  
 DIN EN ISO/IEC 17065: D-ZE-17819-01-00  
 DIN EN ISO/IEC 17020: D-IS-17819-01-00  
 ZLS-GS-0066  
 Notified Body no. 0767



# Prüfbericht

## Nr. 20160811

1. Ausfertigung

Auftraggeber/ Hersteller:	Feal d.o.o. Trnska cesta 146 88220 Široki Brijeg, Bosnien und Herzegowina
Inhalt des Auftrages:	Durchführung einer Feuerwiderstandsprüfung an einem Probekörper festverglastes Fenster „Thermo85-E60“ mit einseitiger Beflammung von der Fensterinnenseite nach der Einheits-Temperaturzeitkurve (ETK) gemäß DIN EN 1363-1 (Zeit „t“ $\geq$ 60 min) zum Nachweis des Raumabschlusses (E)
Prüfgrundlage:	DIN EN 1363-1:2012-10 in Verbindung mit DIN EN 1634-1:2014-03
Bezeichnung des Probekörpers:	„Thermo85-E60“
Auftragsdatum:	08.06.2016
Prüfdatum:	29.09.2016
Ausfertigungsdatum:	03.11.2016
Prüfberichtsumfang:	8 Seiten Text inklusive Anlagenverzeichnis und 21 Seiten Anlagen



Veröffentlichungen von Prüfberichten, auch auszugsweise, und Hinweise auf Prüfungen zu Werbezwecken bedürfen in jedem Einzelfalle der schriftlichen Einwilligung der MPA Dresden GmbH. Die einzelnen Blätter dieses Prüfberichtes sind mit dem Firmenstempel der MPA Dresden GmbH versehen.

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Amtsgericht Chemnitz HRB 28268  
 Steuernummer: 220/114/03364  
 USt-IdNr. DE291271296

Sparkasse Mittelsachsen  
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 09599 Freiberg  
 IBAN DE68 870520003115024672  
 BIC WELADED1FGX



MPA Dresden GmbH  
Anlage A2 zum Prüfbericht Nr. 20160811 vom 03.11.2016

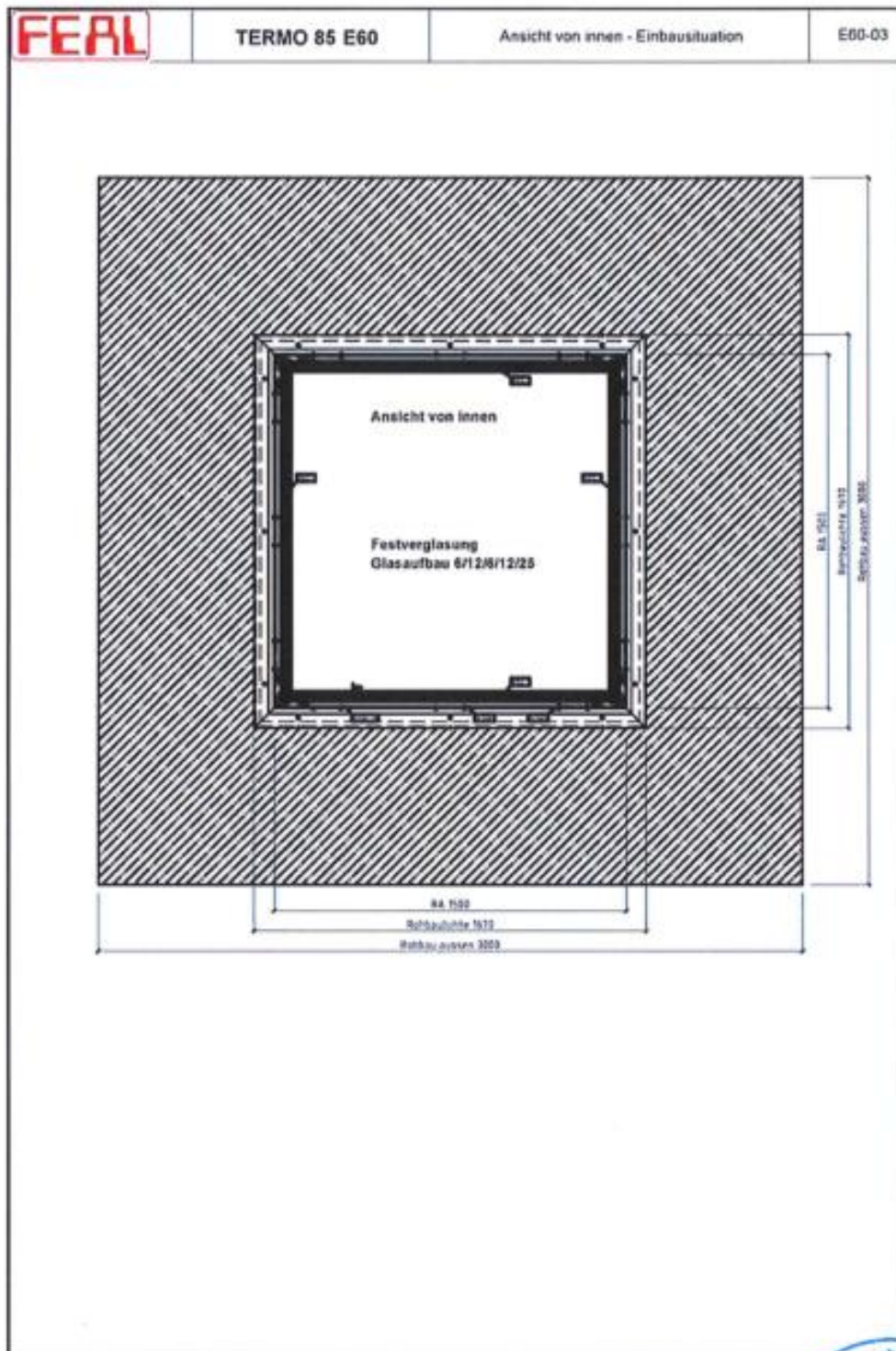


Abb. 2.1: Konstruktionszeichnung Prüfaufbau, Innenseite Probekörper



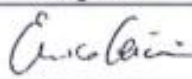


MPA Dresden GmbH  
Anlage A12 zum Prüfbericht Nr. 20160811 vom 03.11.2016

<b>AGC</b>	DECLARATION OF PERFORMANCE		<b>CE</b>
<b>N°/ Unique identification code of the product-type</b>			
<b>Trademark</b> 6 mm Planibel Clearlite - 12 mm Air 100% - 6 mm Planibel Clearlite - 12 mm Air 100% - 25 Pyrobel EI 60 (External glass must be laminated)			
<b>Intended use/s</b> Insulating glass units intended to be used in buildings and construction work			
<b>Manufacturer</b> AGC Glass Europe - Avenue Jean Monnet 4 - 1348 Louvain-la-Neuve - Belgium			
<b>Harmonized Standard</b> EN 1279-5:2005 + A2:2010			
<b>Notified Body/ies</b> 0761 1121 1136 1174 1234 1343 1694 1812			
<b>Declared performances:</b>			
<b>Essential characteristics</b>		<b>AVCP systems</b>	<b>Performance</b>
<b>Safety in the case of fire</b>			
Resistance to fire	1		EI 60
Reaction to fire	3, 4		NPD
External fire performance	3, 4		NPD
<b>Safety in use</b>			
Bullet Resistance	1		NPD
Explosion resistance	1		NPD
Burglar Resistance	3		NPD
Pendulum body impact resistance	3		NPD / NPD / 1B1
Resistance against sudden temperature changes and temperature differentials	4		NPD / NPD / NPD
Wind, snow, permanent and imposed load resistance	4		NPD
<b>Protection against noise</b>			
Direct airborne sound insulation	3		NPD
<b>Energy economy and heat retention</b>			
Declared emissivity	3		NPD
Thermal properties (EN 673): Ug-Value (W/(m².K))	3		1.8
Light Transmission	3		0.67
Light Reflection	3		0.19
Solar Energy Transmission	3		0.44
Solar energy reflection	3		0.16
Solar factor	3		0.66

NPD = No Performance Determined

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) N° 305/2011, under the sole responsibility of the manufacturer identified above. Signed for and on behalf of the manufacturer by:

<b>Name and function</b> E. Ceriani Primary Sales & Strategic Marketing Director Building	<b>Place and date of issue</b> Louvain-la-Neuve 28/10/2016	<b>Signature</b> 
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www.yourglass.com

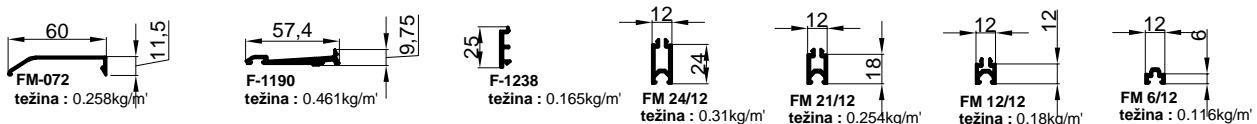
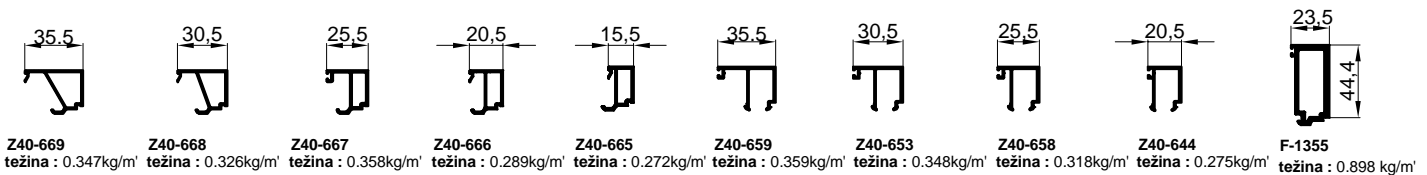
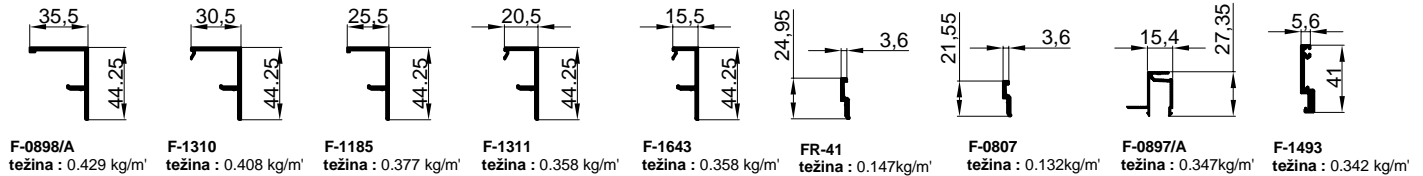
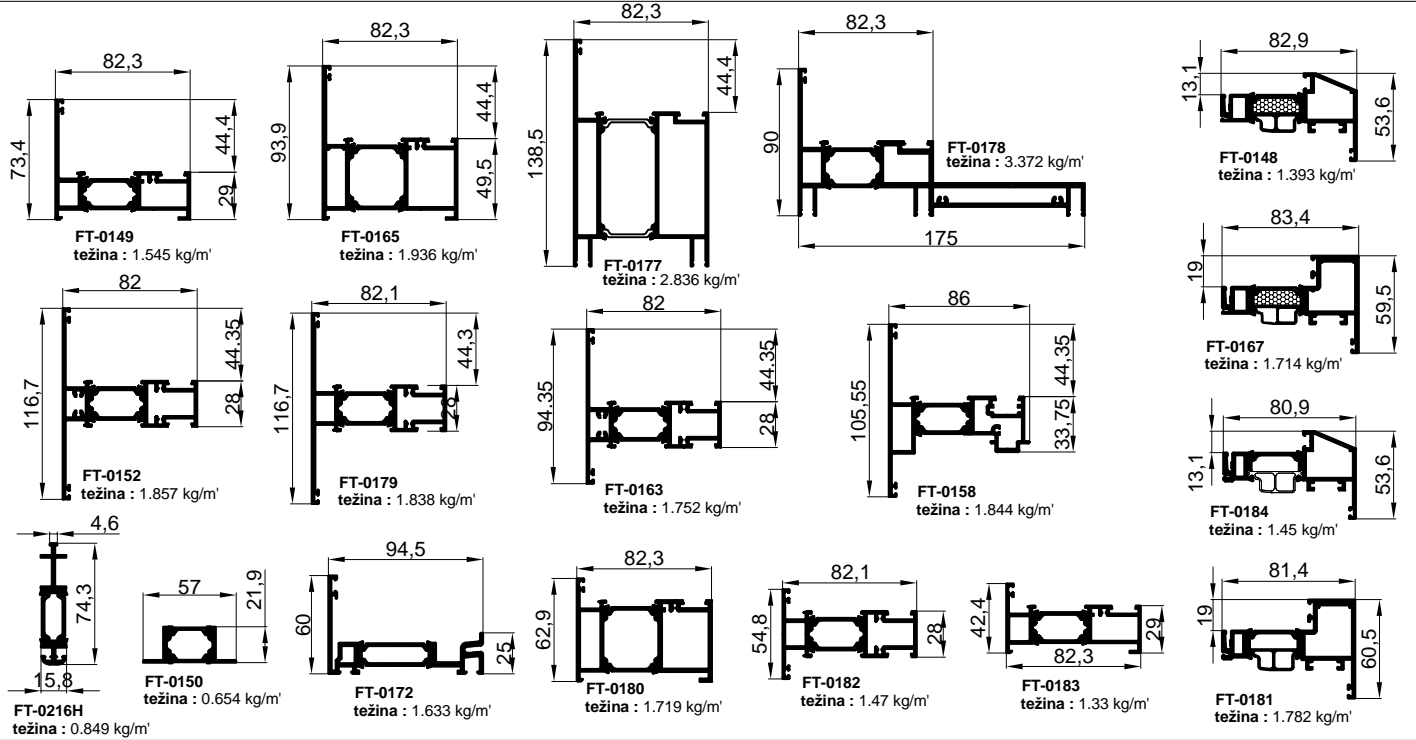
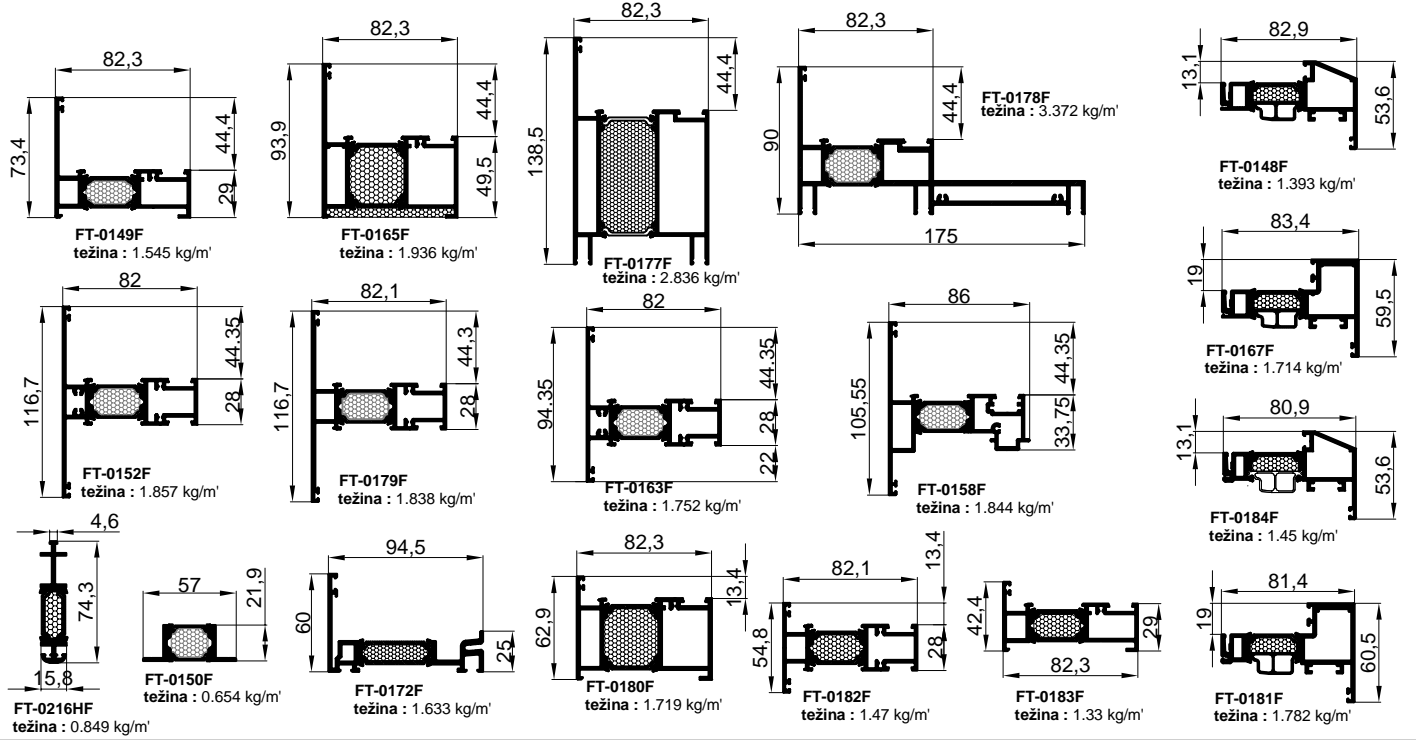


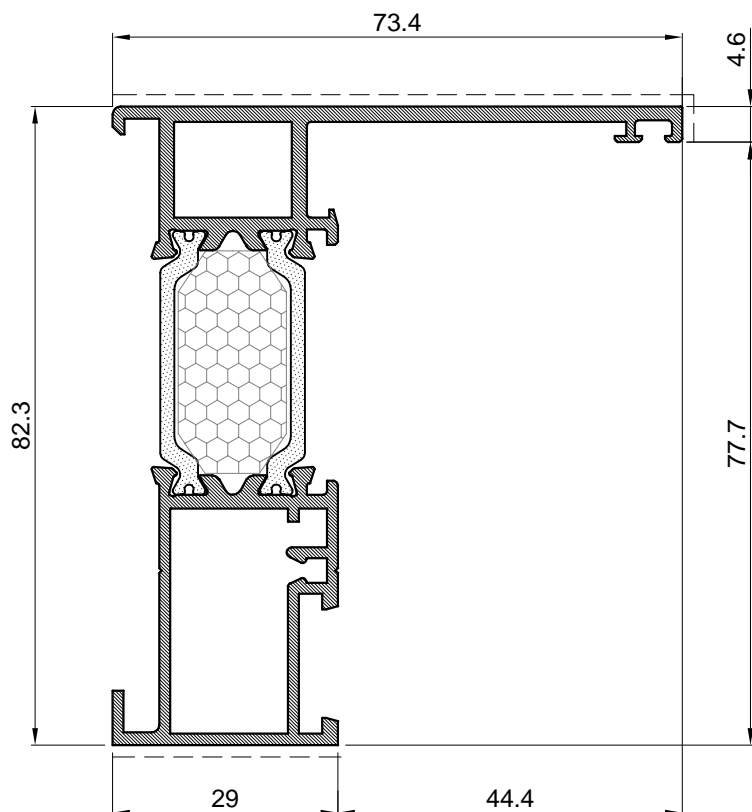
Abb. 12.1: Produktdatenblatt der Verglasung



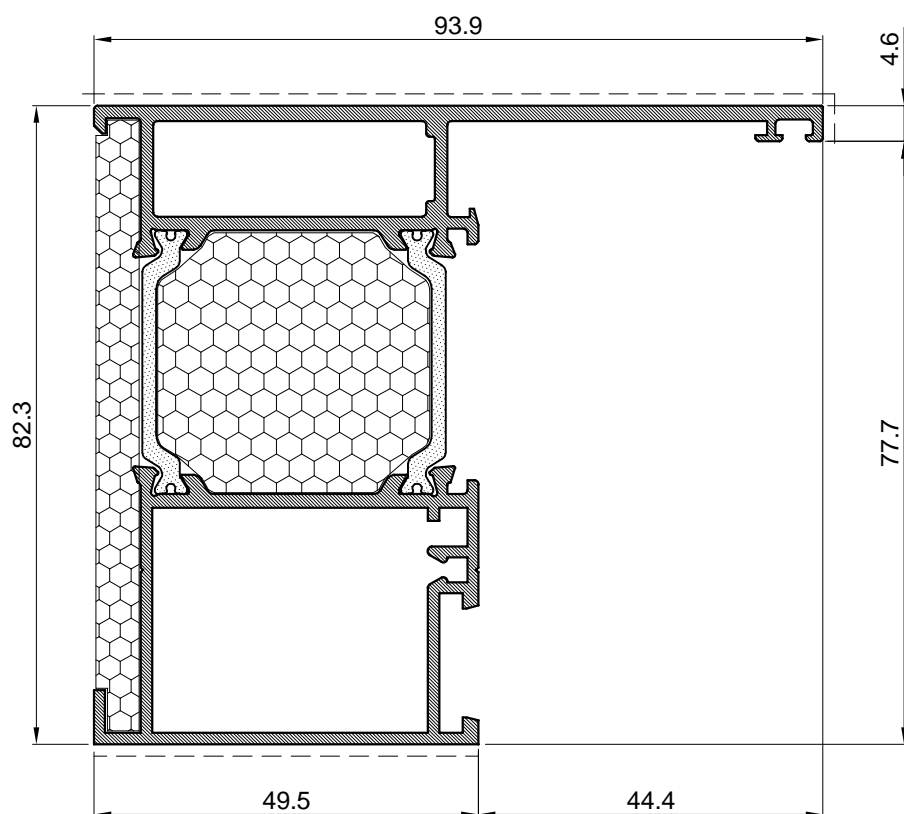
# Profili



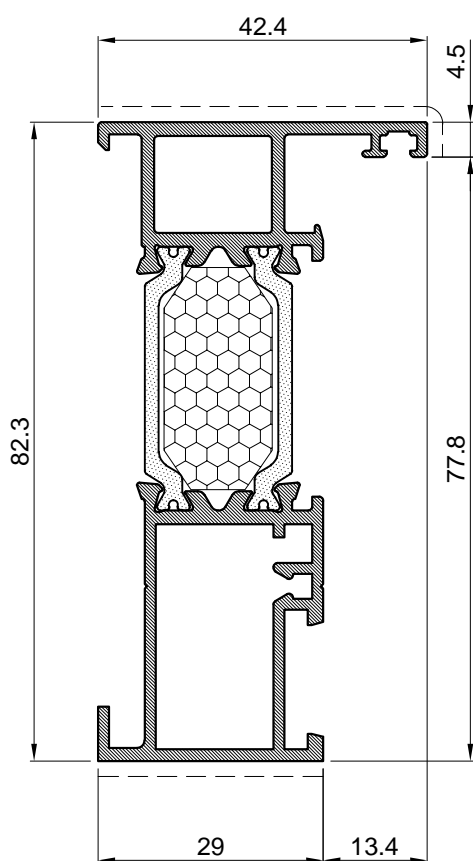
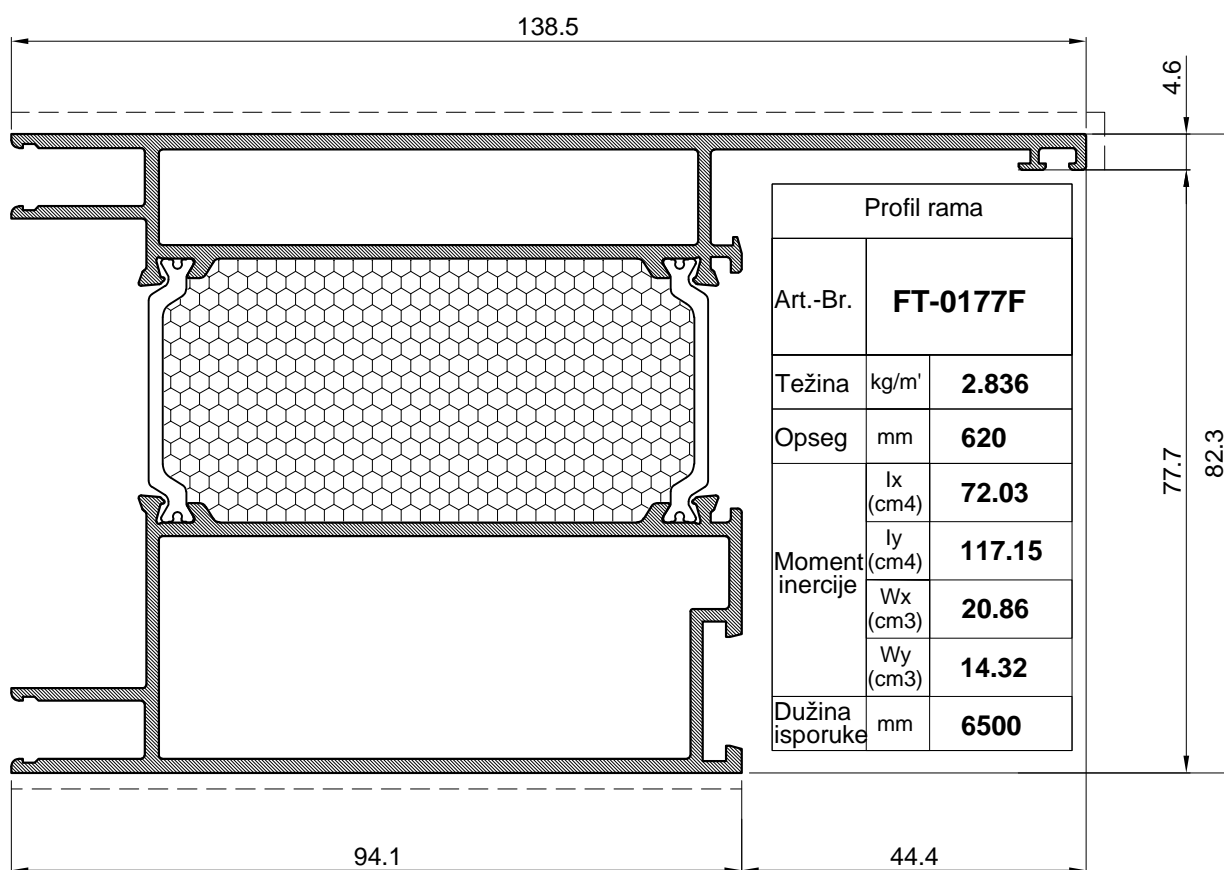


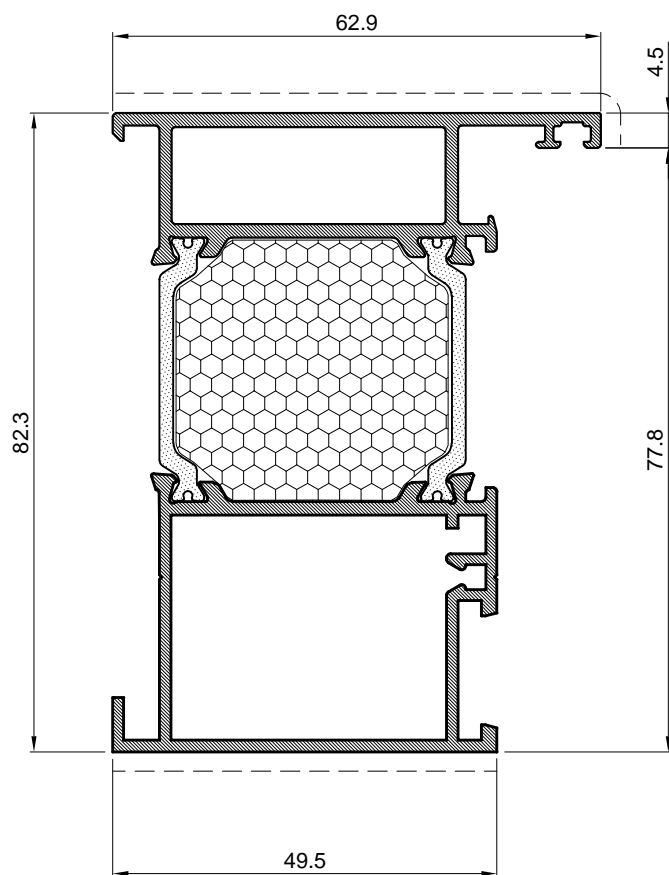


Profil rama		
Art.-Br.	<b>FT-0149F</b>	
Težina	kg/m'	<b>1.545</b>
Opseg	mm	<b>392</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>34.03</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>14.98</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>9.4</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>2.99</b>
Dužina isporuke	mm	<b>6500</b>

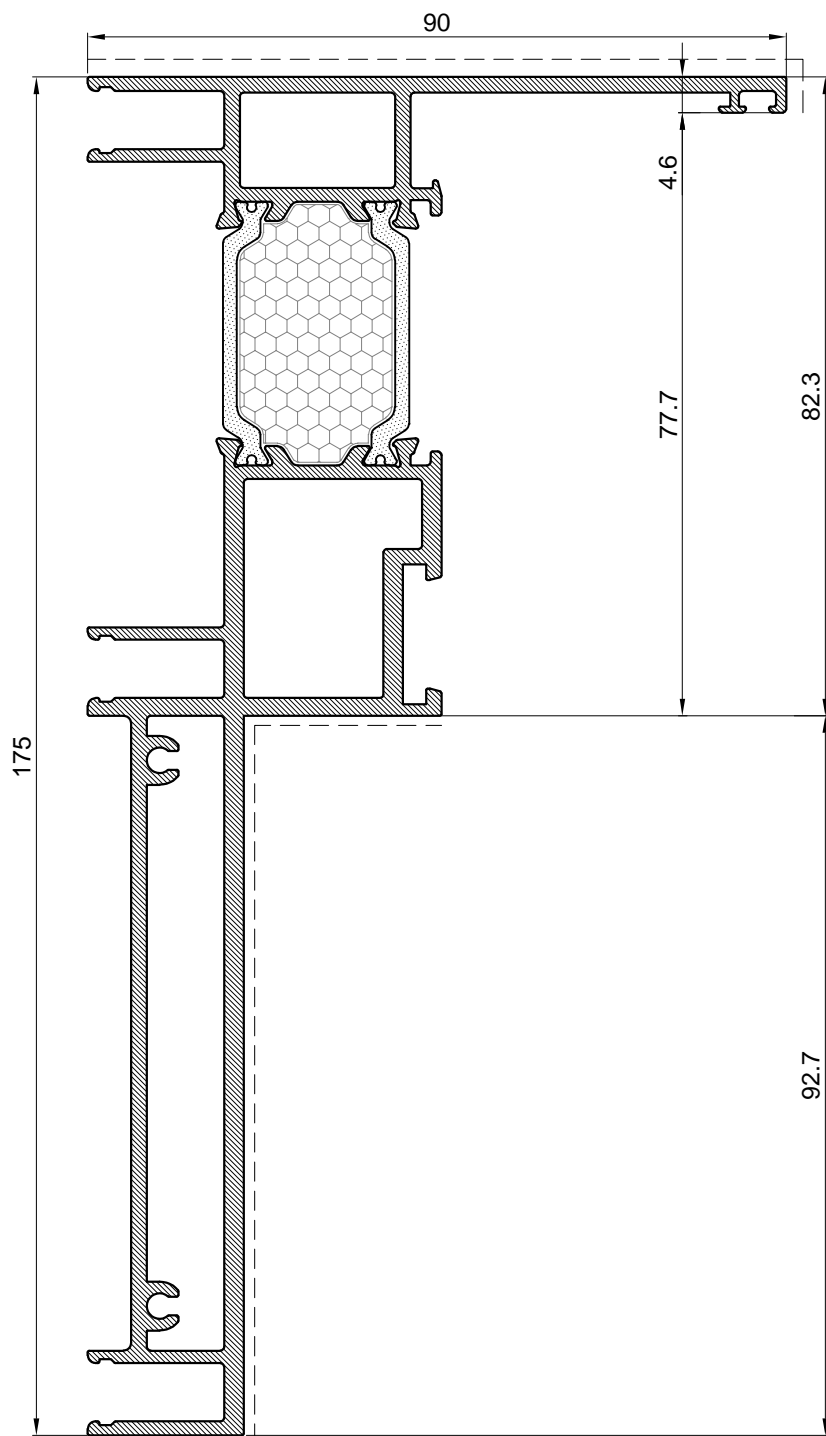


Profil rama		
Art.-Br.	<b>FT-0165F</b>	
Težina	kg/m'	<b>1.936</b>
Opseg	mm	<b>443</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>44.43</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>33.29</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>12.38</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.55</b>
Dužina isporuke	mm	<b>6500</b>

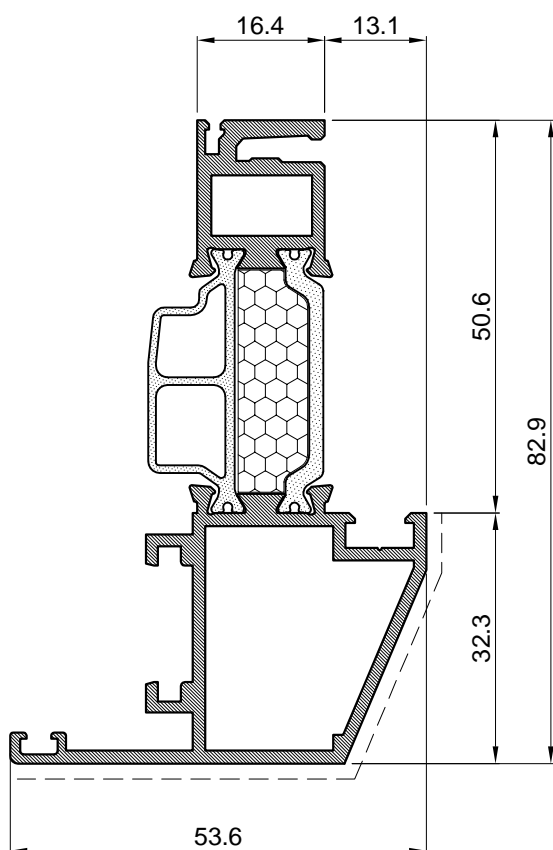




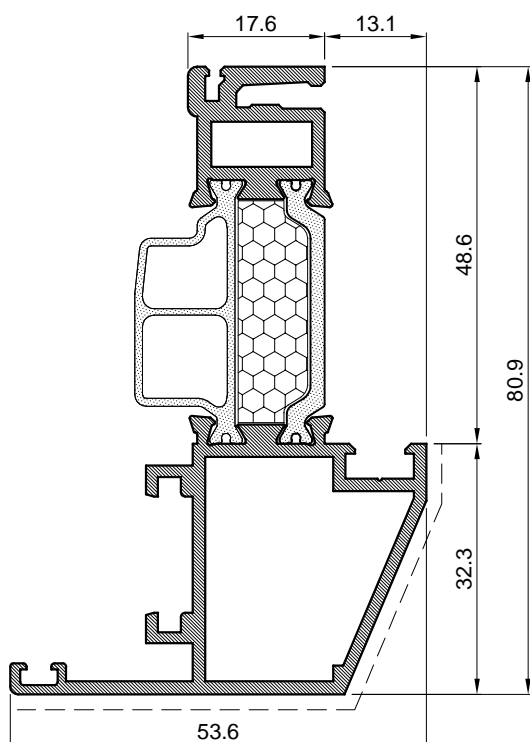
Profil rama		
Art.-Br.	<b>FT-0180F</b>	
Težina	kg/m'	<b>1.719</b>
Opseg	mm	<b>376.92</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>37.79</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>16.32</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>11.54</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>4.72</b>
Dužina isporuke	mm	<b>6500</b>



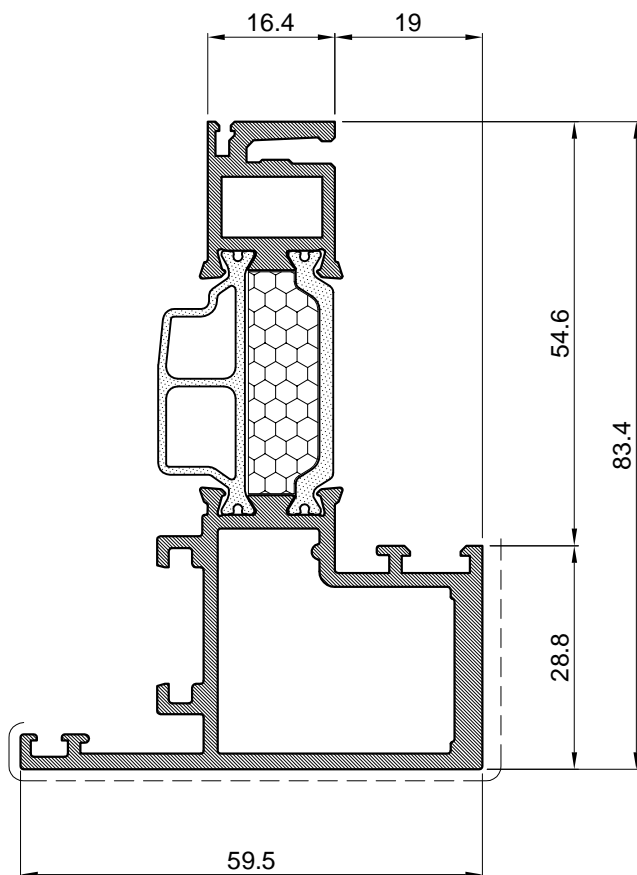
Profil rama		
Art.-Br.	<b>FT-0178F</b>	
Težina	kg/m'	<b>3.372</b>
Opseg	mm	<b>740</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>291.51</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>39.2</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>36.34</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.99</b>
Dužina isporuke	mm	<b>6500</b>



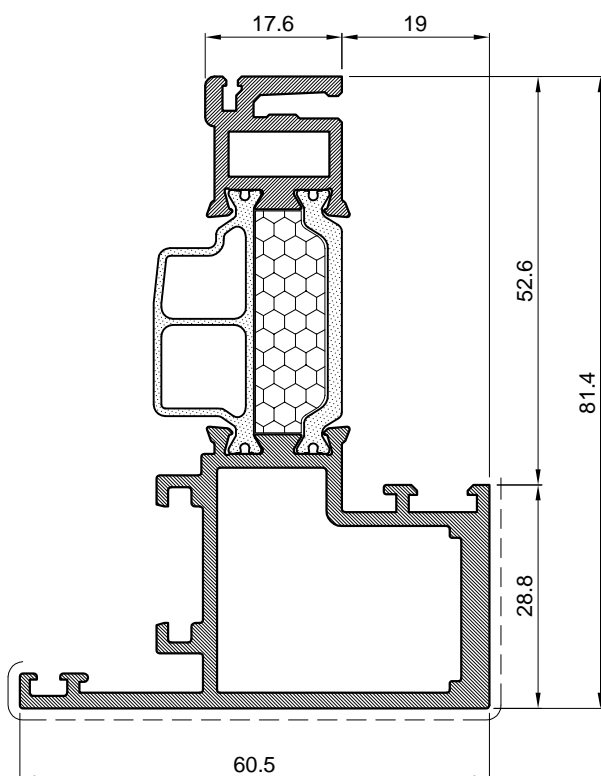
Profil krila		
Art.-Br.	<b>FT-0148F</b>	
Težina	kg/m'	<b>1.393</b>
Opseg	mm	<b>389</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>28.3</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>5.69</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.18</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>1.82</b>
Dužina isporuke	mm	<b>6500</b>



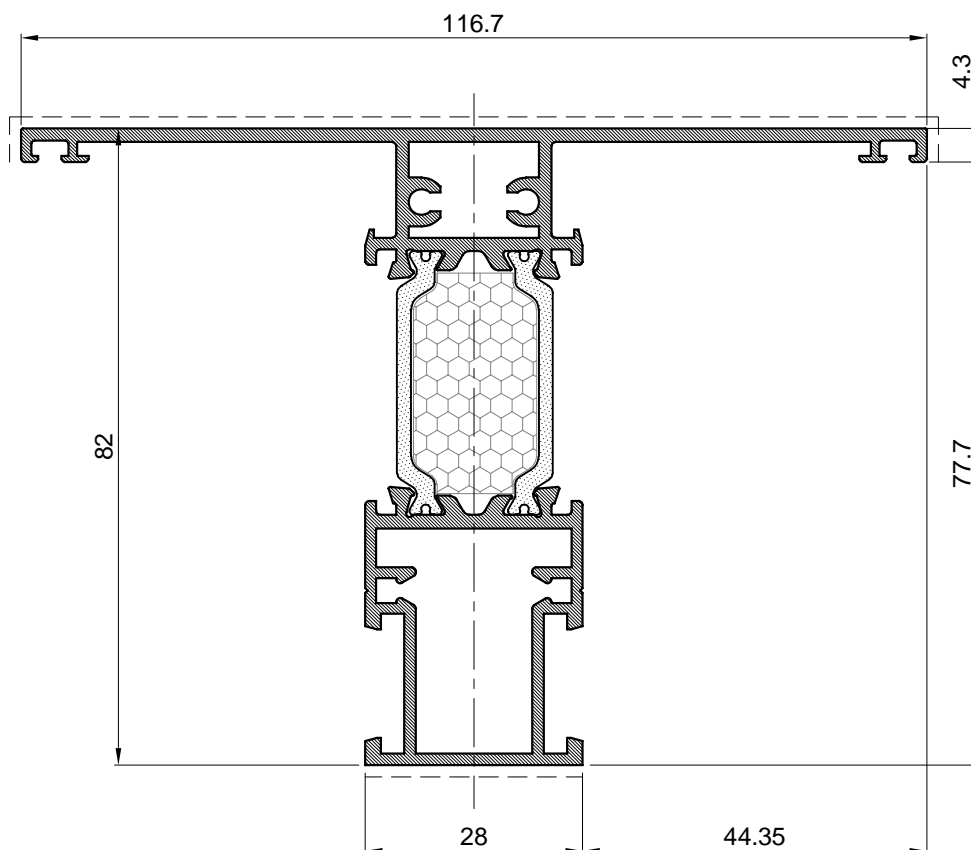
Profil		
Art.-Br.	<b>FT-0184F</b>	
Težina	kg/m'	<b>1.45</b>
Opseg	mm	<b>352</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>27.5</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>5.69</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.25</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>1.83</b>
Dužina isporuke	mm	<b>6500</b>



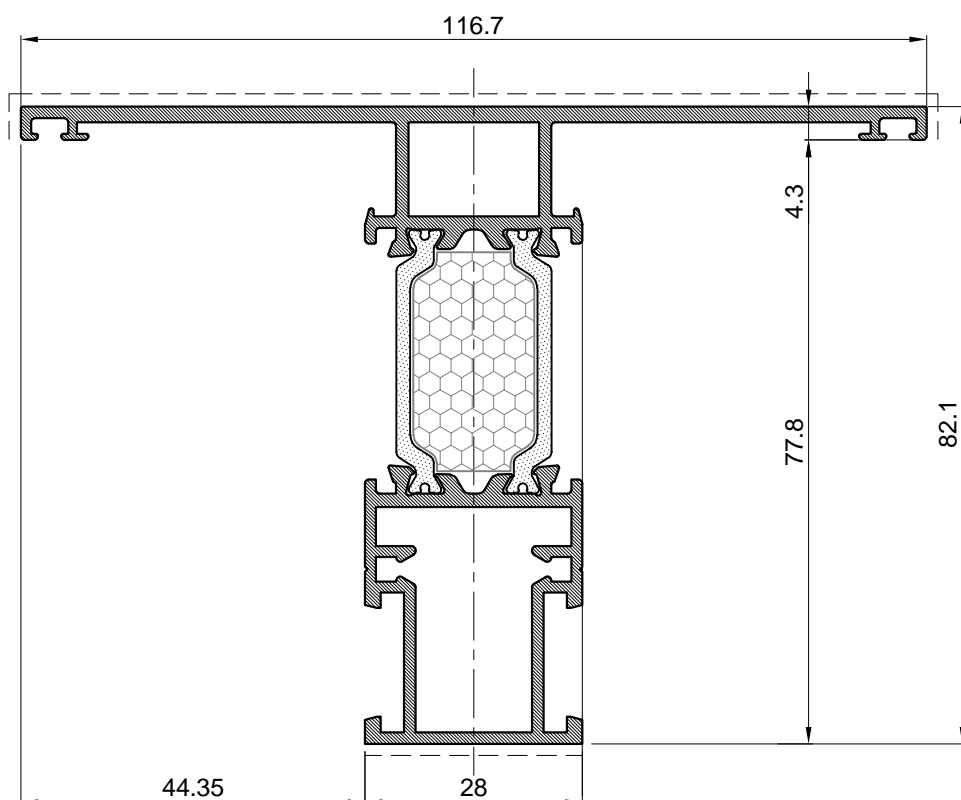
Profil krila		
Art.-Br.	<b>FT-0167F</b>	
Težina	kg/m'	<b>1.714</b>
Opseg	mm	<b>417</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>34.21</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>12.11</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.79</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>3.44</b>
Dužina isporuke	mm	<b>6500</b>



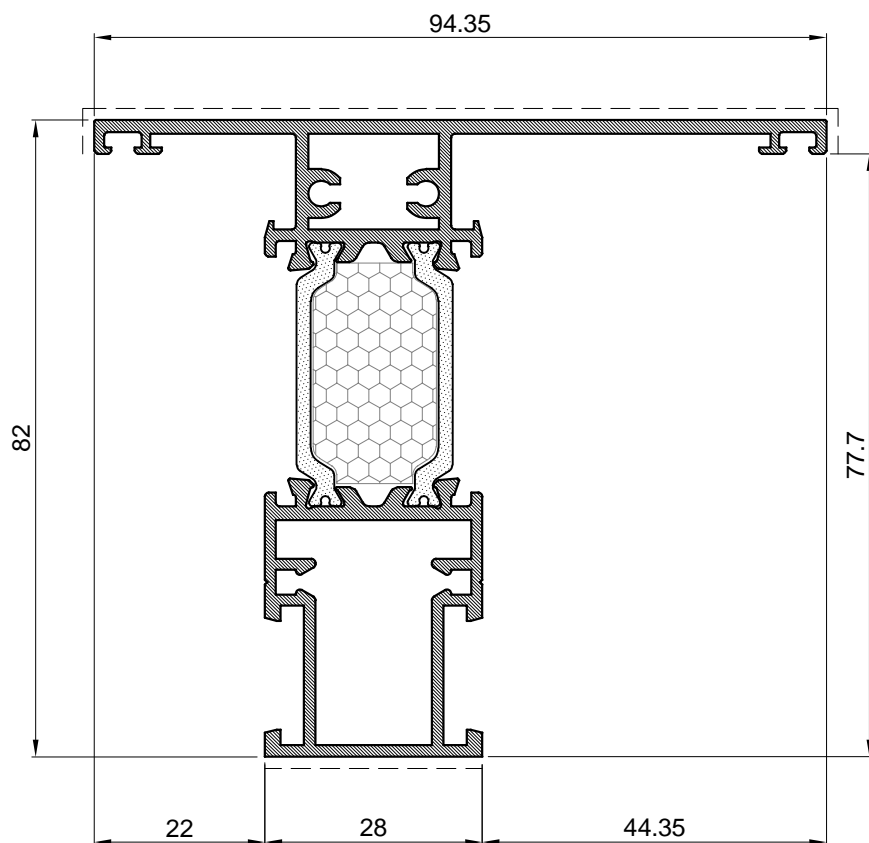
Profil krila		
Art.-Br.	<b>FT-0181F</b>	
Težina	kg/m'	<b>1.782</b>
Opseg	mm	<b>397.24</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>33.55</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>12.83</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.88</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>3.57</b>
Dužina isporuke	mm	<b>6500</b>



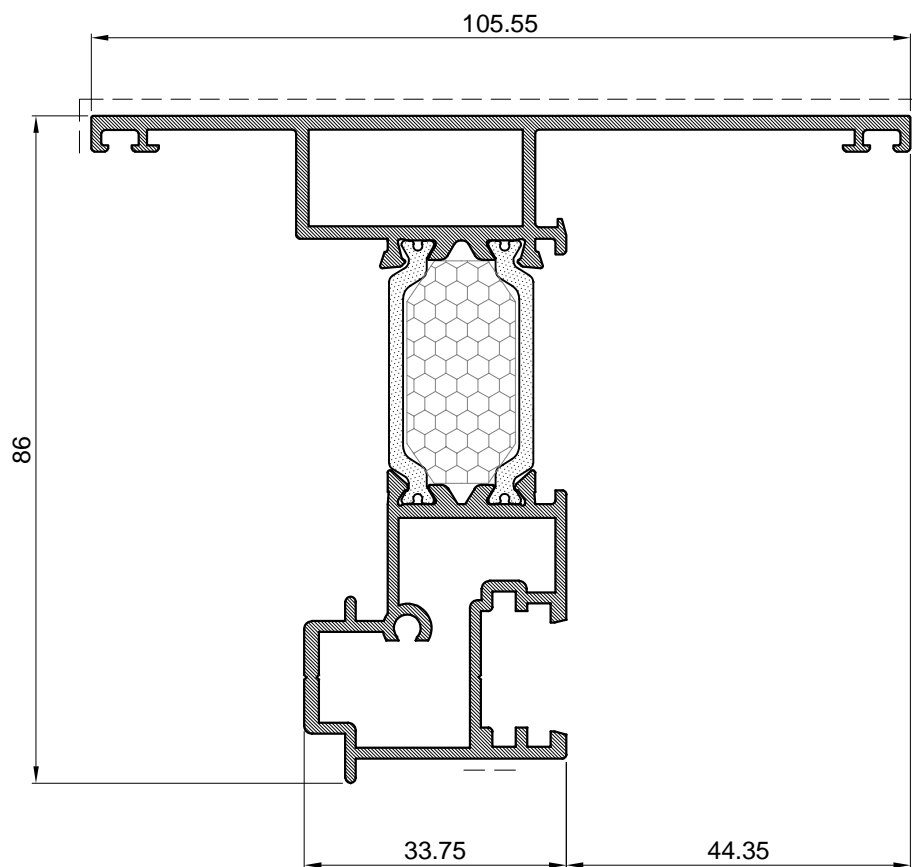
Profil prečke		
Art.-Br.	<b>FT-0152F</b>	
Težina	kg/m'	<b>1.857</b>
Opseg	mm	<b>518</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>39.61</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>31.11</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>10.26</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.33</b>
Dužina isporuke	mm	<b>6500</b>



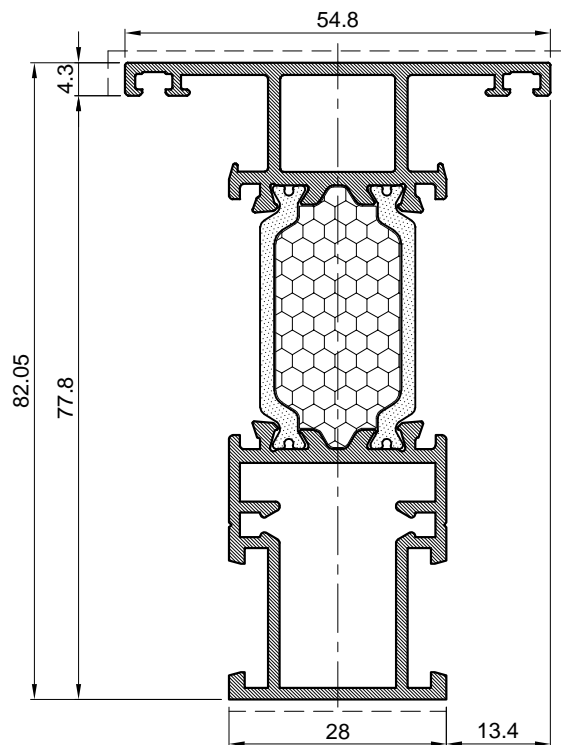
Profil prečke		
Art.-Br.	<b>FT-0179F</b>	
Težina	kg/m'	<b>1.838</b>
Opseg	mm	<b>515</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>40.2</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>32.99</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>10.37</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.65</b>
Dužina isporuke	mm	<b>6500</b>



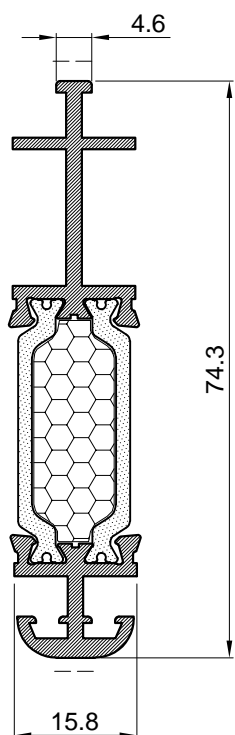
Profil prečke		
Art.-Br.	<b>FT-0163F</b>	
Težina	kg/m'	<b>1.752</b>
Opseg	mm	<b>473</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>37.26</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>20.03</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>10</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>3.65</b>
Dužina isporuke	mm	<b>6500</b>



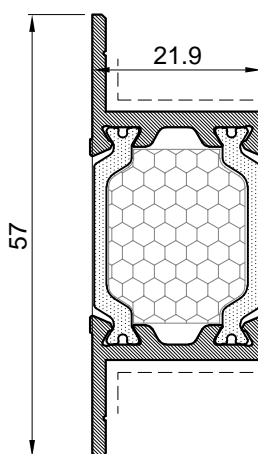
Profil kombatute		
Art.-Br.	<b>FT-0158F</b>	
Težina	kg/m'	<b>1.844</b>
Opseg	mm	<b>509</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>42.88</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>27.11</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>11.08</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>4.69</b>
Dužina isporuke	mm	<b>6500</b>



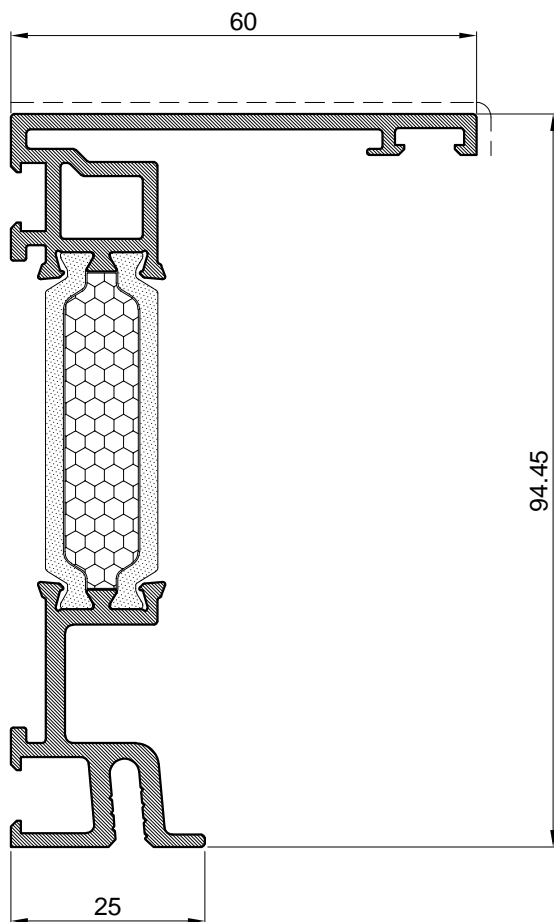
Profil prečke		
Art.-Br.	<b>FT-0182F</b>	
Težina	kg/m'	<b>1.47</b>
Opseg	mm	<b>392.68</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>29.82</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>6.1</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.97</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>2.23</b>
Dužina isporuke	mm	<b>6500</b>



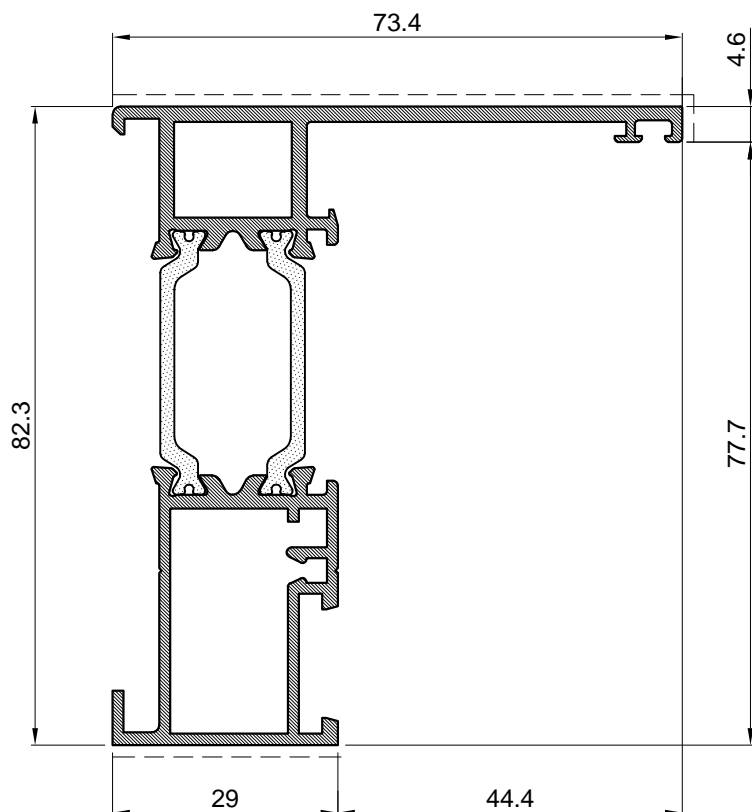
Vezni profil		
Art.-Br.	<b>FT-0216HF</b>	
Težina	kg/m'	<b>0.849</b>
Opseg	mm	<b>260</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>11.08</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>0.38</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>3.79</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>0.44</b>
Dužina isporuke	mm	<b>6500</b>



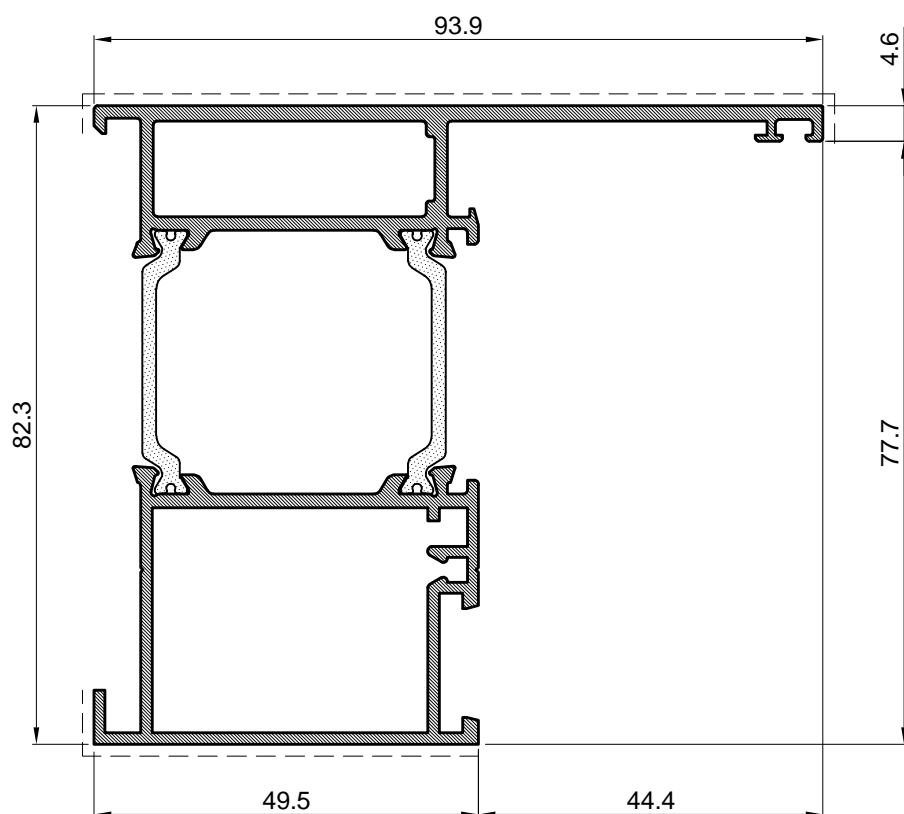
Profil		
Art.-Br.	<b>FT-0150F</b>	
Težina	kg/m'	<b>0.654</b>
Opseg	mm	<b>160</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>3.52</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>1.01</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>1.72</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>0.74</b>
Dužina isporuke	mm	<b>6500</b>



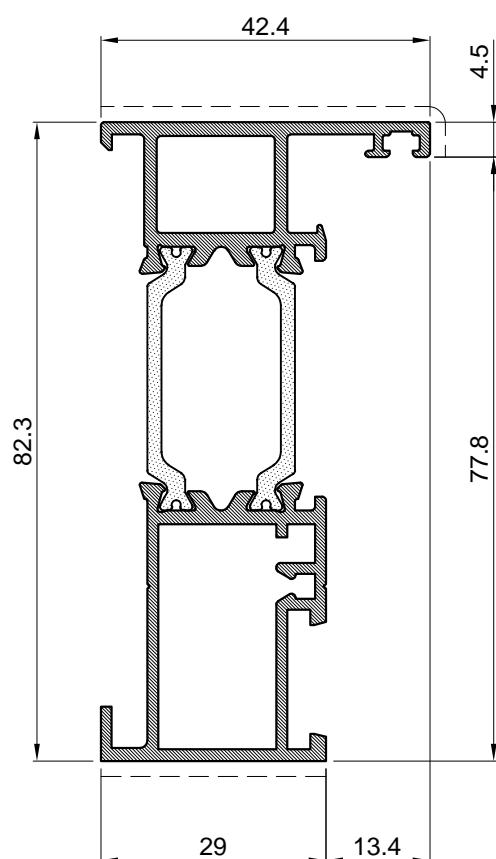
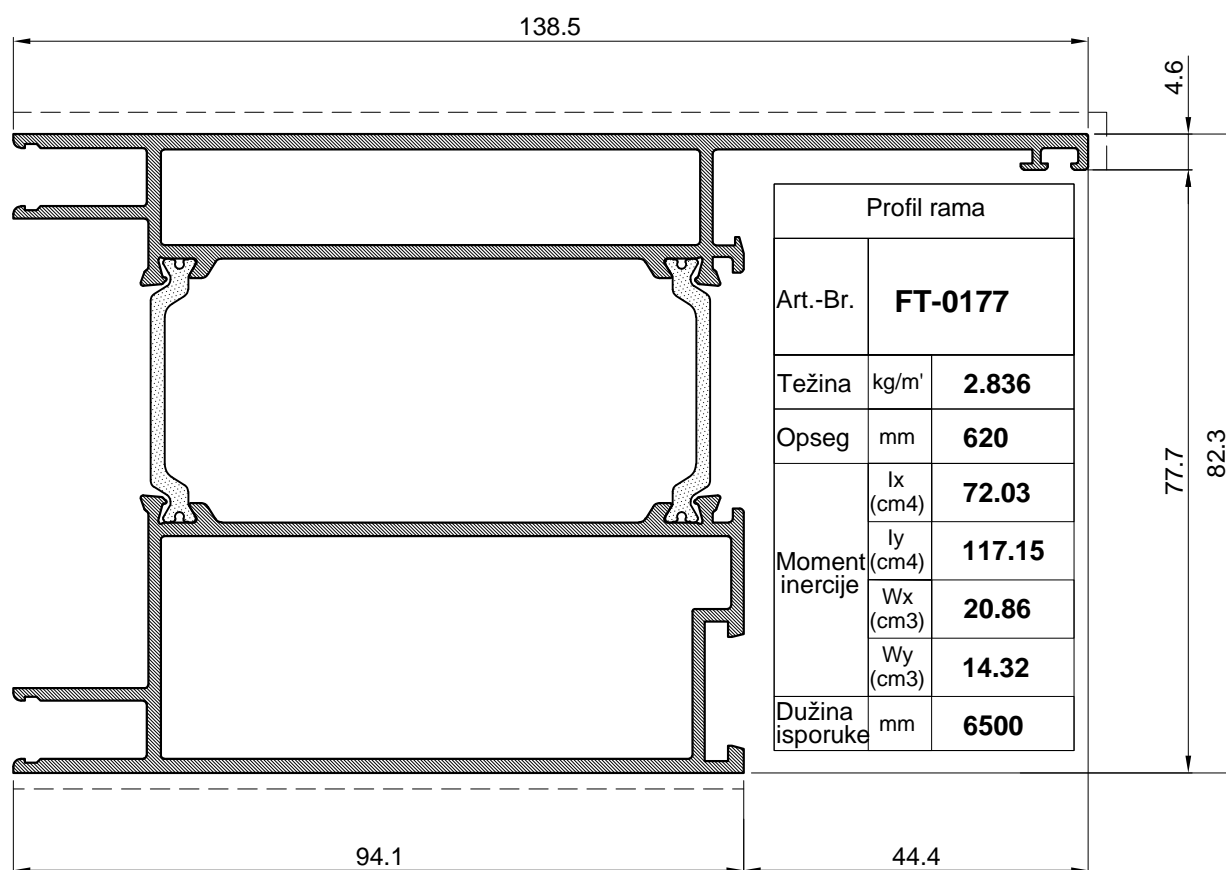
Profil		
Art.-Br.	<b>FT-0172F</b>	
Težina	kg/m'	<b>1.633</b>
Opseg	mm	<b>488</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>48.31</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>10.23</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>12.28</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>2.34</b>
Dužina isporuke	mm	<b>6500</b>



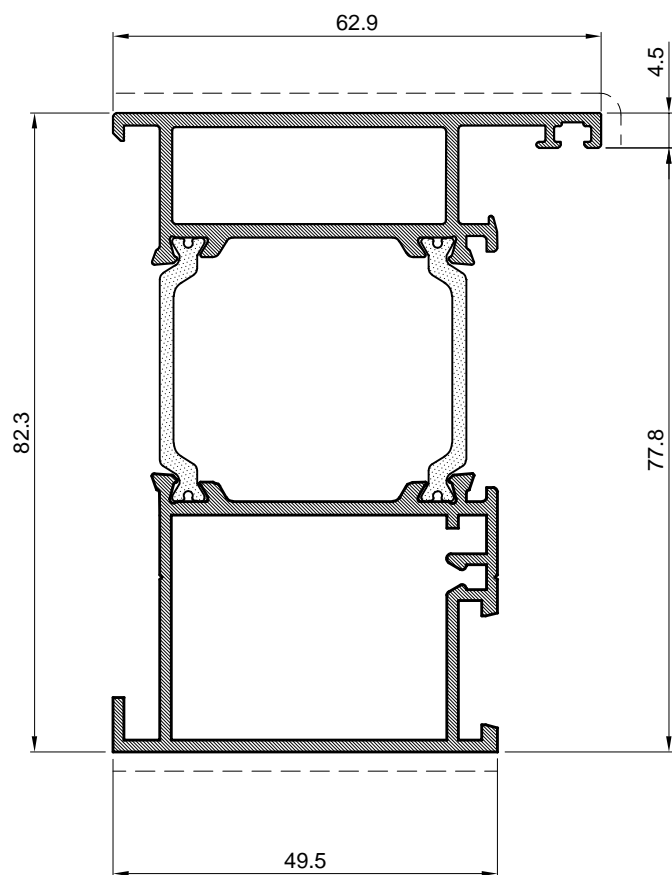
Profil rama		
Art.-Br.	<b>FT-0149</b>	
Težina	kg/m'	<b>1.545</b>
Opseg	mm	<b>392</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>34.03</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>14.98</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>9.4</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>2.99</b>
Dužina isporuke	mm	<b>6500</b>



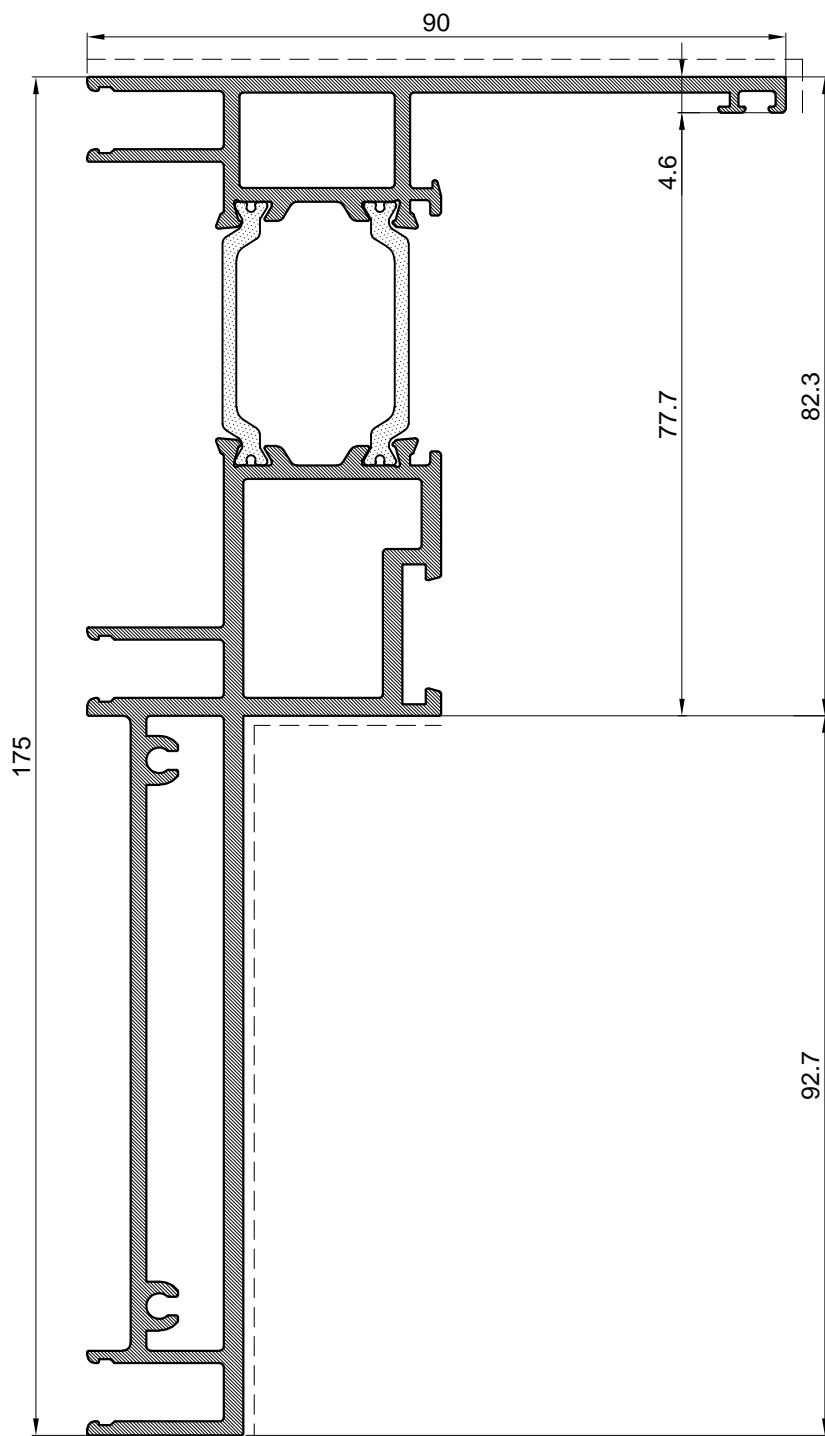
Profil rama		
Art.-Br.	<b>FT-0165</b>	
Težina	kg/m'	<b>1.936</b>
Opseg	mm	<b>443</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>44.43</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>33.29</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>12.38</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.55</b>
Dužina isporuke	mm	<b>6500</b>



