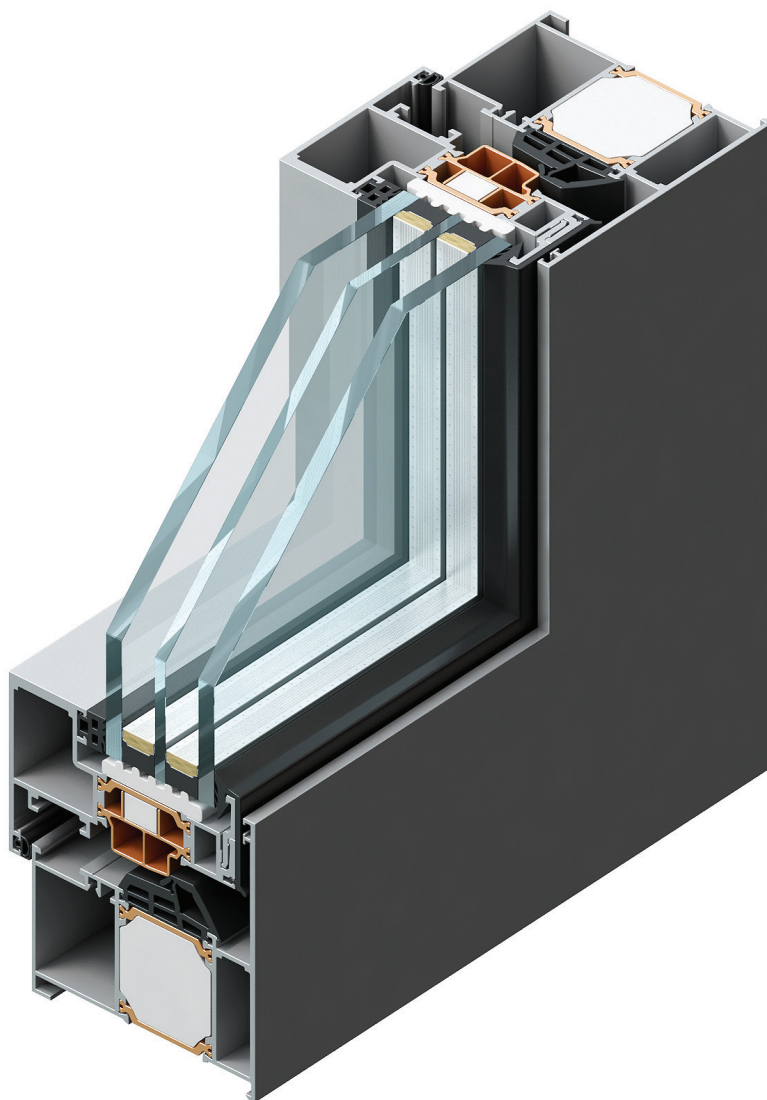


FEAL



TERMO 85 SK

PROZORI I VRATA
WINDOWS AND DOORS

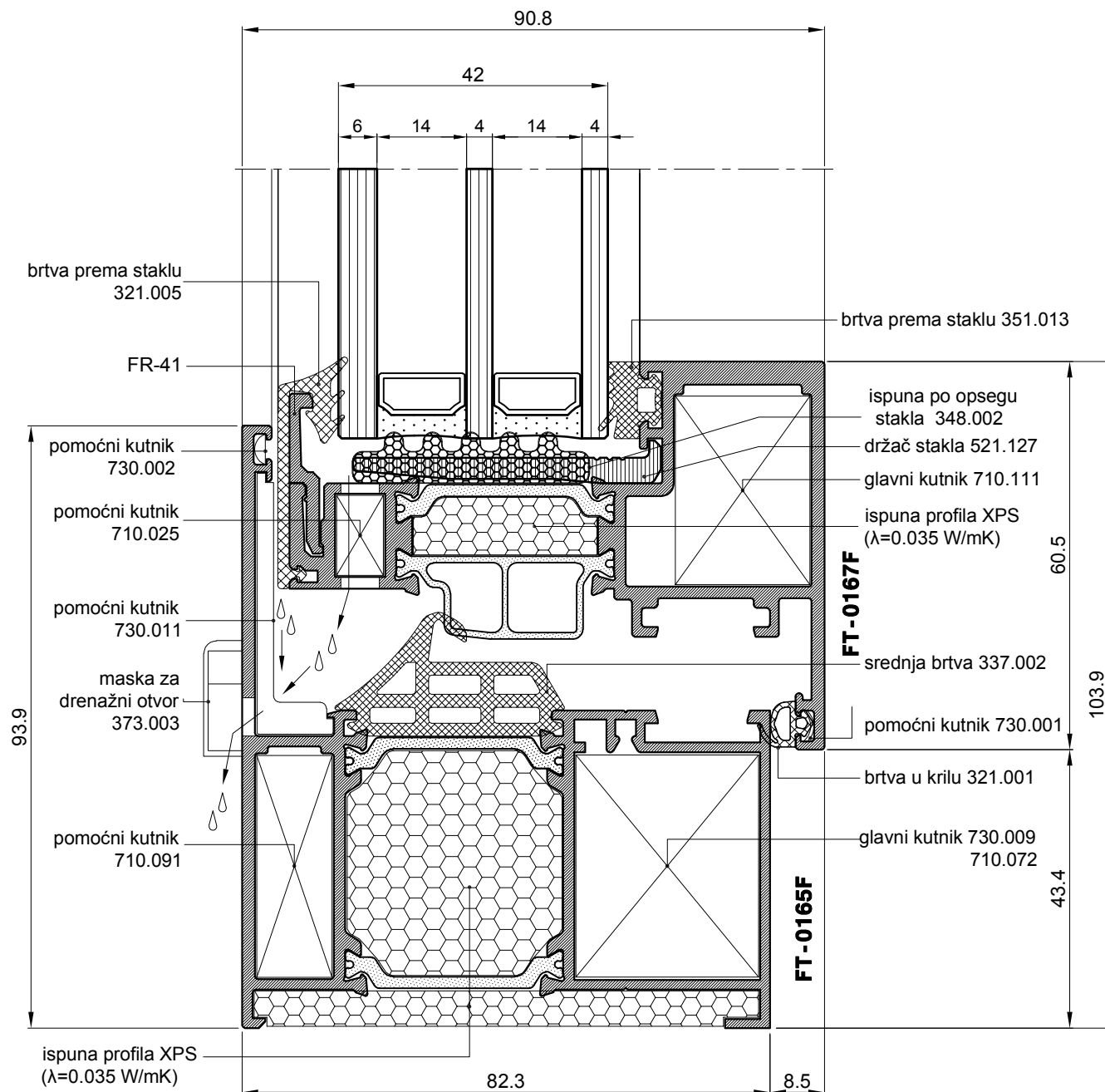
SADRŽAJ - KAZALO

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 λ /veliki otpor prolaza topline/
materijal: **XPS**, $\lambda=0.035$ W/mK

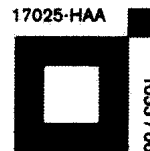


Ispitivanja i certifikati



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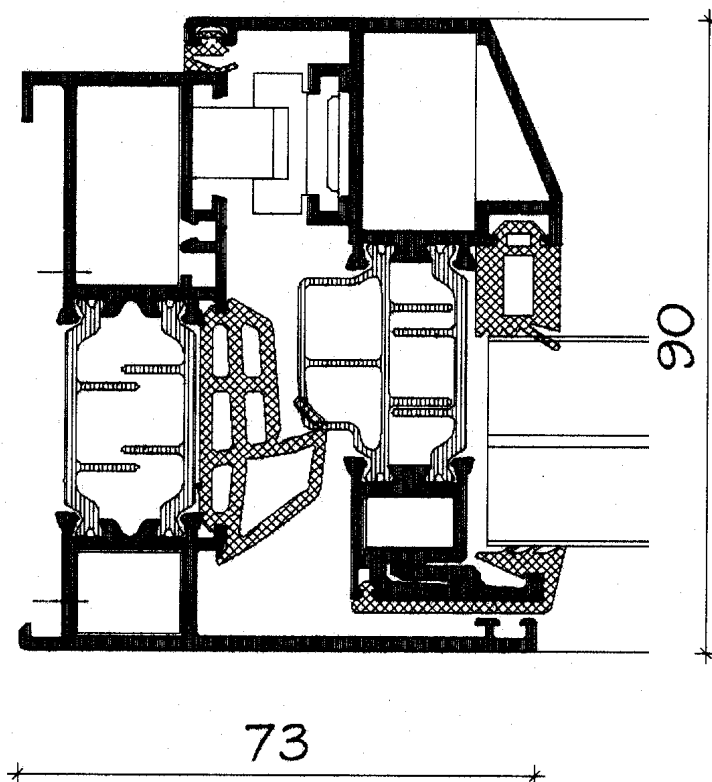
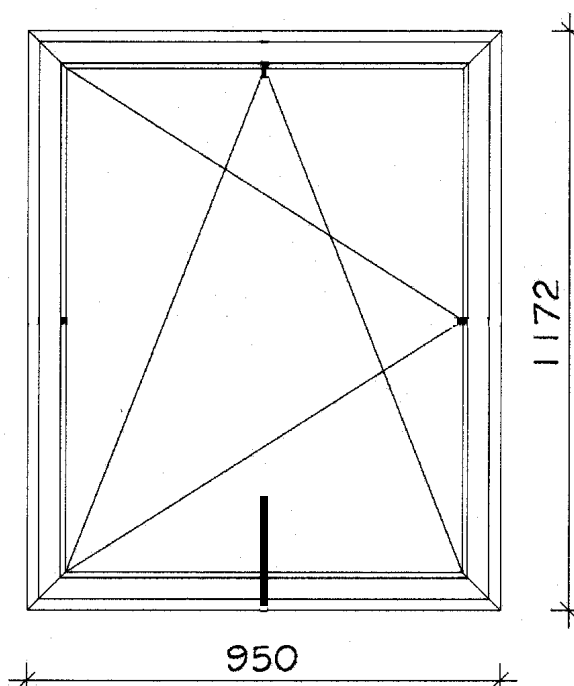


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IZVJEŠTAJ O ISPITIVANJU BR. 2920-541/07

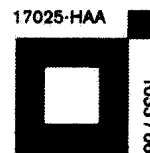
Opis ispitnog uzorka:

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

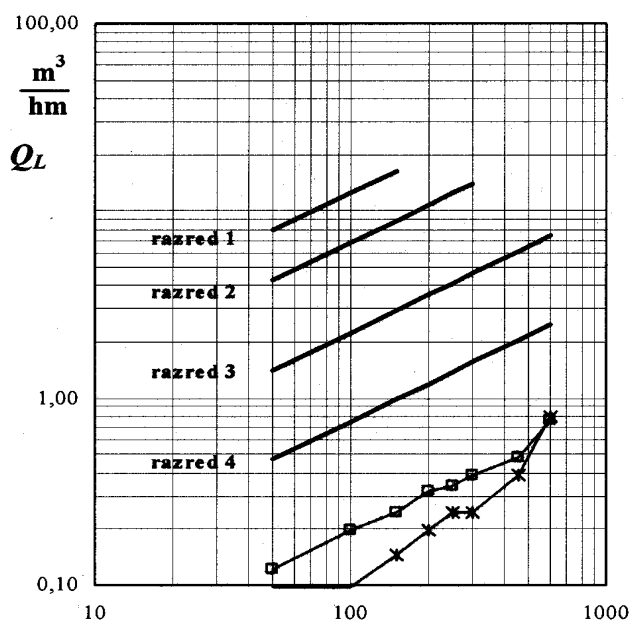
Ispitivanje uzorka, označenog kao LGF 060/07, provedeno je u skladu s HRN EN 1026:2000, pozitivnim opterećenjem na tlak.

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

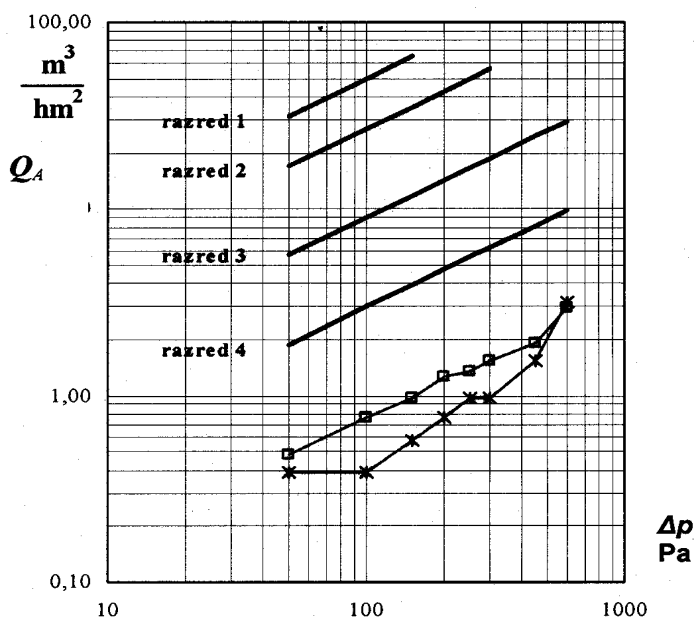
Duljina sljubnica ispitivanog uzorka: $l = 4,10 \text{ m}$.

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

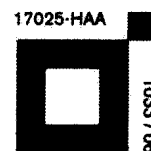


—□— LGF 060/07-o - prvo ispitivanje zrakopropusnosti
—*— LGF 060/07-o - ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom

S obzirom na **zrakopropusnost**, ispitani jednokrlni 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 Δp (Pa)	VRIJEME τ (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),

A₀, B₀, C₀ – početno stanje s obzirom na pomak - ugođeno tako da pokazuje 0 mm pri $\Delta p = 0$ (Pa),

A_P – čeonu pomak na mjernom mjestu A pri iskazanoj razlici tlakova P1,

B_P – čeonu pomak na mjernom mjestu B pri iskazanoj razlici tlakova P1,

C_P – čeonu pomak na mjernom mjestu C pri iskazanoj razlici tlakova P1,

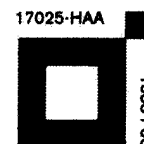
F_P = (**B_P**) - ((**A_P**) + (**C_P**))/2 - čeonu savijanje,

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

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



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TLAK Δp (Pa)	LGF 060/07-o					TLAK Δp (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 čono 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 čono savijanje iznosilo 1/2180.

REZULTATI ISPITIVANJA OTPORNOSTI S PROMJENJIVIM TLAKOM P2

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

Nakon provedenog opterećenja na ispitanoj 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.

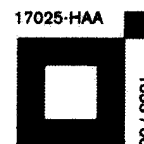
Nakon provedenog opterećenja na ispitanoj jednokrlnom aluminijskom otklopno-zaokretnom prozoru serije TERMO 85 SK (laboratorijska oznaka uzorka LGF 060/07), proizvođača FEAL d.o.o., nije bilo vidljivih napuknuća na bilo kojem dijelu uzorka (staklo, okvir i okovi), niti je došlo do otvaranja otvarajućeg 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 ² ·K/W	5,216
λ_{sur}	W/(K·m)	0,038
ψ_{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
Φ_{in}	(ulazna snaga hot box) W	66,21
Φ_{sur}	(zaštitni panel toplinski tok) W	10,96
Φ_{ed}	(rubni dio toplinski tok) W	2,16
q_t	gustoća toplinskog toka kroz ispunu i profile prozora W/m ²	29,60
$U_{m,t}$	(izmj. koeficijent prol. topline ispune i profila) W/(m ² ·K)	1,53
F_{cl}	(konvekcijski dio-topli)	0,443
F_{ce}	(konvekcijski dio-hladni)	0,802
$R_{s,t}$	(ukupni površinski otpor) m ² ·kW	0,182
θ_{ri}	(temperatura zračenja-topla) °C	19,45
θ_{re}	(temperatura zračenja-topla) °C	2,03
θ_{ni}	(temperatura zraka-topla) °C	19,89
θ_{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 ² ·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:

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

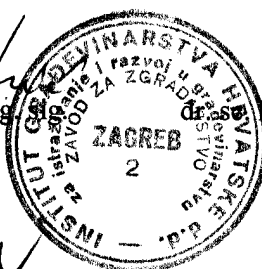
Voditelji ispitivanja:

Voditelj laboratorija:

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

za D dio ispitivanja: Zlatko Franolić

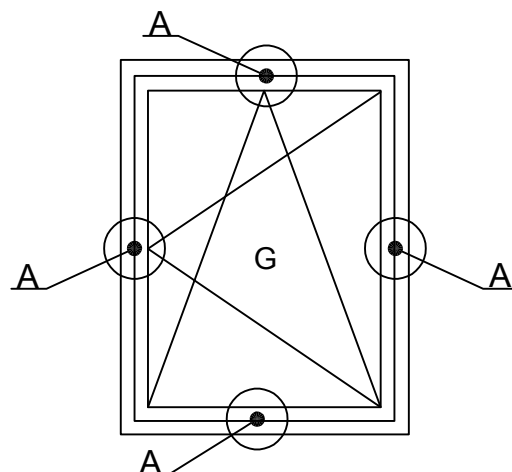
za D dio ispitivanja: Zlatko Franolić



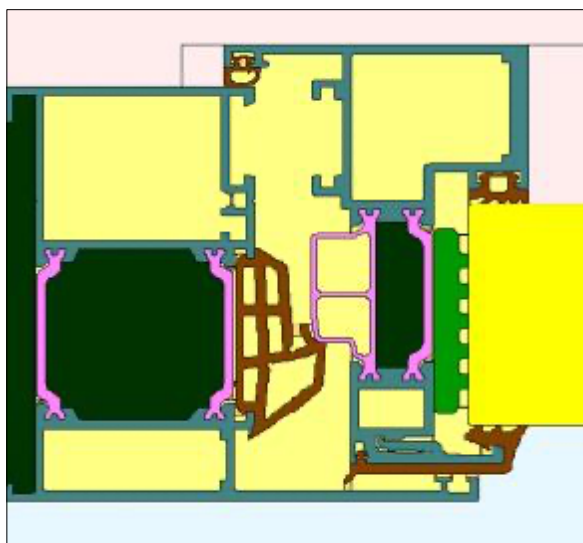
TOPLINSKE ZNAČAJKE TERMO 85 SK

Proračun koeficijenta prolaska topline počiva na 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 ² K)	1.7
G-glass (staklo)	U_g	(W/m ² K)	0.6
Kombinacija stakla i profila	U_w	(W/m ² K)	1



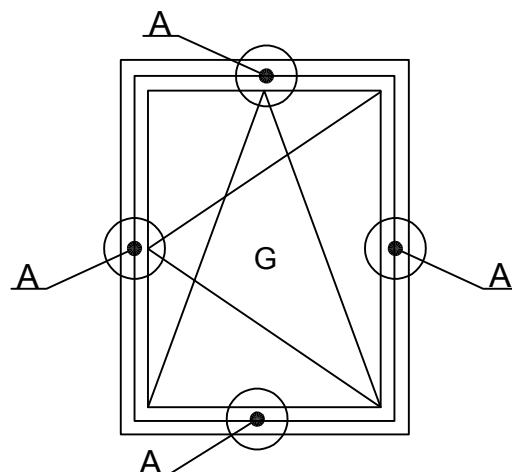
Temperaturni dijagram za A



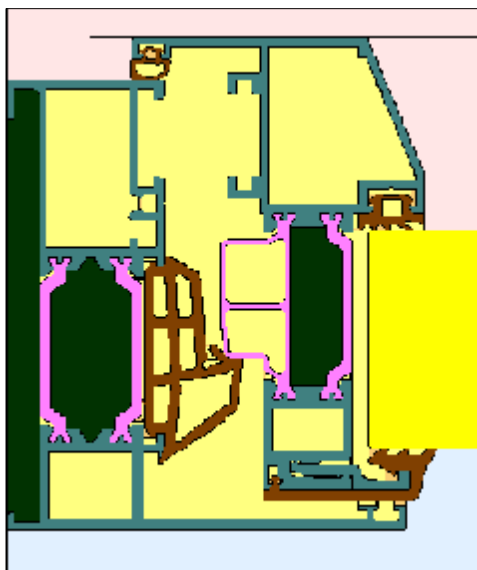
TOPLINSKE ZNAČAJKE TERMO 85 SK

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 ² K)	1.9
G-glass (staklo)	U_g	(W/m ² K)	0.6
Kombinacija stakla i profila	U_w	(W/m ² K)	1



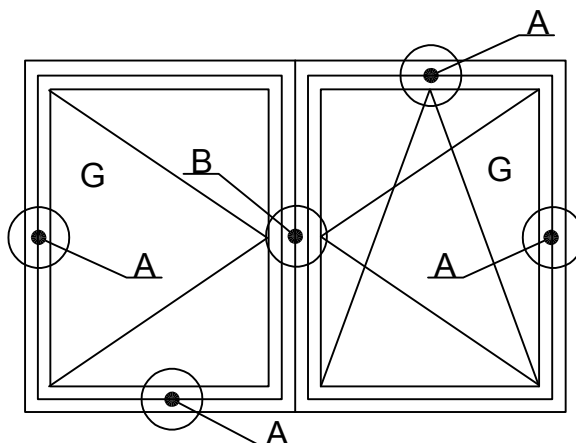
Temperaturni dijagram za A



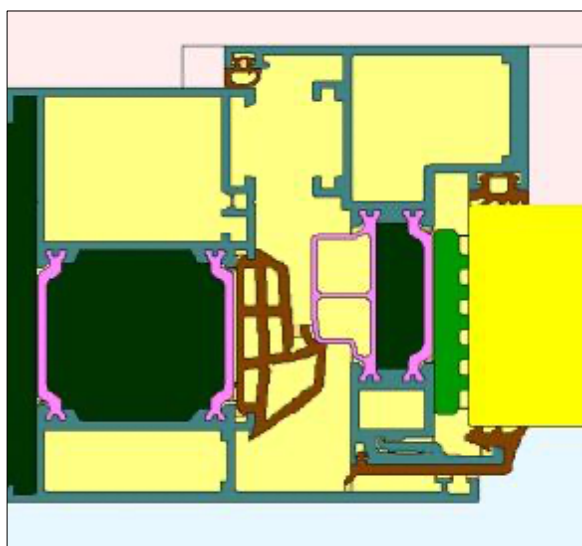
TOPLINSKE ZNAČAJKE TERMO 85 SK

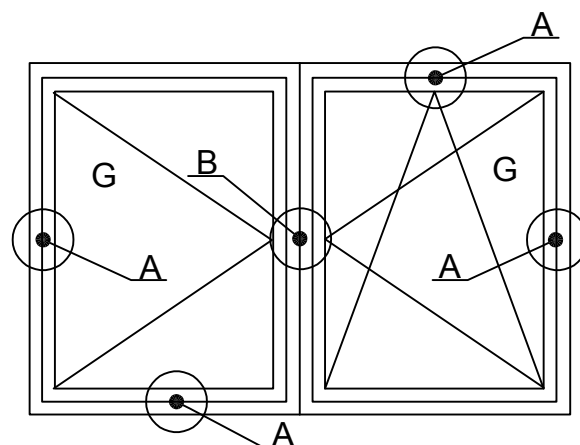
Proračun koeficijenta prolaska topline počiva na dvodimenzionalnoj numeričkoj metodi konačnih elemenata određene prema prEN ISO 10077-2.

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

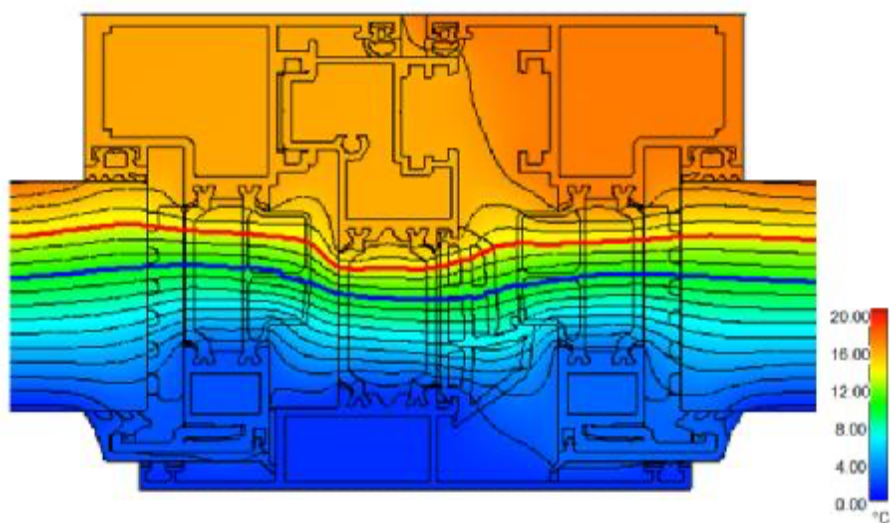
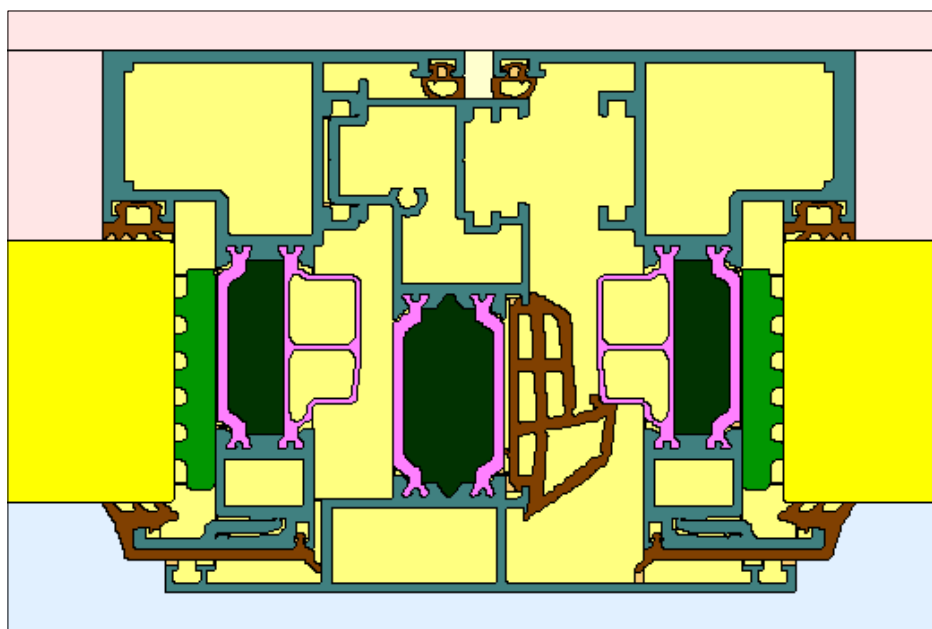


Temperaturni dijagram za A





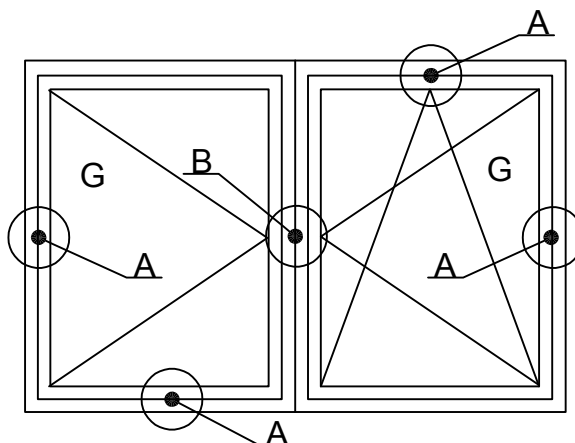
Temperaturni dijagram za B



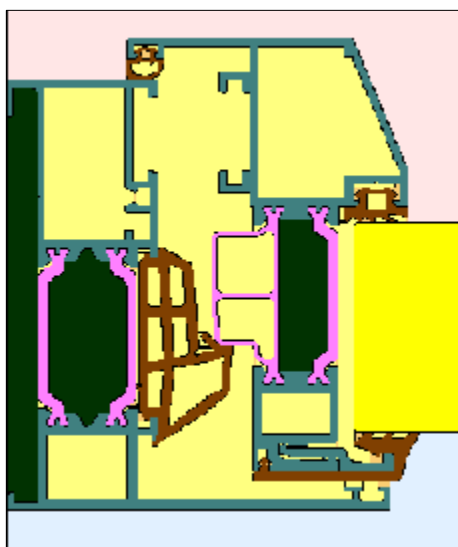
TOPLINSKE ZNAČAJKE TERMO 85 SK

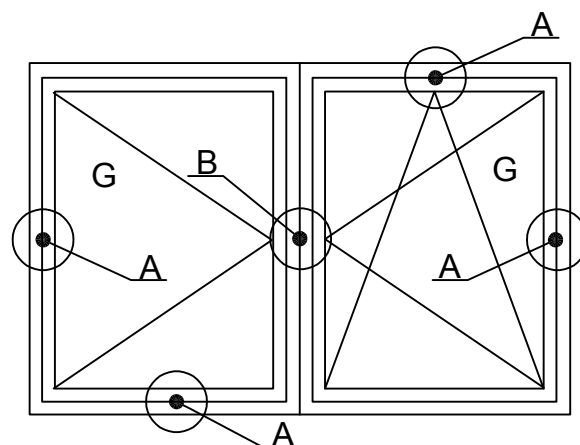
Proračun koeficijenta prolaska topline počiva na dvodimenzionalnoj numeričkoj metodi konačnih elemenata određene prema prEN ISO 10077-2.

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

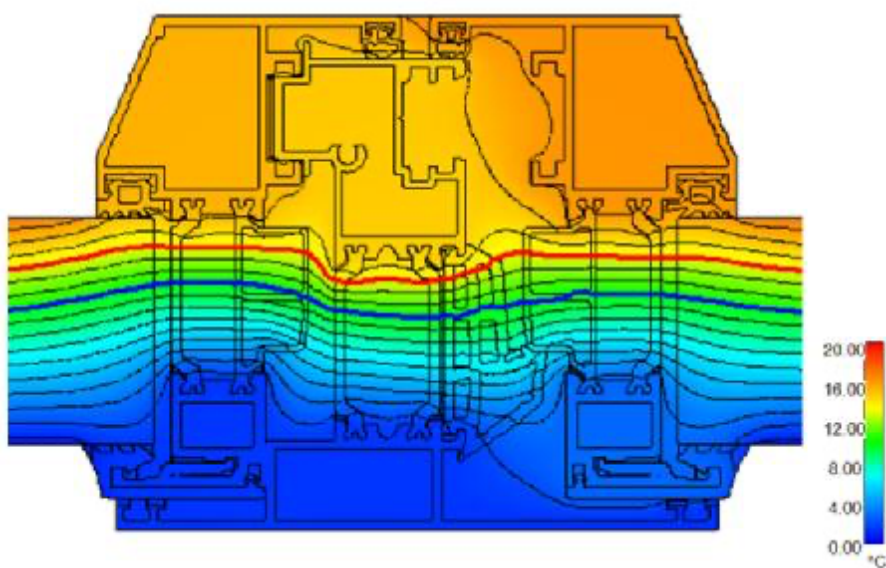
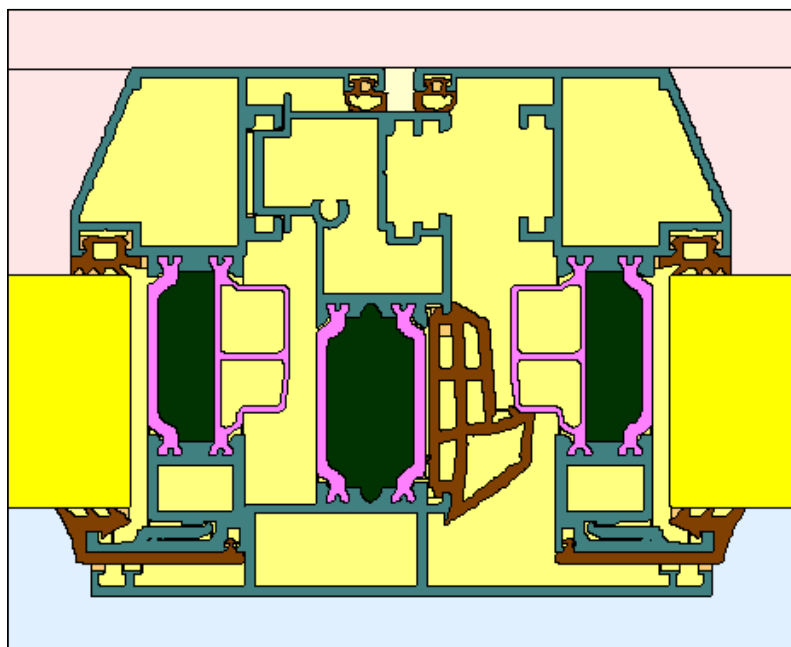


Temperaturni dijagram za A





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

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)

Produkt Flügelrahmen-Blendrahmen Metall

Bezeichnung System: TERMO 85 SK

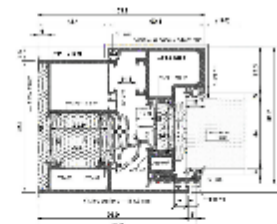
Lieferbezeichnung: FT-0165F ; FT-0167F

Leistungsrelevante
Produktdetails

Ansichtsbreite B in mm 104; Material Aluminiumlegierung;
Oberflächenbehandlung eloxiert, lackiert, pulverbeschichtet;
Dämmstege; Material Polyamid 6.6 mit 25 % Glasfasern;
Einlageschaum in der Dämmzone; Material „XPS (Dicke bis 60 mm)“;
Wärmeleitfähigkeit λ in $W/(m \cdot K)$ 0,034; Einlageschaum zum Glasfalz; Material „XPE“;
Wärmeleitfähigkeit in $W/(m \cdot K)$ 0,038; Flügelrahmen; Breite in mm 60,5; Dicke in mm 85; Blendrahmen; Breite in mm 94;
Dicke in mm 82; Einlageschaum zum Baukörperanschluss;
Material „XPS (Dicke bis 60 mm)“; Wärmeleitfähigkeit in $W/(m \cdot K)$ 0,034; Ersatzpaneel; Dicke in mm 44; Ein-
stand in mm 12

Besonderheiten -

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 "Markblatt zur Benutzung von ift-Prüfdokumentationen". Das Deckblatt kann als Kurzfassung verwendet werden.

Inhalt

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

Ergebnis

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



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

ift Rosenheim

11.12.2015

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

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

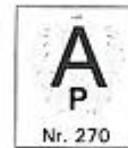
Fenster / Fensterprüfung

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

gbd LAB

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Akkreditierte Prüf- und Inspektionsstelle – gbd LAB GmbH



Auftraggeber	Feal d.o.o.	Adresse	Trn bb BA-88220 Siroki Brijeg
---------------------	-------------	----------------	----------------------------------

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

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



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Steinebach 13a A-6850 Dornbirn

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Prüfbericht Version: *03*

Anlagen: -2-

Akkreditierte Prüf- und Inspektionsstelle – gbd LAB GmbH FN295310f

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Fenster / Fensterprüfung

07.07.2010 | Auftragsnr. 10/562_02 | Kundennr. 0320 | Zeichen hp/dp | Seite 6/8



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 ± 1760 Pa
maximaler Prüfdruck P_1 ± 1600 Pa

Die Prüfung wird für Druck und Sog durchgeführt.

Fenster / Fensterprüfung

07.07.2010 | Auftragsnr. 10/562_02 | Kundenr. 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

Volkhard Hammerer



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

Zeichnungsberechtigter

Dipl.-Ing. Heinz Pfefferkorn

Anlagen:

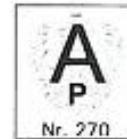
Anlage -1- Messprotokolle – 4 Seiten

Anlage -2- Prüfelementspezifikationen – 9 Seiten

Dreh-Kipp Element / Luftschalldämmung

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

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Auftraggeber	Feal d.o.o.	Adresse	Trn bb BA-88220 Siroki Brijeg
---------------------	-------------	----------------	----------------------------------

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

Prüfvorschrift	ON EN ISO 140-3	Klassifizierungsnorm	ON EN ISO 717-1
-----------------------	-----------------	-----------------------------	-----------------

Typ	Füllung [mm]	R _w (C,C _{tr}) [dB]
2-fach Isolierglas	Float 8 mm SZR 20 mm VSG ESG 4_4/2	44(-1;-5)

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Prüfbericht Version: "02"

Anlagen: -2-

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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)

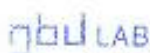
Das bewertete Schalldämmmaß $R_w(C,C_{tr})$ beträgt 44(-1;-5) dB.

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
Steinbach 13a A-6850 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	Auftragennr. Order no.	14/0286_01	Kundennr. Client no.	0320	Zeichen Sign	hh/hi	Seite Page	1/15
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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

Auftraggeber Client	FEAL d.o.o	Adresse Address	Trn bb BIH – 88220 Siroki Brijeg
-------------------------------	------------	---------------------------	-------------------------------------

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

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

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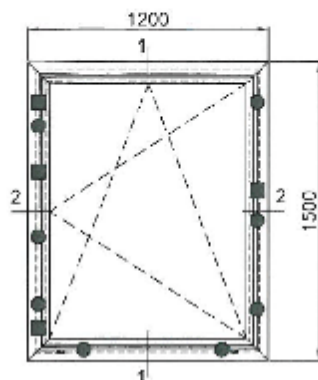
Vorlage 01 / Template 01

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Steinebach 13a A-6850 Dornbirn T +43 5572 394830-0 F +43 5572 394830-30 office.lab@gbd.at www.gbd.at

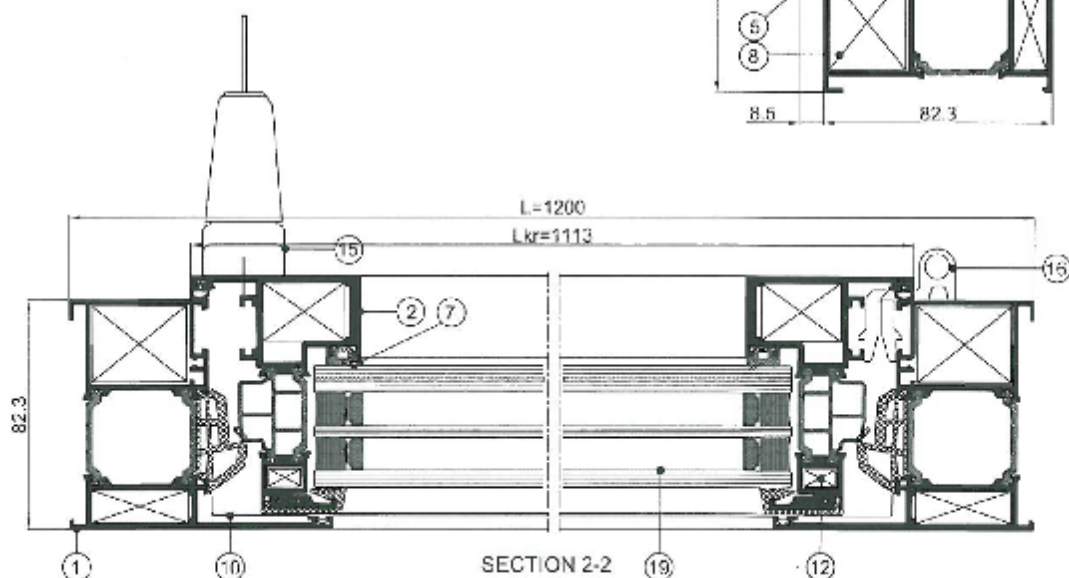
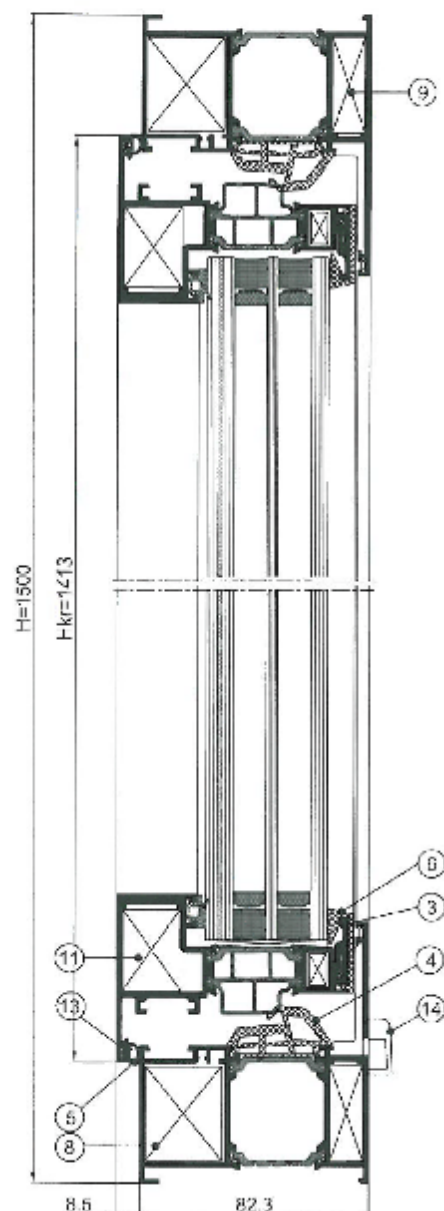


SAMPLE TESTING TERMO 85 SK - open in

gbd LAB 14/0286-01
Mide - 1. Sept. 1
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-41	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 (LIPDM)	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	Metallgovina
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)	Kristel



Evidence of Performance

Air permeability, Watertightness, Resistance to wind load



Test Report

No. 14-001849-PR03

(PB-A01-02-en-01)

Client	FEAL d.o.o. Trnska cesta 146 88220 Siroki Brijeg Bosnia-Herzegovina
Product	Double combined side hung / turn tilt window with opening meeting stile
Designation	System designation: TERMO 85 SK
Performance-relevant product details	Material: Aluminium profiles with thermal break
Overall dimensions (W x H)	1,600 mm x 1,480 mm
Special features	Test sequence

Basis

EN 14351-1:2005+A1:2010

Test standard/s:

EN 1026:2000-08

EN 1027:2000-08

EN 12211:2000-06

Corresponds to the national standard/s (e.g. DIN EN)

Representation



Results

Air permeability according to EN 12207:1999-11



Class 4

Watertightness according to EN 12208:1999-11



Class 9A

Resistance to wind load according to EN 12210:1999-11/AC:2002-08



Class C4 / B4

Instructions for use

The results obtained can be used by the manufacturer as the basis for the manufacturer ITT test report summary. Observe the specifications set out by the applicable product standard.

Validity

The data and results refer solely to the tested and described specimen. Classification remains valid as long as the product and the above basis remain unchanged. The results can be extrapolated under the manufacturer's own liability subject to observance of the relevant specifications set out by the applicable product standard. This test/evaluation does not allow any statement to be made on any further characteristics regarding performance and quality of the construction presented; in particular the effects of weathering and ageing were not taken into account.

Notes on publication

The ift-Guidance Sheet "Advertising with ift test documents" applies. The cover sheet can be used as an abstract.

The report contains a total of 20 pages.

ift Rosenheim

12.08.2014

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Head of Testing Department
Construction Product Testing

Michael Brock-Stock, M.Eng., Dipl.-Ing. (FH)
Operating Testing Officer
Construction Product Testing

ift Rosenheim GmbH

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

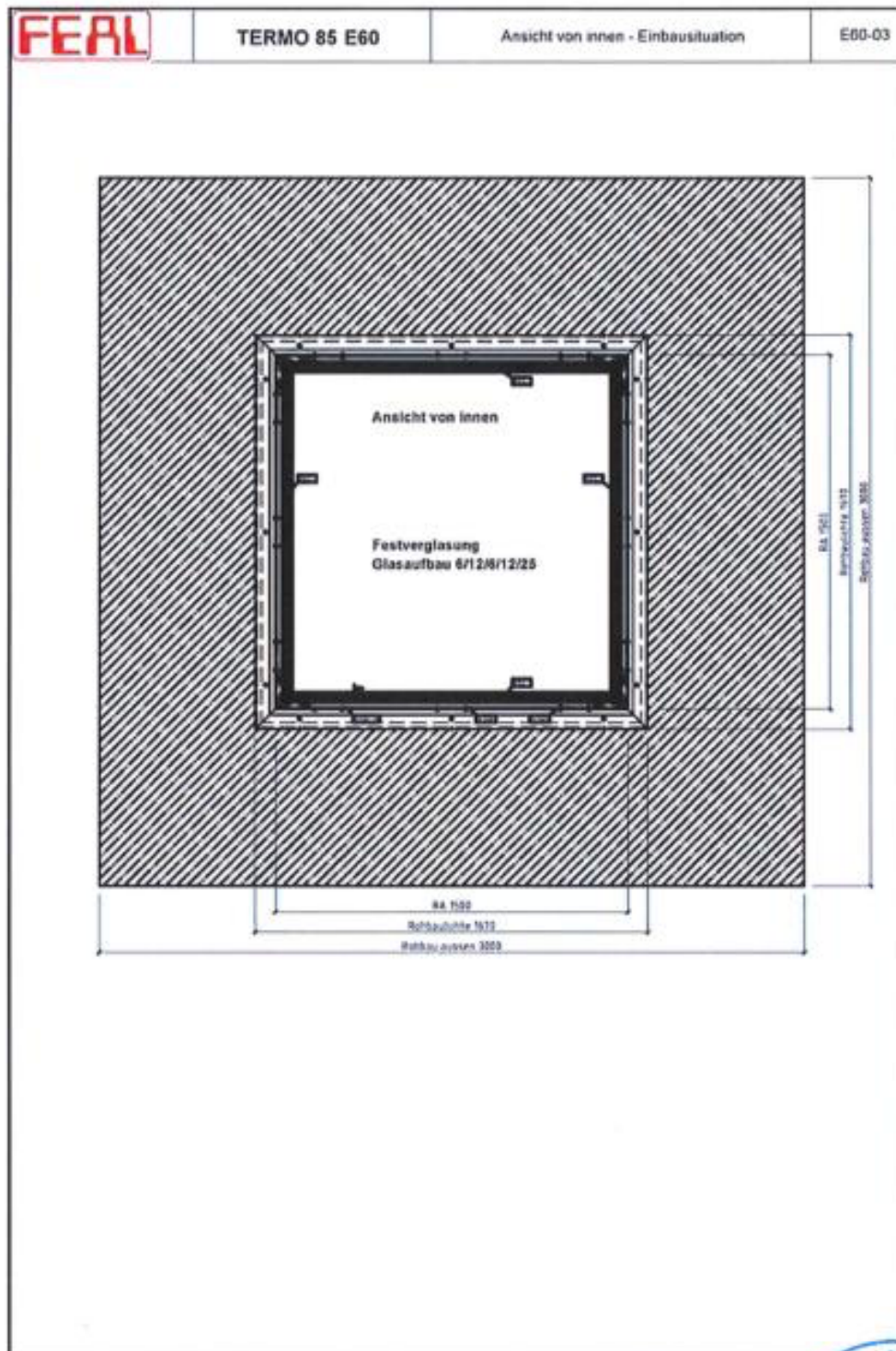


Abb. 2.1: Konstruktionszeichnung Prüfaufbau, Innenseite Probekörper



MPA Dresden GmbH
Anlage A4 zum Prüfbericht Nr. 20160811 vom 03.11.2016

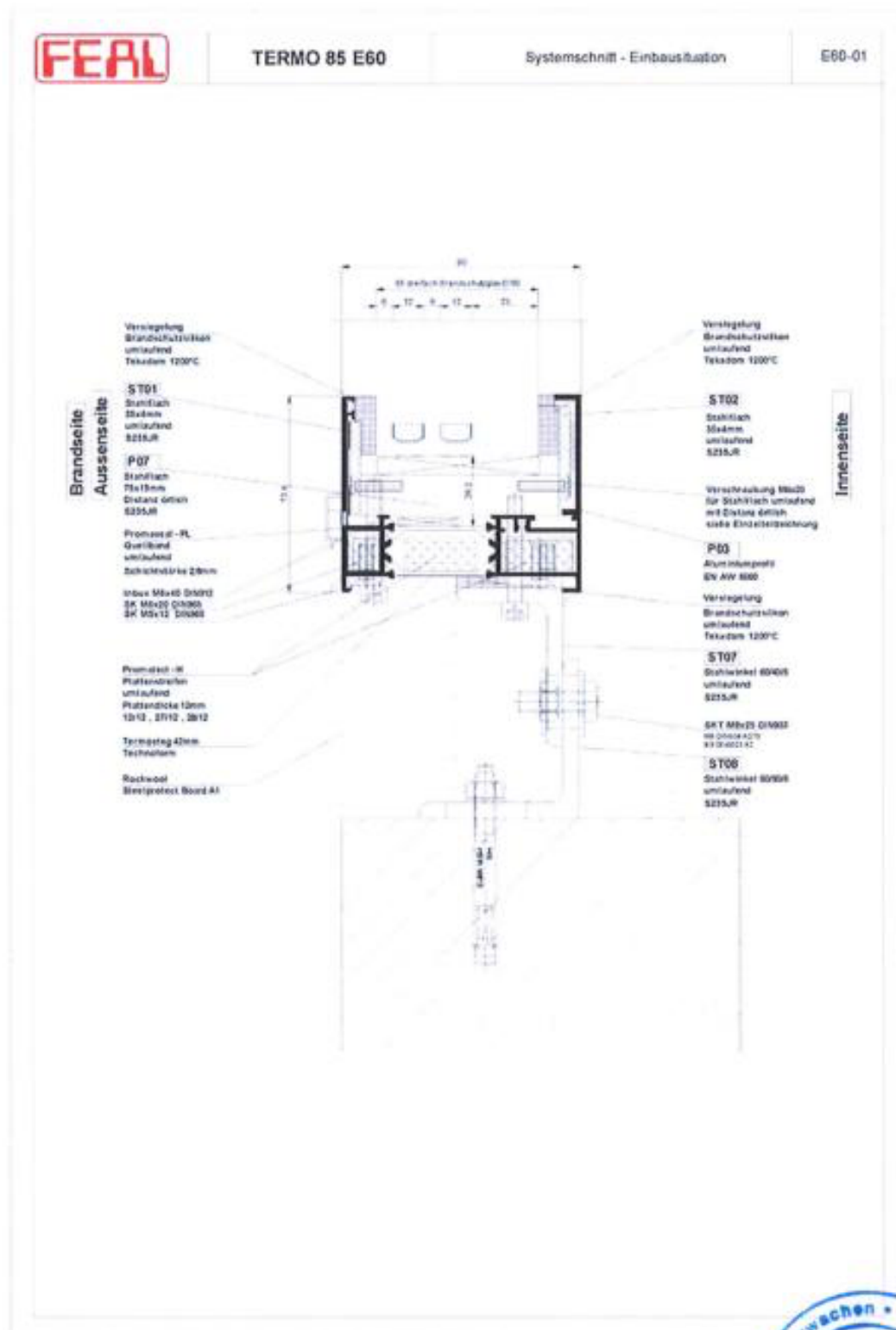


Abb. 4.1: Schnittzeichnung mit Materialangaben

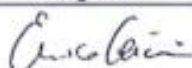


MPA Dresden GmbH
Anlage A12 zum Prüfbericht Nr. 20160811 vom 03.11.2016

AGC	DECLARATION OF PERFORMANCE		CE
N°/ Unique identification code of the product-type			
Trademark 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)			
Intended use/s Insulating glass units intended to be used in buildings and construction work			
Manufacturer AGC Glass Europe - Avenue Jean Monnet 4 - 1348 Louvain-la-Neuve - Belgium			
Harmonized Standard EN 1279-5:2005 + A2:2010			
Notified Body/ies 0761 1121 1136 1174 1234 1343 1694 1812			
Declared performances:			
Essential characteristics	AVCP systems	Performance	
Safety in the case of fire			
Resistance to fire	1	EI 60	
Reaction to fire	3, 4	NPD	
External fire performance	3, 4	NPD	
Safety in use			
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	
Protection against noise			
Direct airborne sound insulation	3	NPD	
Energy economy and heat retention			
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:

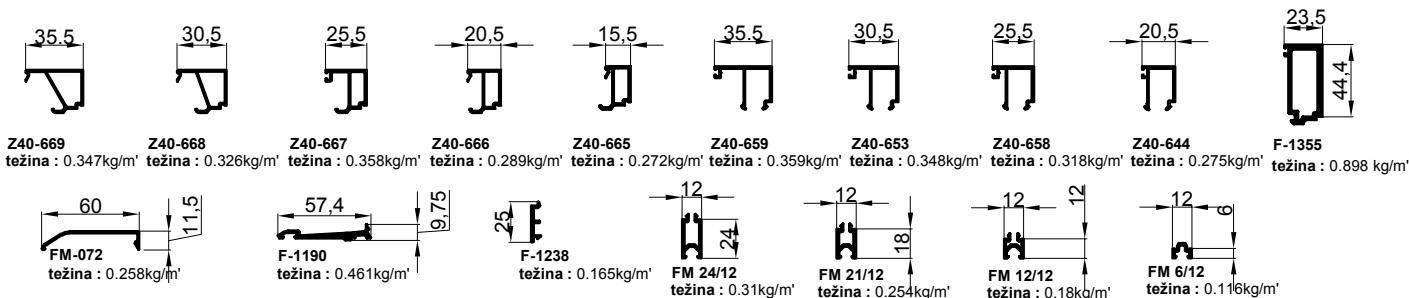
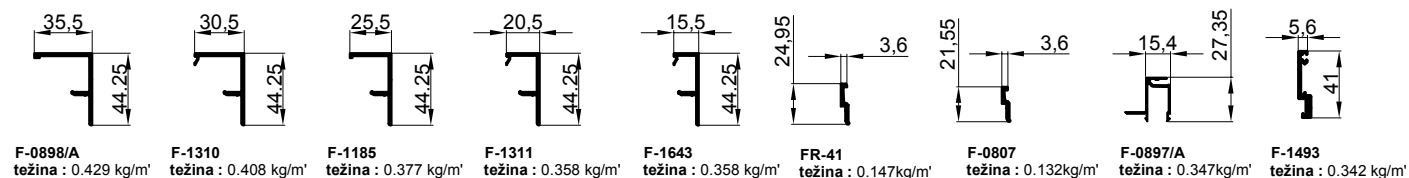
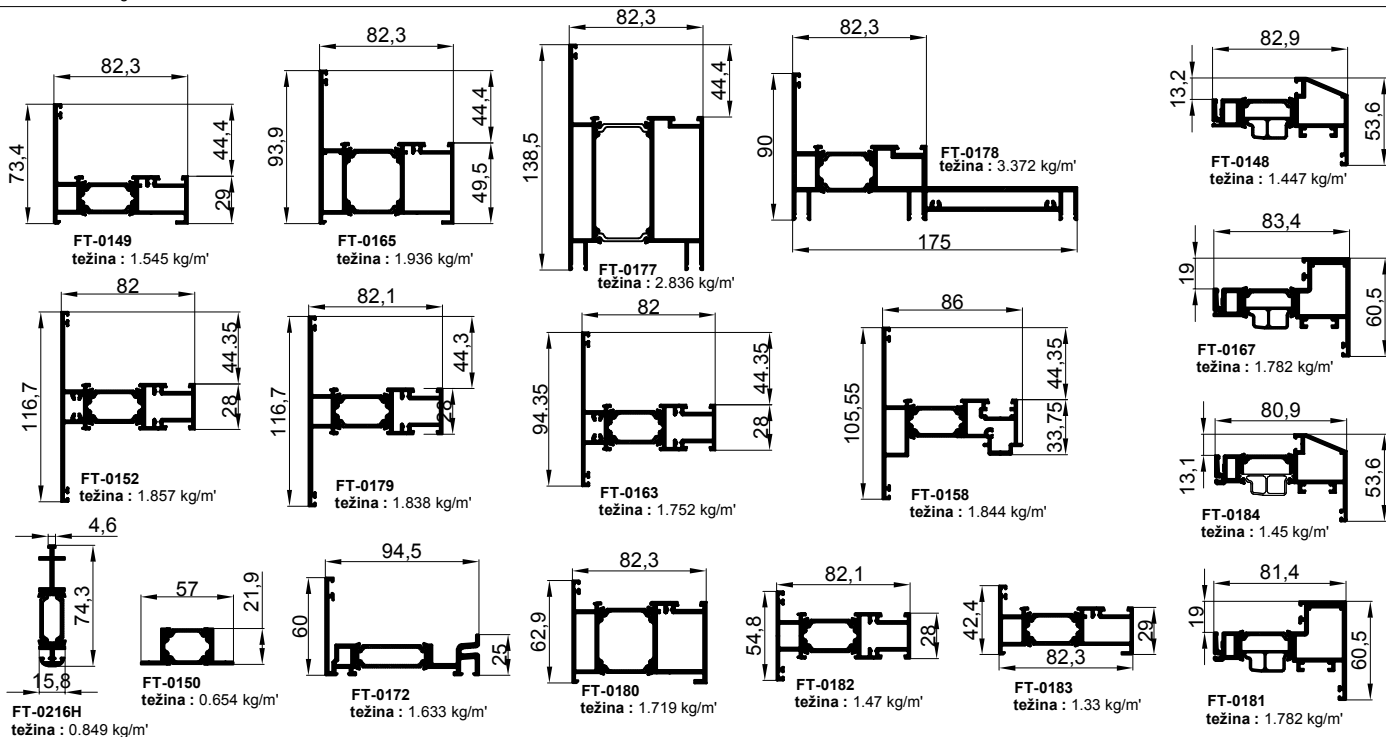
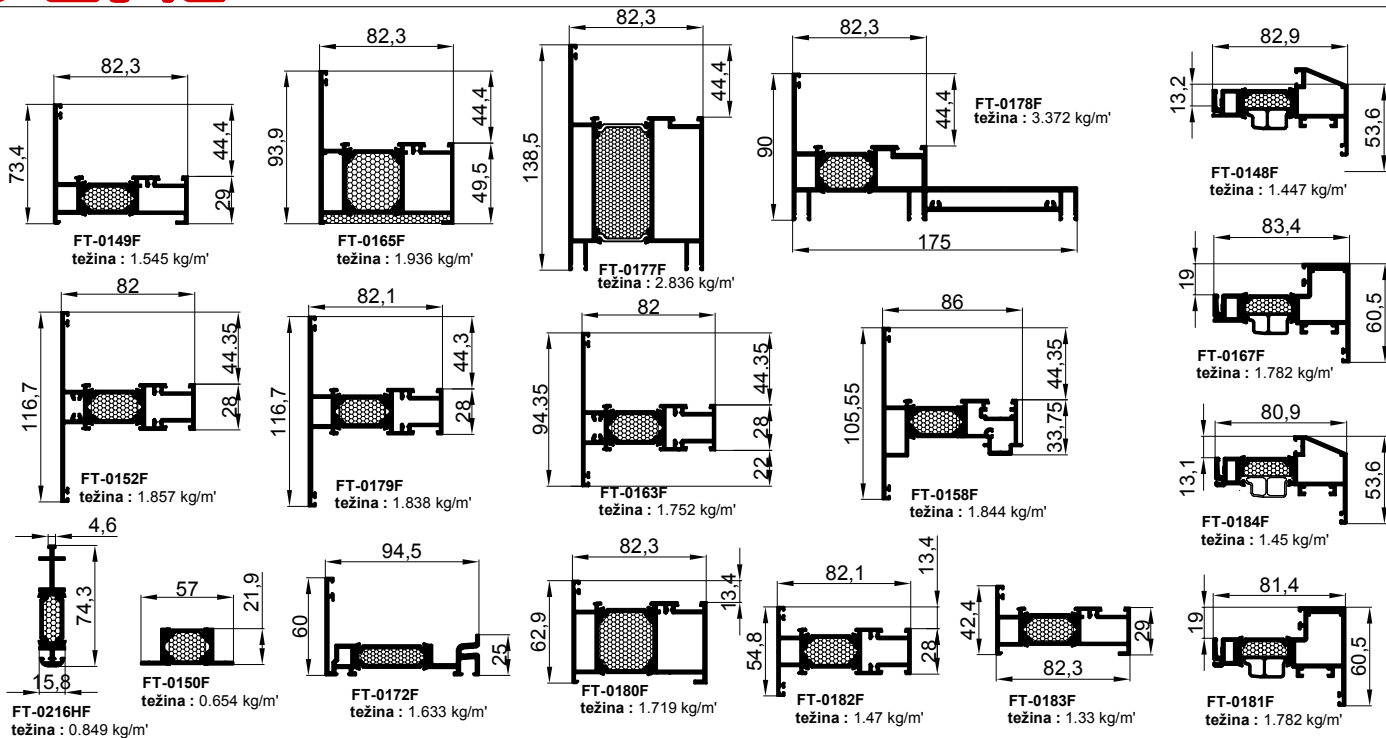
Name and function	Place and date of issue	Signature
E. Ceriani Primary Sales & Strategic Marketing Director Building	Louvain-la-Neuve 28/10/2016	

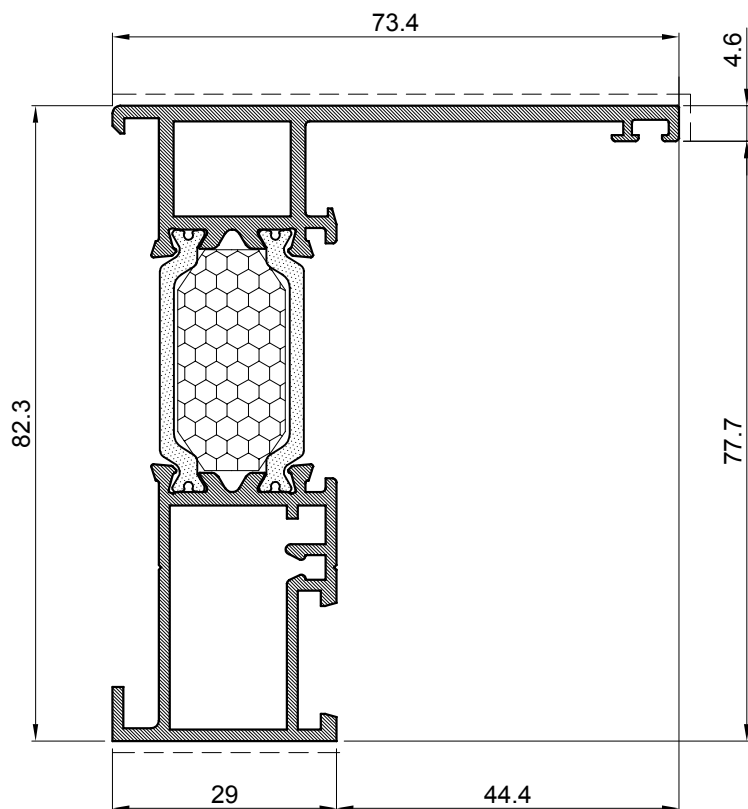
www.yourglass.com



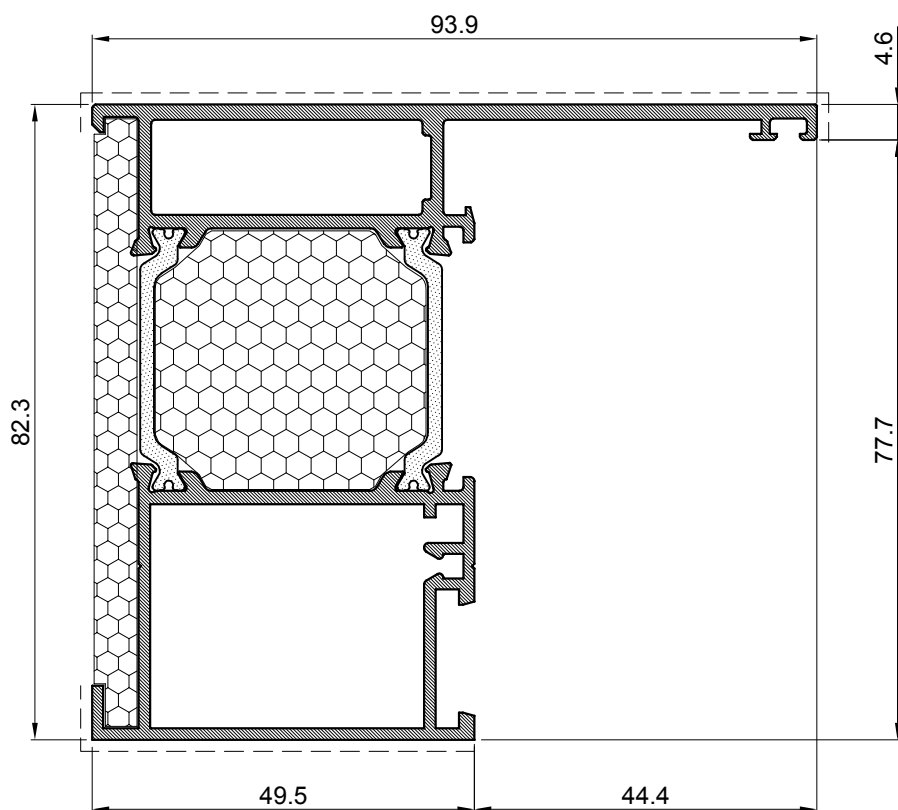
Abb. 12.1: Produktdatenblatt der Verglasung

Profili

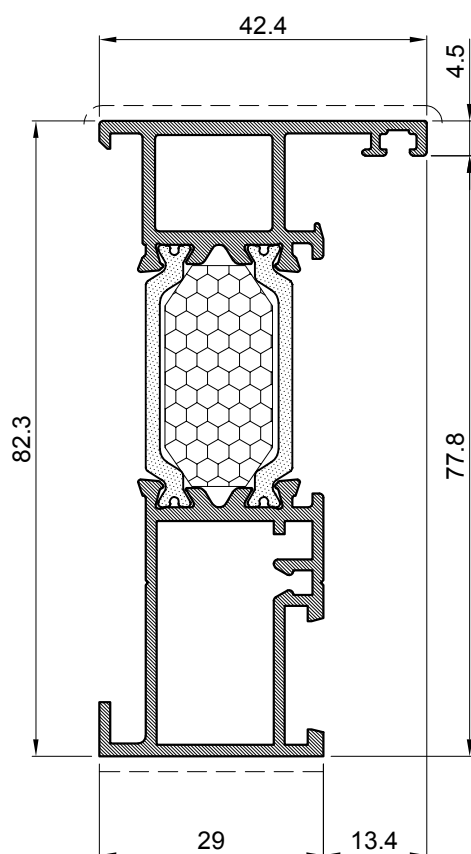
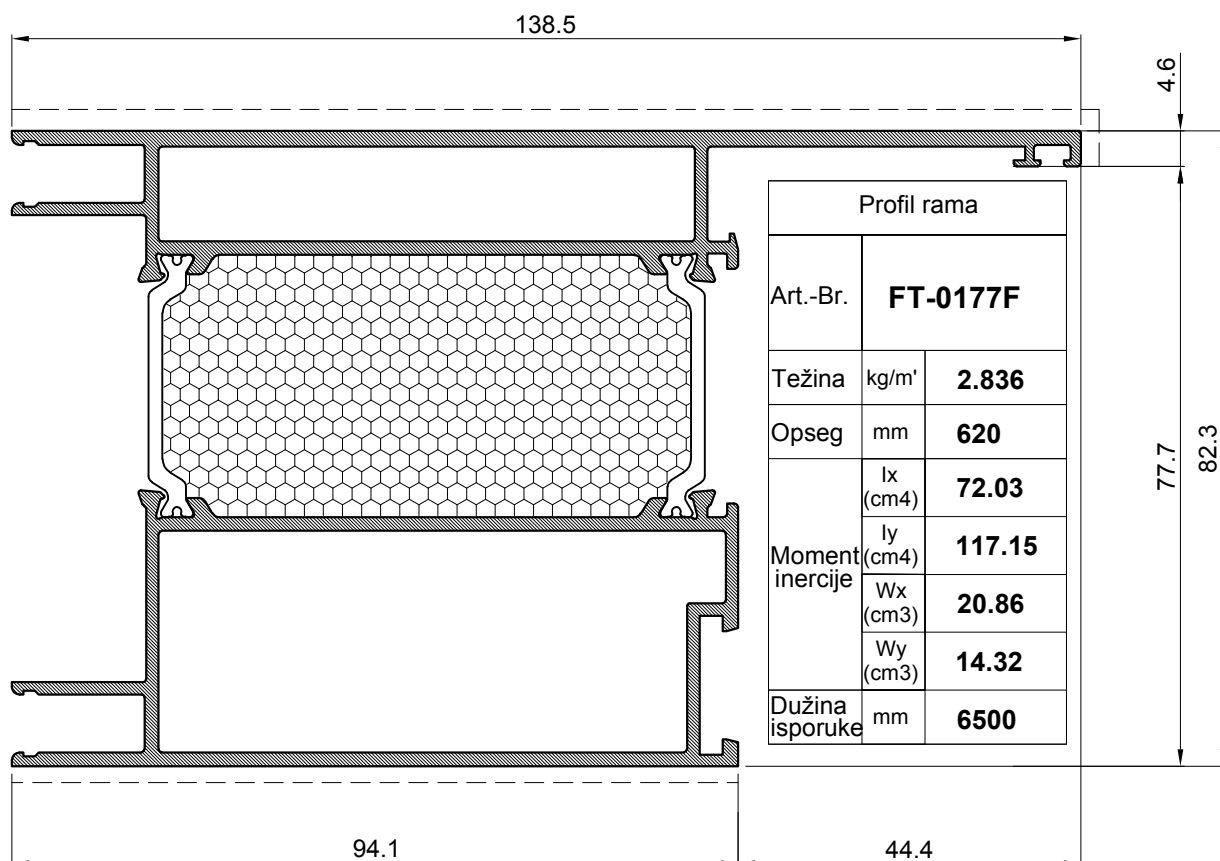


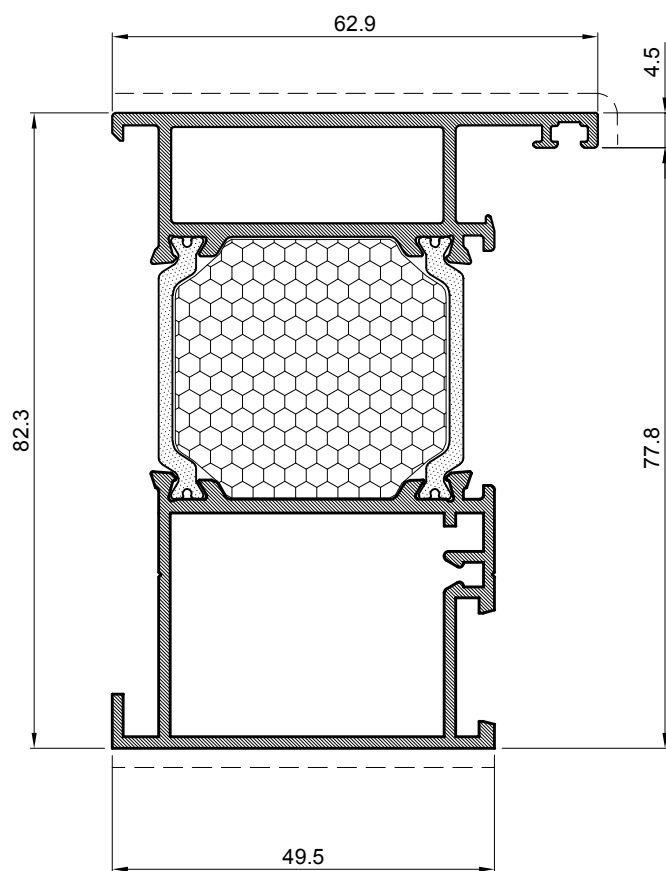


Profil rama		
Art.-Br.	FT-0149F	
Težina	kg/m'	1.545
Opseg	mm	392
Moment inercije	I _x (cm ⁴)	34.03
	I _y (cm ⁴)	14.98
	W _x (cm ³)	9.4
	W _y (cm ³)	2.99
Dužina isporuke	mm	6500

