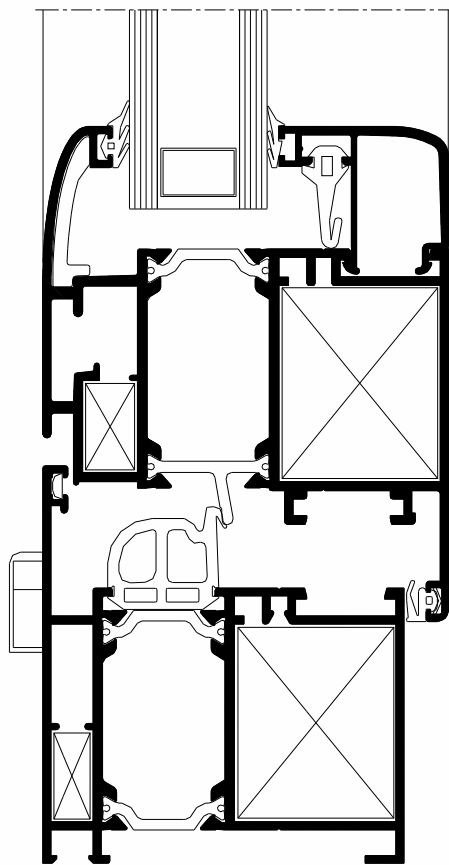


# FEAL

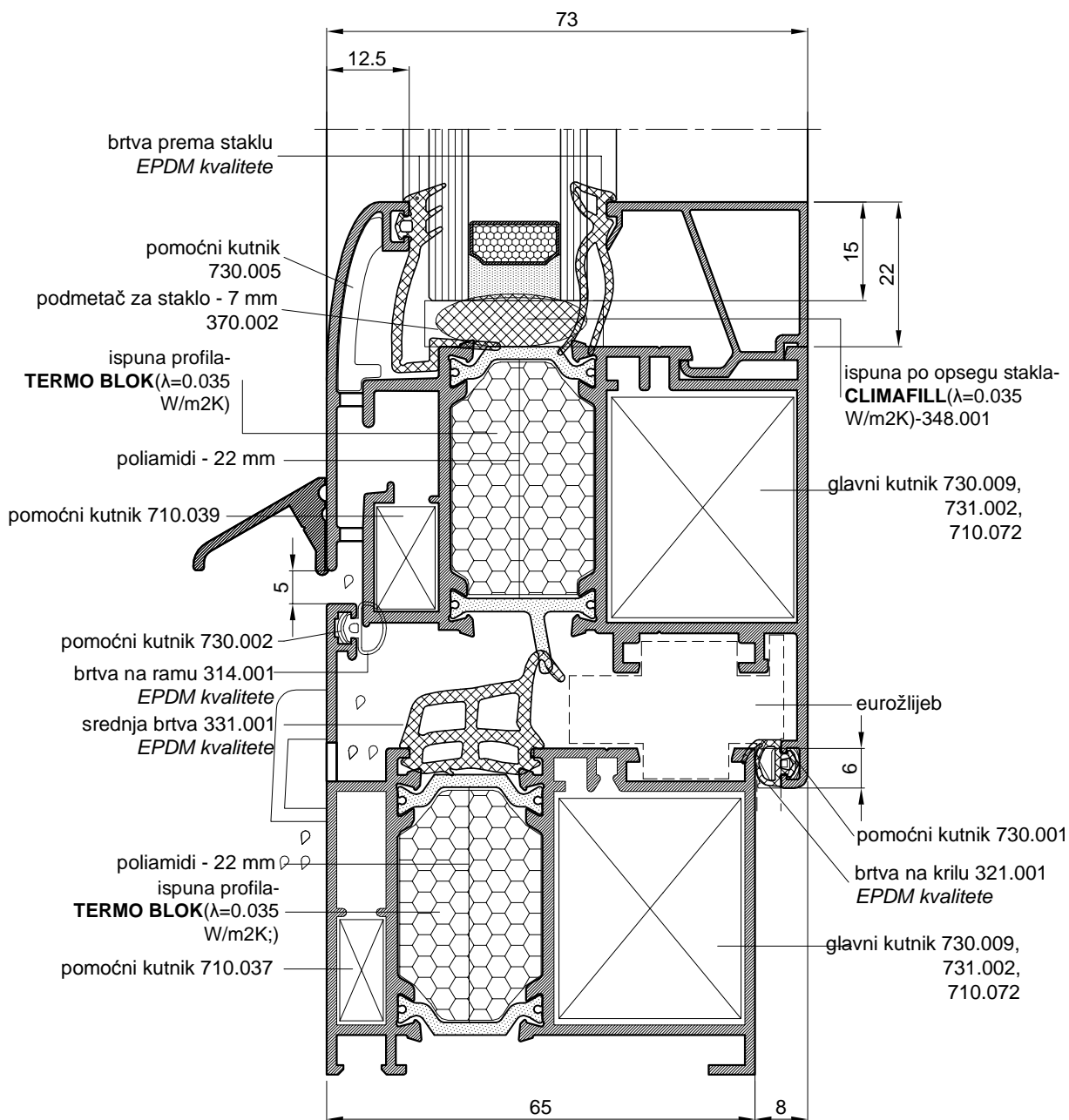
FEAL d.o.o za preradu aluminija-Široki Brijeg, Trnska cesta 146

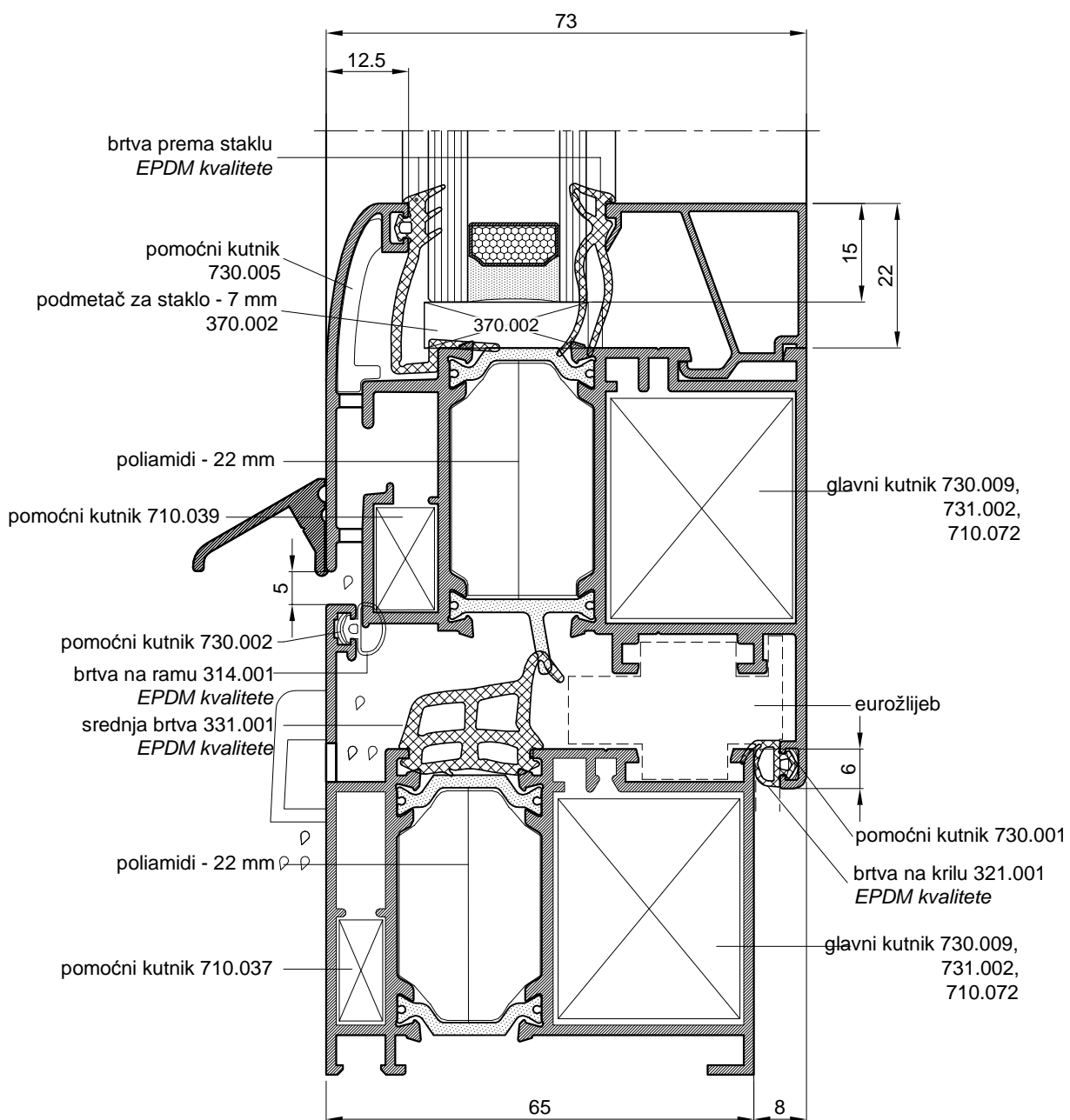


Serijski **TERMO 65**

PROFILI IZ SERIJE TERMO 65 DODATNO PUNJENI TERMOIZOLACIONIM MATERIJALOM

- ispunjena je od materijala s malim koeficijentom vodljivosti topline  $\lambda$  /veliki otpor prolaza topline/  
materijal: **TERMO BLOK**  $-\lambda=0.035$  W/mK/
- koeficijent prolaza topline  $U_f=2.15 - 2.4$  W/m<sup>2</sup>K





## Nachweis

Widerstandsfähigkeit bei Windlast  
Schlagregendichtheit  
Luftdurchlässigkeit  
Bedienkräfte



Prüfbericht 102 38064/1

Auftraggeber **FEAL d.o.o.**  
Trnska cesta 146

88220 Siroki Brijeg  
Bosnien-Herzegowina

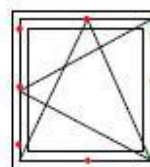
### Grundlagen

EN 14351-1 : 2006-03  
Prüfnormen:  
EN 1026 : 2000-06  
EN 1027 : 2000-06  
EN 12211 : 2000-06  
EN 12046-1 : 2003-11

Produkt	Einflügeliges Drehkipfenster
System	Thermo 65
Außenmaß (B x H)	1230 mm x 1480 mm
Rahmenmaterial	Aluminium-Kunststoff-Verbundprofile Verriegelungen schließseitig oben, oben und bandseitig
Besonderheiten	auf minimalen Anzug gestellt

Entsprechende nationale Fassungen (DIN EN)

### Darstellung



### Widerstandsfähigkeit bei Windlast – EN 12210



**Klasse C5 / B5**

### Schlagregendichtheit – EN 12208



**Klasse 7A**

### Luftdurchlässigkeit – EN 12207



**Klasse 4**

### Bedienkräfte – EN 13115



**Klasse 0**

### Verwendungshinweise

Dieser Prüfbericht dient zum Nachweis der aufgeführten Eigenschaften für Fenster nach EN 14351-1 : 2006-03. Die ermittelten Ergebnisse können vom Hersteller als Grundlage für den herstellereigenen zusammenfassenden ITT-Bericht verwendet werden. Die Festlegungen aus EN 14351-1 : 2006-03 sind zu beachten.

### Gültigkeit

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

Die Prüfergebnisse können nach EN 14351-1, unter Beachtung von Anlage E.1, in Eigenverantwortung des Herstellers übertragen werden.

Diese Prüfung ermöglicht keine Aussage über weitere Leistungs- und qualitätsbestimmenden Eigenschaften der vorliegenden Konstruktion; insbesondere Witterungs- und Alterungserscheinungen wurden nicht berücksichtigt.

### Veröffentlichungshinweise

Es gilt ift-Merkblatt „Bedingungen und Hinweise zur Benutzung von ift-Prüfdokumentationen“.

Das Deckblatt kann als Kurzfassung verwendet werden.

### Inhalt

Der Nachweis umfasst insgesamt 11 Seiten

ift Rosenheim  
4. Mai 2009

Jörn Peter Lass, Dipl.-Ing. (FH)  
Prüfstellenleiter  
ift Zentrum Fenster & Fassaden

Michael Brecht-Schick, Dipl.-Ing. (FH)  
Prüfingenieur  
ift Zentrum Fenster & Fassaden



## Nachweis

Widerstandsfähigkeit bei Windlast  
Schlagregendichtheit  
Luftdurchlässigkeit  
Bedienkräfte



Prüfbericht 102 38064/2

Auftraggeber FEAL d.o.o.  
Trnska cesta 146  
  
88220 Siroki Brijeg  
Bosnien-Herzegowina

### Grundlagen

EN 14351-1 : 2006-03

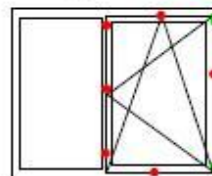
### Prüfnormen:

EN 1026 : 2000-06  
EN 1027 : 2000-06  
EN 12211 : 2000-06  
EN 12048-1 : 2003-11  
EN 14609 : 2004-03

Entsprechende nationale Fassungen (DIN EN)

Produkt	Einfügeliges Drehkipfenster mit seitlich liegender Festverglasung
System	Thermo 65
Außenmaß (B x H)	1480 mm x 1480 mm
Rahmenmaterial	Aluminium-Kunststoff-Verbundprofile
Besonderheiten	Glashalteleisten der Festverglasung an den Stößen mit spritzbarem Dichtstoff abgedichtet

### Darstellung



### Widerstandsfähigkeit bei Windlast – EN 12210



Klasse C5 / B5

### Schlagregendichtheit – EN 12208



Klasse 8A

### Luftdurchlässigkeit – EN 12207



Klasse 4

### Bedienkräfte – EN 13115



Klasse 0

### Verwendungshinweise

Dieser Prüfbericht dient zum Nachweis der aufgeführten Eigenschaften für Fenster nach EN 14351-1 : 2006-03. Die ermittelten Ergebnisse können vom Hersteller als Grundlage für den herstellereigenen zusammenfassenden ITT-Bericht verwendet werden. Die Festlegungen aus EN 14351-1 : 2006-03 sind zu beachten.

### Gültigkeit

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

Die Prüfergebnisse können nach EN 14351-1, unter Beachtung von Anlage E.1, in Eigenverantwortung des Herstellers übertragen werden.

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### Veröffentlichungshinweise

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### Inhalt

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ift Rosenheim  
4. Mai 2009

Jörn Peter Lass, Dipl.-Ing. (FH)  
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ift Zentrum Fenster & Fassaden

Michael Breckl-Stock, M.Eng., Dipl.-Ing. (FH)  
Prüfingenieur  
ift Zentrum Fenster & Fassaden

## Nachweis

Widerstandsfähigkeit bei Windlast  
Schlagregendichtheit  
Luftdurchlässigkeit  
Bedienkräfte

Prüfbericht 102 38064/3



Auftraggeber FEAL d.o.o.  
Trnska cesta 146  
  
88220 Siroki Brijeg  
Bosnien-Herzegowina

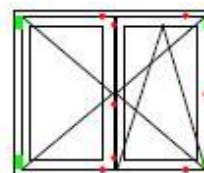
### Grundlagen

EN 14351-1 : 2006-03  
Prüfnormen:  
EN 1026 : 2000-06  
EN 1027 : 2000-06  
EN 12211 : 2000-06  
EN 12046-1 : 2003-11

Produkt	Zweiflügeliges Dreh-Drehkipfenster mit offenbarem Mittelstück
System	TERMO 65
Außenmaß (B x H)	1480 mm x 1480 mm
Rahmenmaterial	Aluminium-Kunststoff-Verbundprofile
Besonderheiten	-/-

Entsprechende nationale Fassungen (DIN EN)

### Darstellung



### Widerstandsfähigkeit bei Windlast – EN 12210



Klasse C4 / B4

### Schlagregendichtheit – EN 12208



Klasse 1A

### Luftdurchlässigkeit – EN 12207



Klasse 4

### Bedienkräfte – EN 13115



Klasse 1

### Verwendungshinweise

Dieser Prüfbericht dient zum Nachweis der aufgeführten Eigenschaften für Fenster nach EN 14351-1 : 2006-03. Die ermittelten Ergebnisse können vom Hersteller als Grundlage für den herstellereigenen zusammenfassenden ITT-Bericht verwendet werden. Die Festlegungen aus EN 14351-1 : 2006-03 sind zu beachten.

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Die Prüfergebnisse können nach EN 14351-1, unter Beachtung von Anlage E.1, in Eigenverantwortung des Herstellers übertragen werden.

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### Inhalt

Der Nachweis umfasst insgesamt 13 Seiten

ift Rosenheim  
4. Mai 2009

Thom Peter Lass, Dipl.-Ing. (FH)  
Prüfstellenleiter  
ift Zentrum Fenster & Fassaden

Michael Bredt-Stück, M.Eng. Dipl.-Ing. (FH)  
Prüfingenieur  
ift Zentrum Fenster & Fassaden



ift Rosenheim GmbH  
Geschäftsführer:  
Dipl.-Ing. (FH) Ulrich Sieberath  
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www.ift-rosenheim.de

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AG Traunstein, HRB 14763  
Sparkasse Rosenheim  
Kto. 3922  
BLZ 711 500 00

Notified Body Nr.: 0757  
Anerkannte PUZ-Stelle: BAY 18

**Evidence of Performance**  
 Airborne sound insulation of building  
 elements  
 Test report 161 38064/Z01e\*)



\*) This is a translation of the test report No. 161 38064/Z01 dated 23 March 2009

Client **FEAL d.o.o.**  
 Trnska cesta 146  
 88220 Siroki Brijeg  
 Bosnien-Herzegowina

**Basis**

EN ISO 140-1: 1997+A1: 2004  
 EN 20140-3: 1995+A1: 2004  
 EN ISO 717-1: 1996+A1: 2006

**Representation**



Product	Single window, one leaf
System designation	TERMO 65
Size (W x H)	1230 mm x 1480 mm
Material	Aluminium profiles with thermal break
Type of opening	tilt and turn
Reabate sealants	1 central seal, 1 internal seal
Infill panel	Insulating glass unit, Construction: 8 LG/15/6 Interlayer: 0.76 mm acoustic foil
Special features	-/-

**Instructions for use**

This test report may be used to classify the sound insulation of building elements.

For Germany DIN 4109:1989-11 is valid:

- $R_w$  is equivalent to  $R_{w,p}$ .
- $R_{w,R} = R_{w,p} - 2$  dB
- $R_{w,R}$  for „Bauregelliste“

**Validity**

The data and results given relate solely to the described, tested object.

Testing for sound insulation does not allow any statement to be made on further characteristics of the present structure which could define performance and quality.

Weighted sound reduction index  $R_w$   
 Spectrum adaptation terms C and  $C_{tr}$



$$R_w (C; C_{tr}) = 38 (-1; -4) \text{ dB}$$

**Notes on publication**

The ift notice "Conditions and notes for the use of ift test documents" applies.

The cover sheet can be used as a summary.

**Contents**

The report comprises a total of 9 pages

- 1 Object
  - 2 Procedure
  - 3 Detailed results
  - 4 Instruction for use
- Data sheet (1 page)

ift Rosenheim  
 25 May 2009

Dr. Joachim Hessinger, Dipl.-Phys.  
 Head of Testing Department  
 ift Centre for Acoustics

Johann Baume, Dipl.-Ing. (FH)  
 Test engineer  
 ift Centre for Acoustics



## Nachweis Wärmedurchgangskoeffizient

Prüfbericht 422 30558/1



Auftraggeber **FEAL d.o.o.**  
Tm bb

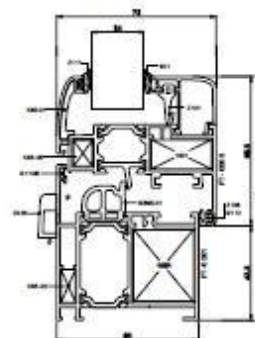
88220 Siroki Brijeg  
Bosnien-Herzegowina

Produkt	Thermisch getrennte Metallprofile, Profilkombination: Flügelrahmen- Blendrahmen
Bezeichnung	Thermo 65
Bautiefe	Blendrahmen: 65 mm Flügelrahmen: 73 mm
Ansichtsbreite	112 mm
Material	Aluminiumprofil mit thermischer Trennung
Oberfläche	anodisch oxidiert / pulverbeschichtet Art: Stege durchgehend Material: Polyamid 6.6 verstärkt mit 25 % Glasfaser Einlagen: keine
Thermische Trennung / Dämmzone	Metalloberflächen im Dämmzonenbereich: anodisch oxidiert/lackiert/pulverbeschichtet
Füllung	Dicke: 24 mm Einbautiefe: 15 mm
Besonderheiten	-

### Grundlagen

EN ISO 10077-2 : 2003-10  
Wärmetechnisches Verhalten von Fenstern, Türen und Abschlüssen - Berechnung des Wärmedurchgangskoeffizienten - Teil 2: Numerisches Verfahren für Rahmen

### Darstellung



### Verwendungshinweise

Dieser Prüfbericht dient zum Nachweis des Wärmedurchgangskoeffizienten  $U_f$ .

### Gültigkeit

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

Die Ermittlung des Wärmedurchgangskoeffizienten ermöglicht keine Aussage über weitere leistungs- und qualitätsbestimmende Eigenschaften der vorliegenden Konstruktion.

### Veröffentlichungshinweise

Es gilt das ift-Merkblatt „Bedingungen und Hinweise zur Benutzung von ift-Prüfdokumentationen“.

Das Deckblatt kann als Kurzfassung verwendet werden.

### Inhalt

Der Nachweis umfasst insgesamt 5 Seiten

- 1 Gegenstand
- 2 Durchführung
- 3 Einzelergebnisse

### Wärmedurchgangskoeffizient



$$U_f = 3,1 \text{ W}/(\text{m}^2 \cdot \text{K})$$



ift Rosenheim  
28. Juni 2006

*Konrad Huber*

Konrad Huber, Dipl.-Ing. (FH)  
Stv. Prüfstellenleiter Wärmeschutz  
ift Zentrum Glas, Baustoffe & Bauphysik

*Klaus Specht*

Klaus Specht, Dipl.-Ing. (FH)  
Prüfingenieur  
ift Zentrum Glas, Baustoffe & Bauphysik





# Nachweis

## Wärmedurchgangskoeffizient

Prüfbericht 422 30558/3



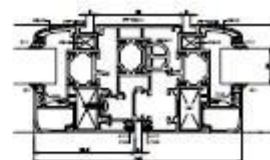
Auftraggeber **FEAL d.o.o.**  
**Tm bb**

88220 Siroki Brijeg  
 Bosnien-Herzegowina

**Grundlagen**  
 EN ISO 10077-2 : 2003-10  
 Wärmetechnisches Verhalten  
 von Fenstern, Türen und  
 Abschlüssen - Berechnung des  
 Wärmedurchgangs-  
 koeffizienten - Teil 2: Numeri-  
 sches Verfahren für Rahmen

Produkt	Thermisch getrennte Metallprofile, Profilkombination: Flügelrahmen-Stulp-Flügelrahmen
Bezeichnung	Thermo 65
Bautiefe	Stulp: 65,5 mm Flügelrahmen: 73 mm
Ansichtsbreite	142 mm
Material	Aluminiumprofil mit thermischer Trennung
Oberfläche	anodisch oxidiert / pulverbeschichtet
Thermische Trennung / Dämmzone	Art: Stege durchgehend Material: Polyamid 6.6 verstärkt mit 25 % Glasfaser Einlagen: keine Metalloberflächen im Dämmzonenbereich: anodisch oxidiert/lackiert/pulverbeschichtet
Füllung	Dicke: 24 mm Einbautiefe: 15 mm
Besonderheiten	-

### Darstellung



**Verwendungshinweise**  
 Dieser Prüfbericht dient zum  
 Nachweis des Wärmedurch-  
 gangskoeffizienten  $U_f$ .

**Gültigkeit**  
 Die genannten Daten und Er-  
 gebnisse beziehen sich aus-  
 schließlich auf den geprüften  
 und beschriebenen Gegen-  
 stand.

Die Ermittlung des Wärme-  
 durchgangskoeffizienten er-  
 möglicht keine Aussage über  
 weitere leistungs- und qualitäts-  
 bestimmende Eigenschaften  
 der vorliegenden Konstruktion.

### Wärmedurchgangskoeffizient



$$U_f = 3,3 \text{ W}/(\text{m}^2 \cdot \text{K})$$



ift Rosenheim  
 28. Juni 2006

Konrad Huber, Dipl.-Ing. (FH)  
 Stv. Prüfstellenleiter Wärmeschutz  
 ift Zentrum Glas, Baustoffe & Bauphysik

Klaus Specht, Dipl.-Ing. (FH)  
 Prüflingenieur  
 ift Zentrum Glas, Baustoffe & Bauphysik

### Veröffentlichungshinweise

Es gilt das ift-Merkblatt  
 „Bedingungen und Hinweise  
 zur Benutzung von ift-  
 Prüfdokumentationen“.

Das Deckblatt kann als  
 Kurzfassung verwendet  
 werden.

### Inhalt

Der Nachweis umfasst  
 insgesamt 5 Seiten

- 1 Gegenstand
- 2 Durchführung
- 3 Einzelergebnisse

## Nachweis Wärmedurchgangskoeffizient

Prüfbericht 422 30558/4



Auftraggeber **FEAL d.o.o.**  
Tm bb  
  
88220 Siroki Brijeg  
Bosnien-Herzegowina

### Grundlagen

EN ISO 10077-2 : 2003-10  
Wärmetechnisches Verhalten  
von Fenstern, Türen und  
Abschlüssen - Berechnung des  
Wärmedurchgangs-  
koeffizienten - Teil 2: Numerisches  
Verfahren für Rahmen

Produkt	Thermisch getrennte Metallprofile, Profilkombination: Blendrahmen
Bezeichnung	Thermo 65
Bautiefe	Blendrahmen: 65 mm
Ansichtsbreite	71,5 mm
Material	Aluminiumprofil mit thermischer Trennung
Oberfläche	anodisch oxidiert / pulverbeschichtet Art: Stege durchgehend Material: Polyamid 6.6 verstärkt mit 25 % Glasfaser Einlagen: keine
Thermische Trennung / Dämmzone	Metalloberflächen im Dämmzonenbereich: anodisch oxidiert/lackiert/pulverbeschichtet Dicke: 24 mm
Füllung	Einbautiefe: 15 mm
Besonderheiten	-

### Darstellung



### Verwendungshinweise

Dieser Prüfbericht dient zum  
Nachweis des Wärmedurchgangs-  
koeffizienten  $U_f$ .

### Gültigkeit

Die genannten Daten und Er-  
gebnisse beziehen sich auf  
schließlich auf den geprüften  
und beschriebenen Gegen-  
stand.

Die Ermittlung des Wärme-  
durchgangskoeffizienten er-  
möglicht keine Aussage über  
weitere leistungs- und qualitäts-  
bestimmende Eigenschaften  
der vorliegenden Konstruktion.

### Wärmedurchgangskoeffizient



$$U_f = 3,1 \text{ W/(m}^2 \cdot \text{K)}$$



ift Rosenheim  
28. Juni 2006

Konrad Huber, Dipl.-Ing. (FH)  
Stv. Prüfstellenleiter Wärmeschutz  
ift Zentrum Glas, Baustoffe & Bauphysik

Klaus Specht, Dipl.-Ing. (FH)  
Prüfingenieur  
ift Zentrum Glas, Baustoffe & Bauphysik

### Veröffentlichungshinweise

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zur Benutzung von ift-  
Prüfdokumentationen“.

Das Deckblatt kann als  
Kurzfassung verwendet  
werden.

### Inhalt

Der Nachweis umfasst  
insgesamt 5 Seiten

- 1 Gegenstand
- 2 Durchführung
- 3 Einzelergebnisse



## Nachweis Wärmedurchgangskoeffizient

Prüfbericht 422 30558/5



Auftraggeber **FEAL d.o.o.**  
**Tm bb**

88220 Siroki Brijeg  
Bosnien-Herzegowina

### Grundlagen

EN ISO 10077-2 : 2003-10  
Wärmetechnisches Verhalten  
von Fenstern, Türen und  
Abschlüssen - Berechnung des  
Wärmedurchgangs-  
koeffizienten - Teil 2: Numeri-  
sches Verfahren für Rahmen

Produkt	Thermisch getrennte Metallprofile, Profilkombination: Pfosten
Bezeichnung	Thermo 65
Bautiefe	Pfostenrahmen: 64,5 mm
Ansichtsbreite	72 mm
Material	Aluminiumprofil mit thermischer Trennung
Oberfläche	anodisch oxidiert / pulverbeschichtet Art: Stege durchgehend Material: Polyamid 6.6 verstärkt mit 25 % Glasfaser Einlagen: keine
Thermische Trennung / Dämmzone	Metalloberflächen im Dämmzonenbereich: anodisch oxidiert/lackiert/pulverbeschichtet Dicke: 24 mm
Füllung	Einbautiefe: 15 mm
Besonderheiten	-

### Darstellung



### Verwendungshinweise

Dieser Prüfbericht dient zum  
Nachweis des Wärmedurch-  
gangskoeffizienten  $U_f$ .

### Gültigkeit

Die genannten Daten und Er-  
gebnisse beziehen sich aus-  
schließlich auf den geprüften  
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stand.

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### Inhalt

Der Nachweis umfasst  
insgesamt 5 Seiten

- 1 Gegenstand
- 2 Durchführung
- 3 Einzelergebnisse

### Wärmedurchgangskoeffizient



$$U_f = 2,9 \text{ W/(m}^2 \cdot \text{K)}$$



ift Rosenheim  
28. Juni 2008

Konrad Huber, Dipl.-Ing. (FH)  
Stv. Prüfstellenleiter Wärmeschutz  
ift Zentrum Glas, Baustoffe & Bauphysik

Klaus Specht, Dipl.-Ing. (FH)  
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Nalog za ispitivanje: 113/09  
 RN: 72160817

Datum: 12. 11. 2009.

3124 100

Zagreb, 2009-10-19

## IZVJEŠTAJ O ISPITIVANJU BR. 2160-261/09

**Naručitelj:** Feal Hrvatska d.o.o.  
 Rudeška cesta 3a  
 HR-10 000 Zagreb

**Ugovor/narudžba:** ponuda 2160-0-1494/09 od 2009-07-08

**Proizvod:** Jednokrilni otklopno-zaokretni aluminijski prozor izrađen od aluminijskih profila serije TERMO 65 F

**Proizvođač:** FEAL d.o.o.  
 poduzeće za preradu aluminija  
 Široki Brijeg, BIH

**Datum zaprimanja uzoraka:** 2009-07-07

**Mjesto ispitivanja:** Institut IGH d.d., Sektor IGH Institut, Laboratorij IGH, Laboratorij za građevinsku fiziku, Janka Rakuše 1, HR-10000 Zagreb

**Laboratorijska oznaka uzorka:** LGF 210/09

**Ispitana svojstva:** A dio: koeficijent prolaska topline  $U_f$  profila prozora i  
 B dio: koeficijent prolaska topline  $U_w$  prozora i  
 (sve metode ispitivanja akreditirane su od strane HAA)

Voditelj ispitivanja:

Zlatko Franolić



Voditelj laboratorija:

dr. sc. Ivica Kušević, dipl. ing. fizike

Laboratorij za građevinsku fiziku, akreditiran je od Hrvatske akreditacijske agencije (HAA) prema zahtjevima norme HRN EN ISO/IEC 17025 za ispitivanja toplinsko-izolacijskih proizvoda za primjenu u građiteljstvu, izabranih ispitivanja: građevnih materijala i proizvoda s obzirom na toplinu, vlagu i akustička svojstva, toplinskih značajki zgrada, svojstava prozora i vrata, boja i lakova, te građevnih materijala i elemenata u požaru, prema Prilogu potvrde o akreditaciji br. 1033/09.

Rezultati ispitivanja odnose se samo na ispitane uzorke. Djelomično umnožavanje ovog izvještaja nije dopušteno bez pismenog odobrenja Voditelja laboratorija.

Stranica 1 od 9



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Izvještaj broj: 2160-261/09

IZRAČUN KOEFICIJENTA PROLAZA TOPLINE PROFILA PROZORA		jedinica	vrijednost
$\theta_{me,sur}$	(srednja temperatura zaštitni panel)	°C	10,18
$R_{sur}$		m <sup>2</sup> ·K/W	4,926
$\lambda_{sur}$		W/(K·m)	0,041
$\psi_{ed}$		W/(K·m)	0,0172
$\Delta\theta_{s,sur}$	(temperaturna razlika zaštitni panel)	K	19,06
$\Delta\theta_c$	(temperaturna razlika zrak)	K	19,96
$\Phi_{in}$	(ulazna snaga hot box)	W	65,56
$\Phi_{sur}$	(zaštitni panel toplinski tok)	W	11,65
$\Phi_{ed}$	(rubni dio toplinski tok)	W	1,85
$q_t$	(gustoća toplinskog toka kroz ispunu i profile prozora)	W/m <sup>2</sup>	29,03
$F_{ci}$	(konvekcijski dio-topli)		0,446
$F_{ce}$	(konvekcijski dio-hladni)		0,801
$R_{s,t}$	(ukupni površinski otpor)	m <sup>2</sup> ·K/W	0,182
$\theta_{ri}$	(temperatura zračenja-topla)	°C	19,28
$\theta_{re}$	(temperatura zračenja-hladna)	°C	1,31
$\theta_{ni}$	(temperatura zraka-topla)	°C	19,82
$\theta_{ne}$	(temperatura zraka-hladna)	°C	0,61
$\Delta\theta_n$	(razlika temperature zraka)	K	19,21
$U_f$	(izmj. koeficijent prol. topline prozora)	W/(m <sup>2</sup> ·K)	2,28

#### ZAKLJUČAK

Ispitani aluminijski profili serije TERMO 65 F koji služe za izradu prozora, opremljeni sa svima sastavnim dijelovima (brtvama, ukutom i okovom), proizvođača FEAL d.o.o., imaju koeficijent prolaska topline:

$$U_f = 2,3 \text{ W/(m}^2\cdot\text{K)}$$

#### B DIO: ISPITIVANJE KOEFICIJENTA PROLASKA TOPLINE $U_w$ PROZORA

Zadatak: Ispitati koeficijent prolaza topline  $U_w$  jednokrlnog otklopno-zaokretnog aluminijskog prozora izrađenog od aluminijskih profila serije TERMO 65 F, ostakljenog troslojnim izolacijskim staklom debljine 44 mm, sastava: staklo Climaguard low-e 4 mm + međuprostor punjen argonom 16 mm + staklo Climaguard N 4 mm + međuprostor punjen argonom 16 mm + staklo Climaguard low-e 4 mm (skica 1).

Ispitano prema normi: HRN EN ISO 8990:1998 i HRN EN ISO 12567-1:2002

Datum ispitivanja: Ispitivanje je provedeno od 29. do 30. rujna 2009.





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Izveštaj broj: 2160-261/09

IZRAČUN KOEFICIJENTA PROLAZA TOPLINE PROFILA PROZORA		jedinica	vrijednost
$\theta_{me,sur}$	(srednja temperatura zaštitni panel)	°C	10,43
$R_{sur}$		m <sup>2</sup> ·K/W	4,923
$\lambda_{sur}$		W/(K·m)	0,041
$\psi_{ed}$		W/(K·m)	0,0172
$\Delta\theta_{s,sur}$	(temperaturna razlika zaštitni panel)	K	19,35
$\Delta\theta_c$	(temperaturna razlika zrak)	K	19,90
$\Phi_{in}$	(ulazna snaga hot box)	W	62,55
$\Phi_{sur}$	(zaštitni panel toplinski tok)	W	11,82
$\Phi_{ed}$	(rubni dio toplinski tok)	W	1,84
$q_t$	(gustoća toplinskog toka kroz ispunu i profile prozora)	W/m <sup>2</sup>	27,26
$F_{ci}$	(konvekcijski dio-topli)		0,453
$F_{ce}$	(konvekcijski dio-hladni)		0,796
$R_{s,t}$	(ukupni površinski otpor)	m <sup>2</sup> ·K/W	0,183
$\theta_{ri}$	(temperatura zračenja-topla)	°C	19,42
$\theta_{re}$	(temperatura zračenja-hladna)	°C	1,34
$\theta_{ni}$	(temperatura zraka-topla)	°C	19,90
$\theta_{ne}$	(temperatura zraka-hladna)	°C	0,65
$\Delta\theta_n$	(razlika temperature zraka)	K	19,24
$U_m$	(izmjereni koeficijent prolaza topline prozora)	W/(m <sup>2</sup> ·K)	1,42

$U_{st}$  (normirani koeficijent prolaska topline prozora) = 1,44 W/(m<sup>2</sup>·K)

#### ZAKLJUČAK

Ispitani jednokrlni otklopno-zaokretni aluminijski prozor izrađen od aluminijskih profila serije TERMO 65 F, proizvođača Feal d.o.o., ostakljen troslojnim izolacijskim staklom debljine 44 mm, sastava: staklo Climaguard low-e 4 mm + međuprostor punjen argonom 16 mm + kaljeno staklo 4 mm + međuprostor punjen argonom 16 mm + staklo Climaguard low-e 4, ima koeficijent prolaska topline:

$$U_w = 1,4 \text{ W/(m}^2\cdot\text{K)}$$

*Napomena: Iskazana vrijednost koeficijenta prolaska topline prozora dobivena je na normiranoj izmjeri prozora (1,22 m x 1,47 m). Na navedenoj izmjeri prozora odnosi udjela ploštine profila i ploštine ostakljenja obzirom na ukupnu površinu prozora iznose: profili 38 %, ostakljenje 62 %.*



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Nalog za ispitivanje: 168/09  
RN: 72160804

Zagreb, 2010-02-08

## IZVJEŠTAJ O ISPITIVANJU BR. 2160-026/10

**Naručitelj:** Feal Hrvatska d.o.o.  
Rudeška cesta 3a  
HR-10 000 Zagreb

**Ugovor/narudžba:** ponuda 2160-0-1993/09 od 2009-11-03 i narudžbenica od 2009-11-05

**Proizvod:** Jednokrilni otklopno-zaokretni aluminijski prozor izrađen od aluminijskih profila serije TERMO 65 F

**Proizvođač:** FEAL d.o.o.  
Trnska cesta 146  
BA-88220 Široki Brijeg  
Bosna i Hercegovina

**Datum zaprimanja uzoraka:** 2009-07-07

**Mjesto ispitivanja:** Institut IGH d.d., Laboratorij IGH, Laboratorij za građevinsku fiziku, Janka Rakuše 1, HR-10000 Zagreb

**Laboratorijska oznaka uzorka:** LGF 210/09

**Ispitana svojstva:** A dio: zrakopropusnost  
B dio: vodonepropusnost  
C dio: otpornost na opterećenje vjetrom  
D dio: zvučna izolacija  
(sve metode ispitivanja akreditirane su od strane HAA)

Odgovorne osobe:

za A, B i C dio: Zlatko Franolić

za D dio: Maro Puljizević, dipl. ing. građ.



Voditelj laboratorija:

dr. sc. Ivica Kušević, dipl. ing. fizike

Laboratorij za građevinsku fiziku, akreditiran je od Hrvatske akreditacijske agencije (HAA) prema zahtjevima norme HRN EN ISO/IEC 17025 za ispitivanja toplinsko-izolacijskih proizvoda za primjenu u graditeljstvu, izabranih ispitivanja: građevnih materijala i proizvoda s obzirom na toplinu, vlagu i akustička svojstva, toplinskih značajki zgrada, svojstava prozora i vrata, boja i lakova, te građevnih materijala i elemenata u požaru, prema Prilogu potvrde o akreditaciji br. 1033/09.  
Institut IGH d.d., Zagreb, ovlašten je od Ministarstva zaštite okoliša, prostornog uređenja i graditeljstva Republike Hrvatske za radnje ispitivanja prozora i vrata, evidencijski broj 1/05, ovlaštenje klasa: UP/I 360-01/09-08/12, urbroj: 531-01-09-3 od 9. studenog 2009.

Rezultati ispitivanja odnose se samo na ispitane uzorke. Djelomično umnožavanje ovog izvještaja nije dopušteno bez pismenog odobrenja Voditelja laboratorija.

Stranica 1 od 11



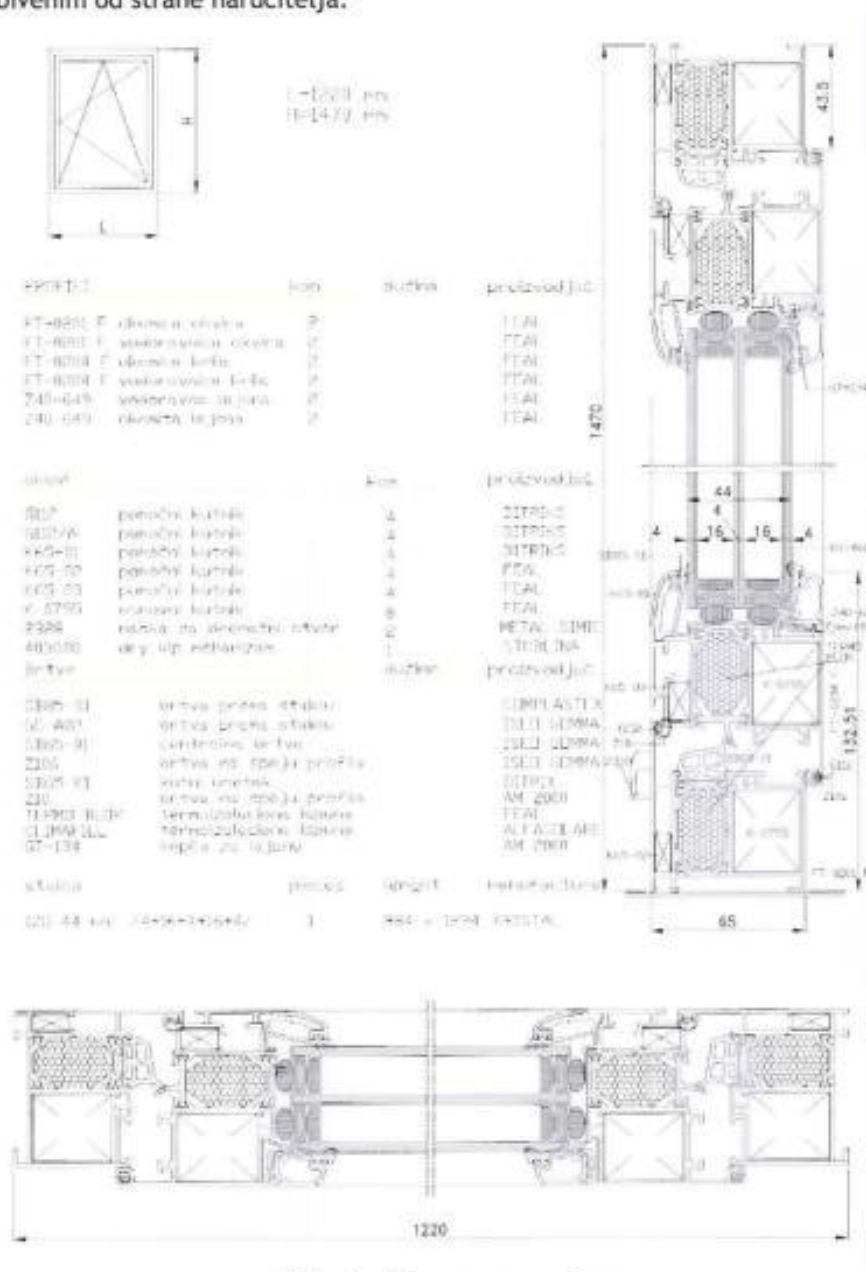
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Izveštaj broj: 2160-026/10

### Opis ispitnog uzorka:

Naučitelj je dostavio jedan uzorak jednokrlnog otklopno-zaokretnog aluminijskog prozora izrađenog od aluminijskih profila serije TERMO 65 F, ostakljenog troslojnim izolacijskim staklom debljine 44 mm (staklo Climaguard low-e 4 mm + međuprostor punjen argonom 16 mm + staklo Climaguard N 4 mm + međuprostor punjen argonom 16 mm + staklo Climaguard low-e 4 mm). U nastavku su dane skice s karakterističnim presjecima i kataloškim brojevima sastavnih dijelova prozora dobivenim od strane naručitelja.



Skica 1: skica prozora s opisom.

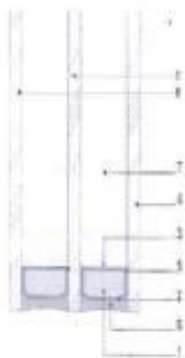




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Izveštaj broj: 2160-026/10



1. sredstvo za sušenje MOLEKULAR-PHONOSORB 551 GRACE DAVISON
2. razmaknica (poliamidni profil), Tehnoform TGI, RAL 7035
3. perforacija
4. staklo Climaguard 4 mm (Guardian, Oroshaza, Mađarska)
5. unutarnji butilni kit (KÖMMERLING GD 115), Njemačka
6. vanjski polisulfidni kit (POLISULFID TIOELAST TM) TKK SLOVENIJA
7. plin argon
8. staklo Climaguard 4 mm (Guardian, Oroshaza, Mađarska)
9. staklo Climaguard N 4 mm (Guardian, Oroshaza, Mađarska)

Skica 2: presjek IZO-stakla s opisom.

## A DIO: ZRAKOPROPUSNOST

**Zadatak:** Ispitati svojstvo zrakopropusnosti ispitnog uzorka LGF 210/09 (jednokrilni otklopno-zaokretni prozor izrađen aluminijskih profila serije TERMO 65 F) vanjskih izmjera 1,22 m x 1,47 m.

Ispitano prema normi: HRN EN 1026:2001

Datum ispitivanja: 2010-01-15

Temperatura, relativna vlažnost zraka i atmosferski tlak tijekom ispitivanja: 24 °C, 30 % i 1002 hPa.

**Mjerna i ispitna oprema:**

- uređaj za ispitivanje prozora proizvođača HOLTEN, tip "Type VAEPC", oznaka mjerila 1674,
- termohigrometar, ROTRONIC, tip Hygroclip S, oznaka mjerila 1679,
- metalni metar.



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### REZULTATI ISPITIVANJA ZRAKOPROPUSNOSTI

Ploština ispitivanog uzorka:  $A = 1,79 \text{ m}^2$ .

Duljina sljubnica ispitivanog uzorka:  $l = 5,02 \text{ m}$ .

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

Tablica 1: prvo ispitivanje zrakopropusnosti

<i>prvo ispitivanje zrakopropusnosti:</i>										
$\Delta p$ (Pa)	ispitni rezultat	$Q_L$ ( $\text{m}^3/\text{hm}$ )				ispitni rezultat	$Q_A$ ( $\text{m}^3/\text{hm}^2$ )			
		razred (prema HRN EN 12207:2001)					razred (prema HRN EN 12207:2001)			
		1	2	3	4		1	2	3	4
50	0,00	7,87	4,25	1,42	0,47	0,01	31,5	17,0	5,7	1,9
100	0,14	12,50	6,75	2,25	0,75	0,39	50,0	27,0	9,0	3,0
150	0,18	16,38	8,85	2,95	0,98	0,50	65,5	35,4	11,8	3,9
200	0,22		10,71	3,57	1,19	0,61		42,9	14,3	4,8
250	0,26		12,43	4,14	1,38	0,73		49,7	16,6	5,5
300	0,32		14,04	4,68	1,56	0,89		56,2	18,7	6,2
450	0,64			6,13	2,04	1,79			24,5	8,2
600	1,04			7,43	2,48	2,91			29,7	9,9

Tablica 2: ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom:

<i>ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom:</i>										
$\Delta p$ (Pa)	ispitni rezultat	$Q_L$ ( $\text{m}^3/\text{hm}$ )				ispitni rezultat	$Q_A$ ( $\text{m}^3/\text{hm}^2$ )			
		razred (prema HRN EN 12207:2001)					razred (prema HRN EN 12207:2001)			
		1	2	3	4		1	2	3	4
50	0,00	7,87	4,25	1,42	0,47	0,01	31,5	17,0	5,7	1,9
100	0,06	12,50	6,75	2,25	0,75	0,17	50,0	27,0	9,0	3,0
150	0,12	16,38	8,85	2,95	0,98	0,34	65,5	35,4	11,8	3,9
200	0,16		10,71	3,57	1,19	0,45		42,9	14,3	4,8
250	0,20		12,43	4,14	1,38	0,56		49,7	16,6	5,5
300	0,22		14,04	4,68	1,56	0,61		56,2	18,7	6,2
450	0,34			6,13	2,04	0,95			24,5	8,2
600	0,58			7,43	2,48	1,62			29,7	9,9

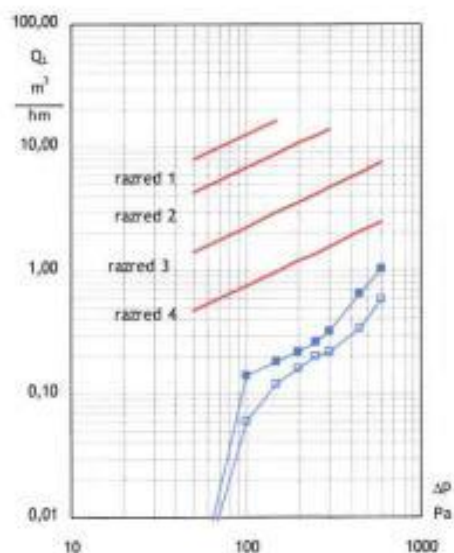




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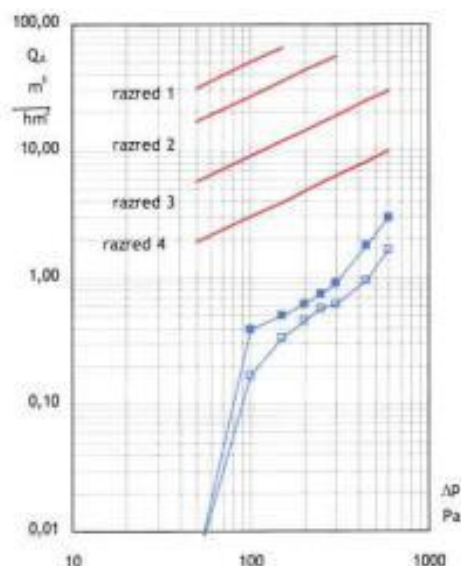


Izveštaj broj: 2160-026/10



—■— LGF 210/09 - prvo ispitivanje zrakopropusnosti

—□— LGF 210/09 - ispitivanje zrakopropusnosti nakon ispitivanja otpornosti opterećenja na vjetar



—■— LGF 210/09 - prvo ispitivanje zrakopropusnosti

—□— LGF 210/09 - ispitivanje zrakopropusnosti nakon ispitivanja otpornosti opterećenja na vjetar

### ZAKLJUČAK

S obzirom na zrakopropusnost, ispitani jednokrilni otklopno-zaokretni prozor izrađen iz aluminijskih profila serije TERMO 65 F, proizvođača FEAL d.o.o., ostakljen troslojnim izolacijskim staklom debljine 44 mm (laboratorijska oznaka uzorka LGF 210/09), može se prema HRN EN 12207:2001 svrstati u **razred 4**.

### B DIO: VODONEPROPUSNOST

**Zadatak:** Ispitati svojstvo vodonepropusnosti ispitnog uzorka LGF 210/09 (jednokrilni otklopno-zaokretni prozor izrađen iz aluminijskih profila serije TERMO 65 F) vanjskih izmjera 1,22 m x 1,47 m.

**Ispitano prema normi:** HRN EN 1027:2001, Metoda 1A

**Datum ispitivanja:** 2010-01-15

**Temperatura, relativna vlažnost zraka i atmosferski tlak tijekom ispitivanja:** 24 °C, 30 % i 1002 hPa.

**Mjerna i ispitna oprema:**

- uređaj za ispitivanje prozora proizvođača HOLTEN, tip "Type VAEPK", oznaka mjerila 1674,
- termohigrometar, ROTRONIC, tip Hygroclip S, oznaka mjerila 1679,
- metalni metar.



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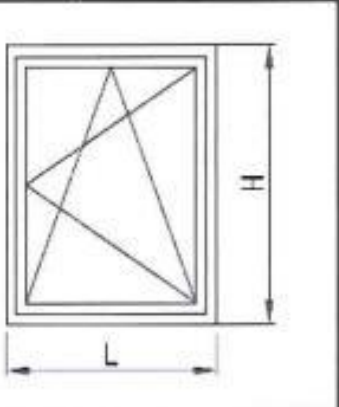


Izveštaj broj: 2160-026/10

Rezultati ispitivanja vodonepropusnosti prikazani su tablicom 3, oznaka „+“ znači da nije došlo do propuštanja vode, a oznaka „V“ znači da je došlo do propuštanja vode i to mjesto je tada označeno na skici:

Tablica 3: rezultati ispitivanja vodonepropusnosti.

tlak $\Delta p$ (Pa)	vrijeme $\tau$ (min)	ispitni rezultat	razred (prema 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



Tijekom ispitivanja u skladu s HRN EN 1027:2001, u rasponu natisnog tlaka od 0 Pa do 600 Pa (pozitivno opterećenje), jednokrilni otklopno-zaokretni prozor (ispitni uzorak LGF 210/09) nije propustio vodu ni pri najvećem tlaku od 600 Pa.

### ZAKLJUČAK

S obzirom na vodonepropusnost, ispitani jednokrilni otklopno-zaokretni prozor izrađen iz aluminijskih profila serije TERMO 65 F, proizvođača FEAL d.o.o., ostakljen troslojnim izolacijskim staklom debljine 44 mm (laboratorijska oznaka uzorka LGF 210/09), može se prema HRN EN 12208:2001 svrstati u **razred 9A**.

### C DIO: OTPORNOST NA OPTEREĆENJE VJETROM

Zadatak: Ispitati svojstvo otpornosti na opterećenje vjetrom ispitnog uzorka LGF 210/09 (jednokrilni otklopno-zaokretni prozor izrađen iz aluminijskih profila serije TERMO 65 F) vanjskih izmjera 1,22 m x 1,47 m.

Ispitano prema normi: HRN EN 12211:2002

Datum ispitivanja: 2009-01-15

Temperatura, relativna vlažnost zraka i atmosferski tlak tijekom ispitivanja: 24 °C, 30 % i 1002 hPa.

#### Mjerna i ispitna oprema:

- uređaj za ispitivanje prozora proizvođača HOLTEN, tip "Type VAEP", oznaka mjerila 1674,
- termohigrometar, ROTRONIC, tip Hygroclip S, oznaka mjerila 1679,
- metalni metar.



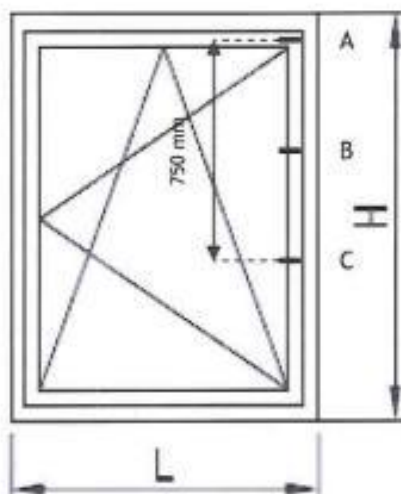
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Izveštaj broj: 2160-026/10

## C1. REZULTATI ISPITIVANJA ČEONOG SAVIJANJA

Ispitivanje je provedeno na desnom okomitom profilu, na dijelu gdje postoji najveći razmak između dva susjedna učvršćenja krila prozora za doprozornik.



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

A - mjerno mjesto na desnom okomitom profilu prozorskog krila, na kojem zglobnica učvršćuje prozorsko krilo za doprozornik (oznaka na crtežu),

C - mjerno mjesto na desnom okomitom profilu prozorskog krila na mjestu gdje se nalazi učvršćenje prozorskog krila za doprozornik (oznaka na crtežu),

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

$A_p$  - čeonu pomak na mjernom mjestu A pri iskazanoj razlici tlakova  $P_1$ ,

$B_p$  - čeonu pomak na mjernom mjestu B pri iskazanoj razlici tlakova  $P_1$ ,

$C_p$  - čeonu pomak na mjernom mjestu C pri iskazanoj razlici tlakova  $P_1$ ,

$F_p = (B_p) - ((A_p) + (C_p))/2$  - čeonu savijanje,

$L = 0,750$  m - razmak između točaka A i C,

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





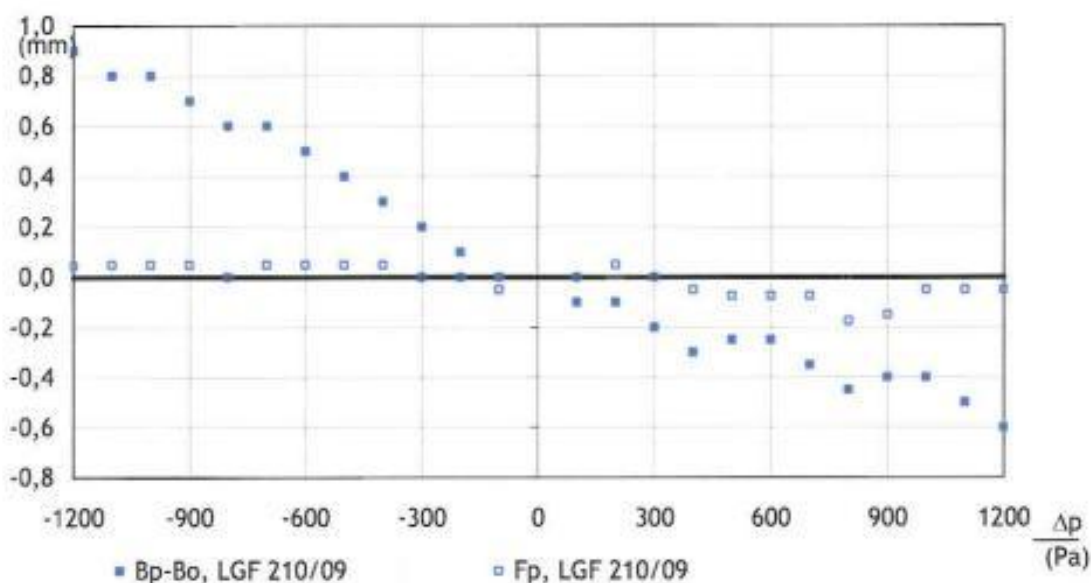
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Izveštaj broj: 2160-026/10

Tablica 5: rezultati ispitivanja čeonog savijanja

tlak $\Delta p$ (Pa)	ispitni rezultat					tlak $\Delta p$ (Pa)	ispitni rezultat				
	$A_p-A_0$ (mm)	$B_p-B_0$ (mm)	$C_p-C_0$ (mm)	$F_p$ (mm)	$F_{rp}$ ( $\times 10^{-4}$ )		$A_p-A_0$ (mm)	$B_p-B_0$ (mm)	$C_p-C_0$ (mm)	$F_p$ (mm)	$F_{rp}$ ( $\times 10^{-4}$ )
100	-0,1	-0,1	-0,1	0,00	0,00	-100	0,1	0,0	0,0	-0,05	-0,67
200	-0,2	-0,1	-0,1	0,05	0,67	-200	0,1	0,1	0,1	0,00	0,00
300	-0,3	-0,2	-0,1	0,00	0,00	-300	0,2	0,2	0,2	0,00	0,00
400	-0,3	-0,3	-0,2	-0,05	-0,67	-400	0,3	0,3	0,2	0,05	0,67
500	-0,3	-0,3	-0,1	-0,08	-1,00	-500	0,4	0,4	0,3	0,05	0,67
600	-0,3	-0,3	-0,1	-0,08	-1,00	-600	0,5	0,5	0,4	0,05	0,67
700	-0,4	-0,4	-0,2	-0,08	-1,00	-700	0,6	0,6	0,5	0,05	0,67
800	-0,4	-0,5	-0,2	-0,18	-2,33	-800	0,6	0,6	0,6	0,00	0,00
900	-0,3	-0,4	-0,2	-0,15	-2,00	-900	0,7	0,7	0,6	0,05	0,67
1000	-0,4	-0,4	-0,3	-0,05	-0,67	-1000	0,8	0,8	0,7	0,05	0,67
1100	-0,4	-0,5	-0,5	-0,05	-0,67	-1100	0,8	0,8	0,7	0,05	0,67
1200	-0,5	-0,6	-0,6	-0,05	-0,67	-1200	0,9	0,9	0,8	0,05	0,60



### C1.1 Vrednovanje čeonog savijanja prema HRN EN 12210:2001

S obzirom na relativno čeonu savijanje, ispitani jednokrlni otklopno-zaokretni prozor izrađen iz aluminijskih profila serije TERMO 65 F, ostakljen troslojnim izolacijskim staklom debljine 44 mm (laboratorijska oznaka uzorka LGF 210/09), može se prema HRN EN 12210:2001 svrstati u razred C ( $F_{rp} < 1/300$ ), budući da je maksimalno relativno čeonu savijanje iznosilo 1/4285.



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## C2. REZULTATI ISPITIVANJA OTPORNOSTI PROMJENJIVIM TLAKOM P2

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

Nakon provedenog opterećenja na uzorku LGF 210/09 nije bilo vidljivih oštećenja niti promjena u funkcionalnosti prozora.

## C3. REZULTATI SIGURNOSNOG ISPITIVANJA

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

Nakon provedenog opterećenja na uzorku LGF 210/09 nije bilo vidljivih napuknuća na bilo kojem dijelu uzorka (staklo, okvir i okovi), niti je došlo do otvaranja prozora.

## ZAKLJUČAK

S obzirom na ispitivanje otpornosti na opterećenje vjetrom i ponovljeno ispitivanje zrakopropusnosti nakon ispitivanja otpornosti na opterećenje vjetrom, koje pokazuje da nije došlo do povećanja vrijednosti zrakopropusnosti od 20 % u odnosu na prvo ispitivanje zrakopropusnosti, ispitani jednokrlni otklopno-zaokretni prozor izrađen iz aluminijskih profila serije TERMO 65 F, proizvođača FEAL d.o.o., ostakljen troslojnim izolacijskim staklom debljine 44 mm (laboratorijska oznaka uzorka LGF 210/09), može se prema HRN EN 12210:2001 svrstati u razred C3.





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Izveštaj broj: 2160-026/10

## D DIO: ISPITIVANJE ZVUČNE IZOLACIJE

**Zadatak:** Ispitati zvučnu izolaciju jednokrlnog otklopno-zaokretnog aluminijskog prozora izrađenog od aluminijskih profila serije TERMO 65 F, ostakljenog troslojnim izolacijskim staklom debljine 44 mm.

**Ispitano prema normi:** HRN EN ISO 140-3:1998; HRN EN ISO 717-1:1998

**Datum ispitivanja:** 2009-11-17

### Mjerna i ispitna oprema:

- modularni analizator zvuka, tip 2260 Investigator, Bruel & Kjaer, serijski broj: 2418322,
- kalibrator razine zvučnog tlaka, tip 4231, Bruel & Kjaer, serijski broj: 2094668,
- termohigrometar, ROTRONIC, tip Hygroclip S, oznaka mjerila 1679, serijski broj: 23535 012,
- kondenzatorski mikrofoni, tip 4189, Bruel & Kjaer, serijski broj: 2417824 i 2662954,
- predpojačala, tip ZC 0026, Bruel & Kjaer, serijski broj: 2877 i 4222,
- pojačalo snage, Bruel & Kjaer, tip 2716, serijski broj: 2486522,
- izvor zvuka, tip 4296, Bruel & Kjaer, serijski broj: 2485310.
- rotacijski stalci za mikrofone, tip 3923, Bruel & Kjaer, serijski broj: 1213978 i 2500962.

### Rezultati ispitivanja:

Indeks zvučne izolacije ( $R$ ) ispitnog uzorka prikazan je kao funkcija frekvencije tablicom i dijagramom.

Pri iskazivanju rezultata ispitivanja rabljene su sljedeće oznake:

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



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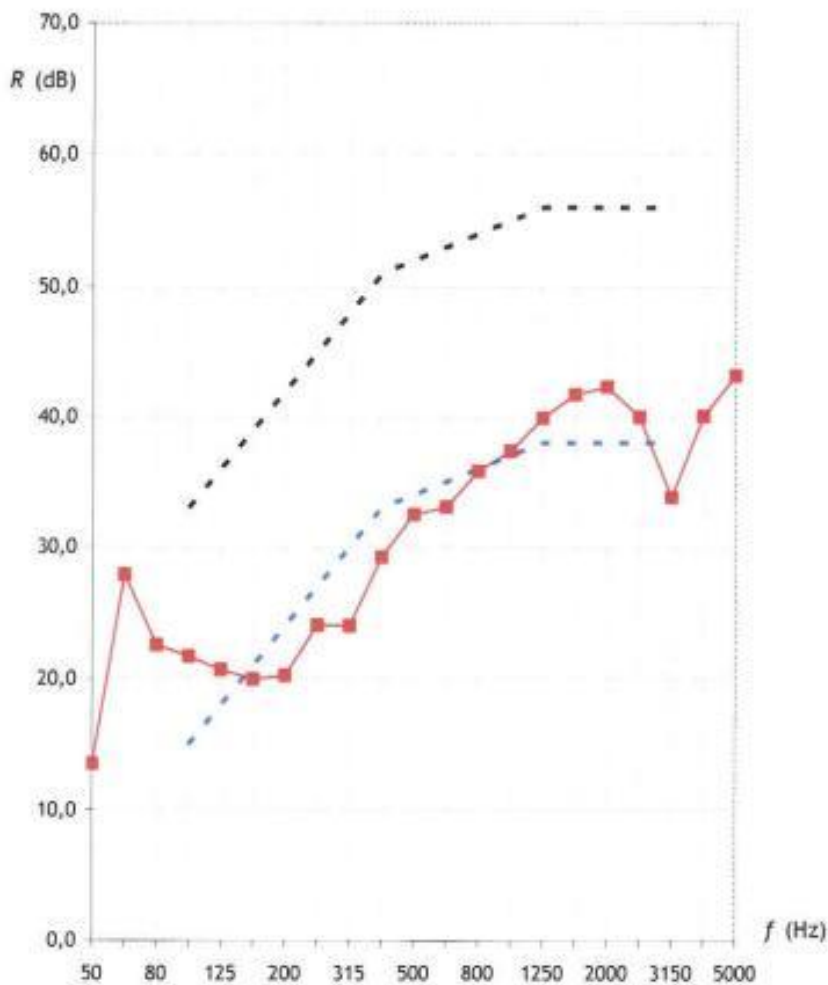


Izveštaj broj: 2160-026/10

Proizvođač: FEAL d.o.o., Trnska cesta 146, BA-88220 Široki Brijeg  
 Naručitelj: FEAL Hrvatska d.o.o., Rudeška cesta 3a, HR-10000 Zagreb  
 Oznaka proizvoda: LGF 210/09, jednokrlni otklopno-zaokretni aluminijski prozor izrađen od aluminijskih profila serije TERMO 65 F, ostakljen troslojnim izolacijskim staklom debljine 44 mm  
 Prijemna prostorija: gornja južna prostorija akustičkog laboratorija  
 Predajna prostorija: gornja sjeverna prostorija akustičkog laboratorija  
 Predmet ispitivanja ugradio: Ispitni laboratorij  
 Nadnevak ispitivanja: 2009-11-17  
 Površina S ispitivanog uzorka: 1,79 m<sup>2</sup>  
 Temperatura zraka: 21,7 °C  
 Vlažnost zraka: 42,6 %  
 Volumen predajne prostorije: 59,9 m<sup>3</sup>  
 Volumen prijemne prostorije: 55,7 m<sup>3</sup>

- Indeks zvučne izolacije
- - - Referentna krivulja izolacije od zračnog zvuka, 52 dB
- - - Pomaknuta referentna krivulja izolacije od zračnog zvuka, 34 dB

Frekvencija <i>f</i> (Hz)	Terca <i>R</i> (dB)
50	13,5
63	27,9
80	22,6
100	21,7
125	20,7
160	20,0
200	20,3
250	24,1
315	24,0
400	29,2
500	32,5
630	33,0
800	35,8
1000	37,4
1250	39,9
1600	41,7
2000	42,3
2500	40,0
3150	33,8
4000	40,0
5000	43,2



#### ZAKLJUČAK

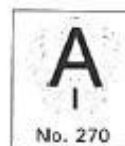
Ispitani jednokrlni otklopno-zaokretni aluminijski prozor izrađen od aluminijskih profila serije TERMO 65 F, proizvođača FEAL d.o.o., prema HRN EN ISO 717-1:1998, ima indeks zvučne izolacije:

$$R_w (C; C_{tr}; C_{50-5000}; C_{tr, 50-5000}) = 34 (-1; -4; 0; -5) \text{ dB.}$$

## Window system / Calculation of thermal transmittance



2009-06-12 | Job No. 09/469\_02 | Cust. No. 0320 | Ref hp/dp | Page 1/4


**Calculation of thermal transmittance -  $U_w$** 

<b>Client</b>	FEAL d.o.o Tvornica za preradu aluminija	<b>Address</b>	Trnska cesta 146 88220 Široki Brijeg Bosnia and Herzegovina
---------------	--	----------------	---

<b>Designation</b>	TERMO 65 F	<b>Identification</b>	Single tilt and turn window
<b>Frame material</b>	Aluminium	<b>Dimensions</b>	Width 1230 mm Height 1480 mm

<b>Product Standard</b>	ON EN 14351-1	<b>Test Standard</b>	ON EN ISO 10077-1 ON EN ISO 10077-2
-------------------------	---------------	----------------------	--

Glass pane $U_g$	Spacer $\Psi_g$ Average	Frame $U_f$ Average	Window $U_w$
[W/(m <sup>2</sup> ·K)]	[W/(m·K)]	[W/(m <sup>2</sup> ·K)]	[W/(m <sup>2</sup> ·K)]
Insulation glazing 0.60	0.08	2.136	<b>1.338</b>

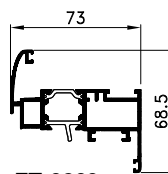
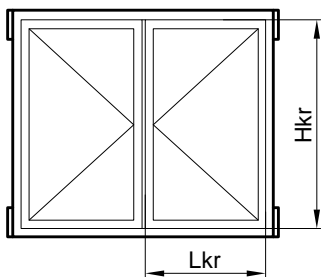
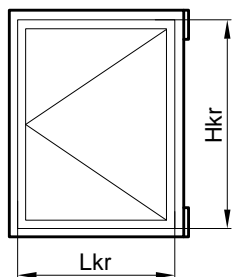

 Akkr. Prof- und Inspektionsstelle  
 gbd Lab GmbH www.gbd-lab.at  
 Steinebach 13a A-6850 Dornbirn

The cover sheet can be used as a summary.

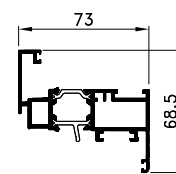
We reserve all rights to this document and the information contained herein. Unauthorized use or communication to third parties is prohibited without express permission. Test Report Version: \*02\* Appendices: -1-

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

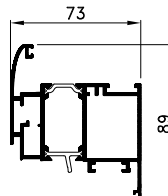




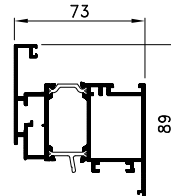
FT-0203



FT-0221



FT-0204



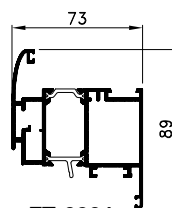
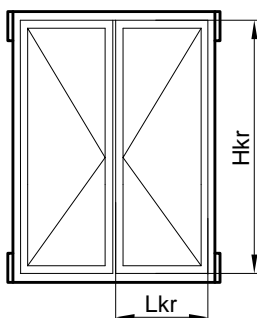
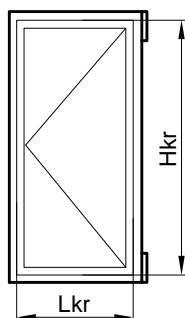
FT-0230

MINIMALNA ŠIRINA KRILA (Lkr x Hkr) 550X550

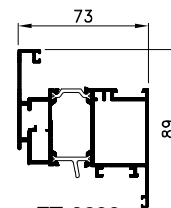
 MAKSIMALNA TEŽINA KRILA = 75 Kg (DVODJELNA BAGLAMA)  
85 Kg (TRODJELNA BAGLAMA)

PROFILI	OPTEREĆENJE VJETROM (Pa)	MAKSIMALNE DIMENZIJE KRILA (Lkr x Hkr)	
		JEDNOKRILNI PROZOR	DVOKRILNI PROZOR
FT-0203 FT-0221	400	1300x1800	1000x1800
	800	1300x1600	1000x1600
	1200	1300x1400	1000x1400
FT-0204 FT-0230	400	1400x2000	1200x2000
	800	1400x1800	1200x1800
	1200	1400x1600	1200x1600

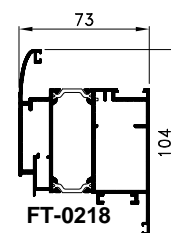
## MAKSIMALNE DIMENZIJE KRILA ZA JEDNOKRILNA I DVOKRILNA BALKONSKA VRATA



FT-0204



FT-0230

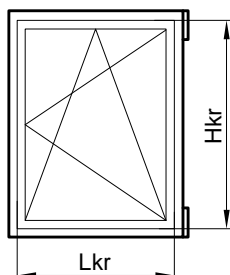


FT-0218

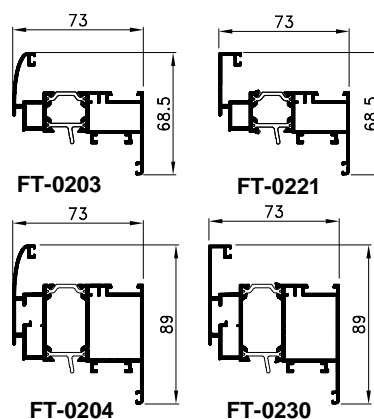
MINIMALNA ŠIRINA KRILA (Lkr x Hkr) 550X1900

 MAKSIMALNA TEŽINA KRILA = 75 Kg (DVODJELNA BAGLAMA)  
85 Kg (TRODJELNA BAGLAMA)

PROFILI	OPTEREĆENJE VJETROM (Pa)	MAKSIMALNE DIMENZIJE KRILA (Lkr x Hkr)	
		JEDNOKRILNA BALKONSKA VRATA	DVOKRILNA BALKONSKA VRATA
FT-0204 FT-0230	400	1200x2300	1100x2300
	800	1000x2300	900x2300
	1200	1000x2200	900x2200
FT-0218	400	1200x2350	1100x2350
	800	1000x2300	900x2300
	1200	1000x2250	900x2250



PREPORUKE PROIZVOĐAČA OKOVA ZA  
OTKLOPNO ZAOKRETNI MEHANIZAM "4030.00" I "4031.00" :  
MAKSIMALNA TEŽINA KRILA ≈ 50 (kg/m<sup>2</sup>)

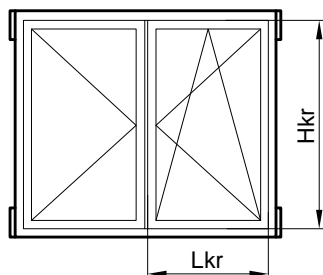


## GARNITURE OKOVA "4031.00" MINIMALNA ŠIRINA KRILA 445X535 mm

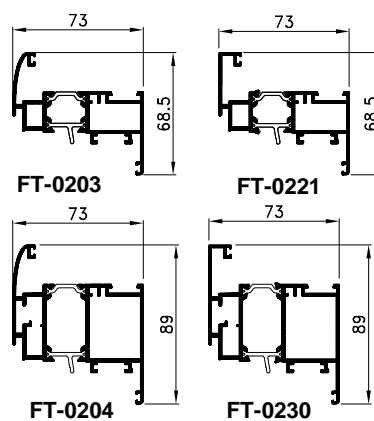
PROFILI	OPTEREČENJE VJETROM (Pa)	MAKSIMALNE DIMENZIJE KRILA (Lkr x Hkr)
		JEDNOKRILNI PROZOR
FT-0203	400	550x600
	800	550x600
FT-0221	1200	550x600
FT-0204	400	550x600
	800	550x600
FT-0230	1200	550x600

## GARNITURE OKOVA "4030.00" MINIMALNA ŠIRINA KRILA 535X535 mm

PROFILI	OPTEREČENJE VJETROM (Pa)	MAKSIMALNE DIMENZIJE KRILA (Lkr x Hkr)
		JEDNOKRILNI PROZOR
FT-0203	400	1000x1600
	800	1000x1450
FT-0221	1200	1000x1350
FT-0204	400	1000x1750
	800	1000x1600
FT-0230	1200	1000x1450



PREPORUKE PROIZVOĐAČA OKOVA ZA  
OTKLOPNO ZAOKRETNI MEHANIZAM "4030.00" :  
MAKSIMALNA TEŽINA KRILA ≈50 (kg/m<sup>2</sup>)



GARNITURE OKOVA "4030.00" MINIMALNA ŠIRINA KRILA 535X535 mm

PROFILI	OPTEREČENJE VJETROM (Pa)	MAKSIMALNE DIMENZIJE KRILA (Lkr x Hkr)
		JEDNOKRILNI PROZOR
FT-0203	400	1000x1700
FT-0221	800	1000x1550
	1200	1000x1350
FT-0204	400	1000x1800
FT-0230	800	1000x1600
	1200	1000x1400





Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
FT-0201			1.688	371.0	23.80	6.00
					17.21	3.82
FT-0202			1.631	373.0	28.30	7.35
					14.11	3.37
FT-0203			1.503	421.0	25.10	6.37
					7.81	2.18
FT-0204			1.984	463.0	34.70	8.63
					24.00	4.35
FT-0205			1.452	379.0	18.90	4.65
					7.41	1.95
FT-0206			1.789	410.0	24.40	6.07
					19.10	4.12
FT-0207			3.437	603.0	49.90	12.60
					187.00	22.50
FT-0208			3.497	626.0	54.00	14.02
					203.00	23.70

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
FT-0209			2.711	520.0	108.40	17.32
					29.30	6.30
FT-0210			1.995	530.0	33.00	7.35
					20.90	4.20
FT-0211			1.478	375.0	21.30	5.00
					6.40	1.77
FT-0213			1.339	376.0	18.70	4.35
					6.70	1.95
FT-0213/A			1.293	333.0	18.40	4.27
					6.68	1.95
FT-0214			1.797	427.0	25.80	6.22
					22.50	4.35
FT-0215			1.727	430.0	31.90	8.03
					18.70	3.75
FT-0216			0.830	248.0	0.39	0.45
					7.80	2.09



Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
FT-0217			1.780	269.0	16.90	4.80
					25.10	6.89
FT-0218			2.311	461.0	41.60	8.10
					44.30	10.40
FT-0219			2.348	541.0	40.20	9.10
					43.20	7.30
FT-0220			1.629	354.0	28.30	7.30
					13.80	3.22
FT-0221			1.502	431.0	25.60	7.27
					7.95	3.14
FT-0222			1.586	390.0	24.10	6.55
					24.10	6.55
FT-0223			0.832	175.0		
FT-0224			1.738	408.0	29.60	6.97
					19.30	4.35


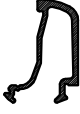


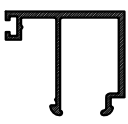
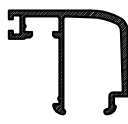


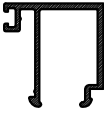
Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
FT-0225			1.789	433.0	28.70	7.76
					23.50	4.35
FT-0226			2.027	516.0	82.90	13.20
					5.90	1.80
FT-0227			1.311	386.0	17.80	4.50
					4.90	1.50
FT-0228			1.707	371.0	24.10	6.45
					20.10	4.50
FT-0229			1.878	461.0	35.10	8.85
					25.80	4.70
FT-0230			1.999	479.0	34.90	8.70
					24.20	4.60
FT-0231			1.890	491.0	29.60	7.50
					25.60	5.10


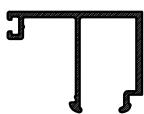
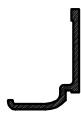
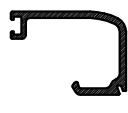


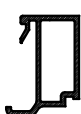

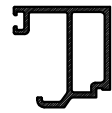
Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
FT-0232			2.023	484.0	45.40	9.45
					24.40	4.87
FT-0233			1.401	345.0	20.50	5.10
					9.51	2.62
FT-0234			1.542	376.0	34.10	6.97
					10.90	4.35
FT-0235			1.796	448.0	36.10	8.63
					36.10	8.63
FT-0236			1.517	420.0	25.80	6.77
					7.80	2.17
FT-0237			1.506	350.0	21.20	5.18
					6.10	1.65
FT-0239			1.543	415.0	21.30	5.18
					6.20	1.67
FT-0242			1.498	444.0		





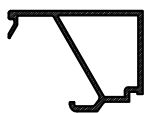
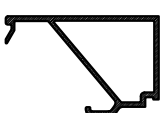

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
FT-0243			4.239	653.0	82.41	21.96
					450.13	45.01
FT-0262			1.490	440.0	24.90	5.85
					8.50	2.32
FT-0142			1.327	420.0	41.70	6.83
					2.57	2.47
T1-812			0.916	300.0		
F-1190			0.461	145.0		
FM 072			0.258	152.0		
F-0758			0.228	121.0		
P45-648			0.257	140.0		

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
060 350			0.285	107.0		
F-0228			0.153	68.0		
NC-1459			0.156	51.0		
M45-709			0.258	153.0		
M45-740			0.258	148.0		
Z40-636			0.261	141.0		
Z40-644			0.275	166.0		
Z40-646			0.286	157.0		

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	/cm <sup>4</sup> /	/cm <sup>3</sup> /
					/cm <sup>4</sup> /	/cm <sup>3</sup> /
Z40-647			0.226	137.0		
Z40-648			0.268	125.0		
Z40-649			0.221	105.0		
Z40-653			0.348	201.0		
Z40-653/B			0.356	199.0		
Z40-656			0.215	107.0		
Z40-657			0.186	73.0		
Z40-658			0.318	184.0		

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
Z40-659			0.359	204.0		
Z40-660			0.179	89.0		
Z40-661			0.314	146.0		
Z40-662			0.245	116.0		
Z40-664			0.243	93.0		
Z40-665			0.272	112.0		
Z40-666			0.289	122.0		
Z40-667			0.358	139.0		



Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x / \text{cm}^4$	$W_x / \text{cm}^3$
					$I_y / \text{cm}^4$	$W_y / \text{cm}^3$
Z40-668			0.326	135.0		
Z40-669			0.347	143.0		
Z40-670			0.373	150		
F-0784			0.33	105.0		

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x/\text{cm}^4$	$W_x/\text{cm}^3$
					$I_y/\text{cm}^4$	$W_y/\text{cm}^3$
FT-0201F			1.688	371,0	23,80	6,00
					17,21	3,82
FT-0202F			1.631	373,0	28,30	7,35
					14,11	3,37
FT-0203F			1.503	421,0	25,10	6,37
					7,81	2,18
FT-0204F			1.984	463,0	34,70	8,63
					24,00	4,35
FT-0205F			1.452	379,0	18,90	4,65
					7,41	1,95
FT-0206F			1.789	410,0	24,40	6,07
					19,10	4,12
FT-0207F			3.437	603,0	49,90	12,6
					187,00	22,50
FT-0208F			3.497	626,0	54,00	14,02
					203,00	23,70

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x/\text{cm}^4$	$W_x/\text{cm}^3$
					$I_y/\text{cm}^4$	$W_y/\text{cm}^3$
FT-0209F			2.711	520,0	108,40	17,32
					29,30	6,30
FT-0210F			1.995	530,0	33,00	7,35
					20,90	4,20
FT-0211F			1.478	375,0	21,30	5,00
					6,40	1,77
FT-0213			1.339	376,0	18,7	4,35
					6,70	1,95
FT-0213/AF			1.293	333,0	18,40	4,27
					6,68	1,95
FT-0214F			1.797	427,0	25,80	6,22
					22,50	4,35
FT-0215F			1.727	430,0	31,90	8,03
					18,70	3,75
FT-0216			0.830	248,0	0,39	0,45
					7,80	2,085

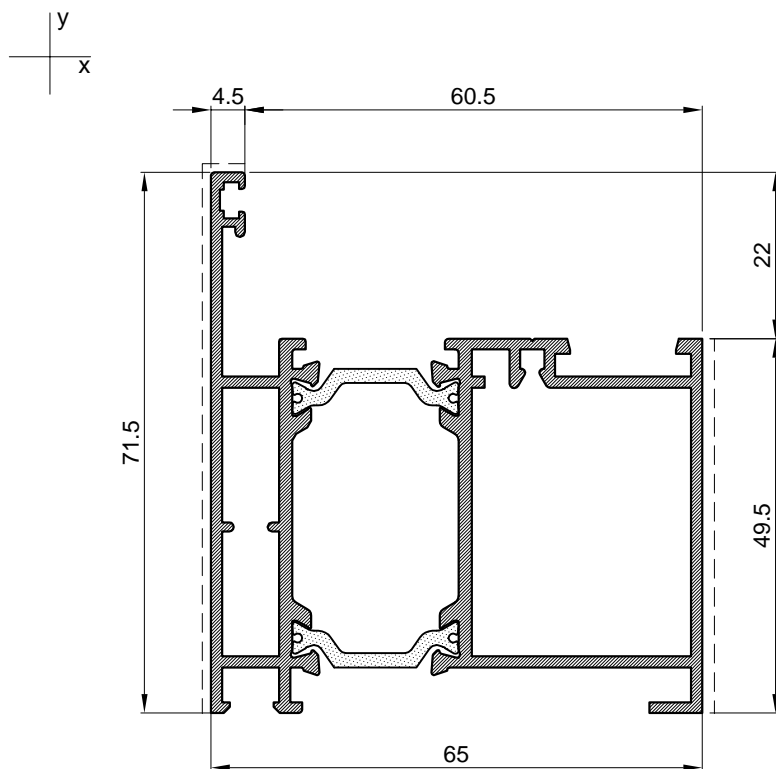
Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x/\text{cm}^4$	$W_x/\text{cm}^3$
					$I_y/\text{cm}^4$	$W_y/\text{cm}^3$
FT-0217F			1.780	269,0	16,90	4,80
					25,10	6,89
FT-0218F			2.311	461,0	41,60	8,10
					44,30	10,40
FT-0219F			2.348	541,0	40,20	9,10
					43,20	7,30
FT-0220F			1.629	354,0	28,30	7,30
					13,80	3,22
FT-0221F			1.502	431,0	25,60	7,27
					7,95	3,14
FT-0222F			1.586	390,0	24,10	6,55
					24,10	6,55
FT-0223			0.832	175,0		
FT-0224F			1.738	408,0	29,60	6,97
					19,30	4,35



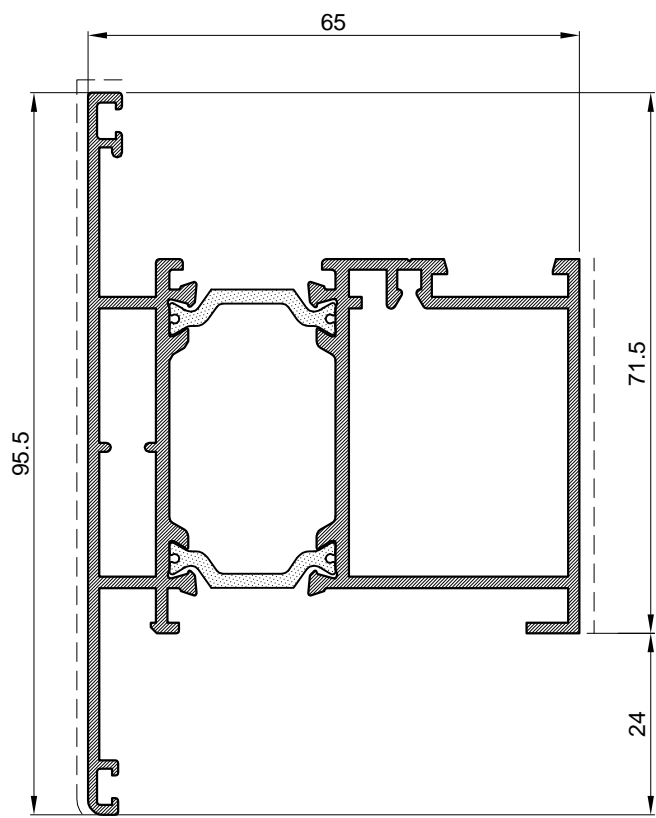
Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x/\text{cm}^4$	$W_x/\text{cm}^3$
					$I_y/\text{cm}^4$	$W_y/\text{cm}^3$
FT-0225F			1.789	433,0	28,70	7,76
					23,50	4,35
FT-0226F			2.027	516,0	82,90	13,20
					5,90	1,80
FT-0227F			1.131	386,0	17,80	4,50
					4,90	1,50
FT-0228F			1.707	371,0	24,10	6,45
					20,10	4,50
FT-0229F			1.878	461,0	35,10	8,85
					25,80	4,70
FT-0230F			1.999	479,0	34,90	8,70
					24,20	4,60
FT-0231F			1.890		29,60	7,50
					25,60	5,10