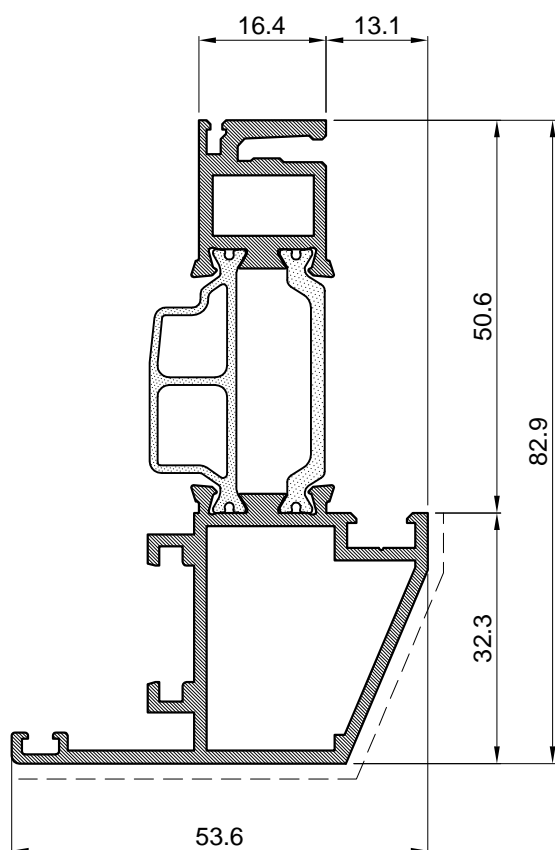
Profil rama		
Art.-Br.	<b>FT-0183</b>	
Težina	kg/m'	<b>1.33</b>
Opseg	mm	<b>335.1</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>27.66</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>4.06</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.58</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>1.63</b>
Dužina isporuke	mm	<b>6500</b>



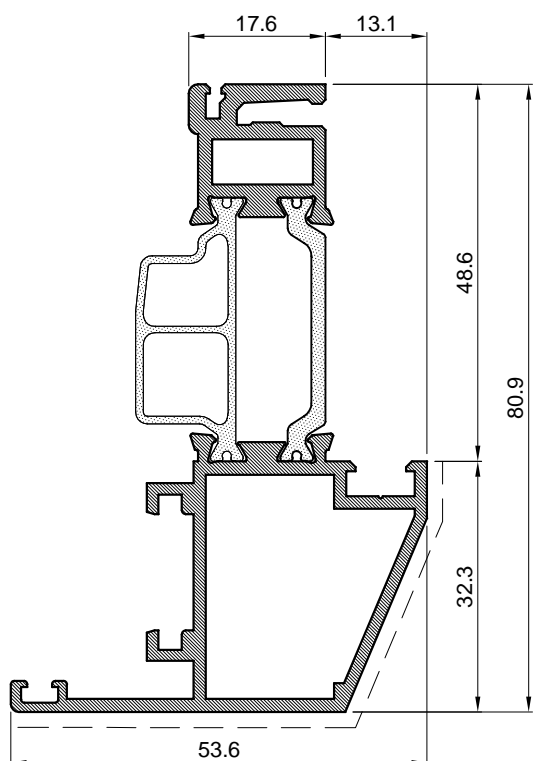
Profil rama		
Art.-Br.	<b>FT-0180</b>	
Težina	kg/m'	<b>1.719</b>
Opseg	mm	<b>376.92</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>37.79</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>16.32</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>11.54</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>4.72</b>
Dužina isporuke	mm	<b>6500</b>



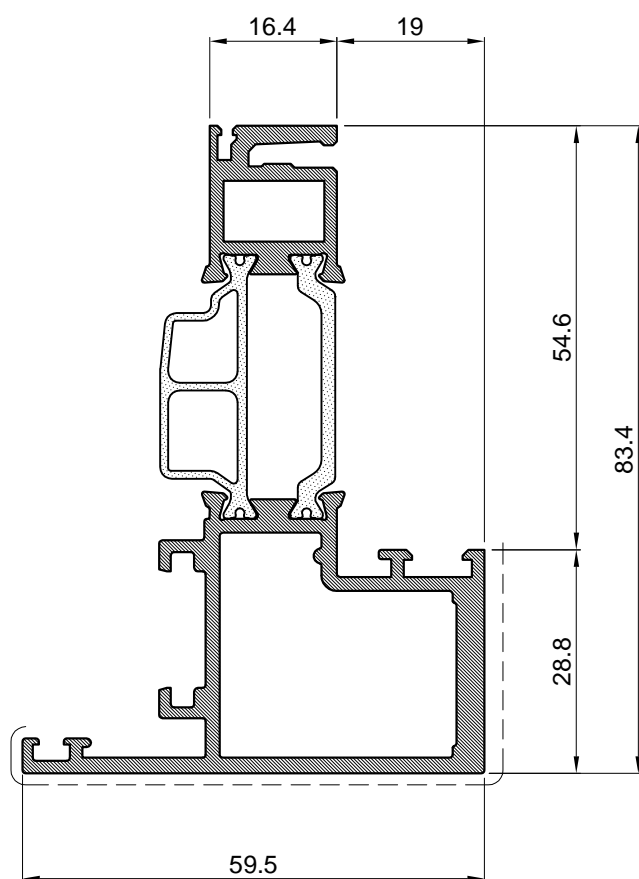
Profil rama		
Art.-Br.	<b>FT-0178</b>	
Težina	kg/m'	<b>3.372</b>
Opseg	mm	<b>740</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>291.51</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>39.2</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>36.34</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.99</b>
Dužina isporuke	mm	<b>6500</b>



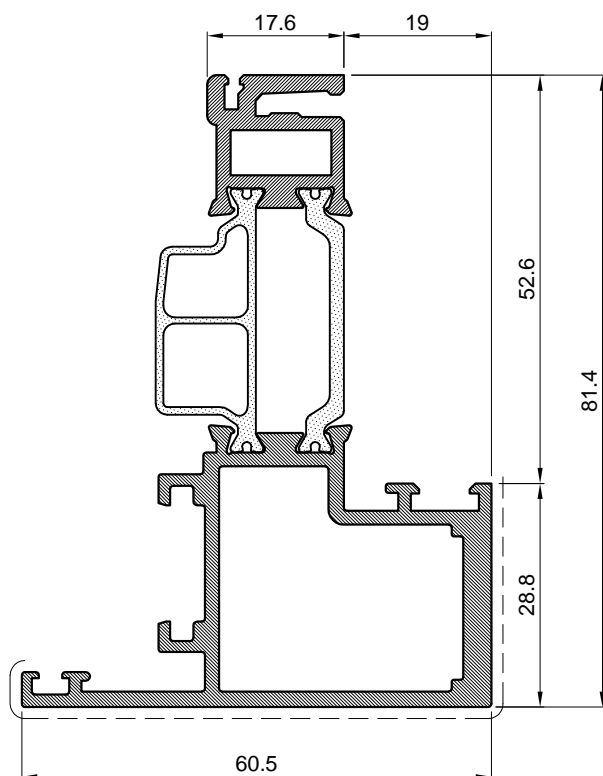
Profil krila		
Art.-Br.	<b>FT-0148</b>	
Težina	kg/m'	<b>1.393</b>
Opseg	mm	<b>389</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>28.3</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>5.69</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.18</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>1.82</b>
Dužina isporuke	mm	<b>6500</b>



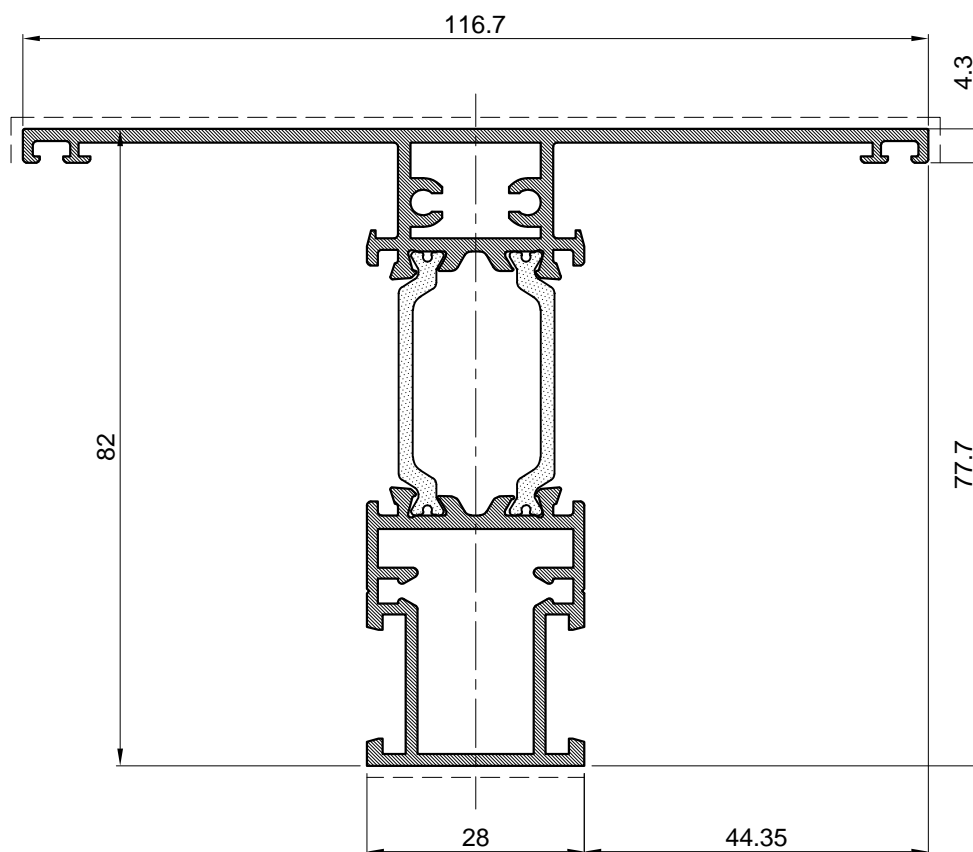
Profil		
Art.-Br.	<b>FT-0184</b>	
Težina	kg/m'	<b>1.45</b>
Opseg	mm	<b>352</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>27.5</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>5.69</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.25</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>1.83</b>
Dužina isporuke	mm	<b>6500</b>



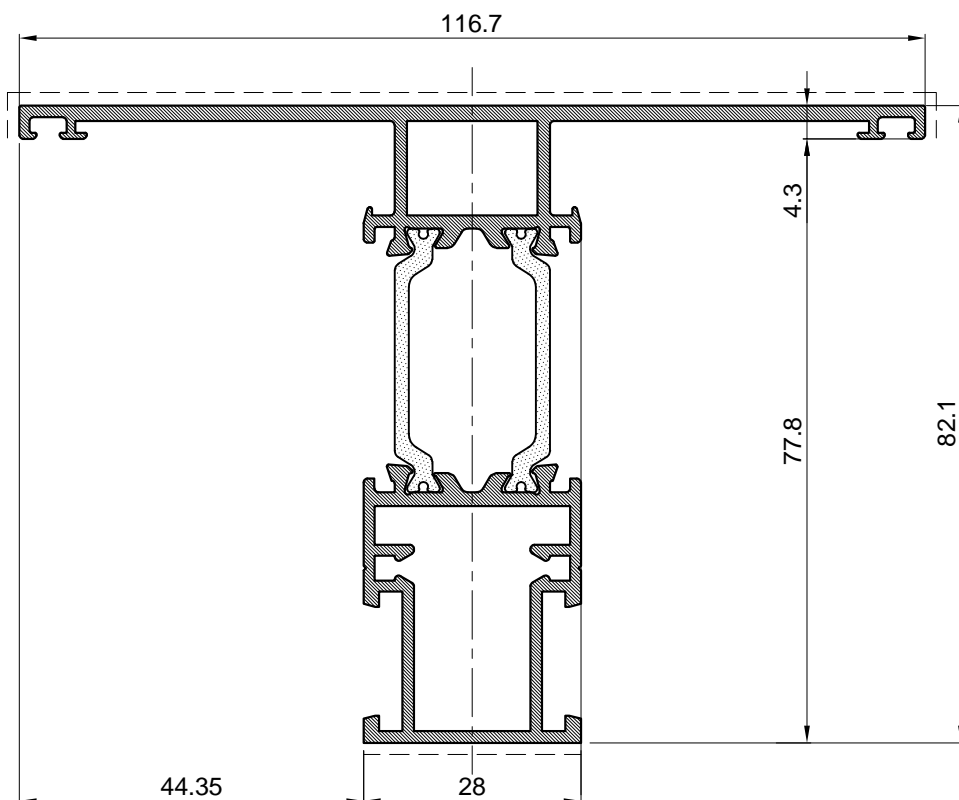
Profil krila		
Art.-Br.	<b>FT-0167</b>	
Težina	kg/m'	<b>1.714</b>
Opseg	mm	<b>417</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>34.21</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>12.11</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.79</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>3.44</b>
Dužina isporuke	mm	<b>6500</b>



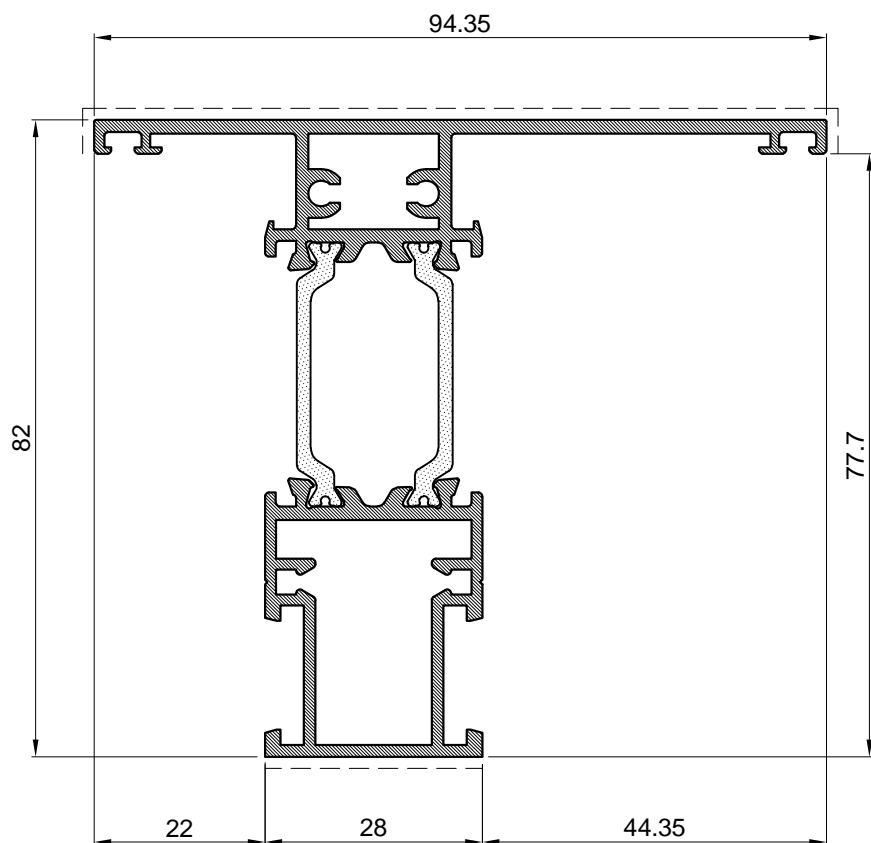
Profil krila		
Art.-Br.	<b>FT-0181</b>	
Težina	kg/m'	<b>1.782</b>
Opseg	mm	<b>397.24</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>33.55</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>12.83</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.88</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>3.57</b>
Dužina isporuke	mm	<b>6500</b>



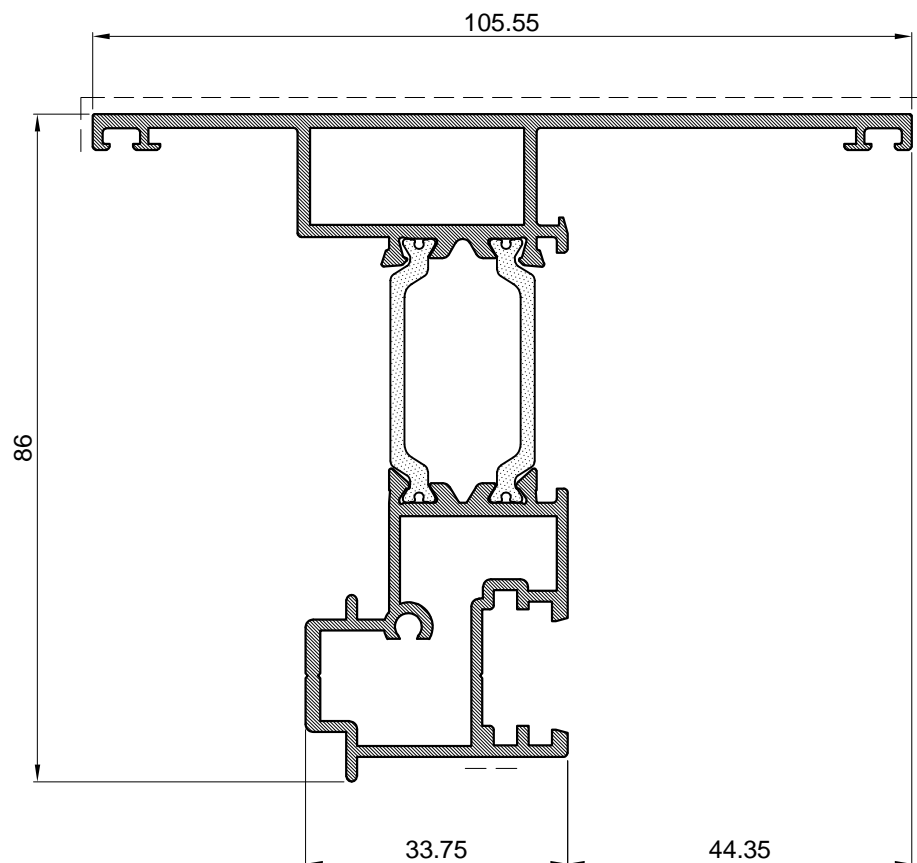
Profil prečke		
Art.-Br.	<b>FT-0152</b>	
Težina	kg/m'	<b>1.857</b>
Opseg	mm	<b>518</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>39.61</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>31.11</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>10.26</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.33</b>
Dužina isporuke	mm	<b>6500</b>



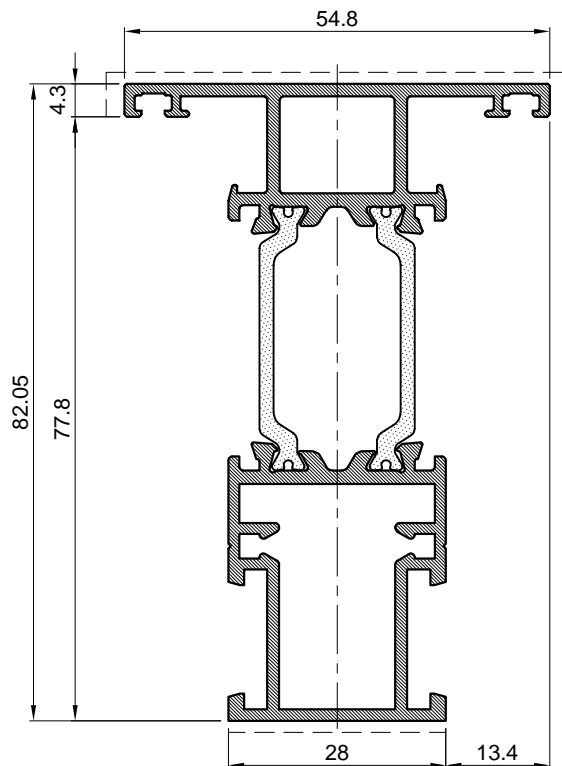
Profil prečke		
Art.-Br.	<b>FT-0179</b>	
Težina	kg/m'	<b>1.838</b>
Opseg	mm	<b>515</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>40.2</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>32.99</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>10.37</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>5.65</b>
Dužina isporuke	mm	<b>6500</b>



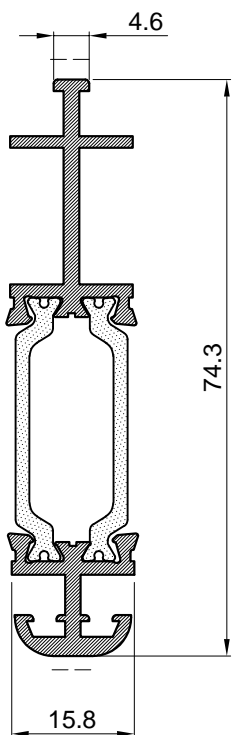
Profil prečke		
Art.-Br.	<b>FT-0163</b>	
Težina	kg/m'	<b>1.752</b>
Opseg	mm	<b>473</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>37.26</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>20.03</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>10</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>3.65</b>
Dužina isporuke	mm	<b>6500</b>



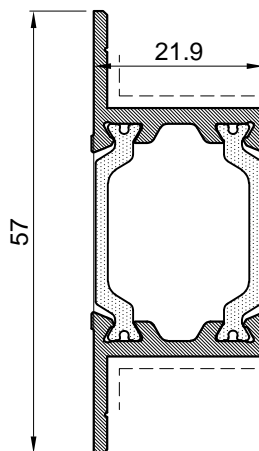
Profil kombatute		
Art.-Br.	<b>FT-0158</b>	
Težina	kg/m'	<b>1.844</b>
Opseg	mm	<b>509</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>42.88</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>27.11</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>11.08</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>4.69</b>
Dužina isporuke	mm	<b>6500</b>



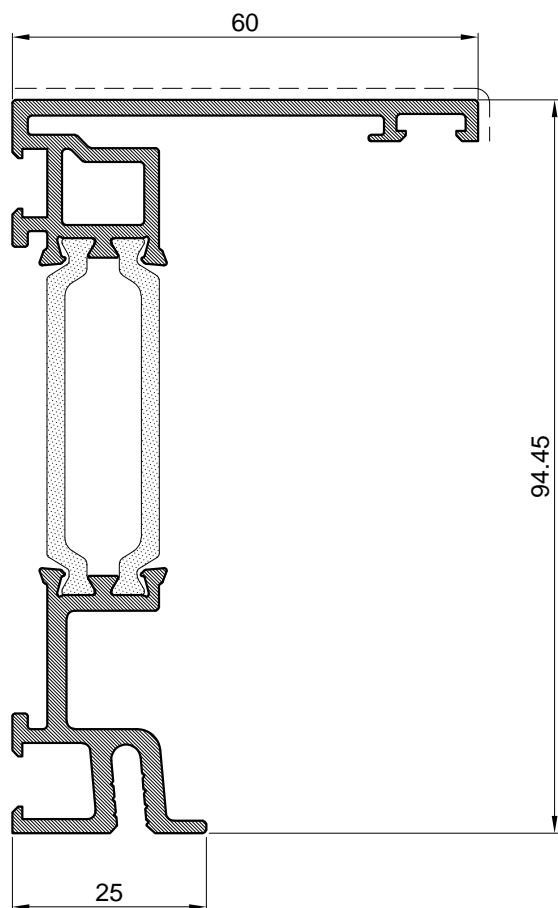
Profil prečke		
Art.-Br.	<b>FT-0182</b>	
Težina	kg/m'	<b>1.47</b>
Opseg	mm	<b>392.68</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>29.82</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>6.1</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>8.97</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>2.23</b>
Dužina isporuke	mm	<b>6500</b>



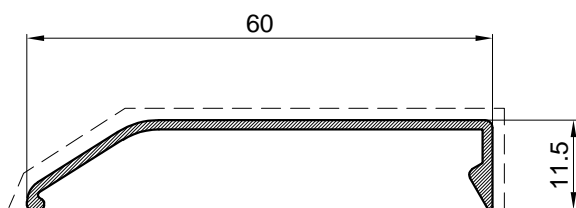
Profil		
Art.-Br.	<b>FT-0216H</b>	
Težina	kg/m'	<b>0.849</b>
Opseg	mm	<b>260</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>11.08</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>0.38</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>3.79</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>0.44</b>
Dužina isporuke	mm	<b>6500</b>



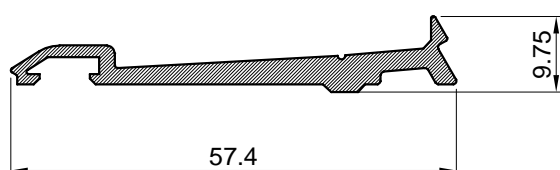
Profil		
Art.-Br.	<b>FT-0150</b>	
Težina	kg/m'	<b>0.654</b>
Opseg	mm	<b>160</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>3.52</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>1.01</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>1.72</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>0.74</b>
Dužina isporuke	mm	<b>6500</b>



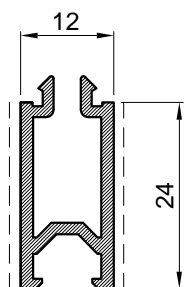
Profil		
Art.-Br.	<b>FT-0172</b>	
Težina	kg/m'	<b>1.633</b>
Opseg	mm	<b>488</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	<b>48.31</b>
	I <sub>y</sub> (cm <sup>4</sup> )	<b>10.23</b>
	W <sub>x</sub> (cm <sup>3</sup> )	<b>12.28</b>
	W <sub>y</sub> (cm <sup>3</sup> )	<b>2.34</b>
Dužina isporuke	mm	<b>6500</b>



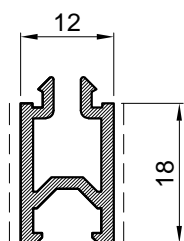
Profil za ugradnju		
Art.-Br.	<b>FM-072</b>	
Težina	kg/m	<b>0.258</b>
Opseg	mm	152.0
Dužine isporuke	mm	6500



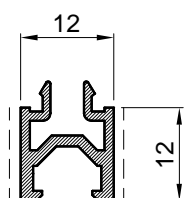
Profil za ugradnju		
Art.-Br.	<b>F-1190</b>	
Težina	kg/m	<b>0.461</b>
Opseg	mm	145.0
Dužine isporuke	mm	6500



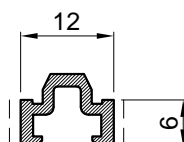
Al profil		
Art.-Br.	<b>FM 24/12</b>	
Težina	kg/m'	<b>0.31</b>
Opseg	mm	<b>148.30</b>
Dužina isporuke	mm	<b>6500</b>



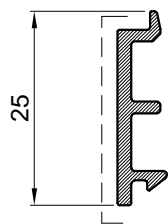
Al profil		
Art.-Br.	<b>FM 21/12</b>	
Težina	kg/m'	<b>0.254</b>
Opseg	mm	<b>124.00</b>
Dužina isporuke	mm	<b>6500</b>



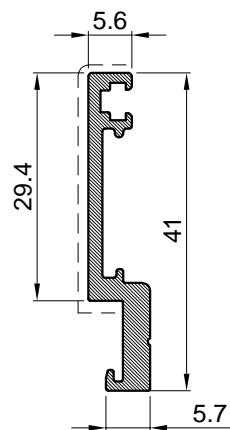
Al profil		
Art.-Br.	<b>FM 12/12</b>	
Težina	kg/m'	<b>0.18</b>
Opseg	mm	<b>100.16</b>
Dužina isporuke	mm	<b>6500</b>



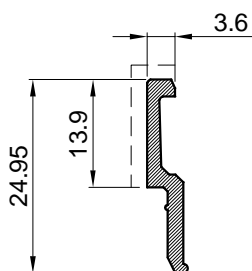
Al profil		
Art.-Br.	<b>FM 6/12</b>	
Težina	kg/m'	<b>0.116</b>
Opseg	mm	<b>61.00</b>
Dužina isporuke	mm	<b>6500</b>



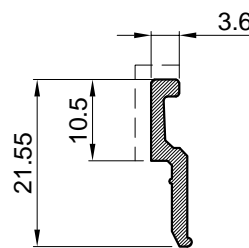
Profil za ugradnju		
Art.-Br.	<b>F-1238</b>	
Težina	kg/m	<b>0.165</b>
Opseg	mm	76
Dužine isporuke	mm	6500



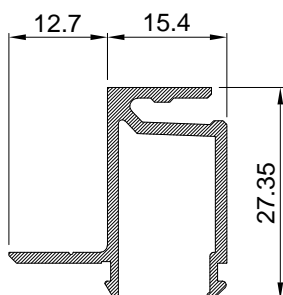
Dodatni profil za ugradnju		
Art.-Br.	<b>F-1493</b>	
Težina	kg/m	<b>0.342</b>
Opseg	mm	125
Dužine isporuke	mm	6500



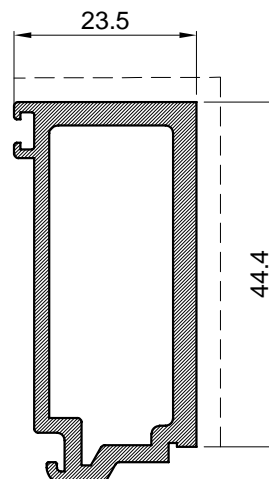
**FR-41**  
težina kg/m 0.147  
svj. povr.mm 16



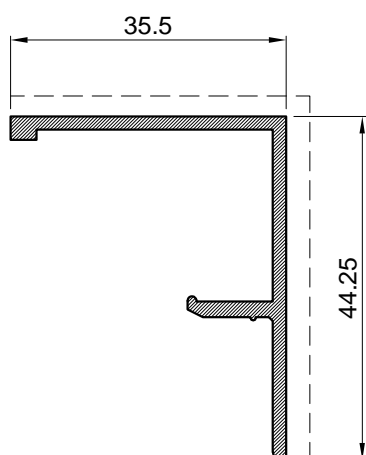
**F-0807**  
težina kg/m 0.132  
svj. povr.mm 14



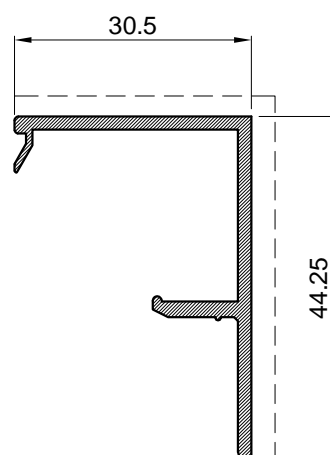
**F-0897/A**  
težina kg/m 0.347



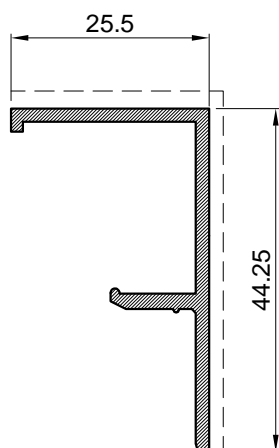
**F-1355**  
težina kg/m 0.898  
opseg 158



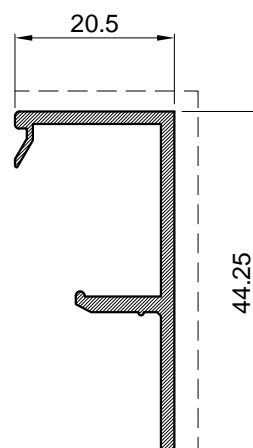
**F-0898/A**  
težina kg/m 0.429  
svj. povr.mm 80



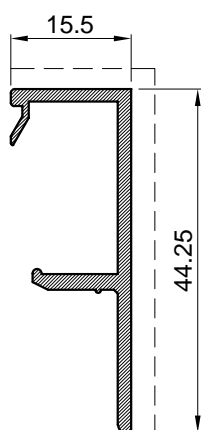
**F-1310**  
težina kg/m 0.408  
svj. povr.mm 75



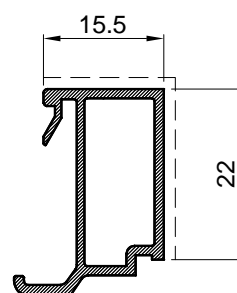
**F-1185**  
težina kg/m 0.377  
svj. povr.mm 70



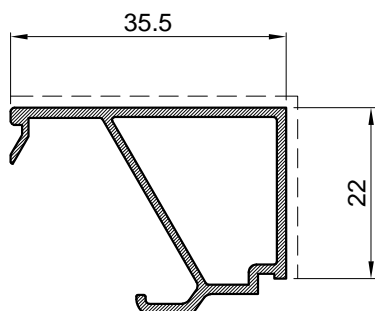
**F-1311**  
težina kg/m 0.358  
svj. povr.mm 65



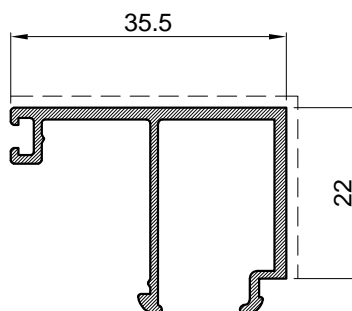
**F-1643**  
težina kg/m 0.336  
svj. povr.mm 60



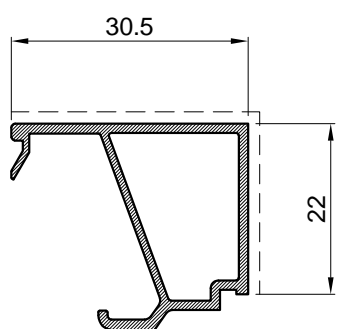
**Z40-665**  
težina kg/m 0.272  
svj. povr.mm 37



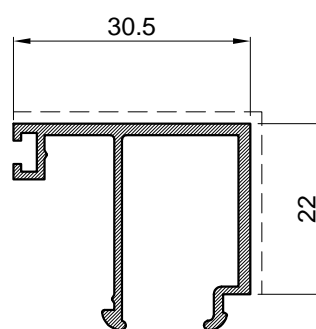
**Z40-669**  
težina kg/m 0.347  
svj. povr.mm 57



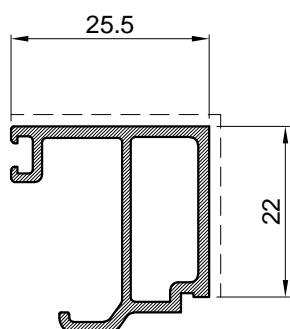
**Z40-659**  
težina: kg/ml 0.359  
svj.povr. mm 57



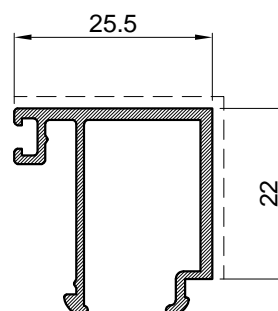
**Z40-668**  
težina kg/m 0.326  
svj. povr.mm 52



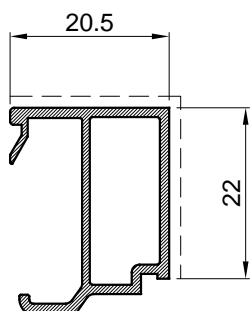
**Z40-653**  
težina: kg/ml 0.348  
svj.povr. mm 52



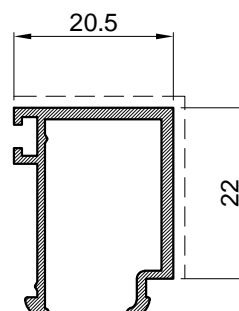
**Z40-667**  
težina kg/m 0.358  
svj. povr.mm 47



**Z40-658**  
težina: kg/ml 0.318  
svj.povr. mm 47



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

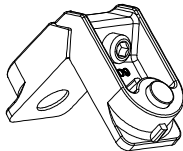
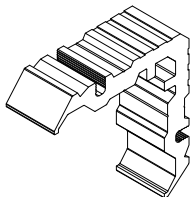
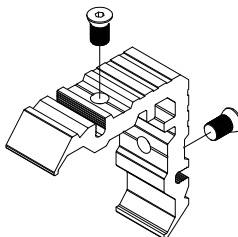
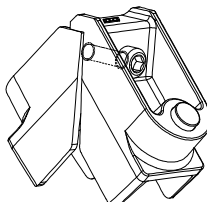
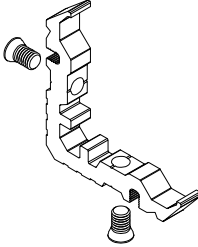
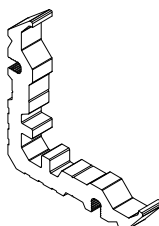


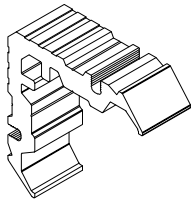
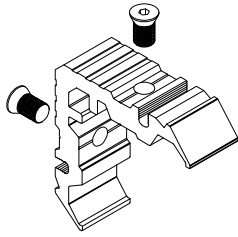
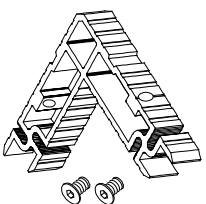
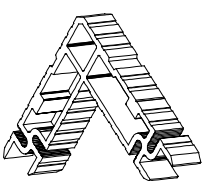
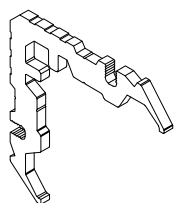
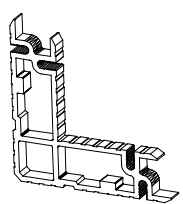
**Z40-644**  
težina: kg/ml 0.275  
svj.povr. mm 42

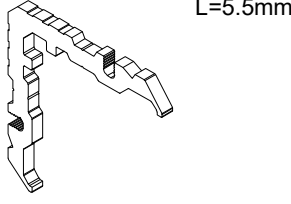
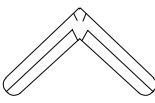
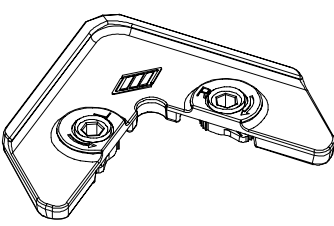
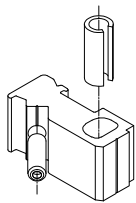


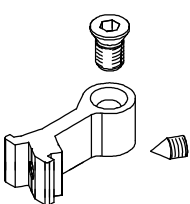
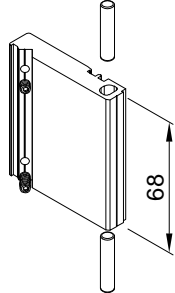
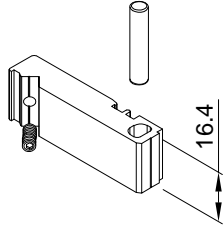
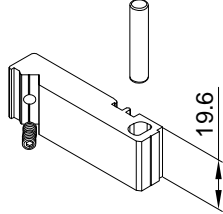
# Vezni elementi



CODE	Izgled-presjek	Opis	Materijal	Nap.
730.008		- Kutna spojnica prozora-za komoru 29x15.2 - Stara oznaka: 0409 ,1001	Zamak #3	
710.450	 l=28,5mm	- Kutna spojnica za komoru 29x15,2 - Stara oznaka K-0868-A	Al.	
710.458	 l=28,5mm M8x13	- Kutna spojnica za komoru 29x15,2 - Stara oznaka K-0868	Al.	
730.009		- Kutna spojnica prozora -za komoru 29x35.5 - Stara oznaka: 4004 ,2001	Zamak #3	
710.447	 l=11.7mm M8x13	- Kutna spojnica prozora -za komoru 12.3x15.2 - Stara oznaka:K-0868/B	Al.	
710.448	 l=11.7mm	- Kutna spojnica prozora -za komoru 12.3x15.2	Al.	

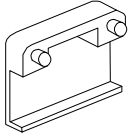
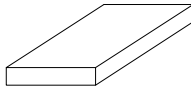
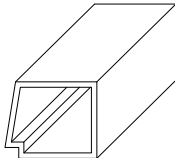
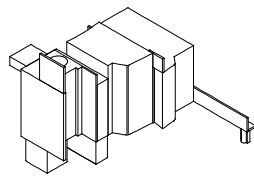

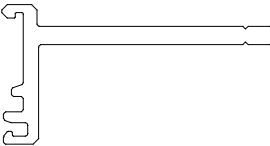
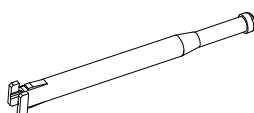
CODE	Izgled-presjek	Opis	Materijal	Nap.
710.462	 <p>I=28.4mm</p>	- Kutna spojnica prozora -za komoru 28.9x16.5 Stara oznaka : K-0558/M	Al.	
710.469	 <p>I=28,5mm</p> <p>M8x13</p>	- Kutna spojnica prozora -za komoru 29x16.5	Al.	
710.111	 <p>L=21 mm</p> <p>M8x13</p>	- Kutna spojnica prozora -za komoru 21.5X30	Al.	
710.112	 <p>L=21 mm</p>	- Kutna spojnica prozora -za komoru 21.5X30	Al.	
710.442	 <p>I=7.3mm</p>	- Kutna spojnica prozora -za komoru 7.8x13 - Stara oznaka: K-0986/H	Al.	
710.091	 <p>I=11.7mm</p>	- Kutna spojnica prozora -za komoru 12.3x35.2	Al.	

CODE	Izgled-presjek	Opis	Materijal	Nap.
710.072	 <p>L=28,5mm M8x13</p>	<ul style="list-style-type: none"> <li>- Kutna spojnica za komoru 29x35,5</li> <li>- Stara oznaka K-0795</li> </ul>	Al.	
710.441	 <p>L=5.5mm</p>	<ul style="list-style-type: none"> <li>- Kutna spojnica krila -za komoru 5.8x12.7</li> <li>- Stara oznaka 712.001</li> </ul>	Al.	
730.011		<ul style="list-style-type: none"> <li>- Kutna spojnica -za profil FT-0149</li> <li>- Stara oznaka:K-85SK-01</li> </ul>	Al.	
730.001		<ul style="list-style-type: none"> <li>- Kutna spojnica za komoru 1.7x4.7</li> <li>- Stara oznaka: G112</li> </ul>	Inox	
730.002		<ul style="list-style-type: none"> <li>- Kutna spojnica za komoru 1.7x4.7</li> <li>- Stara oznaka: G112/A</li> </ul>	Inox	
731.010		<ul style="list-style-type: none"> <li>- Kutna spojnica za usku komoru</li> <li>- Stara oznaka 2019/500</li> </ul>		
710.222	 <p>l=14.3 mm</p>	<ul style="list-style-type: none"> <li>- Veznik za prečku FT-0182F prema prečki FT-0182F i ramu FT-0180F</li> </ul>		

CODE	Izgled-presjek	Opis	Materijal	Nap.
710.066	 <p>M8x13 M6x10</p>	<p>- Veznik (L=14.7mm) - Stara oznaka E-200</p>	Al.	
710.190	 <p>68</p>	Veznik za profil FT-0177F		
710.191	 <p>16.4</p>	<p>-Veznik za profil FT-0179F -Izvorna oznaka E-702</p>		
710.192	 <p>19.6</p>	<p>-Veznik za profil FT-0178F -Izvorna oznaka E-703</p>		

# PVC elementi

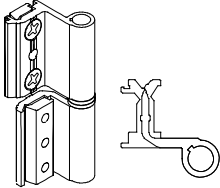
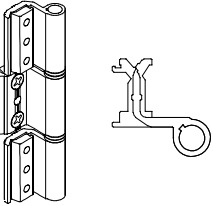
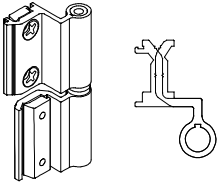
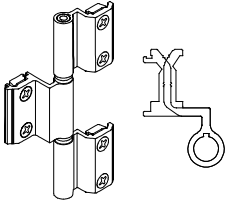
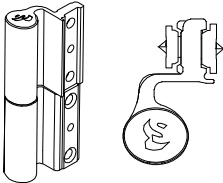
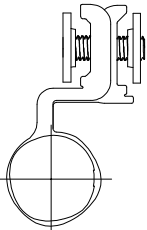


CODE	Izgled-presjek	Opis	Materijal	Nap.
373.003		- Maska za drenažni otvor - Stara oznaka: 2328	PVC	
370.000 370.001 370.002		- Podmetači za staklo    3 mm    370.000 5 mm    370.001 7 mm    370.002	PVC	
374.024		- Podmetač za staklo - kontinuirano po opsegu stakla - Stara oznaka: PLS-001	PVC	
363.004		- Umetak profila za okretanje FT-0158- otvaranje unutra - Stara oznaka: USK-01	PVC	
374.037		-PVC distancer Stara oznaka PI - 110	PVC	
374.047		-PVC distancer za ugradnju	PVC	
360.009		Sustav odvodnje kapljevina Monodrain		



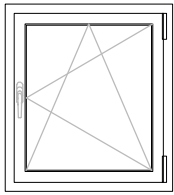
# Mehanizmi



Oznaka	Izgled-presjek	Opis	Materijal	Napomena
111.001.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka <i>EURO ŽLIJEB</i></li> <li>- Stara oznaka E-100</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
111.002.01 02 03		<ul style="list-style-type: none"> <li>- Trodjelna šarka <i>EURO ŽLIJEB</i></li> <li>- Stara oznaka E-120</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
111.003.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka-vani <i>EURO ŽLIJEB</i></li> <li>- Stara oznaka EV-110</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
111.004.01 02 03		<ul style="list-style-type: none"> <li>- Trodjelna šarka-vani <i>EURO ŽLIJEB</i></li> <li>- Stara oznaka EV-130</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
114.001.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka-<i>EURO ŽLIJEB</i></li> <li>- Oznaka proizvođača Stublina: 2006.00.310 -bijela 315 -siva 313 -crna</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
113.003.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka-<i>EURO ŽLIJEB</i></li> <li>- Oznaka proizvođača alu-b: VENUS</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		



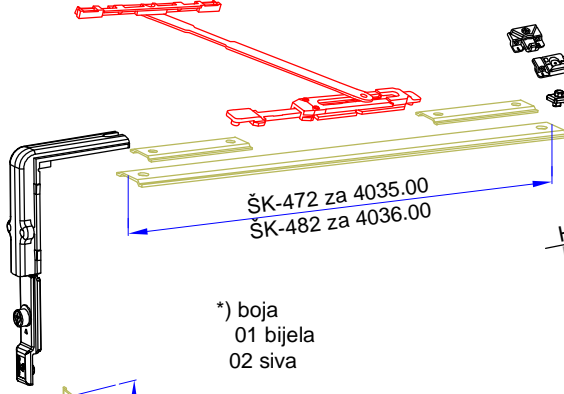
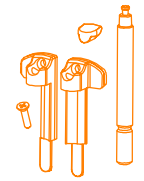
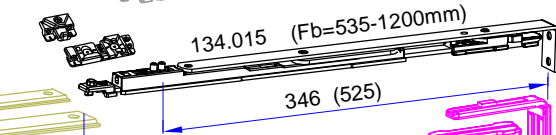
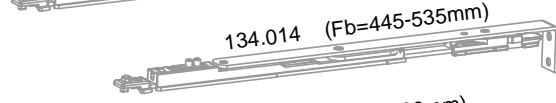
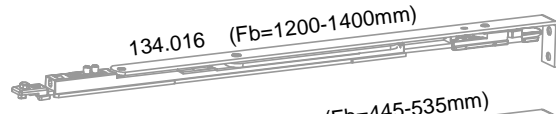
### OTKLOPNO-ZAOKRETNI MEHANIZAM - STUBLINA (art.4135.00)



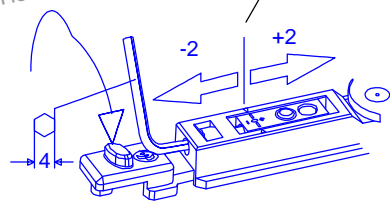
G=80kg  
7 točaka ključanja

Nosivost max. 100 Kg / 130 Kg

Fb= Širina krila



Horizontalno podešavanje krila  
Horizontal sash adjustment



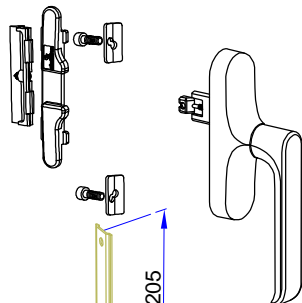
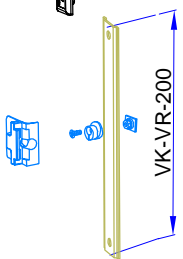
\*) boja  
01 bijela  
02 siva

#### Osnovni okov:

- 134.026 osnovni set: pogonski mehanizam sa ravnom ručkom, škarama (134.015) i šarkama. \*)
- 134.014 škarice 134.014 / 134.016 \*\*)
- 134.016

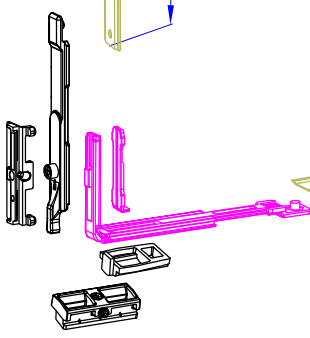
\*\*) Napomena / Remark:

- Škarice 134.015 (za širinu krila Fb=535-1200mm) se nalaze u osnovnom setu (134.000). Škarice za veće ili manje širine krila od 535-1200mm se posebno biraju

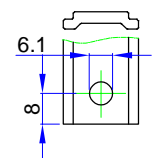


#### Dodatni okov:

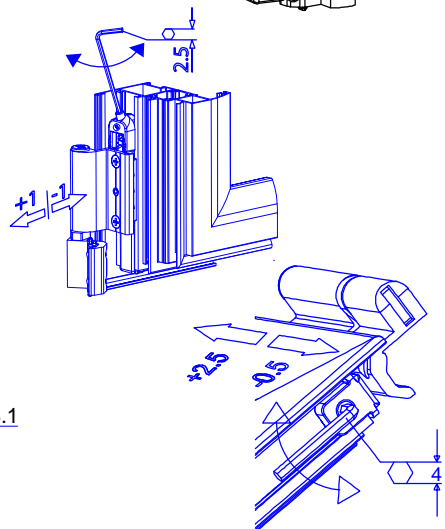
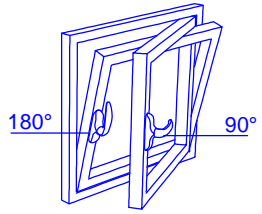
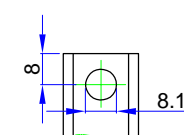
- 134.002 dodatni set ključanja po širini i visini
- 134.003 dodatne škarice za krila većih dimenzija
- 134.004 dodatno ključanje
- 134.005
- 134.024 dodatni umetak gornje šarke za nosivost do 130kg
- klizač



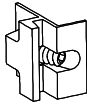

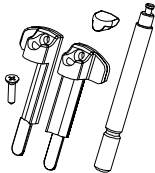
Na krajevima pogonskih letvih izbušiti otvore po dimenzijama prema detalju:



Ako se koriste adapteri na krajevima pogonskih letvi izbušiti otvore po dimenzijama prema detalju:



Oznaka	Izgled-presjek	Opis	Materijal	Napomena
<b>134.026.01</b> <b>02</b> <b>03</b>		<ul style="list-style-type: none"> <li>- Osnovni set: Otklopno-zaokretni mehanizam</li> <li>- Oznaka proizvođača Stublina: <b>4135.00</b></li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> <li>- Škare (134.015) za širinu krila od 535-1200 mm (<b>ručka ravna</b>; donja šarka ima podešavanje u dvije osi)</li> </ul>		Razlika između ova dva navedena osnovna seta je samo u ručki. 134.026 - osnovni set sa ravnom ručkom; 134.025 - osnovni set sa zaobljenom ručkom.
<b>134.025.01</b> <b>02</b> <b>03</b>		<ul style="list-style-type: none"> <li>- Osnovni set: Otklopno-zaokretni mehanizam</li> <li>- Oznaka proizvođača Stublina: <b>4035.00</b></li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> <li>- Škare (134.015) za širinu krila od 535-1200 mm (<b>ručka zaobljena</b>; donja šarka ima podešavanje u dvije osi)</li> </ul>		
<b>134.002</b>		<ul style="list-style-type: none"> <li>- Dodatni set ključanja po širini i visini</li> <li>- Oznaka proizvođača Stublina: 4010.40</li> </ul>	AISi Zamak	
<b>134.003</b>		<ul style="list-style-type: none"> <li>- Pomoćne (dodatne) škare za krila većih dimenzija (za širine L=1200-1600mm)</li> <li>- Oznaka proizvođača Stublina: 4010.50</li> </ul>		

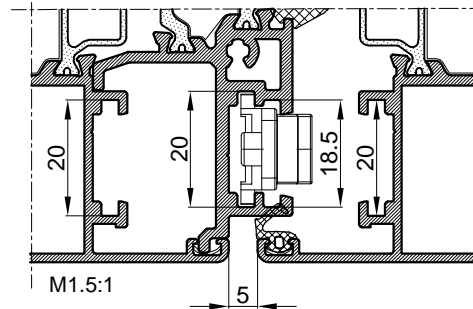
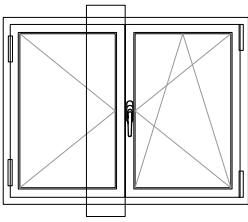
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
134.004		<ul style="list-style-type: none"> <li>- Dodatno ključanje-prihvatnik tuljca</li> <li>- Oznaka proizvođača Stublina: 4010.03</li> </ul>		
134.005		<ul style="list-style-type: none"> <li>- Dodatno ključanje-tuljac</li> <li>- Oznaka proizvođača Stublina: 4010.27</li> </ul>		
134.024		<ul style="list-style-type: none"> <li>- Dodatni umetak gornje šarke za nosivost do 130kg</li> <li>- Oznaka proizvođača Stublina: 4018.30.50U</li> </ul>		

- Tabelarni prikaz osnovnog seta u zavisnosti od širine krila i tipu ručke: Otklopno-zaokretni mehanizam			
Oznaka osnovnog seta	Tip ručke	Škare za širinu krila	Oznaka proizvođača Stublina
134.026.01 -bijela .02 -siva .03 -crna	ravna ručka	535-1200 mm	4135.00.310 4135.00.315 4135.00.313
134.030.01 -bijela .02 -siva .03 -crna	ravna ručka	445-535 mm	4136.00.310 4136.00.315 4136.00.313
134.031.01 -bijela .02 -siva .03 -crna	ravna ručka	1200-1400 mm	4137.00.310 4137.00.315 4137.00.313
134.032.01 -bijela .02 -siva .03 -crna	ravna ručka	375-535 mm	4138.00.310 4138.00.315 4138.00.313
134.025.01 -bijela .02 -siva .03 -crna	zaobljena ručka	535-1200 mm	4035.00.310 4035.00.315 4035.00.313
134.033.01 -bijela .02 -siva .03 -crna	zaobljena ručka	445-535 mm	4036.00.310 4036.00.315 4036.00.313
134.034.01 -bijela .02 -siva .03 -crna	zaobljena ručka	1200-1400 mm	4037.00.310 4037.00.315 4037.00.313
134.035.01 -bijela .02 -siva .03 -crna	zaobljena ručka	375-535 mm	4038.00.310 4038.00.315 4038.00.313

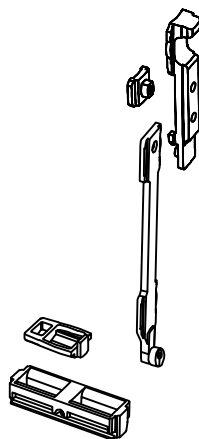
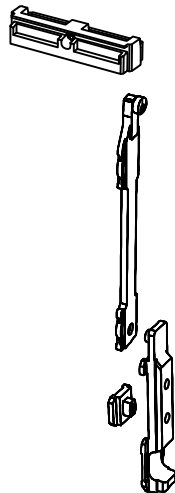
## Napomena


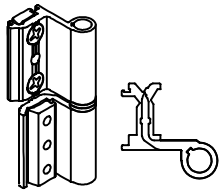
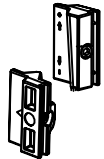
donja šarka kod svih gore navedenih osnovnih setova ima podešavanje u dvije osi

### OKOV ZA FIKSIRANJE POMOĆNOG KRILA - STUBLINA

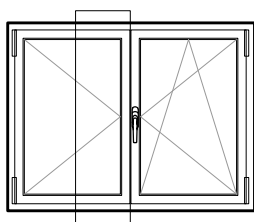


- **134.001** Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu)
- Oznaka proizvođača Stublina: 4001.00

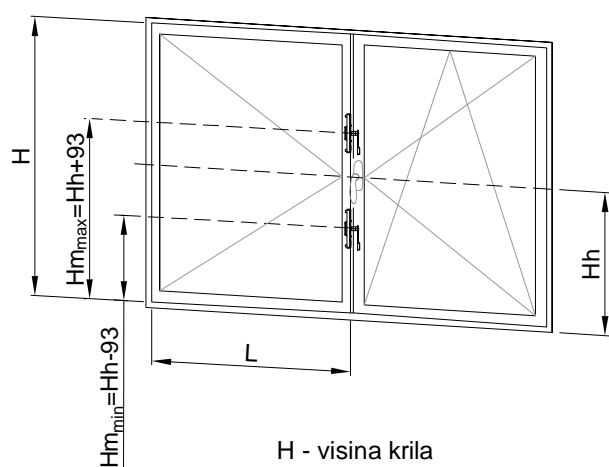
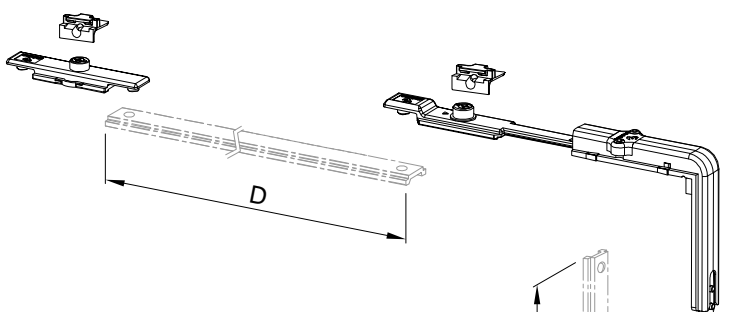
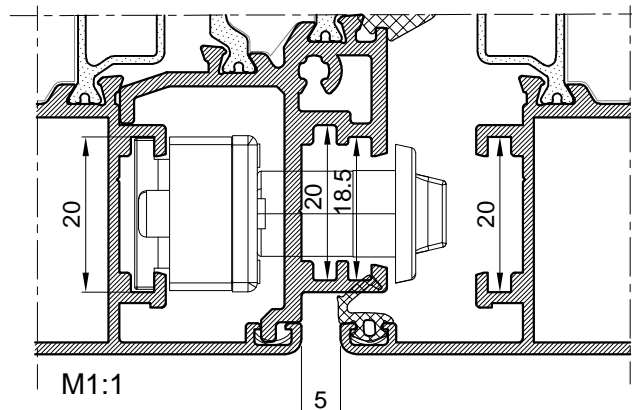


Oznaka	Izgled-presjek	Opis	Materijal	Napomena
134.001		<ul style="list-style-type: none"> <li>- Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu)</li> <li>- Oznaka proizvođača Stublina: 4001.00</li> </ul>		
111.001.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka EURO ŽLIJEB</li> <li>- Stara oznaka E-100</li> <li>- Boje: 01- bijela; 02 - siva; 03 - crna</li> </ul>		
134.023		<ul style="list-style-type: none"> <li>- Dodatno (pasivno) ključanje</li> <li>- Oznaka proizvođača Stublina: 4045.00</li> </ul>		

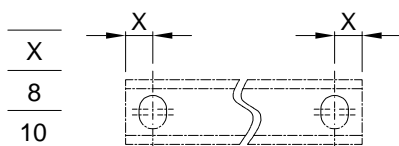
### OKOV ZA FIKSIRANJE POMOĆNOG KRILA - STUBLINA



- **134.036** Okov za fiksiranje pomoćnog krila u više točaka (montiranje okova u krilo)
- Oznaka proizvođača Stublina: 4005.40



H - visina krila  
 L - širina krila  
 Hm - položaj pogonskog mehanizma  
 Hh - položaj pogonske ručke

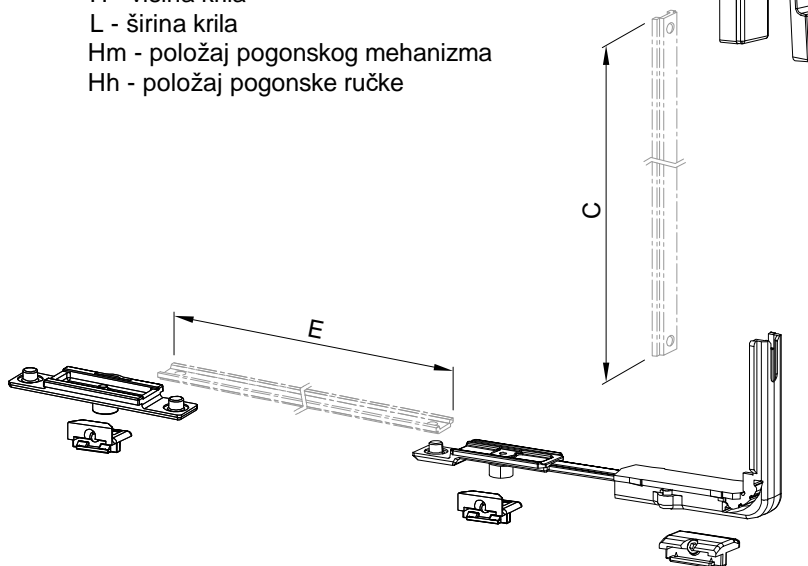


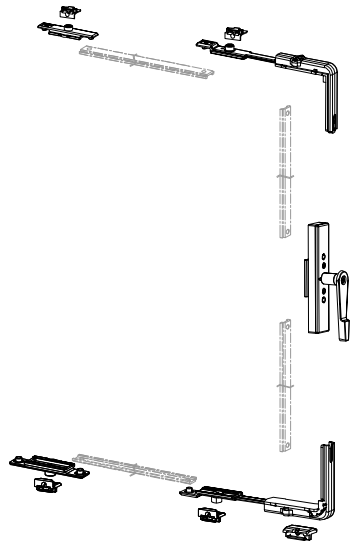
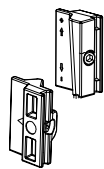
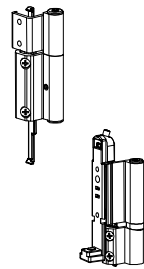
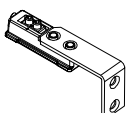
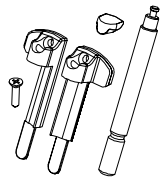
$$C = Hm - 110 + 2X$$

$$B = H - Hm - 110 + 2X$$

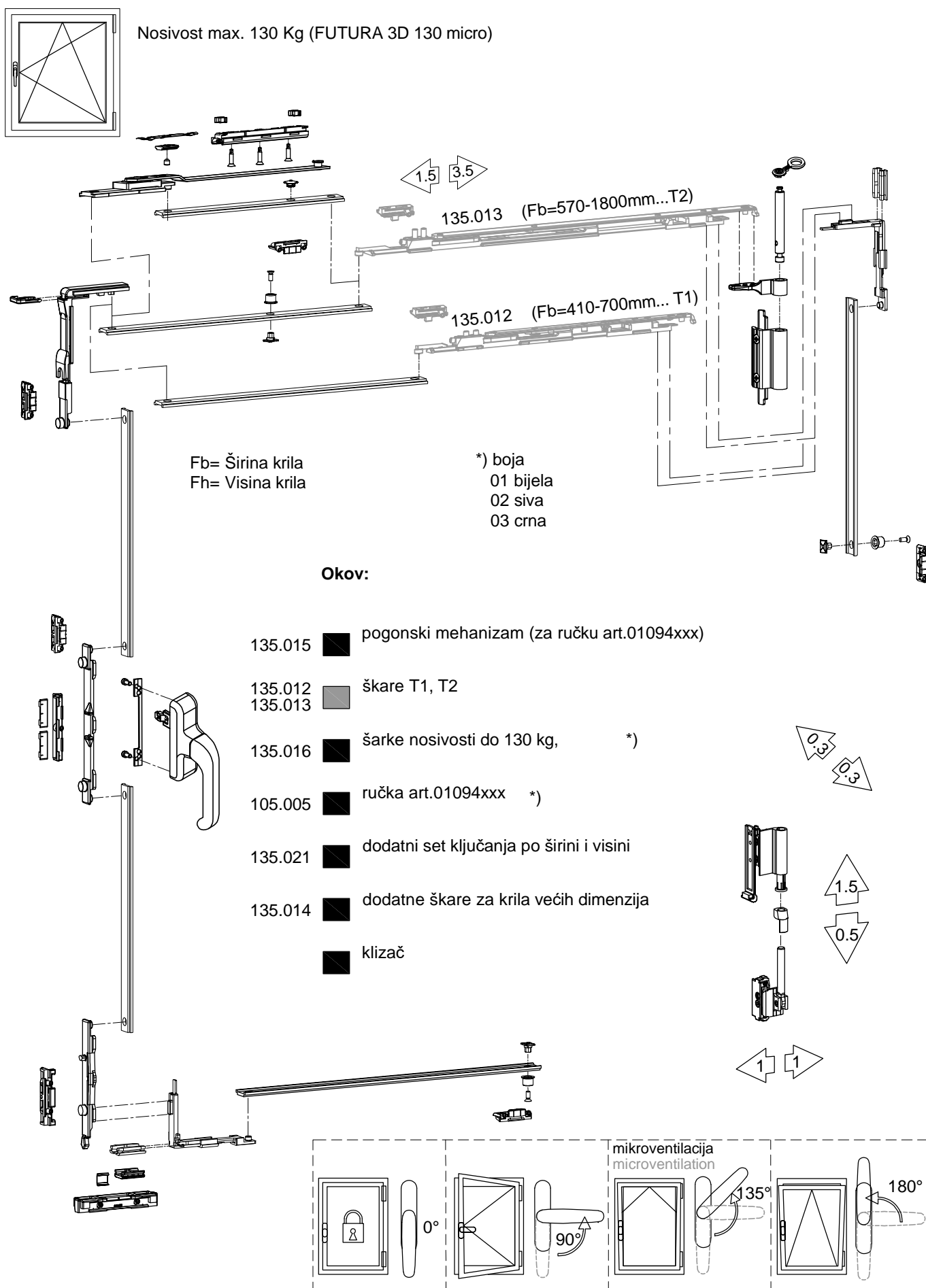
$$D = L/2 - 192 + 2X$$


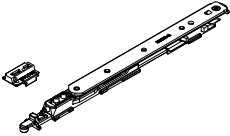
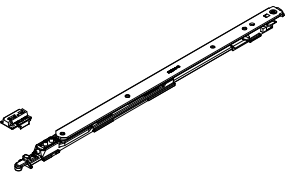
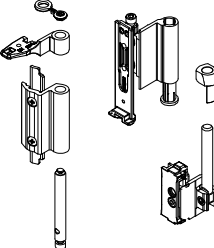
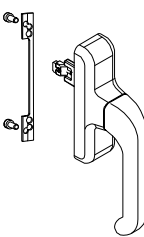
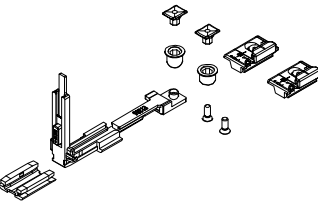
$$E = L/2 - 192 + 2X$$

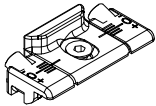


Oznaka	Izgled-presjek	Opis	Materijal	Napomena
134.036		<ul style="list-style-type: none"> <li>- Okov za fiksiranje pomoćnog krila u više točaka (montiranje okova u krilo)</li> <li>- Oznaka proizvođača Stublina: 4005.40</li> </ul>		
134.023		<ul style="list-style-type: none"> <li>-Dodatno (pasivno) ključanje</li> <li>- Oznaka proizvođača Stublina: 4045.00</li> </ul>		
134.037.01 02 03		<ul style="list-style-type: none"> <li>- Šarke nosivosti do 100 kg</li> <li>- Donja šarka ima podešavanje u dvije osi</li> <li>- Oznaka proizvođača Stublina: 4035.30.310 -bijela 4035.30.315 -siva 4035.30.313 -crna</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
134.038		<ul style="list-style-type: none"> <li>- Dodatni element (škare za okretno otvaranje) za šarke 4035.30.xxx - (samo za gornju šarku)</li> <li>- Oznaka proizvođača Stublina: 4047.00</li> </ul>		
134.024		<ul style="list-style-type: none"> <li>- Dodatni umetak gornje šarke za nosivost do 130kg</li> <li>- Oznaka proizvođača Stublina: 4018.30.50U</li> </ul>		