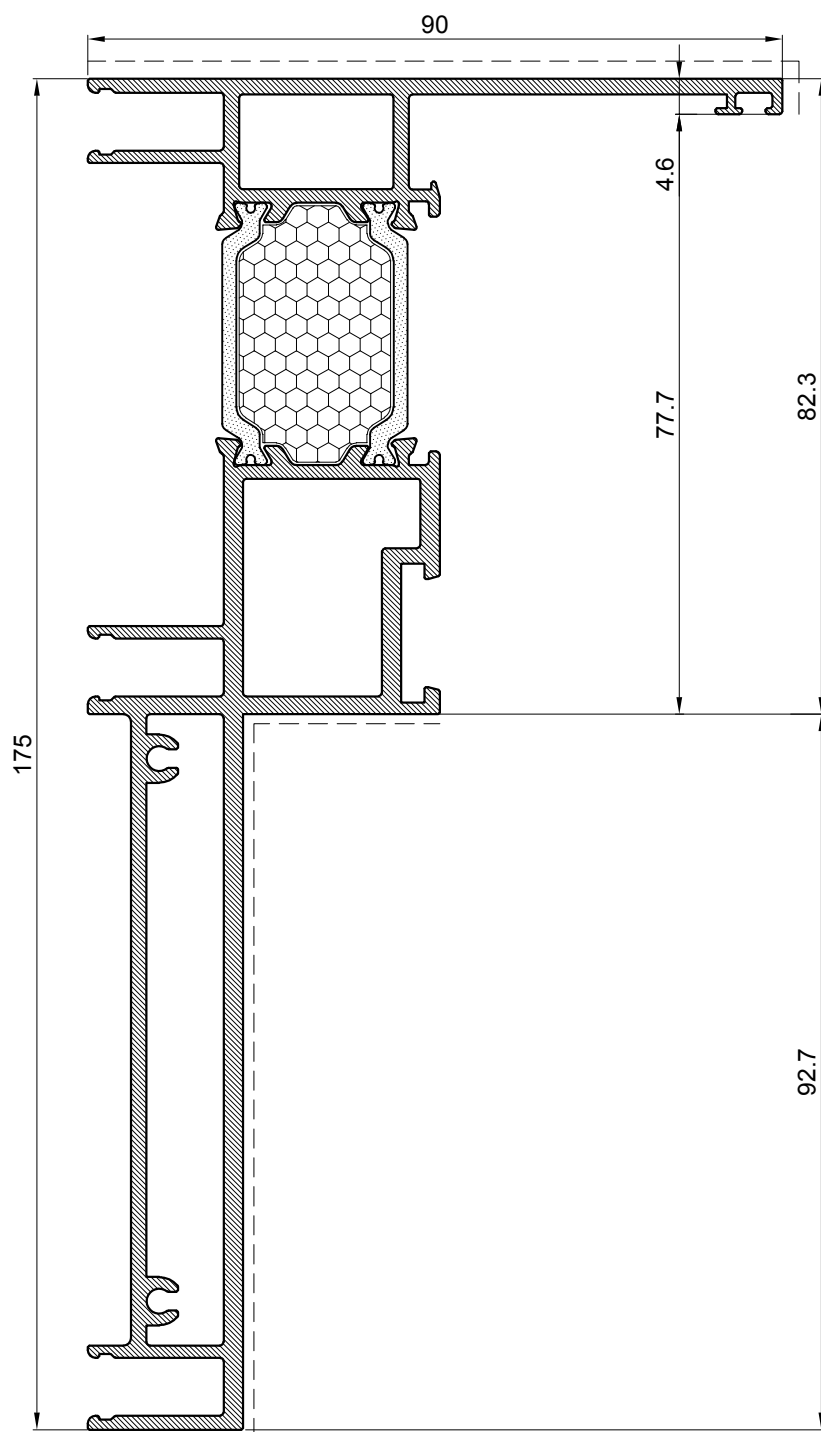


Profil rama		
Art.-Br.	FT-0165F	
Težina	kg/m'	1.936
Opseg	mm	443
Moment inercije	I _x (cm ⁴)	44.43
	I _y (cm ⁴)	33.29
	W _x (cm ³)	12.38
	W _y (cm ³)	5.55
Dužina isporuke	mm	6500

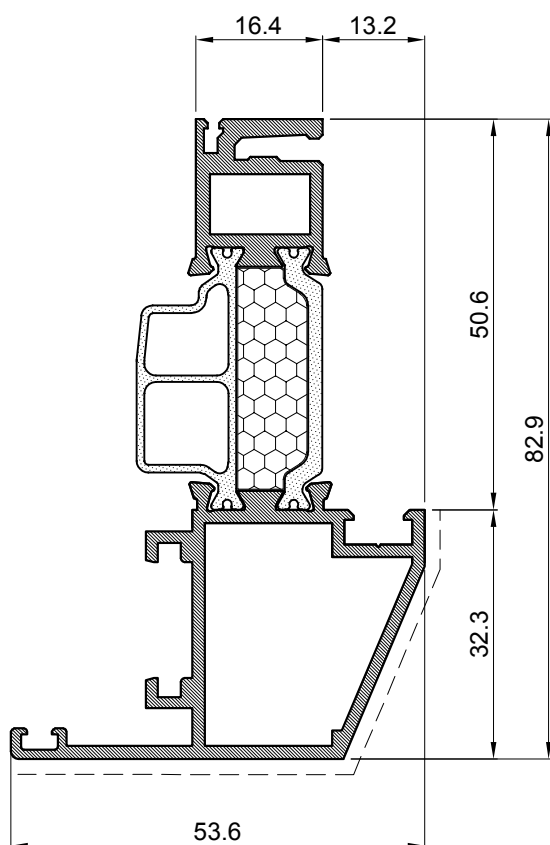




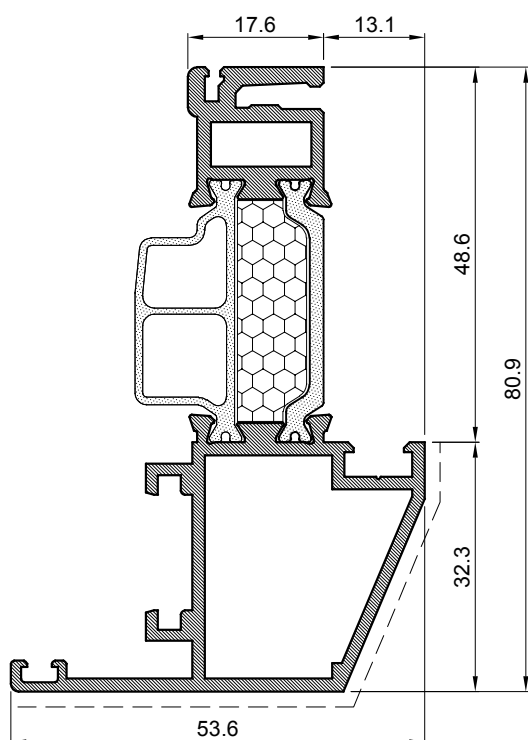
Profil rama		
Art.-Br.	FT-0180F	
Težina	kg/m'	1.719
Opseg	mm	376.92
Moment inercije	I _x (cm ⁴)	37.79
	I _y (cm ⁴)	16.32
	W _x (cm ³)	11.54
	W _y (cm ³)	4.72
Dužina isporuke	mm	6500



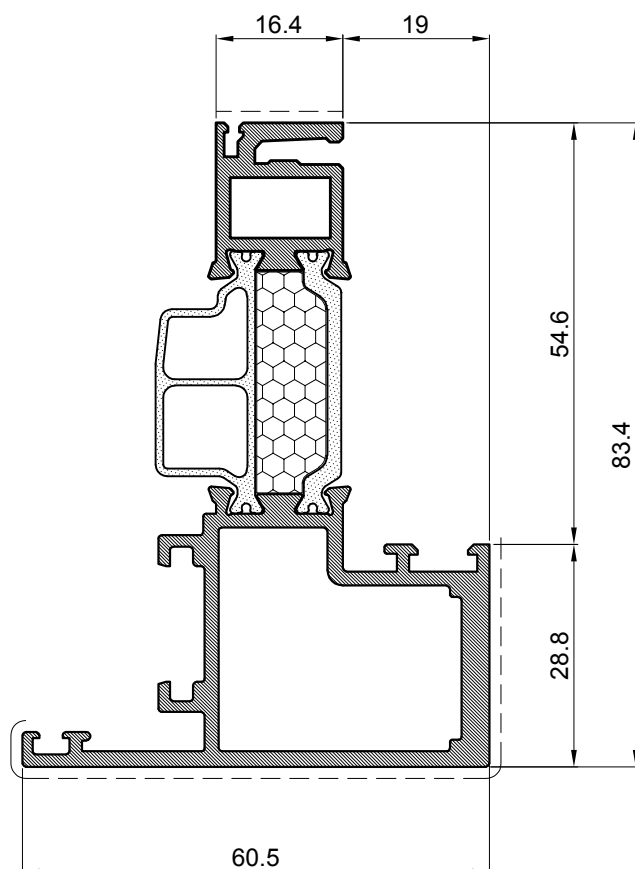
Profil rama		
Art.-Br.	FT-0178F	
Težina	kg/m'	3.372
Opseg	mm	740
Moment inercije	I _x (cm ⁴)	291.51
	I _y (cm ⁴)	39.2
	W _x (cm ³)	36.34
	W _y (cm ³)	5.99
Dužina isporuke	mm	6500



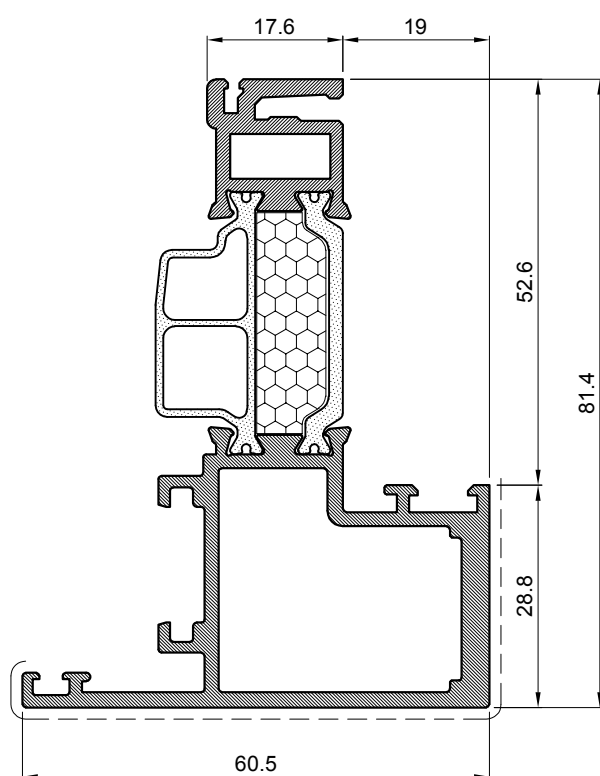
Profil krila		
Art.-Br.	FT-0148F	
Težina	kg/m'	1.447
Opseg	mm	372
Moment inercije	I _x (cm ⁴)	28.3
	I _y (cm ⁴)	5.69
	W _x (cm ³)	8.18
	W _y (cm ³)	1.82
Dužina isporuke	mm	6500



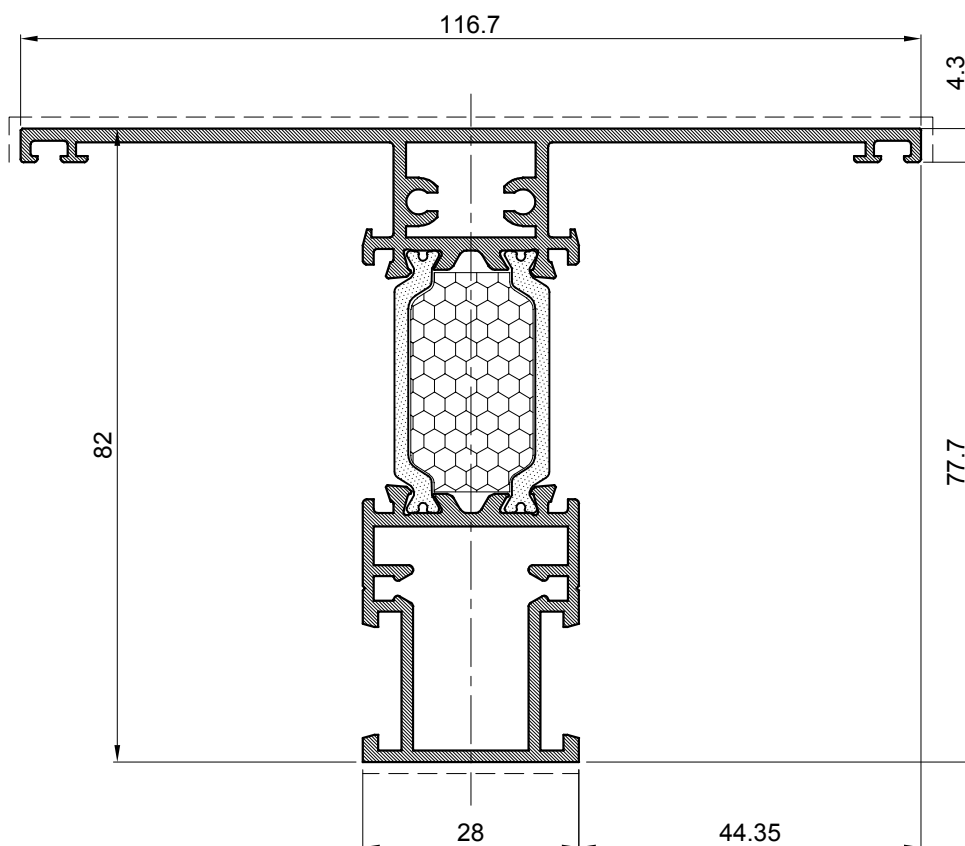
Profil		
Art.-Br.	FT-0184F	
Težina	kg/m'	1.45
Opseg	mm	352
Moment inercije	I _x (cm ⁴)	27.5
	I _y (cm ⁴)	5.69
	W _x (cm ³)	8.25
	W _y (cm ³)	1.83
Dužina isporuke	mm	6500



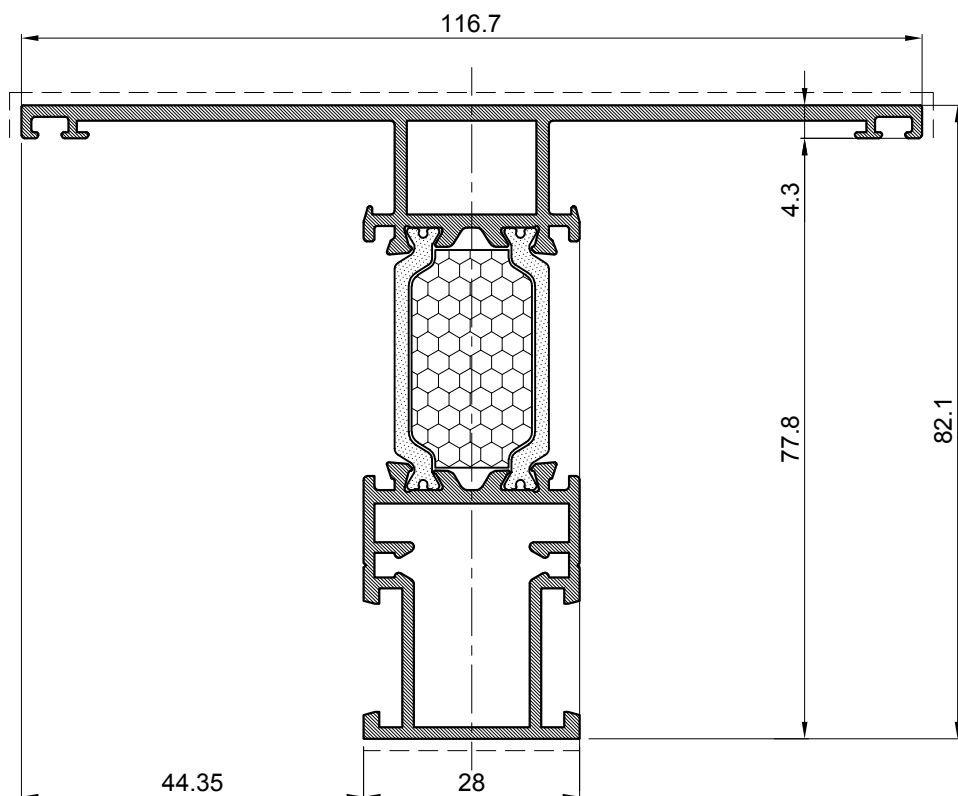
Profil krila		
Art.-Br.	FT-0167F	
Težina	kg/m'	1.782
Opseg	mm	421
Moment inercije	I _x (cm ⁴)	34.47
	I _y (cm ⁴)	12.78
	W _x (cm ³)	8.82
	W _y (cm ³)	3.55
Dužina isporuke	mm	6500



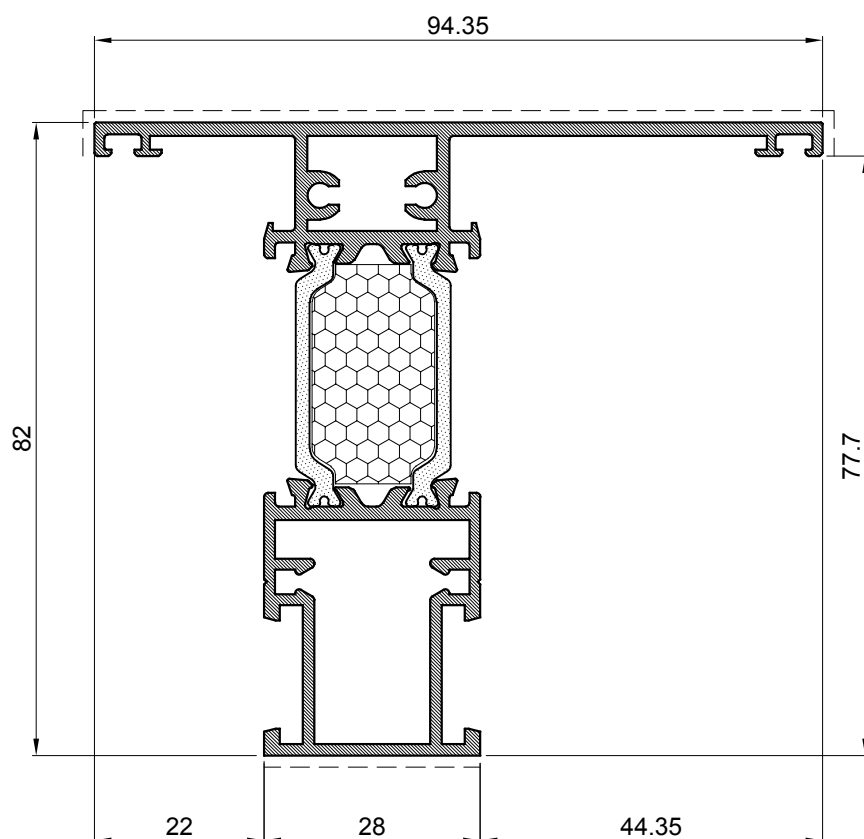
Profil krila		
Art.-Br.	FT-0181F	
Težina	kg/m'	1.782
Opseg	mm	397.24
Moment inercije	I _x (cm ⁴)	33.55
	I _y (cm ⁴)	12.83
	W _x (cm ³)	8.88
	W _y (cm ³)	3.57
Dužina isporuke	mm	6500



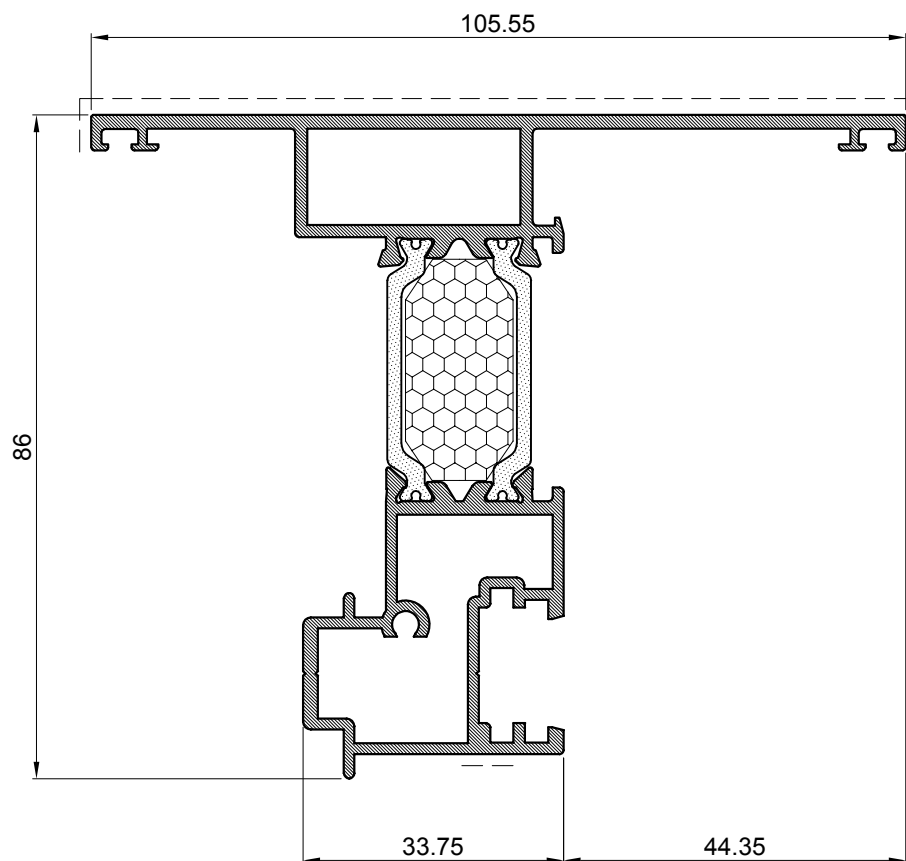
Profil prečke		
Art.-Br.	FT-0152F	
Težina	kg/m'	1.857
Opseg	mm	518
Moment inercije	I _x (cm ⁴)	39.61
	I _y (cm ⁴)	31.11
	W _x (cm ³)	10.26
	W _y (cm ³)	5.33
Dužina isporuke	mm	6500



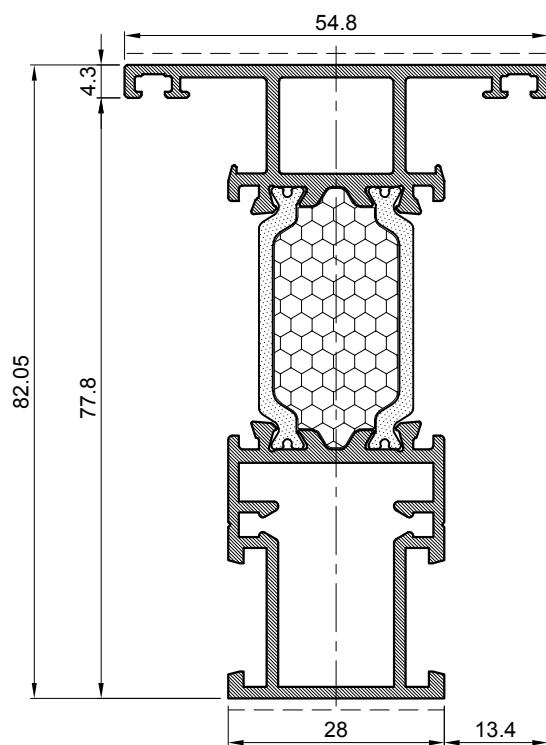
Profil prečke		
Art.-Br.	FT-0179F	
Težina	kg/m'	1.838
Opseg	mm	515
Moment inercije	I _x (cm ⁴)	40.2
	I _y (cm ⁴)	32.99
	W _x (cm ³)	10.37
	W _y (cm ³)	5.65
Dužina isporuke	mm	6500



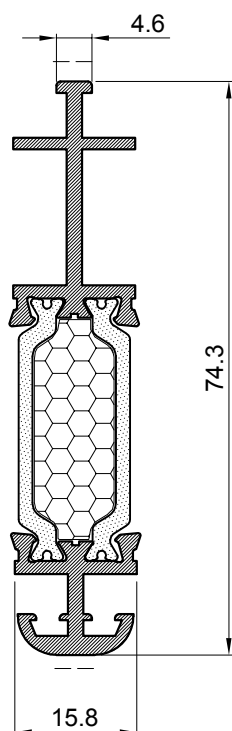
Profil prečke		
Art.-Br.	FT-0163F	
Težina	kg/m'	1.752
Opseg	mm	473
Moment inercije	I _x (cm ⁴)	37.26
	I _y (cm ⁴)	20.03
	W _x (cm ³)	10
	W _y (cm ³)	3.65
Dužina isporuke	mm	6500



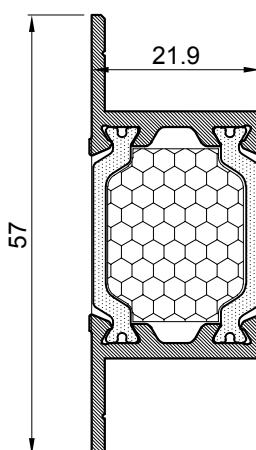
Profil combatute		
Art.-Br.	FT-0158F	
Težina	kg/m'	1.844
Opseg	mm	509
Moment inercije	I _x (cm ⁴)	42.88
	I _y (cm ⁴)	27.11
	W _x (cm ³)	11.08
	W _y (cm ³)	4.69
Dužina isporuke	mm	6500



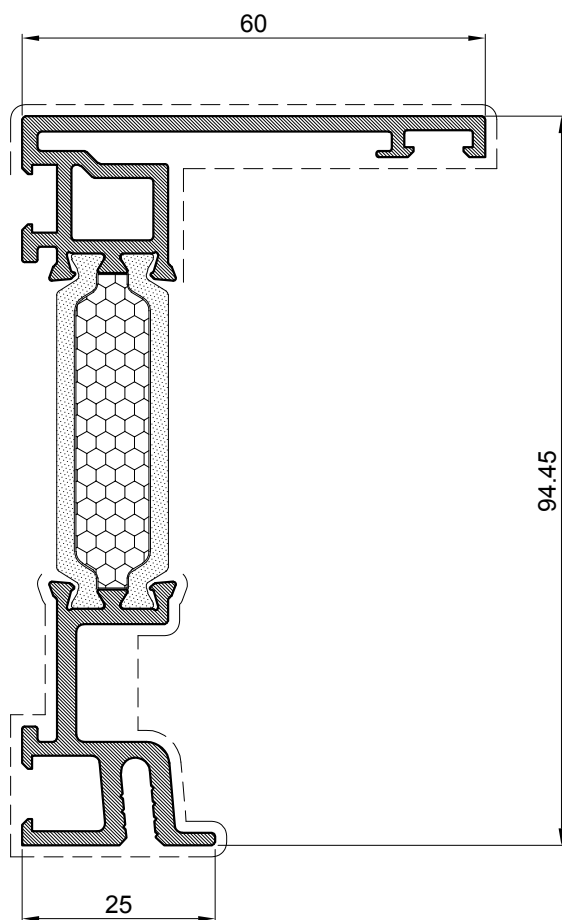
Profil prečke		
Art.-Br.	FT-0182F	
Težina	kg/m'	1.47
Opseg	mm	392.68
Moment inercije	I _x (cm ⁴)	29.82
	I _y (cm ⁴)	6.1
	W _x (cm ³)	8.97
	W _y (cm ³)	2.23
Dužina isporuke	mm	6500



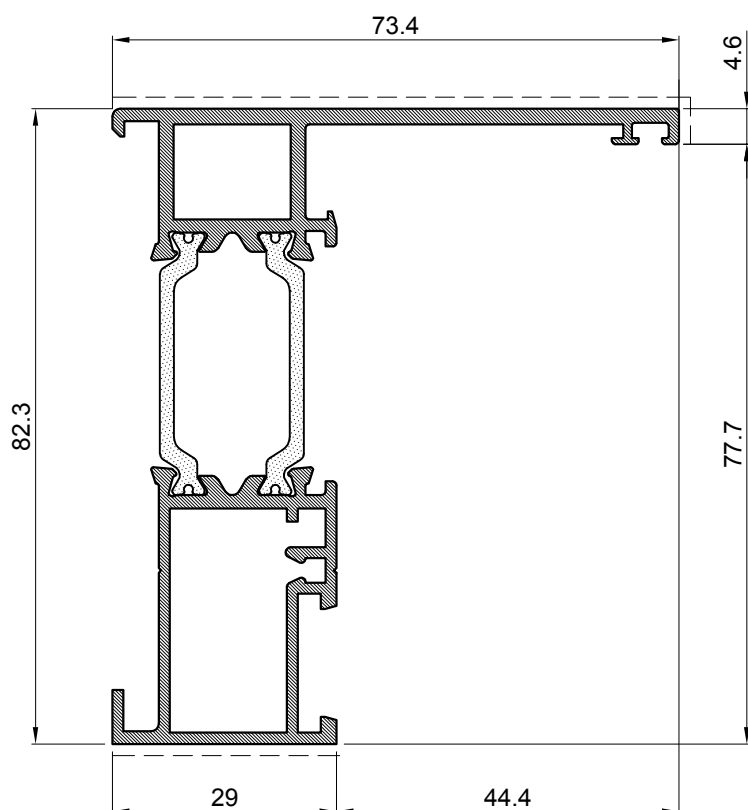
Vezni profil		
Art.-Br.	FT-0216HF	
Težina	kg/m'	0.849
Opseg	mm	260
Moment inercije	I _x (cm ⁴)	11.08
	I _y (cm ⁴)	0.38
	W _x (cm ³)	3.79
	W _y (cm ³)	0.44
Dužina isporuke	mm	6500



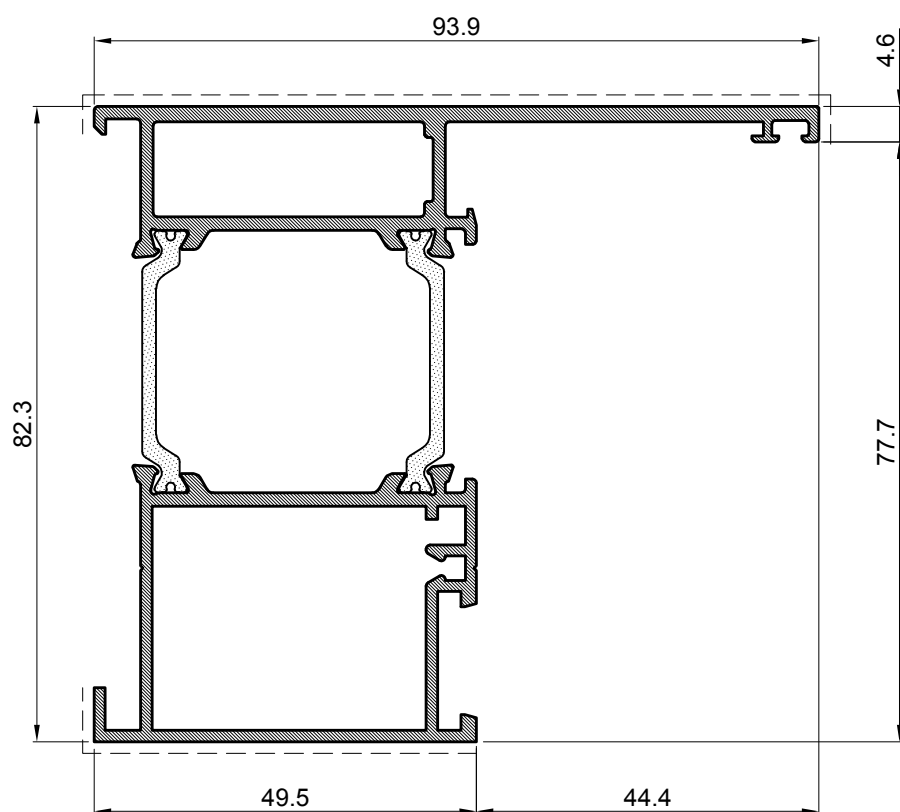
Profil		
Art.-Br.	FT-0150F	
Težina	kg/m'	0.654
Opseg	mm	160
Moment inercije	I _x (cm ⁴)	3.52
	I _y (cm ⁴)	1.01
	W _x (cm ³)	1.72
	W _y (cm ³)	0.74
Dužina isporuke	mm	6500



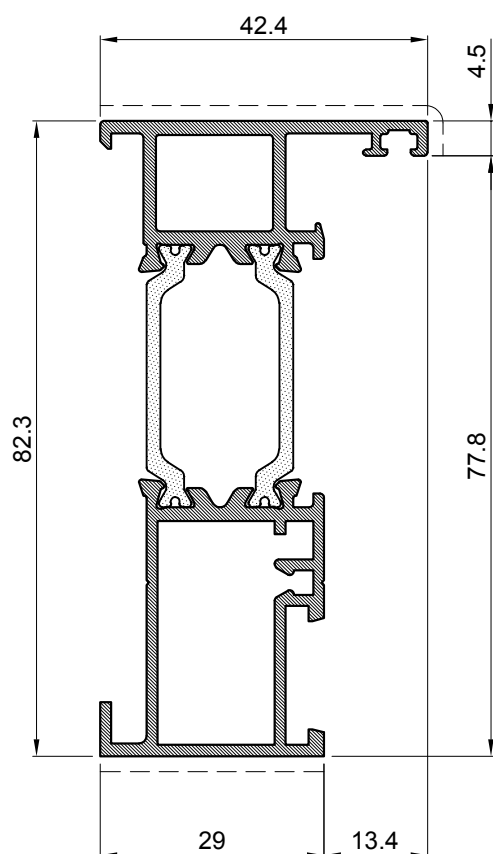
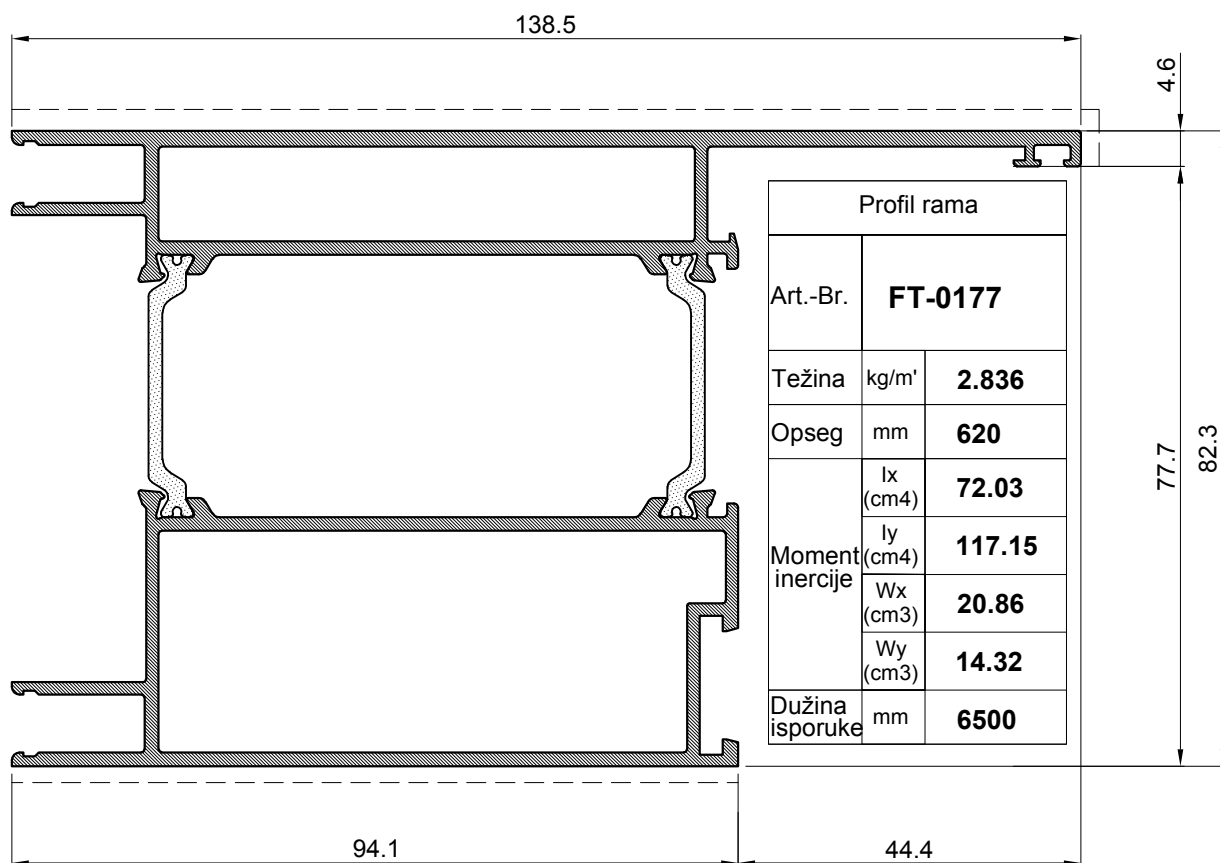
Profil		
Art.-Br.	FT-0172F	
Težina	kg/m'	1.633
Opseg	mm	488
Moment inercije	I _x (cm ⁴)	48.31
	I _y (cm ⁴)	10.23
	W _x (cm ³)	12.28
	W _y (cm ³)	2.34
Dužina isporuke	mm	6500



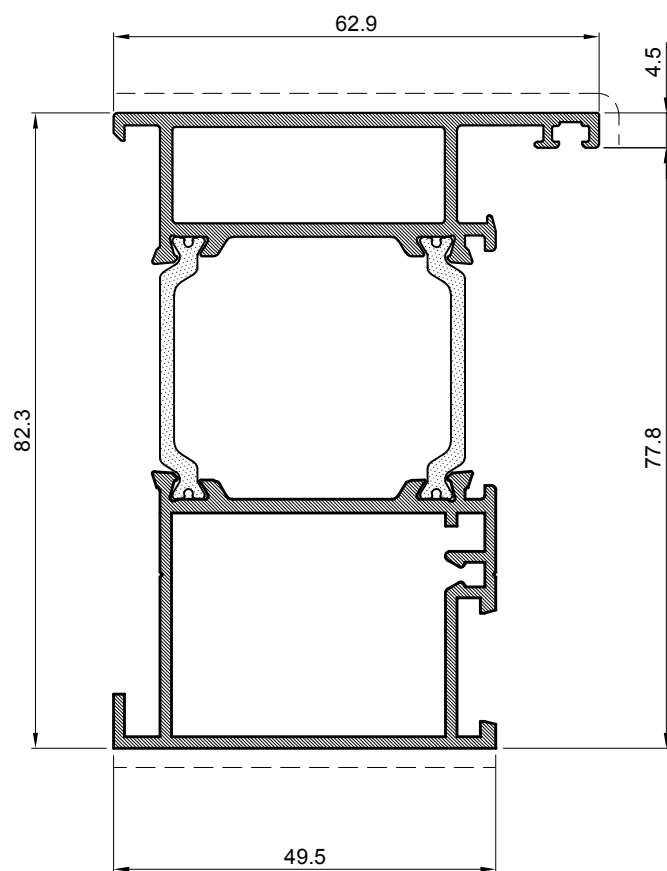
Profil rama		
Art.-Br.	FT-0149	
Težina	kg/m'	1.545
Opseg	mm	392
Moment inercije	I _x (cm ⁴)	34.03
	I _y (cm ⁴)	14.98
	W _x (cm ³)	9.4
	W _y (cm ³)	2.99
Dužina isporuke	mm	6500



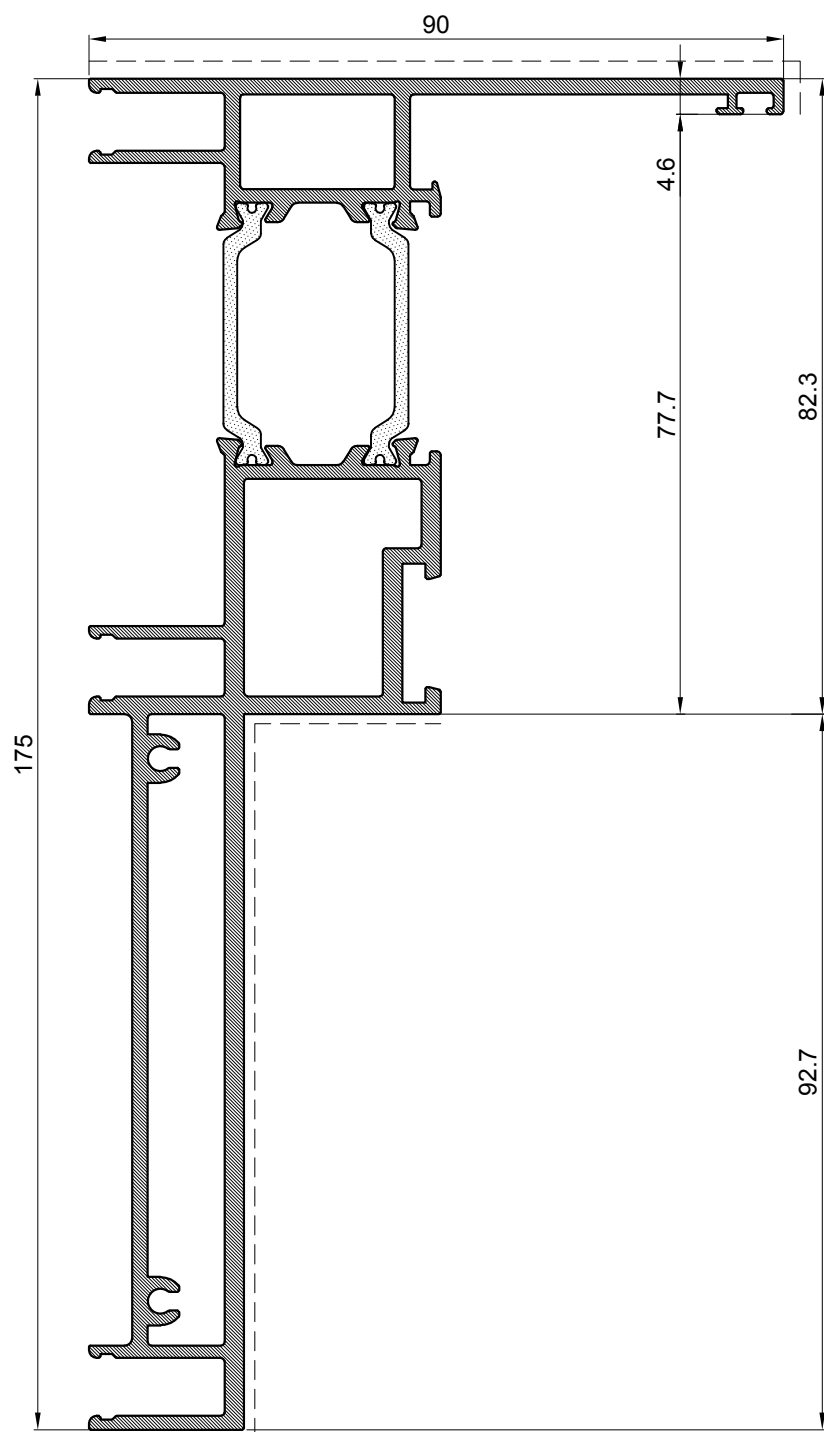
Profil rama		
Art.-Br.	FT-0165	
Težina	kg/m'	1.936
Opseg	mm	443
Moment inercije	I _x (cm ⁴)	44.43
	I _y (cm ⁴)	33.29
	W _x (cm ³)	12.38
	W _y (cm ³)	5.55
Dužina isporuke	mm	6500



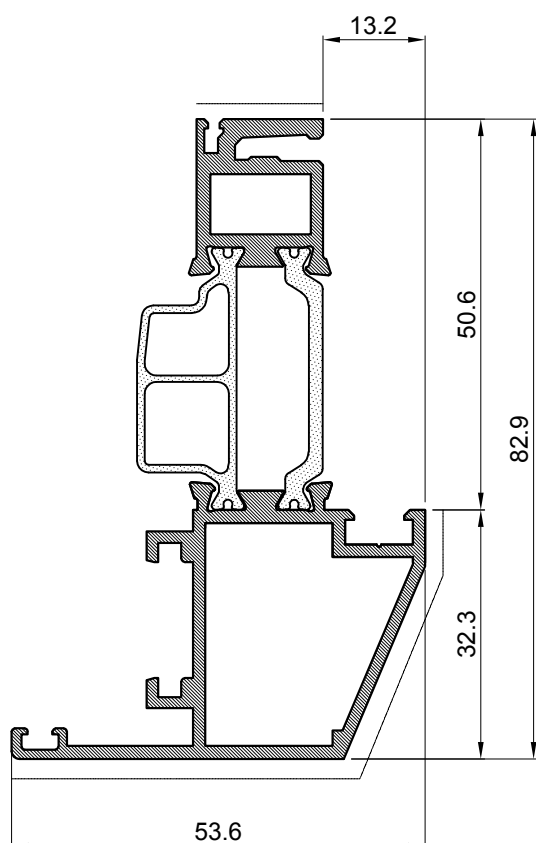
Profil rama		
Art.-Br.	FT-0183	
Težina	kg/m'	1.33
Opseg	mm	335.1
Moment inercije	I _x (cm ⁴)	27.66
	I _y (cm ⁴)	4.06
	W _x (cm ³)	8.58
	W _y (cm ³)	1.63
Dužina isporuke	mm	6500



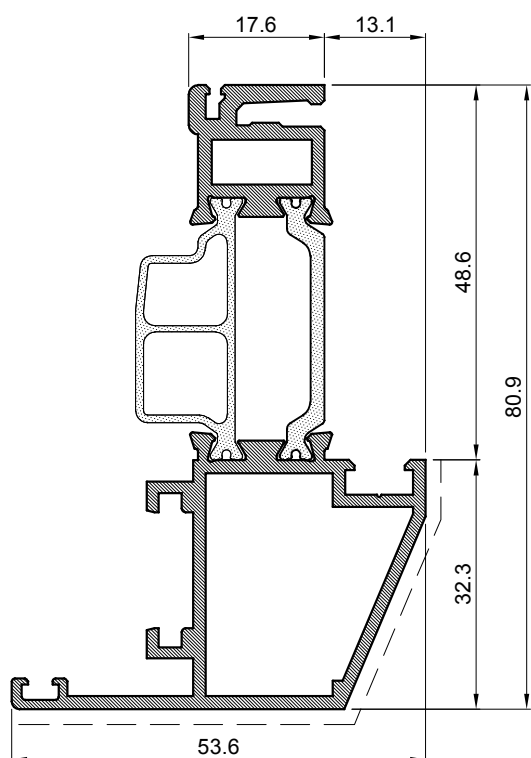
Profil rama		
Art.-Br.	FT-0180	
Težina	kg/m'	1.719
Opseg	mm	376.92
Moment inercije	I _x (cm ⁴)	37.79
	I _y (cm ⁴)	16.32
	W _x (cm ³)	11.54
	W _y (cm ³)	4.72
Dužina isporuke	mm	6500



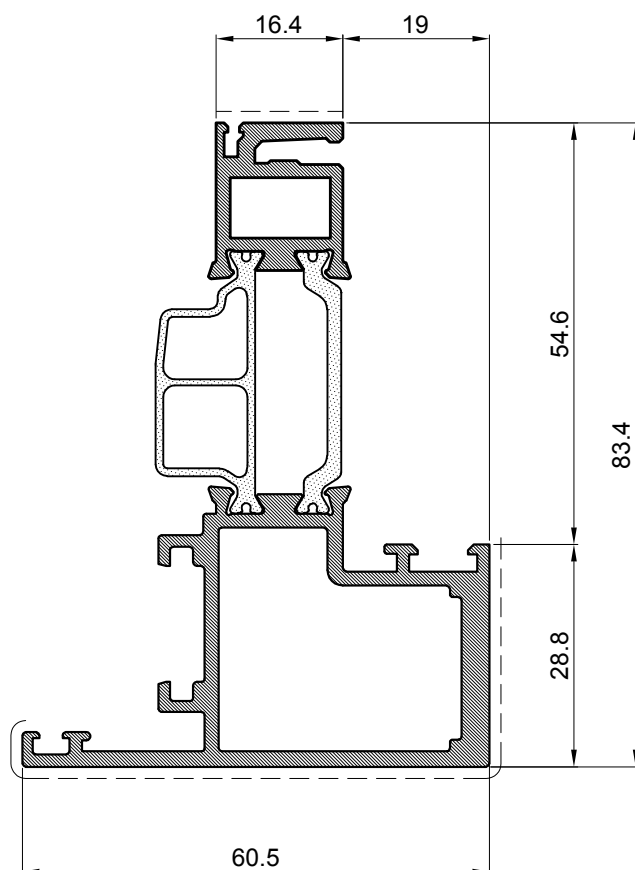
Profil rama		
Art.-Br.	FT-0178	
Težina	kg/m'	3.372
Opseg	mm	740
Moment inercije	I _x (cm ⁴)	291.51
	I _y (cm ⁴)	39.2
	W _x (cm ³)	36.34
	W _y (cm ³)	5.99
Dužina isporuke	mm	6500



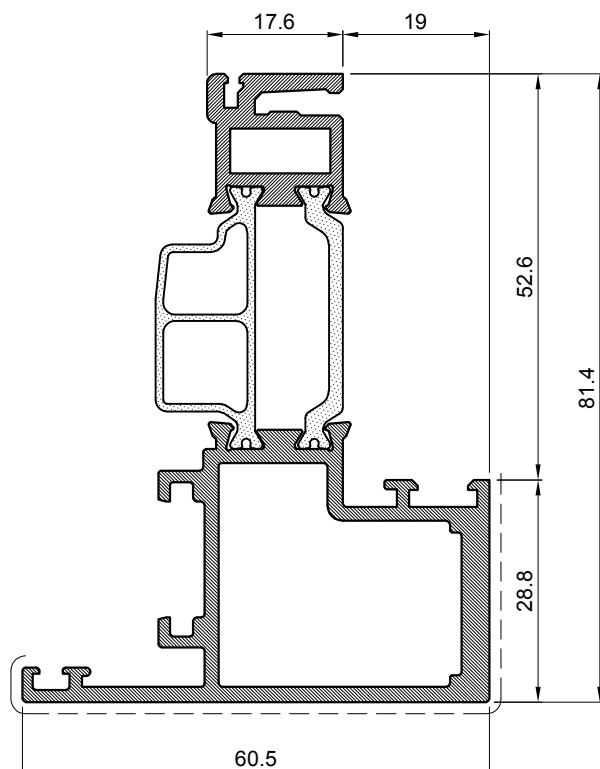
Profil krila		
Art.-Br.	FT-0148	
Težina	kg/m'	1.447
Opseg	mm	372
Moment inercije	I _x (cm ⁴)	28.3
	I _y (cm ⁴)	5.69
	W _x (cm ³)	8.18
	W _y (cm ³)	1.82
Dužina isporuke	mm	6500



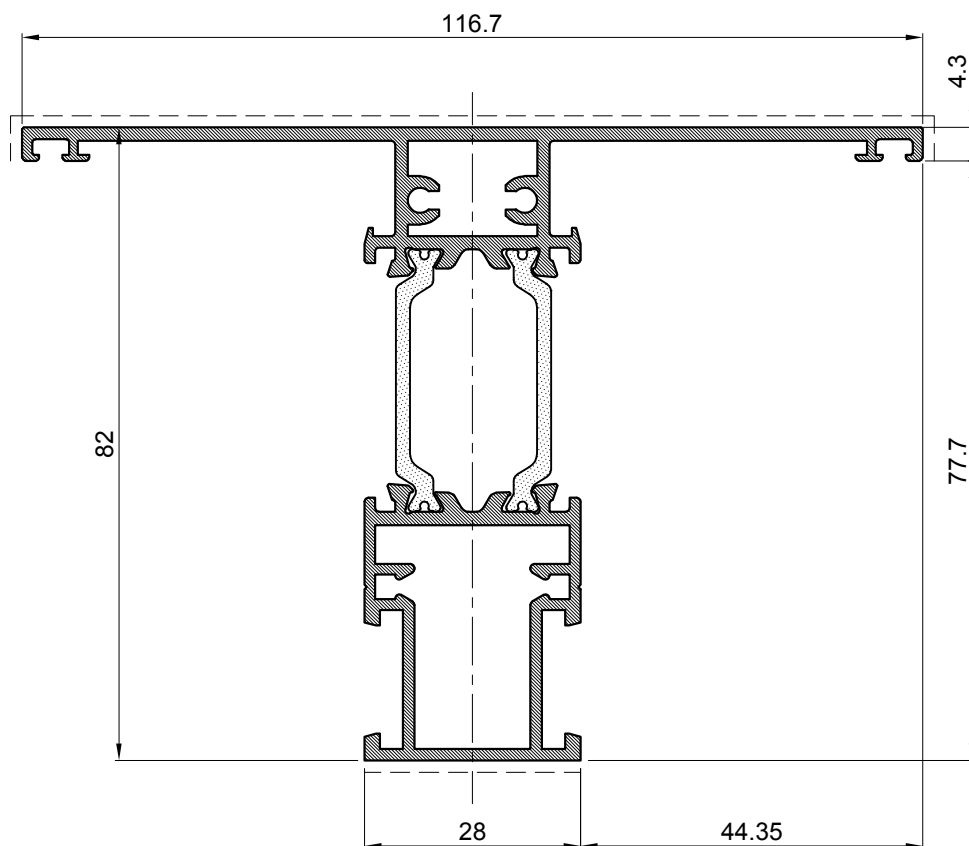
Profil		
Art.-Br.	FT-0184	
Težina	kg/m'	1.45
Opseg	mm	352
Moment inercije	I _x (cm ⁴)	27.5
	I _y (cm ⁴)	5.69
	W _x (cm ³)	8.25
	W _y (cm ³)	1.83
Dužina isporuke	mm	6500



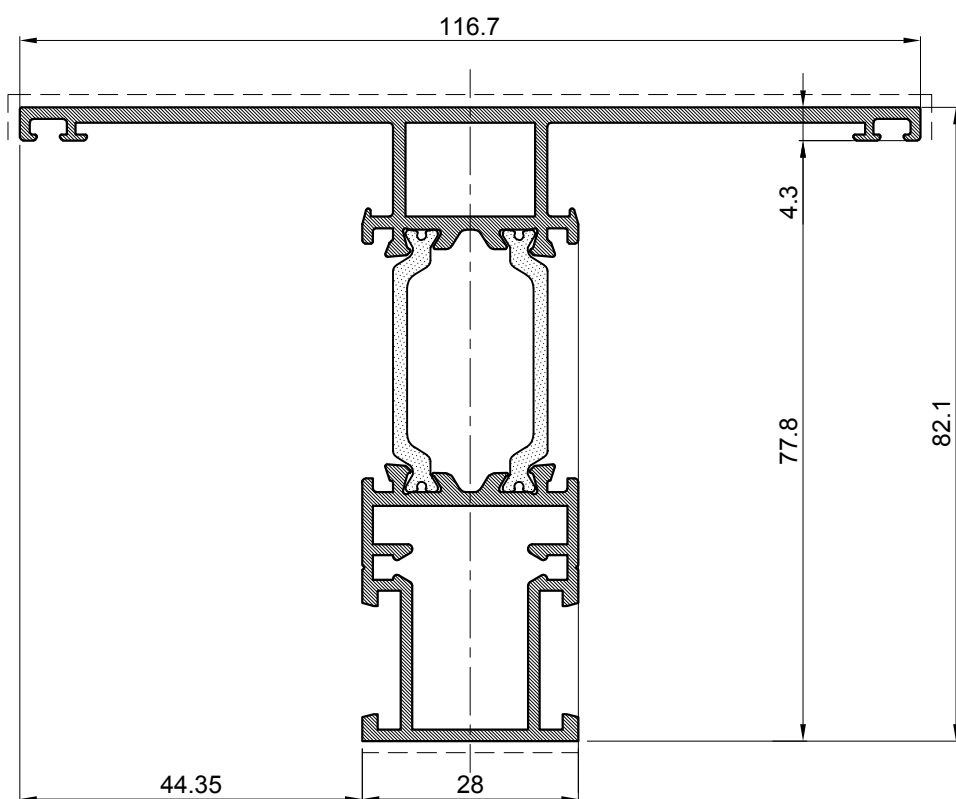
Profil krila		
Art.-Br.	FT-0167	
Težina	kg/m'	1.782
Opseg	mm	421
Moment inercije	I _x (cm ⁴)	34.47
	I _y (cm ⁴)	12.78
	W _x (cm ³)	8.82
	W _y (cm ³)	3.55
Dužina isporuke	mm	6500



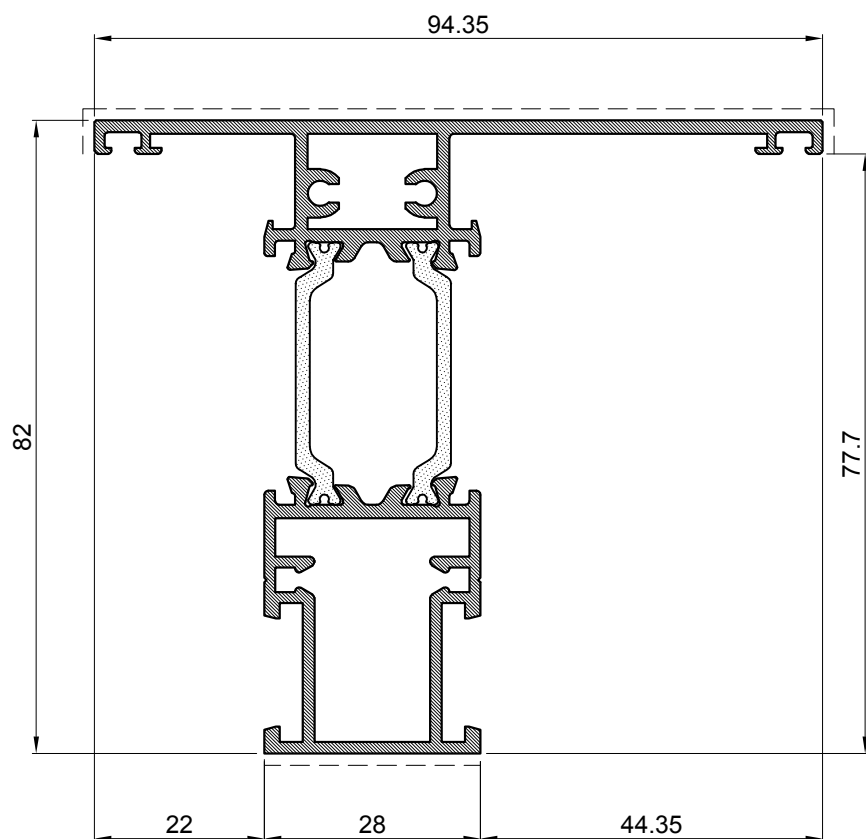
Profil krila		
Art.-Br.	FT-0181	
Težina	kg/m'	1.782
Opseg	mm	397.24
Moment inercije	I _x (cm ⁴)	33.55
	I _y (cm ⁴)	12.83
	W _x (cm ³)	8.88
	W _y (cm ³)	3.57
Dužina isporuke	mm	6500



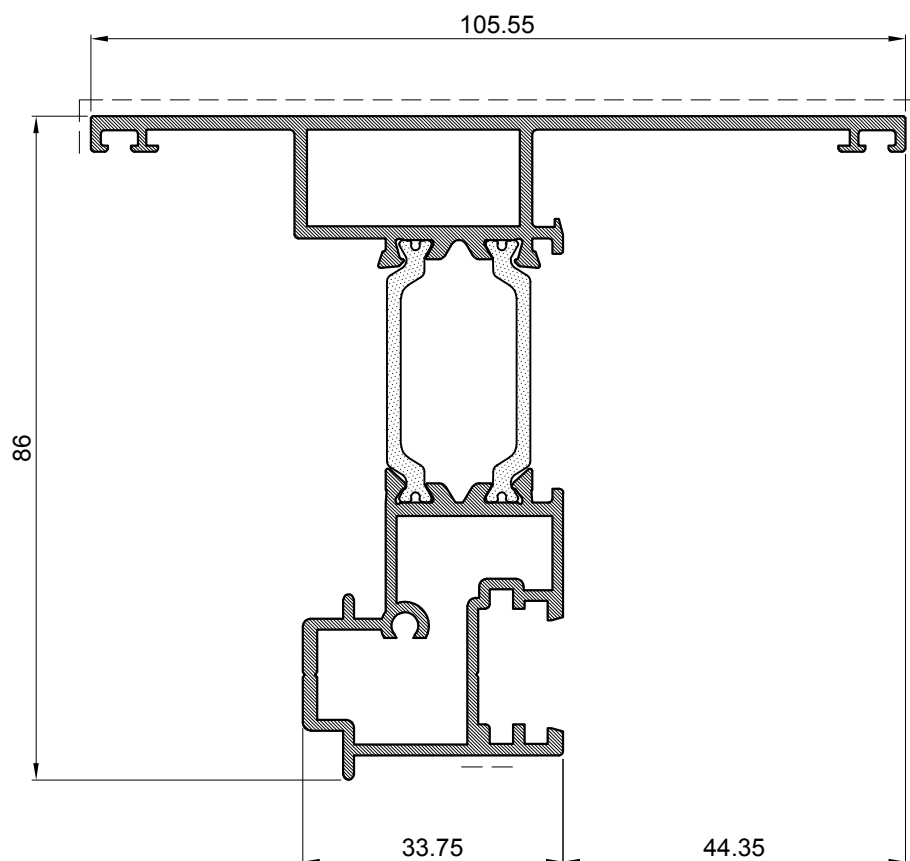
Profil prečke		
Art.-Br.	FT-0152	
Težina	kg/m'	1.857
Opseg	mm	518
Moment inercije	I _x (cm ⁴)	39.61
	I _y (cm ⁴)	31.11
	W _x (cm ³)	10.26
	W _y (cm ³)	5.33
Dužina isporuke	mm	6500



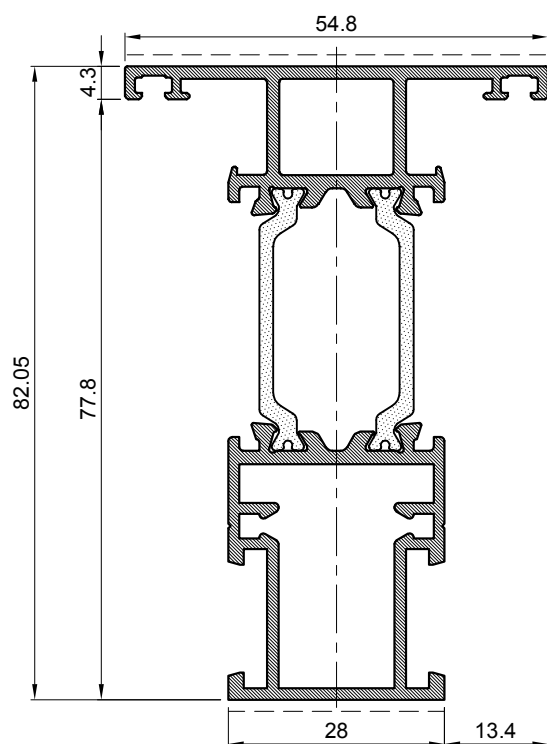
Profil prečke		
Art.-Br.	FT-0179	
Težina	kg/m'	1.838
Opseg	mm	515
Moment inercije	I _x (cm ⁴)	40.2
	I _y (cm ⁴)	32.99
	W _x (cm ³)	10.37
	W _y (cm ³)	5.65
Dužina isporuke	mm	6500



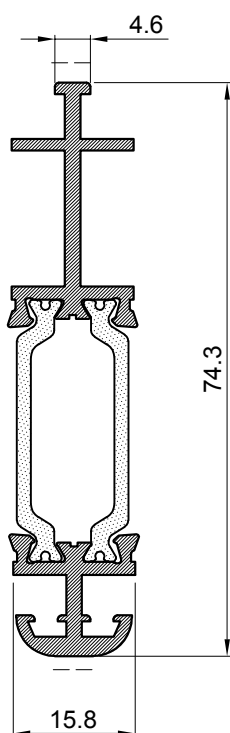
Profil prečke		
Art.-Br.	FT-0163	
Težina	kg/m'	1.752
Opseg	mm	473
Moment inercije	I _x (cm ⁴)	37.26
	I _y (cm ⁴)	20.03
	W _x (cm ³)	10
	W _y (cm ³)	3.65
Dužina isporuke	mm	6500



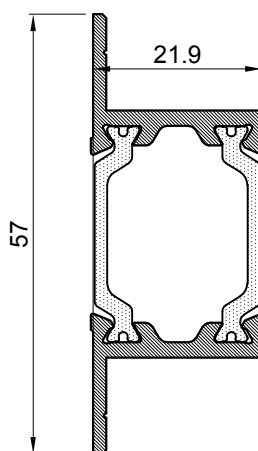
Profil combatute		
Art.-Br.	FT-0158	
Težina	kg/m'	1.844
Opseg	mm	509
Moment inercije	I _x (cm ⁴)	42.88
	I _y (cm ⁴)	27.11
	W _x (cm ³)	11.08
	W _y (cm ³)	4.69
Dužina isporuke	mm	6500



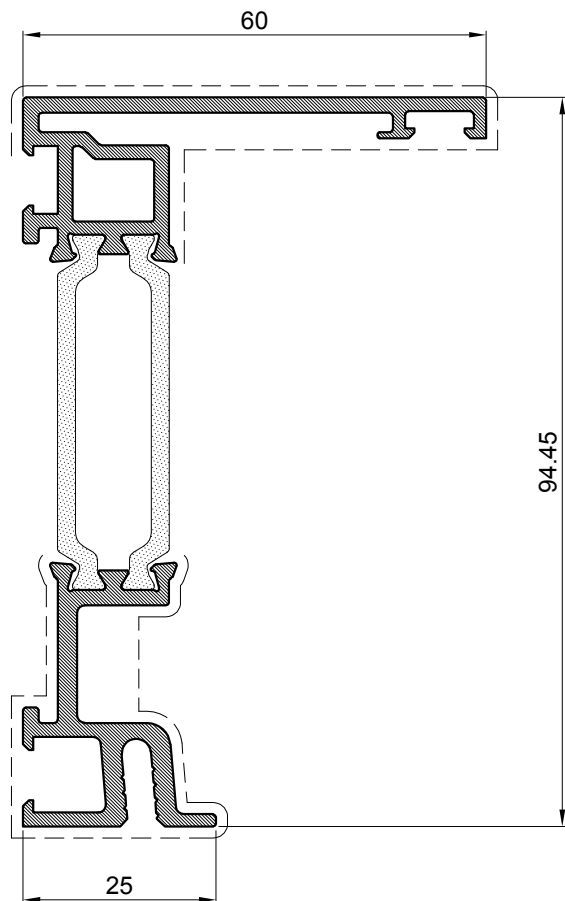
Profil prečke		
Art.-Br.	FT-0182	
Težina	kg/m'	1.47
Opseg	mm	392.68
Moment inercije	I _x (cm ⁴)	29.82
	I _y (cm ⁴)	6.1
	W _x (cm ³)	8.97
	W _y (cm ³)	2.23
Dužina isporuke	mm	6500



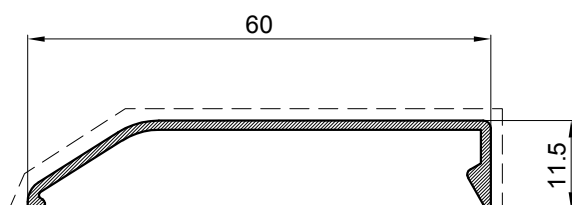
Profil		
Art.-Br.	FT-0216H	
Težina	kg/m'	0.849
Opseg	mm	260
Moment inercije	I _x (cm ⁴)	11.08
	I _y (cm ⁴)	0.38
	W _x (cm ³)	3.79
	W _y (cm ³)	0.44
Dužina isporuke	mm	6500



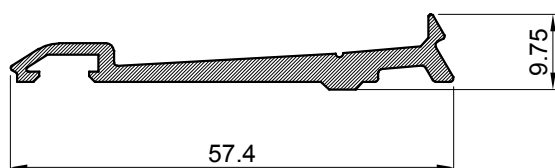
Profil		
Art.-Br.	FT-0150	
Težina	kg/m'	0.654
Opseg	mm	160
Moment inercije	I _x (cm ⁴)	3.52
	I _y (cm ⁴)	1.01
	W _x (cm ³)	1.72
	W _y (cm ³)	0.74
Dužina isporuke	mm	6500



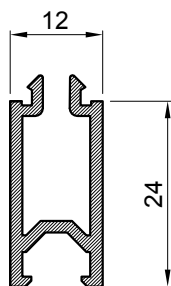
Profil		
Art.-Br.	FT-0172	
Težina	kg/m'	1.633
Opseg	mm	488
Moment inercije	I _x (cm ⁴)	48.31
	I _y (cm ⁴)	10.23
	W _x (cm ³)	12.28
	W _y (cm ³)	2.34
Dužina isporuke	mm	6500



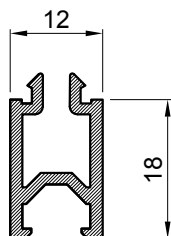
Profil za ugradnju		
Art.-Br.	FM-072	
Težina	kg/m	0.258
Opseg	mm	152.0
Dužine isporuke	mm	6500



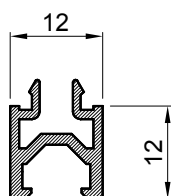
Profil za ugradnju		
Art.-Br.	F-1190	
Težina	kg/m	0.461
Opseg	mm	145.0
Dužine isporuke	mm	6500



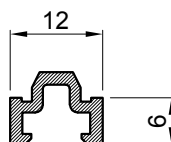
Al profil		
Art.-Br.	FM 24/12	
Težina	kg/m'	0.31
Opseg	mm	148.30
Dužina isporuke	mm	6500



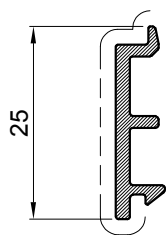
Al profil		
Art.-Br.	FM 21/12	
Težina	kg/m'	0.254
Opseg	mm	124.00
Dužina isporuke	mm	6500



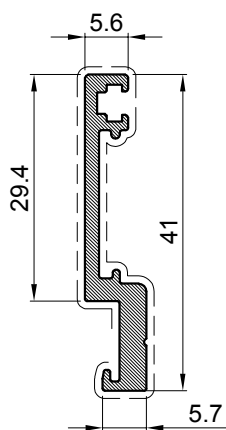
Al profil		
Art.-Br.	FM 12/12	
Težina	kg/m'	0.18
Opseg	mm	100.16
Dužina isporuke	mm	6500



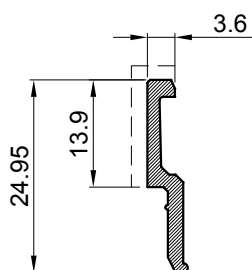
Al profil		
Art.-Br.	FM 6/12	
Težina	kg/m'	0.116
Opseg	mm	61.00
Dužina isporuke	mm	6500



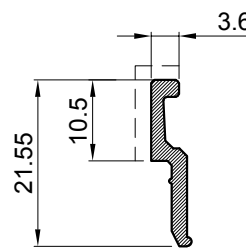
Profil za ugradnju		
Art.-Br.	F-1238	
Težina	kg/m	0.165
Opseg	mm	76
Dužine isporuke	mm	6500



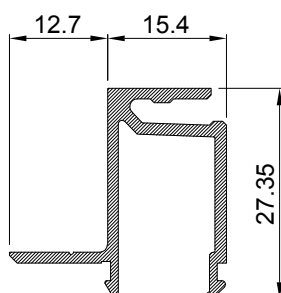
Dodatni profil za ugradnju		
Art.-Br.	F-1493	
Težina	kg/m	0.342
Opseg	mm	125
Dužine isporuke	mm	6500



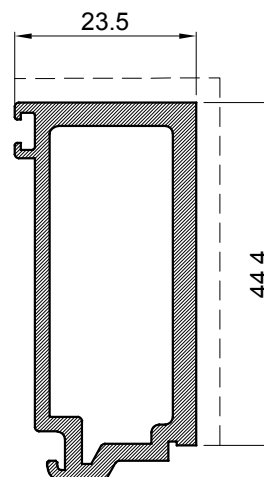
FR-41
težina kg/m 0.147
svj. povr.mm 16



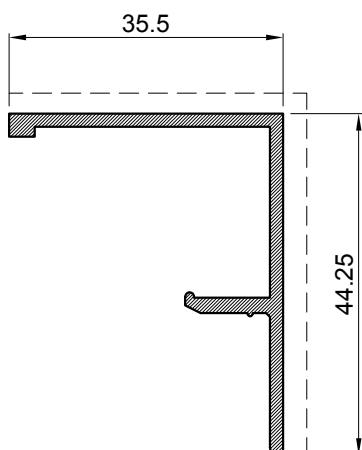
F-0807
težina kg/m 0.132
svj. povr.mm 14