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x/\text{cm}^4$	$W_x/\text{cm}^3$
					$I_y/\text{cm}^4$	$W_y/\text{cm}^3$
FT-0232F			2.023		45,40	9,45
					24,40	4,87
FT-0233F			1.401	345,0	20,50	5,10
					9,51	2,62
FT-0234F			1.542	376,0	34,10	6,97
					10,90	4,35
FT-0235F			1.796	448,0	36,10	8,63
					36,10	8,63
FT-0236			1.517	420,0	25,80	6,77
					7,80	2,17
FT-0237			1.506	350,0	21,20	5,18
					6,10	1,65
FT-0239			1.543	415,0	21,30	5,18
					6,20	1,67
FT-0242			1.498	444,0		

Oznaka		Izgled-presjek	Težina /kg/ml/	Opseg /mm/	$I_x/cm^4$	$W_x/cm^3$
					$I_y/cm^4$	$W_y/cm^3$
FT-0262F			1.490			
FT-0142/39F			1.327			

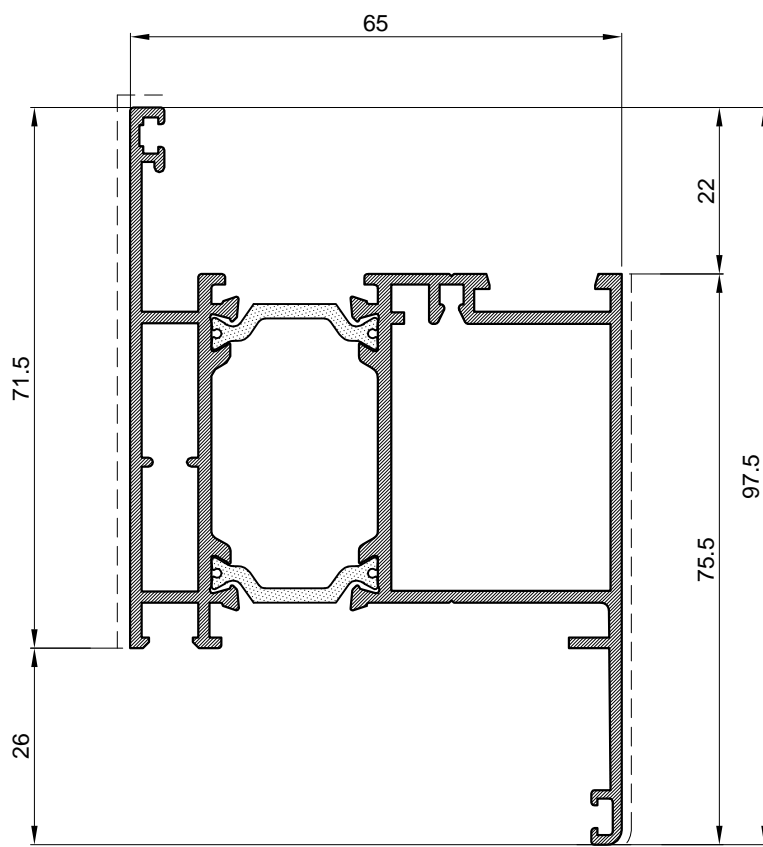


Profil rama		
Art.-Br.	<b>FT-0201</b>	
Težina	kg/m	<b>1.688</b>
Opseg	mm	371.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	17.21
	I <sub>y</sub> (cm <sup>4</sup> )	23.80
	W <sub>x</sub> (cm <sup>4</sup> )	3.82
	W <sub>y</sub> (cm <sup>4</sup> )	6.00
Dužina isporuke	mm	6500

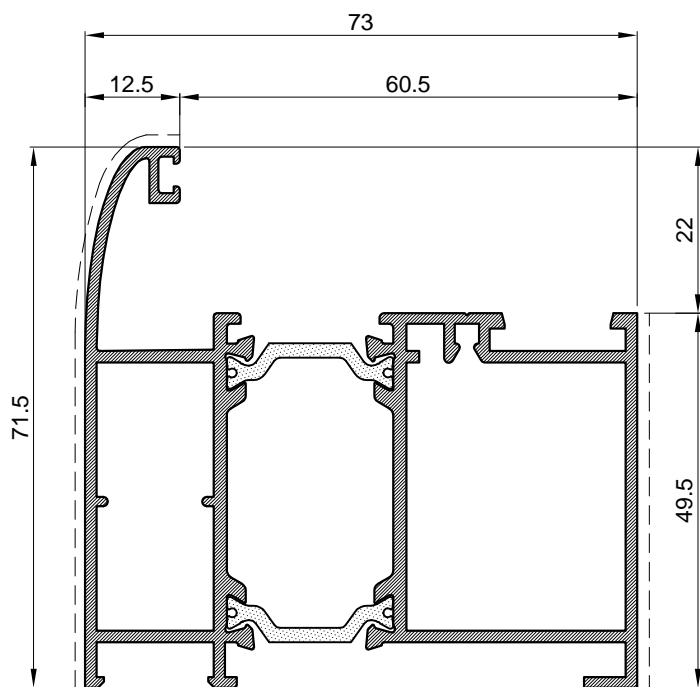


Profil rama		
Art.-Br.	<b>FT-0214</b>	
Težina	kg/m	<b>1.797</b>
Opseg	mm	427.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	22.50
	I <sub>y</sub> (cm <sup>4</sup> )	25.80
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	6.22
Dužina isporuke	mm	6500

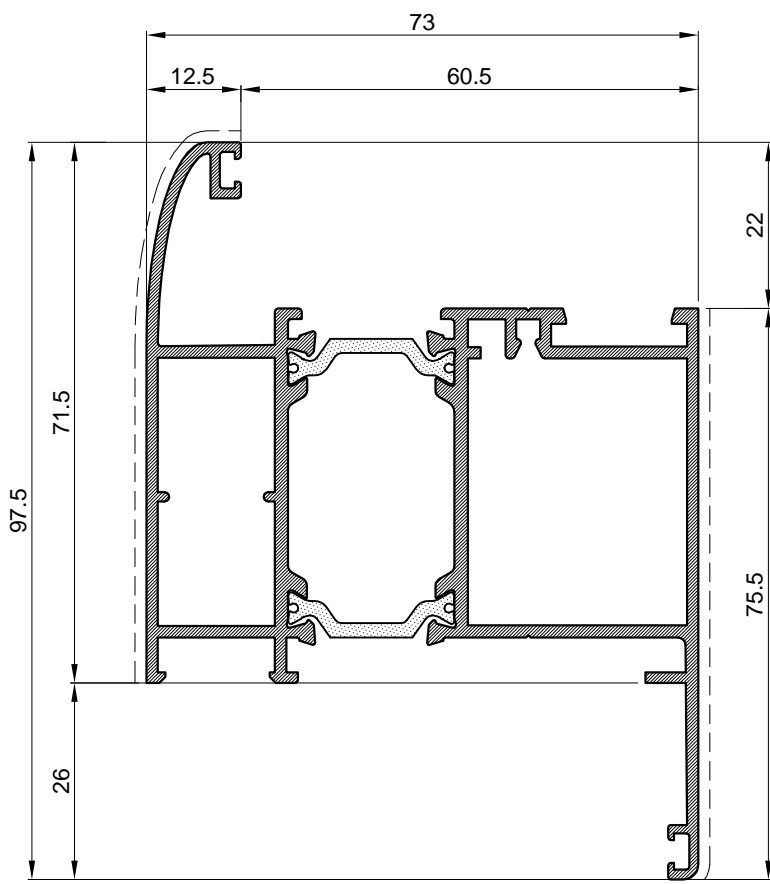




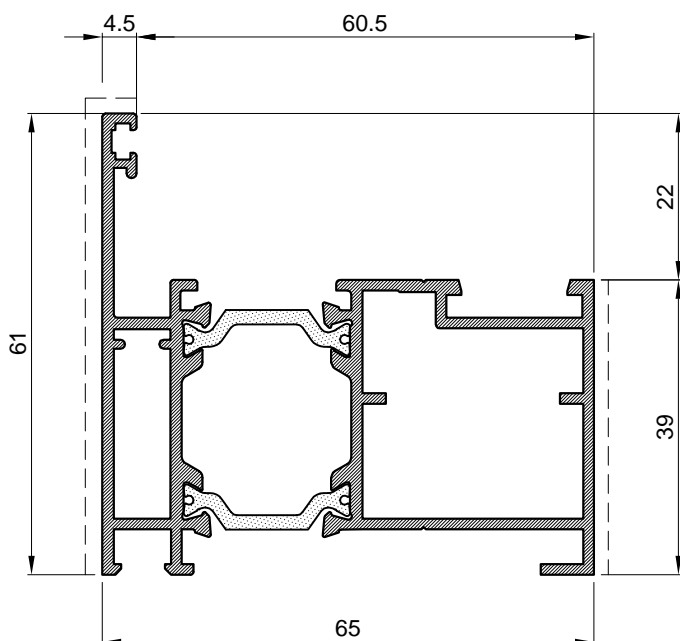
Profil rama		
Art.-Br.	<b>FT-0225</b>	
Težina	kg/m	<b>1.789</b>
Opseg	mm	433
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	23.5
	I <sub>y</sub> (cm <sup>4</sup> )	28.7
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	7.76
Dužina isporuke	mm	6500



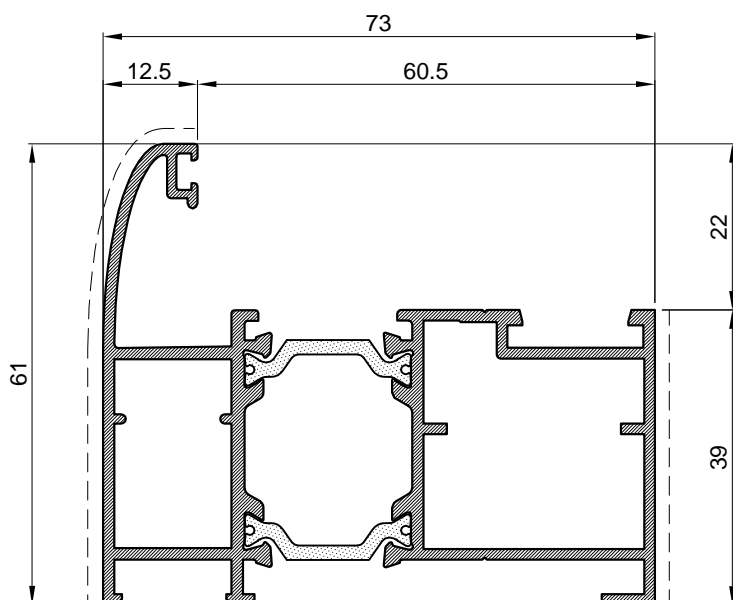
Profil rama		
Art.-Br.	<b>FT-0224</b>	
Težina	kg/m	<b>1.738</b>
Opseg	mm	408
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	19.3
	I <sub>y</sub> (cm <sup>4</sup> )	29.6
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	6.97
Dužina isporuke	mm	6500



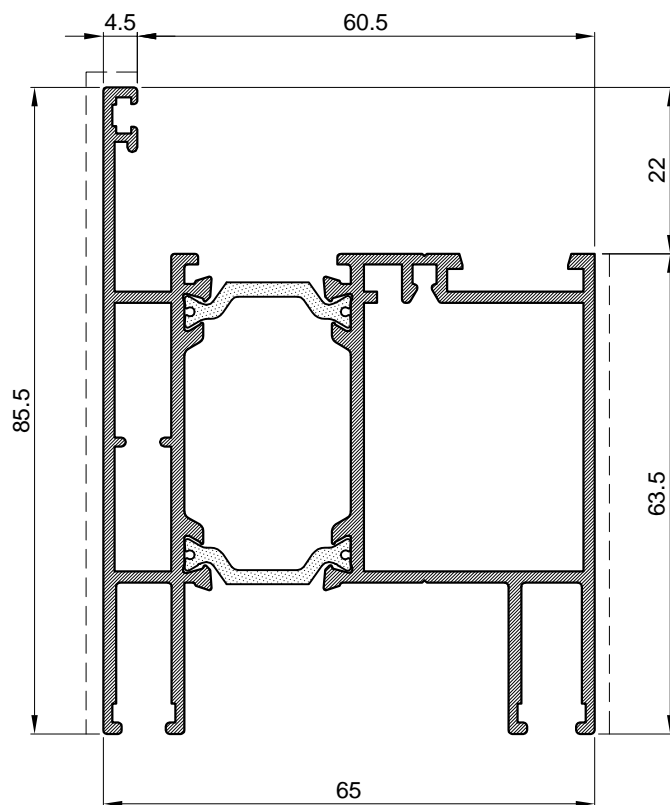
Profil rama		
Art.-Br.	<b>FT-0229</b>	
Težina	kg/m	<b>1.878</b>
Opseg	mm	461
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	25.8
	I <sub>y</sub> (cm <sup>4</sup> )	35.1
	W <sub>x</sub> (cm <sup>4</sup> )	4.7
	W <sub>y</sub> (cm <sup>4</sup> )	8.85
Dužina isporuke	mm	6500



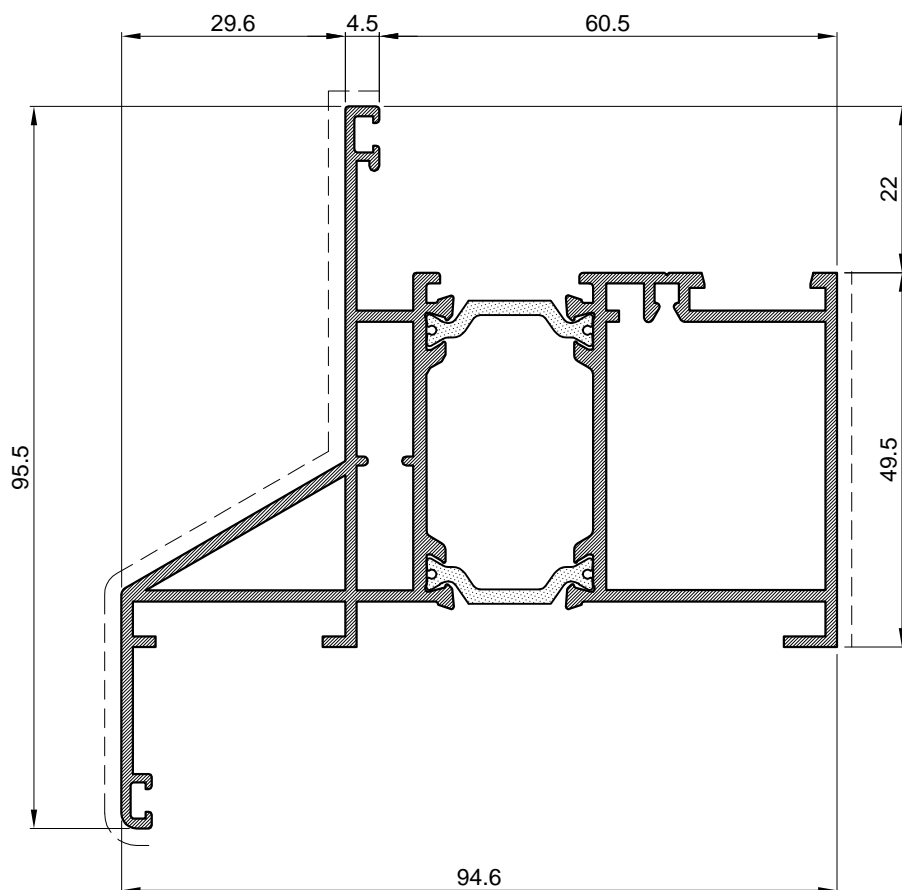
Profil rama		
Art.-Br.	<b>FT-0233</b>	
Težina	kg/m	<b>1.401</b>
Opseg	mm	345
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	9.51
	I <sub>y</sub> (cm <sup>4</sup> )	20.5
	W <sub>x</sub> (cm <sup>4</sup> )	2.62
	W <sub>y</sub> (cm <sup>4</sup> )	5.1
Dužina isporuke	mm	6500



Profil rama		
Art.-Br.	<b>FT-0234</b>	
Težina	kg/m	<b>1.542</b>
Opseg	mm	376
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	10.9
	I <sub>y</sub> (cm <sup>4</sup> )	34.1
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	6.97
Dužina isporuke	mm	6500

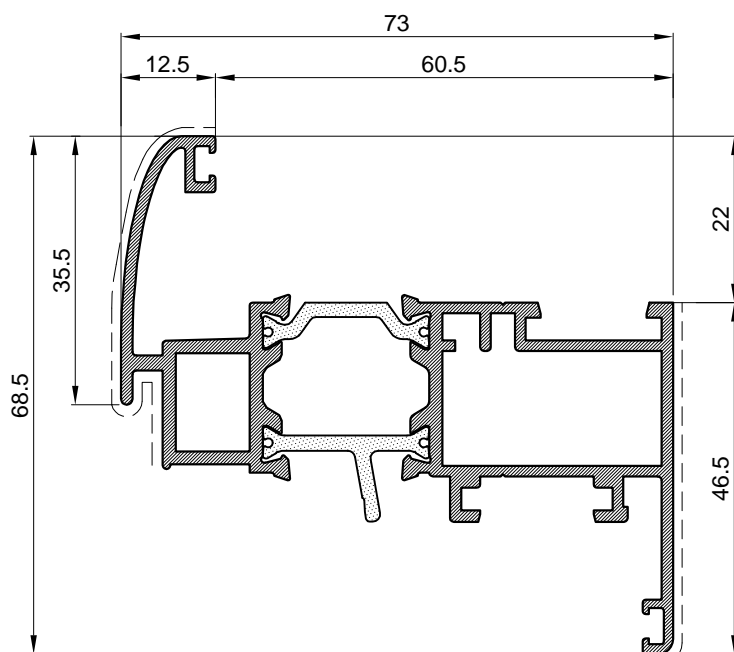


Profil rama		
Art.-Br.	<b>FT-0231</b>	
Težina	kg/m	<b>1.890</b>
Opseg	mm	491
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	25.6
	I <sub>y</sub> (cm <sup>4</sup> )	29.6
	W <sub>x</sub> (cm <sup>4</sup> )	5.1
	W <sub>y</sub> (cm <sup>4</sup> )	7.5
Dužina isporuke	mm	6500

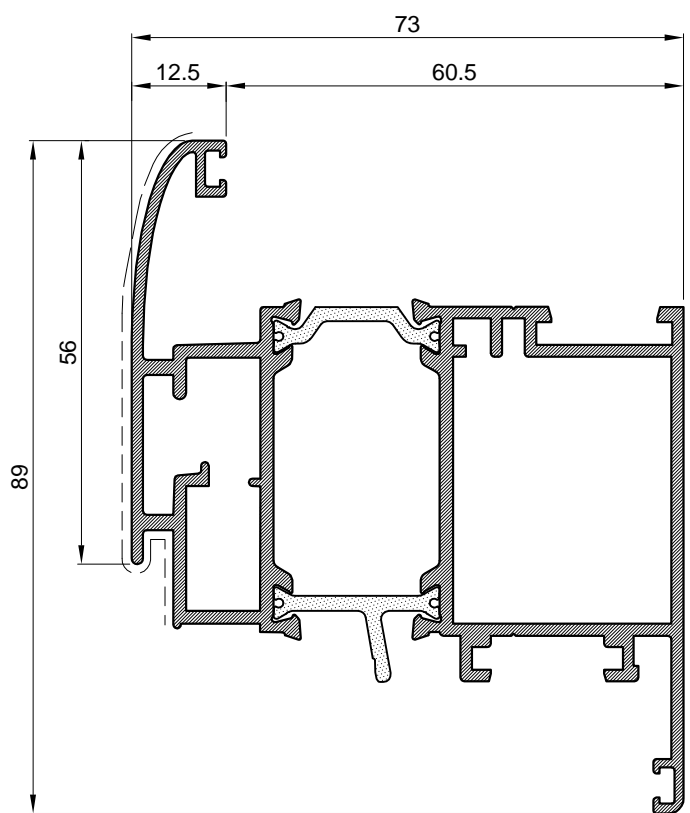


Profil rama		
Art.-Br.	<b>FT-0232</b>	
Težina	kg/m	<b>2.023</b>
Opseg	mm	489
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	24.4
	I <sub>y</sub> (cm <sup>4</sup> )	45.4
	W <sub>x</sub> (cm <sup>4</sup> )	4.87
	W <sub>y</sub> (cm <sup>4</sup> )	9.45
Dužina isporuke	mm	6500

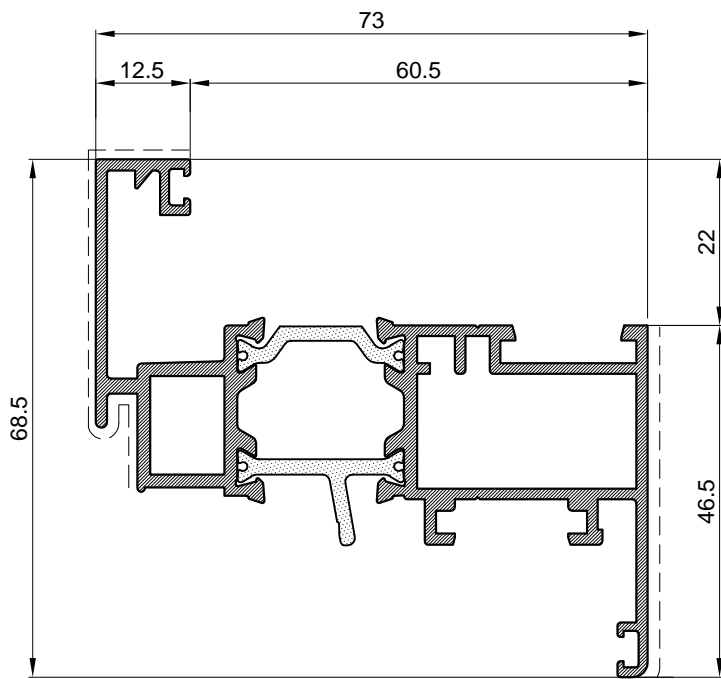




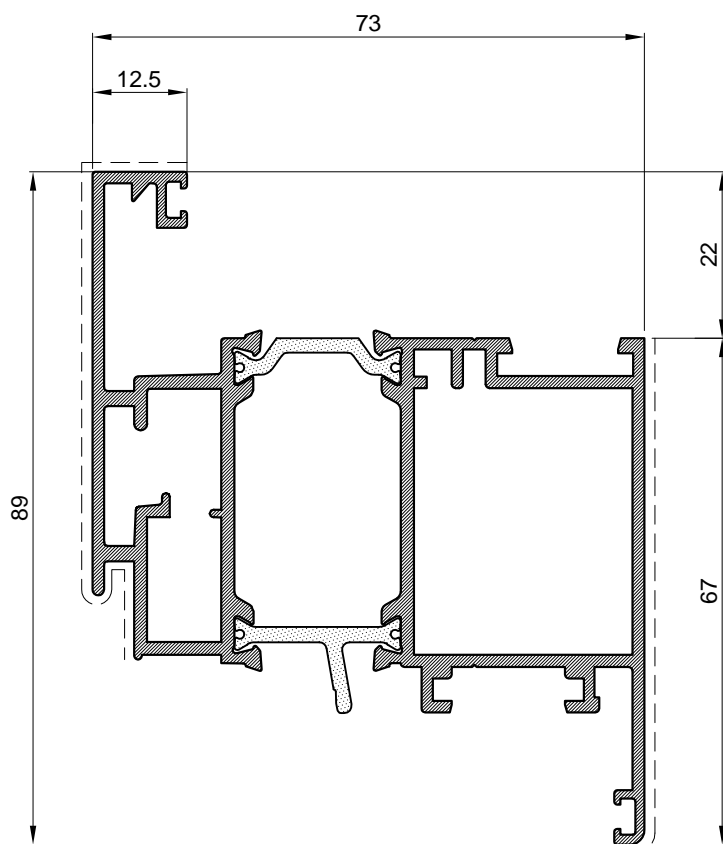
Profil krila		
Art.-Br.	<b>FT-0203</b>	
Težina	kg/m	<b>1.503</b>
Opseg	mm	421.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	7.81
	I <sub>y</sub> (cm <sup>4</sup> )	25.10
	W <sub>x</sub> (cm <sup>4</sup> )	2.18
	W <sub>y</sub> (cm <sup>4</sup> )	6.37
Dužina isporuke	mm	6500



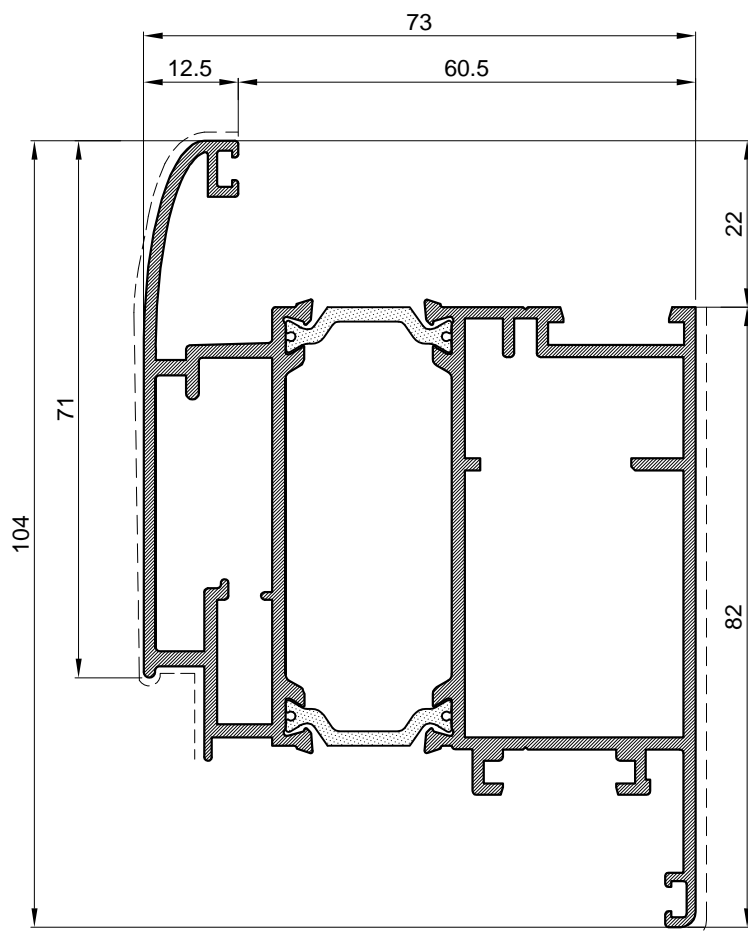
Profil krila		
Art.-Br.	<b>FT-0204</b>	
Težina	kg/m	<b>1.984</b>
Opseg	mm	463.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	24.00
	I <sub>y</sub> (cm <sup>4</sup> )	34.70
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	8.63
Dužina isporuke	mm	6500



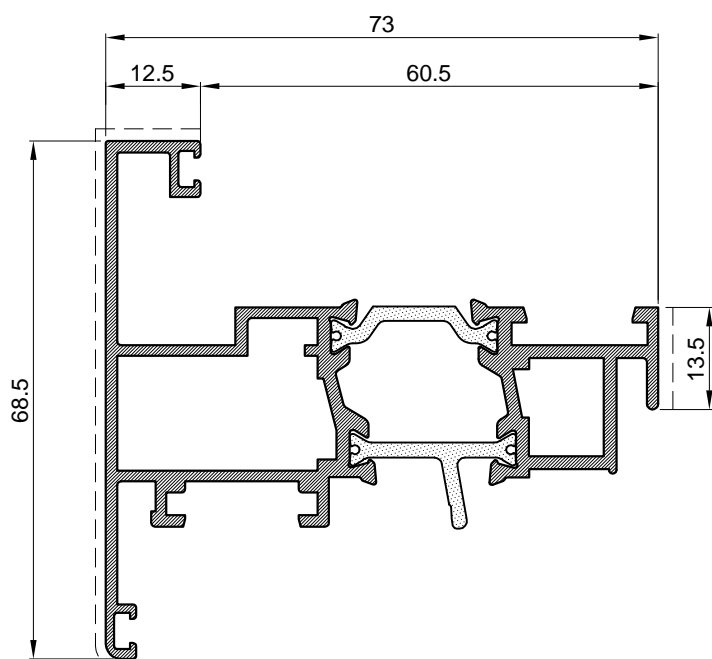
Profil krila		
Art.-Br.	<b>FT-0221</b>	
Težina	kg/m	<b>1.502</b>
Opseg	mm	431
Moment inercije	$I_x$ (cm <sup>4</sup> )	7.95
	$I_y$ (cm <sup>4</sup> )	25.6
	$W_x$ (cm <sup>4</sup> )	3.14
	$W_y$ (cm <sup>4</sup> )	7.27
Dužina isporuke	mm	6500



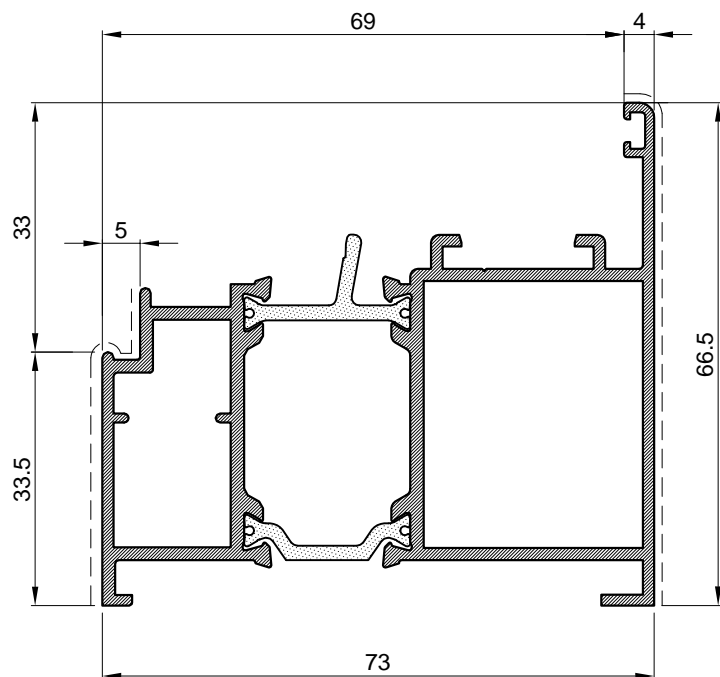
Profil krila		
Art.-Br.	<b>FT-0230</b>	
Težina	kg/m	<b>1.999</b>
Opseg	mm	479
Moment inercije	$I_x$ (cm <sup>4</sup> )	24.2
	$I_y$ (cm <sup>4</sup> )	34.9
	$W_x$ (cm <sup>4</sup> )	4.6
	$W_y$ (cm <sup>4</sup> )	8.7
Dužina isporuke	mm	6500



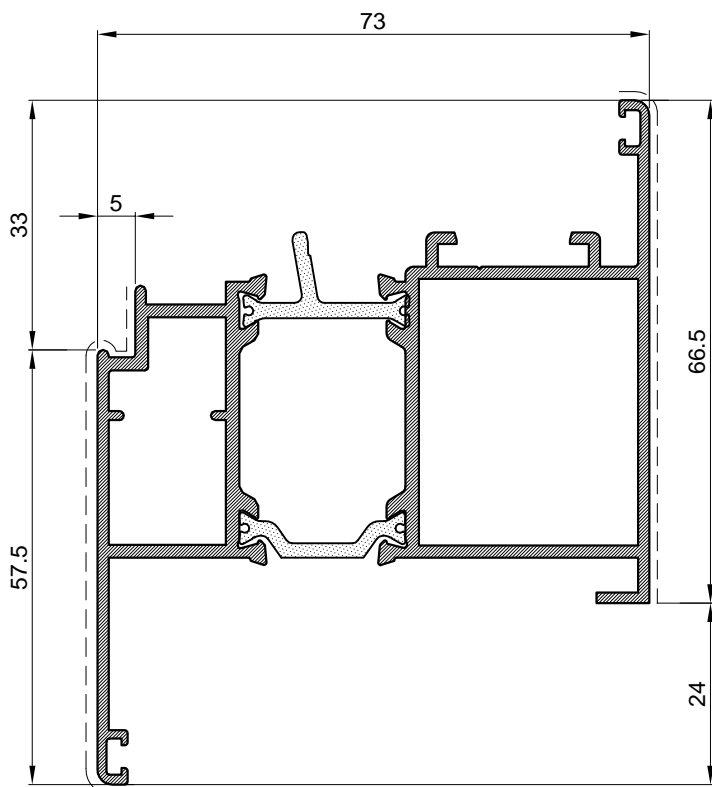
Profil krila		
Art.-Br.	<b>FT-0218</b>	
Težina	kg/m	<b>2.311</b>
Opseg	mm	461
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	44.3
	I <sub>y</sub> (cm <sup>4</sup> )	41.6
	W <sub>x</sub> (cm <sup>4</sup> )	10.4
	W <sub>y</sub> (cm <sup>4</sup> )	8.1
Dužina isporuke	mm	6500



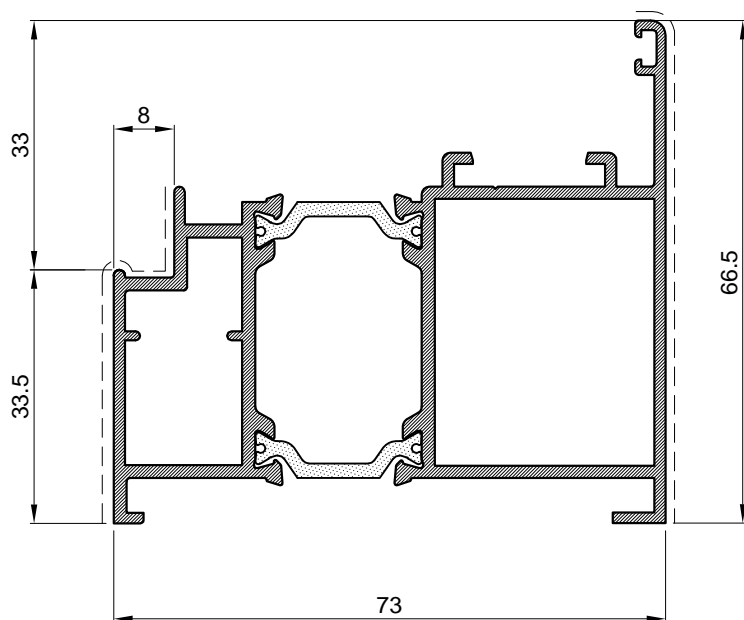
Profil krila otvaranje vani		
Art.-Br.	<b>FT-0262</b>	
Težina	kg/m	<b>1.49</b>
Opseg	mm	440
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	8.5
	I <sub>y</sub> (cm <sup>4</sup> )	24.9
	W <sub>x</sub> (cm <sup>4</sup> )	2.32
	W <sub>y</sub> (cm <sup>4</sup> )	5.85
Dužina isporuke	mm	6500



Profil rama-otvaranje vani		
Art.-Br.	<b>FT-0202</b>	
Težina	kg/m	<b>1.631</b>
Opseg	mm	373.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	14.11
	I <sub>y</sub> (cm <sup>4</sup> )	28.30
	W <sub>x</sub> (cm <sup>4</sup> )	3.37
	W <sub>y</sub> (cm <sup>4</sup> )	7.35
Dužina isporuke	mm	6500

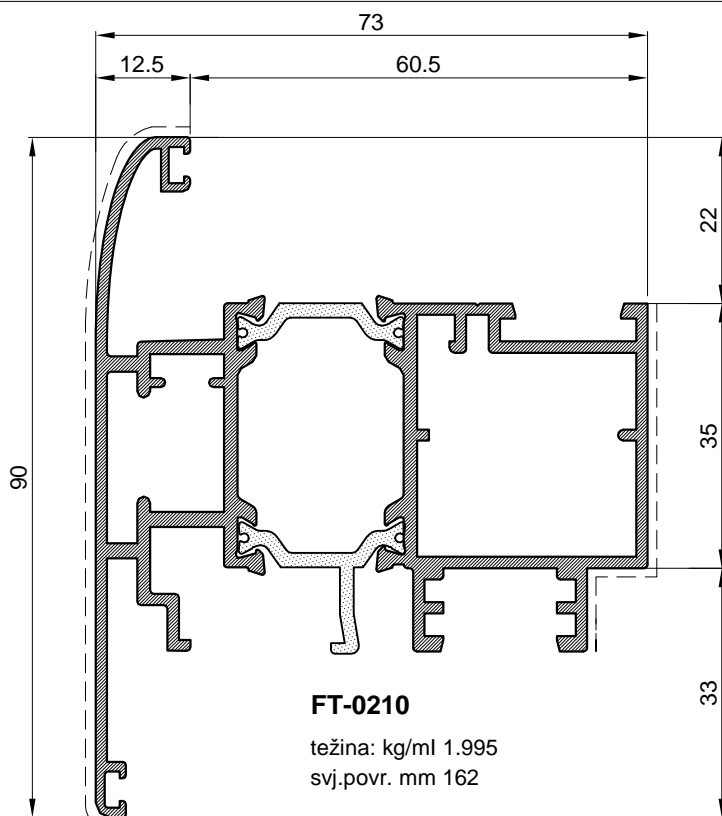


Profil rama-otvaranje vani		
Art.-Br.	<b>FT-0215</b>	
Težina	kg/m	<b>1.727</b>
Opseg	mm	430.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	18.70
	I <sub>y</sub> (cm <sup>4</sup> )	31.90
	W <sub>x</sub> (cm <sup>4</sup> )	3.75
	W <sub>y</sub> (cm <sup>4</sup> )	8.03
Dužina isporuke	mm	6500

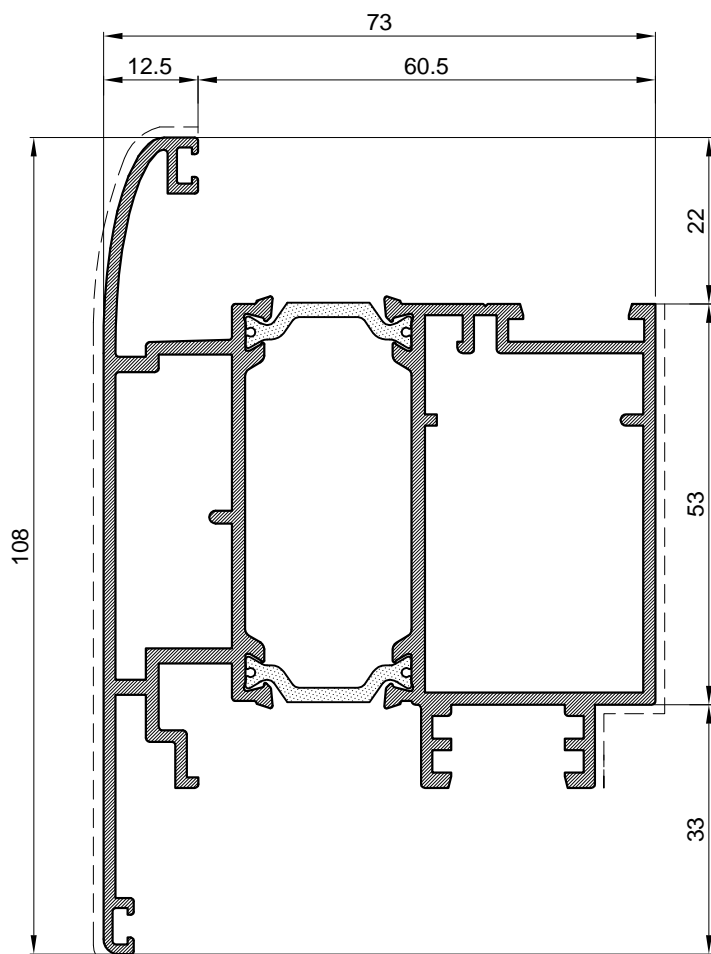


Profil rama vrata- otvaranje vani		
Art.-Br.	<b>FT-0220</b>	
Težina	kg/m	<b>1.629</b>
Opseg	mm	354
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	13.8
	I <sub>y</sub> (cm <sup>4</sup> )	28.3
	W <sub>x</sub> (cm <sup>4</sup> )	3.22
	W <sub>y</sub> (cm <sup>4</sup> )	7.3
Dužina isporuke	mm	6500

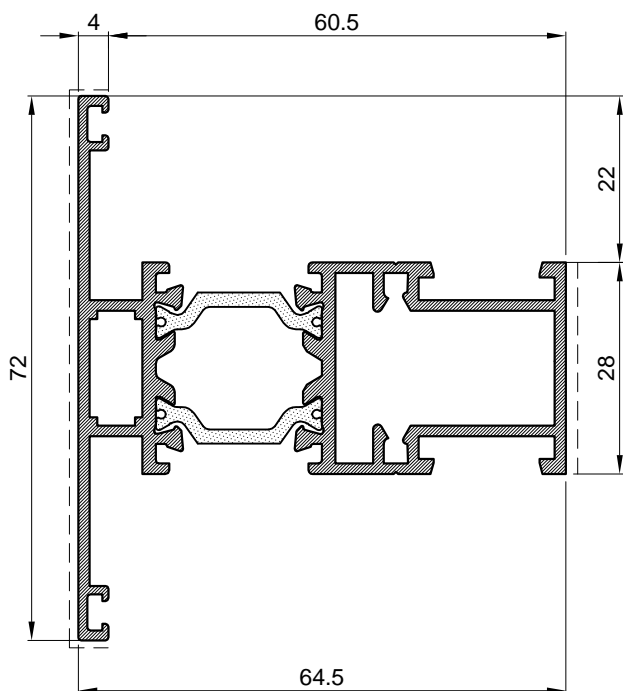




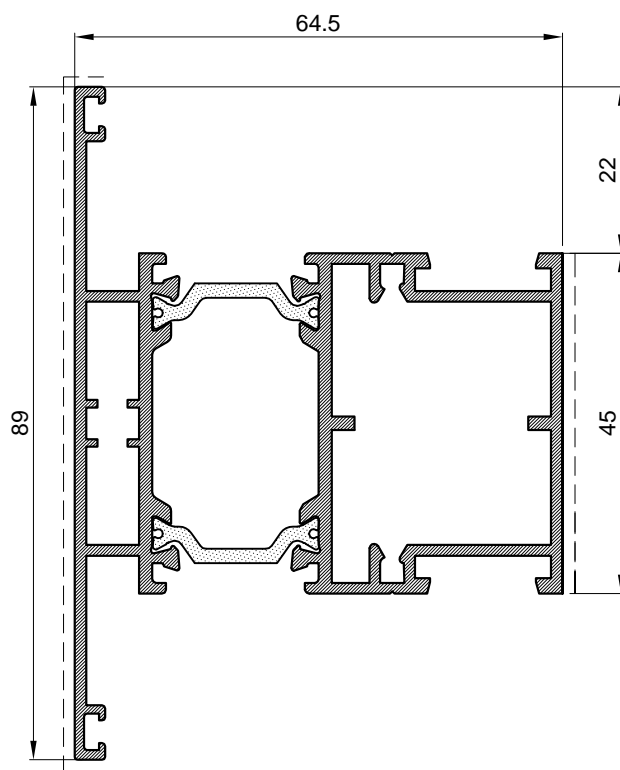
Profil krila-otvaranje vani		
Art.-Br.	<b>FT-0210</b>	
Težina	kg/m	<b>1.995</b>
Opseg	mm	530
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	20.9
	I <sub>y</sub> (cm <sup>4</sup> )	33
	W <sub>x</sub> (cm <sup>4</sup> )	4.2
	W <sub>y</sub> (cm <sup>4</sup> )	7.35
Dužina isporuke	mm	6500



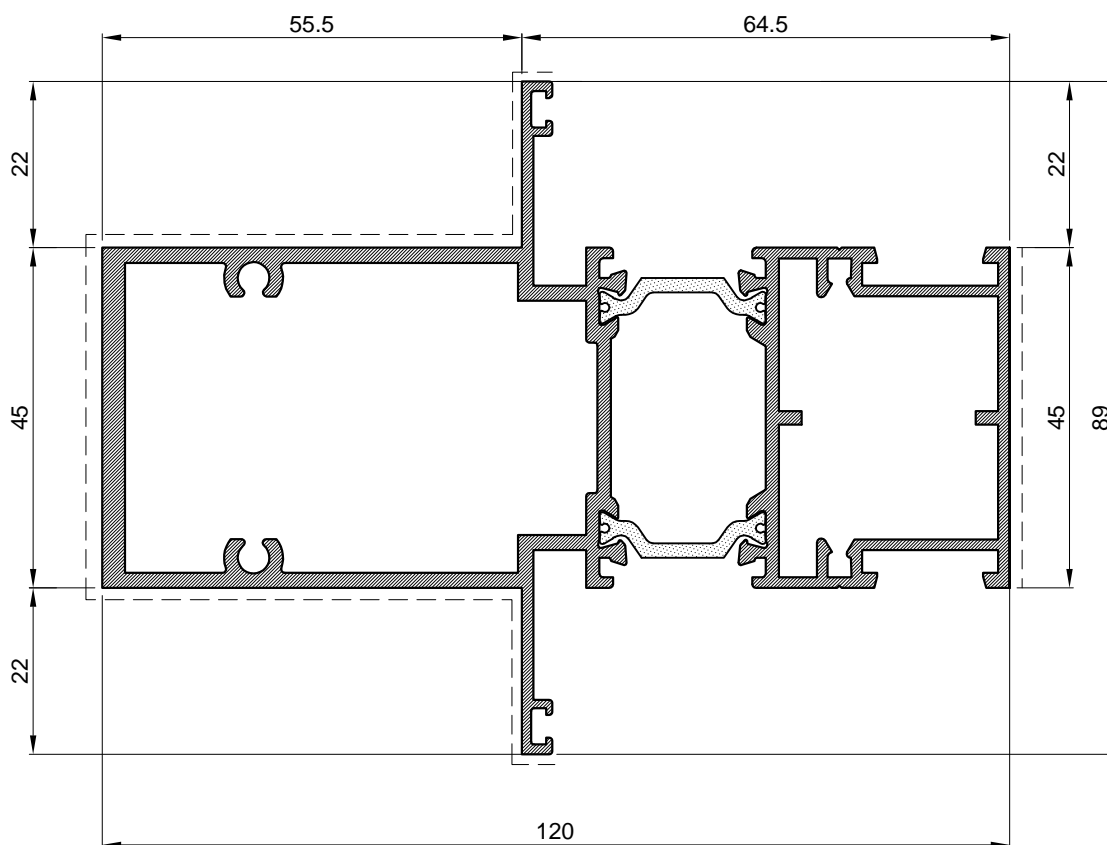
Profil krila-otvaranje vani		
Art.-Br.	<b>FT-0219</b>	
Težina	kg/m	<b>2.348</b>
Opseg	mm	541
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	43.2
	I <sub>y</sub> (cm <sup>4</sup> )	40.2
	W <sub>x</sub> (cm <sup>4</sup> )	7.3
	W <sub>y</sub> (cm <sup>4</sup> )	9.1
Dužina isporuke	mm	6500



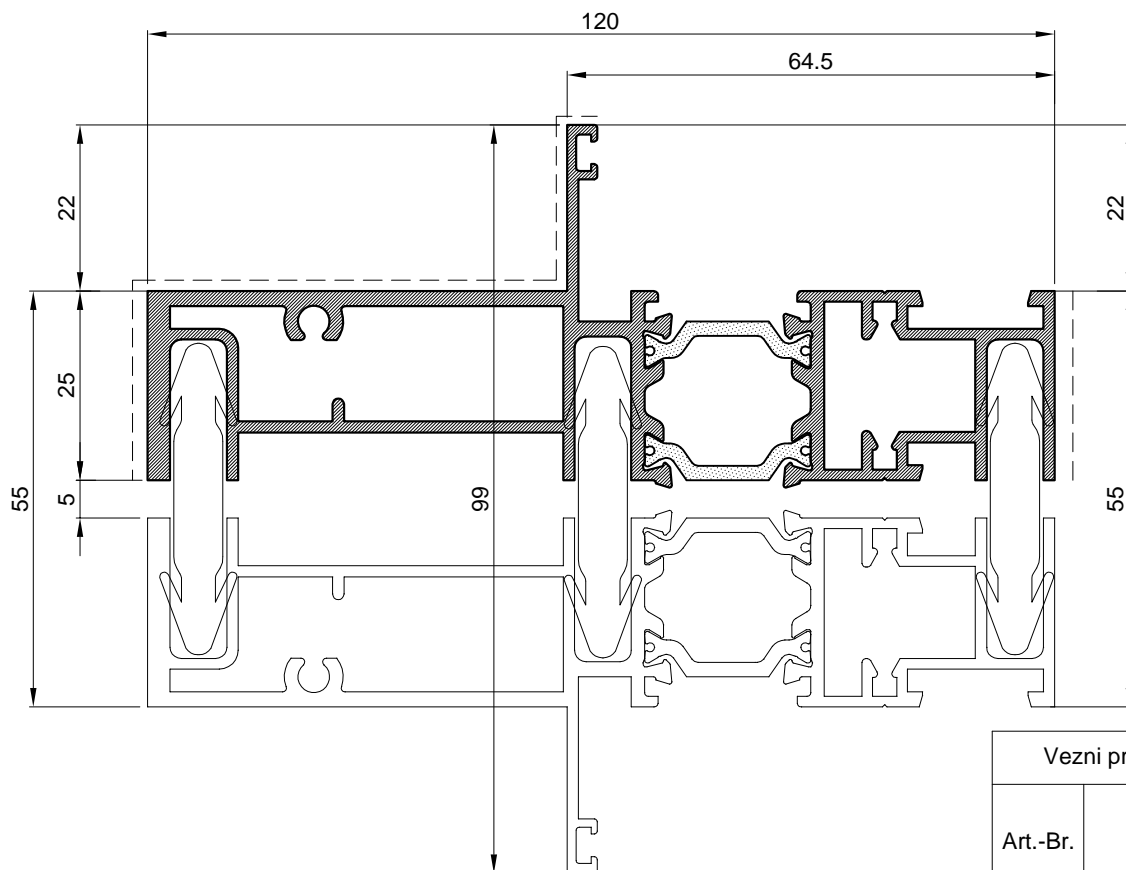
Profil prečke		
Art.-Br.	<b>FT-0205</b>	
Težina	kg/m	<b>1.452</b>
Opseg	mm	379.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	7.41
	I <sub>y</sub> (cm <sup>4</sup> )	18.90
	W <sub>x</sub> (cm <sup>4</sup> )	1.95
	W <sub>y</sub> (cm <sup>4</sup> )	4.65
Dužina isporuke	mm	6500



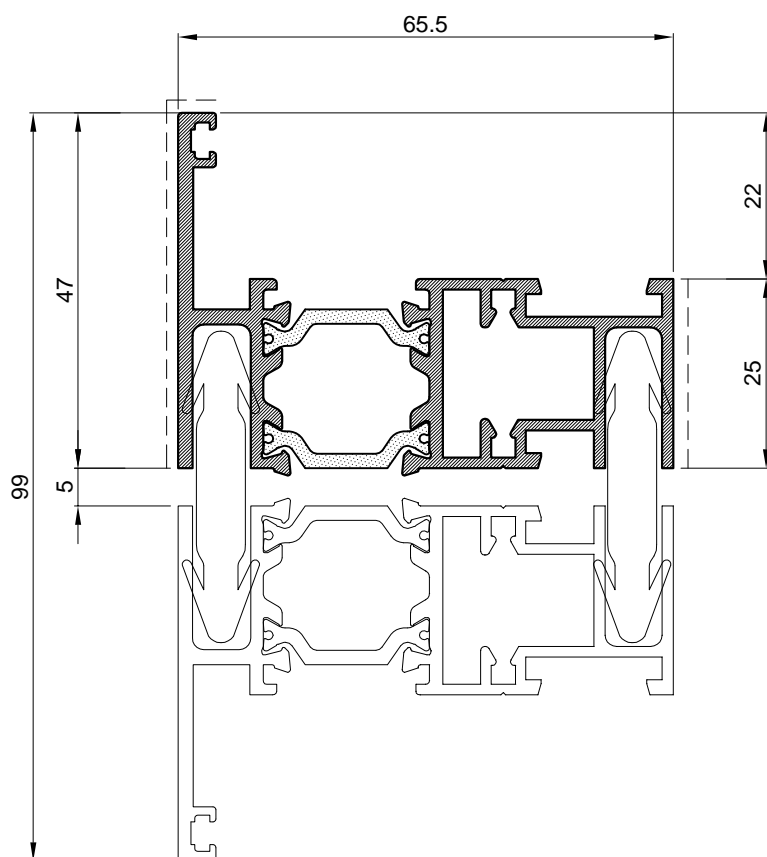
Profil prečke		
Art.-Br.	<b>FT-0206</b>	
Težina	kg/m	<b>1.789</b>
Opseg	mm	410.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	19.10
	I <sub>y</sub> (cm <sup>4</sup> )	24.40
	W <sub>x</sub> (cm <sup>4</sup> )	4.12
	W <sub>y</sub> (cm <sup>4</sup> )	6.07
Dužina isporuke	mm	6500



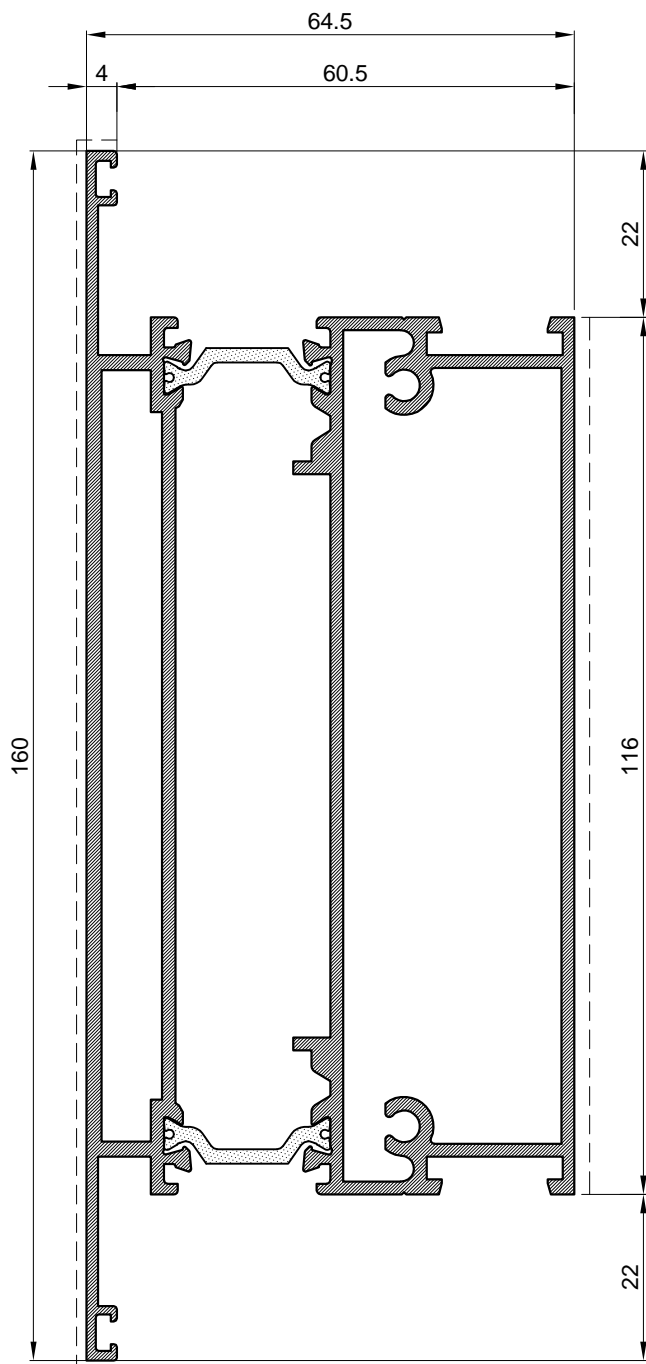
Profil ojačane prečke		
Art.-Br.	<b>FT-0209</b>	
Težina	kg/m	<b>2.711</b>
Opseg	mm	520
Moment inercije	Ix (cm <sup>4</sup> )	29.3
	Iy (cm <sup>4</sup> )	108.4
	Wx (cm <sup>4</sup> )	6.3
	Wy (cm <sup>4</sup> )	17.32
Dužina isporuke	mm	6500



Vezni profil-ojačan		
Art.-Br.	<b>FT-0226</b>	
Težina	kg/m	<b>2.027</b>
Opseg	mm	516
Moment inercije	$I_x$ (cm <sup>4</sup> )	5.9
	$I_y$ (cm <sup>4</sup> )	82.9
	$W_x$ (cm <sup>4</sup> )	1.8
	$W_y$ (cm <sup>4</sup> )	13.2
Dužina isporuke	mm	6500

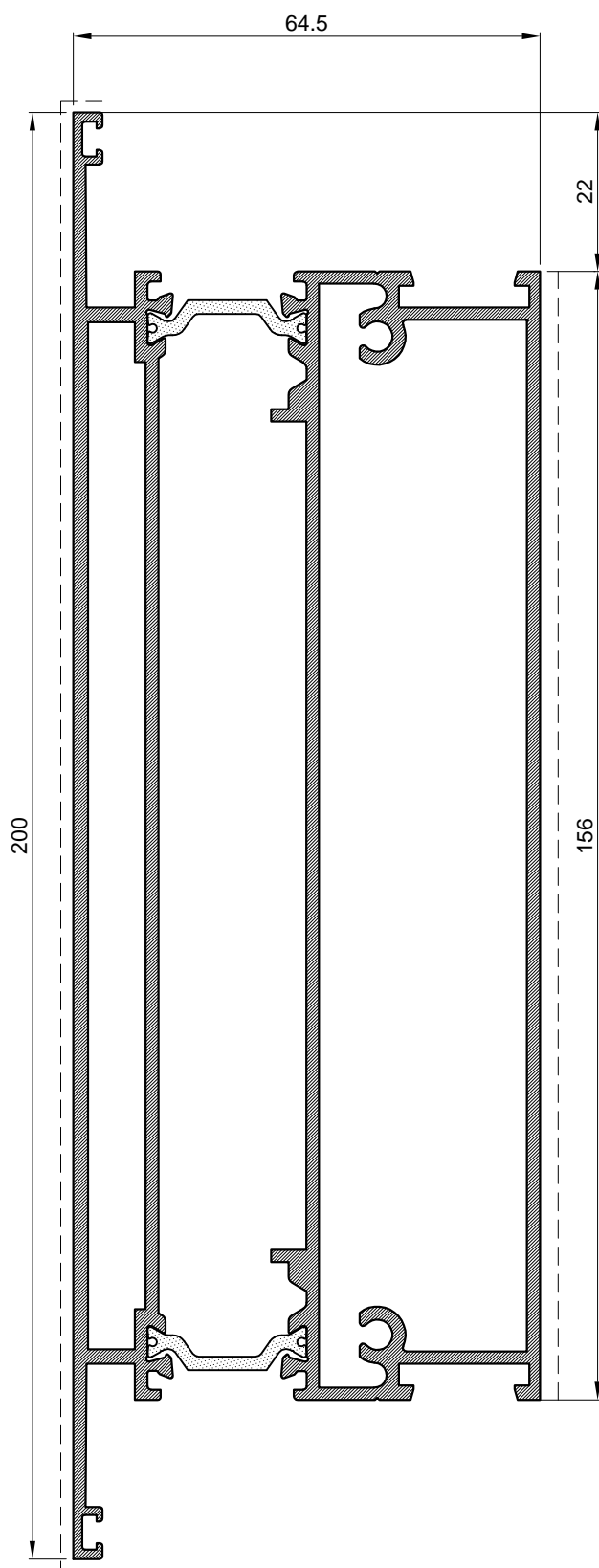


Vezni profil		
Art.-Br.	<b>FT-0227</b>	
Težina	kg/m	<b>1.311</b>
Opseg	mm	386
Moment inercije	$I_x$ (cm <sup>4</sup> )	4.9
	$I_y$ (cm <sup>4</sup> )	17.8
	$W_x$ (cm <sup>4</sup> )	1.5
	$W_y$ (cm <sup>4</sup> )	4.5
Dužina isporuke	mm	6500

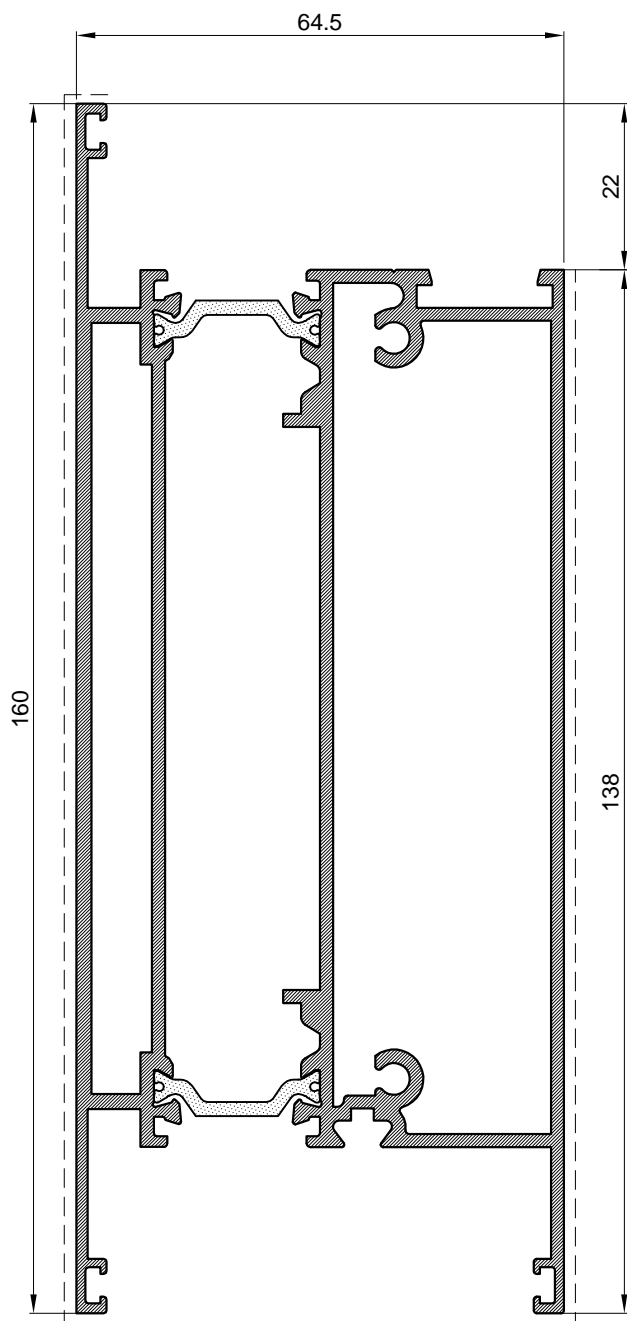


Profil prečke		
Art.-Br.	<b>FT-0207</b>	
Težina	kg/m	<b>3.437</b>
Opseg	mm	603.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	187.00
	I <sub>y</sub> (cm <sup>4</sup> )	49.90
	W <sub>x</sub> (cm <sup>4</sup> )	22.50
	W <sub>y</sub> (cm <sup>4</sup> )	12.60
Dužina isporuke	mm	6500

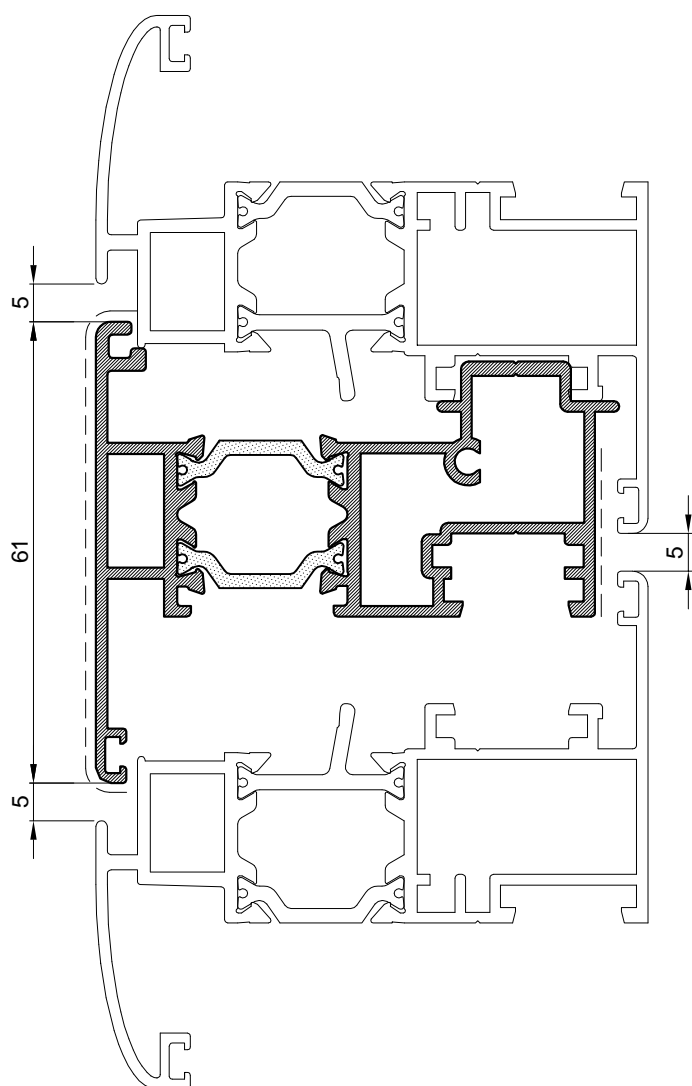




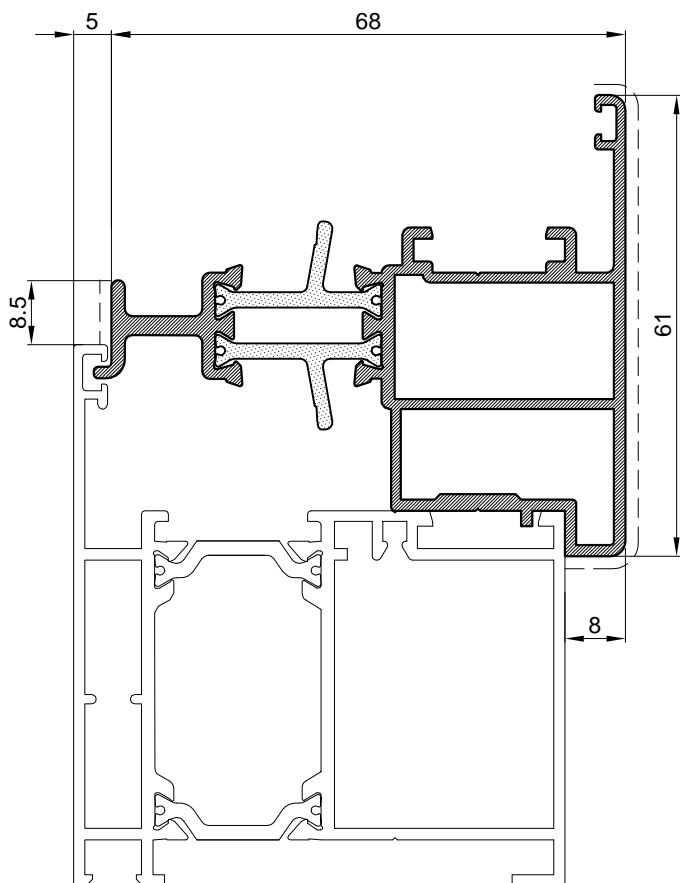
Profili prečke		
Art.-Br.	<b>FT-0243</b>	
Težina	kg/m	<b>4.239</b>
Opseg	mm	653
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	450.13
	I <sub>y</sub> (cm <sup>4</sup> )	82.41
	W <sub>x</sub> (cm <sup>3</sup> )	45.01
	W <sub>y</sub> (cm <sup>3</sup> )	21.96
Dužina isporuke	mm	6500



Profil parapetne prečke		
Art.-Br.	<b>FT-0208</b>	
Težina	kg/m	<b>3.497</b>
Opseg	mm	626.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	203.00
	I <sub>y</sub> (cm <sup>4</sup> )	54.00
	W <sub>x</sub> (cm <sup>4</sup> )	23.70
	W <sub>y</sub> (cm <sup>4</sup> )	14.02
Dužina isporuke	mm	6500

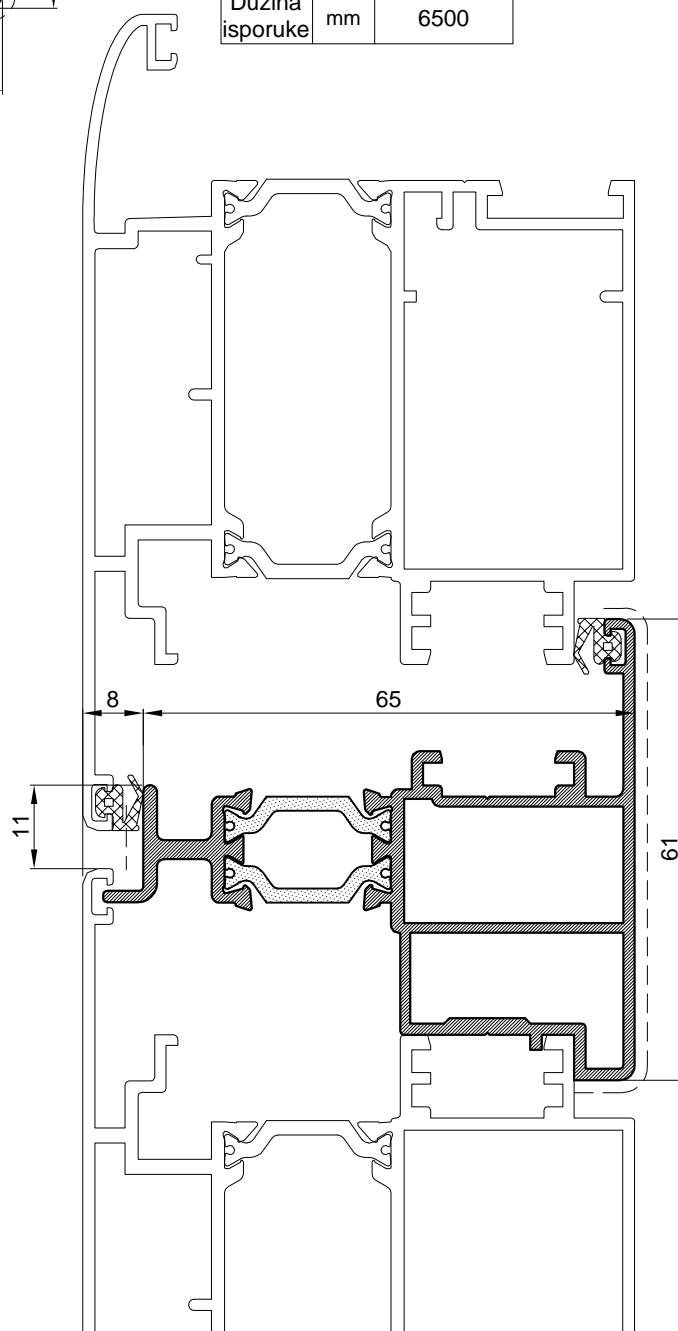


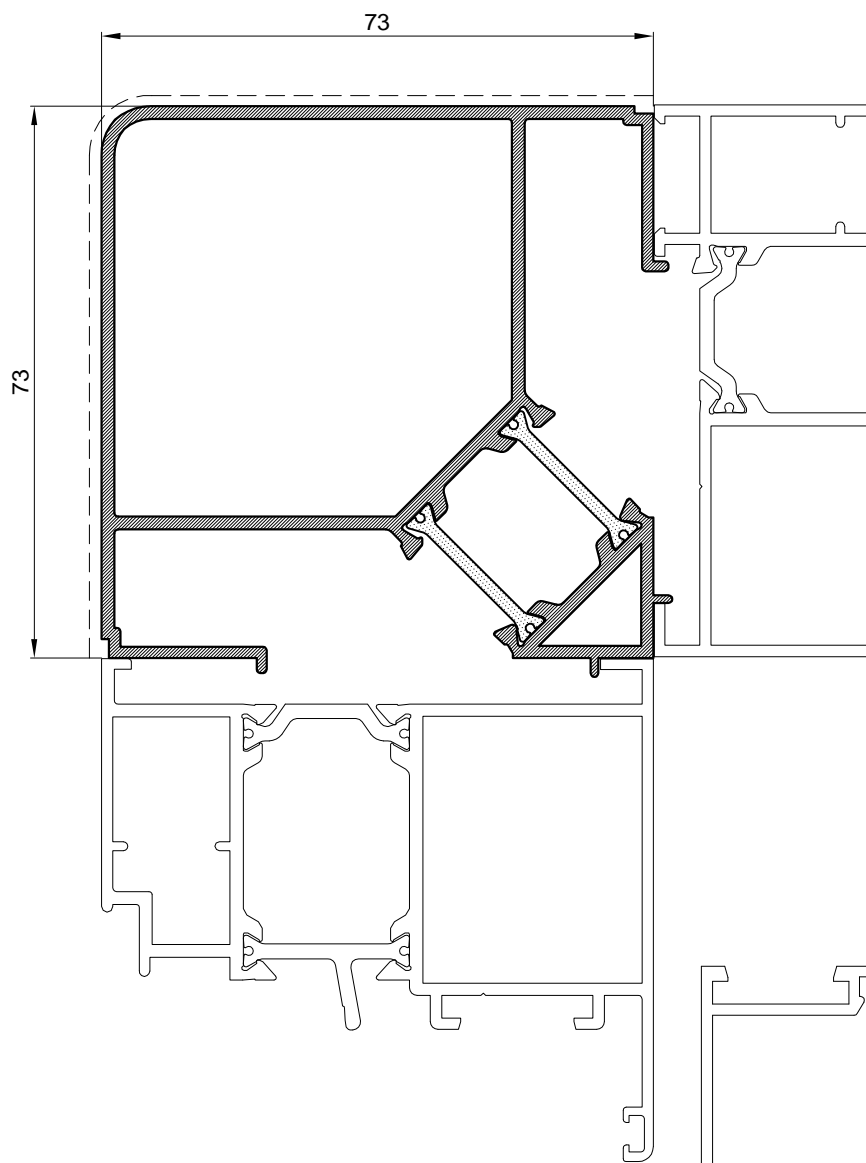
Profil kombatute		
Art.-Br.	<b>FT-0211</b>	
Težina	kg/m	<b>1.478</b>
Opseg	mm	375
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	6.4
	I <sub>y</sub> (cm <sup>4</sup> )	21.3
	W <sub>x</sub> (cm <sup>4</sup> )	1.77
	W <sub>y</sub> (cm <sup>4</sup> )	5
Dužina isporuke	mm	6500



Profil kombatute-otvaranje vani		
Art.-Br.	<b>FT-0213</b>	
Težina	kg/m	<b>1.339</b>
Opseg	mm	376
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	6.7
	I <sub>y</sub> (cm <sup>4</sup> )	18.7
	W <sub>x</sub> (cm <sup>4</sup> )	1.95
	W <sub>y</sub> (cm <sup>4</sup> )	4.35
Dužina isporuke	mm	6500

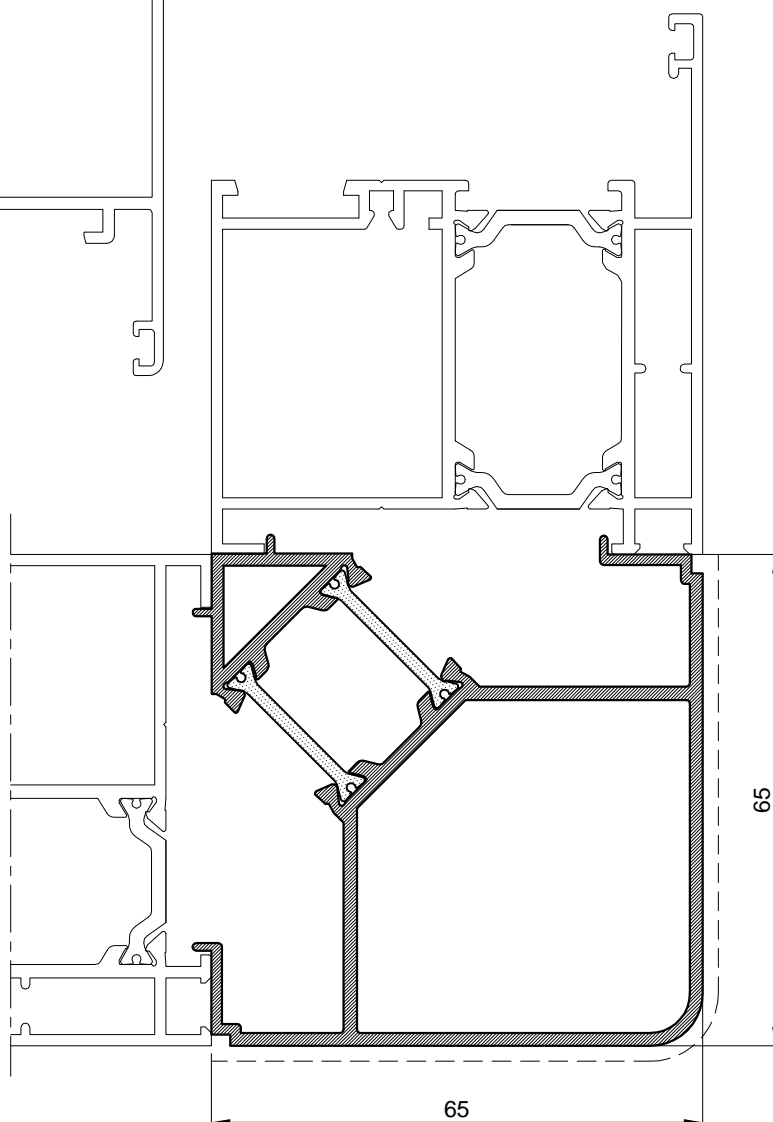
Profil kombatute za vrata-otvaranje vani		
Art.-Br.	<b>FT-0213/A</b>	
Težina	kg/m	<b>1.293</b>
Opseg	mm	333
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	6.68
	I <sub>y</sub> (cm <sup>4</sup> )	18.4
	W <sub>x</sub> (cm <sup>4</sup> )	1.95
	W <sub>y</sub> (cm <sup>4</sup> )	4.27
Dužina isporuke	mm	6500



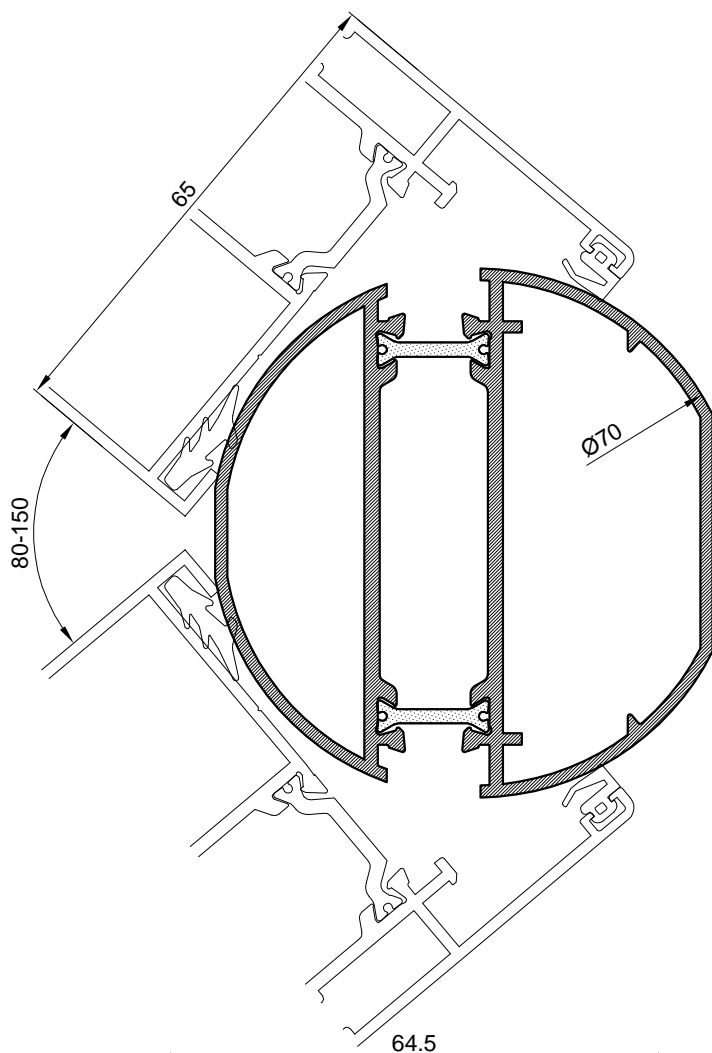


Profil kuta 90° za profil rama 73 mm		
Art.-Br.	<b>FT-0235</b>	
Težina	kg/m	<b>1.796</b>
Opseg	mm	<b>448</b>
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	36.1
	I <sub>y</sub> (cm <sup>4</sup> )	36.1
	W <sub>x</sub> (cm <sup>4</sup> )	8.63
	W <sub>y</sub> (cm <sup>4</sup> )	8.63
Dužina isporuke	mm	6500

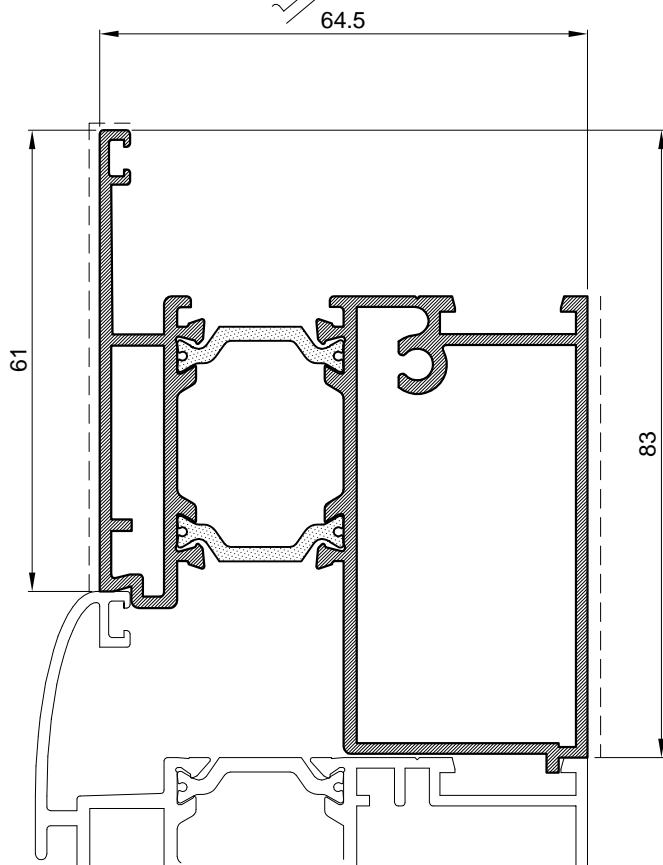
Profil kuta 90° za profil rama 65 mm		
Art.-Br.	<b>FT-0222</b>	
Težina	kg/m	<b>1.586</b>
Opseg	mm	390
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	24.1
	I <sub>y</sub> (cm <sup>4</sup> )	24.1
	W <sub>x</sub> (cm <sup>4</sup> )	6.55
	W <sub>y</sub> (cm <sup>4</sup> )	6.55
Dužina isporuke	mm	6500





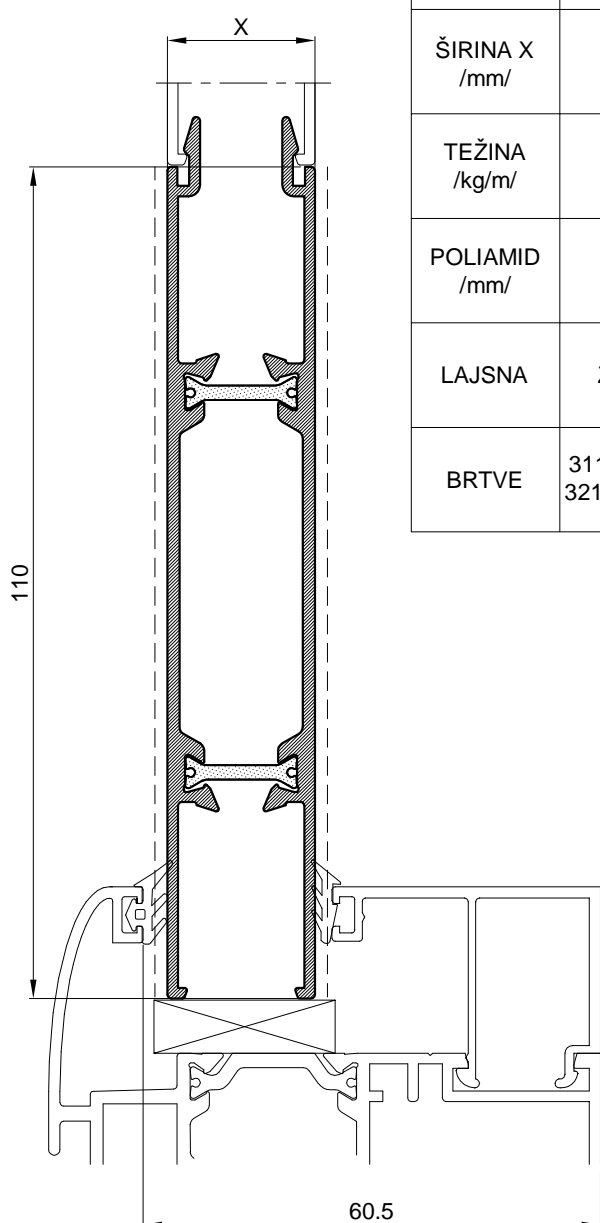


Profil za promjenjivi kut		
Art.-Br.	<b>FT-0217</b>	
Težina	kg/m	<b>1.780</b>
Opseg	mm	269
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	25.1
	I <sub>y</sub> (cm <sup>4</sup> )	16.9
	W <sub>x</sub> (cm <sup>4</sup> )	6.89
	W <sub>y</sub> (cm <sup>4</sup> )	4.8
Dužina isporuke	mm	6500

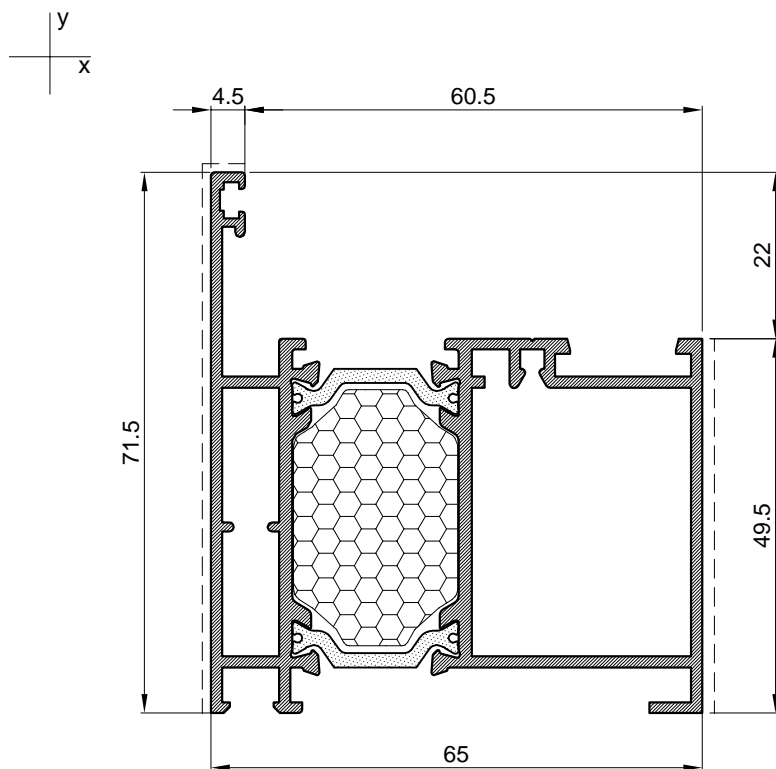


Parapetni profil		
Art.-Br.	<b>FT-0228</b>	
Težina	kg/m	<b>1.707</b>
Opseg	mm	371
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	20.1
	I <sub>y</sub> (cm <sup>4</sup> )	24.1
	W <sub>x</sub> (cm <sup>4</sup> )	4.5
	W <sub>y</sub> (cm <sup>4</sup> )	6.45
Dužina isporuke	mm	6500

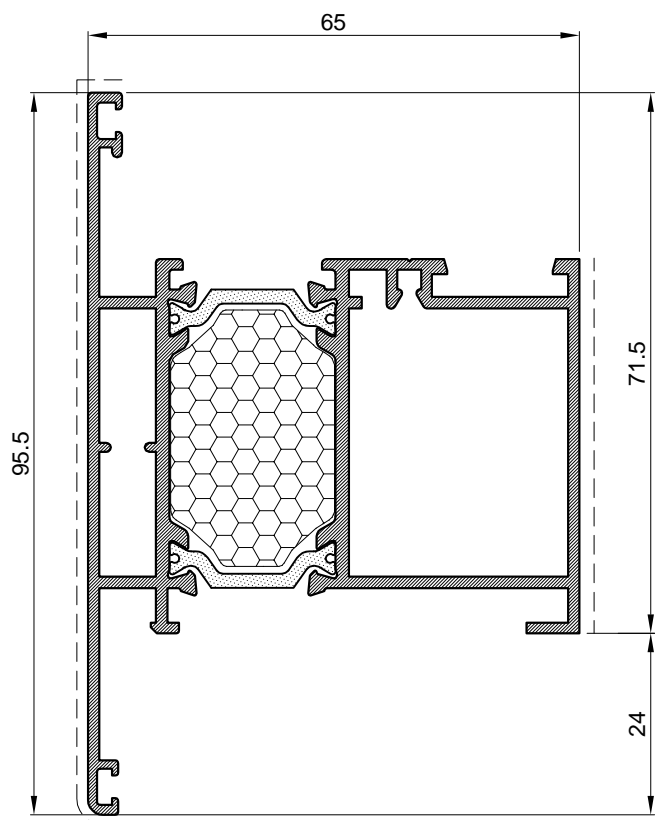
## PROFIL ISPUNE U OVISNOSTI O ŠIRINI POLIAMIDA