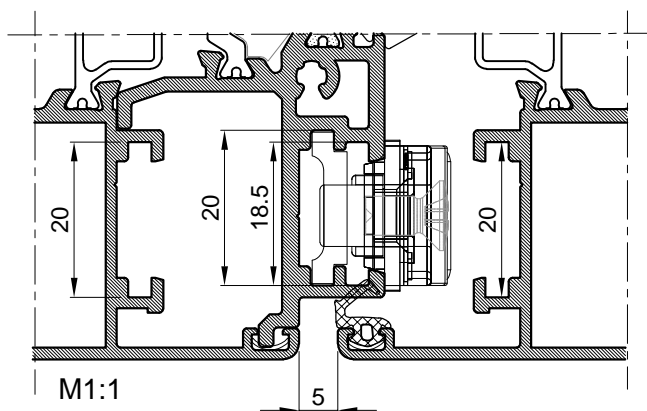
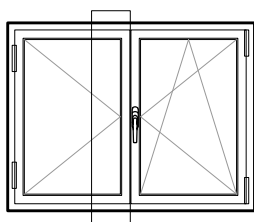
### OTKLOPNO-ZAKRETNI MECHANIZAM - GIESSE FUTURA 3D (130 micro) STANDARD



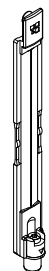
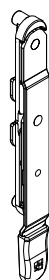
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
135.015		<ul style="list-style-type: none"> <li>- Pogonski mehanizam za FUTURA 3D 130 micro mehanizam (...ručka 01094xxx)</li> <li>- Oznaka proizvođača Giese: 04704000</li> </ul>		
135.012		<ul style="list-style-type: none"> <li>- Škare T1 za širinu krila: Fb= 410mm - 700mm</li> <li>- Oznaka proizvođača Giese: 04284000</li> </ul>		
135.013		<ul style="list-style-type: none"> <li>- Škare T2 za širinu krila: Fb= 570mm - 1800mm</li> <li>- Oznaka proizvođača Giese: 04285000</li> </ul>		
135.016.01 02 03		<ul style="list-style-type: none"> <li>- Šarke nosivosti do 130 kg</li> <li>- Oznaka proizvođača Giese: 04711410 - bijela 04711376 - siva 04711500 - crna</li> <li>- Boje: 01- bijela; 02 - siva; 03 - crna</li> </ul>		
105.005.01 02 03		<ul style="list-style-type: none"> <li>- Ručka; (LA 86/104mm), FUTURA 3D (130 micro)</li> <li>- Oznaka proizvođača Giese: 01094410 -bijela 01094376 -siva 01094500 -crna</li> <li>- Boje: 01- bijela; 02 - siva; 03 - crna</li> </ul>		
135.021		<ul style="list-style-type: none"> <li>- Dodatni set ključanja po širini i visini za krilo preko L&gt;1000 mm i H&gt;1200mm</li> <li>- Oznaka proizvođača Giese: 04770000</li> </ul>		


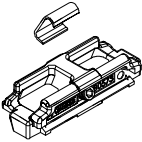
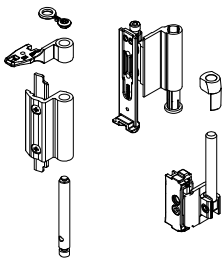
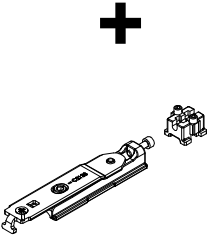
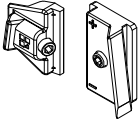
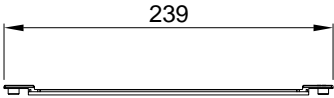
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
135.014		<ul style="list-style-type: none"> <li>- Dodatne škare za krilo preko 1000 mm</li> <li>- Oznaka proizvođača Giesse: 04301000</li> </ul>		
135.029		<ul style="list-style-type: none"> <li>- Zapinjač</li> <li>- Oznaka proizvođača Giesse: 04030000</li> </ul>		
143.042		<ul style="list-style-type: none"> <li>- Prihvatnik zapinjača</li> <li>- Oznaka proizvođača Giesse: 01347000</li> </ul>		

### OKOV ZA FIKSIRANJE POMOĆNOG KRILA - GIESSE

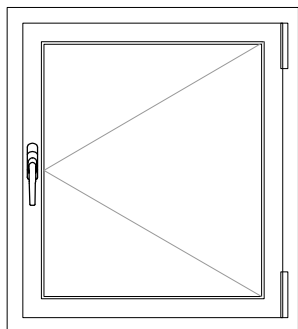


- **143.043** Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu)
- Oznaka proizvođača Giesse: 02191K



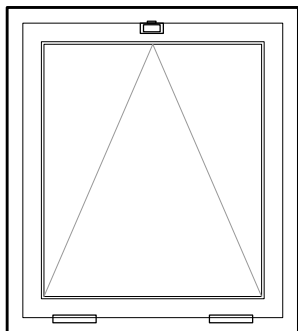
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
143.043		<ul style="list-style-type: none"> <li>- Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu)</li> <li>- Oznaka proizvođača Giese: 02191K</li> </ul>		
143.046		<ul style="list-style-type: none"> <li>- Pihvat zapinjača</li> <li>- Oznaka proizvođača Giese: 01348K</li> </ul>		
135.016.01 02 03		<ul style="list-style-type: none"> <li>- Šarke nosivosti do 130 kg</li> <li>- Oznaka proizvođača Giese: 04711410 - bijela 04711376 - siva 04711500 - crna</li> <li>- Boje: 01- bijela; 02 - siva; 03 - crna</li> </ul>		
135.041		<ul style="list-style-type: none"> <li>- Dodatni element za šarke 04711xxx (samo za gornju šarku)</li> <li>- Oznaka proizvođača Giese: 04728000</li> </ul>		
143.045		<ul style="list-style-type: none"> <li>- Dodatni element (pasivno ključ.) pomoćnog krila</li> <li>- Oznaka proizvođača Giese: 01350K</li> </ul>		
143.050		<ul style="list-style-type: none"> <li>- Prikjučna šipka za radni mehanizam</li> <li>- Oznaka proizvođača Giese: 02187</li> </ul>		

### OKOV ZA ZAOKRETNO OTVARANJE



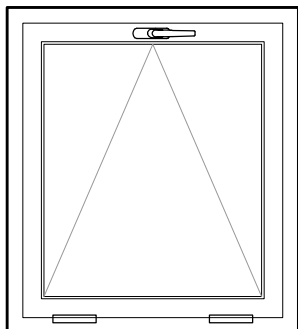
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
104.011.01 02 03		<ul style="list-style-type: none"> <li>- Ručka za prozor</li> <li>- Oznaka proizvođača Stublina: 1102.00.310 -bijela 315 -siva 313 -crna</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>	<p>AISI Zamak</p>	
144.044		<ul style="list-style-type: none"> <li>- Set zapinjača sa prihvatom</li> <li>- Oznaka proizvođača Stublina: 4009.30</li> </ul>		
111.001.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka EURO ŽLIJEB</li> <li>- Stara oznaka E-100</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		

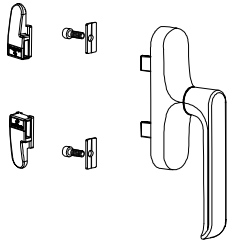
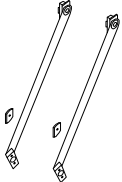
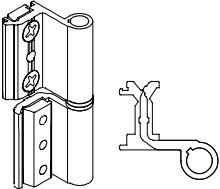
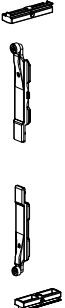
### OTKLOPNI MEHANIZAM (VENTUS) SA BRAVICOM ZA ZATVARANJE



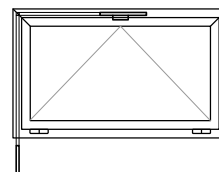
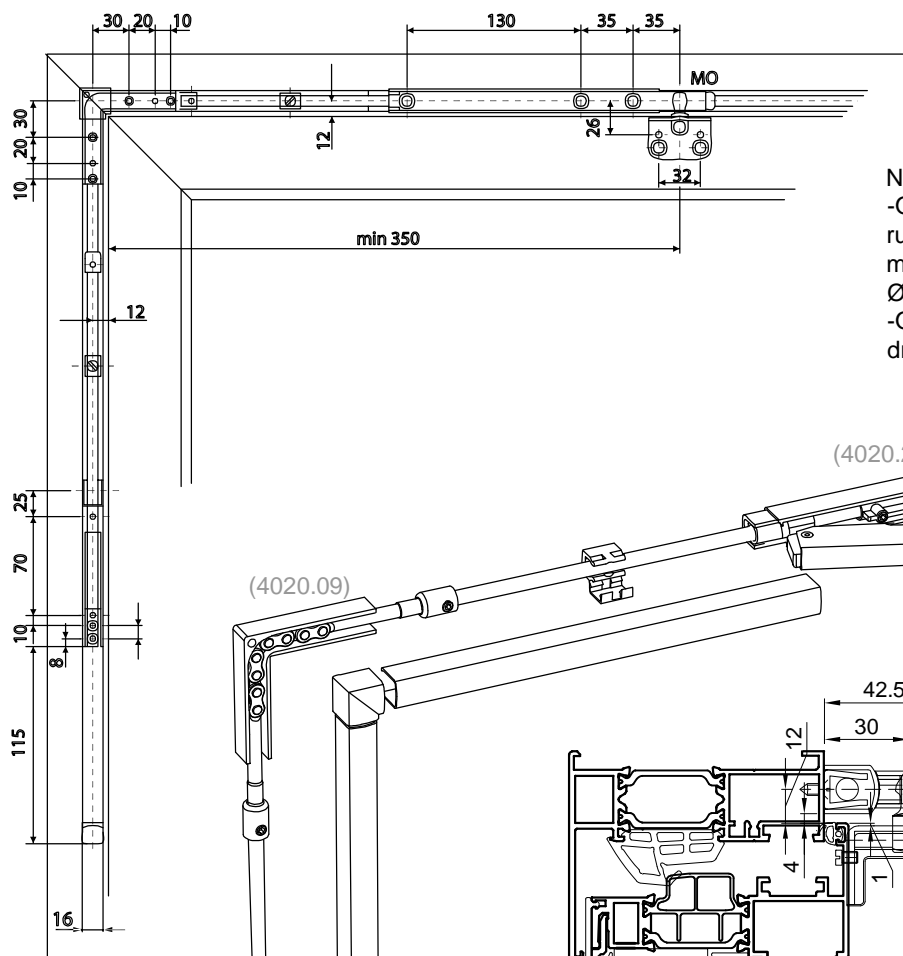
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
124.005.01 02 03		<ul style="list-style-type: none"> <li>- Bravica za zatvaranje otklopnog prozora</li> <li>- Oznaka proizvođača Stublina: 1014.00.310 -bijela 315 -siva 313 -crna</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
131.002		<ul style="list-style-type: none"> <li>- Škare za otklopni prozor</li> <li>- Stara oznaka: E-350</li> </ul>		
111.001.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka EURO ŽLIJEB</li> <li>- Stara oznaka E-100</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		

### OTKLOPNI MEHANIZAM (VENTUS) SA RUČKOM



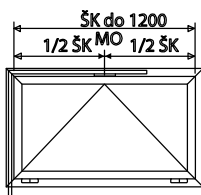
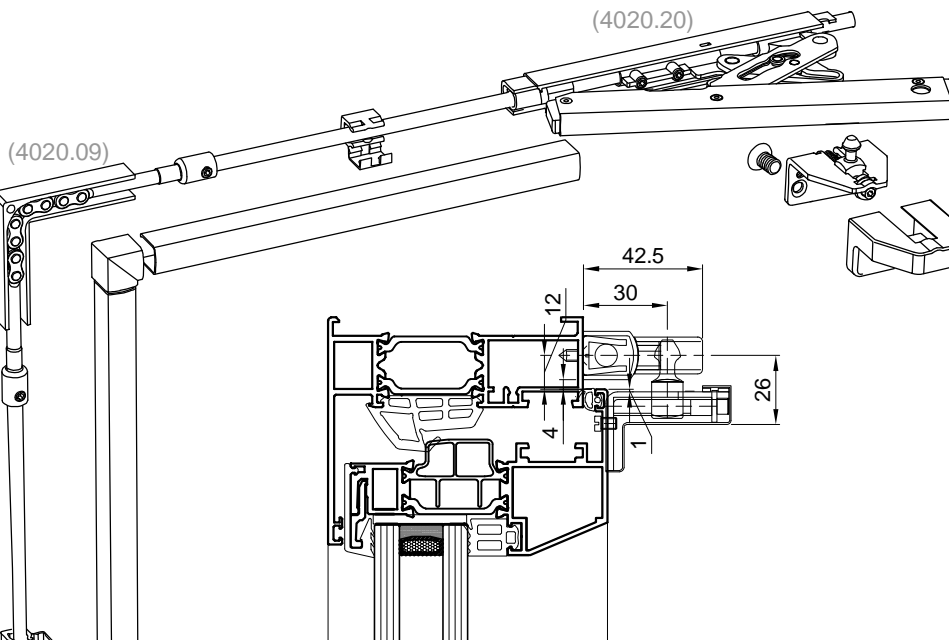
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
104.011.01 02 03		<ul style="list-style-type: none"> <li>- Ručka za prozor</li> <li>- Oznaka proizvođača Stublina: 1102.00.310 -bijela 315 -siva 313 -crna</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>	AlSi Zamak	
131.002		<ul style="list-style-type: none"> <li>- Škare za otklopni provoz</li> <li>- Stara oznaka: E-350</li> </ul>		
111.001.01 02 03		<ul style="list-style-type: none"> <li>- Dvodijelna šarka EURO ŽLIJEB</li> <li>- Stara oznaka E-100</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
144.044		<ul style="list-style-type: none"> <li>- Set zapinjača sa prihvatom</li> <li>- Oznaka proizvođača Stublina: 4009.30</li> </ul>		

134.006.xx- OTKLOPNI MEHANIZAM (VENTUS) SA RUČKOM ZA VISINU - STUBLINA (art.4020.00)

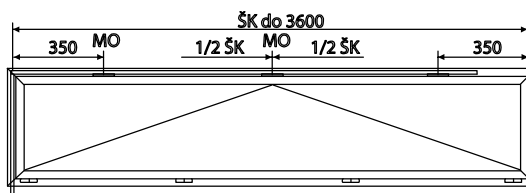
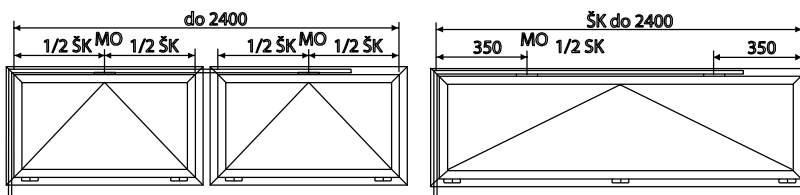


**Napomena:**

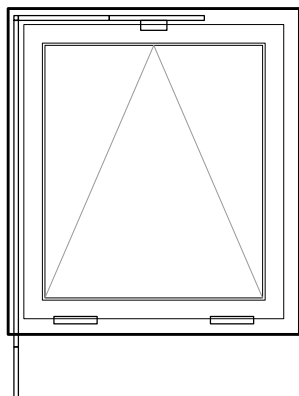
- Otvore na štoku za ugradnju pogonoske ručice 4020.30, kutnog okova 4020.09 mehanizama otvarača 4020.20 bušiti na Ø3mm.
- Otvore na krilu za ugradnju kutnog nosača držača krila 4020.05 bušiti na Ø5.2mm



Legenda  
Mehanizam otvarača .....Mo  
Širina krila .....ŠK



### OTKLOPNI MEHANIZAM (VENTUS) SA RUČKOM ZA VISINU



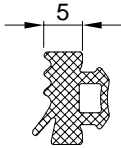


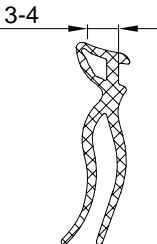
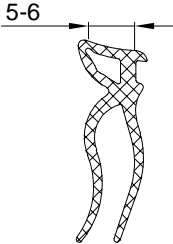
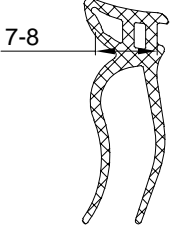
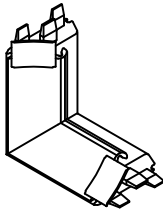
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
<b>134.006.01</b> <b>02</b> <b>03</b>		<ul style="list-style-type: none"> <li>- Ventus set širina krila do 1200 mm</li> <li>- Oznaka proizvođača Stublina: 4020.00.310 -bijela 315 -siva 313 -crna</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		
<b>111.001.01</b> <b>02</b> <b>03</b>		<ul style="list-style-type: none"> <li>- Dvodijelna šarka EURO ŽLIJEB</li> <li>- Stara oznaka E-100</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> </ul>		

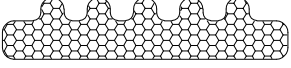
Brtvila



CODE	Izgled-presjek	Opis	Materijal	Nap.
334.004		-Srednja brtva	TPE	
337.002		-Srednja brtva	spužvasti EPDM	
321.001		- Brtva u krilu - Stara oznaka 210.001.090 (Z106)	EPDM	61
322.001		- Brtva u krilu - Stara oznaka 020075	EPDM	70
321.005		- Brtva u krilu	EPDM	
322.002		- Brtva prema staklu - Stara oznaka 020076	EPDM	70
311.001		- Brtva prema staklu /unutarnja/ - Stara oznaka 210.001.125 (921)	EPDM	71

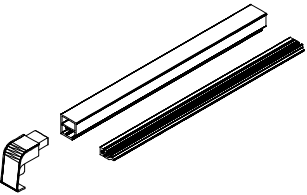
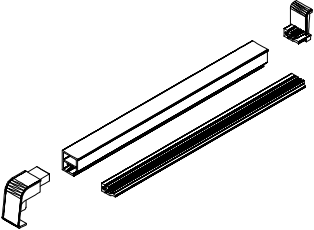
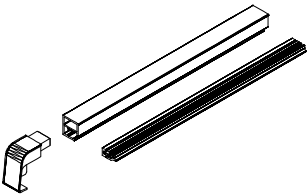
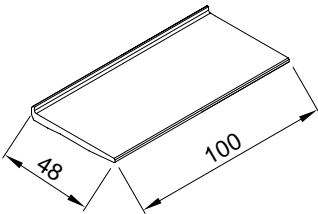
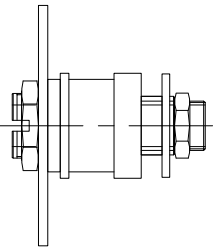
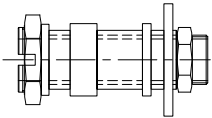
CODE	Izgled-presjek	Opis	Materijal	Nap.
321.002		- Brtva prema staklu /vanjska/ - Stara oznaka 210.001.140 (Z111)	EPDM	61 (ShA)
311.002		-Brtva prema staklu /unutarnja/ - Stara oznaka 210.001.123 (918)	EPDM	71
311.007 311.008 311.009 311.010		-Brtva prema staklu /unutarnja/ - Stare oznake UP-5 nove oznake UP-6 UP-7 UP-8	311.007 311.008 311.009 311.010	EPDM 71
351.017		-Brtva prema staklu /unutarnja/ - Stara oznaka 02892	EPDM	71
351.016		-Brtva prema staklu /unutarnja/ - Stara oznaka 02856	EPDM	71
351.015		-Brtva prema staklu /unutarnja/ - Stara oznaka 02877	EPDM	71
351.014		-Brtva prema staklu /unutarnja/ - Stara oznaka 1966	EPDM	71

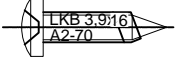
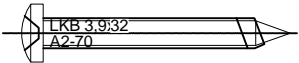
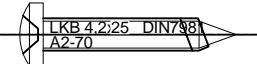
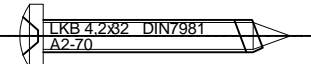
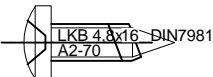
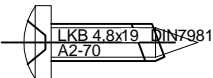
CODE	Izgled-presjek	Opis	Materijal	
351.013		- Brtva prema staklu /unutarnja/ - Stara oznaka 02864	EPDM	71
351.012		- Brtva prema staklu /vanjska/ nosi 3.5mm - Stara oznaka 02865	EPDM	71
351.011		- Brtva prema staklu /unutarnja/ - Stara oznaka 02852	EPDM	71
311.003		- Brtva prema staklu /unutarnja,nosi 3-4 mm/	EPDM	71
311.004		- Brtva prema staklu /unutarnja,nosi 5-6 mm/	EPDM	71
311.005		- Brtva prema staklu /unutarnja,nosi 7-8 mm/	EPDM	71
333.009		-Kutni umetak za brtvu 337.002 i 334.004	Spužvasti EPDM	

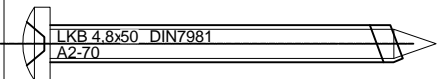
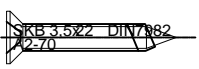
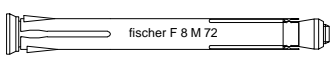
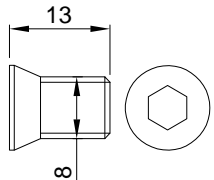


<p><b>348.002</b></p>		<p>- Ispuna po opsegu stakla sa ljepljivom trakom- <b>PLAMAFRAME</b></p>	<p>PPE</p>	

# Dodaci



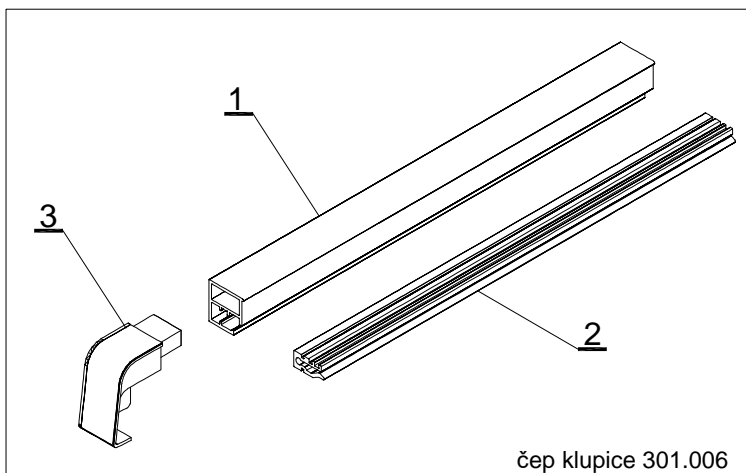
CODE	Izgled-presjek	Opis	Materijal	Nap.
301.006. 01 02 03		- Set za bočni čep klupice	PVC TPE Al.	
301.009. 01 02 03		- Set za bočni čep klupice	PVC TPE Al.	
301.010. 01 02 03		- Set za bočni čep klupice za klupicu 360mm	PVC TPE Al.	
521.127		- Držač stakla - Radi se iz profila F-1349	Al	
220.014		- Grupa glodala za obradu prečki prema profilu okvira (TERMO 85 SK)	Čelik	
220.024		- Grupa glodala za obradu prečke FT-0182F prema profilu okvira FT-0180F i prema prečki (TERMO 85 SK)	Čelik	

CODE	Izgled-presjek	Opis	Materijal	Nap.
433.017		Vijak 3.9x16 DIN 7981	Inox	
433.021		Vijak 3.9x32 DIN 7981	Inox	
433.032		Vijak 4.2x25 DIN 7981	Inox	
433.033		Vijak 4.2x32 DIN 7981	Inox	
433.042		Vijak 4.8x16 DIN 7981	Inox	
433.043		- Vijak 4.8x19 DIN 7981	Inox	

CODE	Izgled-presjek	Opis	Materijal	Nap.
433.049		Vijak 4.8x50 DIN 7981	Inox	
433.094		Vijak 3.5x22 DIN 7982	Inox	
430.159		Metalno tiplo za ugradnju		
431.266		Vijak M8x13 tip Feal		
210.000		- Štanca za otklopno zaokretne sisteme prozora i vrata - Stara oznaka S1		
210.001		- Kliješta za kutne spojnice - Stara oznaka :kliješta -83064		

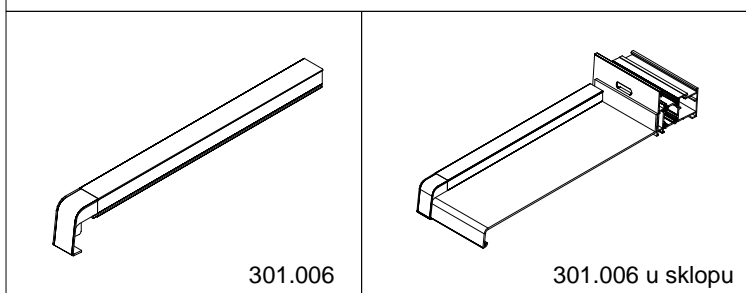
SET ZA BOČNI ČEP PROZORSKE KLUPICE 301.006

- 1. - Osnovni profil
- 2. - PVC prihvatnik klupice
- 3. - Vanjski čep-prihvatnik klupice i profila



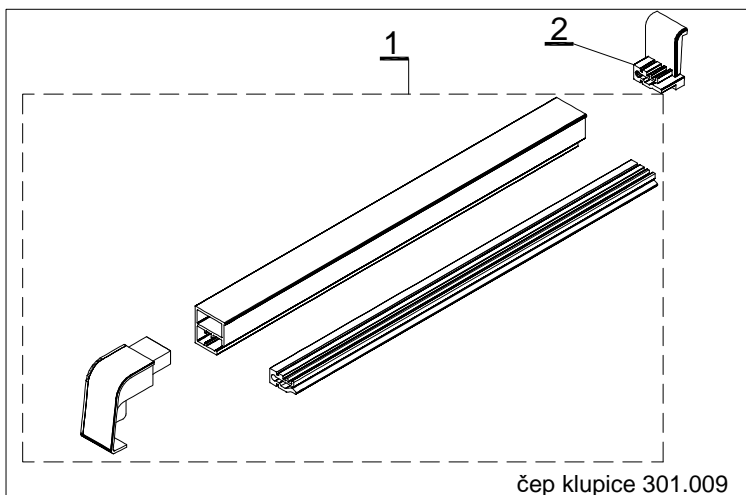
čep klupice 301.006

- Setovi bočnih čepova 301.006 i 301.009 su u veličini profila klupice F-0680/J (280 mm)
- Za manje klupice se radi skraćivanje čepa prema mjerama u uputstvu artikla
- Izbor boje čepova prema RAL-karti

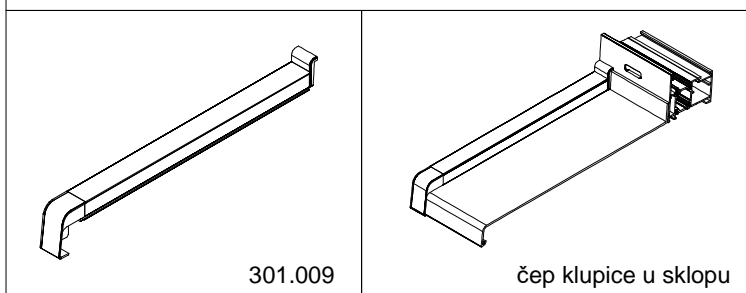


SET ZA BOČNI ČEP PROZORSKE KLUPICE 301.009

- 1. - Set klupice 301.006
- 2. - Čep do otvora-prihvatnik klupice i profila

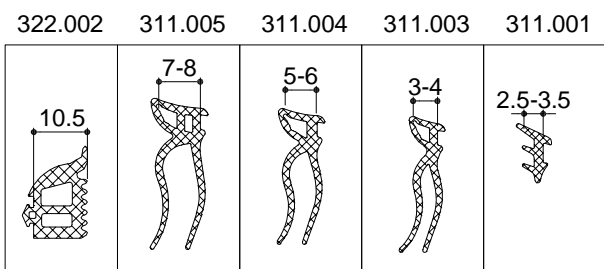
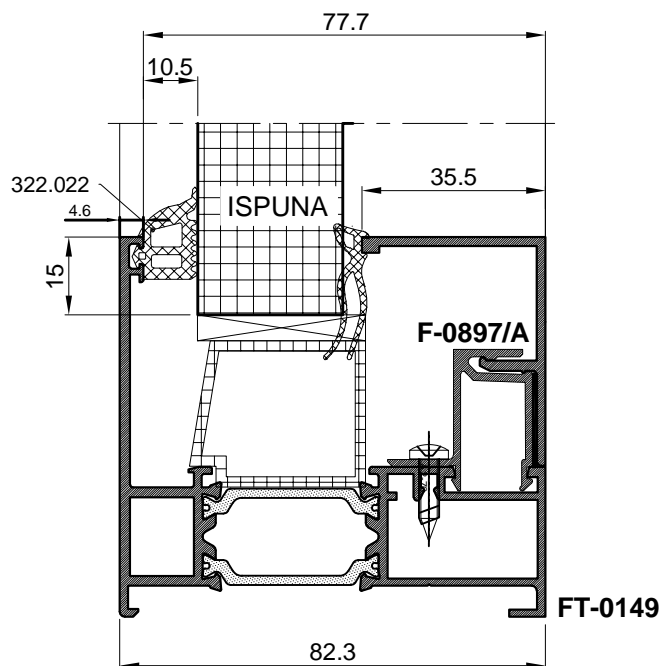


čep klupice 301.009



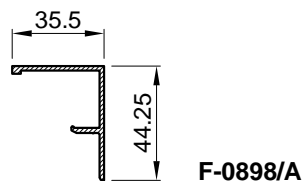
# Prikaz stakljenja





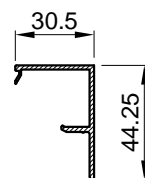
Ispuna X	Vanjska brtva	Unutarnja brtva	Zazor između Ispune X i Lajsne
24	322.002	311.005	7.5
26	322.002	311.004	5.5
28*	322.002	311.003 311.001	3.5

Lajsna



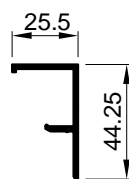
F-0898/A

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32	322.002	311.003	4.5



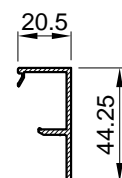
F-1310

36	322.002	311.004	5.5
38*	322.002	311.003 311.001	3.5



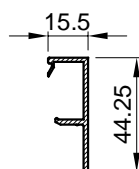
F-1185

40	322.002	311.004	6.5
42	322.002	311.003	4.5



F-1311

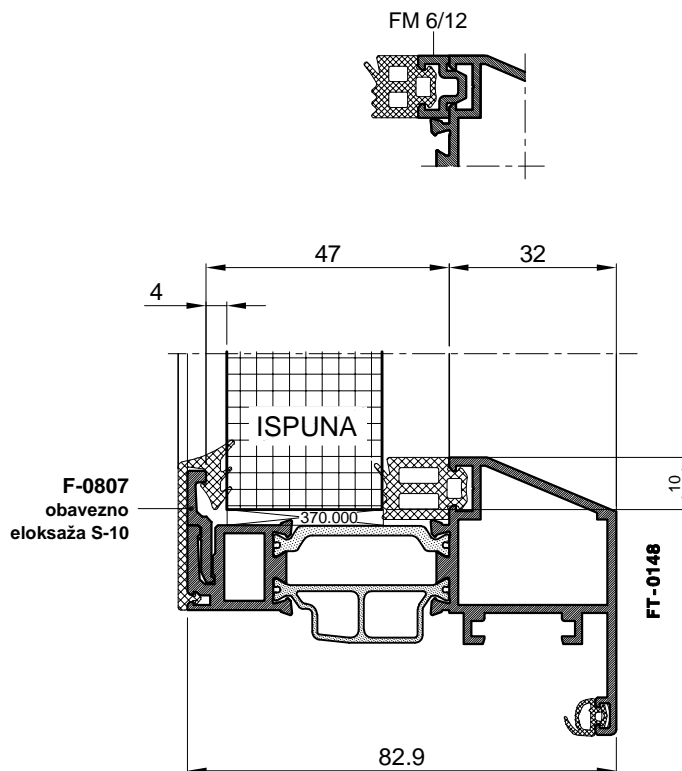
44	322.002	311.005	7.5
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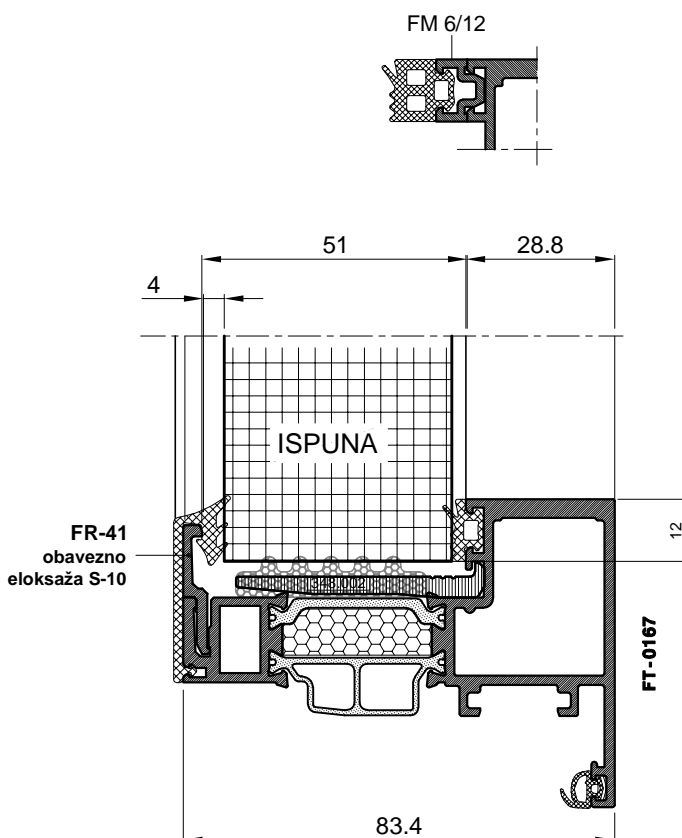
F-1643

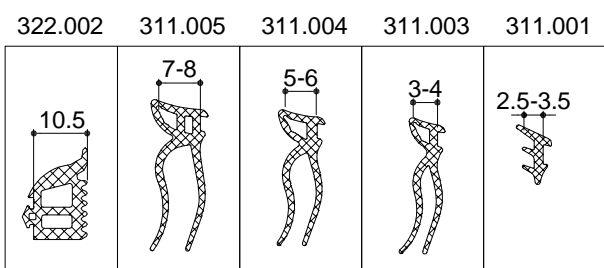
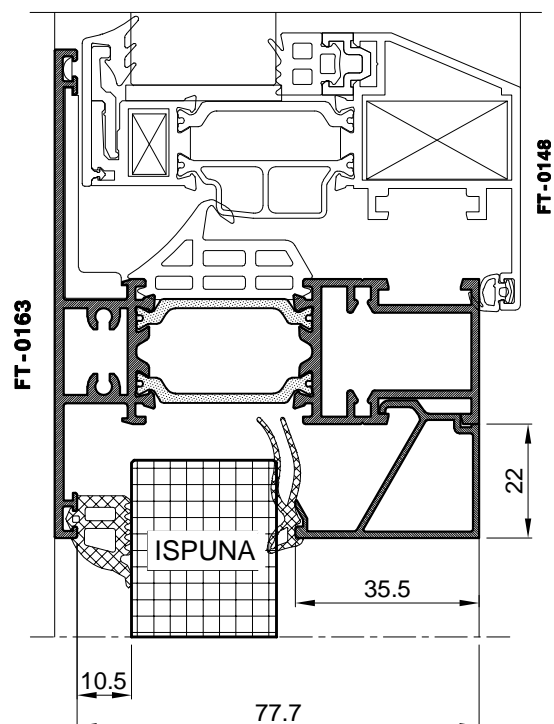
\* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001

	322.001 (020075)	351.017 (02892)	351.016 (02856)	351.015 (02877)	
		351.014 (1966)	351.013 (02864)	351.011 (02852)	FM 6/12
Ispuna X	Vanjska brtva	Unutarnja brtva	Al umetak		
28	322.001	351.015	FM 6/12		
30	322.001	351.017			
32	322.001	351.016			
36	322.001	351.014			
38	322.001	351.013			
40	322.001	351.011			



	321.005	351.017 (02892)	351.016 (02856)	351.015 (02877)	
		351.014 (1966)	351.013 (02864)	351.011 (02852)	FM 6/12
Ispuna X	Vanjska brtva	Unutarnja brtva	Al umetak		
28	321.005	351.017	FM 6/12		
30	321.005	351.016	FM 6/12		
32	321.005	351.015	FM 6/12		
36	321.005	351.016			
38	321.005	351.015			
40	321.005	351.014			
42	321.005	351.013			
44	321.005	351.011			





Ispuna X	Vanjska brtva	Unutarnja brtva	Zazor između Ispune X i Lajsne
24	322.002	311.005	7.5
26	322.002	311.004	5.5
28*	322.002	311.003 311.001	3.5

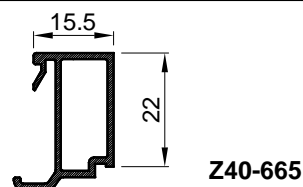
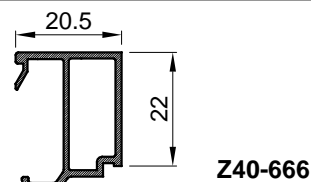
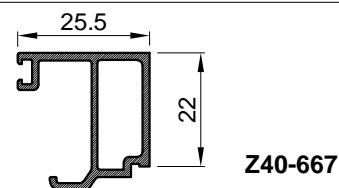
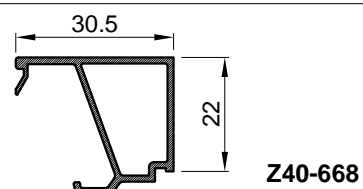
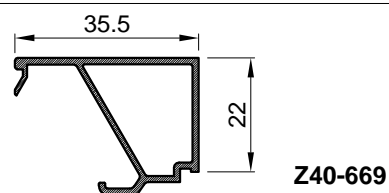
30	322.002	311.004	6.5
32	322.002	311.003	4.5

36	322.002	311.004	5.5
38*	322.002	311.003 311.001	3.5

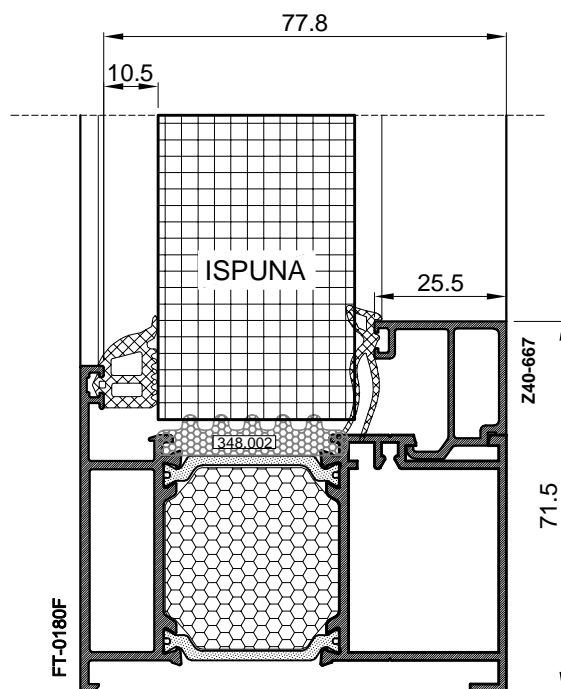
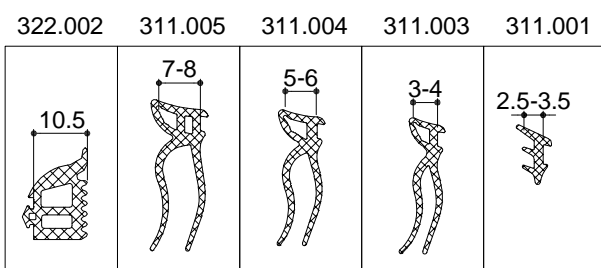
40	322.002	311.004	6.5
42	322.002	311.003	4.5

44	322.002	311.005	7.5
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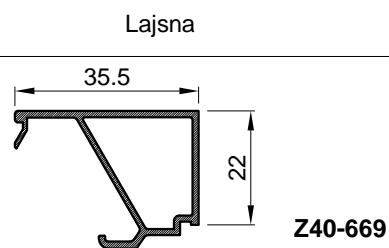
Lajsna



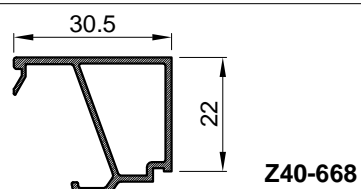
\* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001



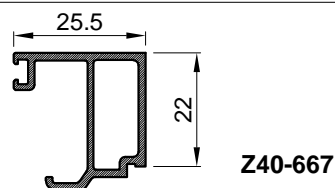
Ispuna X	Vanjska brtva	Unutarnja brtva	Zazor između Ispune X i Lajsne
24	322.002	311.005	7.5
26	322.002	311.004	5.5
28*	322.002	311.003 311.001	3.5



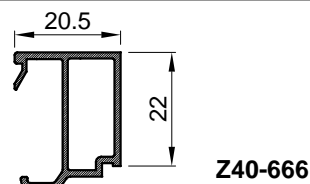
30	322.002	311.004	6.5
32	322.002	311.003	4.5



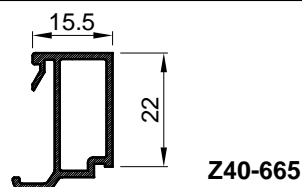
36	322.002	311.004	5.5
38*	322.002	311.003 311.001	3.5



40	322.002	311.004	6.5
42	322.002	311.003	4.5

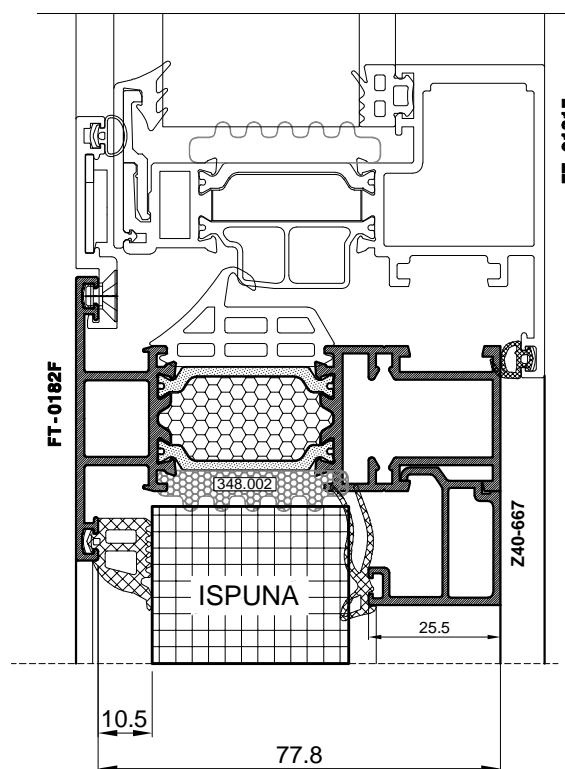
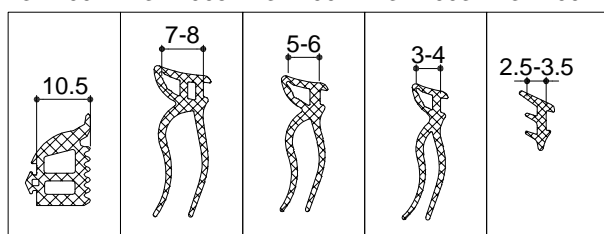


44	322.002	311.005	7.5
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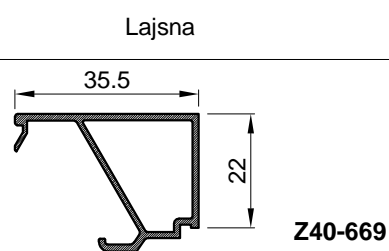


\* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001

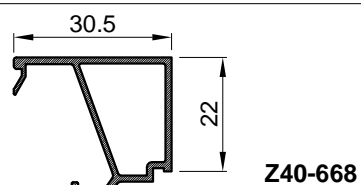
322.002    311.005    311.004    311.003    311.001



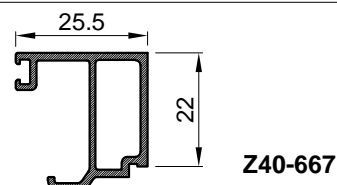
Ispuna X	Vanjska brtva	Unutarnja brtva	Zazor između Ispune X i Lajsne
24	322.002	311.005	7.5
26	322.002	311.004	5.5
28*	322.002	311.003 311.001	3.5



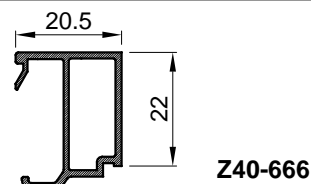
30	322.002	311.004	6.5
32	322.002	311.003	4.5



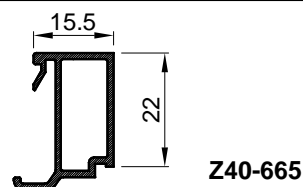
36	322.002	311.004	5.5
38*	322.002	311.003 311.001	3.5



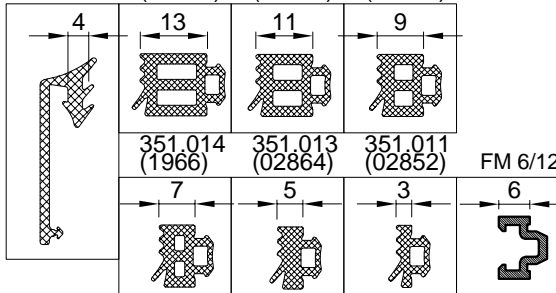
40	322.002	311.004	6.5
42	322.002	311.003	4.5



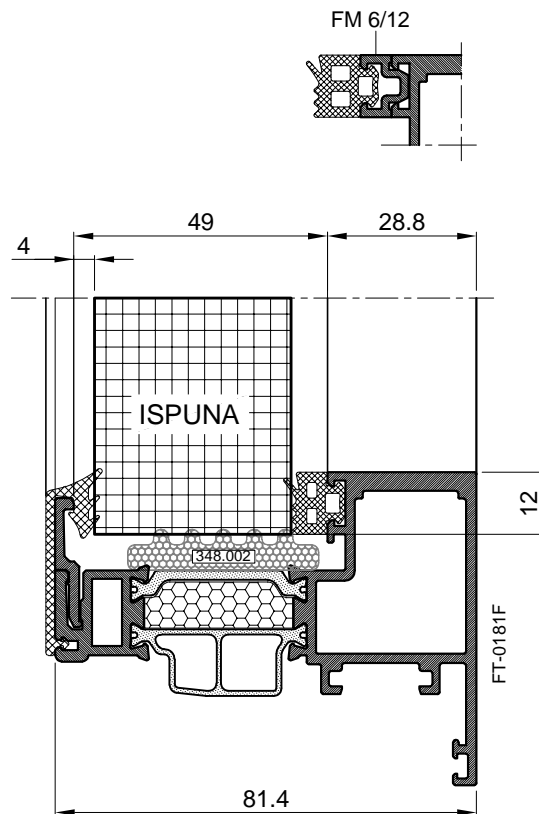
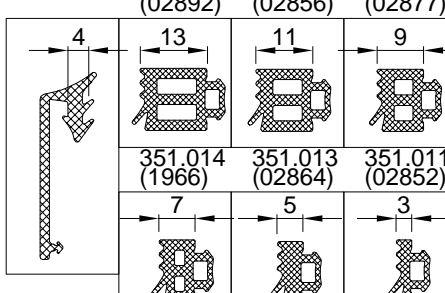
44	322.002	311.005	7.5
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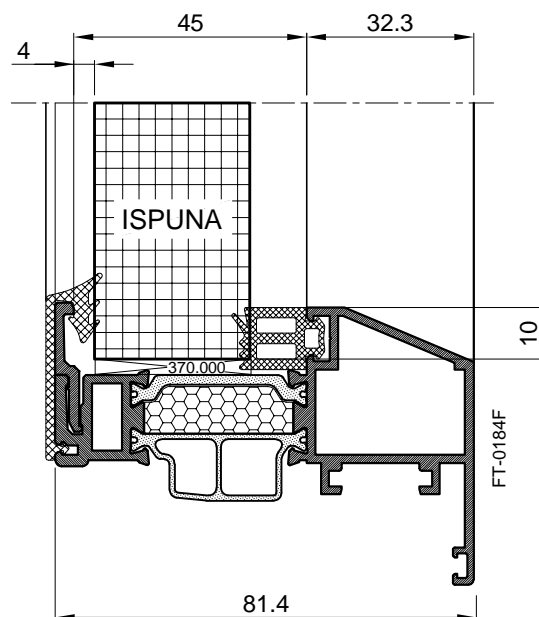
\* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001



Ispuna X	Vanjska brtva	Unutarnja brtva	Al umetak
28	321.005	351.016	FM 6/12
30	321.005	351.015	FM 6/12
32	321.005	351.014	FM 6/12
36	321.005	351.015	
38	321.005	351.014	
40	321.005	351.013	
42	321.005	351.011	

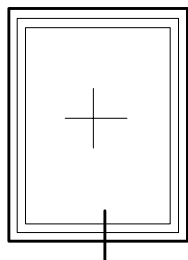



Ispuna X	Vanjska brtva	Unutarnja brtva
28	321.005	351.017
30	321.005	351.016
32	321.005	351.015
36	321.005	351.013
38	321.005	351.011

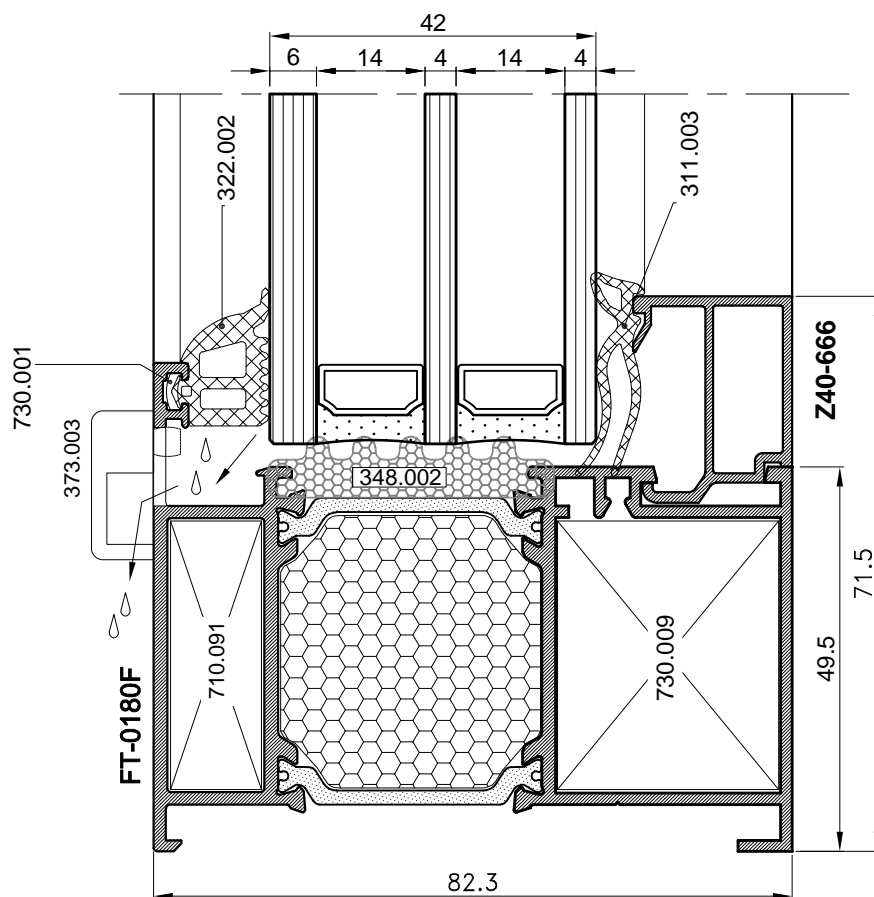
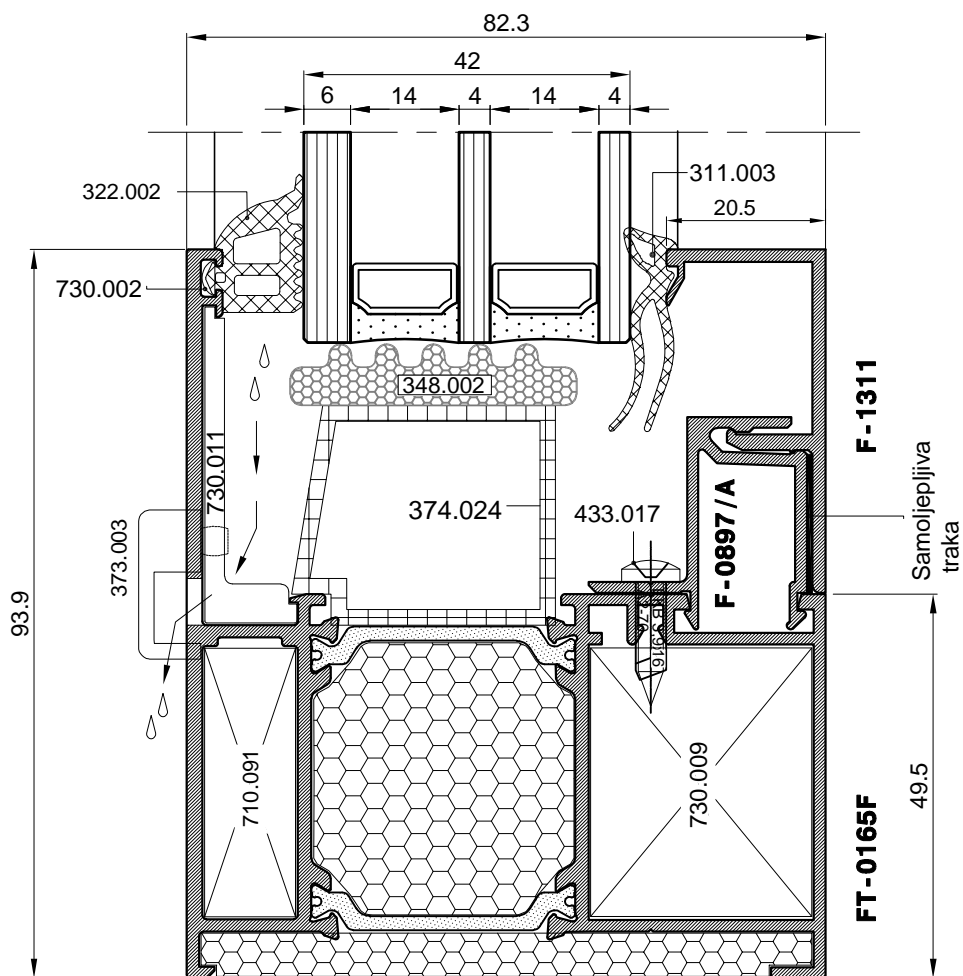


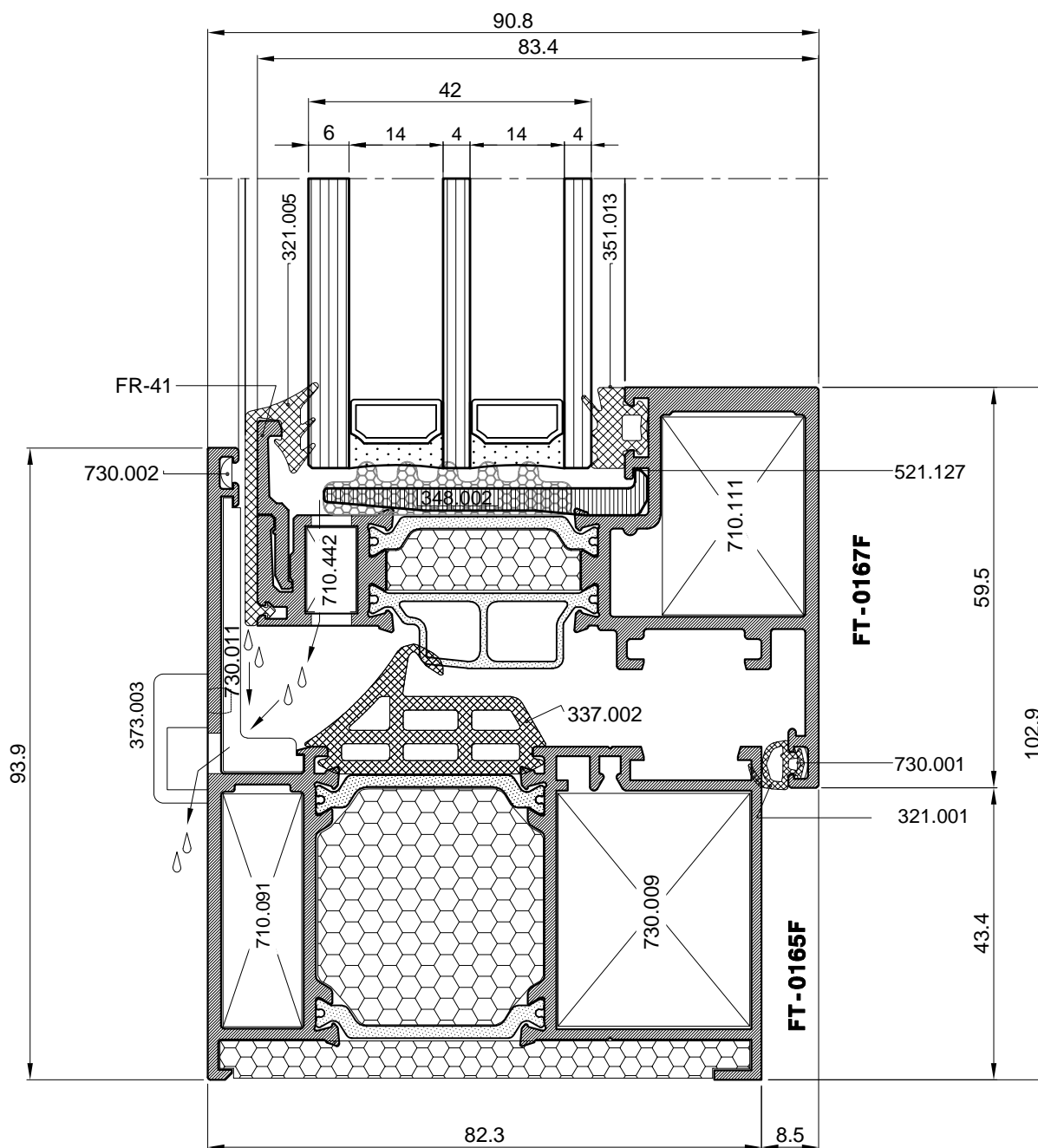
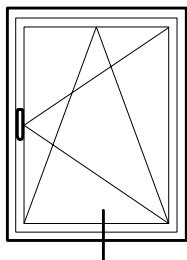
# Presjeci

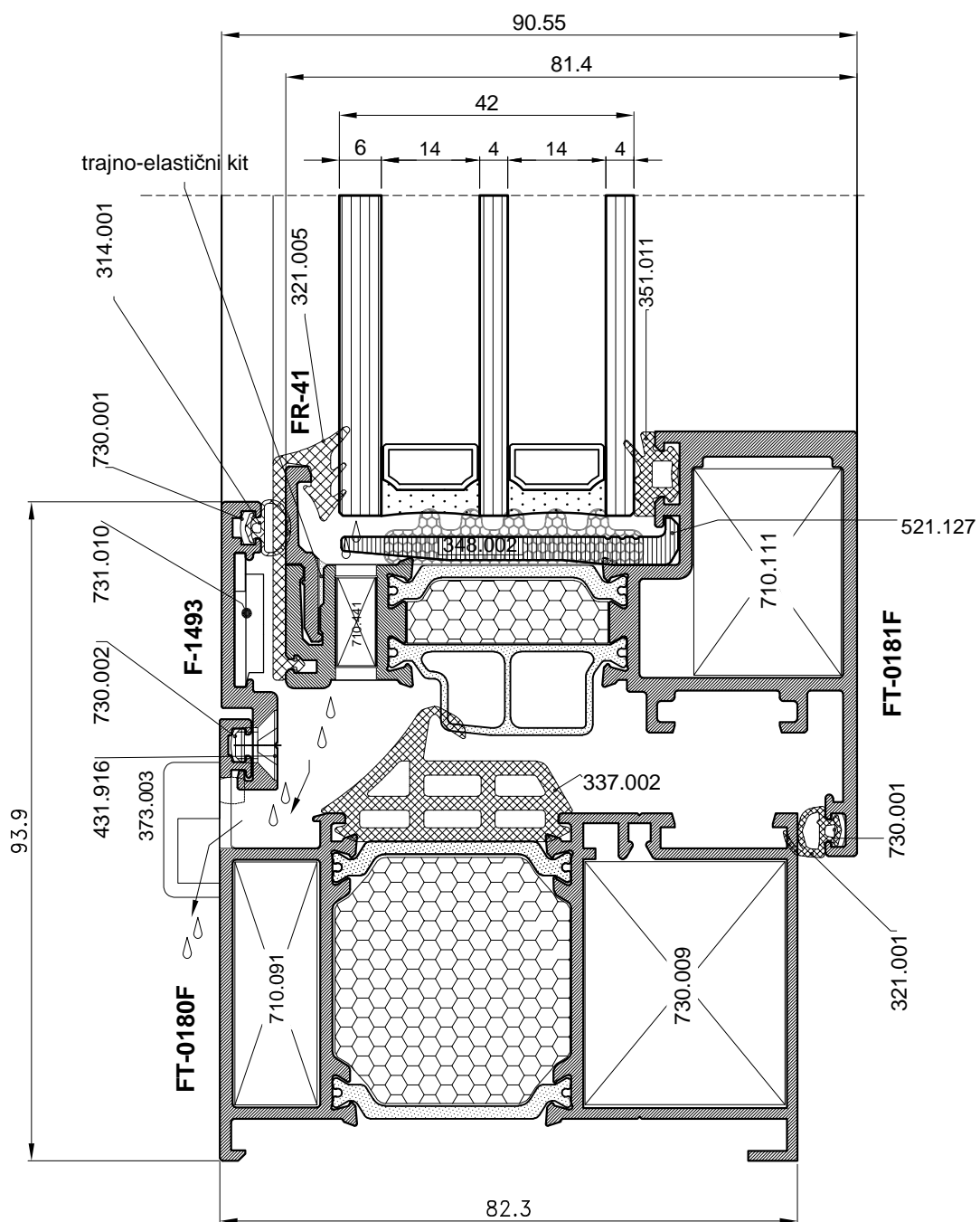
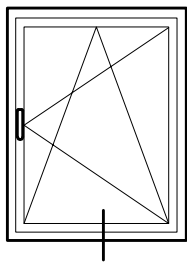




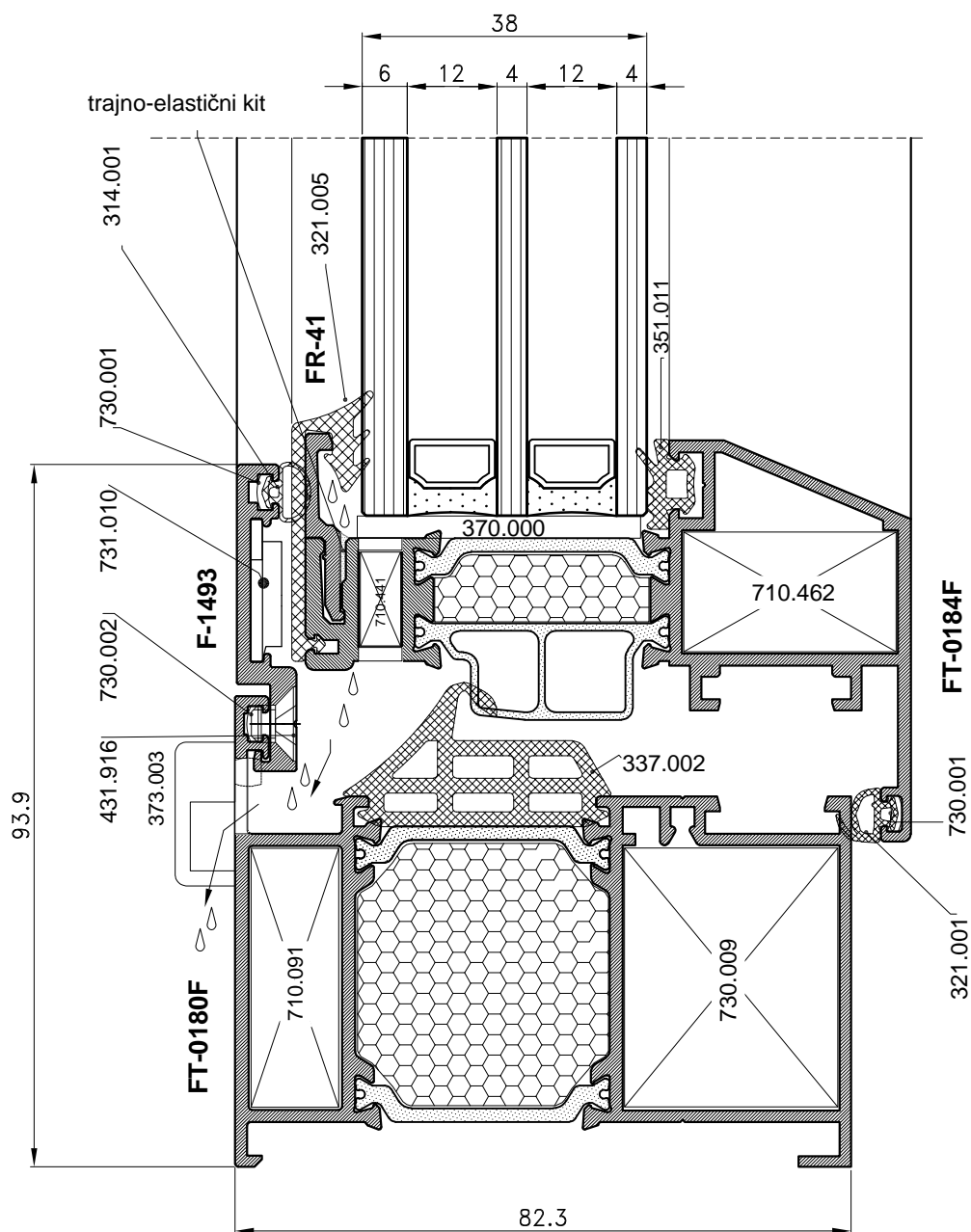
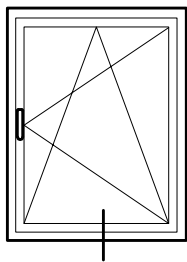
Podmetač za staklo 374.024  
ide kontinuirano  
po opsegu stakla

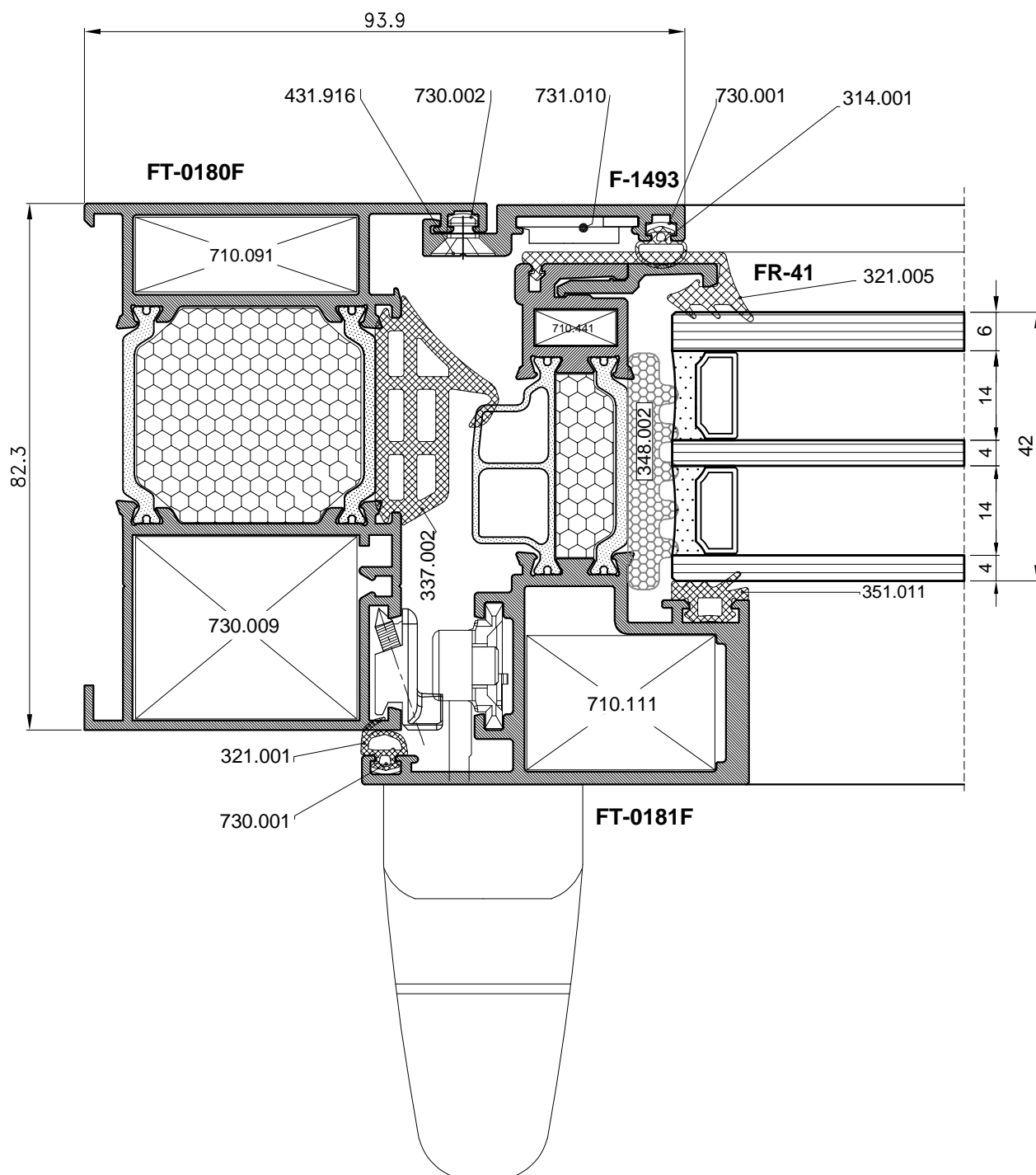
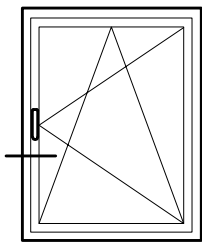