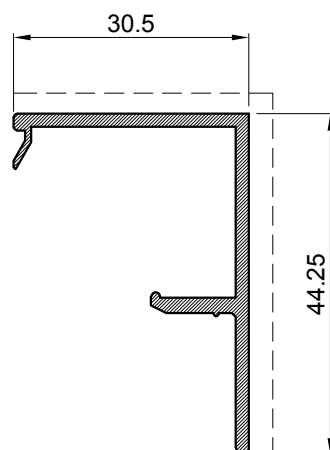
F-0897/A
težina kg/m 0.347



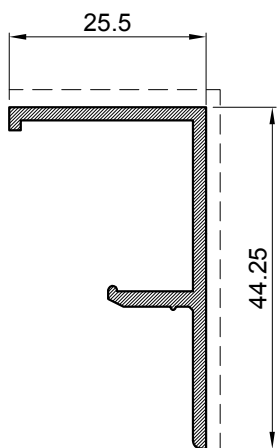
F-1355
težina kg/m 0.898
opseg 158



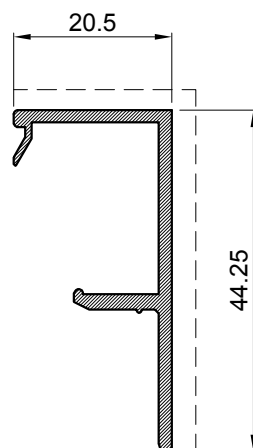
F-0898/A
težina kg/m 0.429
svj. povr.mm 80



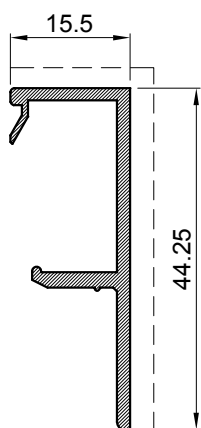
F-1310
težina kg/m 0.408
svj. povr.mm 75



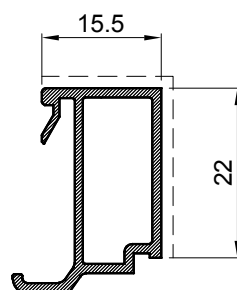
F-1185
težina kg/m 0.377
svj. povr.mm 70



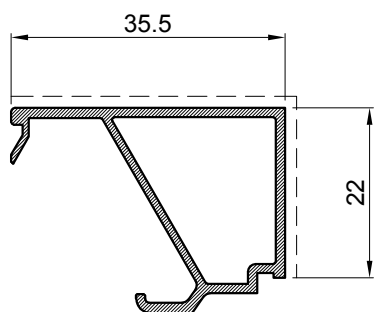
F-1311
težina kg/m 0.358
svj. povr.mm 65



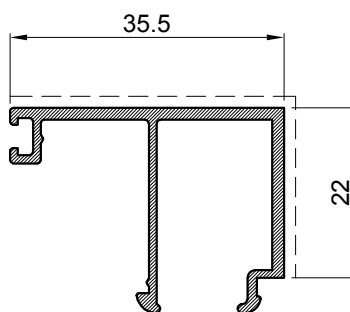
F-1643
težina kg/m 0.336
svj. povr.mm 60



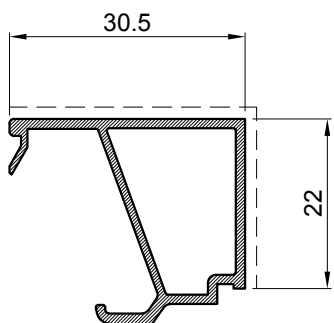
Z40-665
težina kg/m 0.272
svj. povr.mm 37



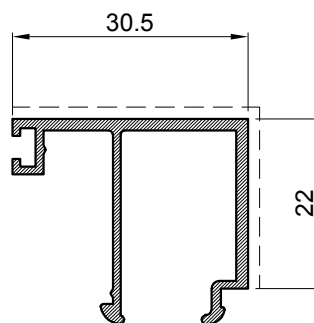
Z40-669
težina kg/m 0.347
svj. povr.mm 57



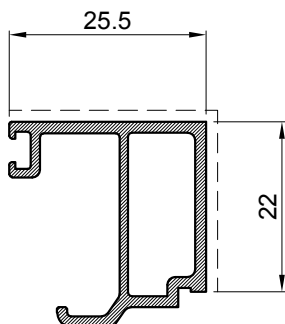
Z40-659
težina: kg/ml 0.359
svj.povr. mm 57



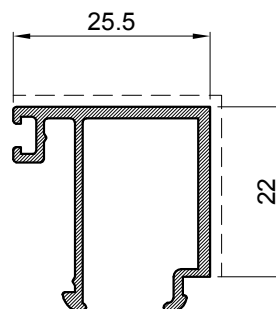
Z40-668
težina kg/m 0.326
svj. povr.mm 52



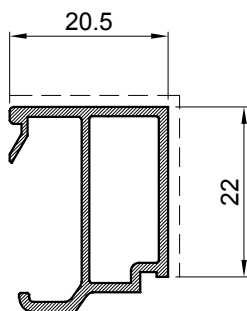
Z40-653
težina: kg/ml 0.348
svj.povr. mm 52



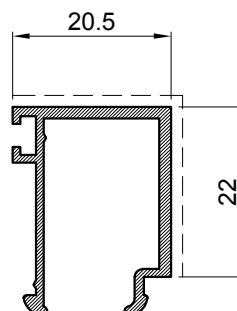
Z40-667
težina kg/m 0.358
svj. povr.mm 47



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

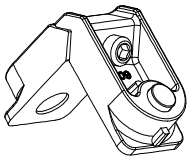
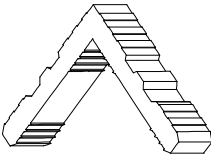
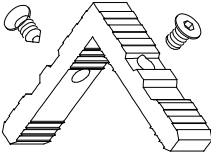
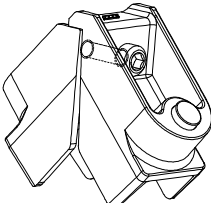
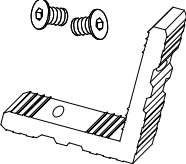
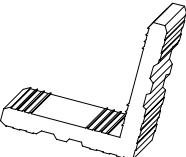


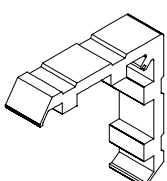
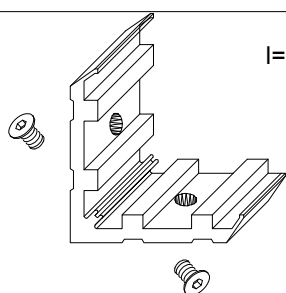
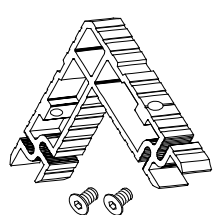
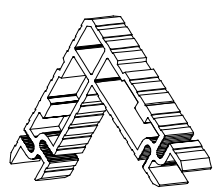
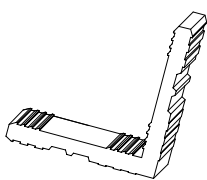
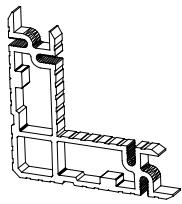
Z40-666
težina kg/m 0.289
svj. povr.mm 42

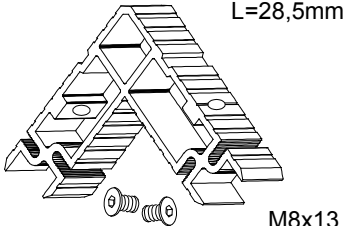
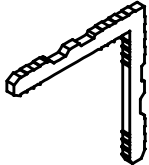
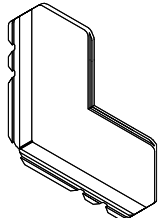
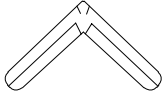
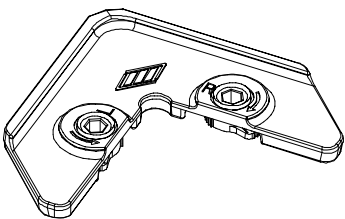
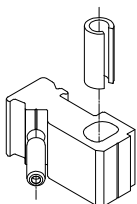


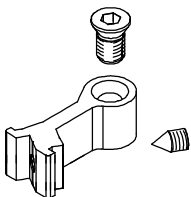
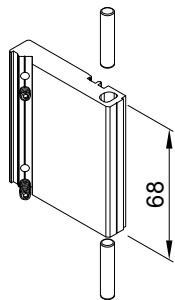
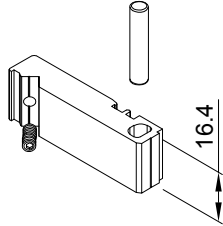
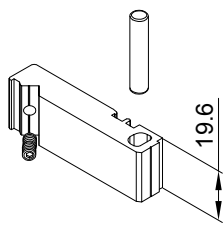
Z40-644
težina: kg/ml 0.275
svj.povr. mm 42

Vezni elementi

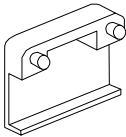
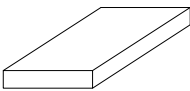
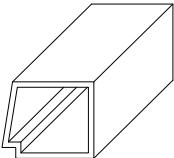
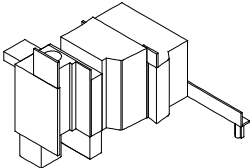
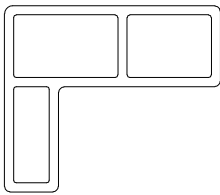
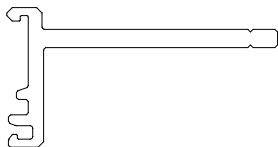
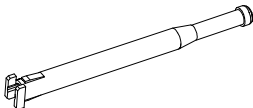
CODE	Izgled-presjek	Opis	Materijal	Nap.
730.008		- Kutna spojnica prozora-za komoru 29x15.2 - Stara oznaka: 0409 ,1001	Zamak #3	
710.035	 l=28,5mm	- Kutna spojnica za komoru 29x15,2 - Stara oznaka K-0868-A	Al.	
710.075	 l=28,5mm M8x13	- Kutna spojnica za komoru 29x15,2 - Stara oznaka K-0868	Al.	
730.009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

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

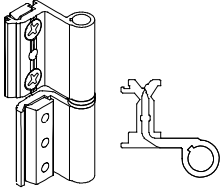
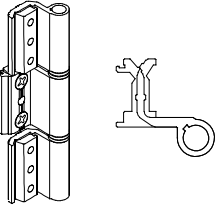
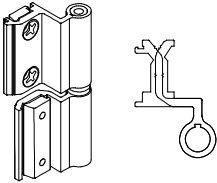
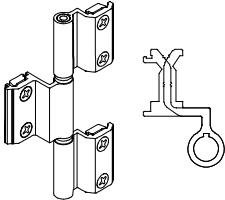
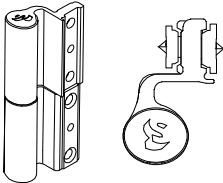
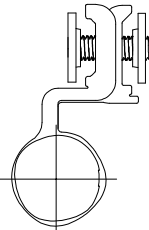
CODE	Izgled-presjek	Opis	Materijal	Nap.
710.072	 L=28,5mm M8x13	- Kutna spojnica za komoru 29x35,5 - Stara oznaka K-0795	Al.	
710.023	 L=5.5mm	- Kutna spojnica krila -za komoru 5.8x12.7 - Stara oznaka 712.001	Al.	
730.011		- Kutna spojnica -za profil FT-0149 - Stara oznaka:K-85SK-01	Al.	
730.001		- Kutna spojnica za komoru 1.7x4.7 - Stara oznaka: G112	Inox	
730.002		- Kutna spojnica za komoru 1.7x4.7 - Stara oznaka: G112/A	Inox	
731.010		- Kutna spojnica za usku komoru - Stara oznaka 2019/500		
710.222	 l=14.3 mm	- Veznik za prečku FT-0182F prema prečki FT-0182F i ramu FT-0180F		

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

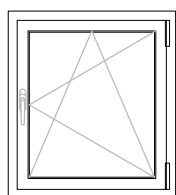
PVC elementi

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		- Dvodijelna šarka <i>EURO ŽLIJEB</i> - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva;03 - crna		
111.002.01 02 03		- Trodjelna šarka <i>EURO ŽLIJEB</i> - Stara oznaka E-120 - Boje: 01- bijela; 02 - siva;03 - crna		
111.003.01 02 03		- Dvodijelna šarka-vani <i>EURO ŽLIJEB</i> - Stara oznaka EV-110 - Boje: 01- bijela; 02 - siva;03 - crna		
111.004.01 02 03		- Trodjelna šarka-vani <i>EURO ŽLIJEB</i> - Stara oznaka EV-130 - Boje: 01- bijela; 02 - siva;03 - crna		
114.001.01 02 03		- Dvodijelna šarka-<i>EURO ŽLIJEB</i> - Oznaka proizvođača Stublina: 2006.00.310 -bijela 315 -siva 313 -crna - Boje: 01- bijela; 02 - siva;03 - crna		
113.003.01 02 03		- Dvodijelna šarka-<i>EURO ŽLIJEB</i> - Oznaka proizvođača alu-b: VENUS - Boje: 01- bijela; 02 - siva;03 - crna		

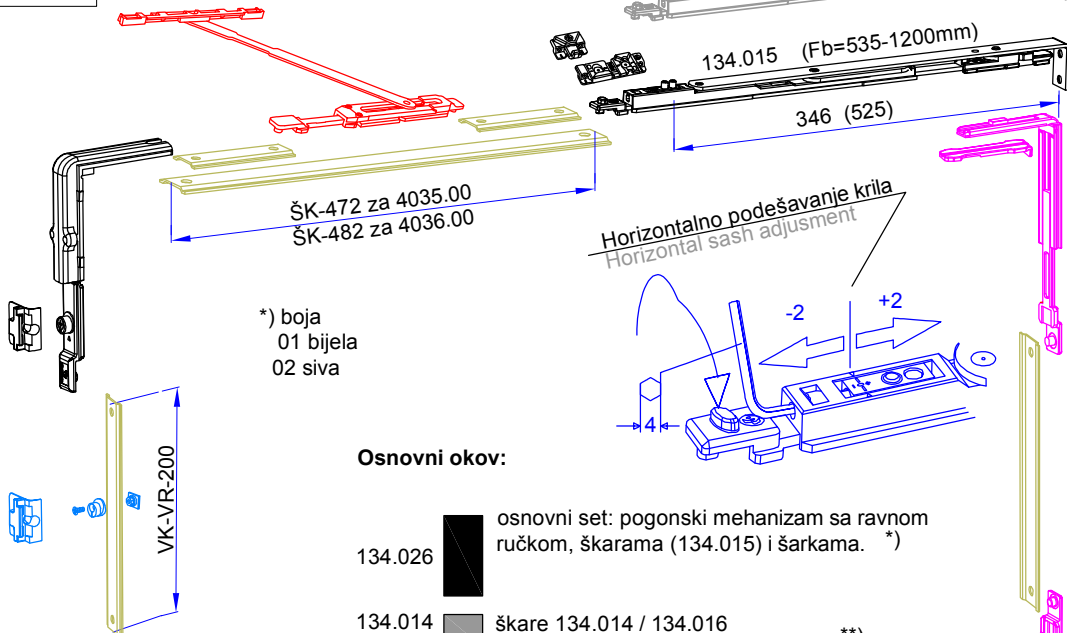
OTKLOPNO-ZAOKRETNI MEHANIZAM - STUBLINA (art.4135.00)



G=80kg
7 točaka ključanja

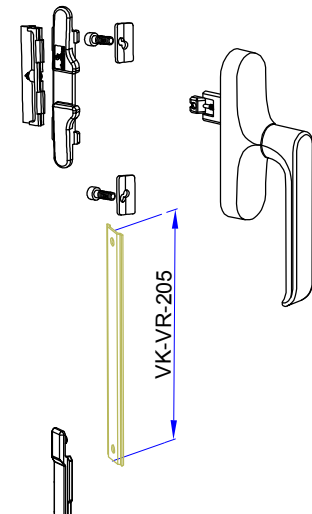
Nosivost max. 100 Kg / 130 Kg

Fb= Širina krila



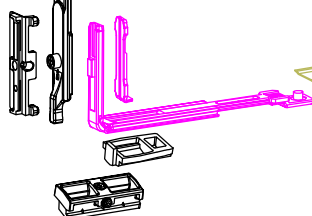
**) Napomena / Remark:

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



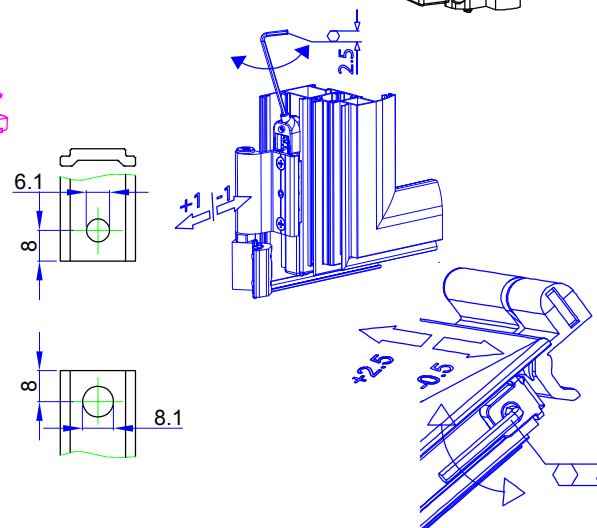
Dodatni okov:

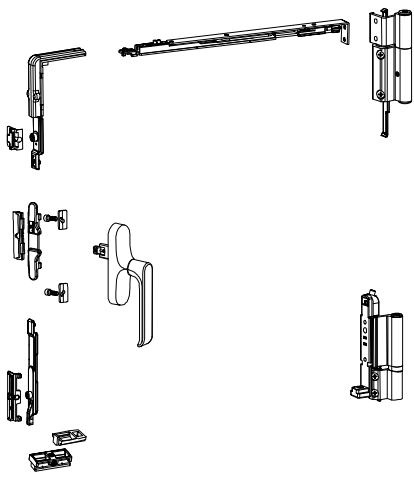
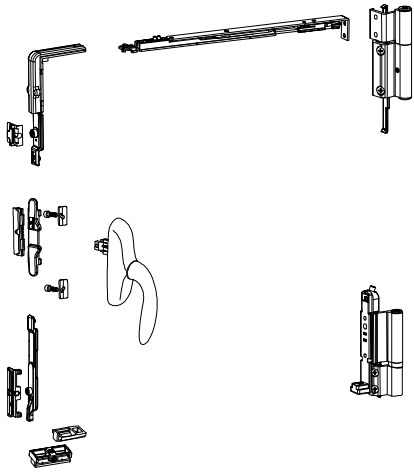
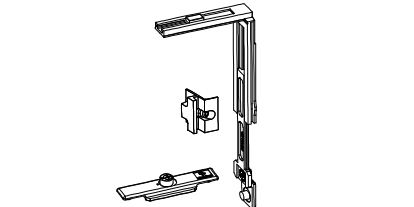
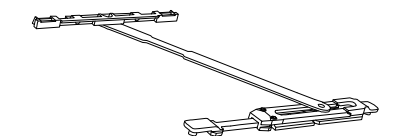
- 134.002 dodatni set ključanja po širini i visini
- 134.003 dodatne škare za krila većih dimenzija
- 134.004 dodatno ključanje
- 134.005 dodatno ključanje
- 134.024 dodatni umetak gornje šarke za nosivost do 130kg
- klizač

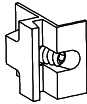
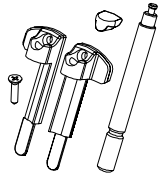


Na krajevima pogonskih letvih izbušiti otvore po dimenzijama prema detalju:

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



Oznaka	Izgled-presjek	Opis	Materijal	Napomena
134.026.01 02 03		- Osnovni set: Otklopno-zaokretni mehanizam - Oznaka proizvođača Stublina: 4135.00 - Boje: 01- bijela; 02 - siva; 03 - crna - Škare (134.015) za širinu krila od 535-1200 mm (ručka ravna; donja šarka ima podešavanje u dvije osi)		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.
134.025.01 02 03		- Osnovni set: Otklopno-zaokretni mehanizam - Oznaka proizvođača Stublina: 4035.00 - Boje: 01- bijela; 02 - siva; 03 - crna - Škare (134.015) za širinu krila od 535-1200 mm (ručka zaobljena; donja šarka ima podešavanje u dvije osi)		
134.002		- Dodatni set ključanja po širini i visini - Oznaka proizvođača Stublina: 4010.40	AISI Zamak	
134.003		- Pomoćne (dodatne) škare za krila većih dimenzija (za širine L=1200-1600mm) - Oznaka proizvođača Stublina: 4010.50		

Oznaka	Izgled-presjek	Opis	Materijal	Napomena
134.004		- Dodatno ključanje-prihvatnik tuljca - Oznaka proizvođača Stublina: 4010.03		
134.005		- Dodatno ključanje-tuljac - Oznaka proizvođača Stublina: 4010.27		
134.024		- Dodatni umetak gornje šarke za nosivost do 130kg - Oznaka proizvođača Stublina: 4018.30.50U		

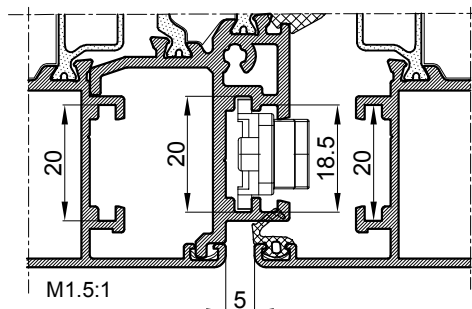
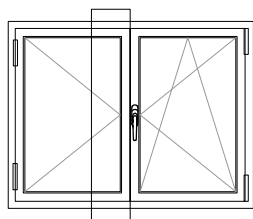
- Tabelarni prikaz osnovnog seta u zavisnosti od širine krila i tipu ručke: Otklopno-zaokretni mehanizam

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
134.027.01 -bijela .02 -siva .03 -crna	zaobljena ručka	445-535 mm	4036.00.310 4036.00.315 4036.00.313
134.028.01 -bijela .02 -siva .03 -crna	zaobljena ručka	1200-1400 mm	4037.00.310 4037.00.315 4037.00.313
134.029.01 -bijela .02 -siva .03 -crna	zaobljena ručka	375-535 mm	4038.00.310 4038.00.315 4038.00.313

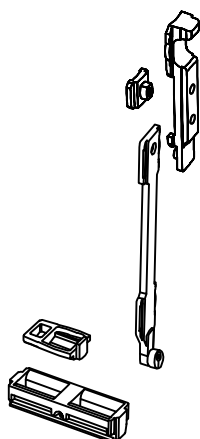
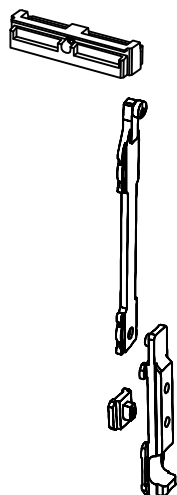
Napomena

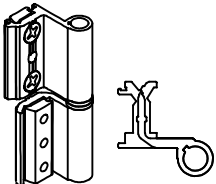
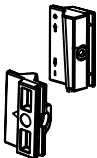
donja šarka kod svih gore navedenih osnovni setova ima podešavanje u dvije osi

OKOV ZA FIKSIRANJE POMOĆNOG KRILA - STUBLINA

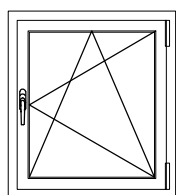


- **134.001** Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu)
- Oznaka proizvođača Stublina: 4001.00

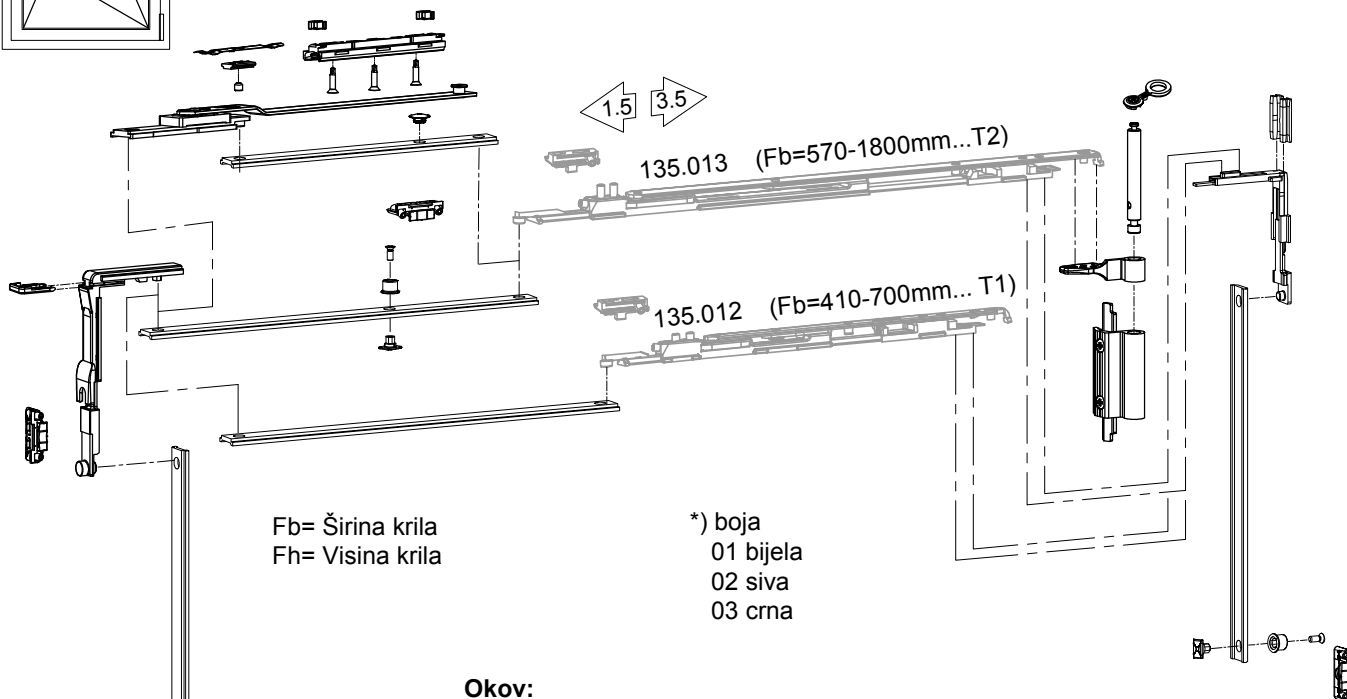


Oznaka	Izgled-presjek	Opis	Materijal	Napomena
134.001		- Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu) - Oznaka proizvođača Stublina: 4001.00		
111.001.01 02 03		- Dvodijelna šarka EURO ŽLIJEB - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva; 03 - crna		
134.023		- Dodatno (pasivno) ključanje - Oznaka proizvođača Stublina: 4045.00		

OTKLOPNO-ZAOKRETNI MEHANIZAM - GIESSE FUTURA 3D (130 micro) STANDARD

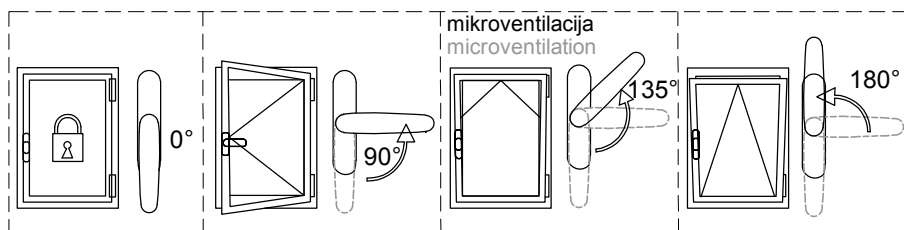
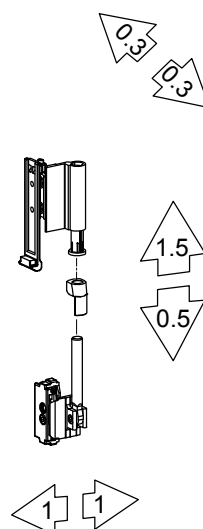


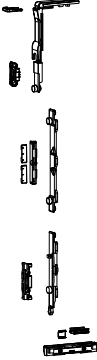
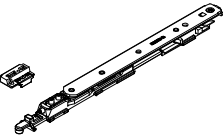
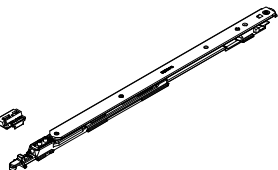
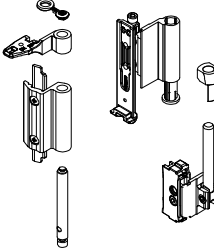
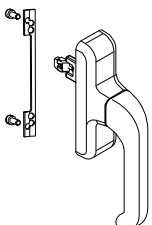
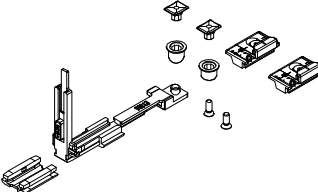
Nosivost max. 130 Kg (FUTURA 3D 130 micro)

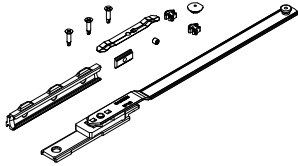
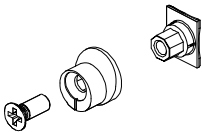
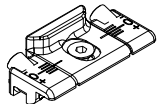


Okov:

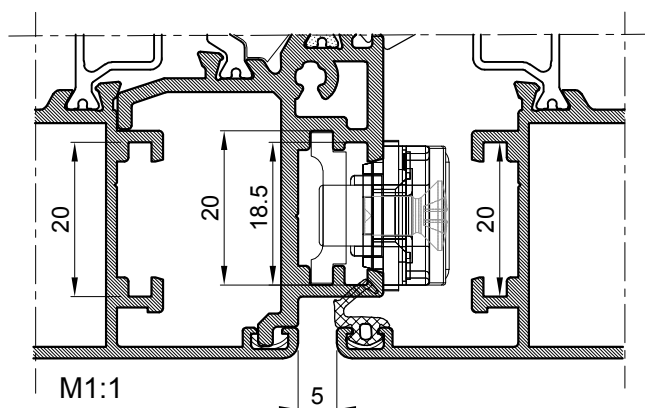
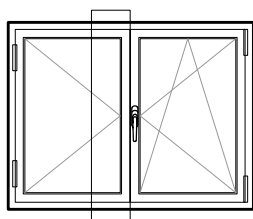
- 135.015  pogonski mehanizam (za ručku art.01094xxx)
- 135.012  škare T1, T2
- 135.013  šarke nosivosti do 130 kg, *)
- 105.005  ručka art.01094xxx *)
- 135.021  dodatni set klučanja po širini i visini
- 135.014  dodatne škare za krila većih dimenzija
-  klizač



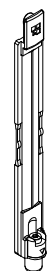
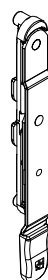
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
135.015		- Pogonski mehanizam za FUTURA 3D 130 micro mehanizam (...ručka 01094xxx) - Oznaka proizvođača Giese: 04704000		
135.012		- Škare T1 za širinu krila: Fb= 410mm - 700mm - Oznaka proizvođača Giese: 04284000		
135.013		- Škare T2 za širinu krila: Fb= 570mm - 1800mm - Oznaka proizvođača Giese: 04285000		
135.016.01 02 03		- Šarke nosivosti do 130 kg - Oznaka proizvođača Giese: 04711410 - bijela 04711376 - siva 04711500 - crna - Boje: 01- bijela; 02 - siva; 03 - crna		
105.005.01 02 03		- Ručka; (LA 86/104mm), FUTURA 3D (130 micro) - Oznaka proizvođača Giese: 01094410 -bijela 01094376 -siva 01094500 -crna - Boje: 01- bijela; 02 - siva; 03 - crna		
135.021		- Dodatni set ključanja po širini i visini za krilo preko L>1000 mm i H>1200mm - Oznaka proizvođača Giese: 04770000		

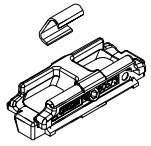
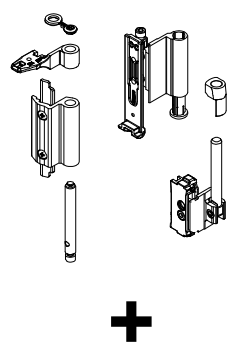
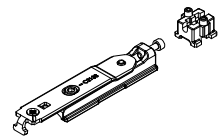
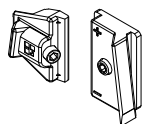
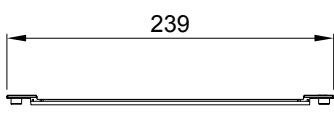
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
135.014		- Dodatne škare za krilo preko 1000 mm - Oznaka proizvođača Giesse: 04301000		
135.029		- Zapinjač - Oznaka proizvođača Giesse: 04030000		
143.042		- Prihvatnik zapinjača - Oznaka proizvođača Giesse: 01347000		

OKOV ZA FIKSIRANJE POMOĆNOG KRILA - GIESSE

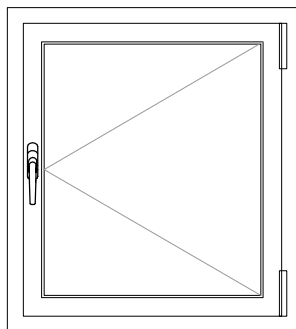


- **143.043** Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu)
- Oznaka proizvođača Giese: 02191K



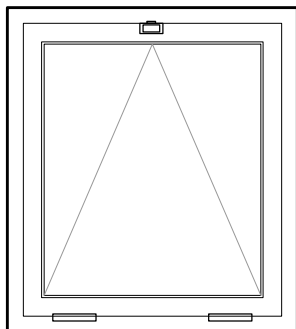
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
143.043		- Okov za fiksiranje pomoćnog krila u dvije točke (montiranje okova u kombatutu) - Oznaka proizvođača Giese: 02191K		
143.046		- Prihvat zapinjača - Oznaka proizvođača Giese: 01348K		
135.016.01 02 03		- Šarke nosivosti do 130 kg - Oznaka proizvođača Giese: 04711410 - bijela 04711376 - siva 04711500 - crna - Boje: 01- bijela; 02 - siva; 03 - crna		
135.041		- Dodatni element za šarke 04711xxx (samo za gornju šarku) - Oznaka proizvođača Giese: 04728000		
143.045		- Dodatni element (pasivno ključ.) pomoćnog krila - Oznaka proizvođača Giese: 01350K		
143.050		- Priključna šipka za radni mehanizam - Oznaka proizvođača Giese: 02187		

OKOV ZA ZAOKRETNO OTVARANJE



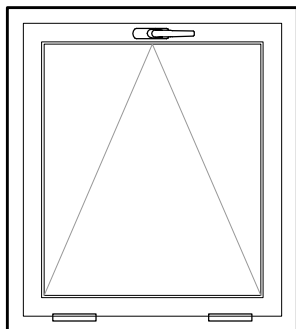
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
104.011.01 02 03		- Ručka za prozor - Oznaka proizvođača Stublina: 1102.00.310 -bijela 315 -siva 313 -crna - Boje: 01- bijela; 02 - siva;03 - crna	AlSi Zamak	
144.044		- Set zapinjača sa prihvatom - Oznaka proizvođača Stublina: 4009.30		
111.001.01 02 03		- Dvodijelna šarka EURO ŽLIJEB - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva;03 - crna		

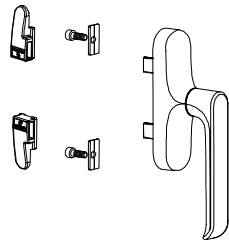
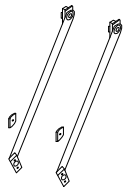
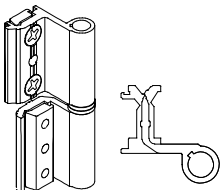
OTKLOPNI MEHANIZAM (VENTUS) SA BRAVICOM ZA ZATVARANJE



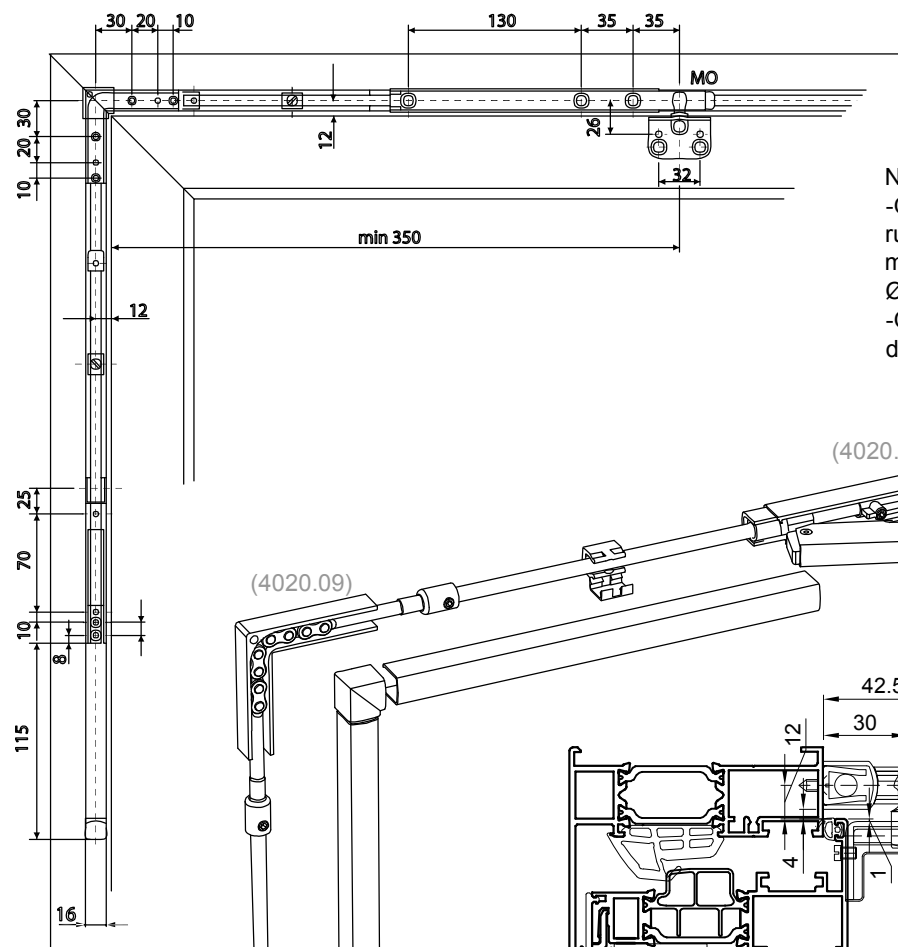
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
124.005.01 02 03		- Bravica za zatvaranje otklopnog prozora - Oznaka proizvođača Stublina: 1014.00.310 -bijela 315 -siva 313 -crna - Boje: 01- bijela; 02 - siva;03 - crna		
131.002		- Škare za otklopni prozor - Stara oznaka: E-350		
111.001.01 02 03		- Dvodijelna šarka EURO ŽLIJEB - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva;03 - crna		

OTKLOPNI MEHANIZAM (VENTUS) SA RUČKOM



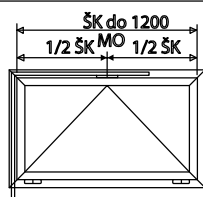
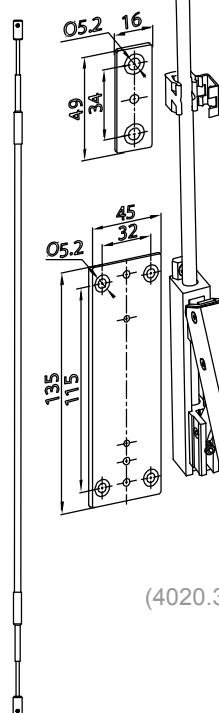
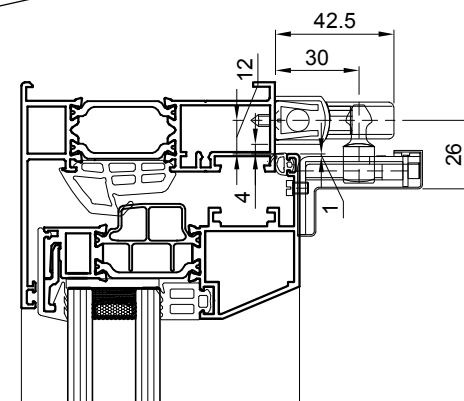
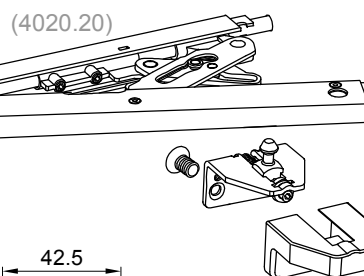
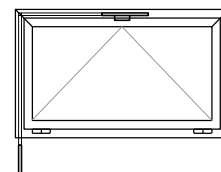
Oznaka	Izgled-presjek	Opis	Materijal	Napomena
104.011.01 02 03		- Ručka za prozor - Oznaka proizvođača Stublina: 1102.00.310 -bijela 315 -siva 313 -crna - Boje: 01- bijela; 02 - siva;03 - crna	AlSi Zamak	
131.002		- Škare za otklopni provoz - Stara oznaka: E-350		
111.001.01 02 03		- Dvodijelna šarka EURO ŽLIJEB - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva;03 - crna		
144.044		- Set zapinjača sa prihvaćom - Oznaka proizvođača Stublina: 4009.30		

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

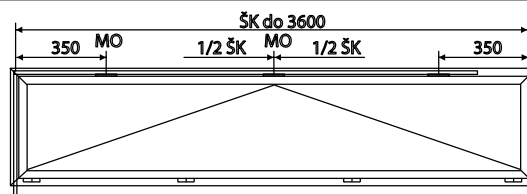
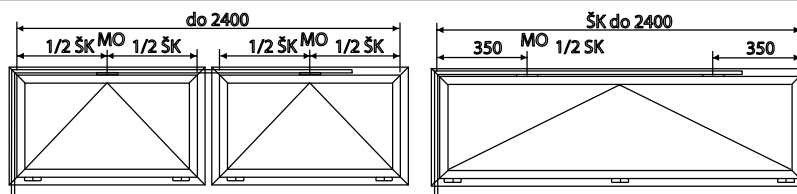


Napomena:

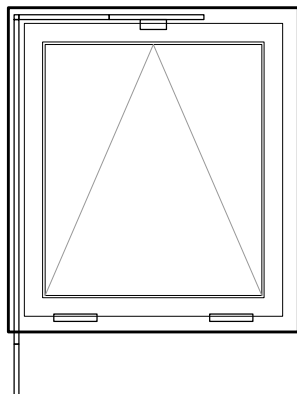
- Otvore na štoku za ugradnju pogonske ručice 4020.30, kutnog okova 4020.09 mehanizama otvarača 4020.20 bušiti na Ø3mm.
- Otvore na krilu za ugradnju kutnog nosača držača krila 4020.05 bušiti na Ø5.2mm



Legenda
Mehanizam otvaračaMO
Širina krilaŠK

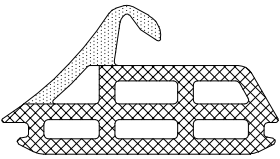
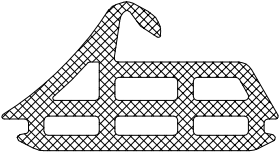
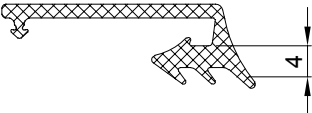
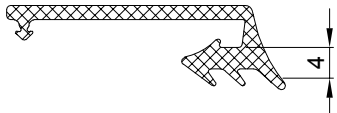
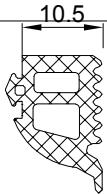
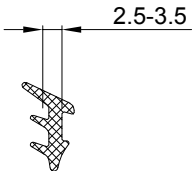


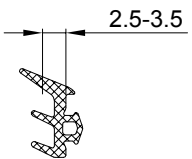
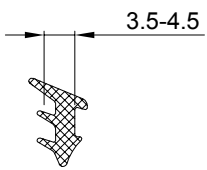
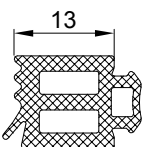
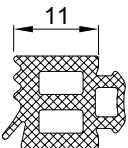
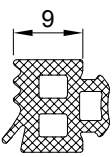
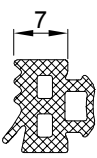
OTKLOPNI MEHANIZAM (VENTUS) SA RUČKOM ZA VISINU

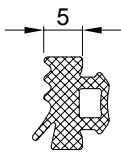
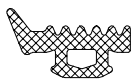
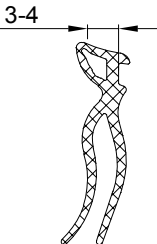
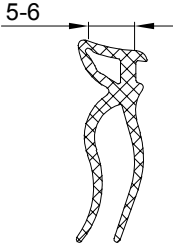
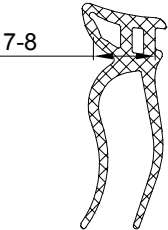
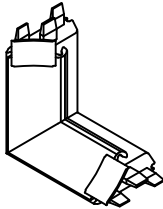


Oznaka	Izgled-presjek	Opis	Materijal	Napomena
134.006.01 02 03		- Ventus set širina krila do 1200 mm - Oznaka proizvođača Stublina: 4020.00.310 -bijela 315 -siva 313 -crna - Boje: 01- bijela; 02 - siva;03 - crna		
111.001.01 02 03		- Dvodijelna šarka EURO ŽLIJEB - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva;03 - crna		

Brtvila

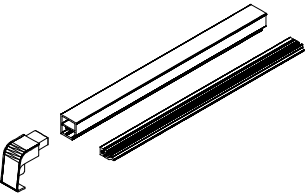
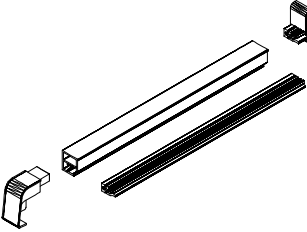
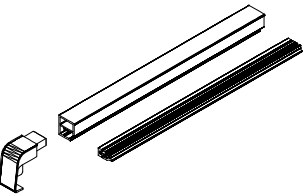
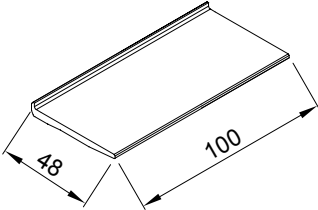
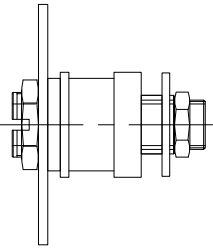
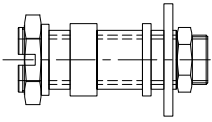
CODE	Izgled-presjek	Opis	Materijal	Nap.
334.004		-Srednja brtva	TPE	
337.002		-Srednja brtva	spužvasti EPDM	
321.001		- Brtva u krilu - Stara oznaka 210.001.090 (Z106)	EPDM	61
322.001		- Brtva u krilu - Stara oznaka 020075	EPDM	70
321.005		- Brtva u krilu	EPDM	
322.002		- Brtva prema staklu - Stara oznaka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

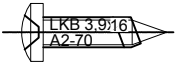
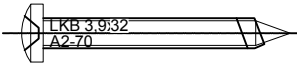
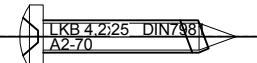
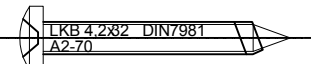
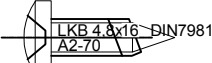
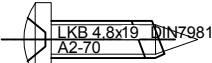
CODE	Izgled-presjek	Opis	Materijal	Nap.
321.002		- Brtva prema staklu /vanjska/ - Stara oznaka 210.001.140 (Z111)	EPDM	61 (ShA)
311.002		-Brtva prema staklu /unutarnja/ - Stara oznaka 210.001.123 (918)	EPDM	71
311.007 311.008 311.009 311.010		-Brtva prema staklu /unutarnja/ - Stare oznake UP-5 nove oznake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

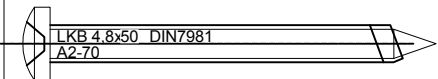
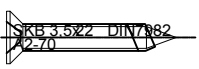
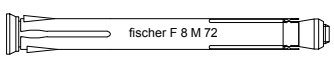
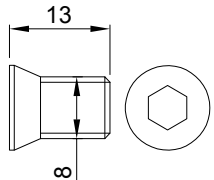
CODE	Izgled-presjek	Opis	Materijal	
351.013		- Brtva prema staklu /unutarnja/ - Stara oznaka 02864	EPDM	71
351.012		- Brtva prema staklu /vanjska/ nosi 3.5mm - Stara oznaka 02865	EPDM	71
351.011		- Brtva prema staklu /unutarnja/ - Stara oznaka 02852	EPDM	71
311.003		- Brtva prema staklu /unutarnja, nosi 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	

348.002		- Ispuna po opsegu stakla sa ljepljivom trakom- PLAMAFRAME	PPE	

Dodaci

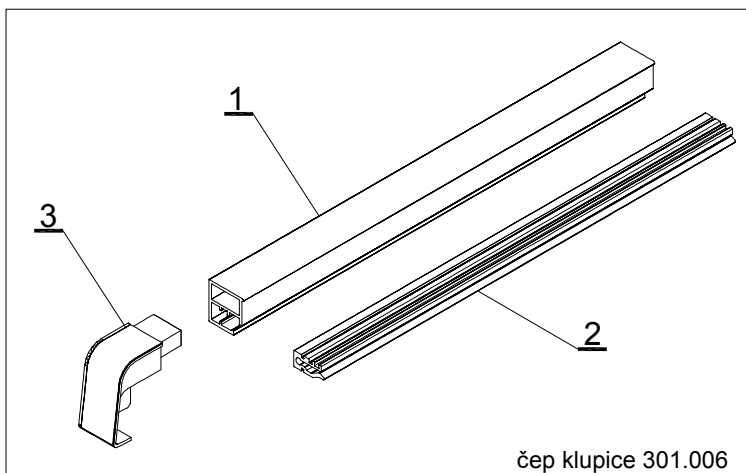
CODE	Izgled-presjek	Opis	Materijal	Nap.
301.006. 01 02 03		- Set za bočni čep klupice	PVC TPE Al.	
301.009. 01 02 03		- Set za bočni čep klupice	PVC TPE Al.	
301.010. 01 02 03		- Set za bočni čep klupice za klupicu 360mm	PVC TPE Al.	
521.127		- Držač stakla - Radi se iz profila F-1349	Al	
220.014		- 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	

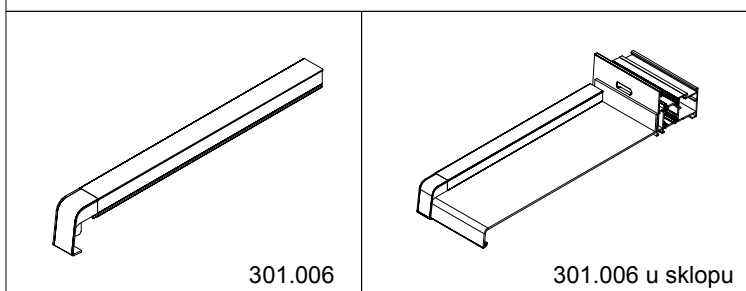
CODE	Izgled-presjek	Opis	Materijal	Nap.
433.049		Vijak 4.8x50 DIN 7981	Inox	
433.094		Vijak 3.5x22 DIN 7982	Inox	
430.159		Metalno tiplo za ugradnju		
431.266		Vijak M8x13 tip Feal		
210.000		- Štanca za otklopno zaokretne sisteme prozora i vrata - Stara oznaka S1		
210.001		- Kliješta za kutne spojnice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

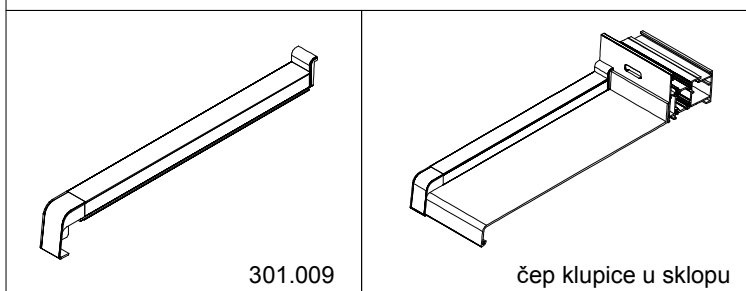
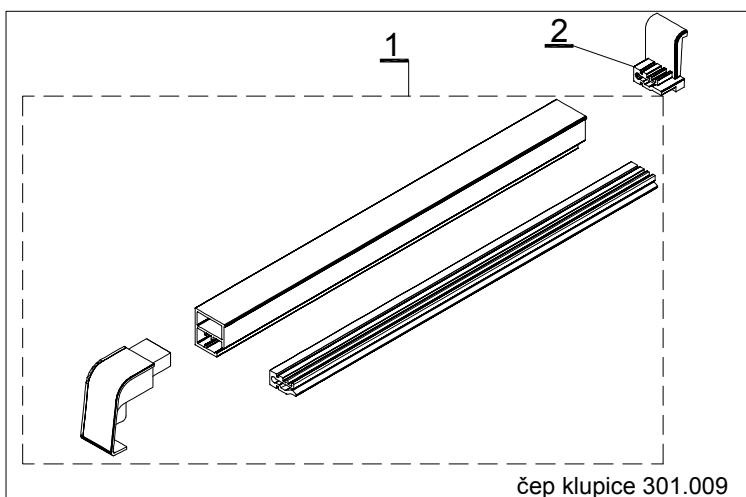


- Setovi bočnih čepova 301.006 i 301.009 su u veličini profila klupice F-0680/J (280 mm)
- Za manje klupice se radi skraćivanje čepa prema mjerama u uputstvu artikla
- Izbor boje čepova prema RAL-karti

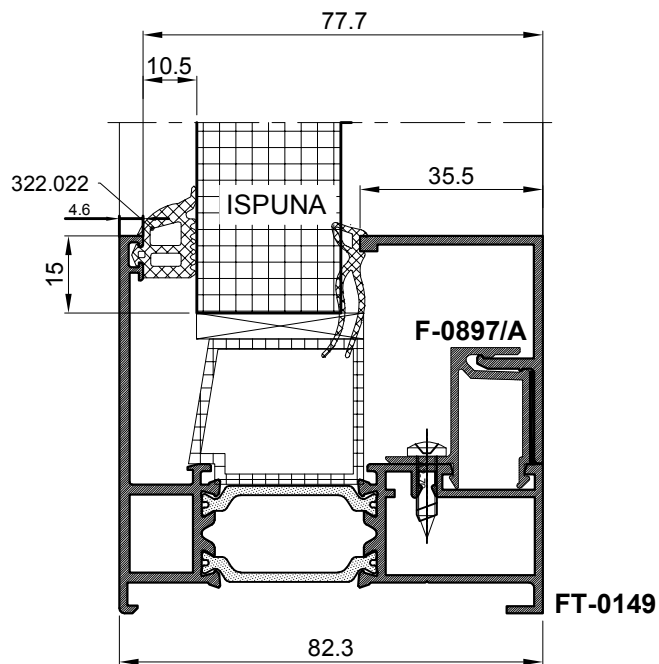
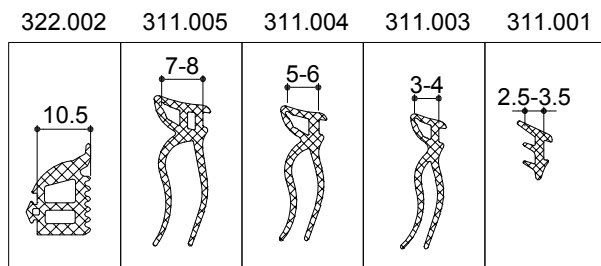


SET ZA BOČNI ČEP PROZORSKE KLUPICE 301.009

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



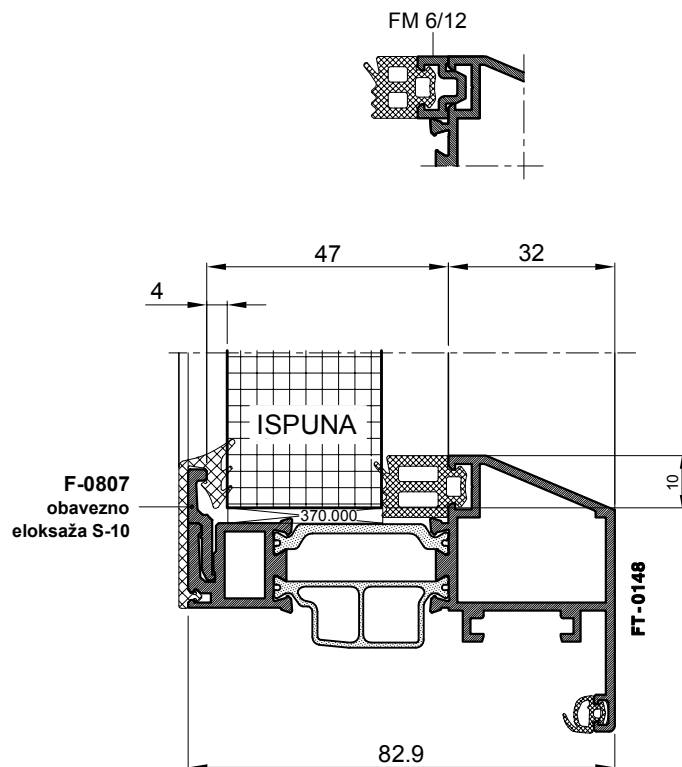
Prikaz stakljenja



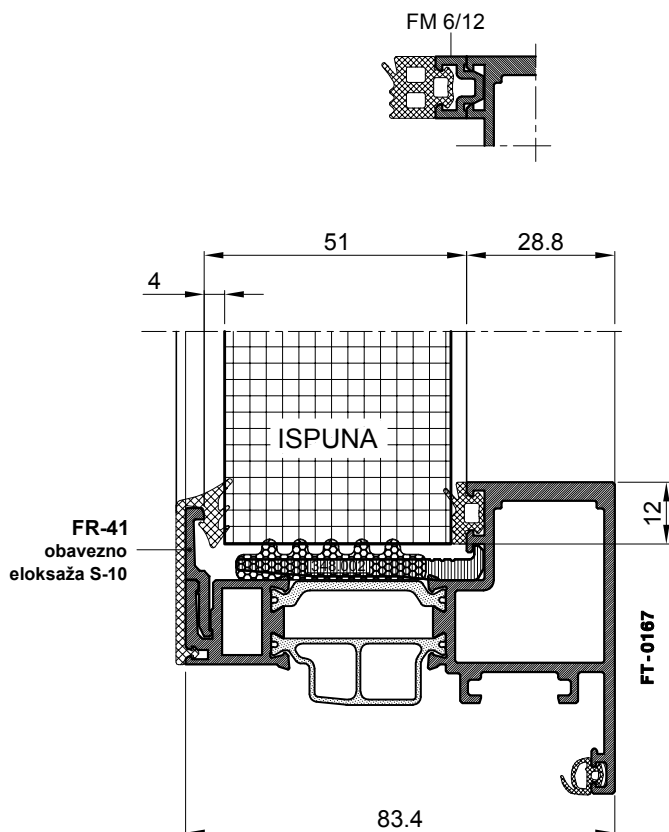
Ispuna X	Vanjska brtva	Unutarnja brtva	Zazor između Ispune X i Lajsne	Lajsna
24	322.002	311.005	7.5	F-0898/A
26	322.002	311.004	5.5	
28*	322.002	311.003 311.001	3.5	
30	322.002	311.004	6.5	F-1310
32	322.002	311.003	4.5	
36	322.002	311.004	5.5	F-1185
38*	322.002	311.003 311.001	3.5	
40	322.002	311.004	6.5	F-1311
42	322.002	311.003	4.5	
44	322.002	311.005	7.5	F-1643

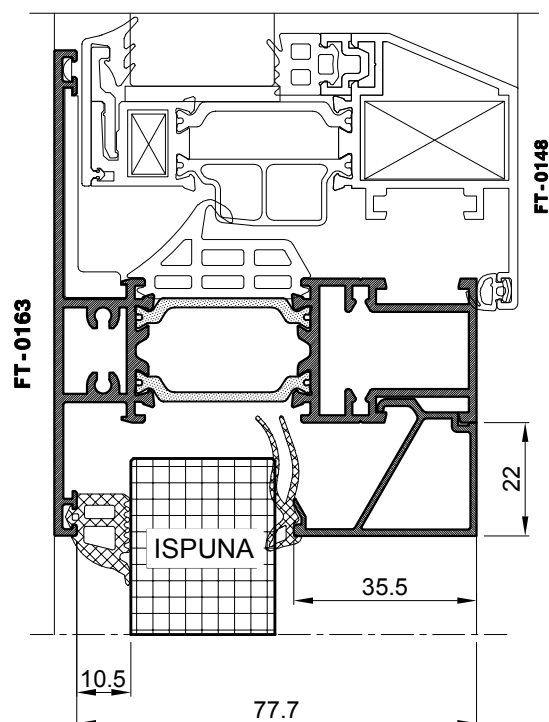
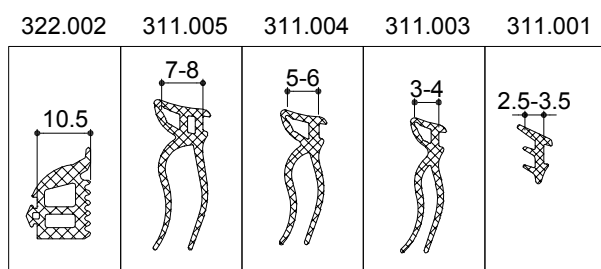
* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001

322.001 (020075)	351.017 (02892)	351.016 (02856)	351.015 (02877)
	351.014 (1966)	351.013 (02864)	351.011 (02852)
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	

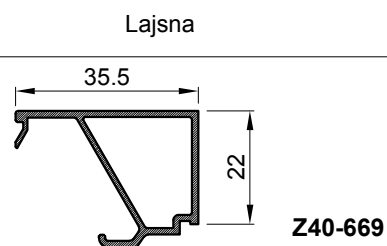


321.005	351.017 (02892)	351.016 (02856)	351.015 (02877)
	351.014 (1966)	351.013 (02864)	351.011 (02852)
Ispuna X	Vanjska brtva	Unutarnja brtva	Al umetak
28	321.005	351.017	FM 6/12
30	321.005	351.016	FM 6/12
32	321.005	351.015	FM 6/12
36	321.005	351.016	
38	321.005	351.015	
40	321.005	351.014	
42	321.005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

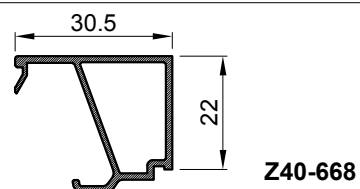




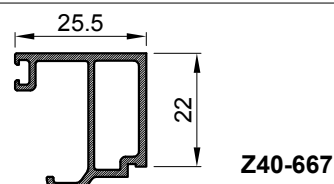
Ispuna X	Vanjska brtva	Unutarnja brtva	Zazor između Ispune X i Lajsne
24	322.002	311.005	7.5
26	322.002	311.004	5.5
28*	322.002	311.003 311.001	3.5



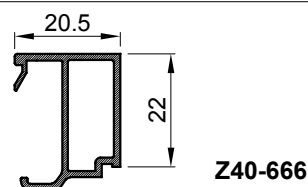
30	322.002	311.004	6.5
32	322.002	311.003	4.5



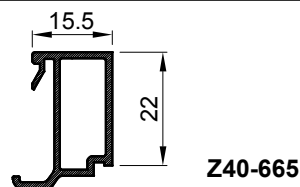
36	322.002	311.004	5.5
38*	322.002	311.003 311.001	3.5



40	322.002	311.004	6.5
42	322.002	311.003	4.5

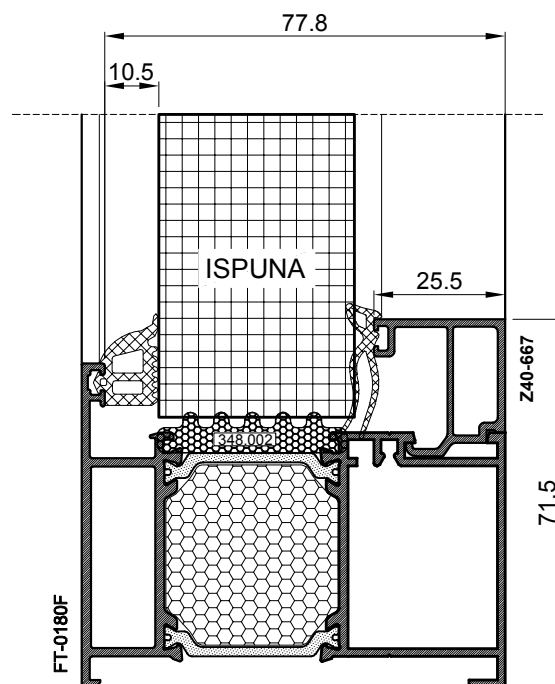


44	322.002	311.005	7.5
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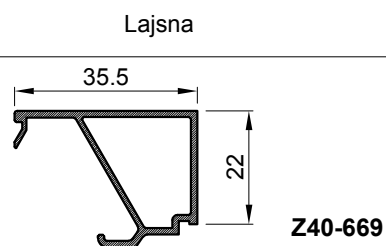


* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001

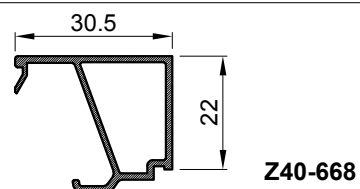
322.002	311.005	311.004	311.003	311.001



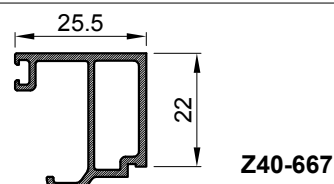
Ispuna X	Vanjska brtva	Unutarnja brtva	Zazor između Ispune X i Lajsne
24	322.002	311.005	7.5
26	322.002	311.004	5.5
28*	322.002	311.003 311.001	3.5



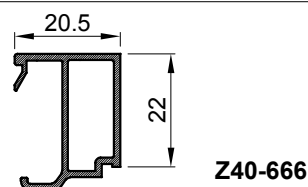
30	322.002	311.004	6.5
32	322.002	311.003	4.5



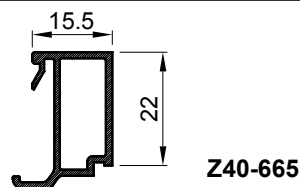
36	322.002	311.004	5.5
38*	322.002	311.003 311.001	3.5



40	322.002	311.004	6.5
42	322.002	311.003	4.5

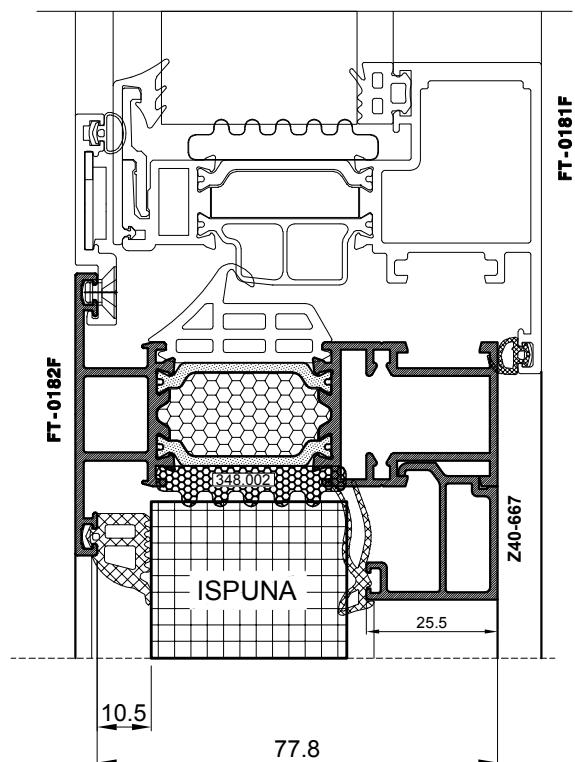
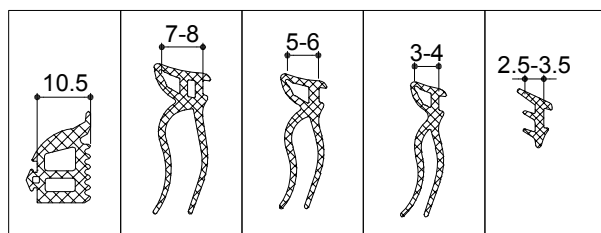


44	322.002	311.005	7.5
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* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001

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

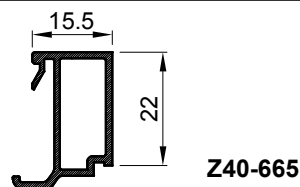
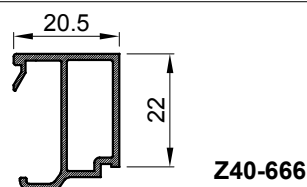
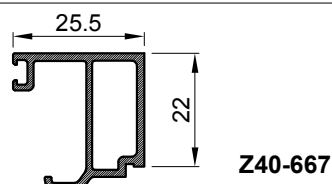
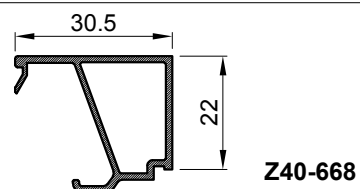
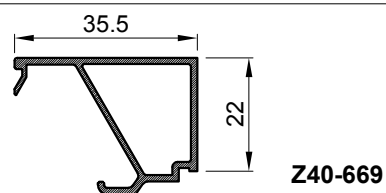
30	322.002	311.004	6.5
32	322.002	311.003	4.5

36	322.002	311.004	5.5
38*	322.002	311.003 311.001	3.5

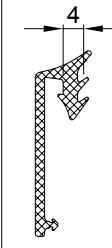
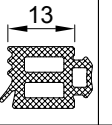
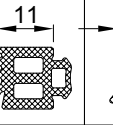
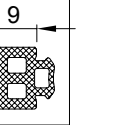
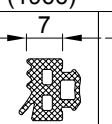
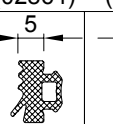
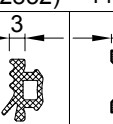
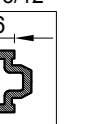
40	322.002	311.004	6.5
42	322.002	311.003	4.5

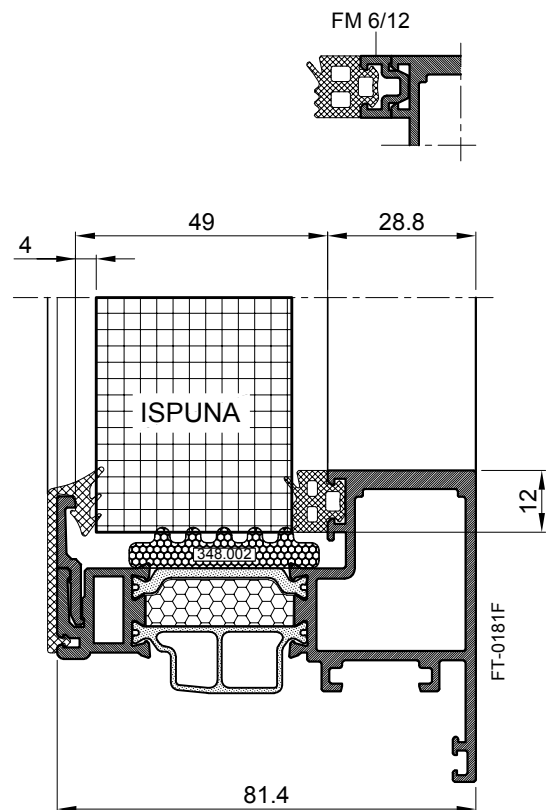
44	322.002	311.005	7.5
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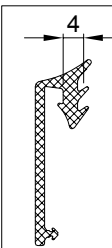
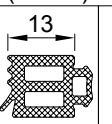
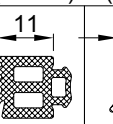
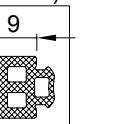
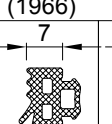
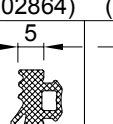
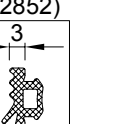
Lajsna