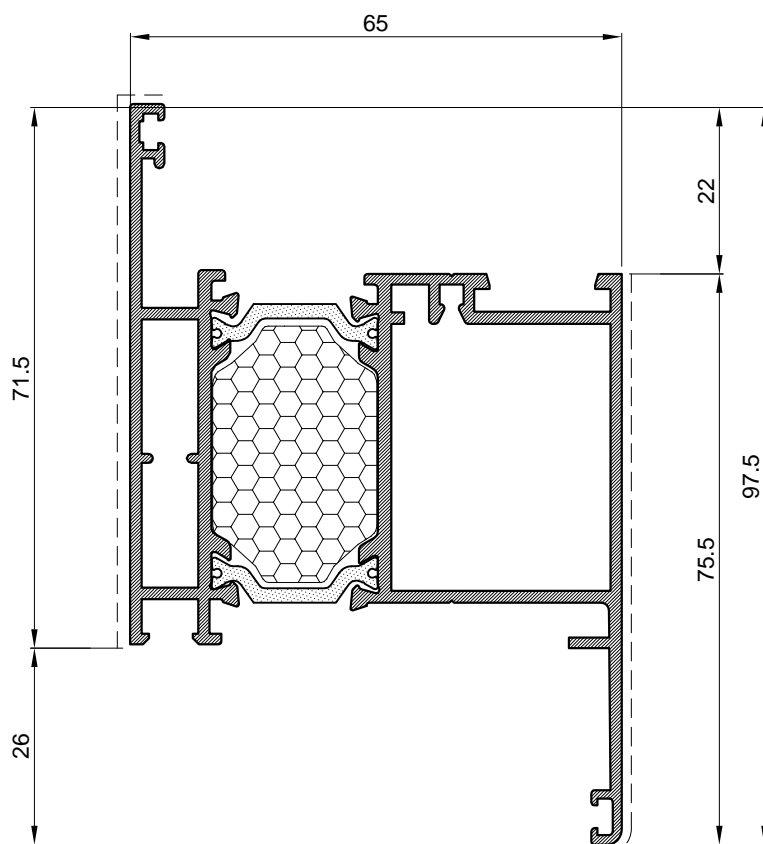
PROFIL	FT-0142/39	FT-0142/35	FT-0142/33	FT-0142/27	FT-0142
ŠIRINA X /mm/	38.7	34,7	32,7	26,7	19.5
TEŽINA /kg/m/	1.437	1.411	1.401	1,372	1.327
POLIAMID /mm/	34	30	28	22	14.8
LAJSNA	Z40-636	M45-709	Z40-644	Z40-658	Z40.659
BRTVE	311.008(UP6) 321.003(Z113)	311.007(UP5) 321.003(Z113)	311.001(921) 321.003(Z113)	311.002(918) 321.003(Z113)	311.001(921) 321.002(Z111)



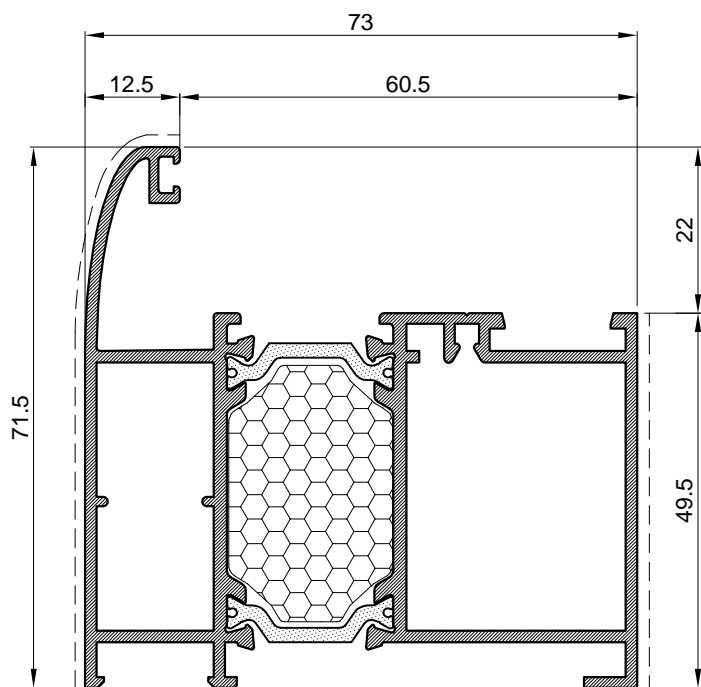
Profil rama		
Art.-Br.	<b>FT-0201F</b>	
Težina	kg/m	<b>1.688</b>
Opseg	mm	371.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	17.21
	I <sub>y</sub> (cm <sup>4</sup> )	23.80
	W <sub>x</sub> (cm <sup>4</sup> )	3.82
	W <sub>y</sub> (cm <sup>4</sup> )	6.00
Dužina isporuke	mm	6500



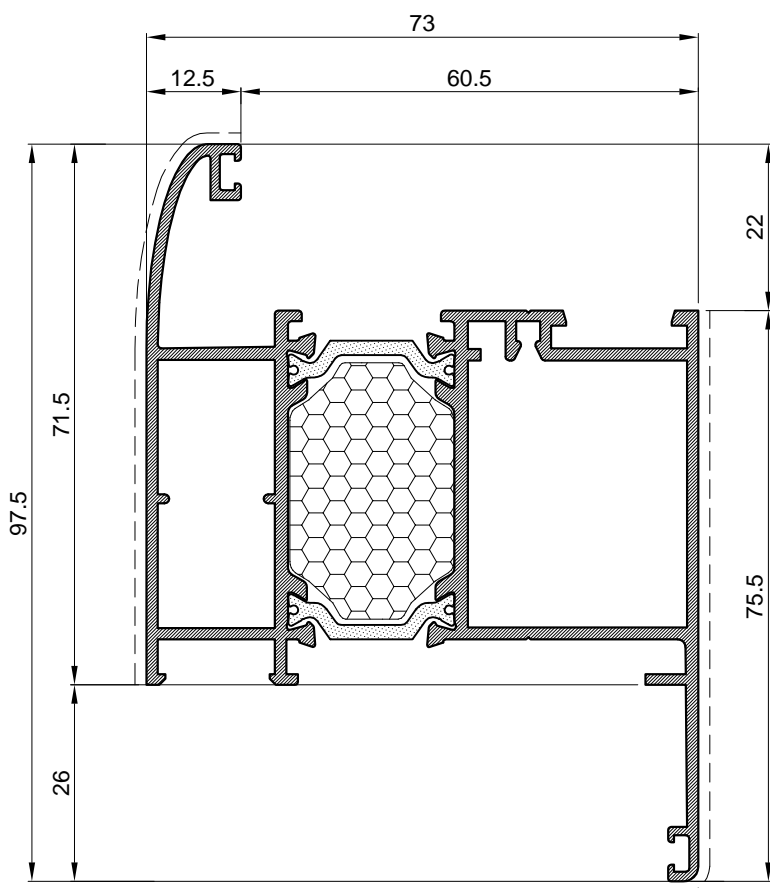
Profil rama		
Art.-Br.	<b>FT-0214F</b>	
Težina	kg/m	<b>1.797</b>
Opseg	mm	427.0
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	22.50
	I <sub>y</sub> (cm <sup>4</sup> )	25.80
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	6.22
Dužina isporuke	mm	6500



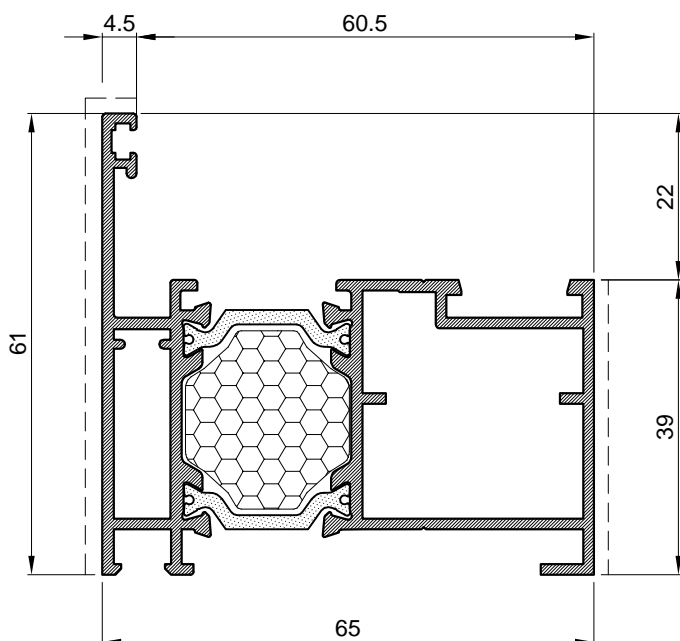
Profil rama		
Art.-Br.	FT-0225F	
Težina	kg/m	<b>1.789</b>
Opseg	mm	433
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	23.5
	I <sub>y</sub> (cm <sup>4</sup> )	28.7
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	7.76
Dužina isporuke	mm	6500



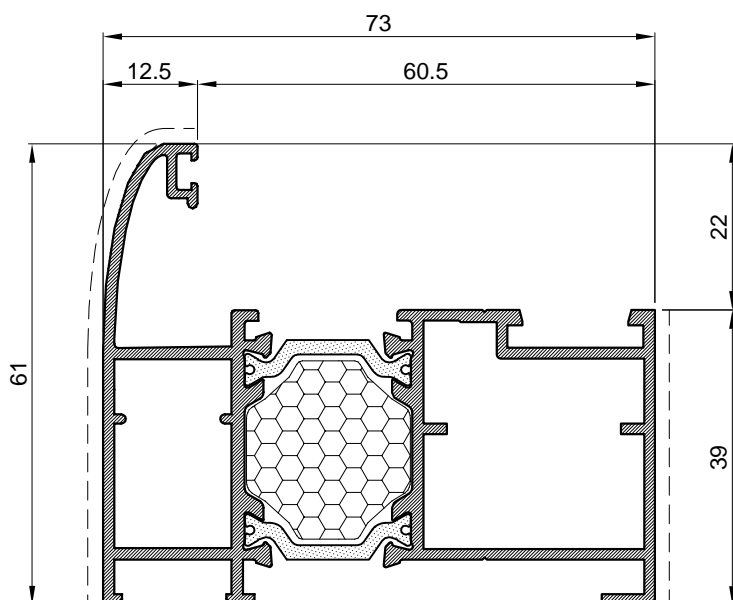
Profil rama		
Art.-Br.	FT-0224F	
Težina	kg/m	<b>1.738</b>
Opseg	mm	408
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	19.3
	I <sub>y</sub> (cm <sup>4</sup> )	29.6
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	6.97
Dužina isporuke	mm	6500



Profil rama		
Art.-Br.	FT-0229F	
Težina	kg/m	<b>1.878</b>
Opseg	mm	461
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	25.8
	I <sub>y</sub> (cm <sup>4</sup> )	35.1
	W <sub>x</sub> (cm <sup>4</sup> )	4.7
	W <sub>y</sub> (cm <sup>4</sup> )	8.85
Dužina isporuke	mm	6500

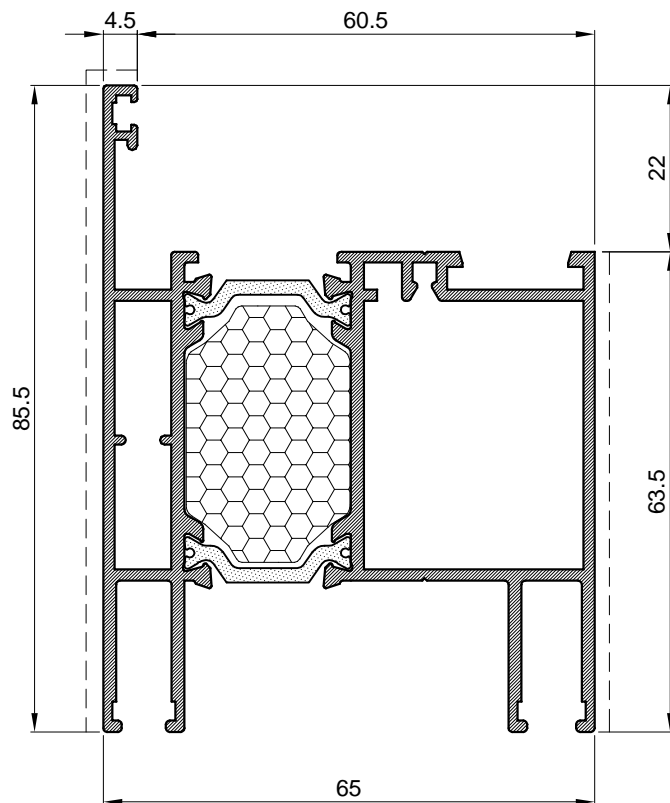


Profil rama		
Art.-Br.	FT-0233F	
Težina	kg/m	<b>1.401</b>
Opseg	mm	345
Moment inercije	$I_x$ (cm <sup>4</sup> )	9.51
	$I_y$ (cm <sup>4</sup> )	20.5
	$W_x$ (cm <sup>4</sup> )	2.62
	$W_y$ (cm <sup>4</sup> )	5.1
Dužina isporuke	mm	6500

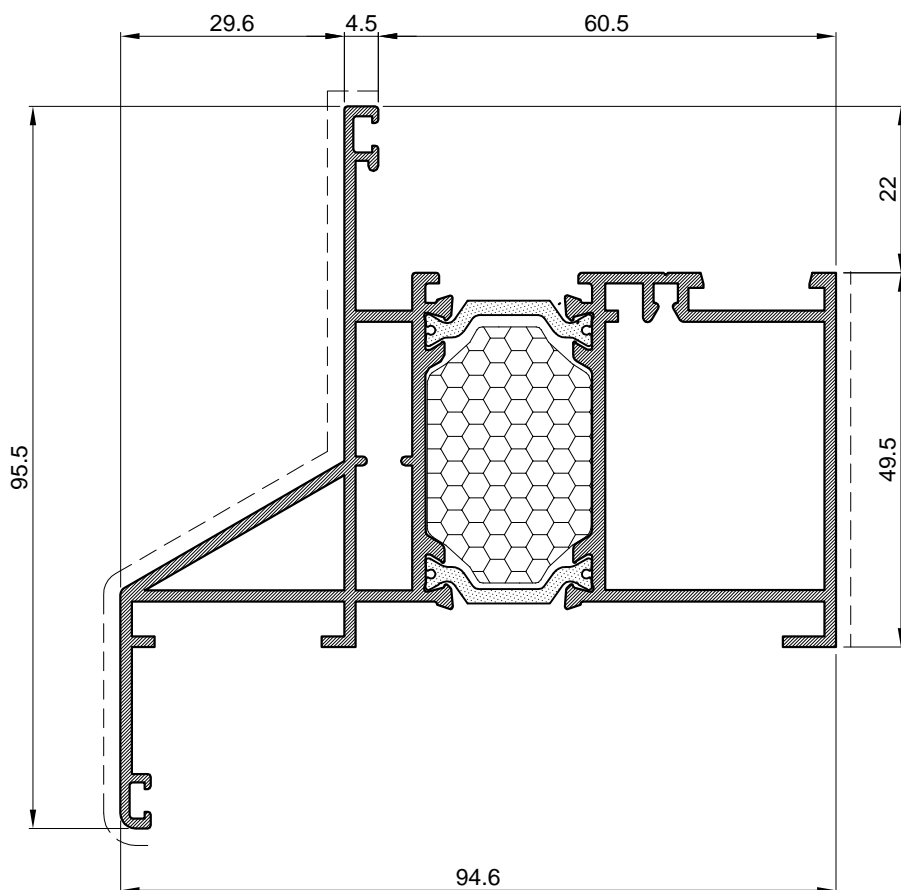


Profil rama		
Art.-Br.	FT-0234F	
Težina	kg/m	<b>1.542</b>
Opseg	mm	376
Moment inercije	$I_x$ (cm <sup>4</sup> )	10.9
	$I_y$ (cm <sup>4</sup> )	34.1
	$W_x$ (cm <sup>4</sup> )	4.35
	$W_y$ (cm <sup>4</sup> )	6.97
Dužina isporuke	mm	6500

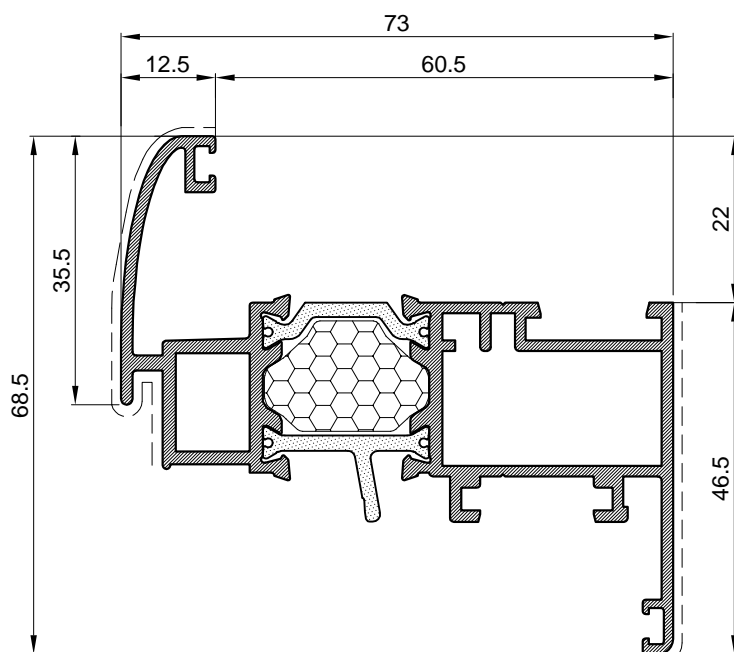




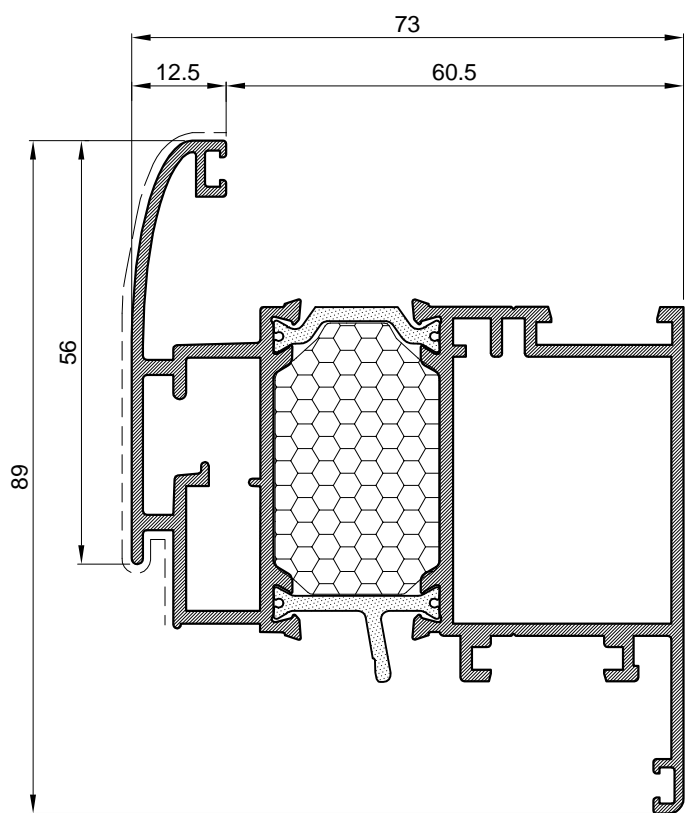
Profil rama		
Art.-Br.	FT-0231F	
Težina	kg/m	<b>1.890</b>
Opseg	mm	491
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	25.6
	I <sub>y</sub> (cm <sup>4</sup> )	29.6
	W <sub>x</sub> (cm <sup>4</sup> )	5.1
	W <sub>y</sub> (cm <sup>4</sup> )	7.5
Dužina isporuke	mm	6500



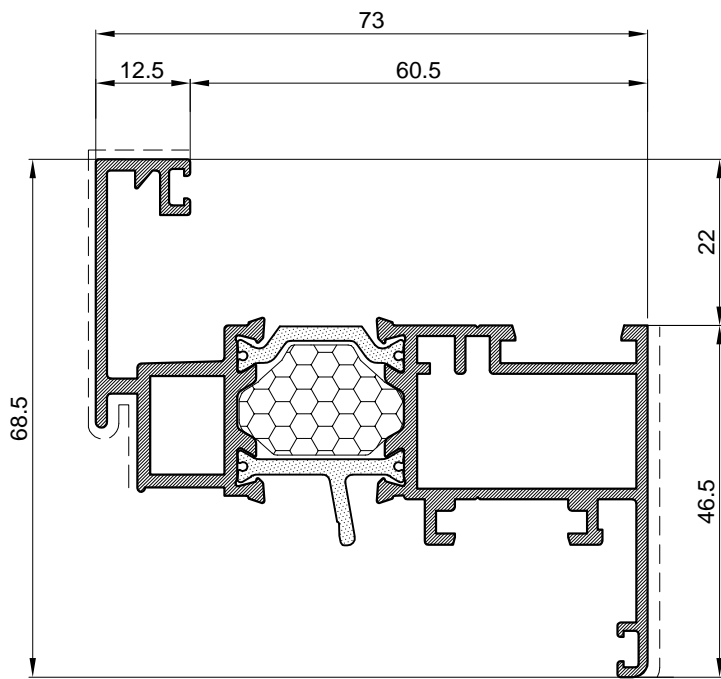
Profil rama		
Art.-Br.	FT-0232F	
Težina	kg/m	<b>2.023</b>
Opseg	mm	489
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	24.4
	I <sub>y</sub> (cm <sup>4</sup> )	45.4
	W <sub>x</sub> (cm <sup>4</sup> )	4.87
	W <sub>y</sub> (cm <sup>4</sup> )	9.45
Dužina isporuke	mm	6500



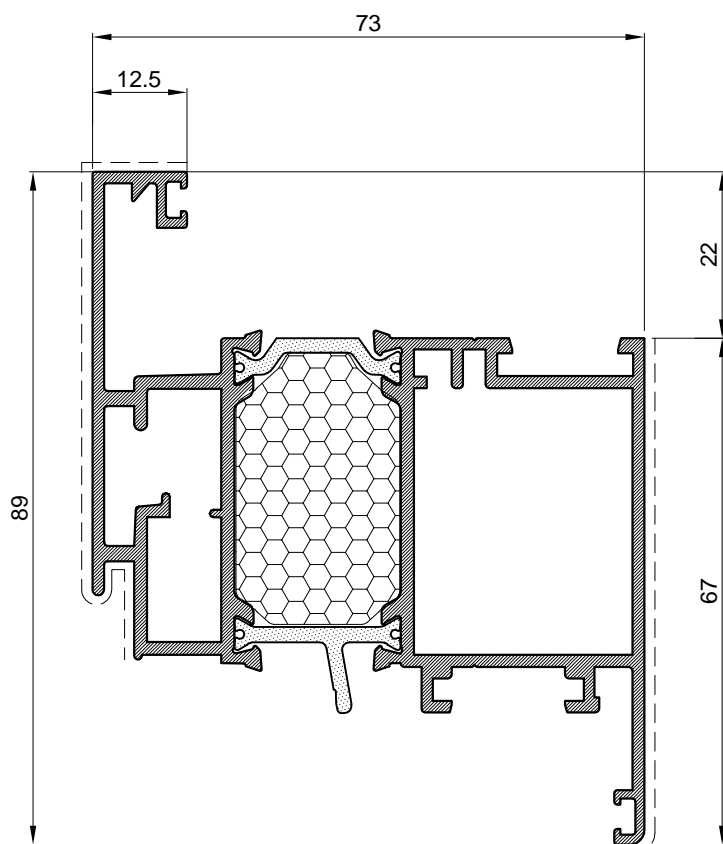
Profil krila		
Art.-Br.	FT-0203F	
Težina	kg/m	<b>1.503</b>
Opseg	mm	421
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	7.81
	I <sub>y</sub> (cm <sup>4</sup> )	25.1
	W <sub>x</sub> (cm <sup>4</sup> )	2.175
	W <sub>y</sub> (cm <sup>4</sup> )	6.37
Dužina isporuke	mm	6500



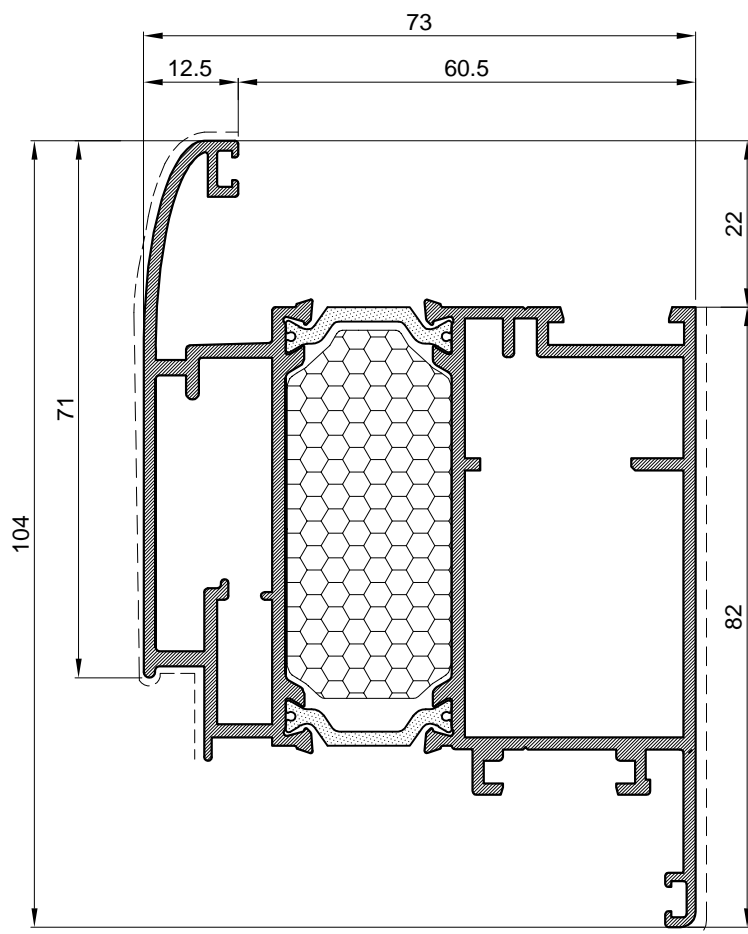
Profil krila		
Art.-Br.	FT-0204F	
Težina	kg/m	<b>1.984</b>
Opseg	mm	463
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	24
	I <sub>y</sub> (cm <sup>4</sup> )	34.7
	W <sub>x</sub> (cm <sup>4</sup> )	4.35
	W <sub>y</sub> (cm <sup>4</sup> )	8.625
Dužina isporuke	mm	6500



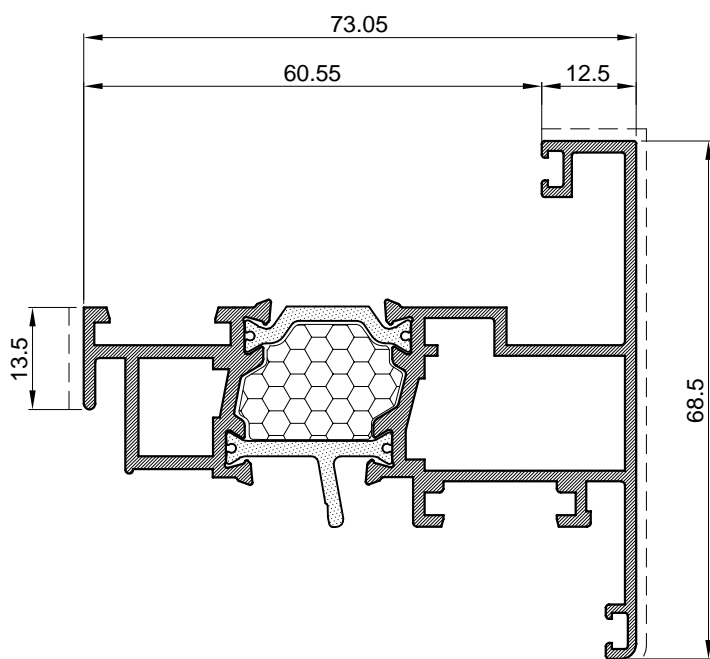
Profil krila		
Art.-Br.	FT-0221F	
Težina	kg/m	<b>1.502</b>
Opseg	mm	431
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	7.95
	I <sub>y</sub> (cm <sup>4</sup> )	25.6
	W <sub>x</sub> (cm <sup>4</sup> )	3.14
	W <sub>y</sub> (cm <sup>4</sup> )	7.27
Dužina isporuke	mm	6500



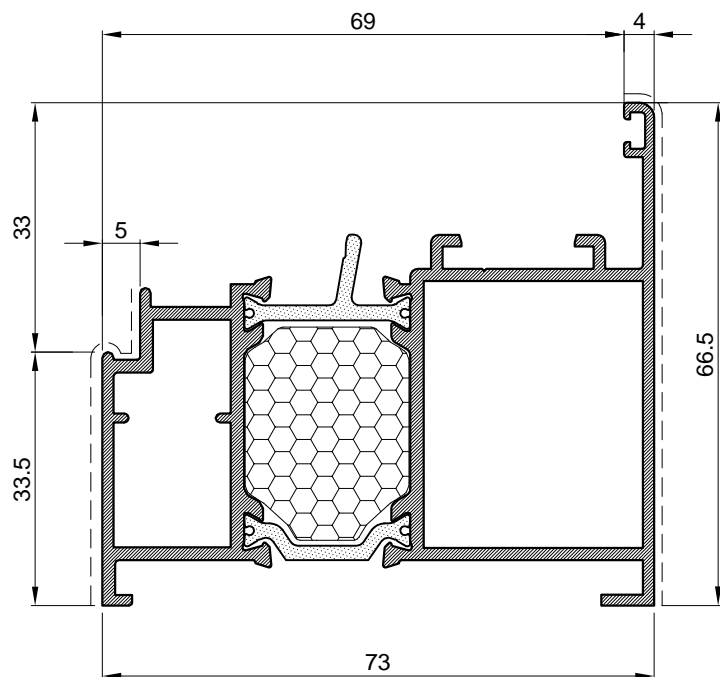
Profil krila		
Art.-Br.	FT-0230F	
Težina	kg/m	<b>1.999</b>
Opseg	mm	479
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	24.2
	I <sub>y</sub> (cm <sup>4</sup> )	34.9
	W <sub>x</sub> (cm <sup>4</sup> )	4.6
	W <sub>y</sub> (cm <sup>4</sup> )	8.7
Dužina isporuke	mm	6500



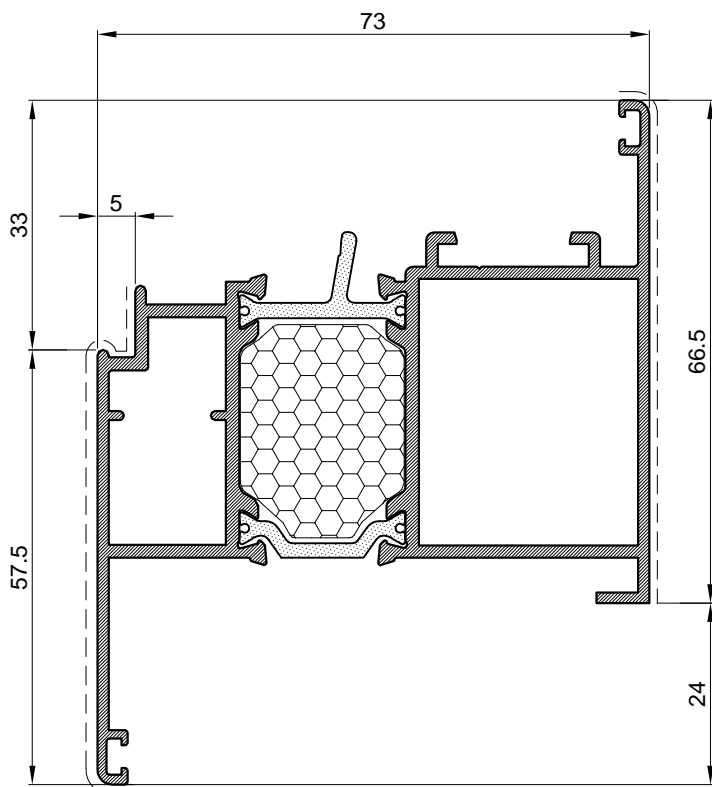
Profil krila		
Art.-Br.	FT-0218F	
Težina	kg/m	<b>2.311</b>
Opseg	mm	461
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	44.3
	I <sub>y</sub> (cm <sup>4</sup> )	41.6
	W <sub>x</sub> (cm <sup>4</sup> )	10.4
	W <sub>y</sub> (cm <sup>4</sup> )	8.1
Dužina isporuke	mm	6500



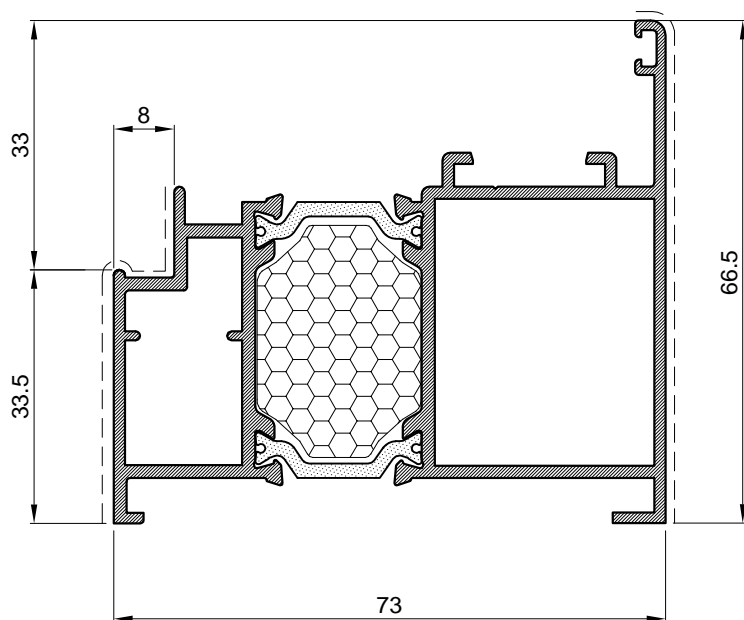
Profil krila otvaranje vani		
Art.-Br.	FT-0262F	
Težina	kg/m	<b>1.49</b>
Opseg	mm	440
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	8.5
	I <sub>y</sub> (cm <sup>4</sup> )	24.9
	W <sub>x</sub> (cm <sup>4</sup> )	2.32
	W <sub>y</sub> (cm <sup>4</sup> )	5.85
Dužina isporuke	mm	6500



Profil rama-otvaranje vani		
Art.-Br.	FT-0202F	
Težina	kg/m	<b>1.631</b>
Opseg	mm	373
Moment inercije	$I_x$ (cm <sup>4</sup> )	14.11
	$I_y$ (cm <sup>4</sup> )	28.3
	$W_x$ (cm <sup>4</sup> )	3.37
	$W_y$ (cm <sup>4</sup> )	7,35
Dužina isporuke	mm	6500

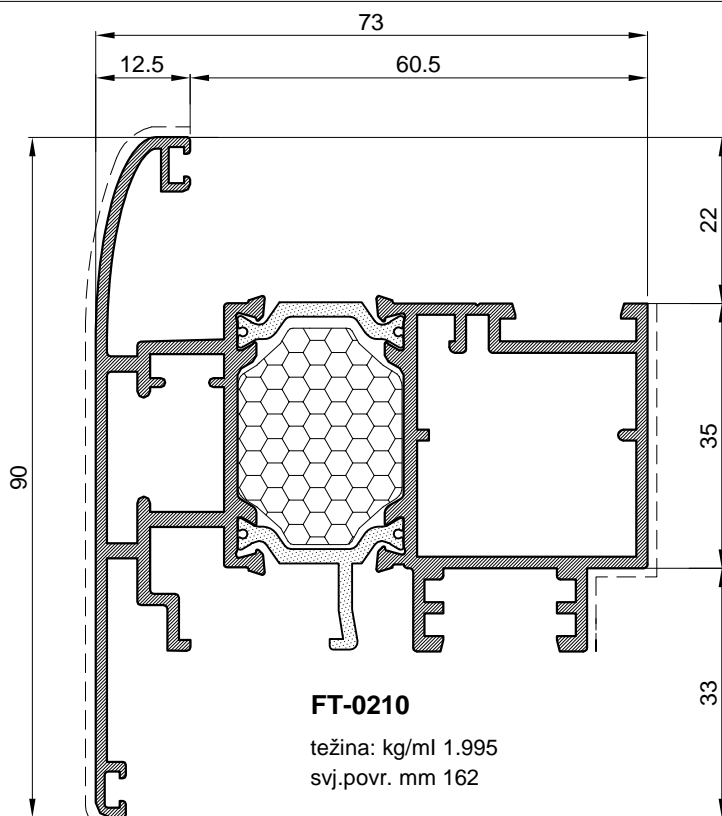


Profil rama-otvaranje vani		
Art.-Br.	FT-0215F	
Težina	kg/m	<b>1.727</b>
Opseg	mm	430
Moment inercije	$I_x$ (cm <sup>4</sup> )	18.7
	$I_y$ (cm <sup>4</sup> )	31.9
	$W_x$ (cm <sup>4</sup> )	3.75
	$W_y$ (cm <sup>4</sup> )	8.03
Dužina isporuke	mm	6500

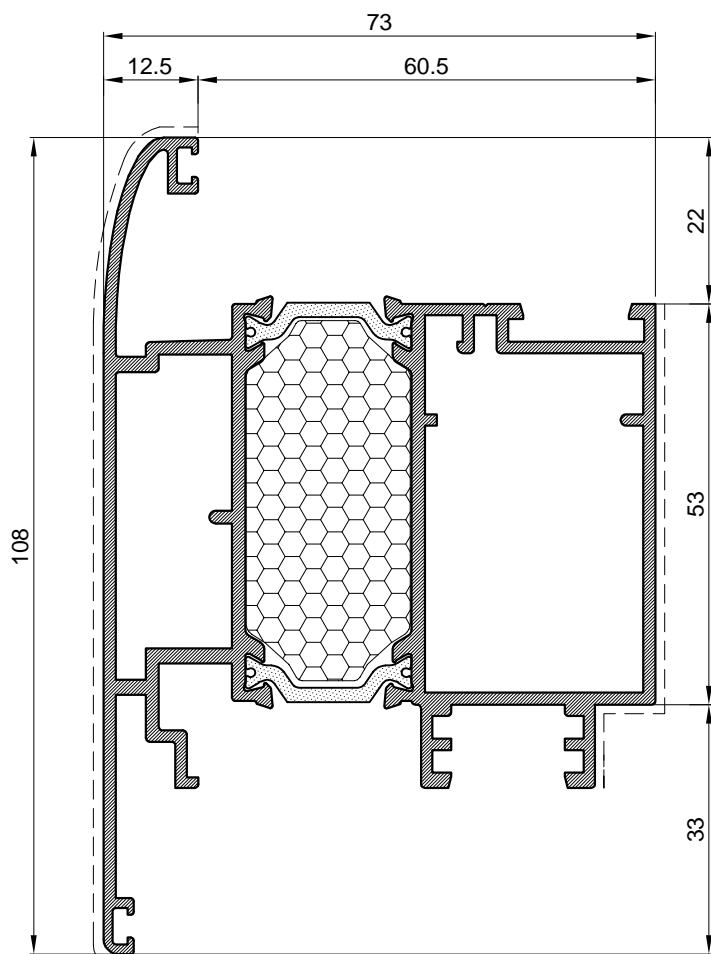


Profil rama vrata- otvaranje vani		
Art.-Br.	FT-0220F	
Težina	kg/m	<b>1.629</b>
Opseg	mm	354
Moment inercije	Ix (cm <sup>4</sup> )	13.8
	Iy (cm <sup>4</sup> )	28.3
	Wx (cm <sup>4</sup> )	3.22
	Wy (cm <sup>4</sup> )	7.3
Dužina isporuke	mm	6500

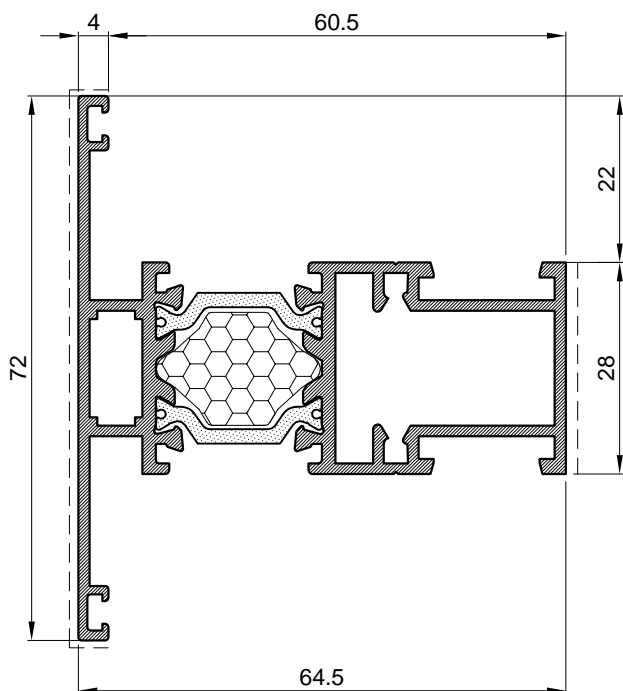




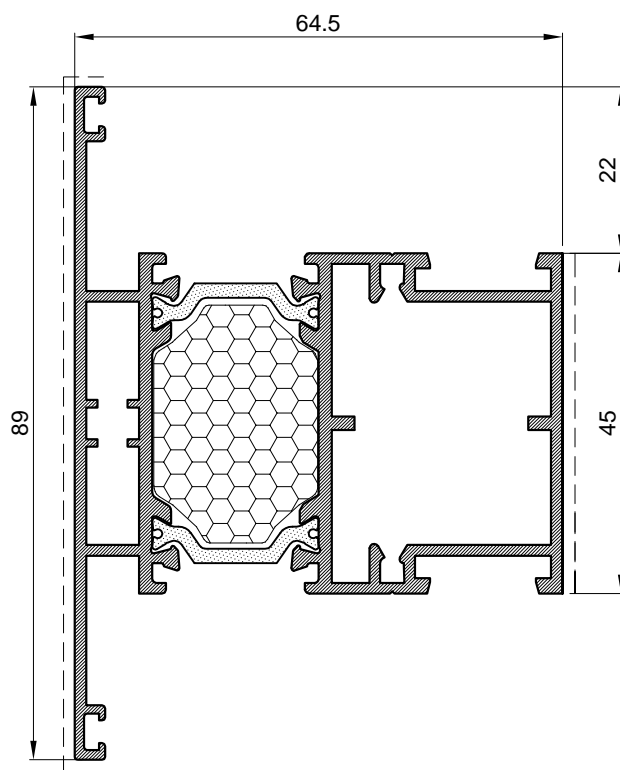
Profil krila-otvaranje vani		
Art.-Br.	FT-0210F	
Težina	kg/m	<b>1.995</b>
Opseg	mm	530
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	20.9
	I <sub>y</sub> (cm <sup>4</sup> )	33
	W <sub>x</sub> (cm <sup>4</sup> )	4.2
	W <sub>y</sub> (cm <sup>4</sup> )	7.35
Dužina isporuke	mm	6500



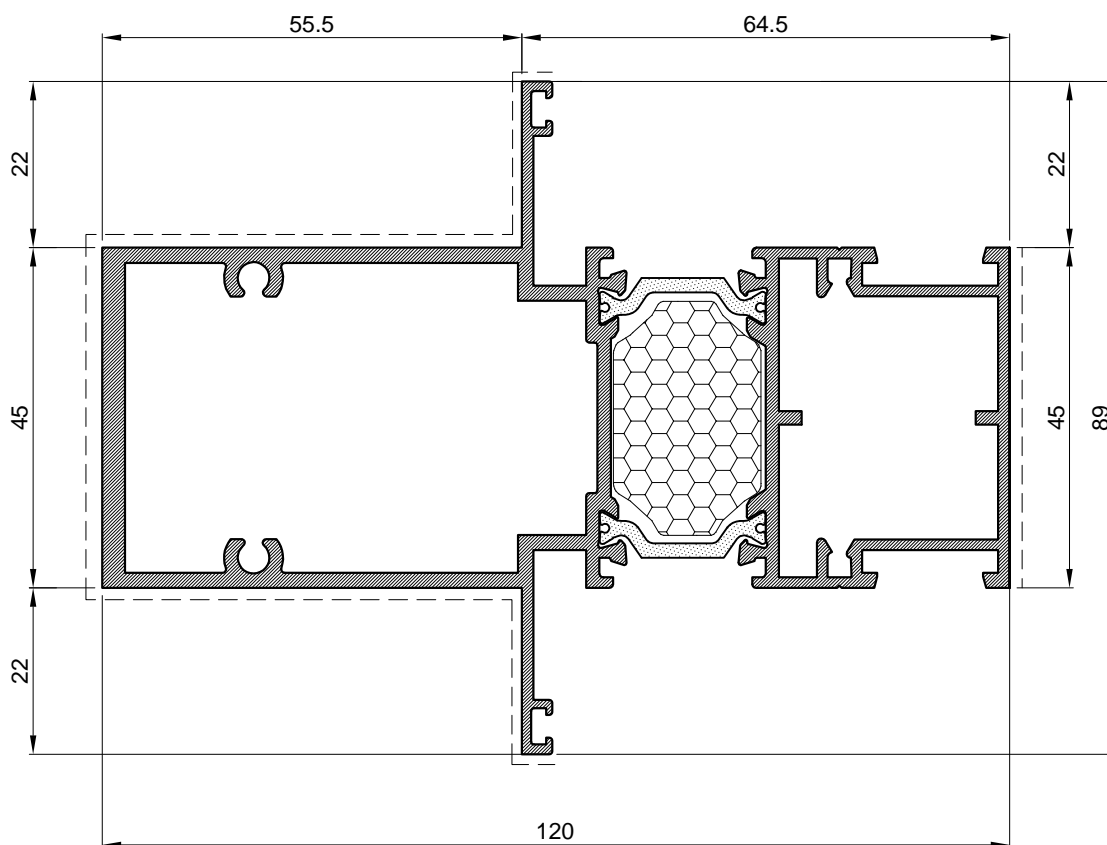
Profil krila-otvaranje vani		
Art.-Br.	FT-0219F	
Težina	kg/m	<b>2.348</b>
Opseg	mm	541
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	43.2
	I <sub>y</sub> (cm <sup>4</sup> )	40.2
	W <sub>x</sub> (cm <sup>4</sup> )	7.3
	W <sub>y</sub> (cm <sup>4</sup> )	9.1
Dužina isporuke	mm	6500



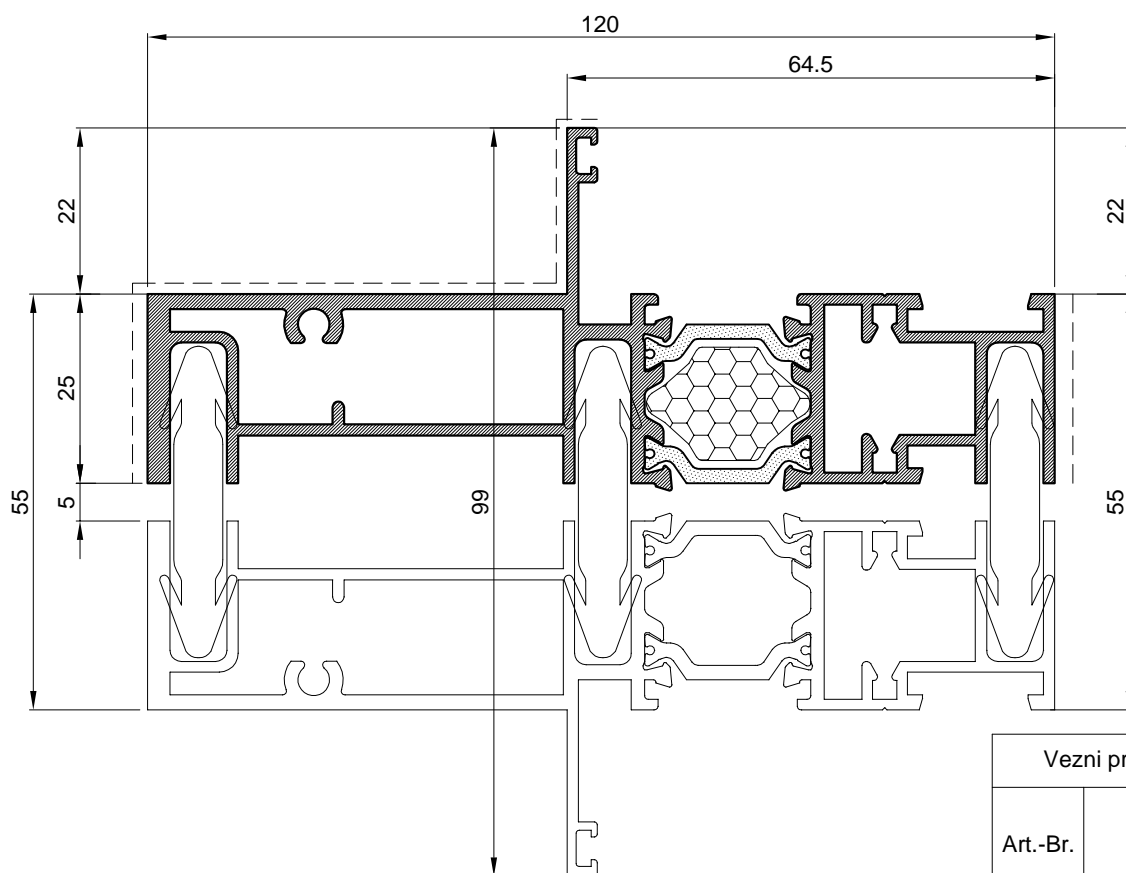
Profil prečke		
Art.-Br.	FT-0205F	
Težina	kg/m	<b>1.452</b>
Opseg	mm	379
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	7.41
	I <sub>y</sub> (cm <sup>4</sup> )	18.9
	W <sub>x</sub> (cm <sup>4</sup> )	1.95
	W <sub>y</sub> (cm <sup>4</sup> )	4.65
Dužina isporuke	mm	6500



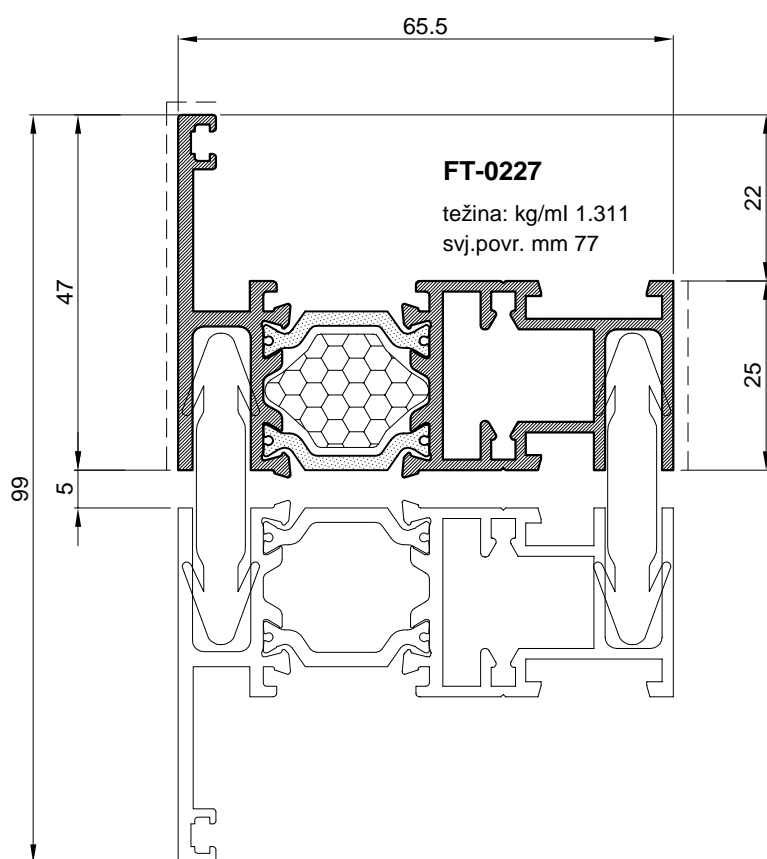
Profil prečke		
Art.-Br.	FT-0206F	
Težina	kg/m	<b>1.789</b>
Opseg	mm	410
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	19.1
	I <sub>y</sub> (cm <sup>4</sup> )	24.4
	W <sub>x</sub> (cm <sup>4</sup> )	4.12
	W <sub>y</sub> (cm <sup>4</sup> )	6.07
Dužina isporuke	mm	6500



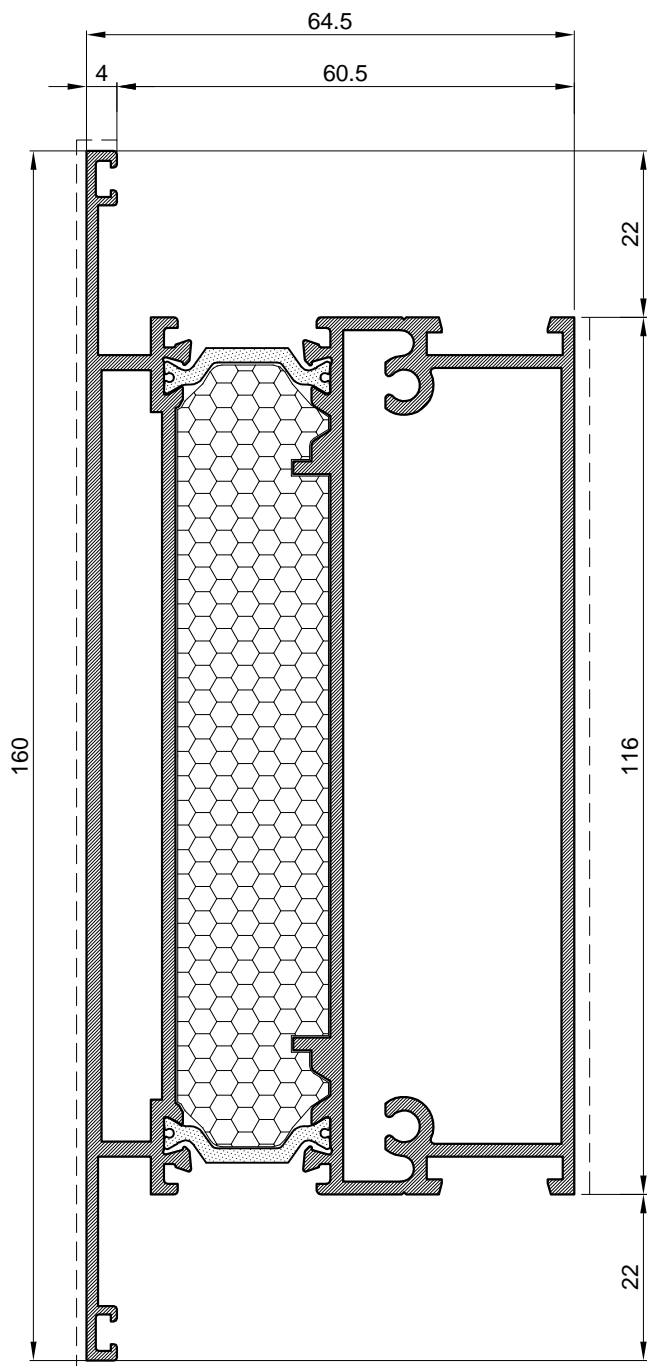
Profil ojačane prečke		
Art.-Br.	FT-0209F	
Težina	kg/m	<b>2.711</b>
Opseg	mm	520
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	29.3
	I <sub>y</sub> (cm <sup>4</sup> )	108.4
	W <sub>x</sub> (cm <sup>4</sup> )	6.3
	W <sub>y</sub> (cm <sup>4</sup> )	17.32
Dužina isporuke	mm	6500



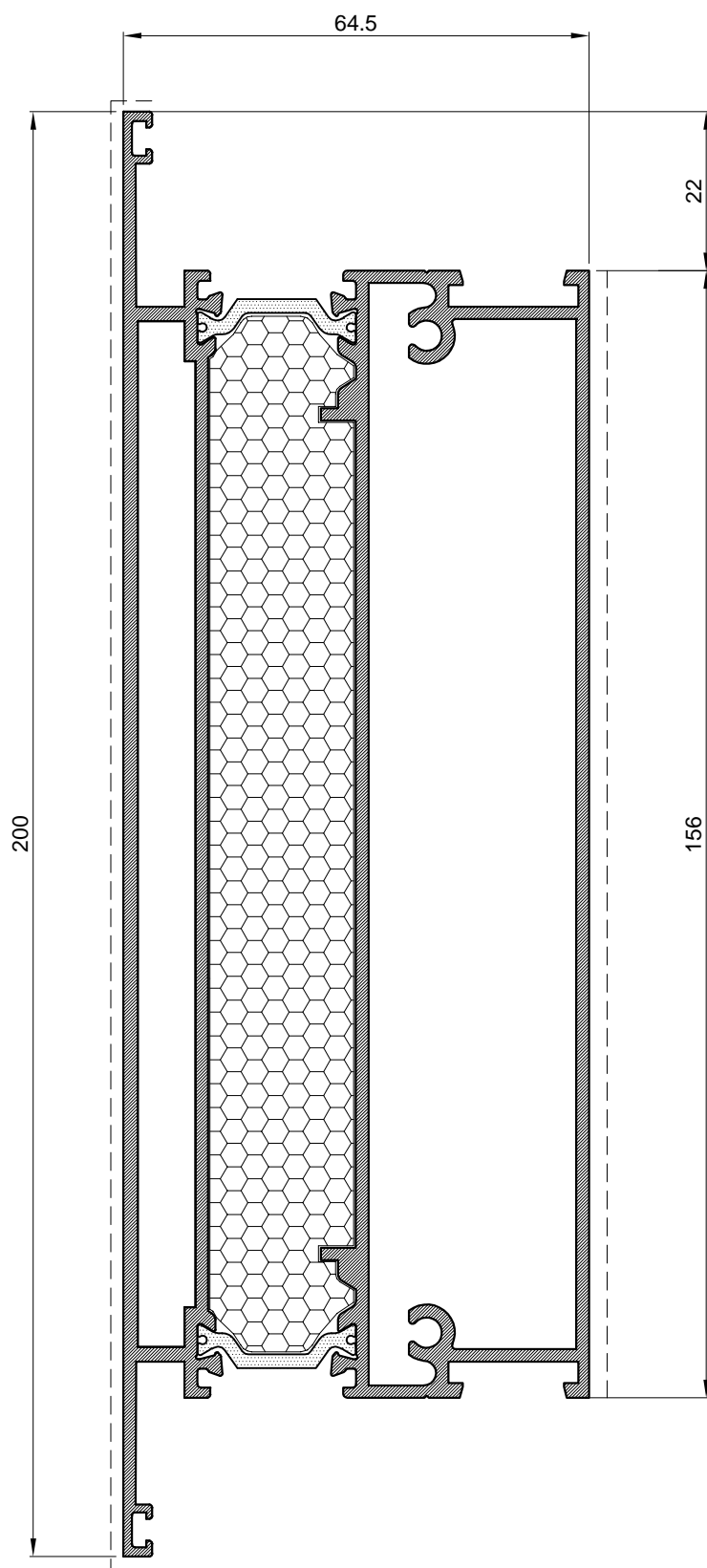
Vezni profil-ojačan		
Art.-Br.	FT-0226F	
Težina	kg/m	<b>2.027</b>
Opseg	mm	516
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	5.9
	I <sub>y</sub> (cm <sup>4</sup> )	82.9
	W <sub>x</sub> (cm <sup>4</sup> )	1.8
	W <sub>y</sub> (cm <sup>4</sup> )	13.2
Dužina isporuke	mm	6500



Vezni profil		
Art.-Br.	FT-0227F	
Težina	kg/m	<b>1.311</b>
Opseg	mm	386
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	4.9
	I <sub>y</sub> (cm <sup>4</sup> )	17.8
	W <sub>x</sub> (cm <sup>4</sup> )	1.5
	W <sub>y</sub> (cm <sup>4</sup> )	4.5
Dužina isporuke	mm	6500

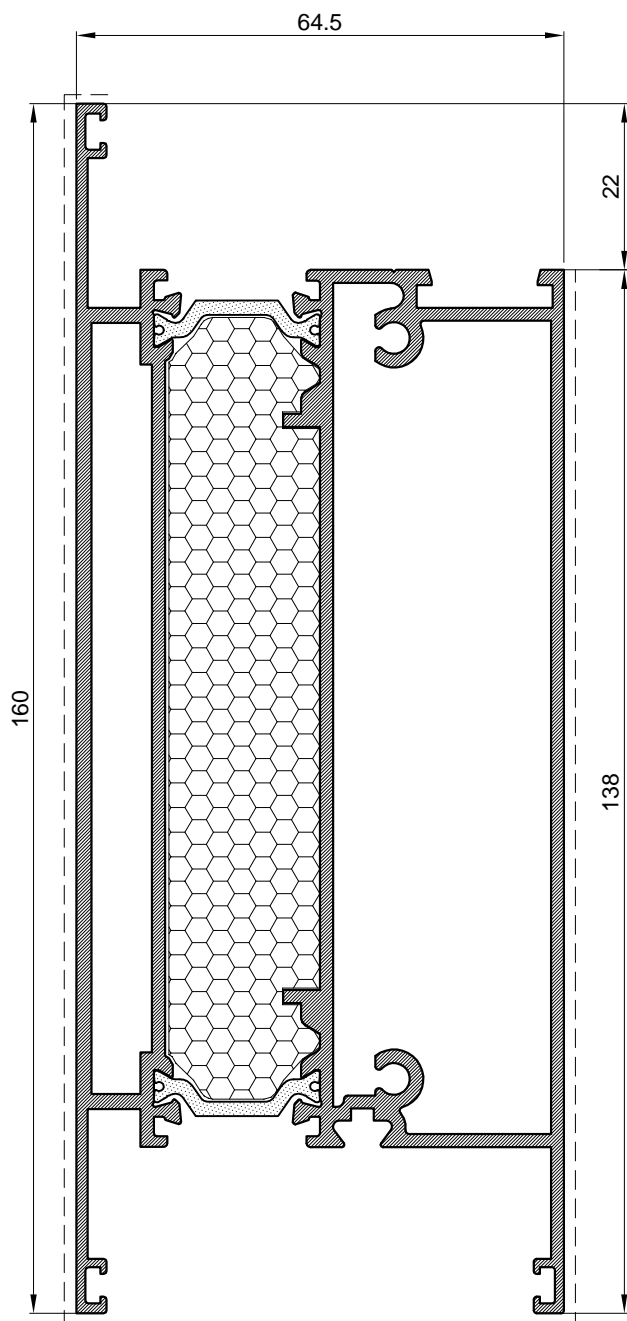


Profil prečke		
Art.-Br.	FT-0207F	
Težina	kg/m	<b>3.437</b>
Opseg	mm	603
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	187
	I <sub>y</sub> (cm <sup>4</sup> )	49.9
	W <sub>x</sub> (cm <sup>4</sup> )	22.5
	W <sub>y</sub> (cm <sup>4</sup> )	12.6
Dužina isporuke	mm	6500

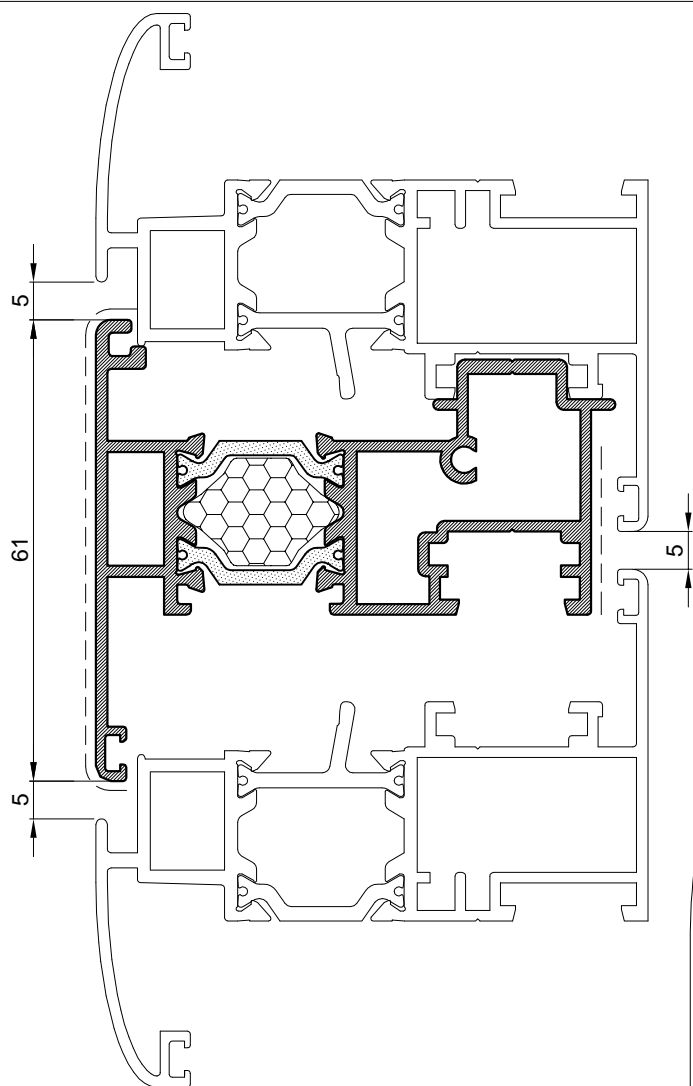


Profili prečke		
Art.-Br.	<b>FT-0243F</b>	
Težina	kg/m	<b>4.239</b>
Opseg	mm	653
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	450.13
	I <sub>y</sub> (cm <sup>4</sup> )	82.41
	W <sub>x</sub> (cm <sup>3</sup> )	45.01
	W <sub>y</sub> (cm <sup>3</sup> )	21.96
Dužina isporuke	mm	6500



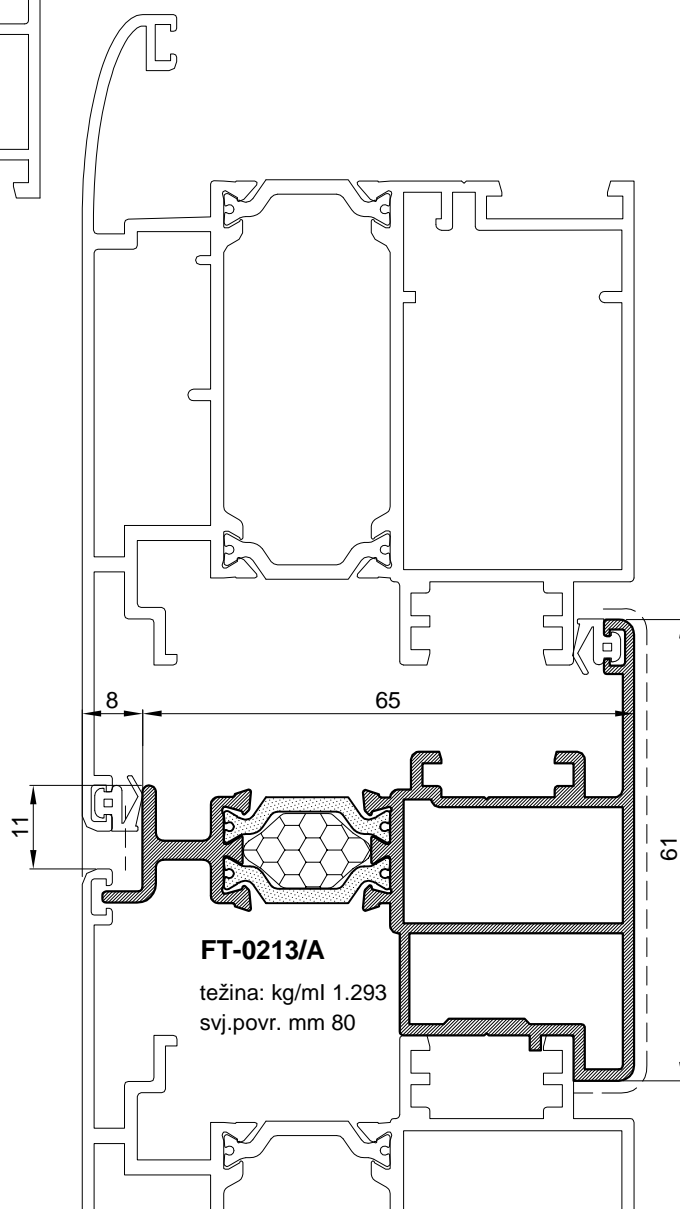


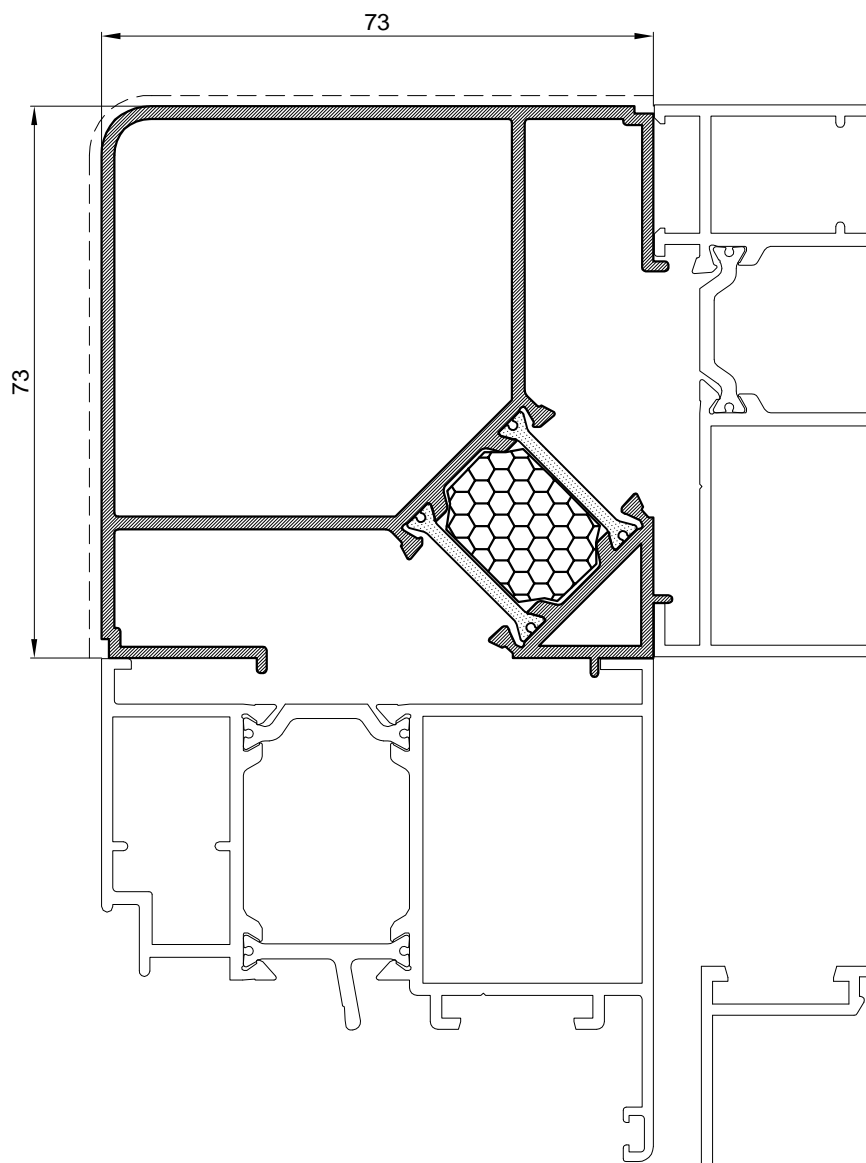
Profil parapetne prečke		
Art.-Br.	FT-0208F	
Težina	kg/m	<b>3.497</b>
Opseg	mm	626
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	203
	I <sub>y</sub> (cm <sup>4</sup> )	54
	W <sub>x</sub> (cm <sup>4</sup> )	23.7
	W <sub>y</sub> (cm <sup>4</sup> )	14.02
Dužina isporuke	mm	6500



Profil kombatute		
Art.-Br.	FT-0211F	
Težina	kg/m	<b>1.478</b>
Opseg	mm	375
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	6.4
	I <sub>y</sub> (cm <sup>4</sup> )	21.3
	W <sub>x</sub> (cm <sup>4</sup> )	1.77
	W <sub>y</sub> (cm <sup>4</sup> )	5
Dužina isporuke	mm	6500

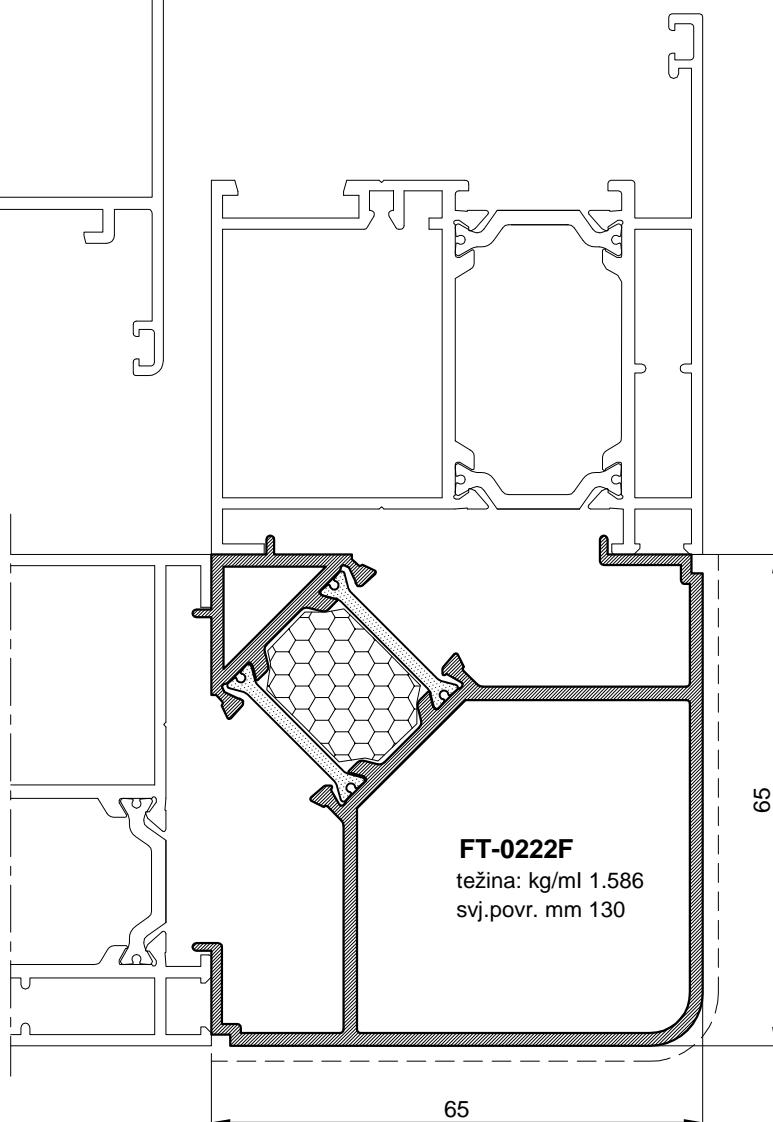
Profil kombatute za vrata-otvaranje vani		
Art.-Br.	FT-0213/AF	
Težina	kg/m	<b>1.293</b>
Opseg	mm	333
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	6.68
	I <sub>y</sub> (cm <sup>4</sup> )	18.4
	W <sub>x</sub> (cm <sup>4</sup> )	1.95
	W <sub>y</sub> (cm <sup>4</sup> )	4.27
Dužina isporuke	mm	6500

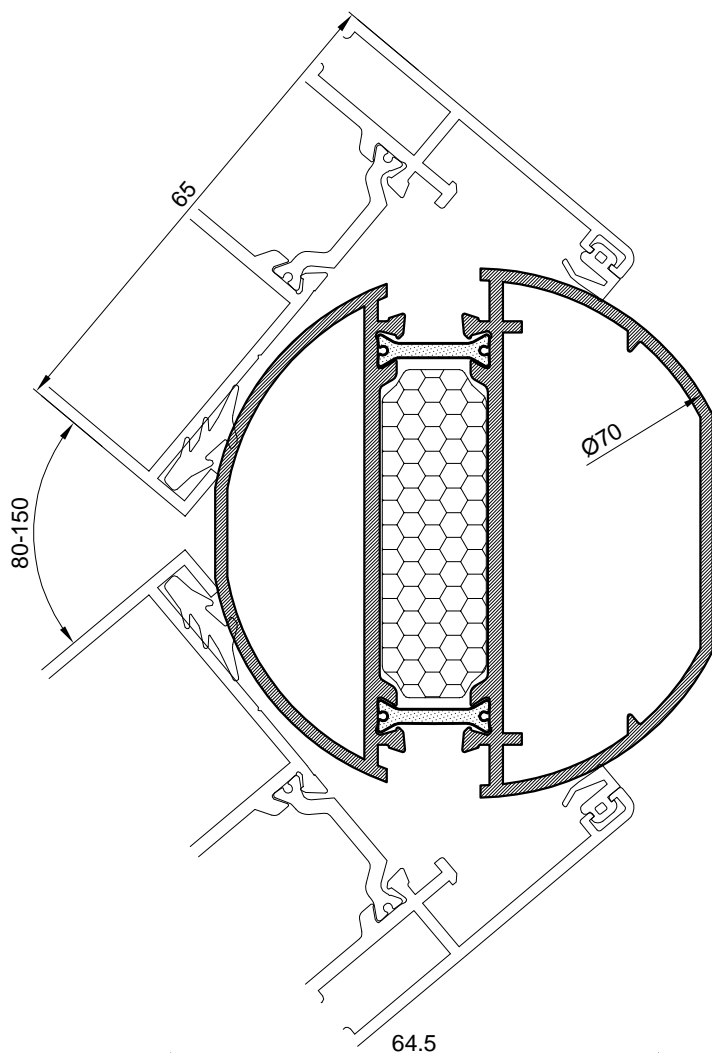




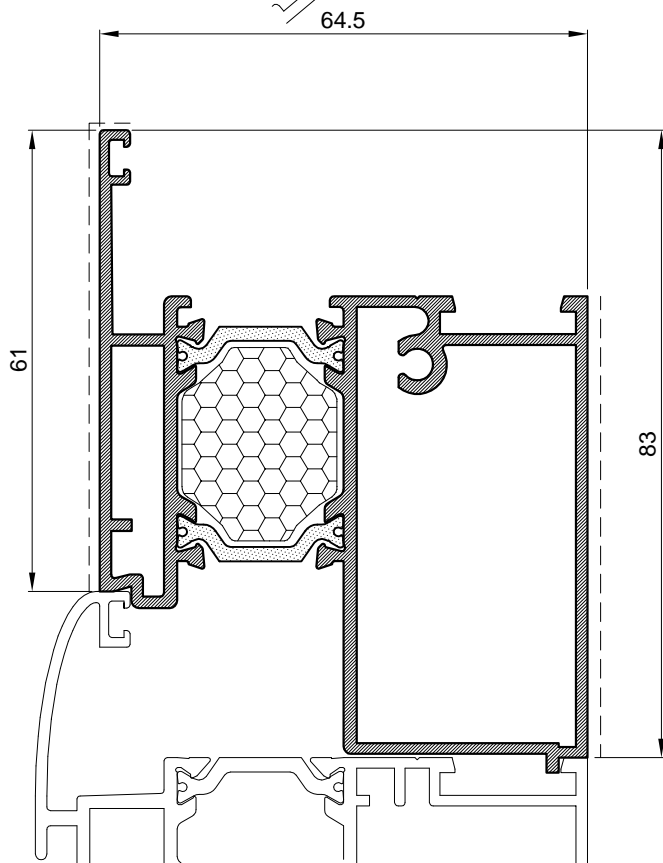
Profil kuta 90° za profil rama 73 mm		
Art.-Br.	FT-0235F	
Težina	kg/m	<b>1.796</b>
Opseg	mm	448
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	36.1
	I <sub>y</sub> (cm <sup>4</sup> )	36.1
	W <sub>x</sub> (cm <sup>4</sup> )	8.63
	W <sub>y</sub> (cm <sup>4</sup> )	8.63
Dužina isporuke	mm	6500

Profil kuta 90° za profil rama 65 mm		
Art.-Br.	FT-0222	
Težina	kg/m	<b>1.586</b>
Opseg	mm	390
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	24.1
	I <sub>y</sub> (cm <sup>4</sup> )	24.1
	W <sub>x</sub> (cm <sup>4</sup> )	6.55
	W <sub>y</sub> (cm <sup>4</sup> )	6.55
Dužina isporuke	mm	6500



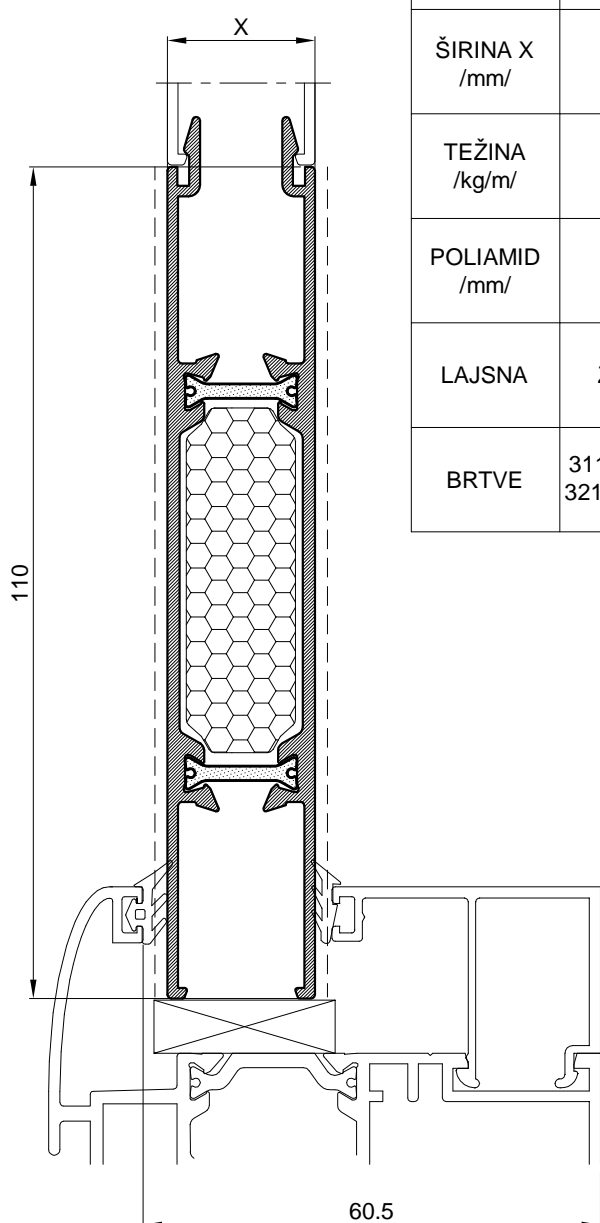


Profil za promjenjivi kut		
Art.-Br.	FT-0217F	
Težina	kg/m	<b>1.780</b>
Opseg	mm	269
Moment inercije	Ix (cm4)	25.1
	Iy (cm4)	16.9
	Wx (cm4)	6.89
	Wy (cm4)	4.8
Dužina isporuke	mm	6500

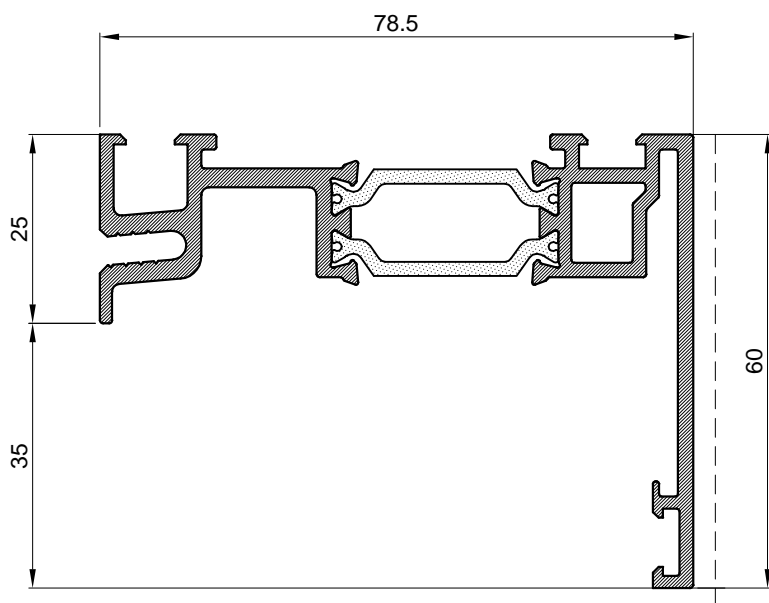


Parapetni profil		
Art.-Br.	FT-0228F	
Težina	kg/m	<b>1.707</b>
Opseg	mm	371
Moment inercije	Ix (cm4)	20.1
	Iy (cm4)	24.1
	Wx (cm4)	4.5
	Wy (cm4)	6.45
Dužina isporuke	mm	6500

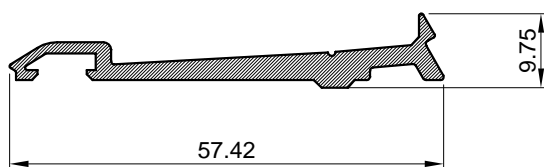
## PROFIL ISPUNE U OVISNOSTI O ŠIRINI POLIAMIDA



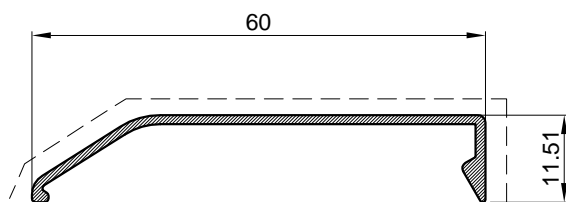
PROFIL	FT-0142/39	FT-0142/35	FT-0142/33	FT-0142/27	FT-0142
ŠIRINA X /mm/	38.7	34,7	32,7	26,7	19.5
TEŽINA /kg/m/	1.437	1.411	1.401	1,372	1.327
POLIAMID /mm/	34	30	28	22	14.8
LAJSNA	Z40-636	M45-709	Z40-644	Z40-658	Z40.659
BRTVE	311.008(UP6) 321.003(Z113)	311.007(UP5) 321.003(Z113)	311.001(921) 321.003(Z113)	311.002(918) 321.003(Z113)	311.001(921) 321.002(Z111)



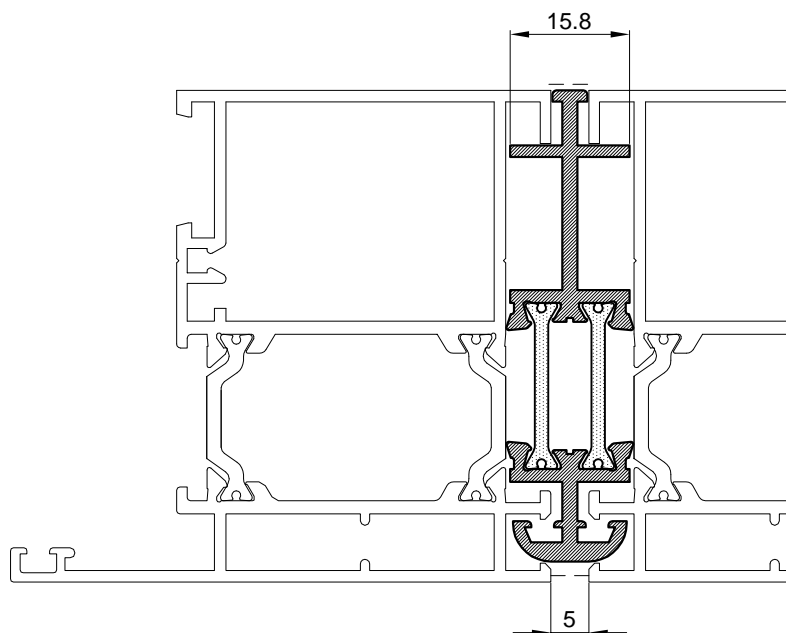
Profil za ugradnju		
Art.-Br.	<b>FT-0242</b>	
Težina	kg/m	<b>1.498</b>
Opseg	mm	444
Dužine isporuke	mm	6500