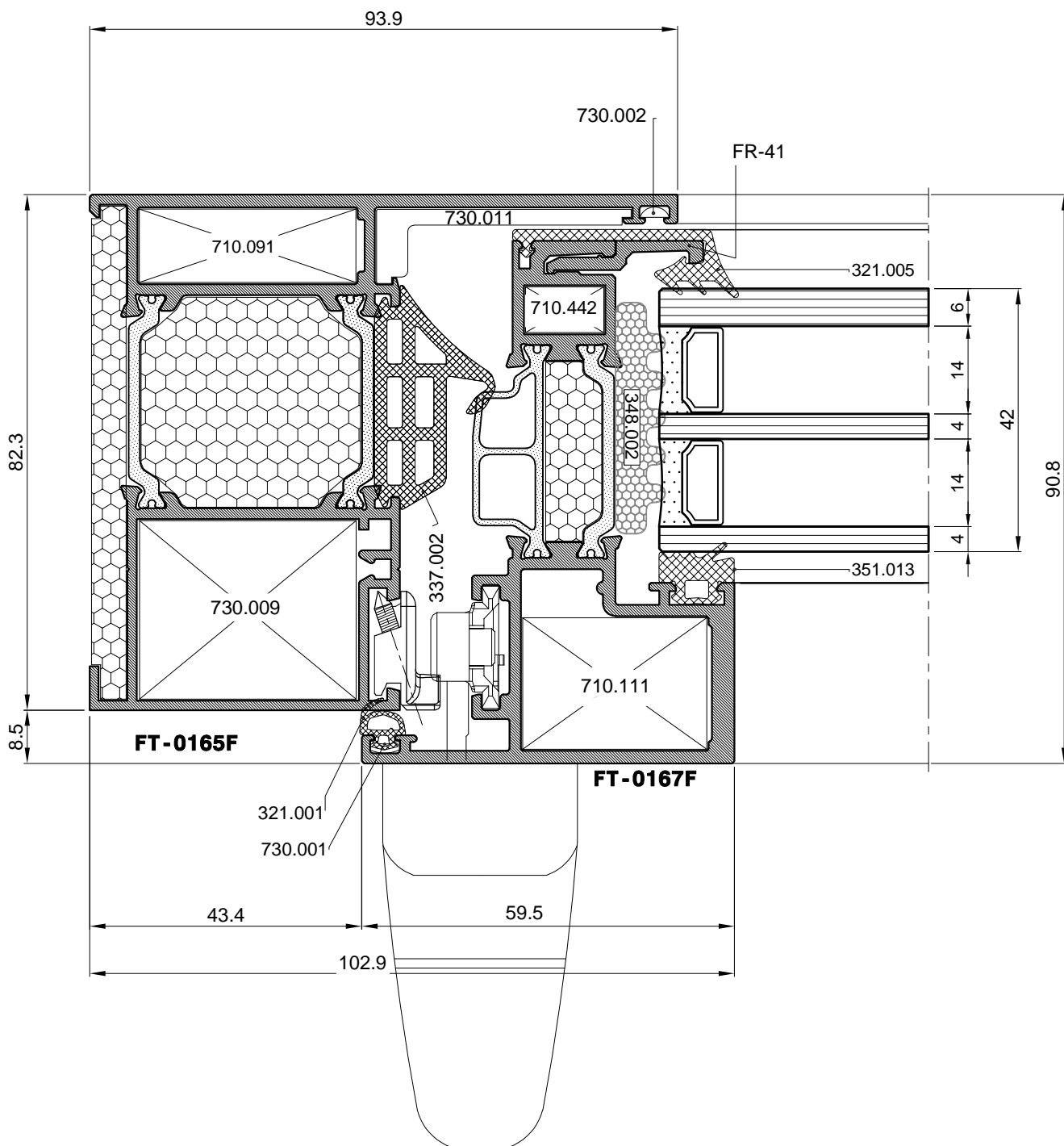
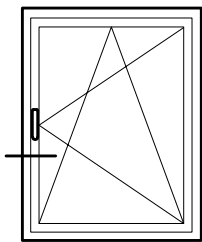


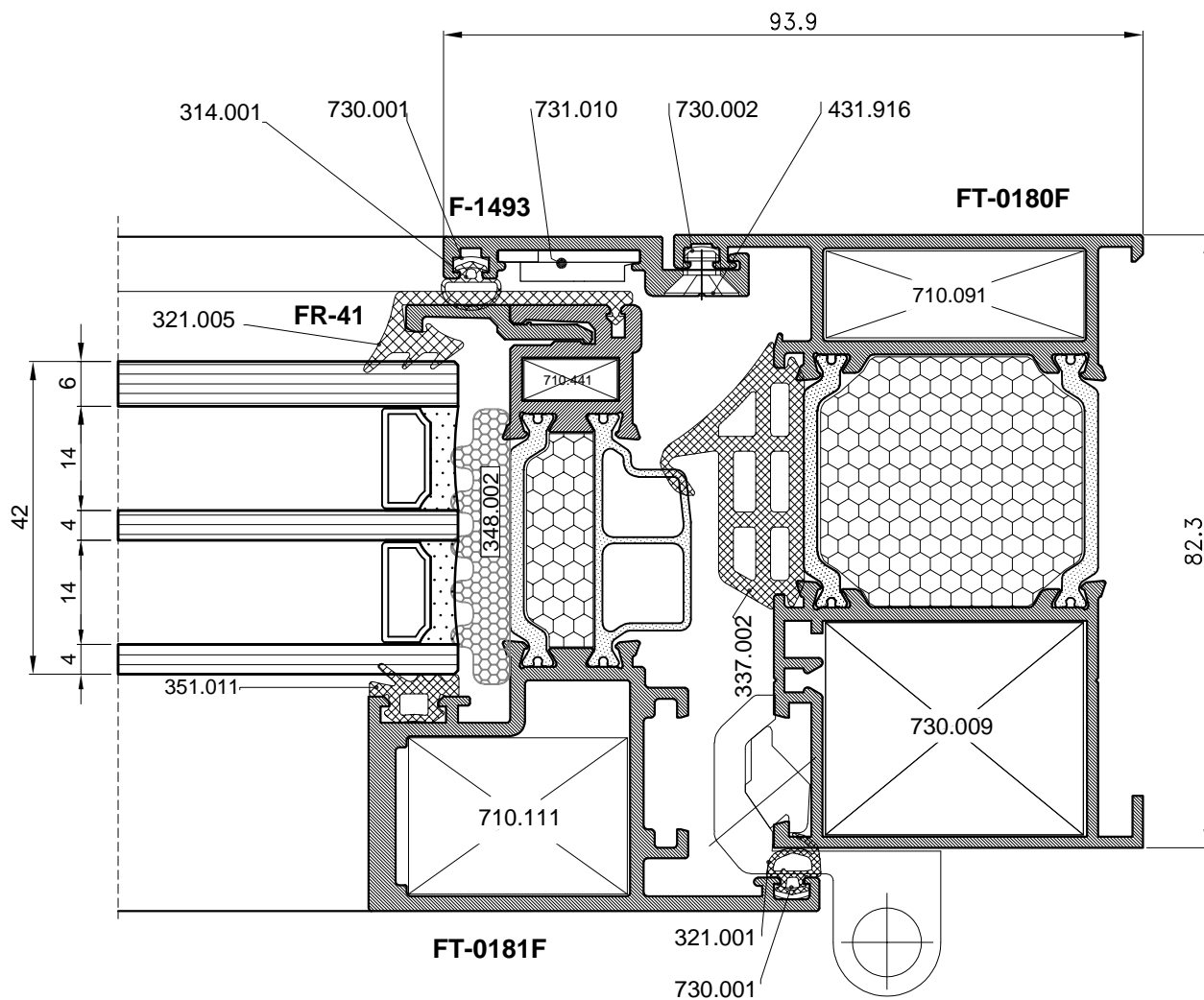
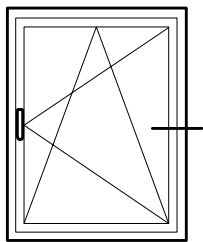


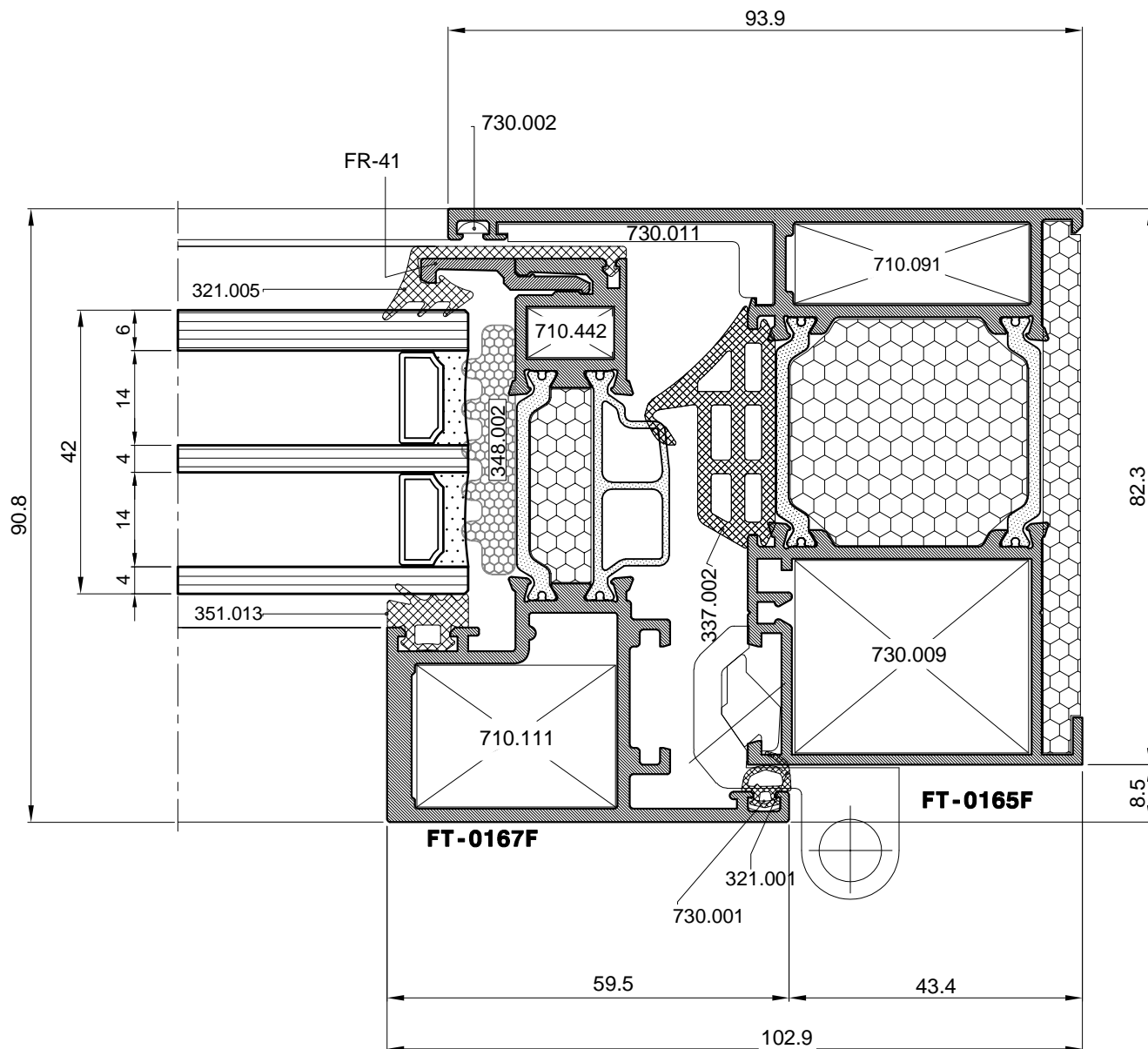
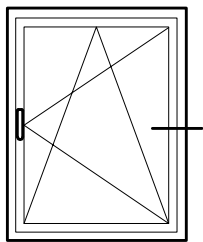


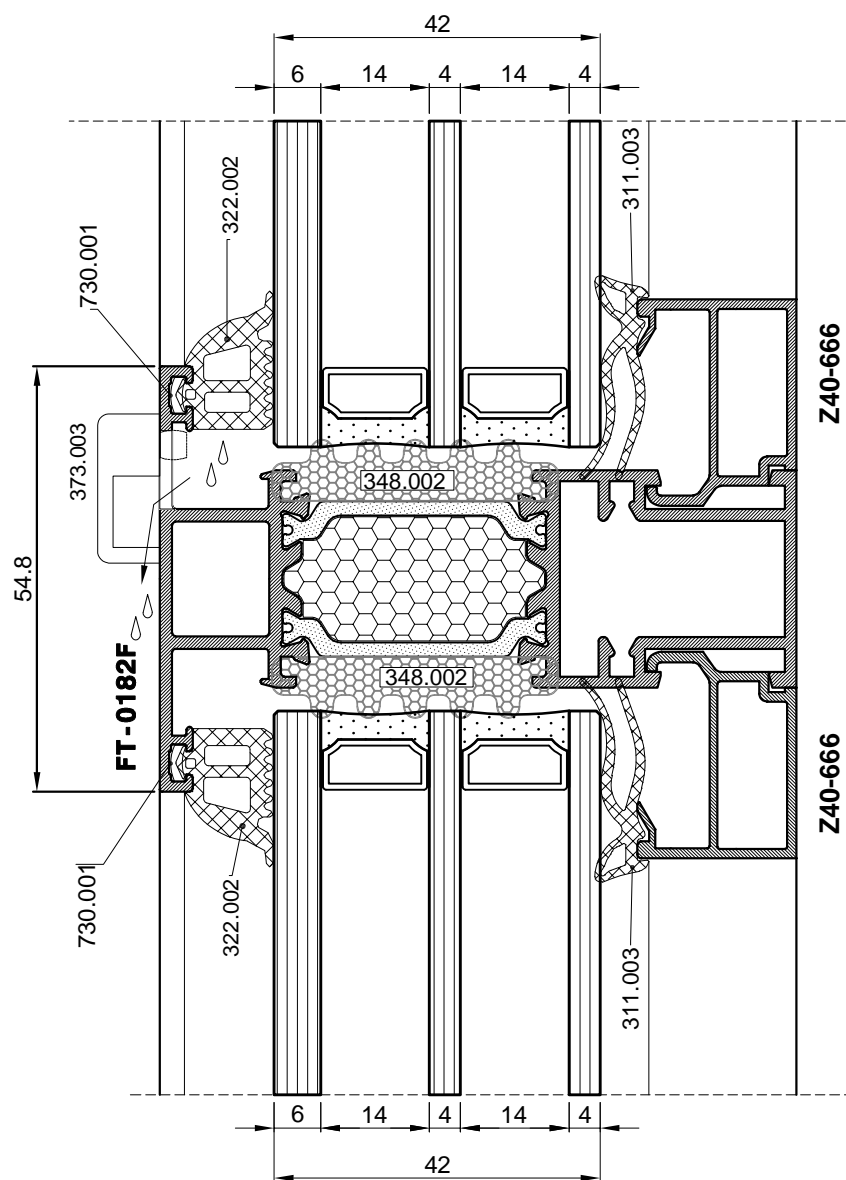
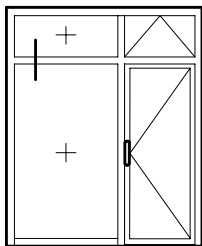


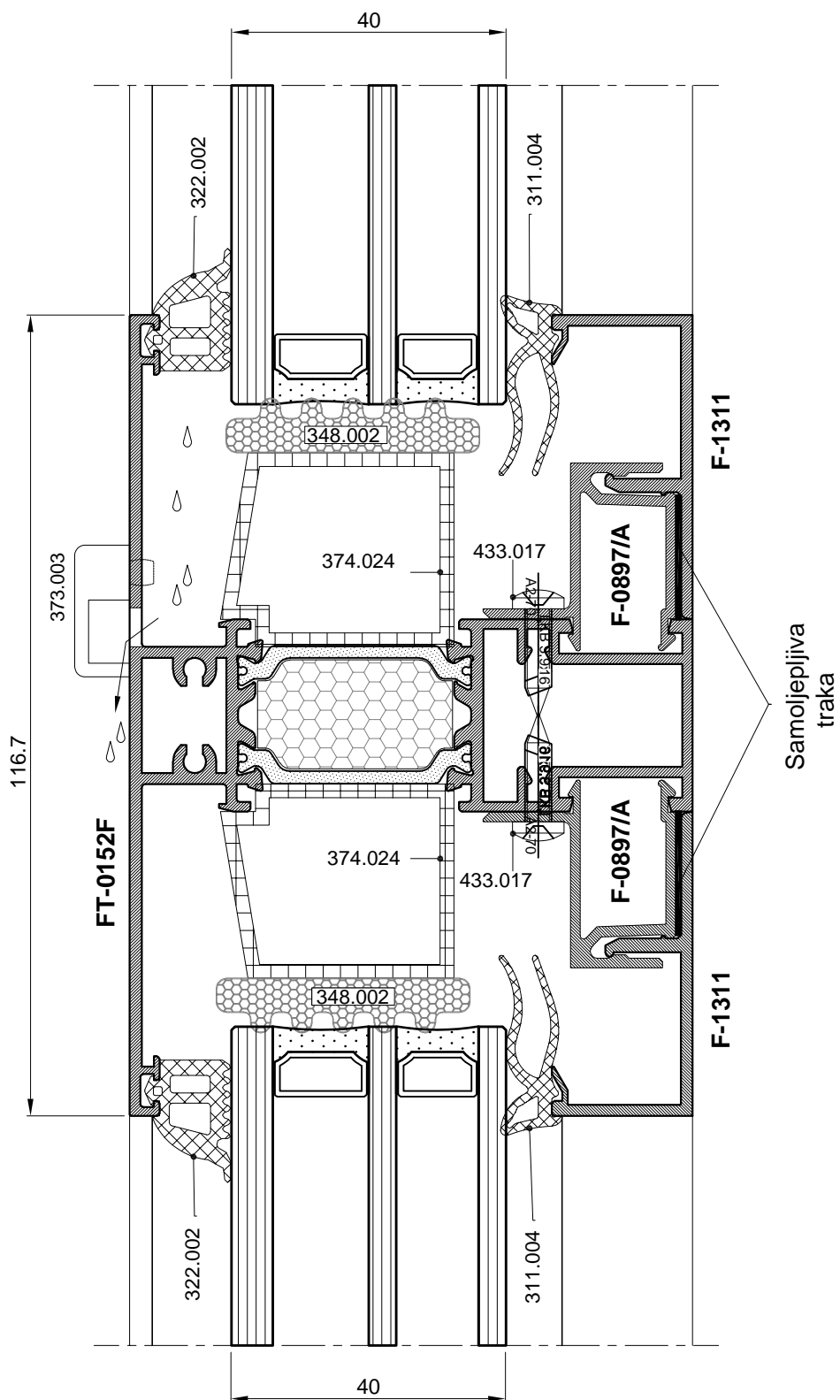
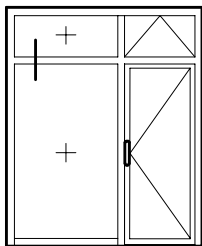


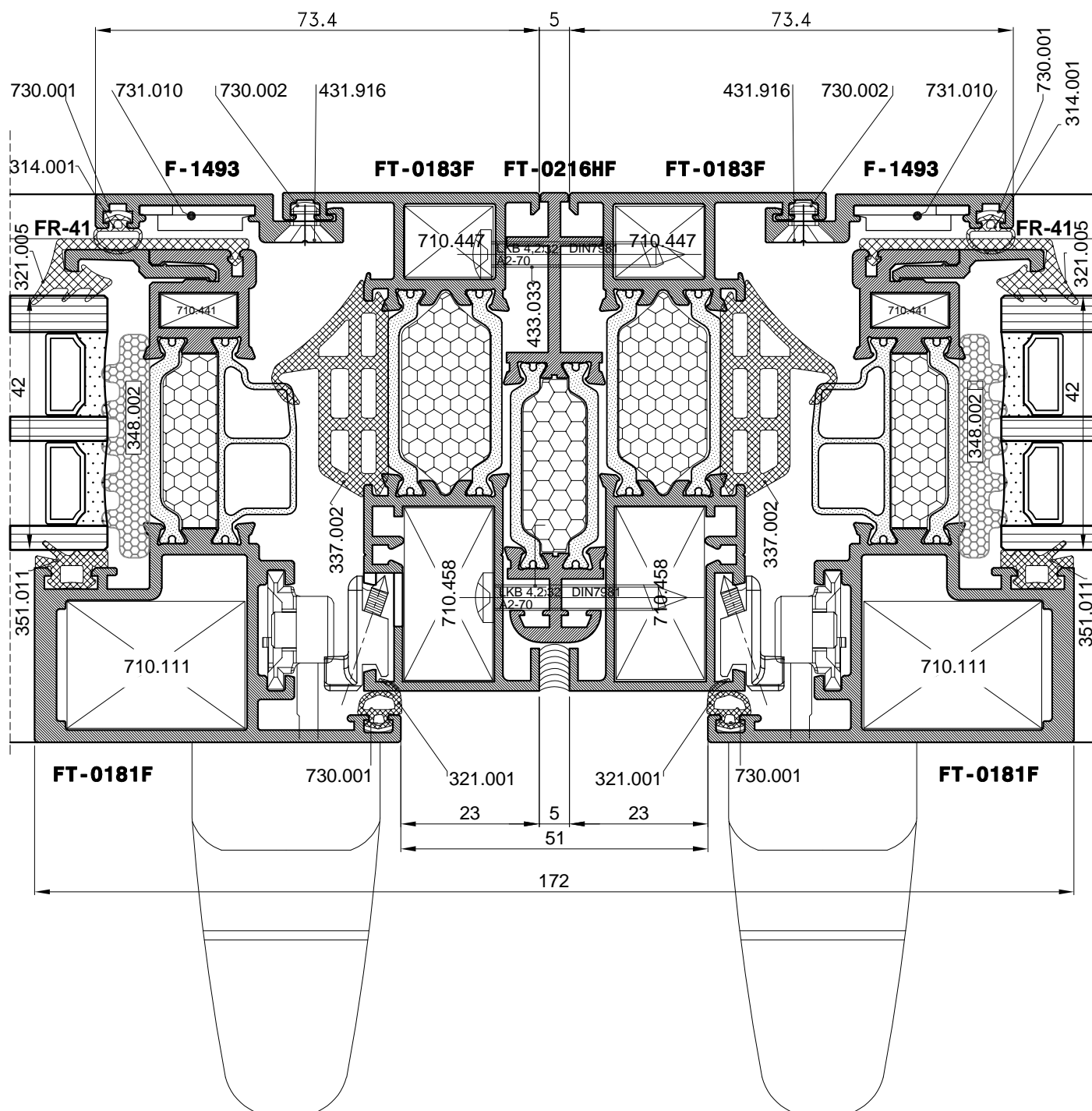
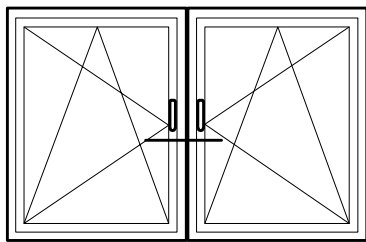


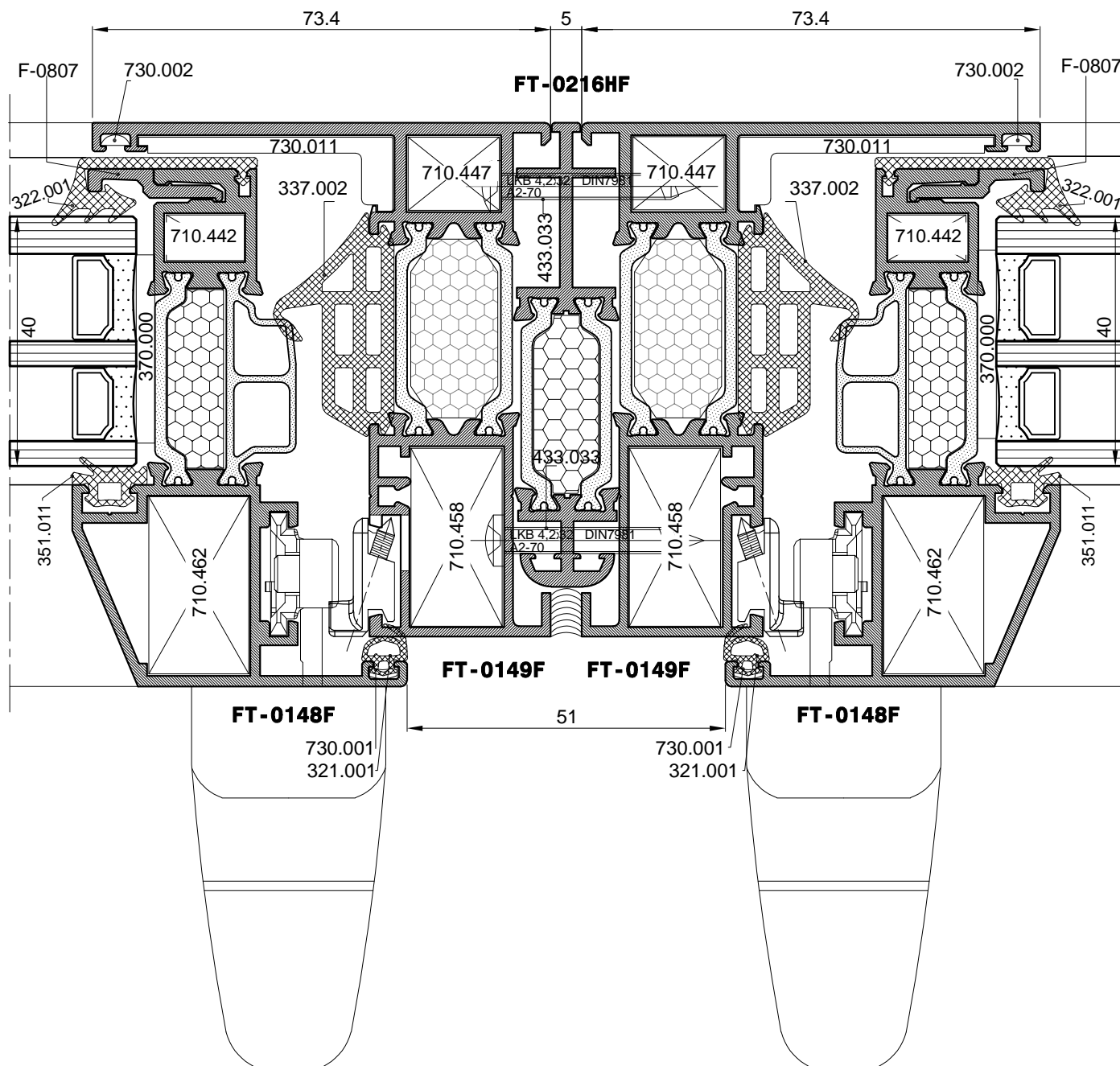
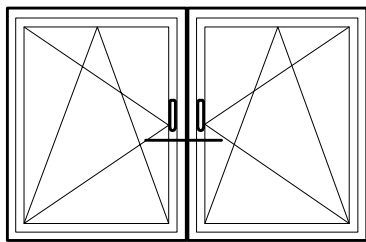


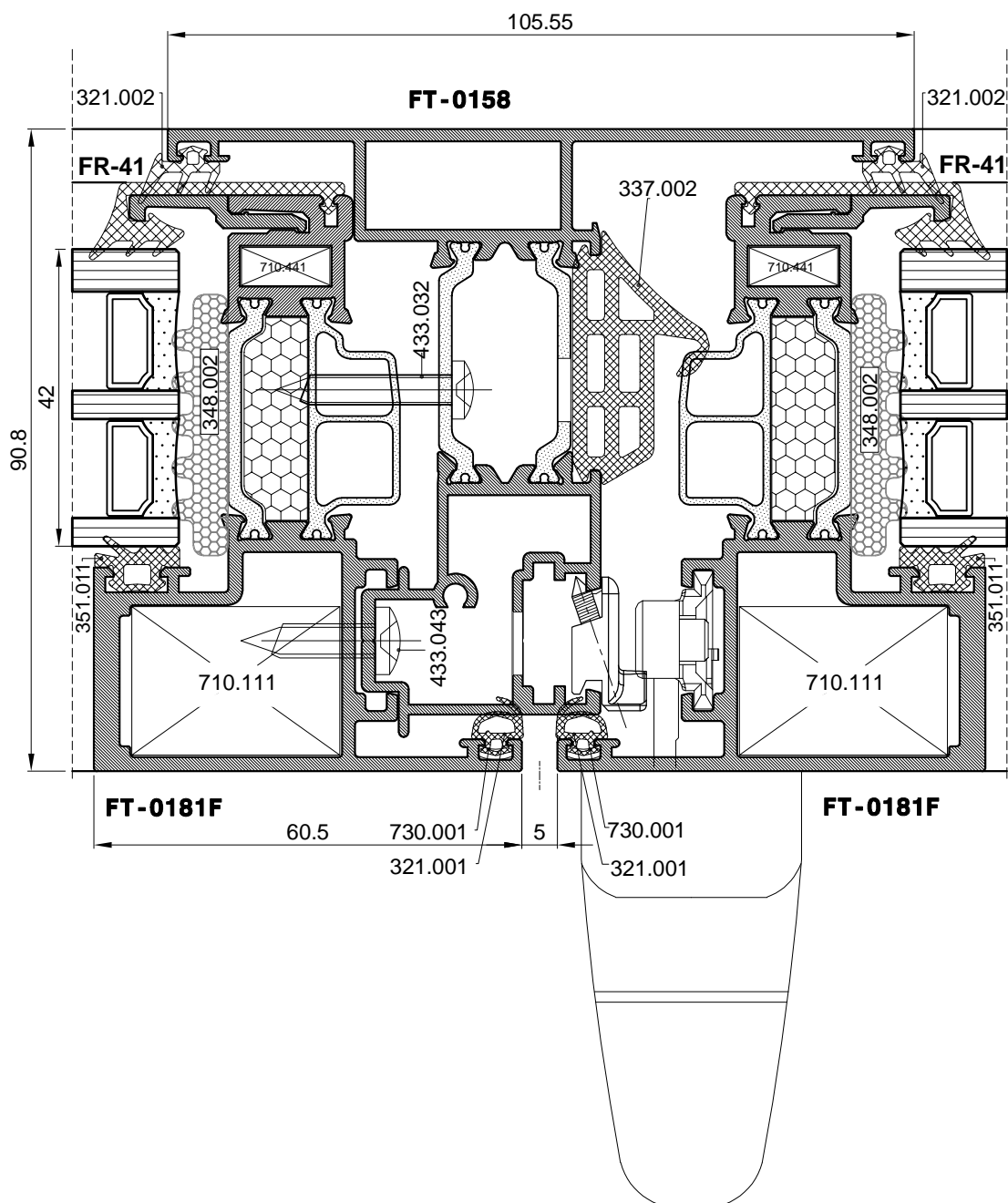
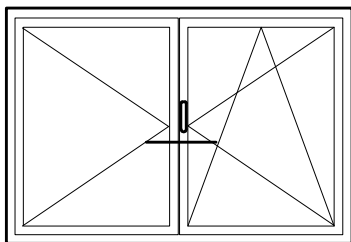


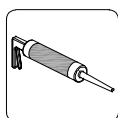
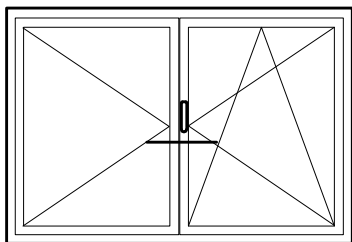




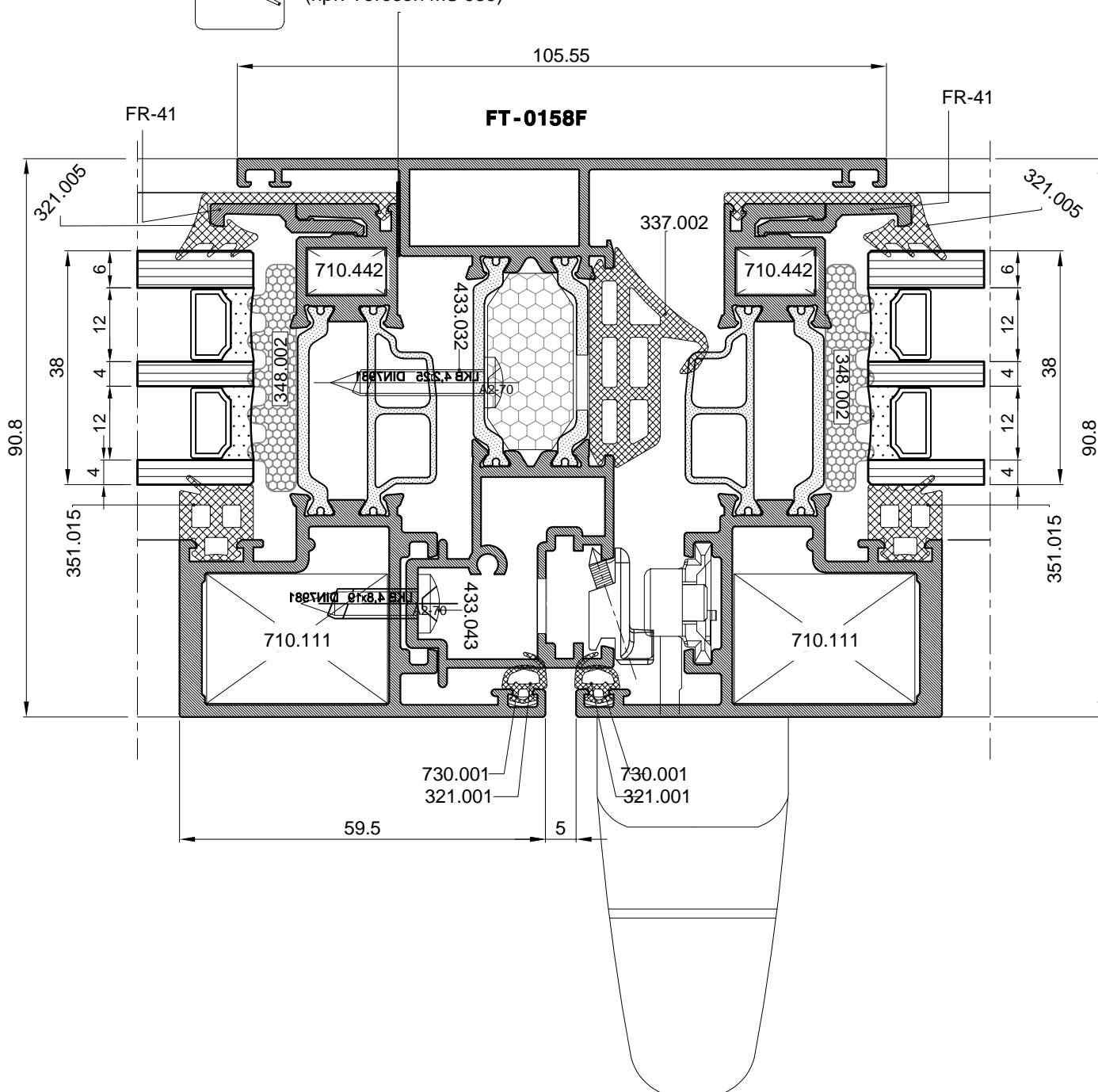


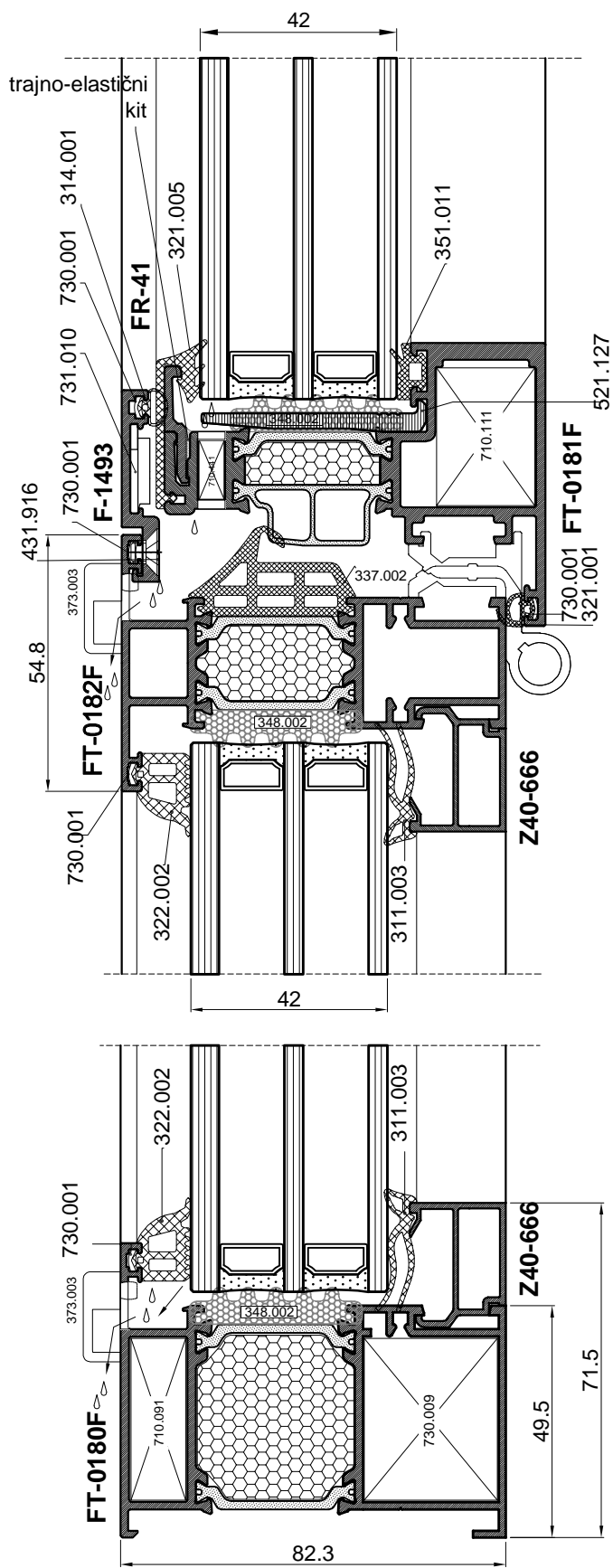
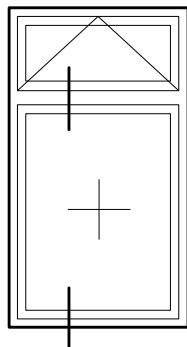


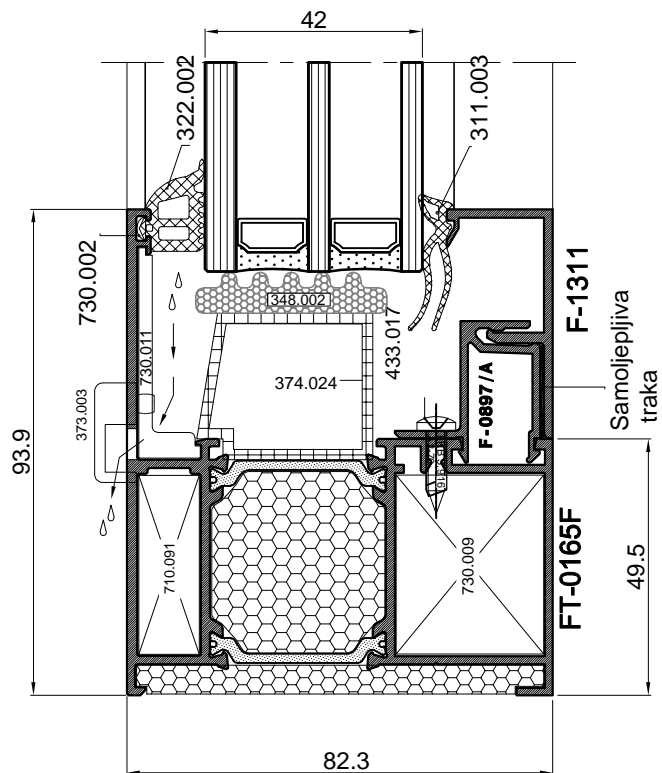
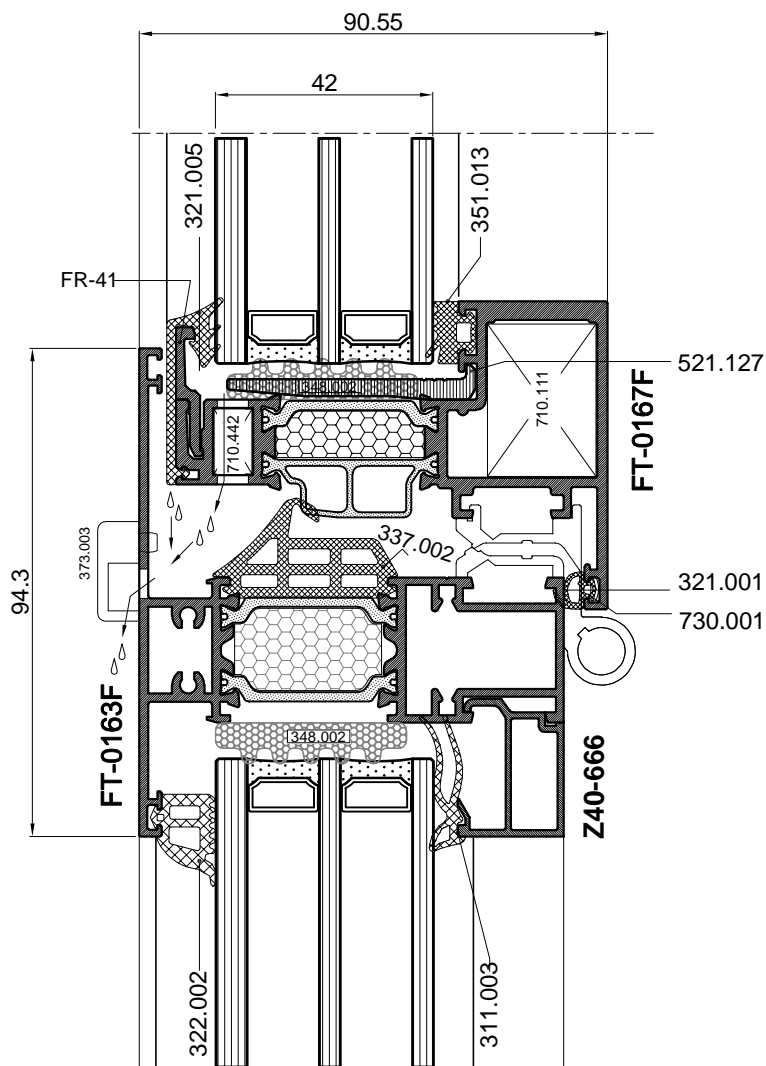
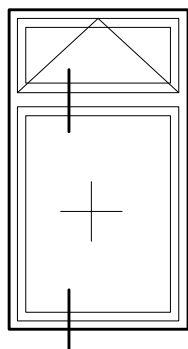


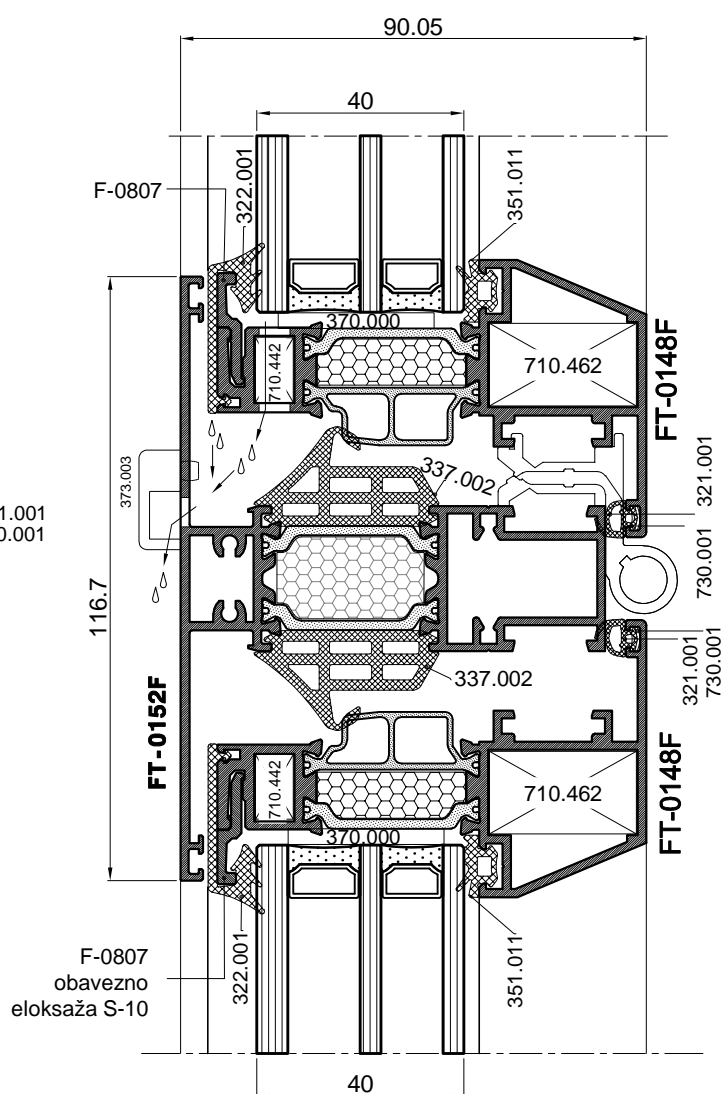
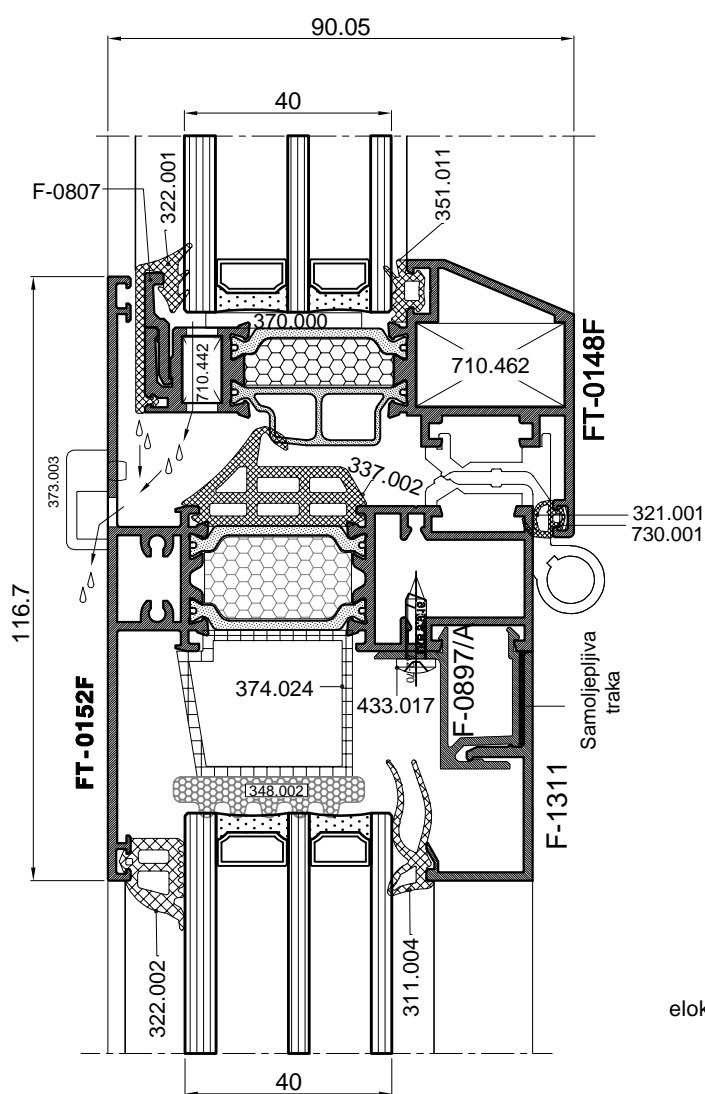
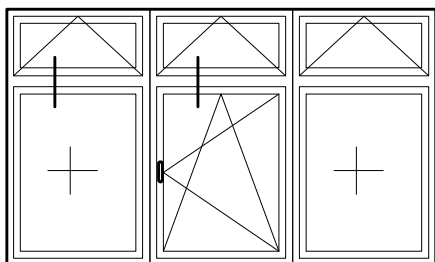


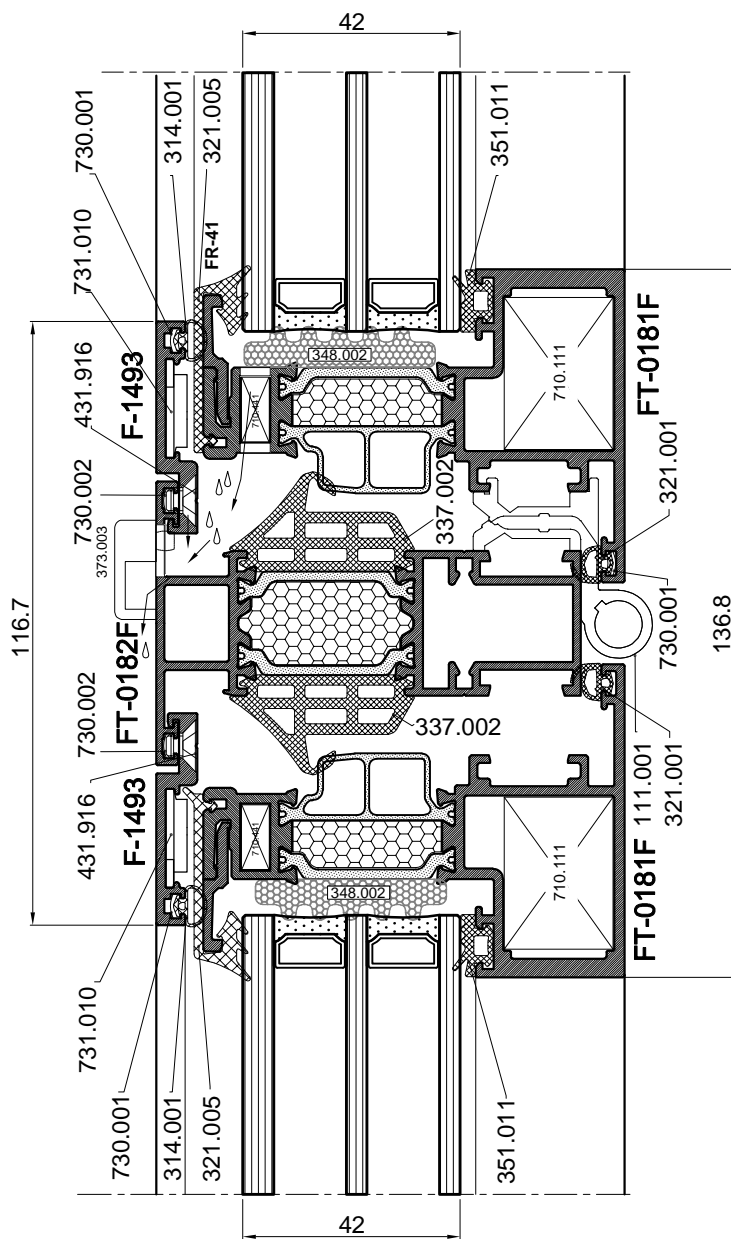
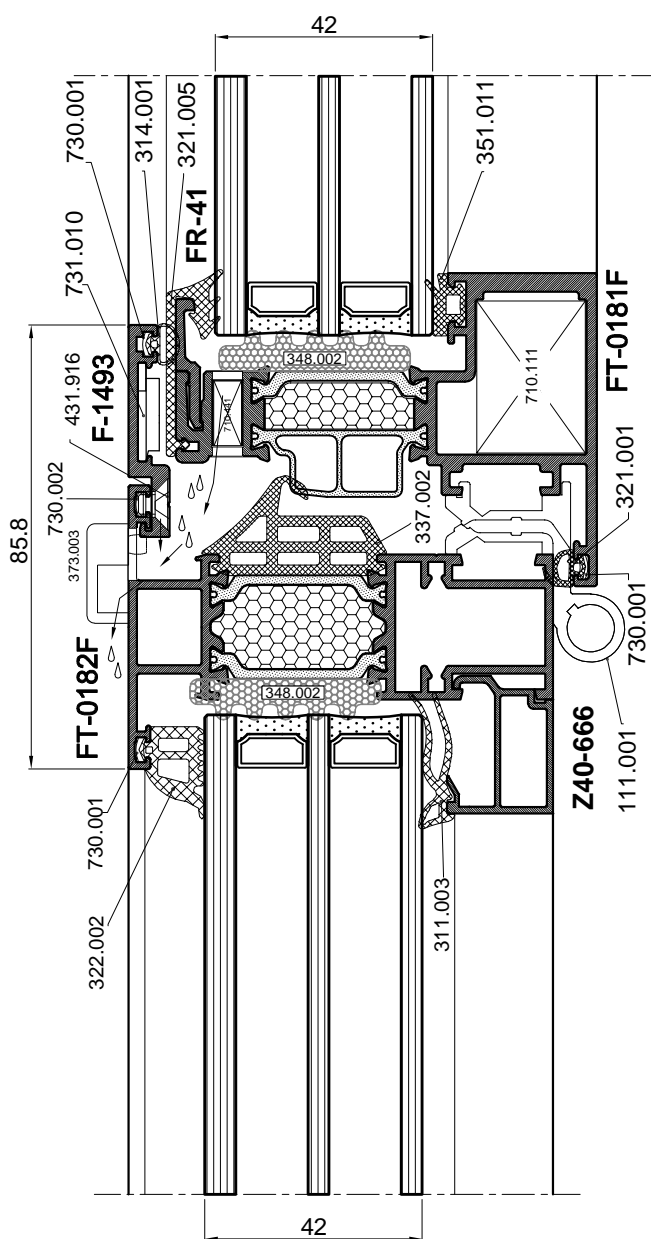
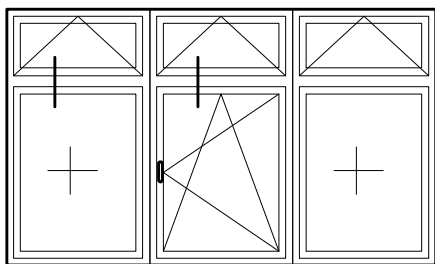
ljepilo za metal  
(npr. Teroson MS 939)

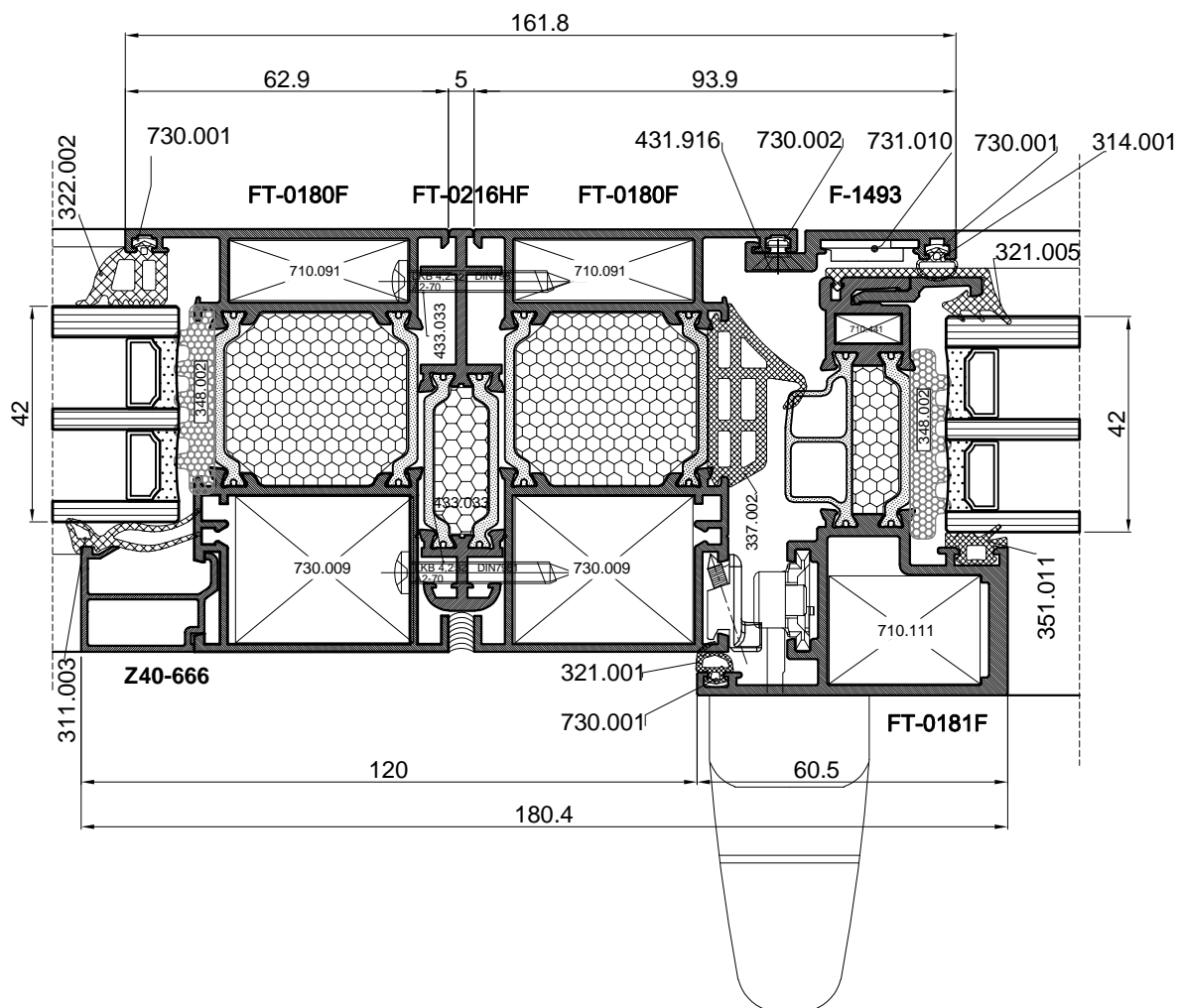
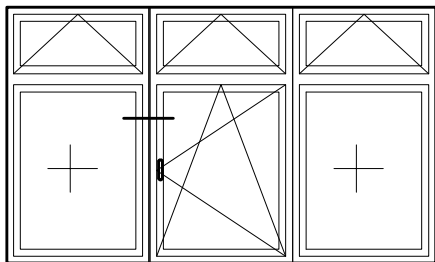


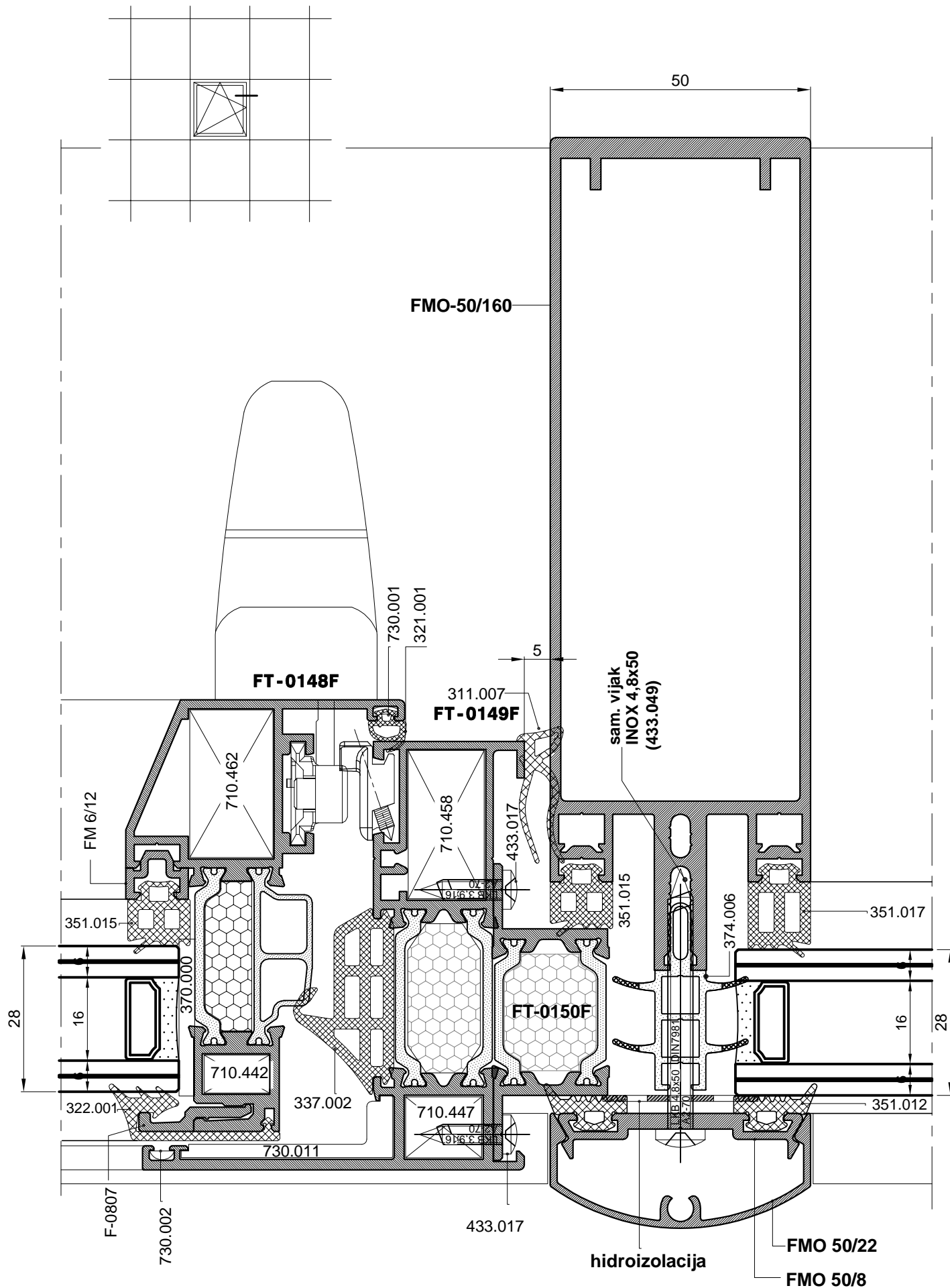


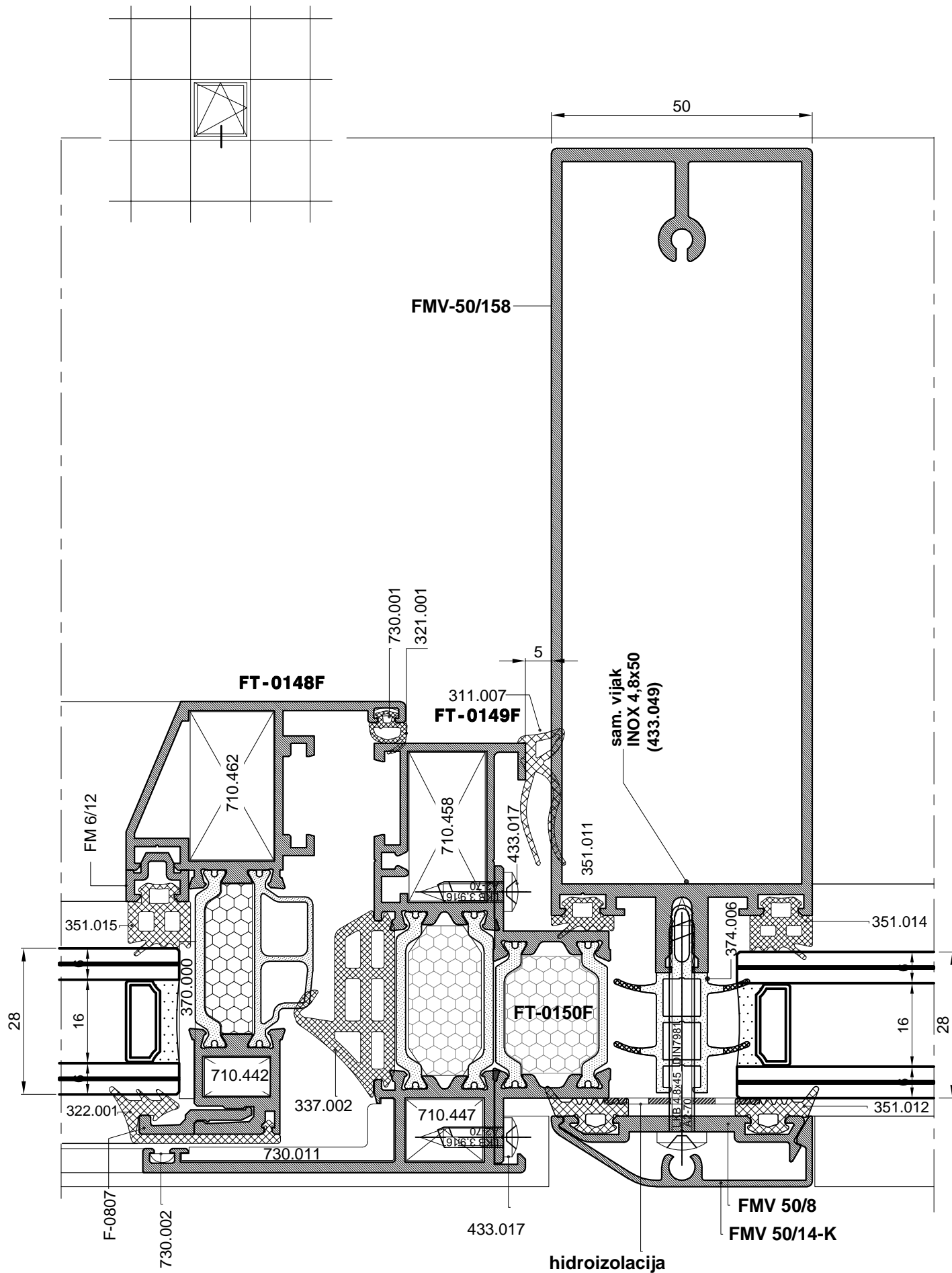


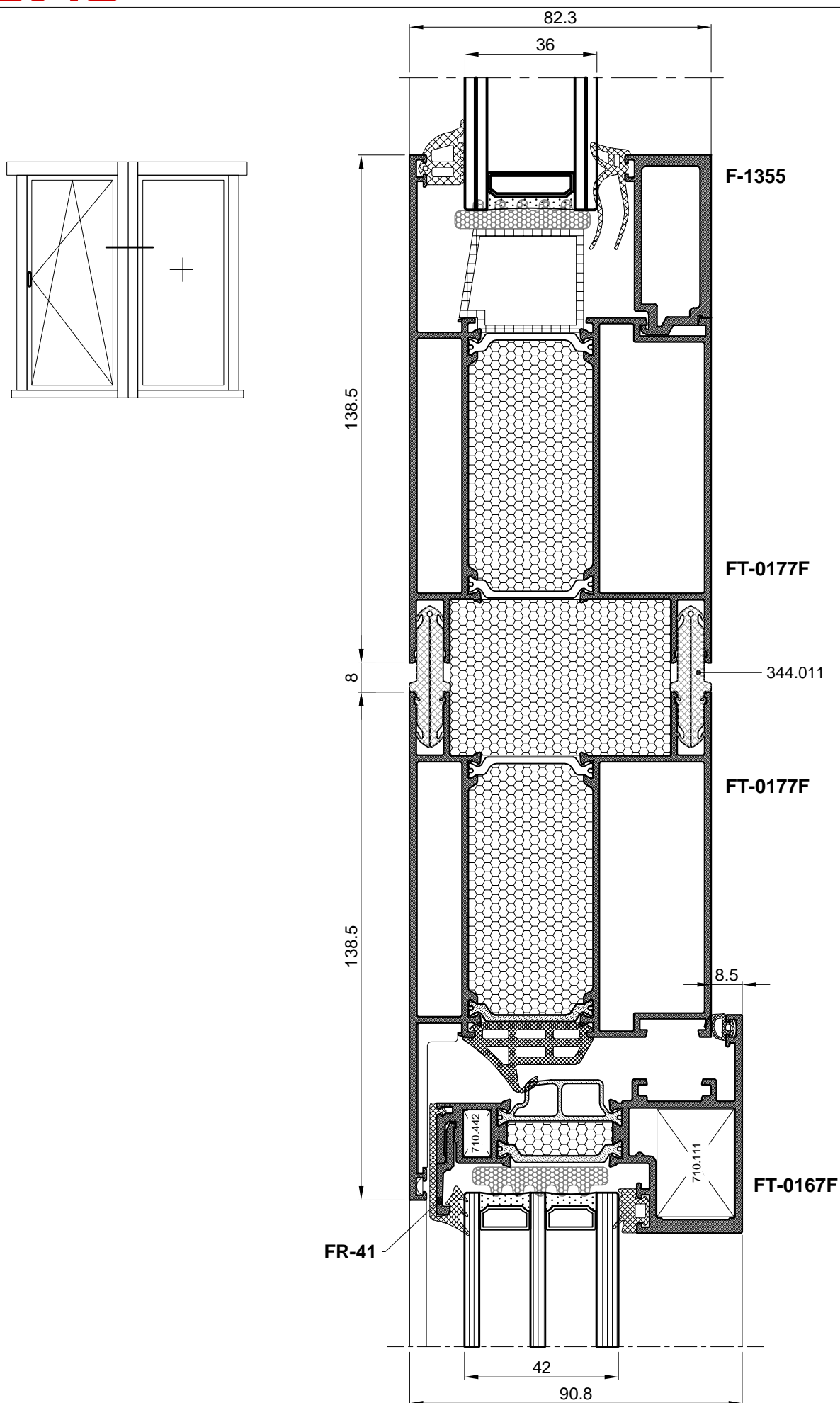










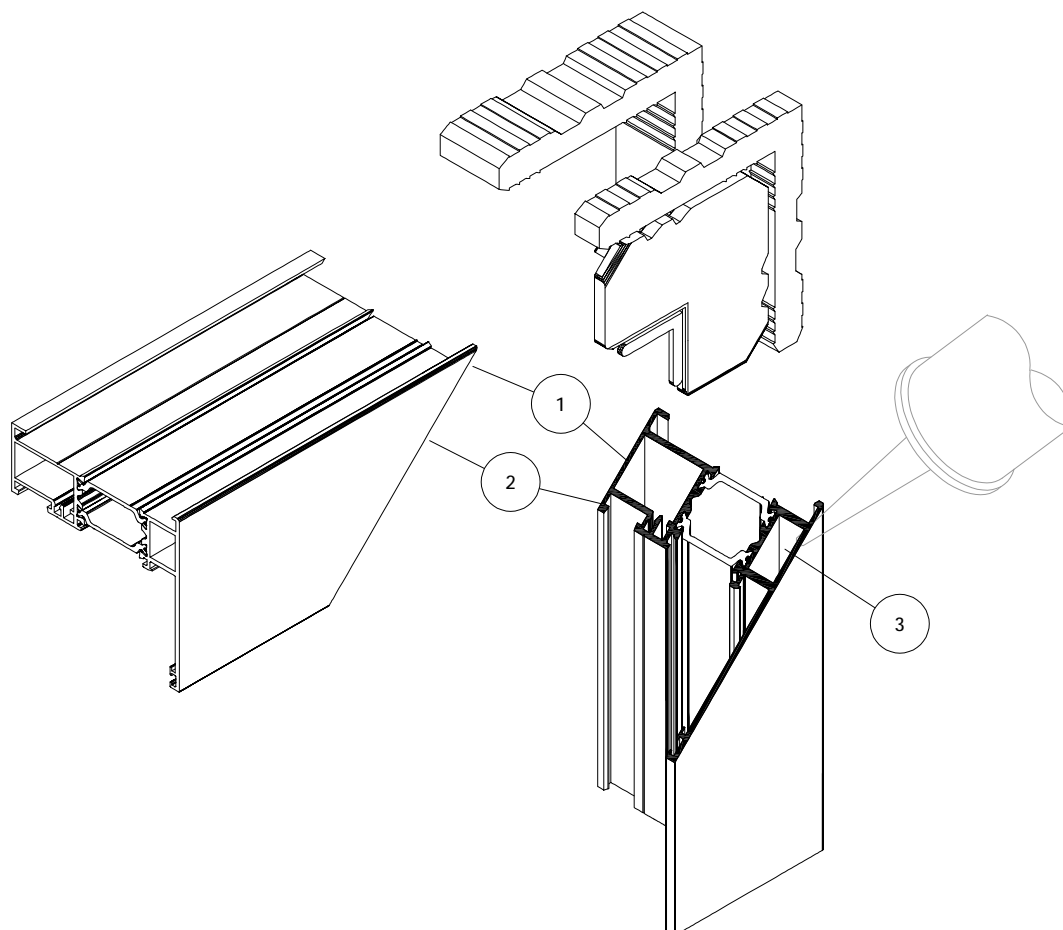




# Obrada i montaža



## SPAJANJE PROFILA KUTNICIMA POD 90°



## POSTUPAK SPAJANJA PROFILA:

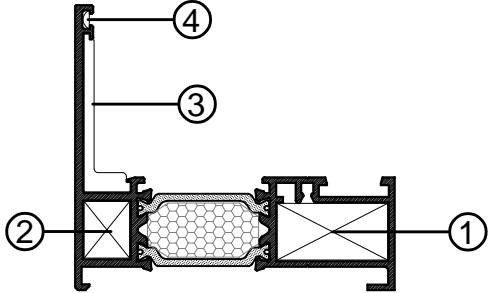
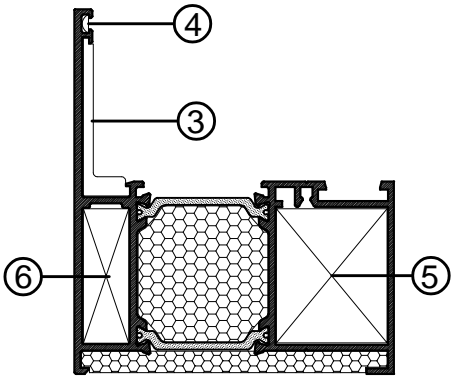
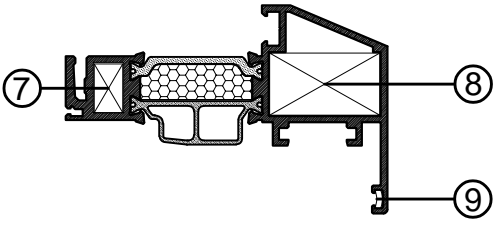
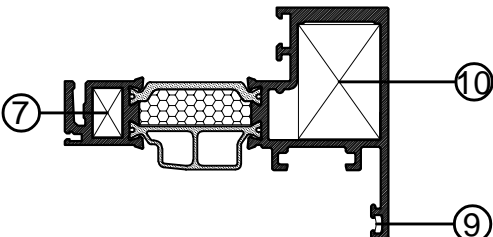
1. Površine koje se spajaju-rezove očistiti i odmastiti prikladnim sredstvom /npr. Sika Remover 208; Wurth-kat.br.:892 130 30/.
2. Premazati površine koje se spajaju ljepilom za metal /npr. Sika Force 7851; Wurth-kat.br.:892 130 010/.
3. Ljepilo za metal ušpricati u komoru za kutnik - po opsegu komore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