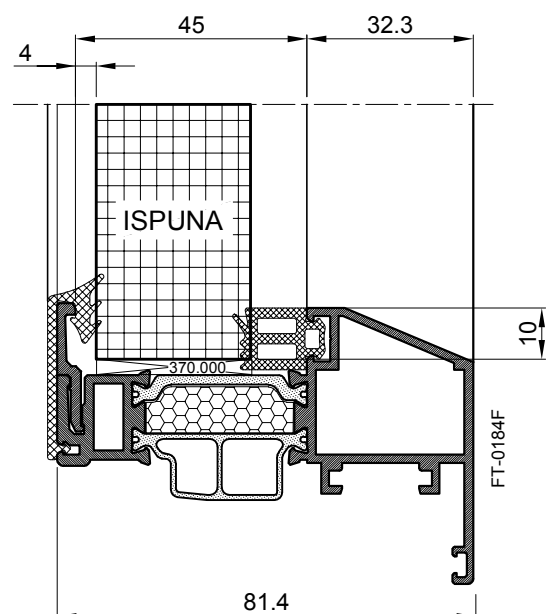


* Ukoliko je ispuna starija od predviđene koristiti brtvu 311.001

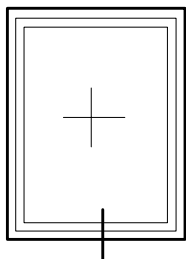
321.005	351.017 (02892)	351.016 (02856)	351.015 (02877)
			
	351.014 (1966)	351.013 (02864)	351.011 (02852)
			
			
Ispuna X	Vanjska brtva	Unutarnja brtva	Al umetak
28	321.005	351.016	FM 6/12
30	321.005	351.015	FM 6/12
32	321.005	351.014	FM 6/12
36	321.005	351.015	
38	321.005	351.014	
40	321.005	351.013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



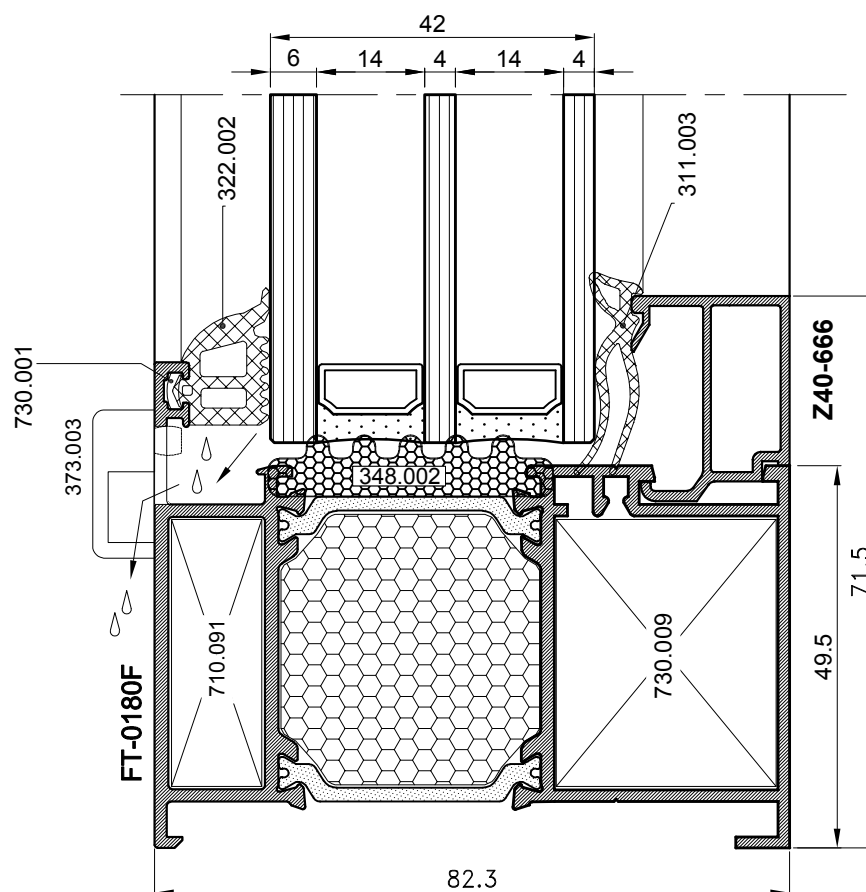
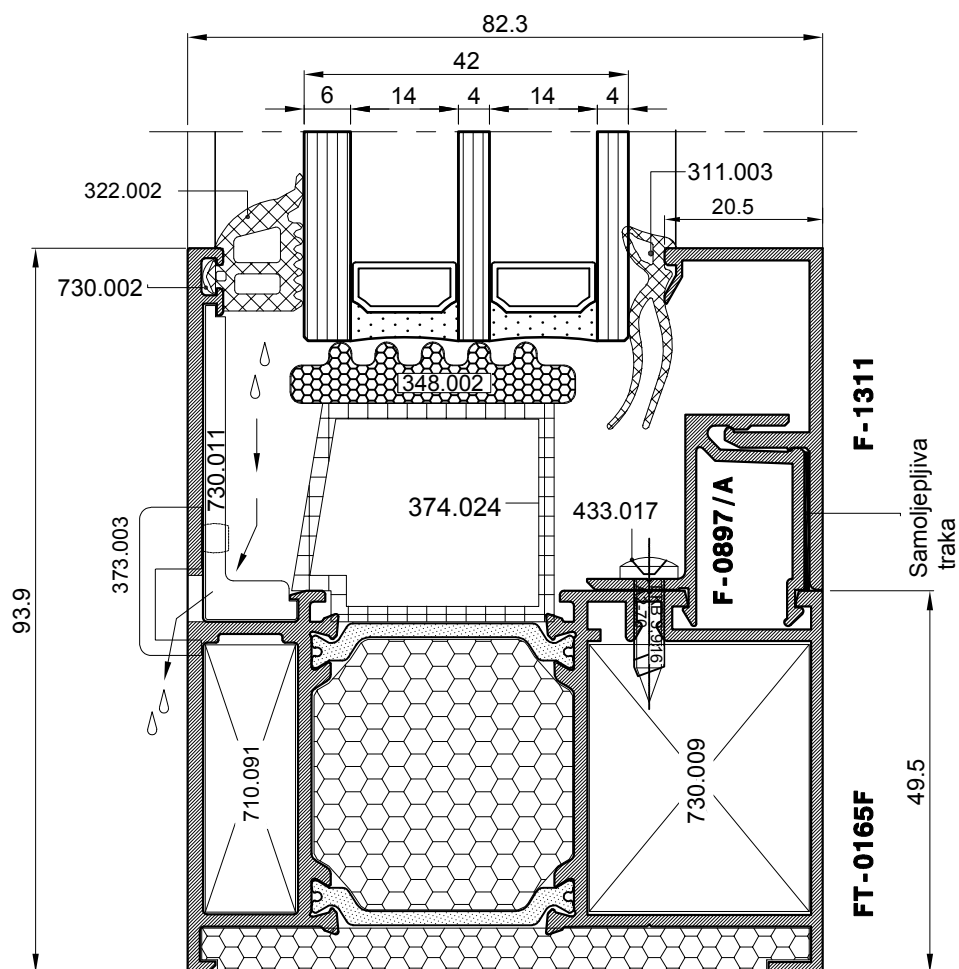
321.005	351.017 (02892)	351.016 (02856)	351.015 (02877)
			
	351.014 (1966)	351.013 (02864)	351.011 (02852)
			
Ispuna X	Vanjska brtva	Unutarnja brtva	
28	321.005	351.017	
30	321.005	351.016	
32	321.005	351.015	
36	321.005	351.013	
38	321.005	351.011	

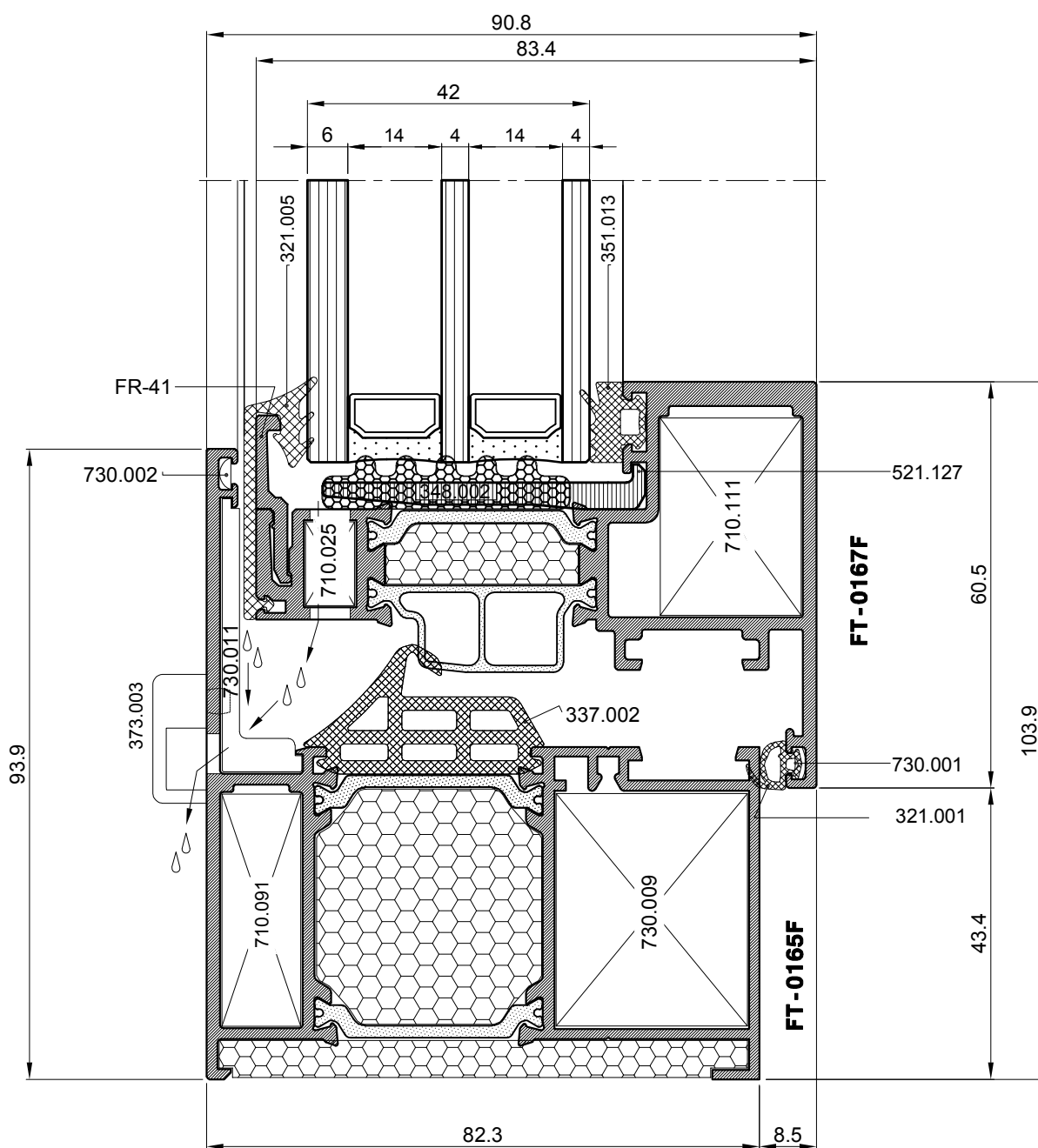
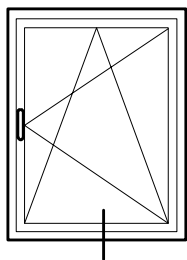


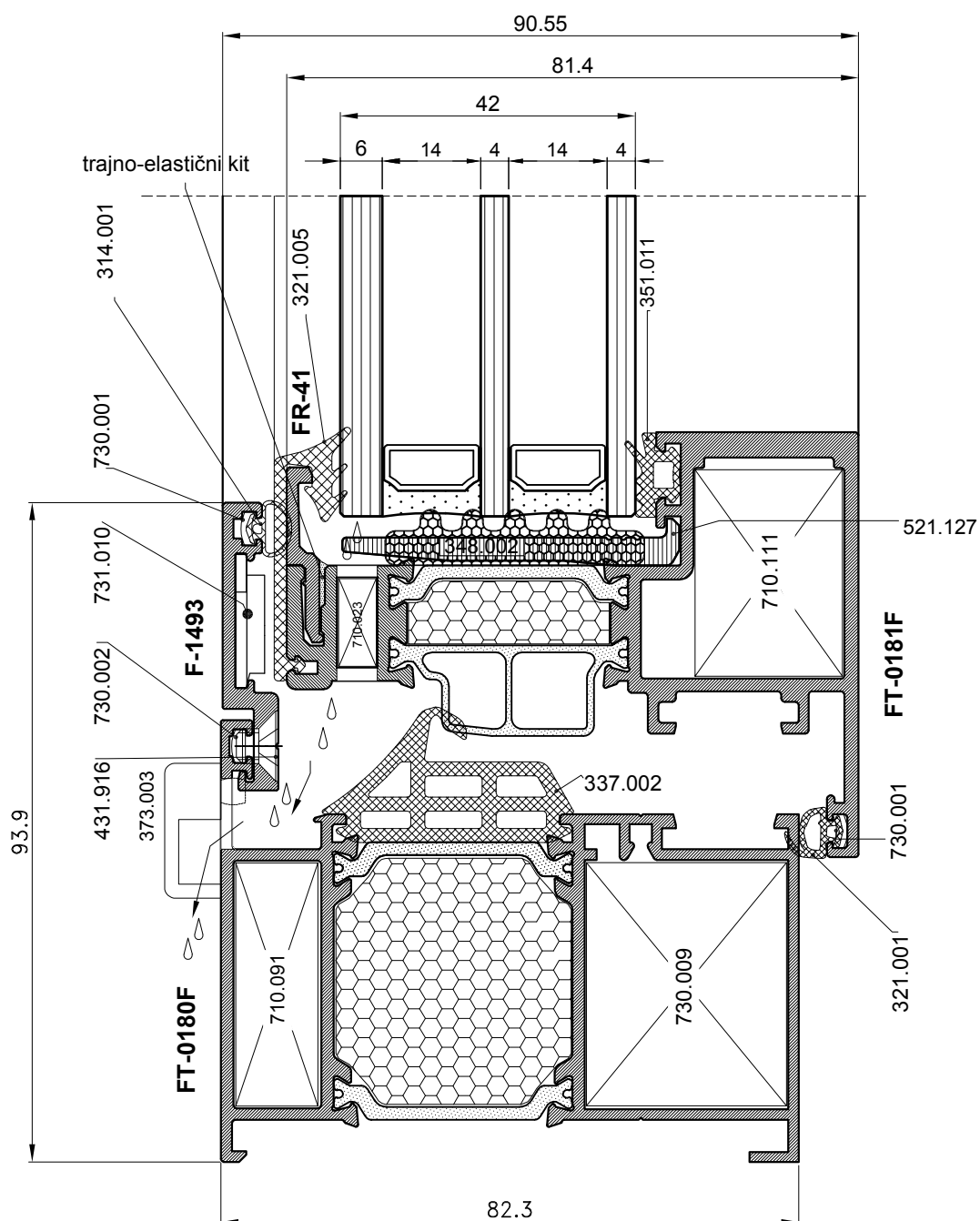
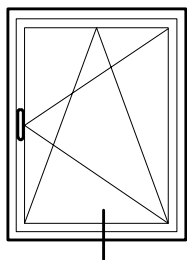
Presjeci

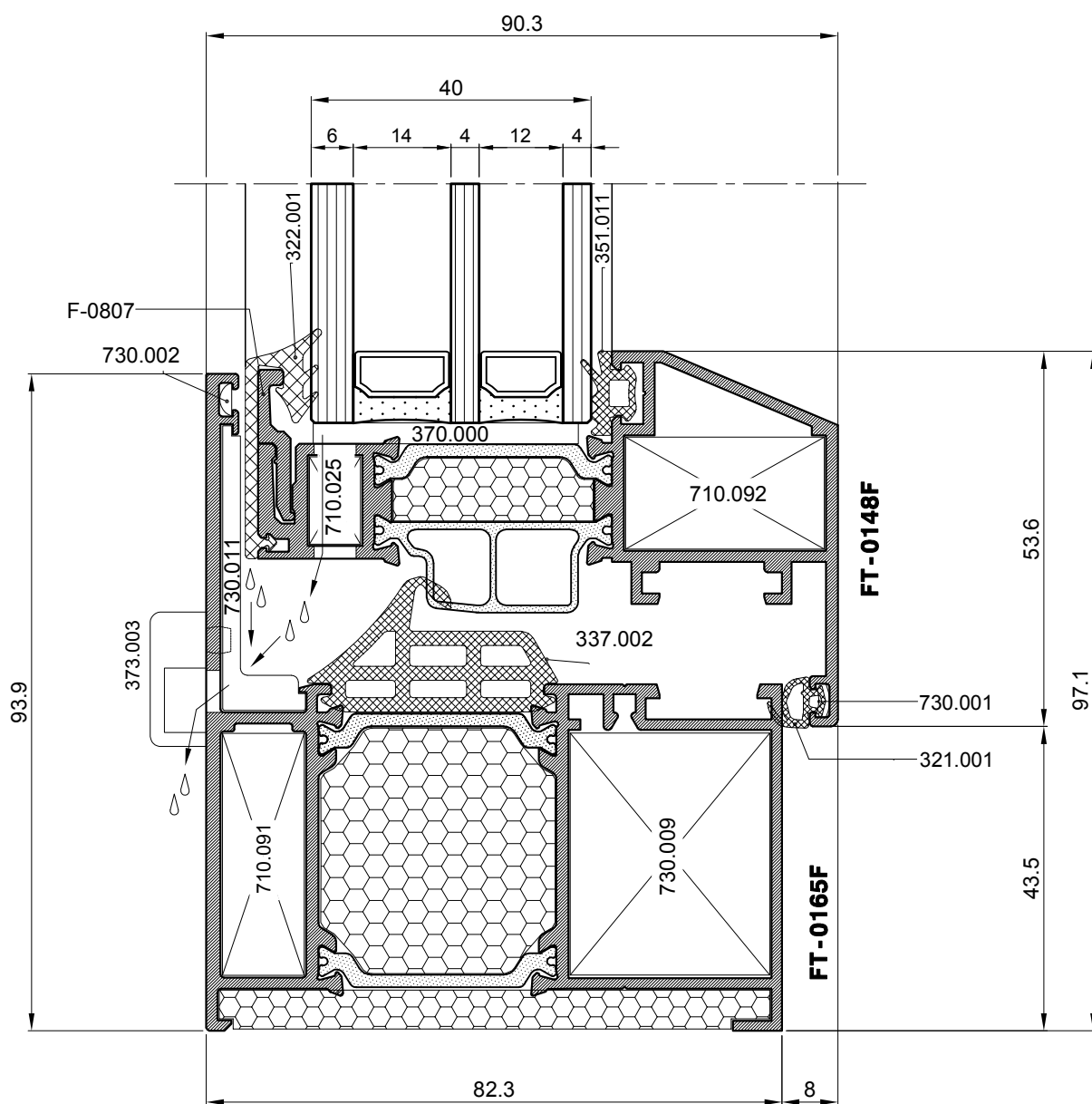
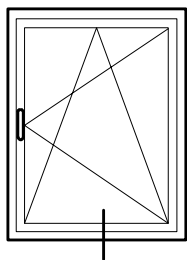


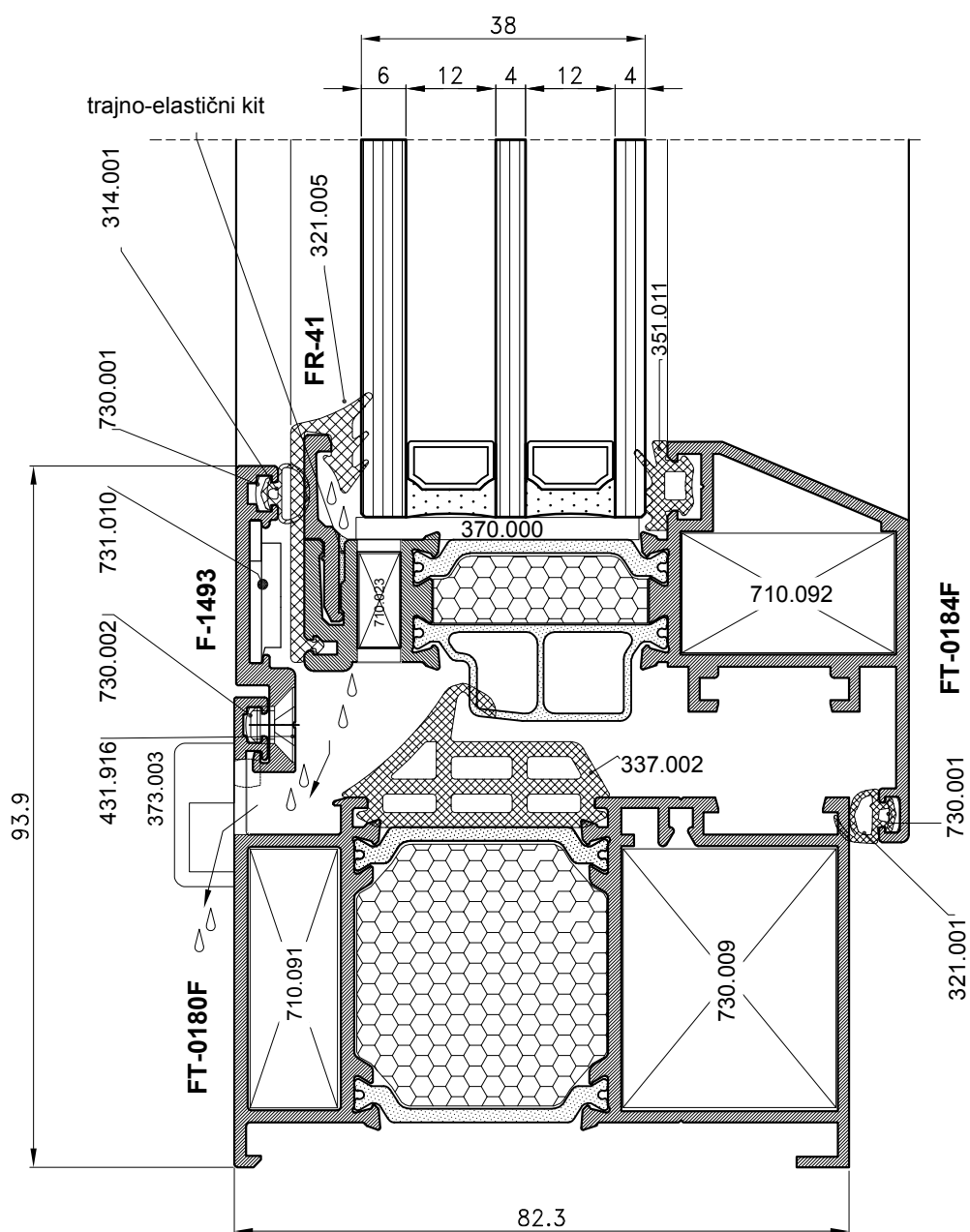
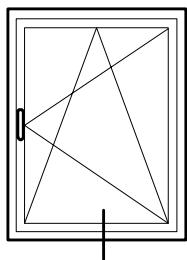
Podmetač za staklo 374.024
ide kontinuirano
po opsegu stakla

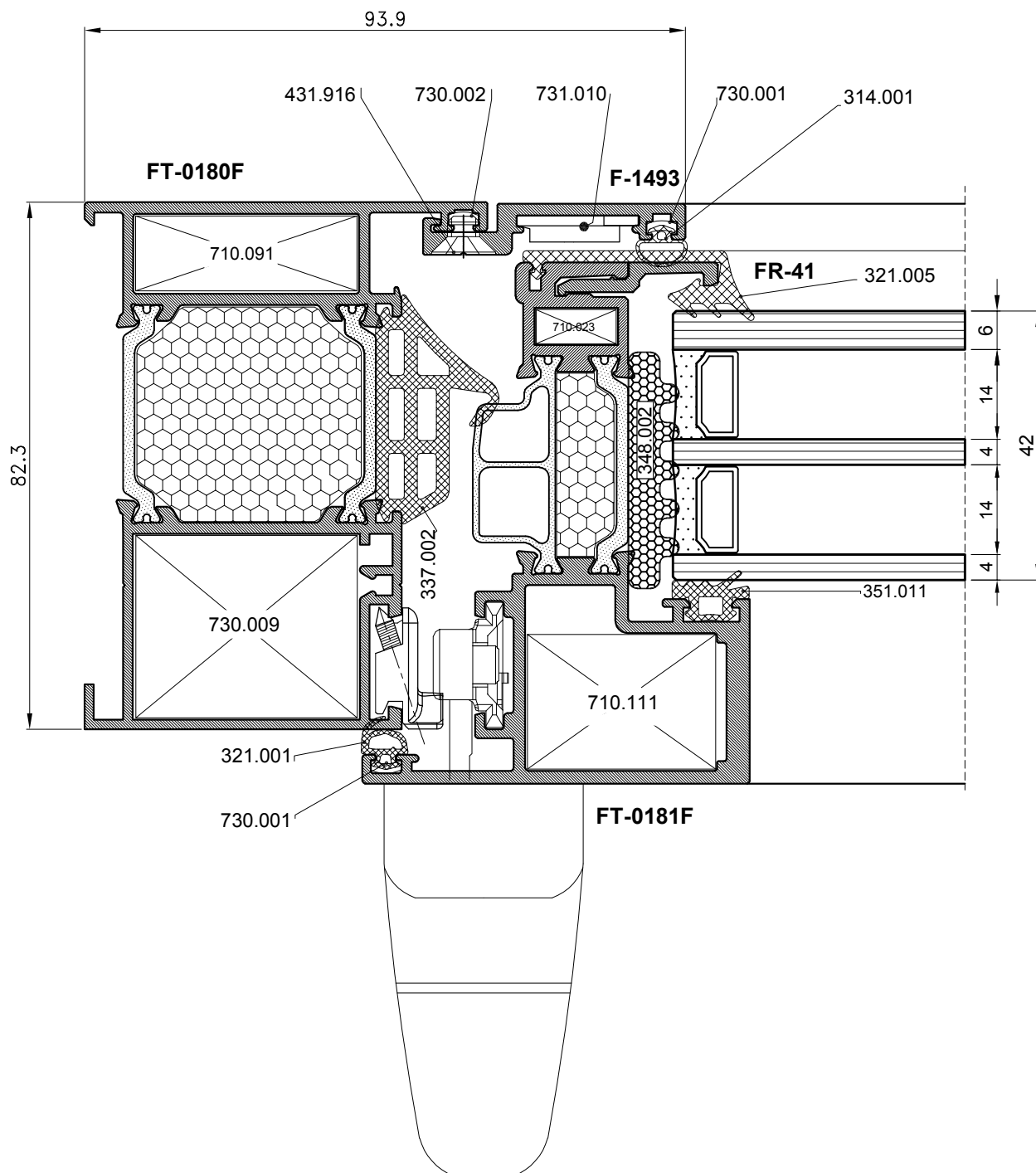
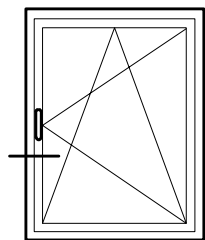


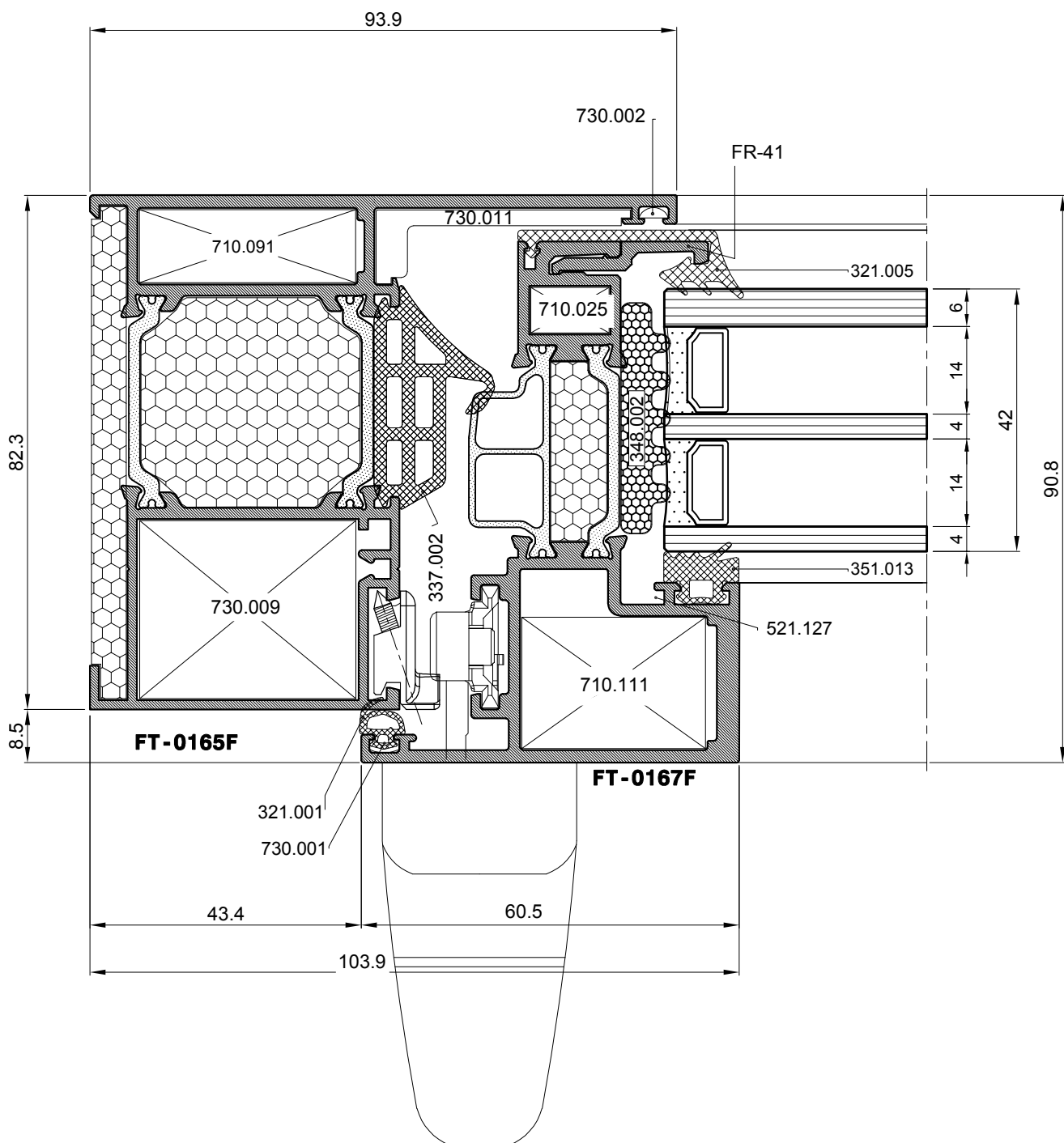
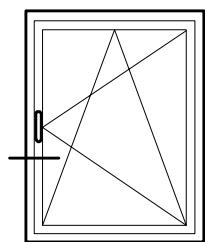


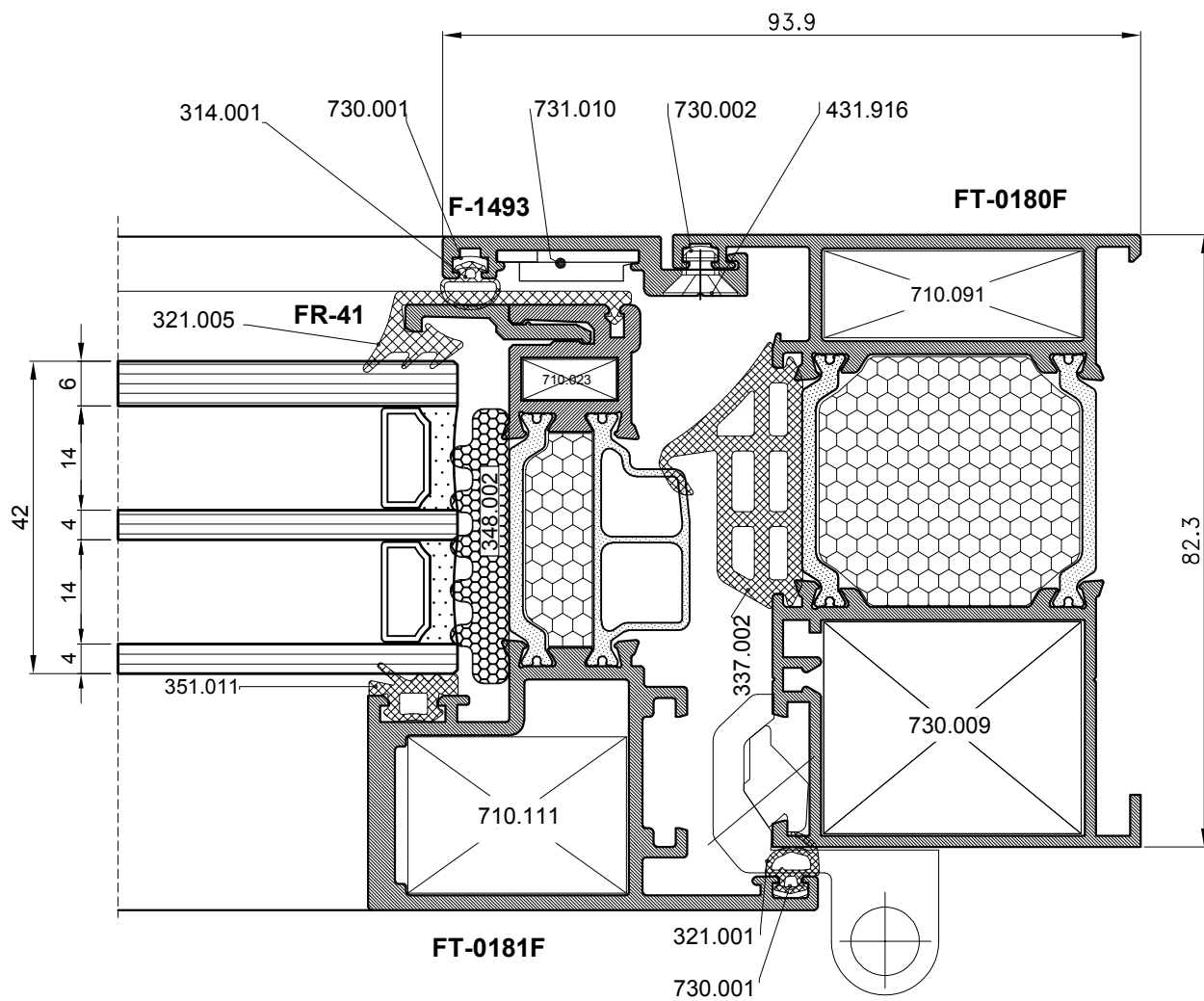
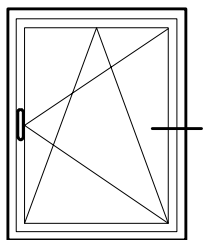


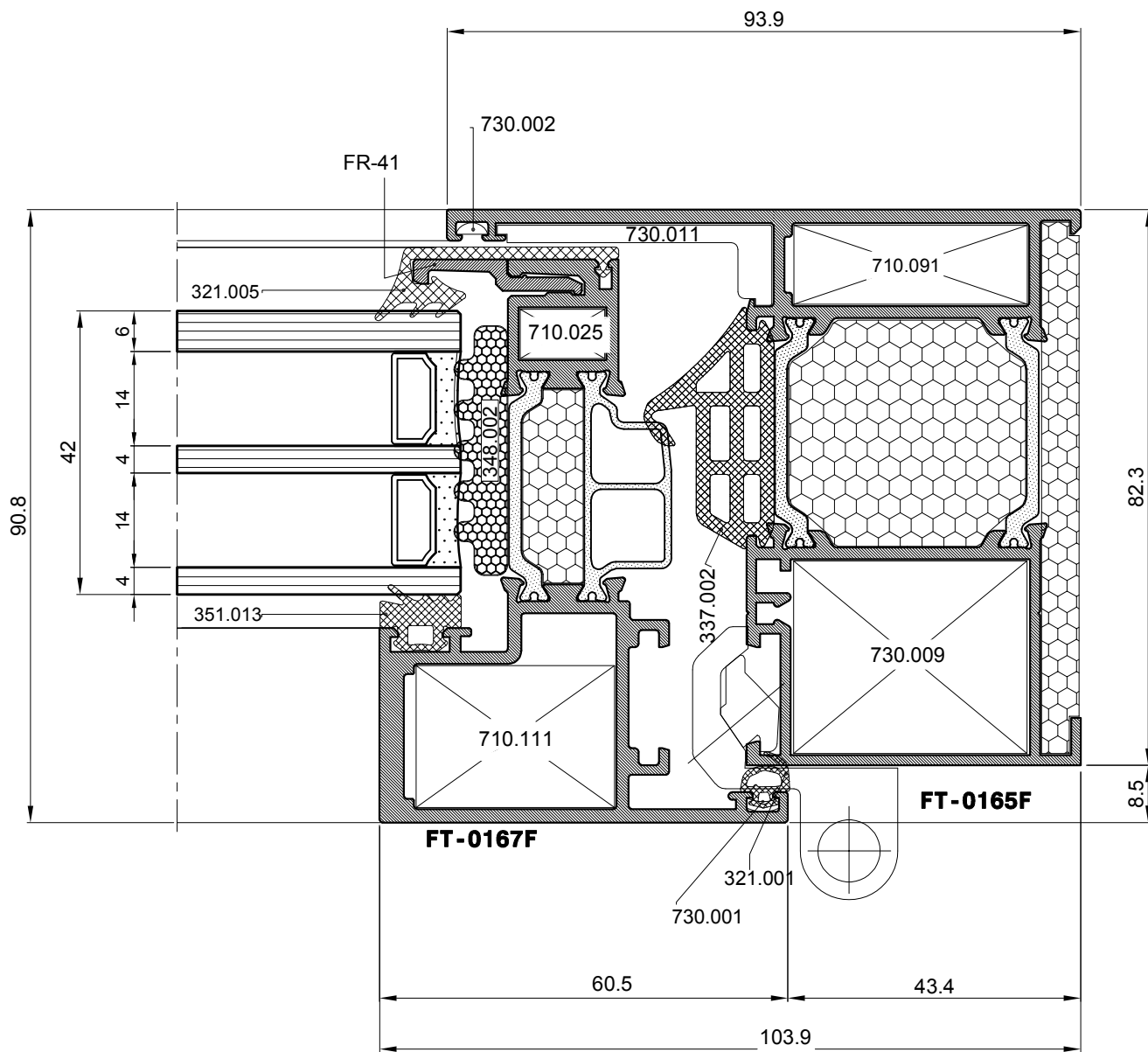
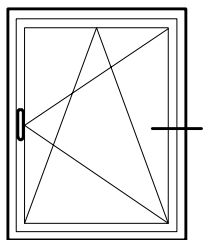


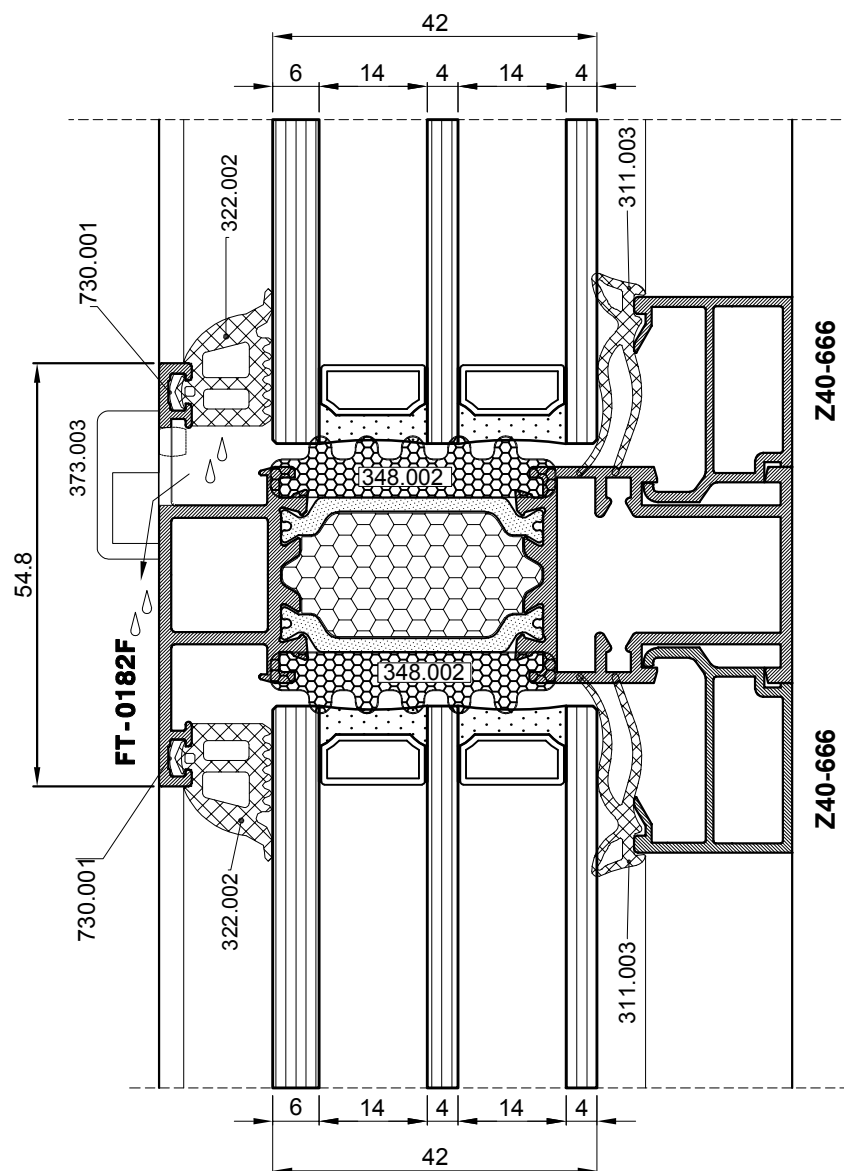
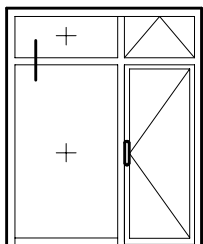


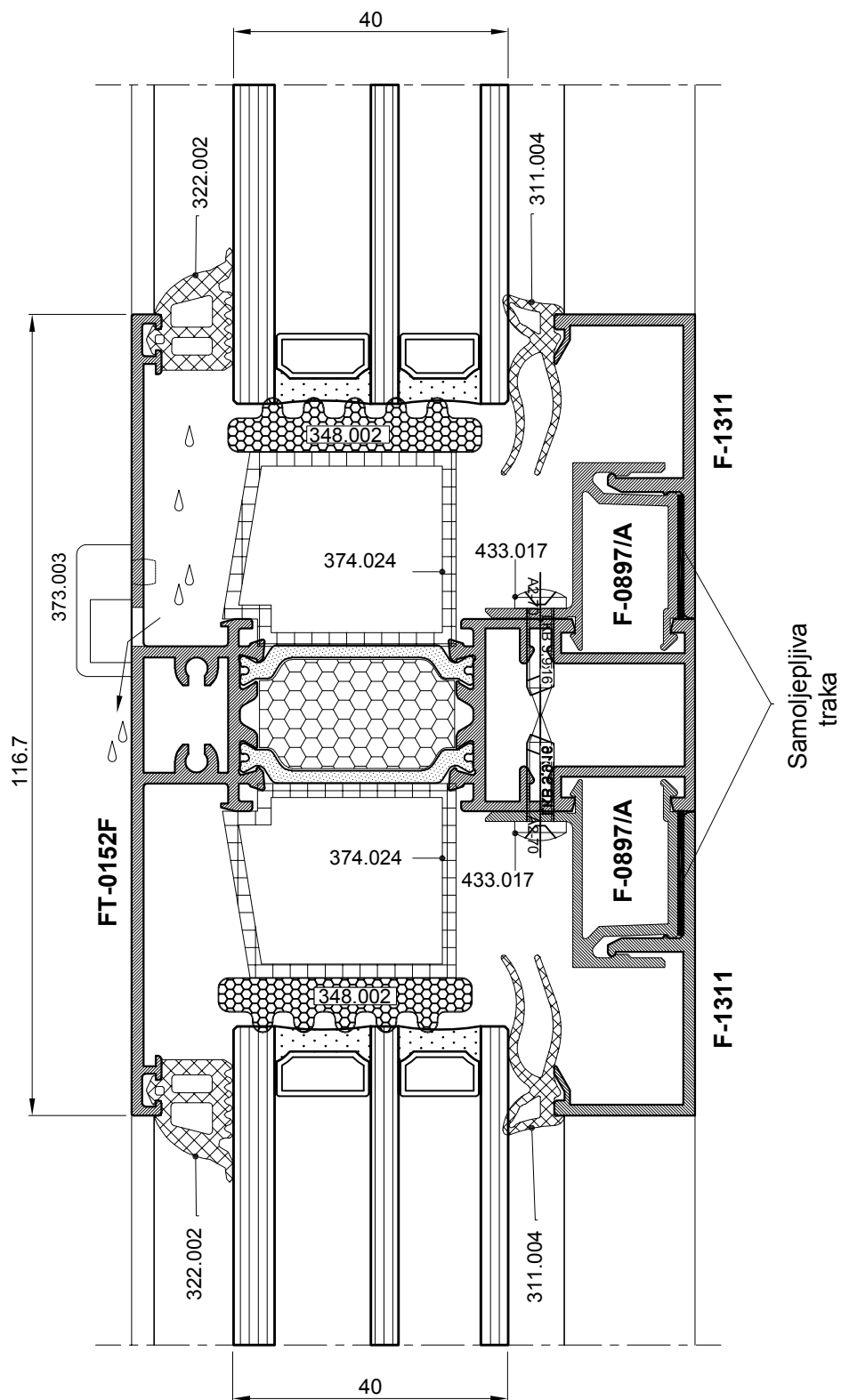
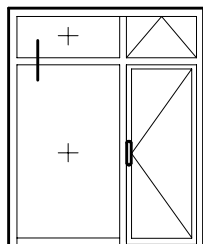


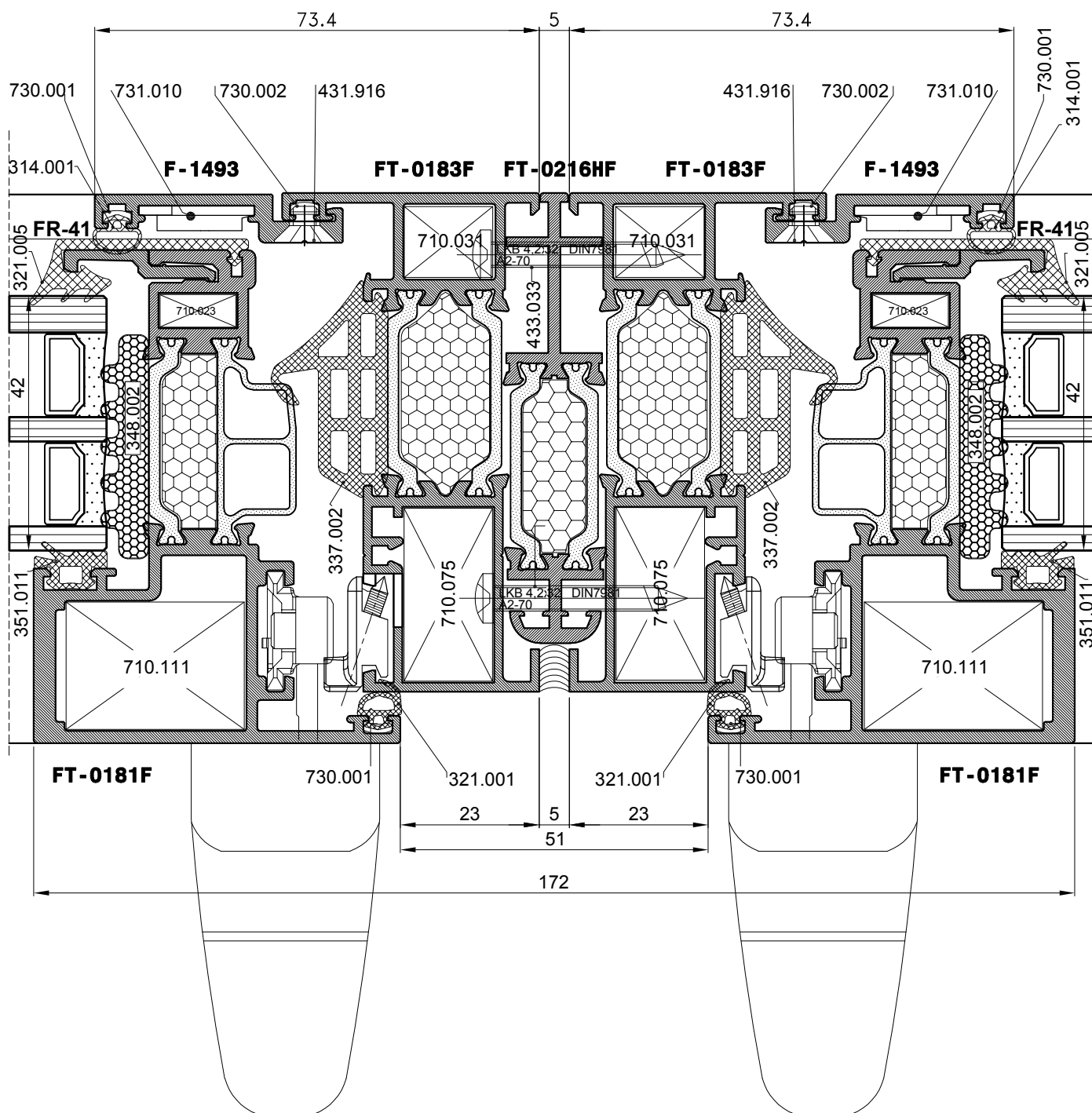
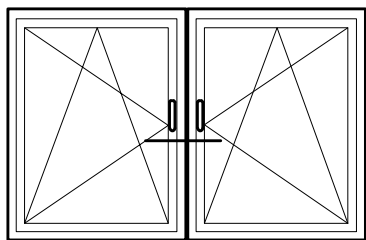


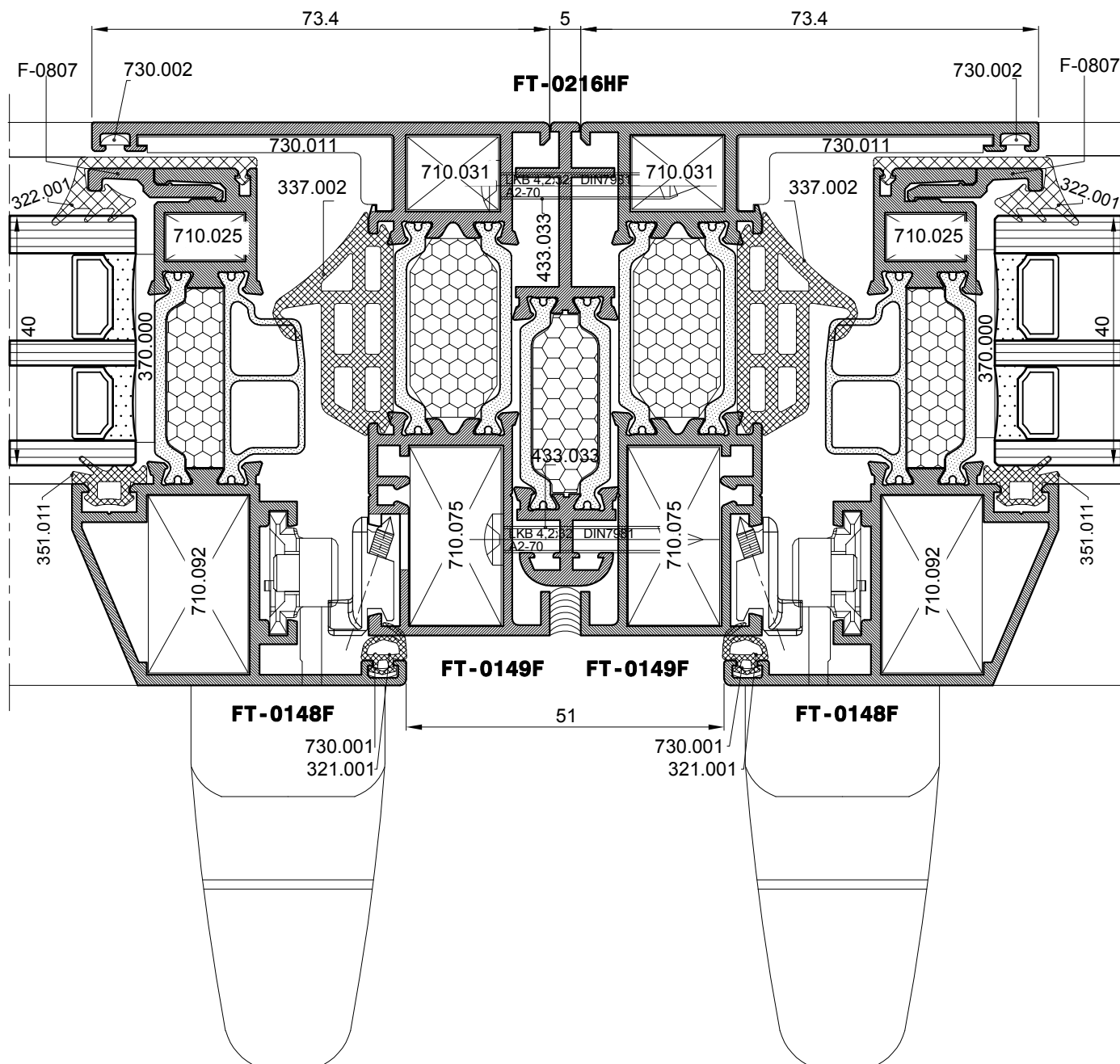
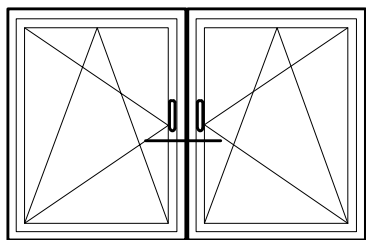


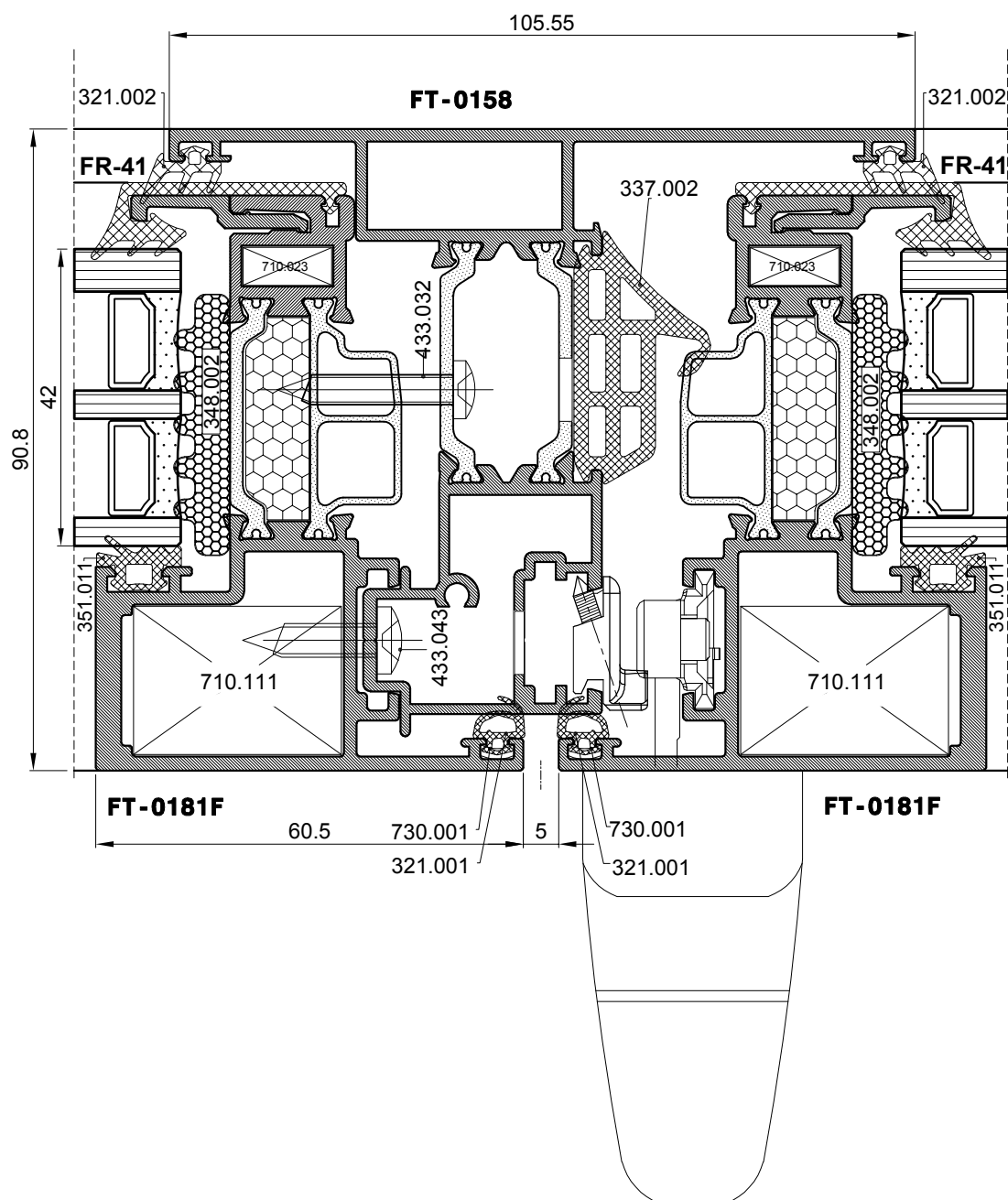
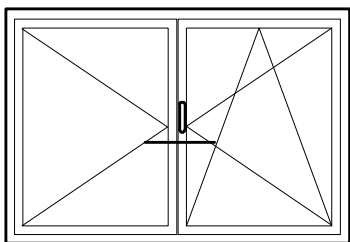


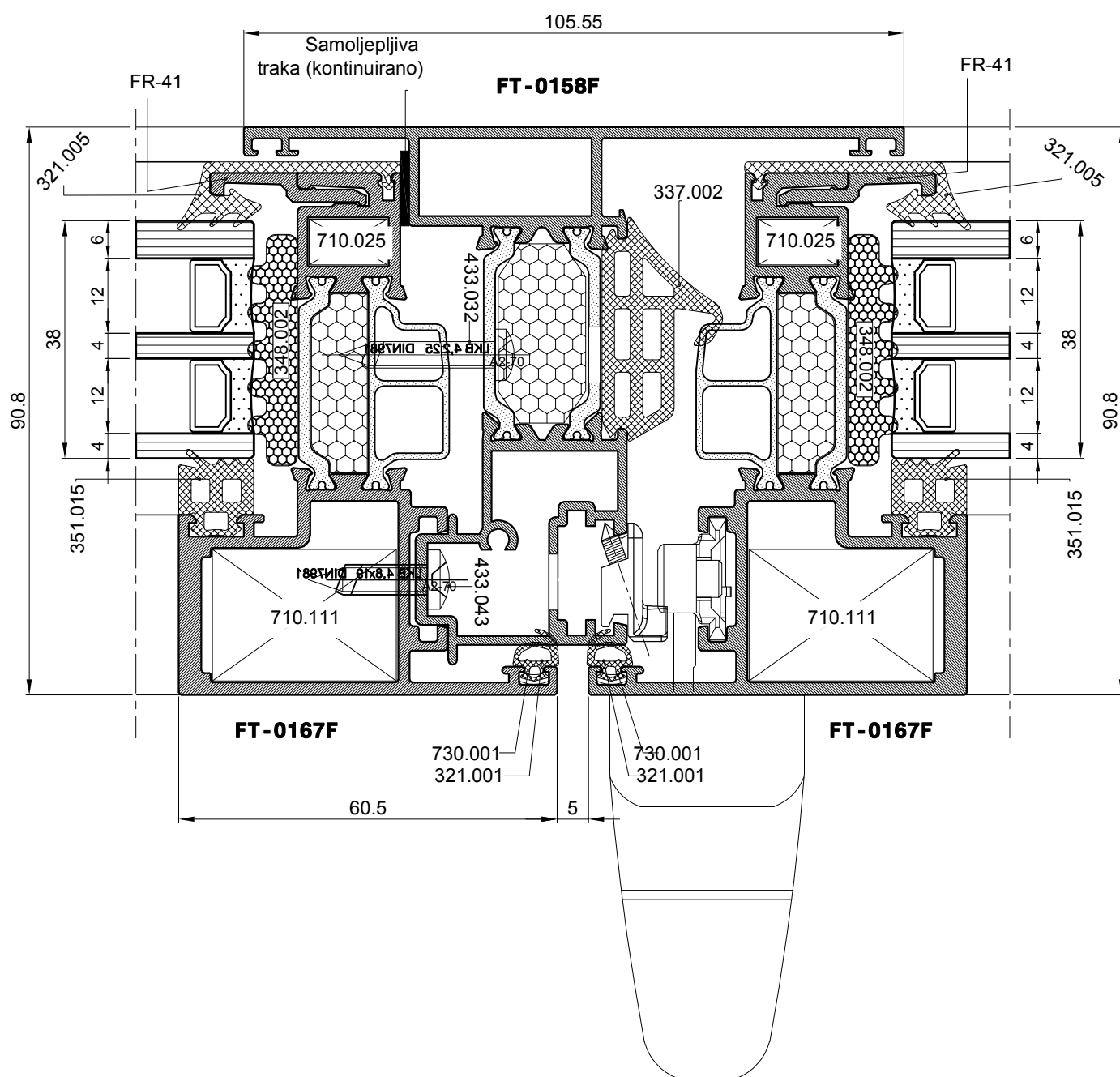
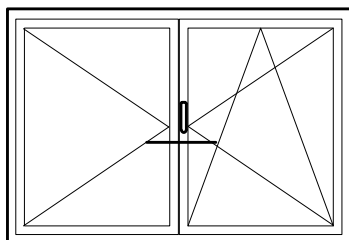


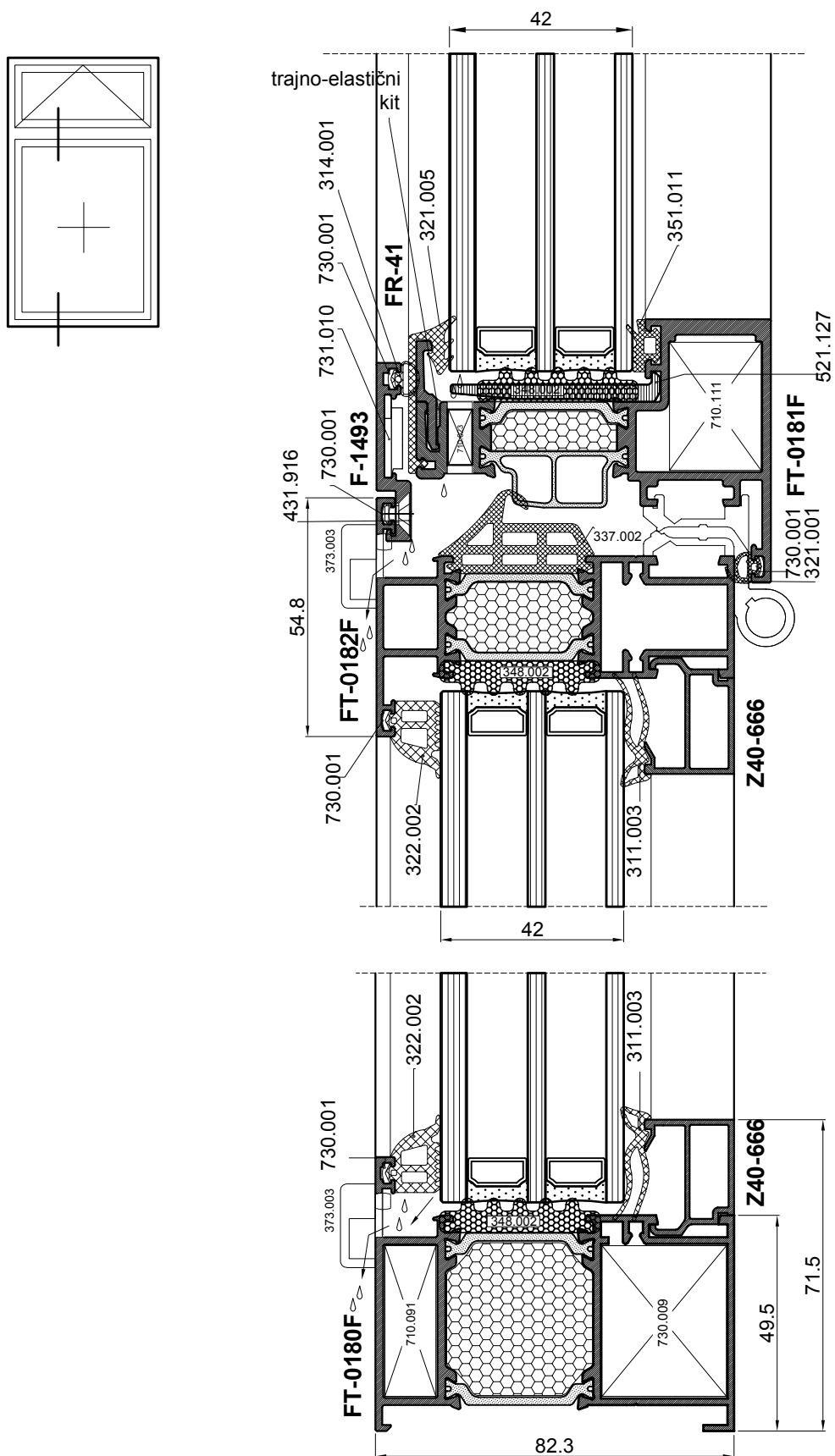


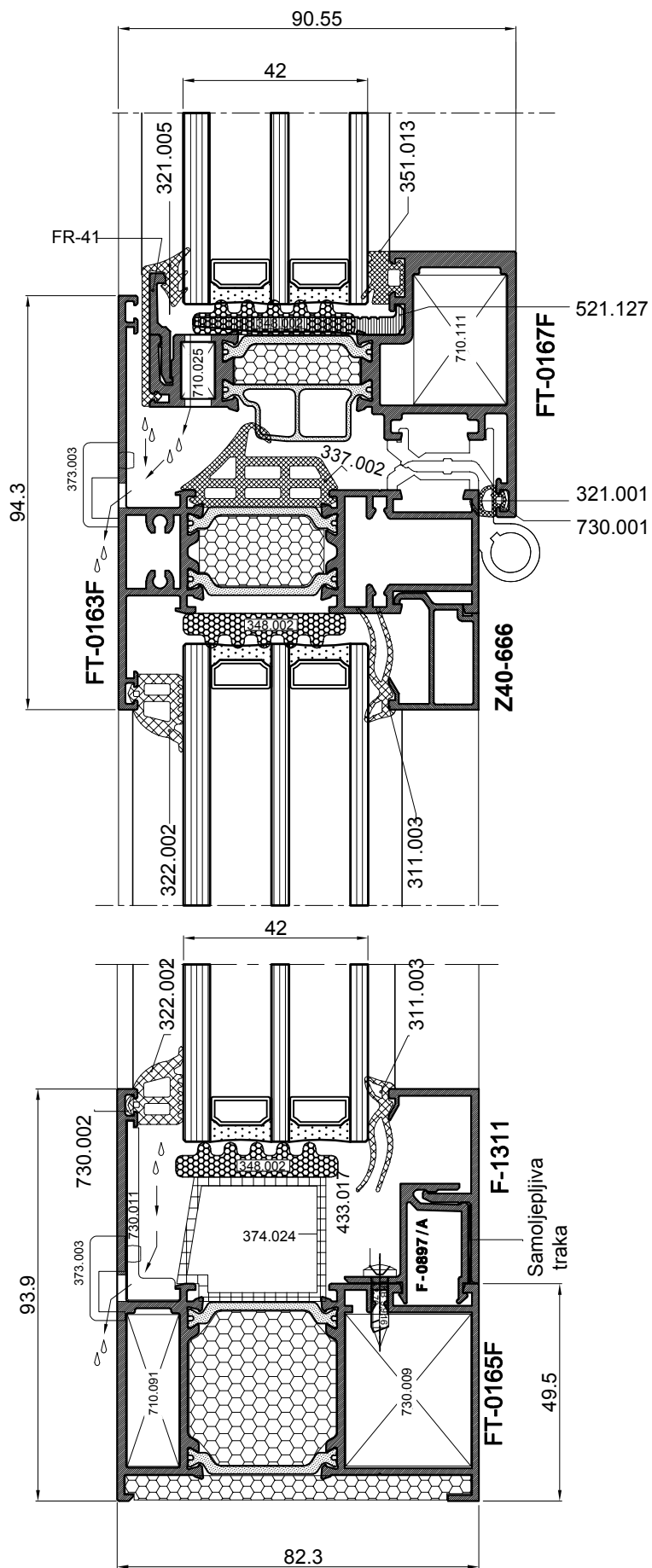
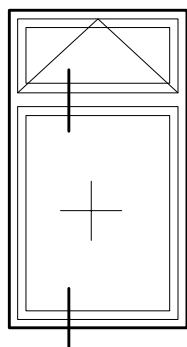


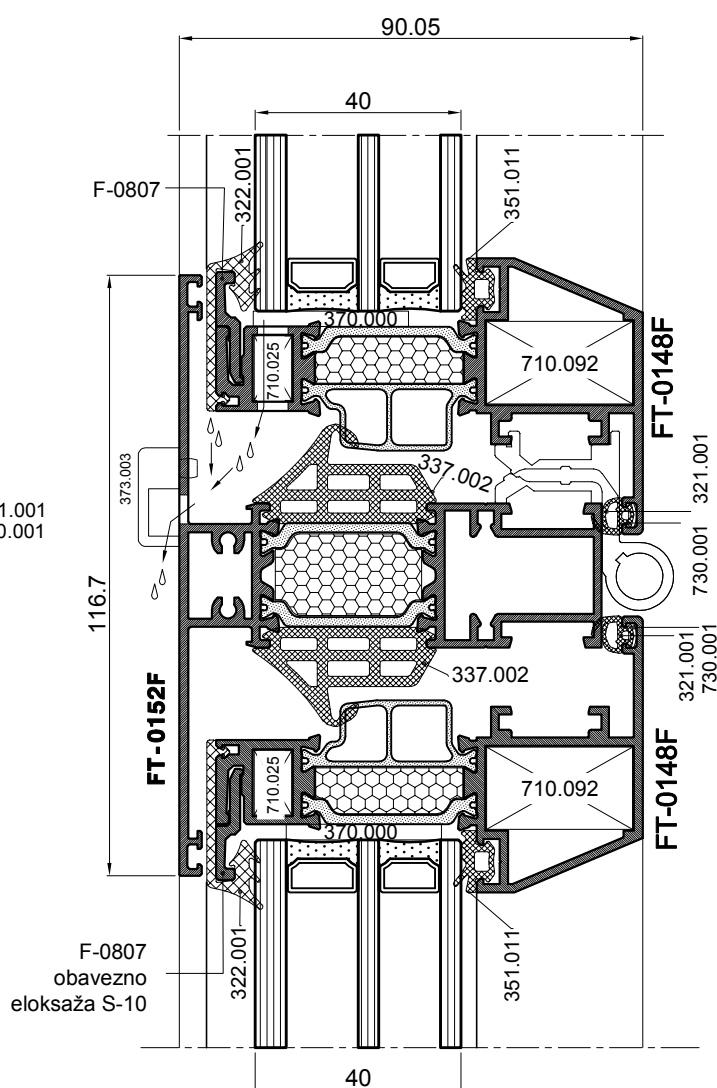
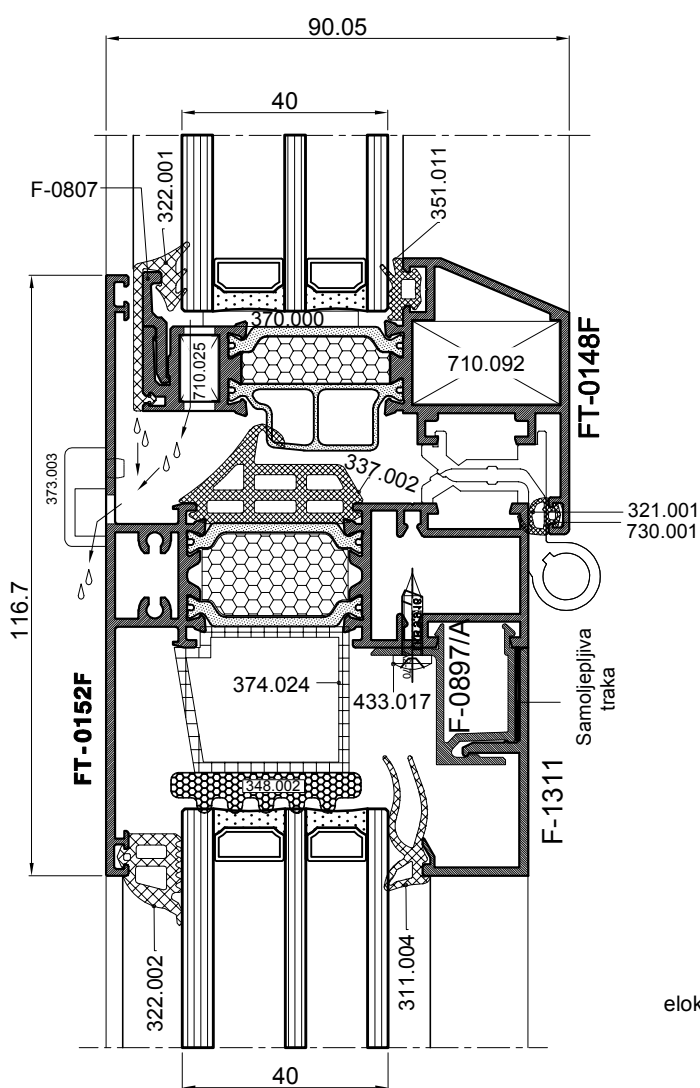
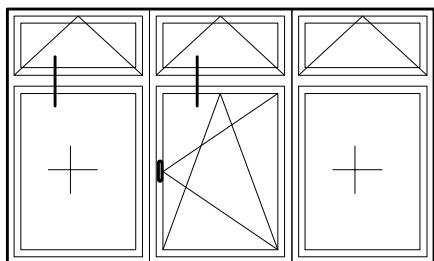