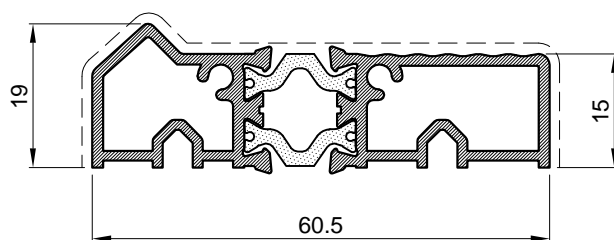
Profil za ugradnju		
Art.-Br.	<b>F-0190</b>	
Težina	kg/m	<b>0.461</b>
Opseg	mm	145
Dužine isporuke	mm	6500



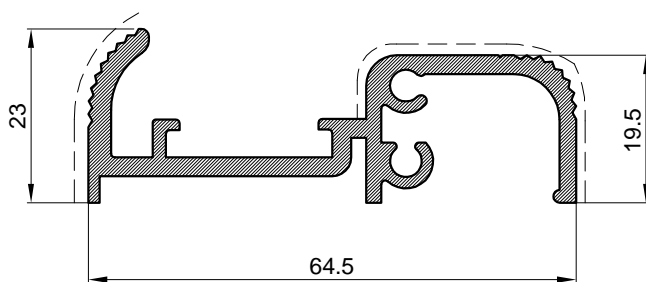
Profil za ugradnju		
Art.-Br.	<b>FM-072</b>	
Težina	kg/m	<b>0.258</b>
Opseg	mm	152
Dužine isporuke	mm	6500



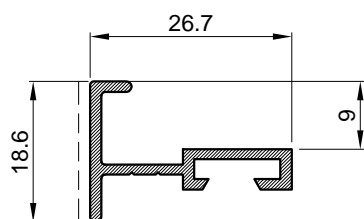
Vezni profil		
Art.-Br.	<b>FT-0216</b>	
Težina	kg/m	<b>0.830</b>
Opseg	mm	248
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	7.8
	I <sub>y</sub> (cm <sup>4</sup> )	0.39
	W <sub>x</sub> (cm <sup>4</sup> )	2.085
	W <sub>y</sub> (cm <sup>4</sup> )	0.45
Dužina isporuke	mm	6500



Profil praga		
Art.-Br.	<b>FT-0223</b>	
Težina	kg/m	<b>0.832</b>
Opseg	mm	175
Dužina isporuke	mm	6500



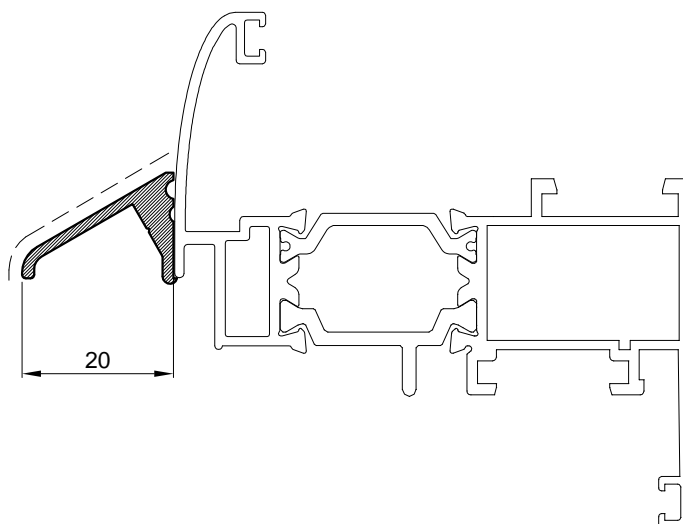
Profil praga		
Art.-Br.	<b>T1-812</b>	
Težina	kg/m	<b>0.916</b>
Opseg	mm	300
Dužina isporuke	mm	6500



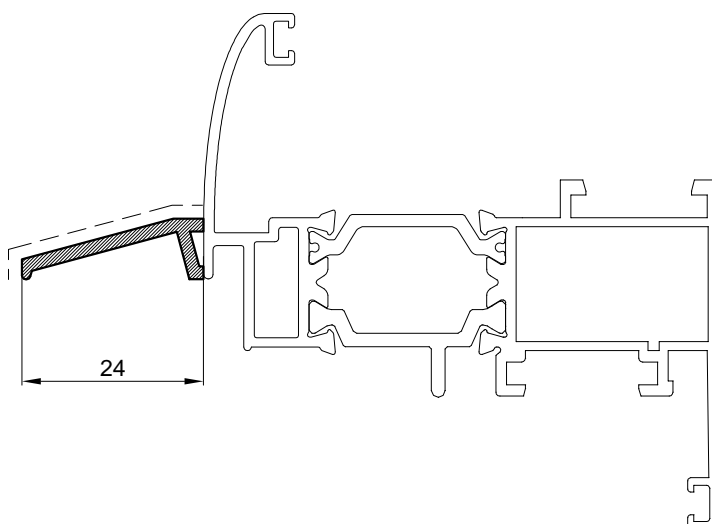
Profil praga		
Art.-Br.	<b>F-0758</b>	
Težina	kg/m	<b>0.228</b>
Opseg	mm	123
Dužina isporuke	mm	6500



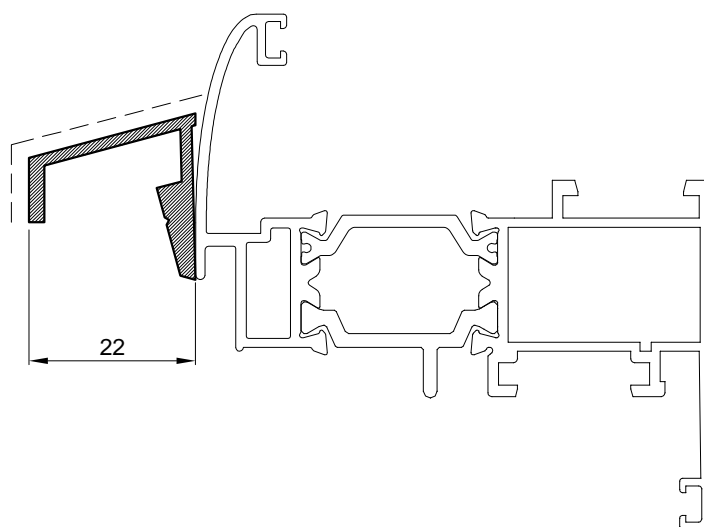
Okapnica		
Art.-Br.	<b>Z40-657</b>	
Težina	kg/m	<b>0.186</b>
Opseg	mm	23
Dužina isporuke	mm	6500

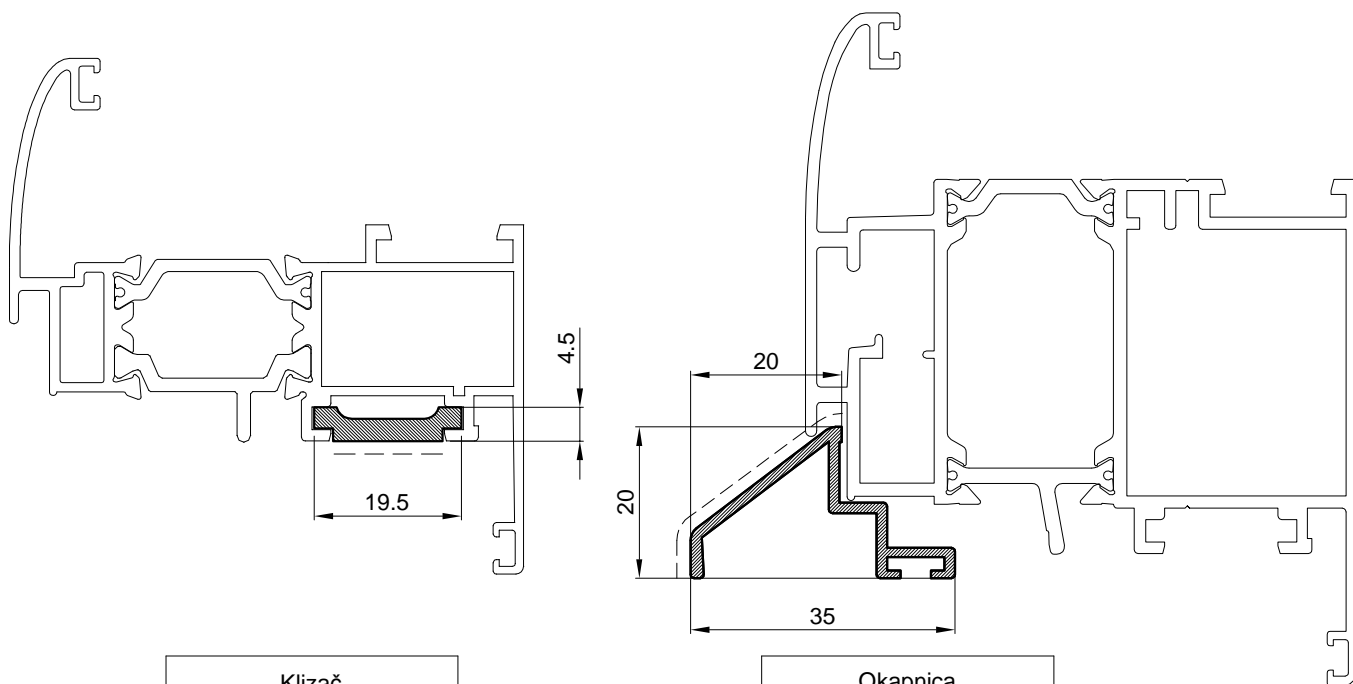


Okapnica		
Art.-Br.	<b>F-0228</b>	
Težina	kg/m	<b>0.153</b>
Opseg	mm	27
Dužina isporuke	mm	6500



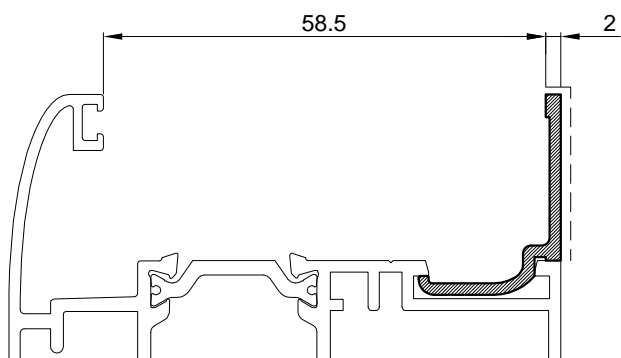
Okapnica		
Art.-Br.	<b>060350</b>	
Težina	kg/m	<b>0.285</b>
Opseg	mm	31
Dužina isporuke	mm	6500



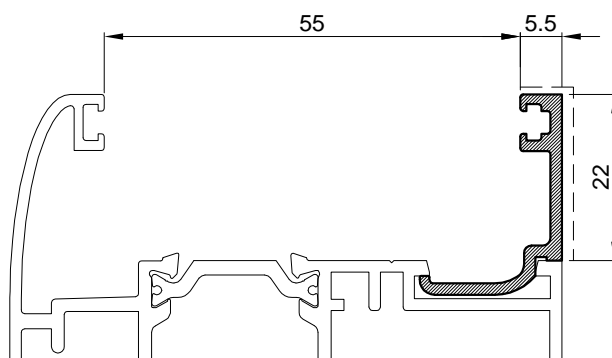


Klizač		
Art.-Br.	<b>NC-1459</b>	
Težina	kg/m	<b>0.156</b>
Opseg	mm	49
Dužina isporuke	mm	6500

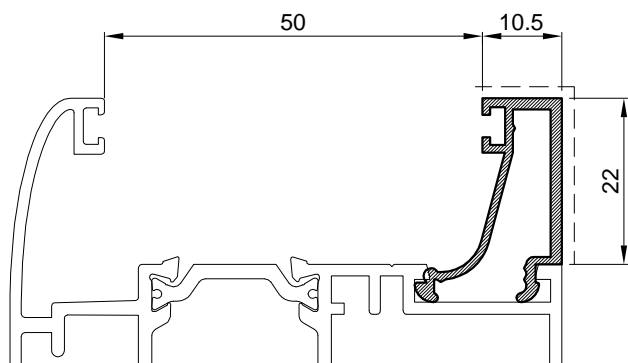
Okapnica		
Art.-Br.	<b>P45-648</b>	
Težina	kg/m	<b>0.257</b>
Opseg	mm	140
Dužina isporuke	mm	6500



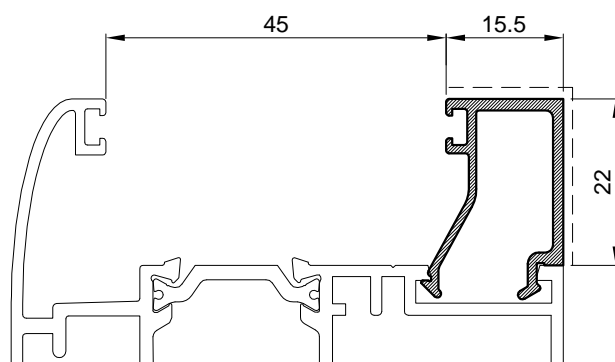
**Z40-660**  
težina kg/m 0.179  
svj. povr.mm 24



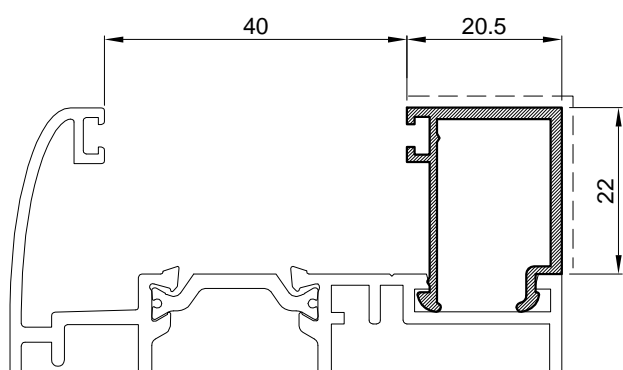
**Z40-656**  
težina kg/m 0.215  
svj. povr.mm 27



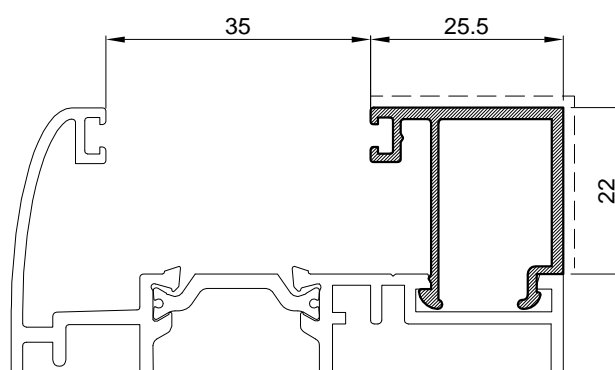
**Z40-636**  
 težiina kg/m 0.261  
 svj. povr.mm 32



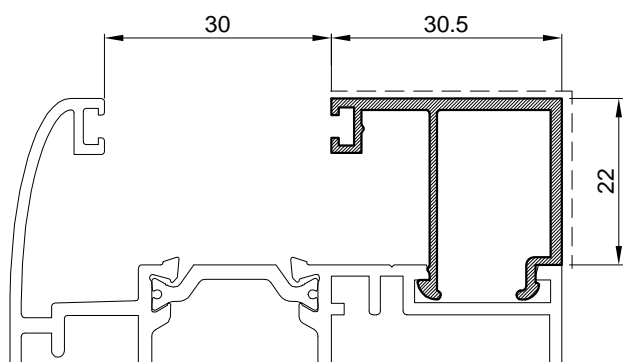
**M45-709**  
 težiina kg/m 0.258  
 svj. povr.mm 37



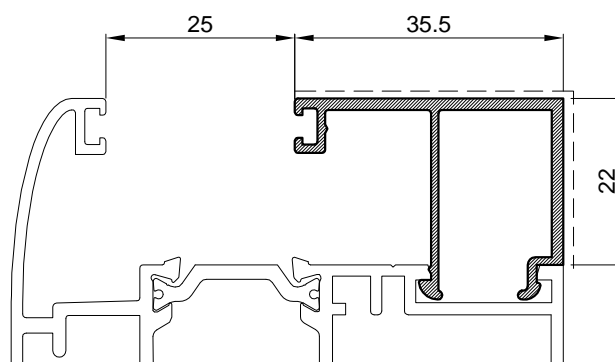
**Z40-644**  
 težiina kg/m 0.275  
 svj. povr.mm 42



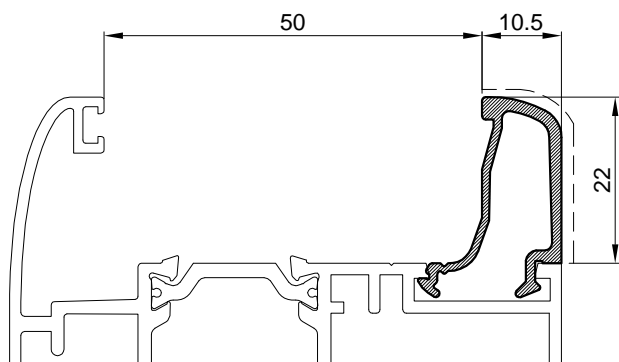
**Z40-658**  
 težiina kg/m 0.318  
 svj. povr.mm 47



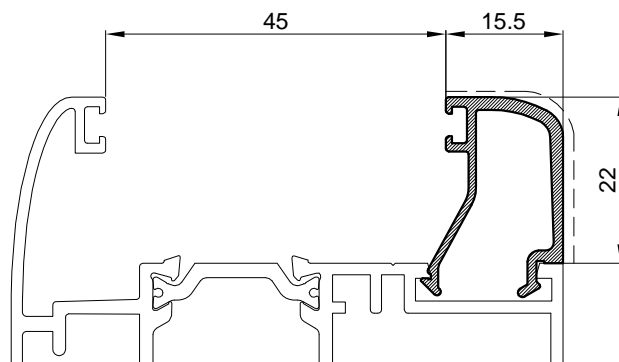
**Z40-653**  
 težiina kg/m 0.247  
 svj. povr.mm 52



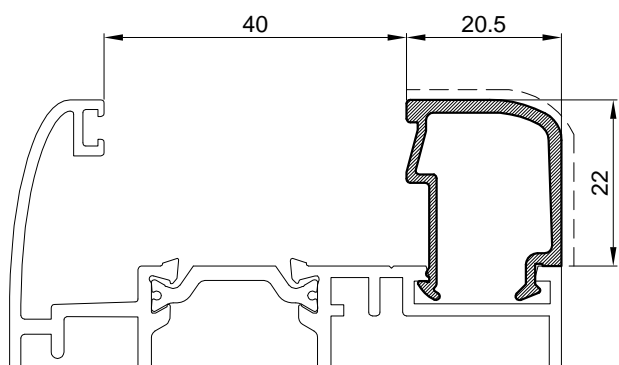
**Z40-659**  
 težiina kg/m 0.359  
 svj. povr.mm 57



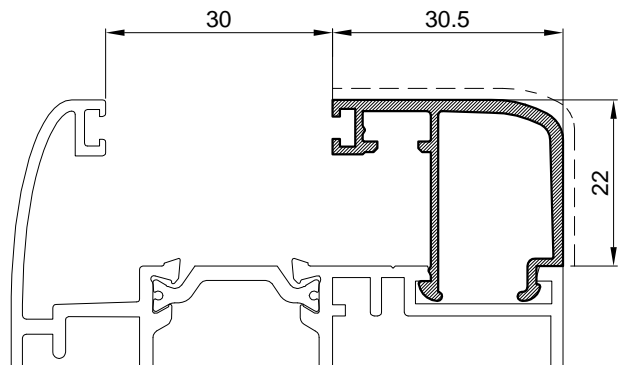
**Z40-647**  
težina kg/m 0.226  
svj. povr.mm 30



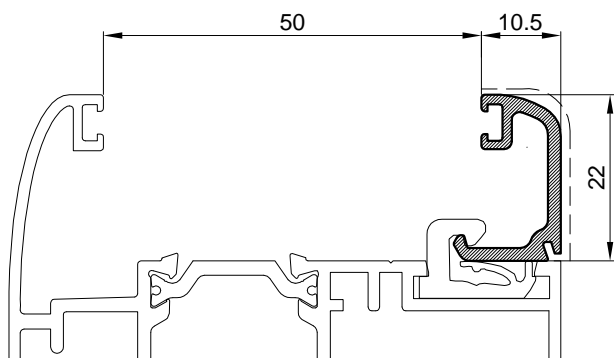
**M45-740**  
težina kg/m 0.258  
svj. povr.mm 35



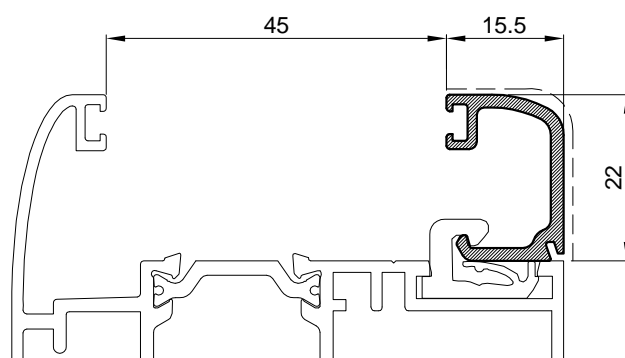
**Z40-646**  
težina kg/m 0.286  
svj. povr.mm 40



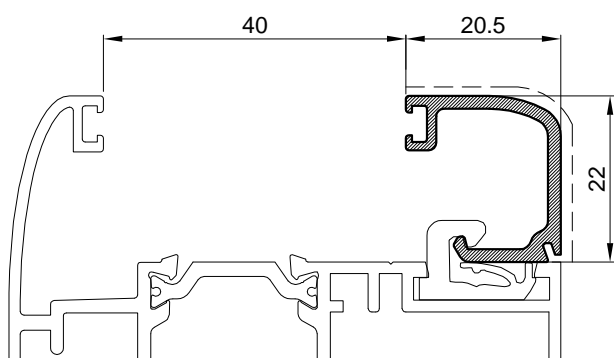
**Z40-653/B**  
težina kg/m 0.356  
svj. povr.mm 53



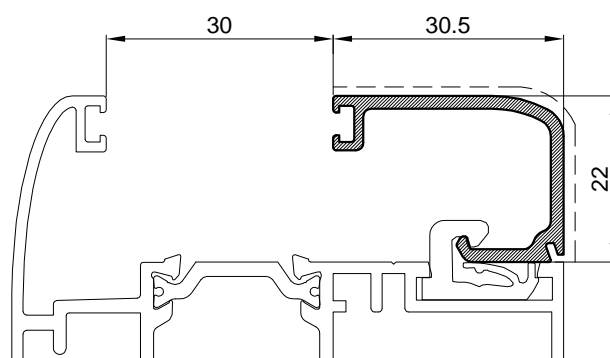
**Z40-649**  
težina kg/m 0.221  
svj. povr.mm 30



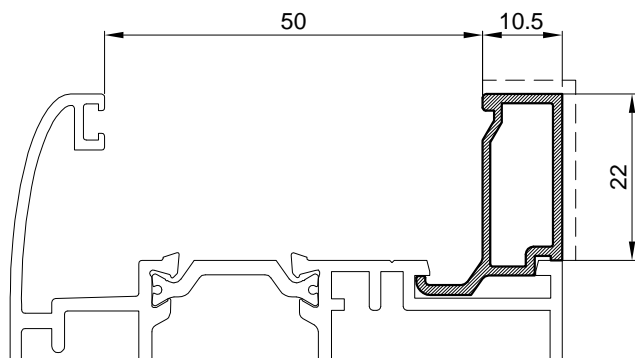
**Z40-662**  
težina kg/m 0.245  
svj. povr.mm 35



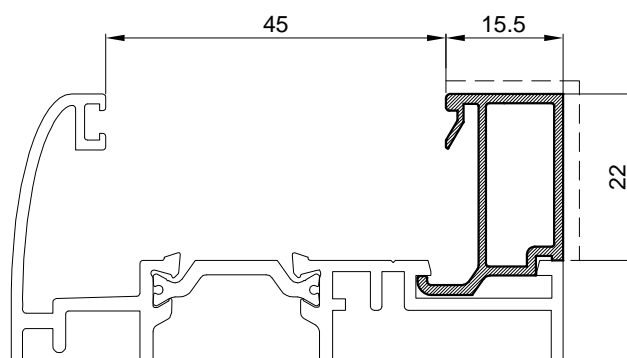
**Z40-648**  
težina kg/m 0.268  
svj. povr.mm 40



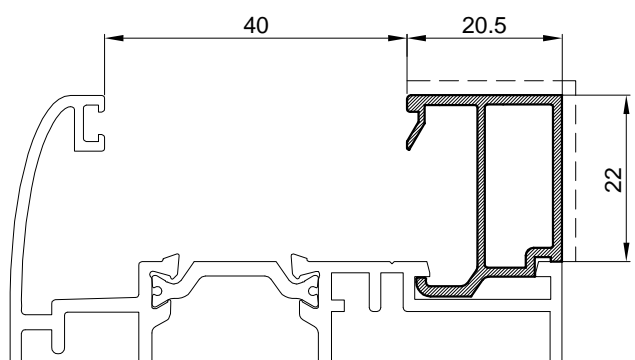
**Z40-661**  
težina kg/m 0.268  
svj. povr.mm 50



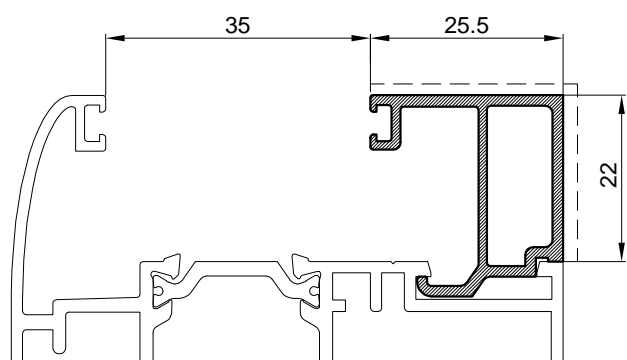
**Z40-664**  
težina kg/m 0.243  
svj. povr.mm 32



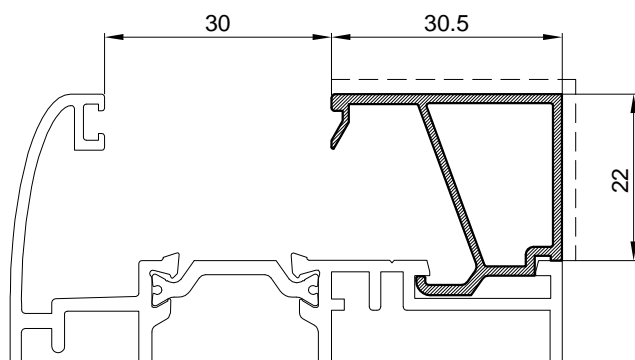
**Z40-665**  
težina kg/m 0.272  
svj. povr.mm 37



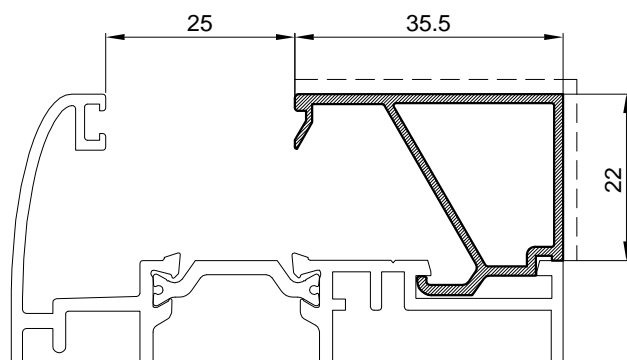
**Z40-666**  
težina kg/m 0.289  
svj. povr.mm 42



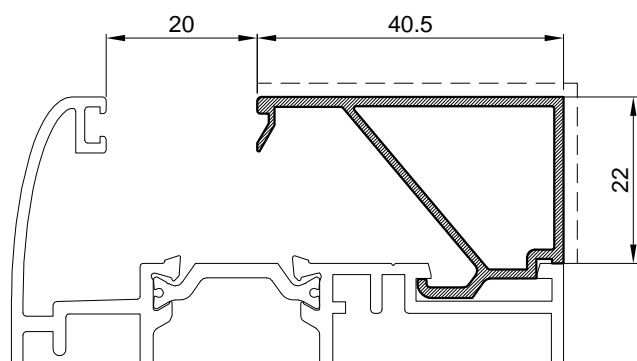
**Z40-667**  
težina kg/m 0.358  
svj. povr.mm 47



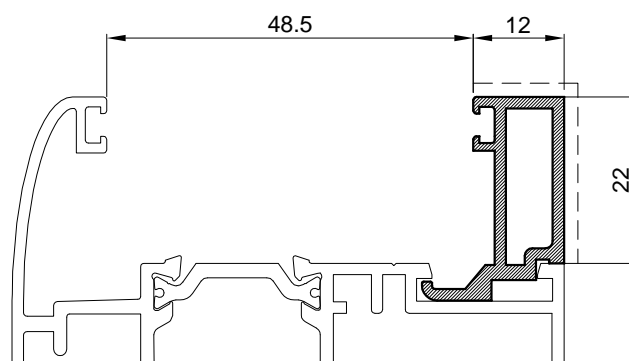
**Z40-668**  
težina kg/m 0.326  
svj. povr.mm 52



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

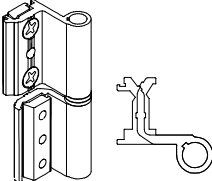
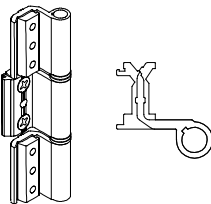
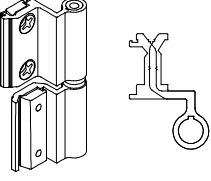
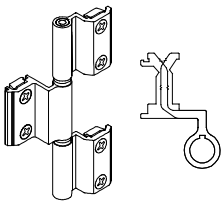
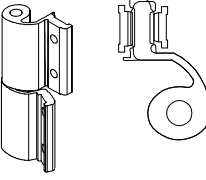
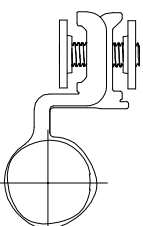


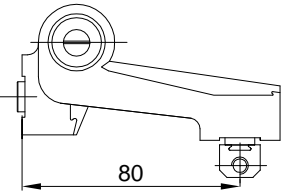
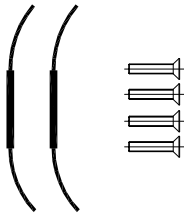
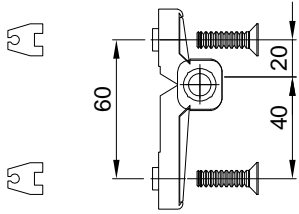
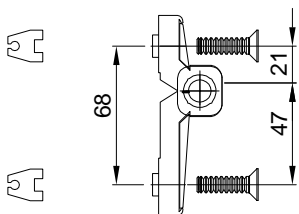
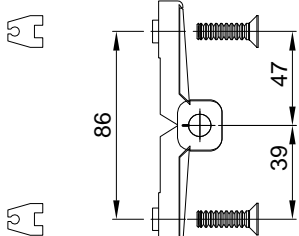
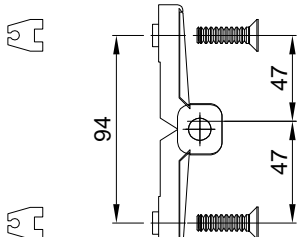
**Z40-670**  
 težiina kg/m 0.373  
 svj. povr.mm 63



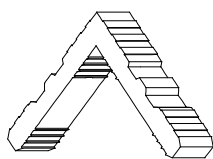
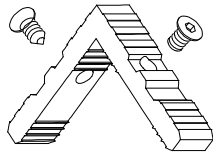
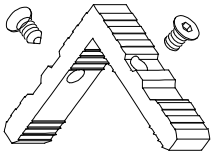
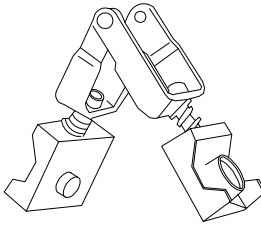
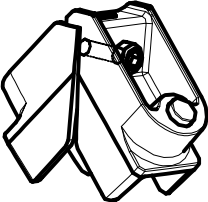
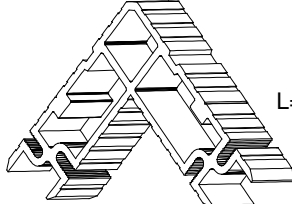
**F-0784**  
 težiina kg/m 0.330  
 svj. povr.mm 34



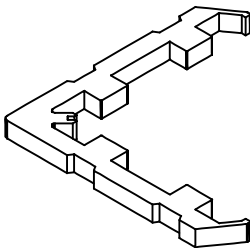
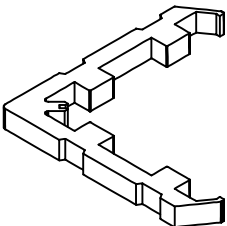
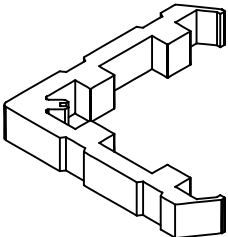
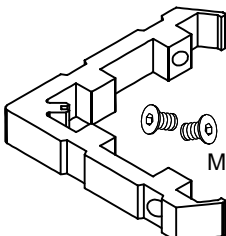
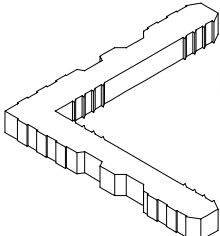
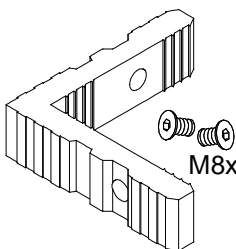
CODE	Izgled-presjek	Opis	Materijal	Nap.
111.001.01 02 03		- Dvodijelna šarka <i>EURO ŽLIJEB</i> - Stara oznaka E-100 - Boje: 01- bijela; 02 - siva;03 - crna		
111.002.01 02 03		- Trodjelna šarka <i>EURO ŽLIJEB</i> - Stara oznaka E-120 - Boje: 01- bijela; 02 - siva;03 - crna		
111.003.01 02 03		- Dvodijelna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

CODE	Izgled-presjek	Opis	Materijal	Nap.
110.003.01 02 03		- Dvodijelna usadna šarka 90°- vanjsko otvaranje - Stara oznaka FAPIM-D ANGOLO ART 6492 - Boje: 01- bijela; 02 - siva;03 - crna		
110.004		- Set za ART 6492 - Stara oznaka: 6620I		
113.006.01 02 03		- Dvodijelna šarka OSNO 60 - Stara oznaka: Osno 60 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.002.01 02 03		- Dvodijelna šarka OSNO 68 - Stara oznaka: Osno 68 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.007.01 02 03		- Dvodijelna šarka OSNO 86 - Stara oznaka: Osno 86 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.001.01 02 03		- Dvodijelna šarka OSNO 94 - Stara oznaka: Osno 94 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	

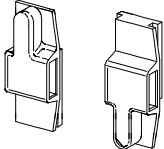


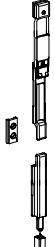
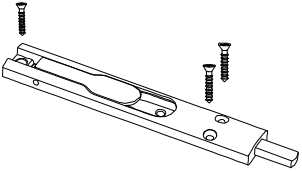
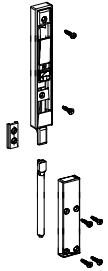
CODE	Izgled-presjek	Opis	Materijal	Nap.
113.008.01 02 03		- Dvodijelna šarka OSNO 60 - Stara oznaka: Max3D 60 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.009.01 02 03		- Dvodijelna šarka OSNO 70 - Stara oznaka: Max3D 68 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.010.01 02 03		- Dvodijelna šarka OSNO 86 - Stara oznaka: Max3D 86 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.011.01 02 03		- Dvodijelna šarka OSNO 96 - Stara oznaka: Max3D 94 - Boje: 01- bijela; 02 - siva;03 - crna	Al. Čelik	
113.012		- Set za TERMO 65 - Stara oznaka: Set za Termo 65		
730.008		- Kutna spojnica prozora-za komoru 29x15.2 - Stara oznaka: 0409 ,1001	Zamak #3	

CODE	Izgled-presjek	Opis	Materijal	Nap.
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.	
710.098	 l=28,5mm  M8x13	- Kutna spojnica za komoru 29x15,2-nesimetrična	Al.	
731.001		- Kutna spojnica za promjenjiv kut za komoru 29x15.2 - Stara oznaka: 0909	Zamak #3	
730.009		- Kutna spojnica prozora -za komoru 29x35.5 - Stara oznaka: 4004 ,2001	Zamak #3	
710.059	 L=28,5mm	- Kutna spojnica za komoru 29x35,5 - Stara oznaka K-0795	Al.	

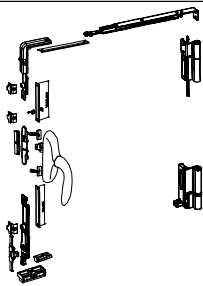
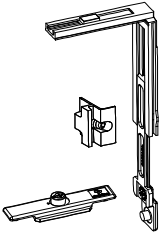
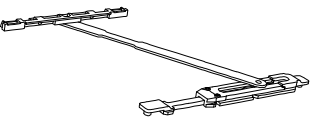


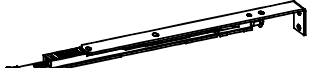


CODE	Izgled-presjek	Opis	Materijal	Nap.
710.072	<p>L=28,5mm M8x13</p>	- Kutna spojnica za komoru 29x35,5 - Stara oznaka K-0795	Al.	
710.099	<p>l=28,5mm M8x13</p>	- Kutna spojnica za komoru 29x35.5-nesimetrična	Al.	
710.100	<p>l=28,5mm M8x13</p>	- Kutna spojnica za komoru 29x16.5 -Stara oznaka: K65-07	Al.	
730.001		- Kutna spojnica za komoru 1.7x4.7 - Stara oznaka: G112	Inox	
730.002		- Kutna spojnica za komoru 1.7x4.7 - Stara oznaka: G112/A	Inox	
730.005		- Kutna spojnica za komoru 27.5x4 - Stara oznaka: K65-01	Zamak #3	


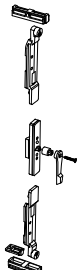
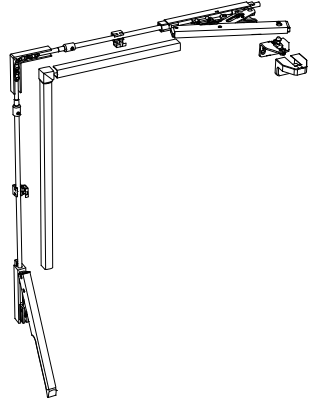
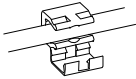
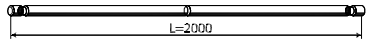
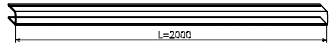

CODE	Izgled-presjek	Opis	Materijal	Nap.
710.037	 <p>L=7mm</p>	- Kutna spojnica za komoru 16,5x7,5 - Stara oznaka K-65-02	Al.	
710.039	 <p>L=9,3mm</p>	- Kutna spojnica za komoru 16,5x9,8 - Stara oznaka K-65-03	Al.	
710.040	 <p>L=15mm</p>	- Kutna spojnica za komoru 16,5x15,5 - Stara oznaka K-65-04	Al.	
710.076	 <p>L=15mm M8x13</p>	- Kutna spojnica za komoru 16,5x15,5 - Stara oznaka K-65-04-A	Al.	
710.026	 <p>L=9,3mm</p>	- Kutna spojnica za komoru 13x9,8 - Stara oznaka K-65-05	Al.	
710.077	 <p>L=26mm M8x13</p>	- Kutna spojnica za komoru 15,2x26,5 - Stara oznaka K-0868/C	Al.	

CODE	Izgled-presjek	Opis	Materijal	Nap.
710.078		- Kutna spojnica za komoru 8,4x29 - Stara oznaka K-0902-D	Al	
710.050		- Kutna spojnica za komoru 22,5x7,5 - Stara oznaka K-0899-A	Al.	
710.066		- Veznik (L=14.7mm) - Stara oznaka E-200	Al.	
		M8x13 M6x10		
710.069		- Dodatni veznik za prečku - Stara oznaka DV-011	Al.	
710.070		- Dodatni veznik za prečku - Stara oznaka DV-012	Al.	
104.002.01 02 03		- Ručka za prozor - Stara oznaka: 1004.00.3xx - Boje: 01- bijela; 02 - siva; 03 - crna	AlSi Zamak	

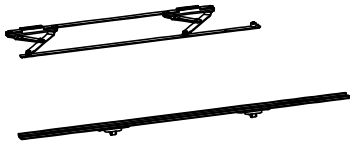
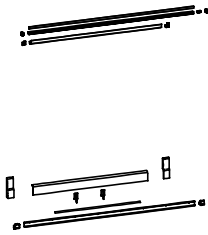
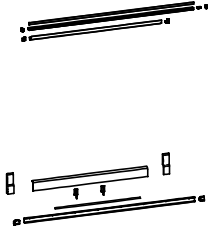
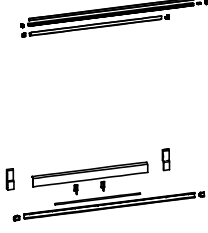
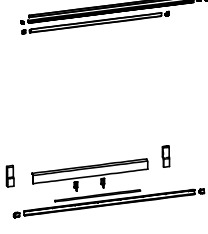
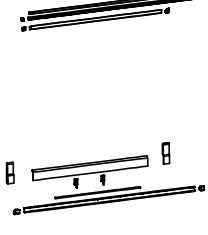
CODE	Izgled-presjek	Opis	Materijal	Nap.
140.035		- Elementi za povezivanje ručke i klizača - Stara oznaka: GS2387	PVC	
143.001		- Zapinjač - Stara oznaka: GS 2114		
143.002		-Zapinjač-krakun za pasivno krilo - Stara oznaka: GS 2111		
143.005		- Fiksni zapinjač-krakun za vrata - Stara oznaka: GS 2172		
144.000		- Zapinjač-krakun za vrata - Stara oznaka:3006.00		
143.006		- Zapinjač vanjski - Stara oznaka: GS 2170		



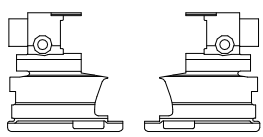
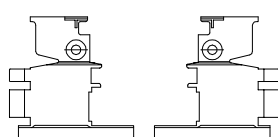
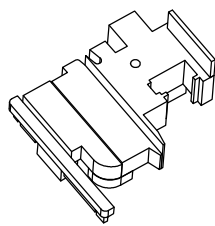
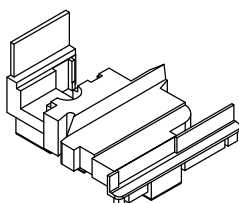
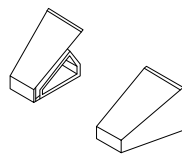
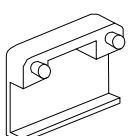
CODE	Izgled-presjek	Opis	Materijal	Nap.
134.000.01 02 03		<ul style="list-style-type: none"> <li>- Otklopno-zaokretni mehanizam -(dry kip)</li> <li>- Stara oznaka 4030.00</li> <li>- Boje: 01- bijela; 02 - siva;03 - crna</li> <li>- Škare za širinu krila od 535-1200 mm</li> </ul>	AlSi Zamak	
134.002		<ul style="list-style-type: none"> <li>-Komplet za bočno zatvaranje krila kod dry kipa (dodatno ključanje)</li> <li>-Stara oznaka 4010.40</li> </ul>	AlSi Zamak	
134.003		<ul style="list-style-type: none"> <li>-Pomoćne škare kod dry kipa- za krila od L=1200-1600 mm</li> <li>-Stara oznaka 4010.50</li> </ul>		
134.014		<ul style="list-style-type: none"> <li>-Škare za širinu krila od 445-535</li> <li>-Stara oznaka 4030.01</li> </ul>		
134.015		<ul style="list-style-type: none"> <li>-Škare za širinu krila od 535-1200- (dio osnovnog seta)</li> <li>-Stara oznaka 4030.02</li> </ul>		
134.016		<ul style="list-style-type: none"> <li>-Škare za širinu krila od 1200-1400</li> <li>-Stara oznaka 4030.05</li> </ul>		
134.004		<ul style="list-style-type: none"> <li>- Dodatno ključanje-prihvatnik tuljca</li> <li>- Stara oznaka 4010.03</li> </ul>		
134.005		<ul style="list-style-type: none"> <li>- Dodatno ključanje-tuljac</li> <li>- Stara oznaka 4010.27</li> </ul>		

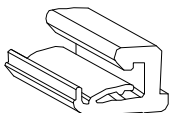
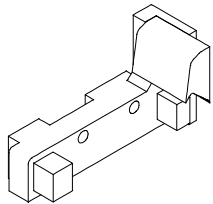
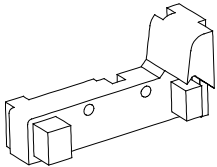
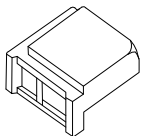
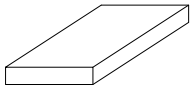
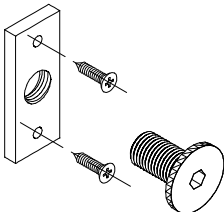
CODE	Izgled-presjek	Opis	Materijal	Nap.
134.001		<ul style="list-style-type: none"> <li>- Komplet okova za fiksiranje pomoćnog krila</li> <li>- Stara oznaka: 4001.00.301</li> </ul>		
134.017		<ul style="list-style-type: none"> <li>- Komplet okova za fiksiranje pomoćnog krila</li> <li>- Stara oznaka: 4005.00.</li> </ul>		
134.006.01 02 03		<ul style="list-style-type: none"> <li>- Ventus komplet širina krila do 1200 mm</li> <li>- Stara oznaka 4020.00.310-bijeli</li> <li>4020.00.315-sivi</li> <li>4020.00.313- crni</li> </ul>		
134.007		<ul style="list-style-type: none"> <li>- Ventus vodilica PVC</li> <li>- Stara oznaka 4020.12</li> </ul>		
134.008		<ul style="list-style-type: none"> <li>- Šipka ventusa L=2000 mm</li> <li>- Stara oznaka 4020.18</li> </ul>		
134.010.01 02 03		<ul style="list-style-type: none"> <li>- Pokrov ventusa L=2000 mm</li> <li>- Stara oznaka 4020.19.310-bijeli</li> <li>4020.19.315-sivi</li> <li>4020.19.313- crni</li> </ul>		
134.009		<ul style="list-style-type: none"> <li>- Spojnica šipke ventusa</li> <li>- Stara oznaka 4020.18.1</li> </ul>		

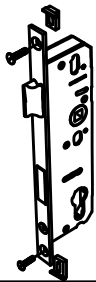
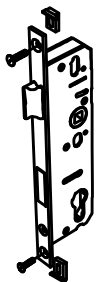
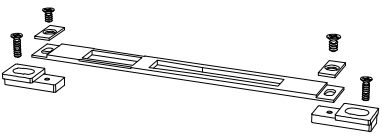
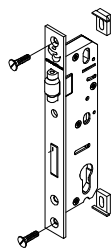
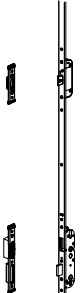
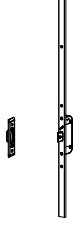
CODE	Izgled-presjek	Opis	Materijal	Nap.
133.027		- Otklopno-klizni mehanizam (notter)- bazni mehanizam-osnovni set -Stara oznaka 464 507 00	AlSi Zamak	
133.028.01 02 03		-Ručka sa pogonom -Stara oznaka: 080 914 03, 05, 07		
133.029		-Točkići -Stara oznaka: -005 509 10-desni -005 509 20-lijevi		
133.030		-Pločice -Stara oznaka: 060 510 00		
133.033		-Dodatak po širini-za širine krila veće od 1481 mm -Stara oznaka: 005 519 00		
133.031		-Škare -Stara oznaka: -005 516 00-za širine krila 630-930		
133.032		-Škare -Stara oznaka: -005 517 00-za širine krila 931-1280		

CODE	Izgled-presjek	Opis	Materijal	Nap.
<b>133.034</b>		-Škare -Stara oznaka:-005 518 00-za širine krila 1281-1680		
<b>133.035.01</b> <b>02</b> <b>05</b>		-Pokrivni profil za širine krila 630-930 -Stara oznaka:-005 511 03-bijeli -005 511 01-sivi -005 511 02-smeđa		
<b>133.036.01</b> <b>02</b> <b>05</b>		-Pokrivni profil za širine krila 931-1080 -Stara oznaka:-005 512 03-bijeli -005 512 01-sivi -005 512 02-smeđa		
<b>133.037.01</b> <b>02</b> <b>05</b>		-Pokrivni profil za širine krila 1081-1280 -Stara oznaka:-005 513 03-bijeli -005 513 01-sivi -005 513 02-smeđa		
<b>133.038.01</b> <b>02</b> <b>05</b>		-Pokrivni profil za širine krila 1281-1480 -Stara oznaka:-005 514 03-bijeli -005 514 01-sivi -005 514 02-smeđa		
<b>133.039.01</b> <b>02</b> <b>05</b>		-Pokrivni profil za širine krila 1481-1680 -Stara oznaka:-005 515 03-bijeli -005 515 01-sivi -005 515 02-smeđa		



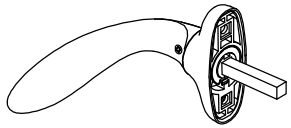
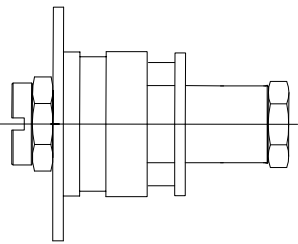


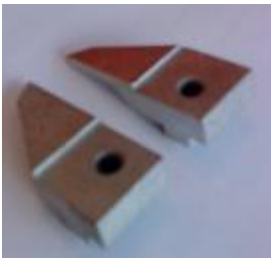
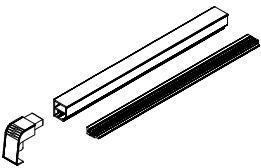
CODE	Izgled-presjek	Opis	Materijal	Nap.
363.001		- Umetak profila za okretanje FT-0211- otvaranje unutra - Stara oznaka: 290063.55	PVC	
364.004		- Umetak profila za okretanje FT-0213- otvaranje vani - Stara oznaka: ZK65-02	PVC	
365.035		- Umetak profila za okretanje FT-0237- otvaranje unutra (PVC okov) - Stara oznaka: ZK 65-03	PVC	
365.043		- Umetak profila za okretanje FT-0237- otvaranje unutra (PVC okov) -Koristi se u slučaju upotrebe specijalnog namjenskog okova pomoćnog krila	PVC	
373.002		- Umetak za profil okapnice Z40-657 - Stara oznaka PRO 23	PVC	
373.003		- Maska za drenažni otvor - Stara oznaka: 2328	PVC	

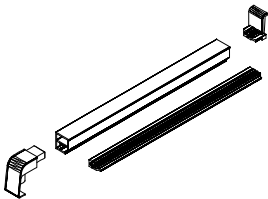
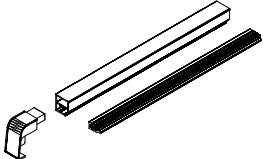
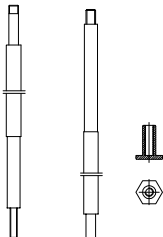
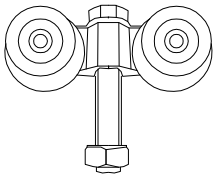
CODE	Izgled-presjek	Opis	Materijal	Nap.
374.002		- umetak za profil rama FT-0201 - Stara oznaka: GT 134	PVC	
365.009		- Umetak za prag FT-0223-otvaranje unutra - Stara oznaka: UP-01	GUMA	
365.010		- Umetak za prag FT-0223-otvaranje vani - Stara oznaka: UP-02	GUMA	
385.002		- Kutni umetak za zaobljene lajsne - Stara oznaka: G2311	ZAMAK	
370.000 370.001 370.002		- Podmetači za staklo 3 mm      370.000 5 mm      370.001 7 mm      370.002	PVC	
521.104		- Element za ugradnju - Stara oznaka EU 52		

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



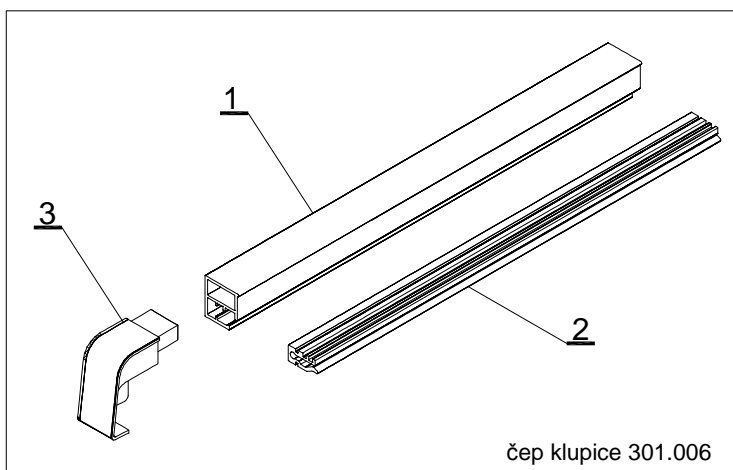
CODE	Izgled-presjek	Opis	Materijal	Nap.
125.001		-Prihvatnik jezička brave (šild) - Stara oznaka: 6862/25	Prokrom Čelik	
126.026		-Elektroprihvatnik- <i>električna brava</i> - Stara oznaka:5661830 (ISEO)		
123.001.01 02 03		- Štitnik cilindra za bravu (par) - Stara oznaka: 149.805 - Boje: 01- bijela; 02 - siva;03 - crna	PVC	
124.004.01 02 03		- Štitnik cilindra za bravu (par) - Stara oznaka: 1016.00 - Boje: 01- bijela; 02 - siva;03 - crna	Zn Čelik	
124.002		- Uložak za bravu 31/61 - Stara oznaka: 5057.00.520	Čelik	
103.001.01 02 03		- Ručke za vrata (par) - Stara oznaka: 890 - Boje: 01- bijela; 02 - siva;03 - crna	AlSi Zamak	

CODE	Izgled-presjek	Opis	Materijal	Nap.
<b>104.001.01</b> 02 03		- Ručke za vrata (par) - Stara oznaka: 1032.00 - Boje: 01- bijela; 02 - siva;03 - crna	AlSi Zamak	
<b>220.001</b>		- Grupa glodala za obradu prečki prema profilu krila i okvira (TERMO 65) - Stara oznaka: Grupa glodala Termo 65	Čelik	
<b>210.000</b>		- Štanca za otklopno zaokretne sisteme prozora i vrata - Stara oznaka S1		
<b>210.001</b>		- Kliješta za kutne spojnice - Stara oznaka :kliješta -83064		
<b>210.002</b>		- Noževi za kliješta kutnih spojnica - Stara oznaka :noževi		
<b>301.006.01</b> 02 03		Set za bočni čep klupice	PVC, TPE Al	

CODE	Izgled-presjek	Opis	Materijal	Nap.
<b>301.009.01</b> 02 03		Set za bočni čep klupice	PVC, TPE Al	
<b>301.010.01</b> 02 03		Set za bočni čep klupice- za klupicu 360 mm	PVC, TPE Al	
<b>140.036</b>		Elementi mehanizma za harmo otvaranje -Stara oznaka: OHV-01		
<b>140.037</b>		Dvostruke koturaljke Žeče -Stara oznaka:Dvostruke koturaljke		

**SET ZA BOČNI ČEP PROZORSKE KLUPICE 301.006**

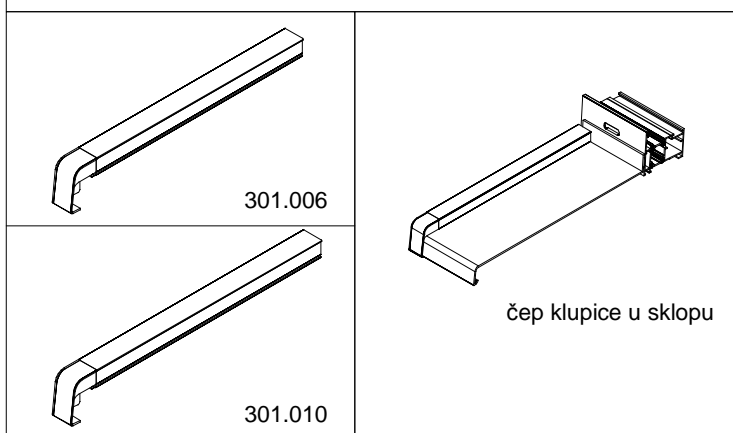
1. - Osnovni profil
2. - PVC prihvatnik klupice
3. - Vanjski čep-prihvatnik klupice i profila



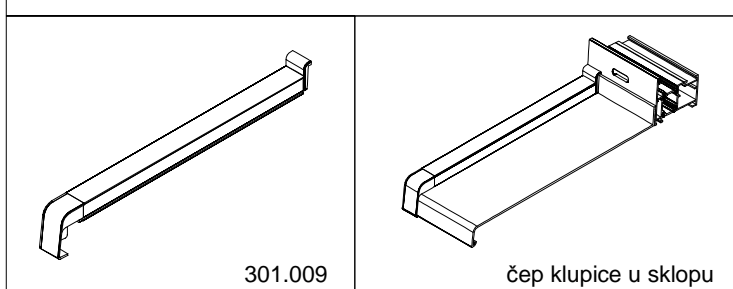
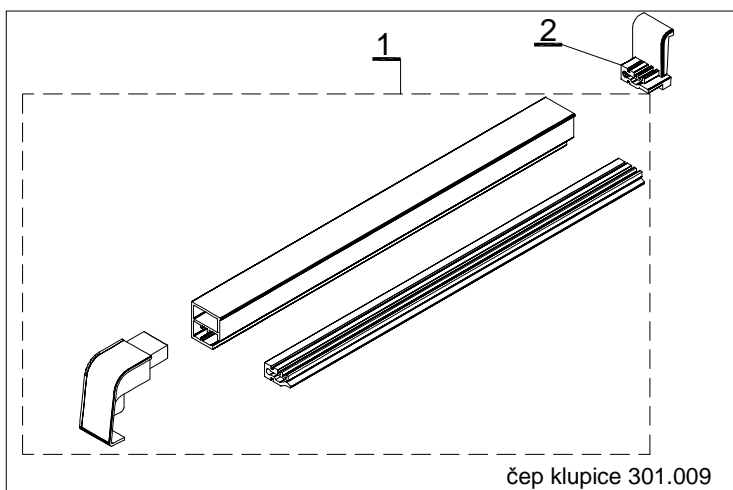
1. Set za bočni čep klupice **301.006**
2. Set za bočni čep klupice **301.009**
3. Set za bočni čep klupice **301.010**

-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

-Set za bočni čep 301.010 -(360 mm)  
 -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



134.000.xx-OTKLOPNO-ZAKRETNI MEHANIZAM-Stublina (art.4030.00)

G=80 kg  
7 tačkica bravljenja

Pomoćne makaze za široke prozore

ŠK-472 za 4010.00  
ŠK-382 za 4011.00

346 (525)  
256

Horizontalno podešavanje krila  
-2 +2

VK-VR-200

VK-205

180° 90°

Maksimalna težina krila 80 kg

	2400	2300	2200	2100	2000	1900	1800	1700	1600	1500	1400	1300	1200	1100	1000	900	800	700	600	
2400	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
2300	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
2200	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
2100	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
2000	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1900	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1800	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1700	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1600	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1500	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1400	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1300	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1200	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1100	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1000	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
900	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
800	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
700	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
600	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
H	350	509	510	600	700	800	900	1000	1100	1200	1300	1400	1500	1600						
L																				

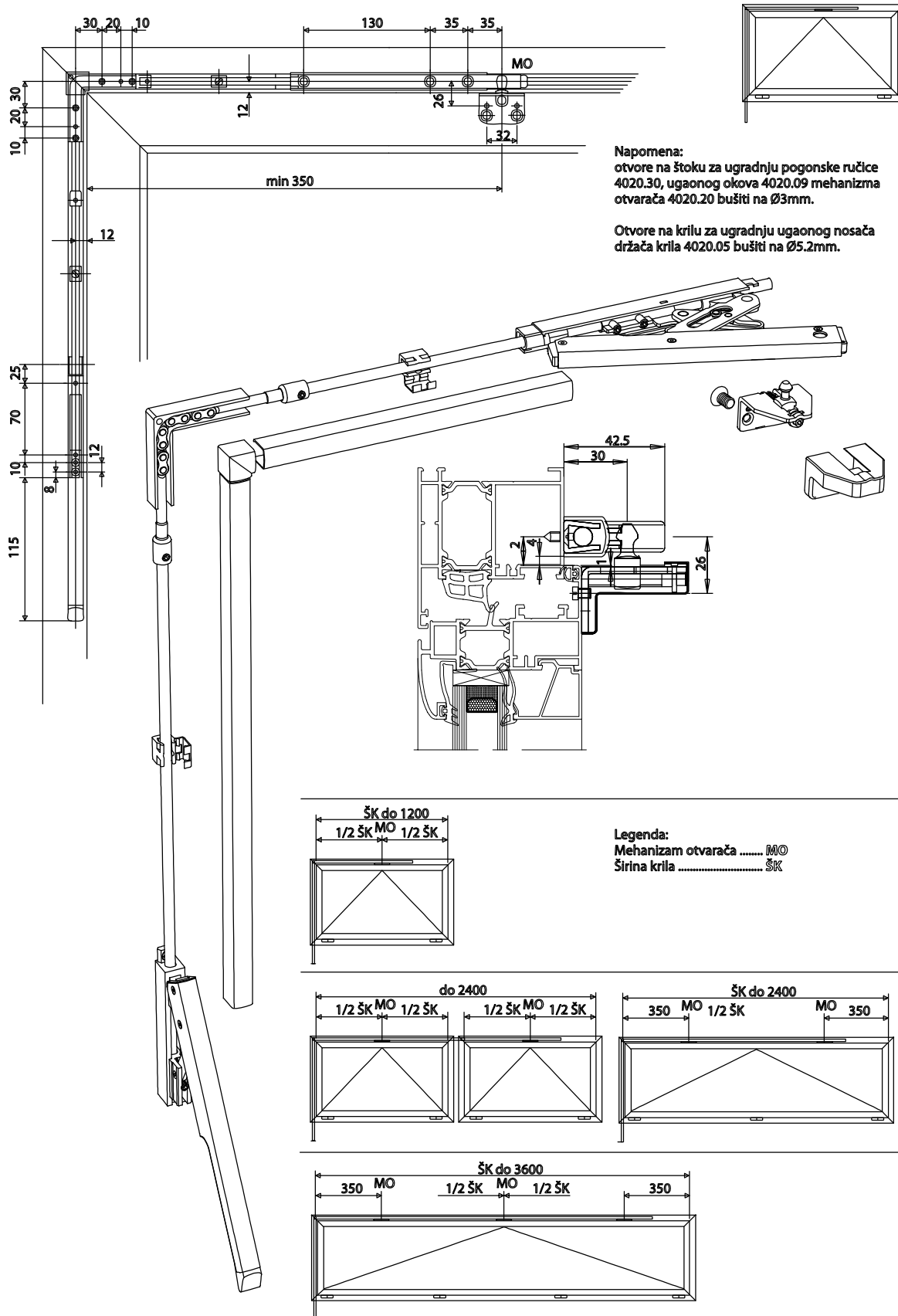
Debljina stakla

mm	kg/m2
6	15
8	20
10	25
12	30
14	35
16	40
18	45
20	50
22	55
24	60
26	65
28	70
30	80
32	85
34	90
36	95
38	100
40	105
42	110
44	115
46	120
48	125

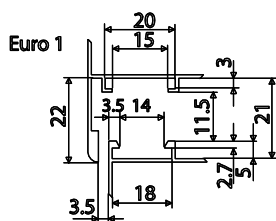
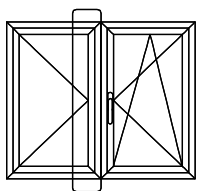
○ Maksimalna debljina stakla 45 mm    ⊠ Neizvodljivo

Na krajevima pogonskih letvi izbušiti otvore po dimenzijama prema detalju

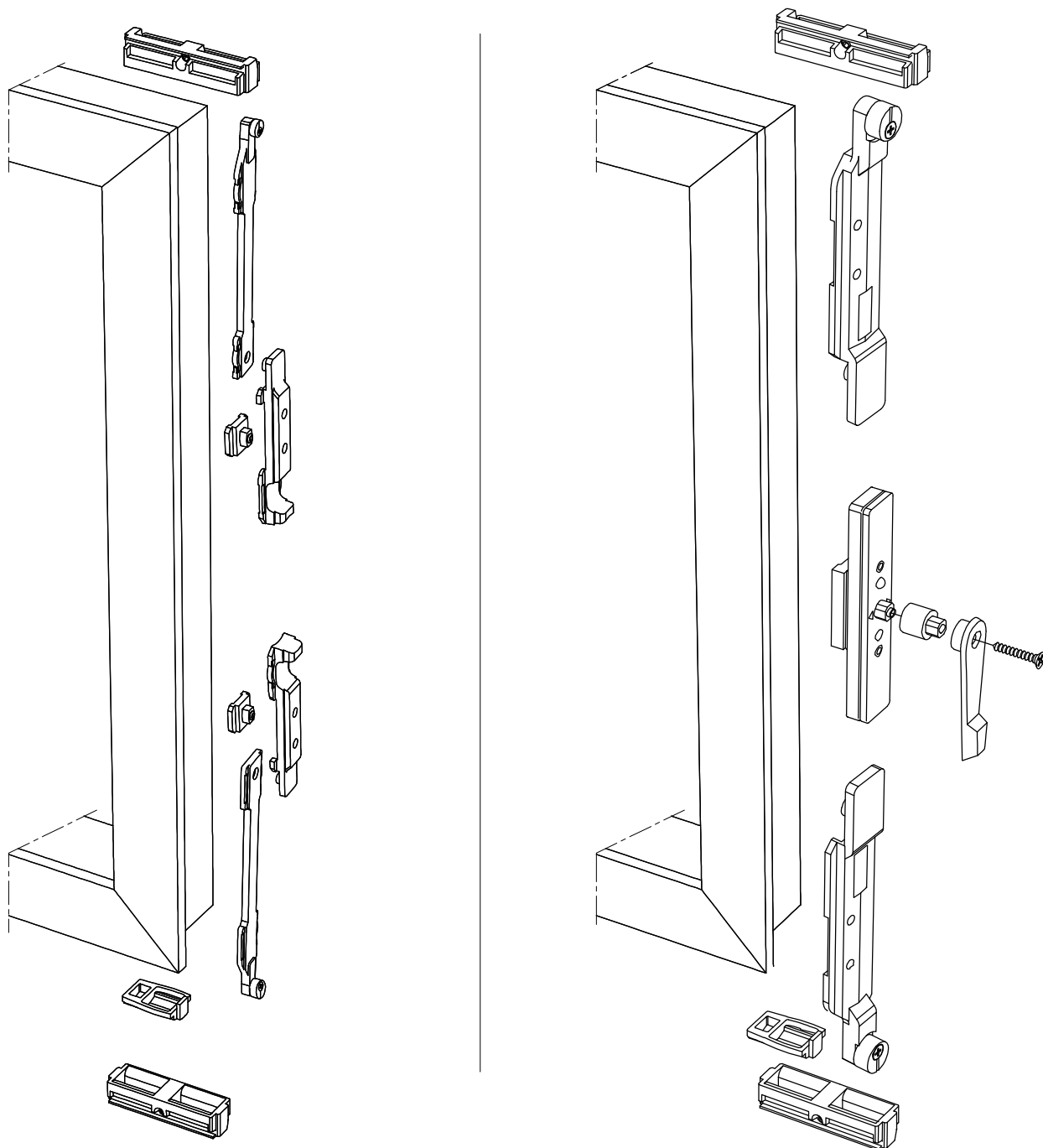
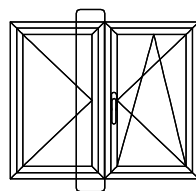
Ako se koriste adapteri na krajevima pogonskih letvi izbušiti otvore po dimenzijama prema detalju:

**134.006.xx-OTKLOPNI MEHANIZAM (VENTUS)-Stublina (art.4020.00)**


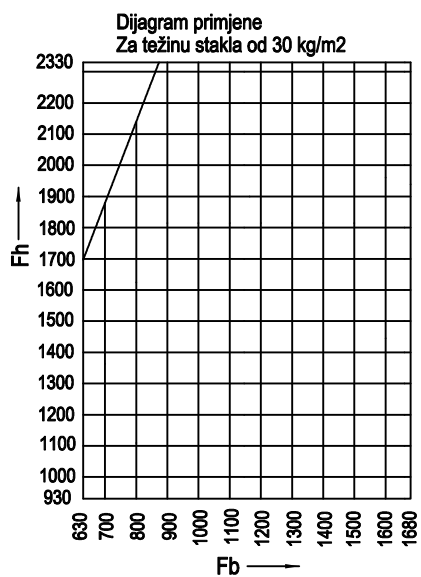
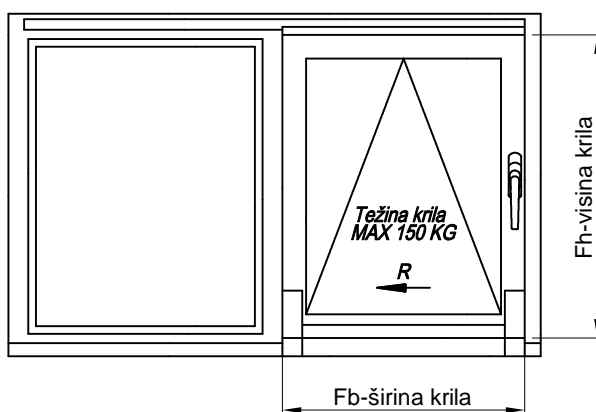
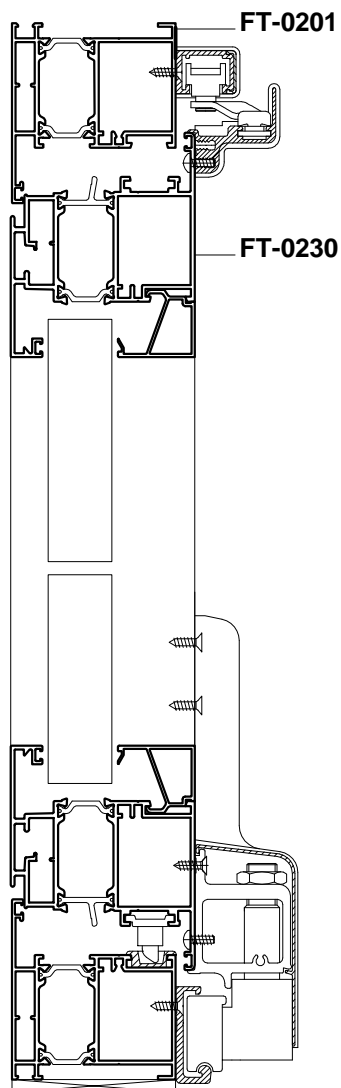
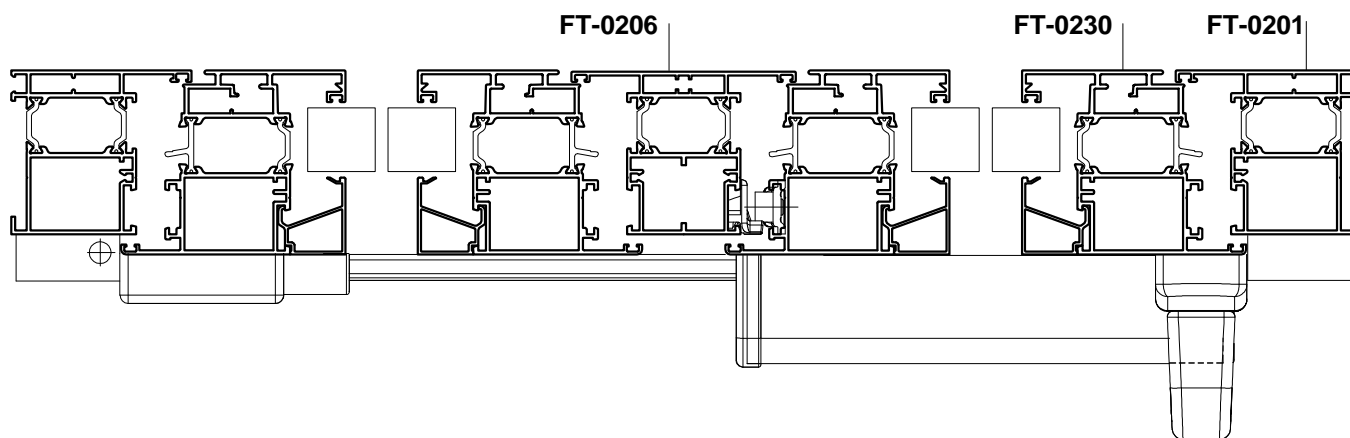
**134.001** -Komplet okova za fiksiranje pomoćnog krila)-Stublina (art.4001.00)



**134.017** -Komplet okova za fiksiranje pomoćnog krila)-Stublina (art.4005.00)

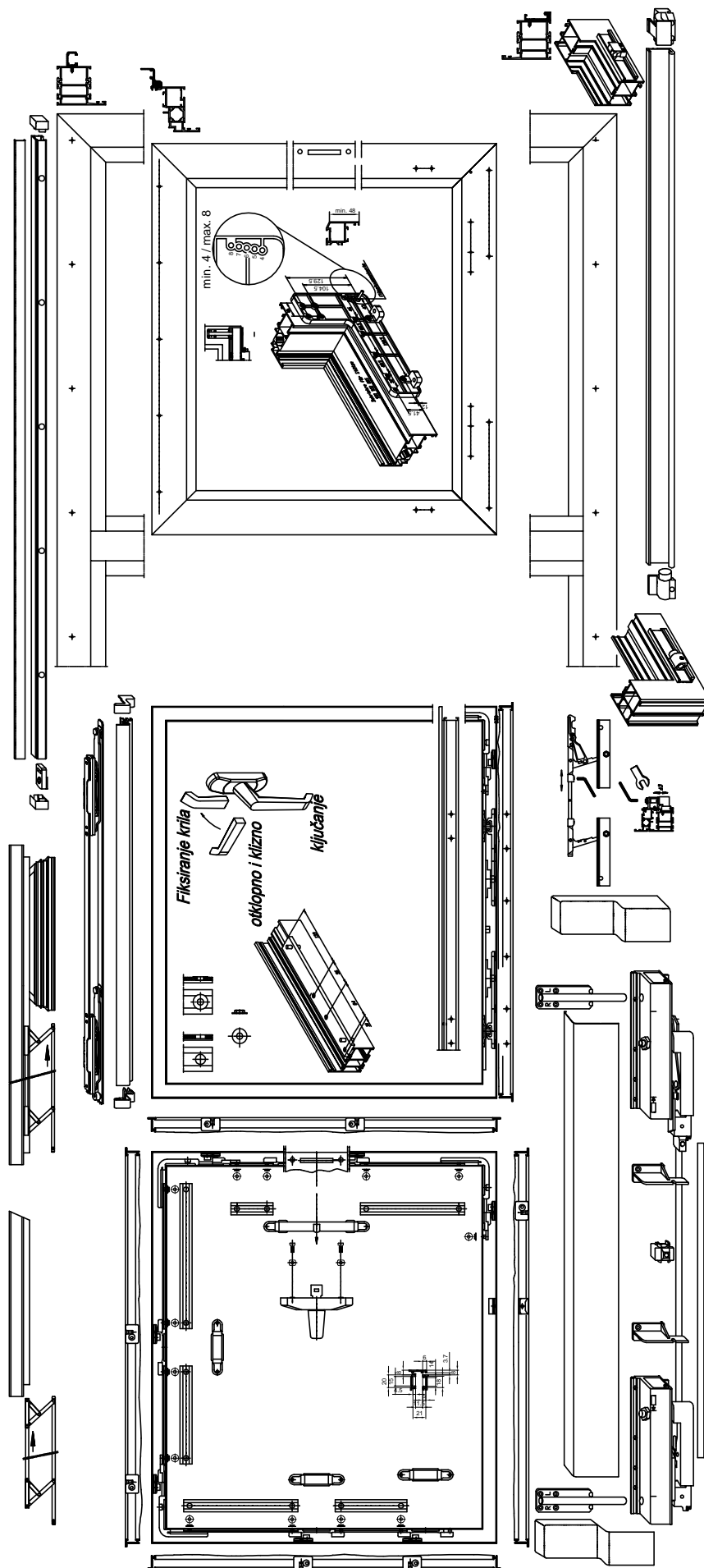


OTKLOPNO KLIZNI MECHANIZAM - NOTTER





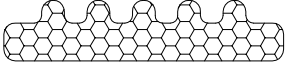

OTKLOPNO KLIZNI MEHANIZAM - NOTTER

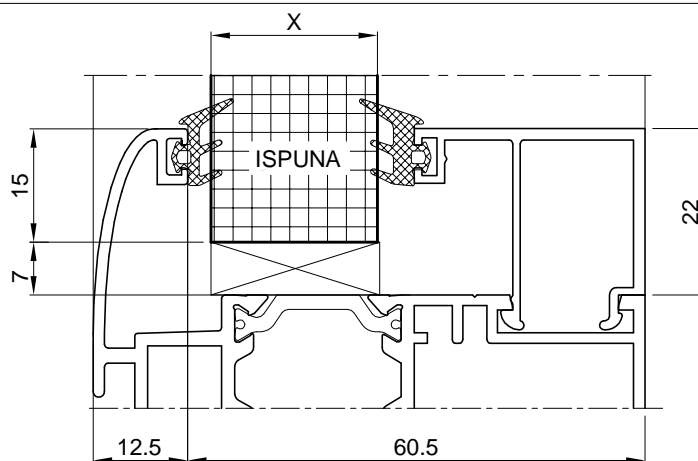


CODE	Izgled-presjek	Opis	Materijal	Nap.
331.001		- Srednja brtva - Stara oznaka 210.001.099 (SB65-01)	EPDM	61
321.001		- Brtva u krilu - Stara oznaka 210.001.090 (Z106)	EPDM	61
311.001		- Brtva prema staklu /unutarnja/ - Stara oznaka 210.001.125 (921)	EPDM	71
311.002		-Brtva prema staklu /unutarnja/ - Stara oznaka 210.001.123 (918)	EPDM	71
321.002		- Brtva prema staklu /vanjska/ - Stara oznaka 210.001.140 (Z111)	EPDM	61
321.003		- Brtva prema staklu /vanjska/ - Stara oznaka 210.001.142 (Z113)	EPDM	61

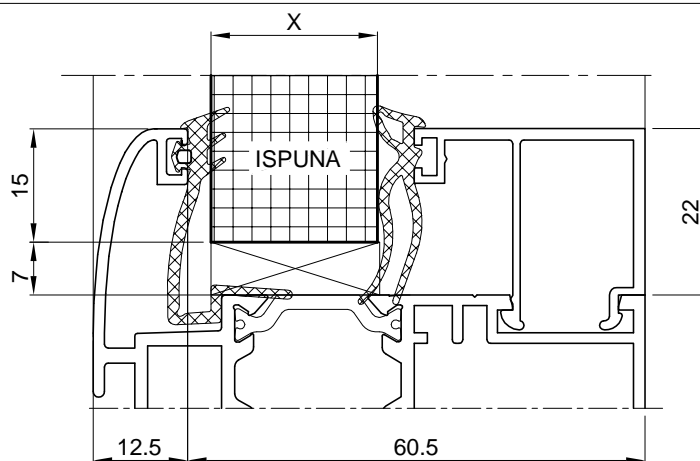
CODE	Izgled-presjek	Opis	Materijal	Nap.
311.003		- Brtva prema staklu /unutarnja,nosi 3-4 mm/	EPDM	71
311.004		- Brtva prema staklu /unutarnja,nosi 5-6 mm/	EPDM	71
311.005		- Brtva prema staklu /unutarnja,nosi 7-8 mm/	EPDM	71
344.011		- Brtva za vezu-dilatacija profila FT-0226 H - Stara oznaka 02781/S	EPDM	71
311.007 311.008 311.009 311.010		-Brtva prema staklu /unutarnja/ - Stare oznake UP-5 nove oznake UP-6 UP-7 UP-8	311.007 311.008 311.009 311.010	EPDM 71
332.001		- Brtva prema pragu - Stara oznaka G114.1.042	EPDM	65

CODE	Izgled-presjek	Opis	Materijal	Nap.
321.004		<ul style="list-style-type: none"> <li>- Brtva prema staklu /vanjska/</li> <li>- Stara oznaka SB85-S1</li> </ul>	EPDM	71
314.001		<ul style="list-style-type: none"> <li>- Brtva u ramu-smanjuje ulazak kapljevina u prozor</li> <li>- Stara oznaka Z-10</li> </ul>	TPE	65
344.001		<ul style="list-style-type: none"> <li>- Kutnik srednje brtve SB65-01</li> <li>- otvaranje unutra L=50x50</li> <li>- Stara oznaka SB65-K1</li> </ul>	EPDM	65
521.001		<ul style="list-style-type: none"> <li>- Držač četkaste brtve L=2500 mm</li> <li>- Stara oznaka Z 801</li> </ul>	Al.	
347.001		<ul style="list-style-type: none"> <li>- Četkasta brtva L=2500 mm</li> <li>- Stara oznaka Z 802</li> </ul>		
348.001		<ul style="list-style-type: none"> <li>- Ispuna po opsegu stakla-</li> <li><b>CLIMAFILL</b></li> <li>- Stara oznaka CLIMAFILL</li> </ul>	PP	

CODE	Izgled-presjek	Opis	Materijal	Nap.
348.002		- Ispuna po opsegu stakla sa ljepljivom trakom- <b>NOMAFLEX</b>	XPE	
347.003		Četkasta brtva 7x9 -Stara oznaka: PB*HFC	EPDM	

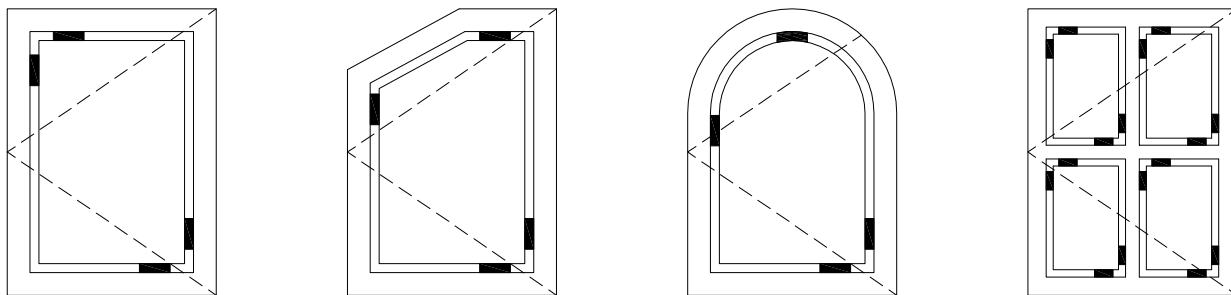


Ispuna X	Vanjska brtva	Unutarnja brtva	LAJSNE ZA STAKLO			
16-17	321.003 (Z113)	311.002 (918)				
18-20	321.002 (Z111)	311.001 (921)	Z40-659			Z40-669
21-22	321.003 (Z113)	311.002 (918)				
23-25	321.002 (Z111)	311.001 (921)	Z40-653	Z40-653/B	Z40-661	Z40-668
26-27	321.003 (Z113)	311.002 (918)				
28-30	321.002 (Z111)	311.001 (921)	Z40-658			Z40-667
31-32	321.003 (Z113)	311.002 (918)				
33-35	321.002 (Z111)	311.001 (921)	Z40-644	Z40-646	Z40-648	Z40-666
36-37	321.003 (Z113)	311.002 (918)				
38-40	321.002 (Z111)	311.001 (921)	M45-709	M45-740	Z40-662	Z40-665
41-42	321.003 (Z113)	311.002 (918)				
43-45	321.002 (Z111)	311.001 (921)	Z40-636	Z40-647	Z40-649	F-784
46-47	321.003 (Z113)	311.002 (918)				
48-50	321.002 (Z111)	311.001 (921)	Z40-656			
49-51	321.003 (Z113)	311.002 (918)				
52-53	321.002 (Z111)	311.001 (921)	Z40-660			

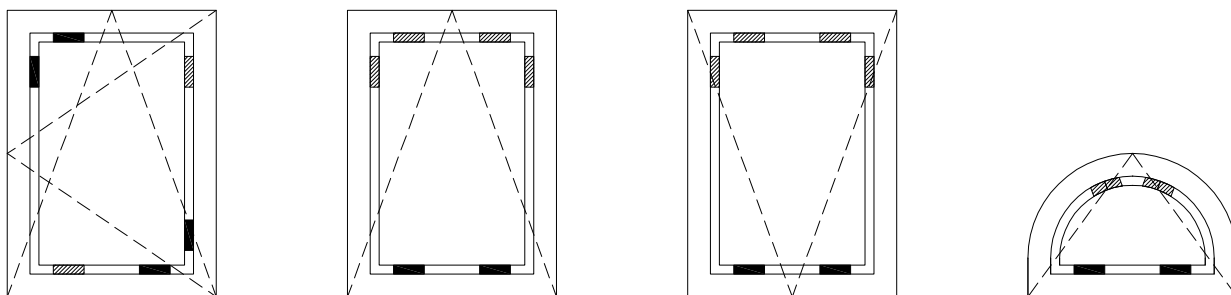


Ispuna X	Vanjska brtva	Unutarnja brtva	LAJSNE ZA STAKLO			
17	331.001	311.003				
18	331.001	311.004	<b>Z40-659</b>			<b>Z40-669</b>
22	331.001	311.003				
23	331.001	311.004	<b>Z40-653</b>	<b>Z40-653/B</b>	<b>Z40-661</b>	<b>Z40-668</b>
27	331.001	311.003				
28	331.001	311.004	<b>Z40-658</b>			<b>Z40-667</b>
32	331.001	311.003				
33	331.001	311.004	<b>Z40-644</b>	<b>Z40-646</b>	<b>Z40-648</b>	<b>Z40-666</b>
37	331.001	311.003				
38	331.001	311.004	<b>M45-709</b>	<b>M45-740</b>	<b>Z40-662</b>	<b>Z40-665</b>
42	331.001	311.003				
43	331.001	311.004	<b>Z40-636</b>	<b>Z40-647</b>	<b>Z40-649</b>	<b>F-784</b>
47	331.001	311.003				
48	331.001	311.004	<b>Z40-656</b>			
50	331.001	311.003				
52	331.001	311.004	<b>Z40-660</b>			

PREPORUKE ZA RASPORED PODMETAČA KOD UGRADNJE ELEMENATA ZA ISPUNU

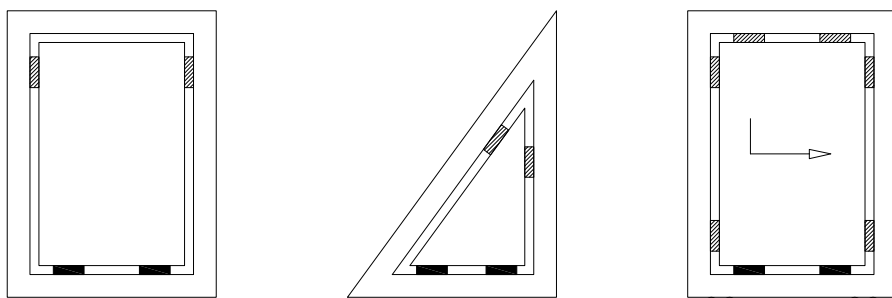


zaokretno



otklopno-zaokretno

otklopno



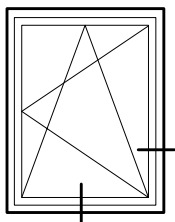
fiksno

otklopno klizno

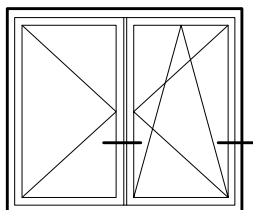
- nosivi podmetač
- odstojni podmetač

Materijal podmetača: pvc

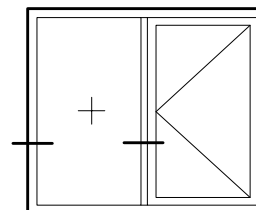




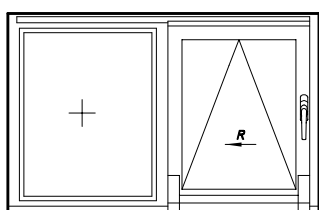
str. 905.001  
str. 905.002



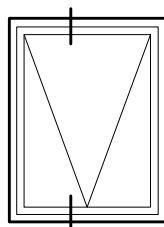
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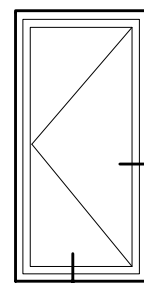
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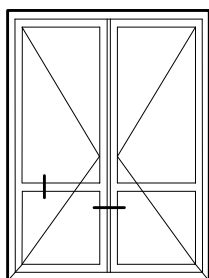
str. 905.005