## NAPOMENA:

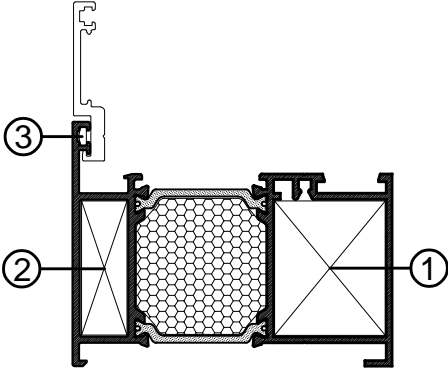
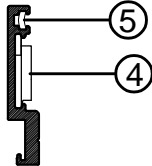
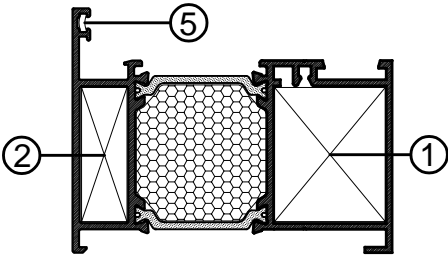
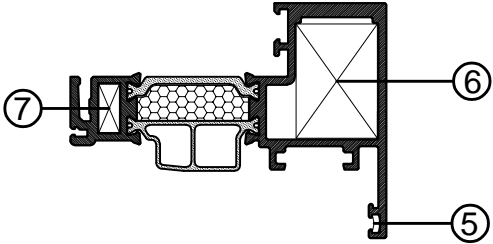
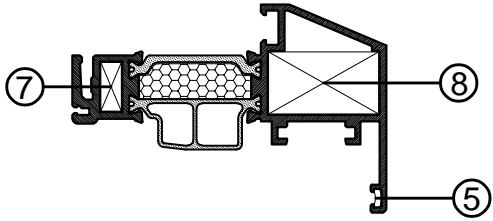
Ovaj postupak spajanja profila primjenjiv je za sve Feal-ove kutnike i njima odgovarajuće komore:

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

### PRIKAZ KUTNIKA U PROFILIMA

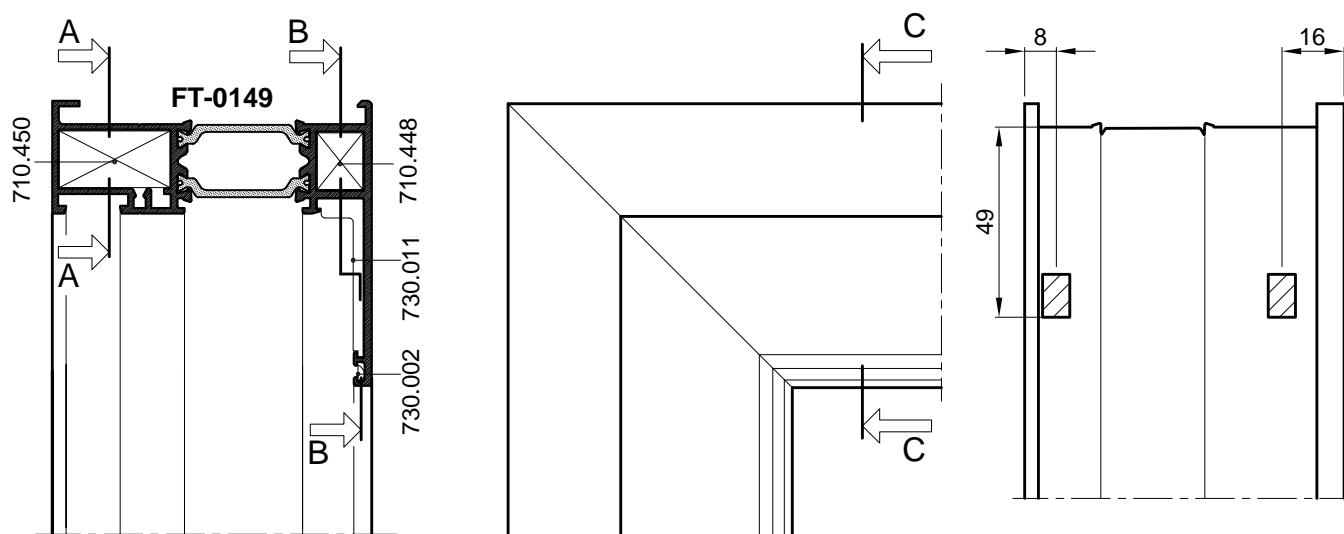
<p><b>FT-0149F</b></p>		<table border="1"> <tbody> <tr> <td rowspan="3">①</td> <td>710.458</td> </tr> <tr> <td>710.450</td> </tr> <tr> <td>730.008</td> </tr> <tr> <td rowspan="2">②</td> <td>710.447</td> </tr> <tr> <td>710.448</td> </tr> <tr> <td>③</td> <td>730.011</td> </tr> <tr> <td>④</td> <td>730.002</td> </tr> </tbody> </table>	①	710.458	710.450	730.008	②	710.447	710.448	③	730.011	④	730.002	
①	710.458													
	710.450													
	730.008													
②	710.447													
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③	730.011													
④	730.002													
<p><b>FT-0165F</b></p>		<table border="1"> <tbody> <tr> <td rowspan="2">⑤</td> <td>710.072</td> </tr> <tr> <td>730.009</td> </tr> <tr> <td>⑥</td> <td>710.091</td> </tr> <tr> <td>④</td> <td>730.002</td> </tr> <tr> <td>③</td> <td>730.011</td> </tr> </tbody> </table>	⑤	710.072	730.009	⑥	710.091	④	730.002	③	730.011			
⑤	710.072													
	730.009													
⑥	710.091													
④	730.002													
③	730.011													
<p><b>FT-0148F</b></p>		<table border="1"> <tbody> <tr> <td>⑦</td> <td>710.442</td> </tr> <tr> <td rowspan="2">⑧</td> <td>710.462</td> </tr> <tr> <td>710.469</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </tbody> </table>	⑦	710.442	⑧	710.462	710.469	⑨	730.001					
⑦	710.442													
⑧	710.462													
	710.469													
⑨	730.001													
<p><b>FT-0167F</b></p>		<table border="1"> <tbody> <tr> <td>⑦</td> <td>710.442</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> <tr> <td rowspan="2">⑩</td> <td>710.111</td> </tr> <tr> <td>710.112</td> </tr> </tbody> </table>	⑦	710.442	⑨	730.001	⑩	710.111	710.112					
⑦	710.442													
⑨	730.001													
⑩	710.111													
	710.112													

### PRIKAZ KUTNIKA U PROFILIMA

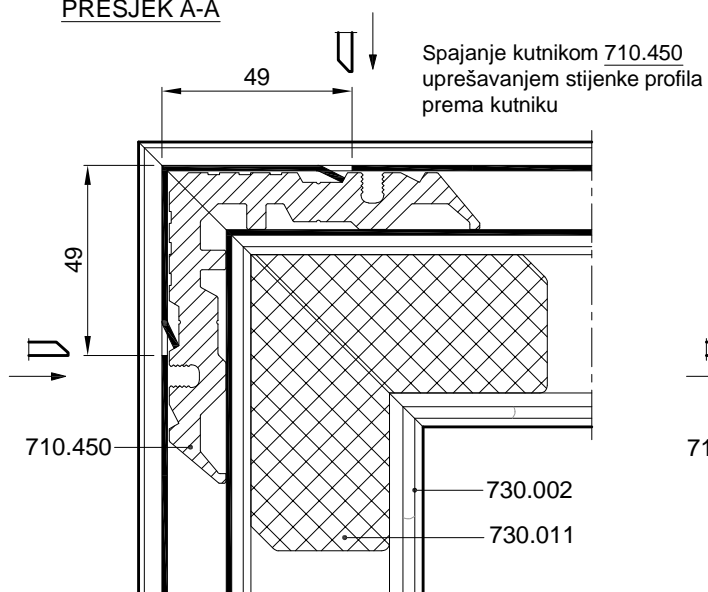
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①	710.072									
	730.009									
②	710.091									
③	730.002									
<p>F-1493</p>		<table border="1"> <tbody> <tr> <td>④</td> <td>731.010</td> </tr> <tr> <td>⑤</td> <td>730.001</td> </tr> </tbody> </table>	④	731.010	⑤	730.001				
④	731.010									
⑤	730.001									
<p>FT-0180F</p>		<table border="1"> <tbody> <tr> <td rowspan="2">①</td> <td>710.072</td> </tr> <tr> <td>730.009</td> </tr> <tr> <td>②</td> <td>710.091</td> </tr> <tr> <td>⑤</td> <td>730.001</td> </tr> </tbody> </table>	①	710.072	730.009	②	710.091	⑤	730.001	
①	710.072									
	730.009									
②	710.091									
⑤	730.001									
<p>FT-0181F</p>		<table border="1"> <tbody> <tr> <td>⑤</td> <td>730.001</td> </tr> <tr> <td rowspan="2">⑥</td> <td>710.111</td> </tr> <tr> <td>710.112</td> </tr> <tr> <td>⑦</td> <td>710.441</td> </tr> </tbody> </table>	⑤	730.001	⑥	710.111	710.112	⑦	710.441	
⑤	730.001									
⑥	710.111									
	710.112									
⑦	710.441									
<p>FT-0184F</p>		<table border="1"> <tbody> <tr> <td>⑤</td> <td>730.001</td> </tr> <tr> <td>⑦</td> <td>710.441</td> </tr> <tr> <td rowspan="2">⑧</td> <td>710.462</td> </tr> <tr> <td>710.469</td> </tr> </tbody> </table>	⑤	730.001	⑦	710.441	⑧	710.462	710.469	
⑤	730.001									
⑦	710.441									
⑧	710.462									
	710.469									

SPAJANJE PROFILA FT-0149 KUTNICIMA : 710.450 ; 710.448

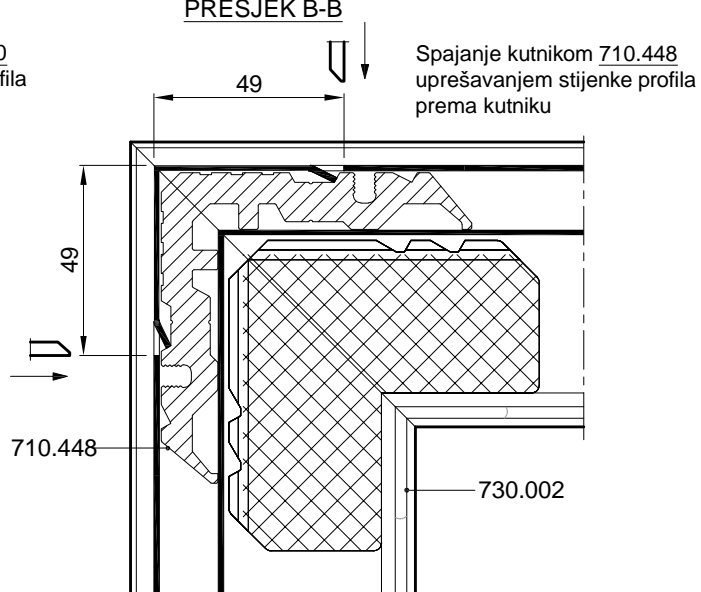
PRESJEK C-C



PRESJEK A-A



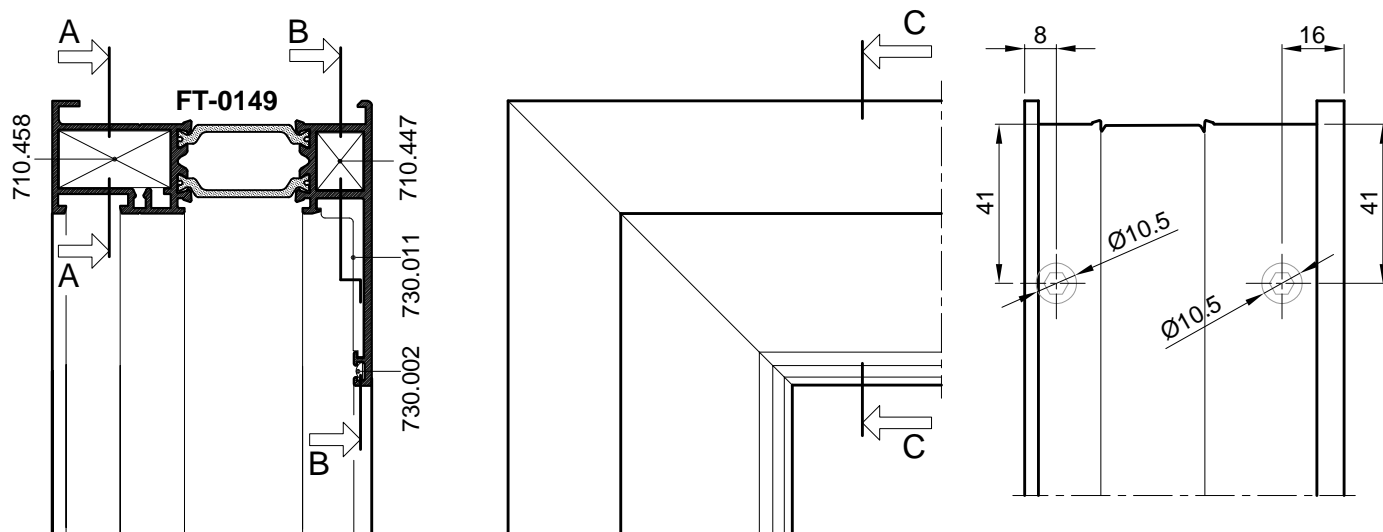
PRESJEK B-B



- |  |
|--|
| <ol style="list-style-type: none"> <li>1. STROJNO UPREŠAVANJE</li> <li>2. RUČNO UPREŠAVANJE-ŠKARAMA</li> </ol> |
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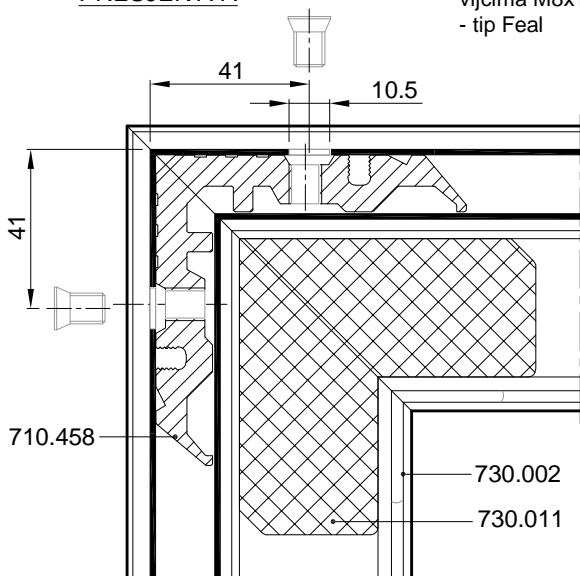
### SPAJANJE PROFILA FT-0149 KUTNICIMA : 710.458 ; 710.447

**PRESJEK C-C**



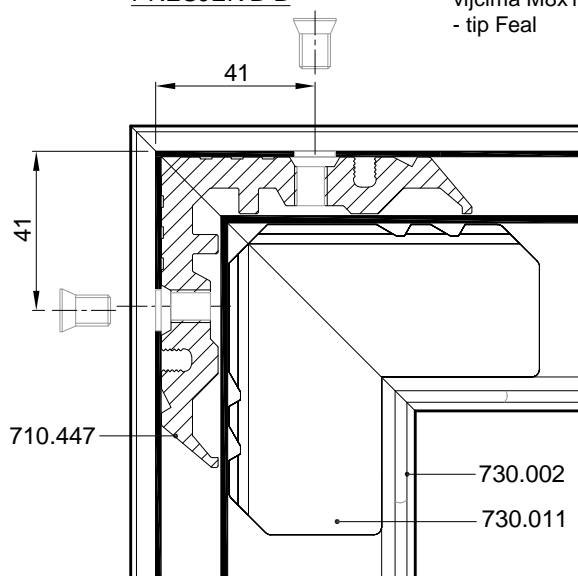
**PRESJEK A-A**

Spajanje kutnikom 710.458  
vijcima M8x13 (431.266)  
- tip Feal



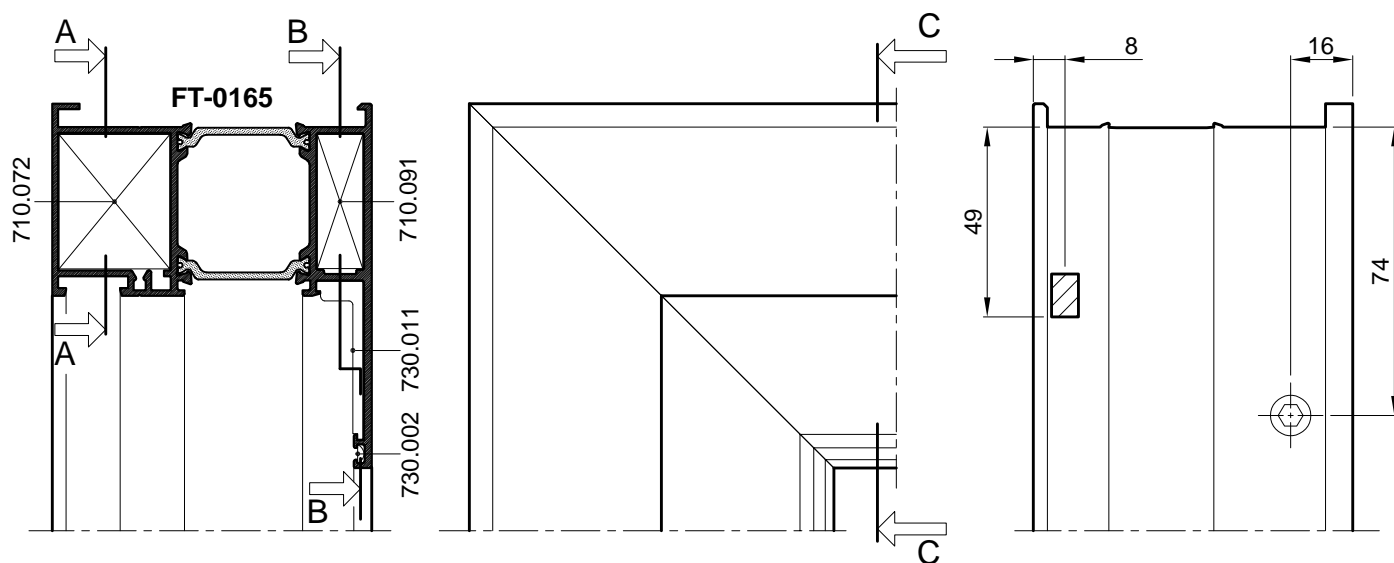
**PRESJEK B-B**

Spajanje kutnikom 710.447  
vijcima M8x13 (431.266)  
- tip Feal

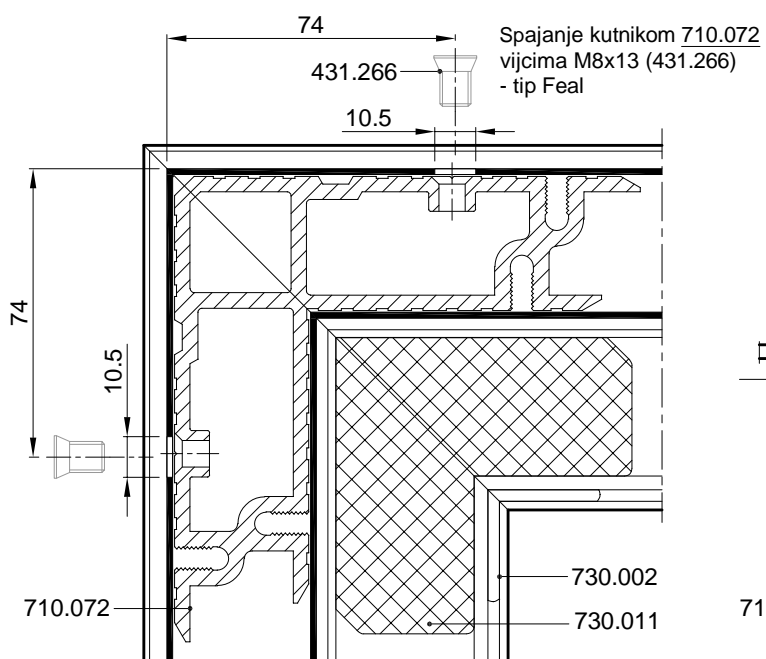


### SPAJANJE PROFILA FT-0165 KUTNICIMA : 710.072 ; 710.091

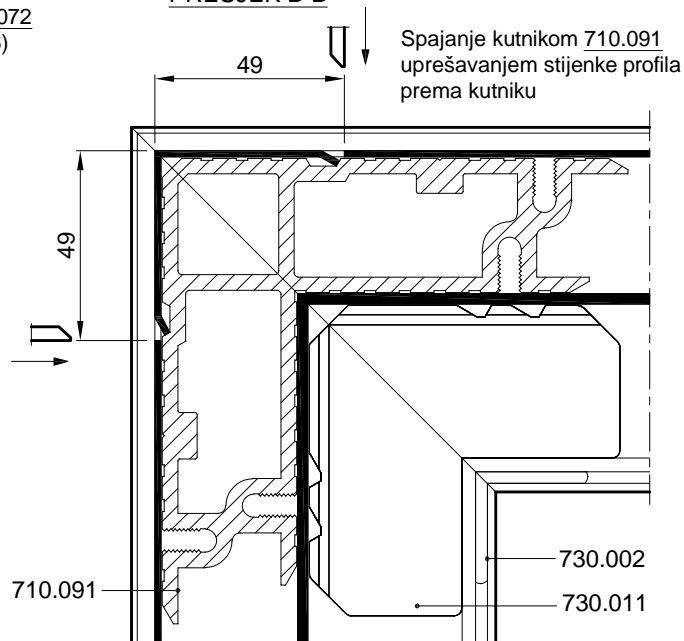
PRESJEK C-C



PRESJEK A-A

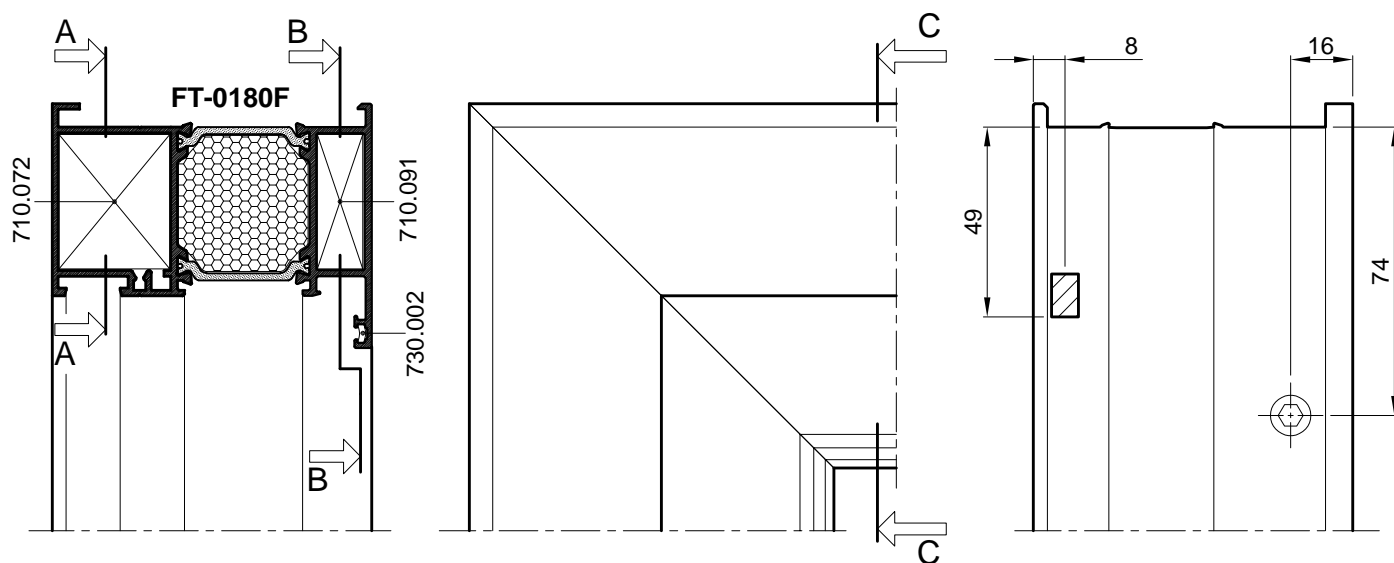


PRESJEK B-B

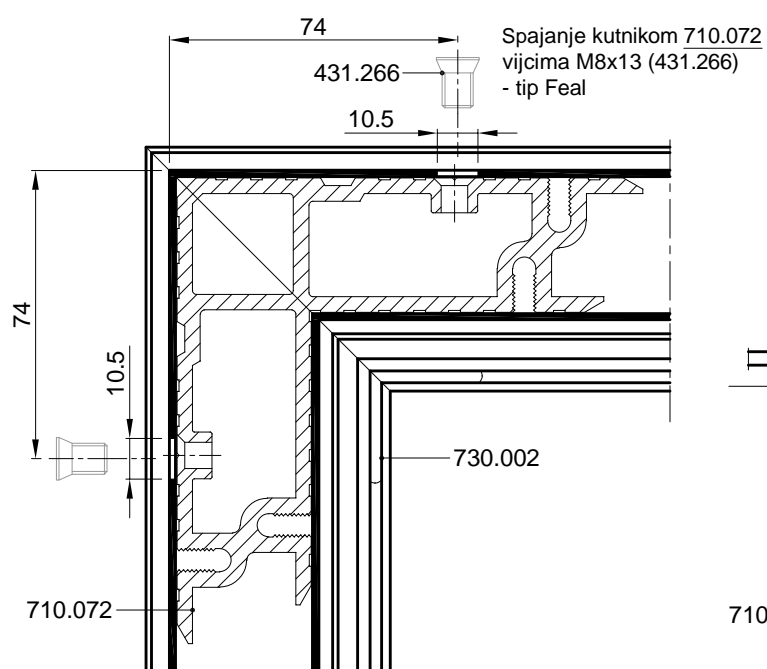


### SPAJANJE PROFILA FT-0180F KUTNICIMA : 710.072 ; 710.091

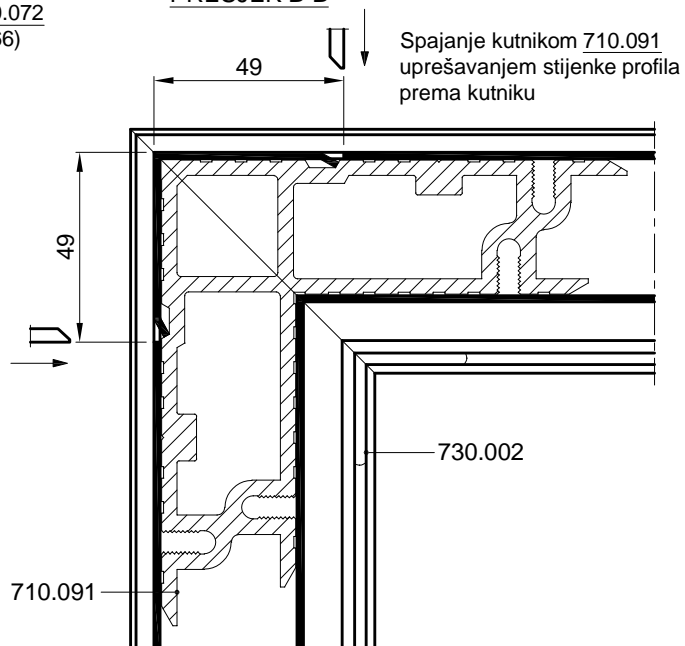
PRESJEK C-C



PRESJEK A-A

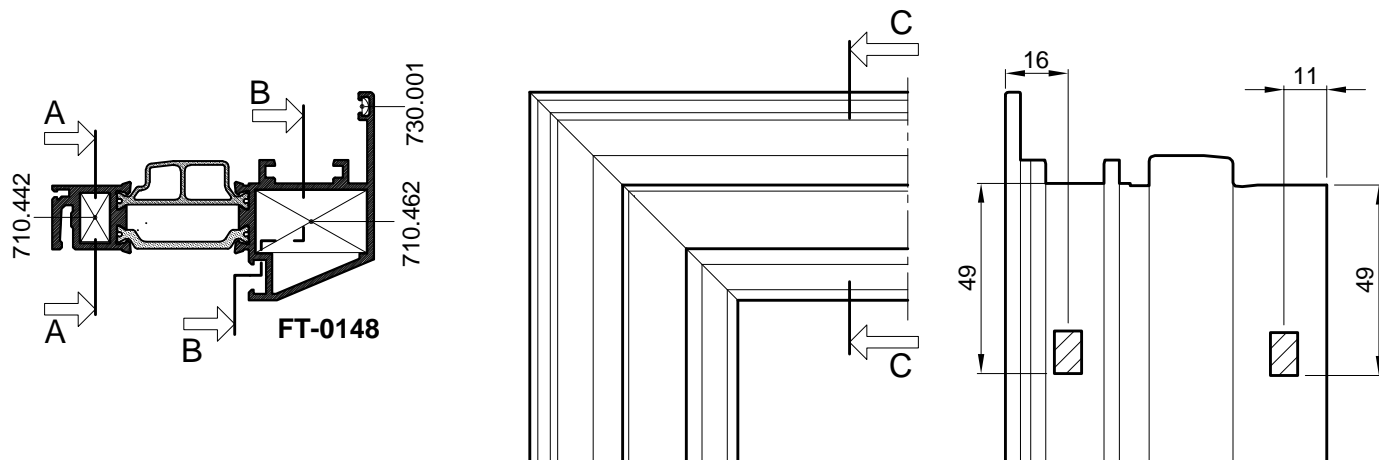


PRESJEK B-B

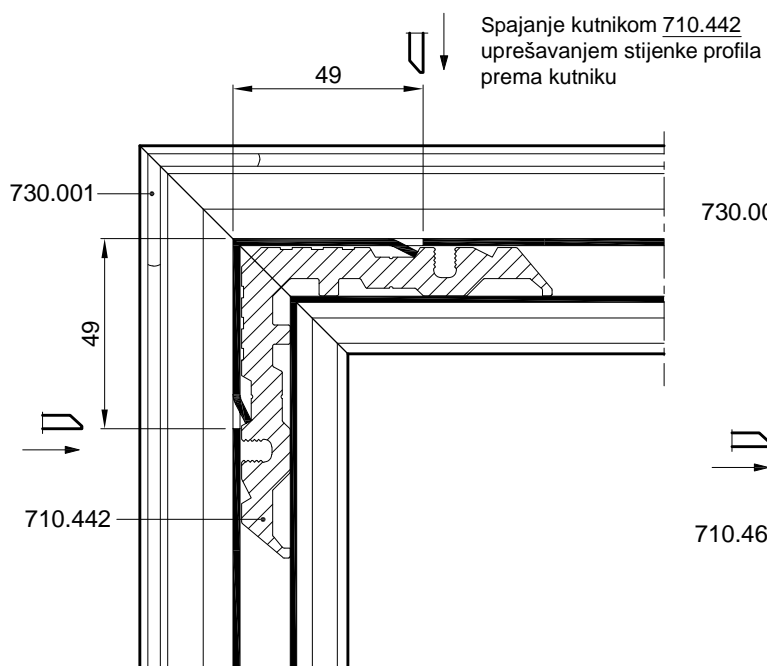


### SPAJANJE PROFILA FT-0148 KUTNICIMA : 710.442 ; 710.462

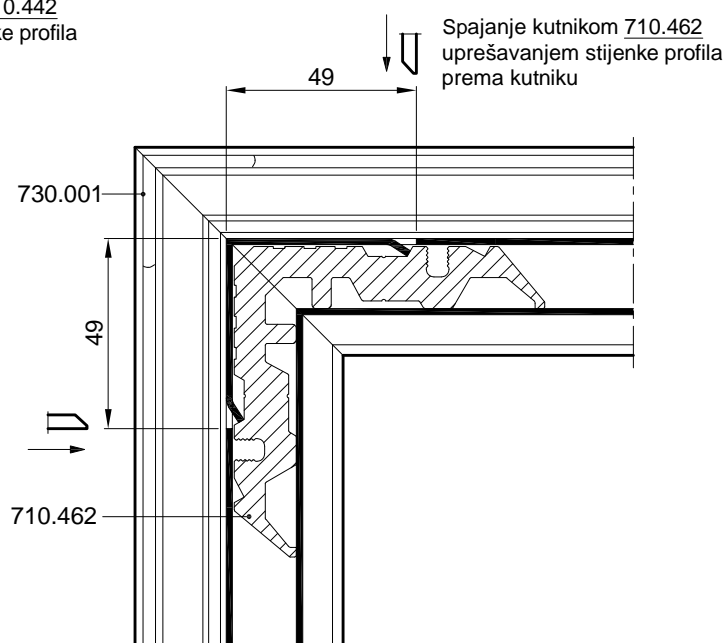
PRESJEK C-C



PRESJEK A-A



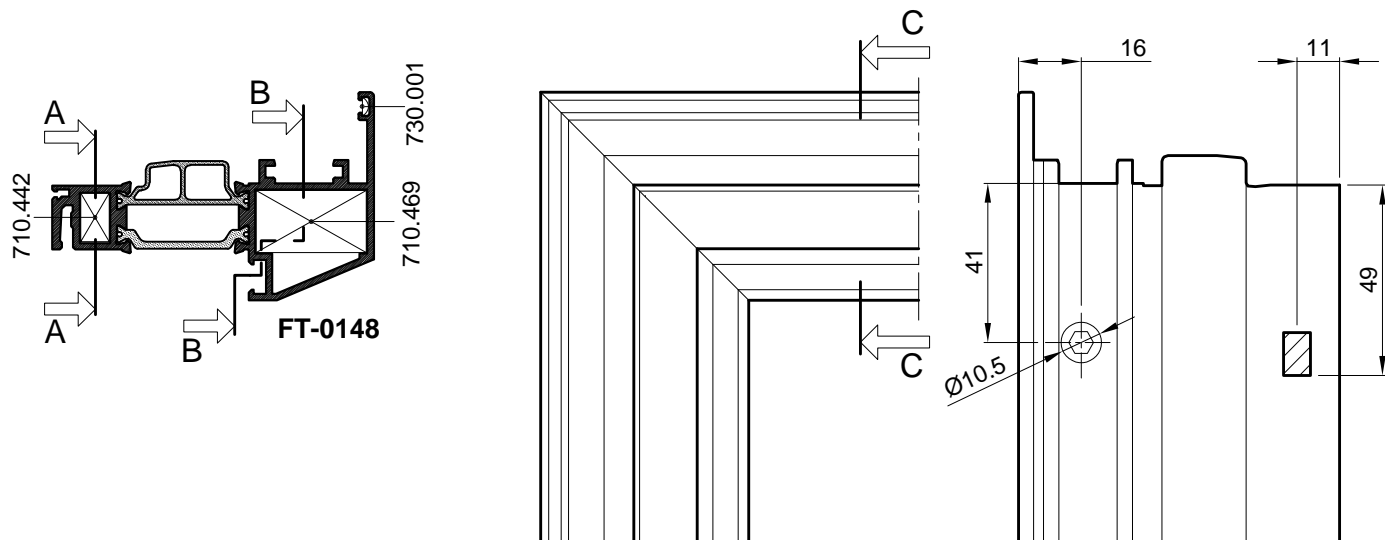
PRESJEK B-B



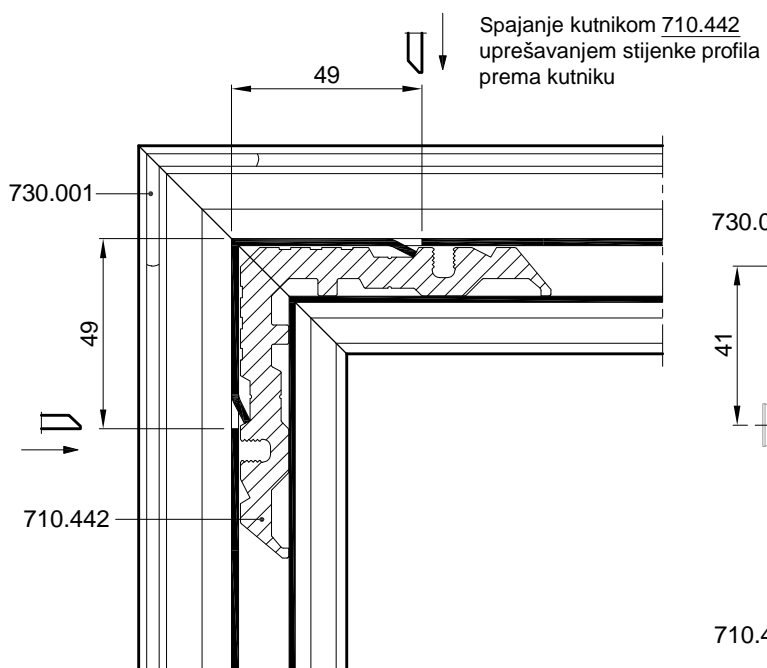
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|--|
| <ol style="list-style-type: none"> <li>1. STROJNO UPREŠAVANJE</li> <li>2. RUČNO UPREŠAVANJE-ŠKARAMA</li> </ol> |
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### SPAJANJE PROFILA FT-0148 KUTNICIMA : 710.442 ; 710.469

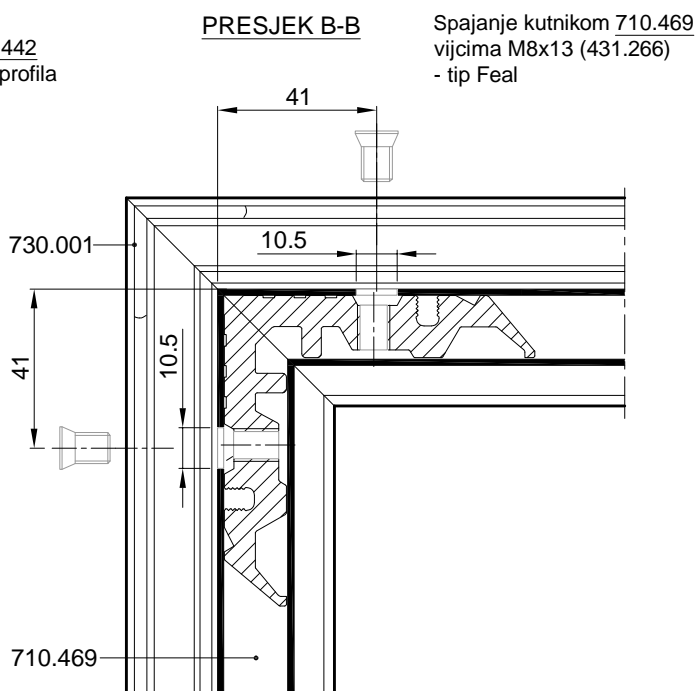
**PRESJEK C-C**



**PRESJEK A-A**

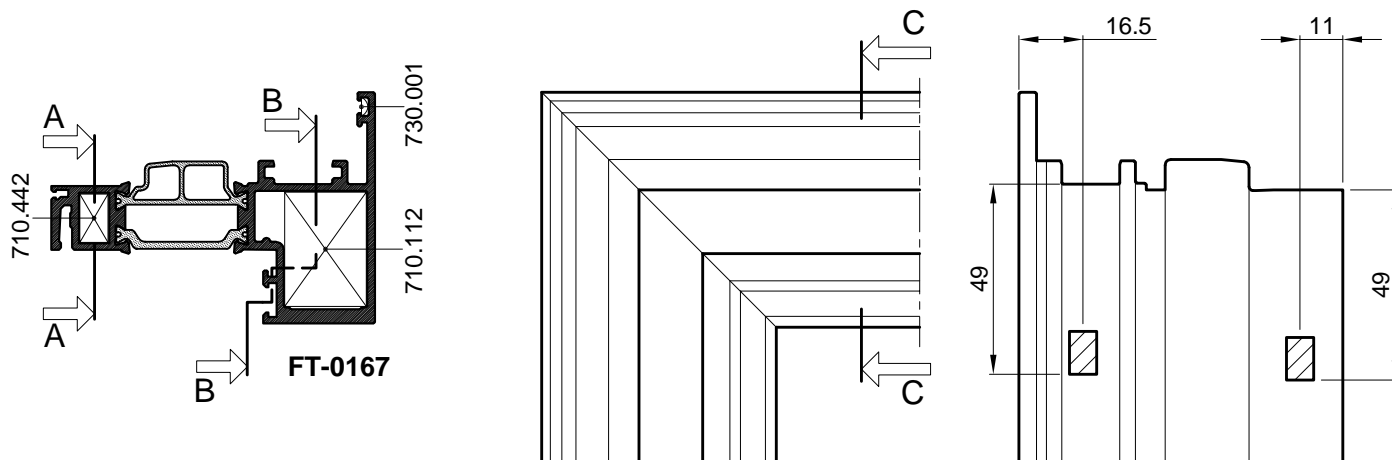


**PRESJEK B-B**

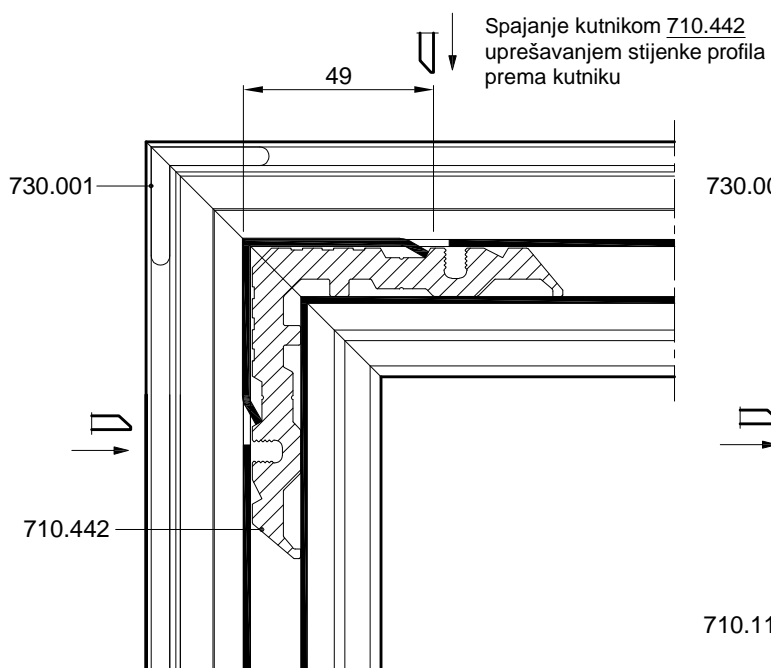


SPAJANJE PROFILA FT-0167 KUTNICIMA : 710.442 ; 710.112

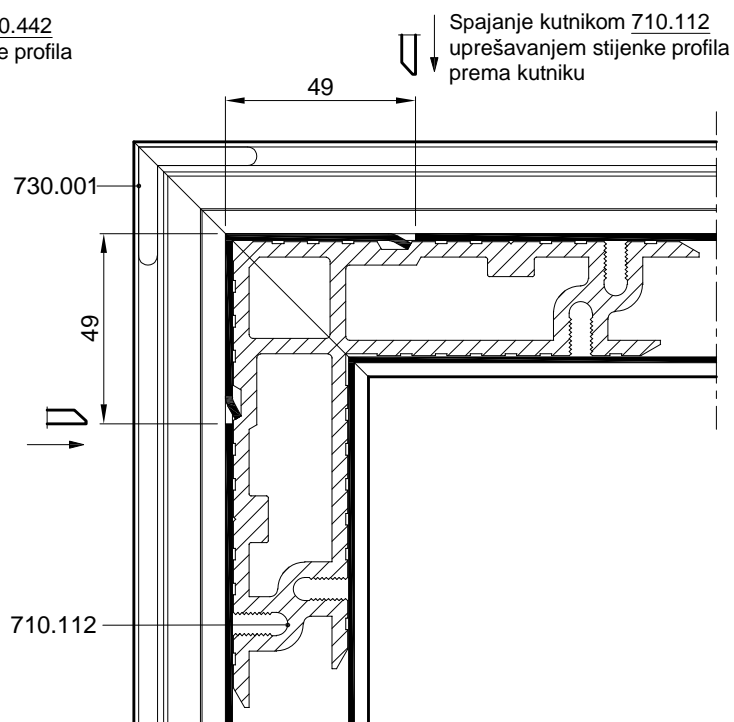
PRESJEK C-C



PRESJEK A-A



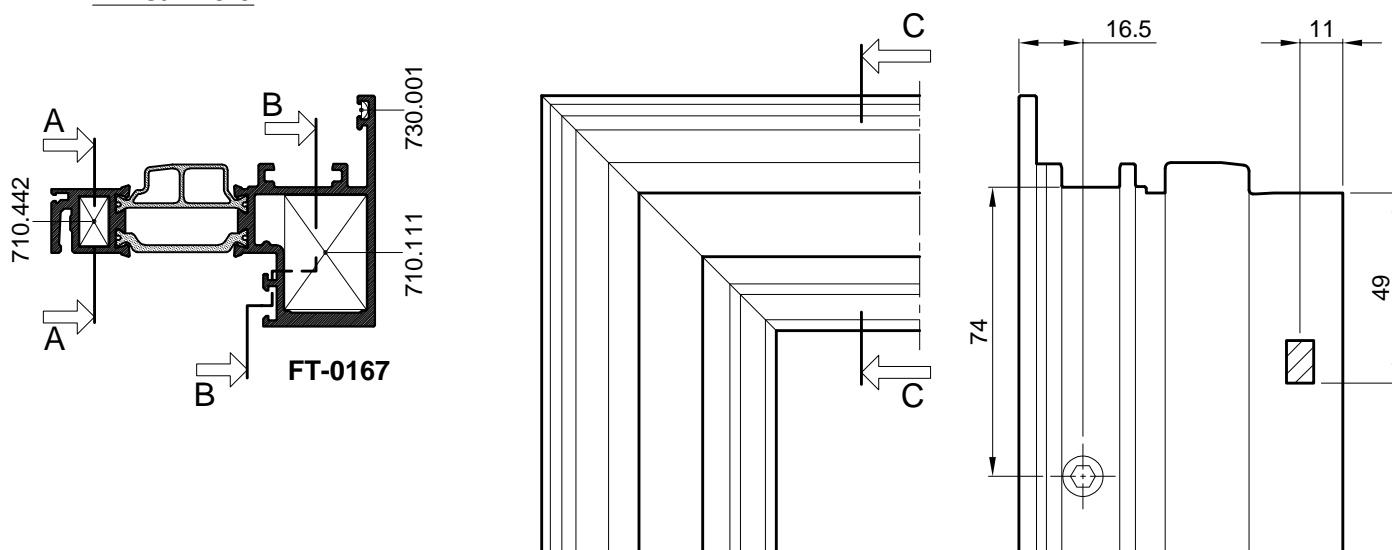
PRESJEK B-B



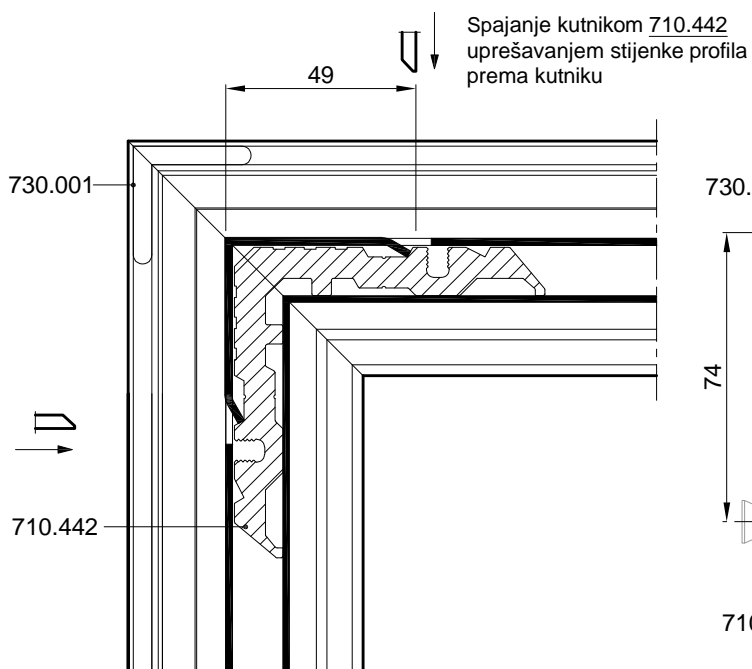
- |  |
|--|
| <ol style="list-style-type: none"> <li>1. STROJNO UPREŠAVANJE</li> <li>2. RUČNO UPREŠAVANJE-ŠKARAMA</li> </ol> |
|--|

### SPAJANJE PROFILA FT-0167 KUTNICIMA : 710.442 ; 710.111

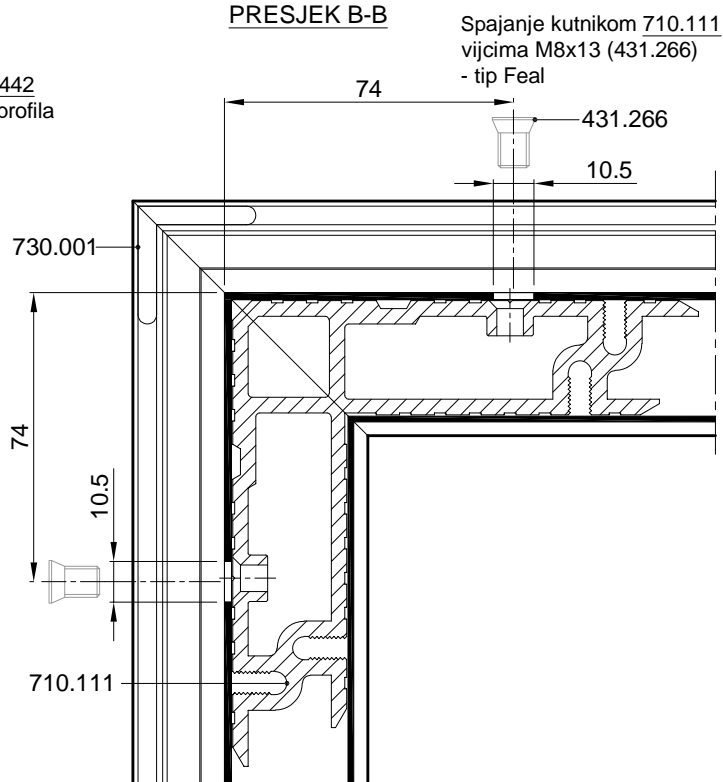
PRESJEK C-C



PRESJEK A-A

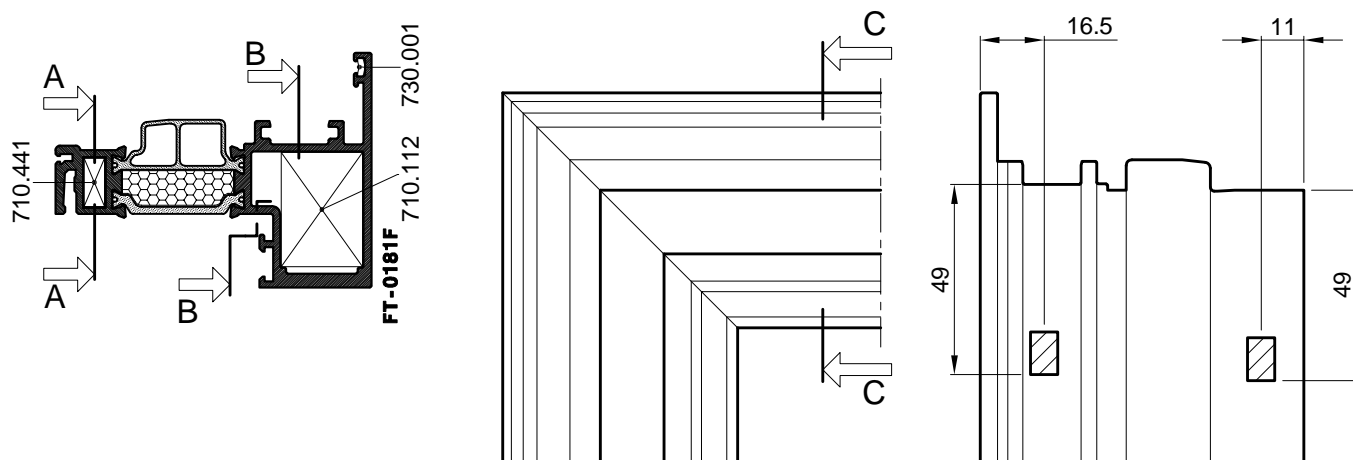


PRESJEK B-B

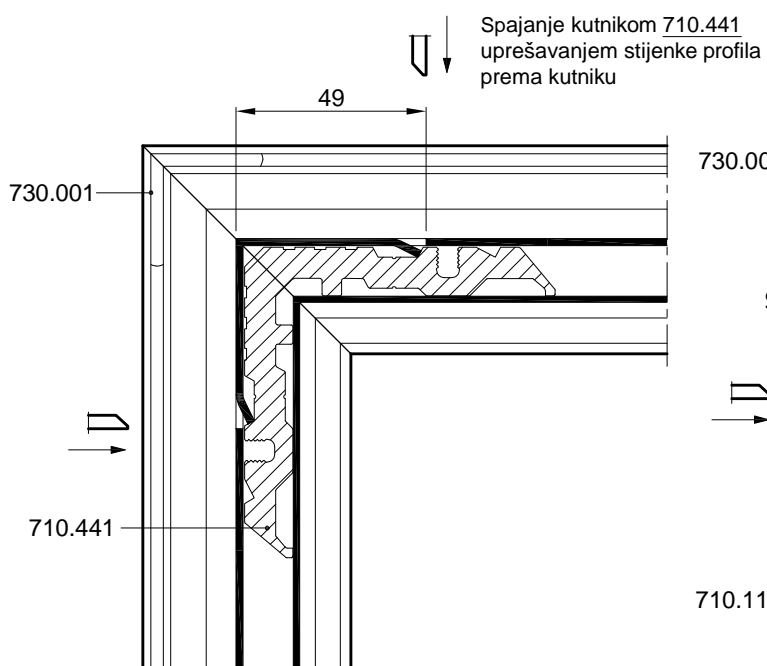


### SPAJANJE PROFILA FT-0181F KUTNICIMA : 710.441 ; 710.112

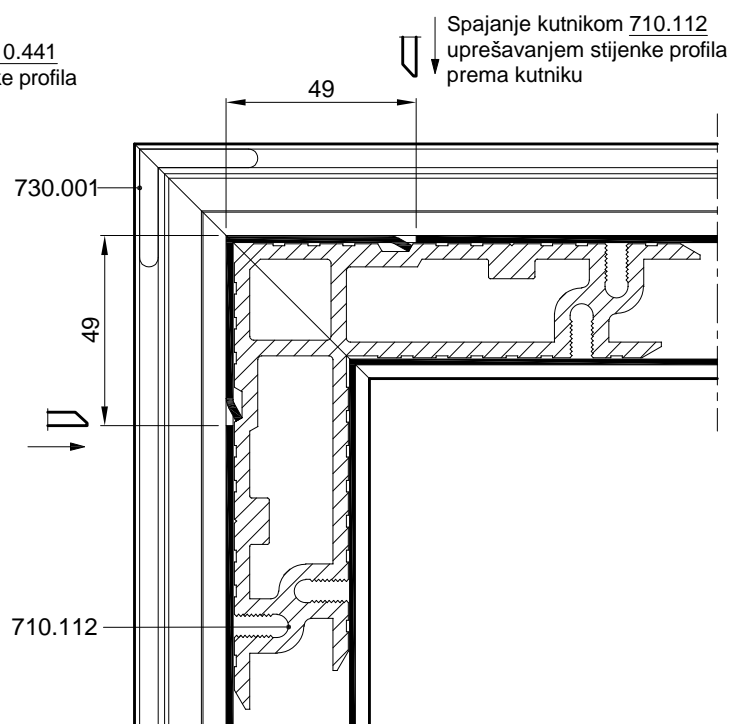
PRESJEK C-C



PRESJEK A-A



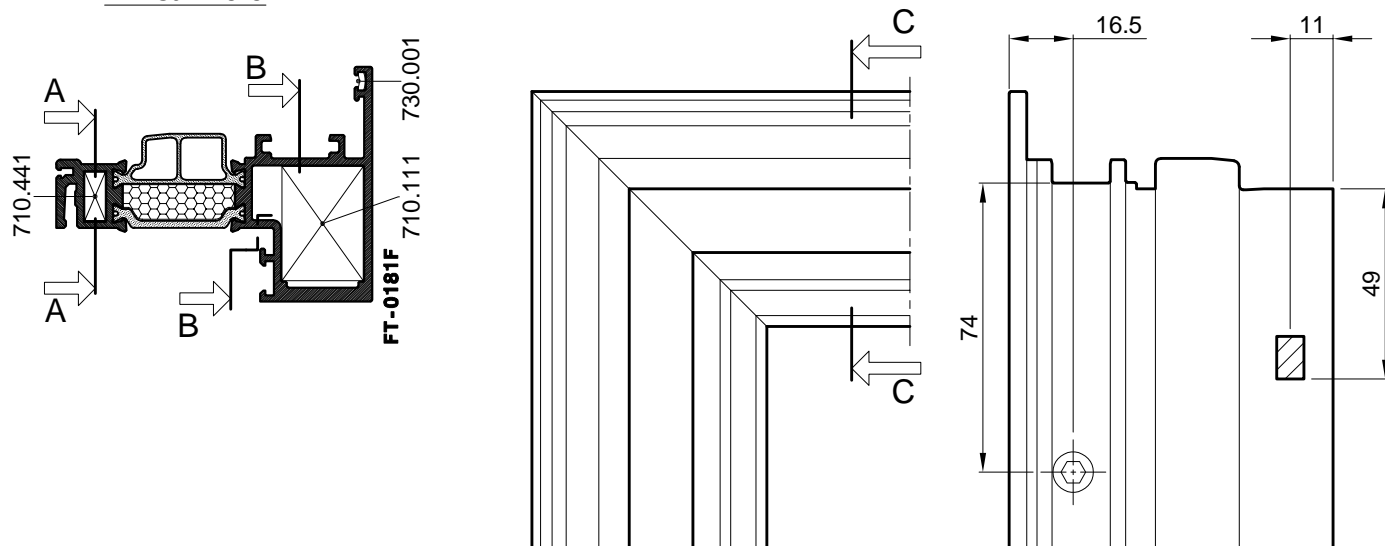
PRESJEK B-B



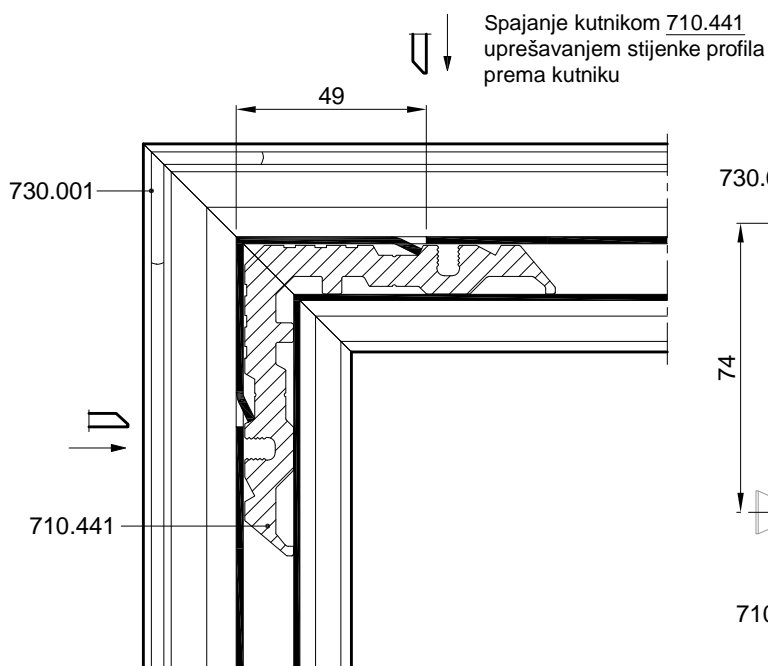
- |  |
|--|
| <ol style="list-style-type: none"> <li>1. STROJNO UPREŠAVANJE</li> <li>2. RUČNO UPREŠAVANJE-ŠKARAMA</li> </ol> |
|--|