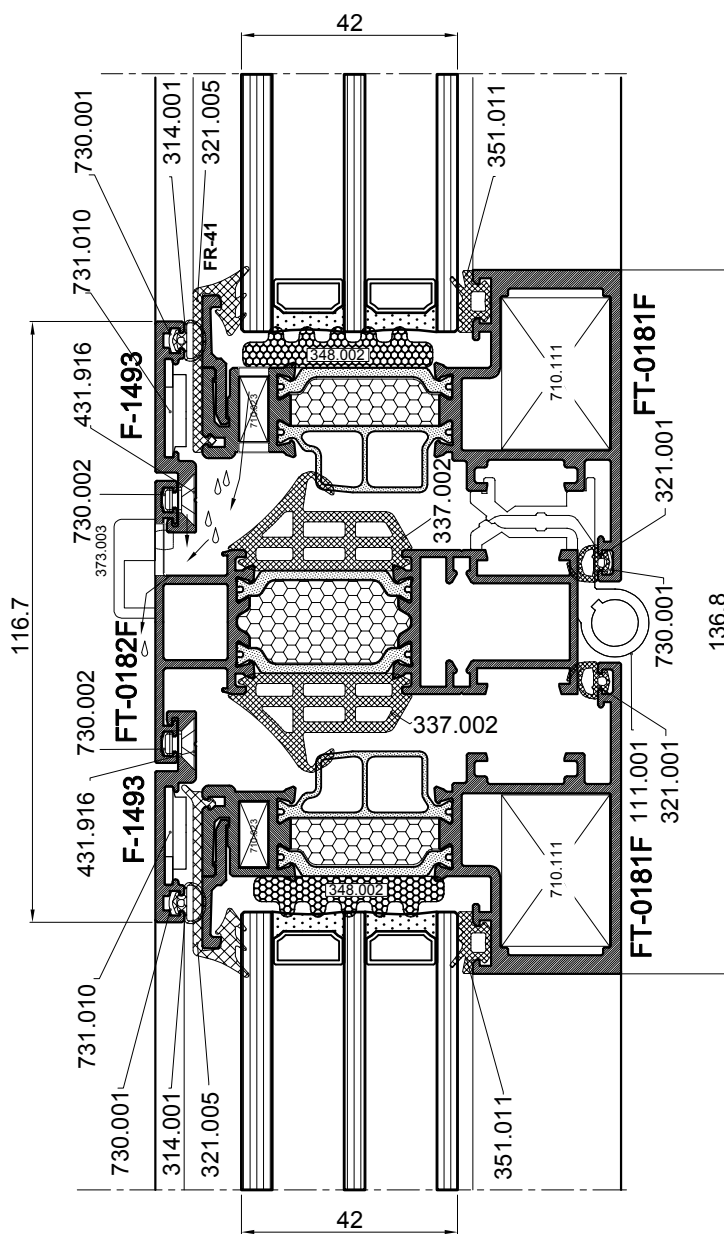
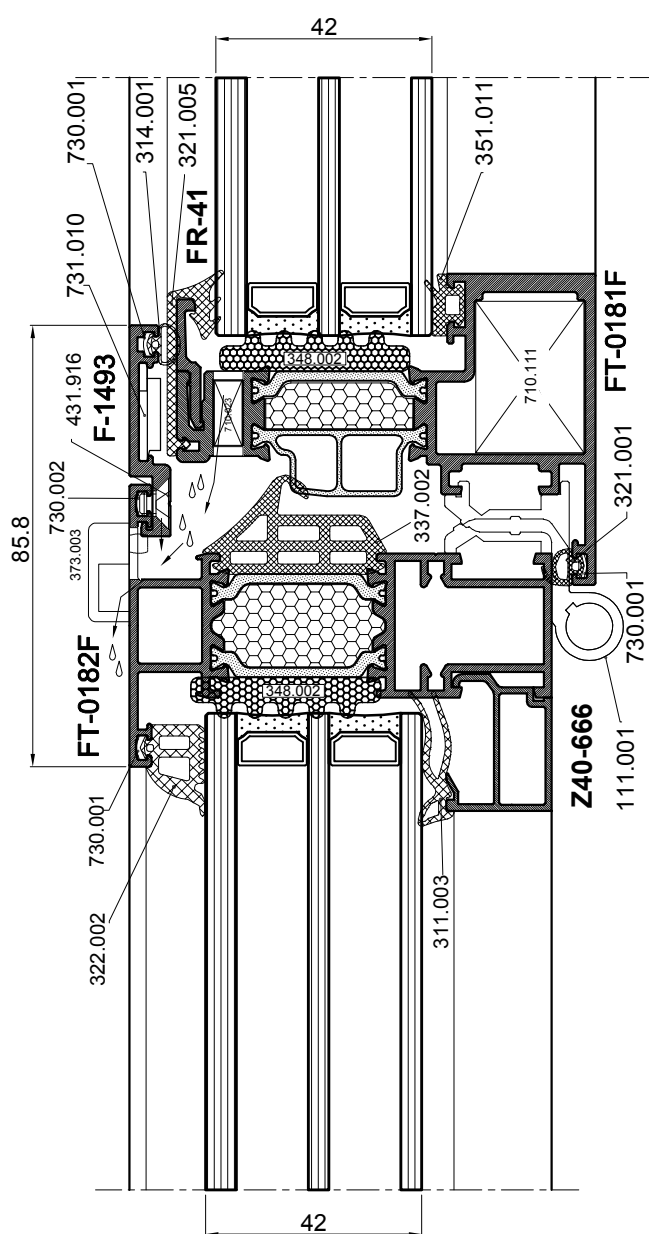
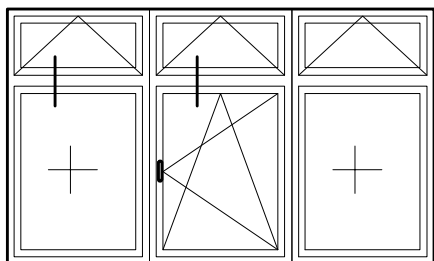


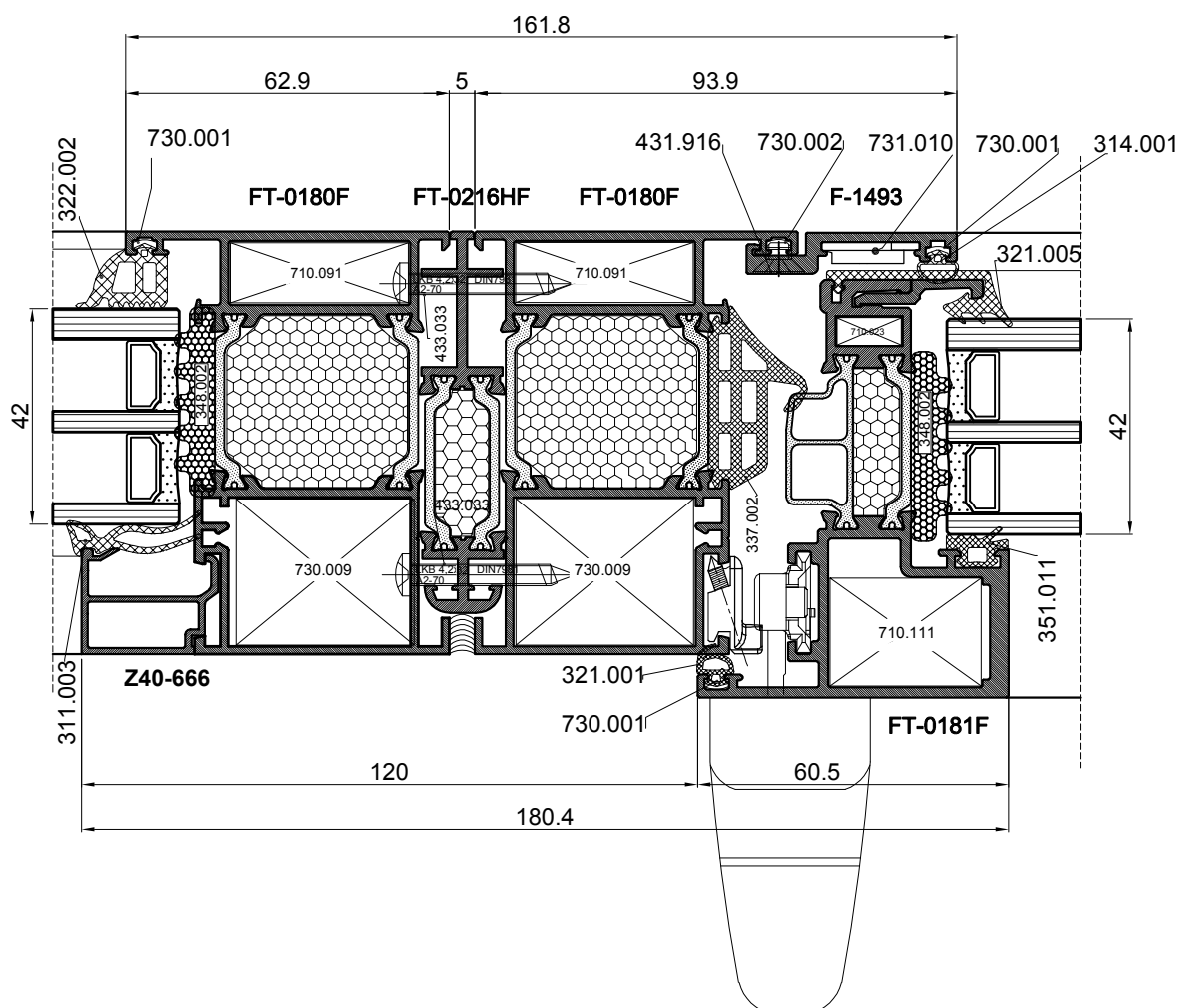
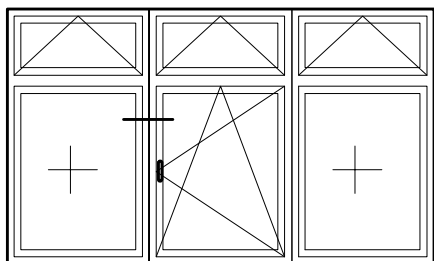


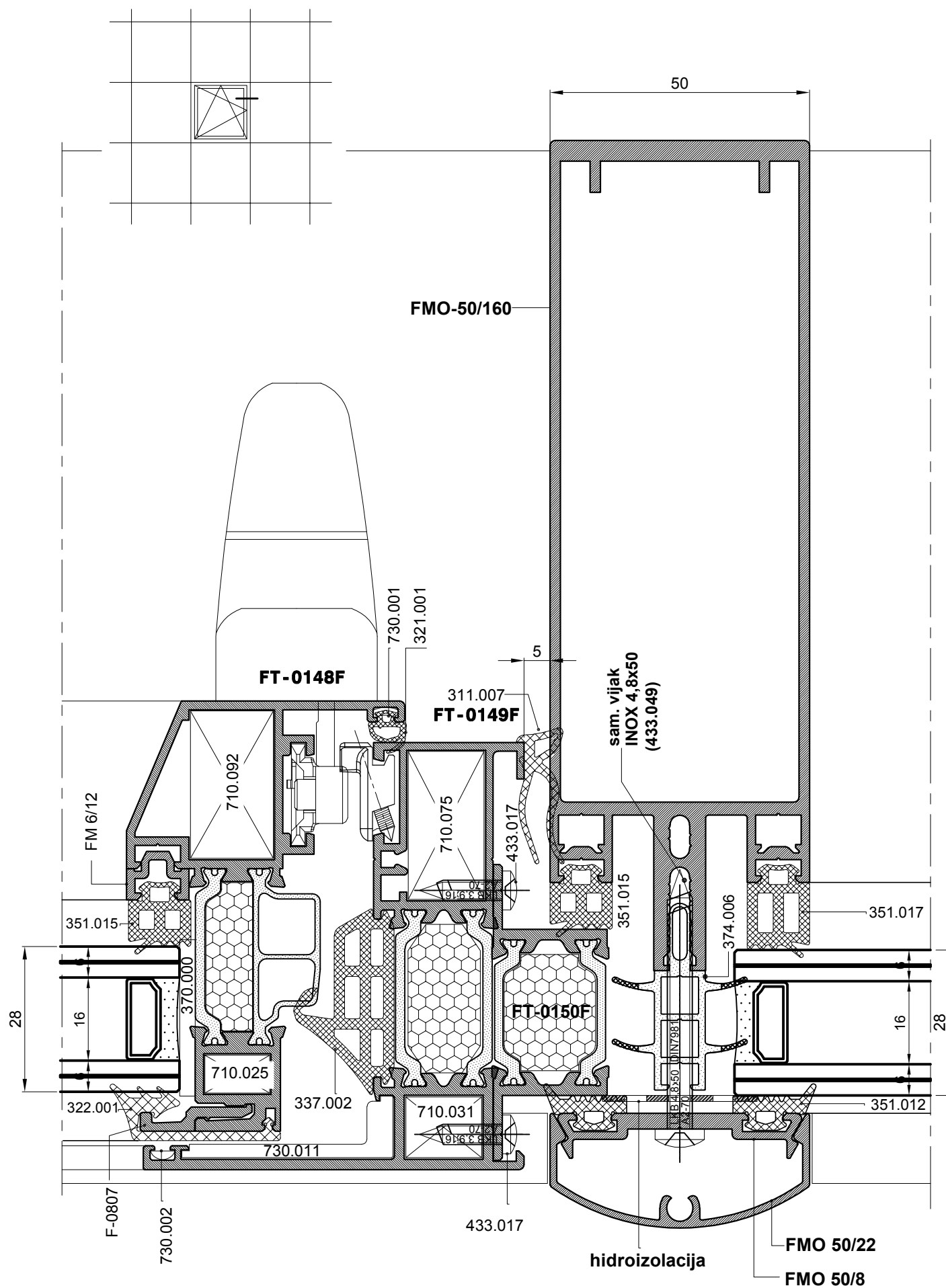


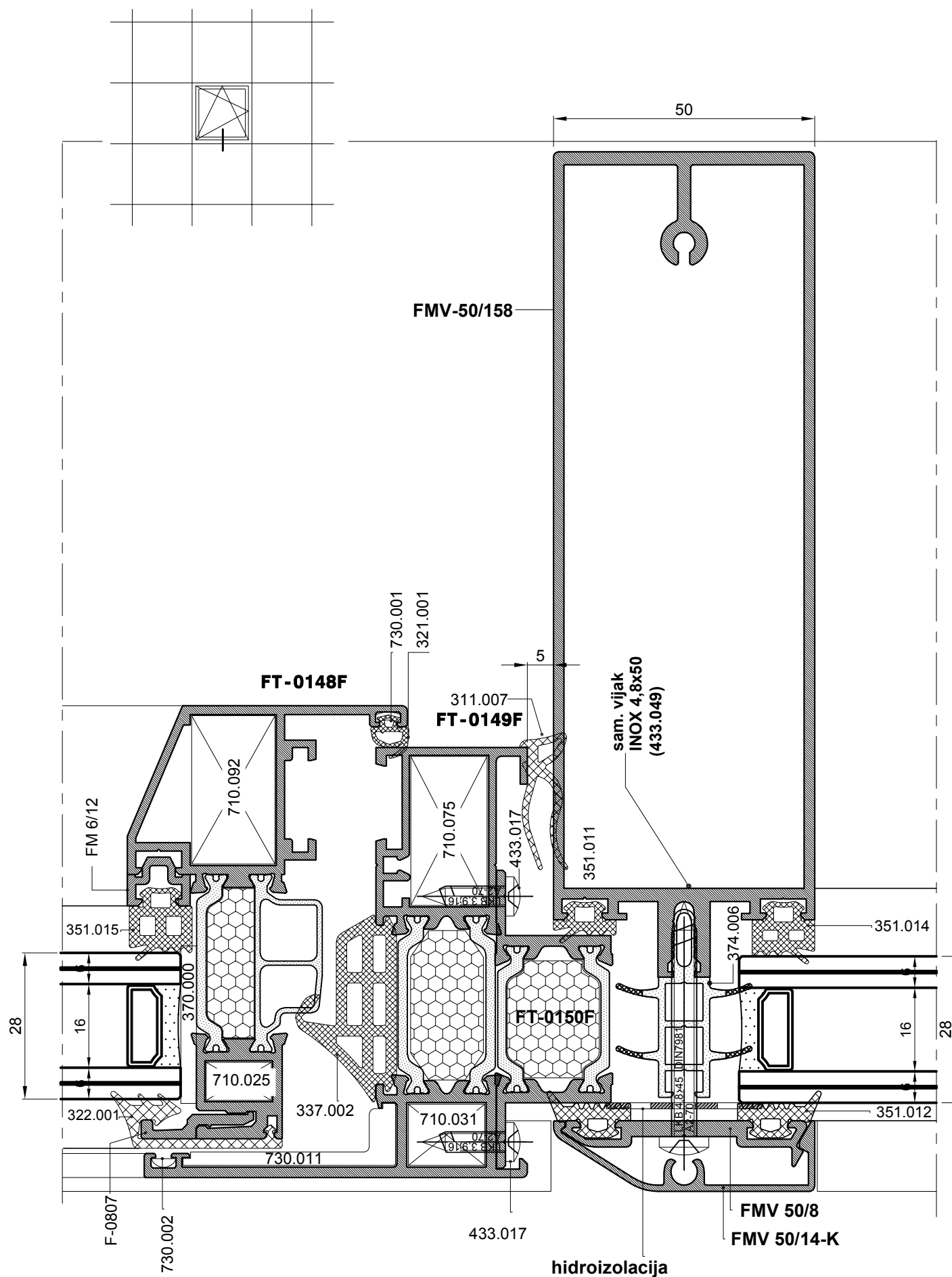


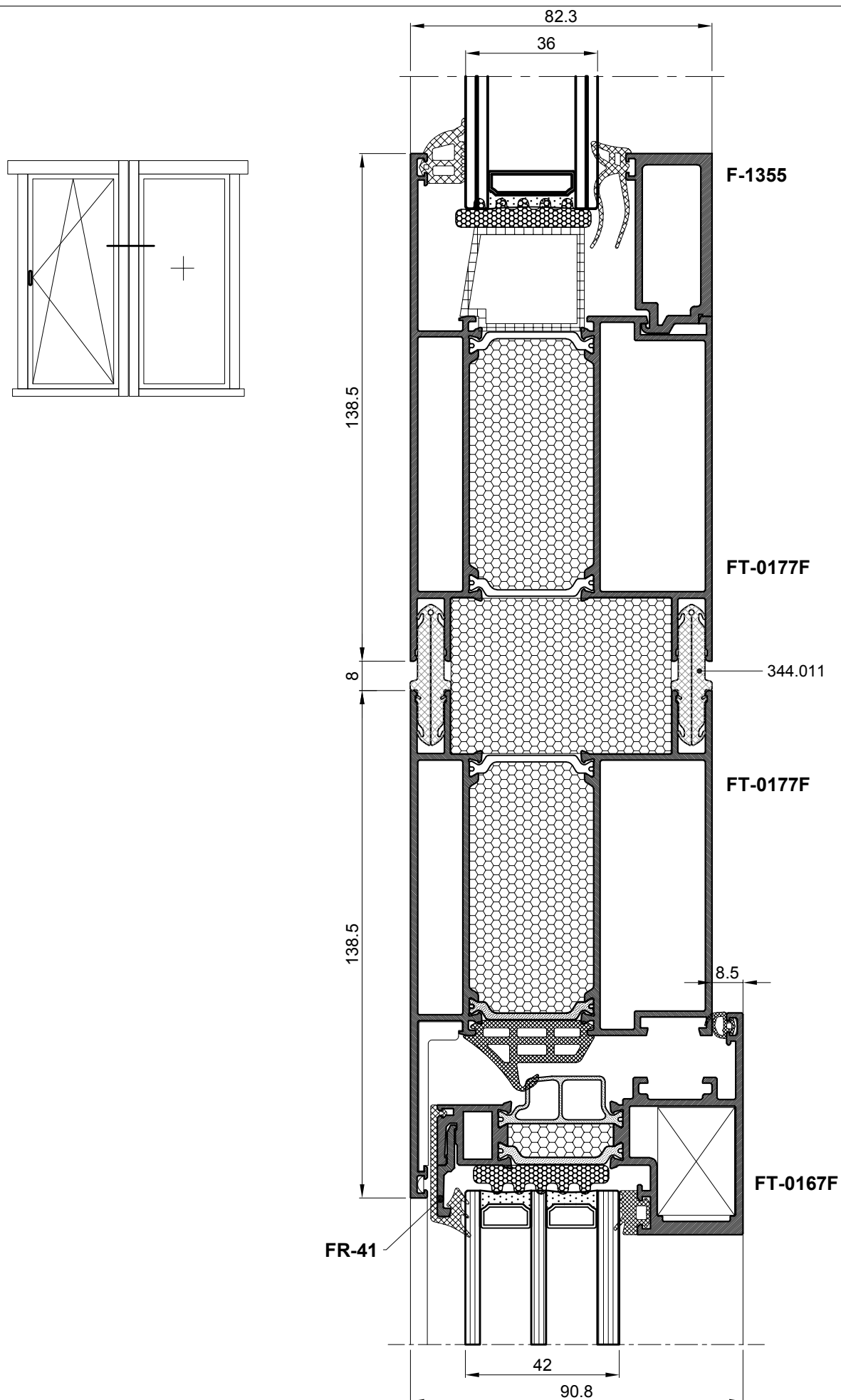






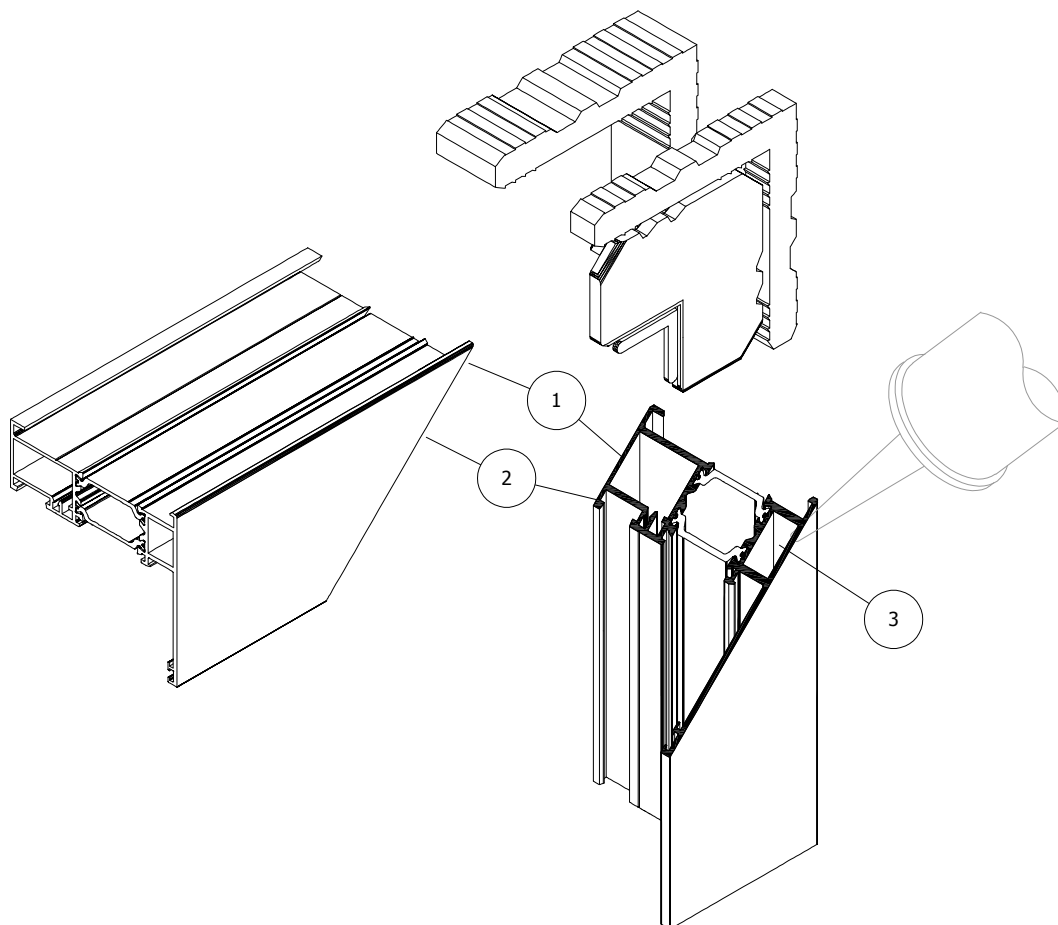






Obrada i montaža

SPAJANJE PROFILA KUTNICIMA POD 90°



POSTUPAK SPAJANJA PROFILA:

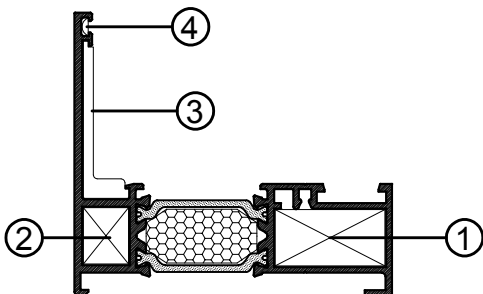
1. Površine koje se spajaju-rezove očistiti i odmastiti prikladnim sredstvom /npr. Sika Remover 208; Wurth-kat.br.:892 130 30/.
2. Premazati površine koje se spajaju ljepilom za metal /npr. Sika Force 7851; Wurth-kat.br.:892 130 010/.
3. Ljepilo za metal ušpricati u komoru za kutnik - po opsegu komore
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/.

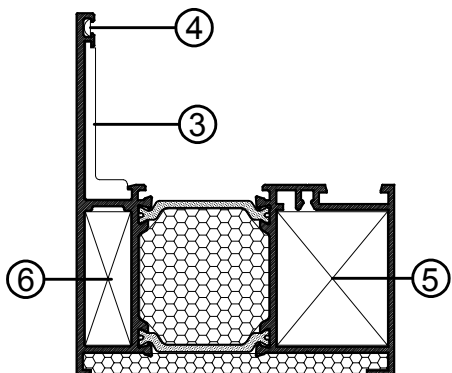
NAPOMENA:

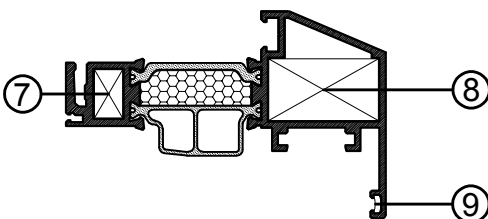
Ovaj postupak spajanja profila primjenjiv je za sve Feal-ove kutnike i njima odgovarajuće komore:

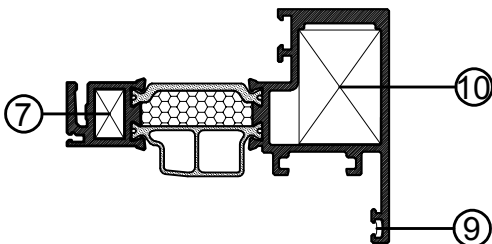
Lijepljenjem rezova i kutnika ljepilima za metal osigurava se potrebna zrako- i vodonepropusnost spoja kao i dodatna mehanička čvrstoća spoja.

PRIKAZ KUTNIKA U PROFILIMA

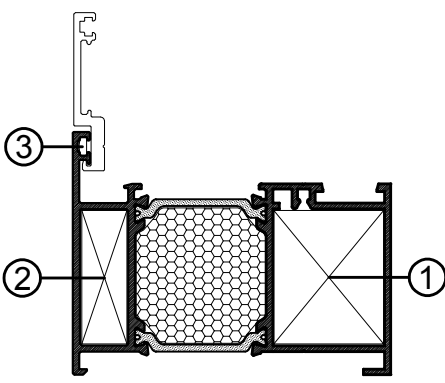
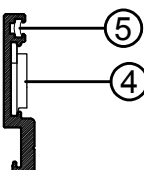
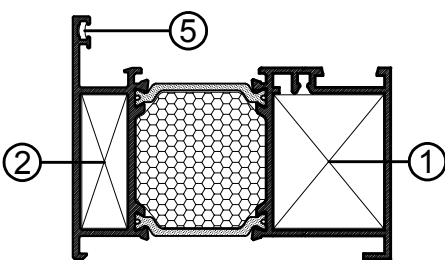
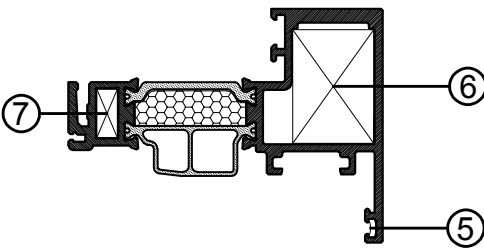
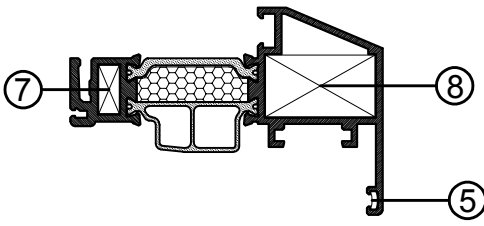
FT-0149F		①	710.075	
			710.035	
			730.008	
			②	
			710.032	
		③	730.011	
		④	730.002	

FT-0165F		⑤	710.072	
			730.009	
		⑥	710.091	
		④	730.002	
		③	730.011	

FT-0148F		⑦	710.025	
			710.092	
		⑧	710.124	
			⑨	

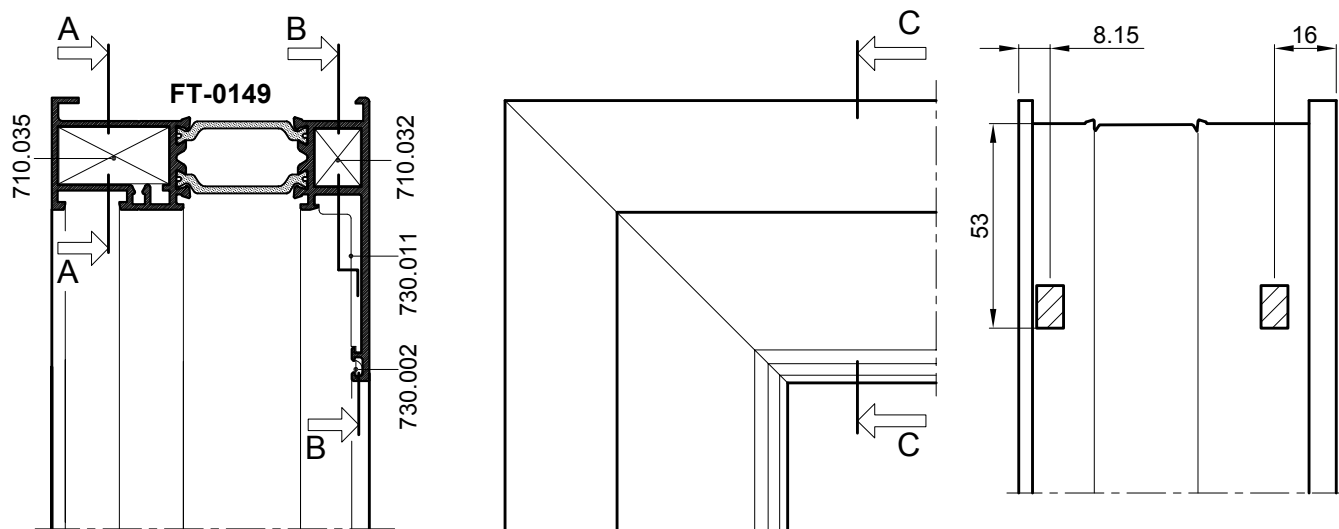
FT-0167F		⑦	710.025	
			730.001	
		⑩	710.111	
			710.112	

PRIKAZ KUTNIKA U PROFILIMA

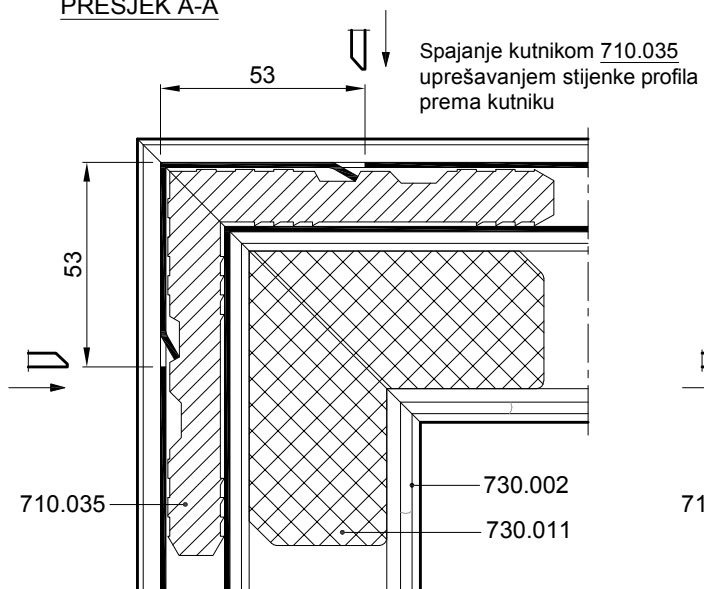
FT-0180F		①	710.072	
			730.009	
		②	710.091	
		③	730.002	
F-1493		④	731.010	
		⑤	730.001	
FT-0180F		①	710.072	
			730.009	
		②	710.091	
		⑤	730.001	
FT-0181F		⑤	730.001	
		⑥	710.111	
			710.112	
		⑦	710.023	
FT-0184F		⑤	730.001	
		⑦	710.023	
		⑧	710.092	
			710.124	

SPAJANJE PROFILA FT-0149 KUTNICIMA : 710.035 ; 710.032

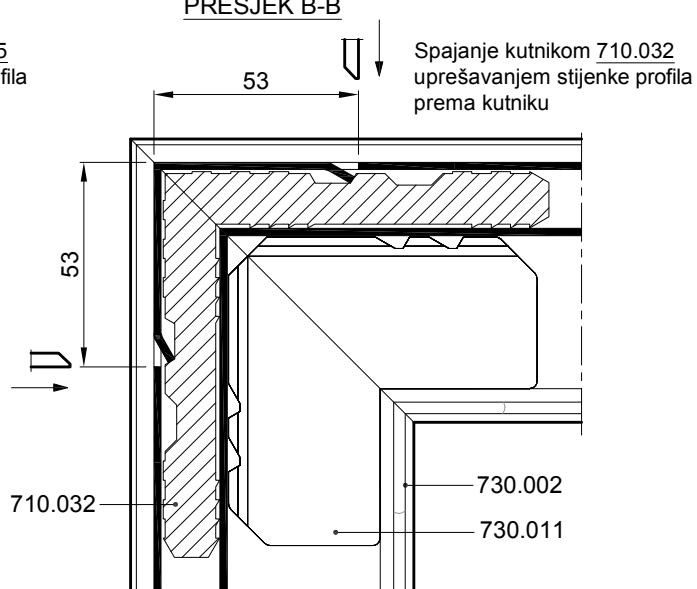
PRESJEK C-C



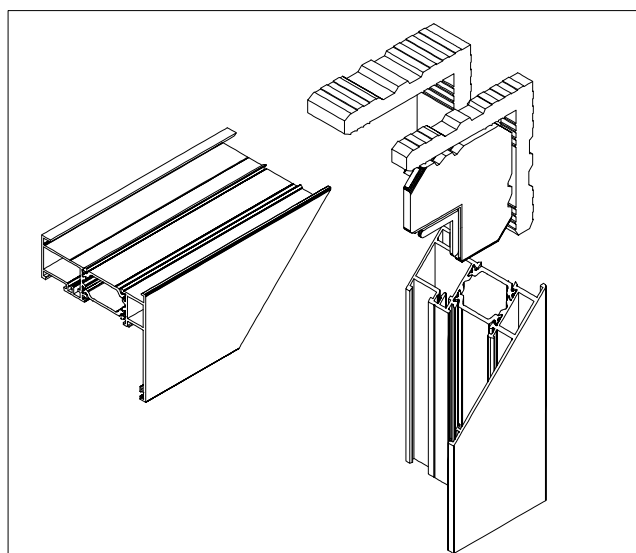
PRESJEK A-A



PRESJEK B-B

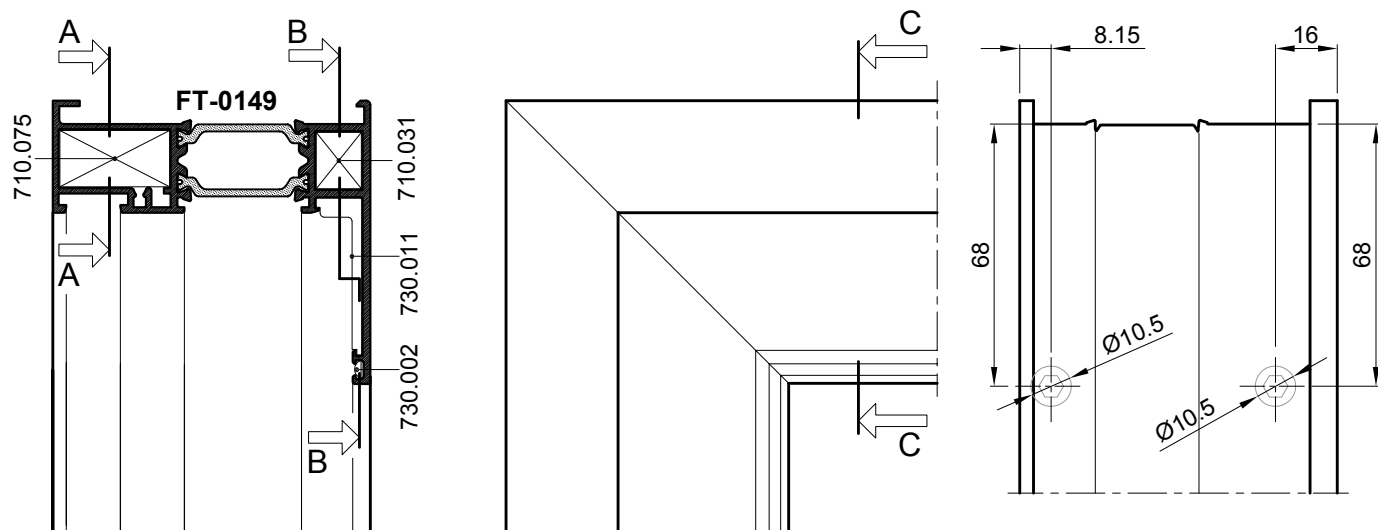


1. STROJNO UPREŠAVANJE
2. RUČNO UPREŠAVANJE-ŠKARAMA

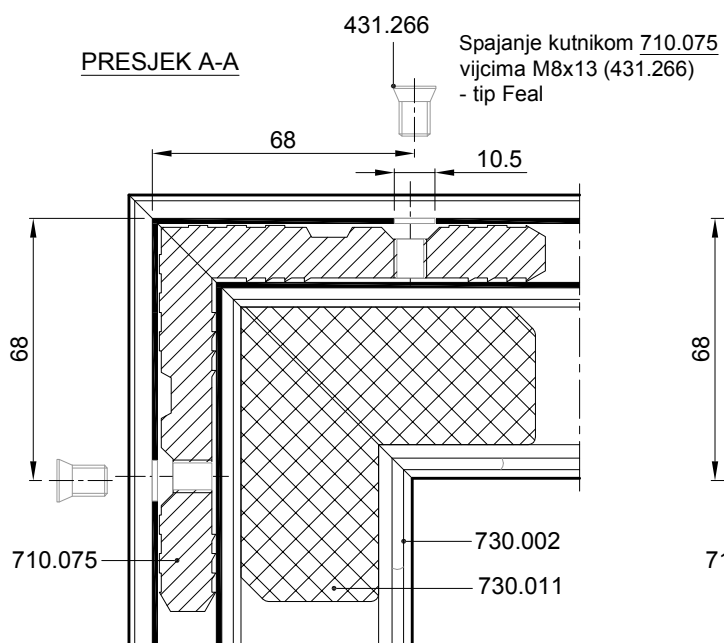


SPAJANJE PROFILA FT-0149 KUTNICIMA : 710.075 ; 710.031

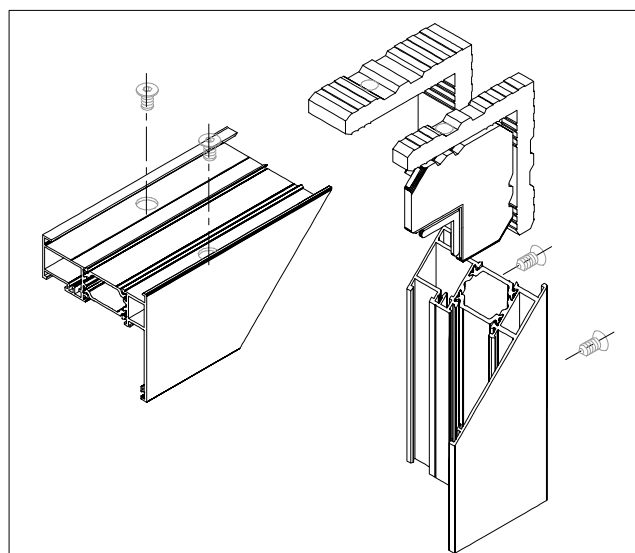
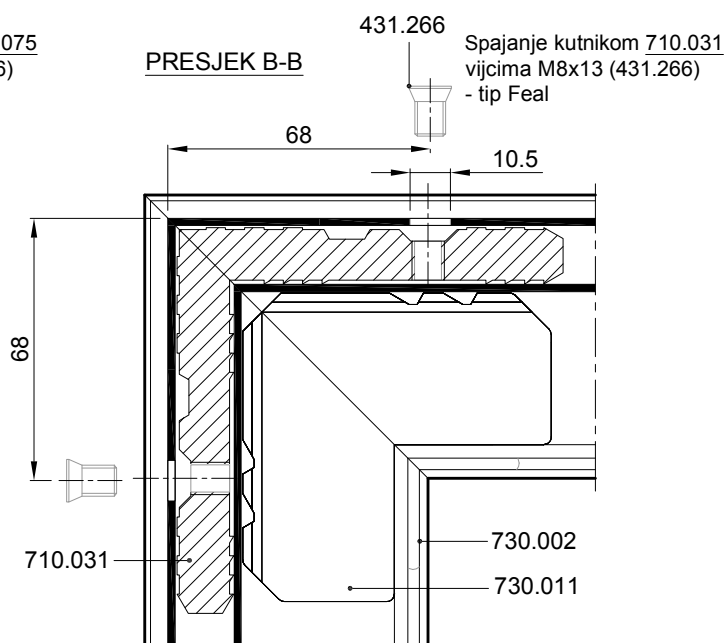
PRESJEK C-C



PRESJEK A-A

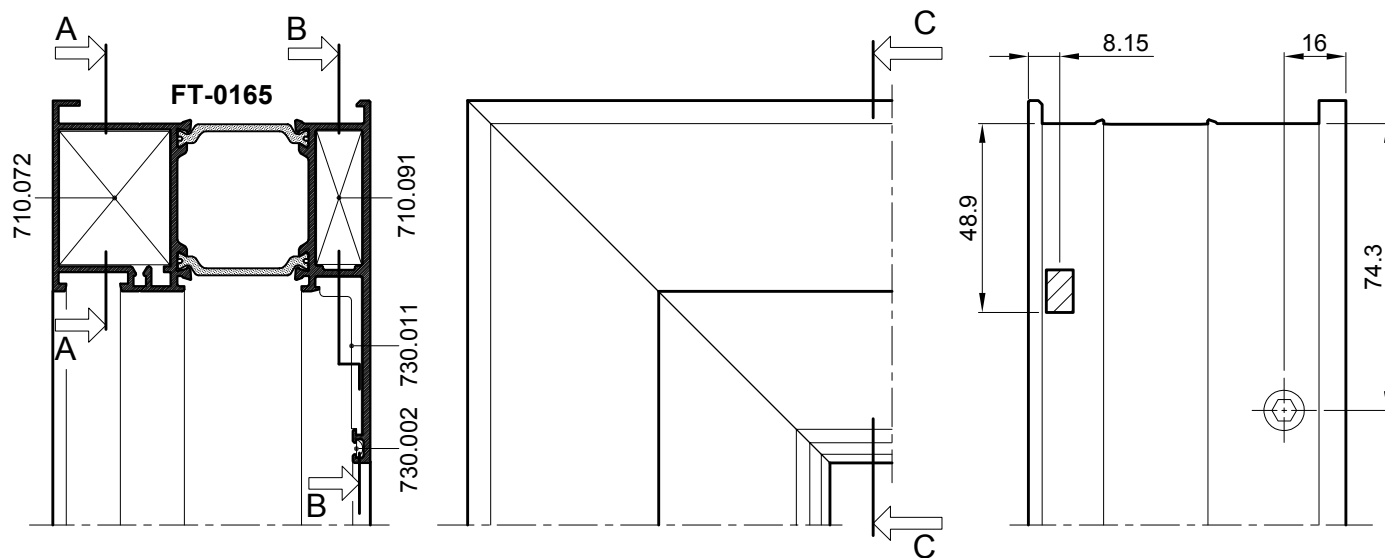


PRESJEK B-B

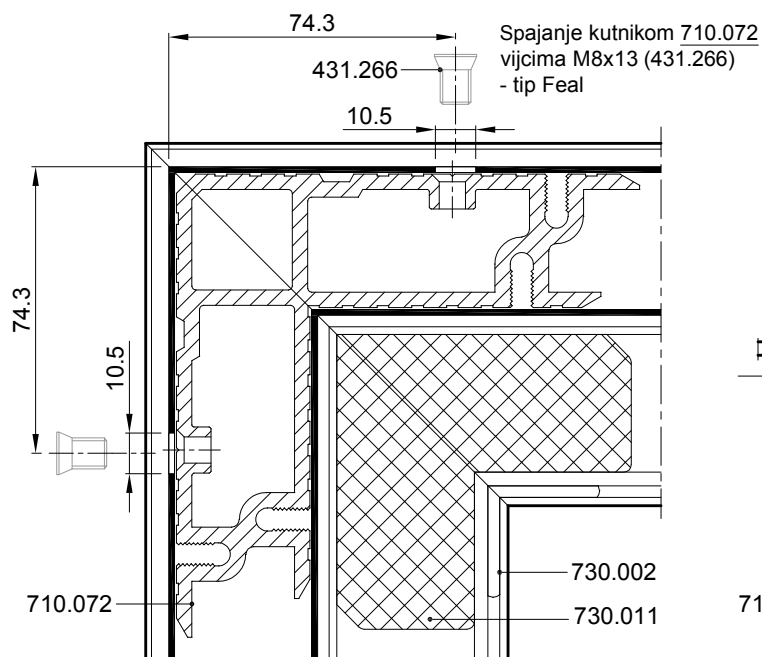


SPAJANJE PROFILA FT-0165 KUTNICIMA : 710.072 ; 710.091

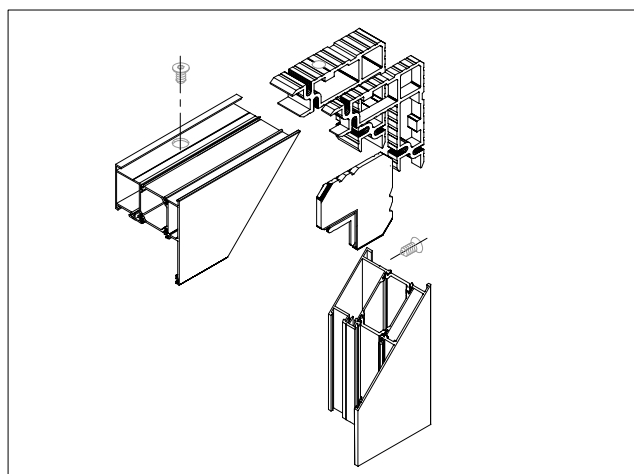
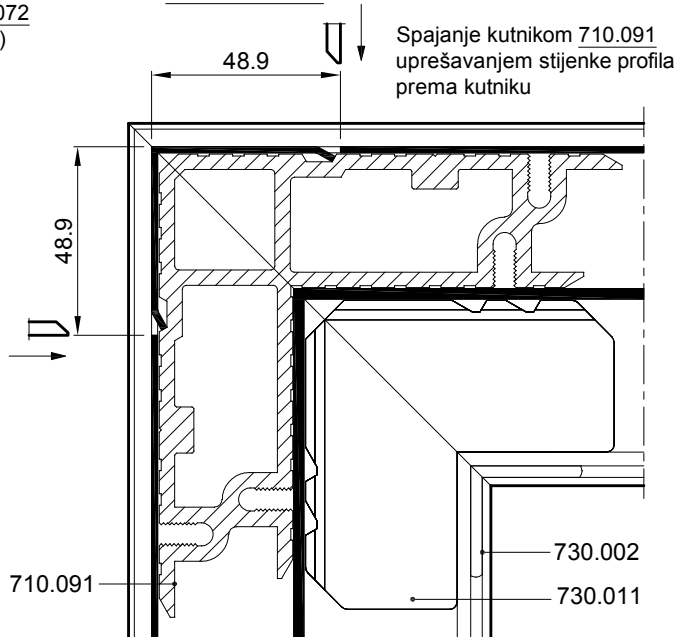
PRESJEK C-C



PRESJEK A-A

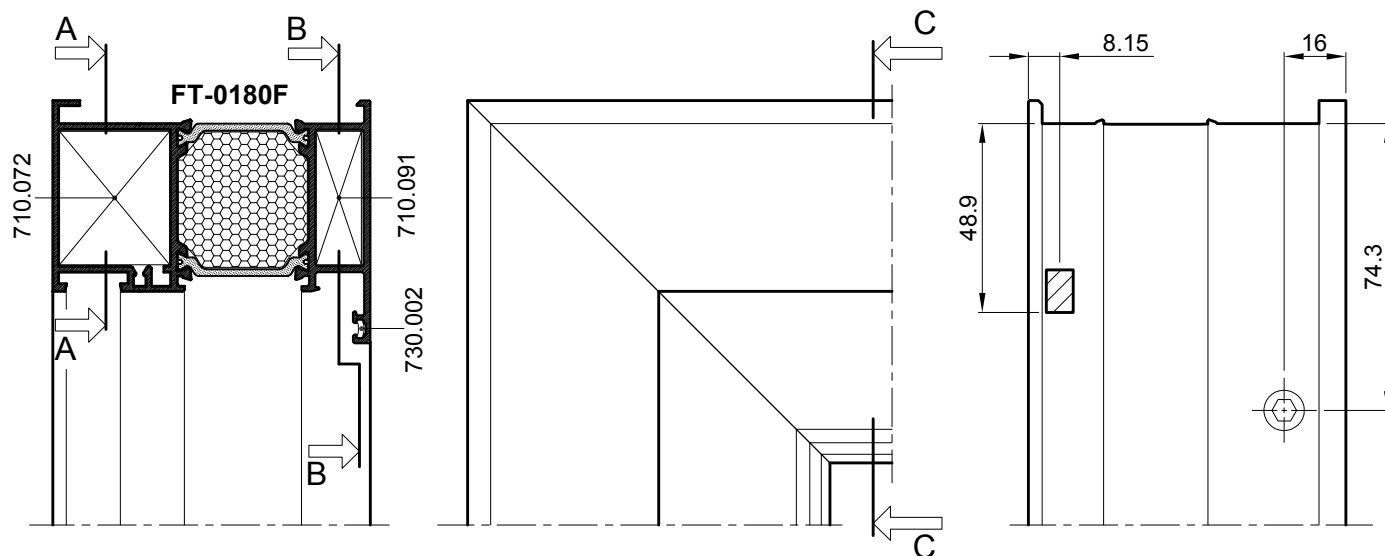


PRESJEK B-B

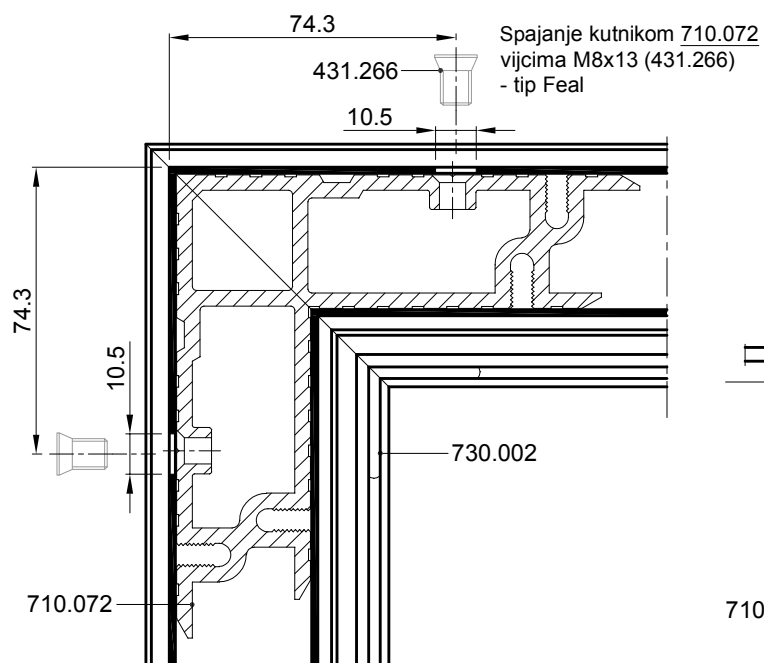


SPAJANJE PROFILA FT-0180F KUTNICIMA : 710.072 ; 710.091

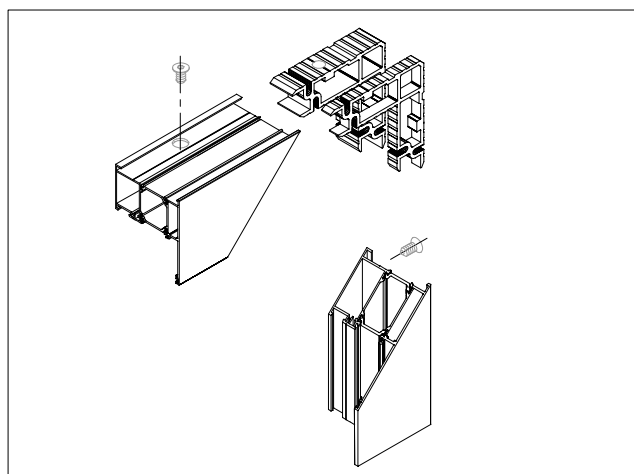
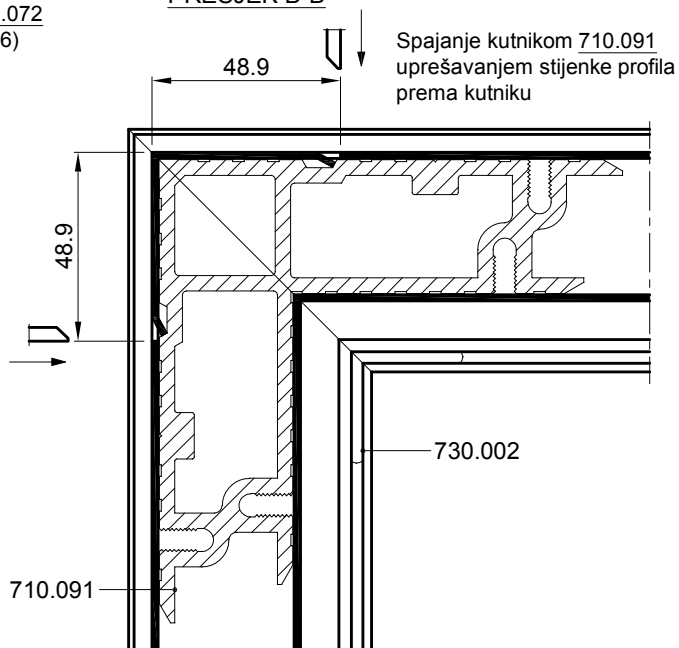
PRESJEK C-C



PRESJEK A-A

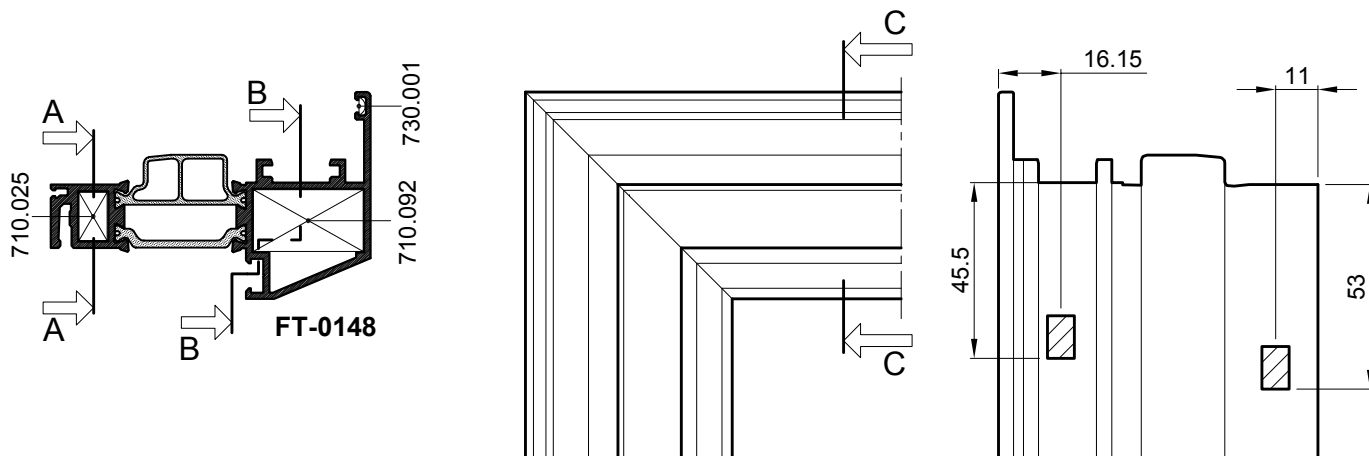


PRESJEK B-B

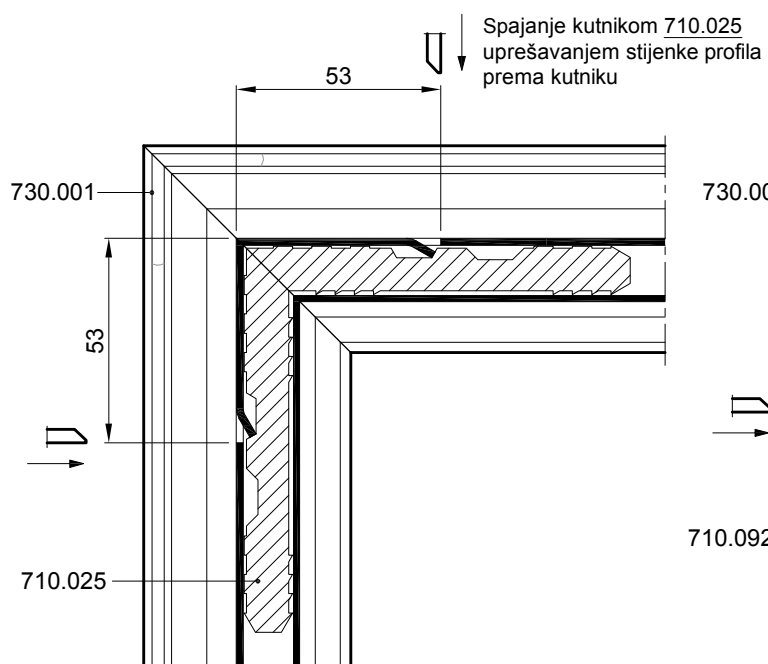


SPAJANJE PROFILA FT-0148 KUTNICIMA : 710.025 ; 710.092

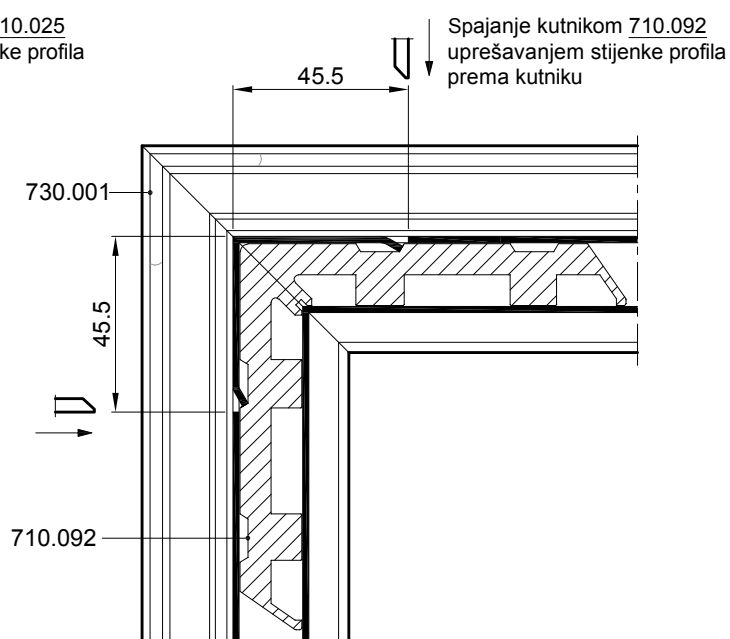
PRESJEK C-C



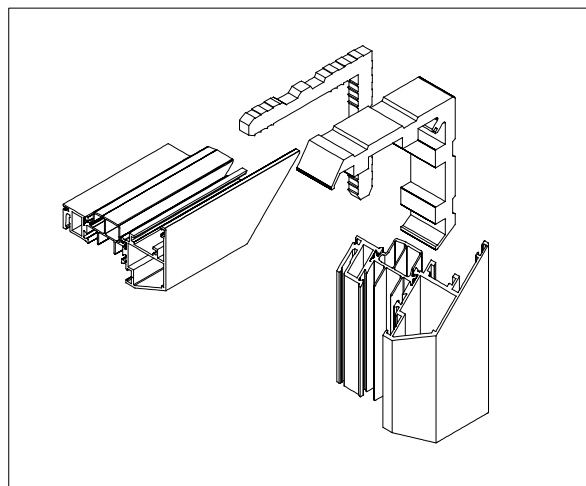
PRESJEK A-A



PRESJEK B-B

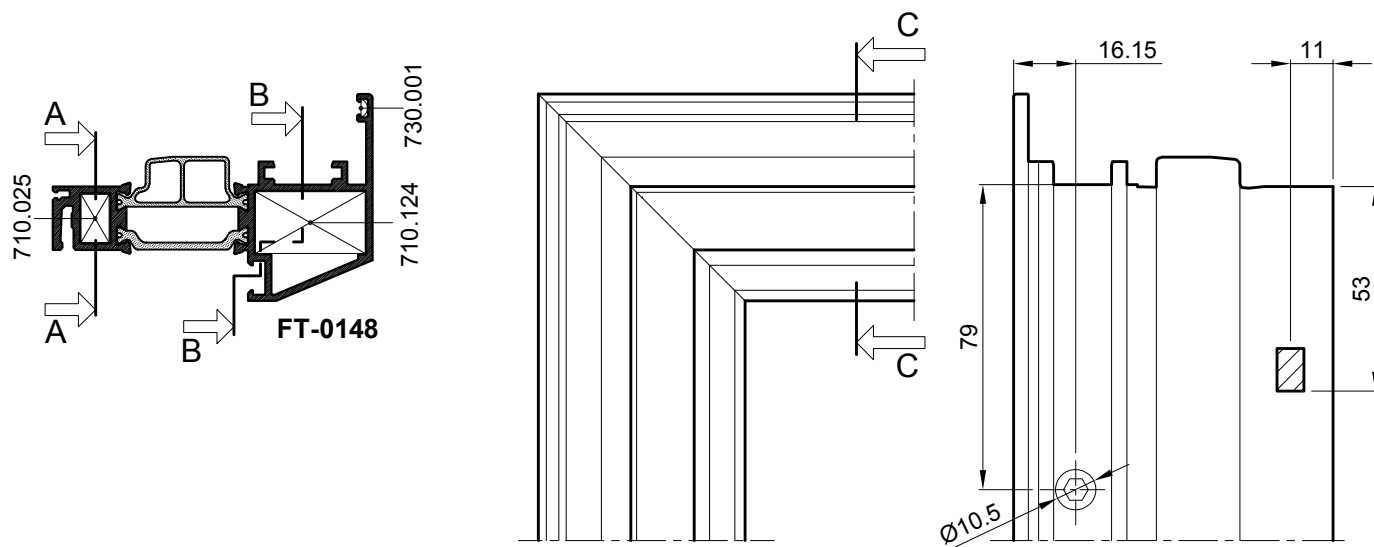


1. STROJNO UPREŠAVANJE
2. RUČNO UPREŠAVANJE-ŠKARAMA

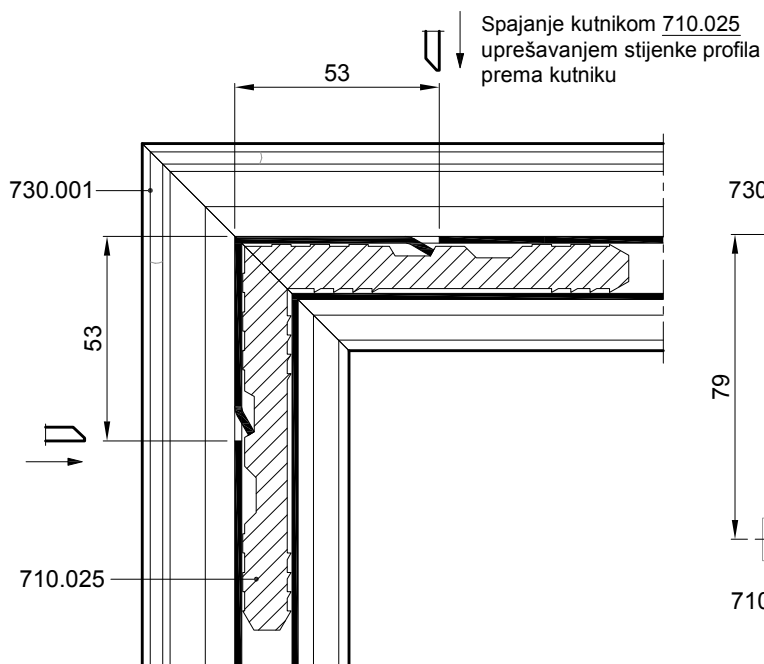


SPAJANJE PROFILA FT-0148 KUTNICIMA : 710.025 ; 710.124

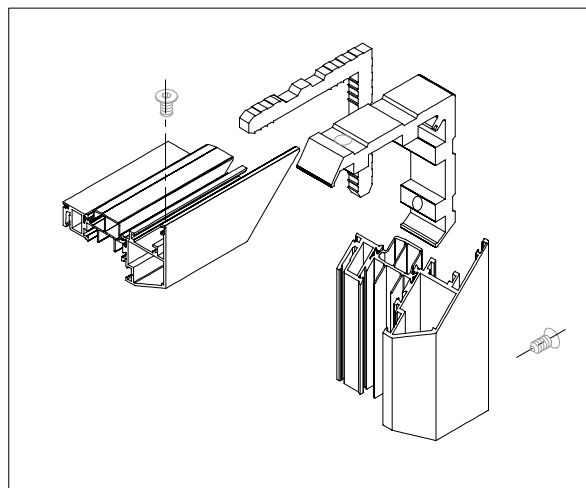
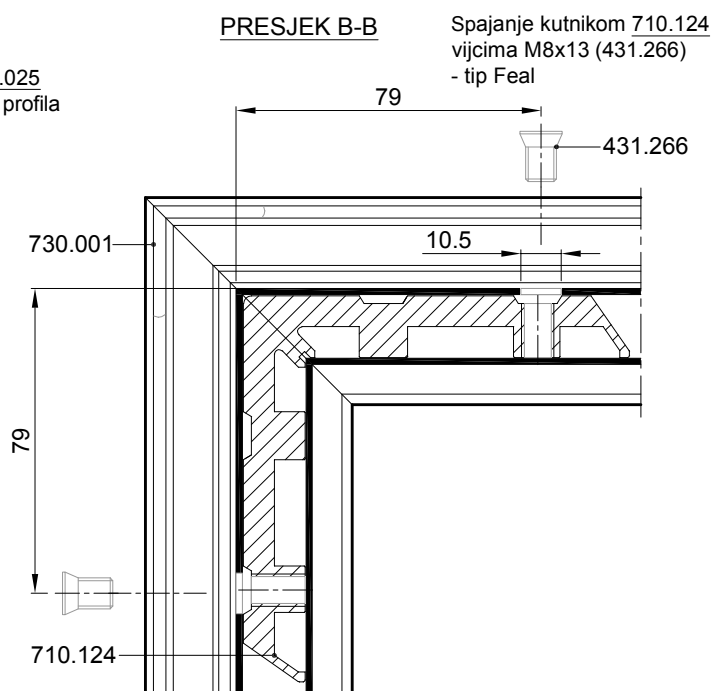
PRESJEK C-C