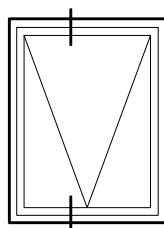
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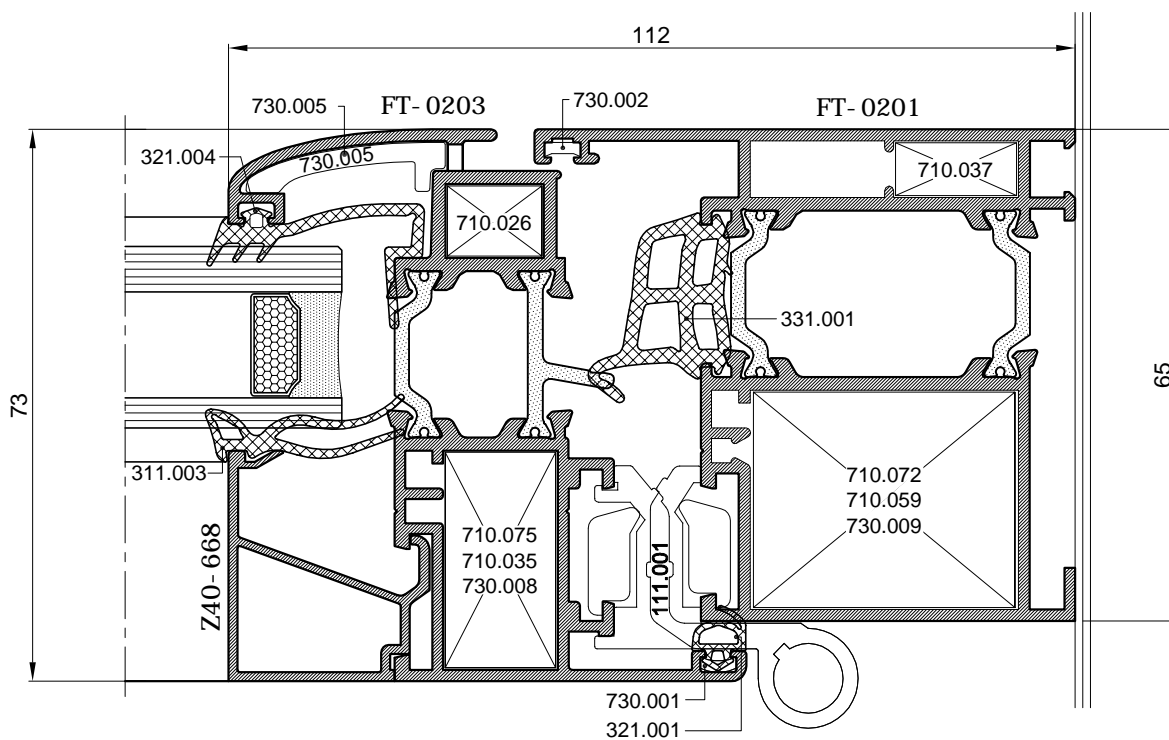
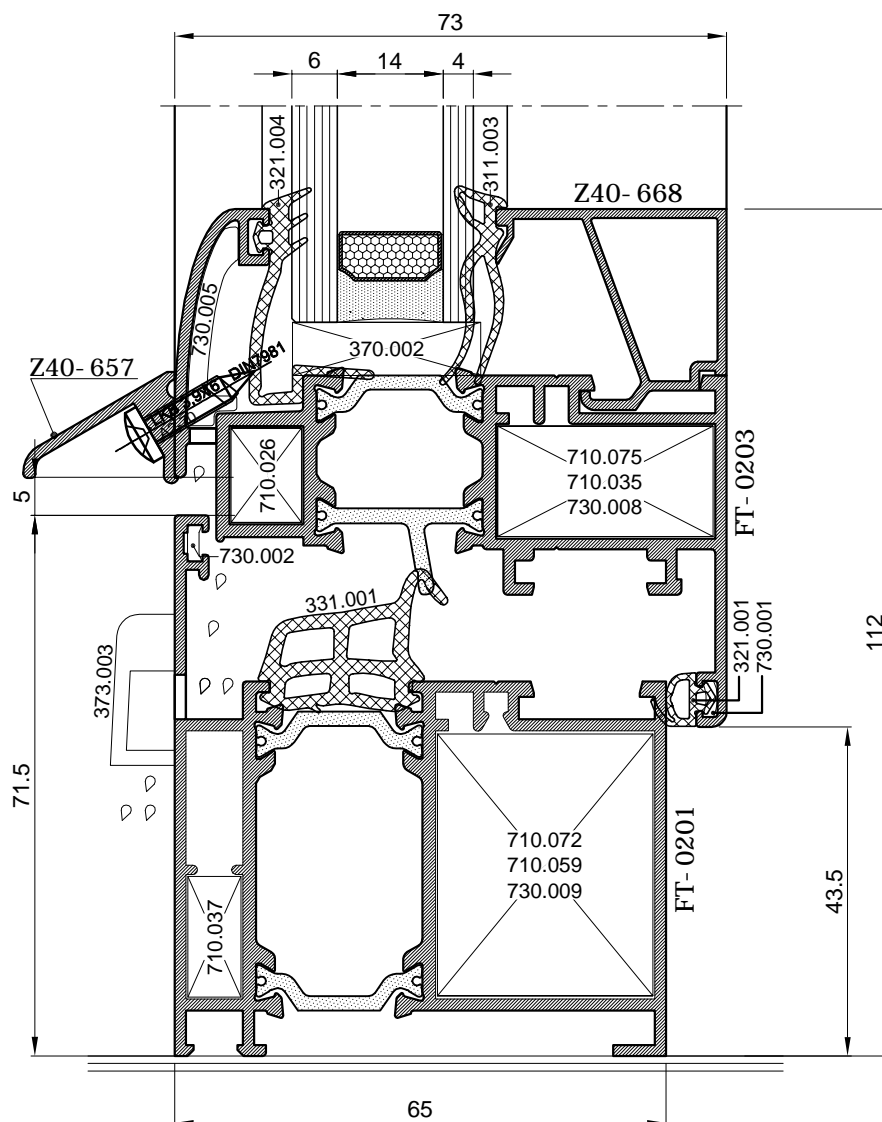
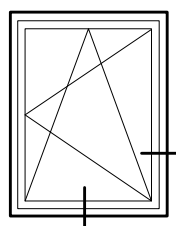
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str. 905.008  
str. 905.009

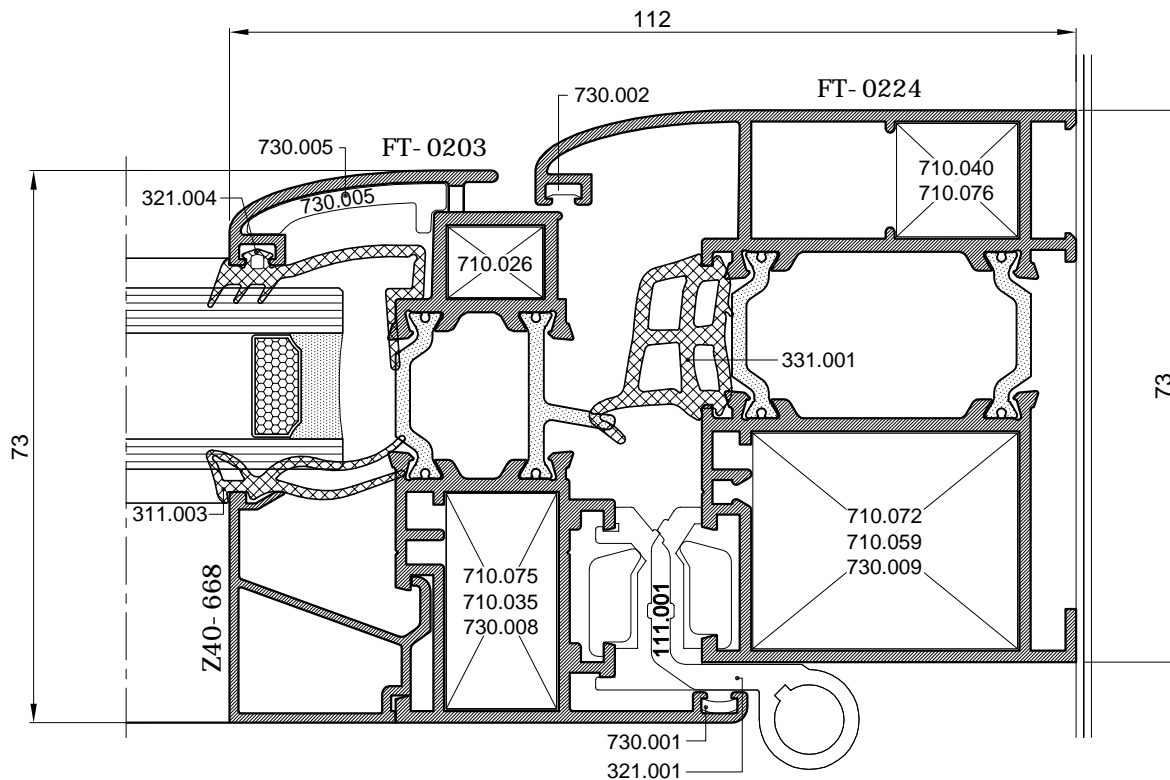
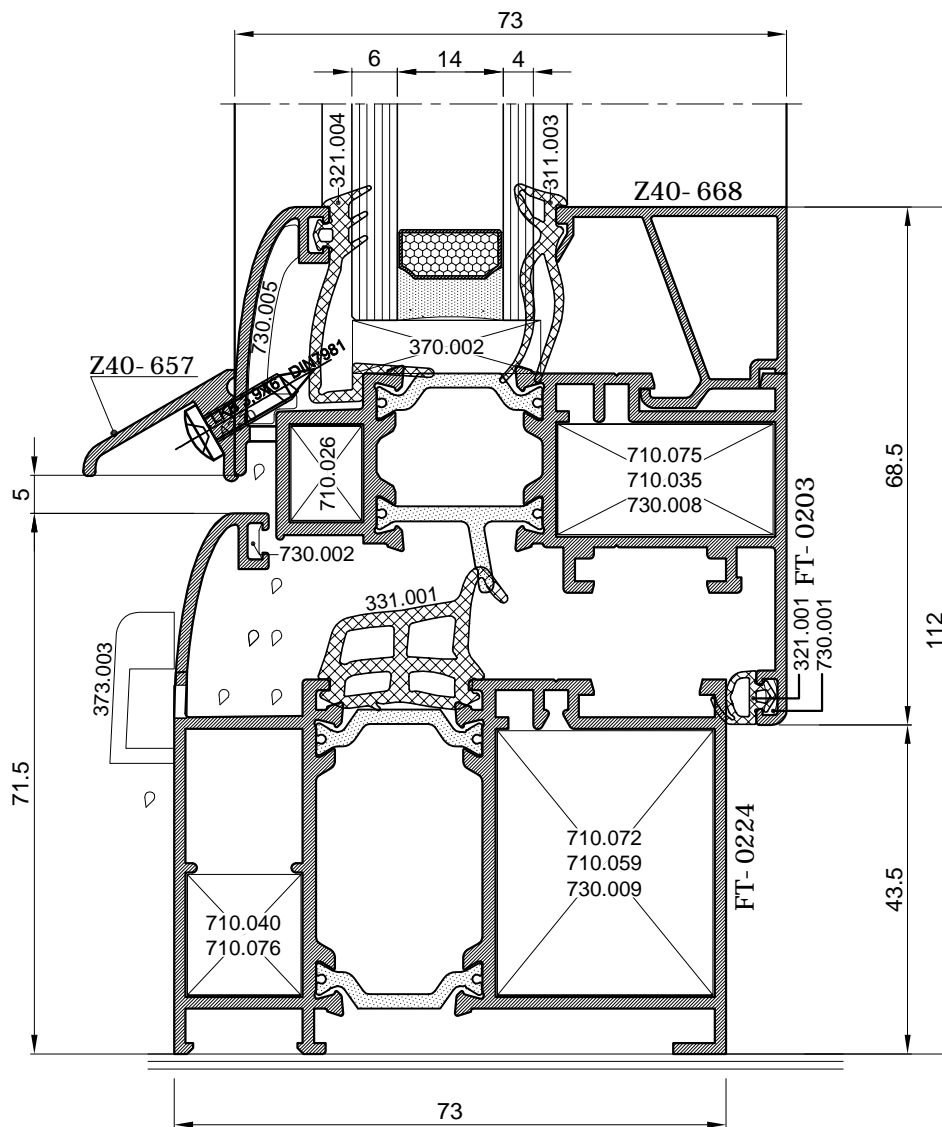
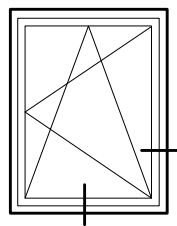


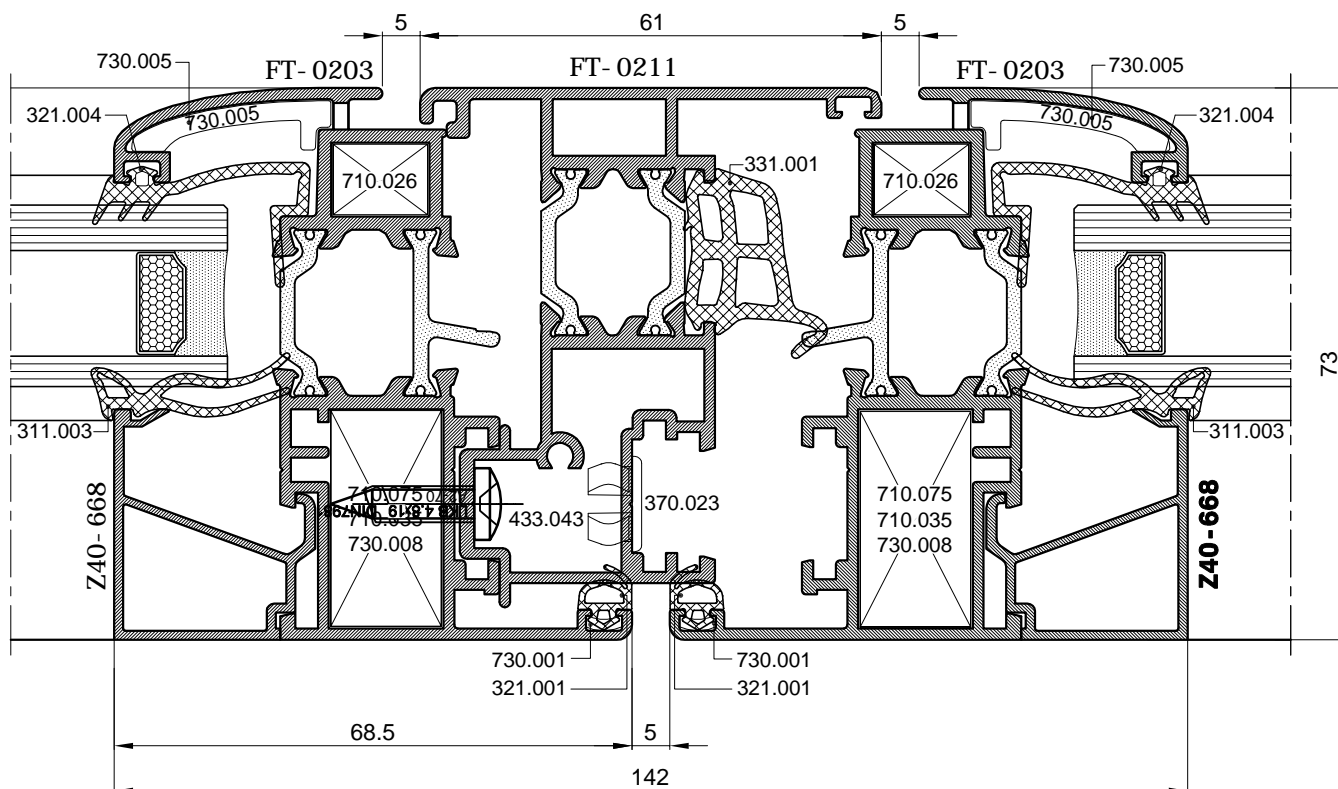
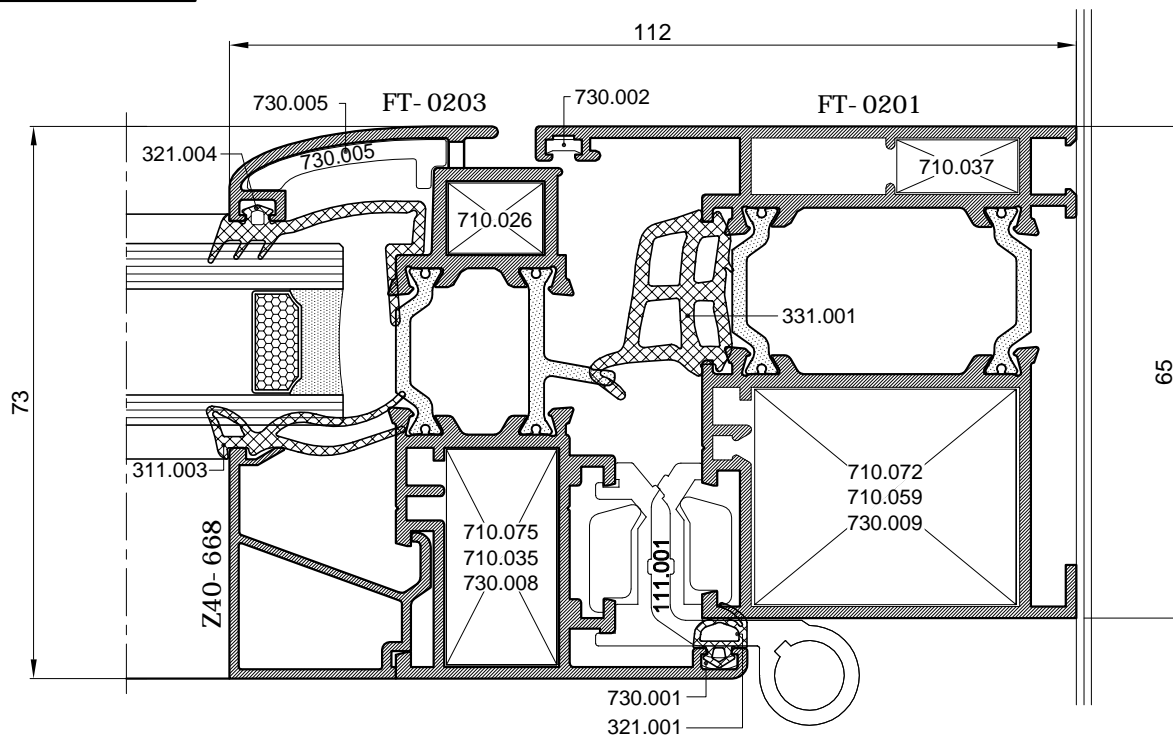
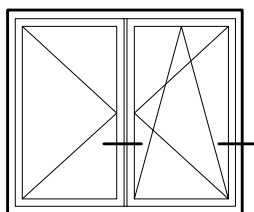
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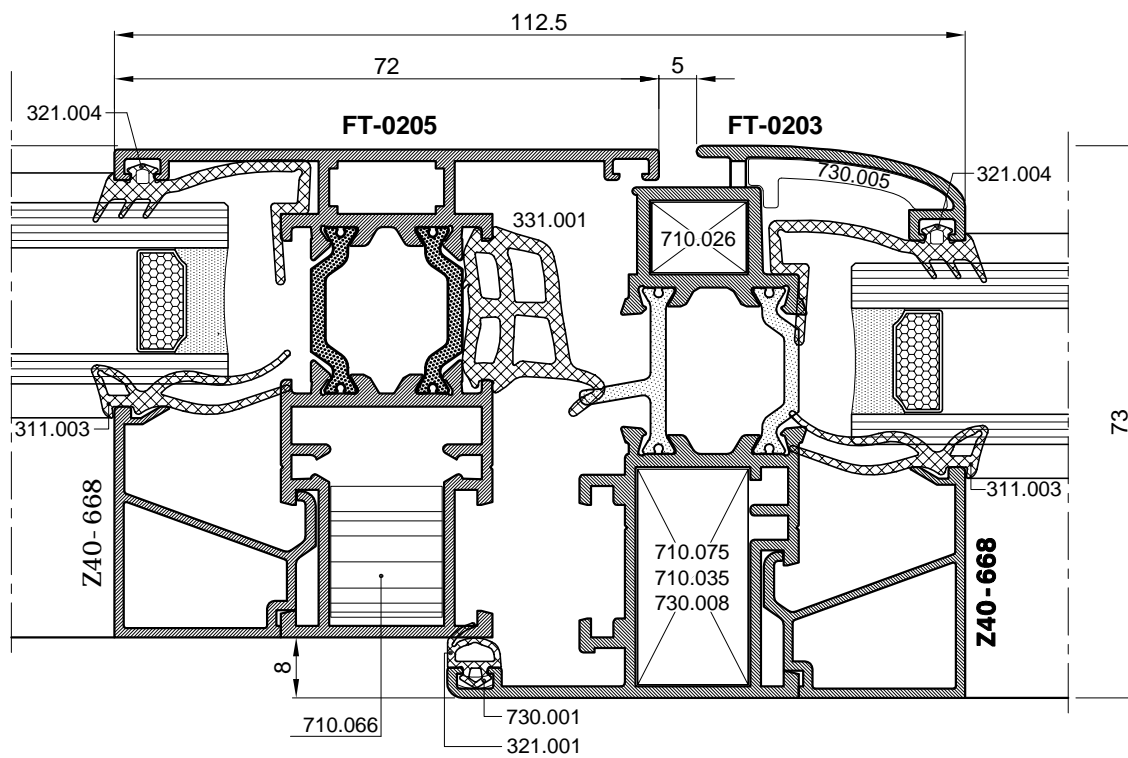
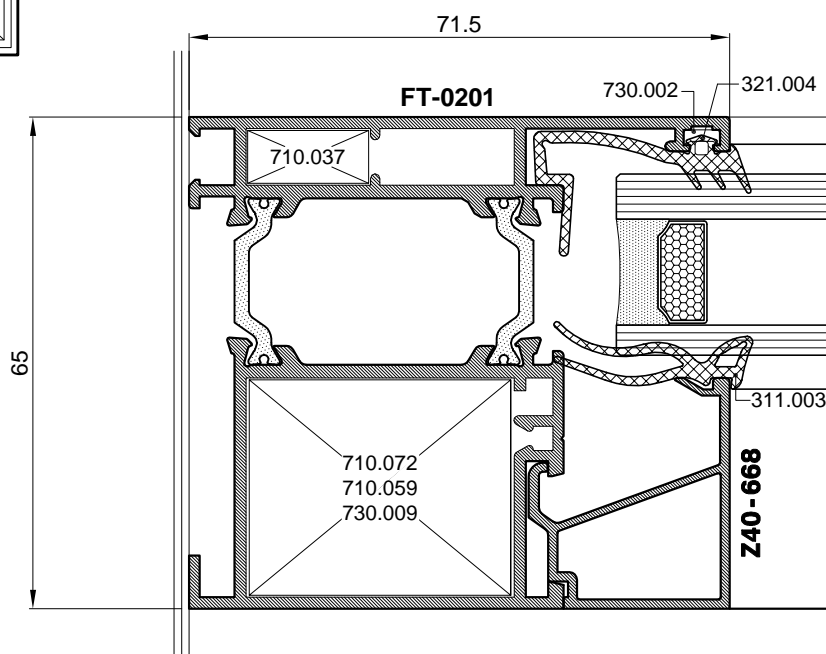
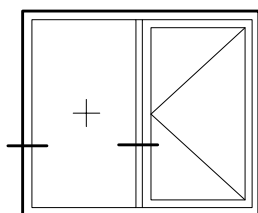


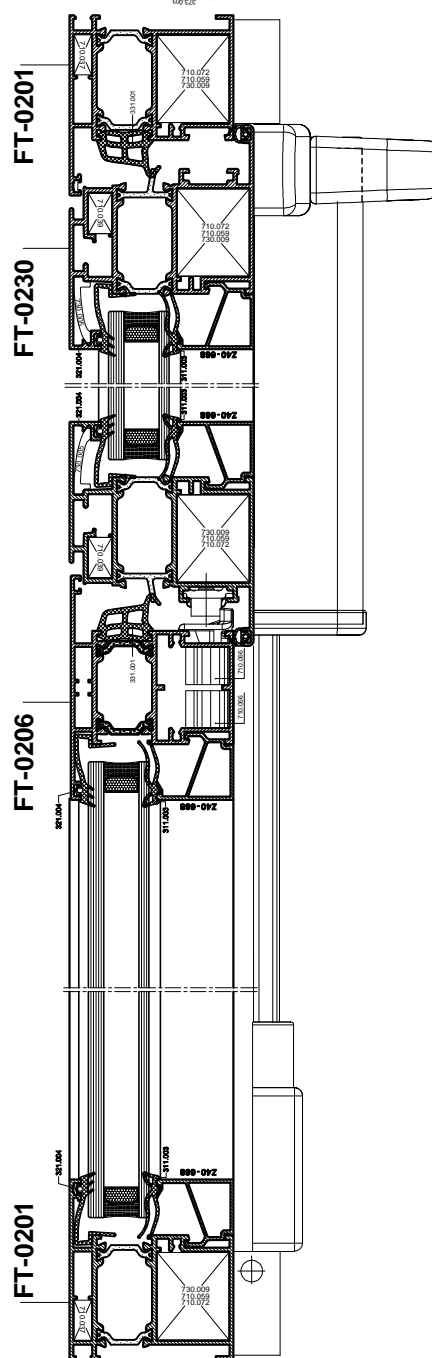
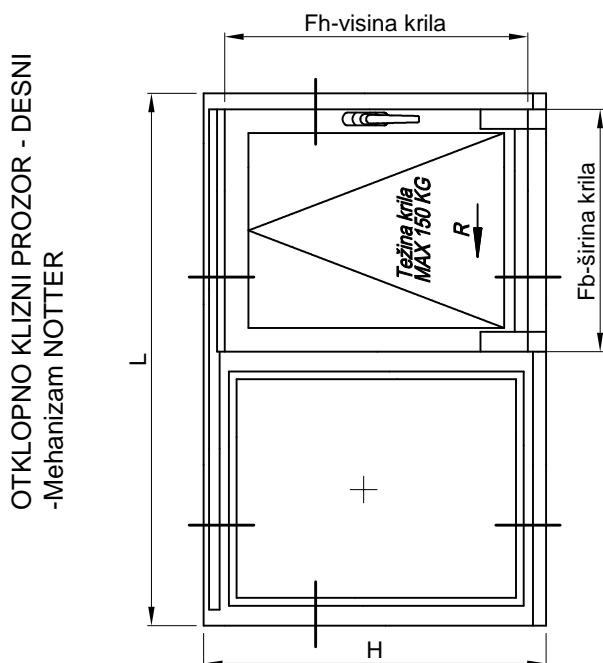
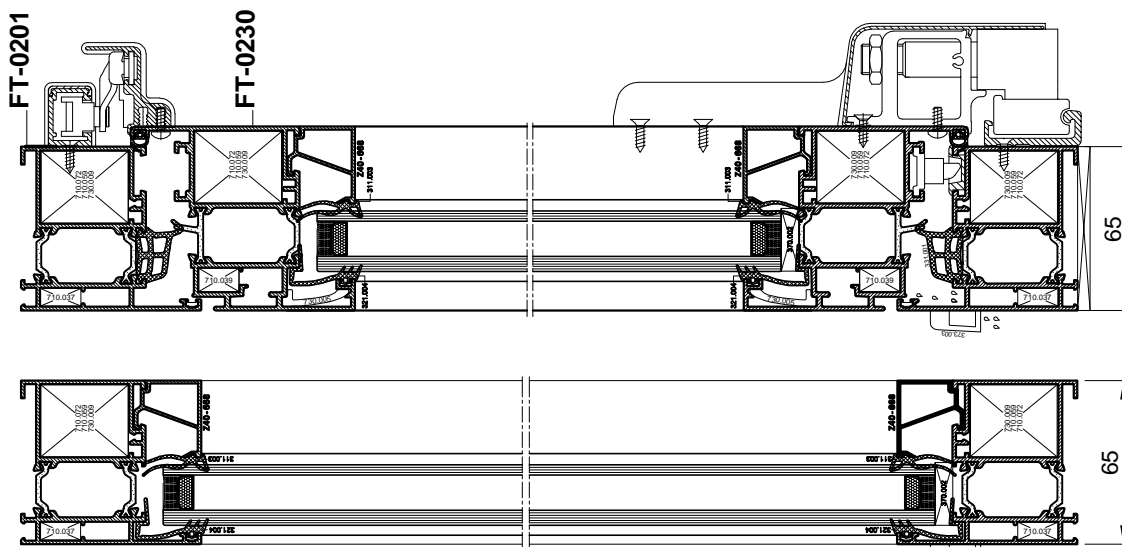
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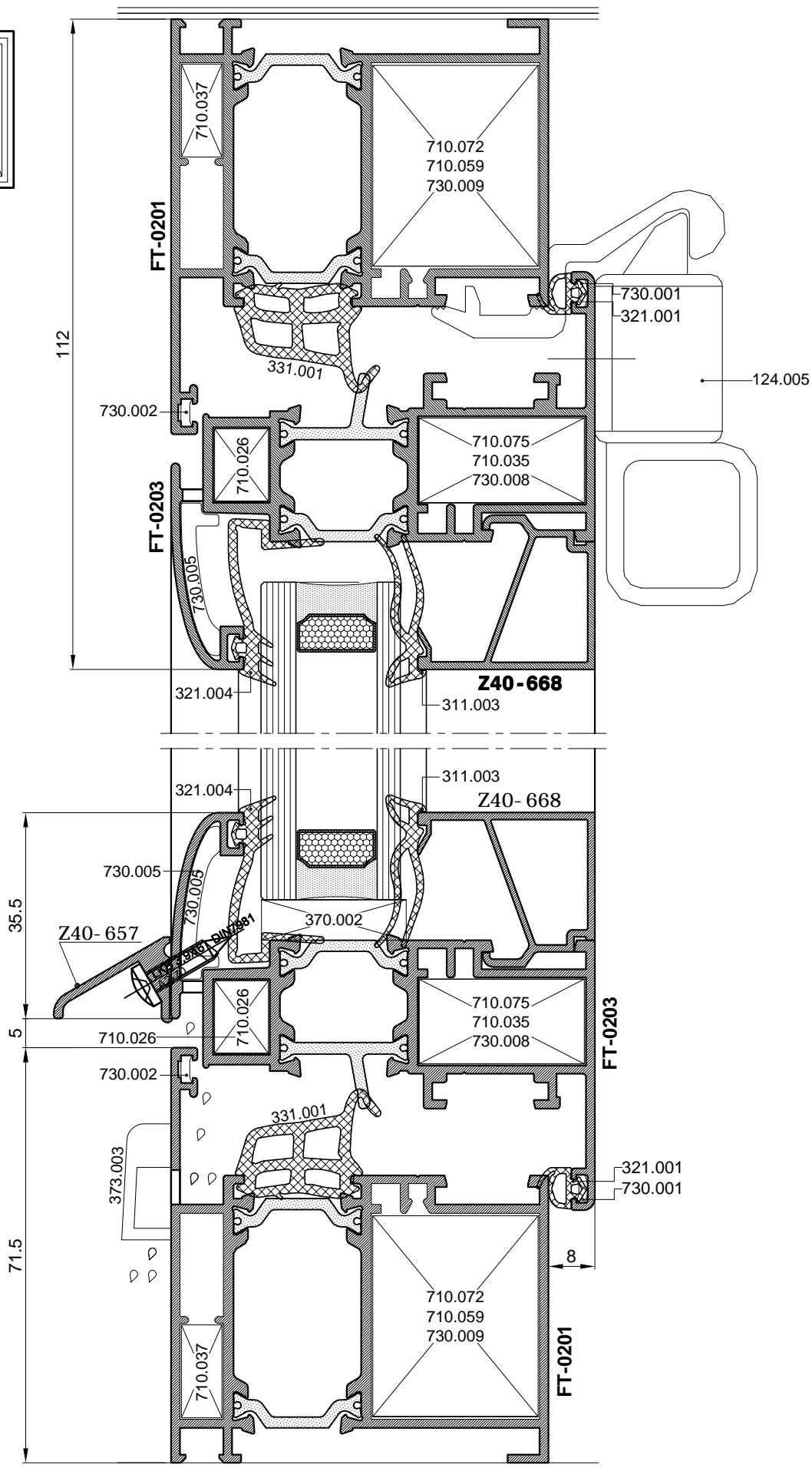
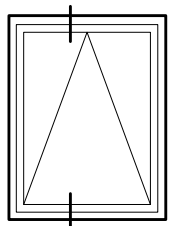




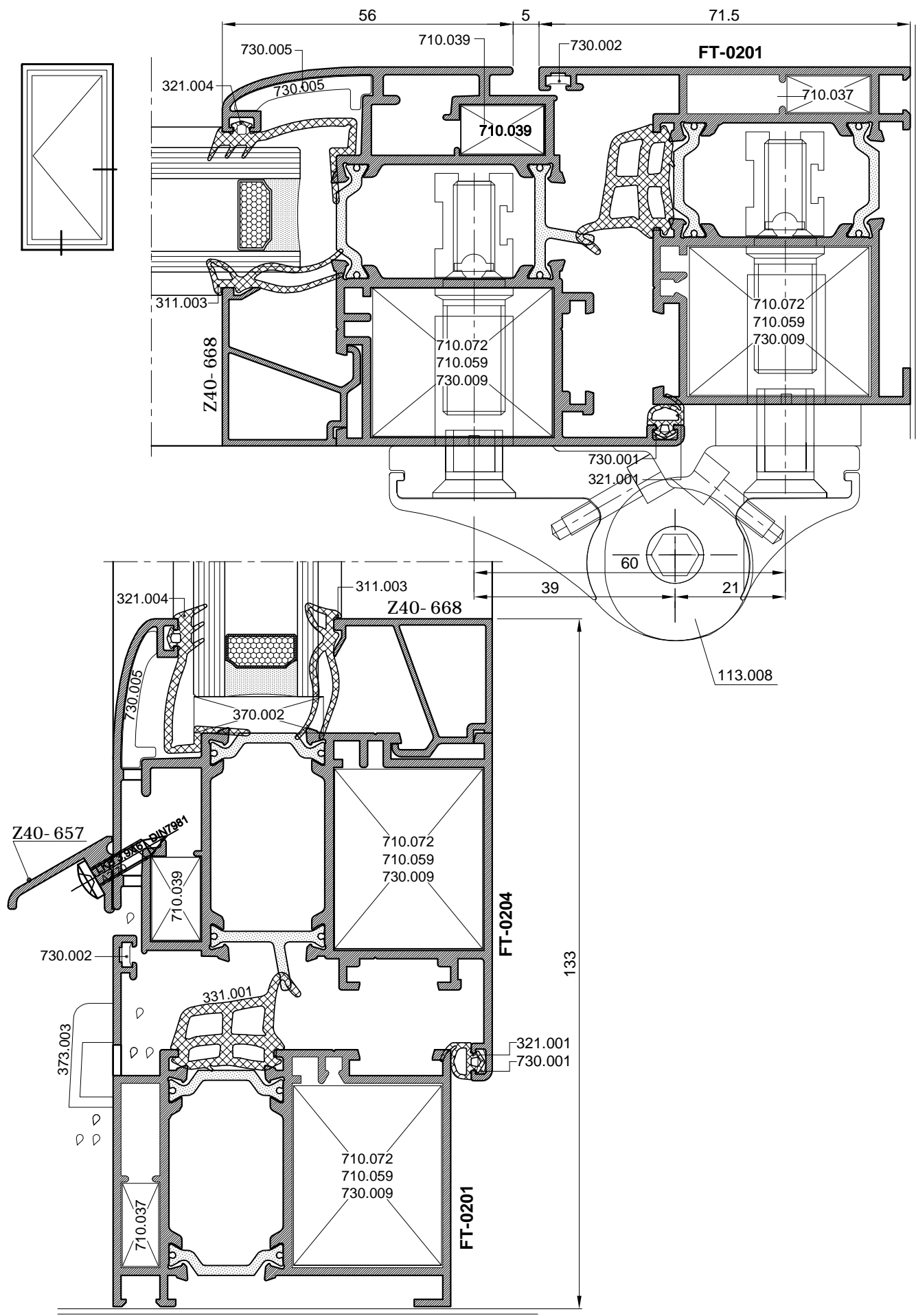




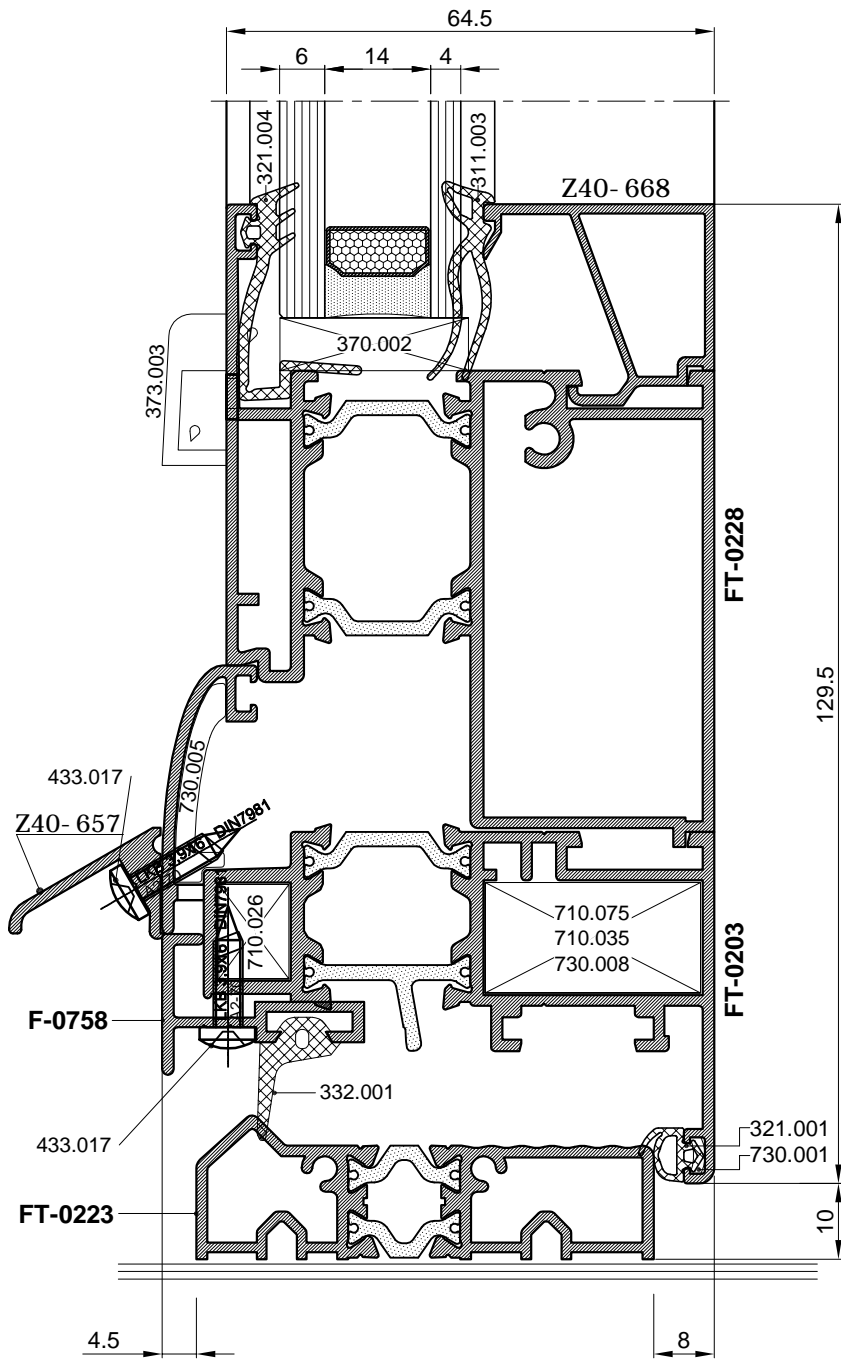
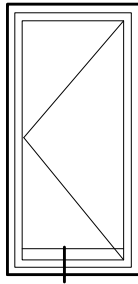


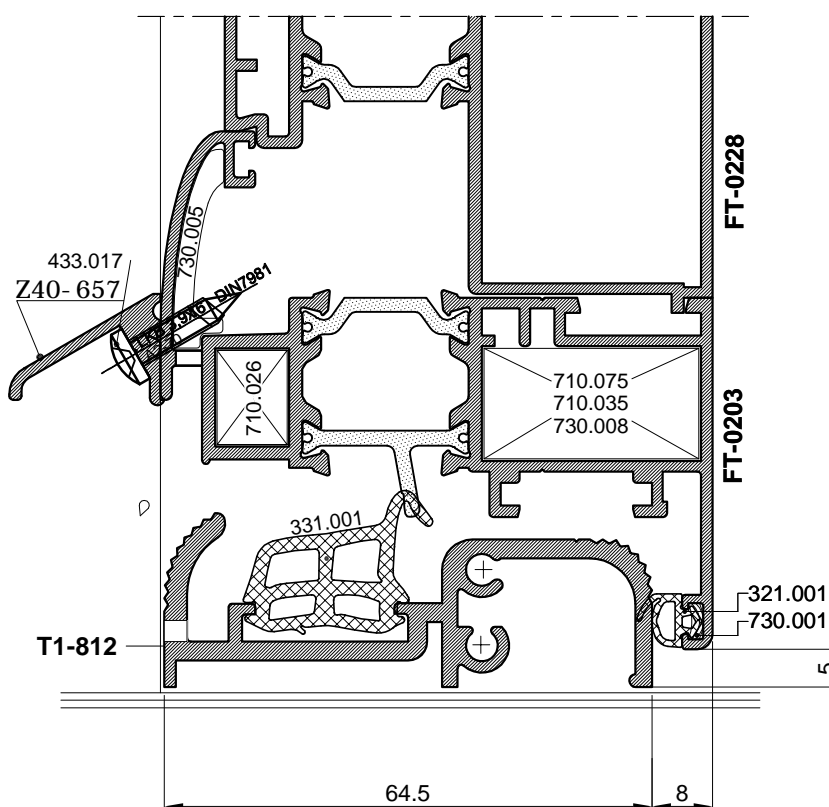
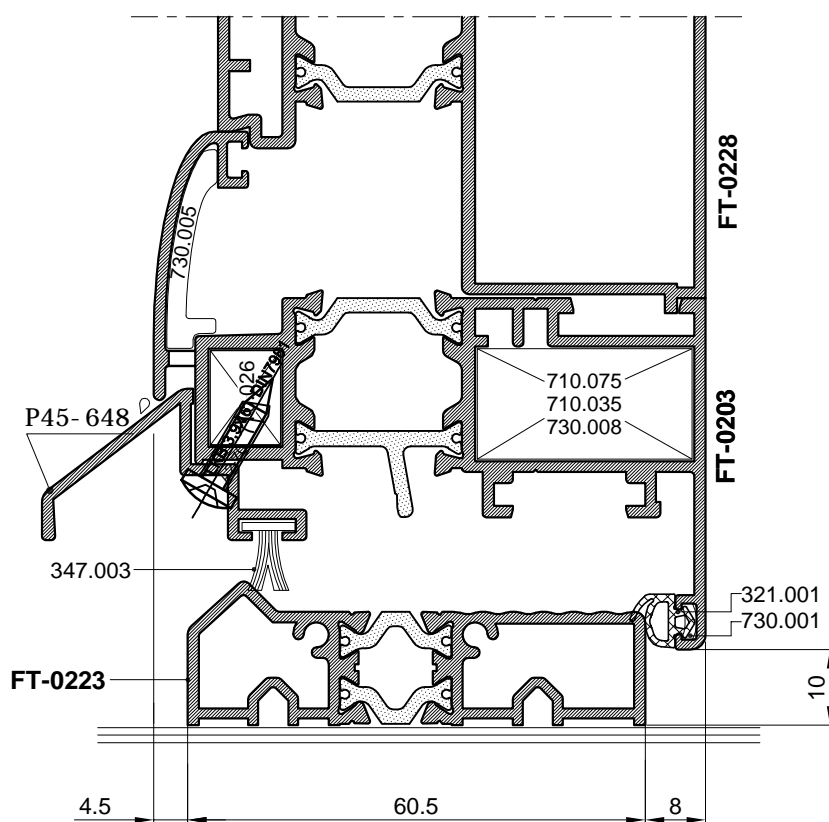
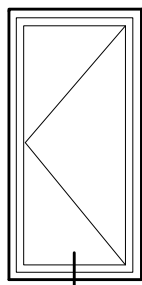


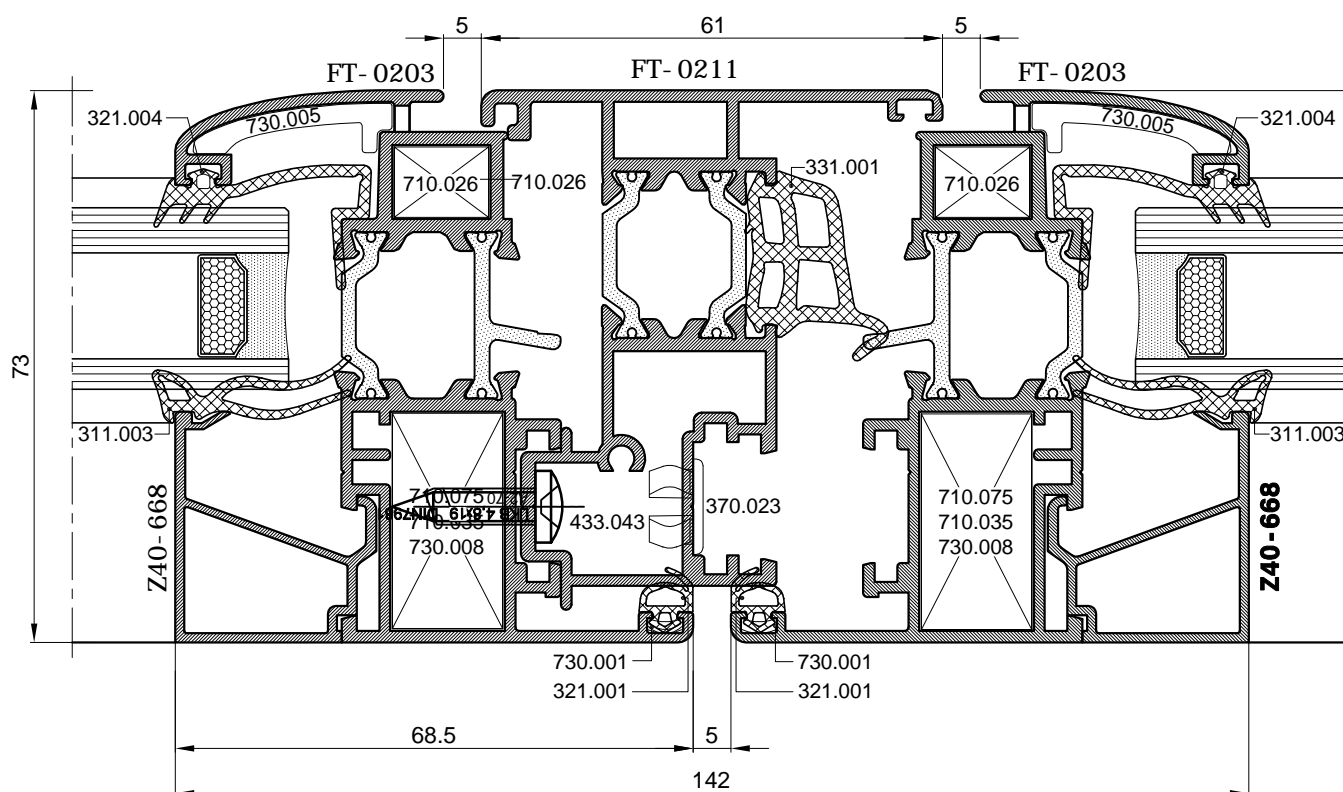
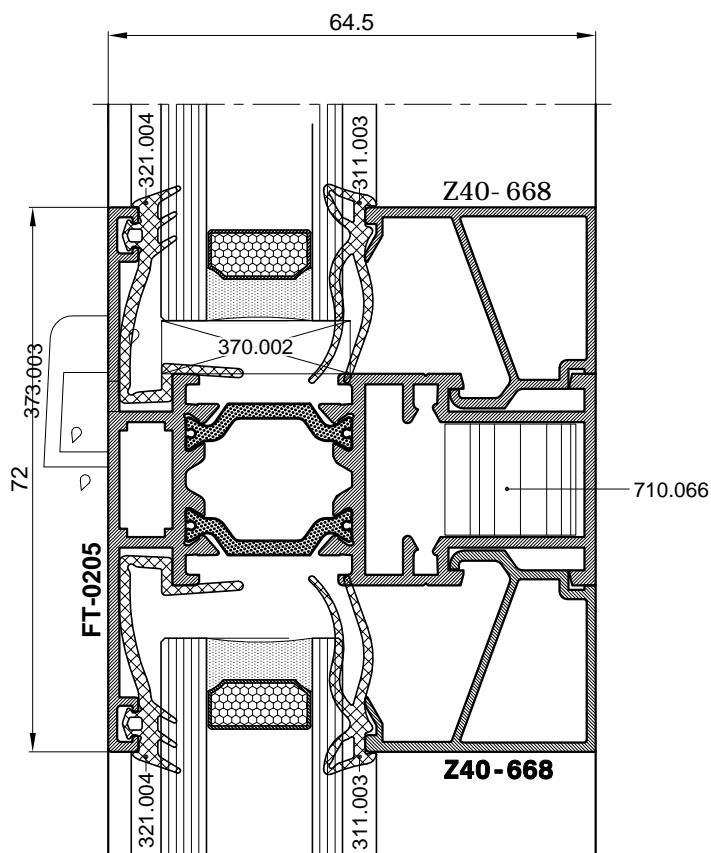
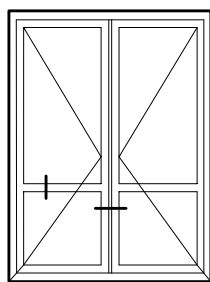


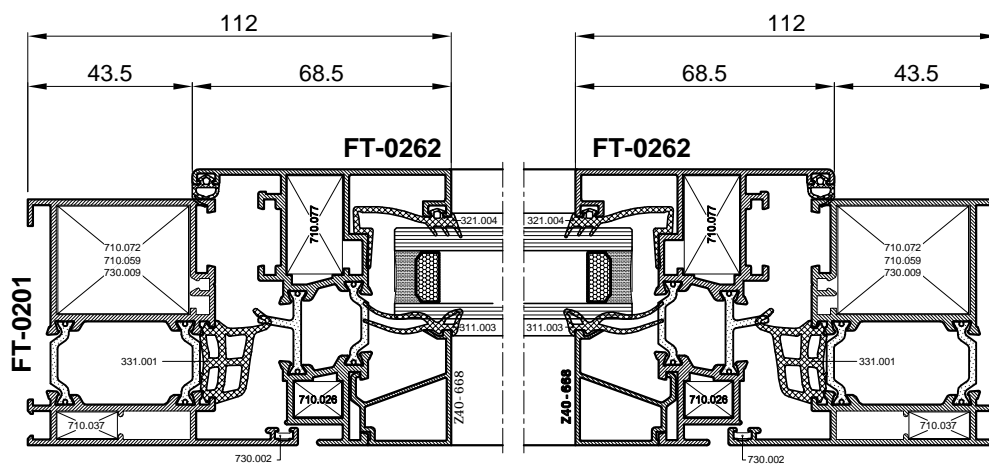
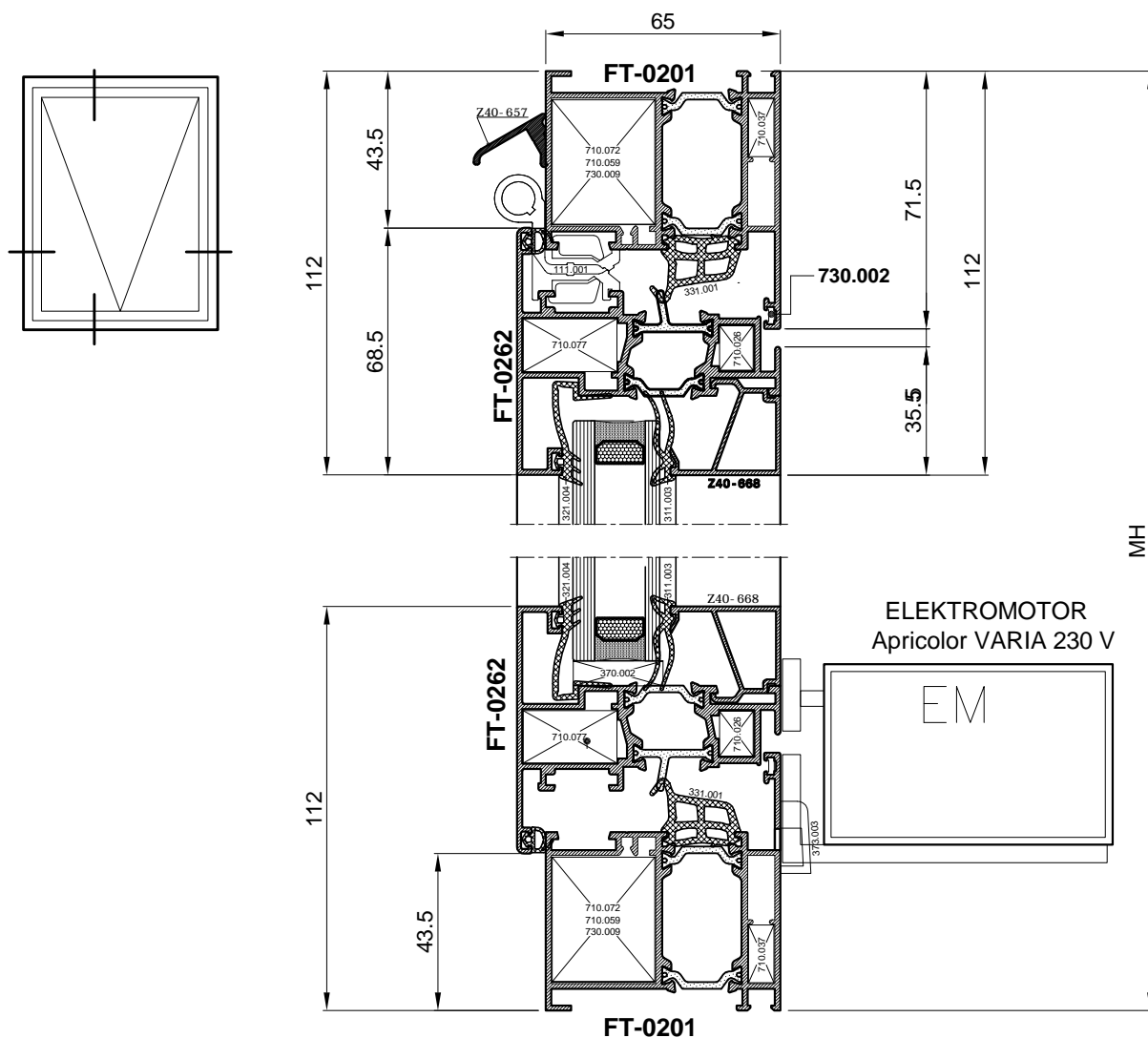




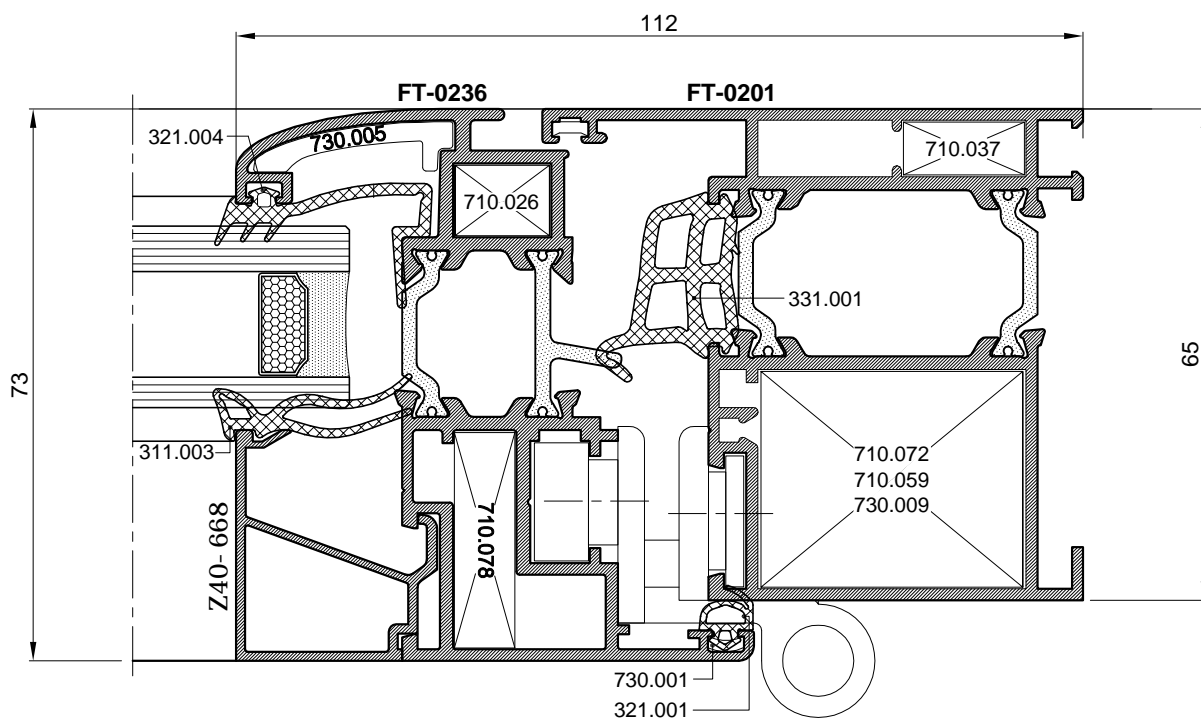
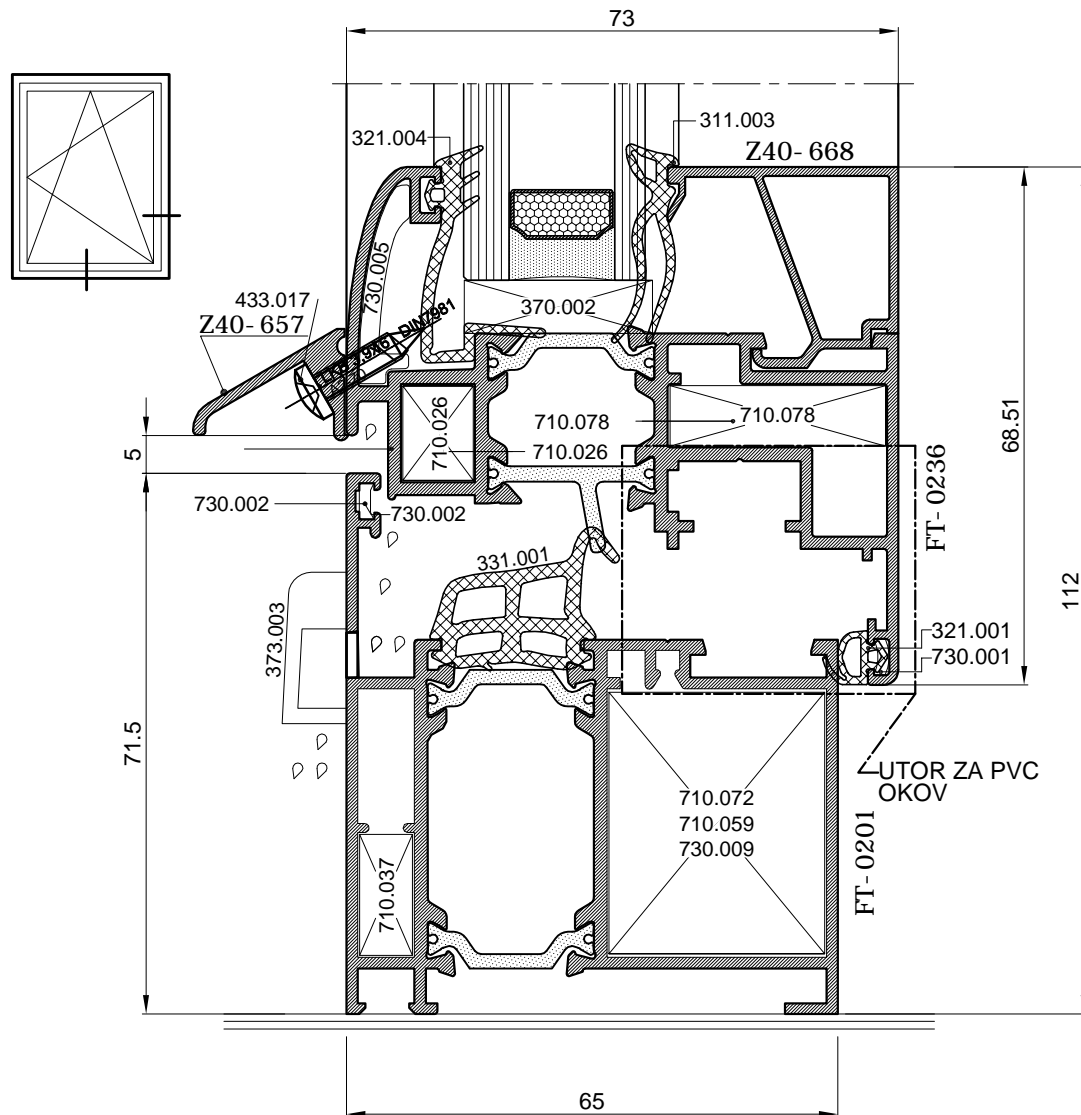




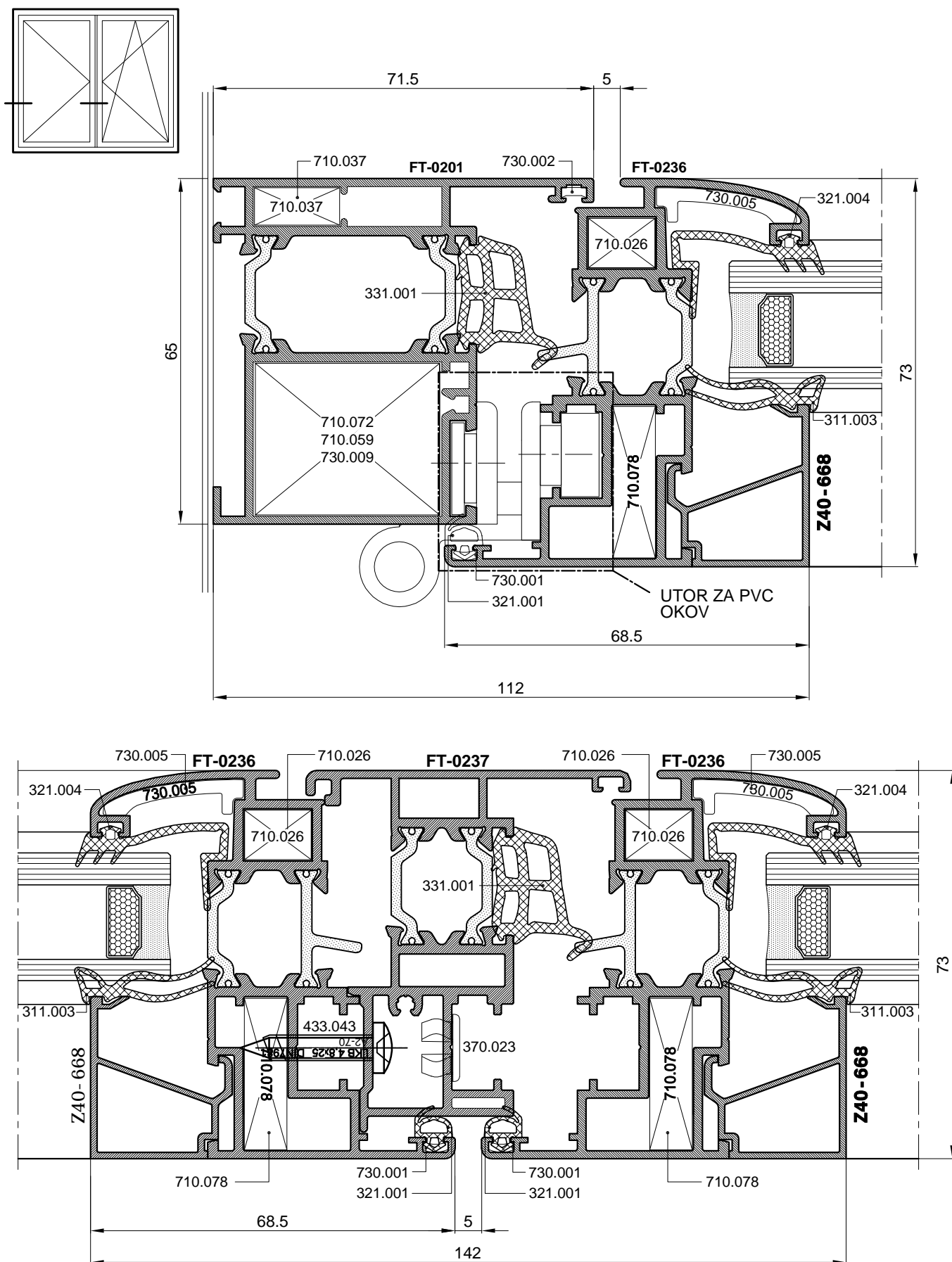


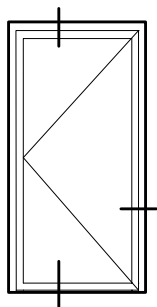


-PROFILI SA UTOROM ZA PVC OKOV 13 mm

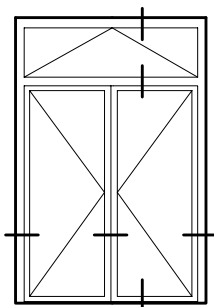


-PROFILI SA UTOROM ZA PVC OKOV 13 mm

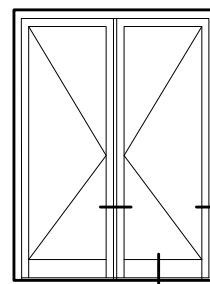




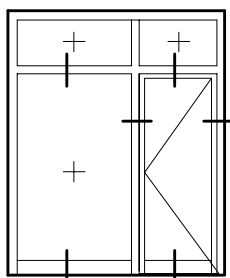
str. 905-015



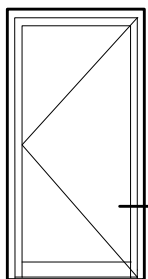
str. 905-017



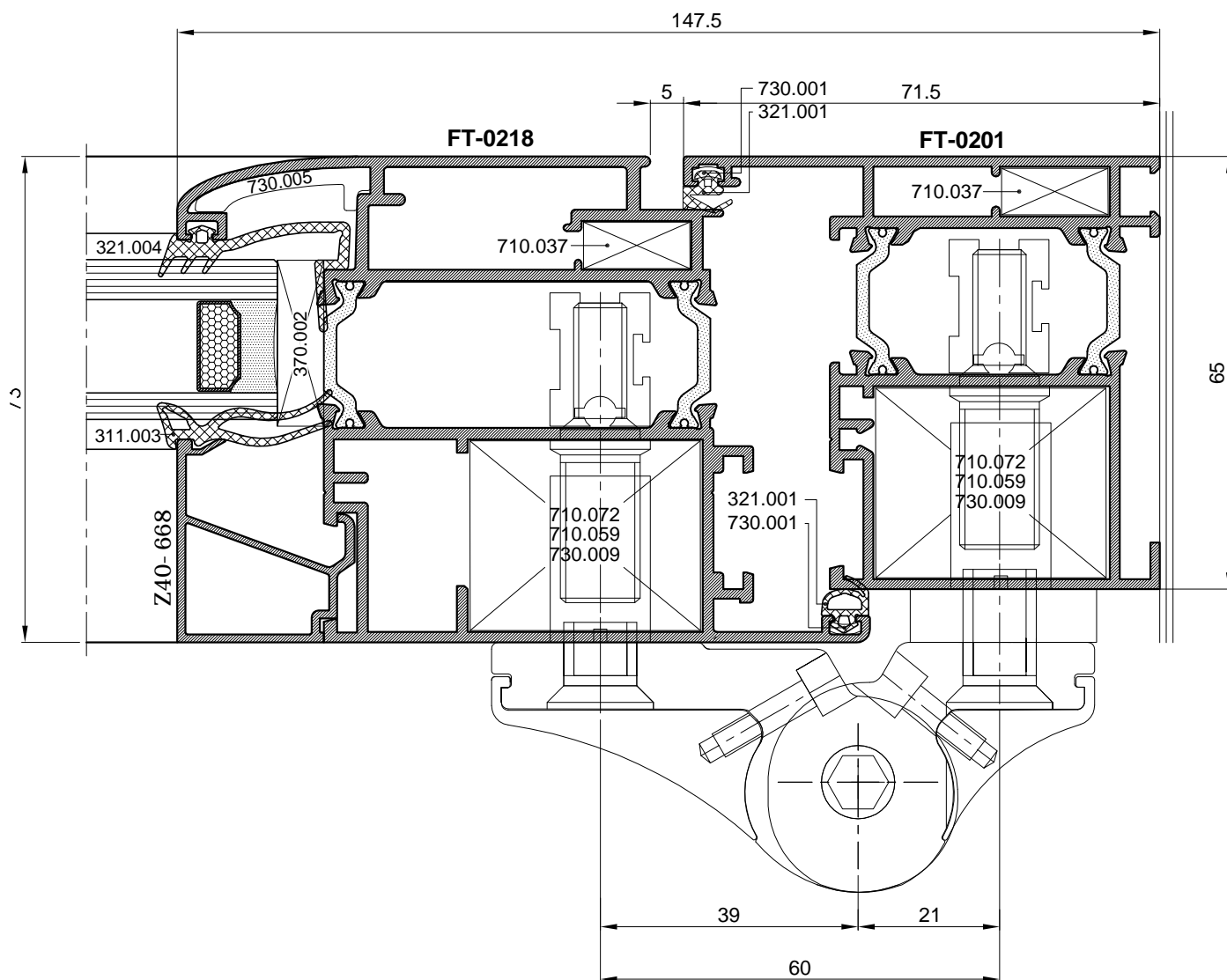
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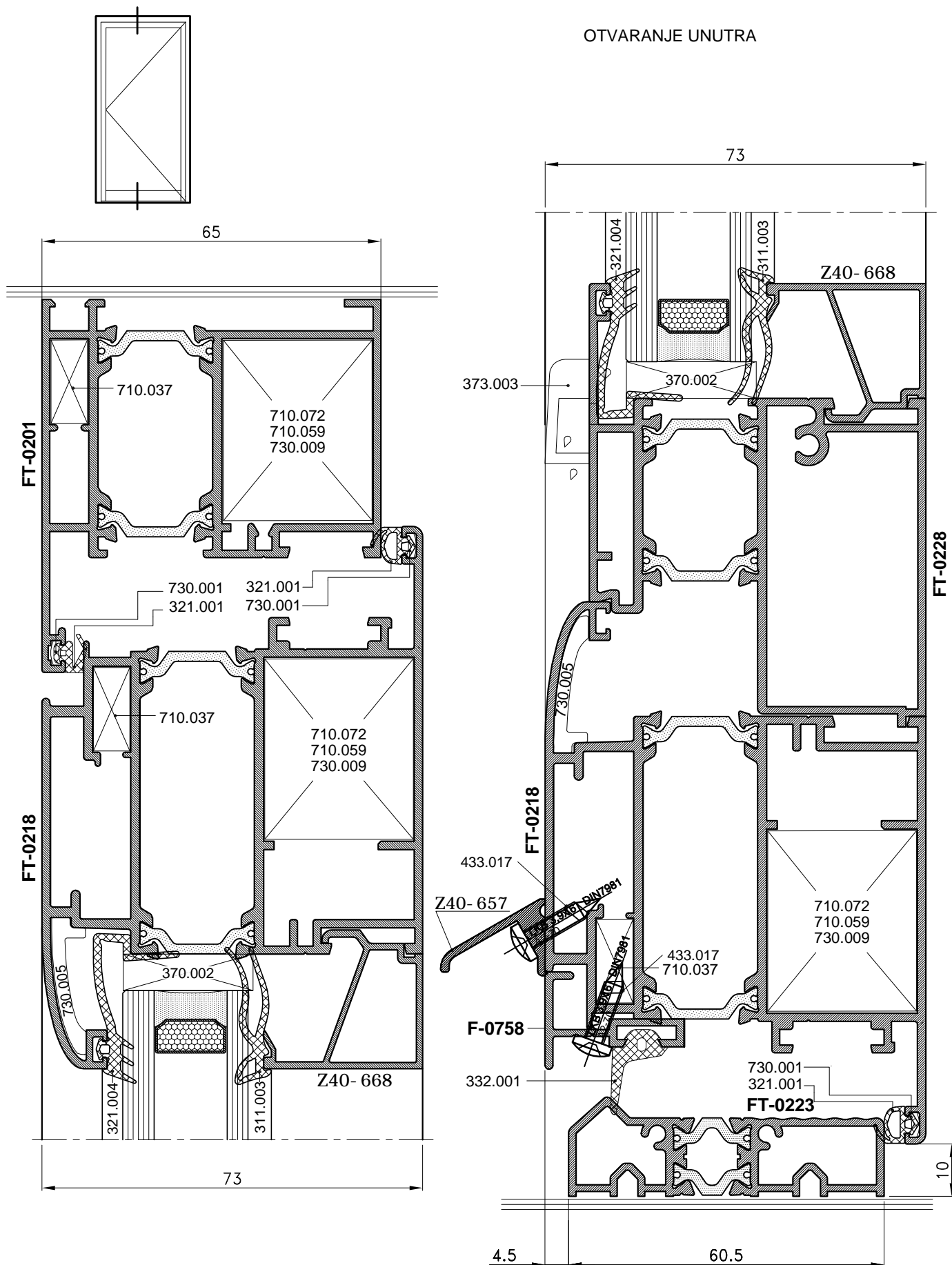
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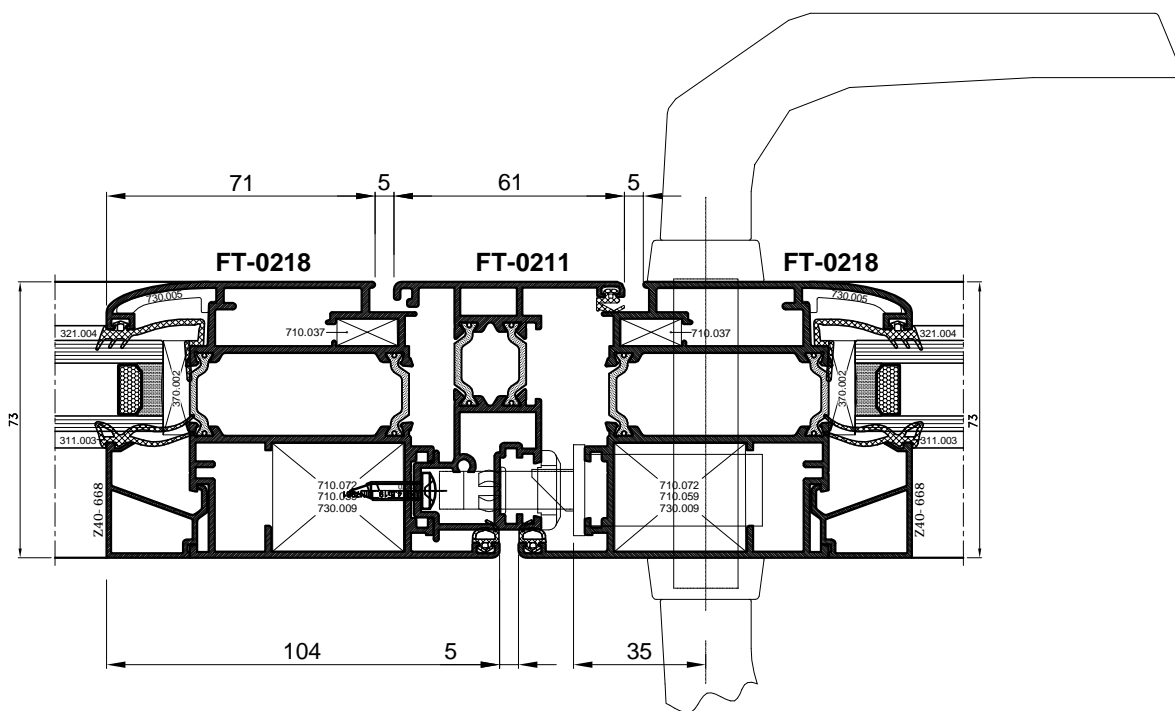
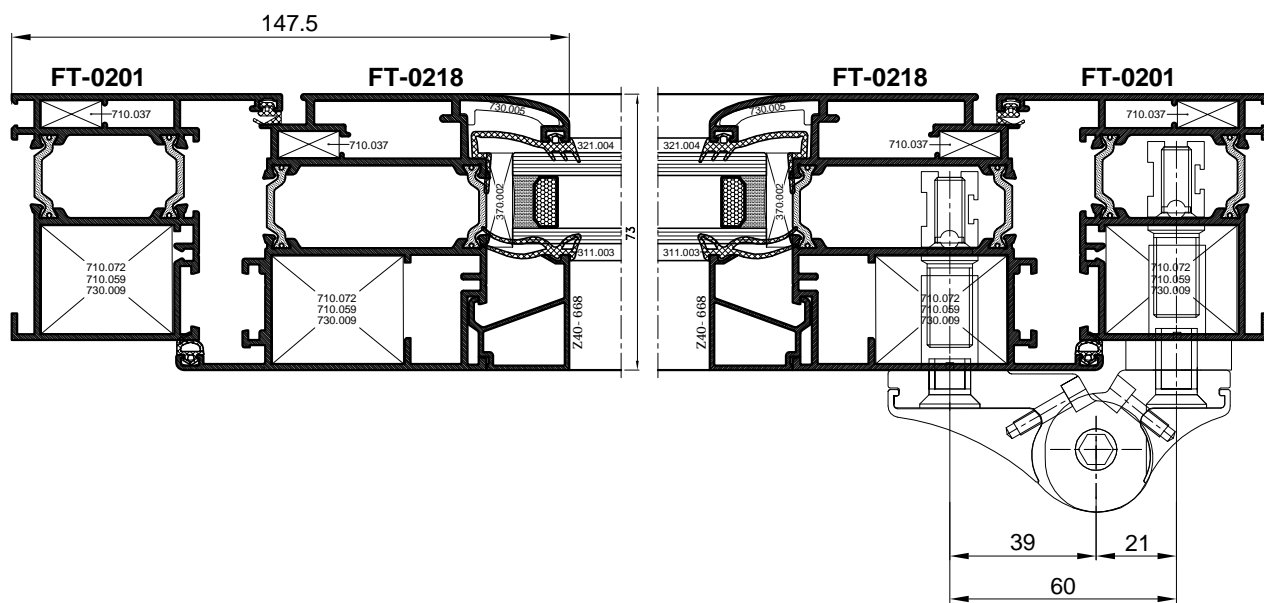
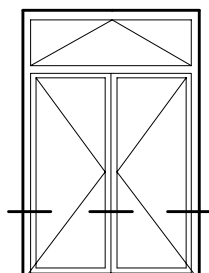


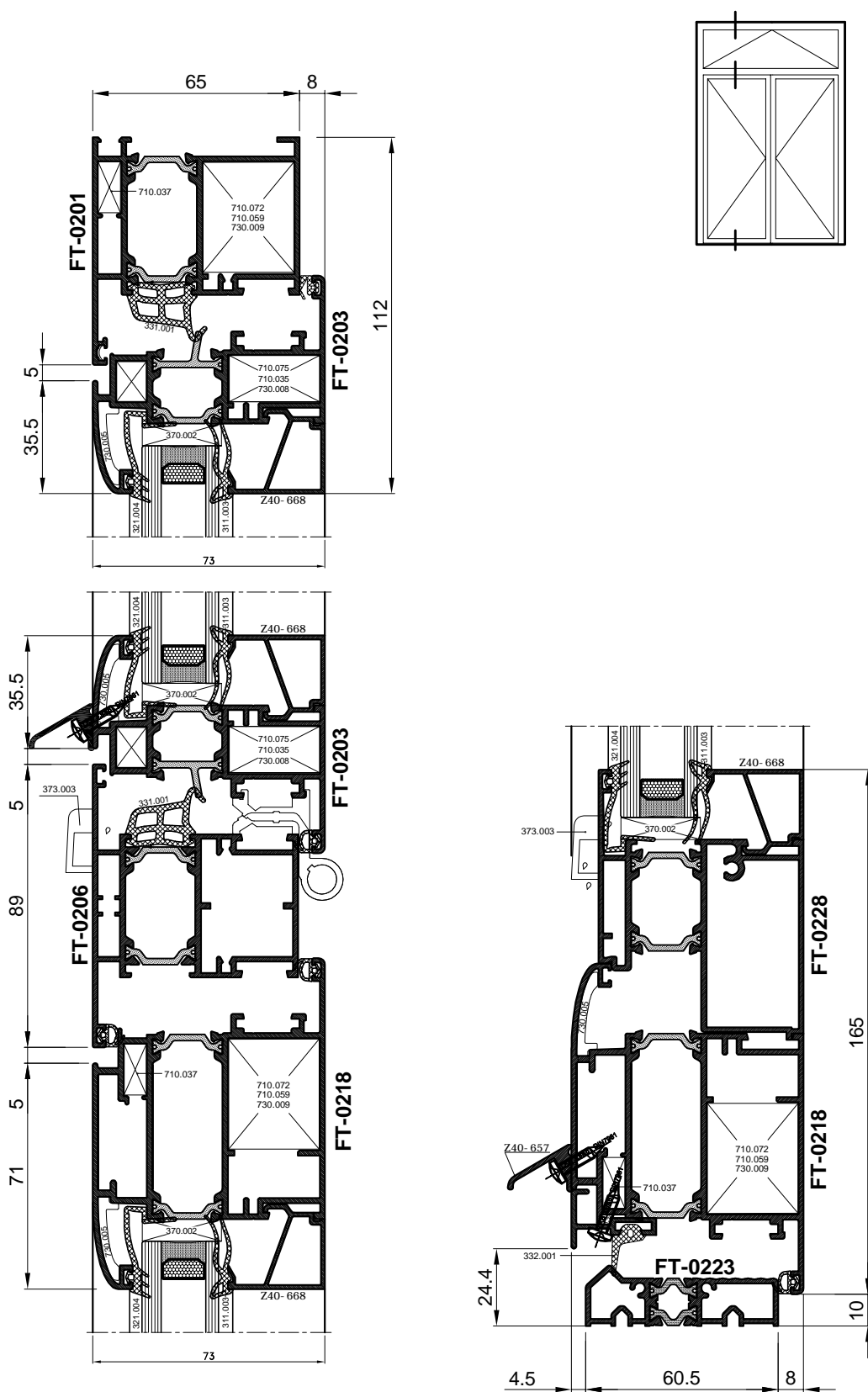
OTVARANJE UNUTRA

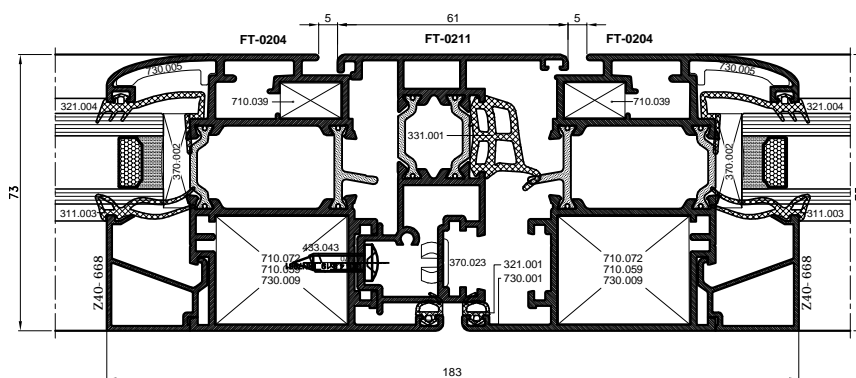
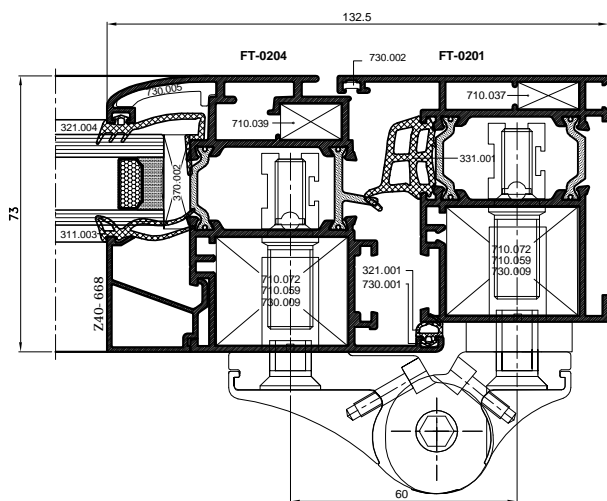
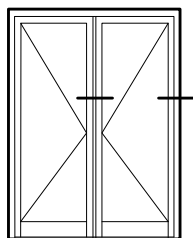


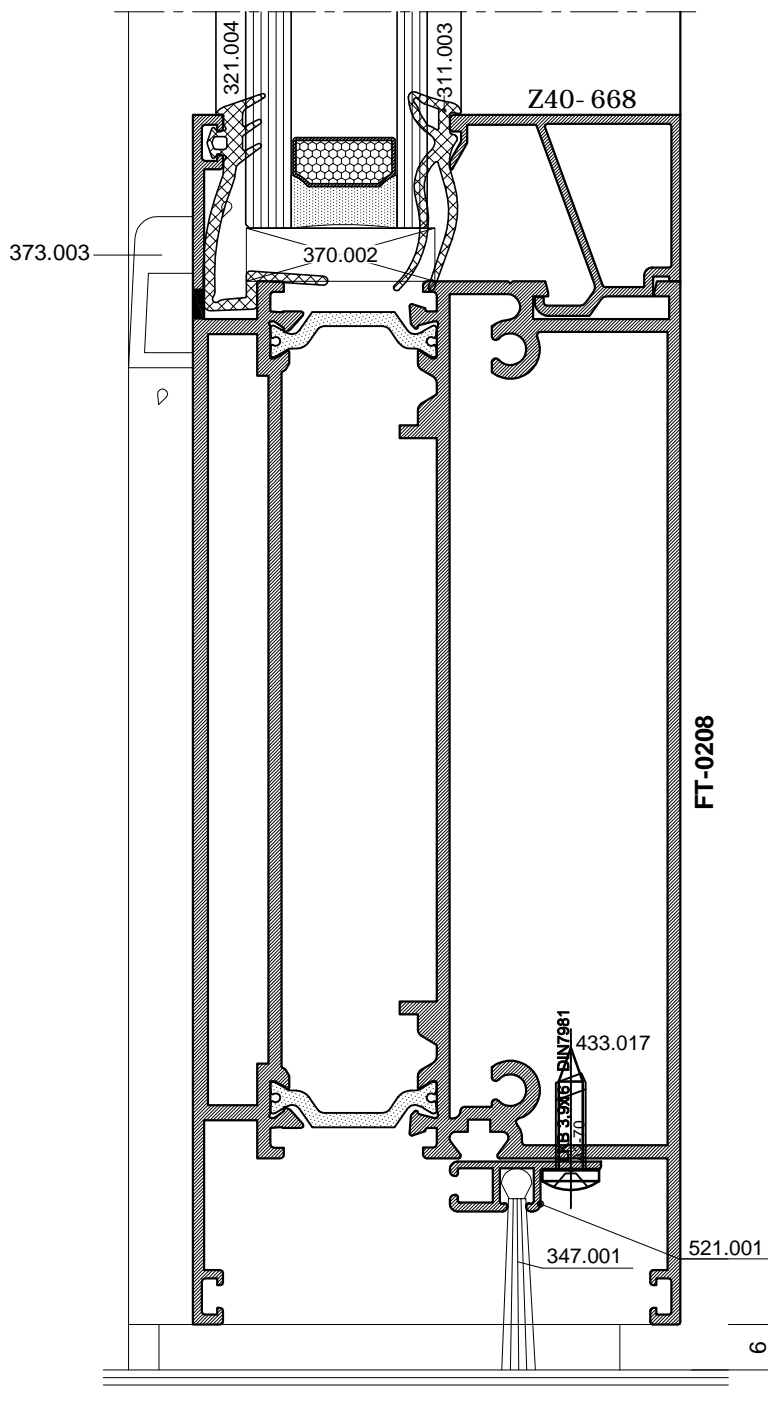
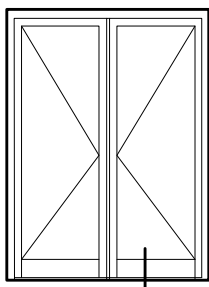