### SPAJANJE PROFILA FT-0181F KUTNICIMA : 710.441 ; 710.111

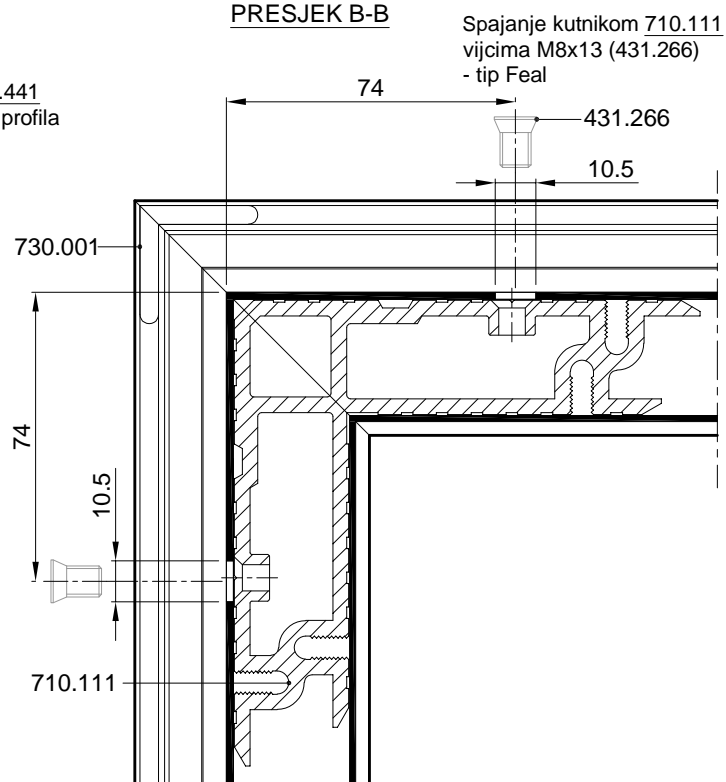
**PRESJEK C-C**



**PRESJEK A-A**

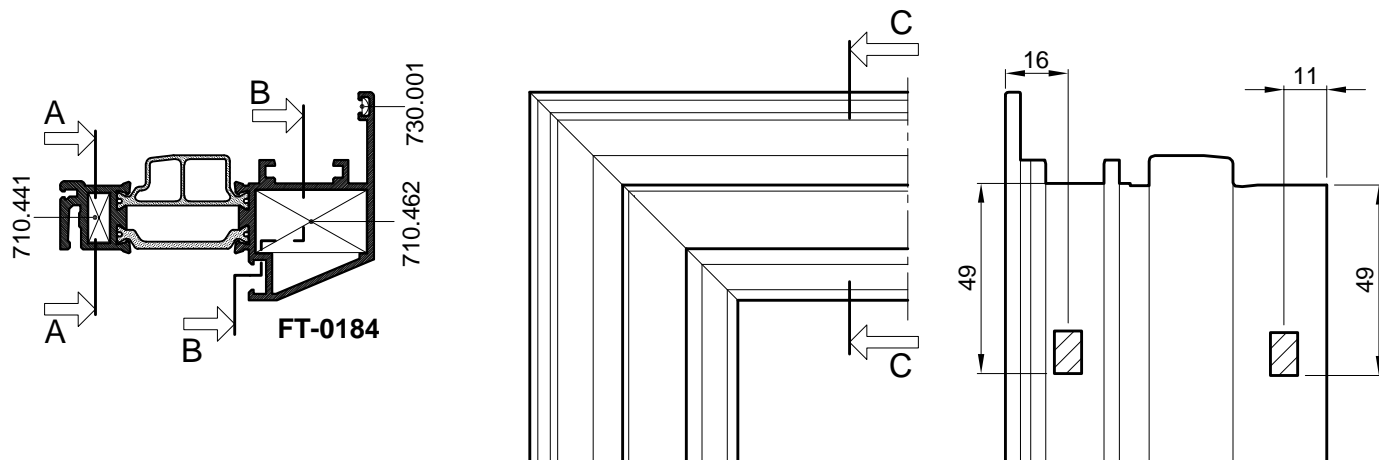


**PRESJEK B-B**

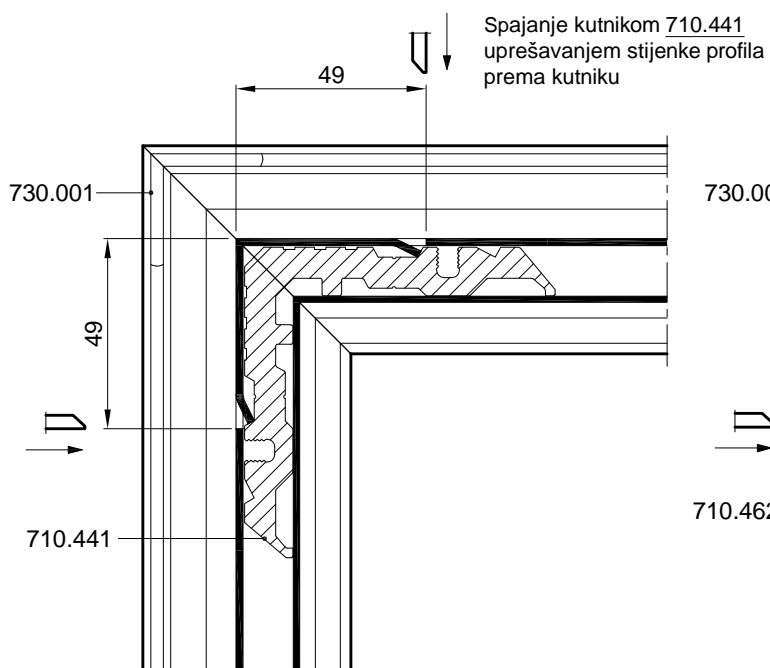


### SPAJANJE PROFILA FT-0184 KUTNICIMA : 710.441 ; 710.462

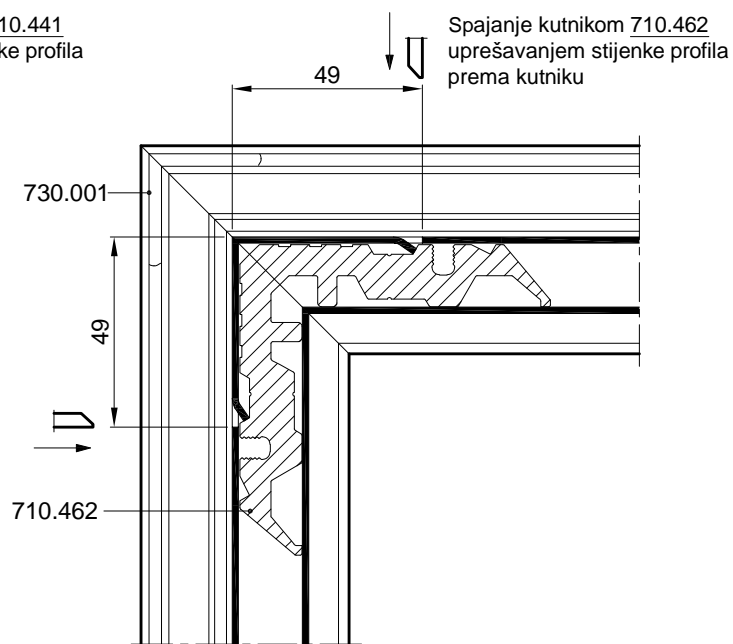
PRESJEK C-C



PRESJEK A-A



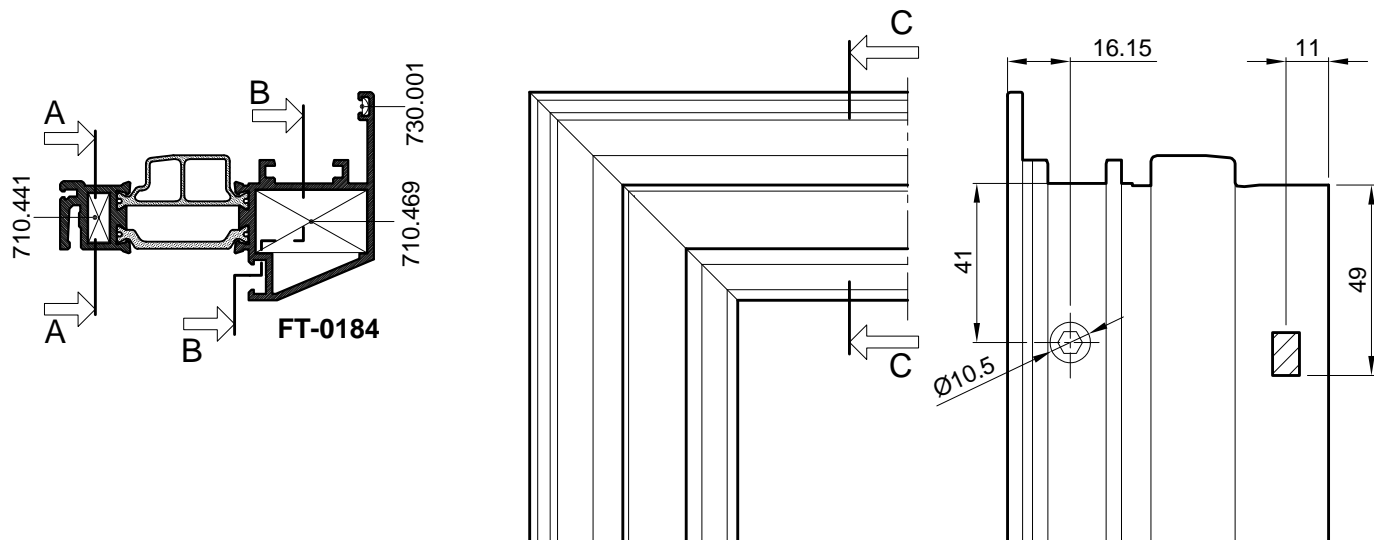
PRESJEK B-B



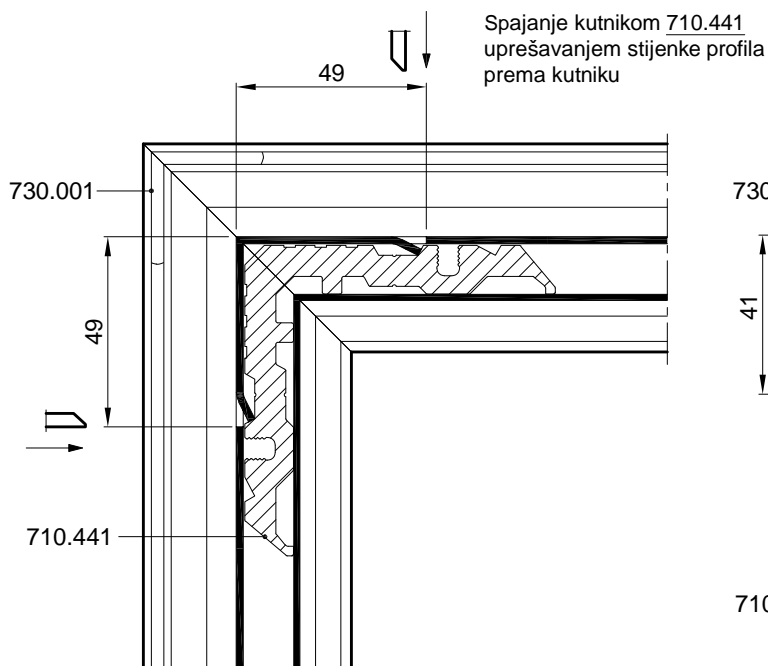
- |  |
|--|
| <ol style="list-style-type: none"> <li>1. STROJNO UPREŠAVANJE</li> <li>2. RUČNO UPREŠAVANJE-ŠKARAMA</li> </ol> |
|--|

### SPAJANJE PROFILA FT-0184 KUTNICIMA : 710.441 ; 710.469

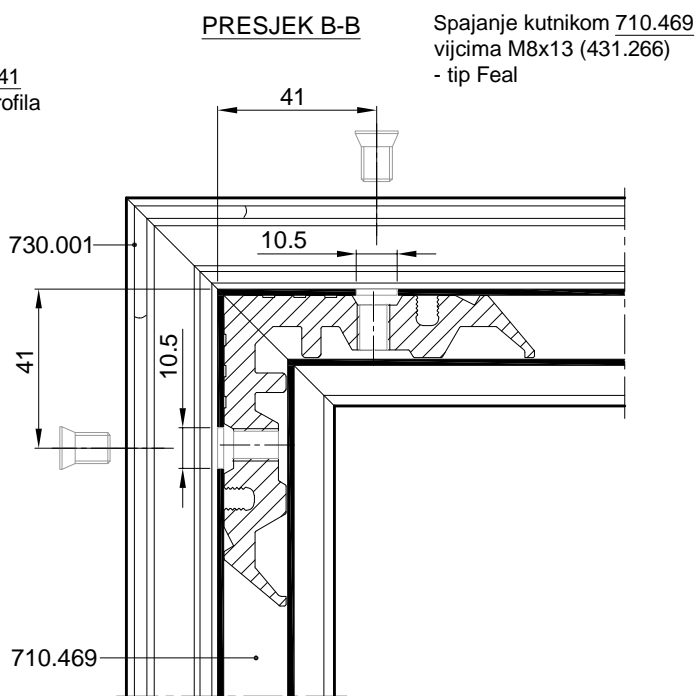
PRESJEK C-C



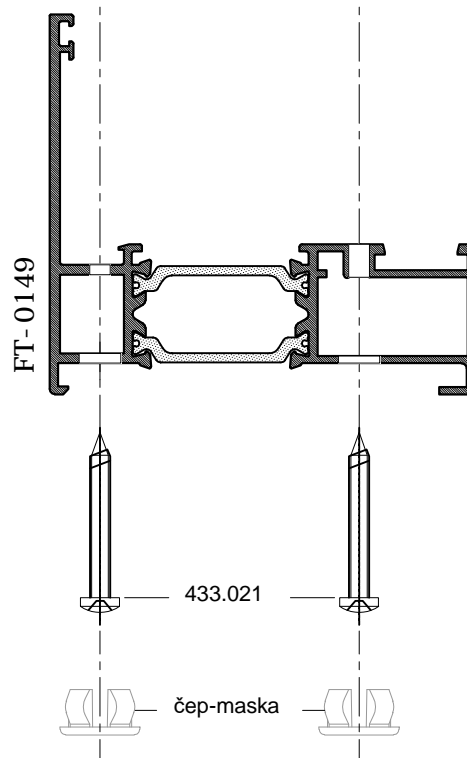
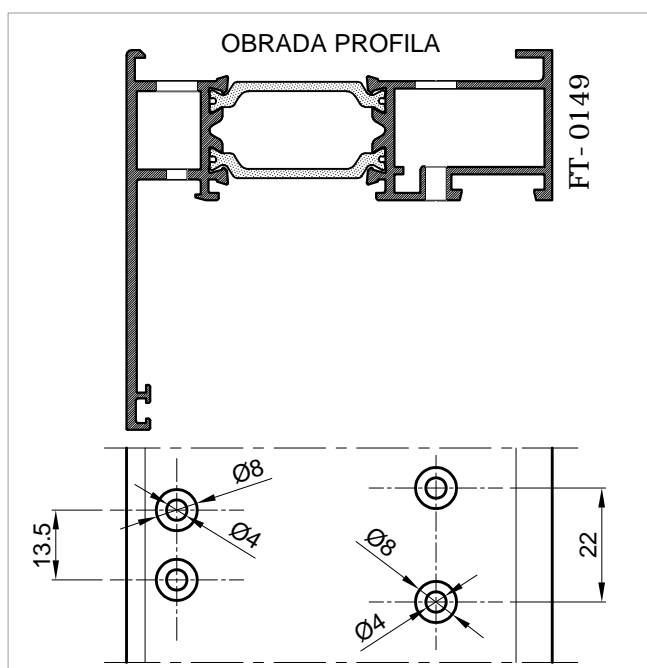
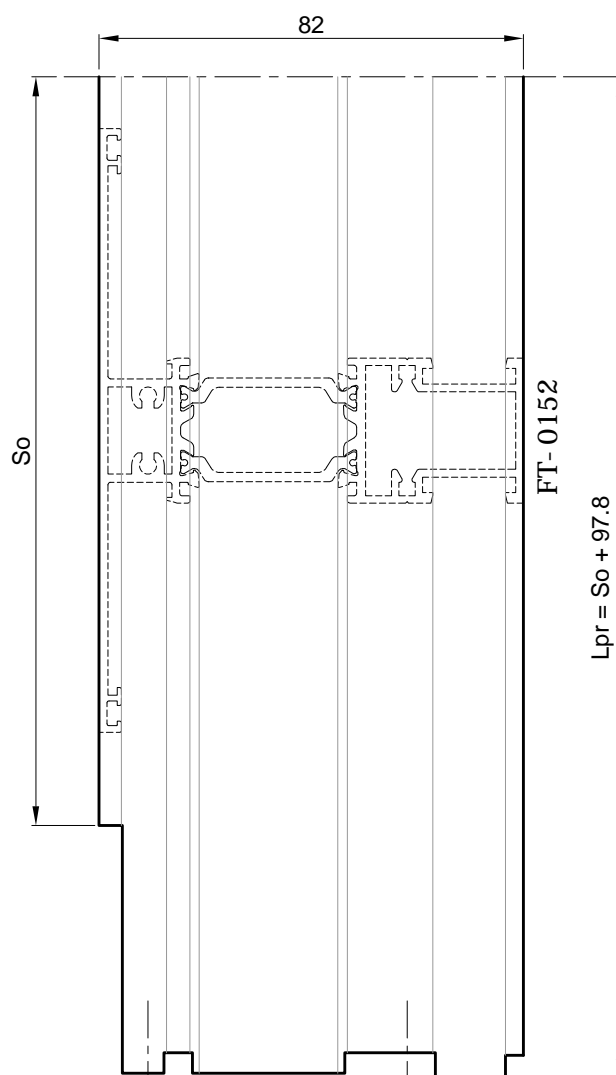
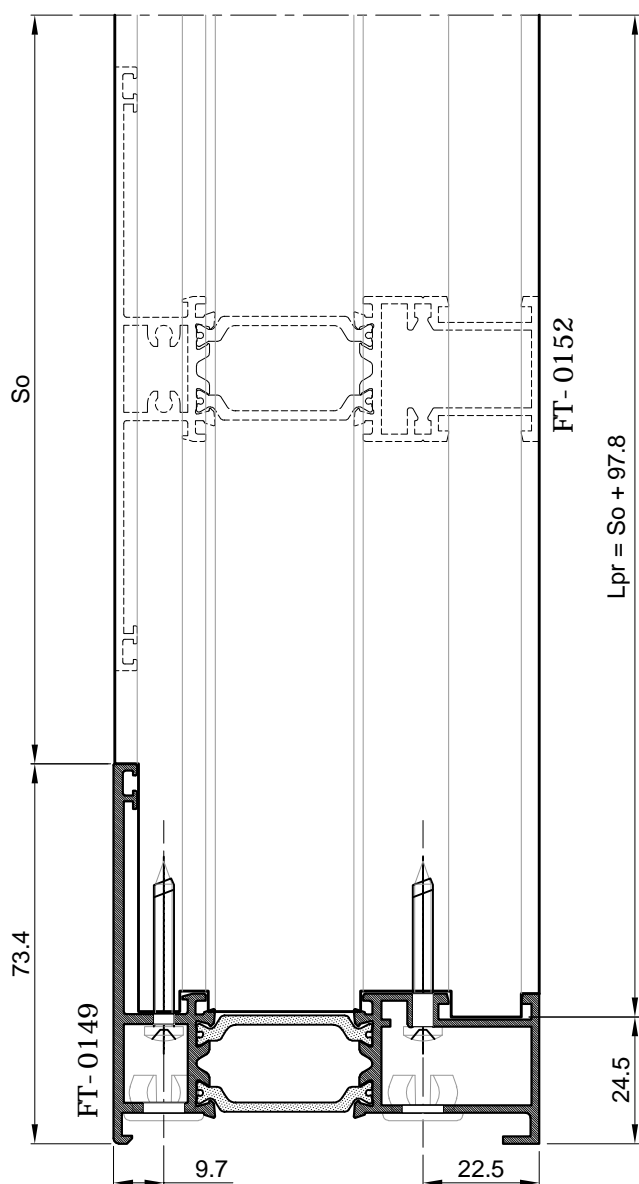
PRESJEK A-A



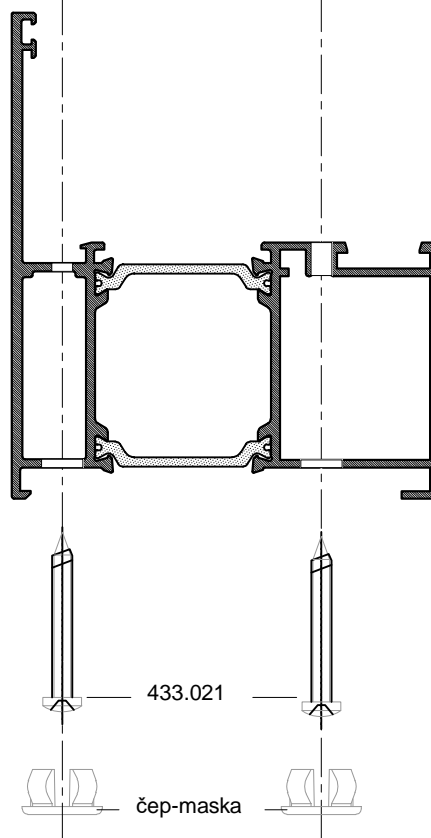
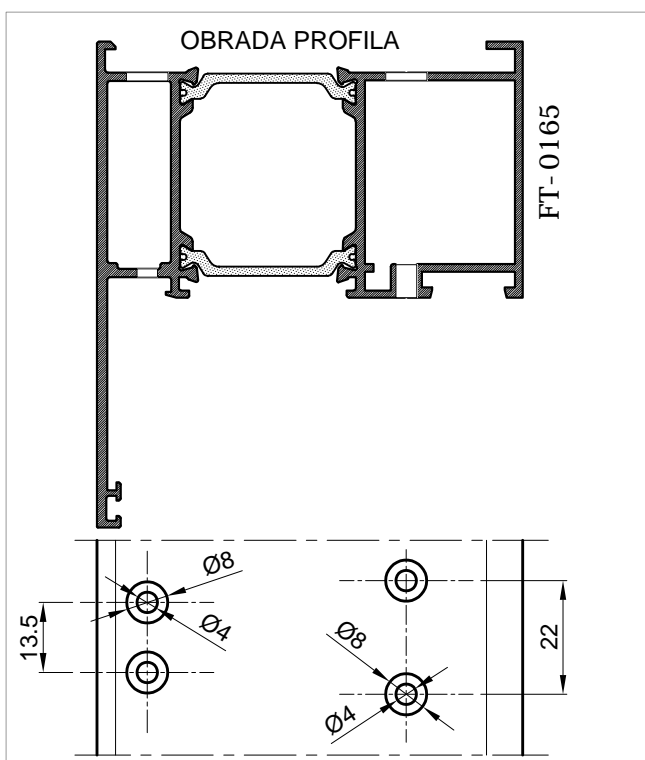
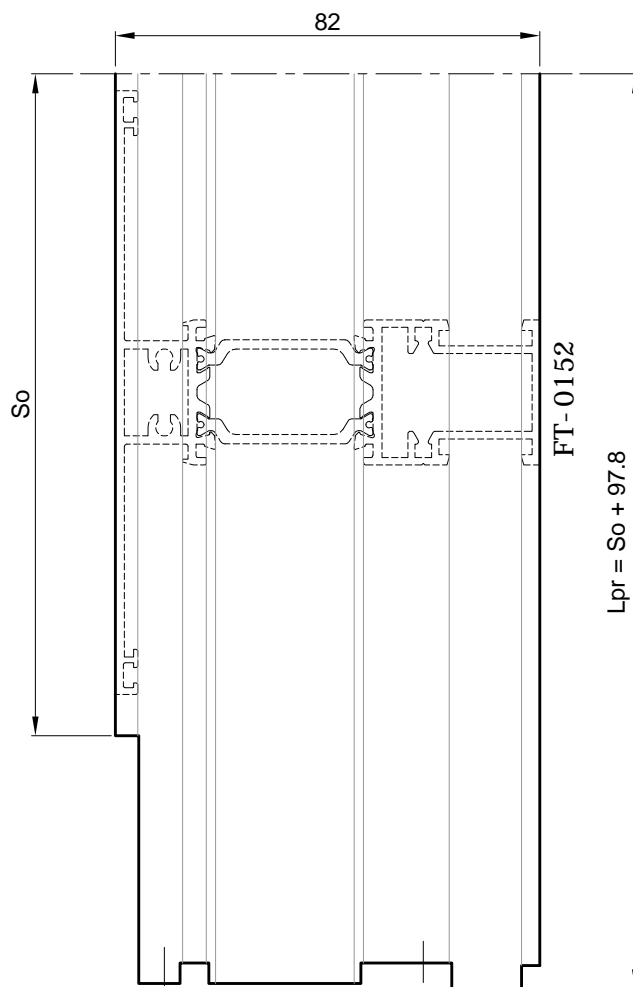
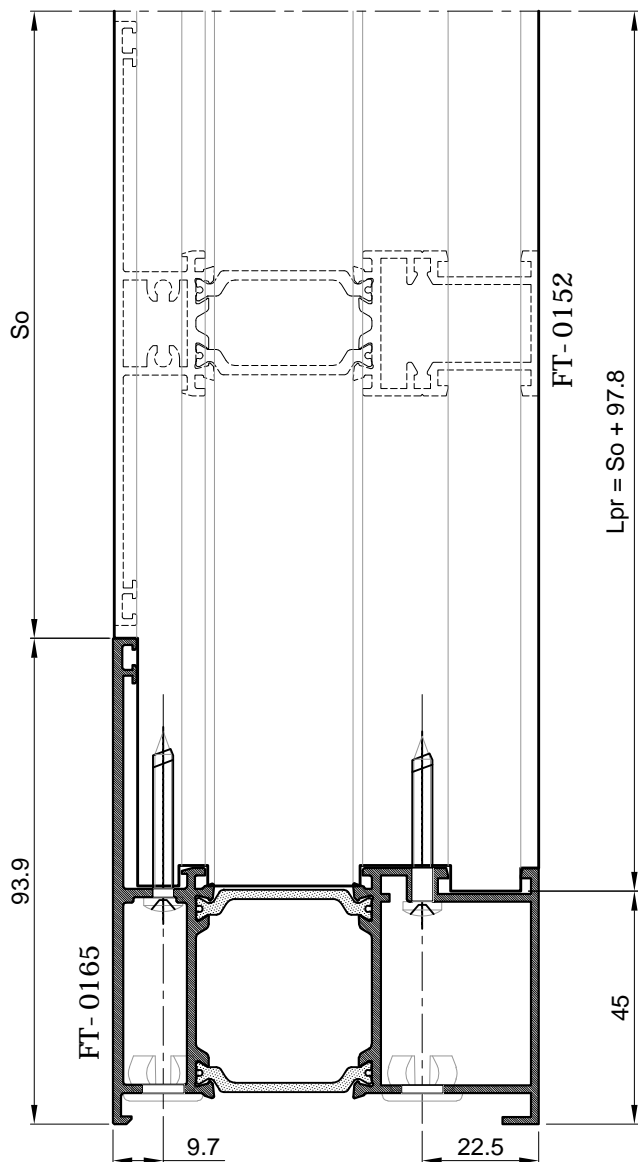
PRESJEK B-B



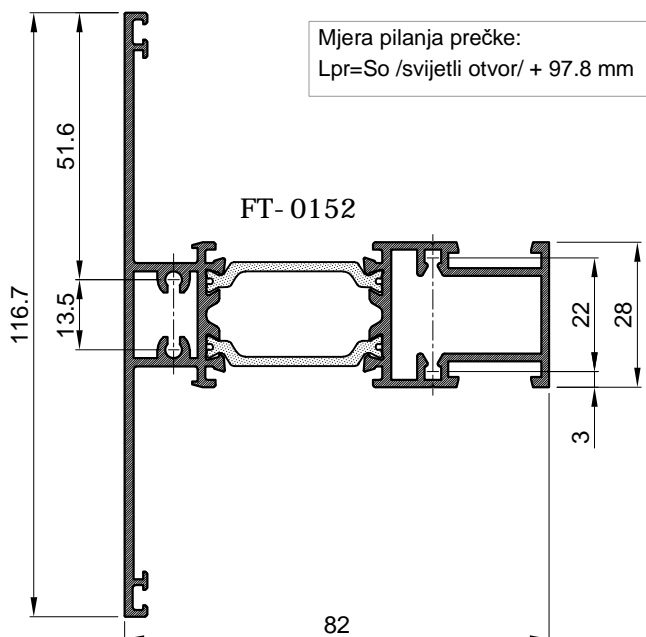
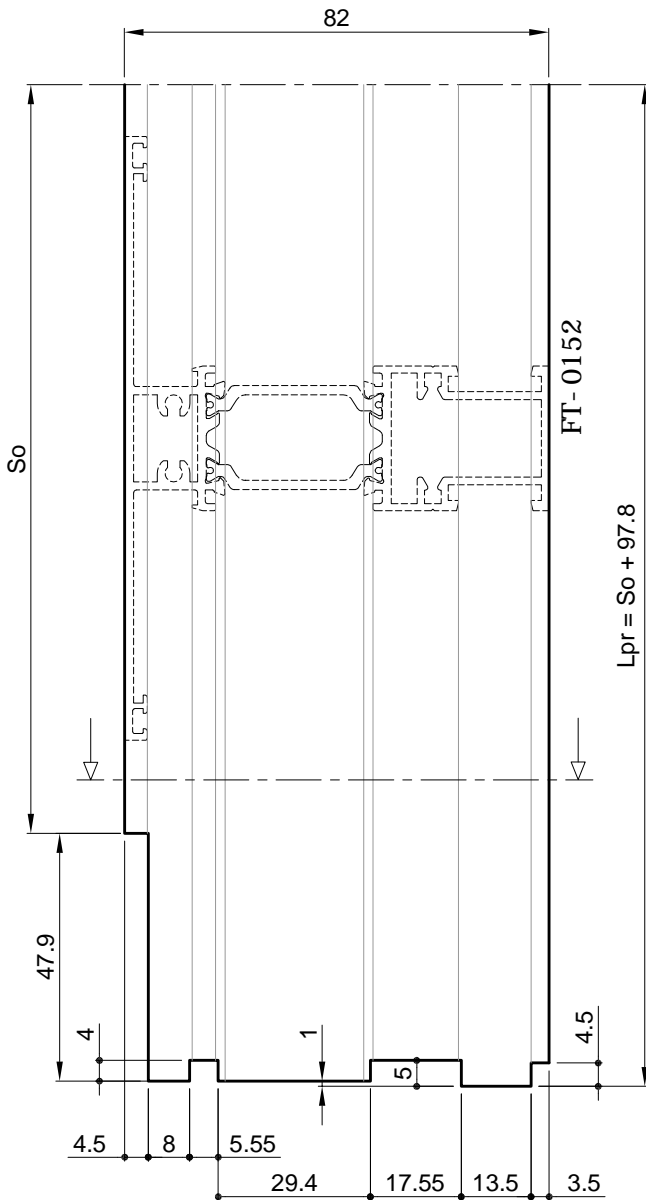
SPAJANJE PROFILA PREČKE FT-0152 SA PROFILOM RAMA FT-0149 - POMOĆU VIJAKA



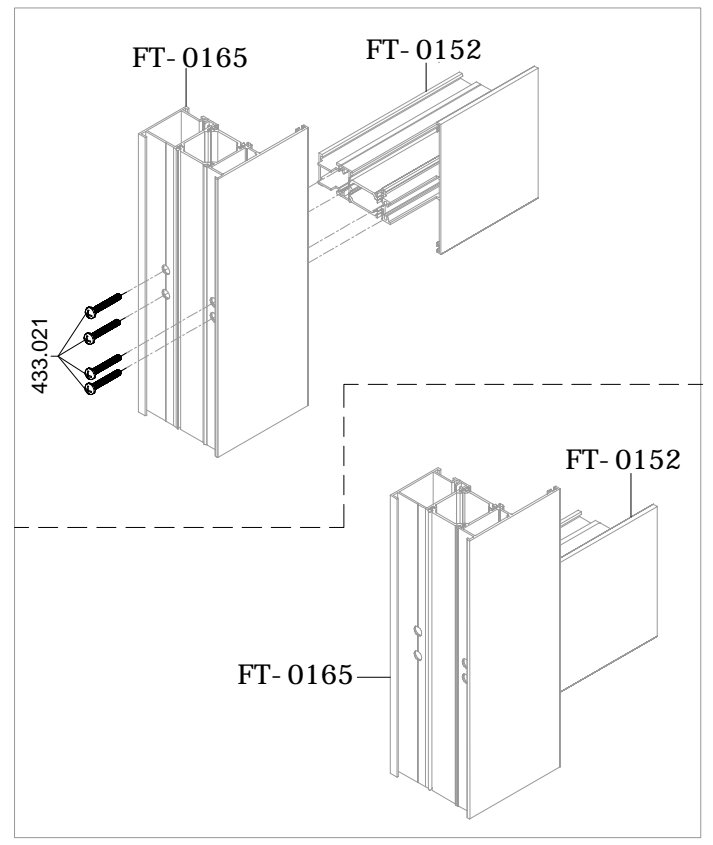
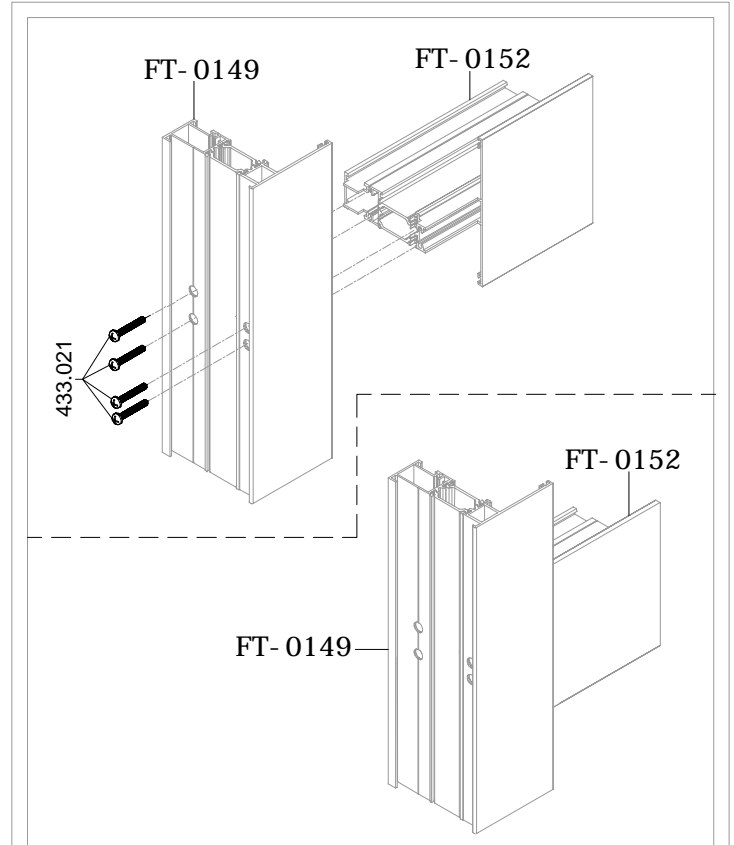
SPAJANJE PROFILA PREČKE FT-0152 SA PROFILOM RAMA FT-0165 - POMOĆU VIJAKA



### SPAJANJE PROFILA PREČKE FT-0152 SA PROFILOM RAMA : FT-0149; FT-0165 - POMOĆU VIJAKA



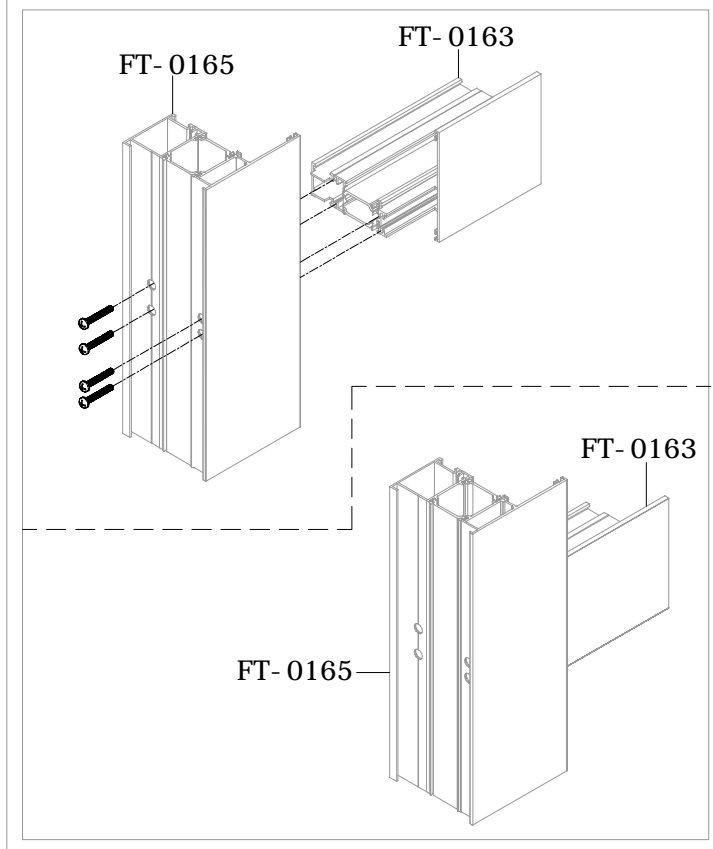
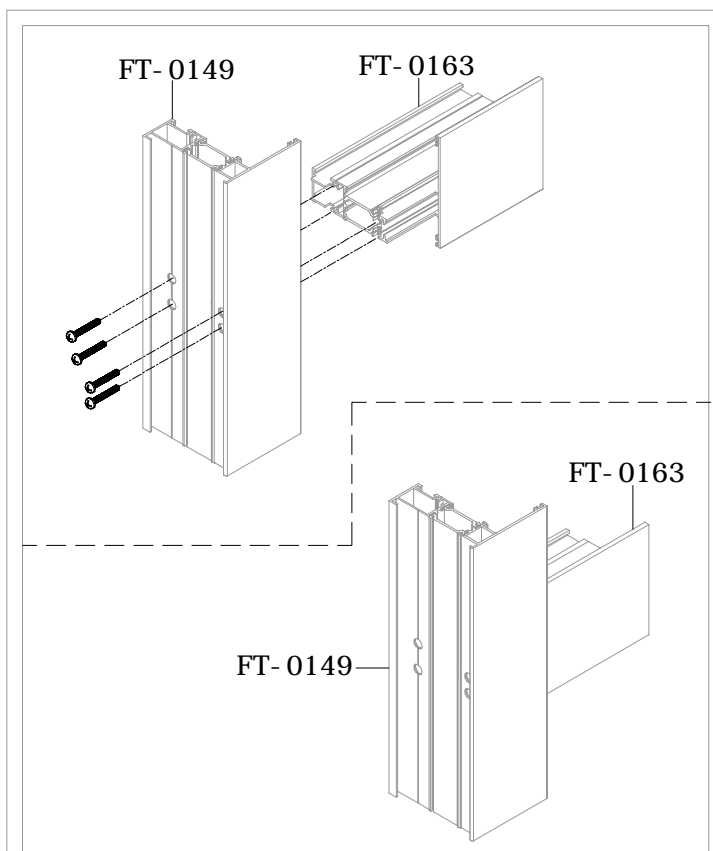
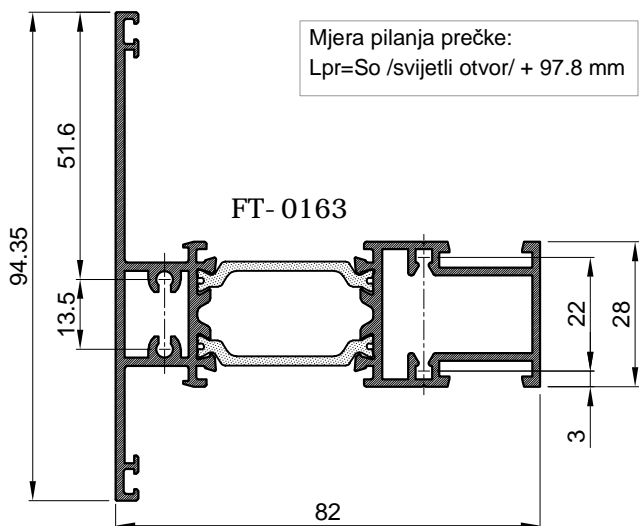
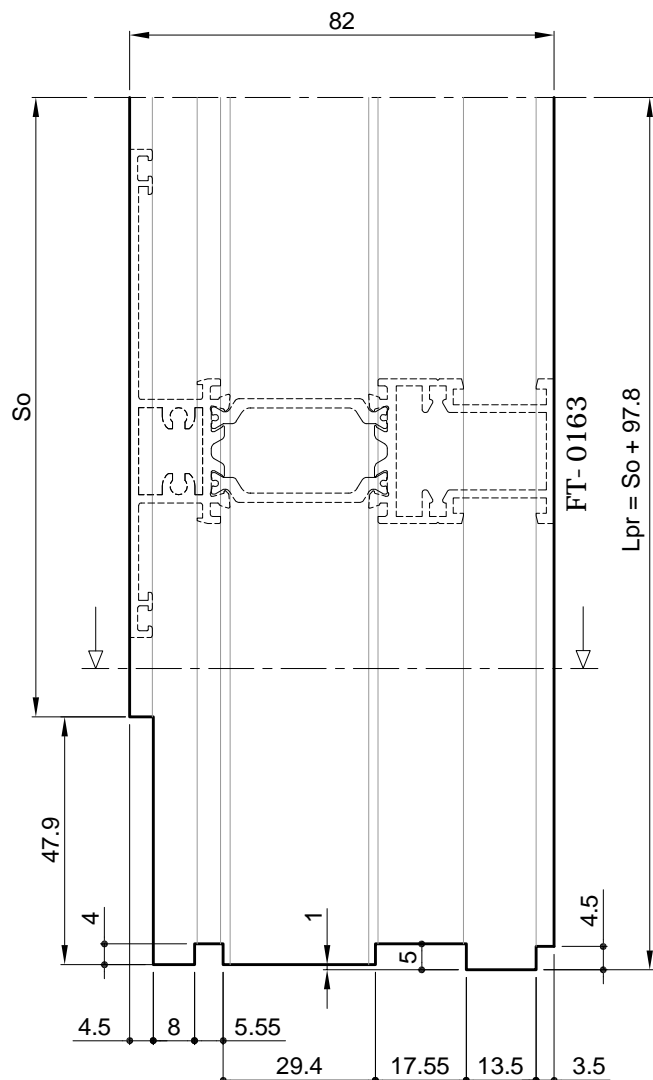
OBRADA PROFILA PREČKE FT-0152  
PREMA PROFILU RAMA : FT-0149;  
FT-0165



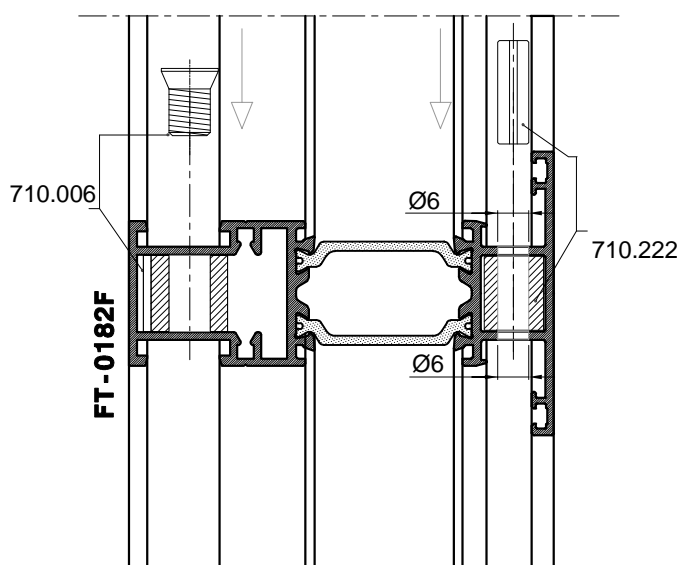
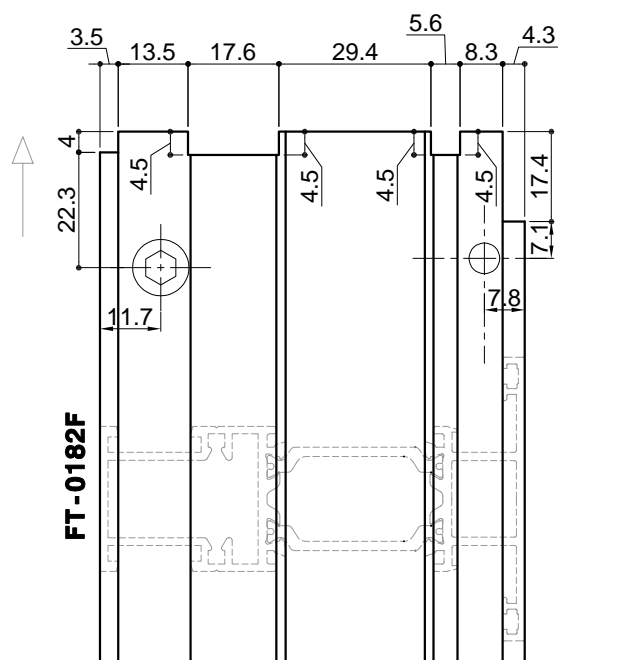
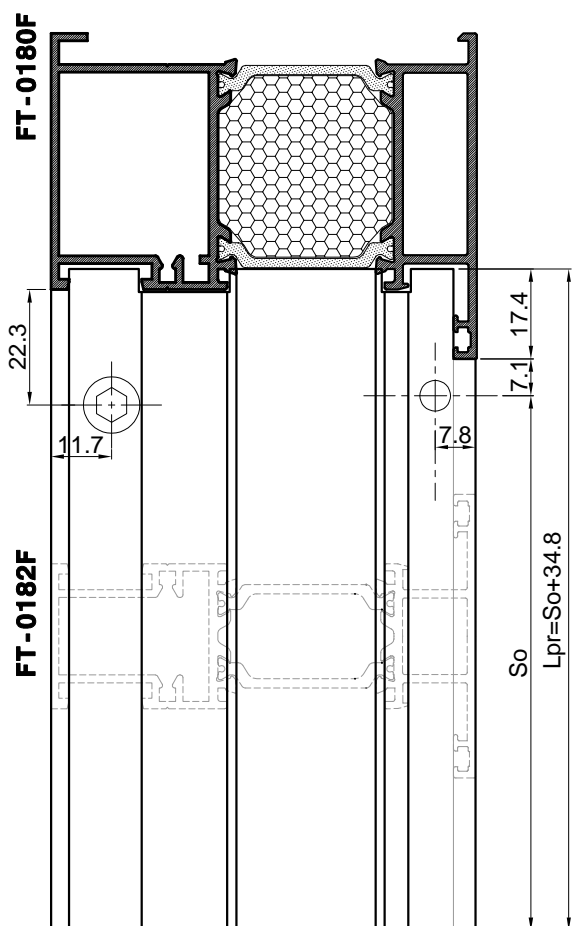
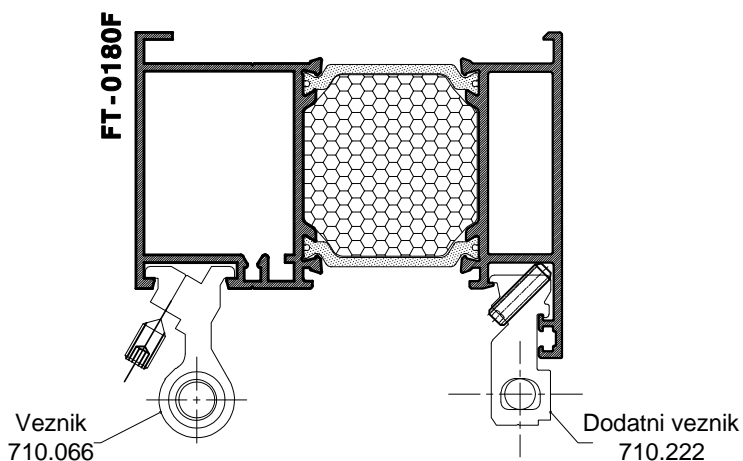
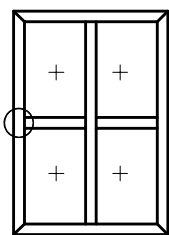
### SPAJANJE PROFILA PREČKE FT-0163 SA PROFILOM RAMA : FT-0149; FT-0165 - POMOĆU VIJAKA

OBRADA PROFILA PREČKE FT-0163  
JE ISTA KAO OBRADA PROFILA  
PREČKE FT-0152

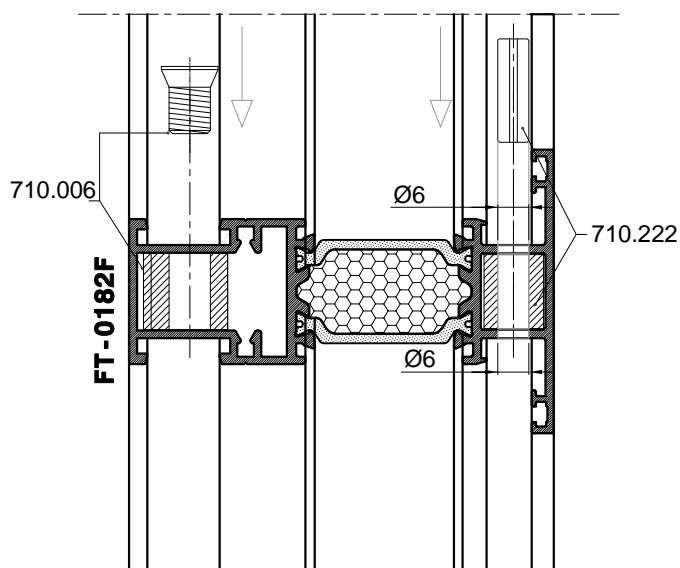
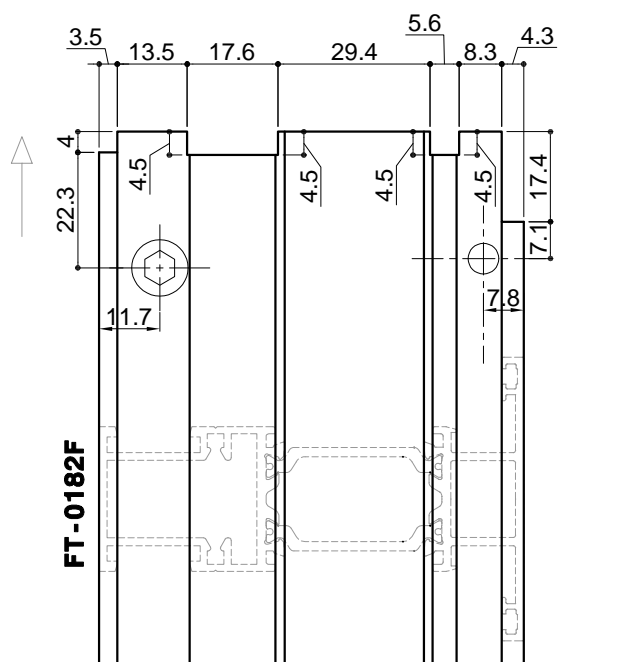
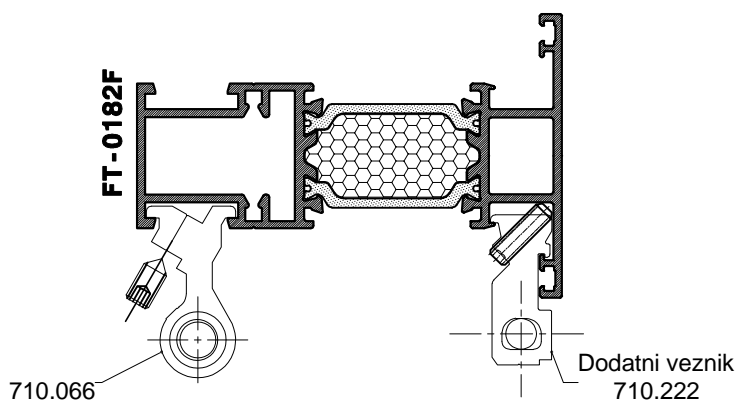
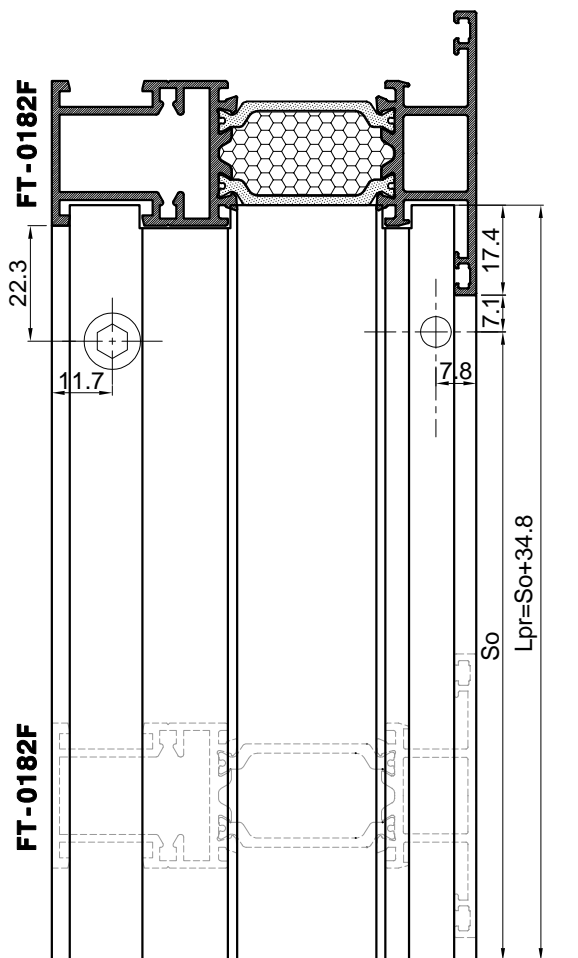
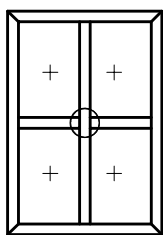
OBRADA PROFILA PREČKE FT-0163  
PREMA PROFILU RAMA : FT-0149;  
FT-0165

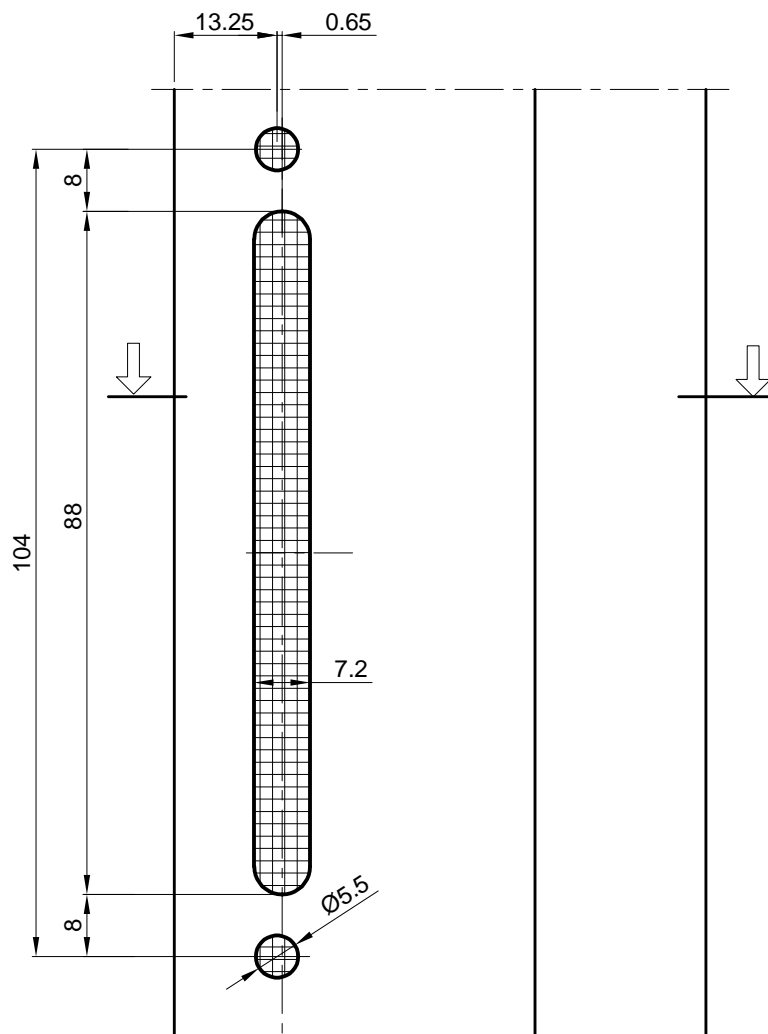


### SPAJANJE PROFILA PREČKE FT-0182F SA PROFILOM RAMA FT-0180F - POMOĆU VEZNIKA

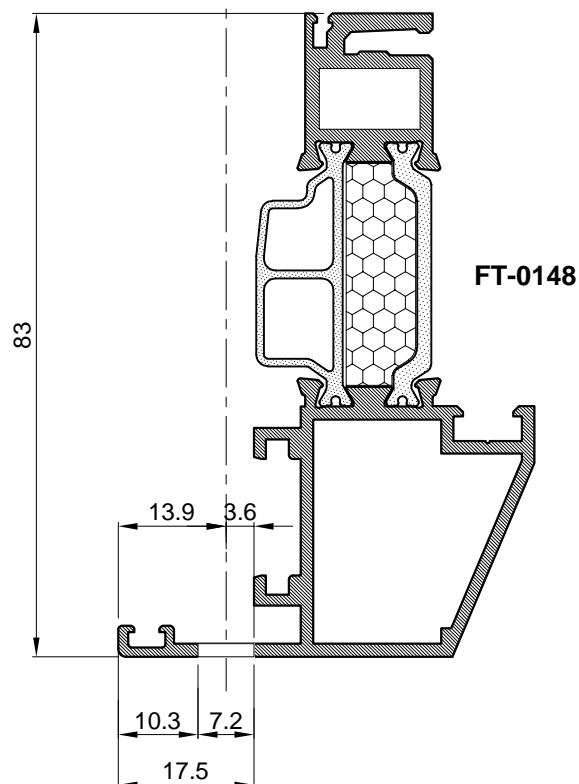


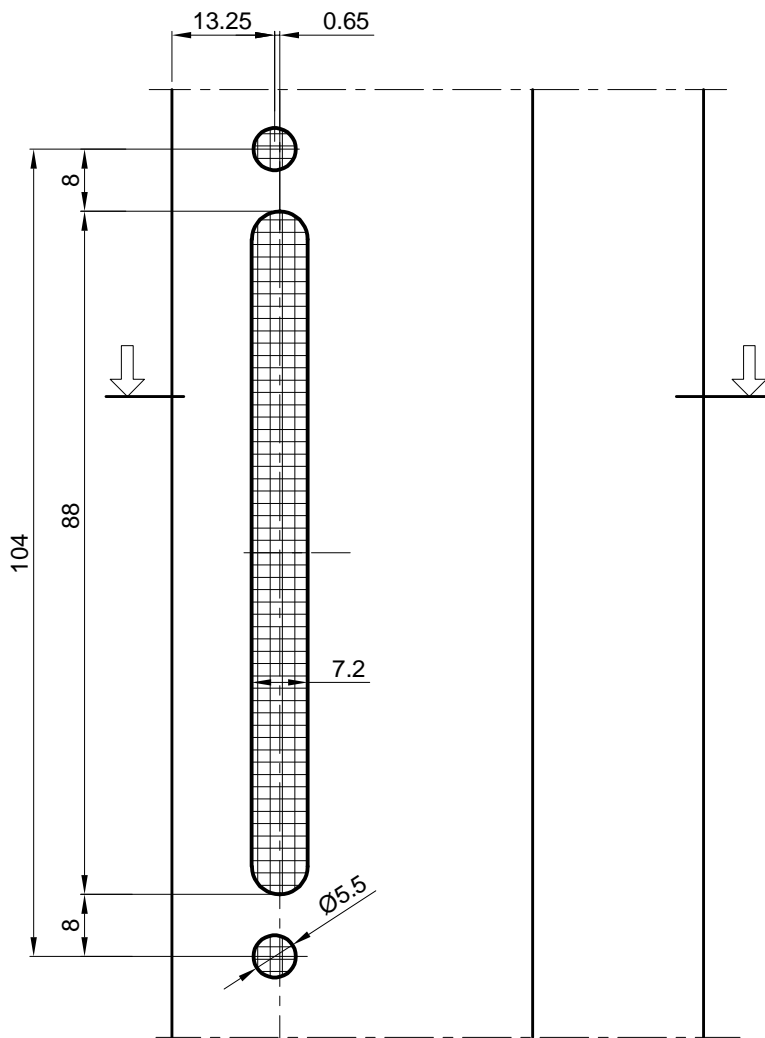
SPAJANJE PROFILA PREČKE FT-0182F - POMOĆU VEZNIKA



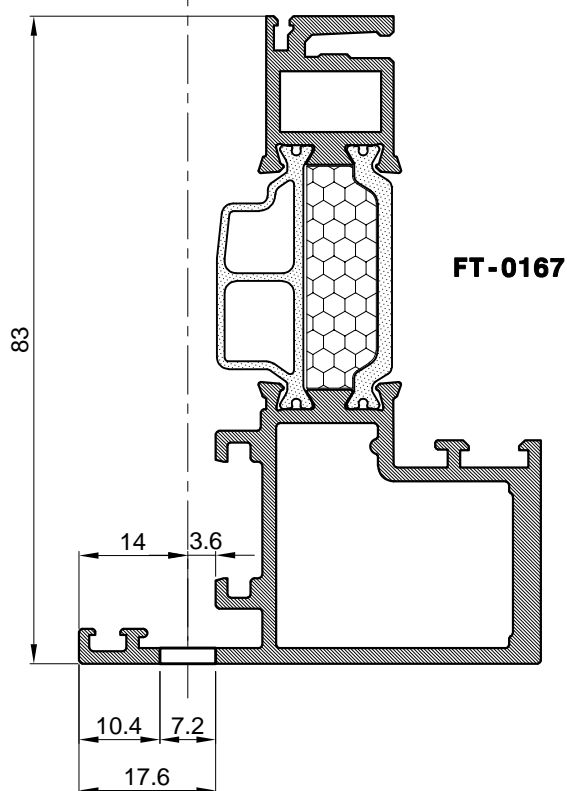


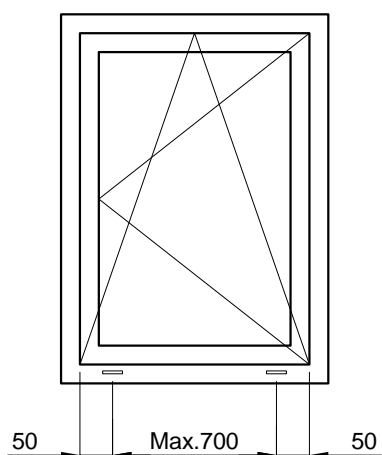
OBRADA PROFILA KRILA  
FT-0148 I FT-0184  
ZA UGRADNJU RUČKE





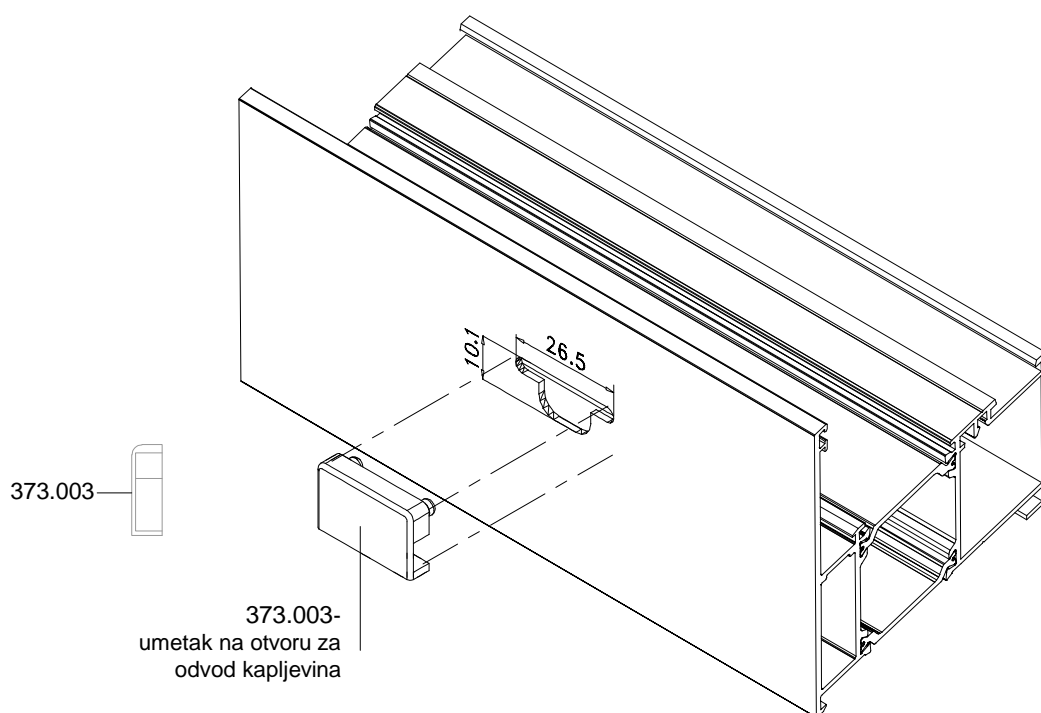
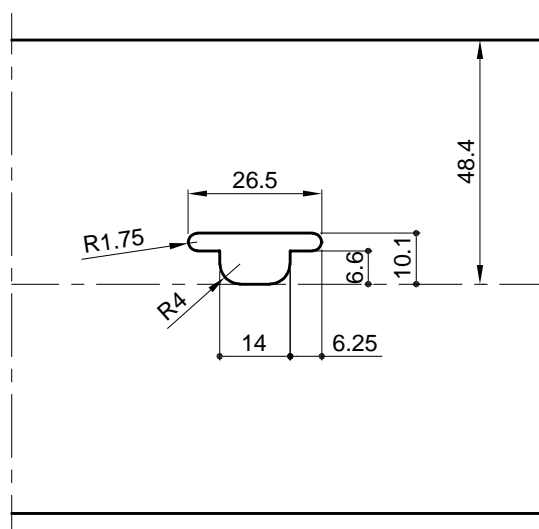
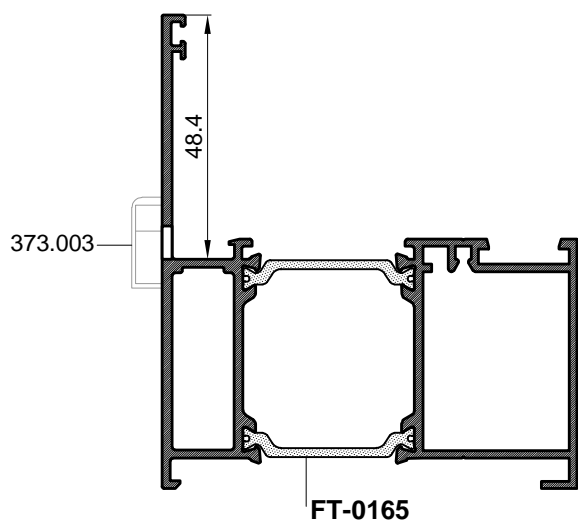
OBRADA PROFILA KRILA  
FT-0167 I FT-0181  
ZA UGRADNJU RUČKE

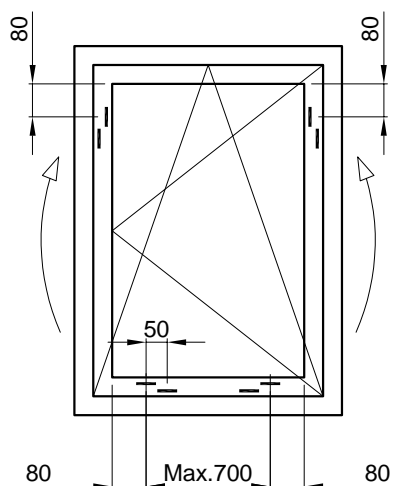




OBRADA NA PROFILU **FT-0165** RADI ODVODA KAPLJEVINA

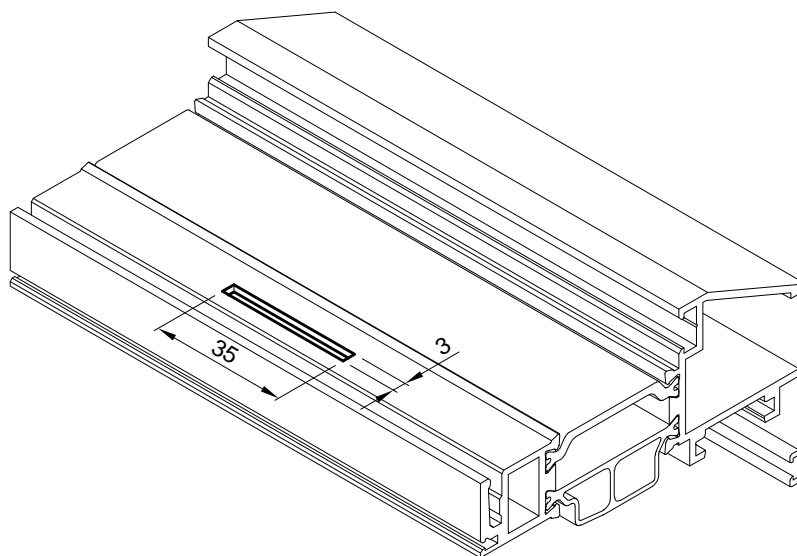
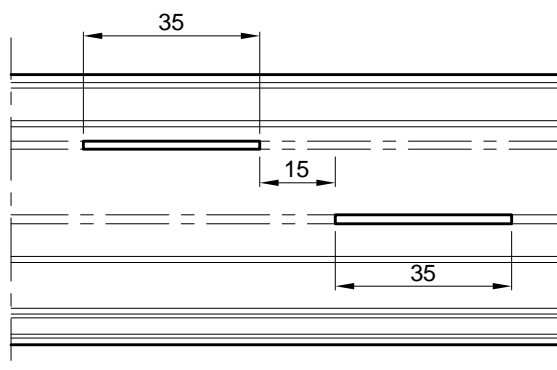
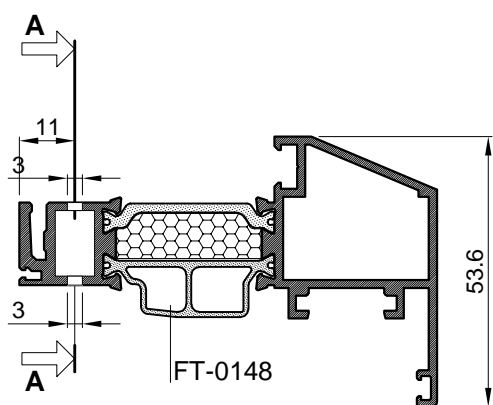
- obrada donjeg pojasa krila /štancanjem/
- 373.003- pvc umetak na otvoru za odvod kapljevina