PRESJEK A-A

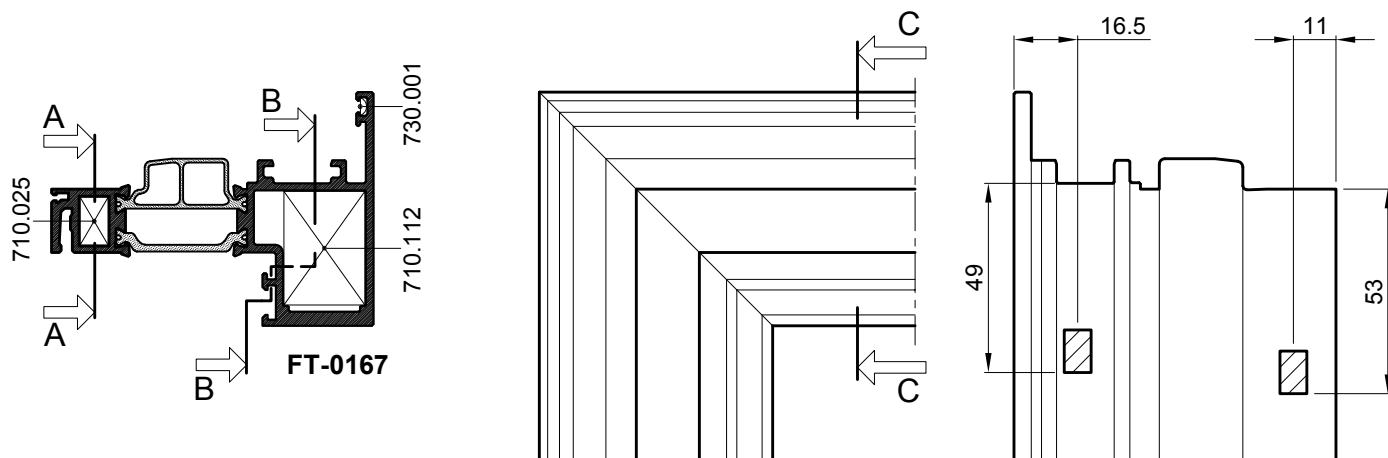


PRESJEK B-B

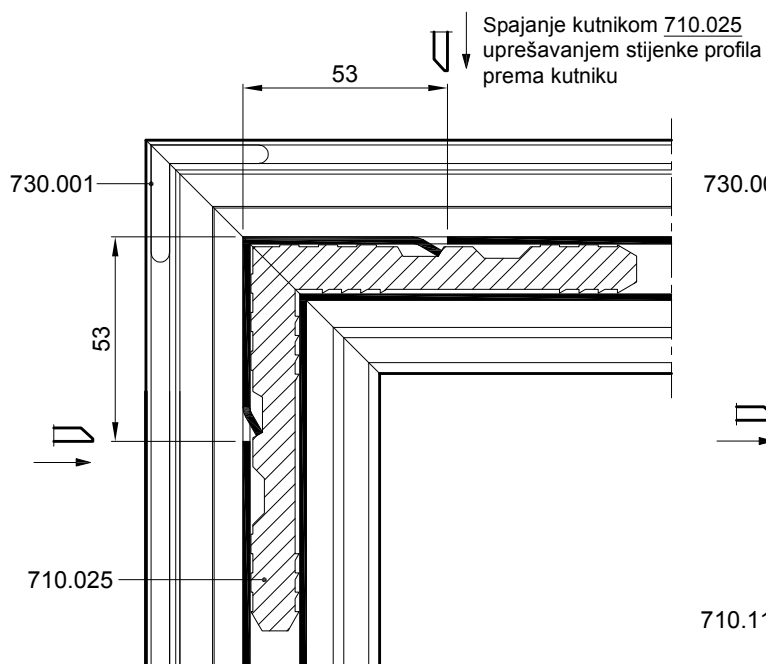


SPAJANJE PROFILA FT-0167 KUTNICIMA : 710.025 ; 710.112

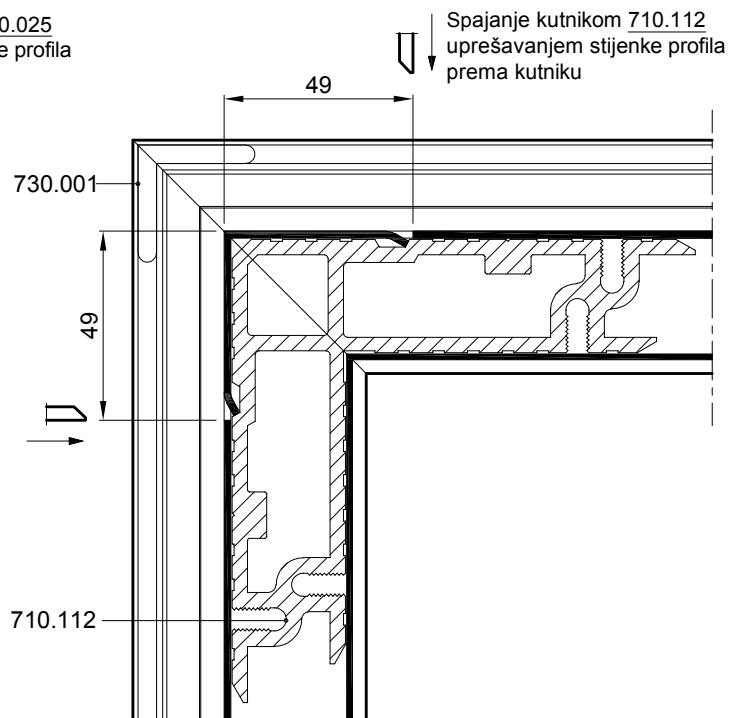
PRESJEK C-C



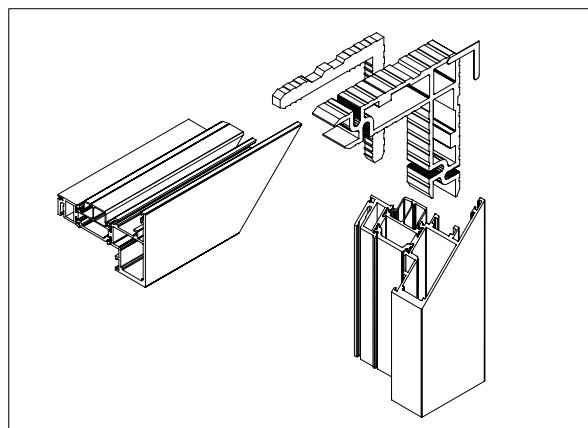
PRESJEK A-A



PRESJEK B-B

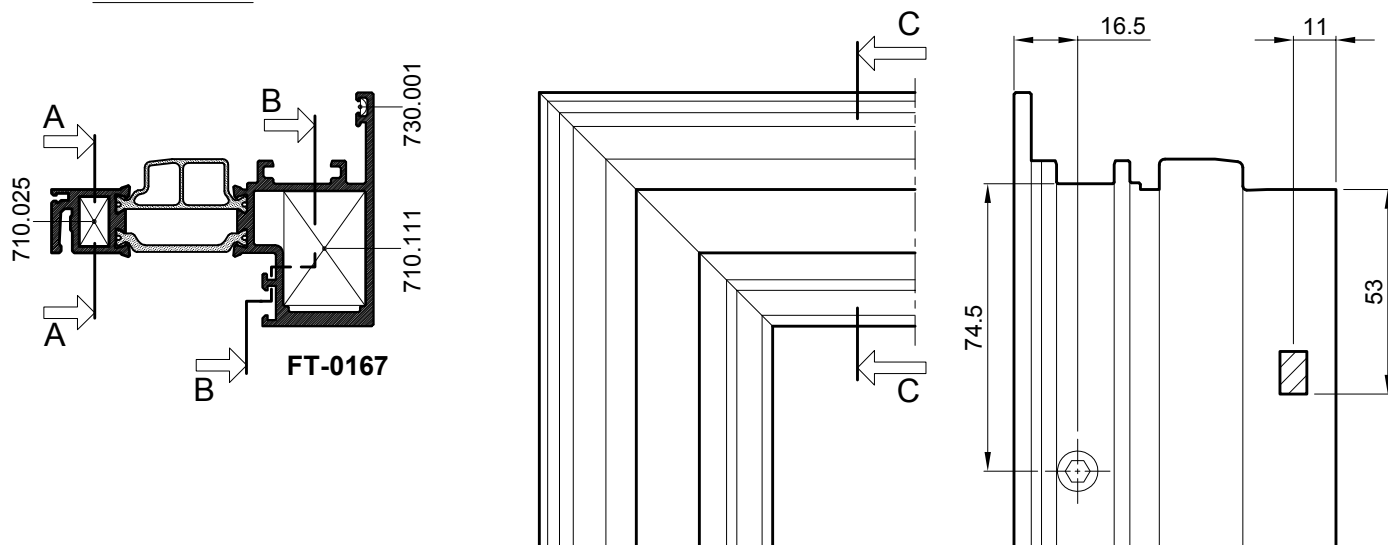


1. STROJNO UPREŠAVANJE
2. RUČNO UPREŠAVANJE-ŠKARAMA

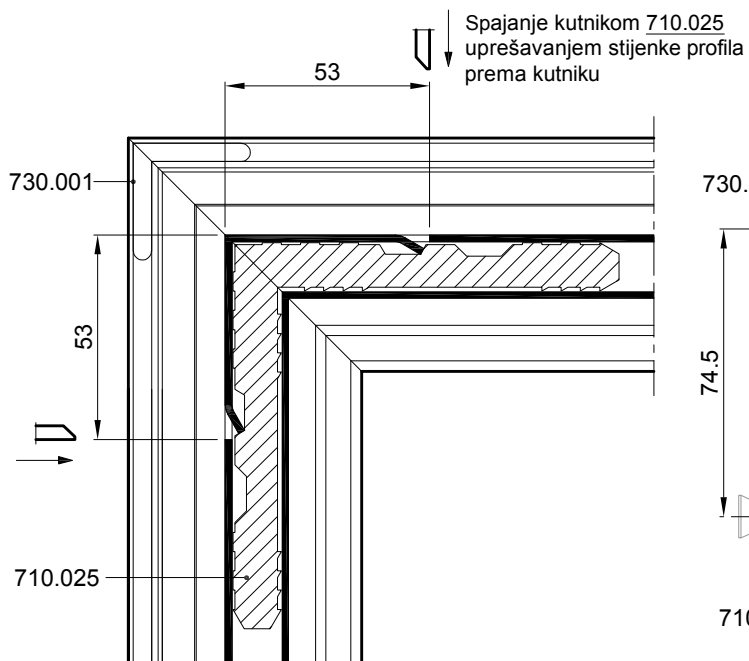


SPAJANJE PROFILA FT-0167 KUTNICIMA : 710.025 ; 710.111

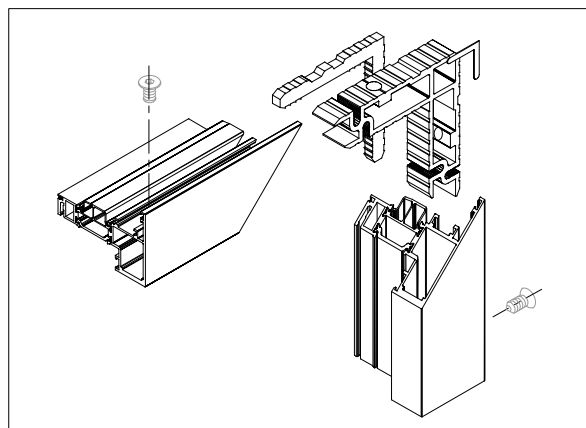
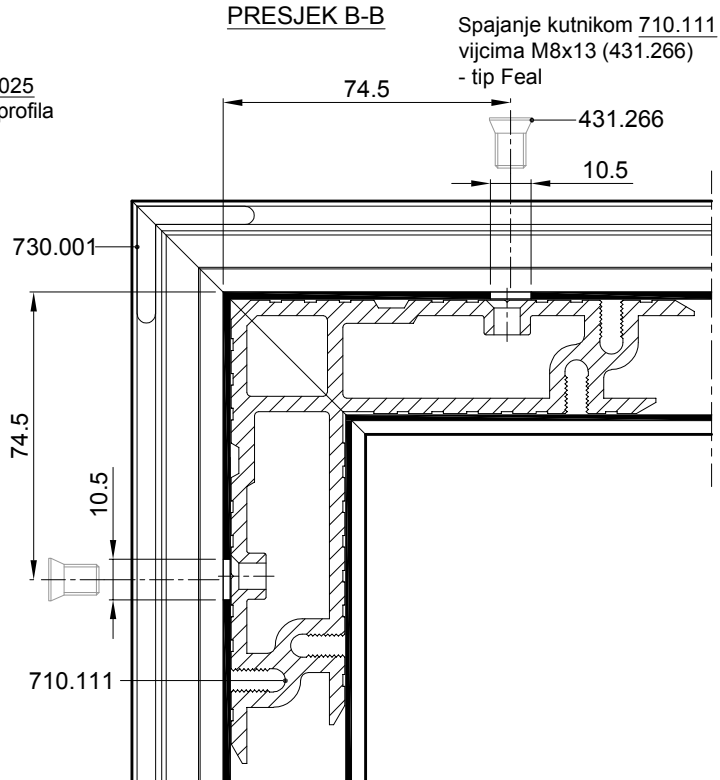
PRESJEK C-C



PRESJEK A-A

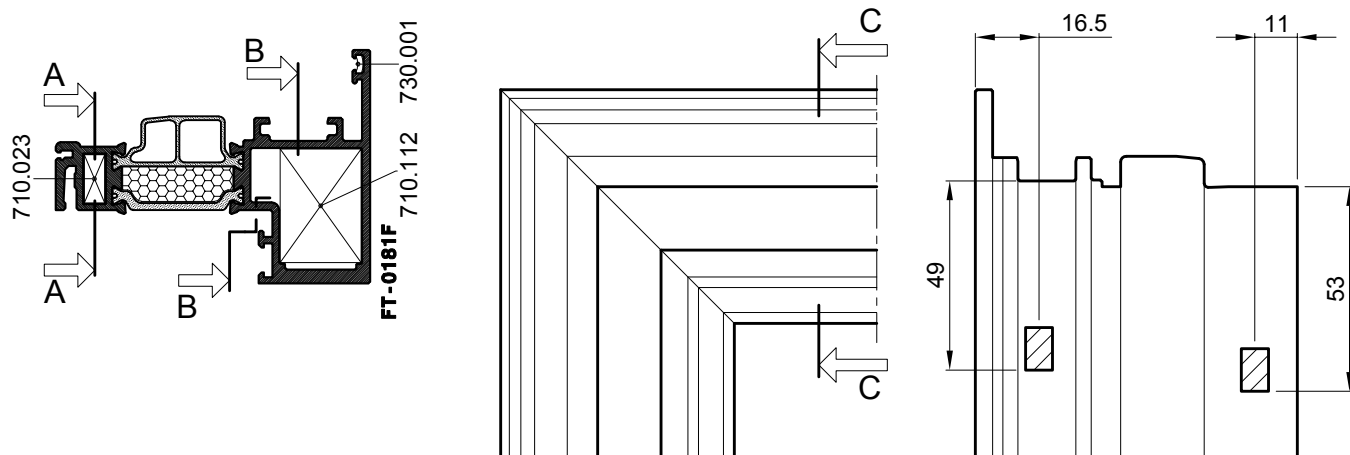


PRESJEK B-B

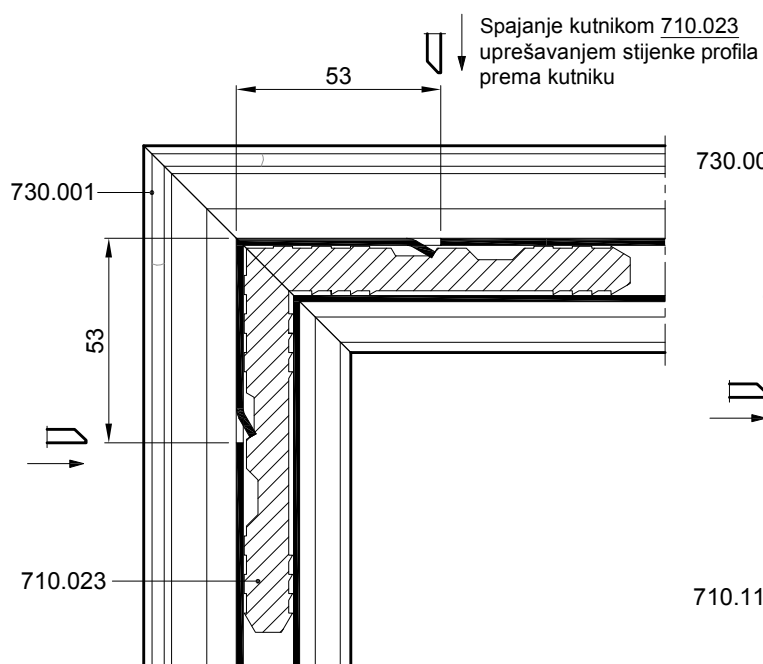


SPAJANJE PROFILA FT-0181F KUTNICIMA : 710.023 ; 710.112

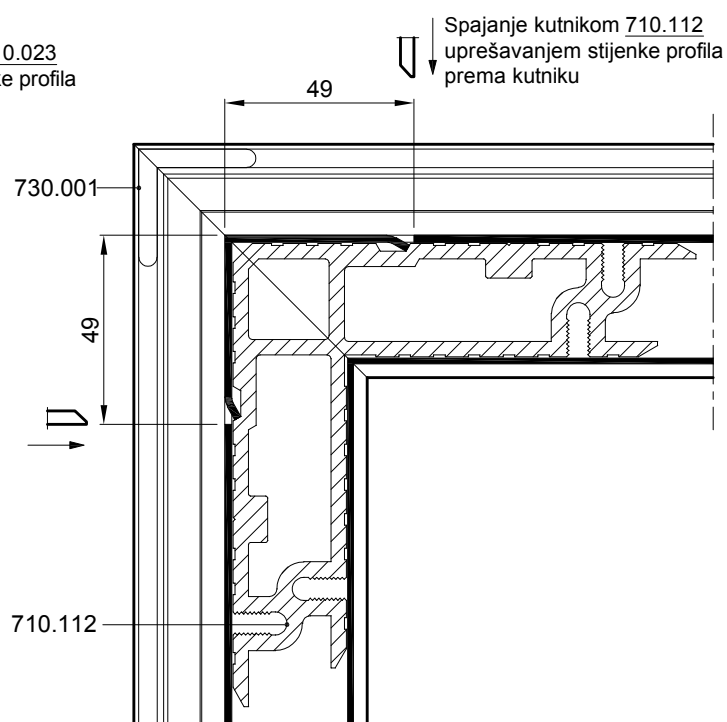
PRESJEK C-C



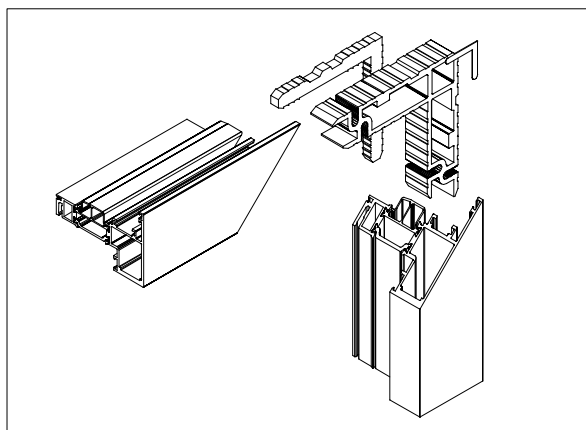
PRESJEK A-A



PRESJEK B-B

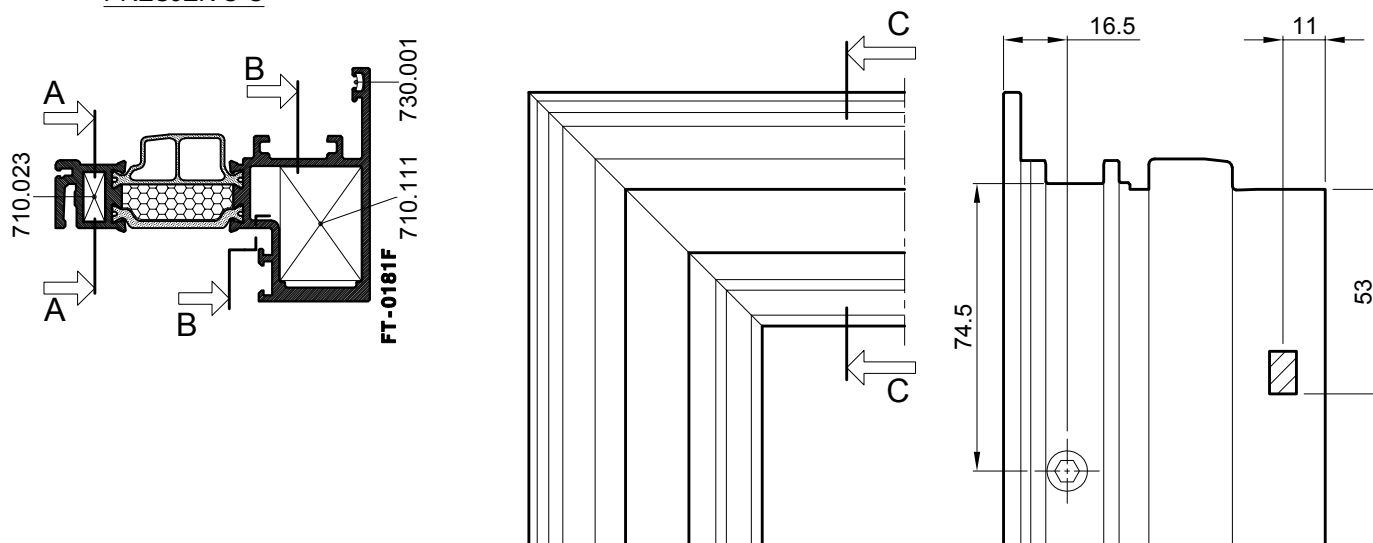


1. STROJNO UPREŠAVANJE
2. RUČNO UPREŠAVANJE-ŠKARAMA

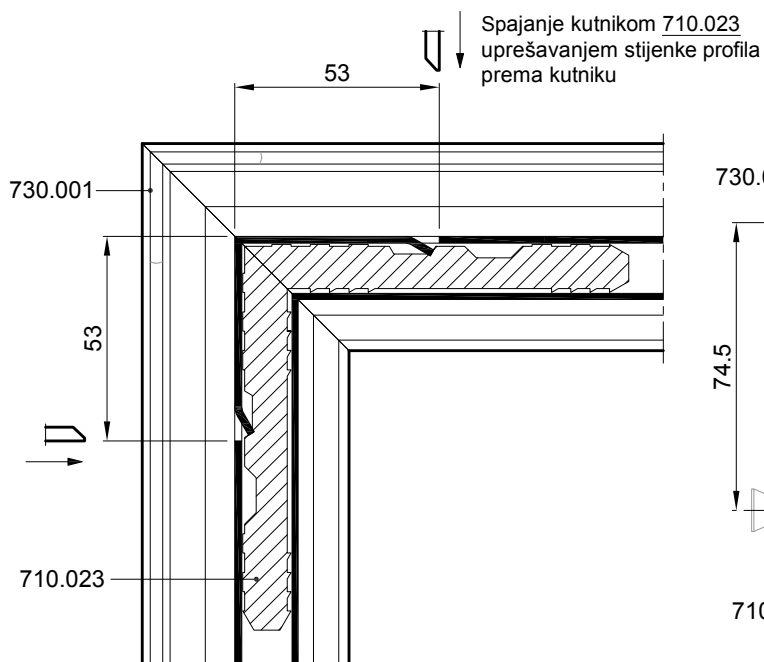


SPAJANJE PROFILA FT-0181F KUTNICIMA : 710.023 ; 710.111

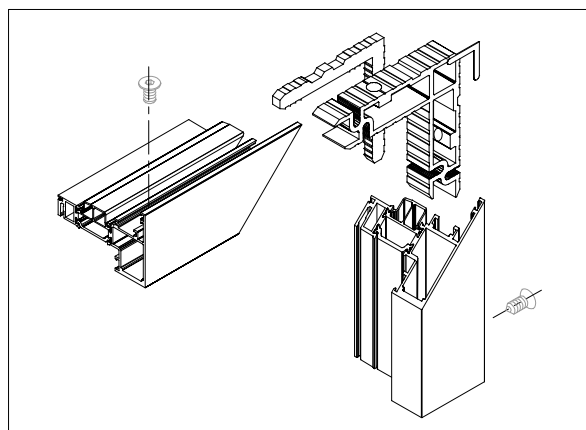
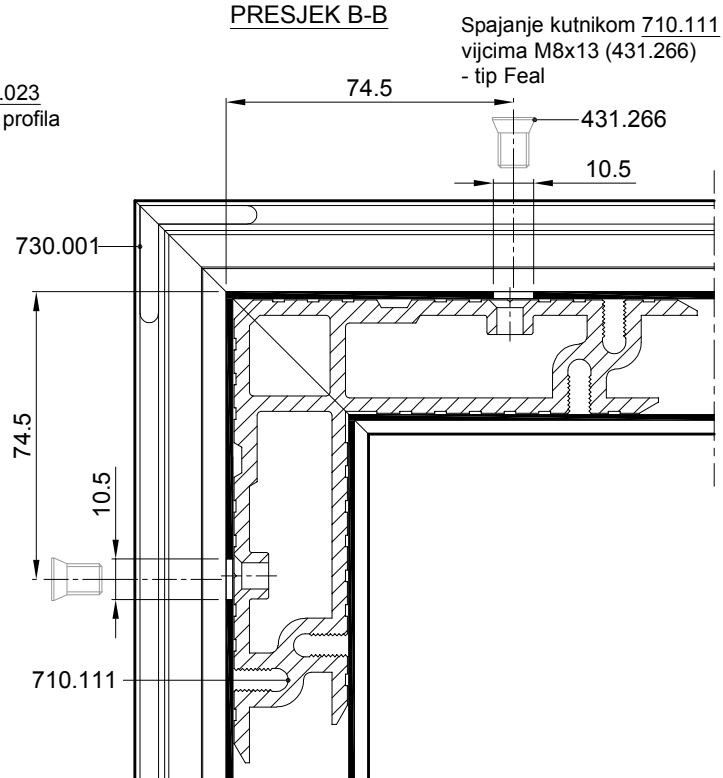
PRESJEK C-C



PRESJEK A-A

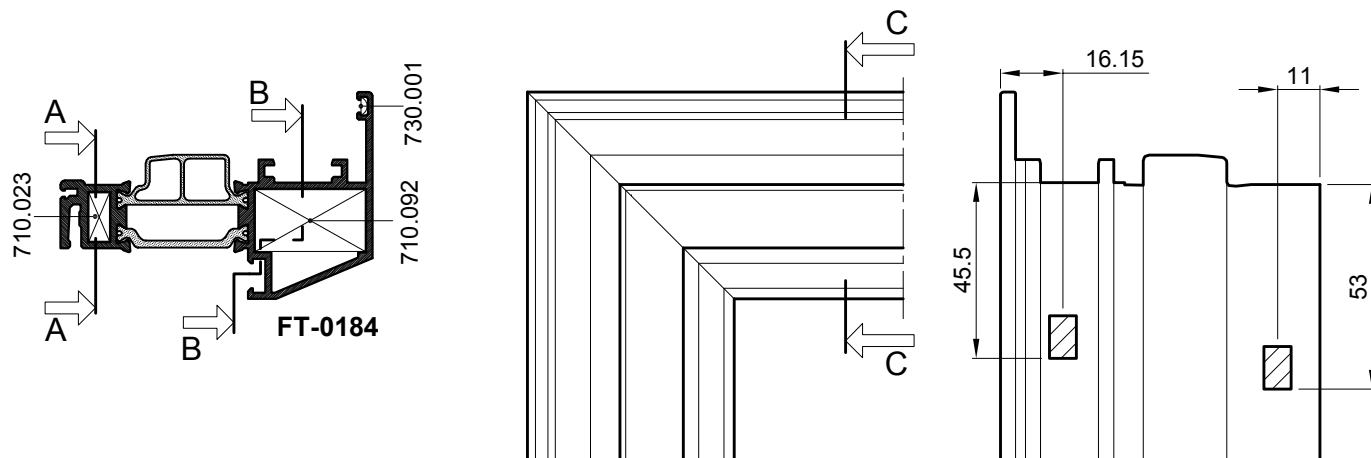


PRESJEK B-B

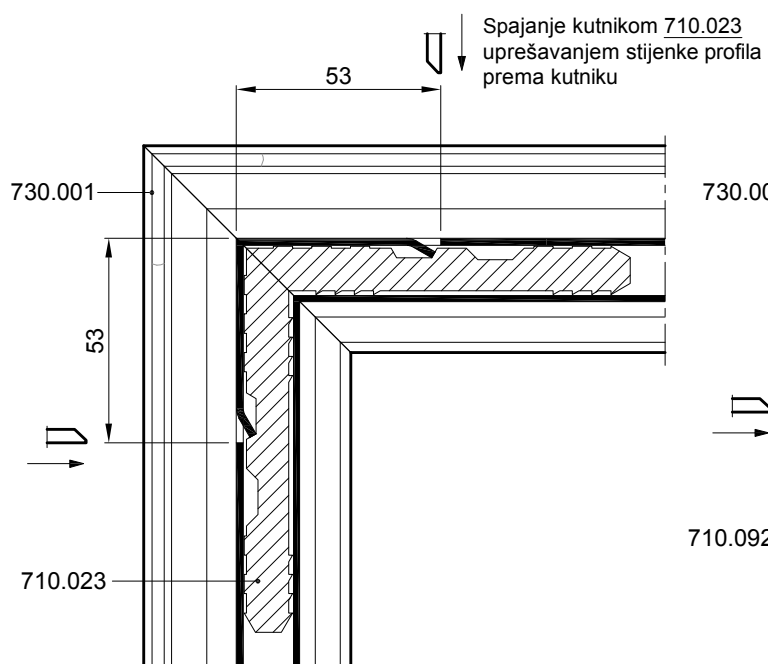


SPAJANJE PROFILA FT-0184 KUTNICIMA : 710.023 ; 710.092

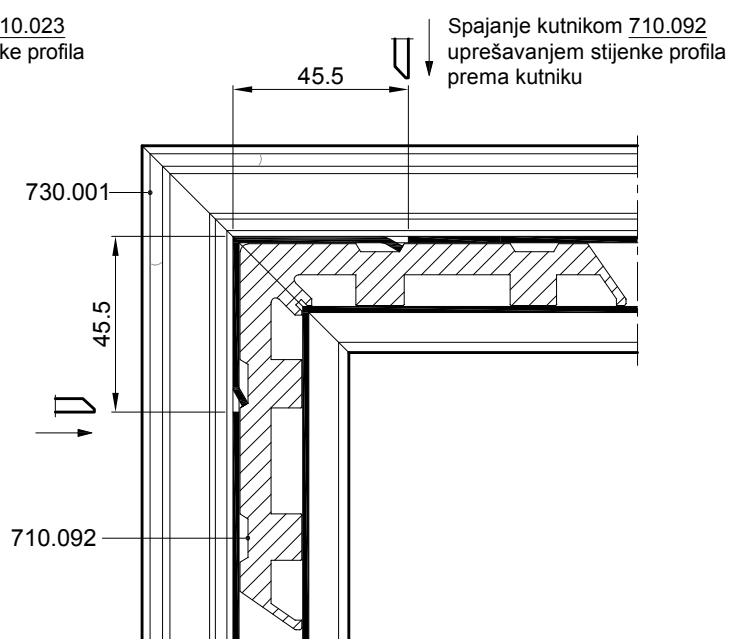
PRESJEK C-C



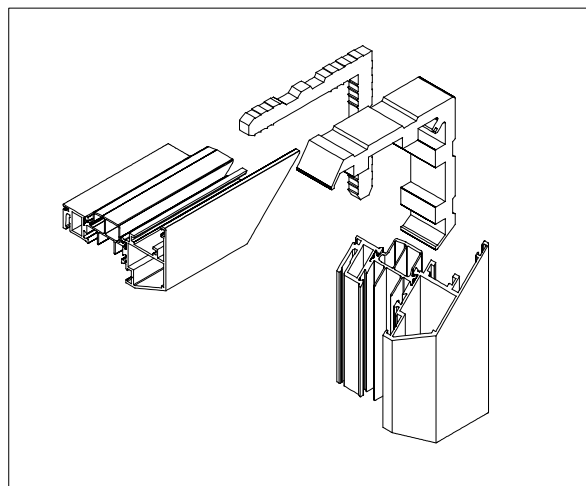
PRESJEK A-A



PRESJEK B-B

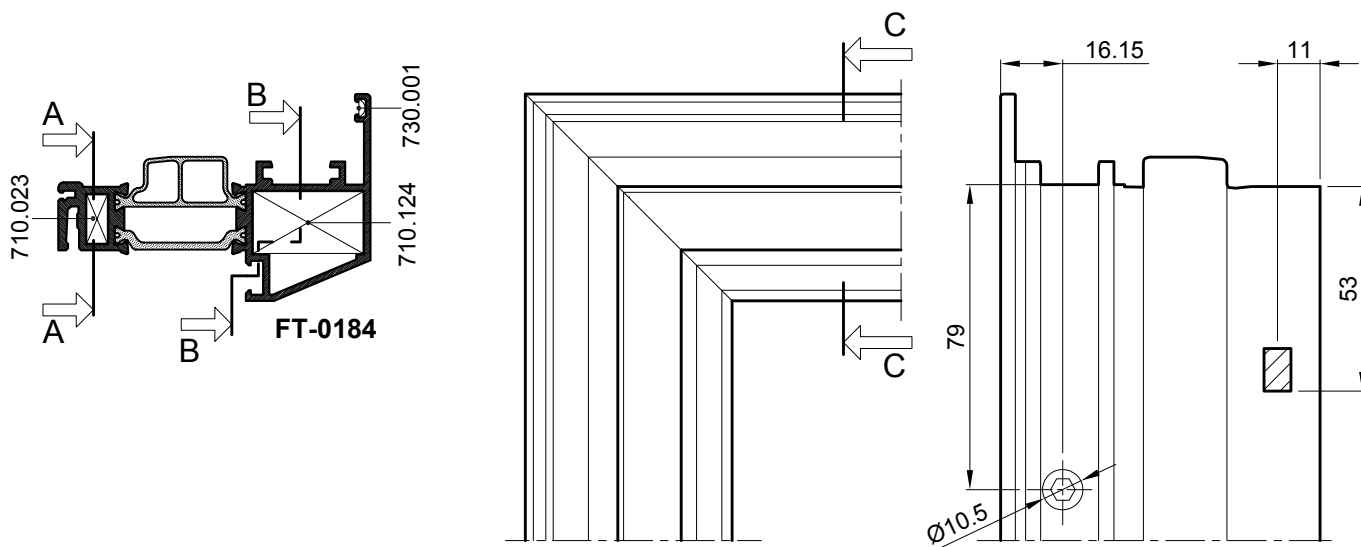


1. STROJNO UPREŠAVANJE
2. RUČNO UPREŠAVANJE-ŠKARAMA

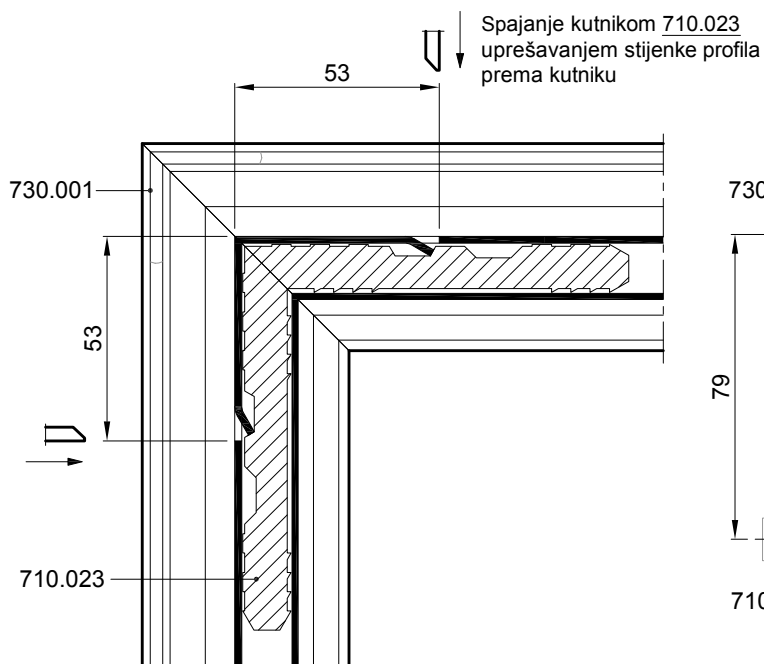


SPAJANJE PROFILA FT-0184 KUTNICIMA : 710.023 ; 710.124

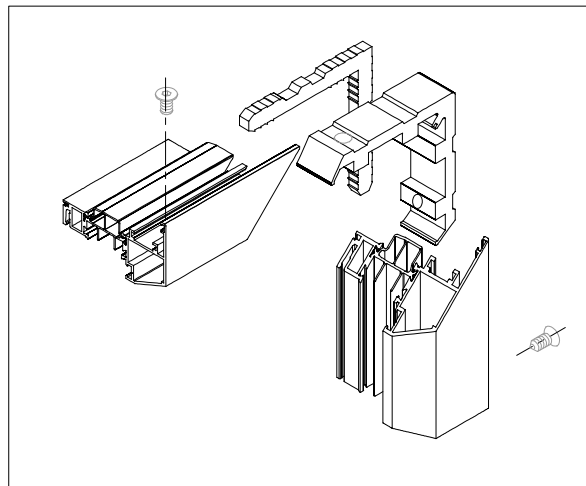
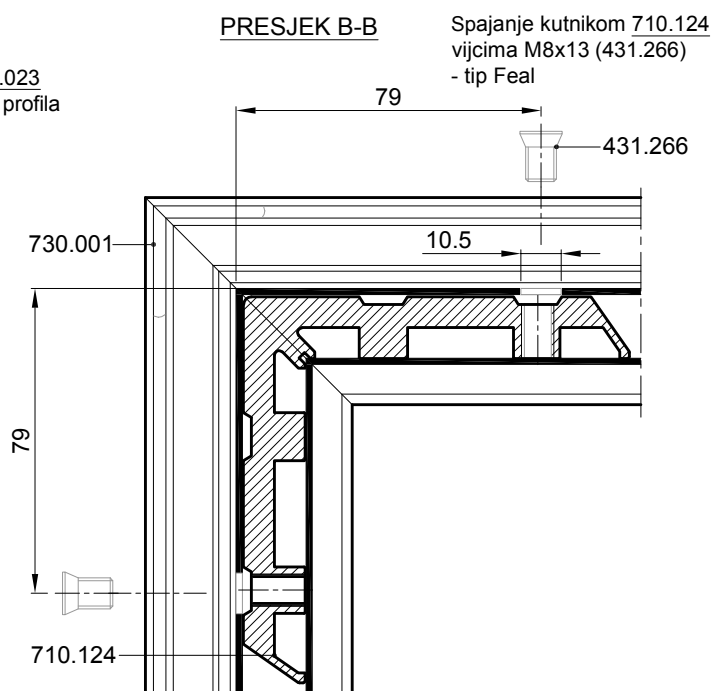
PRESJEK C-C



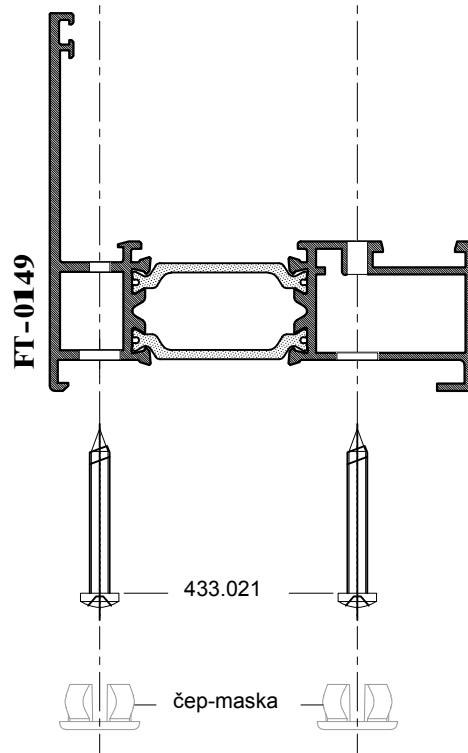
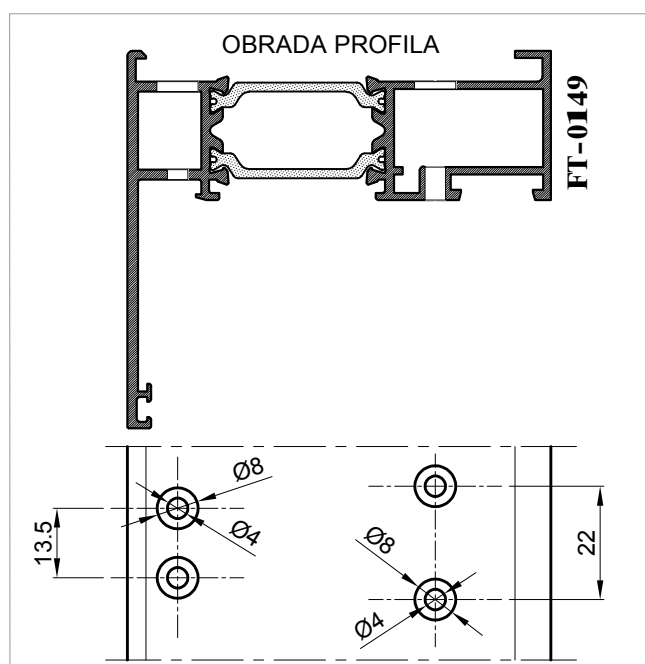
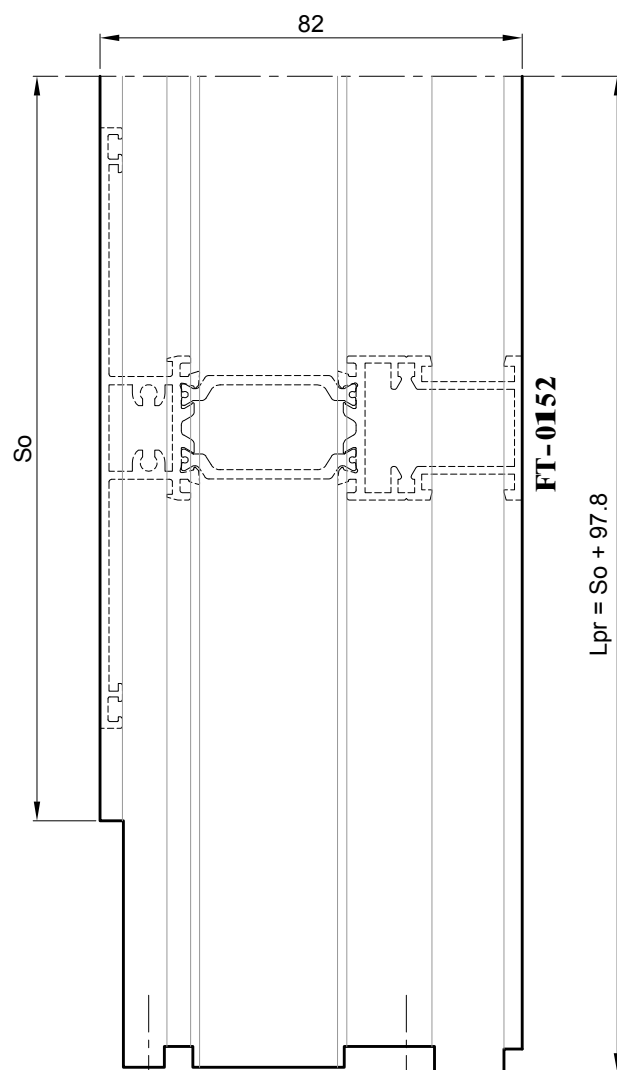
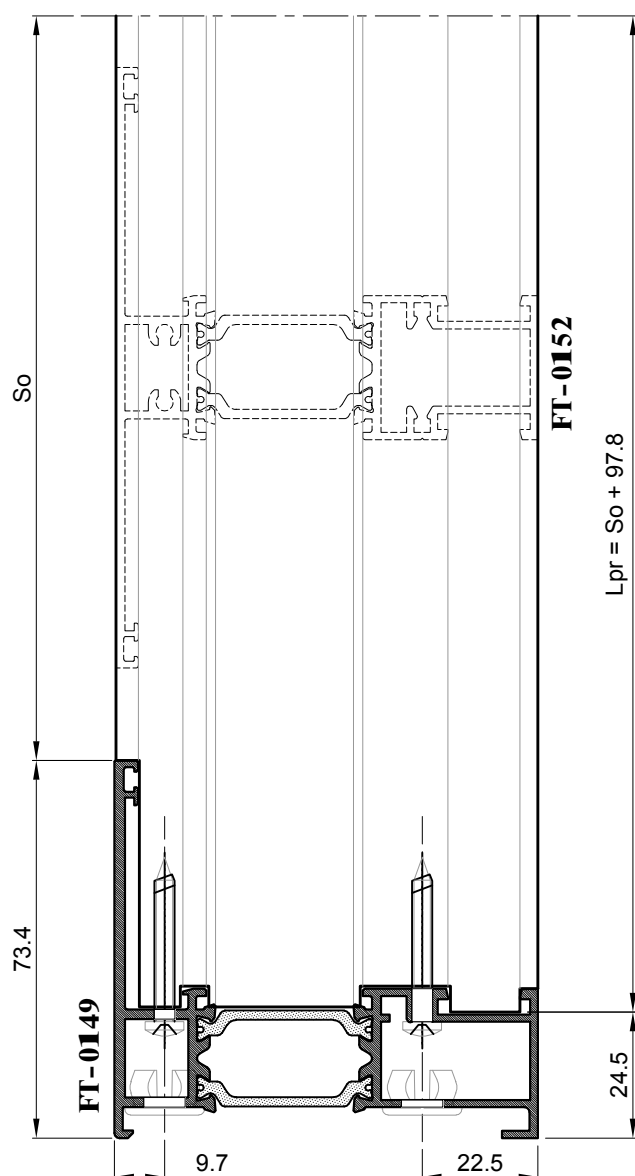
PRESJEK A-A



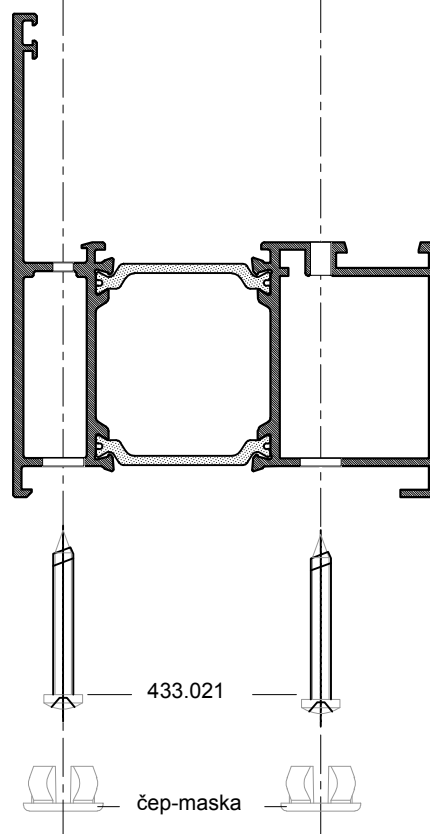
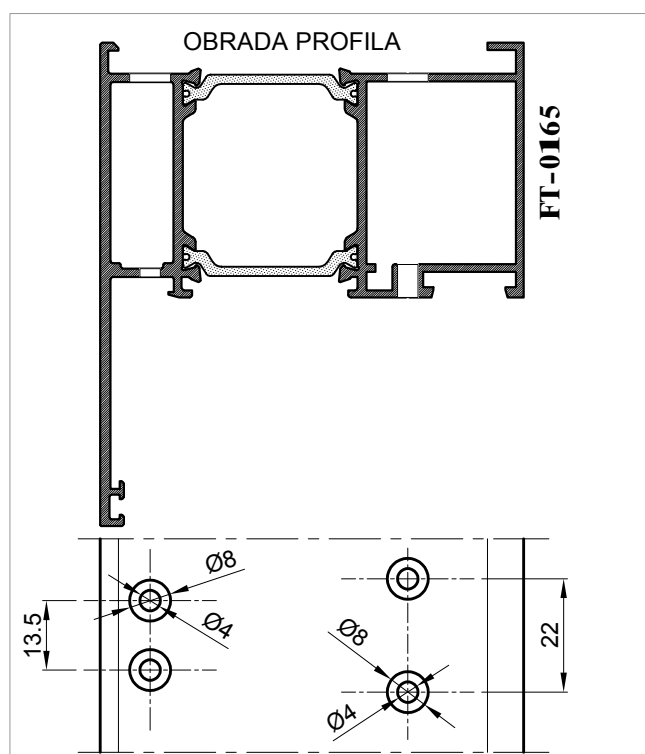
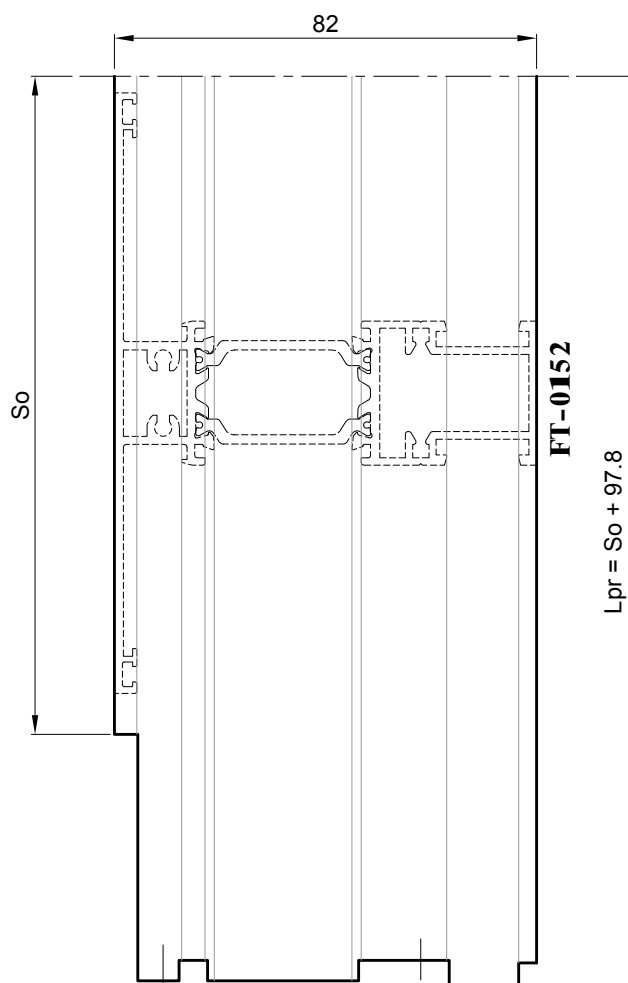
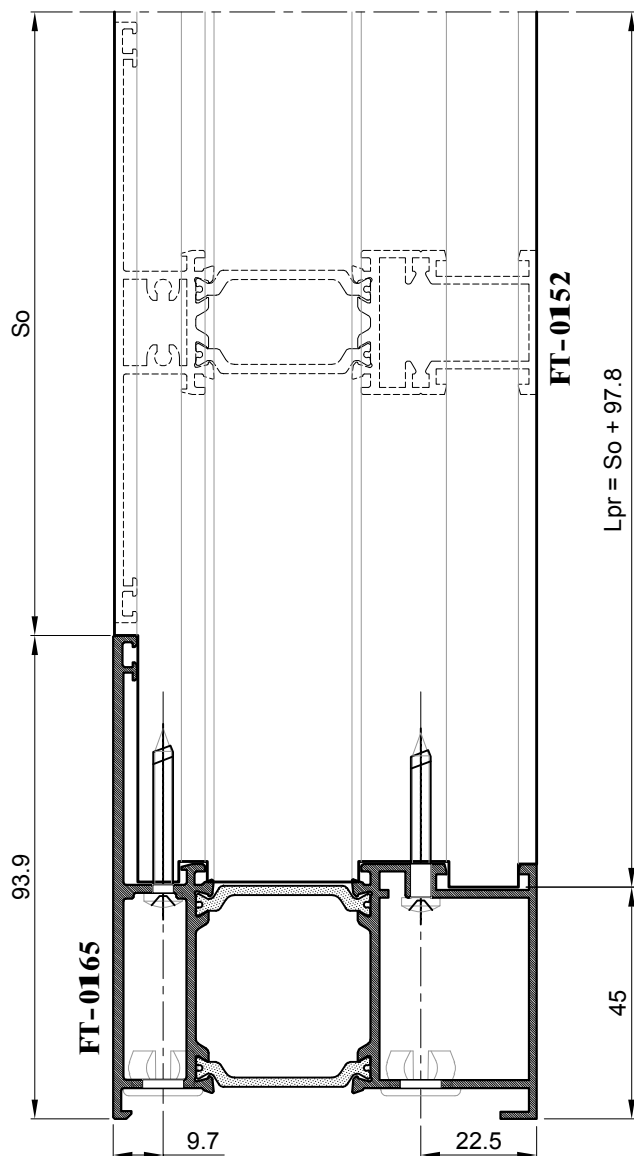
PRESJEK B-B



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



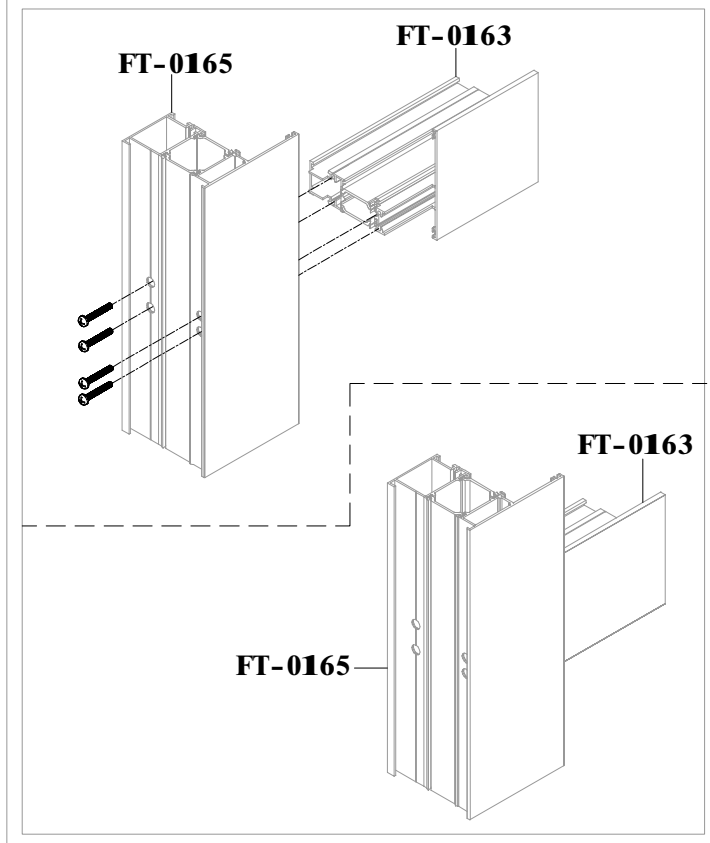
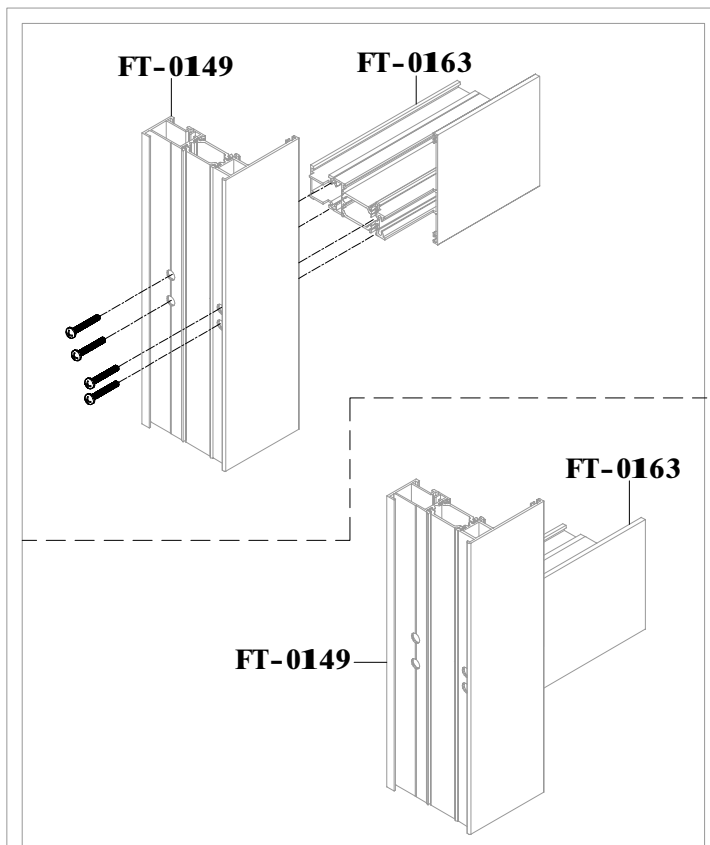
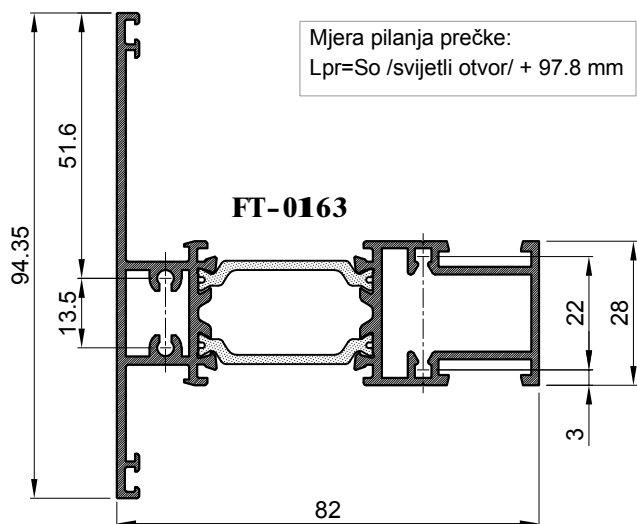
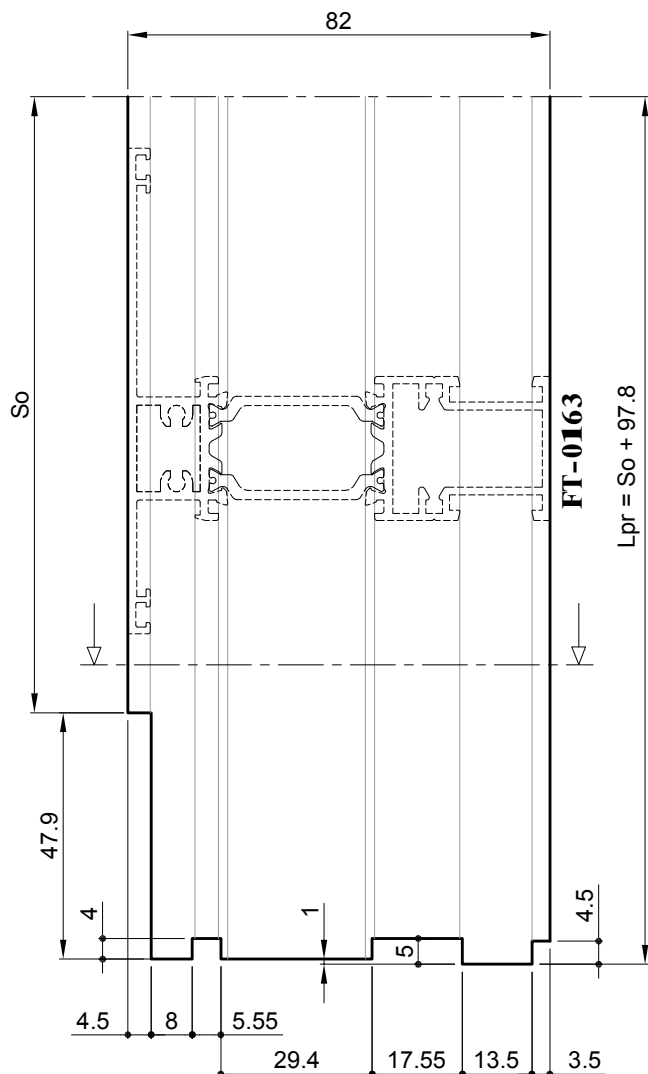
SPAJANJE PROFILA PREČKE FT-0152 SA PROFILOM RAMA FT-0165 - POMOĆU VIJAKA



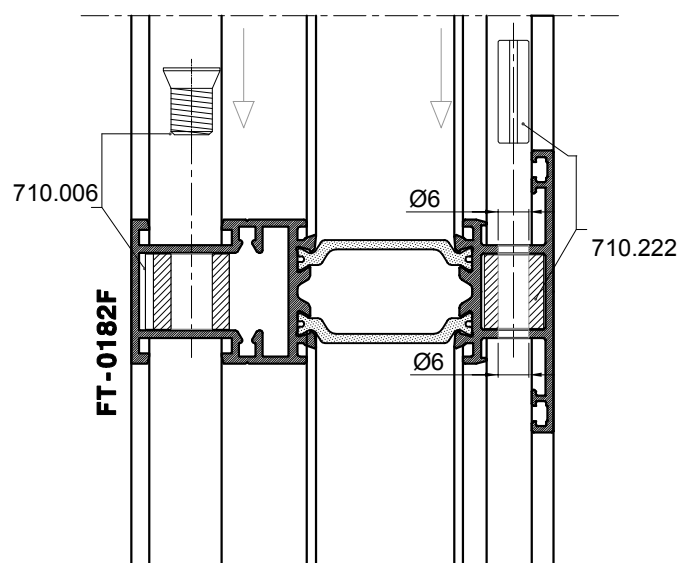
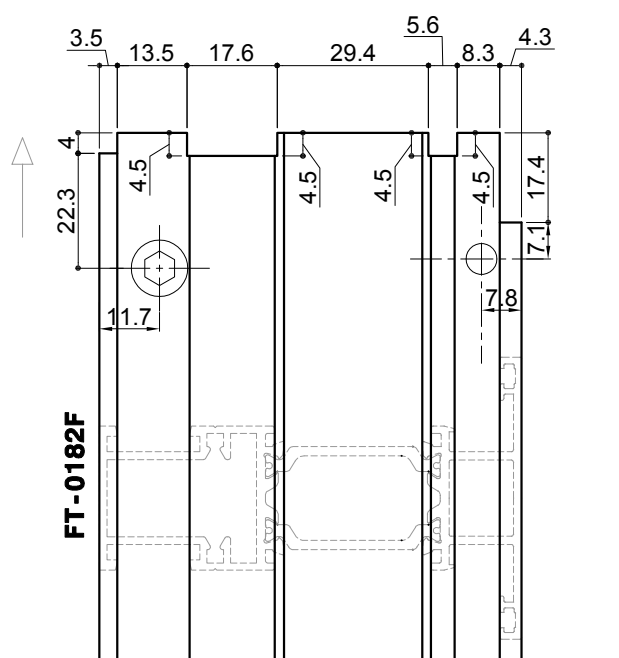
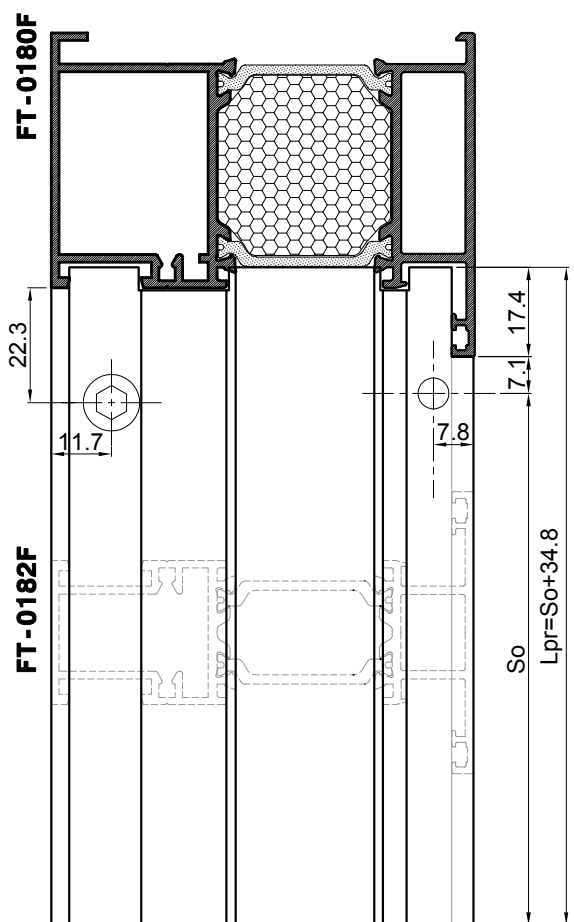
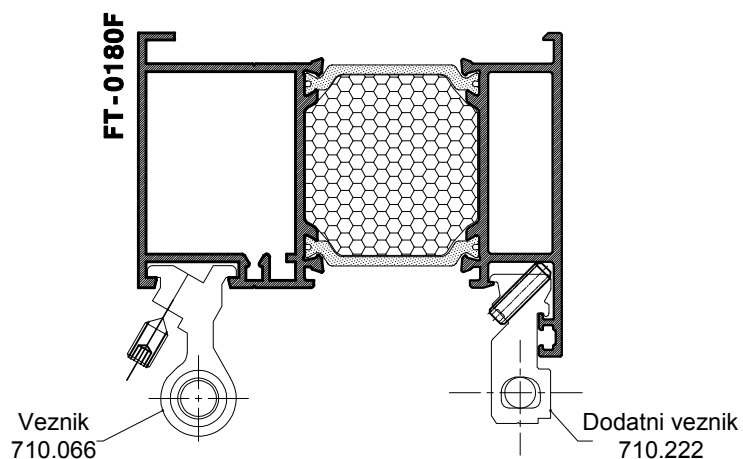
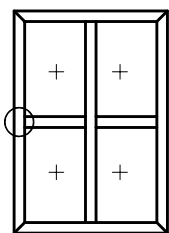
SPAJANJE PROFILA PREČKE FT-0163 SA PROFILOM RAMA : FT-0149; FT-0165 - POMOĆU VIJAKA

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

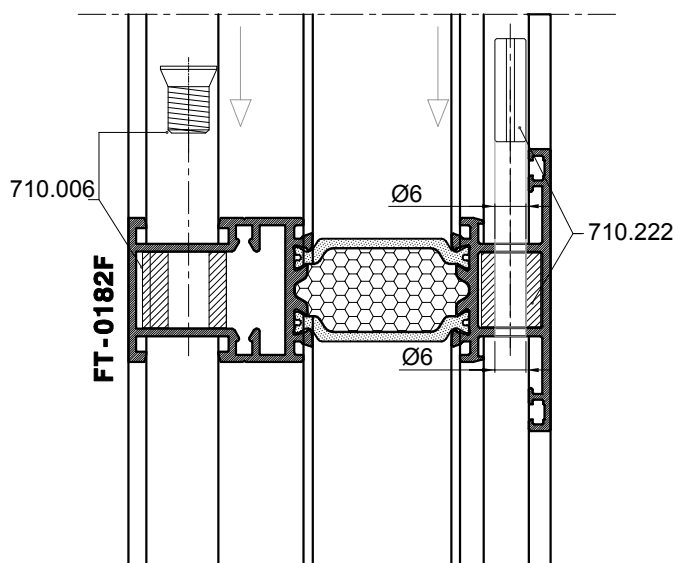
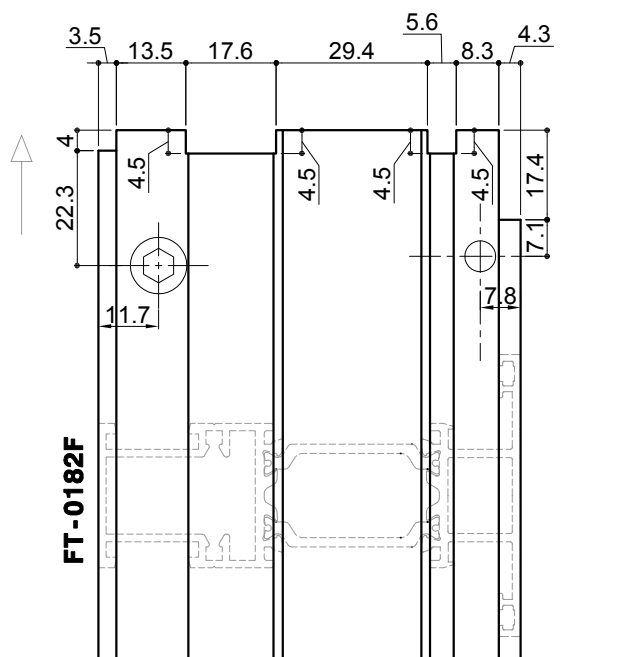
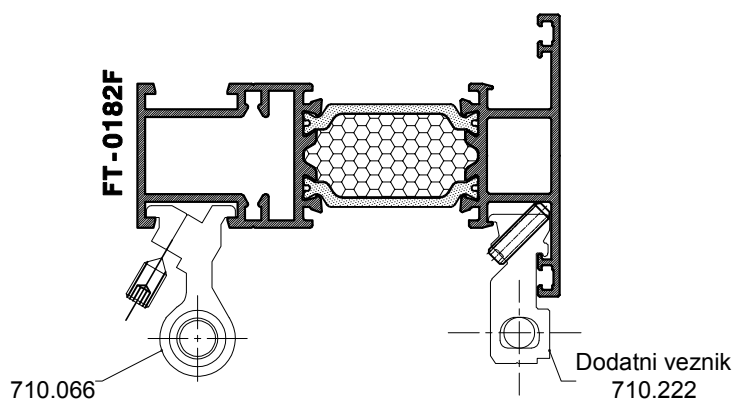
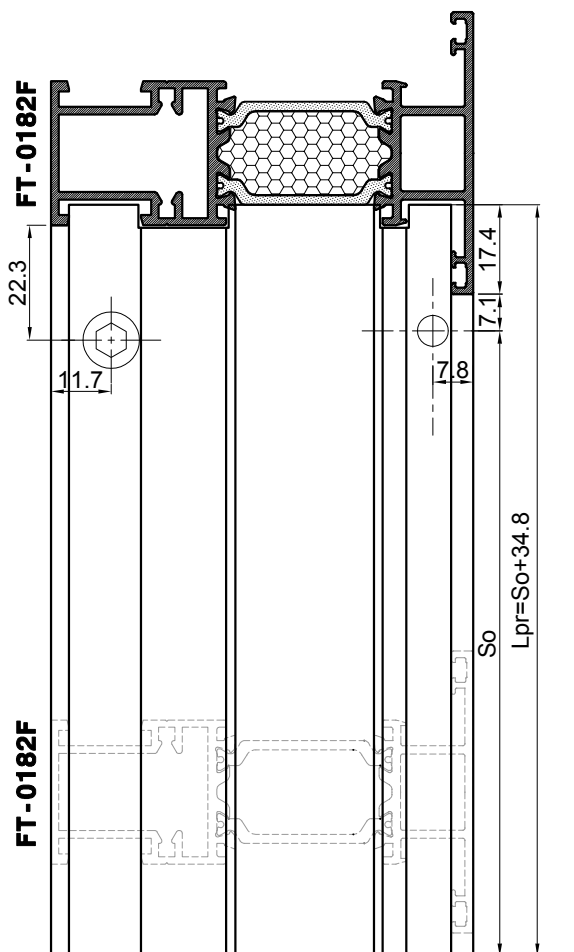
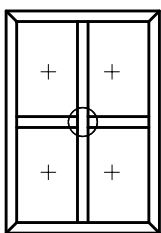
OBRADA PROFILA PREČKE FT-0163
PREMA PROFILU RAMA : FT-0149 ;
FT-0165