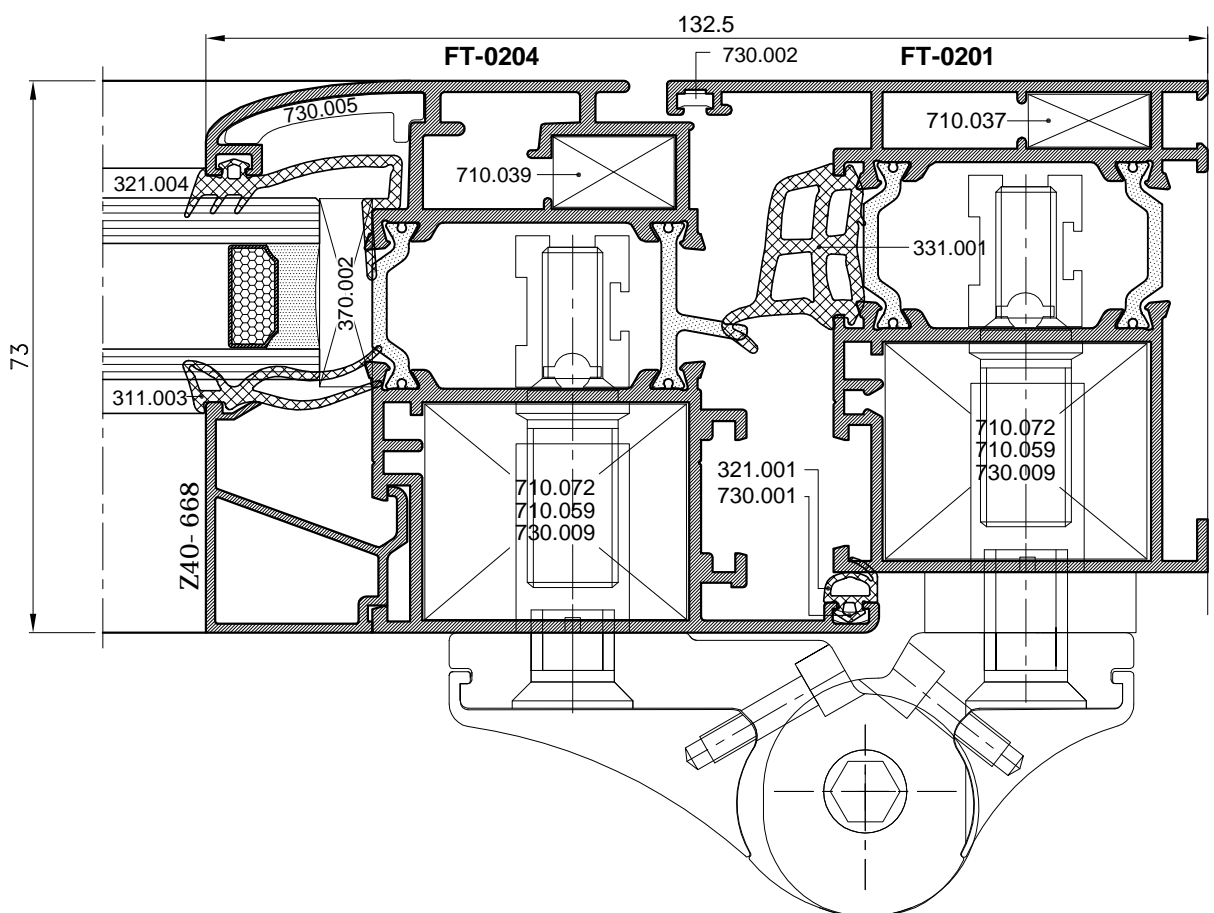
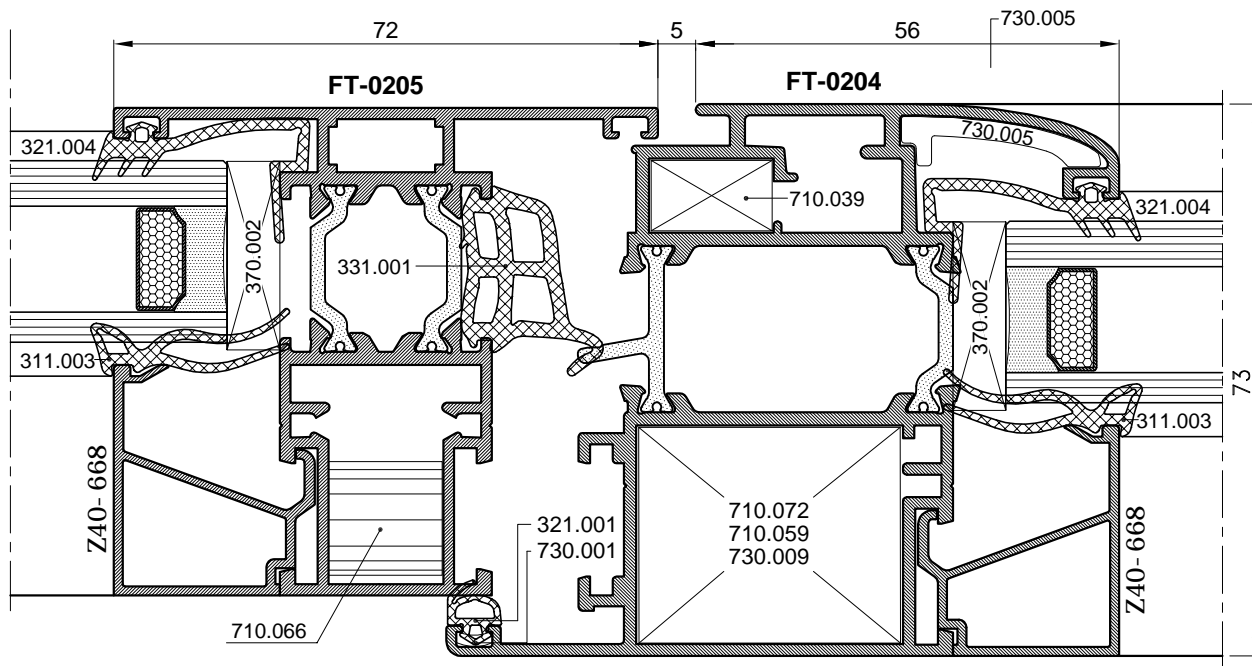
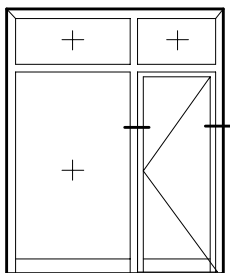


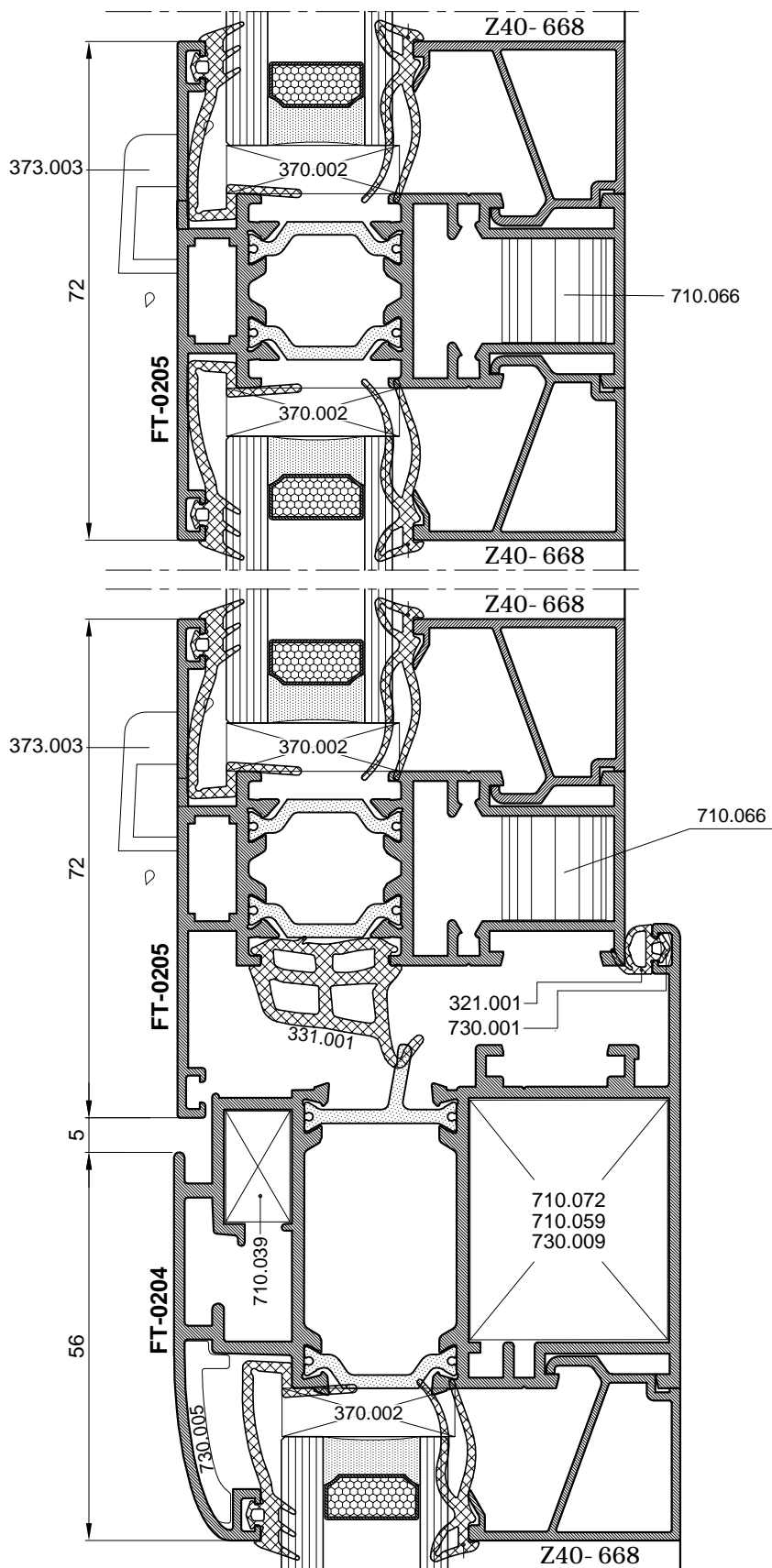
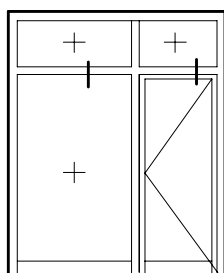




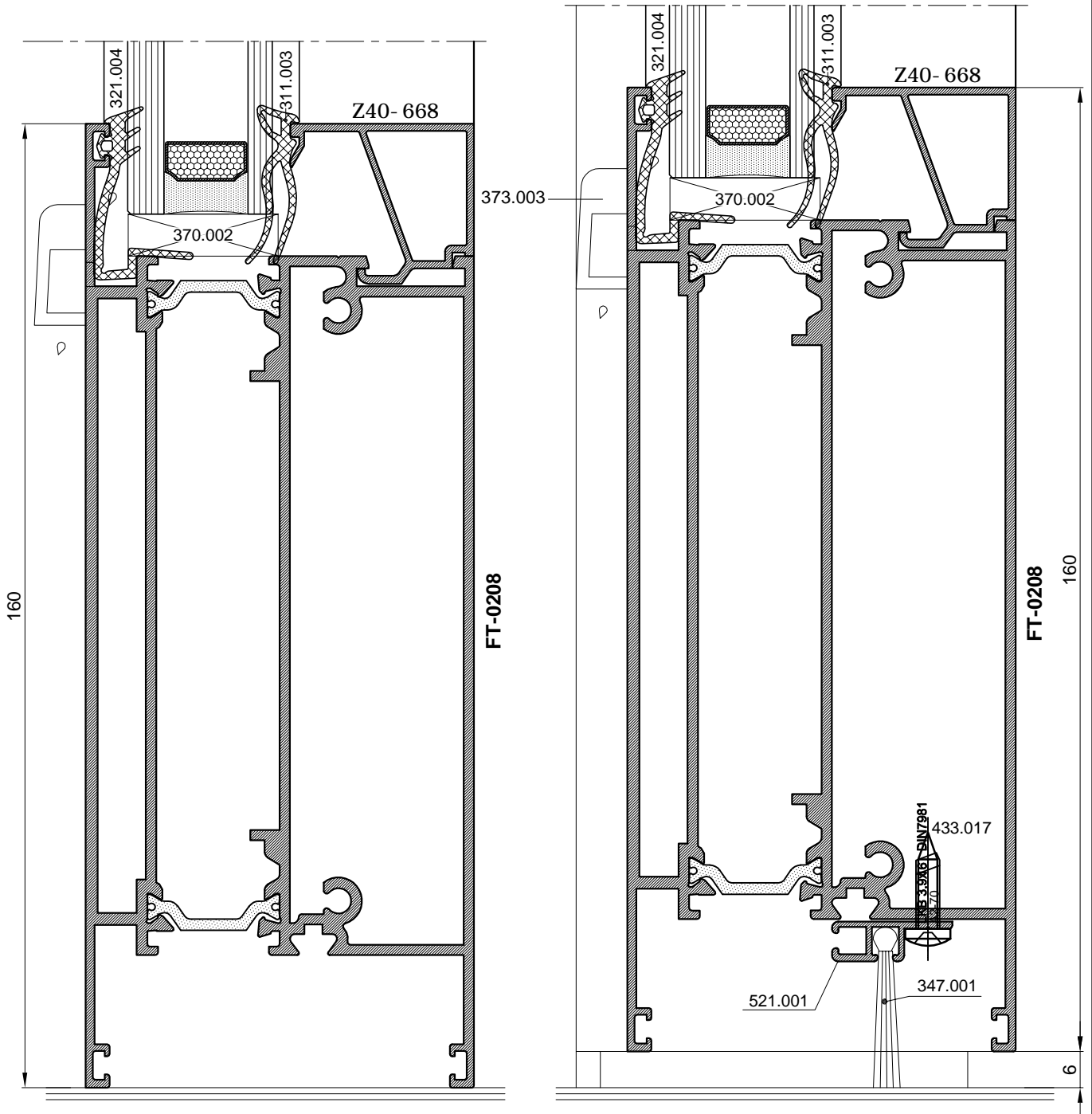
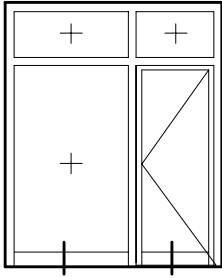




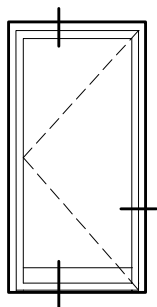




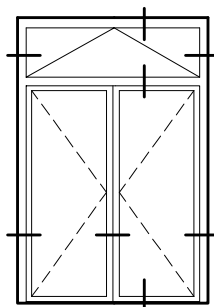




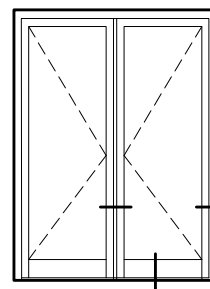




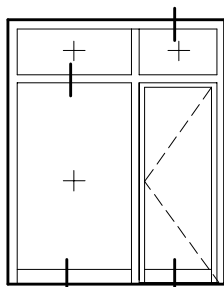
str. 905-025



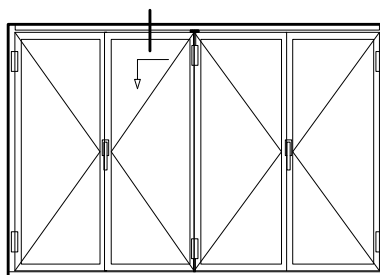
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str. 905-030

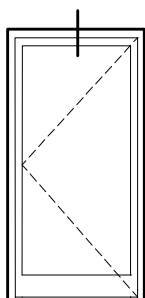


str. 905-032

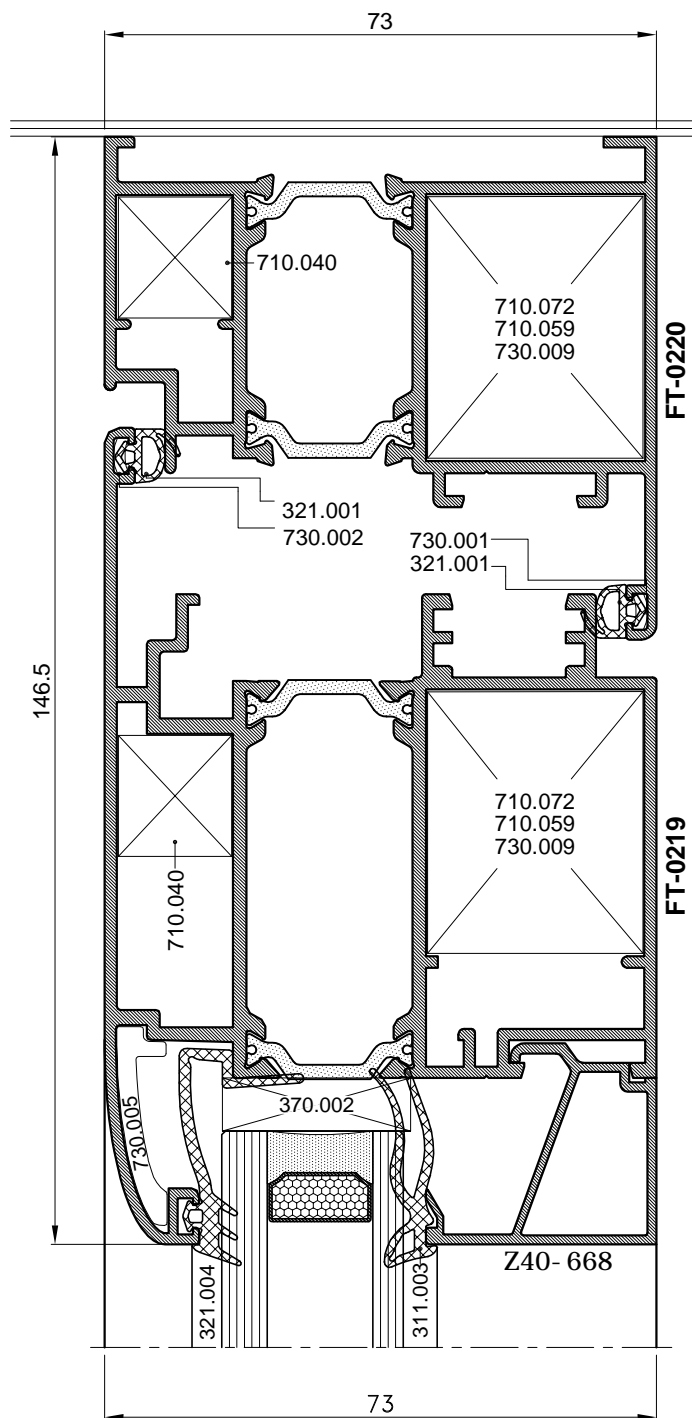


str. 905-034

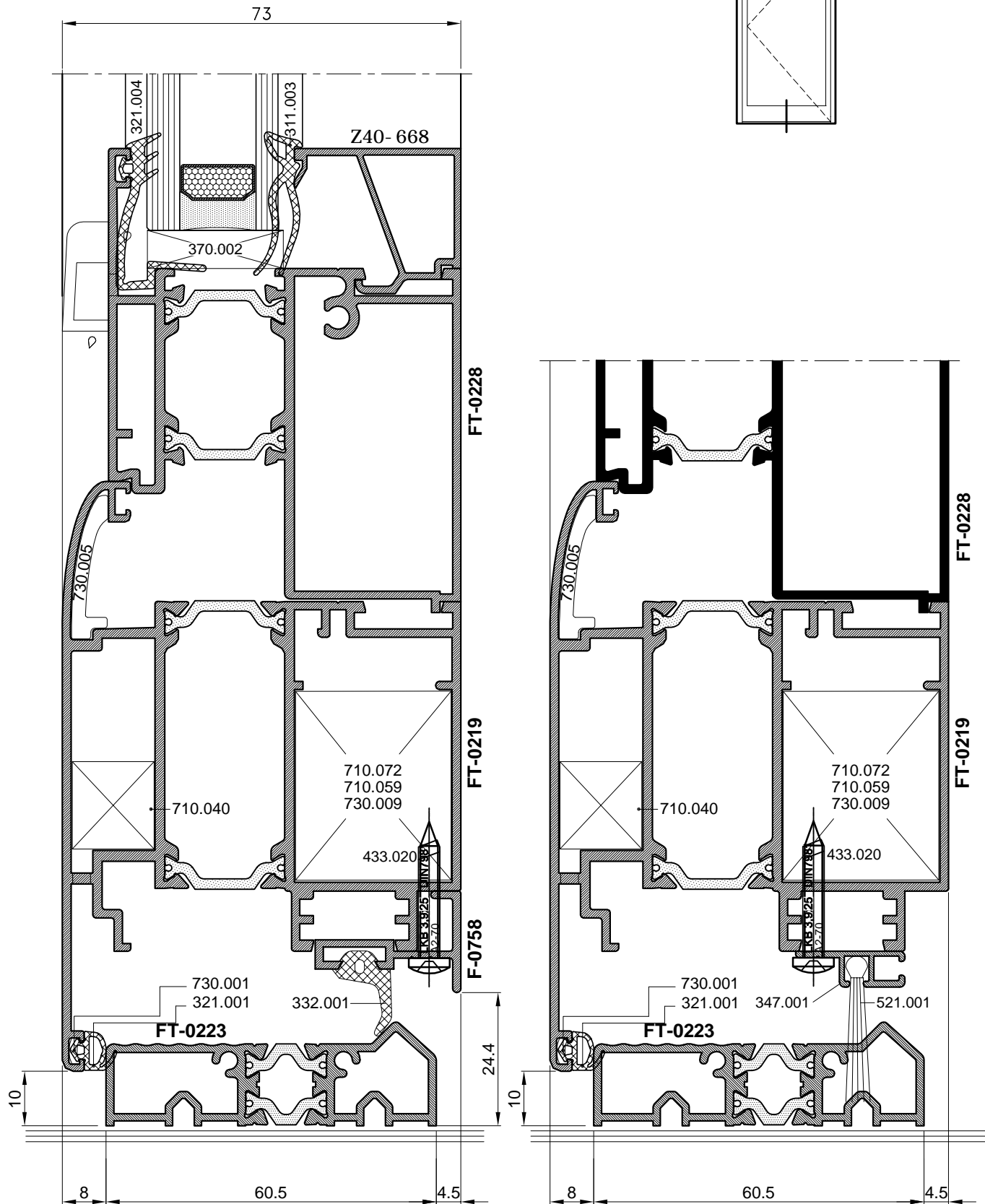
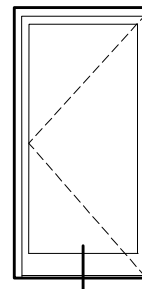


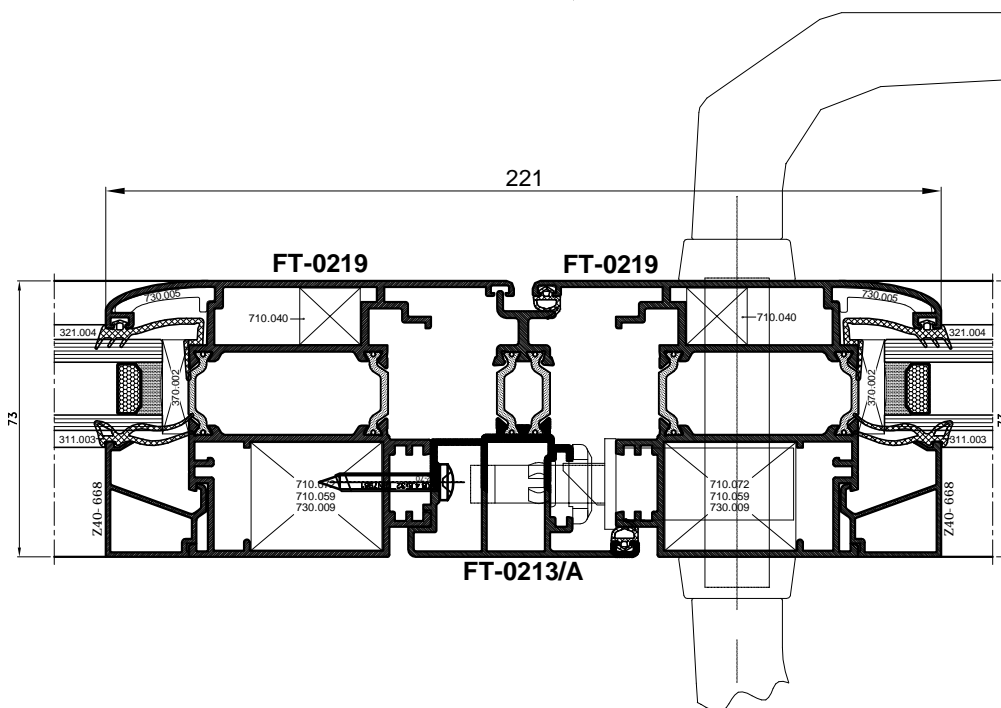
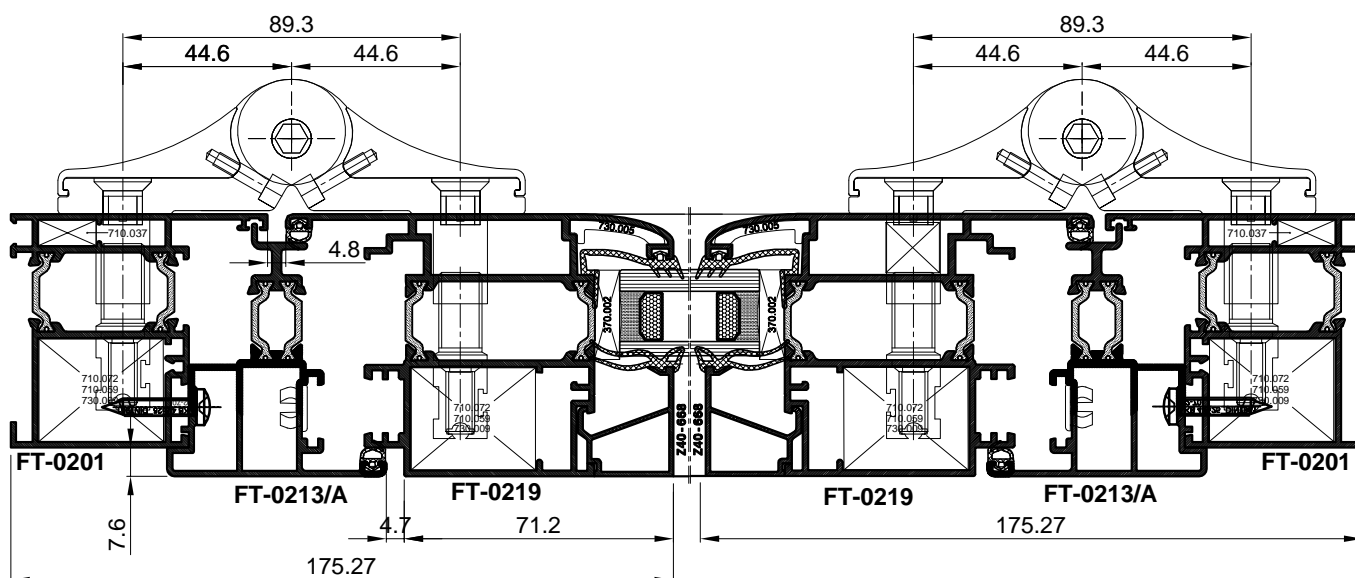
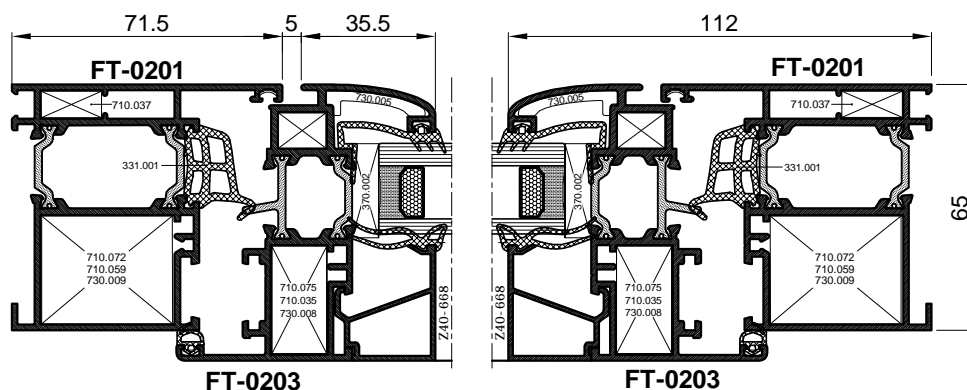
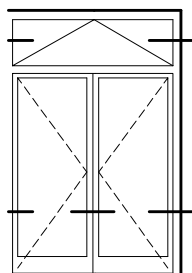


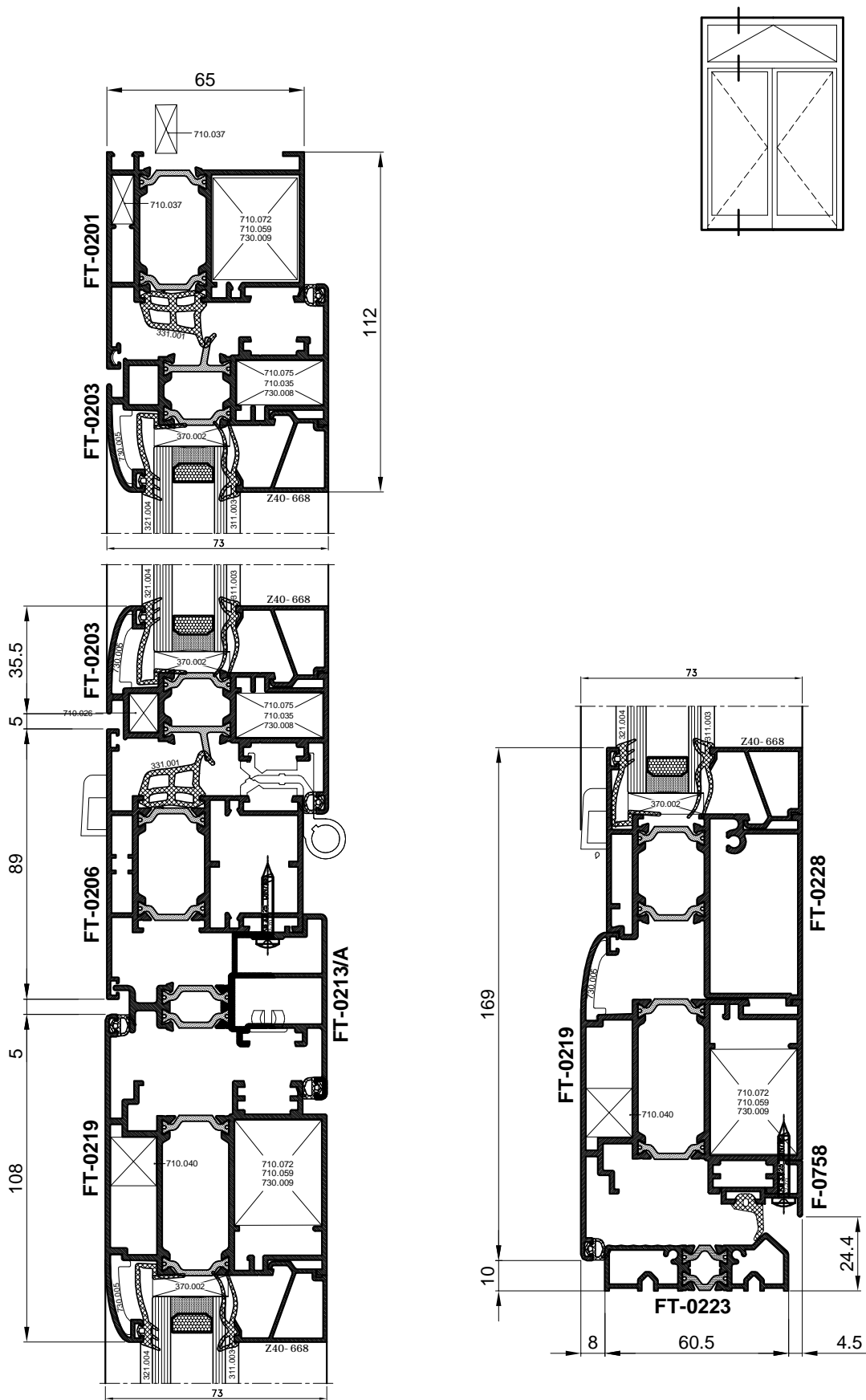
OTVARANJE VANI

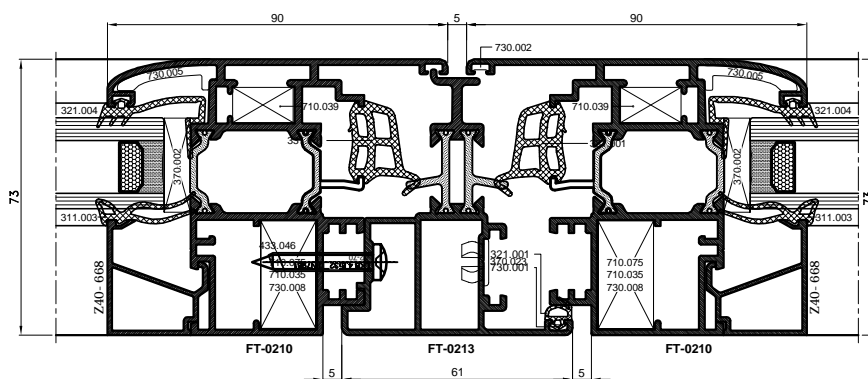
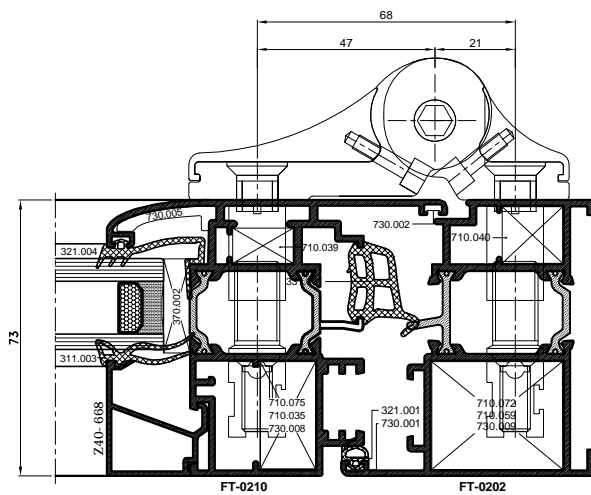
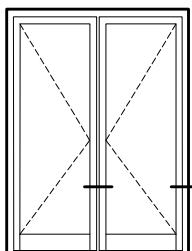


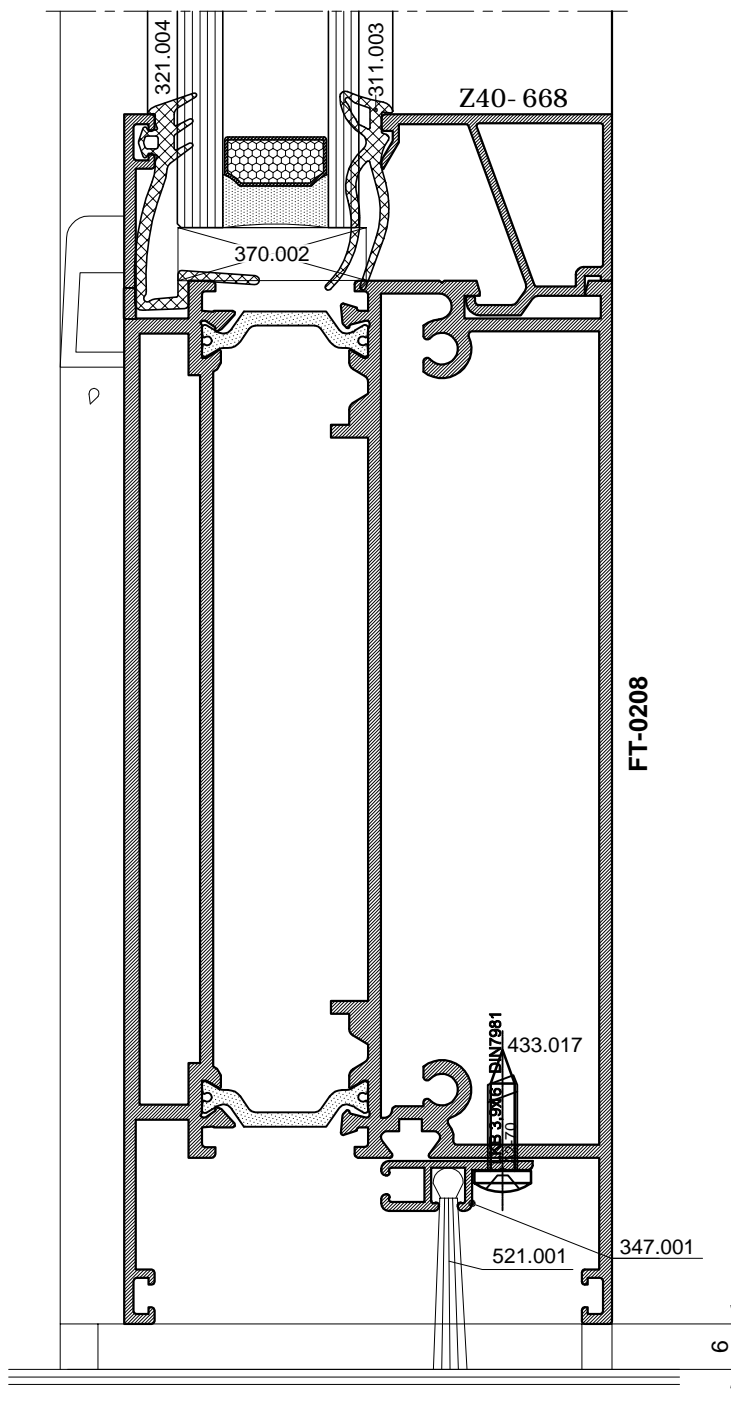
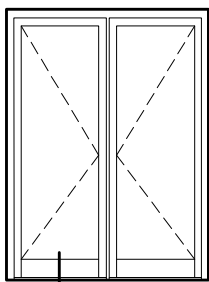
OTVARANJE VANI



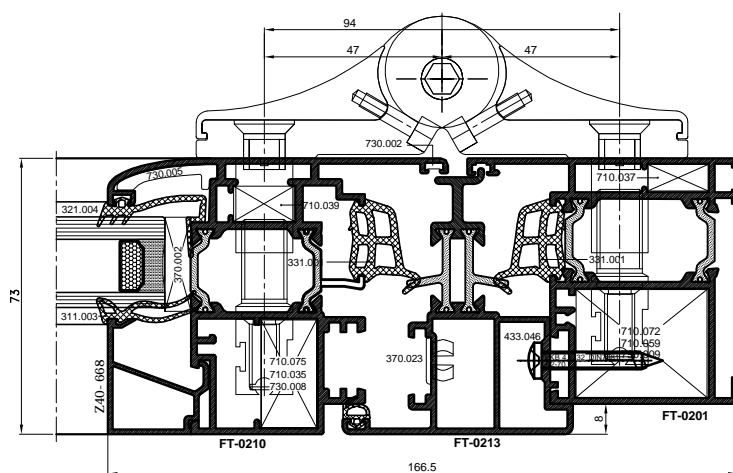
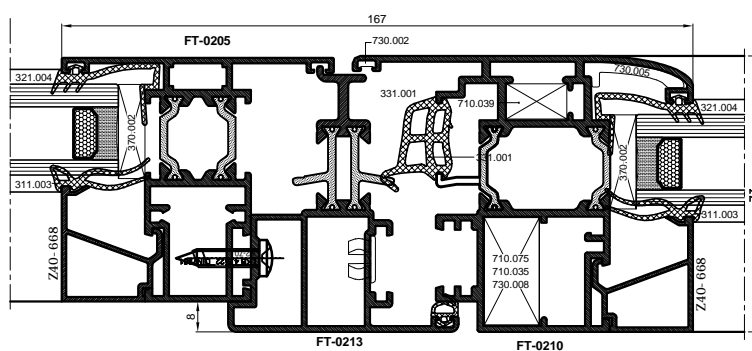
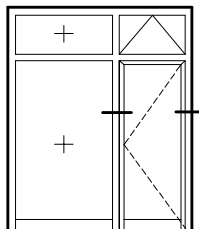


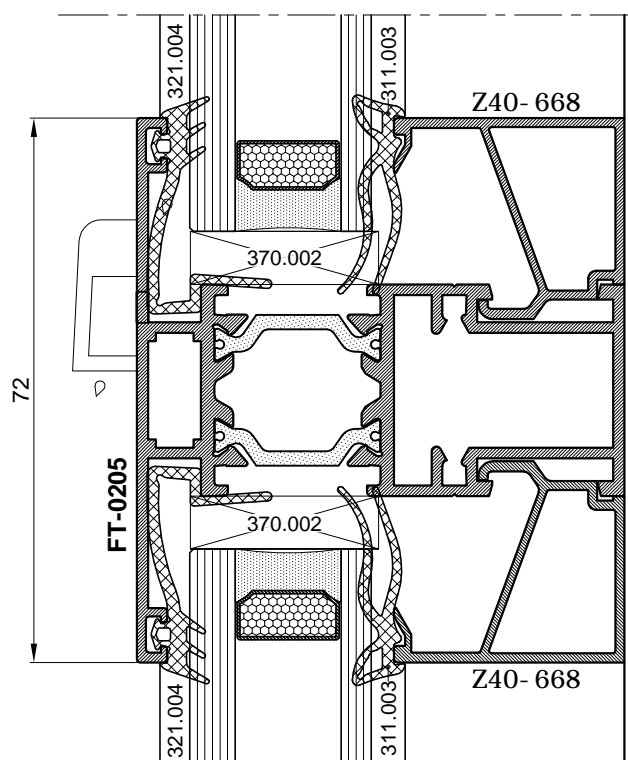
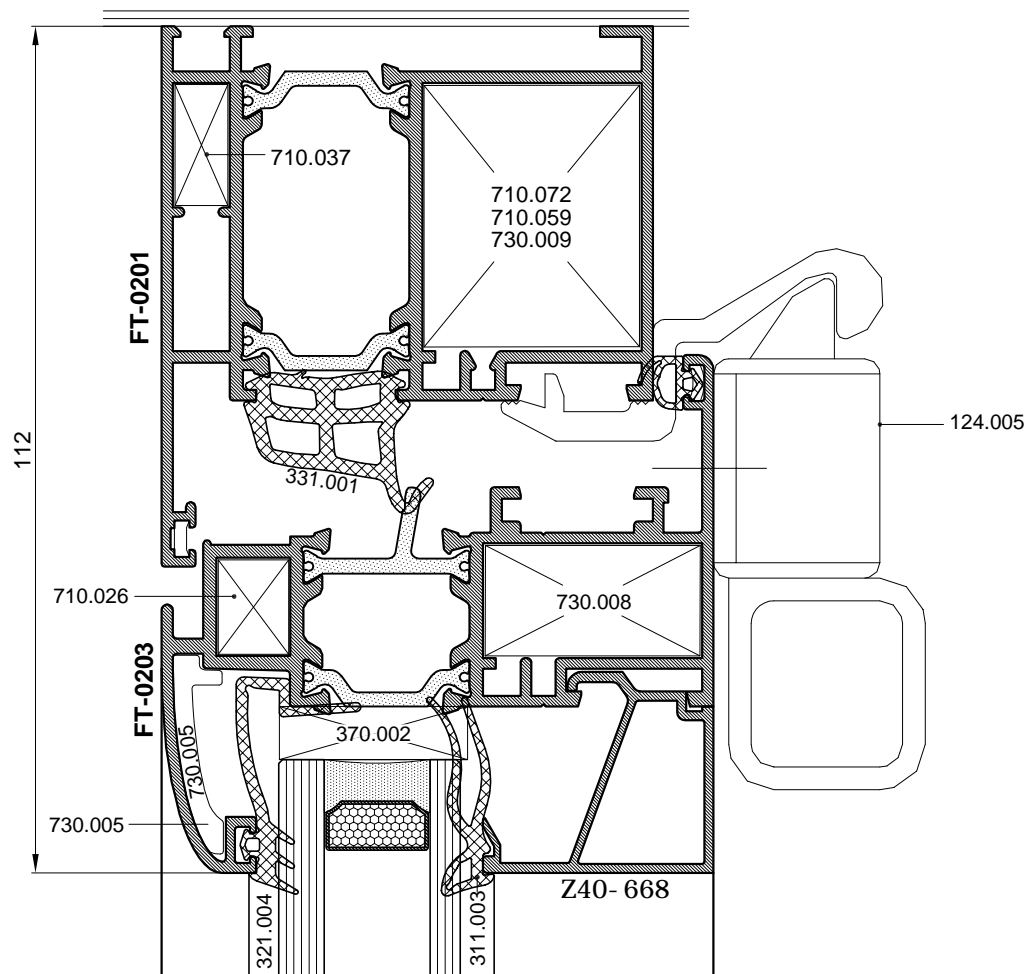
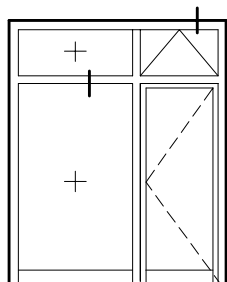


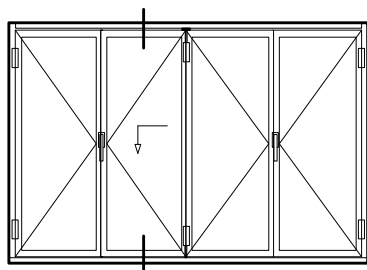








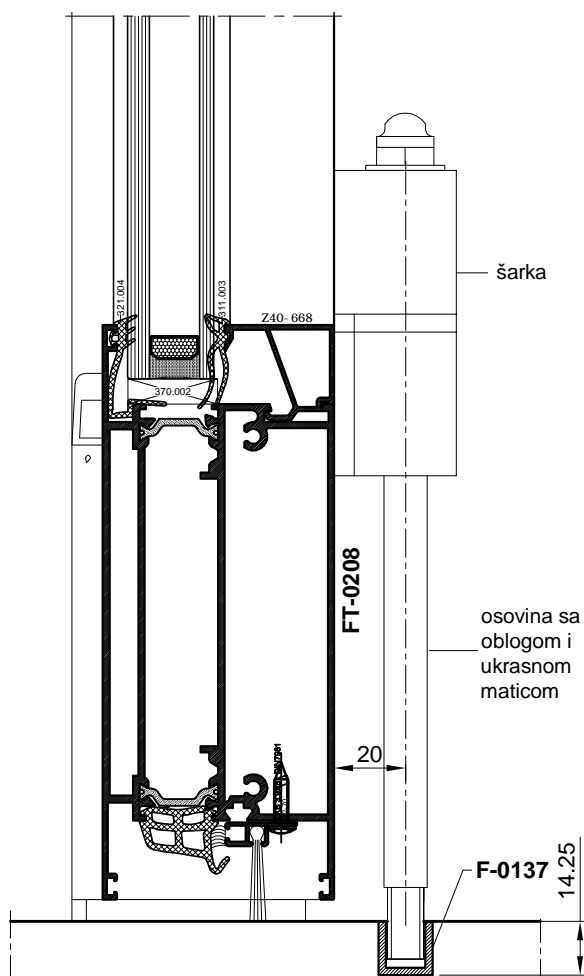
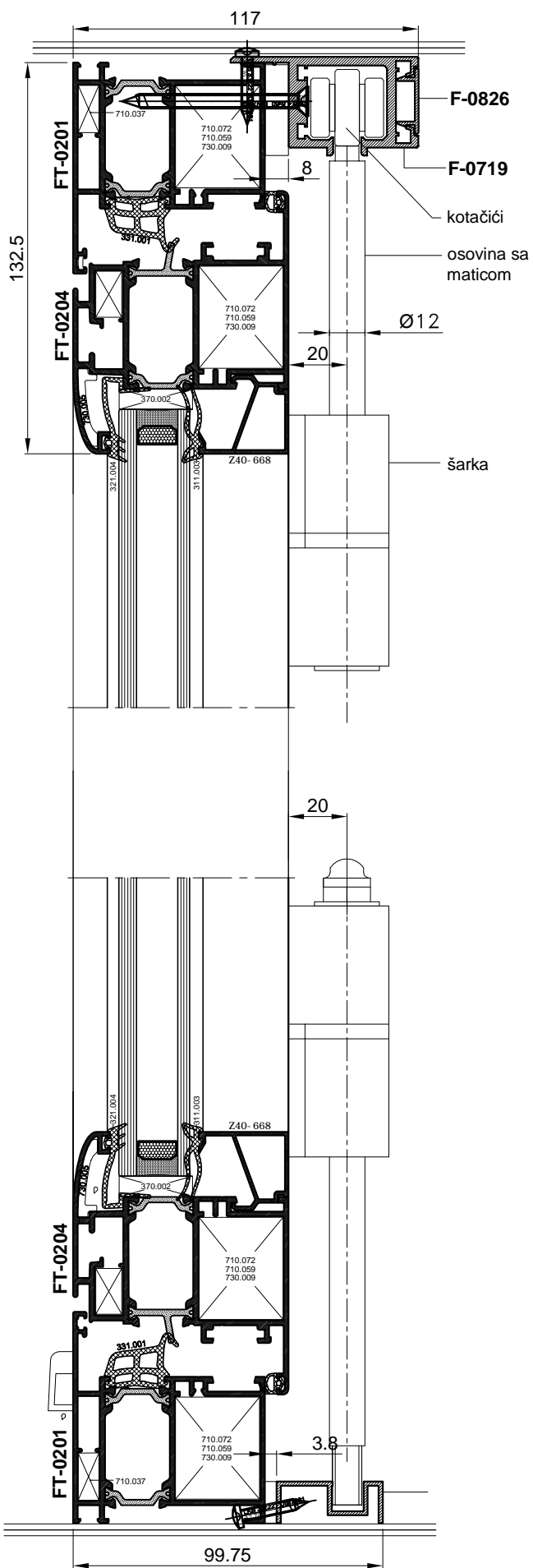


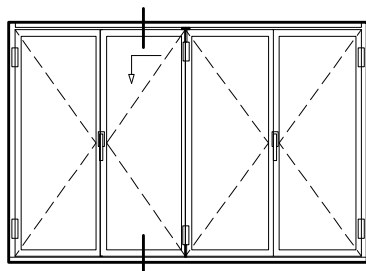

**SUSTAV HARMO**
**NOŠENJE KRILA PREKO KOTAČIČA I ŠARKI**

- Elementi za nošenje: -kotačići  
 -šarka  
 -osovina sa maticom

**VOĐENJE KRILA PREKO ŠARKI I VODILICE**

- Elementi za vođenje: -šar a  
 -osovina sa oblogom i ukrasnom maticom

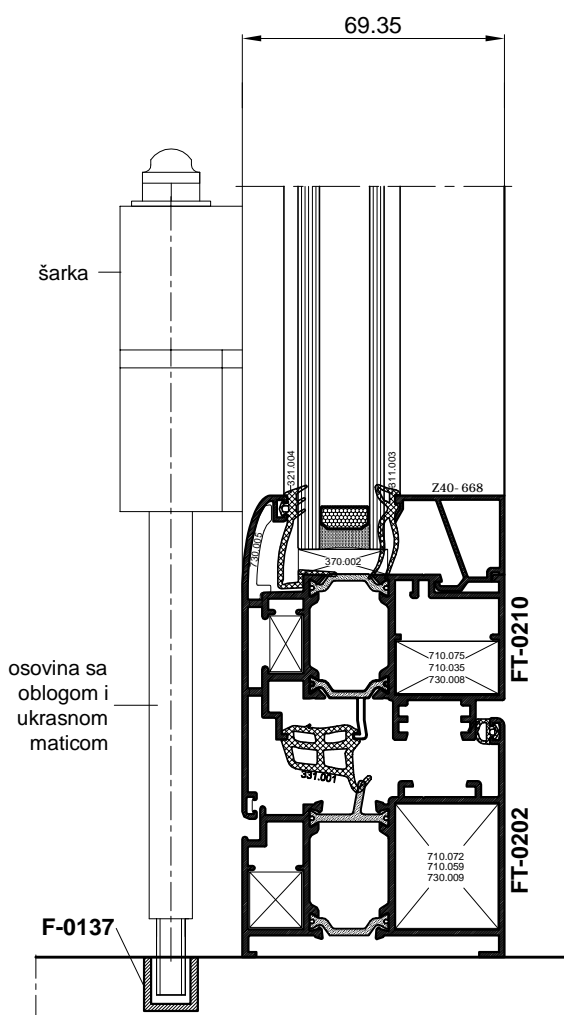
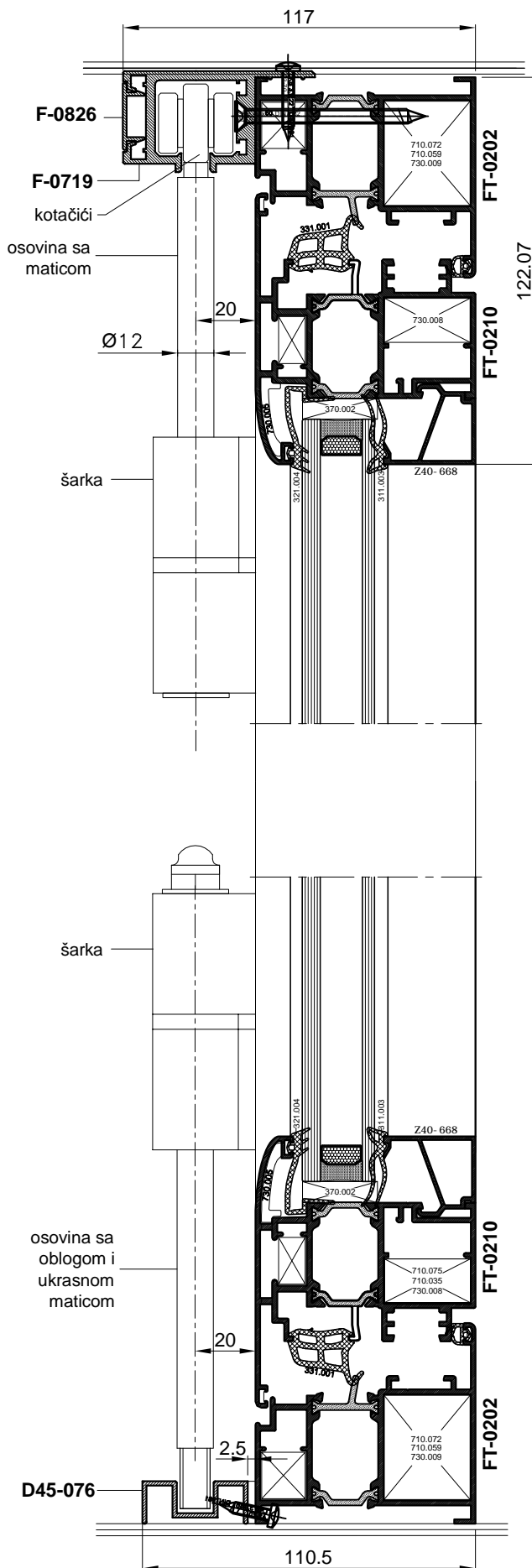


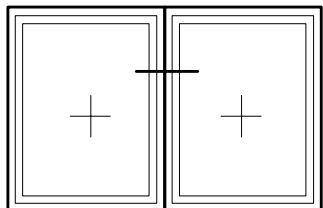

**SUSTAV HARMO**
**NOŠENJE KRILA PREKO KOTAČIČA I ŠARKI**

- Elementi za nošenje: -kotačići  
 -šarka  
 -osovina sa maticom

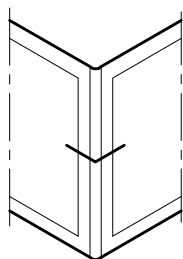
**VOĐENJE KRILA PREKO ŠARKI I VODILICE**

- Elementi za vođenje: -šar a  
 -osovina sa oblogom  
 ukrasnom maticom

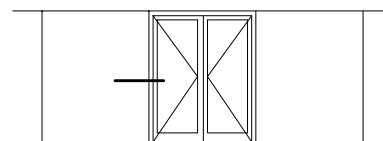




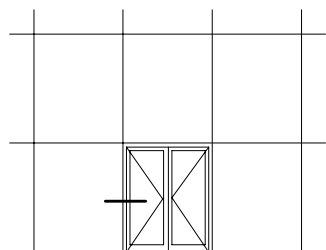
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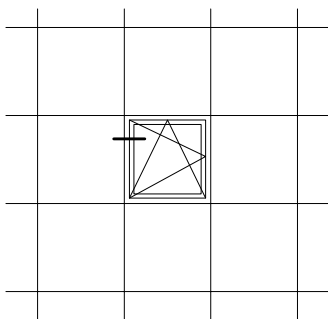
str. 905.038  
str. 905.039  
str. 905.040



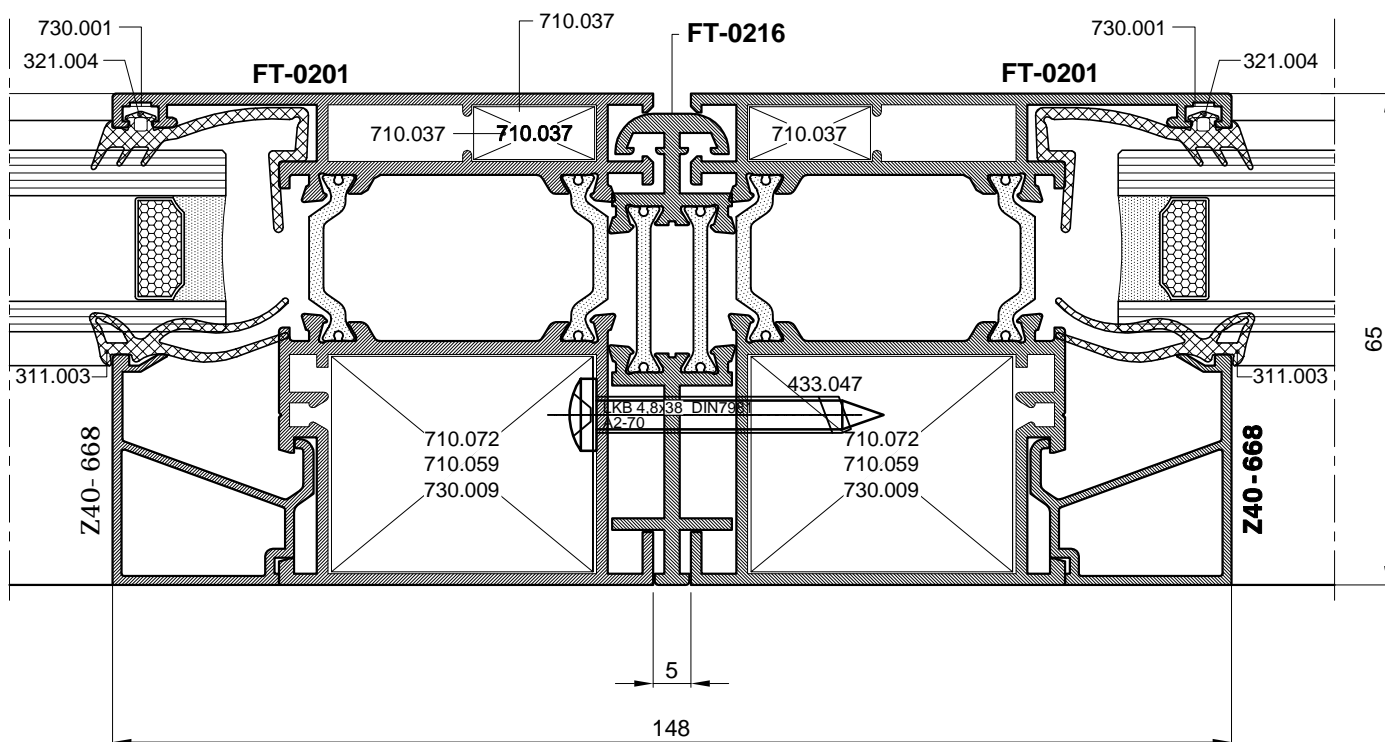
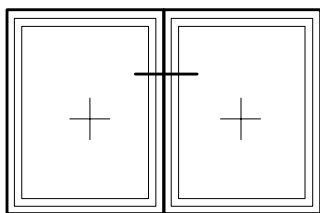
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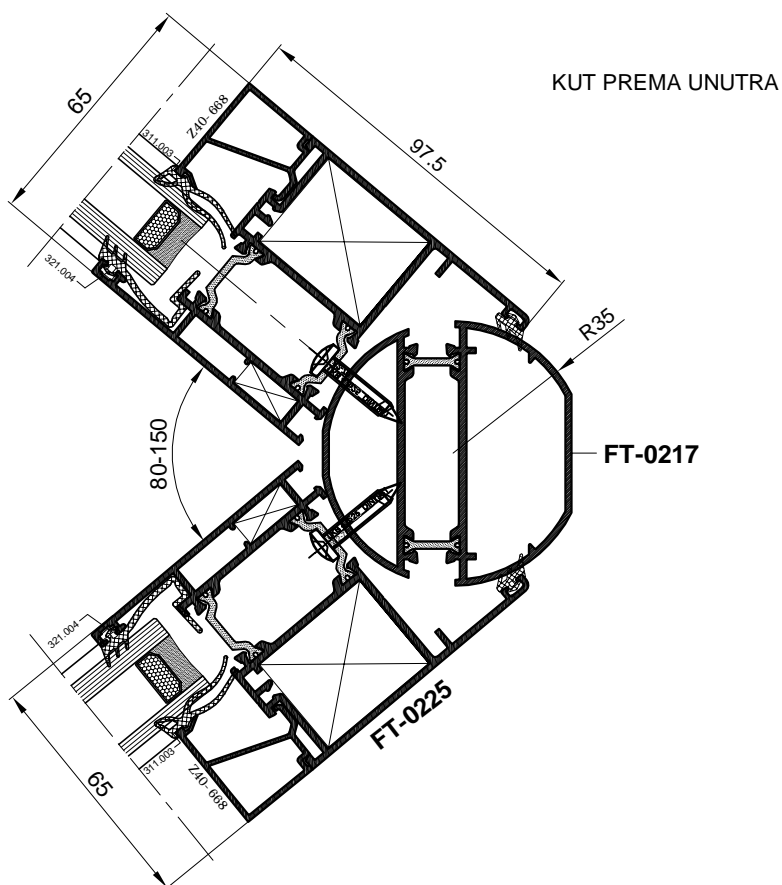
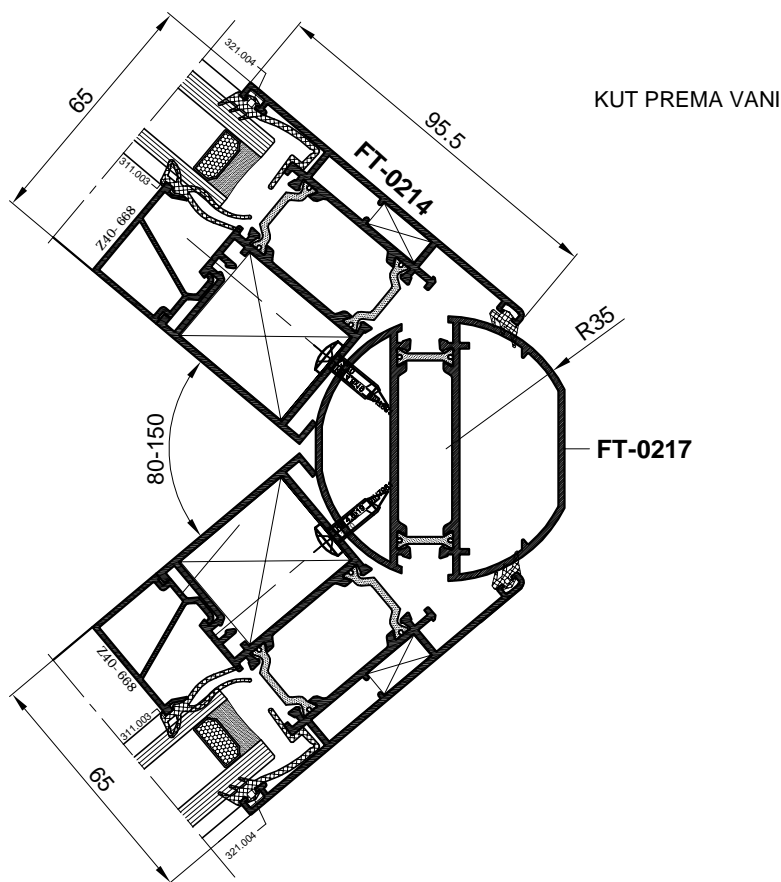
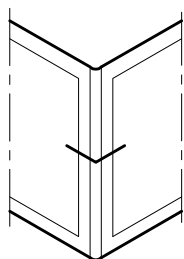


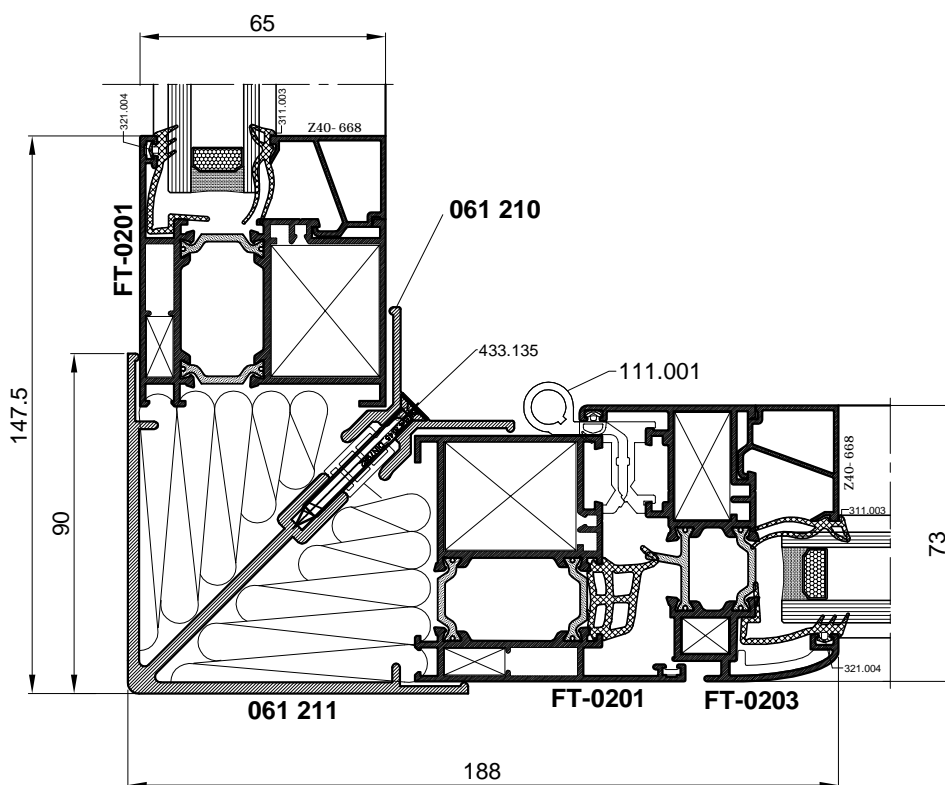
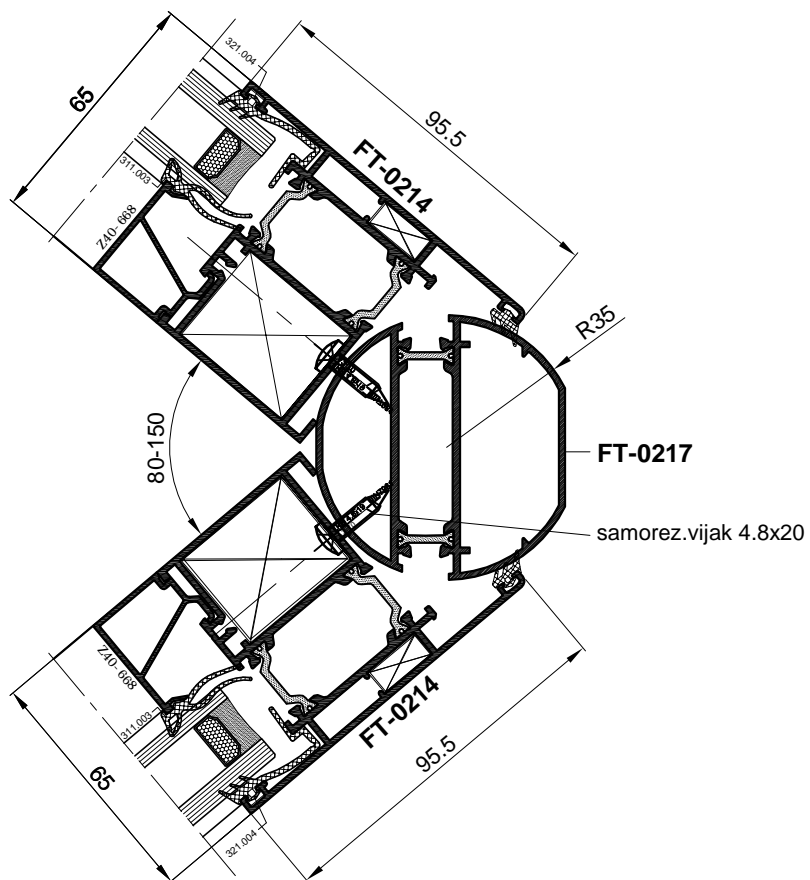
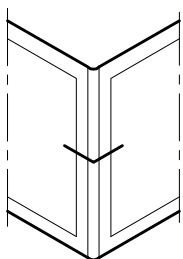
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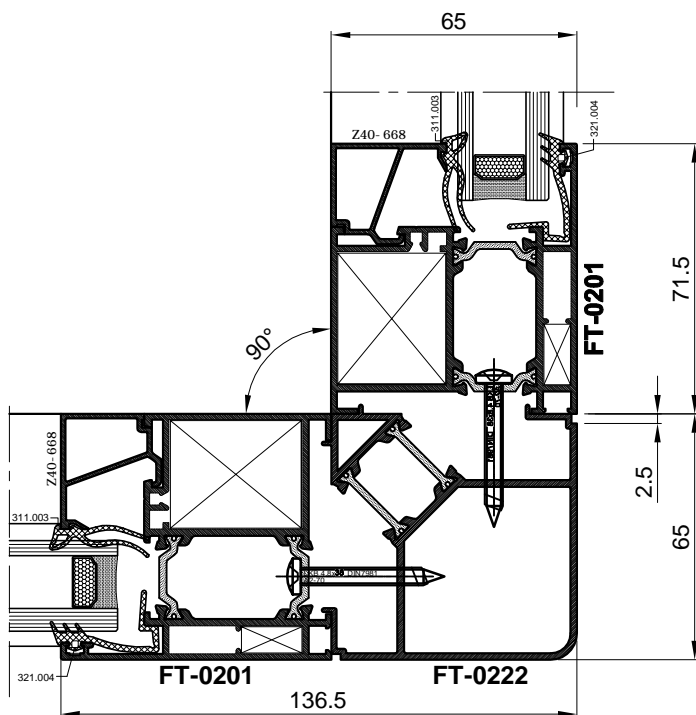
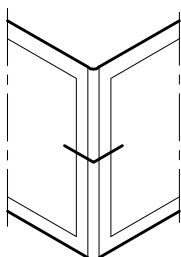
str. 905.043



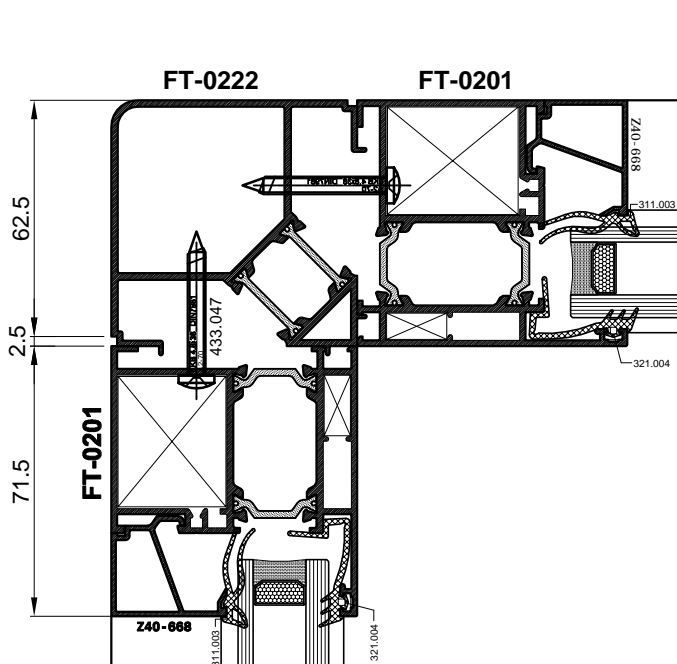




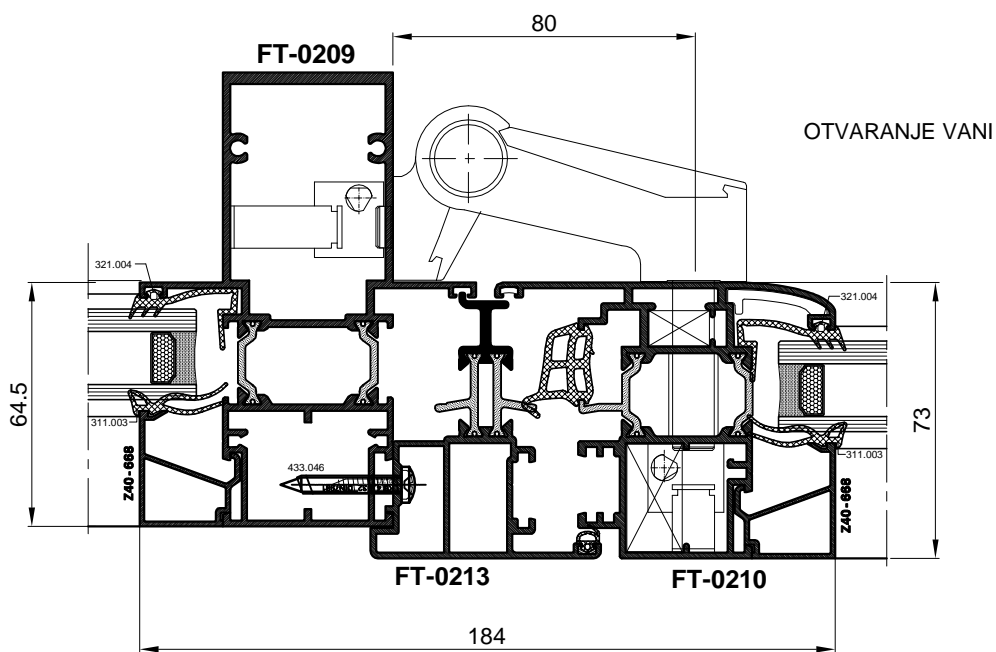
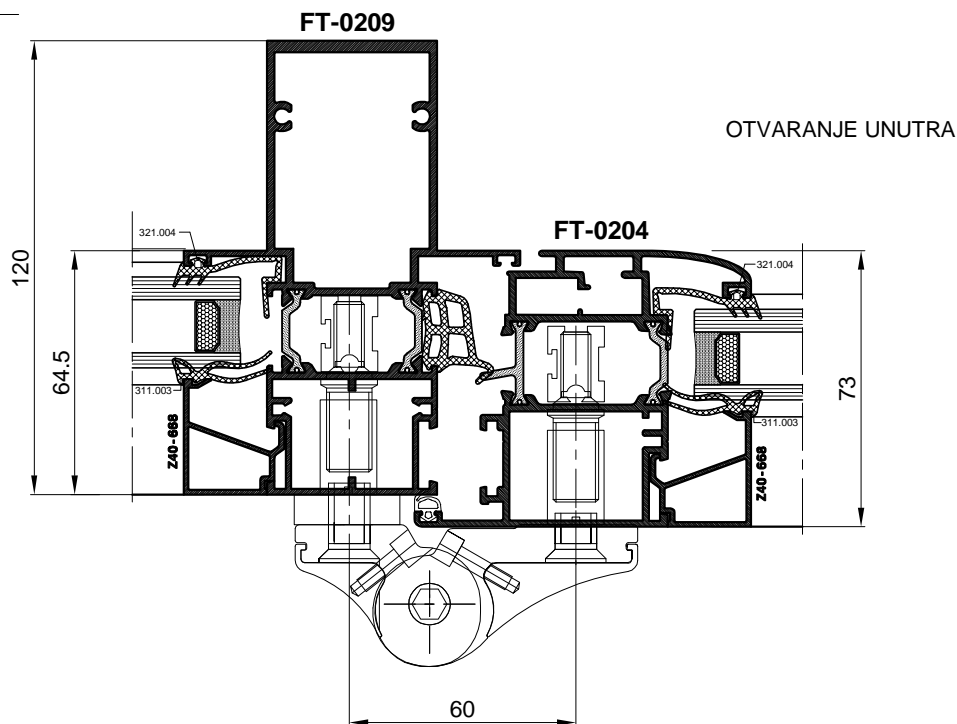
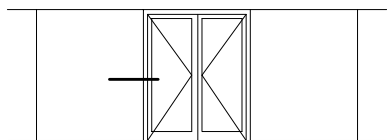


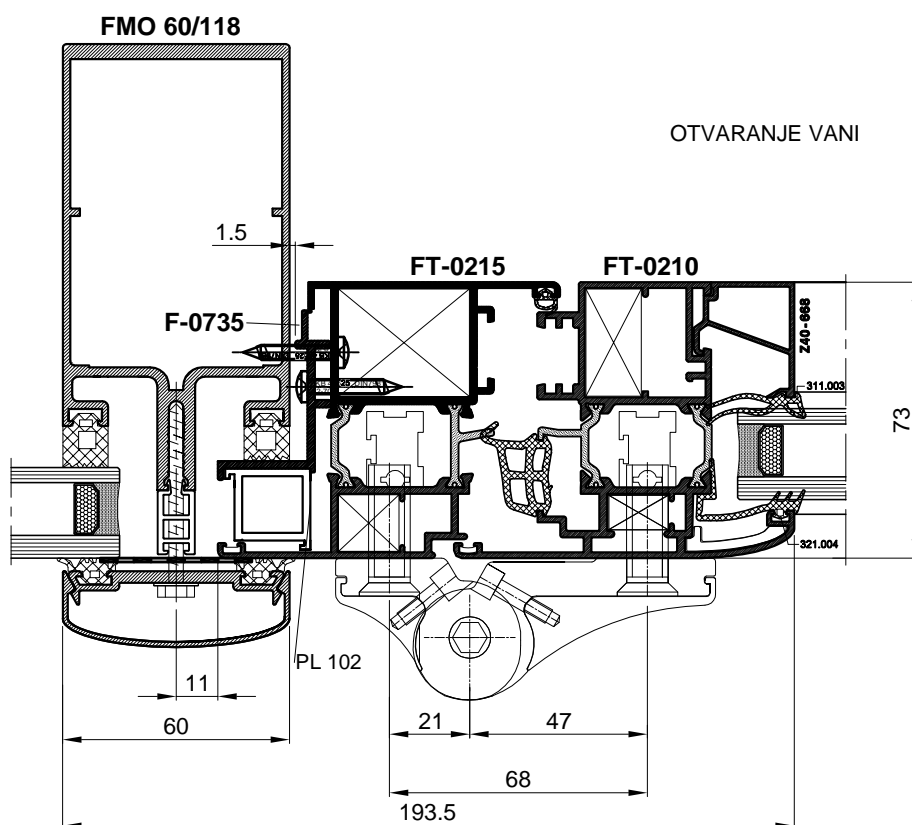
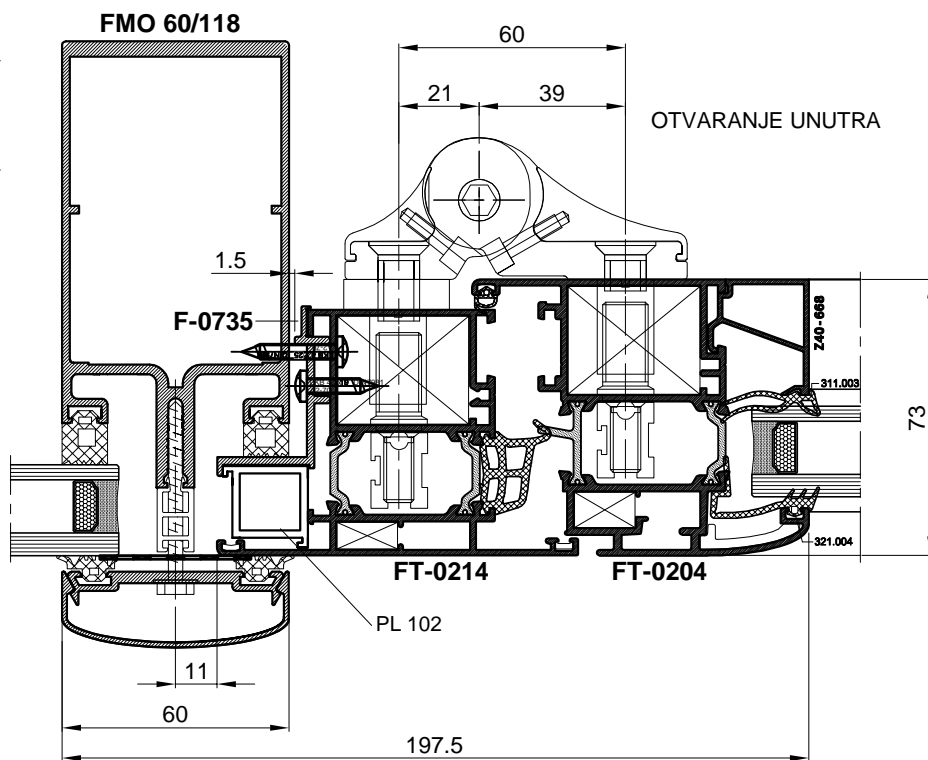
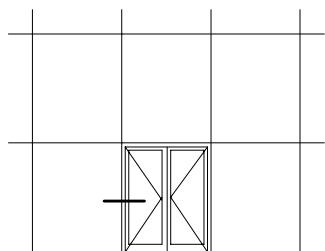


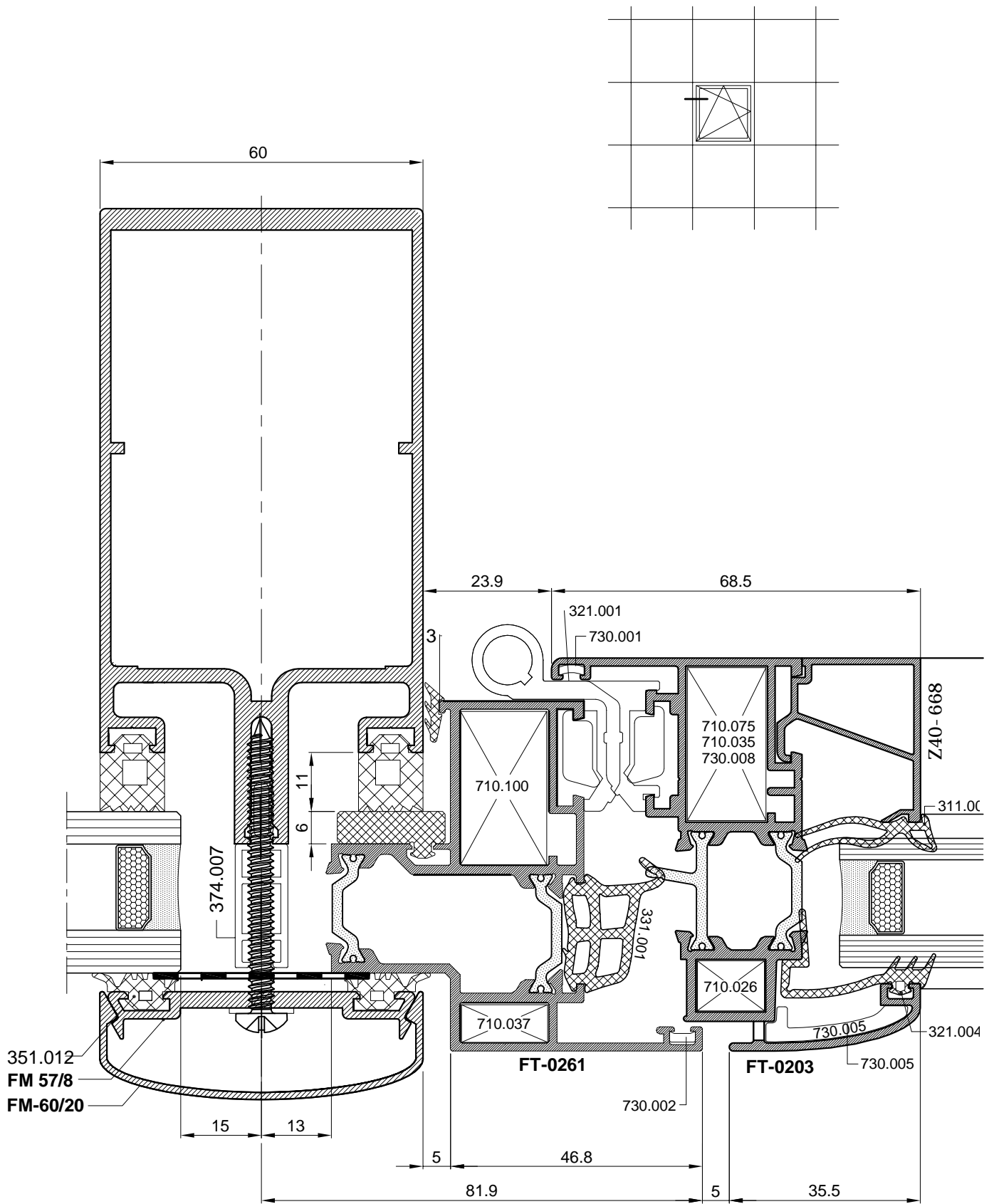
KUT PREMA VANI



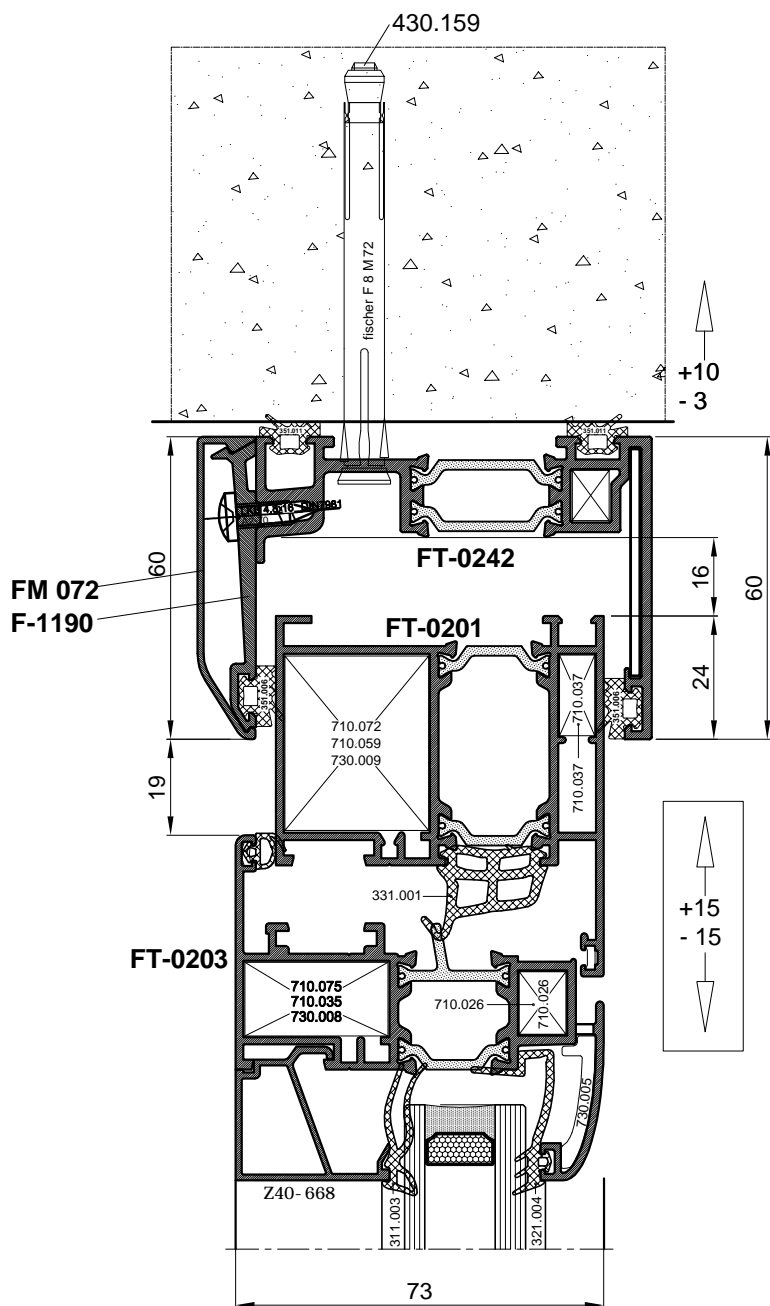
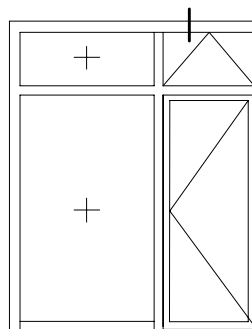
KUT PREMA UNUTRA