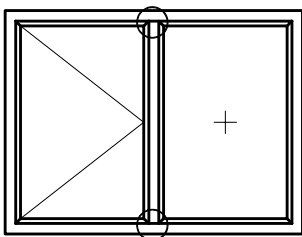


### OBRADA NA PROFILU RADI ODVODA KAPLJEVINA I VENTILIRANJA PROZORA

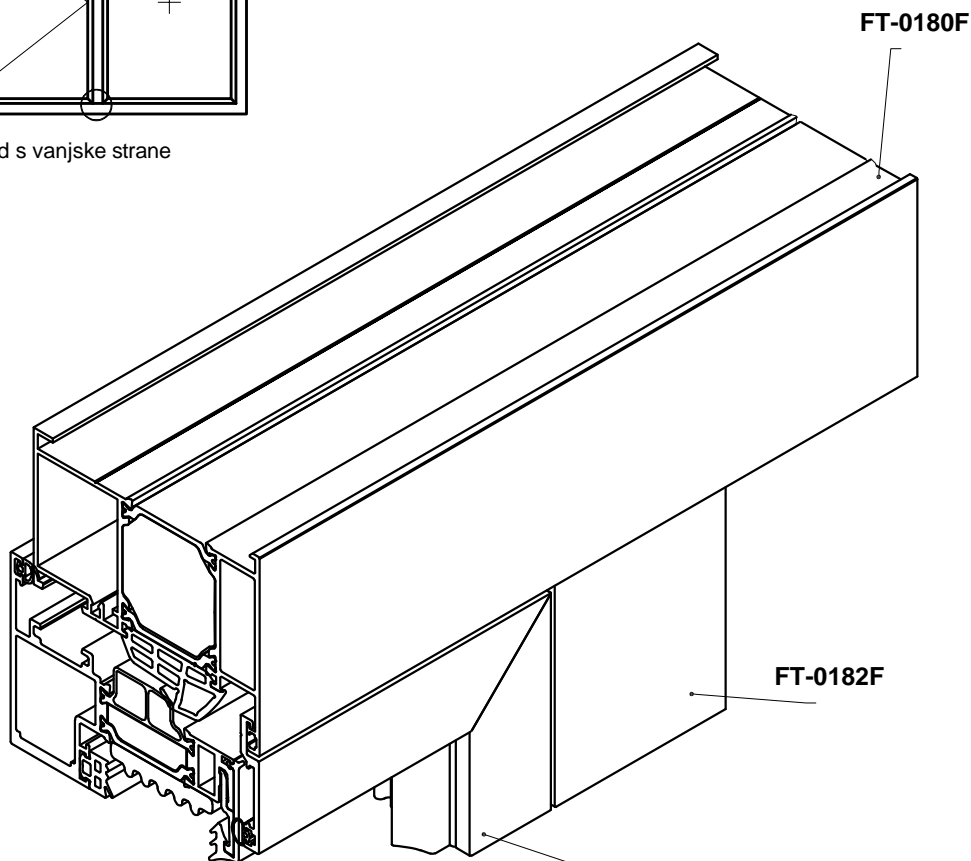
- obrada donjeg pojasa krila /štancanjem/
- obrada okomitih pojasa krila /štancanjem/
- usljed probijenih otvora unutar prozora dolazi do uspostave strujanja zraka i isušivanja mogućih kapljevina



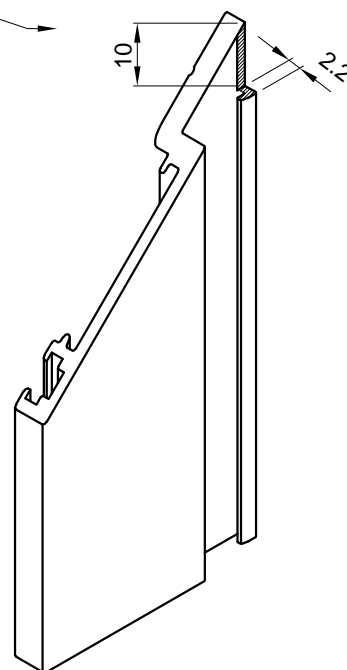
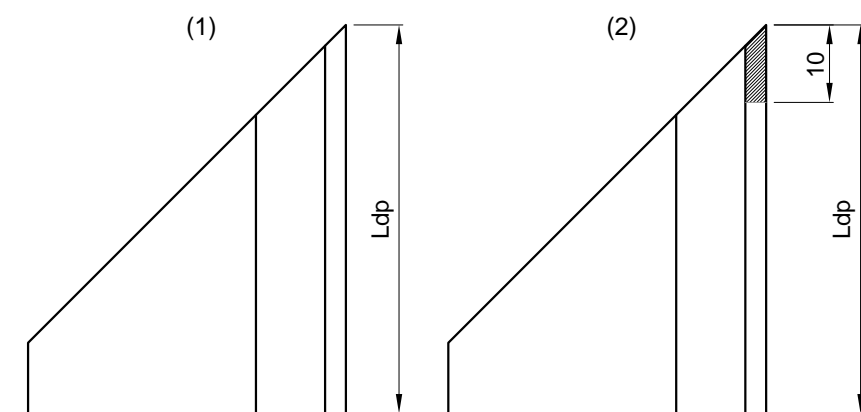
### OBRADA DODATNOG PROFILA F-1493 ZA SPOJ PREČKE FT-0182F I RAMA FT-0180F



\* Pogled s vanjske strane

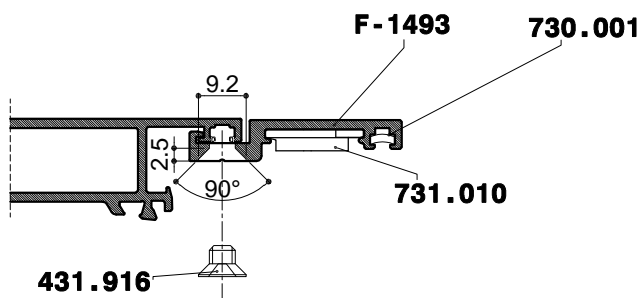


F-1493



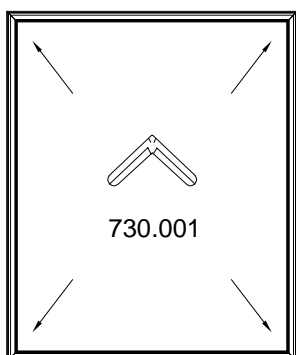
- (1) Dodatni profil F-1493 zapilan pod 45° sa gornje i donje strane
- (2) Zub profila obrađen za 10mm po visini i 2.2 mm po dubini, na gornjoj i donjoj strani profila (prema crtežu)

### SPAJANJE DODATNOG PROFILA F-1493 SA RAMOM ILI PREČKOM POMOĆU VIJAKA

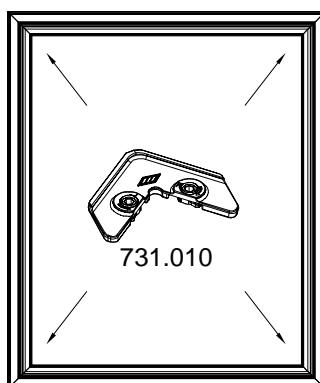


- (1) Obraditi dodatni profil F-1493 za navoj vijka i upustiti za glavu vijka M5 - na svakih cca. 200 mm (u liniji utora za vijak)
- (2) Sklopiti dodatne profile F-1493 izvan okvira i povezati ih kutnicima 730.001
- (3) Unijeti sklopljene profile F-1493 u okvir rama ili prečke te ih povezati kutnicima 731.010
- (4) Obradene rupe na F-1493 premazati masom za prijanjanje vijčanog spoja /npr. *Carlofon Carloflex 410 UV; Wurth Klebt + Dichtet Power/* i uviti vijke
- (5) Dodatne profile F-1493 pritezati križnim redoslijedom A-C-D-B

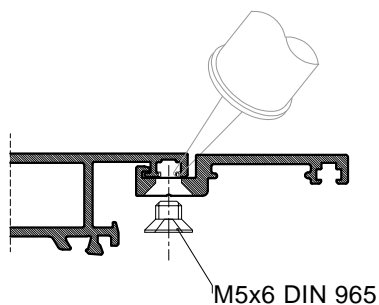
(2)



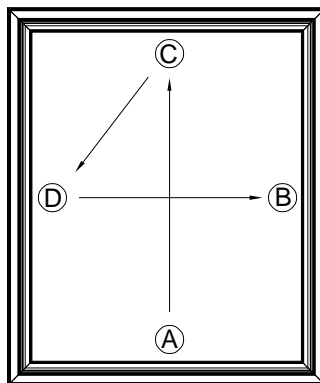
(3)



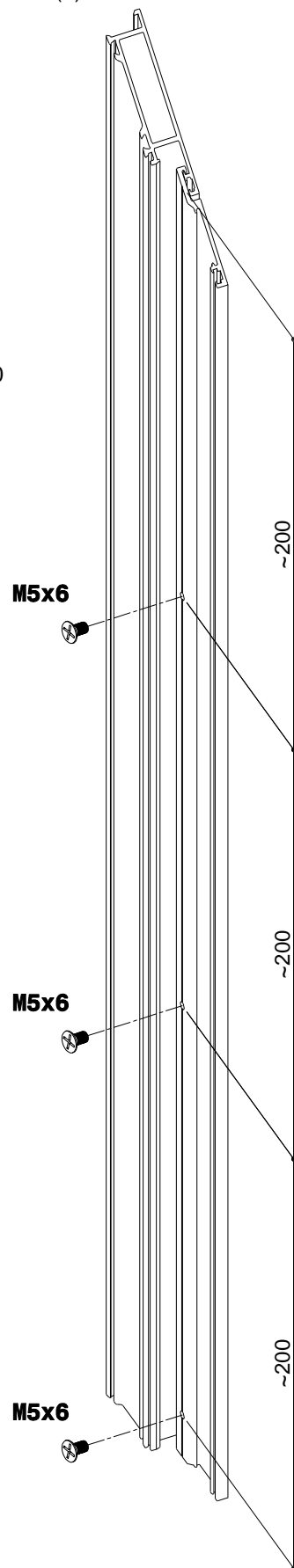
(4)



(5)

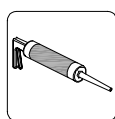
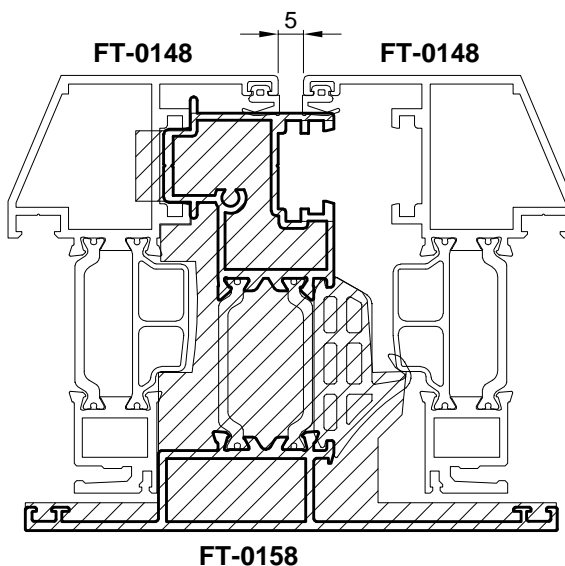
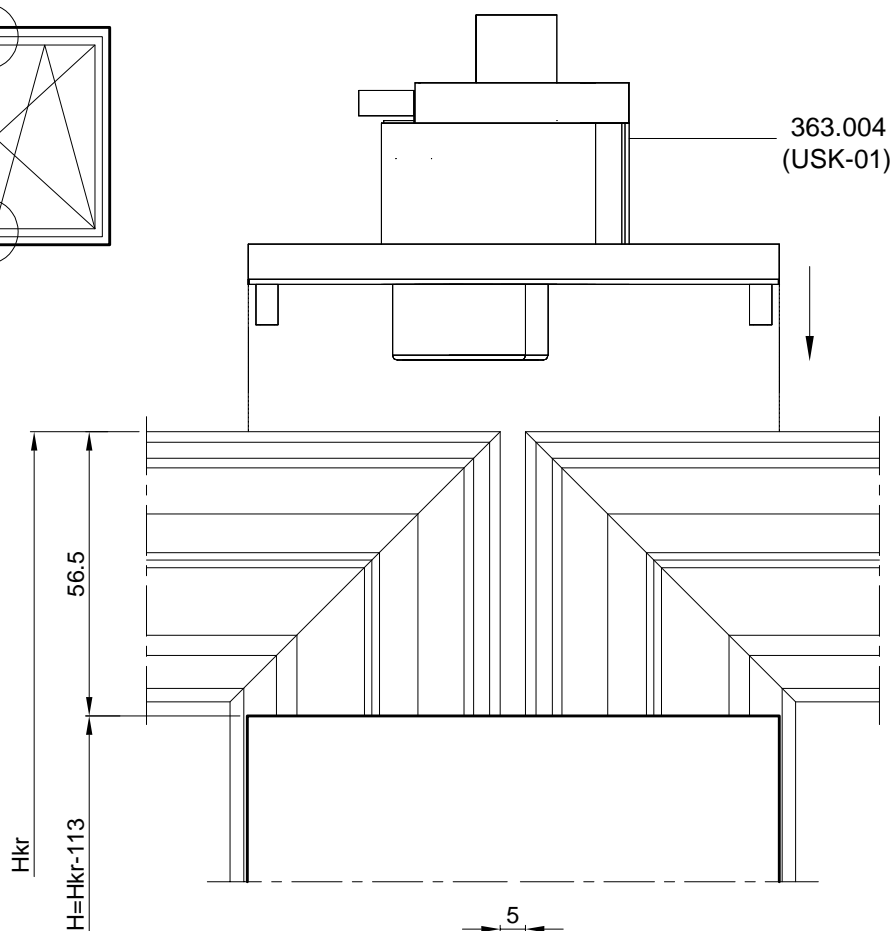
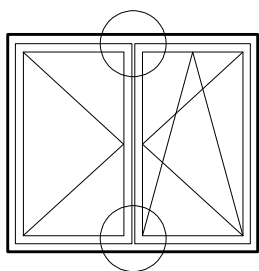


(1)

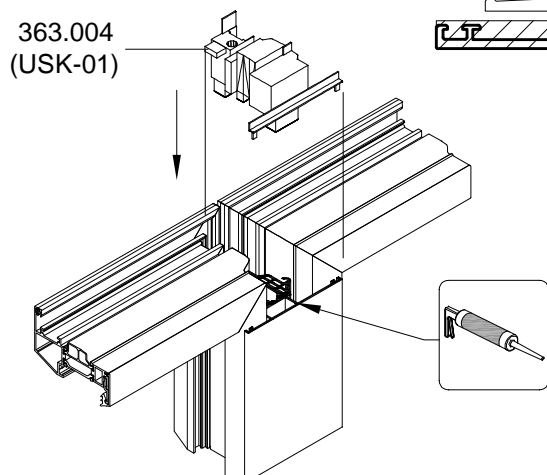


\* Način spajanja F-1493 sa prečkom FT-0182F je jednak kao spajanje sa okvirom FT-0180F.

### 363.004 - UMETAK ZA PROFIL FT-0158 KOD DVOKRILNOG OTVARANJA



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

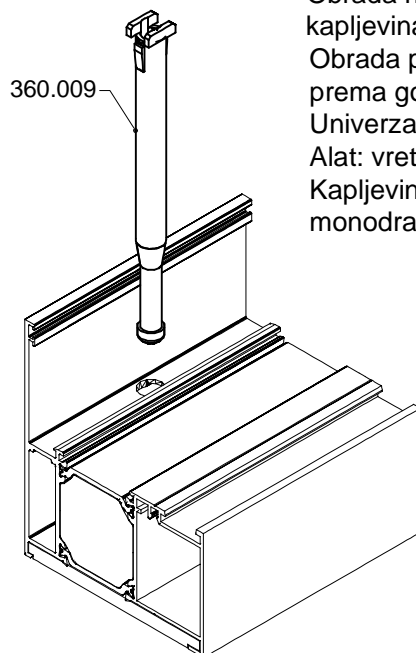
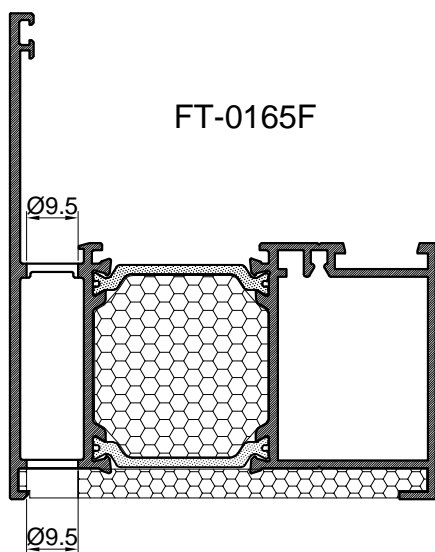


#### 363.004 (USK-01)

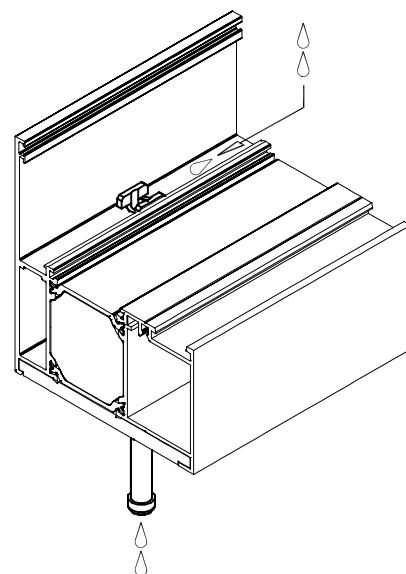
- gornji i donji umetak-simetrično
- materijal: tvrdi PVC
- mjera pilanja profila FT-0158

H=Hkr - 113

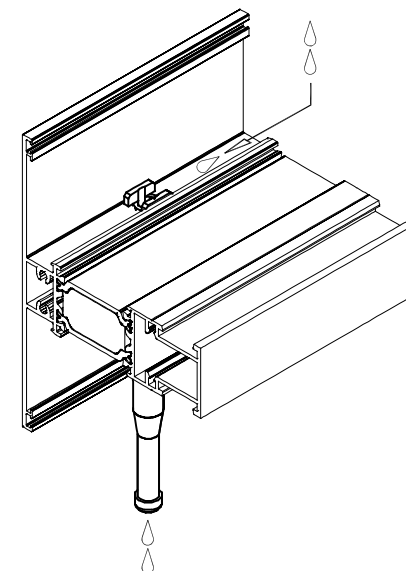
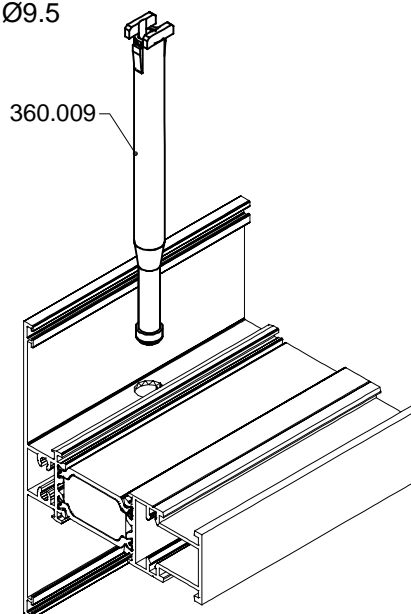
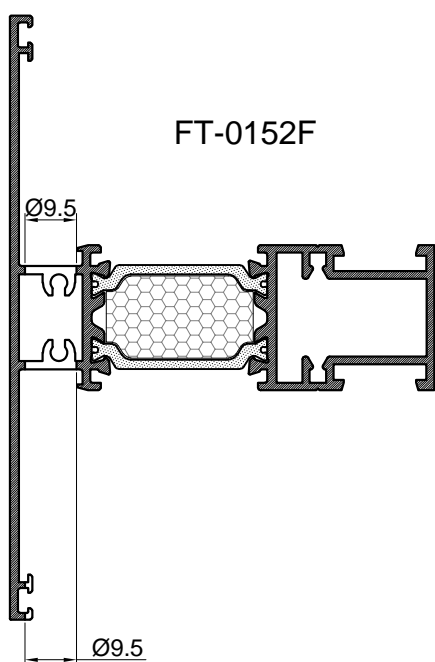
### Obrada profila rama i prečke za skriveni odvod kapljevina



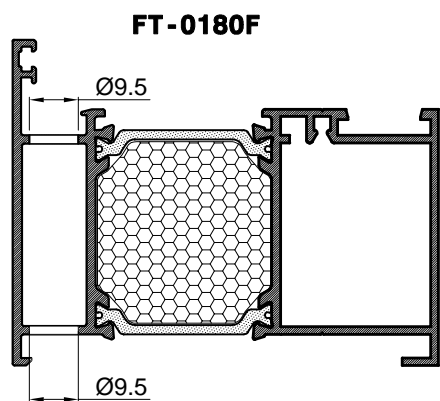
- Obrada na profilu rama FT-0165F za odvod kapljevina.  
Obrada profila se izvodi u smjeru odozdo prema gore i izvodi na:  
Univerzalna glodalica / stubna bušilica  
Alat: vretenasto glodalo Ø9.5 / svrdlo Ø9.5  
Kapljevine se izvode van pomoću monodrain cijevčice 360.009



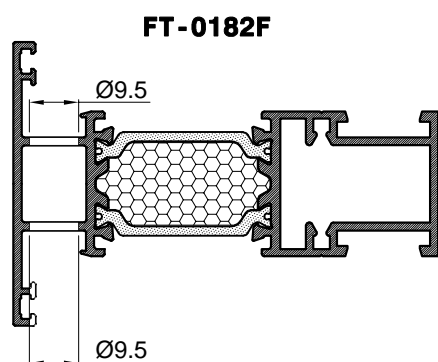
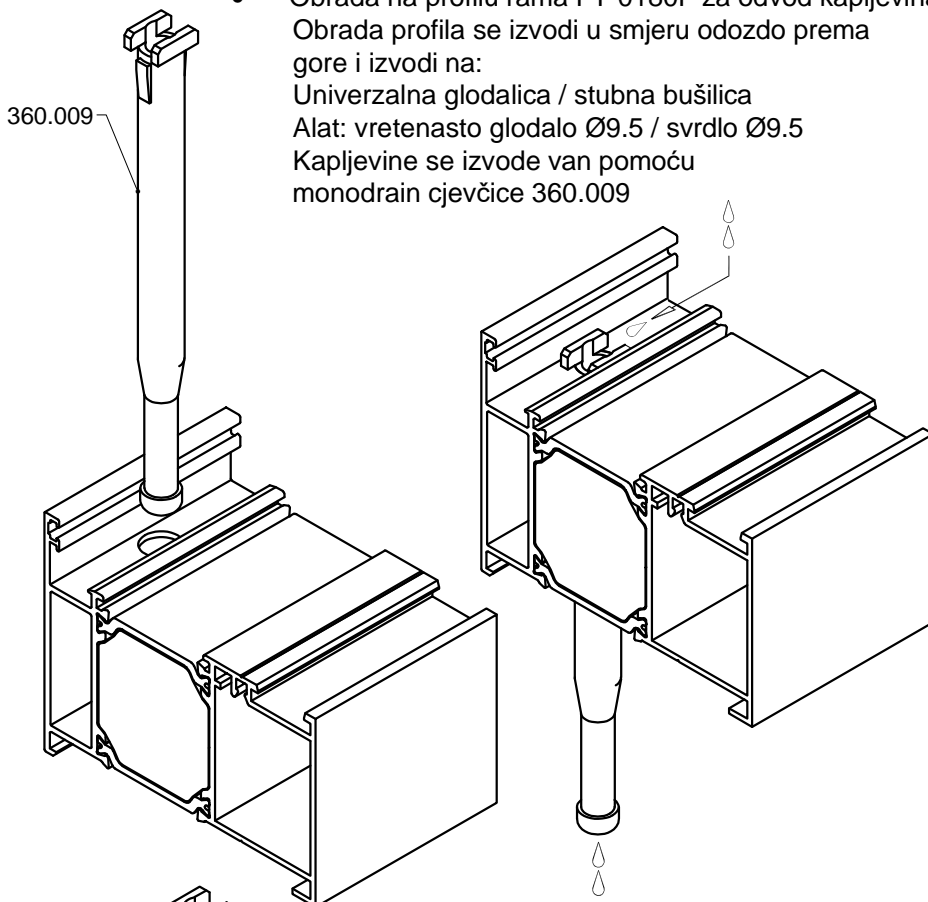
- Obrada na profilu prečke FT-0152F za odvod kapljevina.  
Obrada profila se izvodi u smjeru odozdo prema gore i izvodi na:  
Univerzalna glodalica / stubna bušilica  
Alat: vretenasto glodalo Ø9.5 / svrdlo Ø9.5  
Kapljevine se izvode van pomoću monodrain cijevčice 360.009



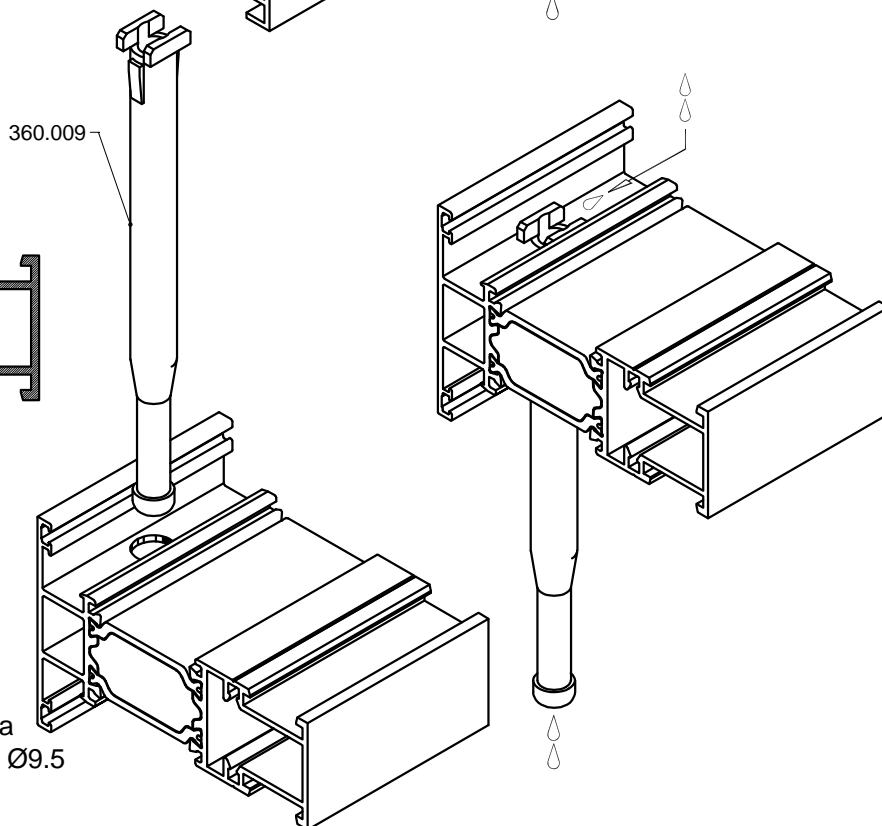
### Obrada profila rama i prečke za skriveni odvod kapljevina



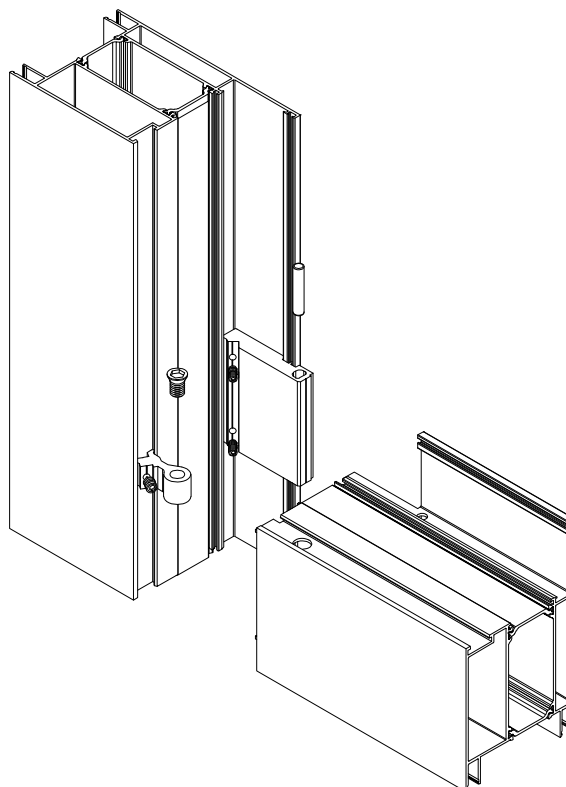
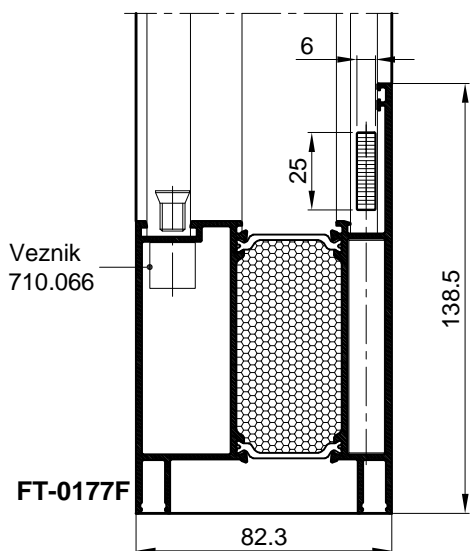
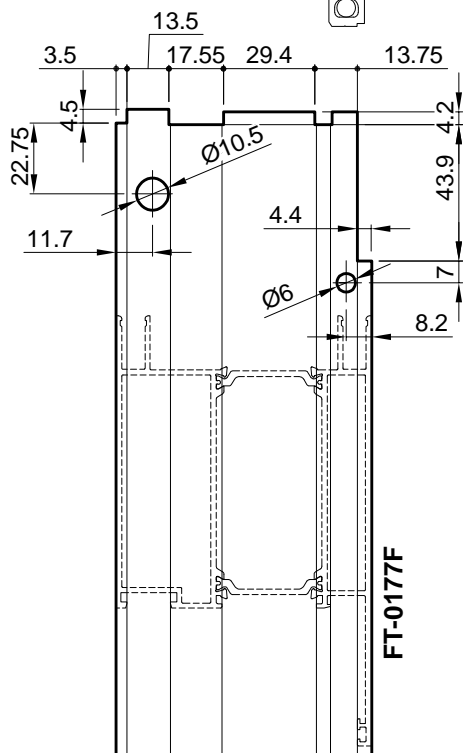
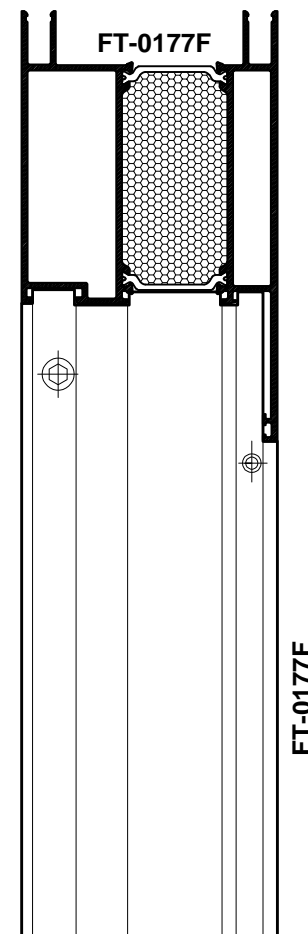
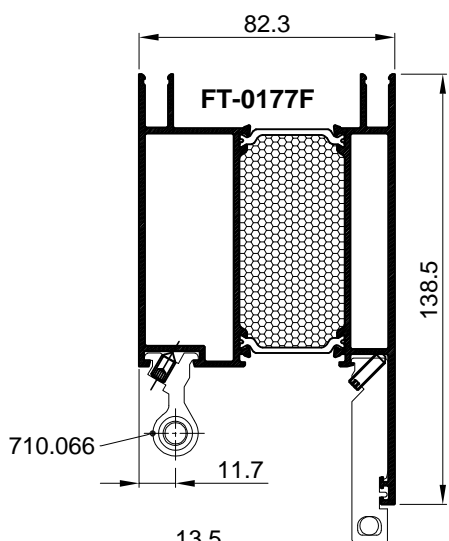
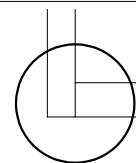
- Obrada na profilu rama FT-0180F za odvod kapljevina. Obrada profila se izvodi u smjeru odozdo prema gore i izvodi na:  
Univerzalna glodalica / stubna bušilica  
Alat: vretenasto glodalo Ø9.5 / svrdlo Ø9.5  
Kapljevine se izvode van pomoću monodrain cjevčice 360.009



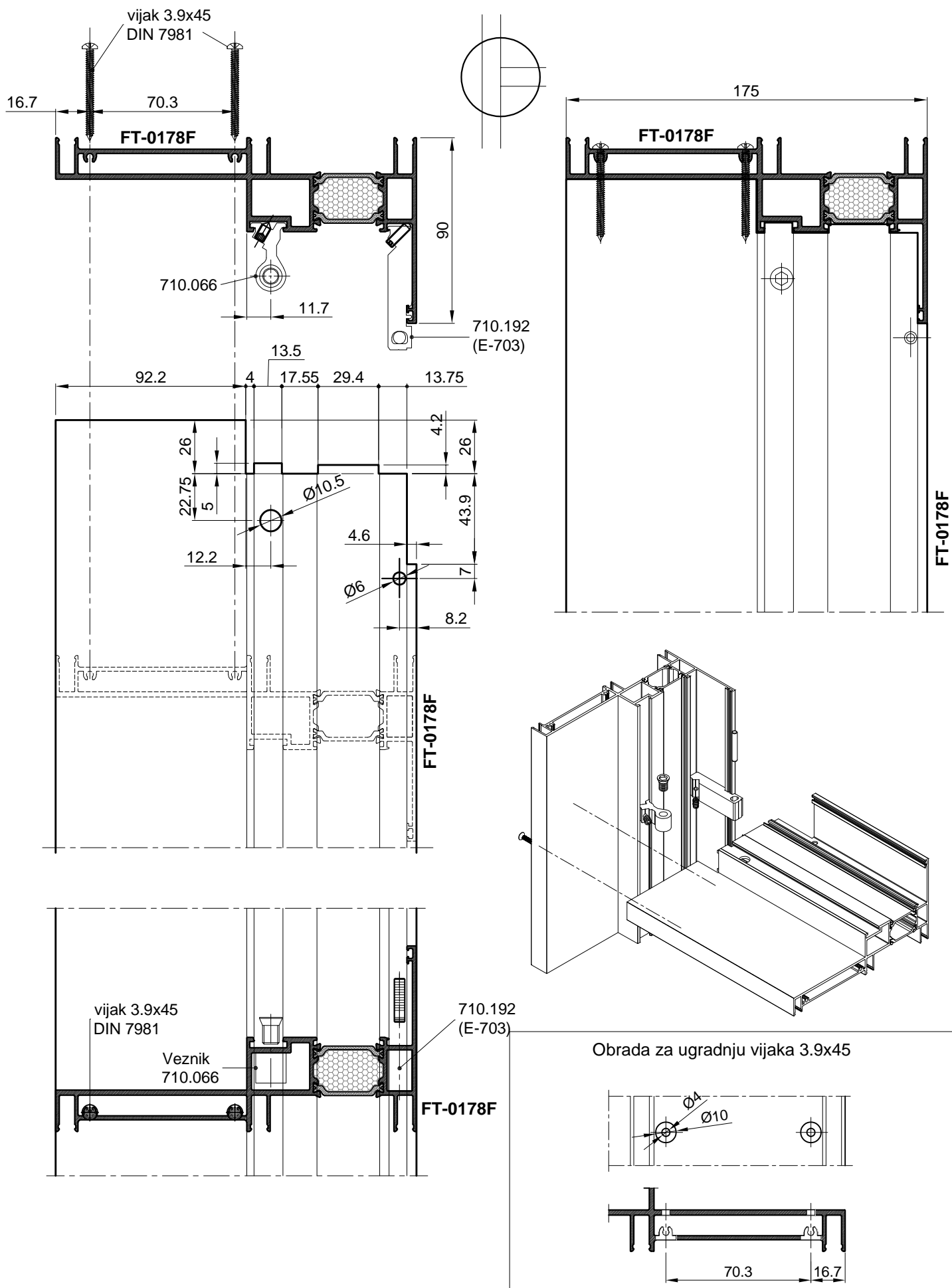
- Obrada na profilu prečke FT-0182F za odvod kapljevina. Obrada profila se izvodi u smjeru odozdo prema gore i izvodi na:  
Univerzalna glodalica / stubna bušilica  
Alat: vretenasto glodalo Ø9.5 / svrdlo Ø9.5  
Kapljevine se izvode van pomoću monodrain cjevčice 360.009



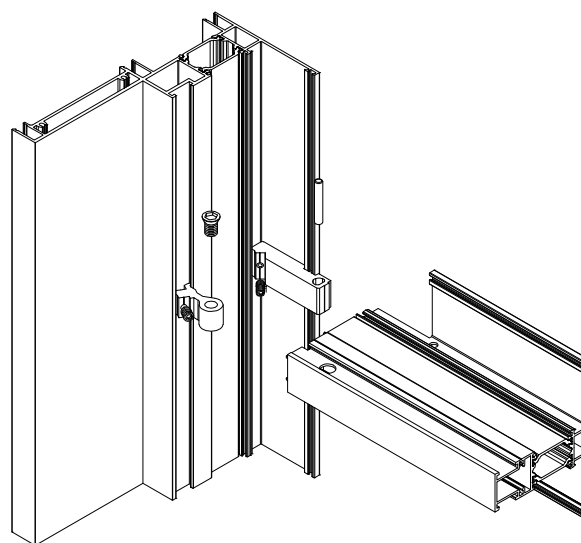
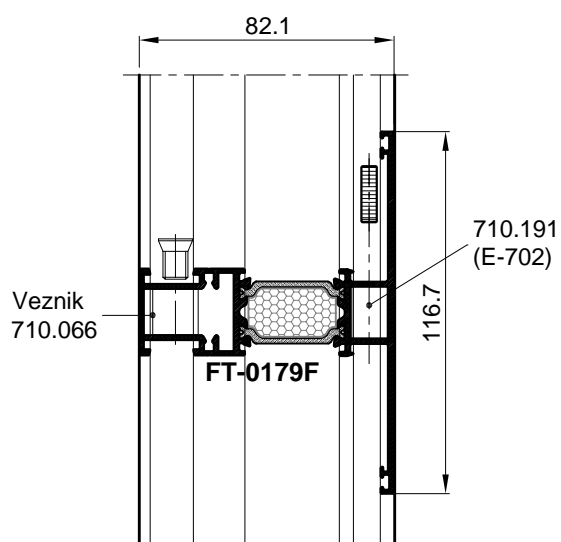
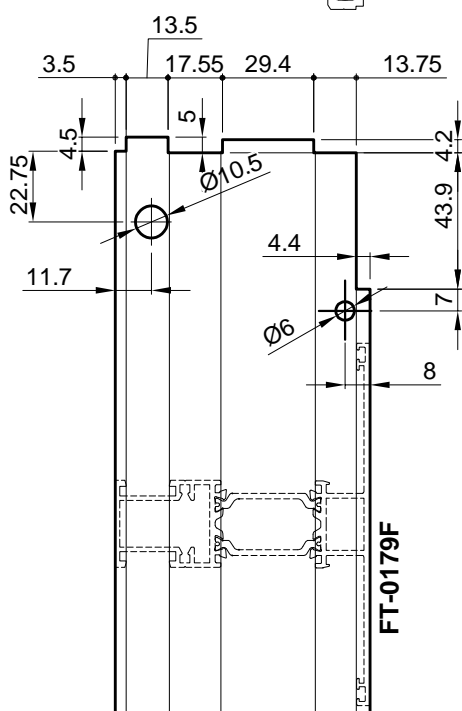
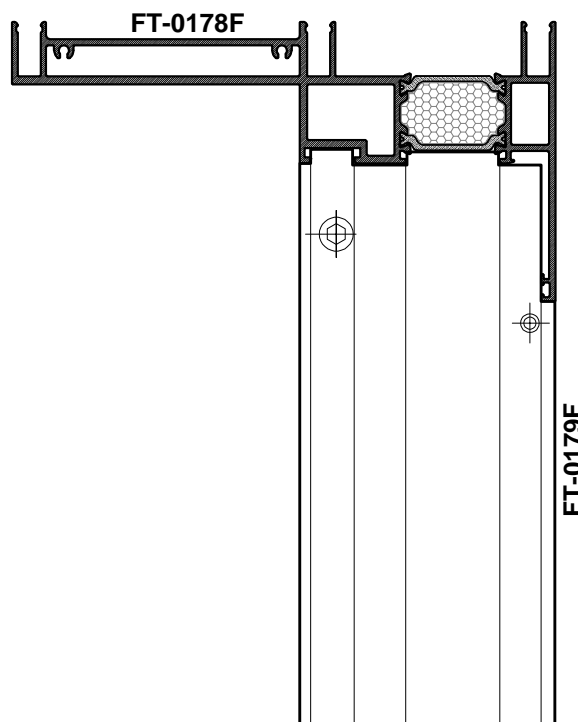
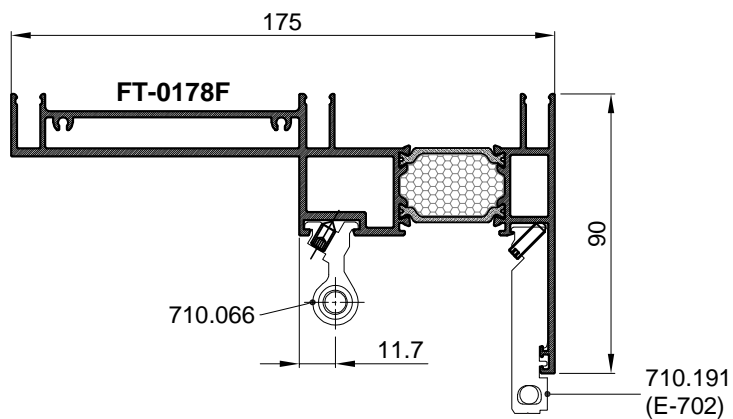
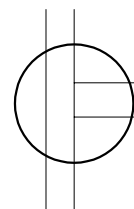
### Spoj profila FT-0177F sa profilom FT-0177F



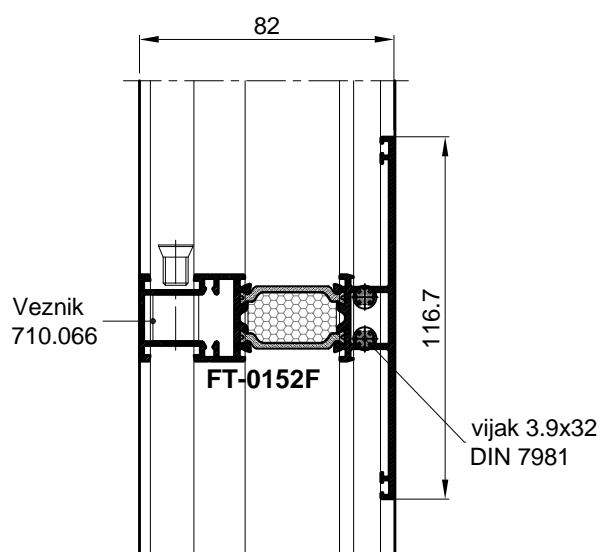
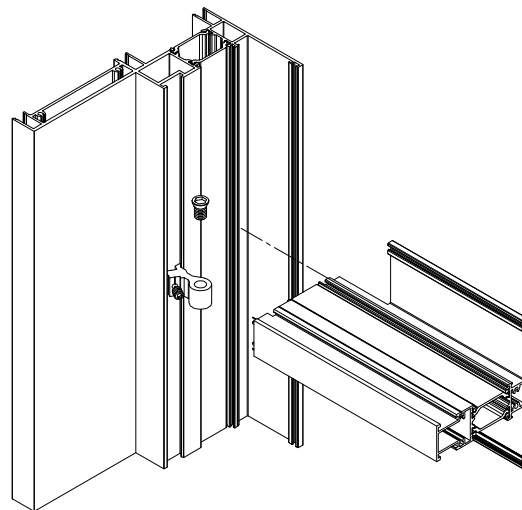
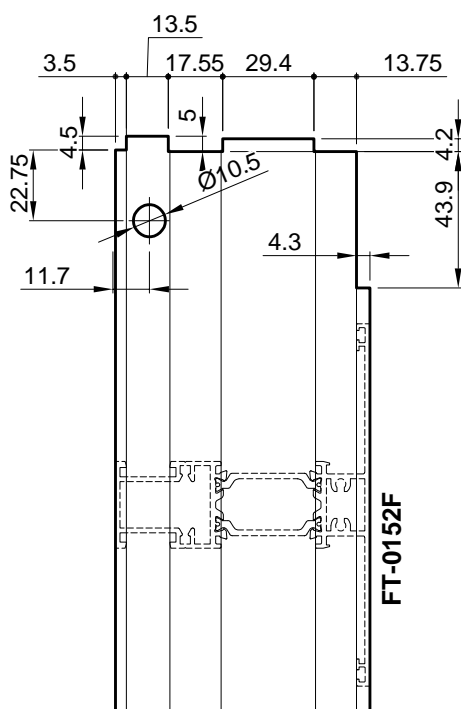
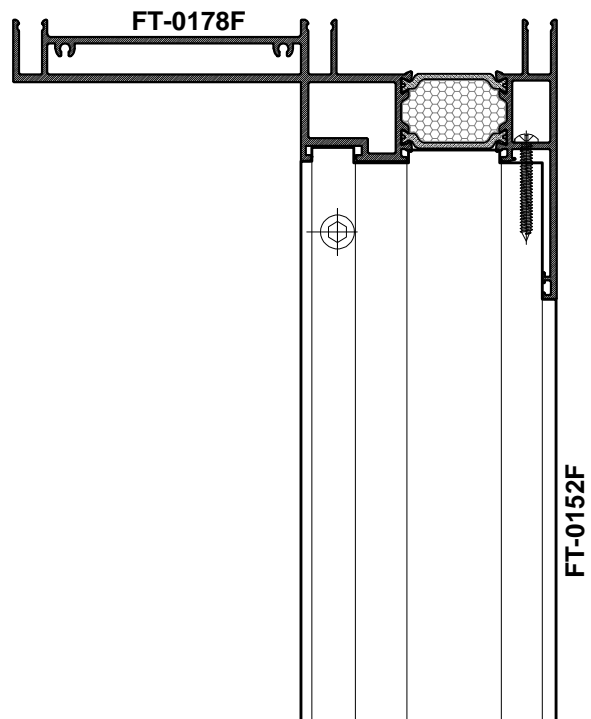
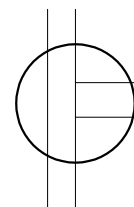
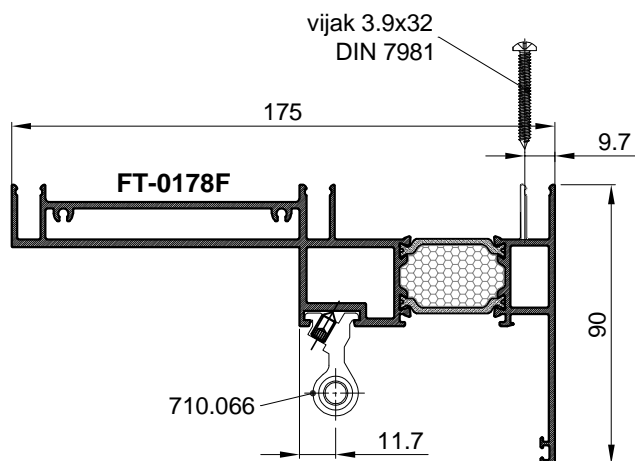
### Spoj profila FT-0178F sa profilom FT-0178F



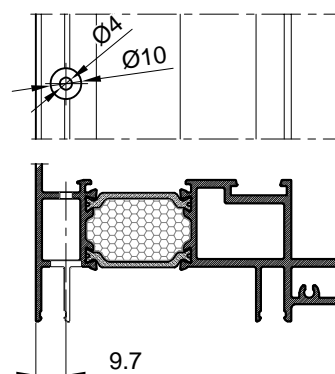
### Spoj profila FT-0178F sa profilom FT-0179F

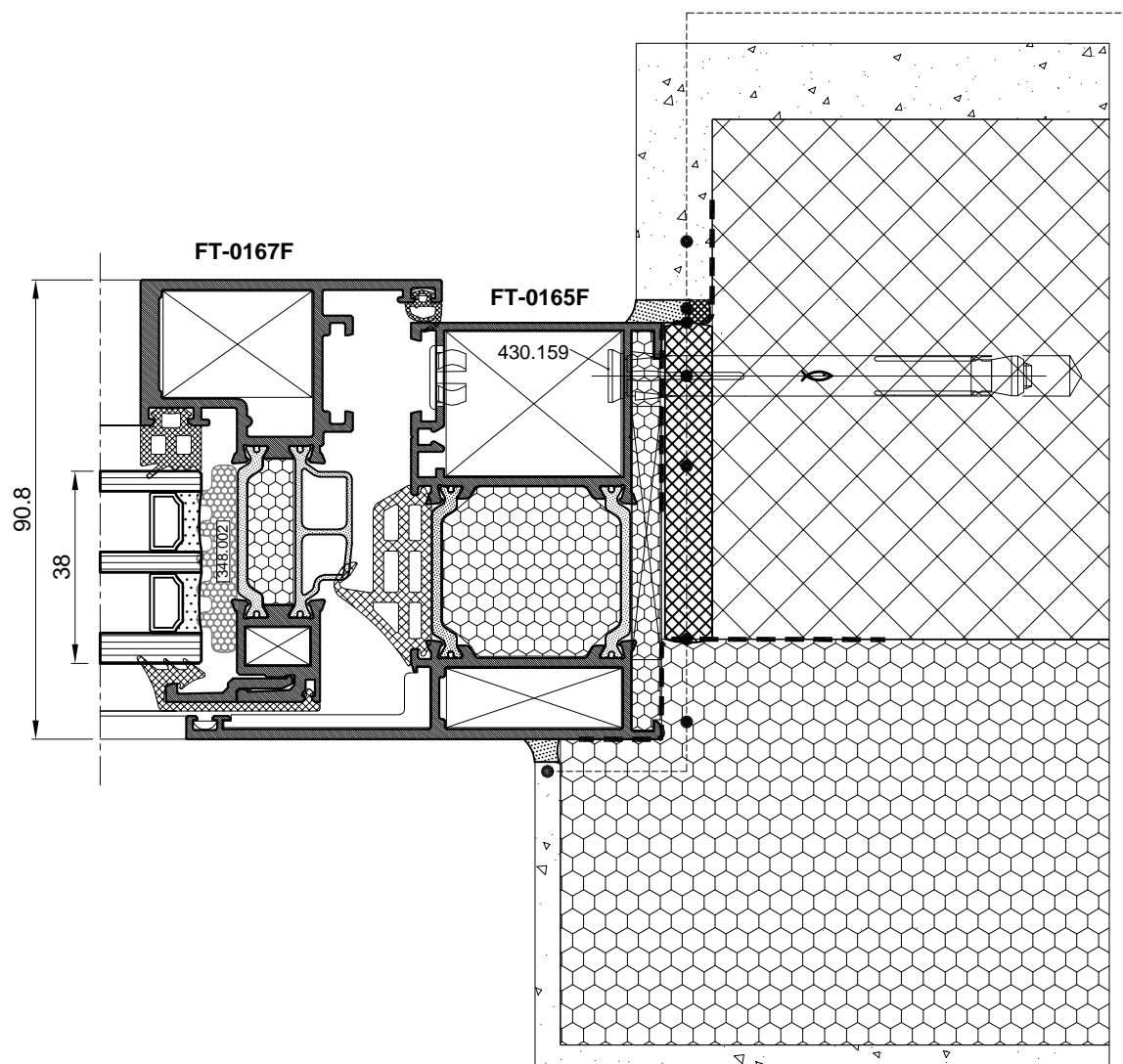


### Spoj profila FT-0178F sa profilom FT-0152F



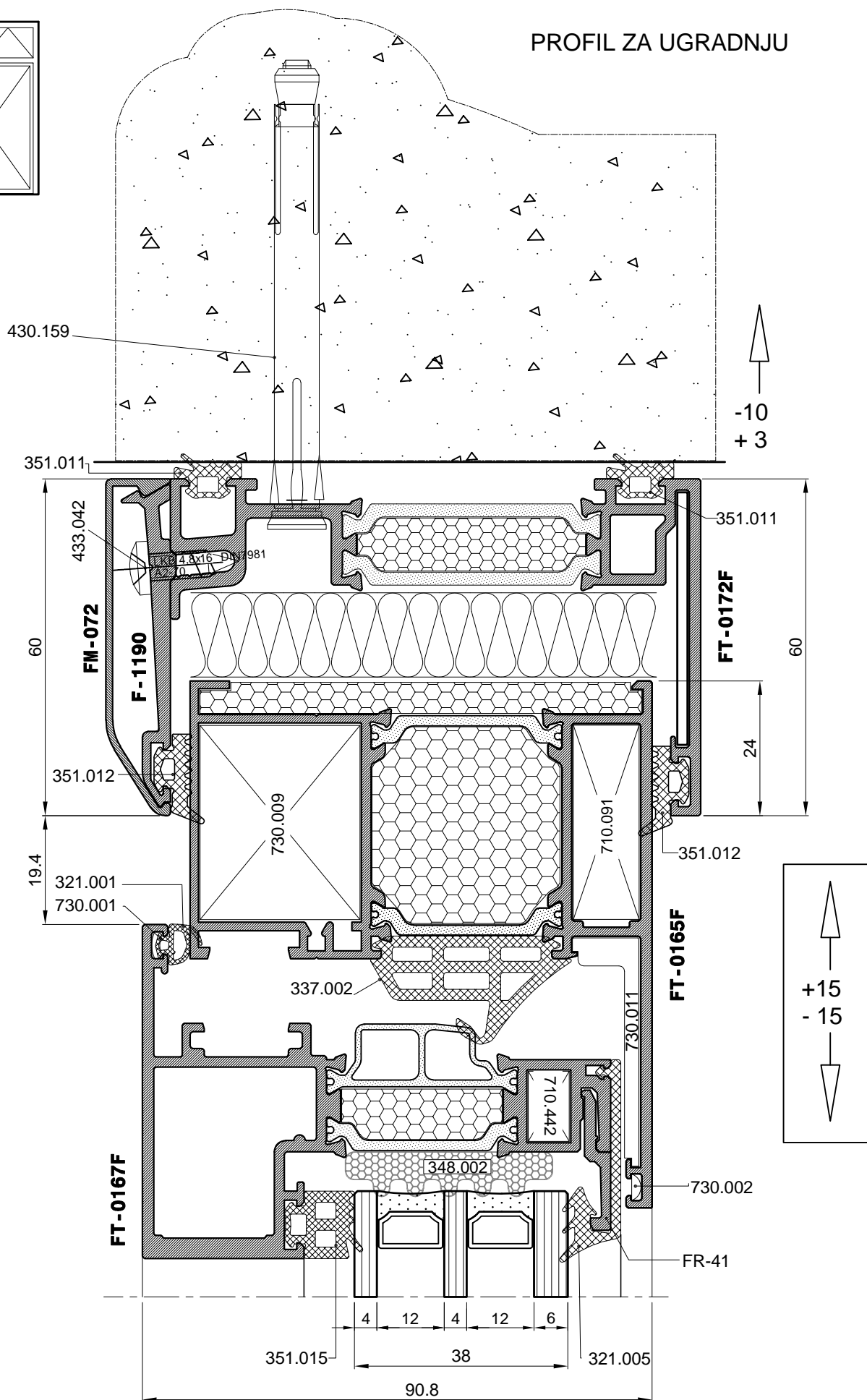
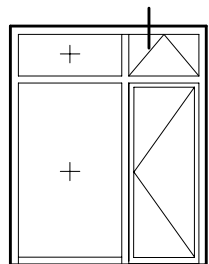
### Obrada za ugradnju vijaka 3.9x32

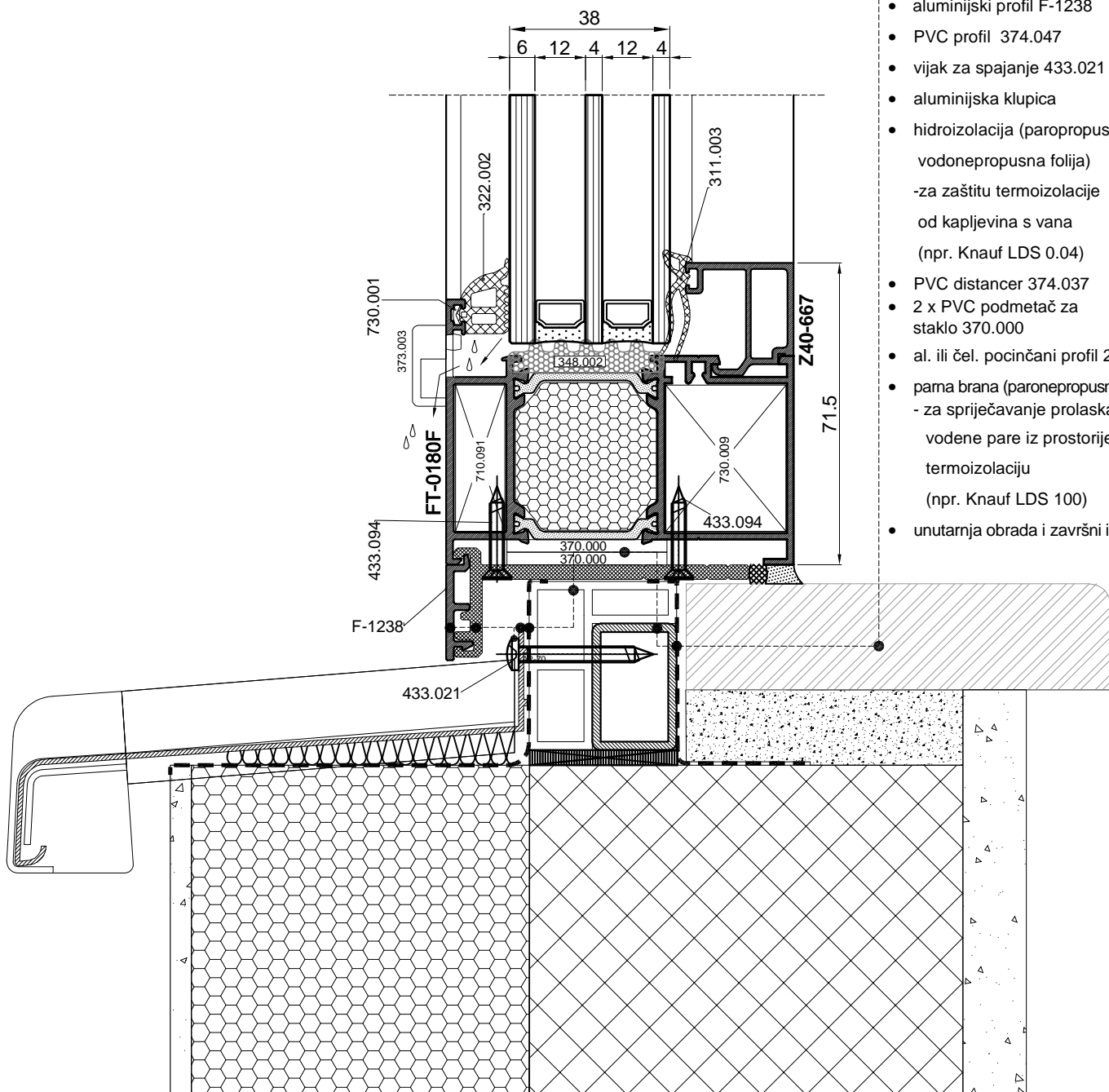
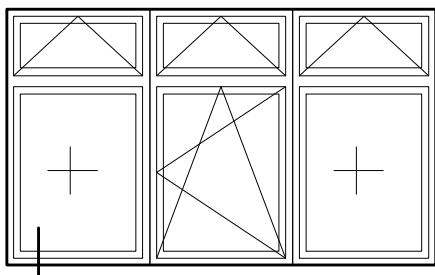




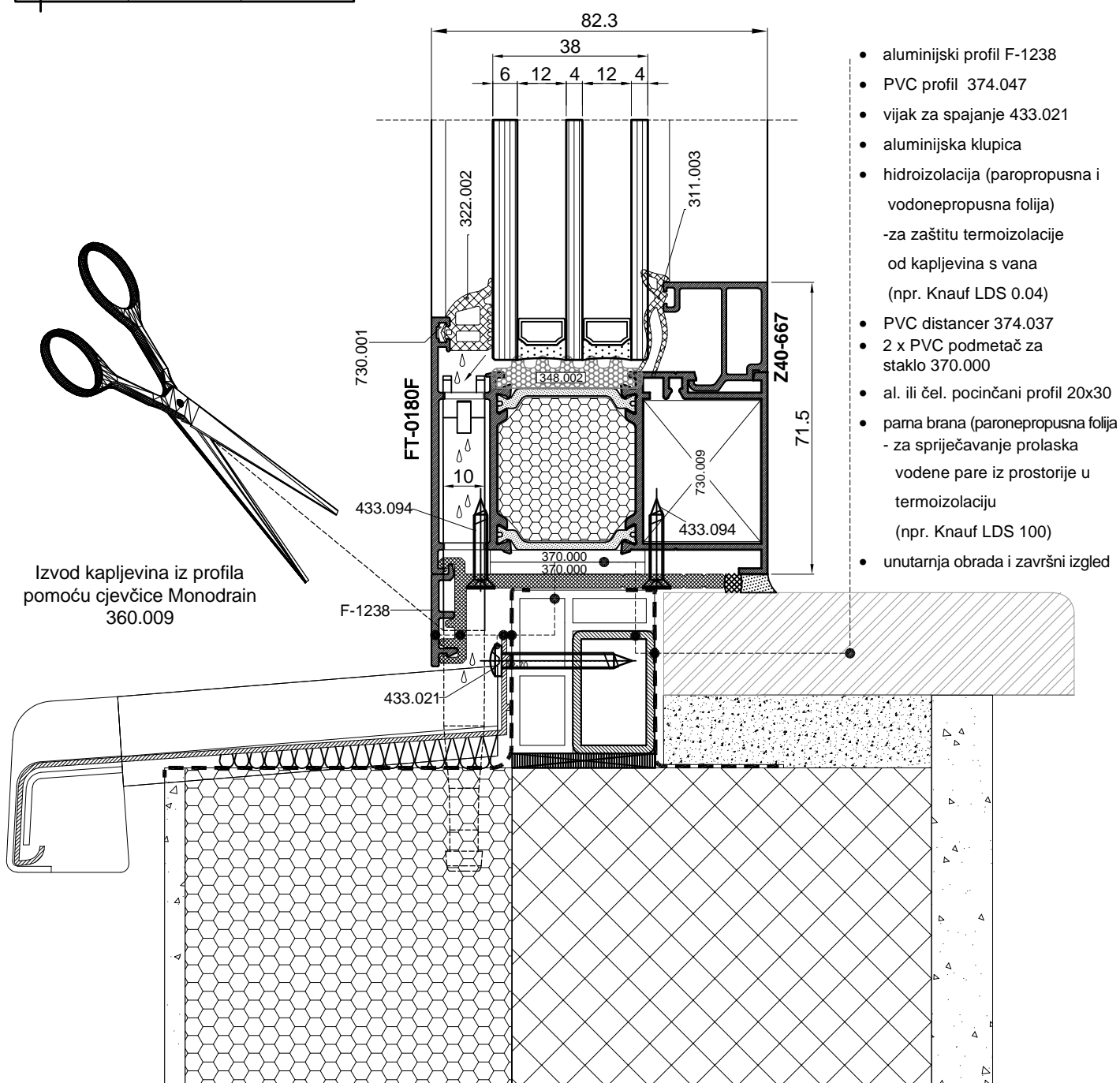
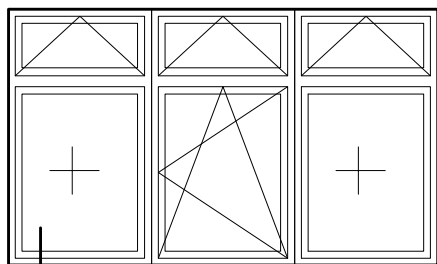
- vanjska žbuka
- termoizolacija
- hidroizolacija  
(paropropusna i vodonepropusna folija)  
-za zaštitu termoizolacije od kapljevina s vana (npr. Knauf LDS 0.04)
- termoizolacije ( exp. spužvica, pur-pjena )
- vijak za montažu
- parna brana (paronepropusna folija)  
-za spriječavanje prolaska vodene pare iz prostorije u termoizolaciju (npr. Knauf LDS 100)
- trajno elastični kit
- unutarnja obrada i završni izgled

### PROFIL ZA UGRADNJU

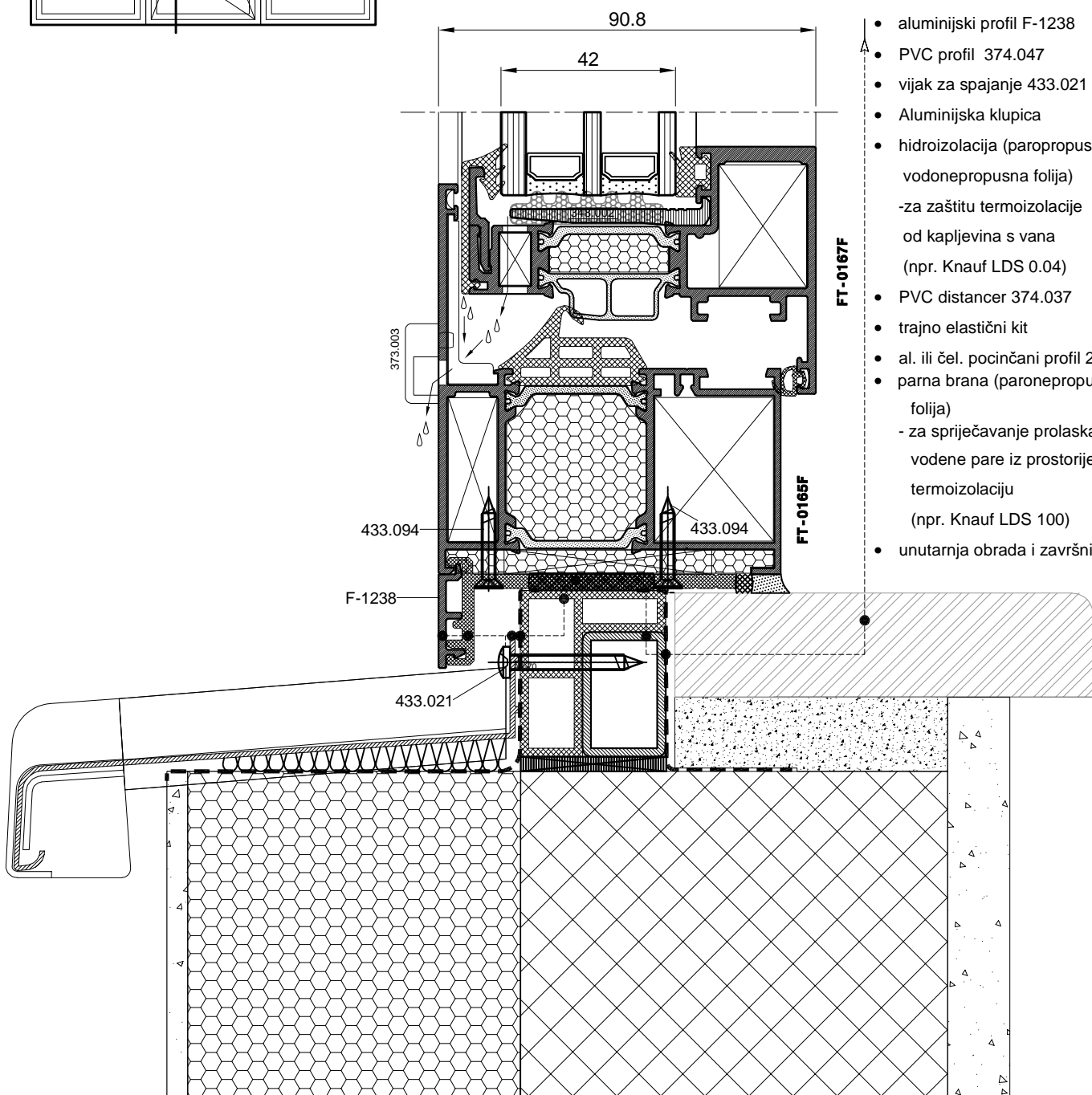
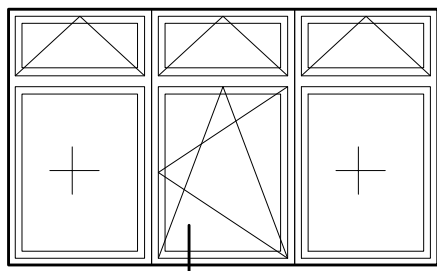