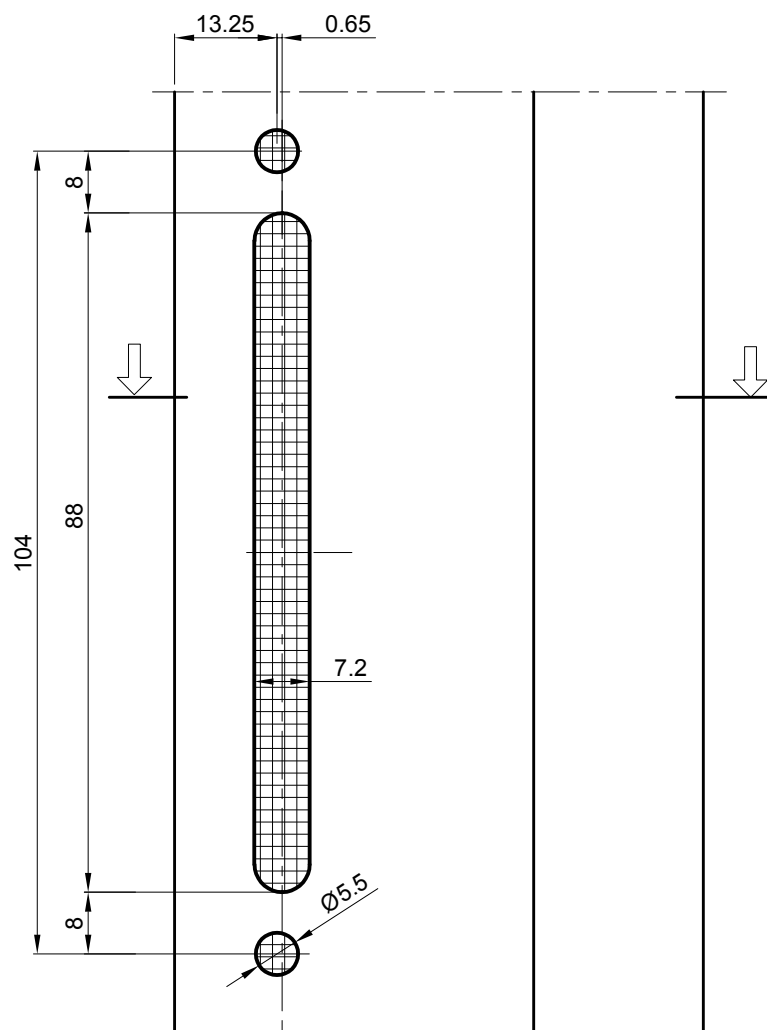


SPAJANJE PROFILA PREČKE FT-0182F SA PROFILOM RAMA FT-0180F - POMOĆU VEZNIKA

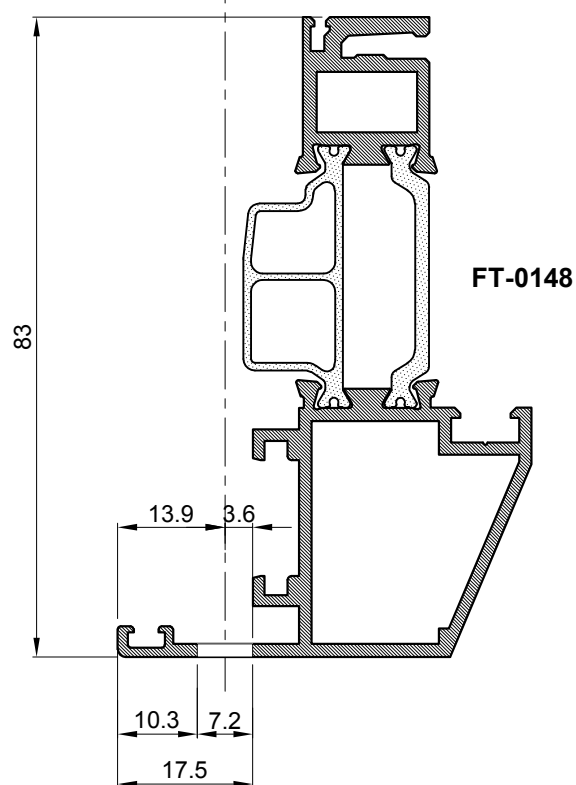


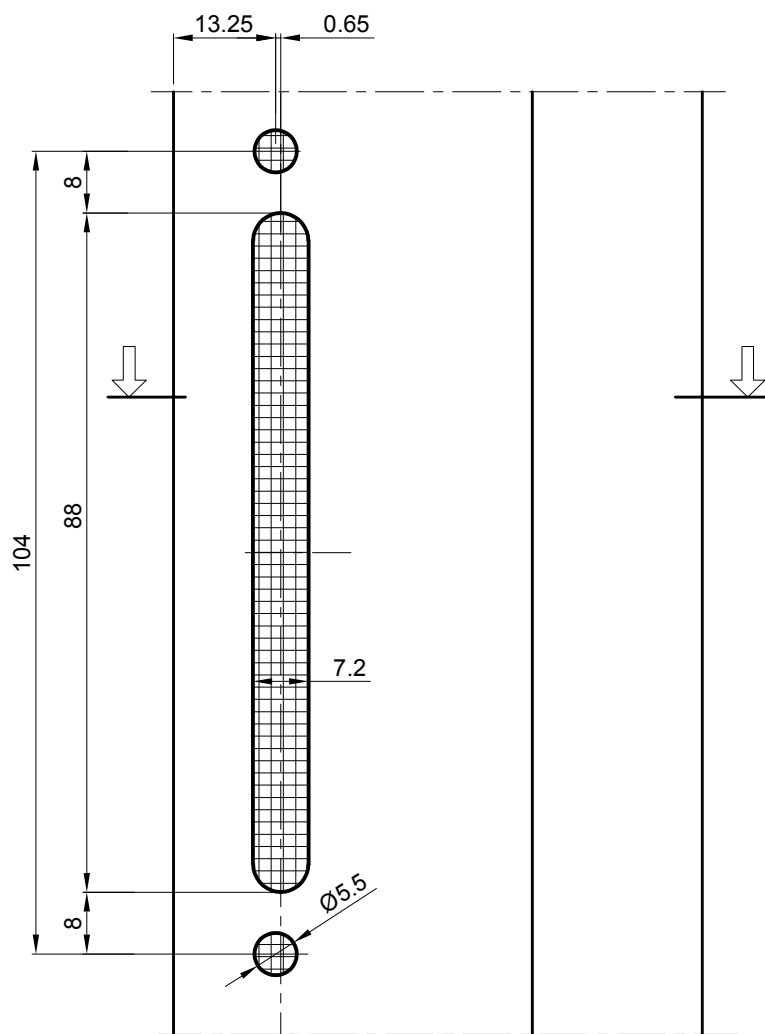
SPAJANJE PROFILA PREČKE FT-0182F - POMOĆU VEZNIKA



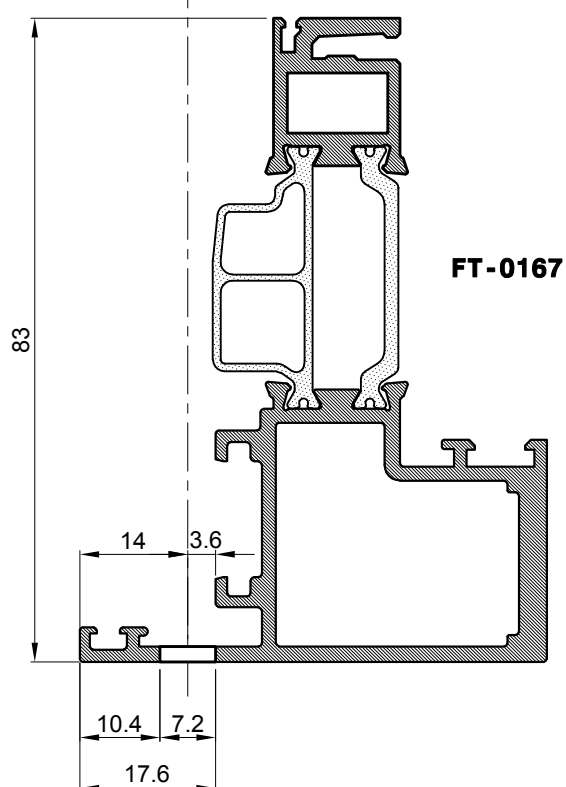


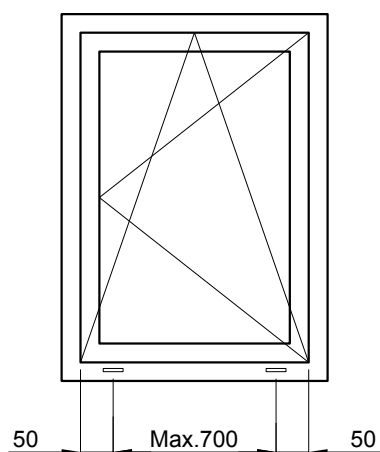
OBRADA PROFILA KRILA
FT-0148 I FT-0184
ZA UGRADNJU RUČKE





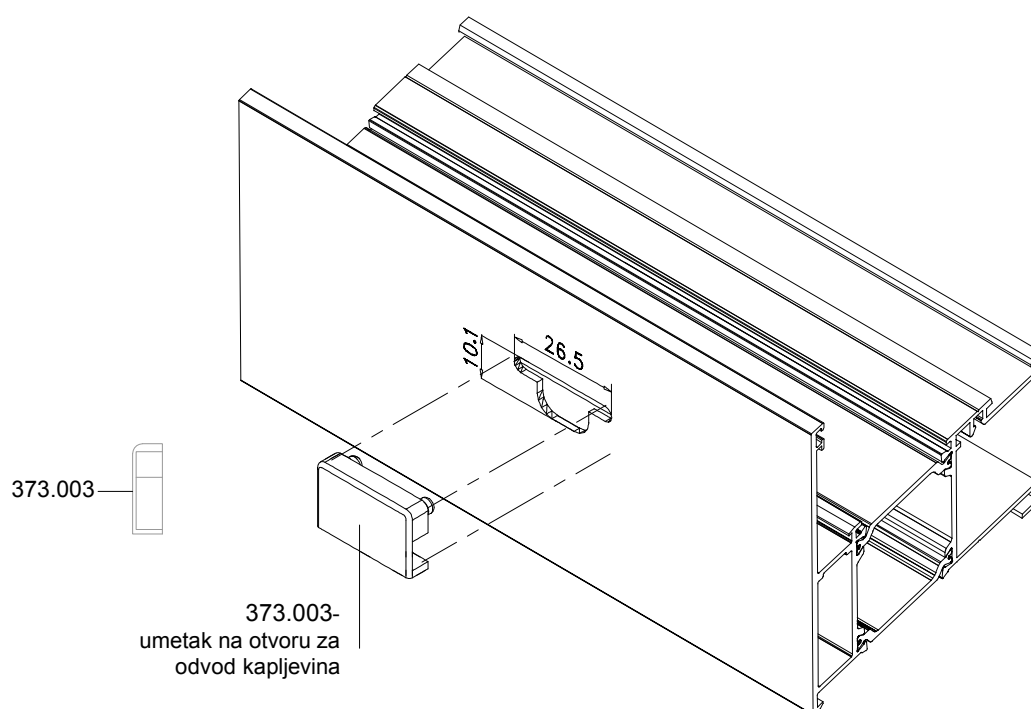
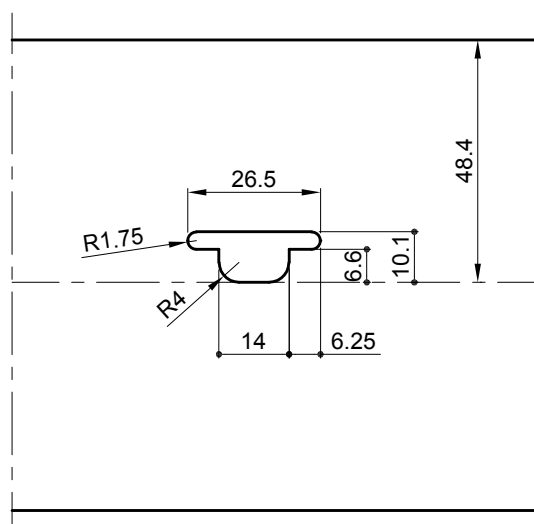
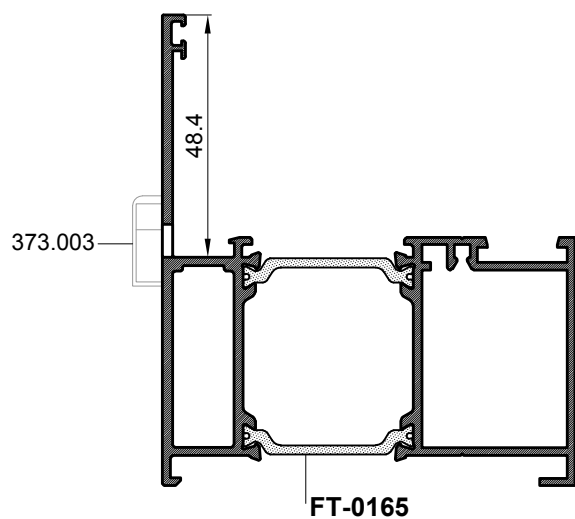
OBRADA PROFILA KRILA
FT-0167 I FT-0181
ZA UGRADNJU RUČKE

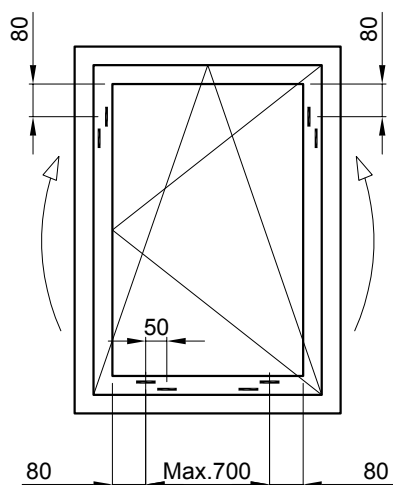




OBRADA NA PROFILU **FT-0165** RADI ODVODA KAPLJEVINA

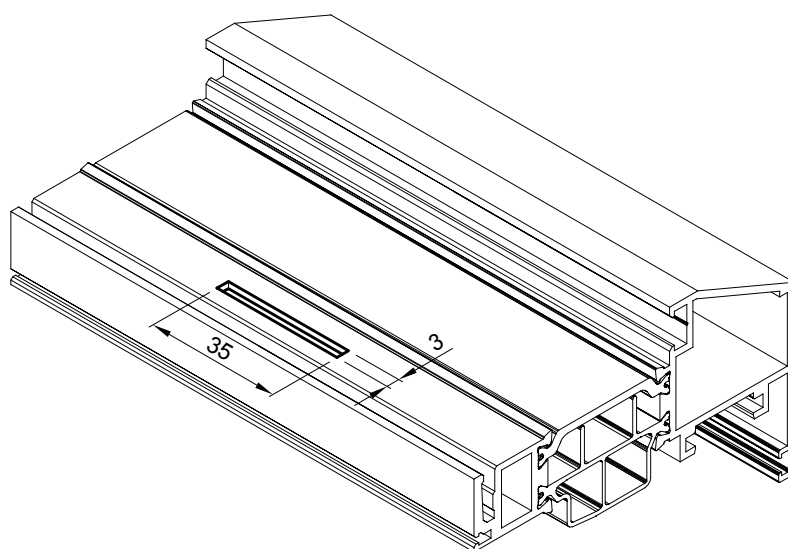
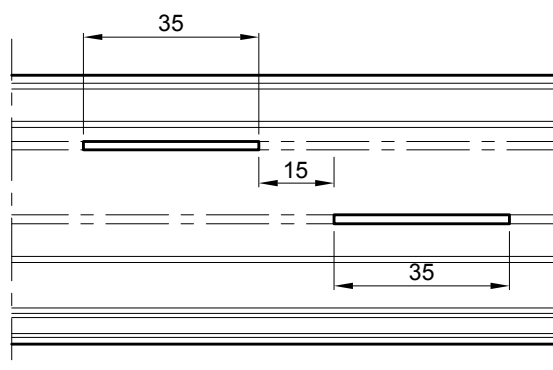
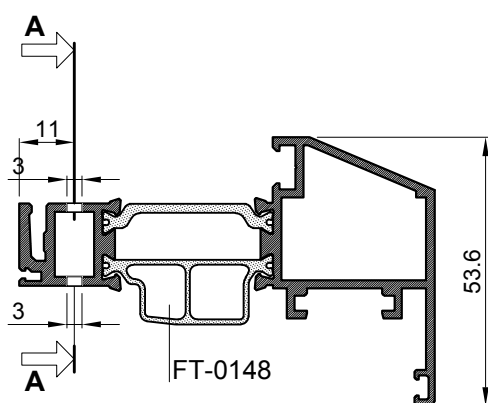
- obrada donjeg pojasa krila /štancanjem/
- 373.003- pvc umetak na otvoru za odvod kapljevina



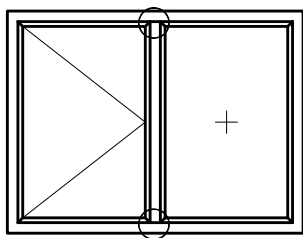


OBRADA NA PROFILU RADI ODVODA KAPLJEVINA I VENTILIRANJA PROZORA

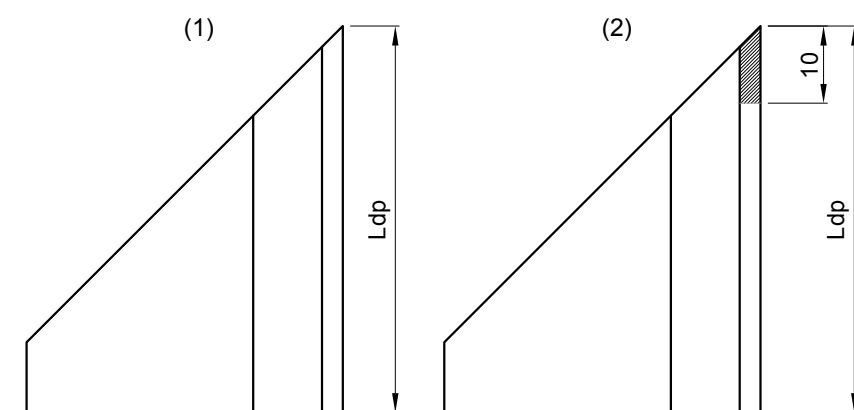
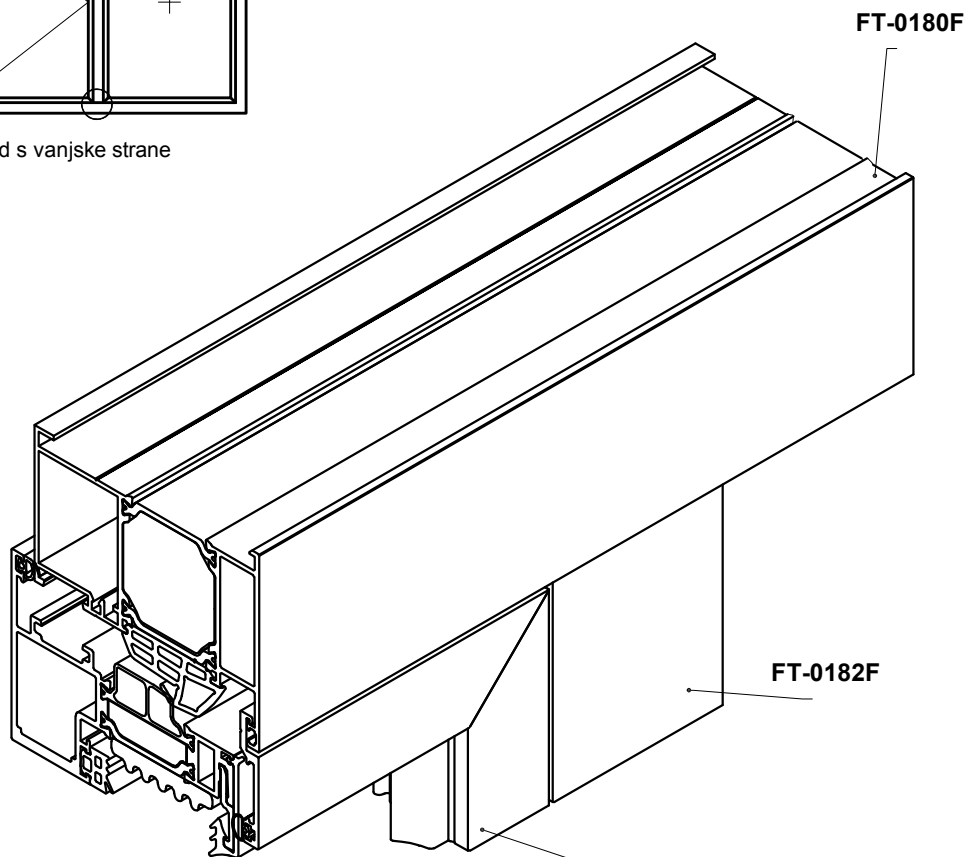
- obrada donjeg pojasa krila /štancanjem/
- obrada okomitih pojasa krila /štancanjem/
- usljed probijenih otvora unutar prozora dolazi do uspostave strujanja zraka i isušivanja mogućih kapljevina



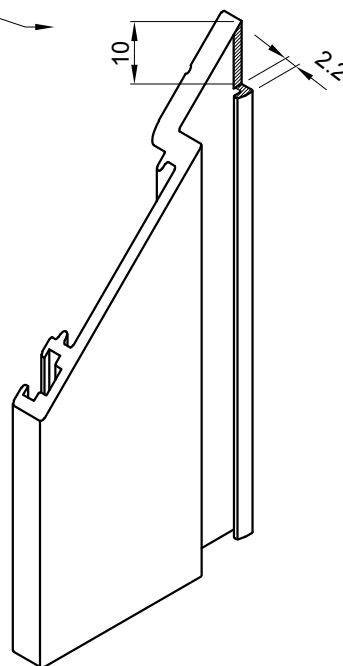
OBRADA DODATNOG PROFILA F-1493 ZA SPOJ PREČKE FT-0182F I RAMA FT-0180F



* Pogled s vanjske strane

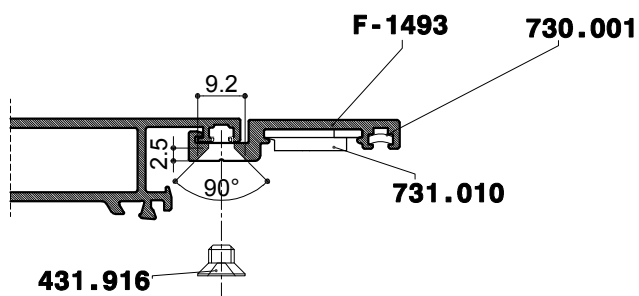


F-1493



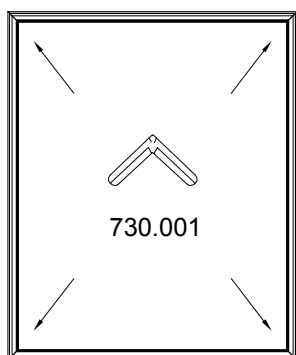
- (1) Dodatni profil F-1493 zapilan pod 45° sa gornje i donje strane
- (2) Zub profila obrađen za 10mm po visini i 2.2 mm po dubini, na gornjoj i donjoj strani profila (prema crtežu)

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

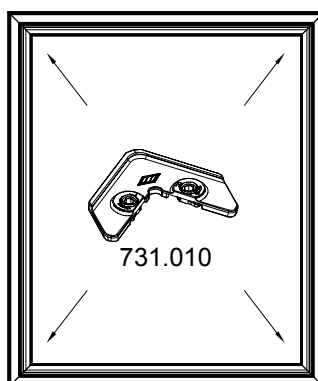


- (1) Obraditi dodatni profil F-1493 za navoj vijka i upustiti za glavu vijka M5 - na svakih cca. 200 mm (u liniji utora za vijak)
- (2) Sklopiti dodatne profile F-1493 izvan okvira i povezati ih kutnicima 730.001
- (3) Unijeti sklopljene profile F-1493 u okvir rama ili prečke te ih povezati kutnicima 731.010
- (4) Obrađene 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

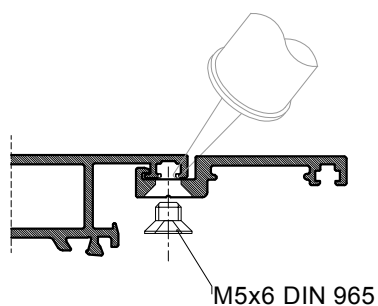
(2)



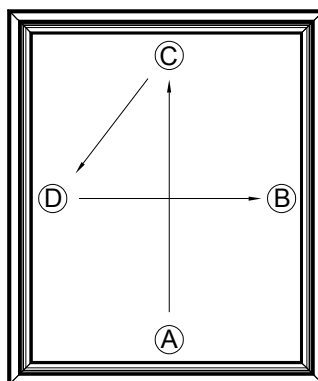
(3)



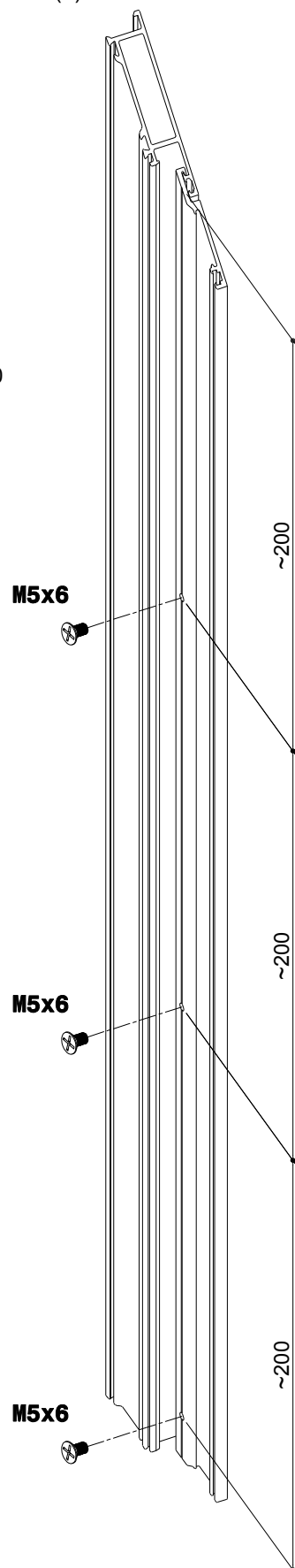
(4)



(5)

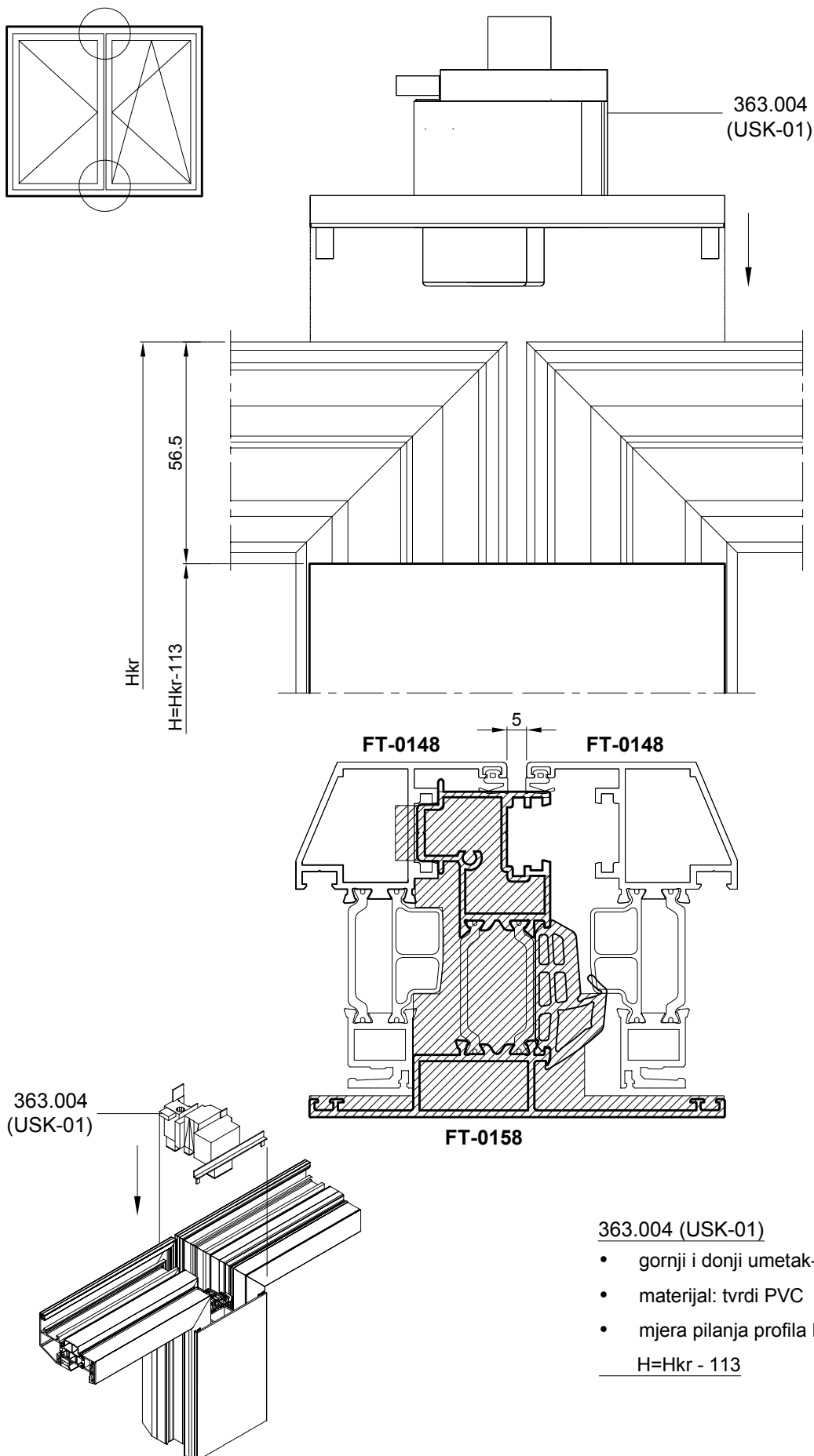


(1)

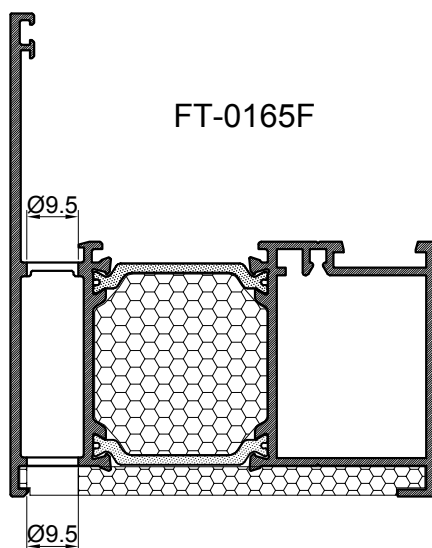


* Način spajanja F-1493 sa prečkom FT-0182F je jednak kao spajanje sa okvirom FT-0180F.

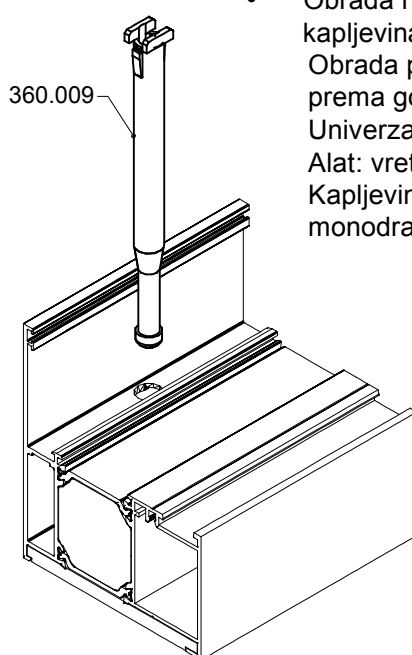
363.004 - UMETAK ZA PROFIL FT-0158 KOD DVOKRILNOG OTVARANJA



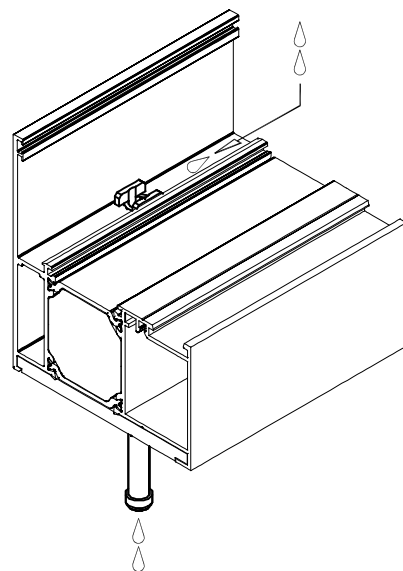
Obrada profila rama i prečke za skriveni odvod kapljevina



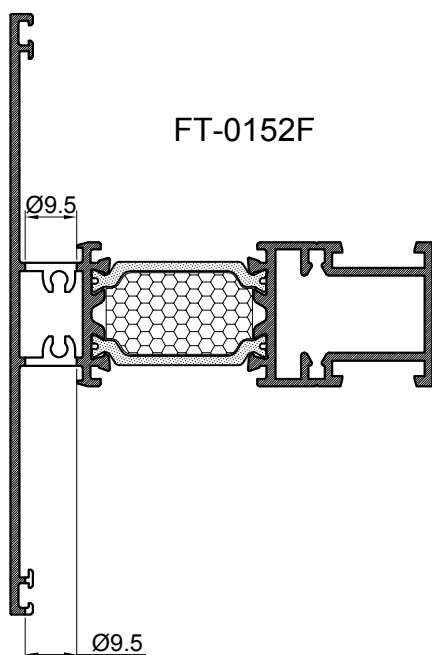
FT-0165F



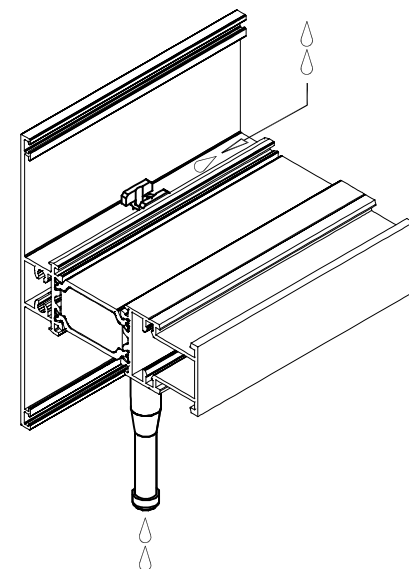
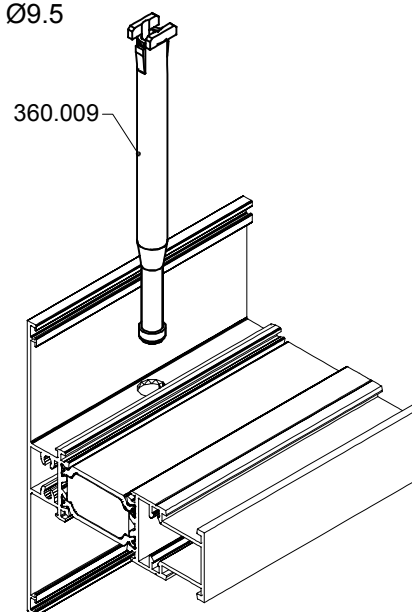
- Obrada na profilu rama FT-0165F za odvod kapljevina.
Obrada profila se izvodi u smjeru odozdo prema gore i izvodi na:
Univerzalna glodalica / stubna bušilica
Alat: vretenasto glodalo Ø9.5 / svrdlo Ø9.5
Kapljevine se izvode van pomoću monodrain cijevčice 360.009



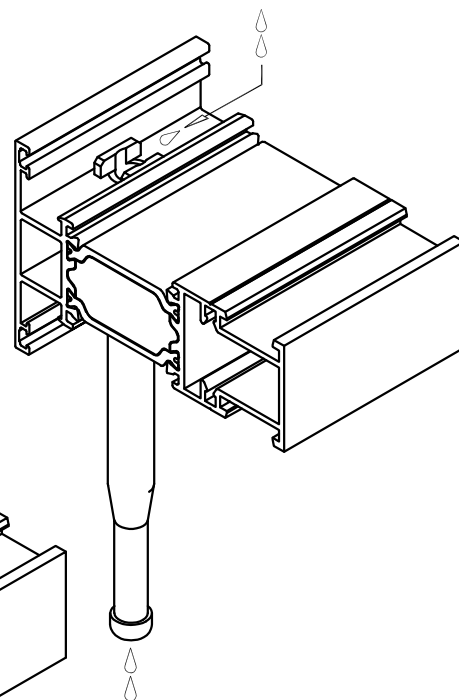
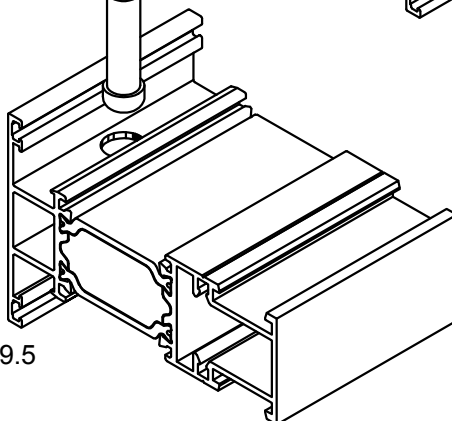
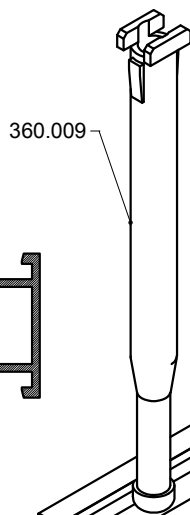
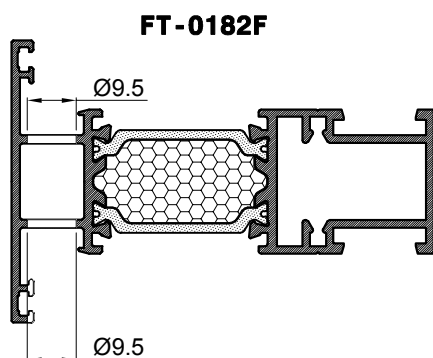
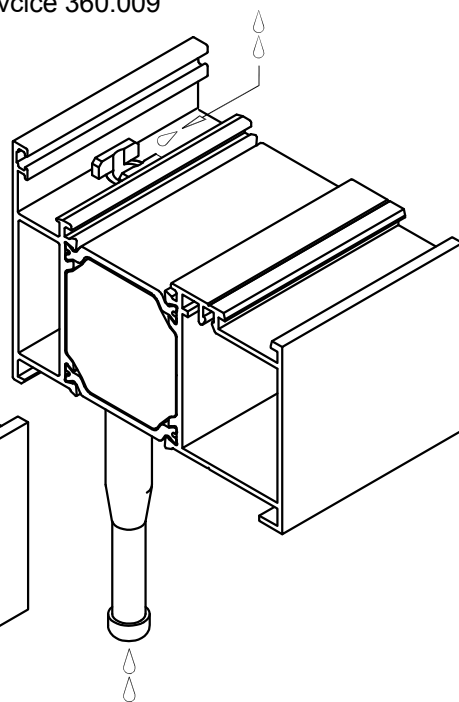
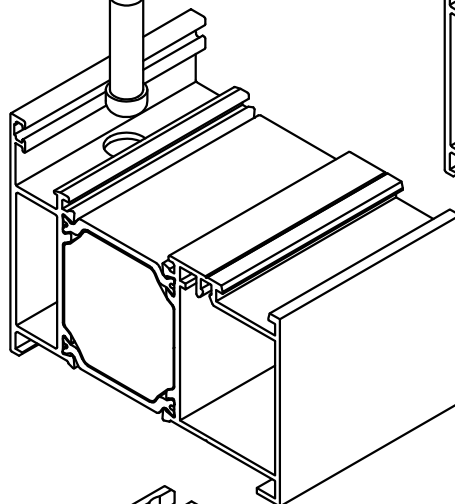
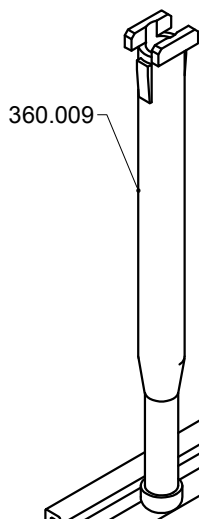
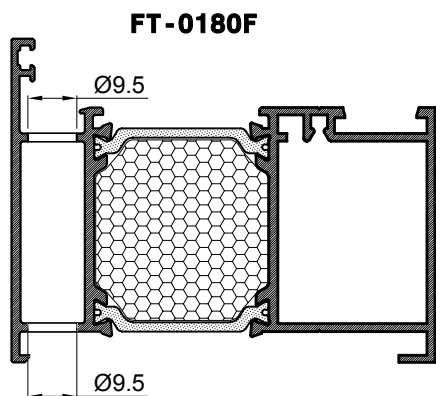
- Obrada na profilu prečke FT-0152F za odvod kapljevina.
Obrada profila se izvodi u smjeru odozdo prema gore i izvodi na:
Univerzalna glodalica / stubna bušilica
Alat: vretenasto glodalo Ø9.5 / svrdlo Ø9.5
Kapljevine se izvode van pomoću monodrain cijevčice 360.009



FT-0152F



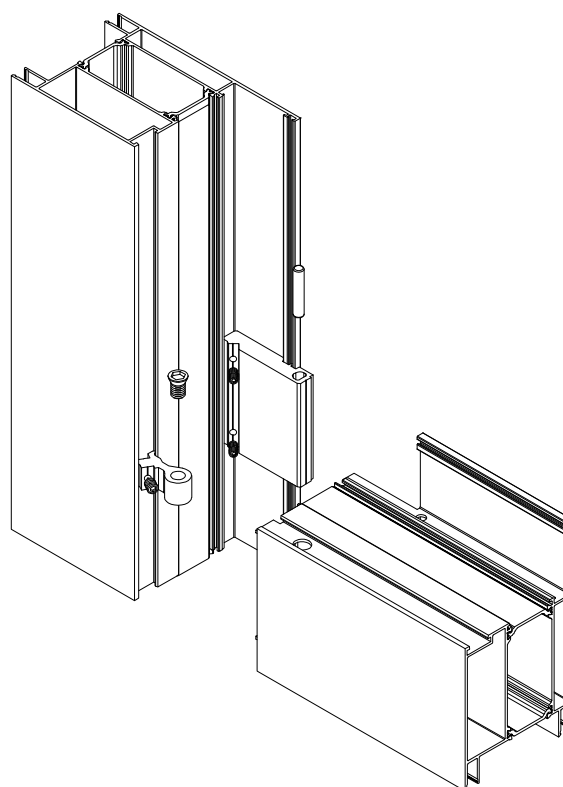
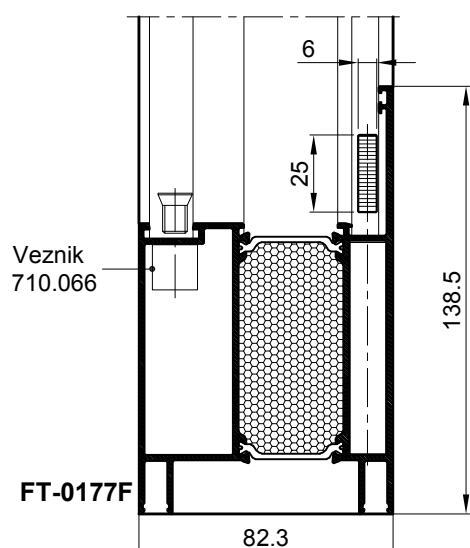
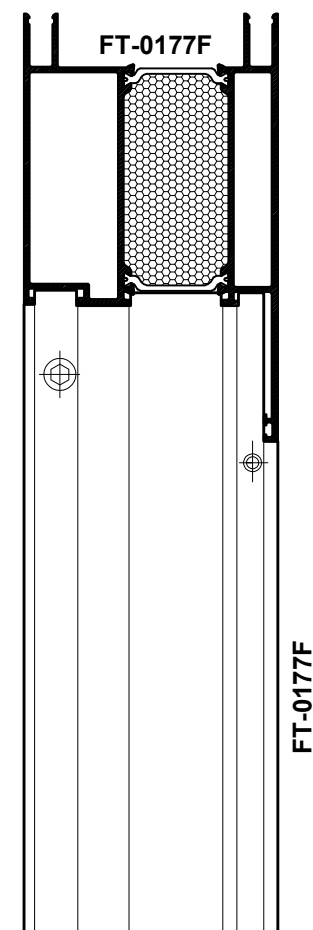
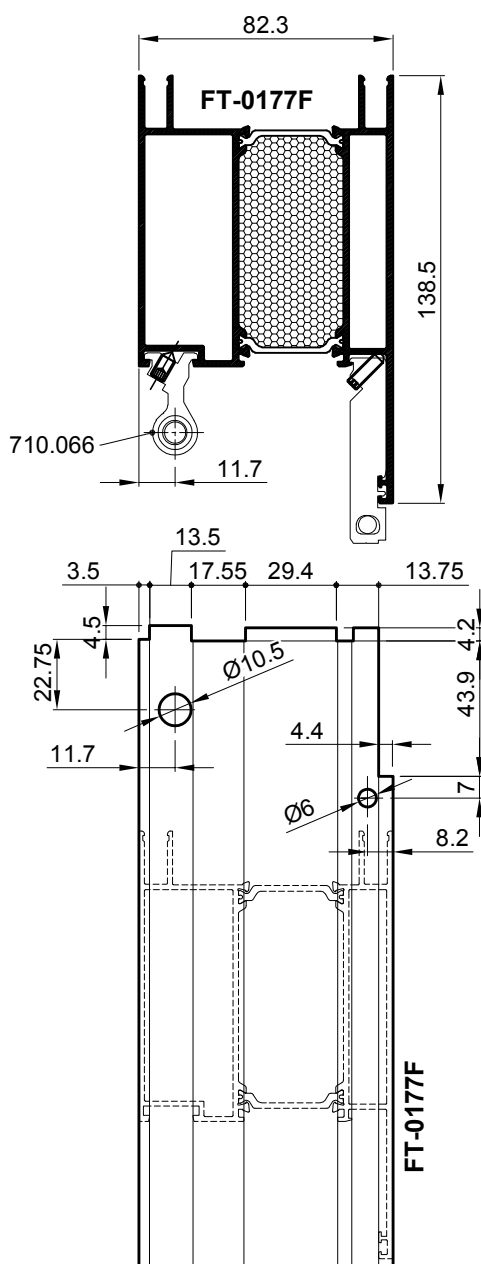
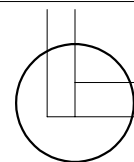
Obrada profila rama i prečke za skriveni odvod kapljevina



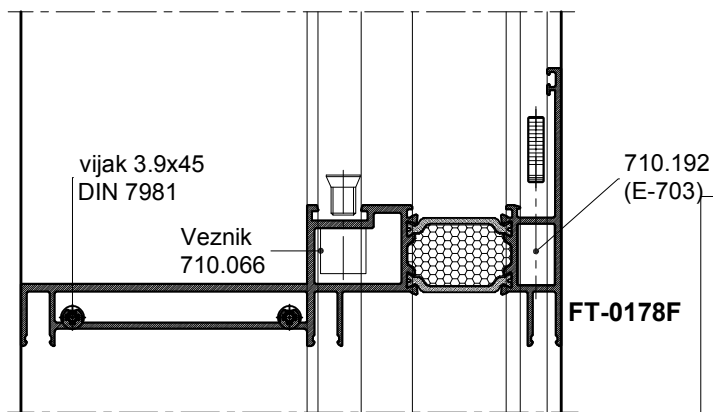
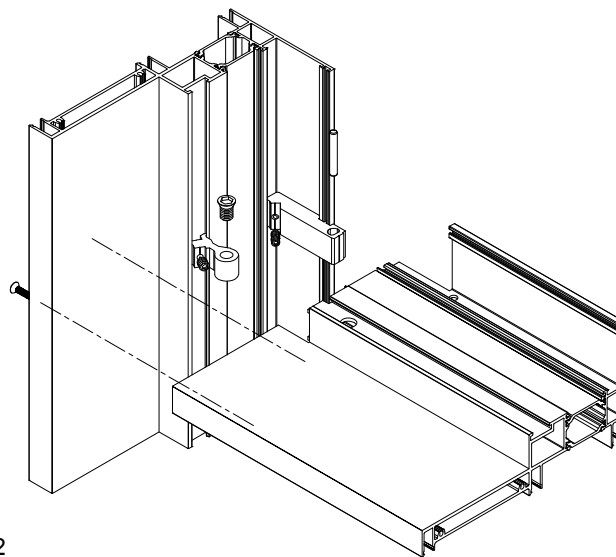
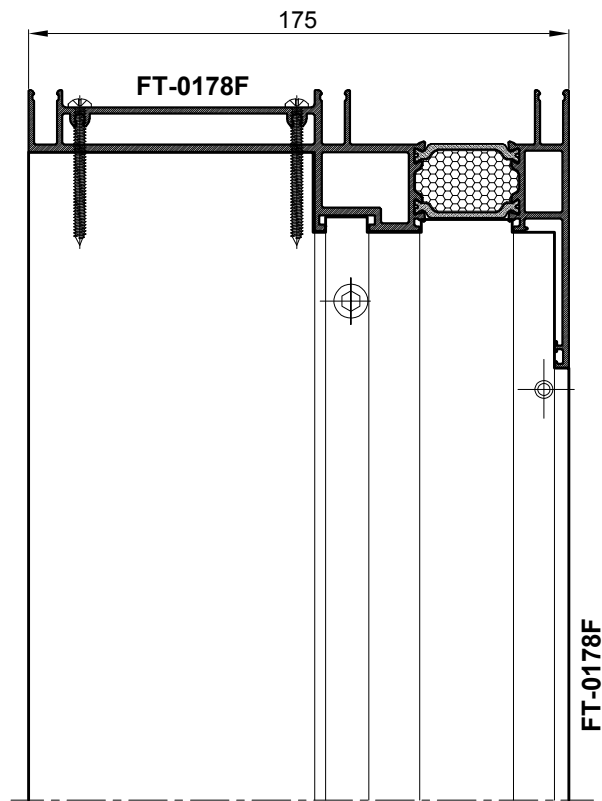
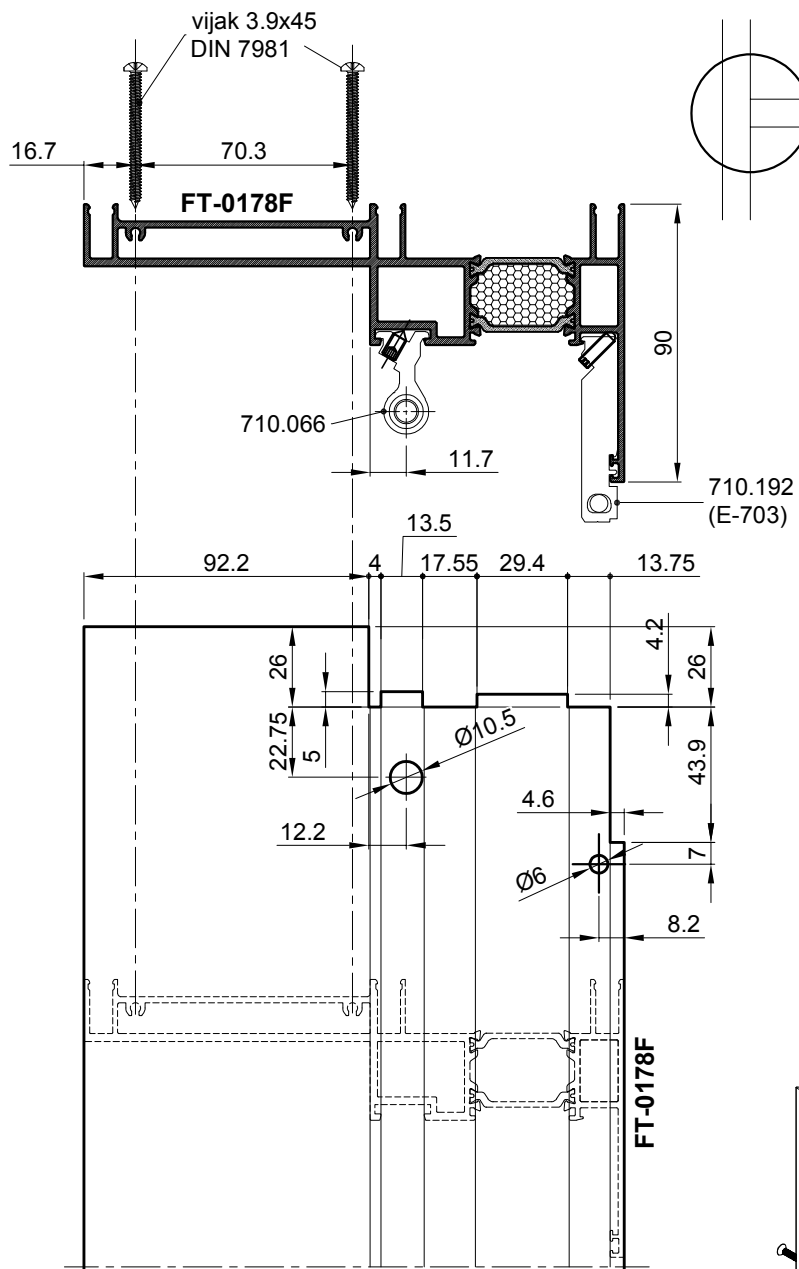
- Obrada na profilu prečke FT-0182F za odvod kapljevina. Obrada profila se izvodi u smjeru odozdo prema gore i izvodi na: Univerzalna glodalica / stubna bušilica
Alat: vretenasto glodalo Ø9.5 / svrdlo Ø9.5
Kapljevine se izvode van pomoću monodrain cjevčice 360.009

- 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

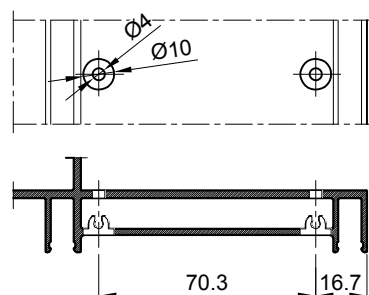
Spoj profila FT-0177F sa profilom FT-0177F



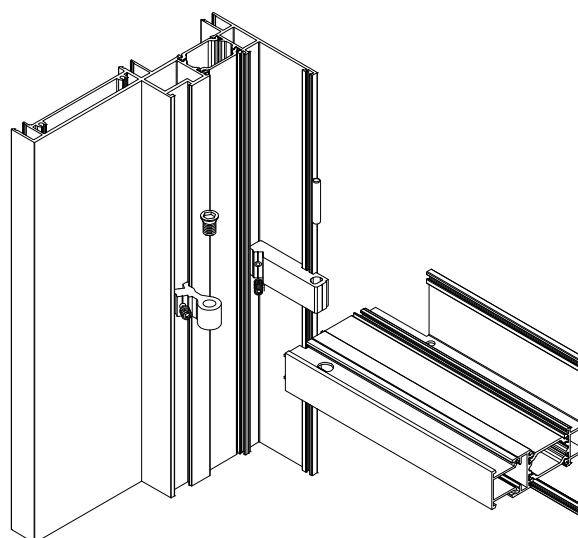
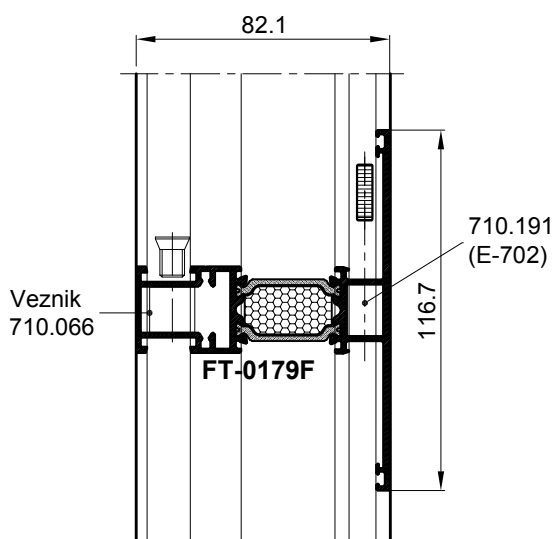
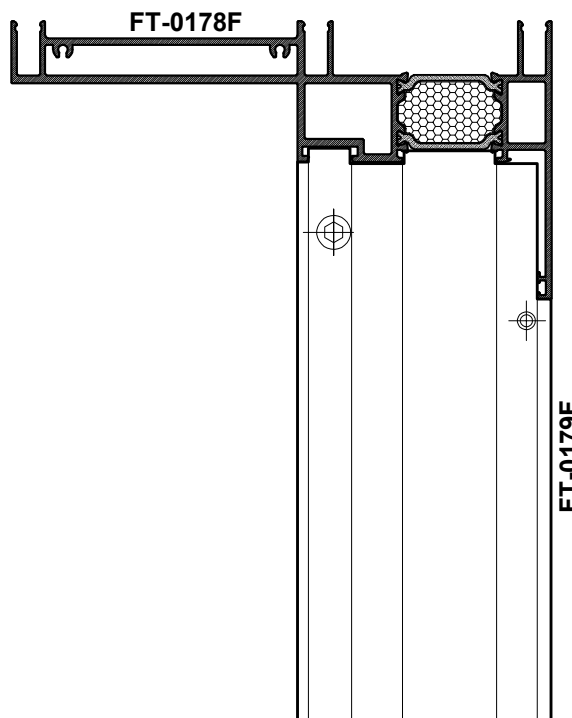
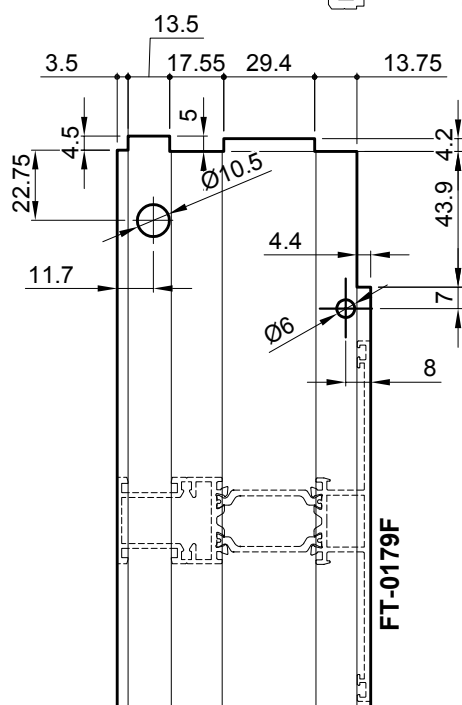
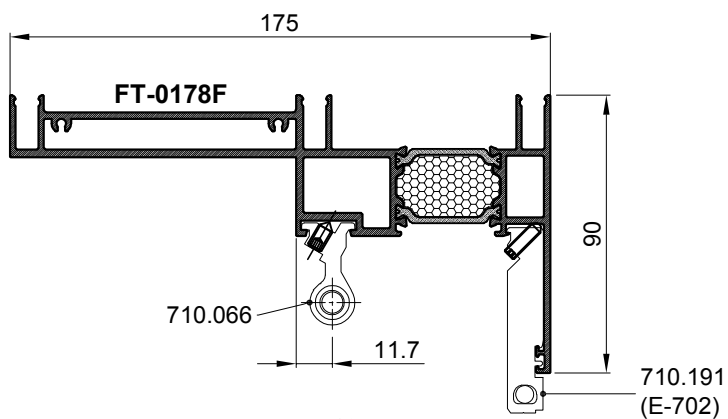
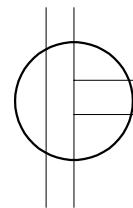
Spoj profila FT-0178F sa profilom FT-0178F



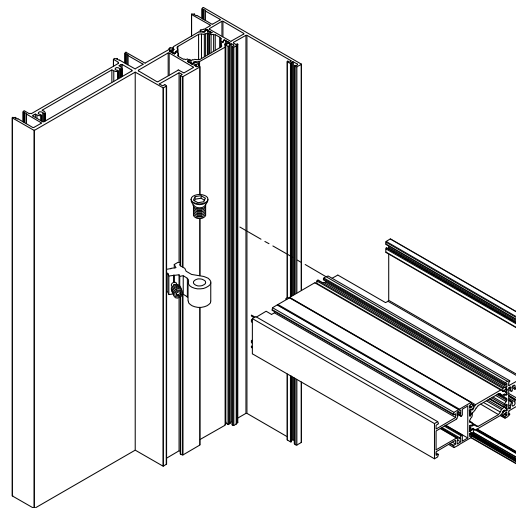
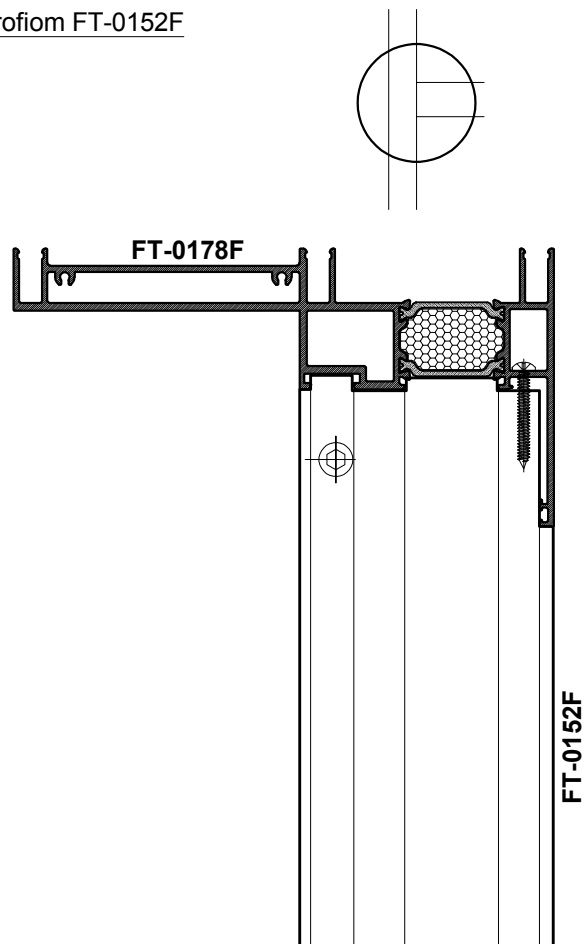
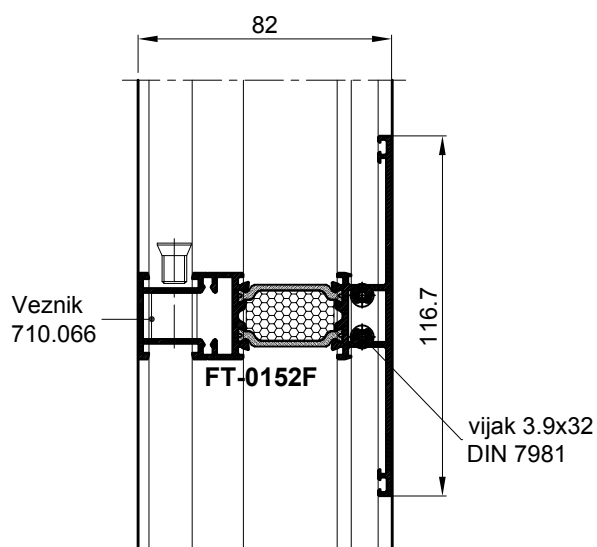
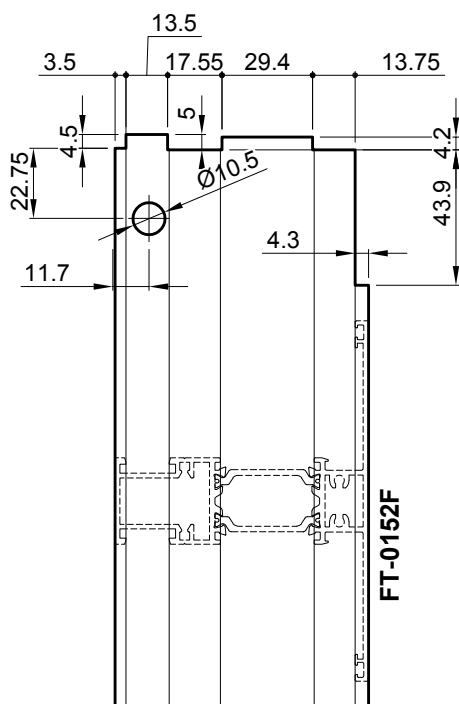
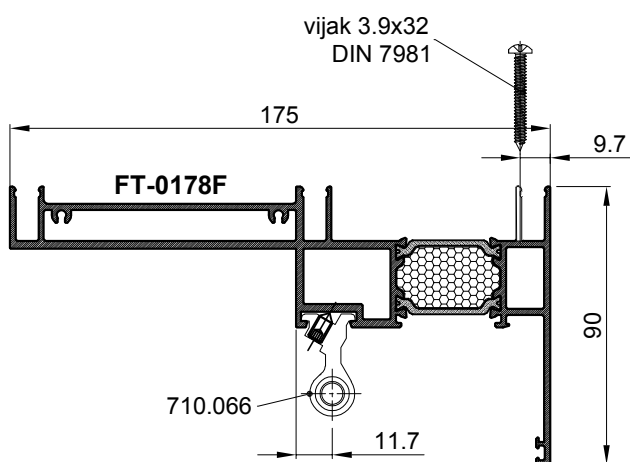
Obrada za ugradnju vijaka 3.9x45



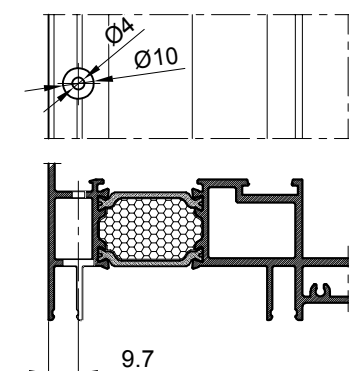
Spoj profila FT-0178F sa profilom FT-0179F

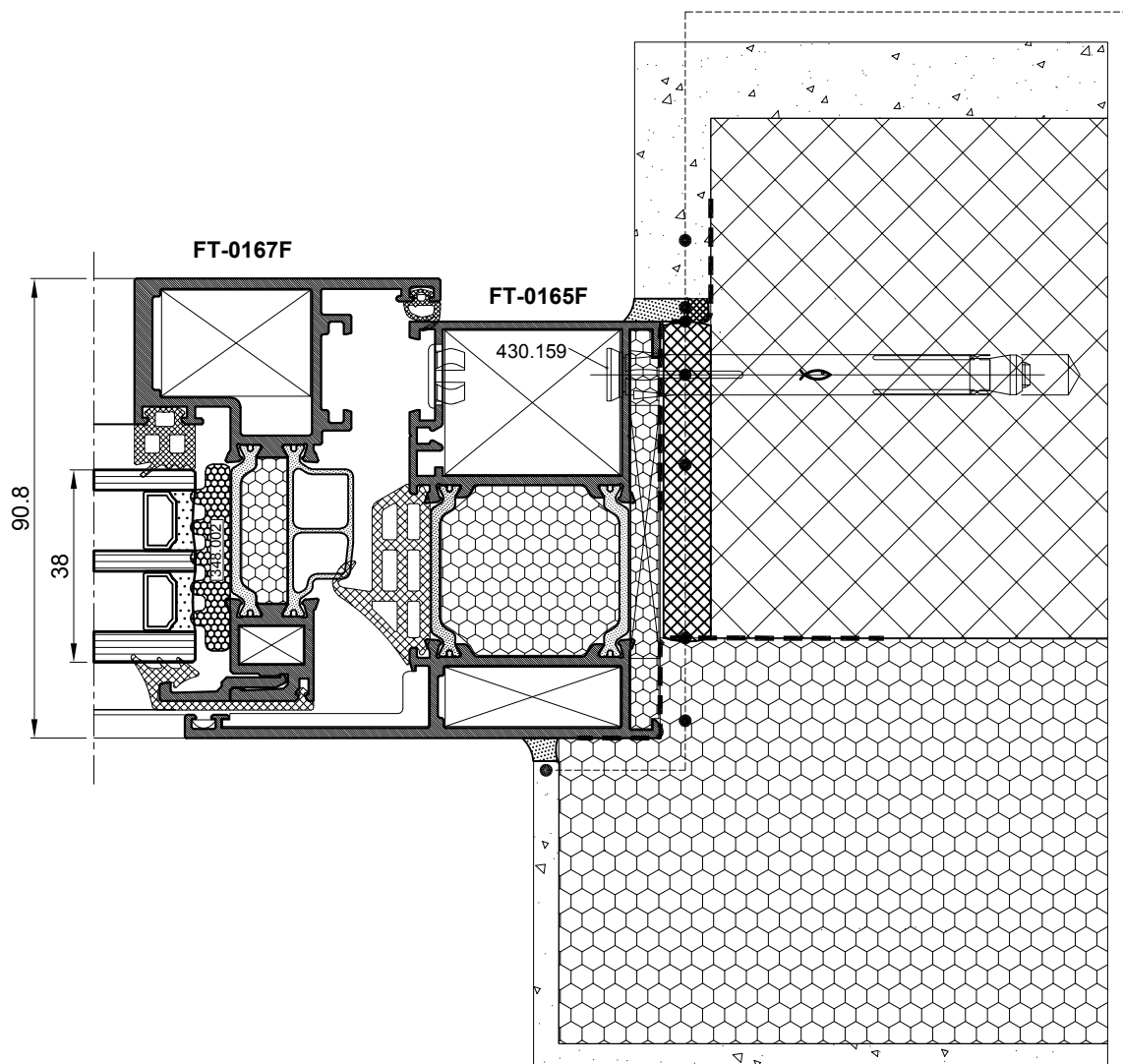


Spoj profila FT-0178F sa profilom FT-0152F

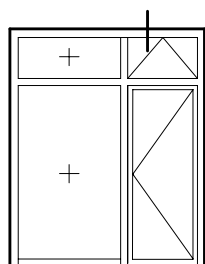


Obrada za ugradnju vijaka 3.9x32

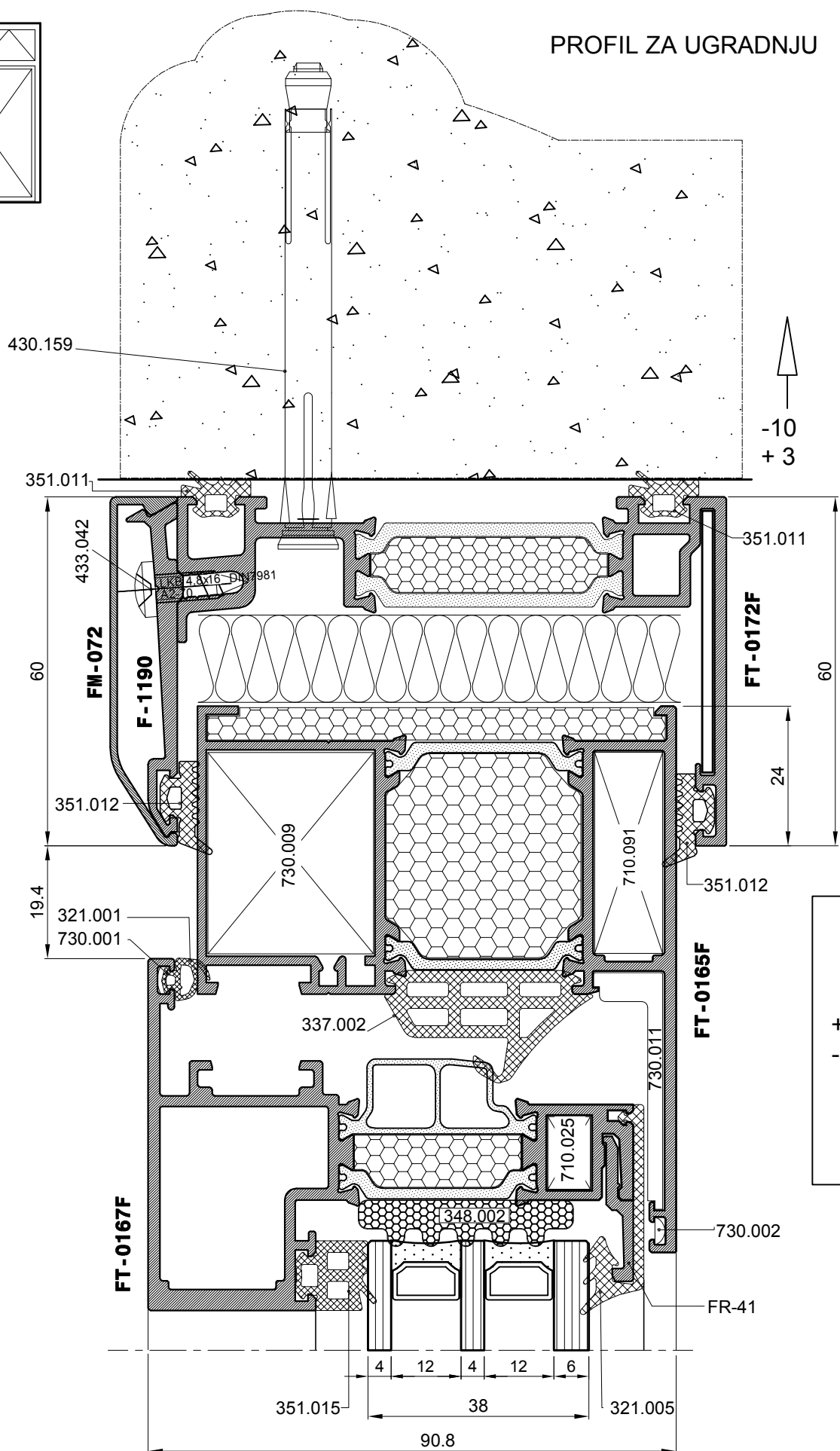


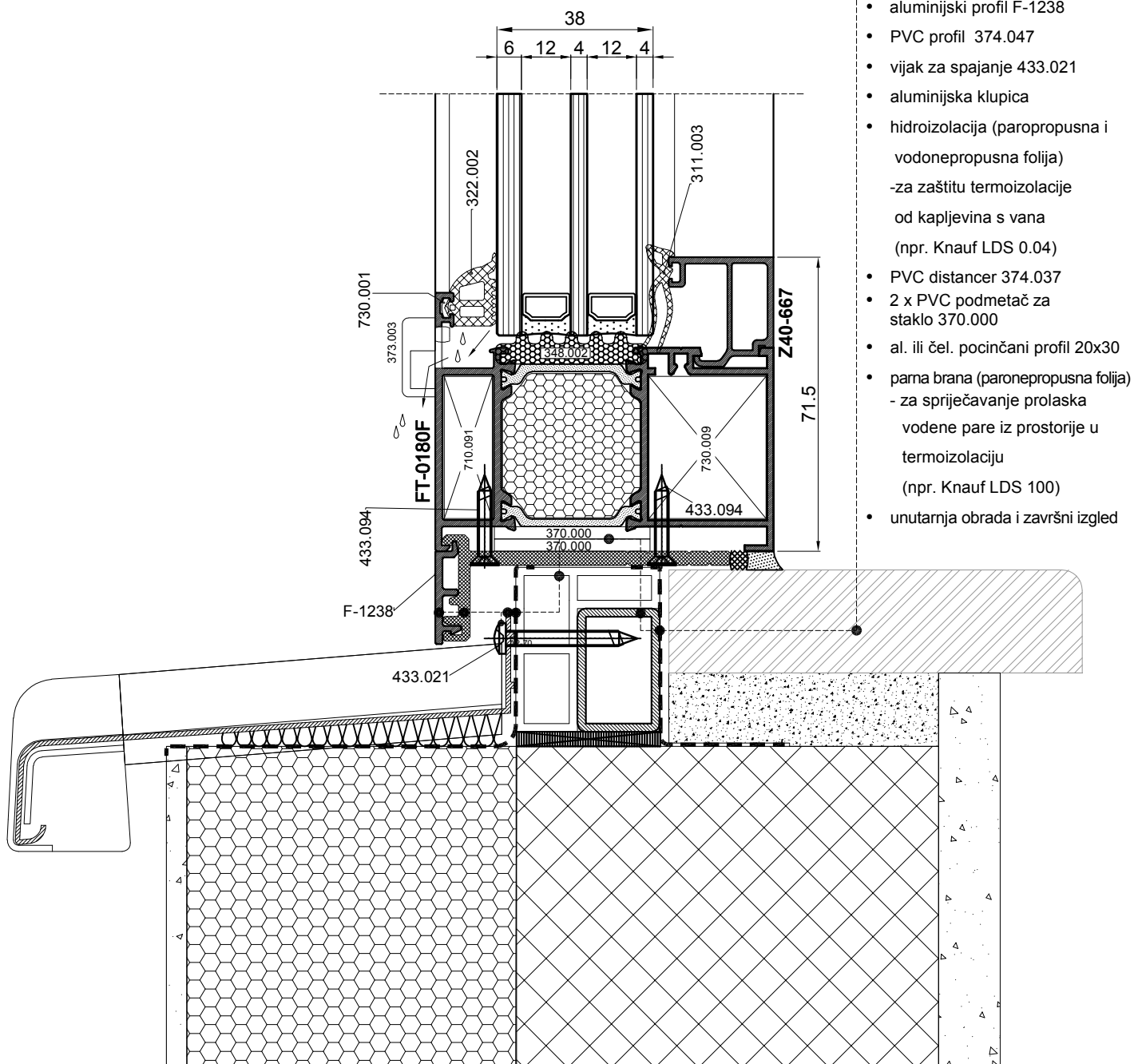
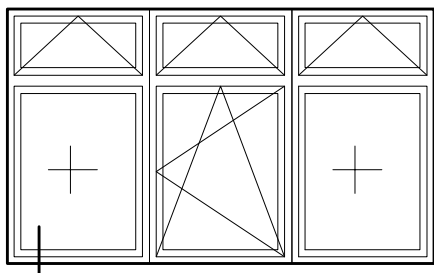