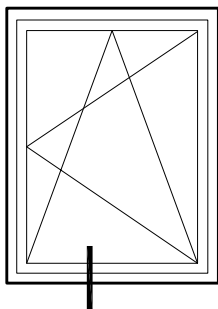


PROFIL ZA UGRADNJU



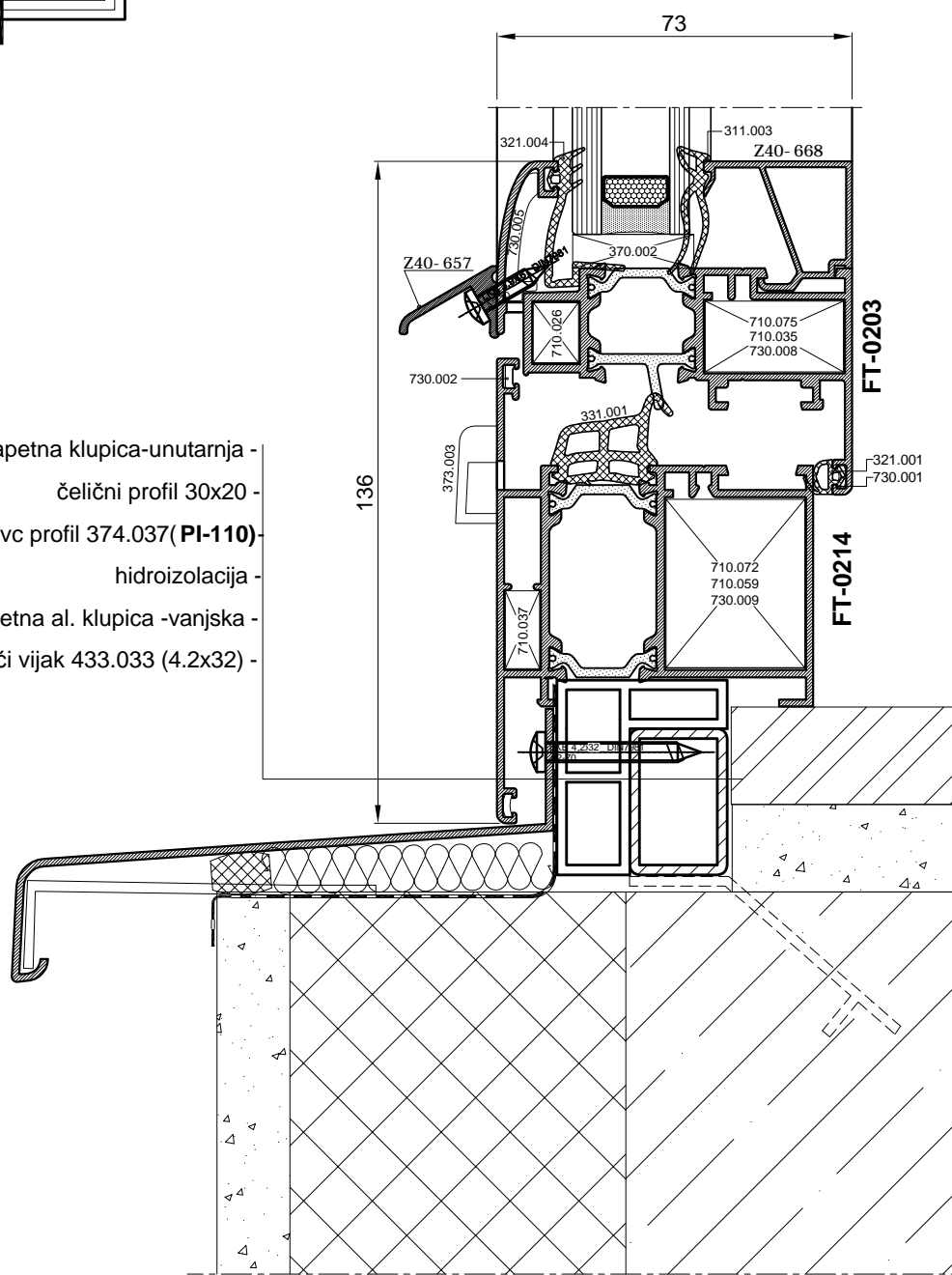
DETALJI

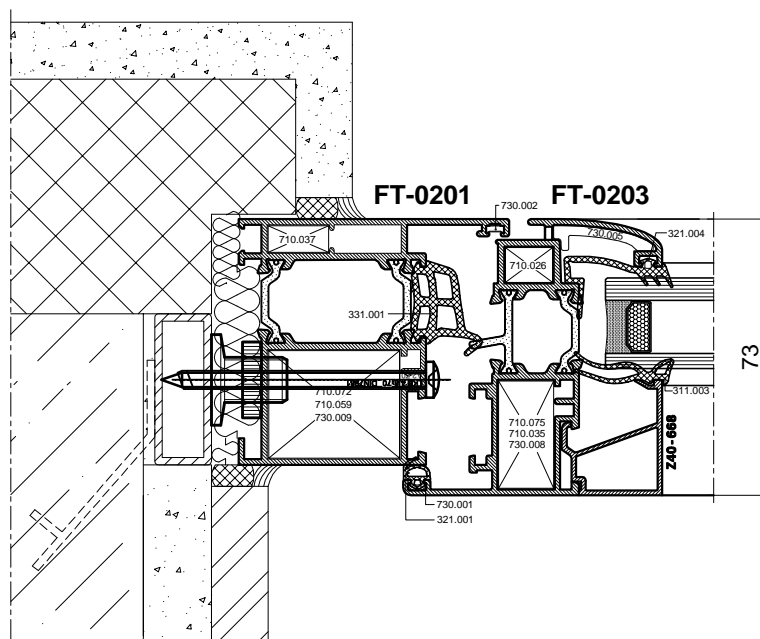
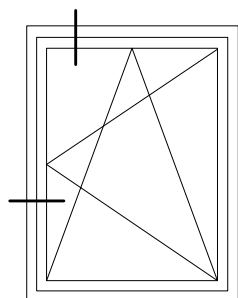
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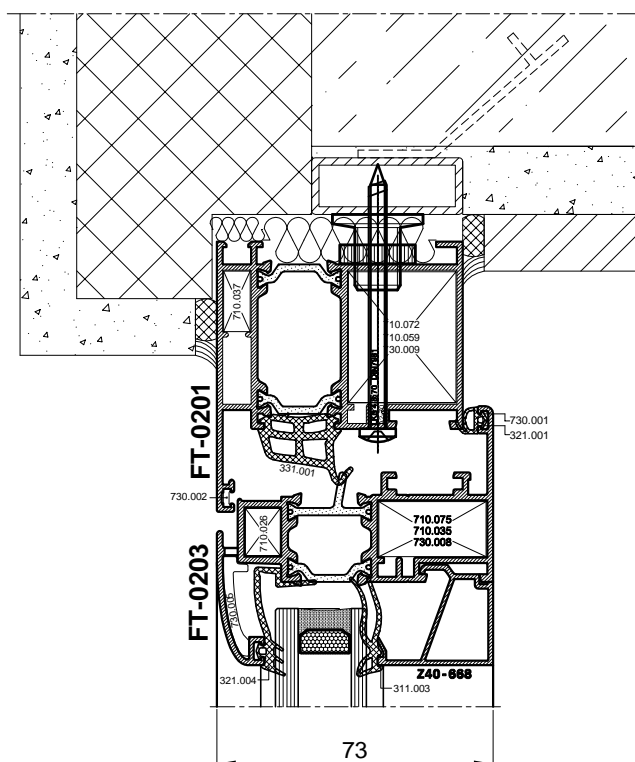
DETALJI UGRADNJE

- parapetna klupica-unutarnja -
- čelični profil 30x20 -
- pvc profil 374.037(PI-110) -
- hidroizolacija -
- parapetna al. klupica -vanjska -
- samorezujući vijak 433.033 (4.2x32) -

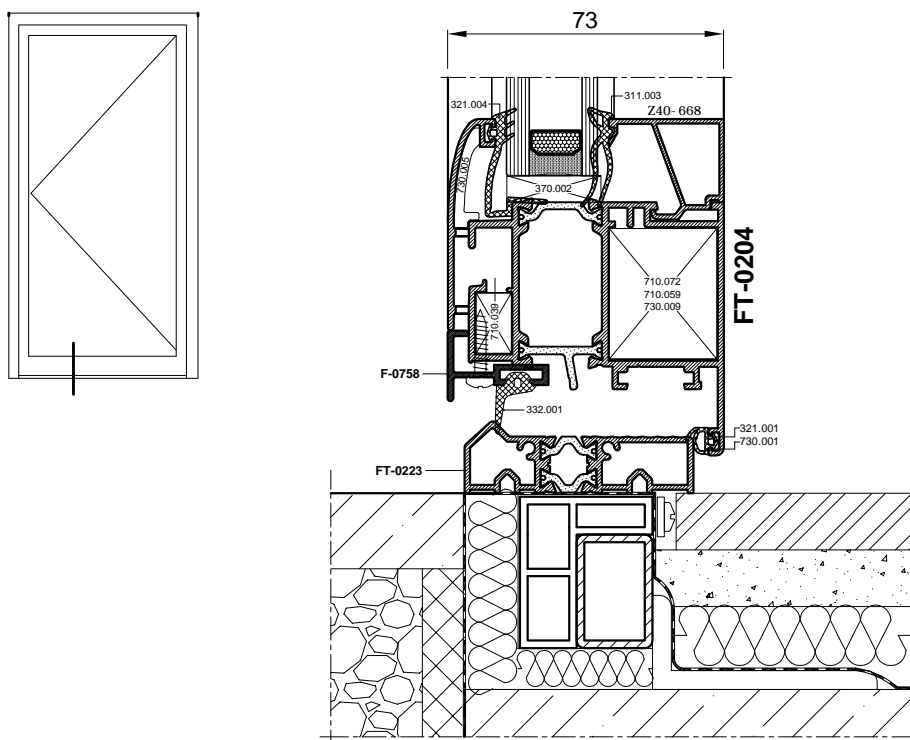




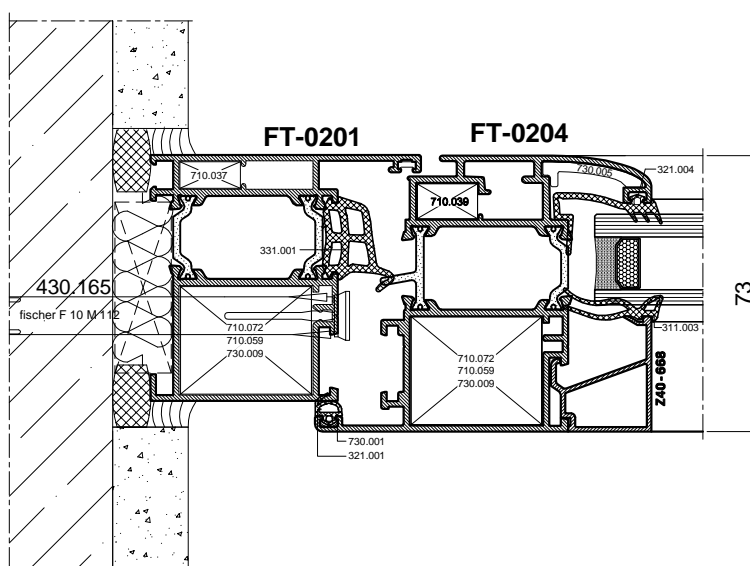
UGRADNJA PROZORA NA *SLIJEPI ŠTOK*  
S ELEMENTIMA ZA UGRADNJU



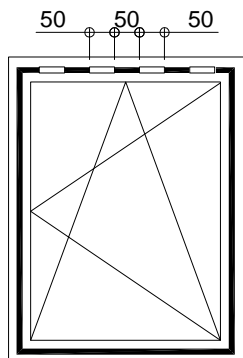




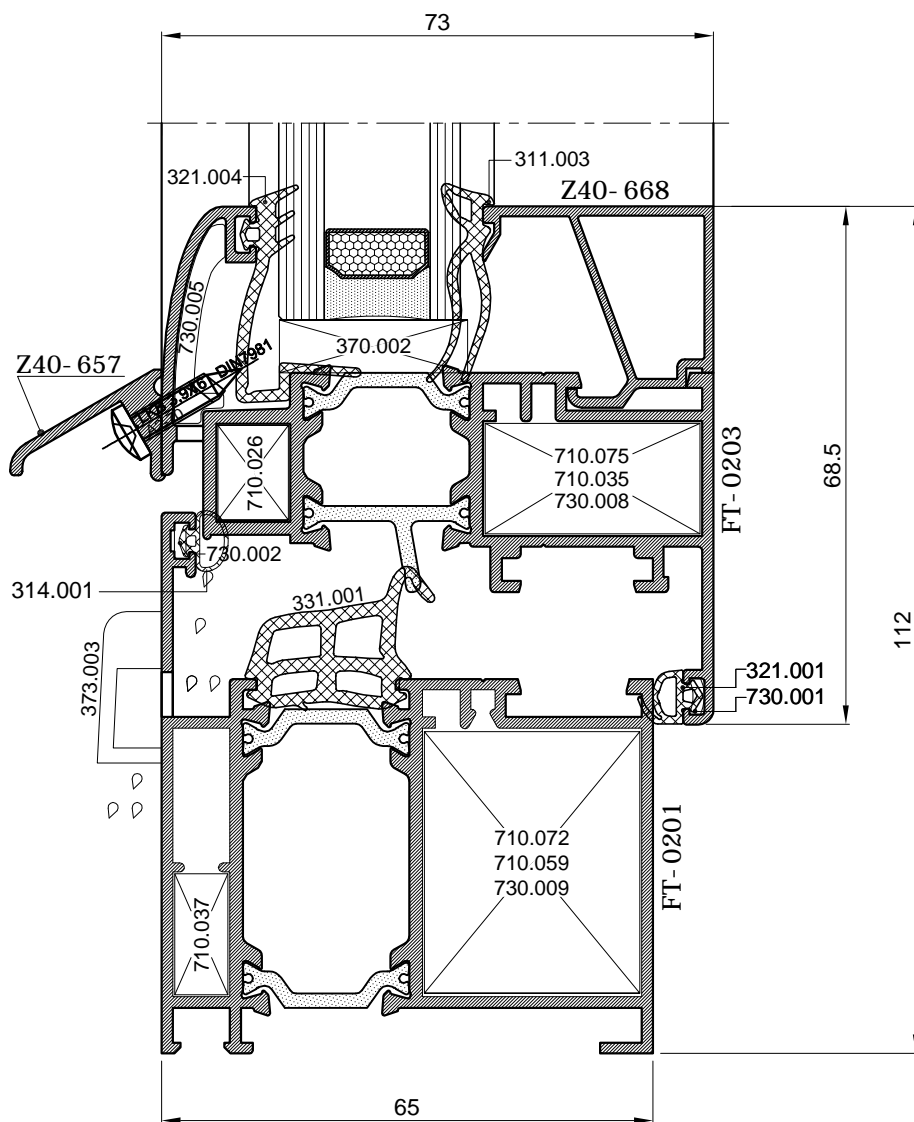
UGRADNJA ULAZNIH VRATA S PRAGOM



## UPORABA BRTVE Z 10

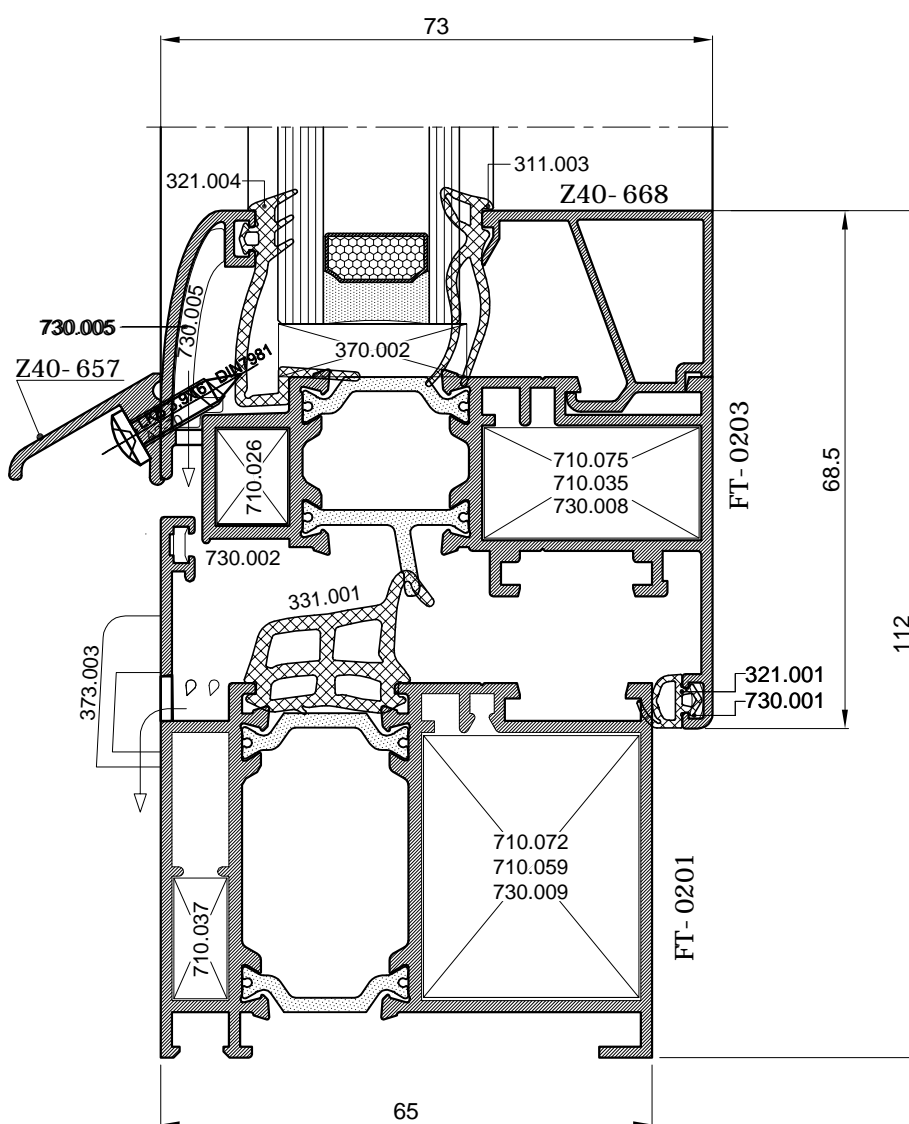


- Ako je prozor izložen većoj količini padalina, postoji mogućnost da dođe do "zagušenja" /otvori za kondenzat na profilu rama nemogu da odvedu sve kapljevine koje uđu u za to predviđeni prostor u profilu rama/, te postoji mogućnost ulaska vode u unutarnji dio profila tj. u objekt.  
Da bi se ovo spriječilo preporučuje se uporaba brtve **314.001** kao i uporaba profila okapnice **Z40-657**
- Brtvu 314.001 umetnuti po opsegu prozora osim u gornjem pojasu gdje se prekida radi omogućavanja ventilacije prozora /vidjeti skicu/.
- Korištenje brtve 314.001 zahtjeva uporabu kutnika 730.001 umjesto kutnika 730.002



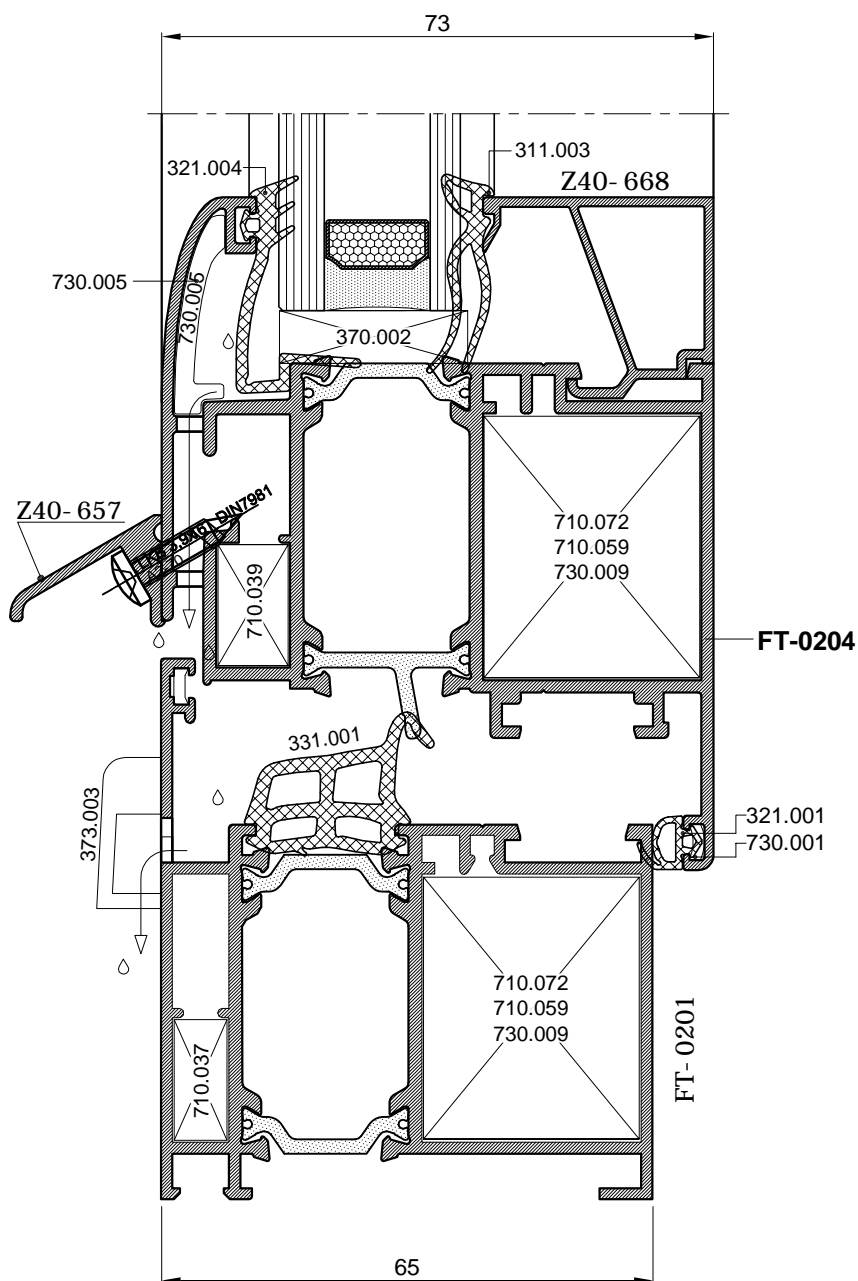
## ODVOD KAPLJEVINA IZ PROZORA

Kapljevine koje uđu u krilo prozora između brtve i ispune vode se kroz otvor na brtvi i profilu krila prema vani. Dio kapljevina iz krila i kapljevine s vana ulaze u predviđeni prostor u profilu rama te ga napuštaju kroz otvore u profilu koji se maskiraju čepom 373.003. Napomena: Otvore na profilu rama i krila držati prohodnim.

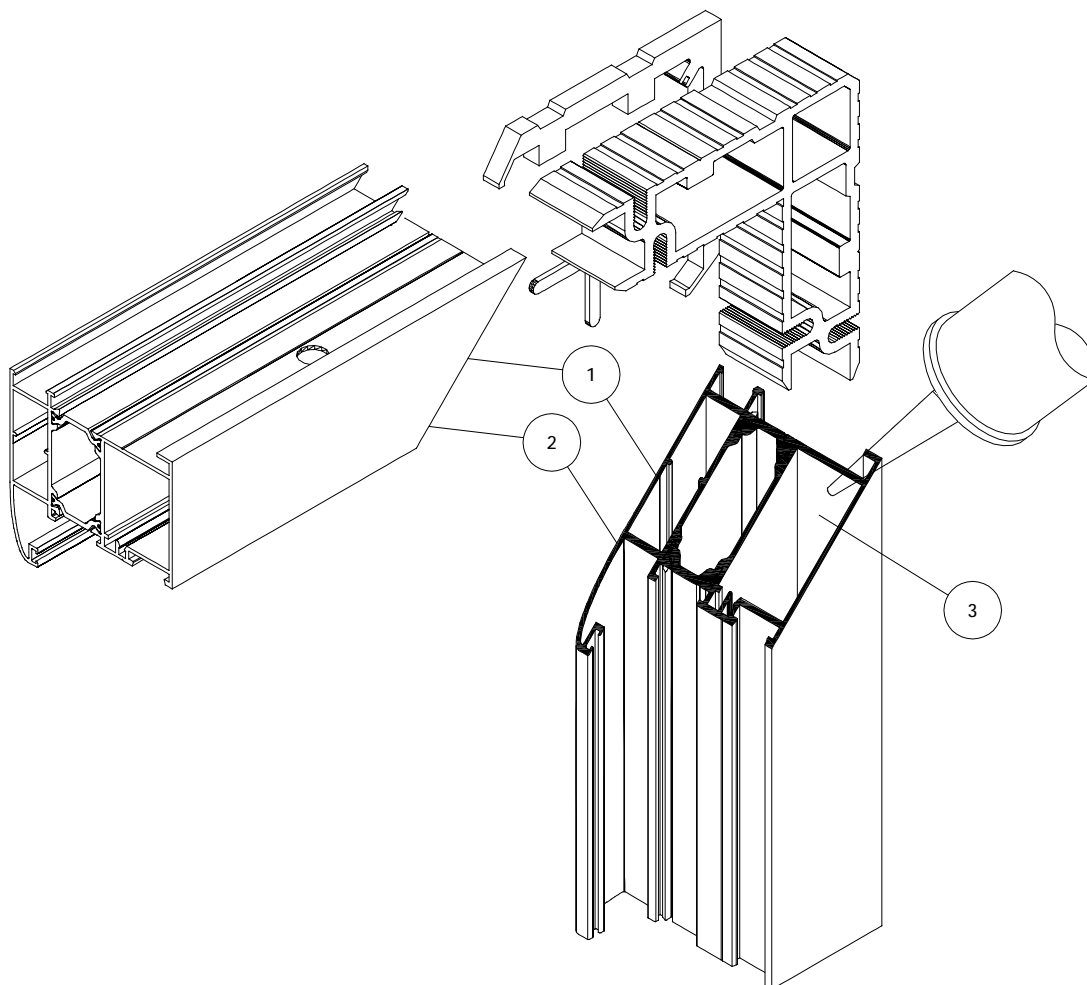


## ODVOD KAPLJEVINA IZ PROZORA

Kapljevine koje uđu u krilo prozora između brtve i ispune vode se kroz otvor na brtvi i profilu krila prema vani. Dio kapljevina iz krila i kapljevine s vana ulaze u predviđeni prostor u profilu rama te ga napuštaju kroz otvore u profilu koji se maskiraju čepom 373.002. Napomena: Otvore na profilu rama i krila držati prohodnim.



## SPAJANJE PROFILA KUTNICIMA POD 90°



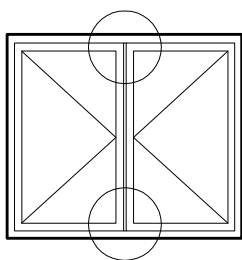
## POSTUPAK SPAJANJA PROFILA:

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

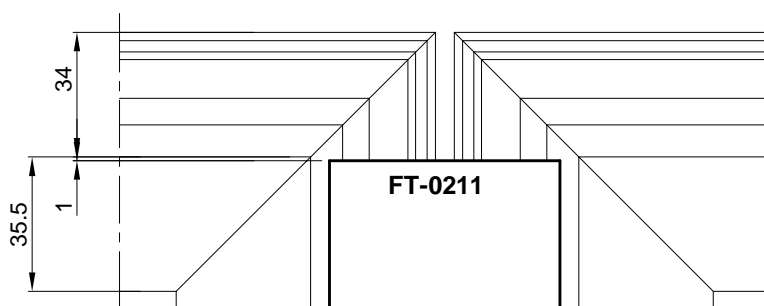
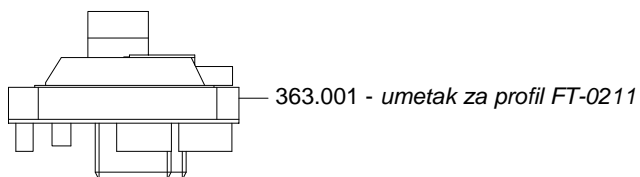
## NAPOMENA:

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

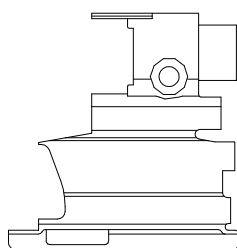
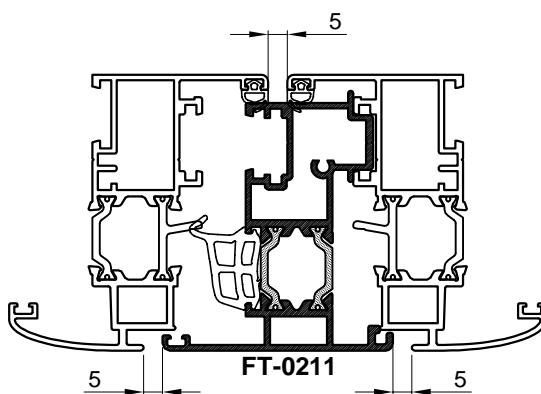
Lijepljenjem rezova i kutnika ljepilima za metal osigurava se potrebna zrako- i vodonepropusnosti spoja kao i dodatna mehanička čvrstoća spoja.

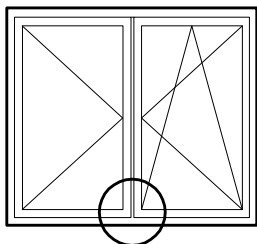


OTVARANJE UNUTRA



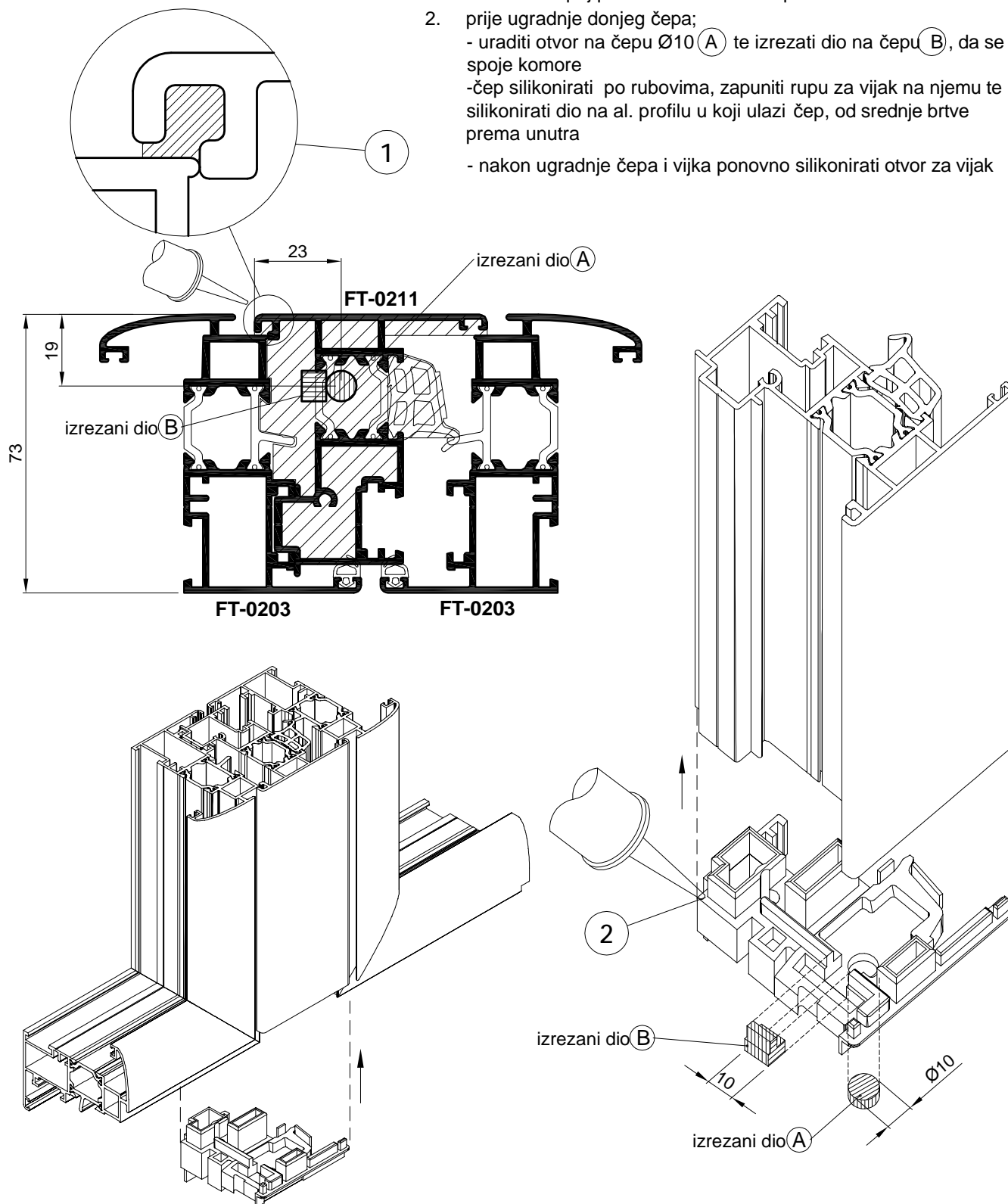
Obrada profila FT-0211  
prema profilu krila

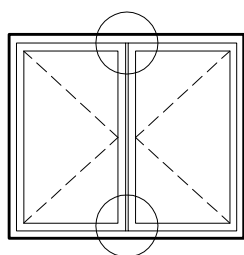




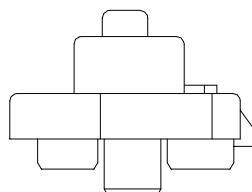
U slučaju korištenja prozora u nepovoljnim vremenskim uvjetima, radi onemogućavanja prodora vode u unutrašnjost, preporučuje se :

1. silikonirati spoj profila krila FT-0203 i profila komb. FT-0211
2. prije ugradnje donjeg čepa;
  - uraditi otvor na čepu  $\varnothing 10$  (A) te izrezati dio na čepu (B), da se spoje komore
  - čep silikonirati po rubovima, zapuniti rupu za vijak na njemu te silikonirati dio na al. profilu u koji ulazi čep, od srednje brtve prema unutra
  - nakon ugradnje čepa i vijka ponovno silikonirati otvor za vijak

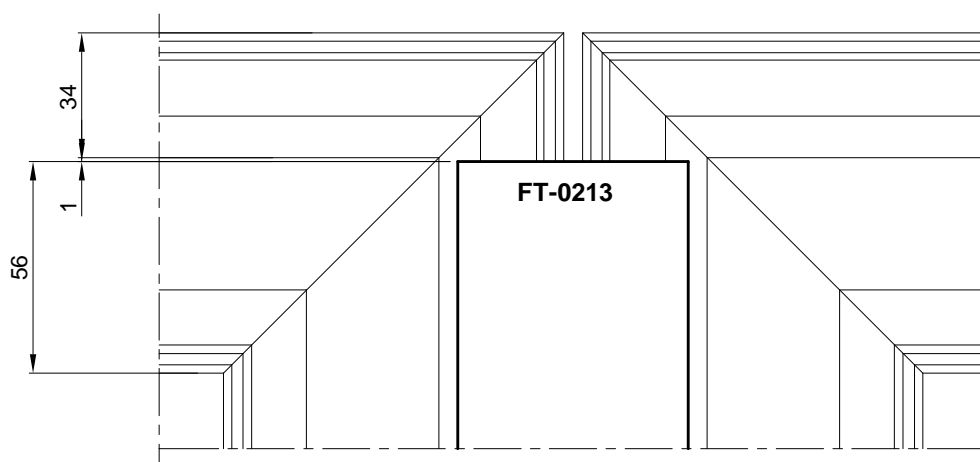




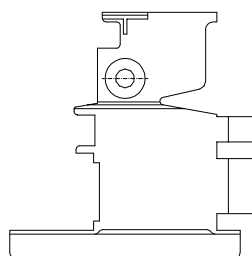
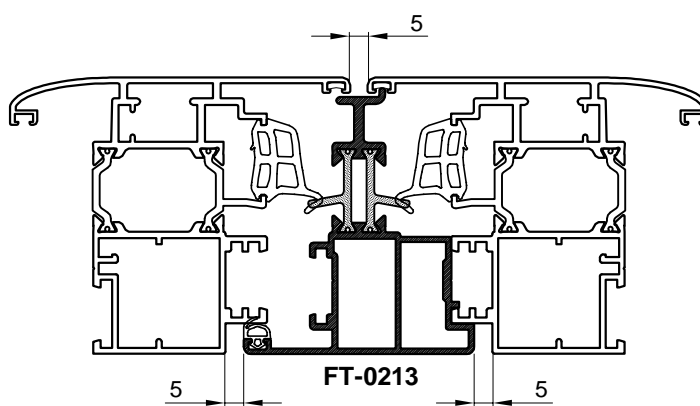
OTVARANJE VANI



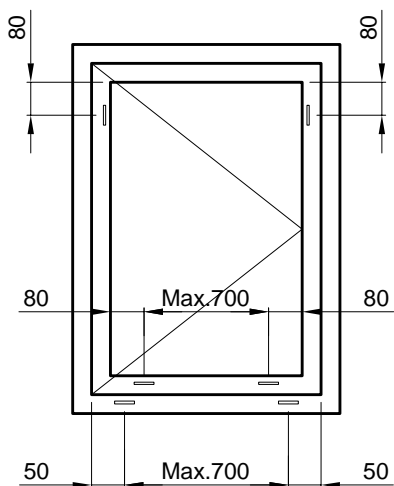
364.004 - umetak za profil FT-0213



Obrada profila FT-0213  
prema profilu krila





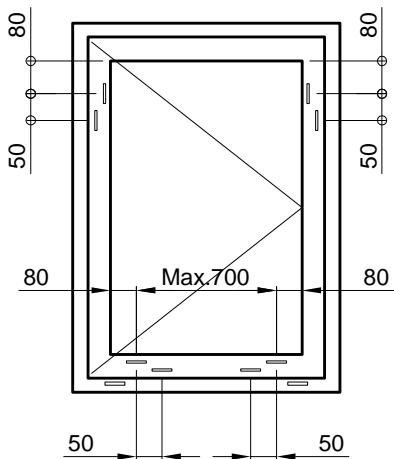
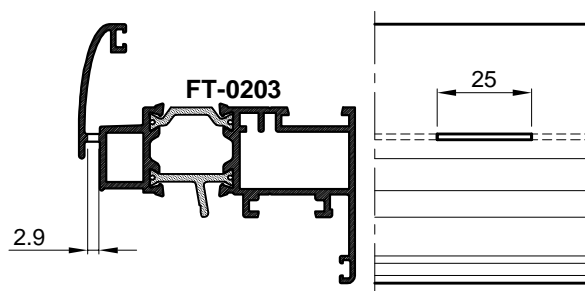
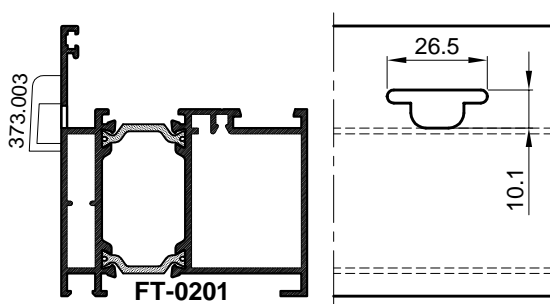


OBRADA NA OKVIRU

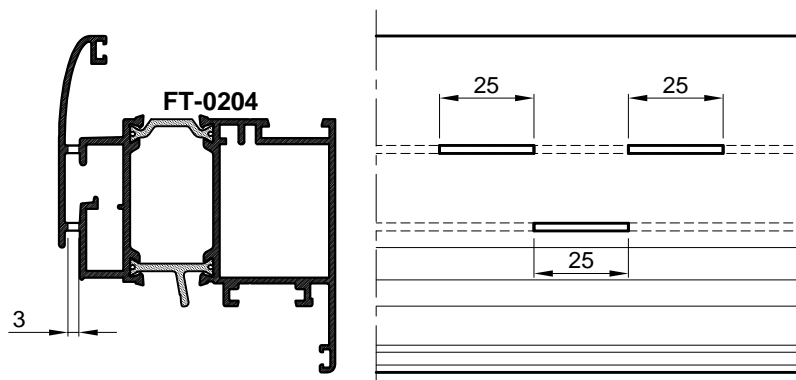
OBRADA NA OKVIRU I KRILU PROZORA  
373.003

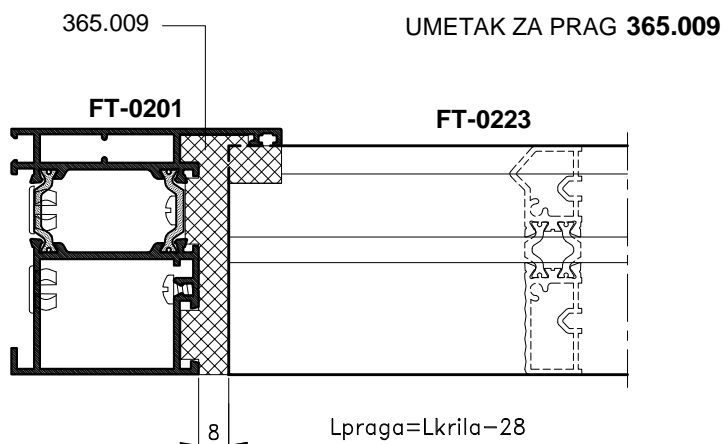
- IZVOD KAPLJEVINA IZ PROZORA
- VENTILIRANJE PROZORA

OBRADA NA KRILU

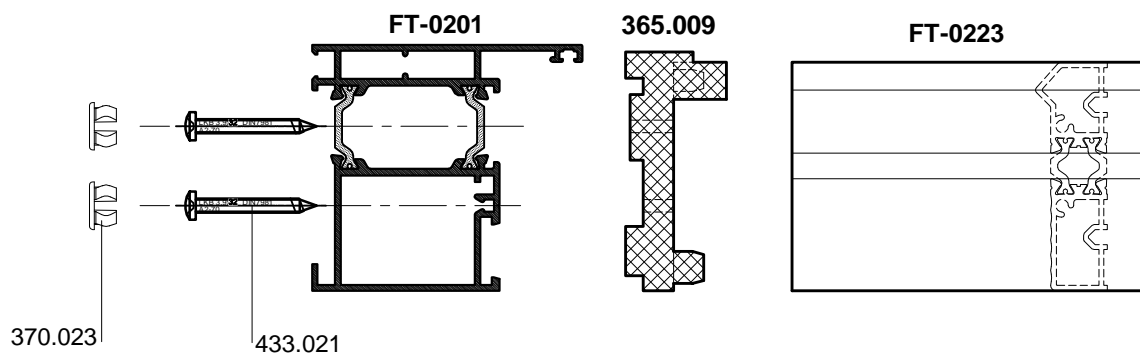


OBRADA NA KRILU



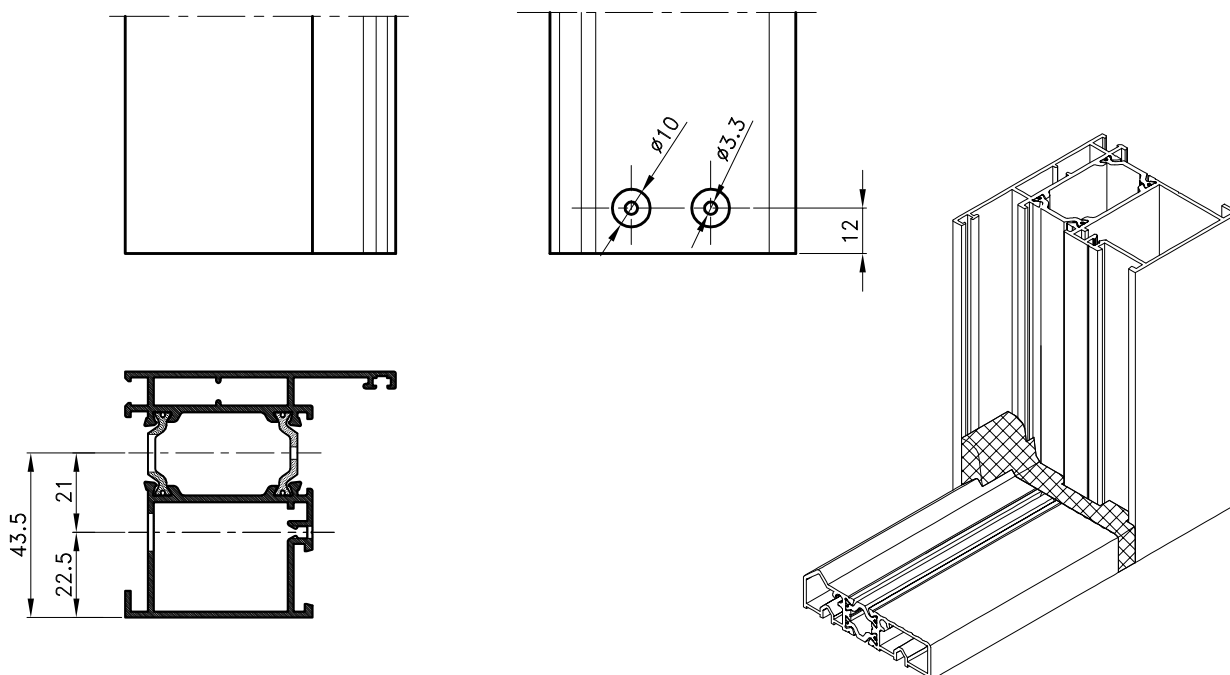


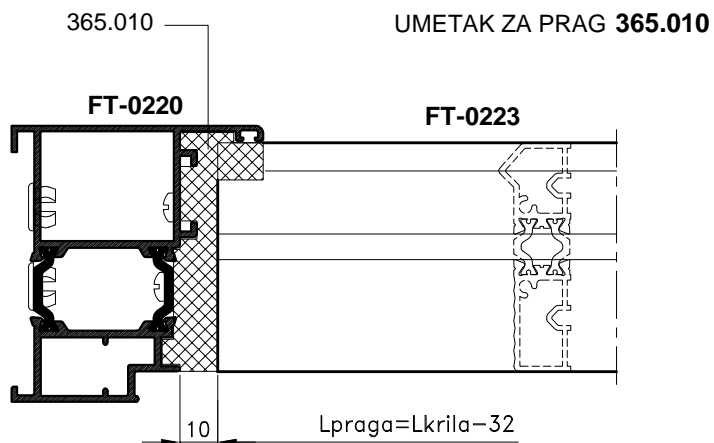
MJERA PILANJA PRAGA



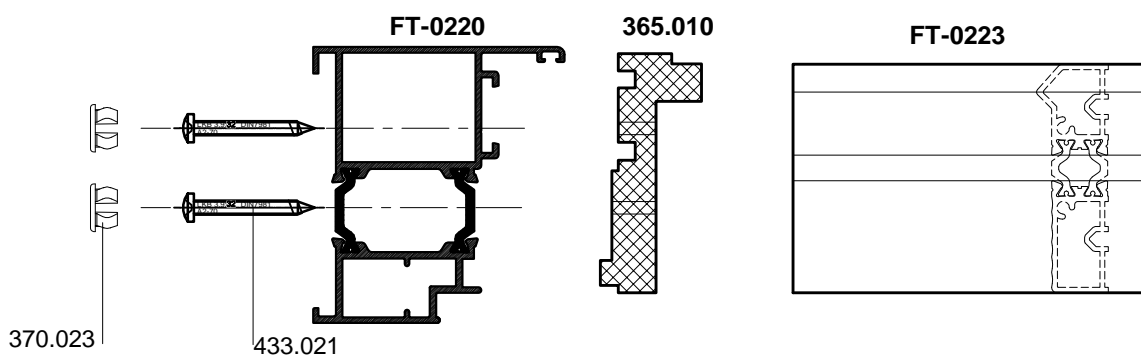
ELEMENTI PRIJE SKLAPANJA

OBRADA NA PROFILU FT-0201



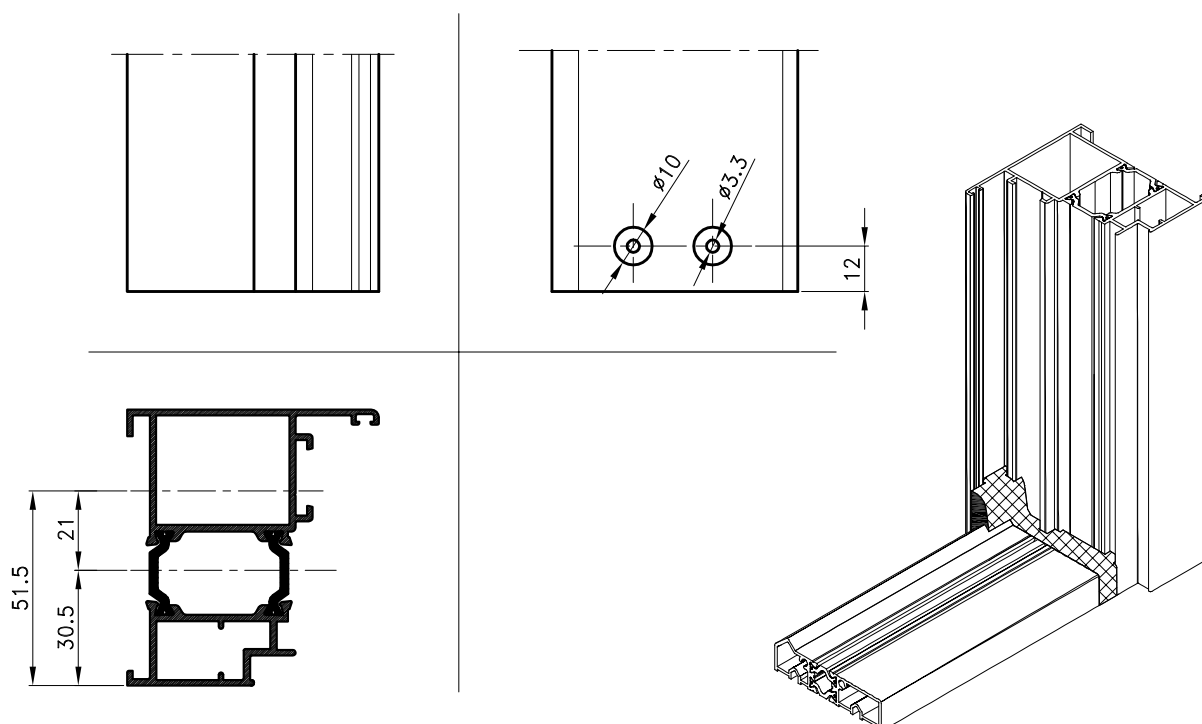


MJERA PILANJA PRAGA

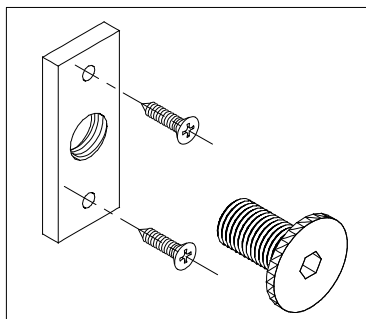


ELEMENTI SKLOPA

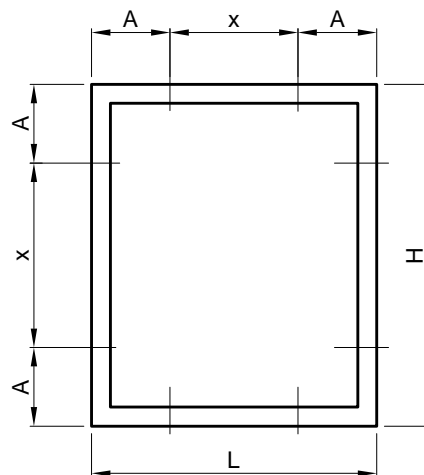
OBRADA NA PROFILU **FT-0220**



ELEMENT ZA UGRADNJU 521.104

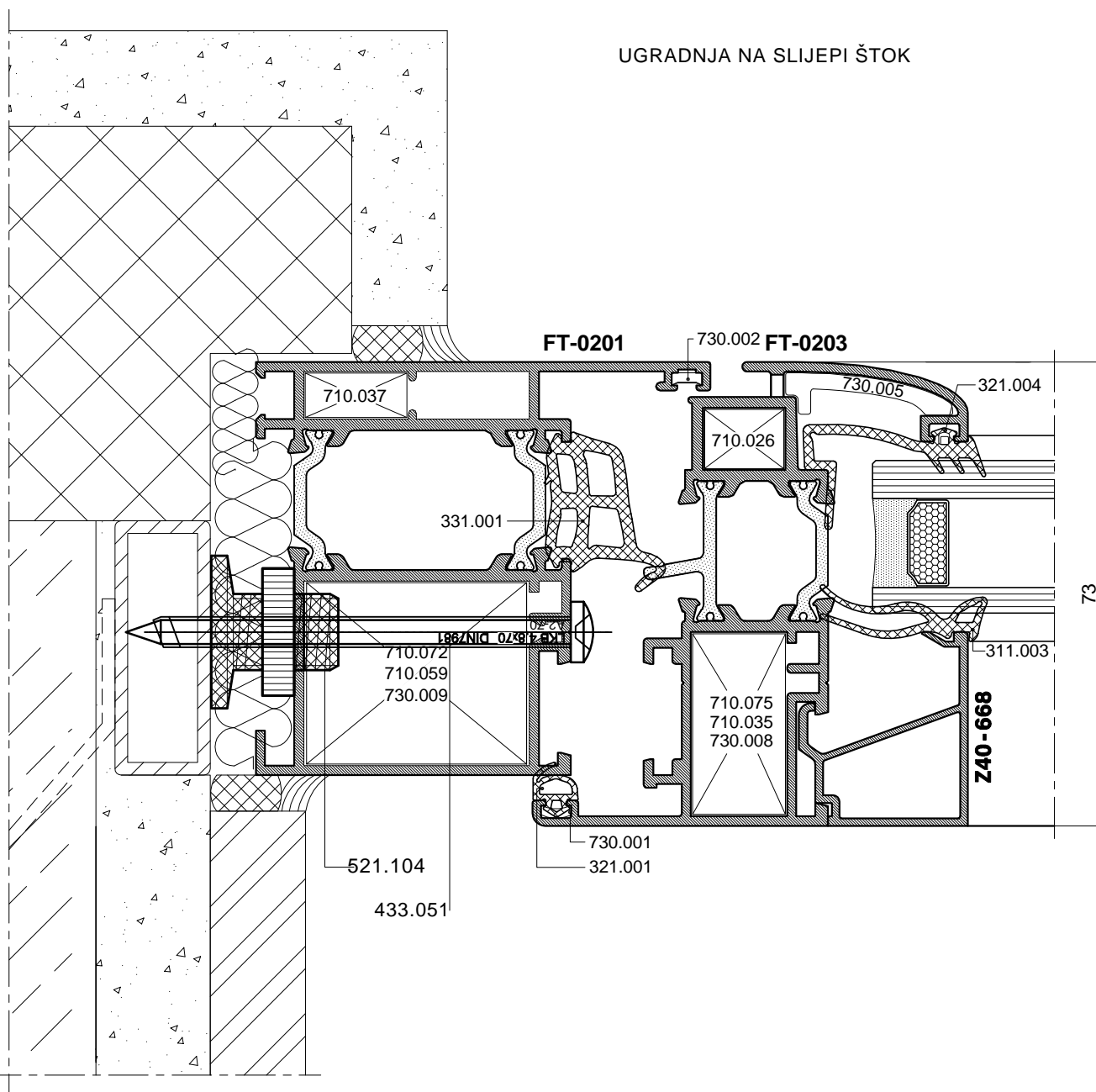


A = 200 mm  
x ≤ 700 mm



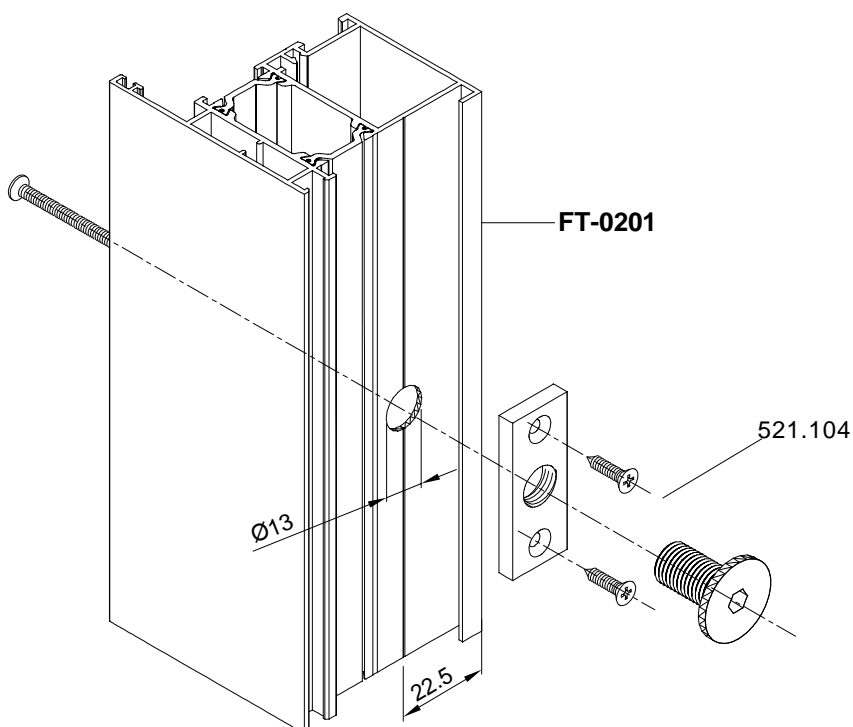
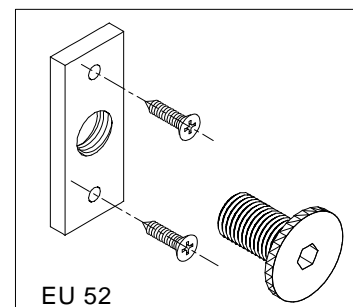
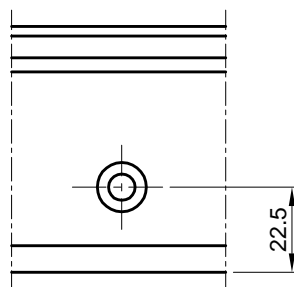
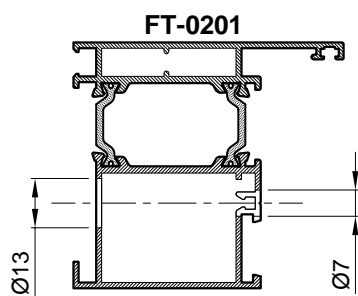
RASPORED ELEMENATA ZA UGRADNJU

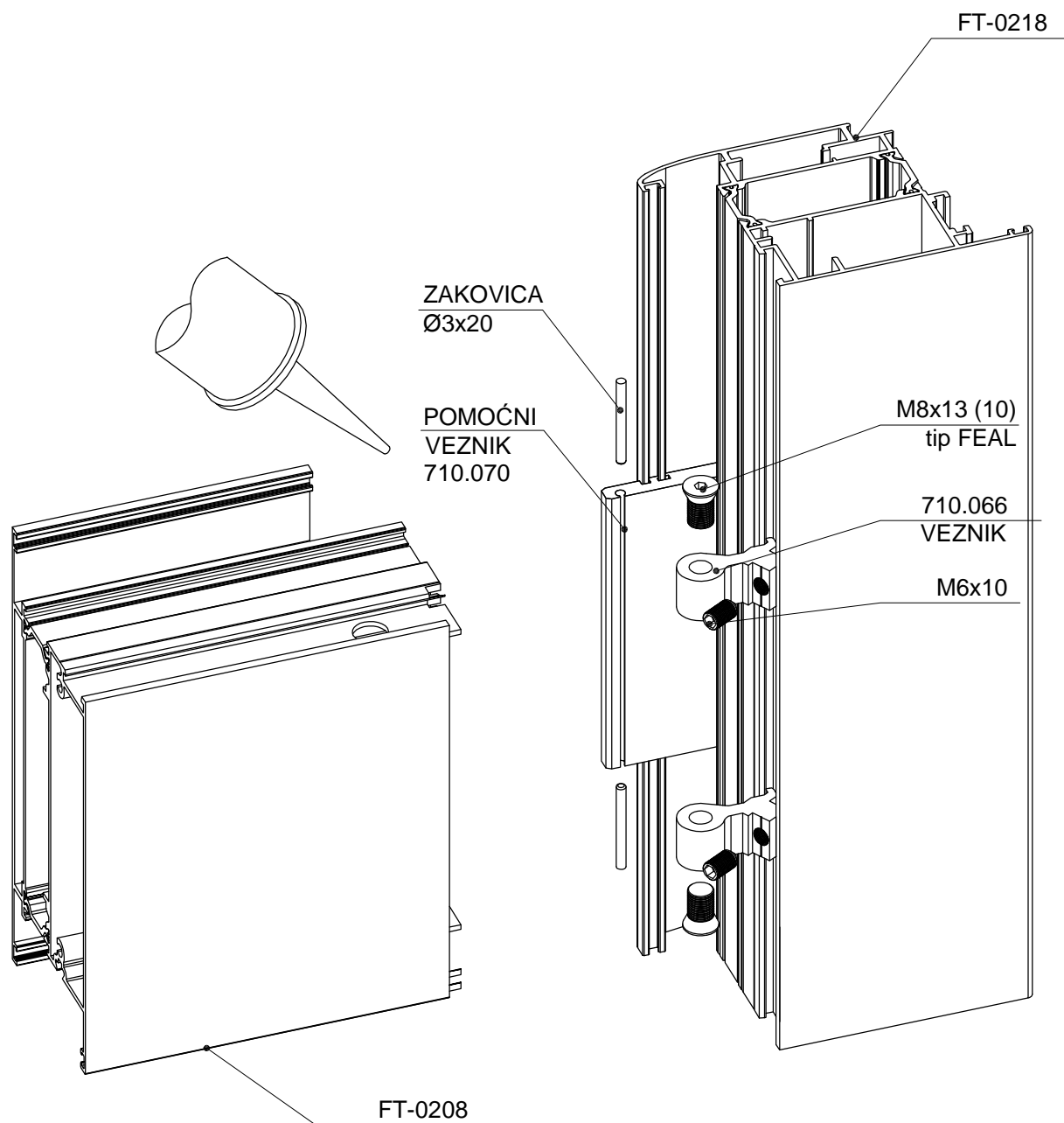
UGRADNJA NA SLIJEPI ŠTOK



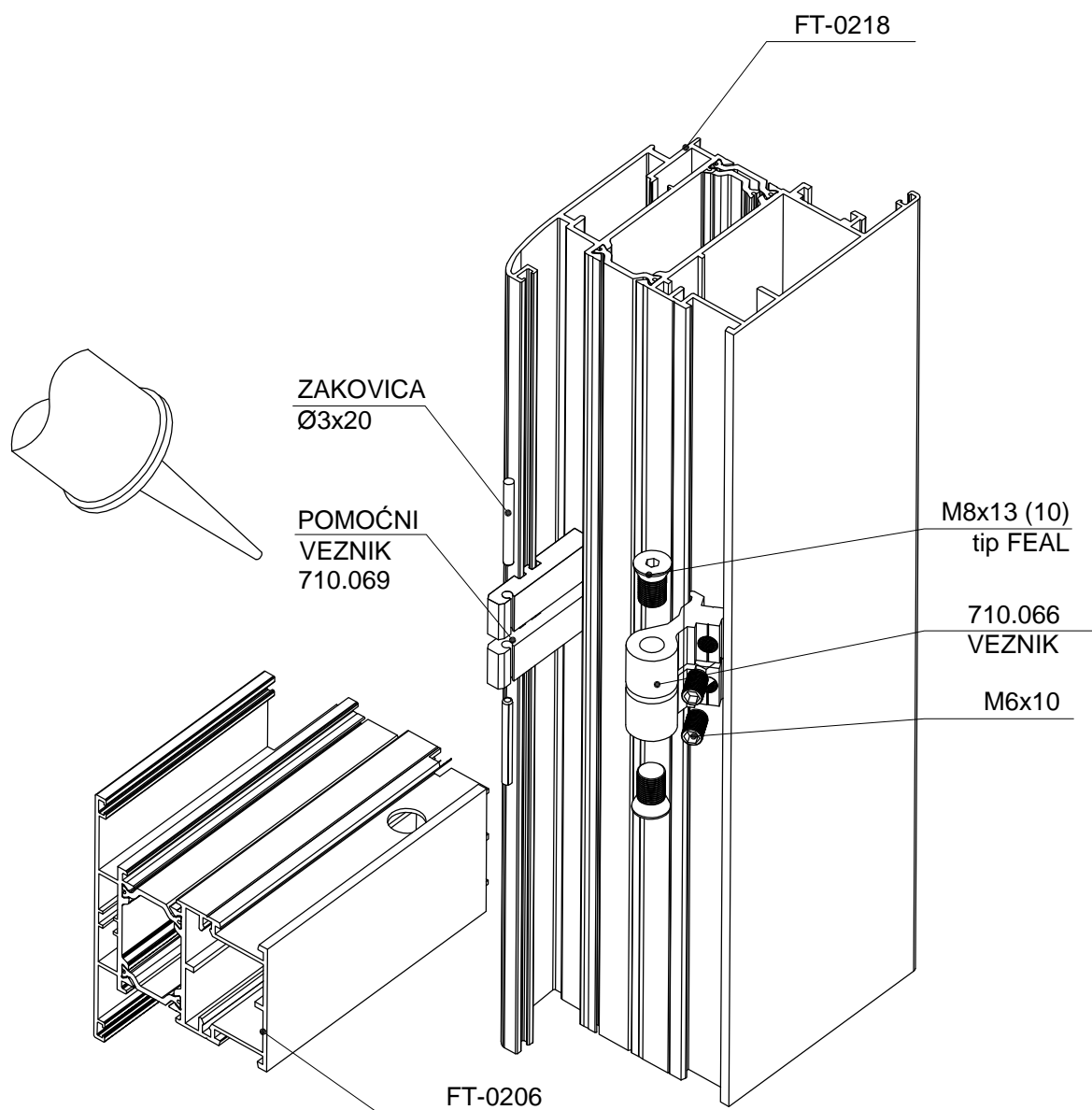
**MONTAŽA ELEMENTA ZA UGRADNJU 521.104**

1. Na profilu rama bušiti rupu  $\varnothing 7$  mm na udaljenosti 22.5 od kraja unutarnje strane profila  
Na vanjskoj stijenci profila rupu proširiti na  $\varnothing 13$  mm
2. PVC vijak sa pločicom dovesti u položaj otvora  $\varnothing 13$  mm
3. Vijcima 4.8x22 /DIN 7982/ pločicu s pvc vijkom pričvrstiti za stjenku profila
4. Imbus ključem 6mm, sa unutarnje strane profila, kroz otvor  $\varnothing 7$  mm djelovati na pvc vijak na način da kretanjem pvc vijka prema metalnom okviru (slijepi štok), dovodimo prozor u *ispravan* položaj
5. Vijkom 4.8x70 /DIN 7981/kroz profil i pvc vijak, fiksirati položaj prozora

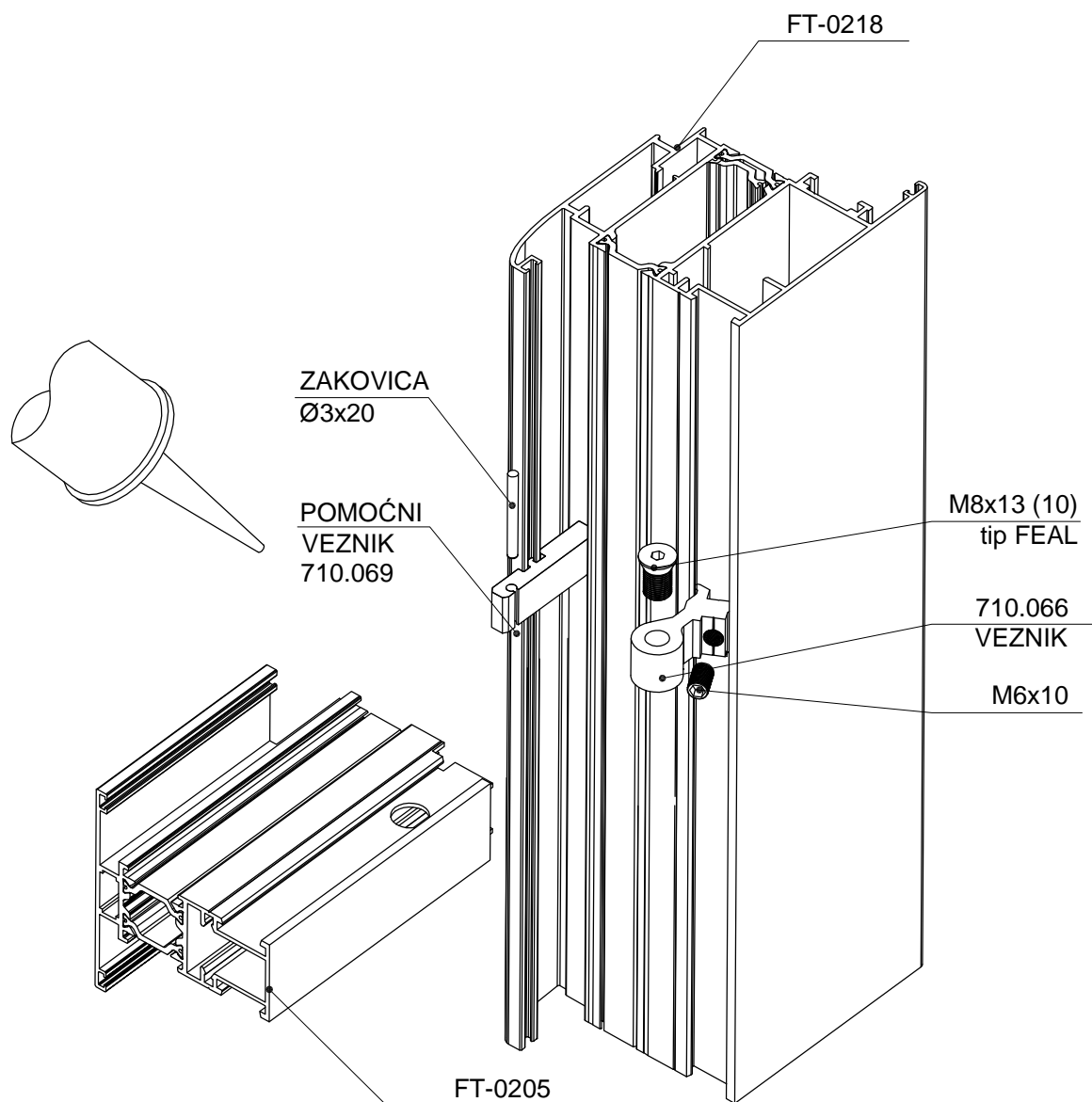
**OBRADA PROFILA ZA SMJEŠTAJ ELEMENATA ZA UGRADNJU 521.104**



NAKON SPAJANJA PROFILA KRILA I PREČKE SPOJEVE  
PREMAZATI TRAJNO-ELASTIČNIM KITOM



NAKON SPAJANJA PROFILA KRILA I PREČKE SPOJEVE  
PREMAZATI TRAJNO-ELASTIČNIM KITOM



NAKON SPAJANJA PROFILA KRILA I PREČKE SPOJEVE  
PREMAZATI TRAJNO-ELASTIČNIM KITOM



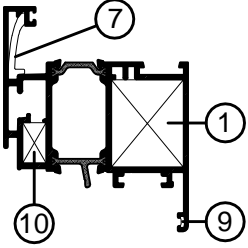
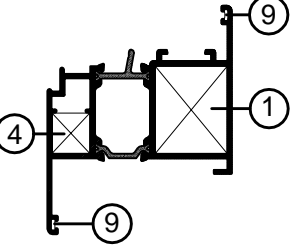
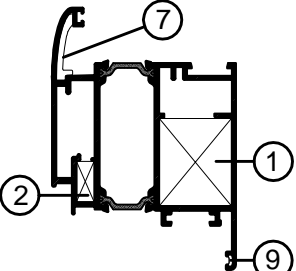
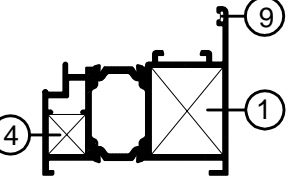
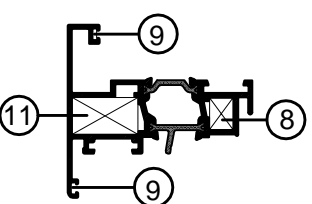
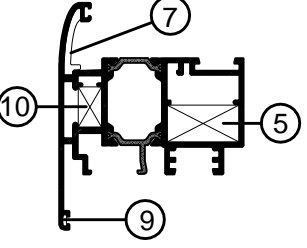
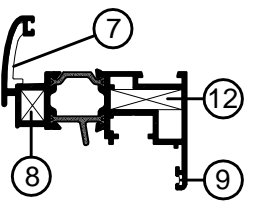
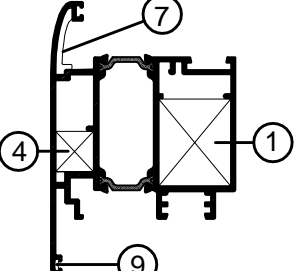
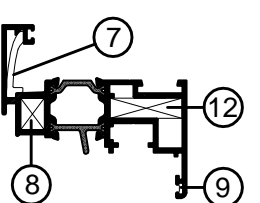
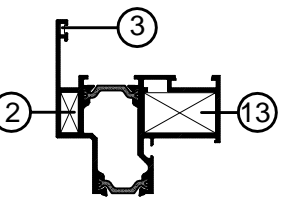
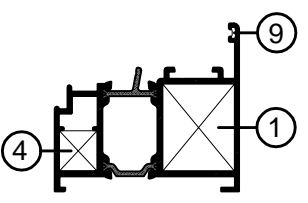
DETALJI OBRADE

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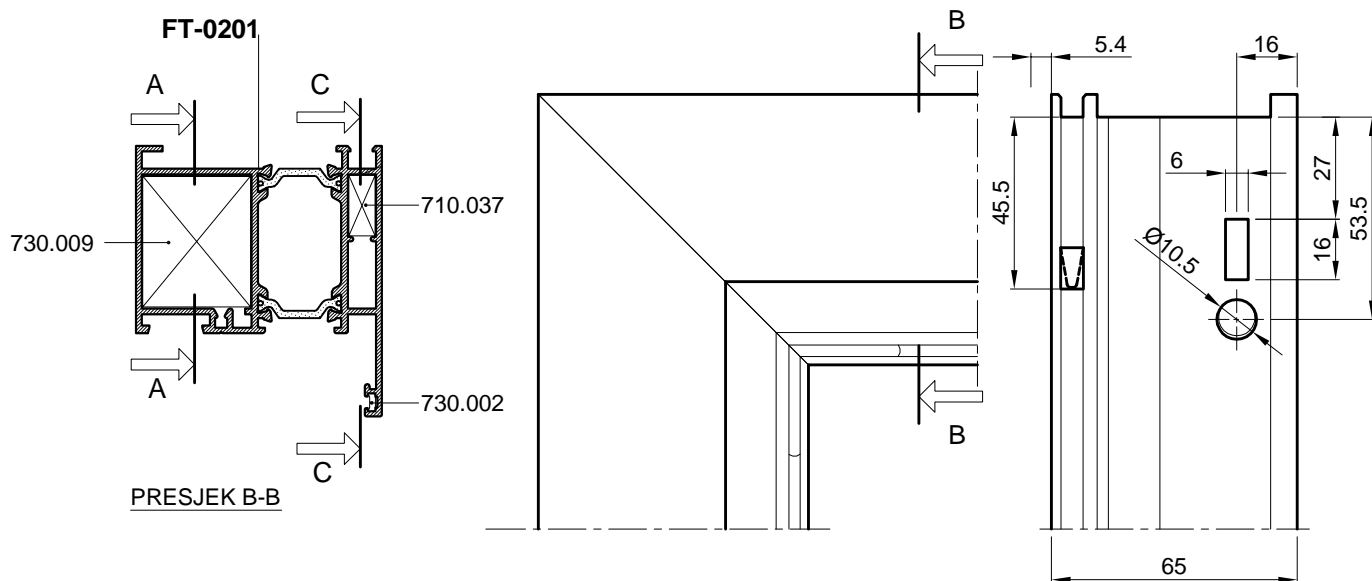
## PRIKAZ KUTNIKA U PROFILIMA

FT-0201		① ② ③	730.009	FT-0234		⑤ ④ ③	730.008
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			710.072				710.075
			710.037				731.001
			730.002				710.040
							710.076
							730.002
FT-0214		① ② ③ ⑨	730.009	FT-0231		① ② ③	730.009
			710.059				710.059
			710.072				710.072
			710.037				710.037
			730.002				730.002
			730.001				730.002
FT-0225		① ② ③ ⑨	730.009	FT-0232		① ② ③ ⑨	730.009
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			710.072				710.072
			710.037				710.037
			730.002				730.002
			730.001				730.001
FT-0224		① ④ ③	730.009	FT-0203		⑤ ⑧ ⑦ ⑨	730.008
			710.059				710.035
			710.072				710.075
			710.040				731.001
			710.076				710.026
			730.002				730.005
FT-0229		① ④ ③ ⑨	730.009	FT-0221		⑤ ⑧ ⑦ ⑨	730.008
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			710.072				710.075
			710.040				731.001
			710.076				710.026
			730.002				710.026
			730.001				730.005
FT-0233		⑤ ⑥ ③	730.008	FT-0204		① ⑩ ⑦ ⑨	730.009
			710.035				710.059
			710.075				710.072
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			710.050				710.039
			730.002				730.005
							730.001

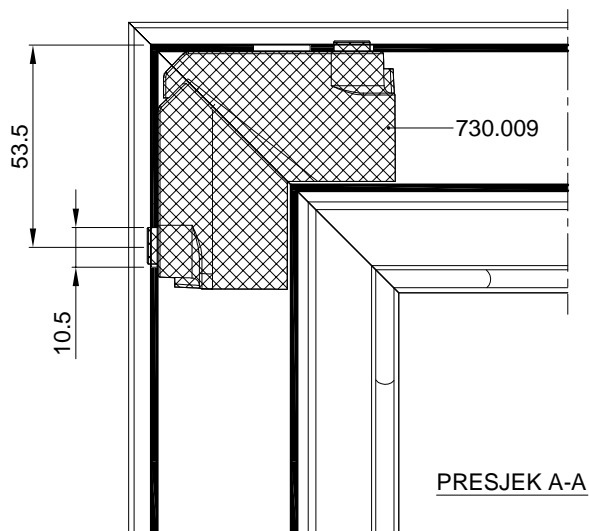
## PRIKAZ KUTNIKA U PROFILIMA

<b>FT-0230</b>		<table border="1"> <tr> <td rowspan="5">①</td> <td>730.009</td> </tr> <tr> <td>710.059</td> </tr> <tr> <td>710.072</td> </tr> <tr> <td>710.039</td> </tr> <tr> <td>730.005</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	①	730.009	710.059	710.072	710.039	730.005	⑨	730.001	<b>FT-0215</b>		<table border="1"> <tr> <td rowspan="2">①</td> <td>710.059</td> </tr> <tr> <td>710.072</td> </tr> <tr> <td rowspan="2">④</td> <td>710.040</td> </tr> <tr> <td>710.076</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	①	710.059	710.072	④	710.040	710.076	⑨	730.001		
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④	710.040																						
	710.076																						
⑨	730.001																						
<b>FT-0218</b>		<table border="1"> <tr> <td rowspan="2">①</td> <td>710.059</td> </tr> <tr> <td>710.072</td> </tr> <tr> <td>②</td> <td>710.037</td> </tr> <tr> <td>⑦</td> <td>730.005</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	①	710.059	710.072	②	710.037	⑦	730.005	⑨	730.001	<b>FT-0220</b>		<table border="1"> <tr> <td rowspan="2">①</td> <td>710.059</td> </tr> <tr> <td>710.072</td> </tr> <tr> <td rowspan="2">④</td> <td>710.040</td> </tr> <tr> <td>710.076</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	①	710.059	710.072	④	710.040	710.076	⑨	730.001	
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	710.072																						
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①	710.059																						
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④	710.040																						
	710.076																						
⑨	730.001																						
<b>FT-0262</b>		<table border="1"> <tr> <td>⑪</td> <td>710.077</td> </tr> <tr> <td>⑧</td> <td>710.026</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	⑪	710.077	⑧	710.026	⑨	730.001	<b>FT-0210</b>		<table border="1"> <tr> <td rowspan="3">⑤</td> <td>710.035</td> </tr> <tr> <td>710.098</td> </tr> <tr> <td>731.001</td> </tr> <tr> <td>⑩</td> <td>710.039</td> </tr> <tr> <td>⑦</td> <td>730.005</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	⑤	710.035	710.098	731.001	⑩	710.039	⑦	730.005	⑨	730.001		
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⑩	710.039																						
⑦	730.005																						
⑨	730.001																						
<b>FT-0236</b>		<table border="1"> <tr> <td>⑫</td> <td>710.078</td> </tr> <tr> <td>⑧</td> <td>710.026</td> </tr> <tr> <td>⑦</td> <td>730.005</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	⑫	710.078	⑧	710.026	⑦	730.005	⑨	730.001	<b>FT-0219</b>		<table border="1"> <tr> <td rowspan="2">①</td> <td>710.059</td> </tr> <tr> <td>710.099</td> </tr> <tr> <td rowspan="2">④</td> <td>710.040</td> </tr> <tr> <td>710.076</td> </tr> <tr> <td>⑦</td> <td>730.005</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	①	710.059	710.099	④	710.040	710.076	⑦	730.005	⑨	730.001
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<b>FT-0239</b>		<table border="1"> <tr> <td>⑫</td> <td>710.078</td> </tr> <tr> <td>⑧</td> <td>710.026</td> </tr> <tr> <td>⑦</td> <td>730.005</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	⑫	710.078	⑧	710.026	⑦	730.005	⑨	730.001	<b>FT-0261</b>		<table border="1"> <tr> <td>⑬</td> <td>710.100</td> </tr> <tr> <td>②</td> <td>710.037</td> </tr> <tr> <td>③</td> <td>730.002</td> </tr> </table>	⑬	710.100	②	710.037	③	730.002				
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②	710.037																						
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<b>FT-0202</b>		<table border="1"> <tr> <td rowspan="2">①</td> <td>710.059</td> </tr> <tr> <td>710.072</td> </tr> <tr> <td rowspan="2">④</td> <td>710.040</td> </tr> <tr> <td>710.076</td> </tr> <tr> <td>⑨</td> <td>730.001</td> </tr> </table>	①	710.059	710.072	④	710.040	710.076	⑨	730.001													
①	710.059																						
	710.072																						
④	710.040																						
	710.076																						
⑨	730.001																						

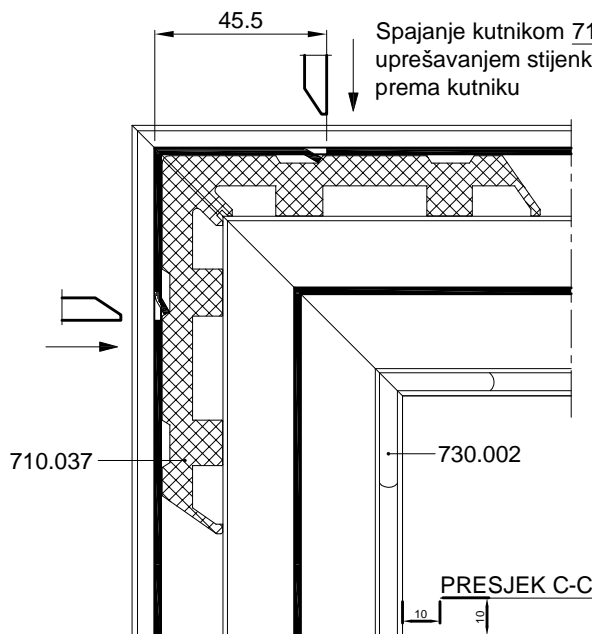
## SPAJANJE PROFILA FT-0201 KUTNICIMA; 730.009, 710.037



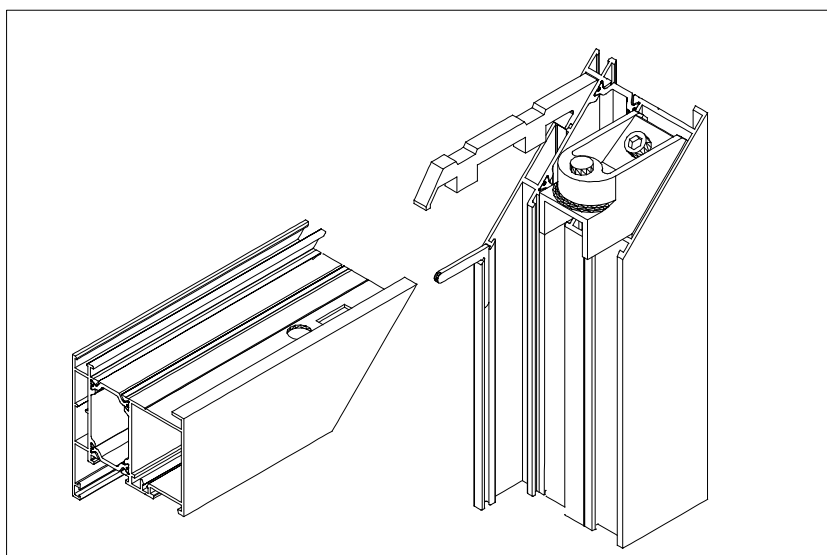
Spajanje kutnikom 730.009 s predobradom štancanja