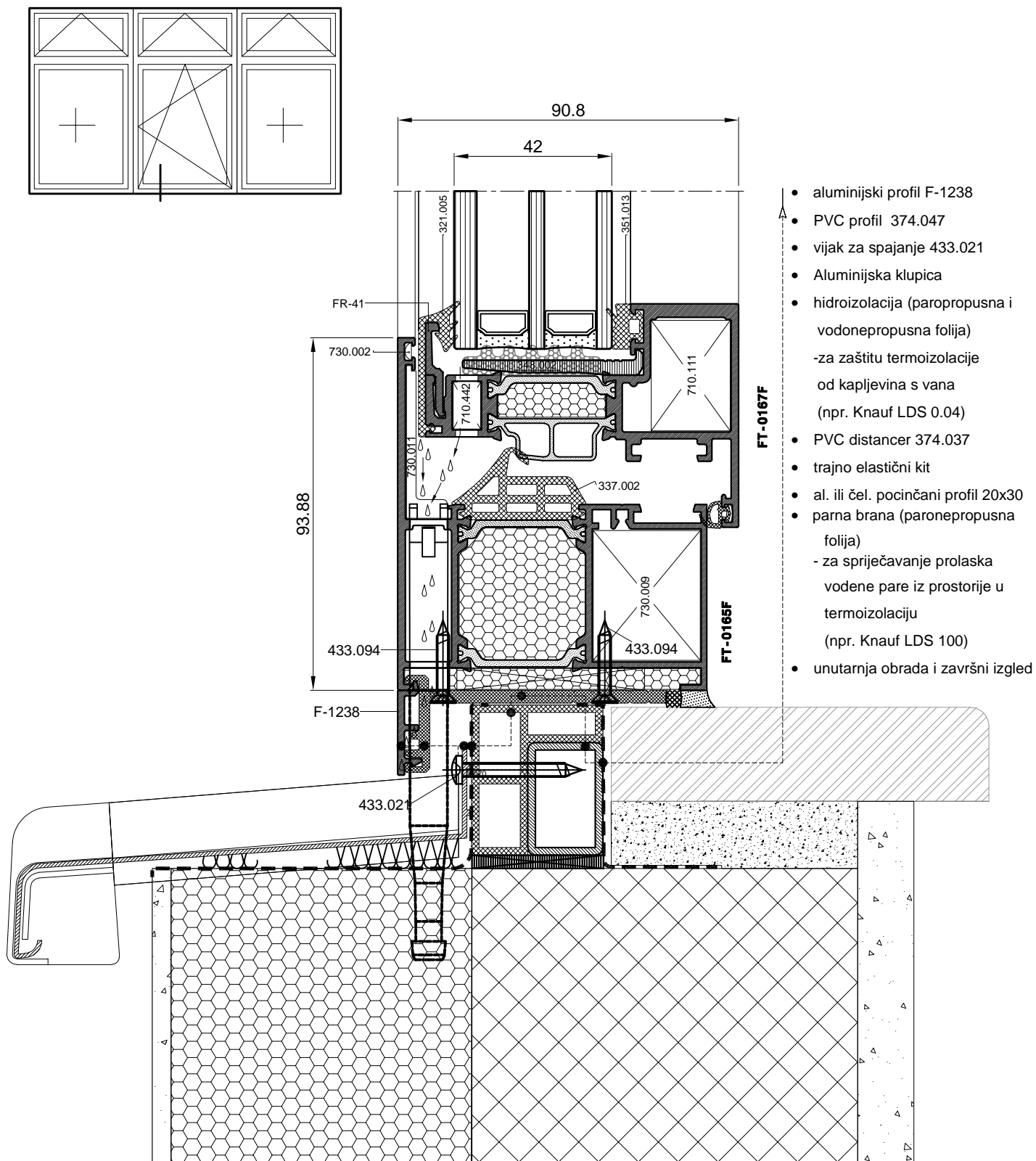
- aluminijski profil F-1238
- PVC profil 374.047
- vijak za spajanje 433.021
- aluminijska klupica
- hidroizolacija (paropropusna i vodonepropusna folija)  
-za zaštitu termoizolacije od kapljevina s vana (npr. Knauf LDS 0.04)
- PVC distancer 374.037
- 2 x PVC podmetač za staklo 370.000
- al. ili čel. pocinčani profil 20x30
- pama brana (paronepropusna folija)  
- za sprječavanje prolaska vodene pare iz prostorije u termoizolaciju (npr. Knauf LDS 100)
- unutarnja obrada i završni izgled

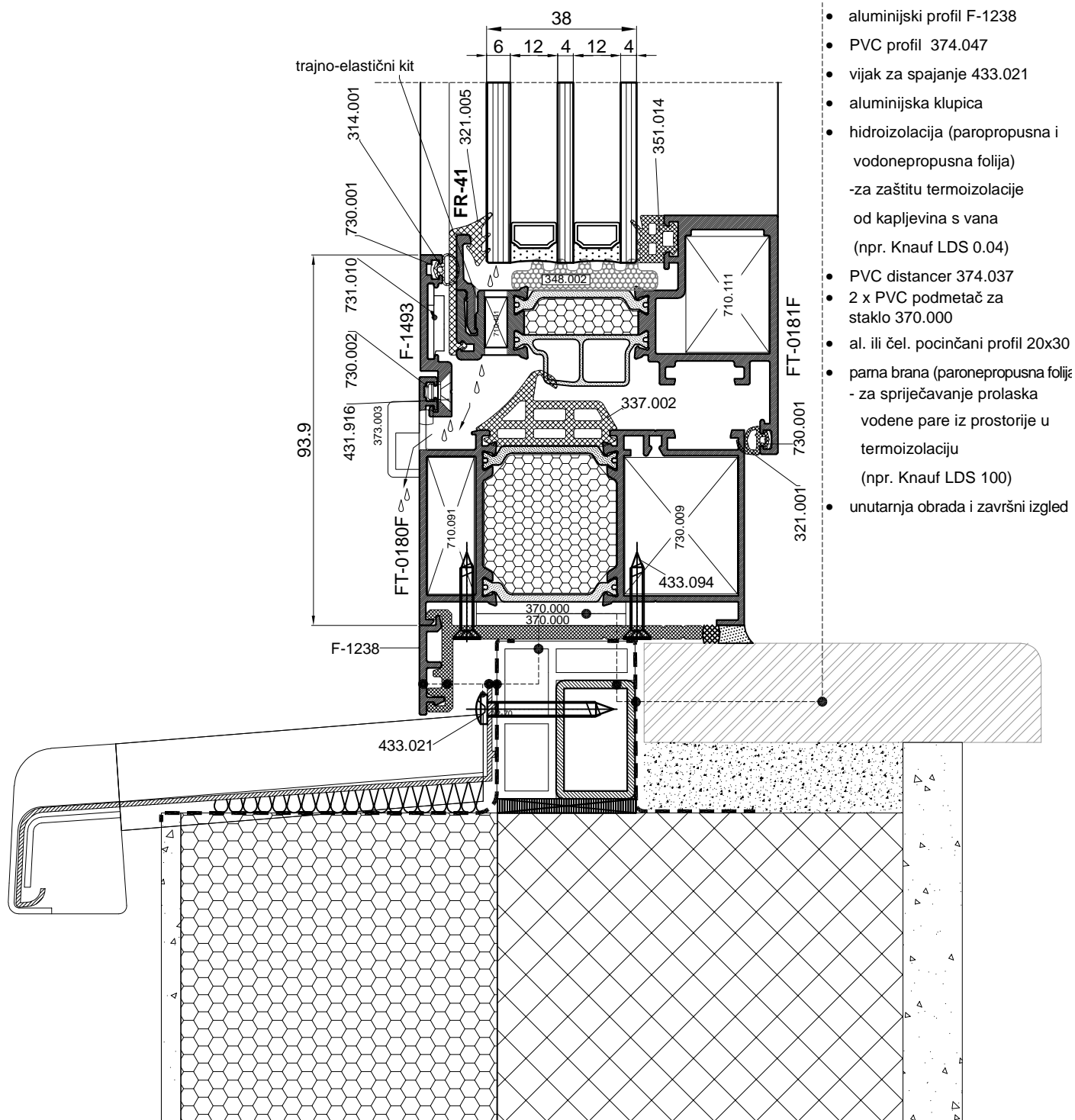
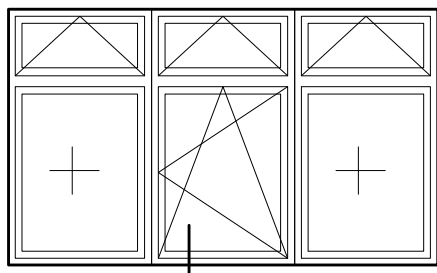


- aluminijski profil F-1238
- PVC profil 374.047
- vijak za spajanje 433.021
- aluminijska klupica
- hidroizolacija (paropropusna i vodonepropusna folija) -za zaštitu termoizolacije od kapljevina s vana (npr. Knauf LDS 0.04)
- PVC distancer 374.037
- 2 x PVC podmetač za staklo 370.000
- al. ili čel. pocinčani profil 20x30
- parna brana (paronepropusna folija - za sprječavanje prolaska vodene pare iz prostorije u termoizolaciju (npr. Knauf LDS 100)
- unutarnja obrada i završni izgled

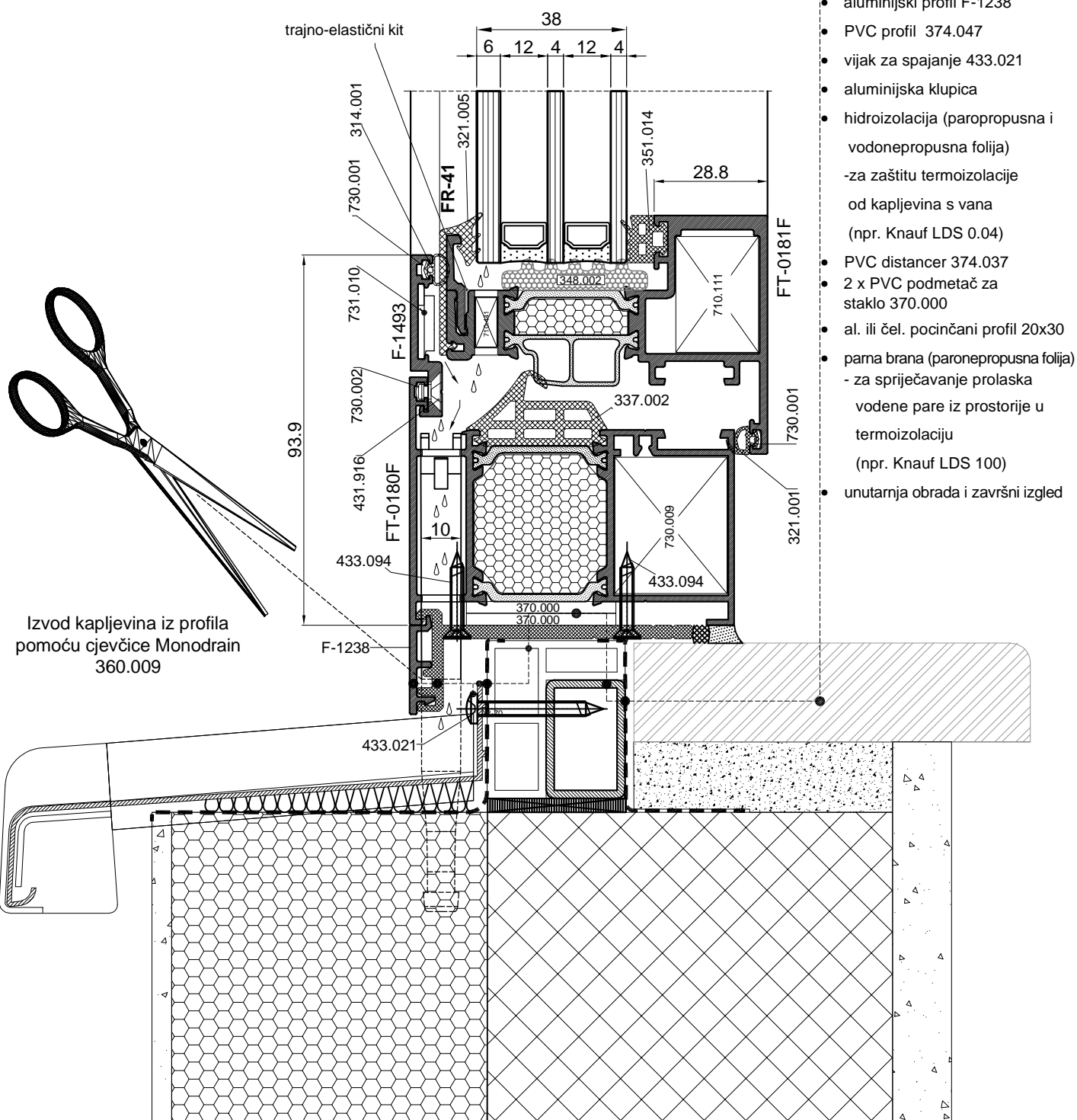
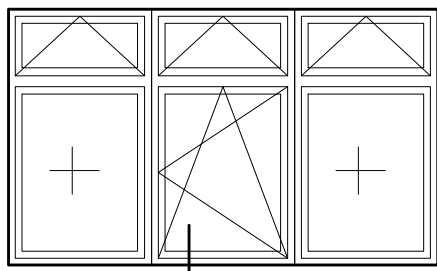


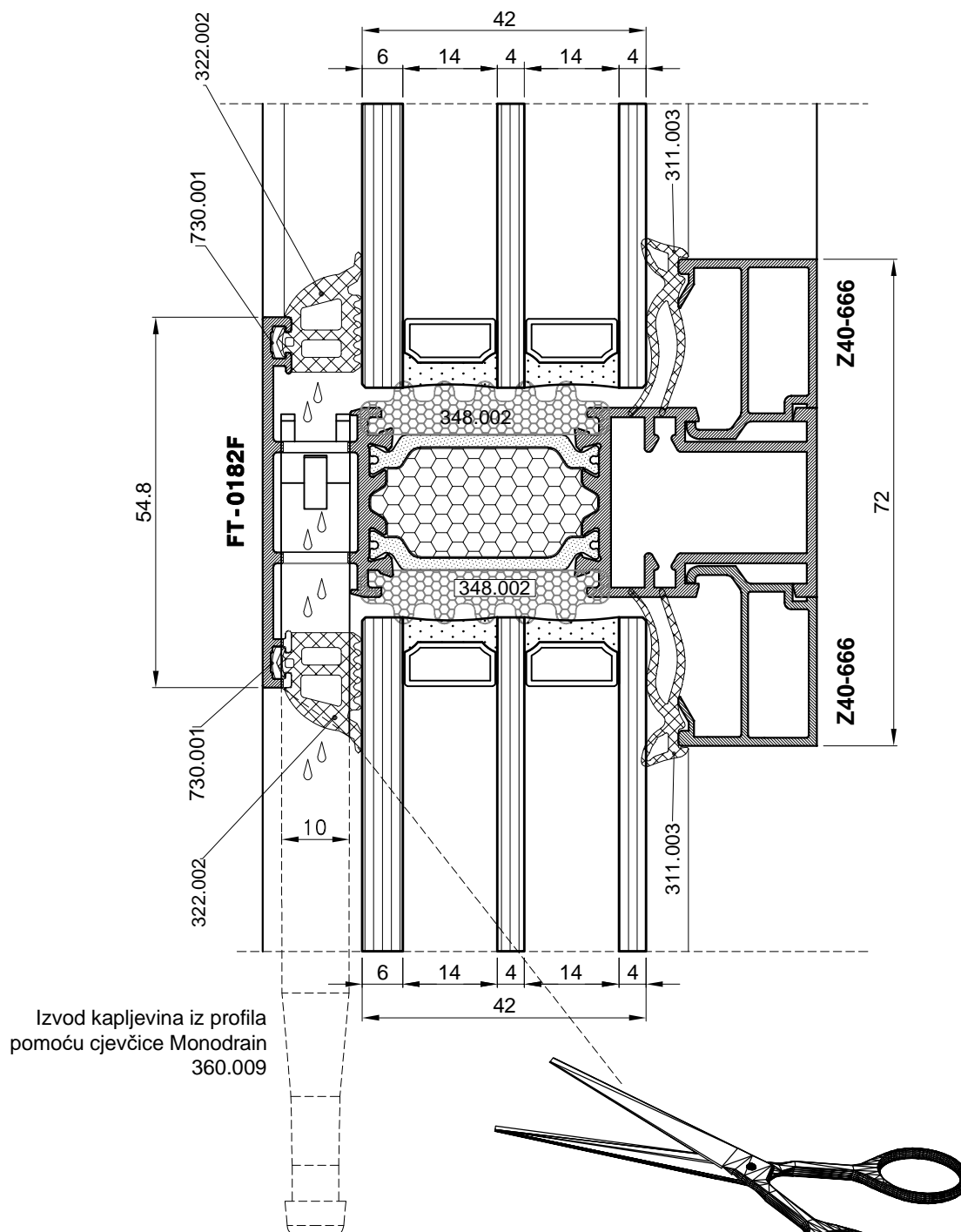
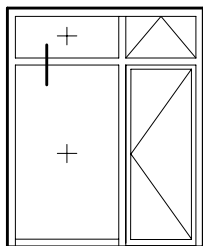
- aluminijski profil F-1238
- PVC profil 374.047
- vijak za spajanje 433.021
- Aluminijska klupica
- hidroizolacija (paropropusna i vodonepropusna folija)  
- za zaštitu termoizolacije od kapljevina s vana (npr. Knauf LDS 0.04)
- PVC distancer 374.037
- trajno elastični kit
- al. ili čel. pocinčani profil 20x30
- parna brana (paronepropusna folija)  
- za spriječavanje prolaska vodene pare iz prostorije u termoizolaciju (npr. Knauf LDS 100)
- unutarnja obrada i završni izgled





- aluminijski profil F-1238
- PVC profil 374.047
- vijak za spajanje 433.021
- aluminijska klupica
- hidroizolacija (paropropusna i vodonepropusna folija) - za zaštitu termoizolacije od kapljevina s vana (npr. Knauf LDS 0.04)
- PVC distancer 374.037
- 2 x PVC podmetač za staklo 370.000
- al. ili čel. pocinčani profil 20x30
- pama brana (paronepropusna folij) - za sprječavanje prolaska vodene pare iz prostorije u termoizolaciju (npr. Knauf LDS 100)
- unutarnja obrada i završni izgled

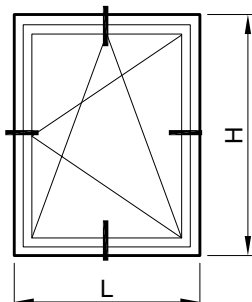




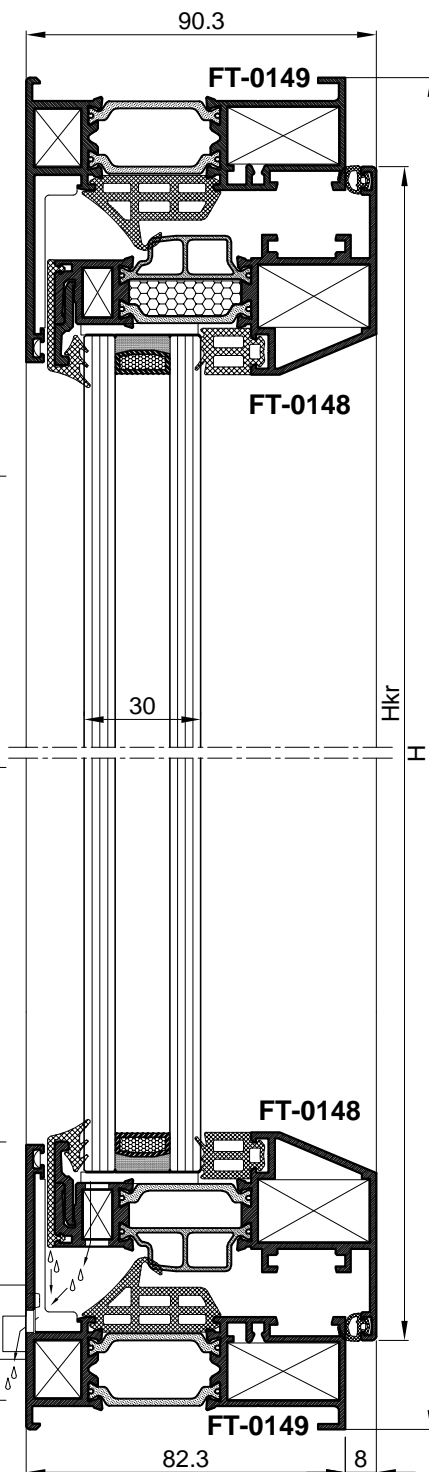


# Rezne liste





### JEDNOKRILNI PROZOR

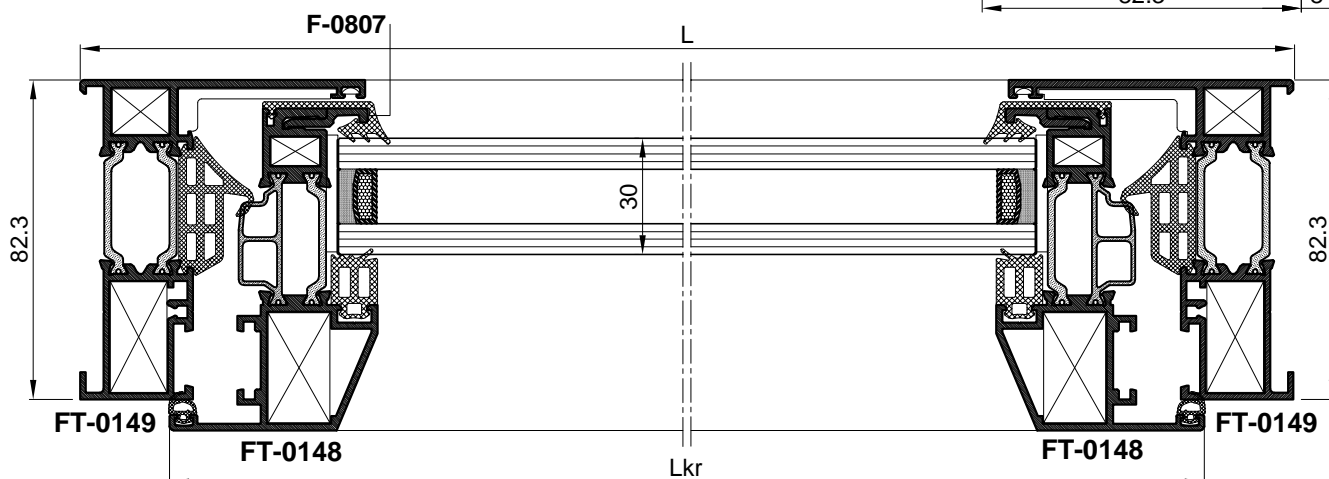


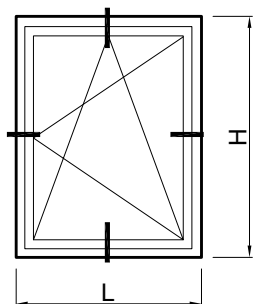
PROFILI		kom	mjera	pilanje
FT-0149	vodoravnica okvira	2	L	45-45
FT-0149	okomica okvira	2	H	45-45
FT-0148	vodoravnica krila	2	Lkr=L-46	45-45
FT-0148	okomica krila	2	Hkr=H-46	45-45
F-0807	vodoravna lajsna	2	Lkr-81	90-90
F-0807	okomita lajsna	2	Hkr-102	90-90

OKOVI		kom	
710.458	glavni kutnik rama	4	
710.447	pomoćni kutnik rama	4	
730.011	pomoćni kutnik rama	4	
730.002	pomoćni kutnik rama	4	
710.462	glavni kutnik krila	4	
710.442	pomoćni kutnik krila	4	
730.001	pomoćni kutnik krila	4	
134.000	otklopno-zaokretni mehanizam	1	
373.003	maska za drenažni otvor	2	

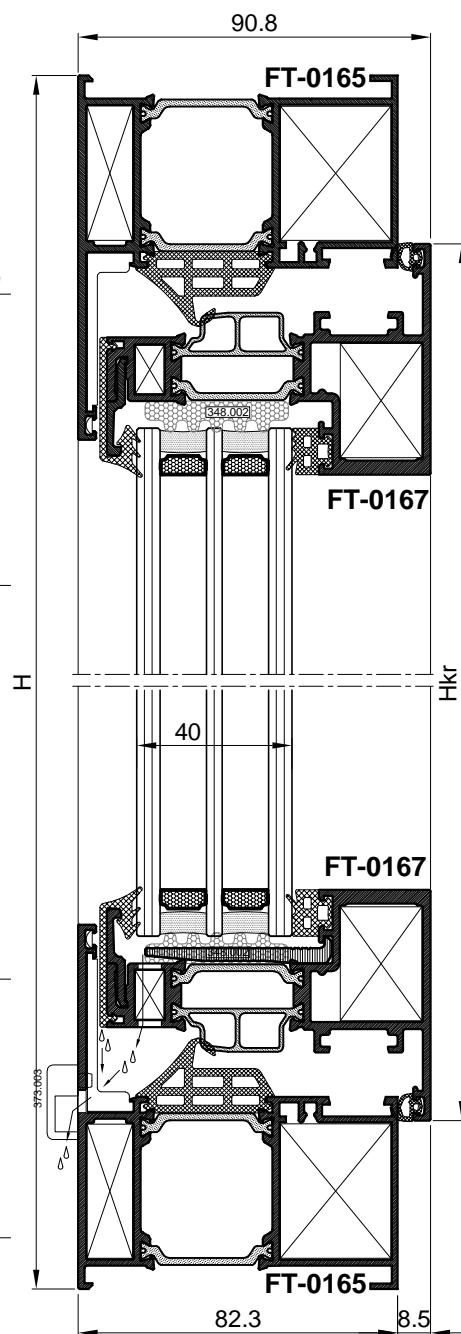
BRTVE		kom	mjera
337.002	srednja brtva		2L+2H
321.001	brtva u krilu unutra		2L+2H
322.001	brtva prema staklu-vani		2L+2H
351.017	brtva prema staklu -unutra		2L+2H
333.009	kutni umetak brtve	4	

STAKLO		kom	mjera
30 mm		1	Lkr-87 x Hkr-87





### JEDNOKRILNI PROZOR

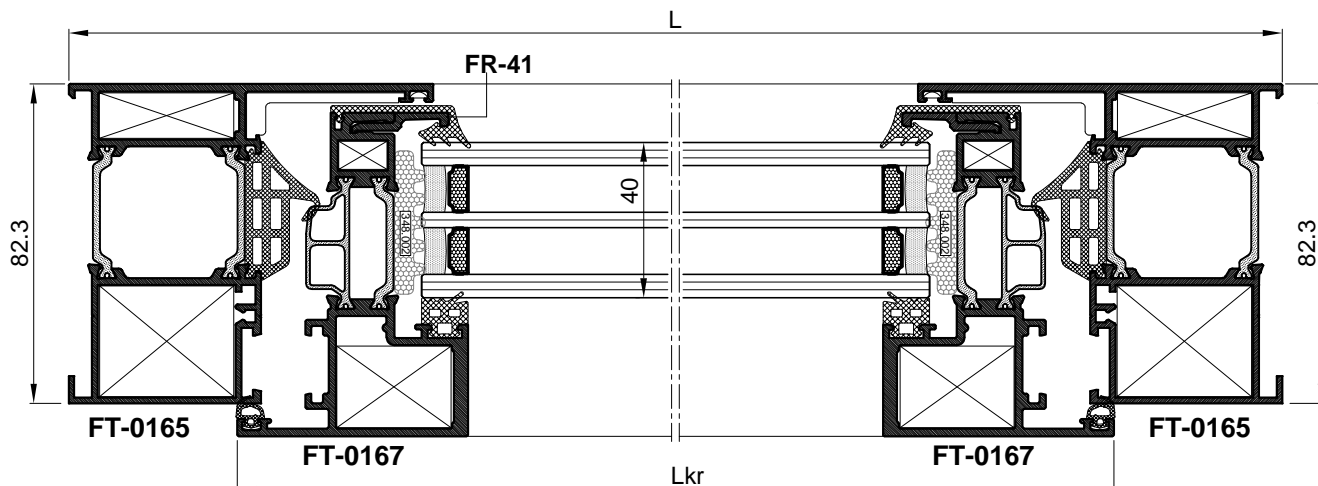


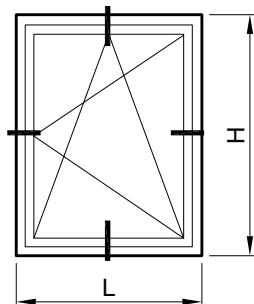
PROFILI		kom	mjera	pilanje
FT-0165	vodoravnica okvira	2	L	45-45
FT-0165	okomica okvira	2	H	45-45
FT-0167	vodoravnica krila	2	Lkr=L-87	45-45
FT-0167	okomica krila	2	Hkr=H-87	45-45
FR-41	vodoravna lajsna	2	Lkr=81	90-90
FR-41	okomita lajsna	2	Hkr=109	90-90

OKOVI		kom	
710.072	glavni kutnik rama	4	
710.091	pomoćni kutnik rama	4	
730.011	pomoćni kutnik rama	4	
730.002	pomoćni kutnik rama	4	
710.111	glavni kutnik krila	4	
710.442	pomoćni kutnik krila	4	
730.001	pomoćni kutnik krila	4	
134.000	otklopno-zaokretni mehanizam	1	
521.127	držač stakla	2	
373.003	maska za drenažni otvor	2	

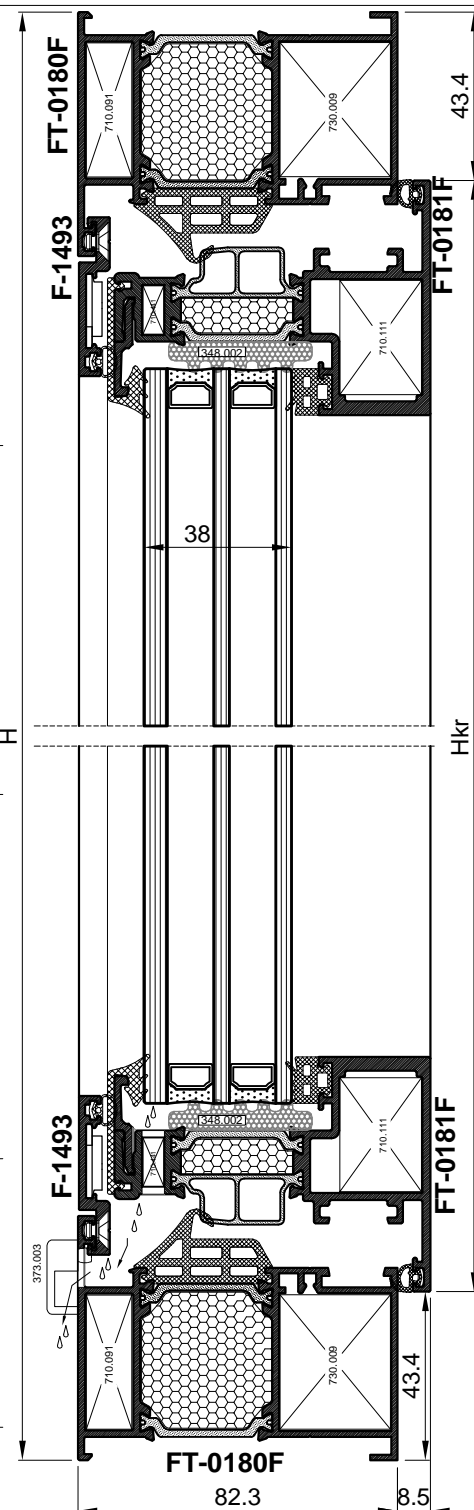
BRTVE		kom	mjera
337.002	srednja brtva		2L+2H
321.001	brtva u krilu unutra		2L+2H
321.005	brtva prema staklu-vani		2L+2H
351.014	brtva prema staklu-unutra		2L+2H
333.009	kutni umetak brtve	4	

STAKLO		kom	mjera
40 mm		1	Lkr-95 x Hkr-95





JEDNOKRILNI PROZOR



PROFILI		kom	mjera	planje
FT-0180F	vodoravnica okvira	2	L	45-45
FT-0180F	okomica okvira	2	H	45-45
FT-0181F	vodoravnica krila	2	Lkr=L-86.8	45-45
FT-0181F	okomica krila	2	Hkr=H-86.8	45-45
FR-41	vodoravna lajsna	2	Lkr-83	90-90
FR-41	okomita lajsna	2	Hkr-111	90-90
F-1493	vodoravnica dod. profila	2	Ldp=Lkr-18.5	45-45
F-1493	okomica dod. profila	2	Hdp=Hkr-18.5	45-45

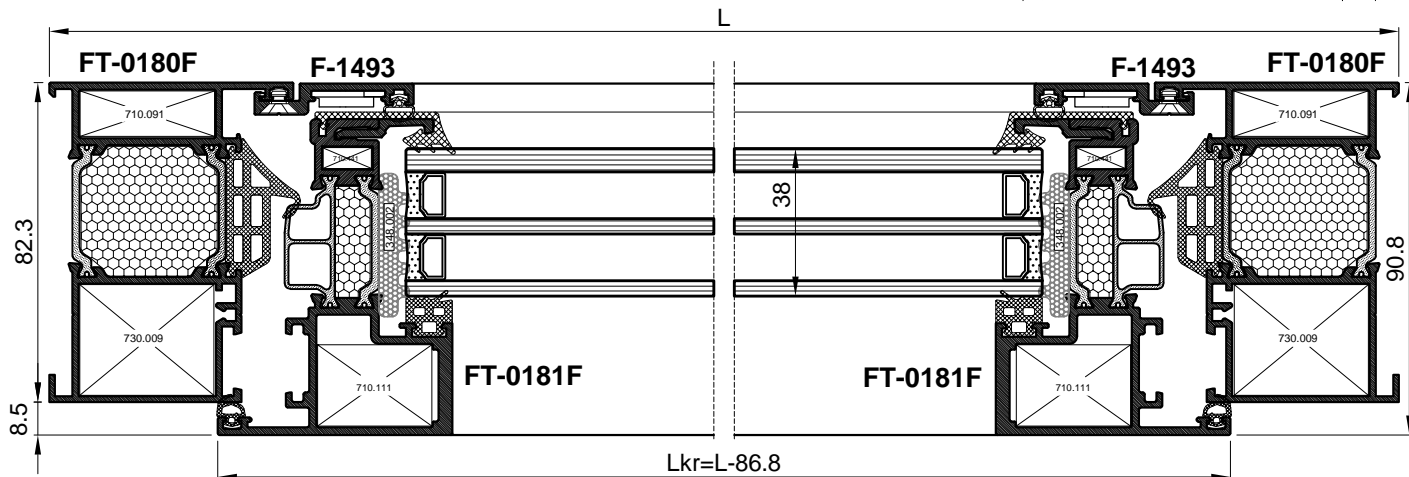
OKOVI		kom	
730.009	glavni kutnik okvira	4	
710.091	pomoćni kutnik okvira	4	
730.002	pomoćni kutnik okvira	4	
710.111	glavni kutnik krila	4	
710.441	pomoćni kutnik krila	4	
731.010	kutnik dodatnog profila	4	
730.001	pomoćni kutnik dodatnog profila	4	
134.000	otklopno-zaokretni mehanizam	1	
373.003	maska za drenažni otvor	2	

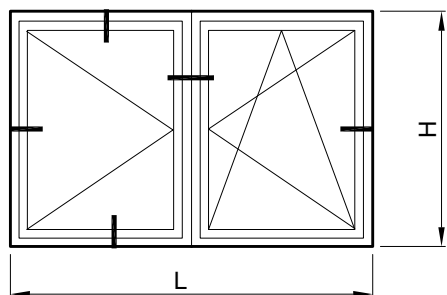
  

BRTVE		kom	mjera
337.002	srednja brtva		2L+2H
321.001	brtva u krilu unutra		2L+2H
321.005	brtva prema staklu-vani		2L+2H
351.014	brtva prema staklu -unutra		2L+2H
314.001	brtva dodatnog profila		2L+2H
333.009	kutni umetak brtve	4	

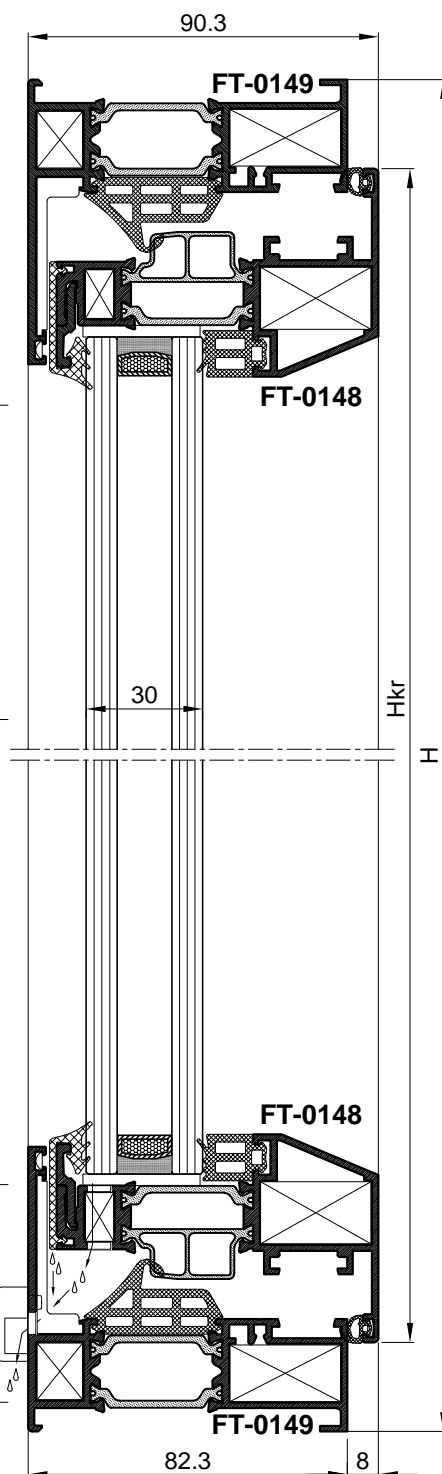
  

STAKLO		kom	mjera
38 mm		1	Lkr-97 x Hkr-97

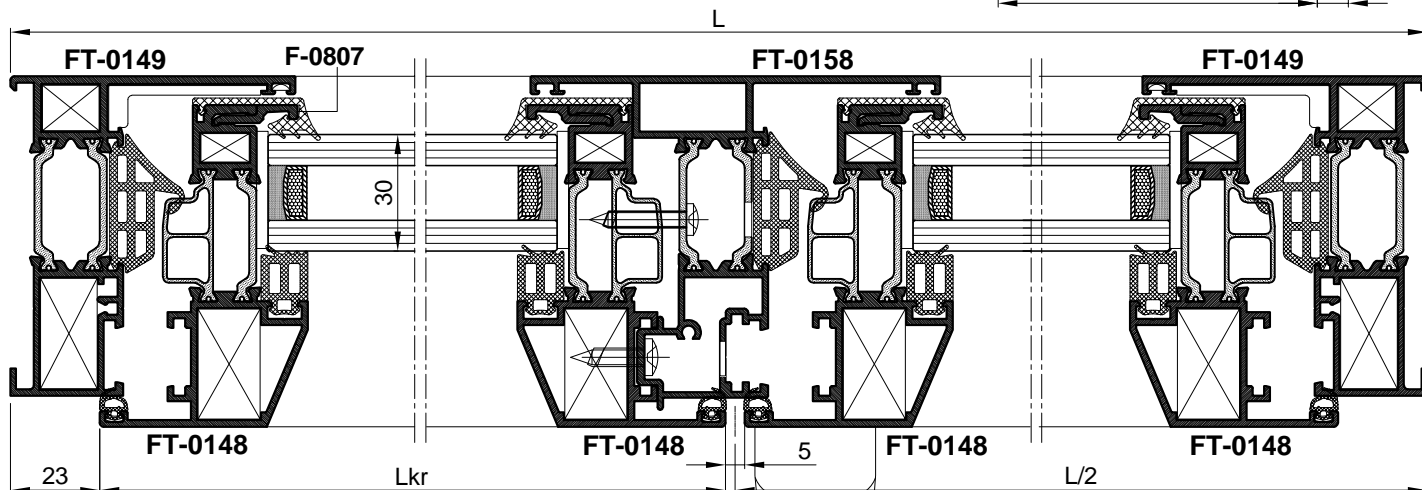




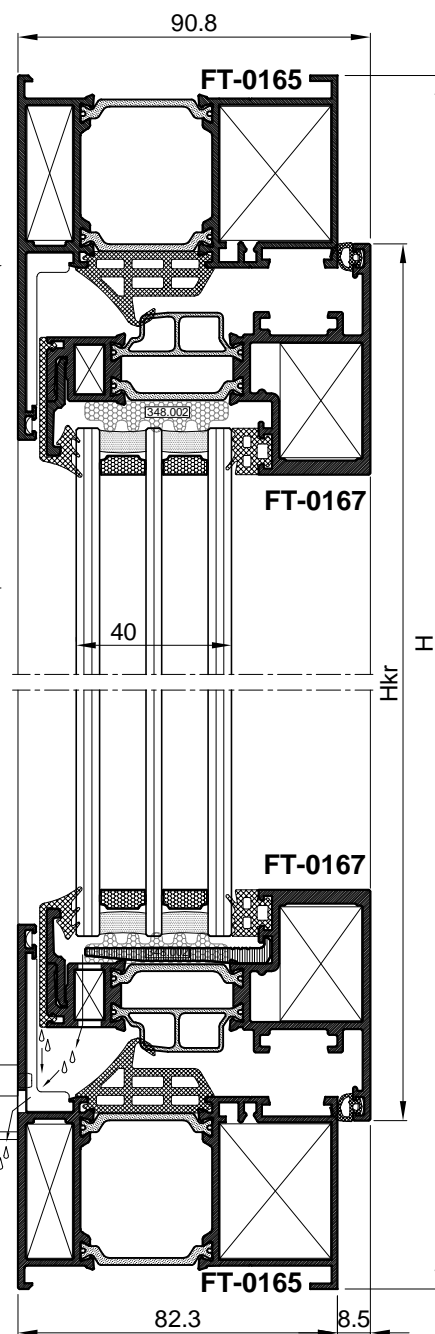
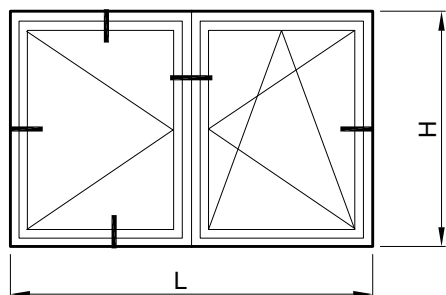
DVOKRILNI PROZOR



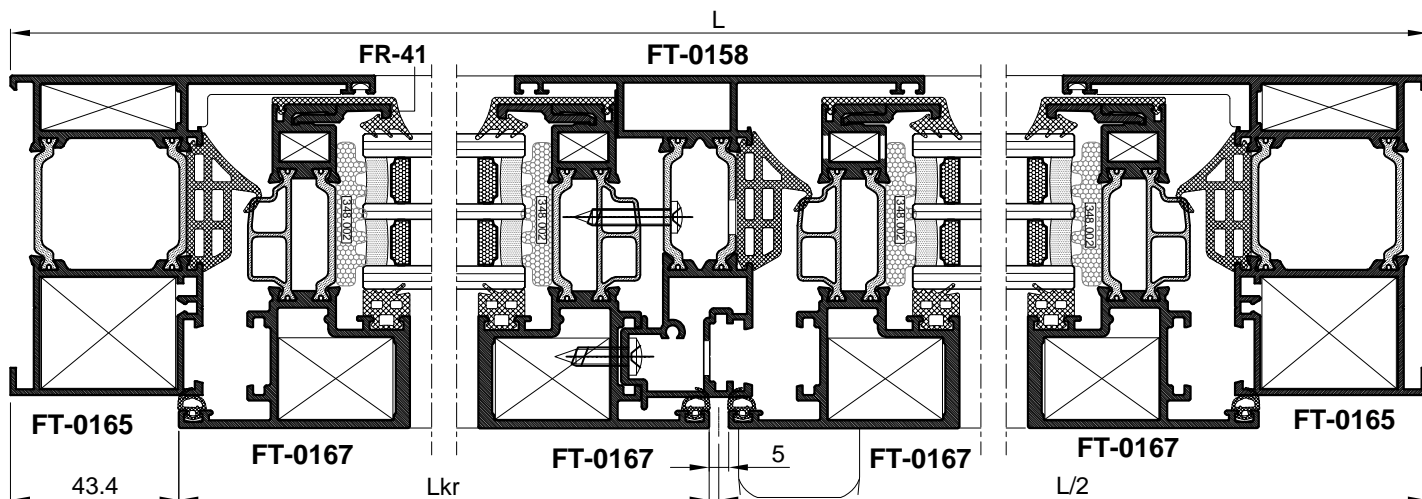
PROFILI		kom	mjera	pilanje
FT-0149	vodoravnica okvira	2	L	45-45
FT-0149	okomica okvira	2	H	45-45
FT-0148	vodoravnica krila	4	$L_{kr}=L/2-25.5$	45-45
FT-0148	okomica krila	4	$H_{kr}=H-46$	45-45
F-0807	vodoravna lajsna	4	$L_{kr}=81$	90-90
F-0807	okomita lajsna	4	$H_{kr}=102$	90-90
FT-0158	kombatuta	1	$H_{kr}=113$	90-90
NC-1459	klizač			
OKOVI		kom		
710.458	glavni kutnik rama	4		
710.447	pomoćni kutnik rama	4		
730.011	pomoćni kutnik rama	4		
730.002	pomoćni kutnik rama	4		
710.462	glavni kutnik krila	8		
710.442	pomoćni kutnik krila	8		
730.001	pomoćni kutnik krila	8		
134.000	otklopno-zaokretni mehanizam	1		
143.002	zapinjač-krakun za pasivno krilo	2		
143.003	jednostrani prihvatač zapinjača	2		
111.001	dvodijelna šarka	2		
373.003	maska za drenažni otvor	2		
363.004	čep za kombatutu	1 par		
BRTVE		kom	mjera	
337.002	srednja brtva		$2L+3H$	
321.001	brtva u krilu unutra		$2L+4H$	
322.001	brtva prema staklu-vani		$2L+4H$	
351.017	brtva prema staklu -unutra		$2L+4H$	
333.009	kutni umetak brtve	4		
STAKLO		kom	mjera	
30 mm		2	$L_{kr}=87 \times H_{kr}=87$	

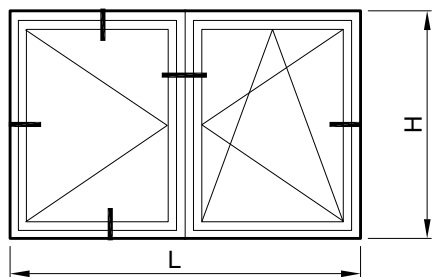


### DVOKRILNI PROZOR

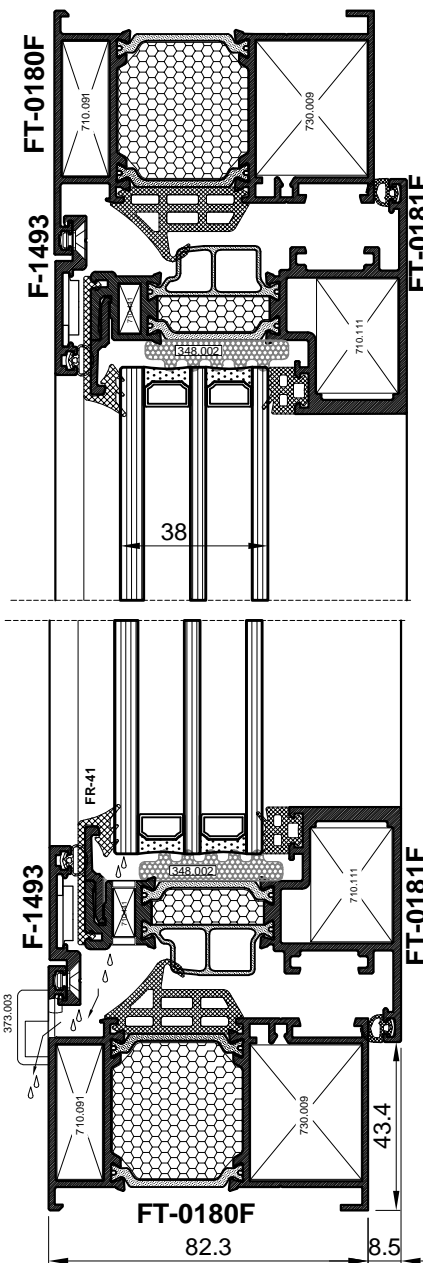


PROFILI		kom	mjera	pilanje
FT-0165	vodoravnica okvira	2	L	45-45
FT-0165	okomica okvira	2	H	45-45
FT-0167	vodoravnica krila	4	Lkr=L/2-46	45-45
FT-0167	okomica krila	4	Hkr=H-87	45-45
FR-41	vodoravna lajsna	4	Lkr-81	90-90
FR-41	okomita lajsna	4	Hkr-109	90-90
FT-0158	kombatuta	1	Hkr-113	90-90
NC-1459	klizač			
OKOVI		kom		
710.072	glavni kutnik rama	4		
710.091	pomoćni kutnik rama	4		
730.011	pomoćni kutnik rama	4		
730.002	pomoćni kutnik rama	4		
710.111	glavni kutnik krila	8		
710.442	pomoćni kutnik krila	8		
730.001	pomoćni kutnik krila	8		
134.000	otklopno-zaokretni mehanizam	1		
143.002	zapinjač-krakun za pasivno krilo	2		
143.003	jednostrani prihvat zapinjača	2		
111.001	dvodijelna šarka	2		
521.127	držač stakla	4		
373.003	maska za drenažni otvor	2		
363.004	čep za kombatutu	1 par		
BRTVE		kom	mjera	
337.002	srednja brtva		2L+3H	
321.001	brtva u krilu unutra		2L+4H	
321.005	brtva prema staklu-vani		2L+4H	
351.014	brtva prema staklu -unutra		2L+4H	
333.009	kutni umetak brtve	4		
STAKLO		kom	mjera	
40 mm		2	Lkr-95 x Hkr-95	





DVOKRILNI PROZOR

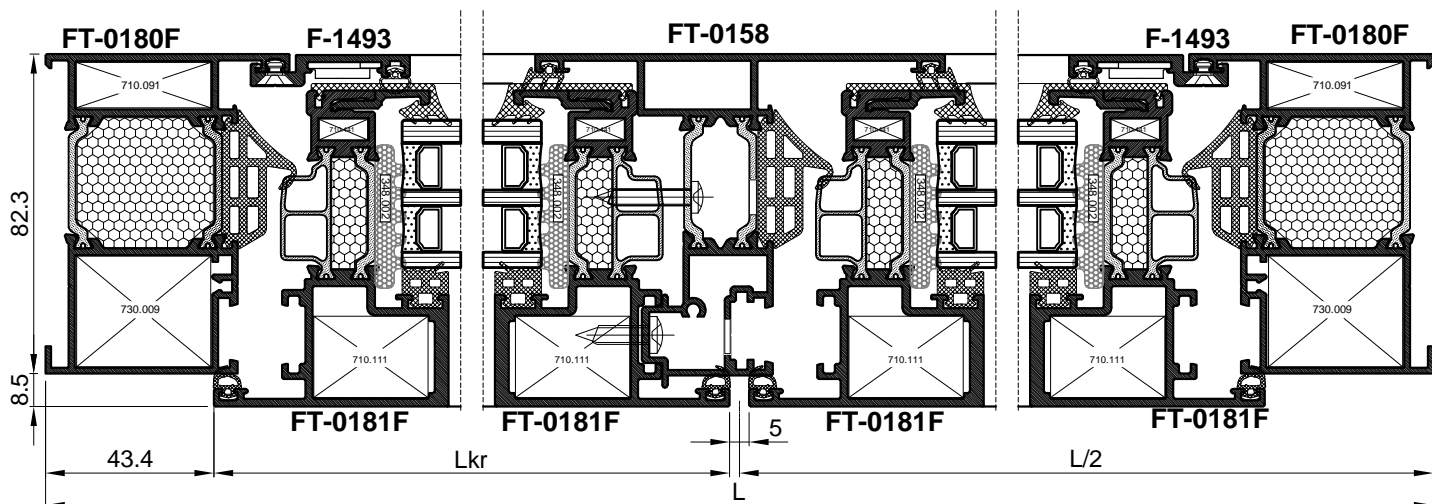


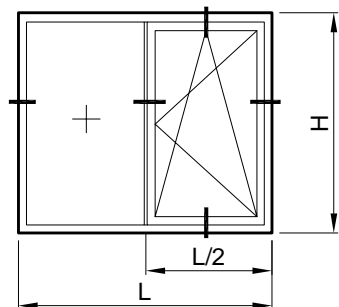
PROFILI		kom	mjera	pilanje
FT-0180F	vodoravnica okvira	2	L	45-45
FT-0180F	okomica okvira	2	H	45-45
FT-0181F	vodoravnica krila	4	Lkr=L/2-45.9	45-45
FT-0181F	okomica krila	4	Hkr=H-86.8	45-45
FR-41	vodoravna lajsna	4	Lkr-83	90-90
FR-41	okomita lajsna	4	Hkr-111	90-90
FT-0158	kombatuta	1	Hkr-113	90-90
NC-1459	klizač			
F-1493	vodoravnica dod. profila	2	Ldp=Lkr-18.5	45-45
F-1493	okomica dod. profila	2	Hdp=Hkr-18.5	45-45

OKOVI		kom	
730.009	glavni kutnik okvira	4	
710.091	pomoćni kutnik okvira	4	
730.002	pomoćni kutnik okvira	4	
710.111	glavni kutnik krila	8	
710.441	pomoćni kutnik krila	8	
731.010	kutnik dodatnog profila	4	
730.001	pomoćni kutnik dodatnog profila	4	
134.000	otklopno-zaokretni mehanizam	1	
143.002	zapinjač-krakun za pasivno krilo	2	
143.003	jednostrani prihvat zapinjača	2	
111.001	dvodijelna šarka	2	
373.003	maska za drenažni otvor	2	
363.004	čep za kombatutu	1 par	

BRTVE		kom	mjera
337.002	srednja brtva		2L+2H
321.001	brtva u krilu unutra		2L+2H
321.005	brtva prema staklu-vani		2L+2H
351.014	brtva prema staklu -unutra		2L+2H
314.001	brtva dodatnog profila		2L+2H
321.002	brtva kombatute		2 x (Hkr - 113)
333.009	kutni umetak brtve	4	

STAKLO		kom	mjera
38 mm		2	Lkr-97 x Hkr-97





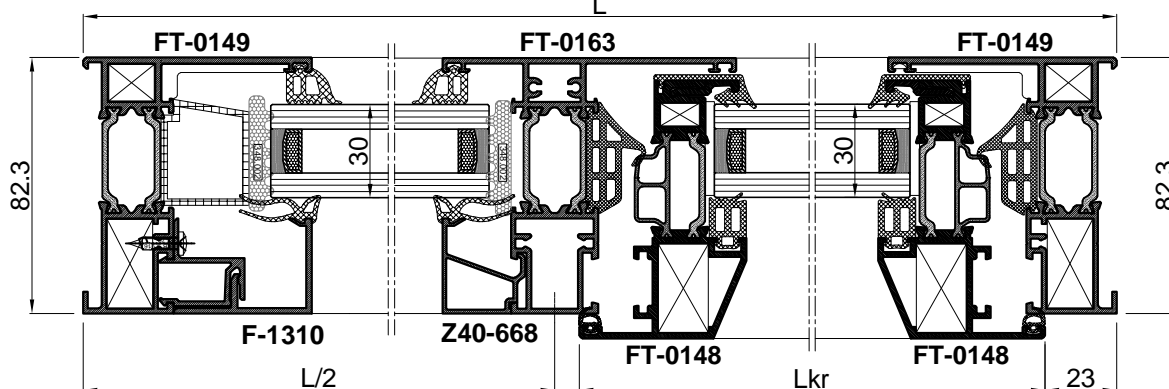
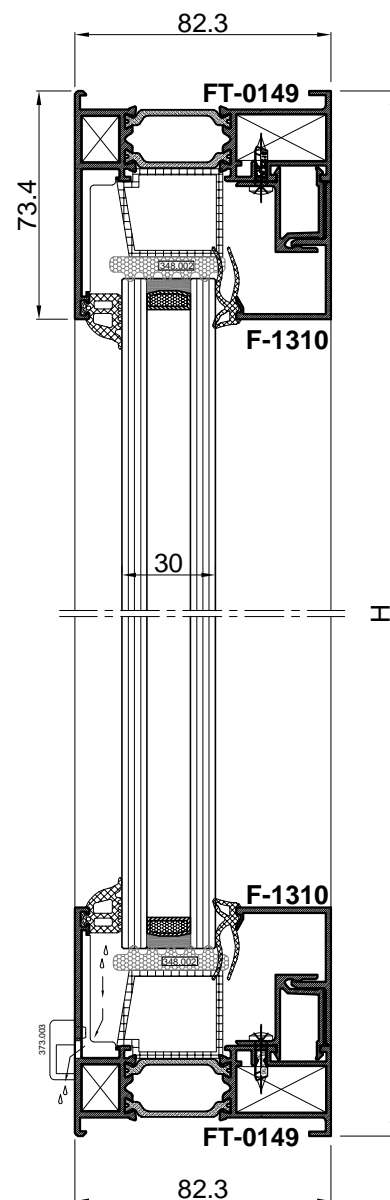
### JEDNOKRILNI PROZOR SA FIKSNIM DIJELOM

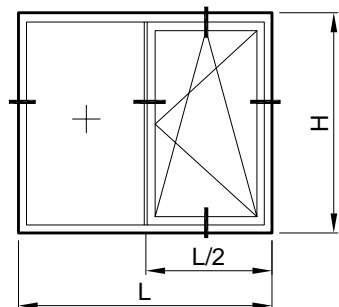
PROFILI		kom	mjera	pilanje
FT-0149	vodoravnica okvira	2	L	45-45
FT-0149	okomica okvira	2	H	45-45
FT-0148	vodoravnica krila	2	Lkr=L/2-31	45-45
FT-0148	okomica krila	2	Hkr=H-46	45-45
F-0807	vodoravna lajsna-krilo	2	Lkr-81	90-90
F-0807	okomita lajsna-krilo	2	Hkr-102	90-90
F-1310	vodoravna lajsna-fiksno	2	L/2-43	90-90
F-1310	okomita lajsna-fiksno	1	H-147	90-90
Z40-668	okomita lajsna-fiksno	1	H-147	90-90
F-0897/A	vodoravna pod-lajsna -fiksno	2	L/2-43	90-90
F-0897/A	okomita pod-lajsna -fiksno	1	H-147	90-90
FT-0163	prečka	1	H-49	90-90
NC-1459	klizač			

OKOVI		kom	
710.458	glavni kutnik rama	4	
710.447	pomoćni kutnik rama	4	
730.011	pomoćni kutnik rama	4	
730.002	pomoćni kutnik rama	4	
710.462	glavni kutnik krila	4	
710.442	pomoćni kutnik krila	4	
730.001	pomoćni kutnik krila	4	
134.000	otklopno-zaokretni mehanizam	1	
373.003	maska za drenažni otvor	2	
374.024	podmetač za staklo		

BRTVE		kom	mjera
337.002	srednja brtva		L+2H
321.001	brtva u krilu unutra		L+2H
322.001	brtva prema staklu-vani (krilo)		L+2H
351.017	brtva prema staklu-unutra (krilo)		L+2H
322.002	brtva prema staklu-vani (ram)		L+2H
311.004	brtva prema staklu-unutra (ram)		L+2H
333.009	kutni umetak brtve	4	

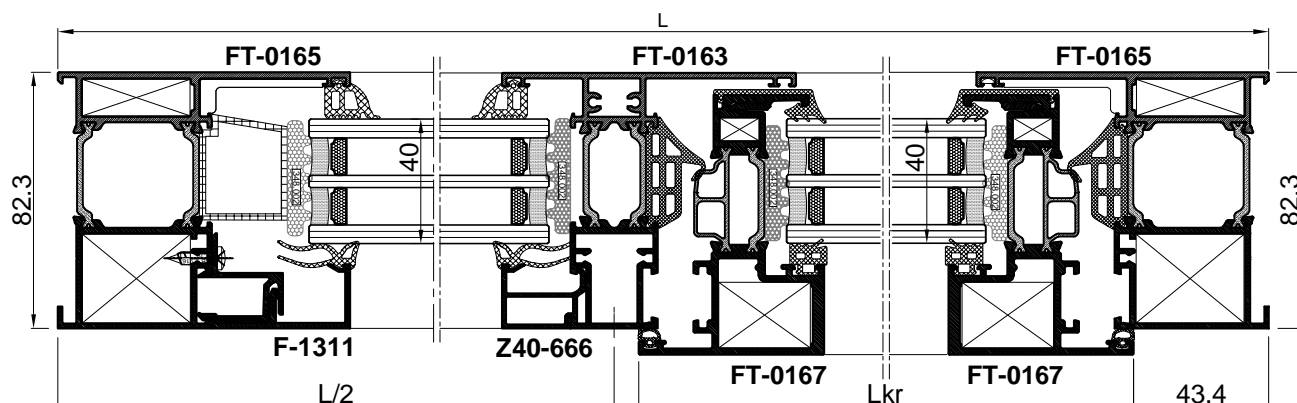
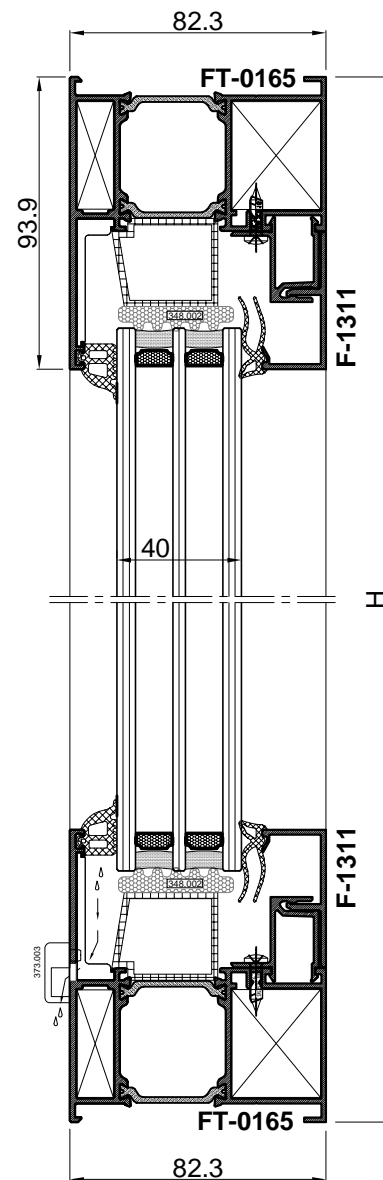
STAKLO		kom	mjera
30 mm		1	L/2-81 x H-120.5
30 mm		1	Lkr-87 x Hkr-87

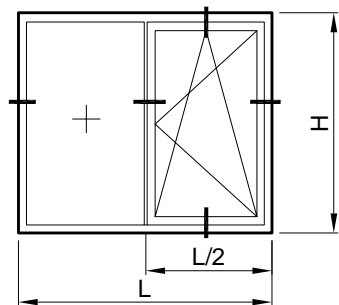




### JEDNOKRILNI PROZOR SA FIKSNIM DIJELOM

PROFILI		kom	mjera	pilanje
FT-0165	vodoravnica okvira	2	L	45-45
FT-0165	okomica okvira	2	H	45-45
FT-0167	vodoravnica krila	2	Lkr=L/2-51.3	45-45
FT-0167	okomica krila	2	Hkr=H-87	45-45
FR-41	vodoravna lajsna-krilo	2	Lkr-81	90-90
FR-41	okomita lajsna-krilo	2	Hkr-109	90-90
F-1311	vodoravna lajsna-fiksno	2	L/2-63.5	90-90
F-1311	okomita lajsna-fiksno	1	H-188	90-90
Z40-666	okomita lajsna-fiksno	1	H-188	90-90
F-0897/A	vodoravna pod-lajsna -fiksno	2	L/2-63.5	90-90
F-0897/A	okomita pod-lajsna -fiksno	1	H-188	90-90
FT-0163	prečka	1	H-90	90-90
NC-1459	kližač			
<b>OKOVI</b>		<b>kom</b>		
710.072	glavni kutnik rama	4		
710.091	pomoćni kutnik rama	4		
730.011	pomoćni kutnik rama	4		
730.002	pomoćni kutnik rama	4		
710.111	glavni kutnik krila	4		
710.442	pomoćni kutnik krila	4		
730.001	pomoćni kutnik krila	4		
134.000	otklopno-zaokretni mehanizam	1		
373.003	maska za drenažni otvor	2		
521.127	držač stakla	2		
374.024	podmetač za staklo			
<b>BRTVE</b>		<b>kom</b>	<b>mjera</b>	
337.002	srednja brtva		L+2H	
321.001	brtva u krilu unutra		L+2H	
322.001	brtva prema staklu-vani (krilo)		L+2H	
351.017	brtva prema staklu-unutra (krilo)		L+2H	
322.002	brtva prema staklu-vani (ram)		L+2H	
311.004	brtva prema staklu-unutra (ram)		L+2H	
333.009	kutni umetak brtve	4		
<b>STAKLO</b>		<b>kom</b>	<b>mjera</b>	
40 mm		1	L/2-102 x H-161.5	
40 mm		1	Lkr-95 x Hkr-95	





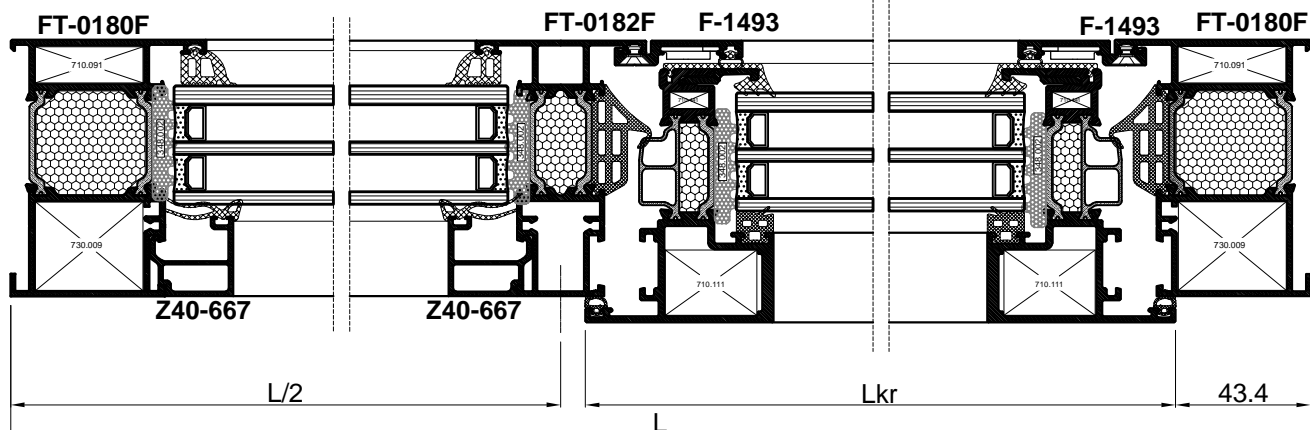
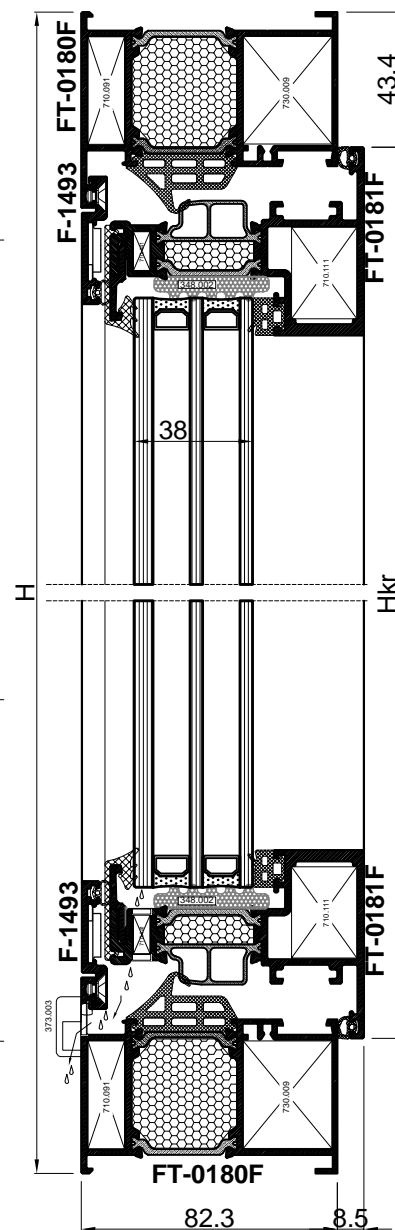
### JEDNOKRILNI PROZOR SA FIKSNIM DIJELOM

PROFILI		kom	mjera	pilanje
FT-0180F	vodoravnica okvira	2	L	45-45
FT-0180F	okomica okvira	2	H	45-45
FT-0181F	vodoravnica krila	2	Lkr=L/2-51.3	45-45
FT-0181F	okomica krila	2	Hkr=H-86.8	45-45
FR-41	vodoravna lajsna-krilo	2	Lkr-83	90-90
FR-41	okomita lajsna-krilo	2	Hkr-111	90-90
Z40-667	vodoravna lajsna-fiksno	2	L/2-63.5	90-90
Z40-667	okomita lajsna-fiksno	2	H-143	90-90
F-1493	vodoravnica dod. profila-krilo	2	Lkr-18.5	45-45
F-1493	okomica dod. profila-krilo	2	Hkr-18.5	45-45
FT-0182F	prečka	1	H-91	90-90
NC-1459	klizač			

OKOVI		kom	
730.009	glavni kutnik okvira	4	
710.091	pomoćni kutnik okvira	4	
730.002	pomoćni kutnik okvira	4	
710.111	glavni kutnik krila	4	
710.441	pomoćni kutnik krila	4	
731.010	kutnik dodatnog profila	4	
730.001	pomoćni kutnik dodatnog profila	4	
134.000	otklopno-zaokretni mehanizam	1	
373.003	maska za drenažni otvor	2	

BRTVE		kom	mjera
337.002	srednja brtva		L+2H
321.001	brtva u krilu unutra		L+2H
321.005	brtva prema staklu-vani (krilo)		L+2H
351.014	brtva prema staklu-unutra (krilo)		L+2H
322.002	brtva prema staklu-vani (okvir)		L+2H
311.003	brtva prema staklu-unutra (okvir)		L+2H
333.009	kutni umetak brtve	4	

STAKLO		kom	mjera
38 mm		1	L/2-69.5 x H-105
38 mm		1	Lkr-97 x Hkr-97





# FEAL



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*Studen 2023. / November 2023*

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