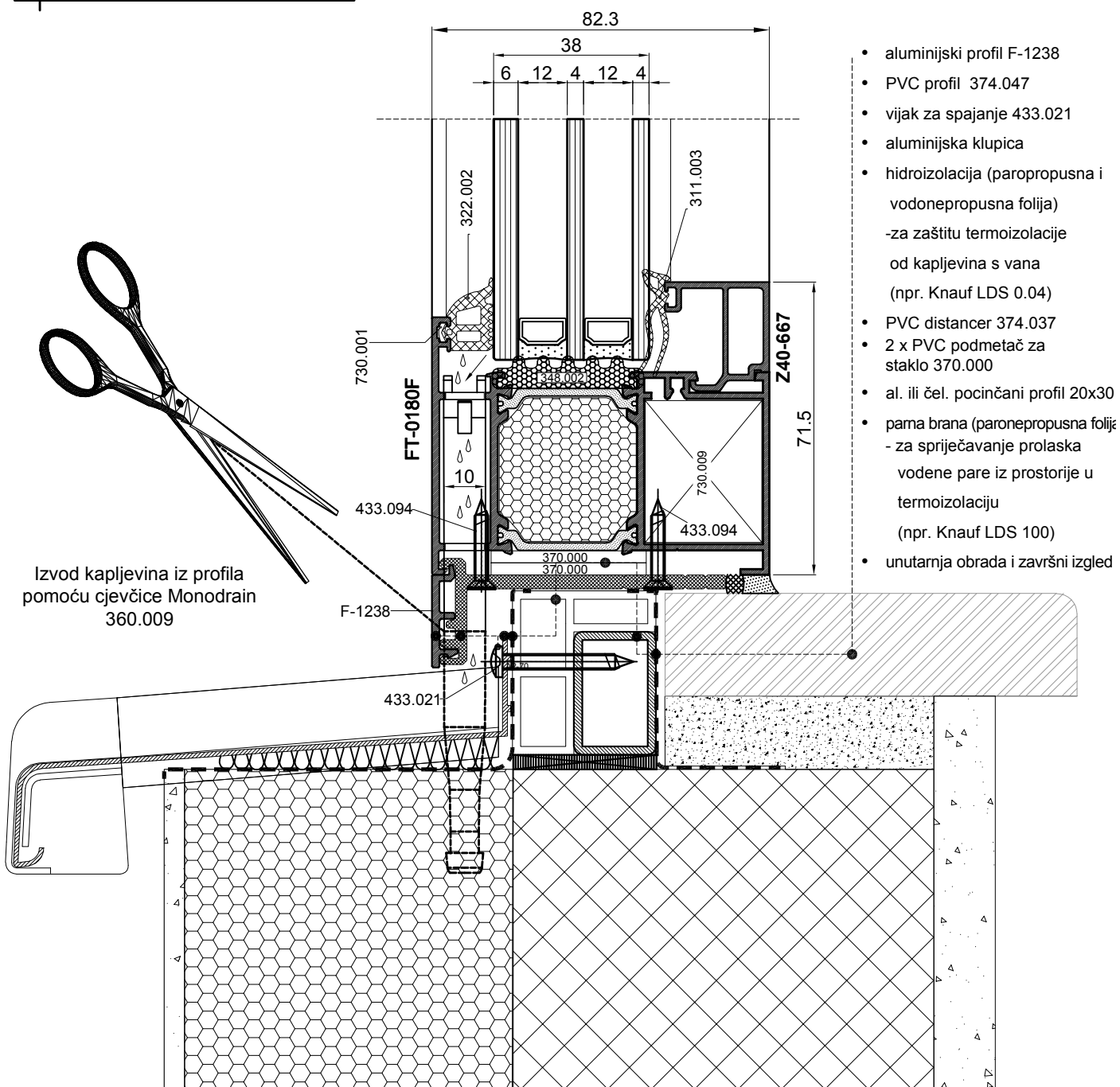
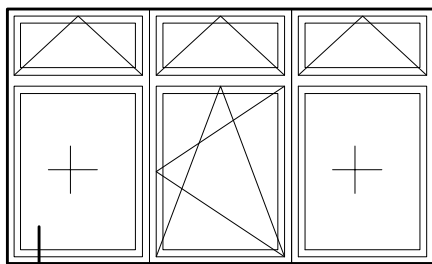
- vanjska žbuka
- termoizolacija
- hidroizolacija
(paropropusna i vodonepropusna folija)
-za zaštitu termoizolacije od kapljevina s vana (npr. Knauf LDS 0.04)
- termoizolacije (exp. spužvica, pur-pjena)
- vijak za montažu
- parna brana
(paronepropusna folija)
-za sprječavanje prolaska vodene pare iz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

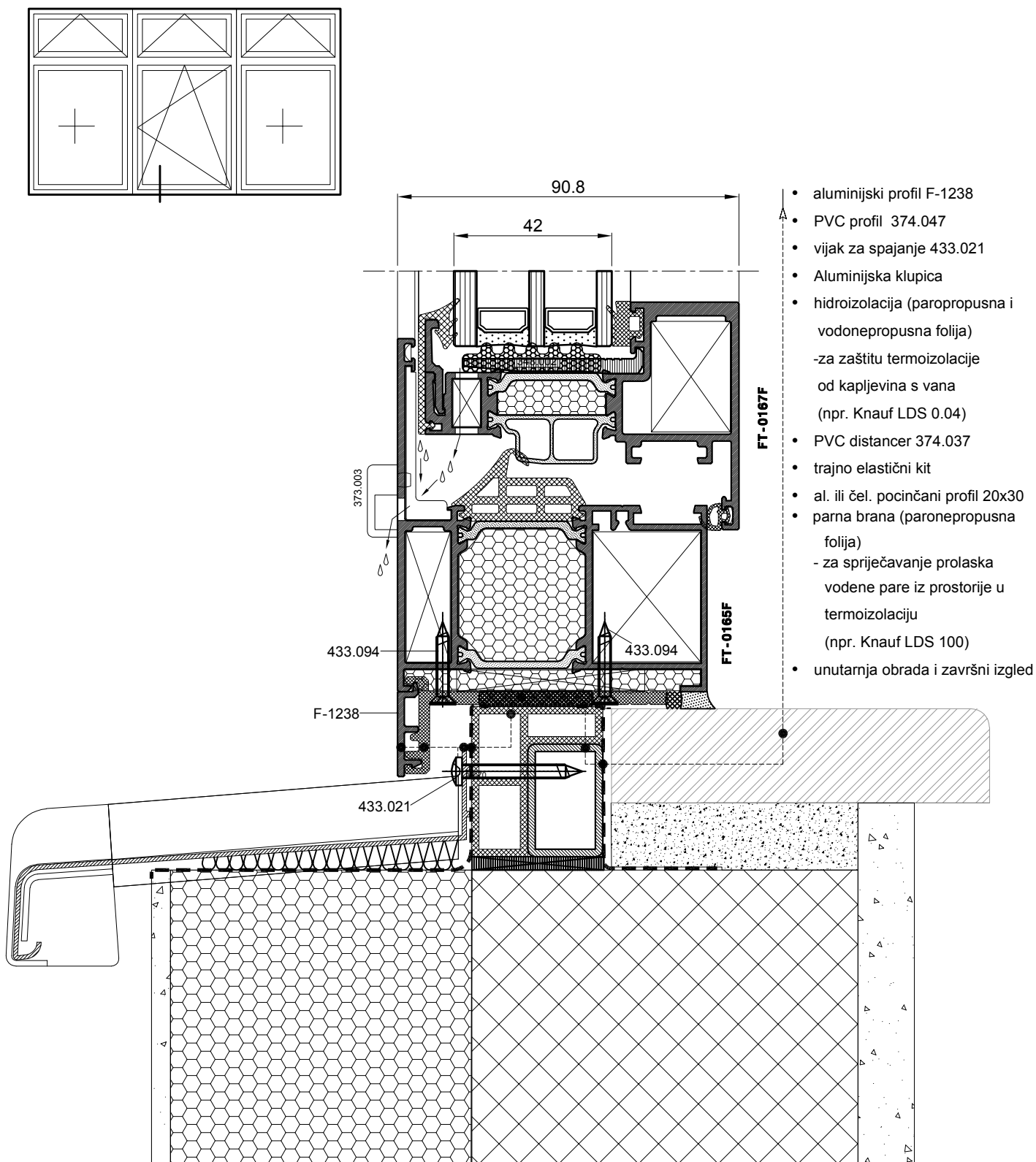


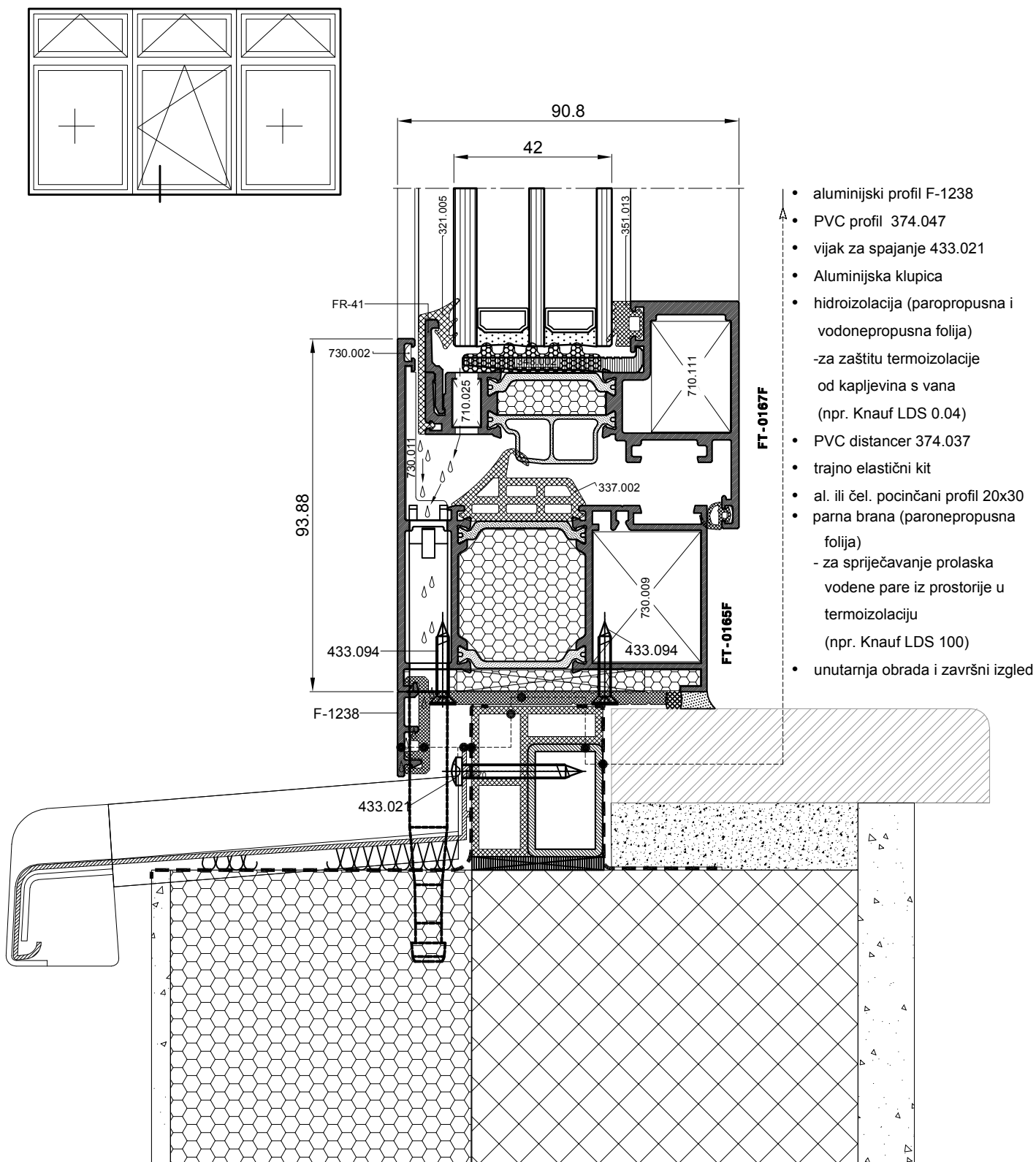
PROFIL ZA UGRADNJU

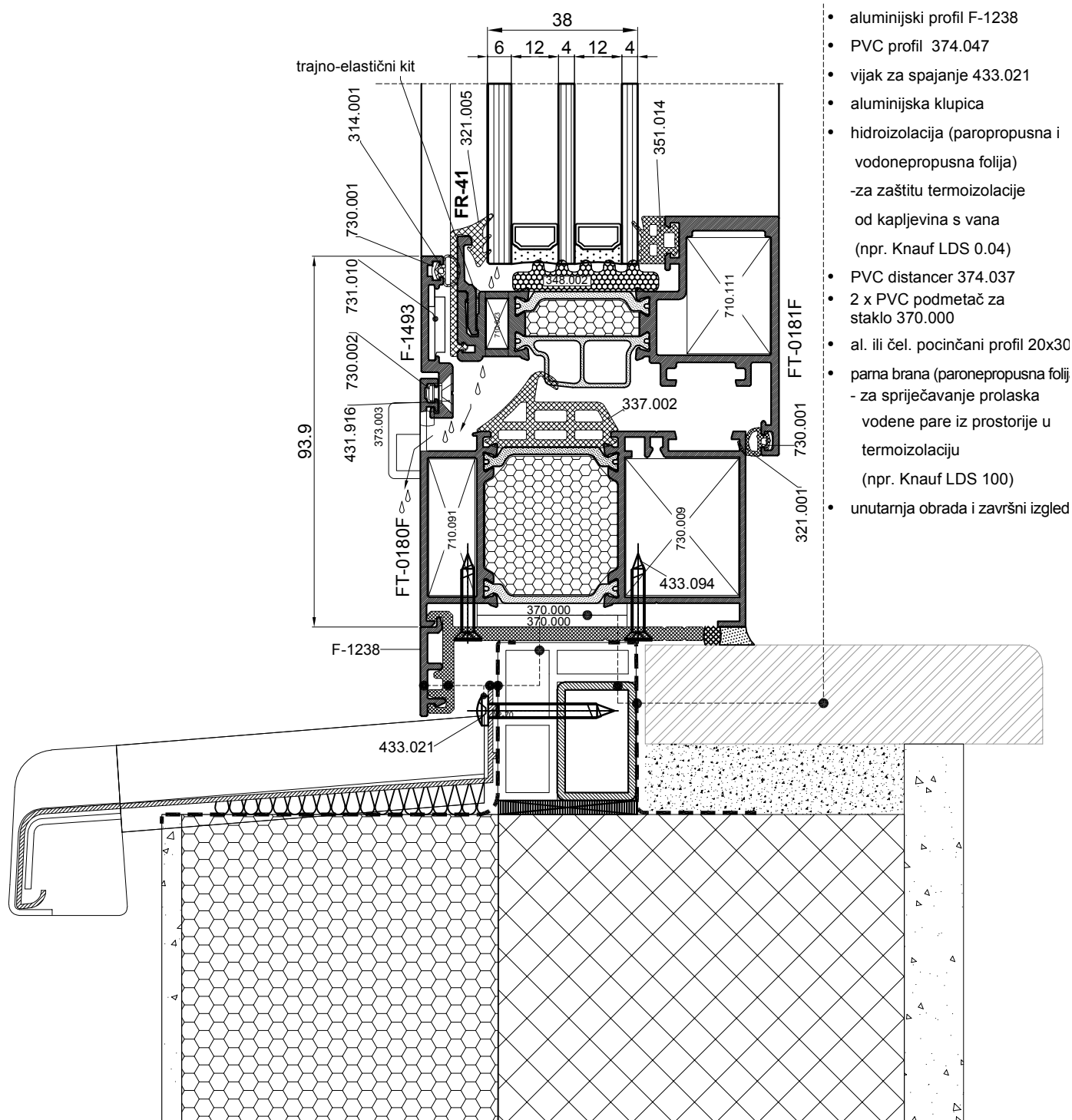
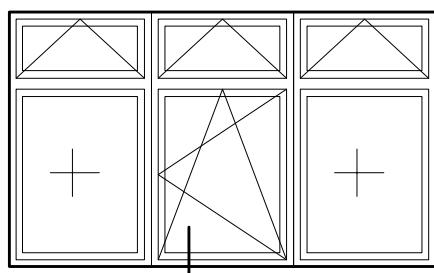


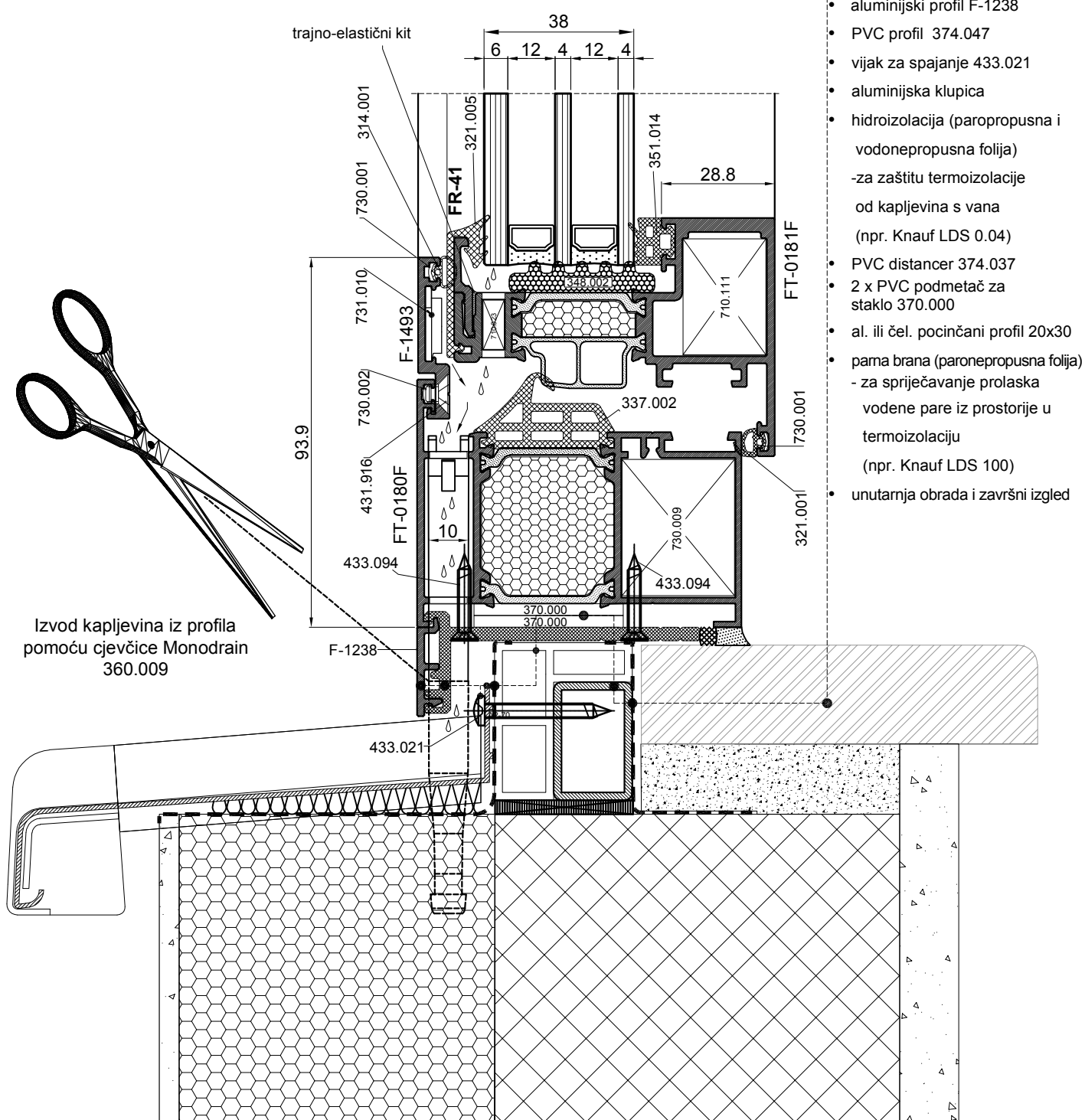
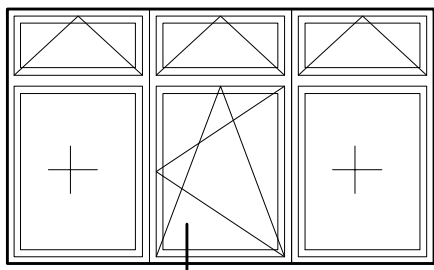


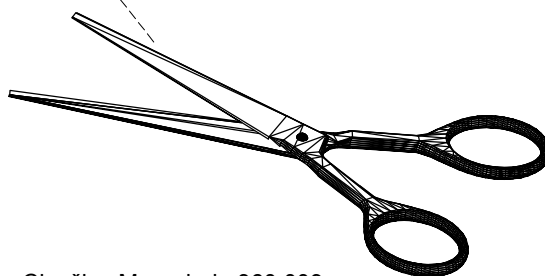
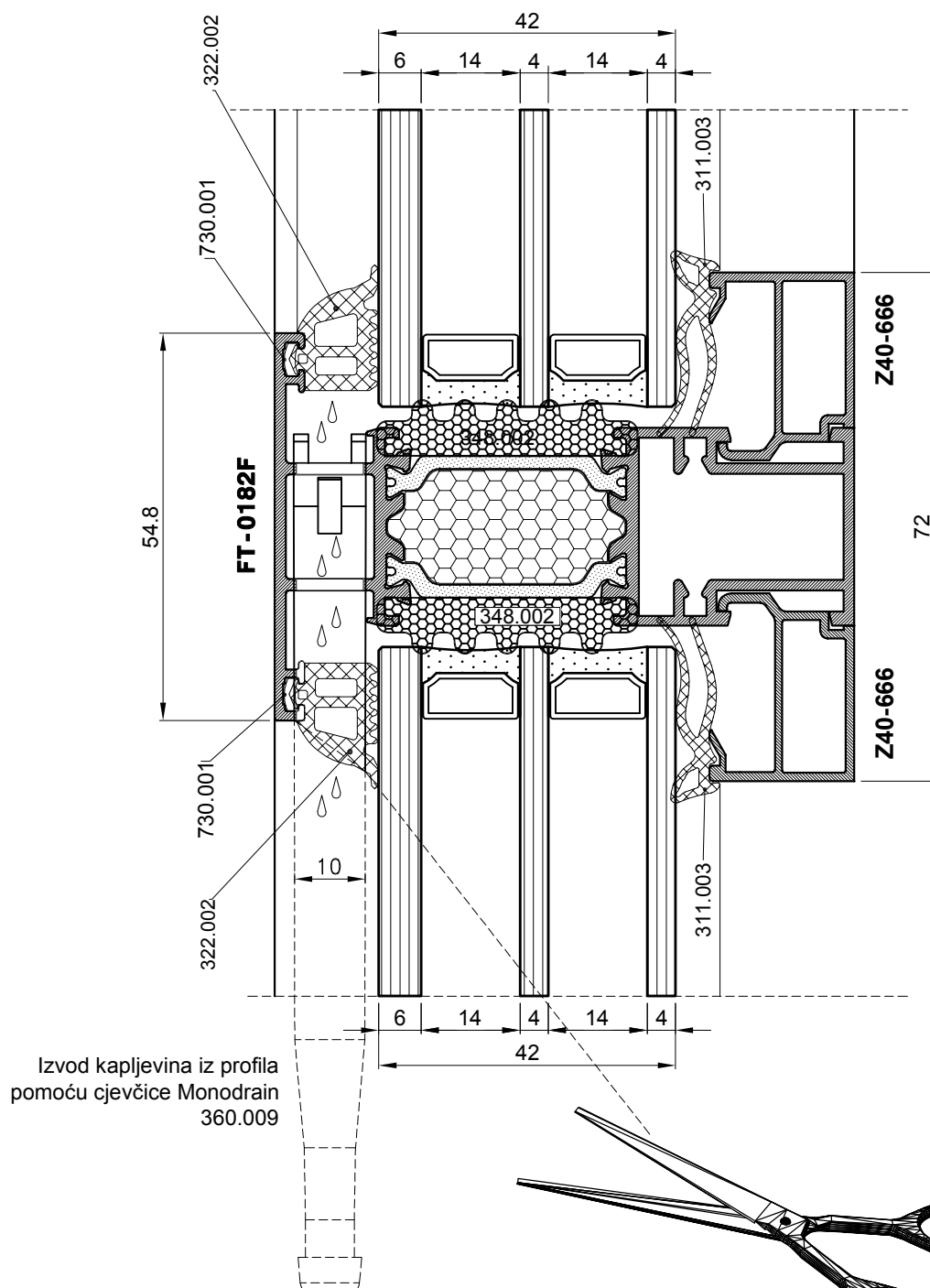
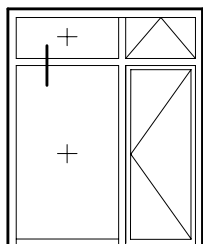






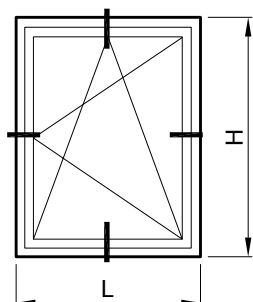






Cjevčicu Monodrain 360.009
odsjeći u konturi brtve.

Rezne liste



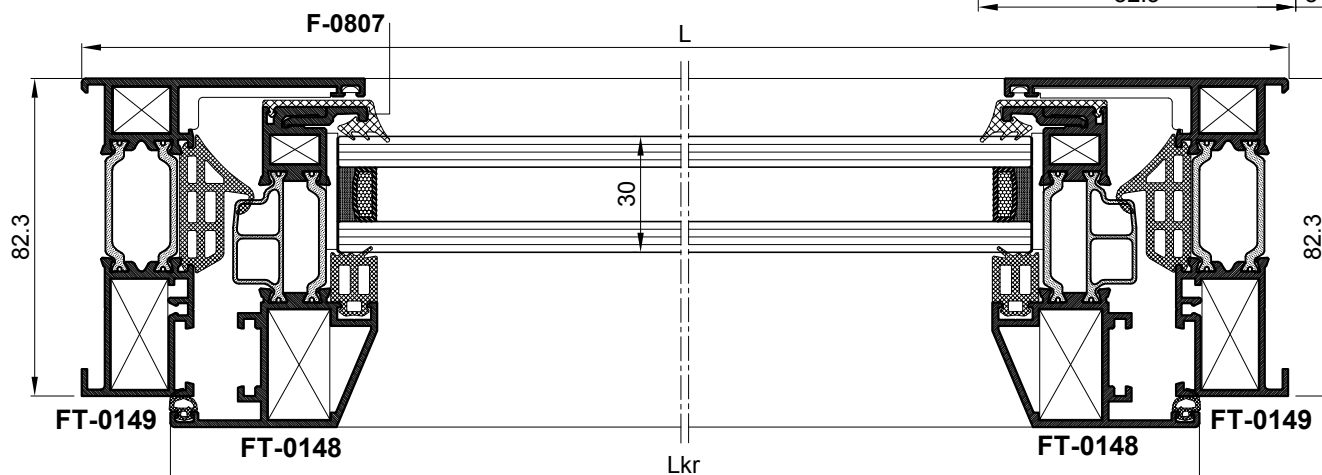
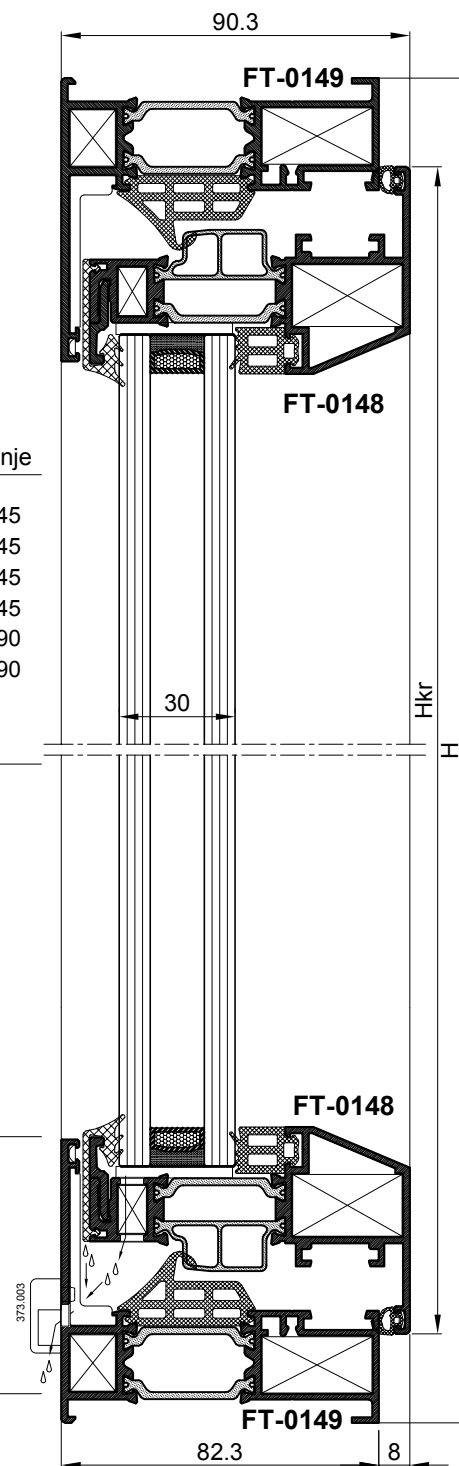
JEDNOKRILNI PROZOR

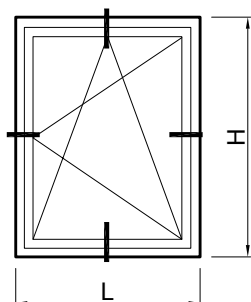
PROFILI		kom	mjera	pilanje
FT-0149	vodoravnica okvira	2	L	45-45
FT-0149	okomica okvira	2	H	45-45
FT-0148	vodoravnica krila	2	Lkr=L-46	45-45
FT-0148	okomica krila	2	Hkr=H-46	45-45
F-0807	vodoravna lajsna	2	Lkr-81	90-90
F-0807	okomita lajsna	2	Hkr-102	90-90

OKOVI		kom
710.075	glavni kutnik rama	4
710.031	pomoćni kutnik rama	4
730.011	pomoćni kutnik rama	4
730.002	pomoćni kutnik rama	4
710.092	glavni kutnik krila	4
710.025	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





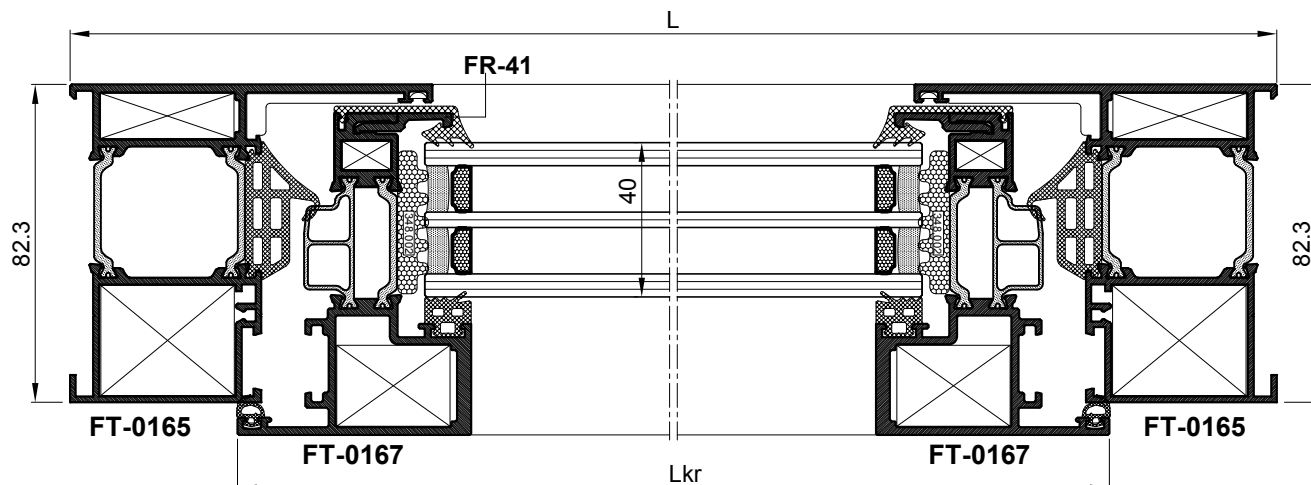
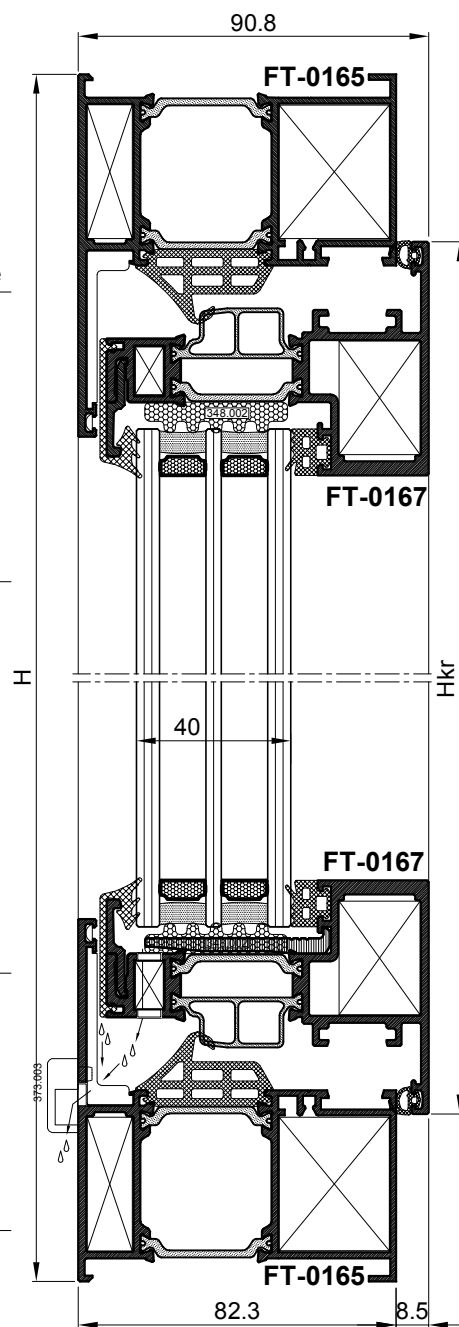
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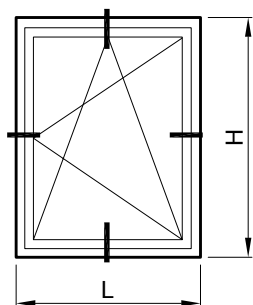
PROFILI		kom	mjera	pilanje
FT-0165	vodoravnica okvira	2	L	45-45
FT-0165	okomica okvira	2	H	45-45
FT-0167	vodoravnica krila	2	Lkr=L-87	45-45
FT-0167	okomica krila	2	Hkr=H-87	45-45
FR-41	vodoravna lajsna	2	Lkr-83	90-90
FR-41	okomita lajsna	2	Hkr-111	90-90

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
710.025	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-97 x Hkr-97





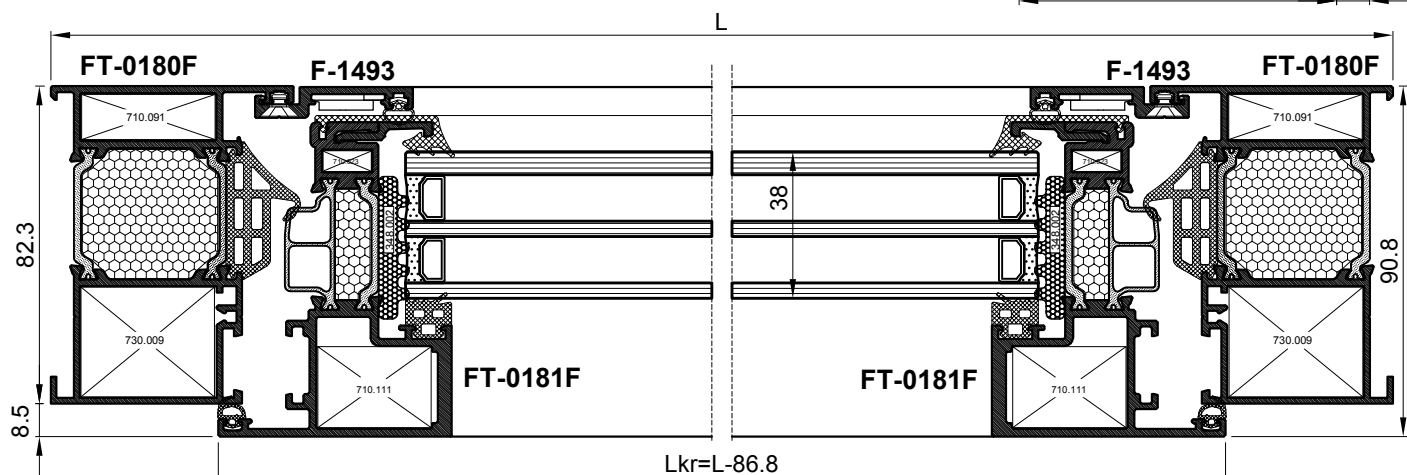
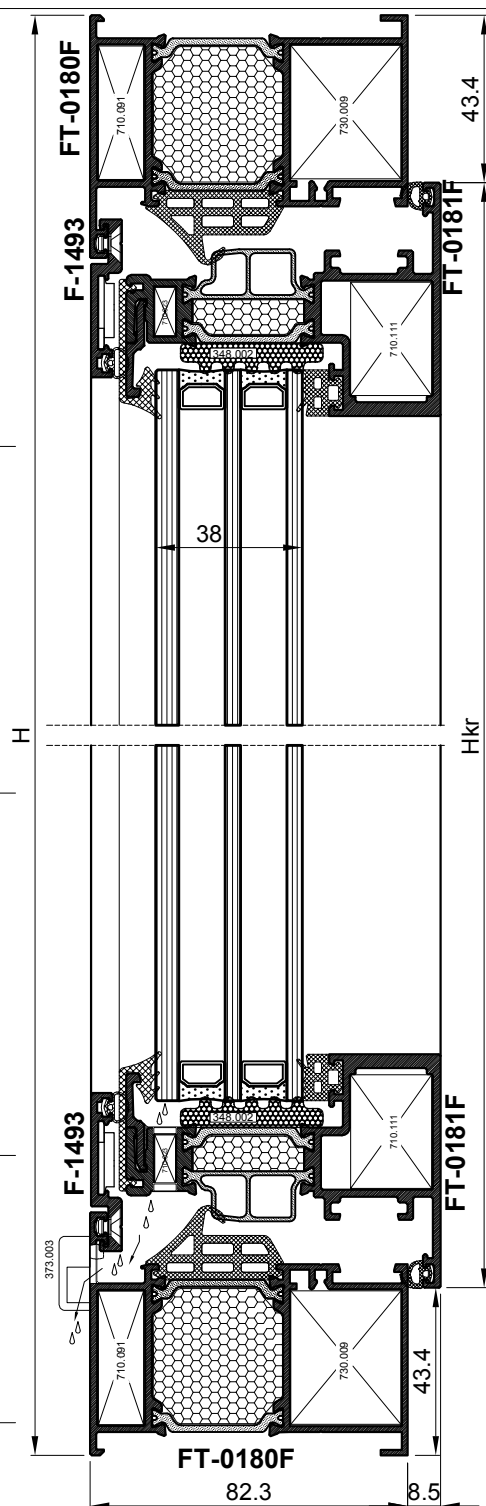
JEDNOKRILNI PROZOR

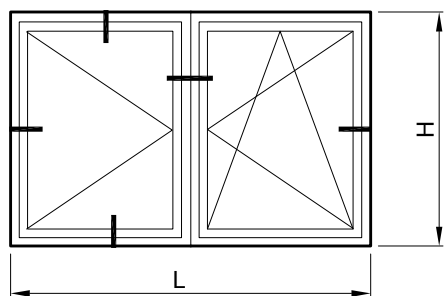
PROFILI		kom	mjera	pilanje
FT-0180F	vodoravnica okvira	2	L	45-45
FT-0180F	okomica okvira	2	H	45-45
FT-0181F	vodoravnica krila	2	Lkr=L-86.8	45-45
FT-0181F	okomica krila	2	Hkr=H-86.8	45-45
FR-41	vodoravna lajsna	2	Lkr-83	90-90
FR-41	okomita lajsna	2	Hkr-111	90-90
F-1493	vodoravnica dod. profila	2	Ldp=Lkr-18.5	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
710.023	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

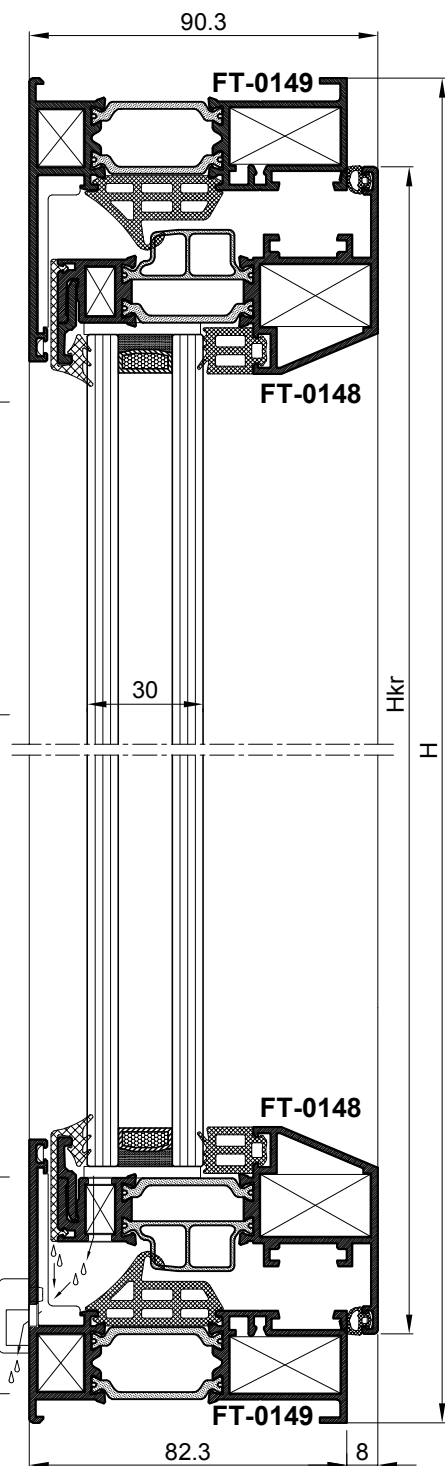
BRTVE		kom	mjera
337.002	srednja brtva		2L+2H
321.001	brtva u krilu unutra		2L+2H
321.005	brtva prema staklu-vani		2L+2H
351.014	brtva prema staklu-unutra		2L+2H
314.001	brtva dodatnog profila		2L+2H
333.009	kutni umetak brtve	4	

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





DVOKRILNI PROZOR

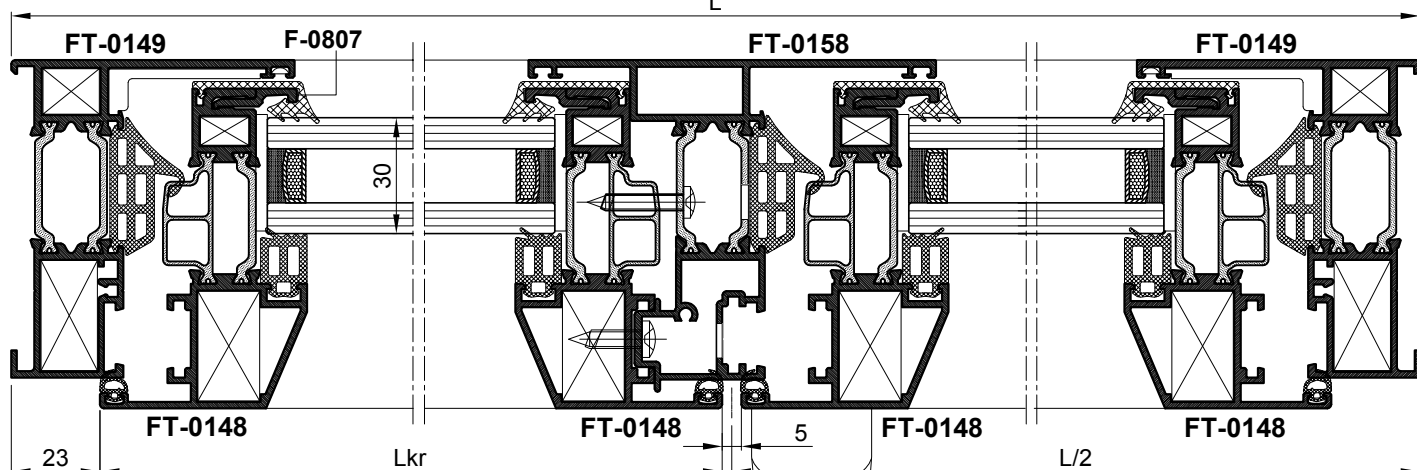


PROFILI		kom	mjera	pilanje
FT-0149	vodoravnica okvira	2	L	45-45
FT-0149	okomica okvira	2	H	45-45
FT-0148	vodoravnica krila	4	$L_{kr}=L/2-25.5$	45-45
FT-0148	okomica krila	4	$H_{kr}=H-46$	45-45
F-0807	vodoravna lajsna	4	Lkr-81	90-90
F-0807	okomita lajsna	4	Hkr-102	90-90
FT-0158	kombatuta	1	Hkr-113	90-90
NC-1459	klizač			

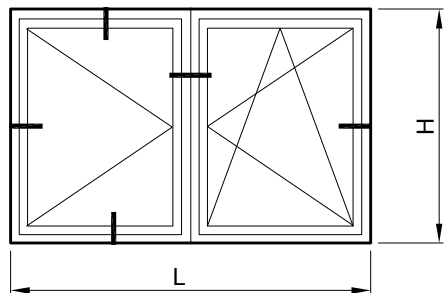
OKOVI		kom
710.075	glavni kutnik rama	4
710.031	pomoćni kutnik rama	4
730.011	pomoćni kutnik rama	4
730.002	pomoćni kutnik rama	4
710.092	glavni kutnik krila	8
710.025	pomoćni kutnik krila	8
730.001	pomoćni kutnik krila	8
134.000	otklopno-zaokretni mehanizam	1
143.002	zapinjač-krakun za pasivno krilo	2
143.003	jednostrani prihvata 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

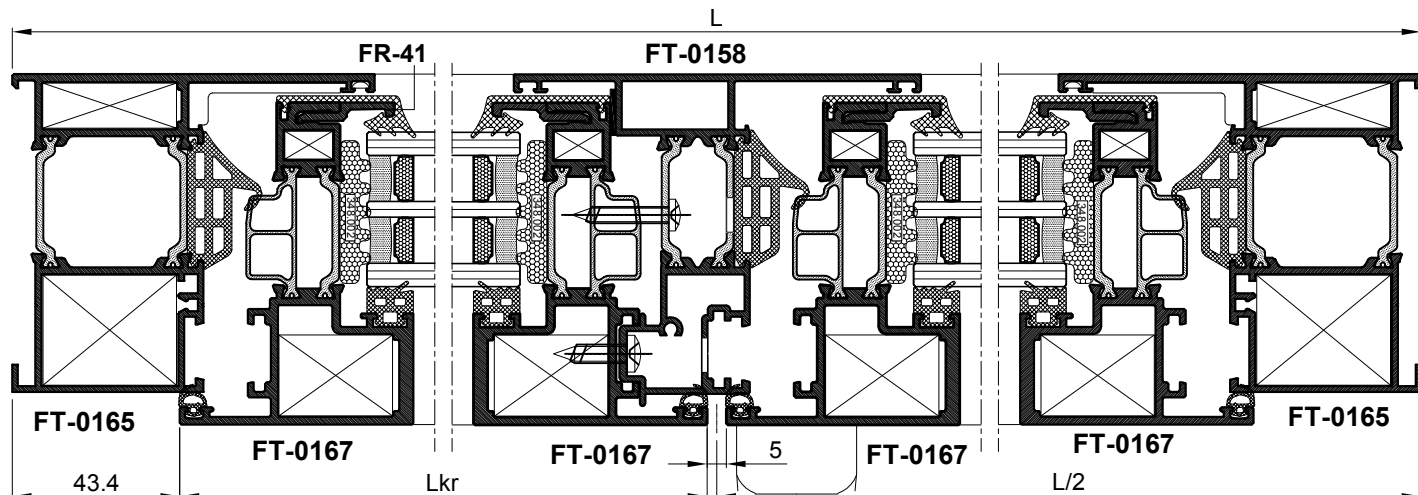
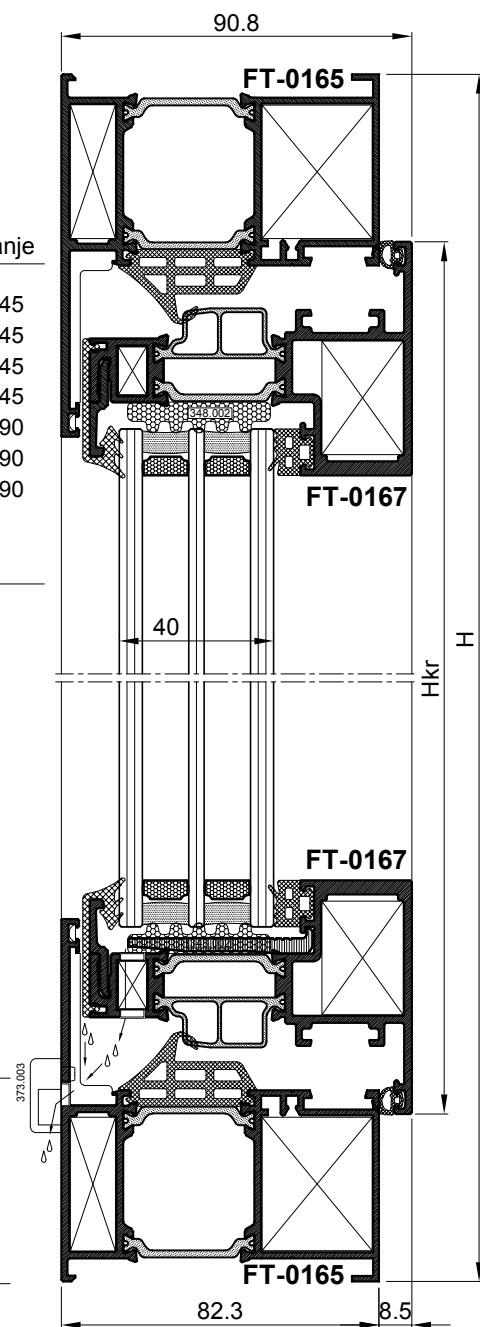


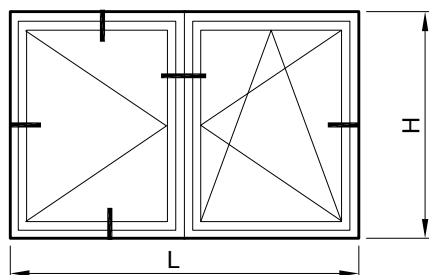
PROFILI		kom	mjera	pilanje
FT-0165	vodoravnica okvira	2	L	45-45
FT-0165	okomica okvira	2	H	45-45
FT-0167	vodoravnica krila	4	Lkr=L/2-46	45-45
FT-0167	okomica krila	4	Hkr=H-87	45-45
FR-41	vodoravna lajsna	4	Lkr-83	90-90
FR-41	okomita lajsna	4	Hkr-111	90-90
FT-0158	kombatuta	1	Hkr-113	90-90
NC-1459	klizač			

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	
710.025	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 prihvata 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-97 x Hkr-97





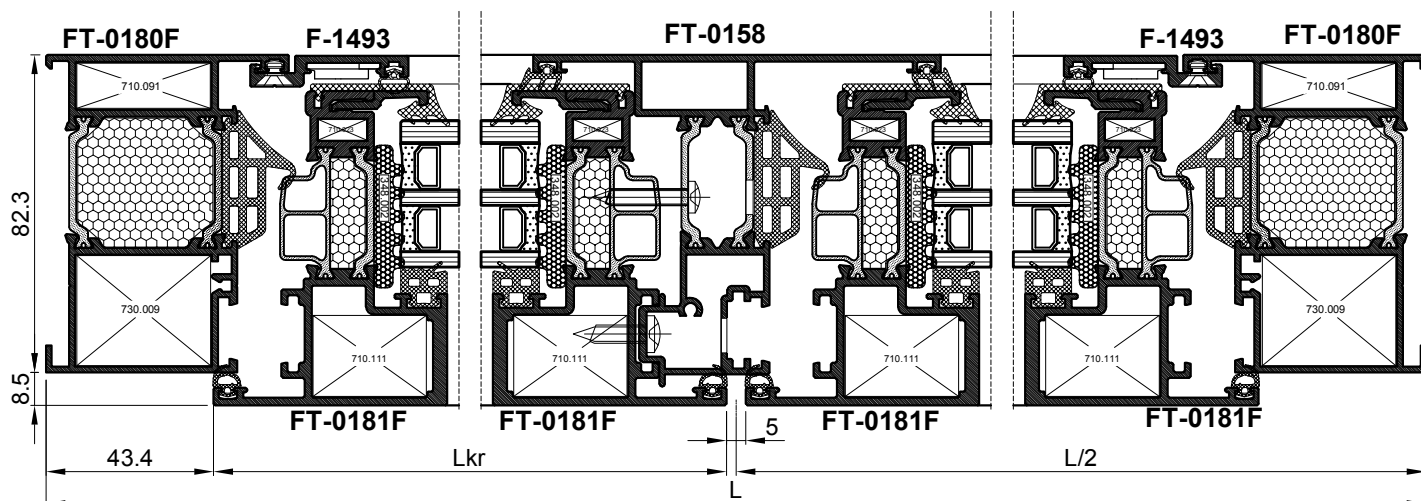
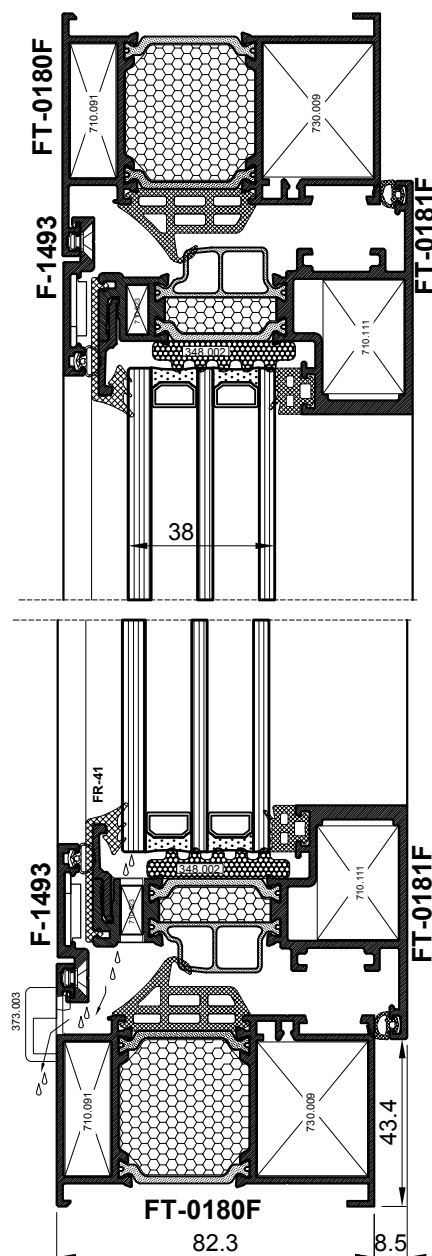
DVOKRILNI PROZOR

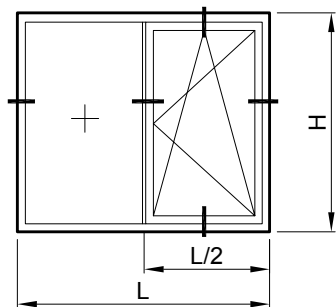
PROFILI		kom	mjera	pilanje
FT-0180F	vodoravnica okvira	2	L	45-45
FT-0180F	okomica okvira	2	H	45-45
FT-0181F	vodoravnica krila	4	$L_{kr}=L/2-45.9$	45-45
FT-0181F	okomica krila	4	$H_{kr}=H-86.8$	45-45
FR-41	vodoravna lajsna	4	Lkr-83	90-90
FR-41	okomita lajsna	4	Hkr-111	90-90
FT-0158	kombatuta	1	Hkr-113	90-90
NC-1459	klizač			
F-1493	vodoravnica dod. profila	2	$L_{dp}=L_{kr}-18.5$	45-45
F-1493	okomica dod. profila	2	$H_{dp}=H_{kr}-18.5$	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	
710.023	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 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		$2L+2H$
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		$2 \times (H_{kr} - 113)$
333.009	kutni umetak brtve	4	

STAKLO		kom	mjera
38 mm		2	$L_{kr}-97 \times H_{kr}-97$





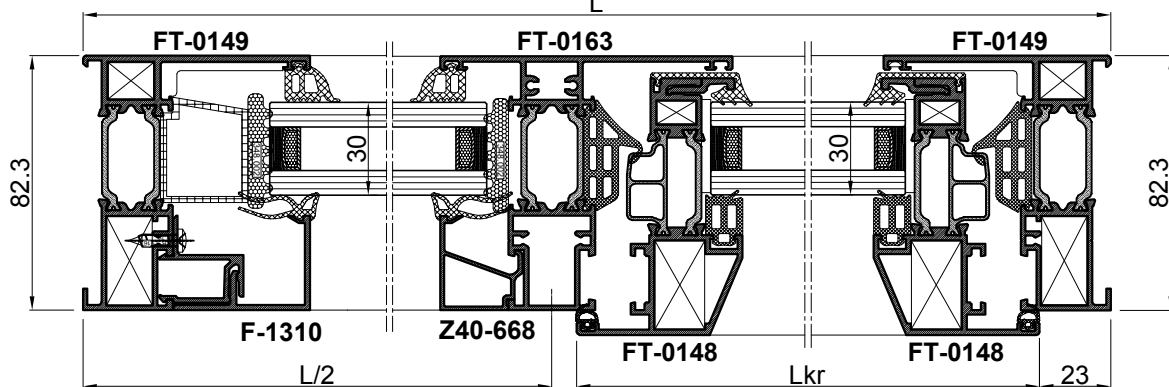
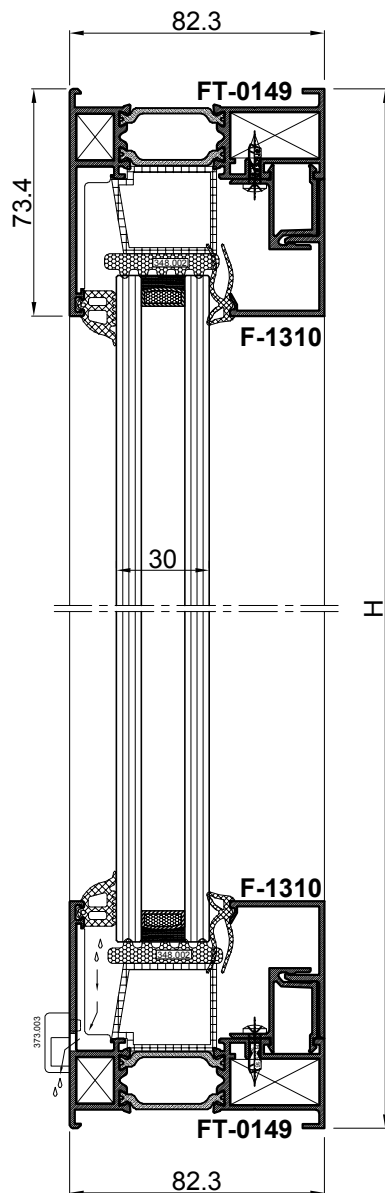
JEDNOKRILNI PROZOR SA FIKSNIM DIJELOM

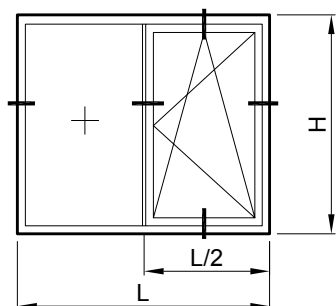
PROFILI		kom	mjera	pilanje
FT-0149	vodoravnica okvira	2	L	45-45
FT-0149	okomica okvira	2	H	45-45
FT-0148	vodoravnica krila	2	$L_{kr}=L/2-31$	45-45
FT-0148	okomica krila	2	$H_{kr}=H-46$	45-45
F-0807	vodoravna lajsna-krilo	2	Lkr-81	90-90
F-0807	okomita lajsna-krilo	2	Hkr-102	90-90
F-1310	vodoravna lajsna-fiksno	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
710.075	glavni kutnik rama	4
710.031	pomoćni kutnik rama	4
730.011	pomoćni kutnik rama	4
730.002	pomoćni kutnik rama	4
710.092	glavni kutnik krila	4
710.025	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	

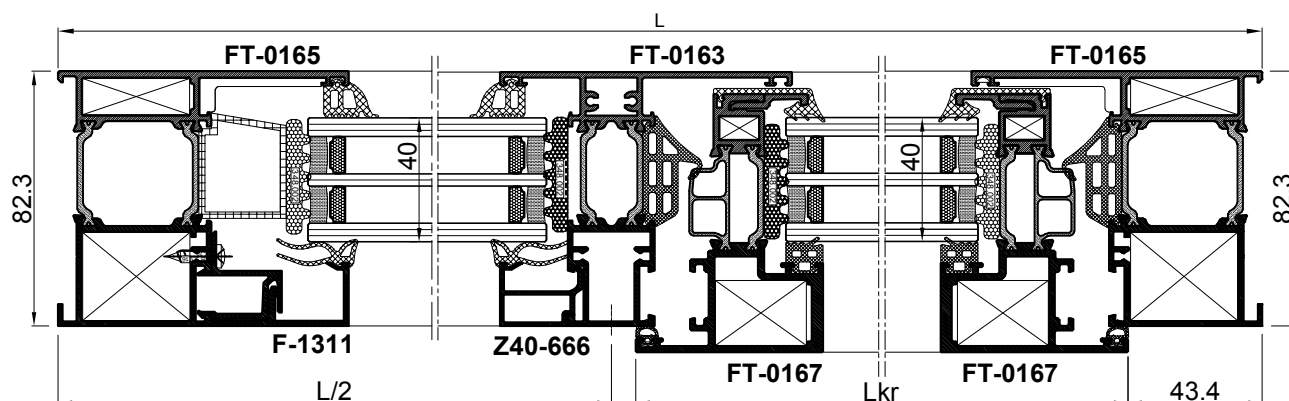
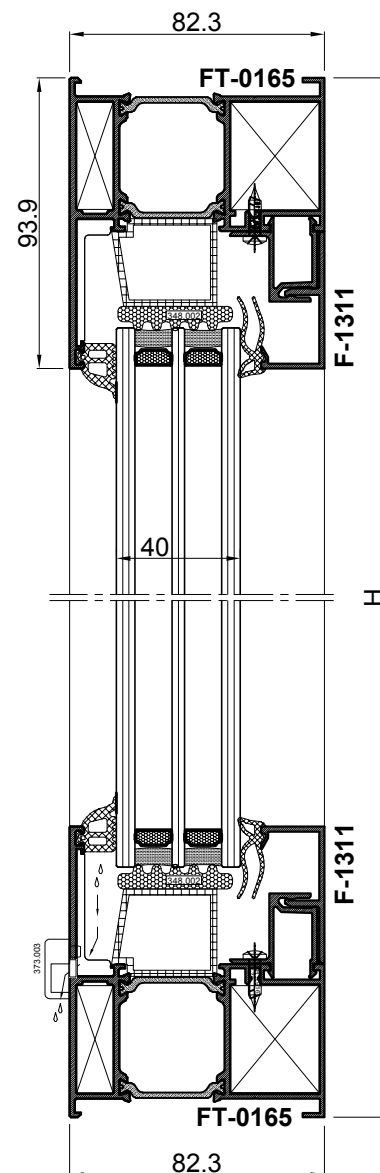
STAKLO		kom	mjera
30 mm		1	$L/2-81 \times H-120.5$
30 mm		1	$L_{kr}-87 \times H_{kr}-87$

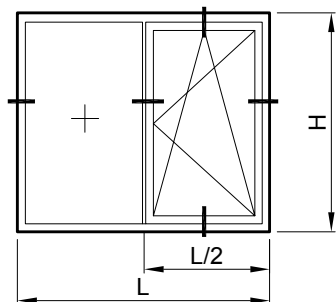




JEDNOKRILNI PROZOR SA FIKSNIM DIJELOM

PROFILI		kom	mjera	planje
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-0148	okomica krila	2	Hkr=H-87	45-45
FR-41	vodoravna lajsna-krilo	2	Lkr-83	90-90
FR-41	okomita lajsna-krilo	2	Hkr-111	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	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	4		
710.025	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			
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	
40 mm		1	L/2-102 x H-161.5	
40 mm		1	Lkr-97 x Hkr-97	





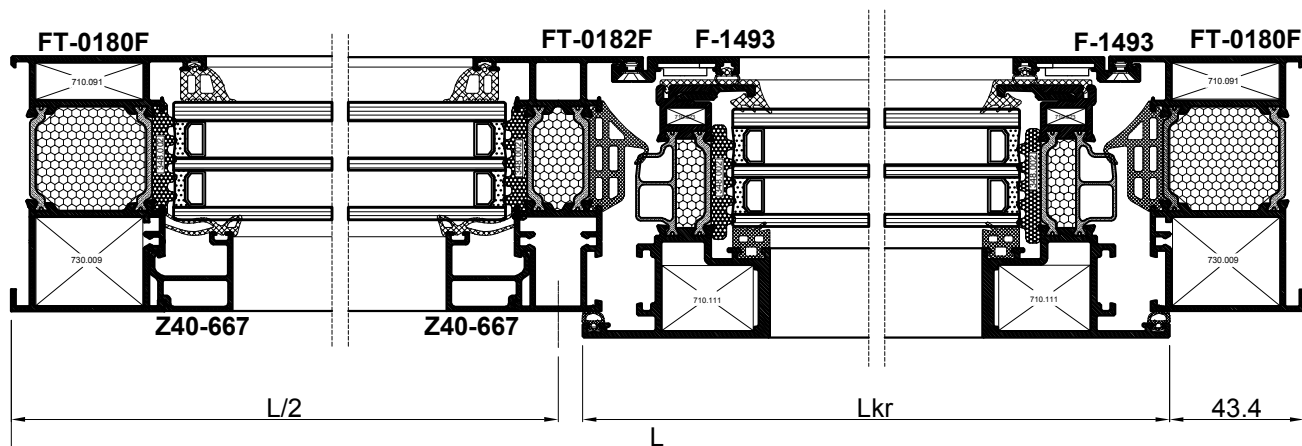
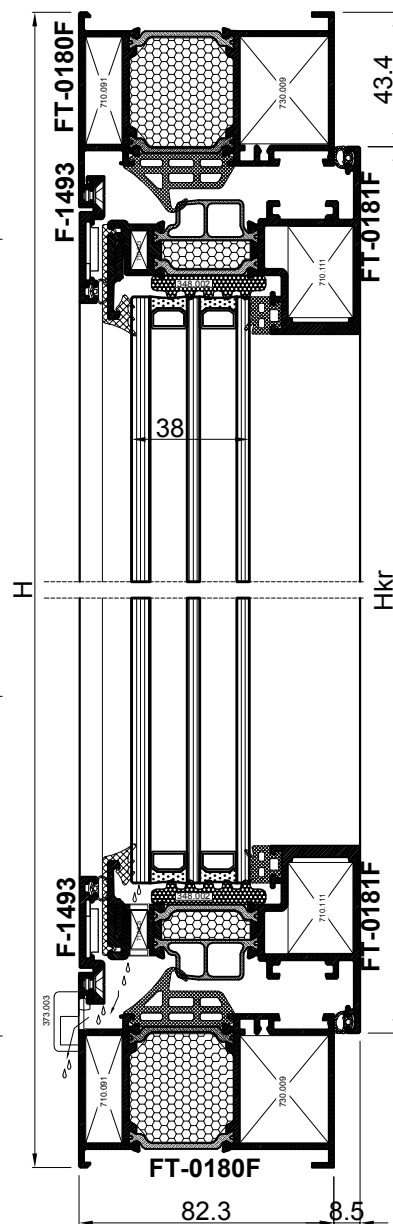
JEDNOKRILNI PROZOR SA FIKSNIM DIJELOM

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
710.023	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



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