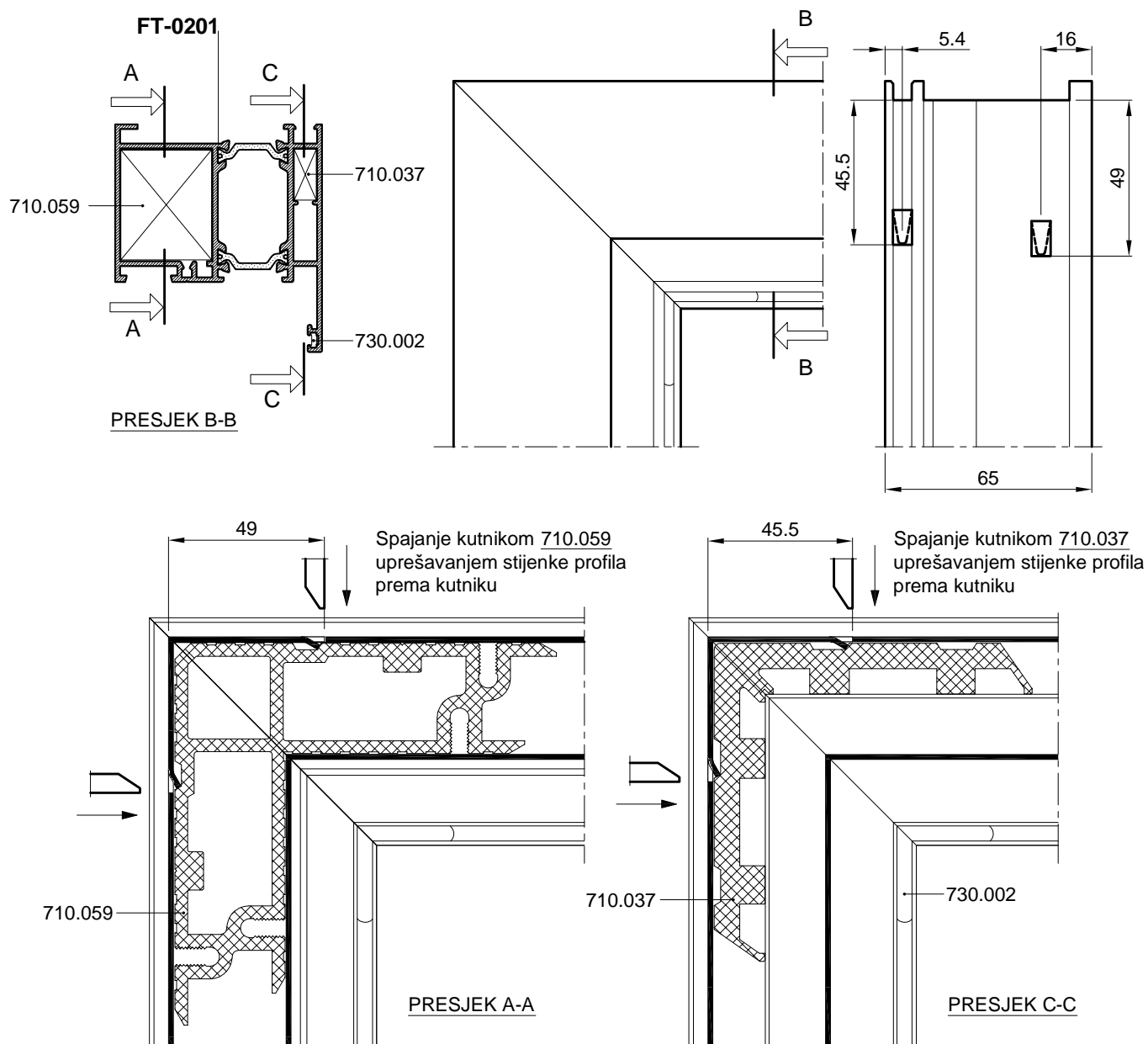


Spajanje kutnikom 710.037 uprešavanjem stijenke profila prema kutniku

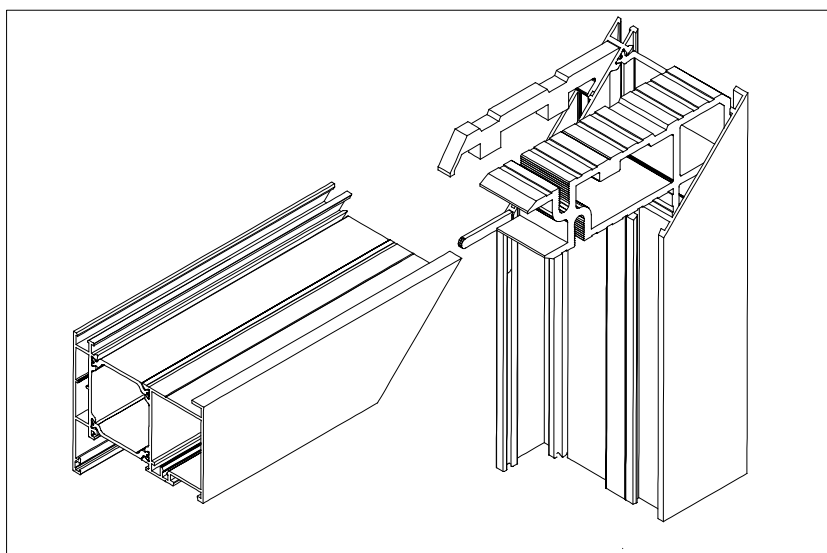


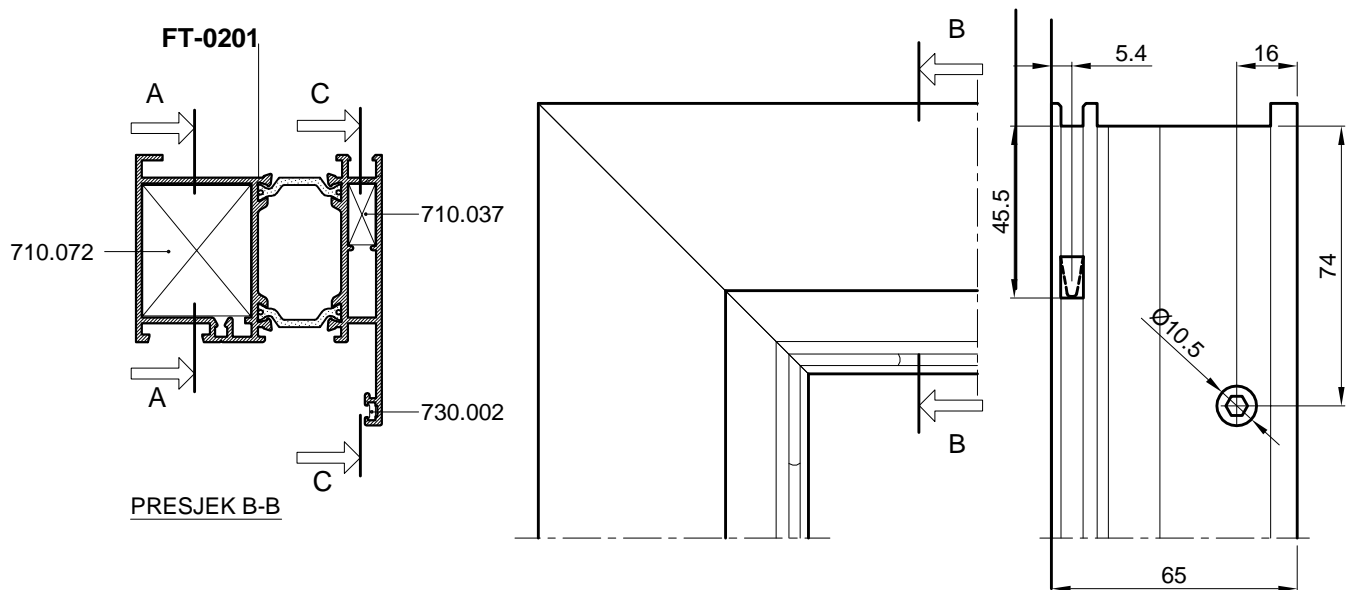
OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFILE RAMA: FT-0214, FT-0225, FT-0231, i FT0232



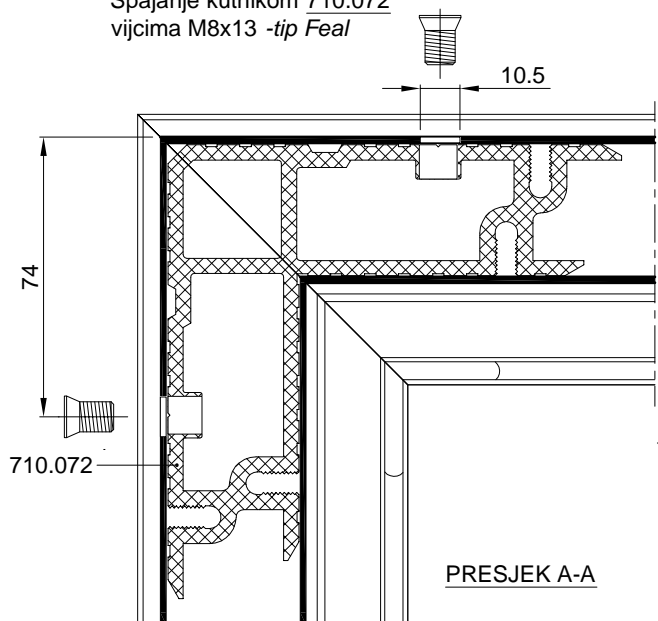
**SPAJANJE PROFILA FT-0201 KUTNICIMA; 730.059, 710.037**


OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFILE RAMA: FT-0214, FT-0225, FT-0231, i FT0232

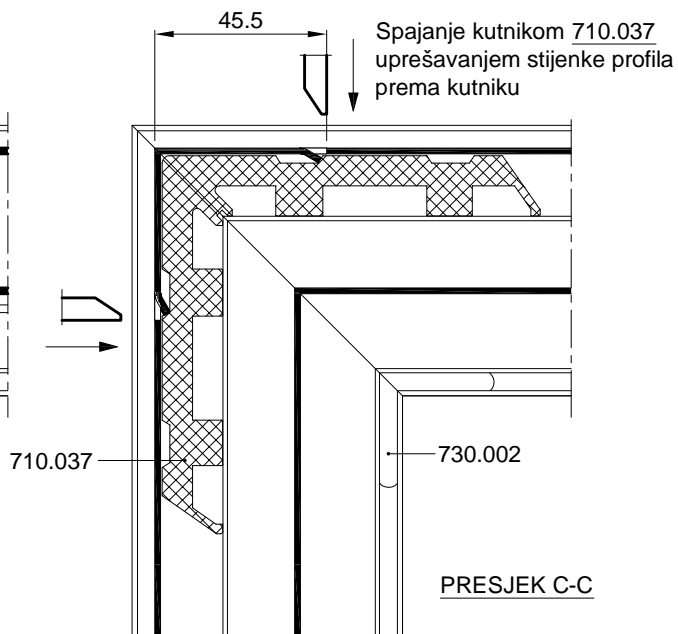


**SPAJANJE PROFILA FT-0201 KUTNICIMA; 710.072, 710.037**


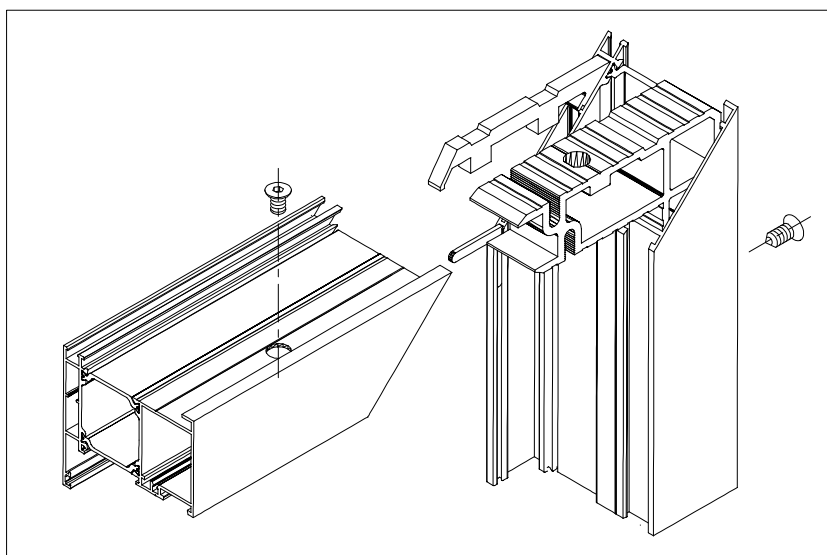
Spajanje kutnikom 710.072  
vijcima M8x13 -tip Feal



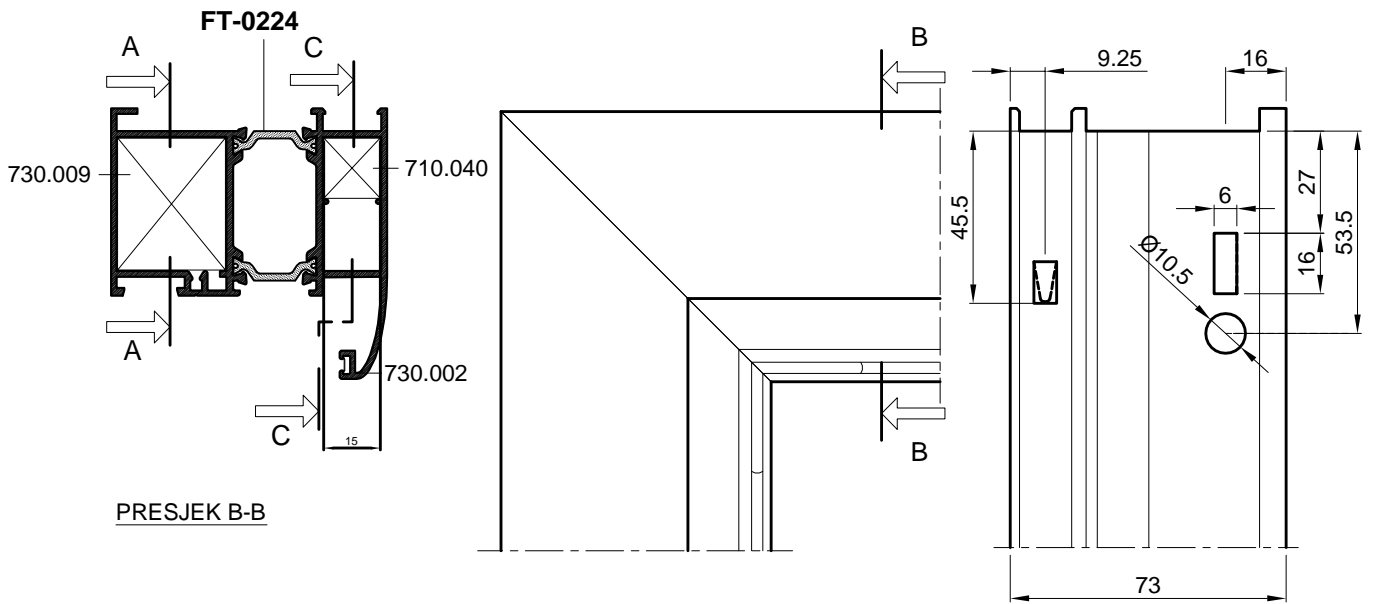
Spajanje kutnikom 710.037  
uprešavanjem stijenke profila  
prema kutniku



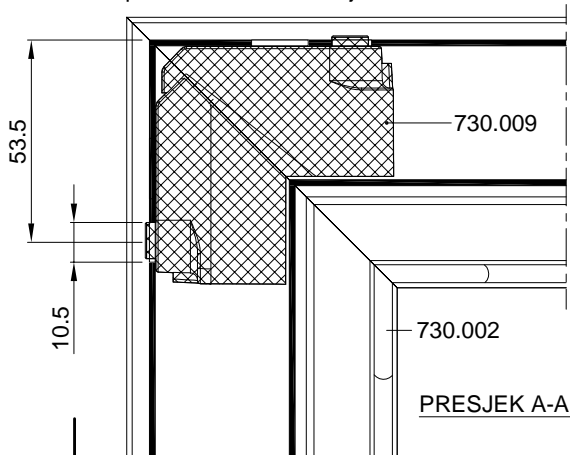
OVAJ RASPORED I NAČIN SPAJANJA  
KUTNICIMA PRIMJENJIV JE I NA PROFILE  
RAMA: FT-0214, FT-0225, FT-0231, i FT0232



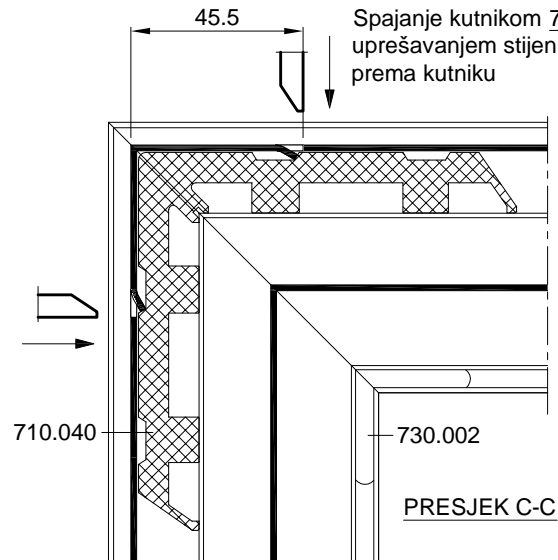
## SPAJANJE PROFILA FT-0224 KUTNICIMA; 730.009, 710.040



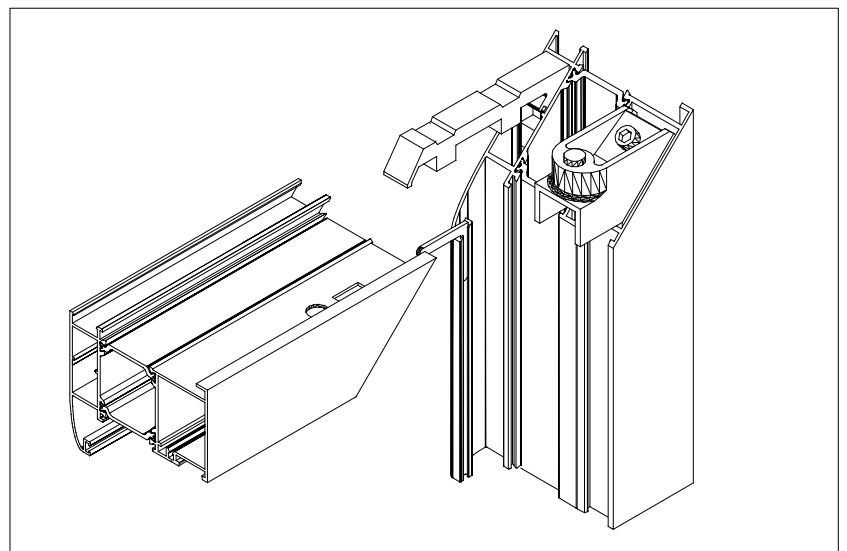
Spajanje kutnikom 730.009 s predobradom štancanja



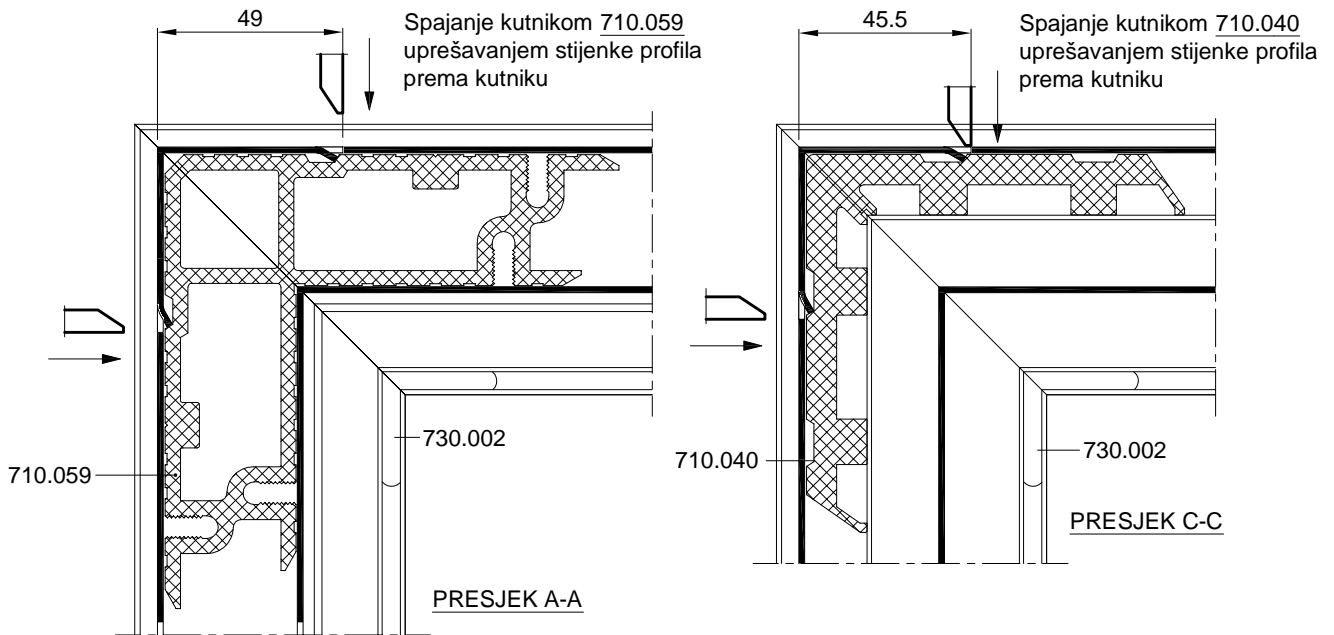
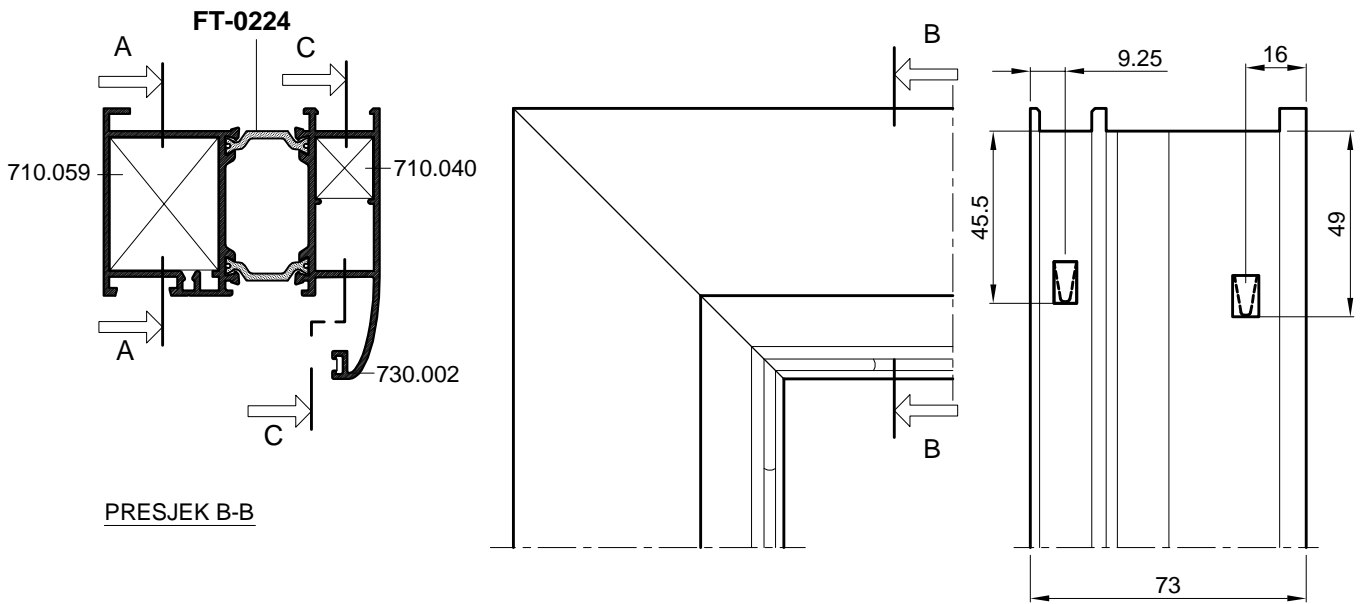
Spajanje kutnikom 710.040 uprešavanjem stijenke profila prema kutniku



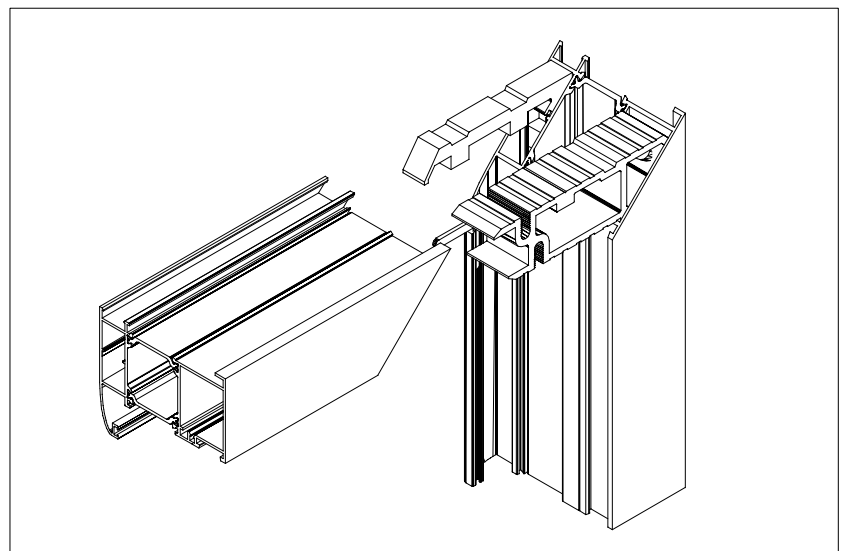
OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL RAMA FT-0229



## SPAJANJE PROFILA FT-0224 KUTNICIMA; 710.059, 710.040

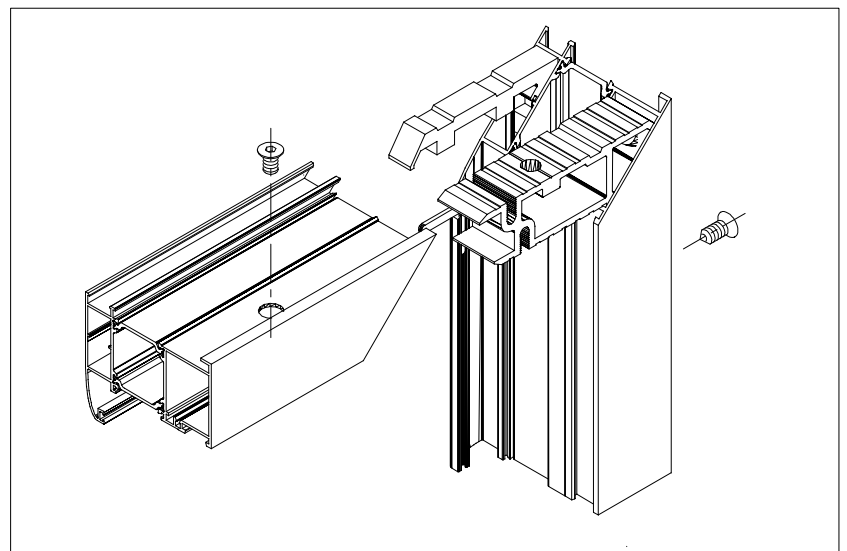
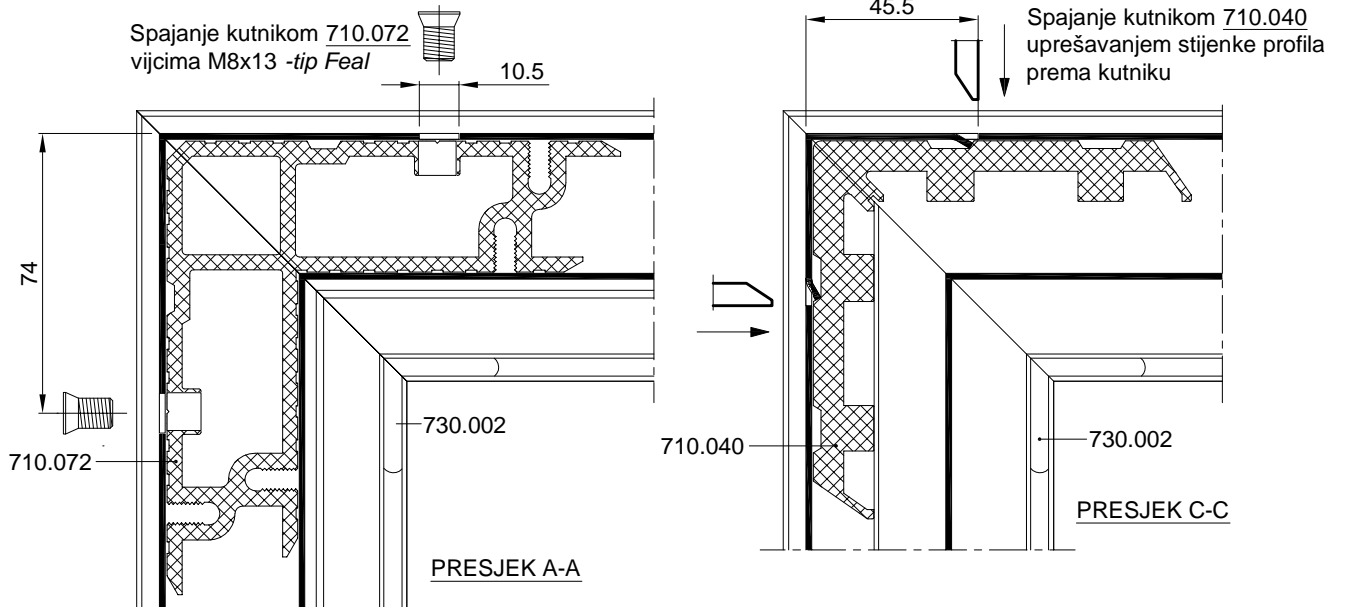
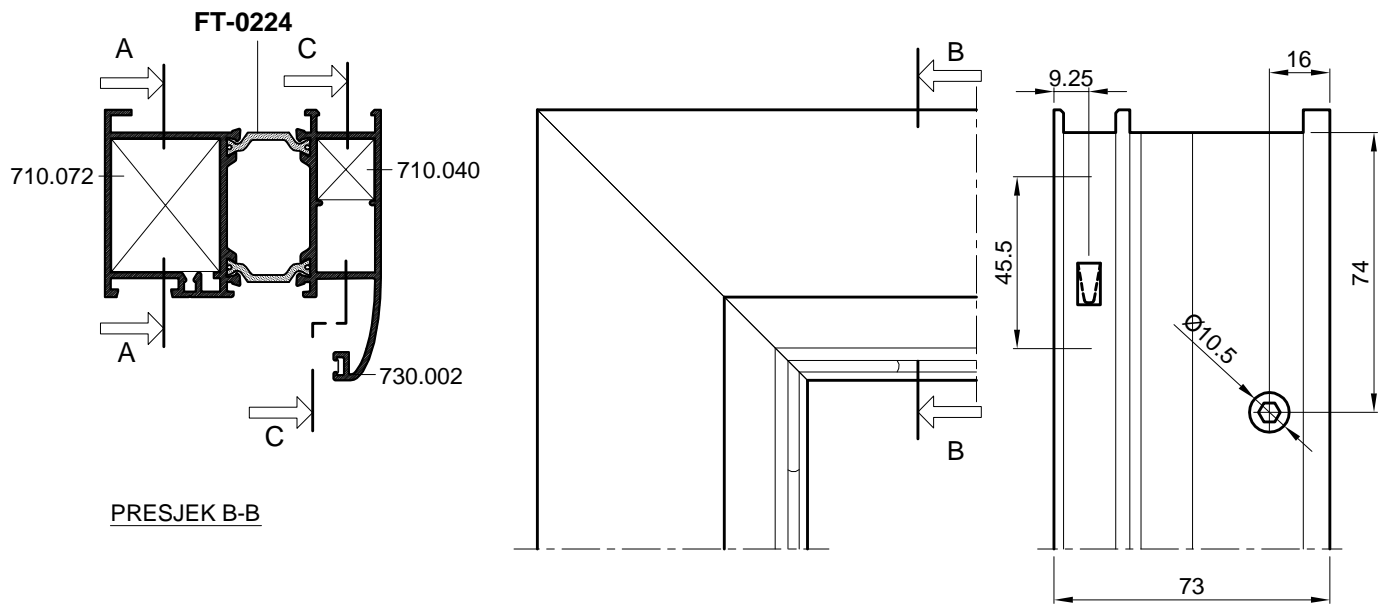


OVAJ RASPORED I NAČIN SPAJANJA  
KUTNICIMA PRIMJENJIV JE I NA PROFIL  
RAMA FT-0229

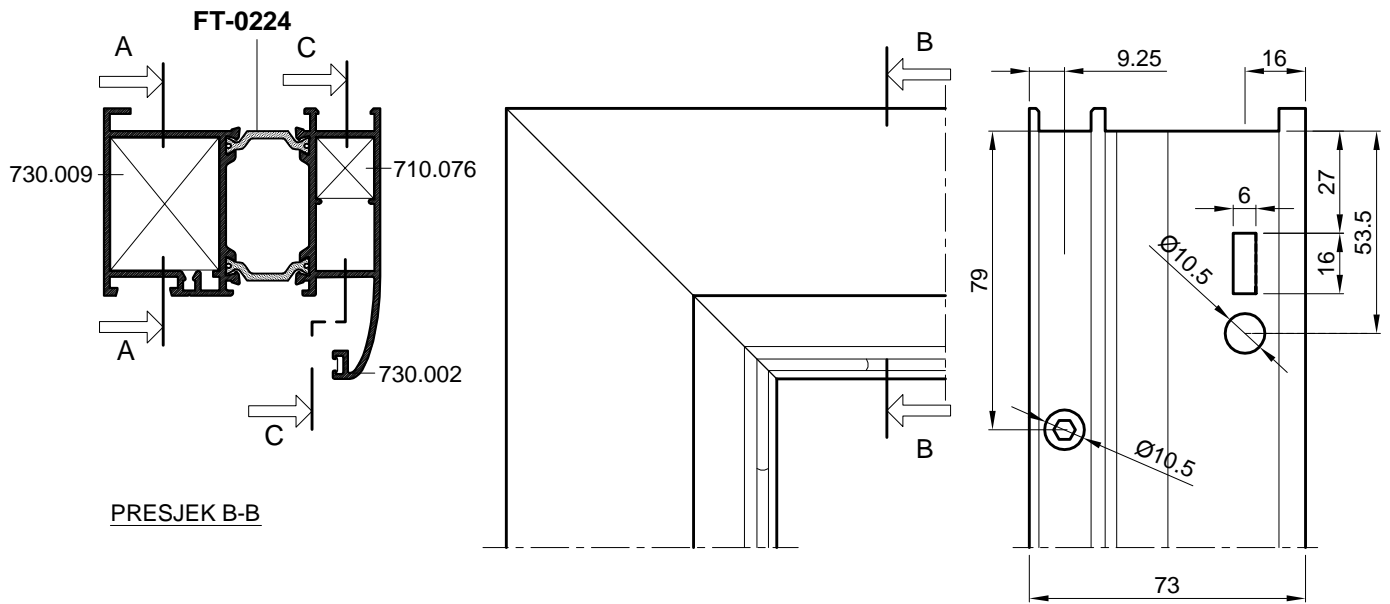




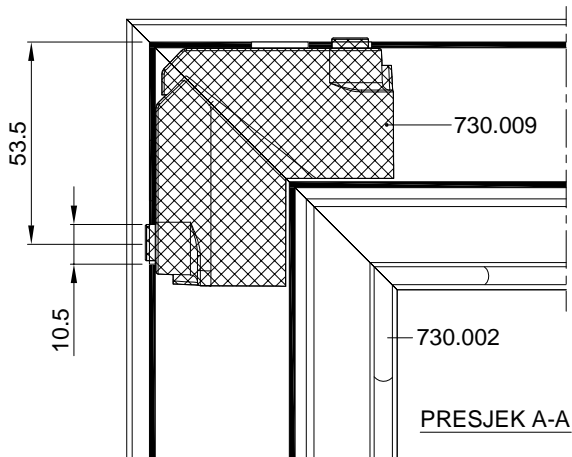
SPAJANJE PROFILA FT-0224 KUTNICIMA; 710.072, 710.040



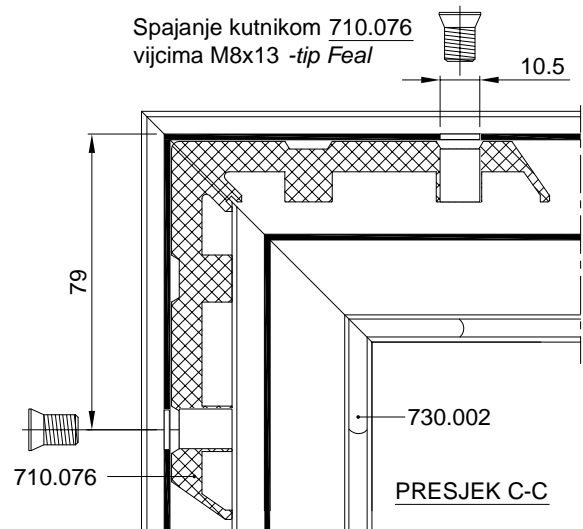
## SPAJANJE PROFILA FT-0224 KUTNICIMA; 730.009, 710.076



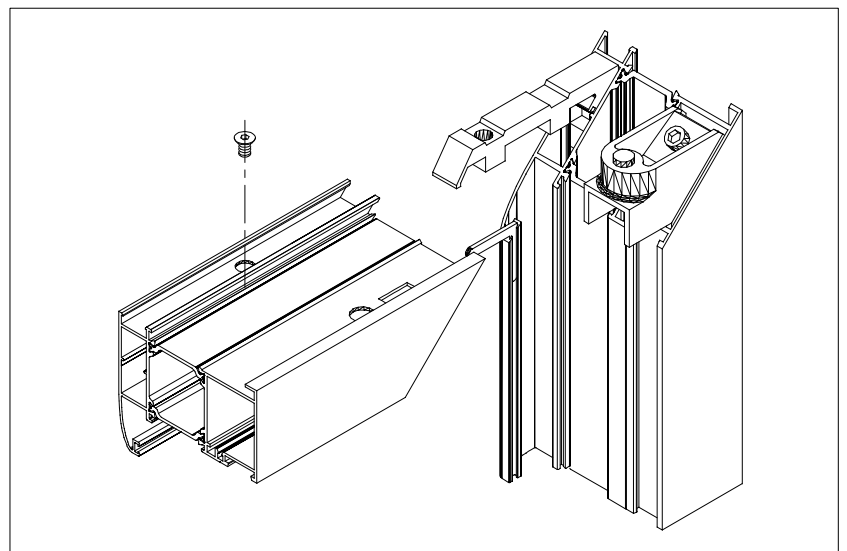
Spajanje kutnikom 730.009 s predobradom štancanja



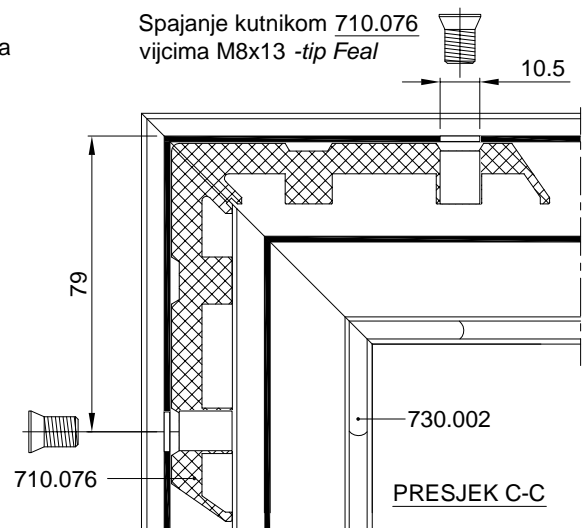
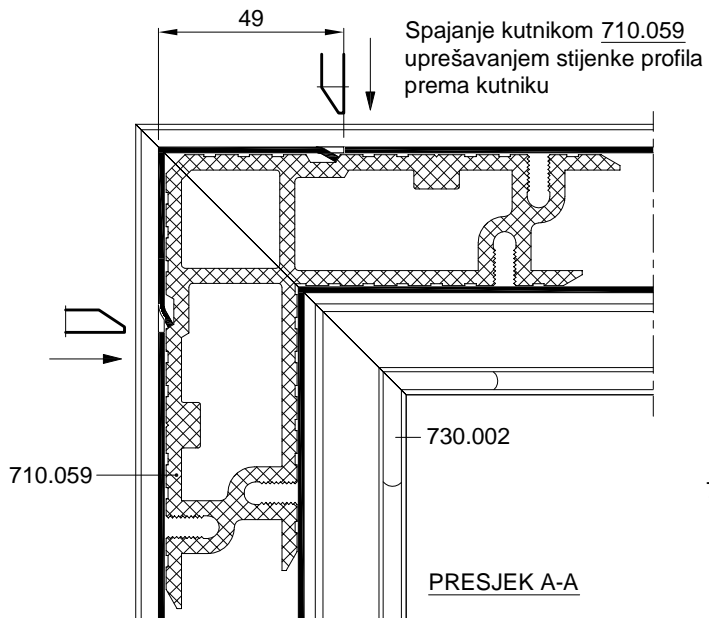
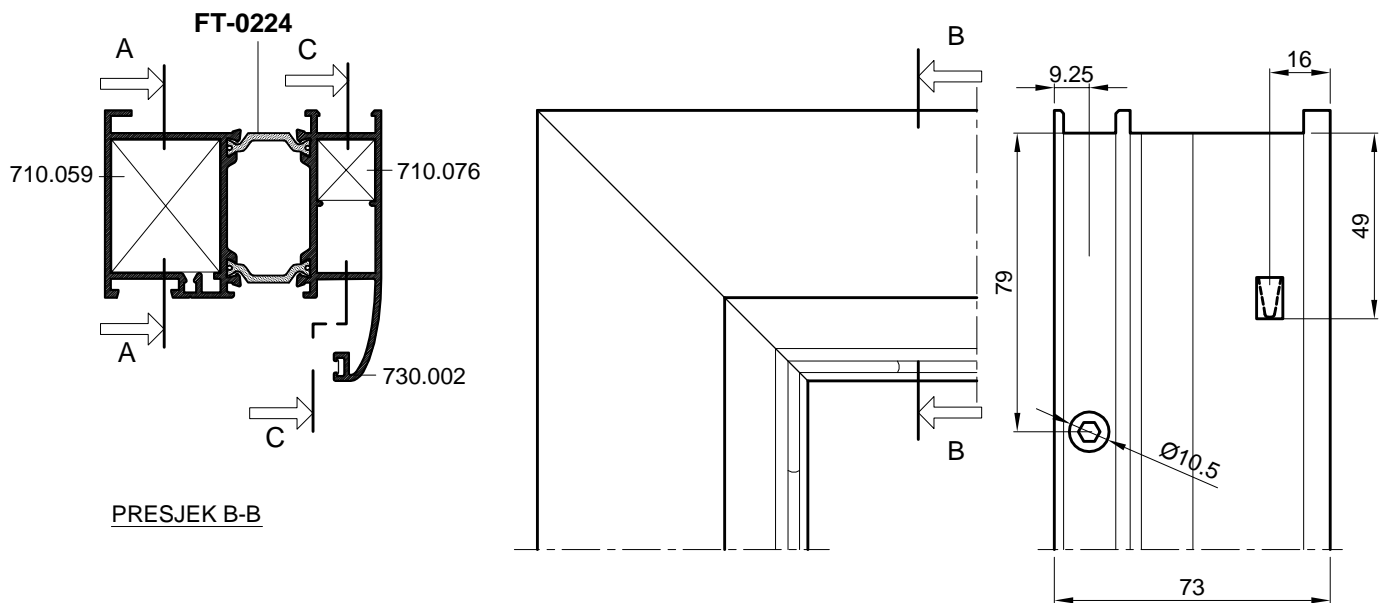
Spajanje kutnikom 710.076 vijcima M8x13 -tip Feal



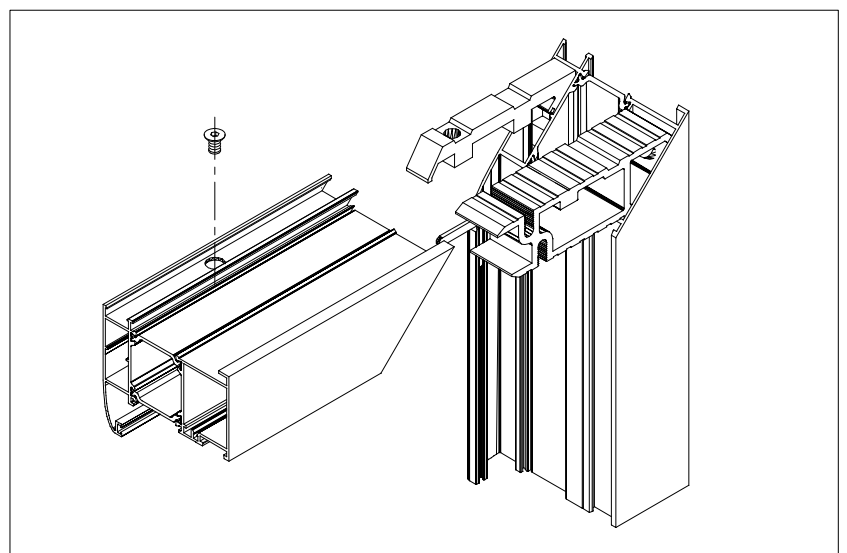
OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL RAMA FT-0229



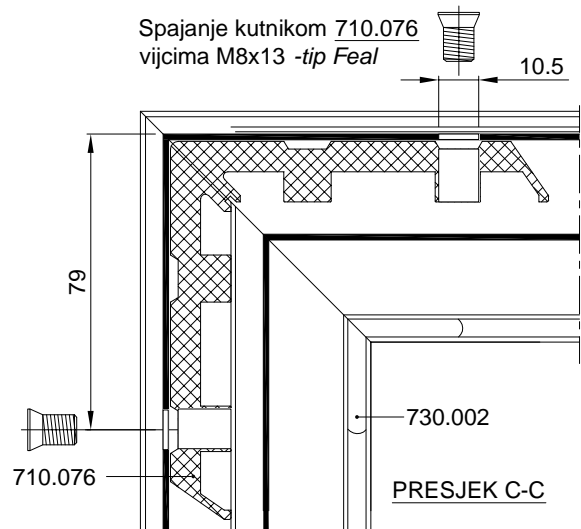
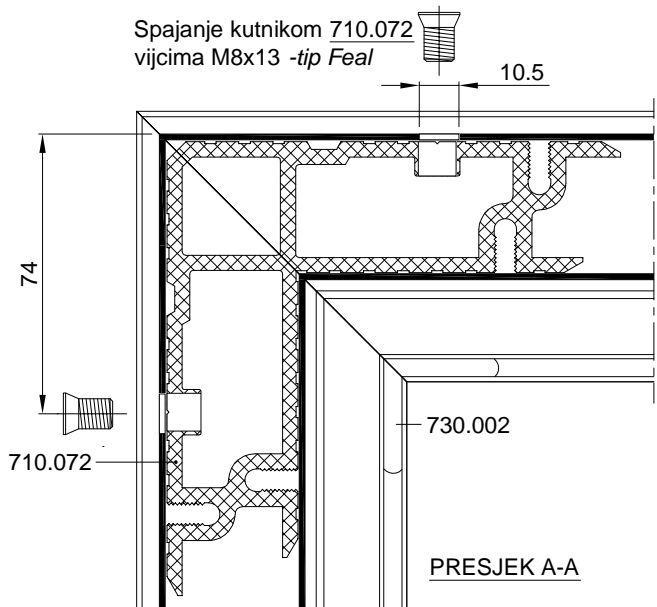
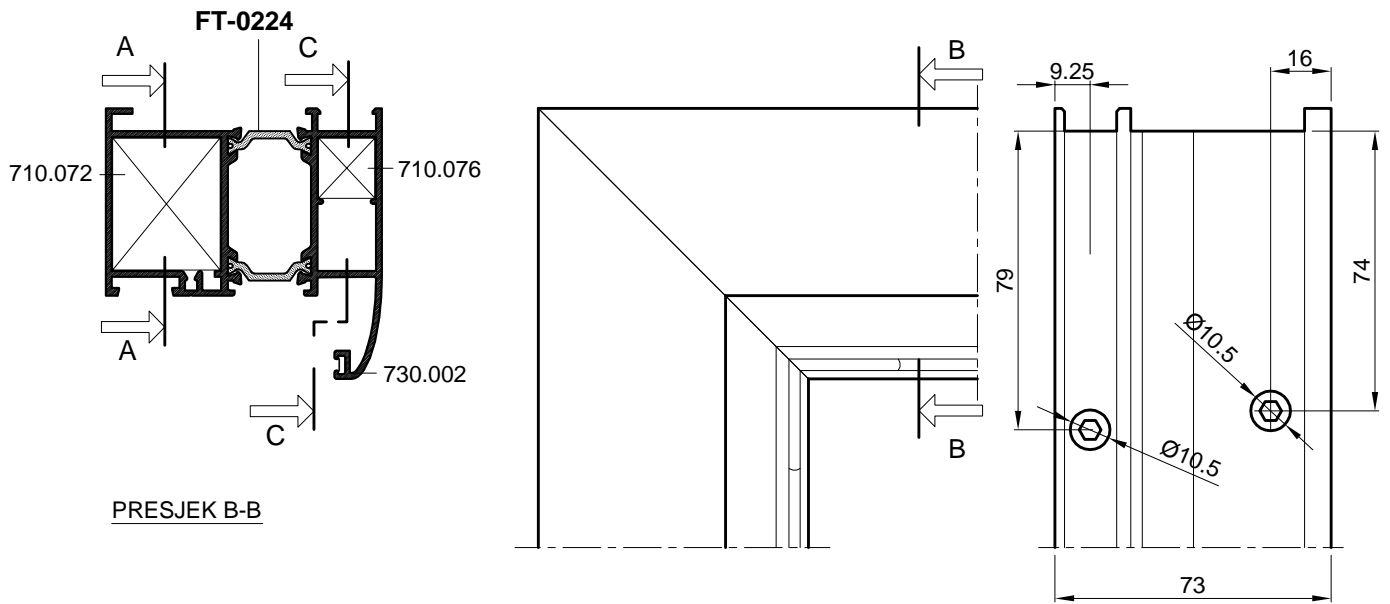
## SPAJANJE PROFILA FT-0224 KUTNICIMA; 710.059, 710.076



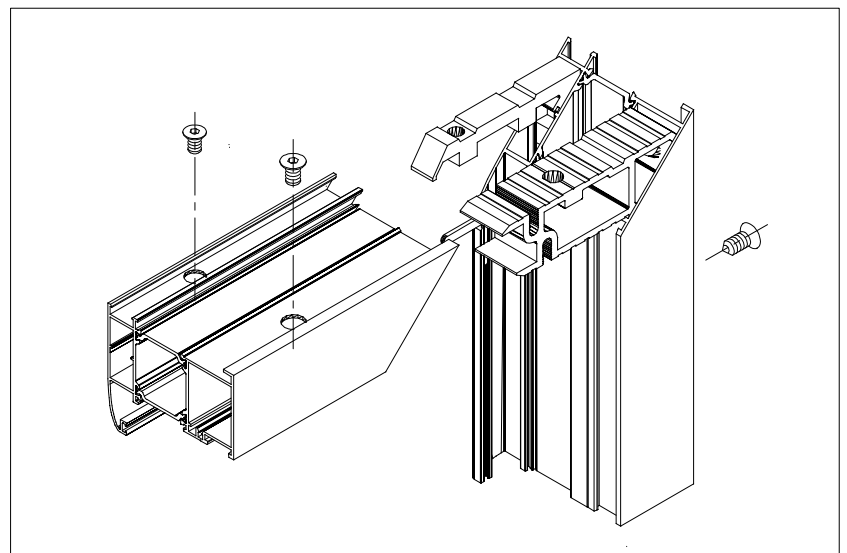
OVAJ RASPORED I NAČIN SPAJANJA  
KUTNICIMA PRIMJENJIV JE I NA PROFIL  
RAMA FT-0229



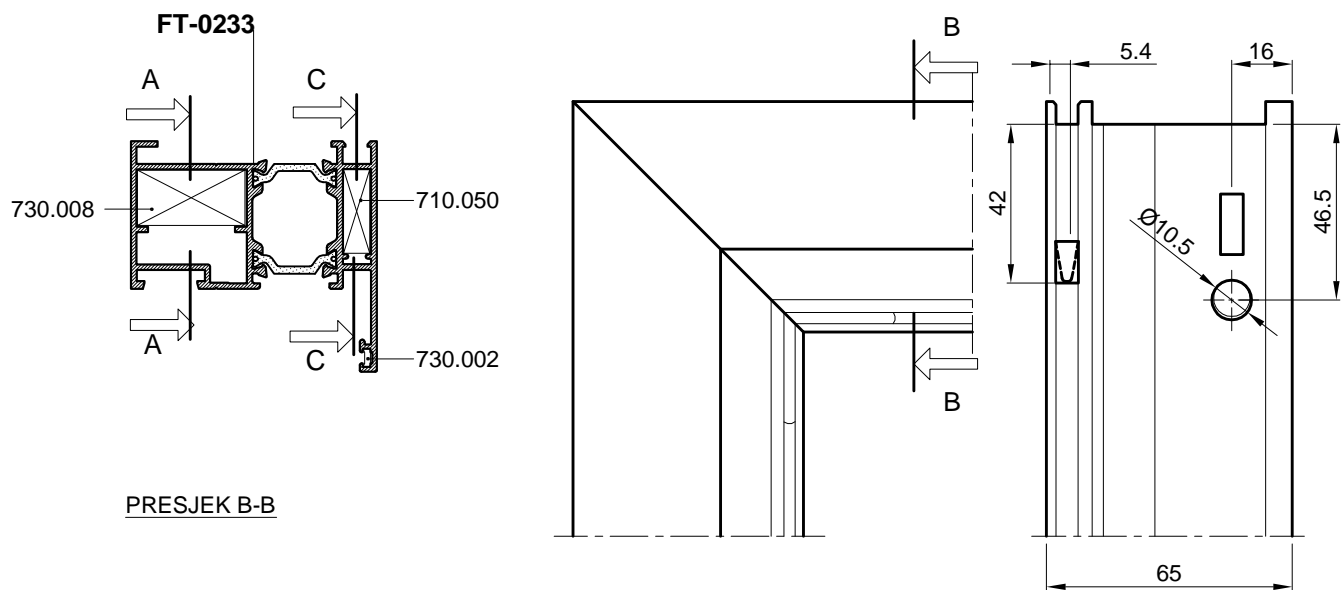
## SPAJANJE PROFILA FT-0224 KUTNICIMA; 710.072, 710.076



OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFILE RAMA: FT-0214, FT-0225, FT-0231, i FT0232

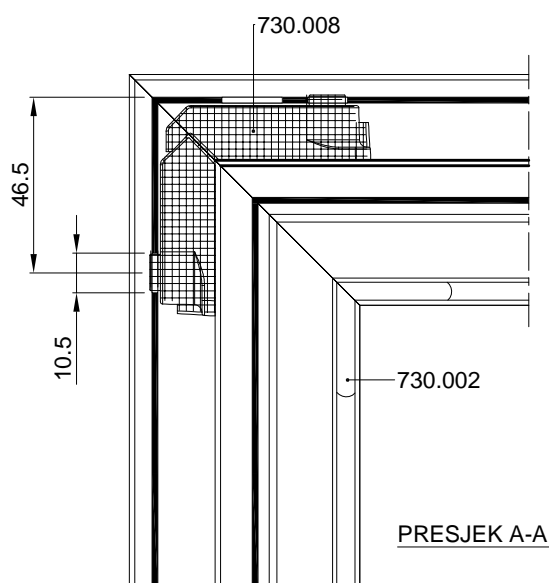


## SPAJANJE PROFILA FT-0233 KUTNICIMA; 730.008, 710.050



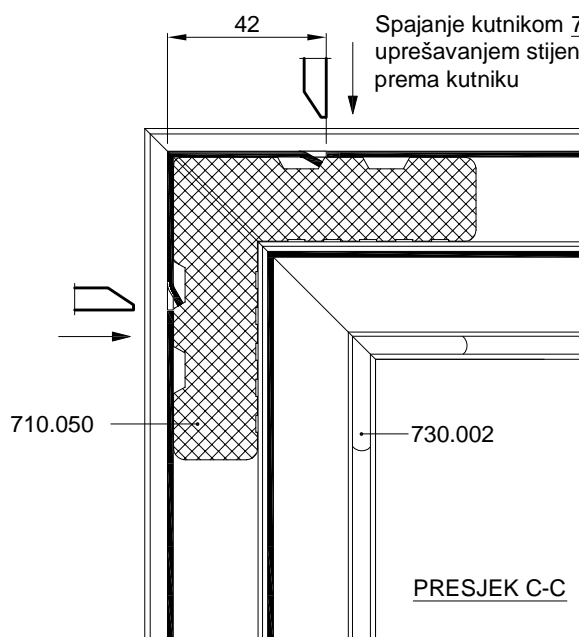
PRESJEK B-B

Spajanje kutnikom 730.008 s predobradom štancanja

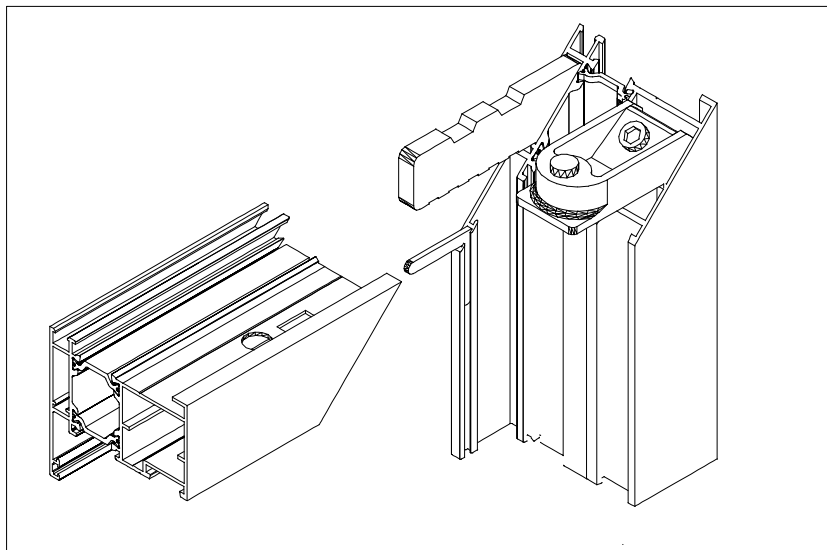


PRESJEK A-A

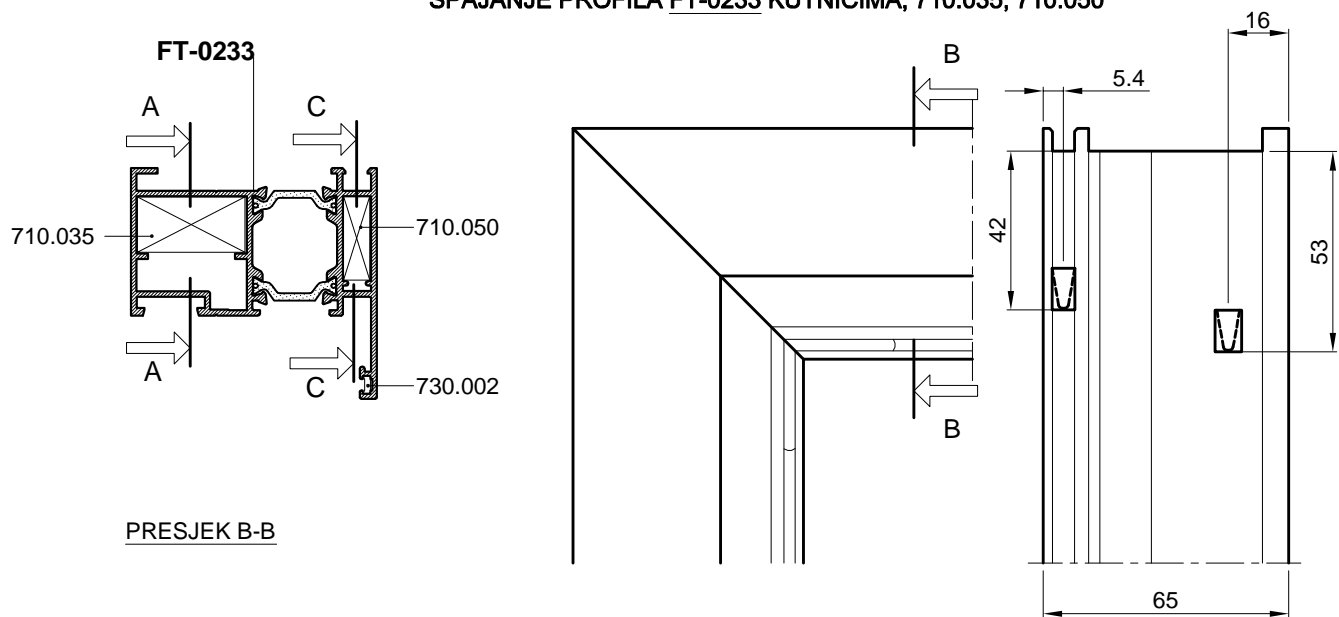
Spajanje kutnikom 710.050 uprešavanjem stijenke profila prema kutniku



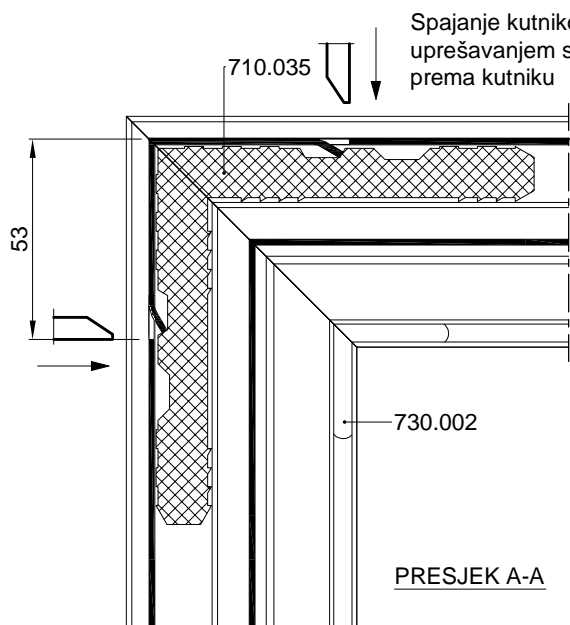
PRESJEK C-C



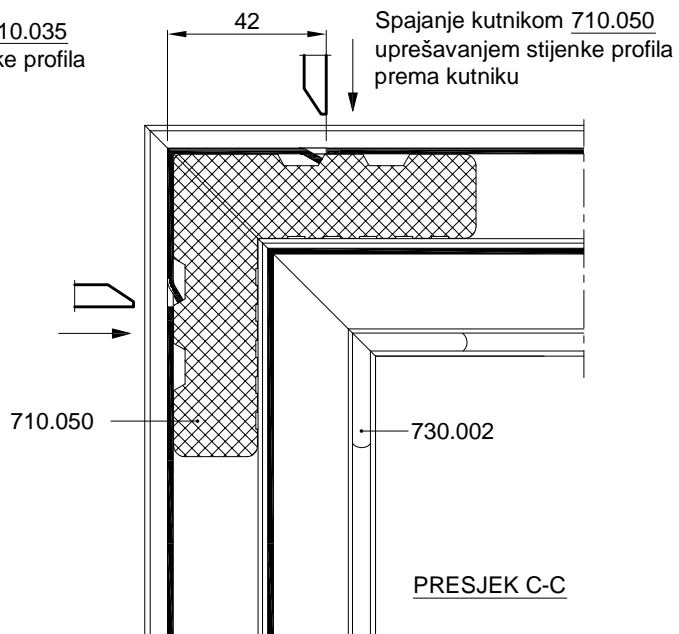
SPAJANJE PROFILA FT-0233 KUTNICIMA; 710.035, 710.050



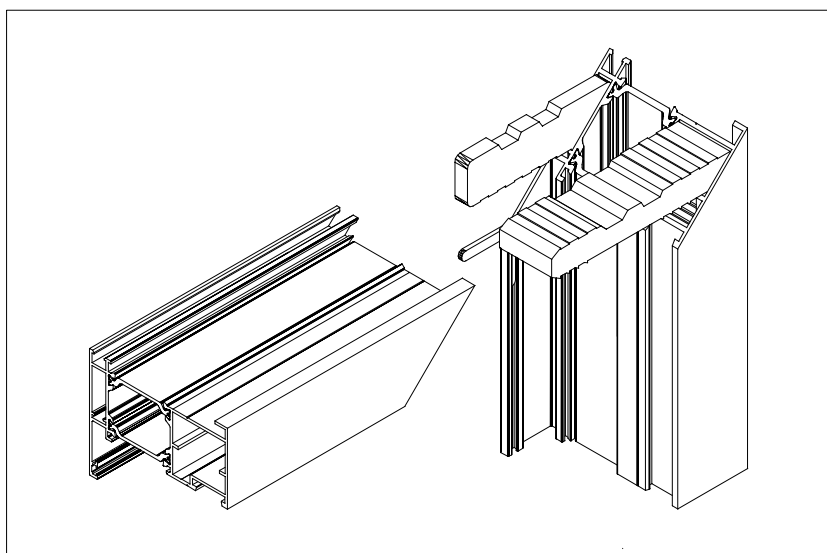
PRESJEK B-B



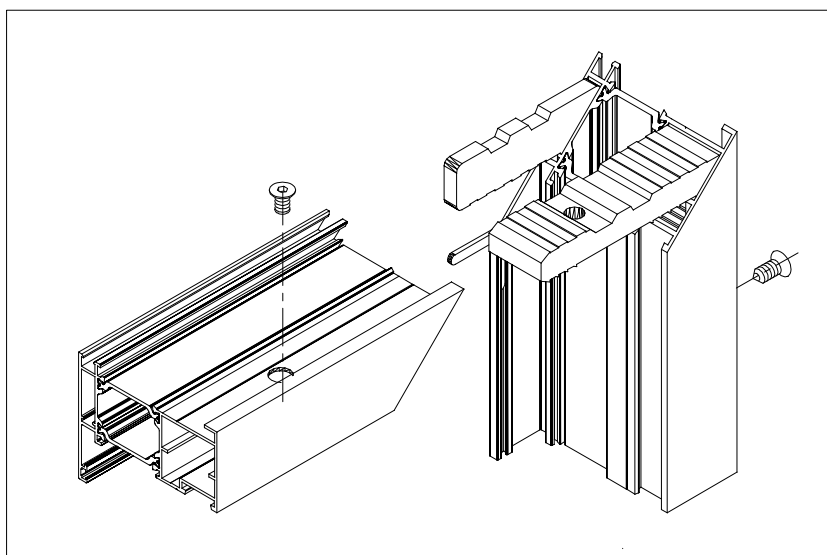
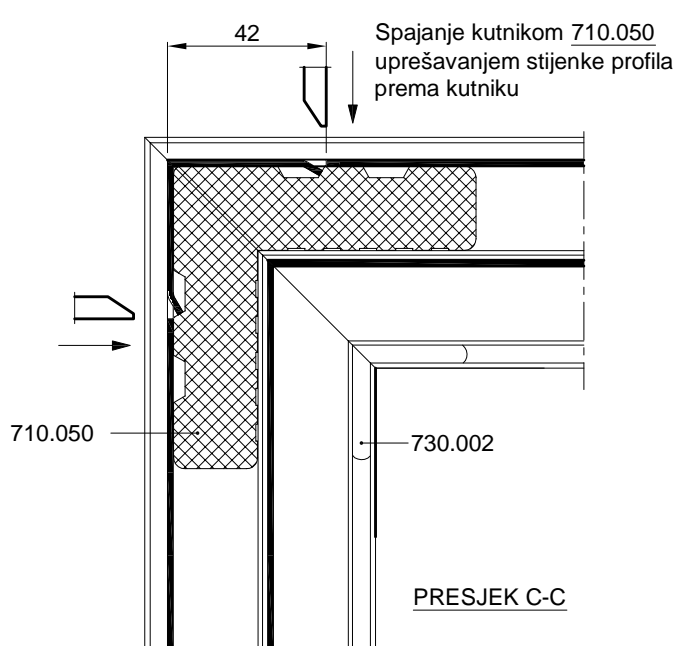
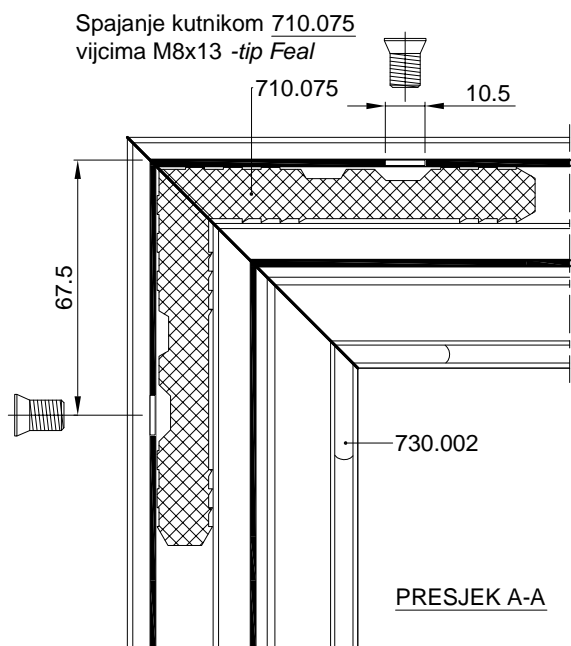
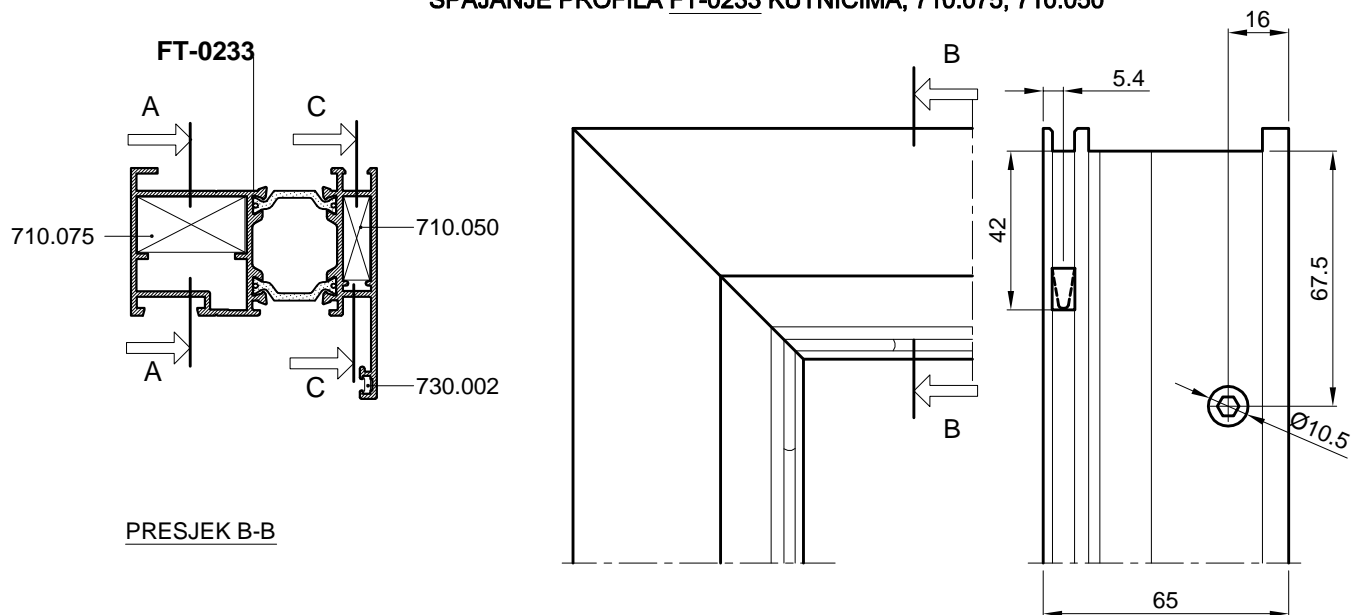
PRESJEK A-A



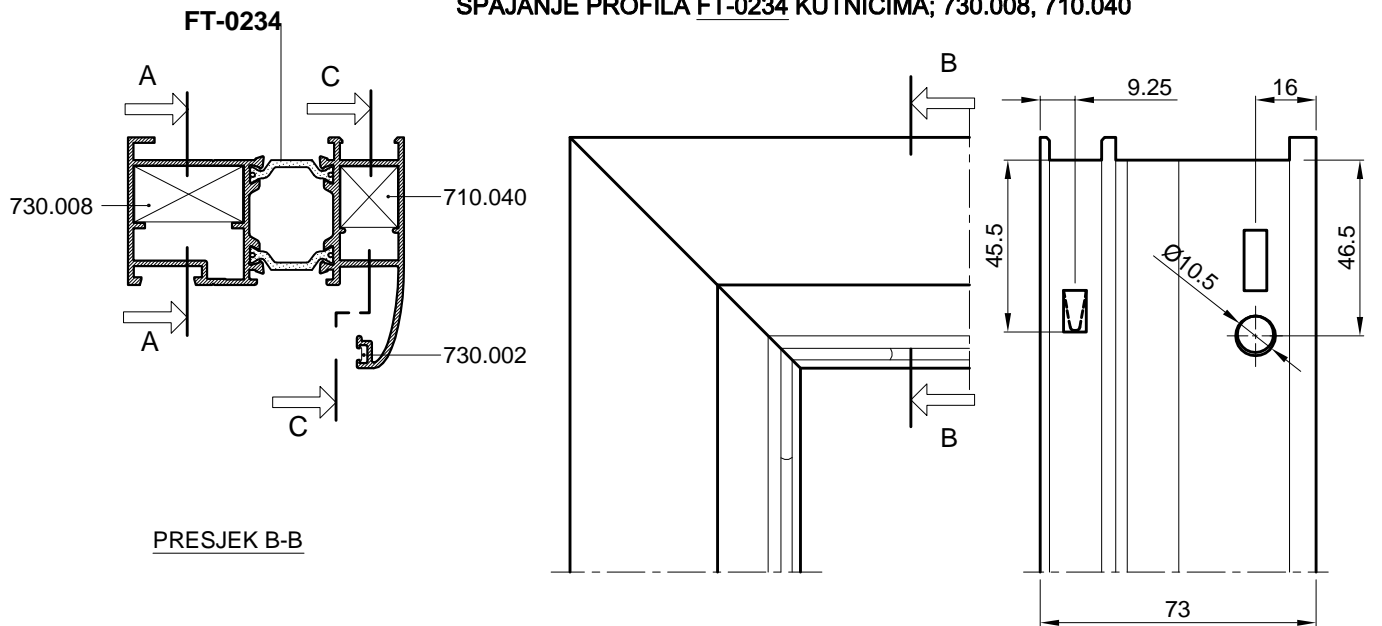
PRESJEK C-C



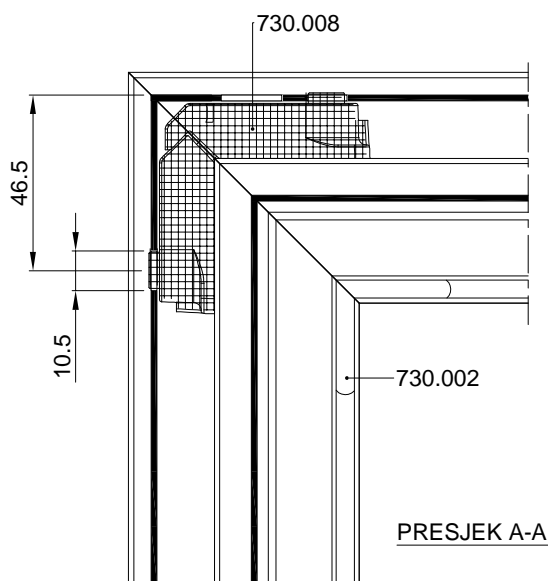
## SPAJANJE PROFILA FT-0233 KUTNICIMA; 710.075, 710.050



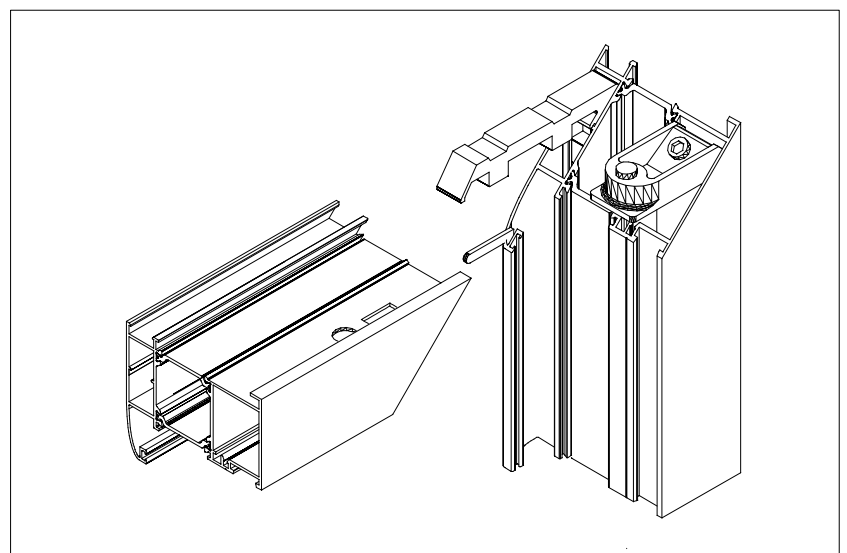
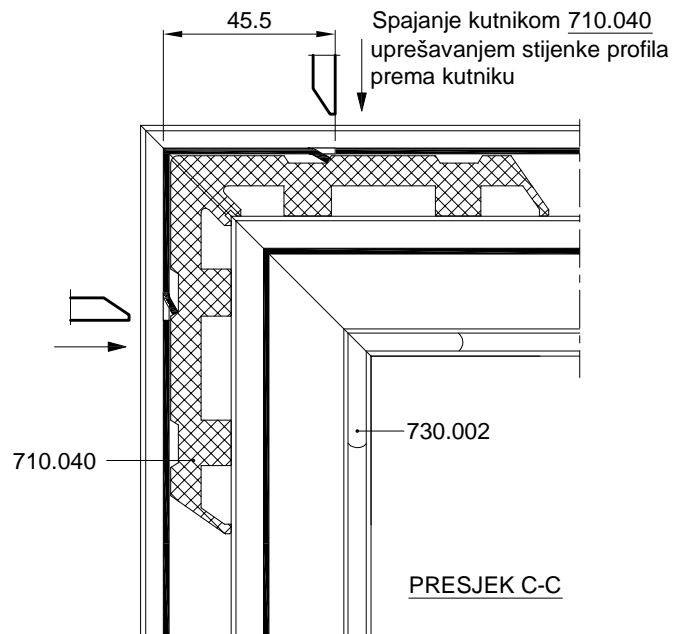
## SPAJANJE PROFILA FT-0234 KUTNICIMA; 730.008, 710.040



Spajanje kutnikom 730.008 s predobradom štancanja

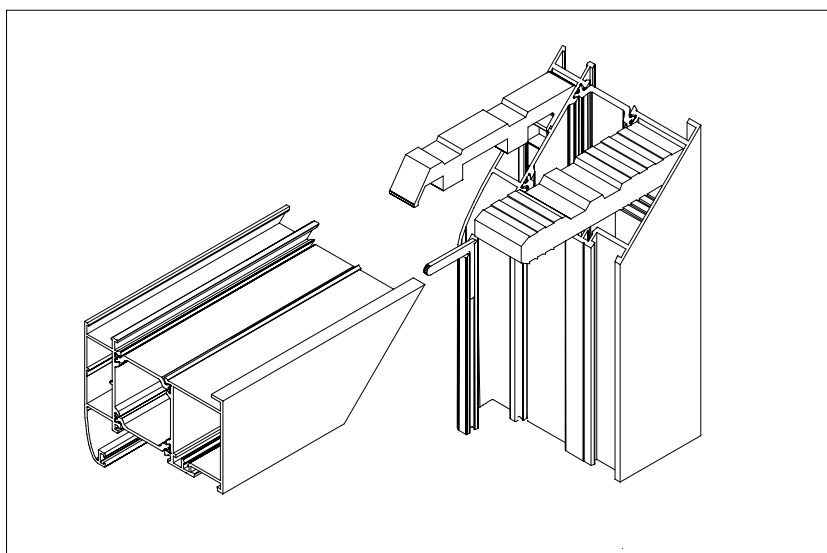
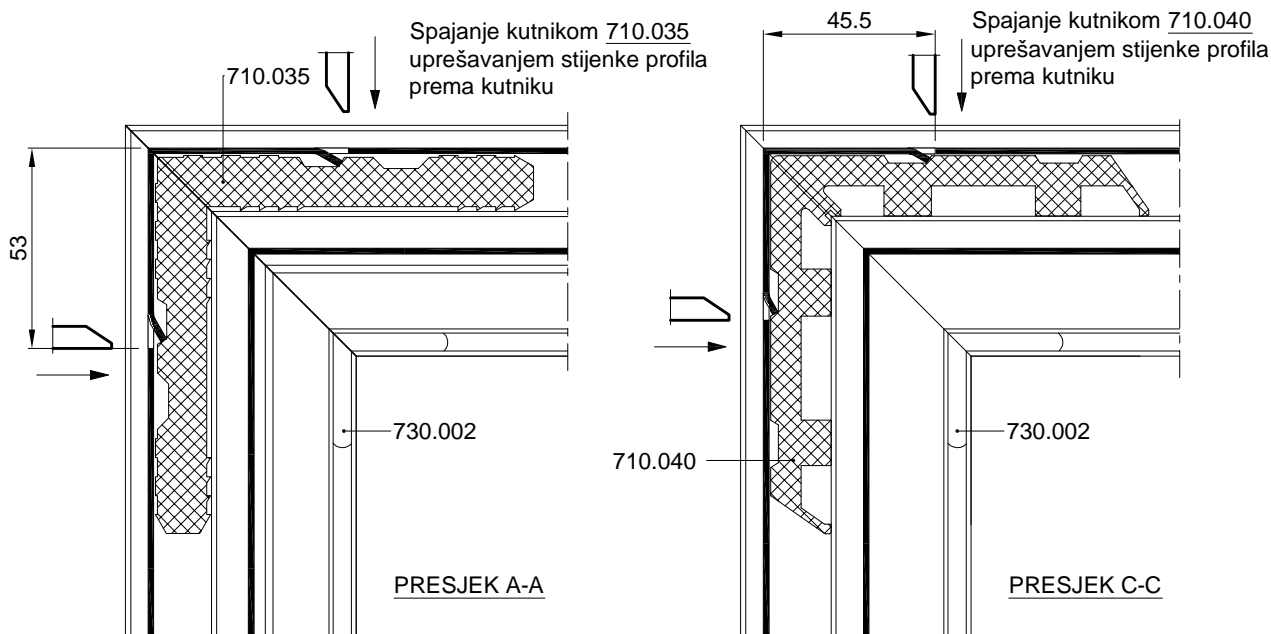
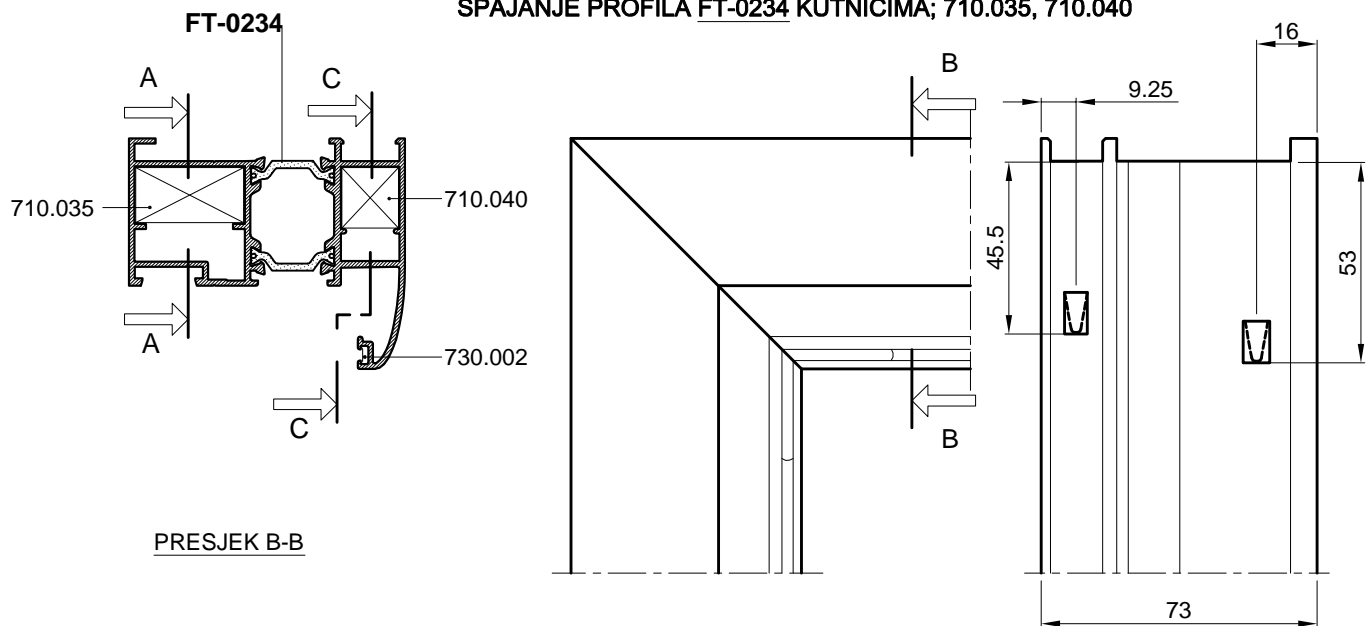


Spajanje kutnikom 710.040 uprešavanjem stijenke profila prema kutniku

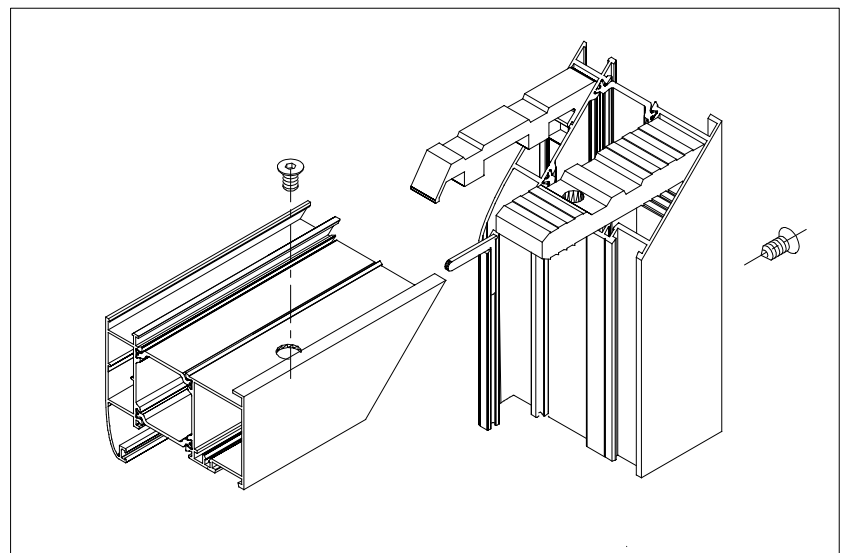
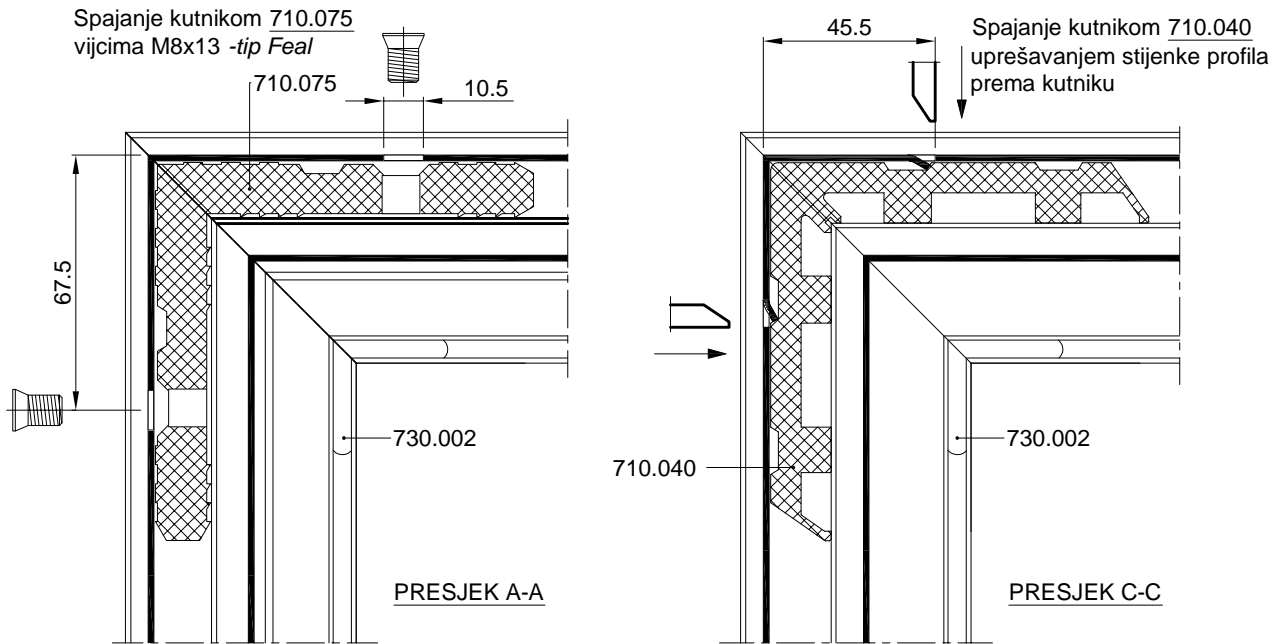
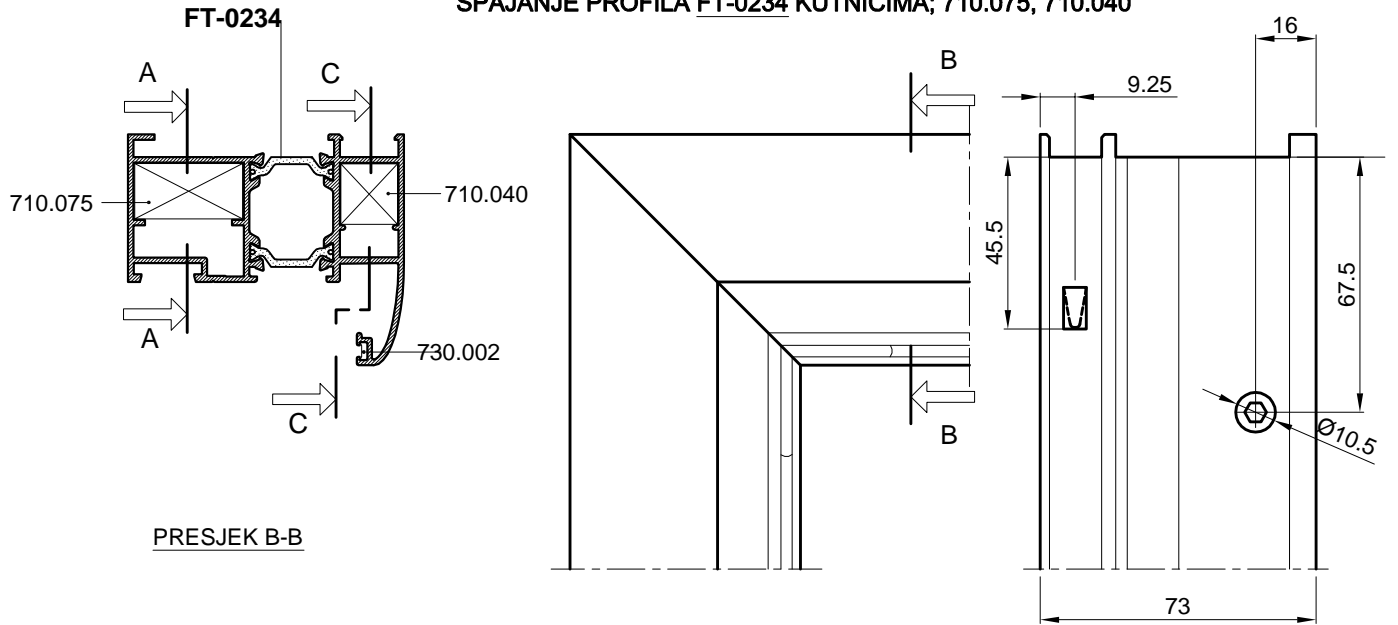




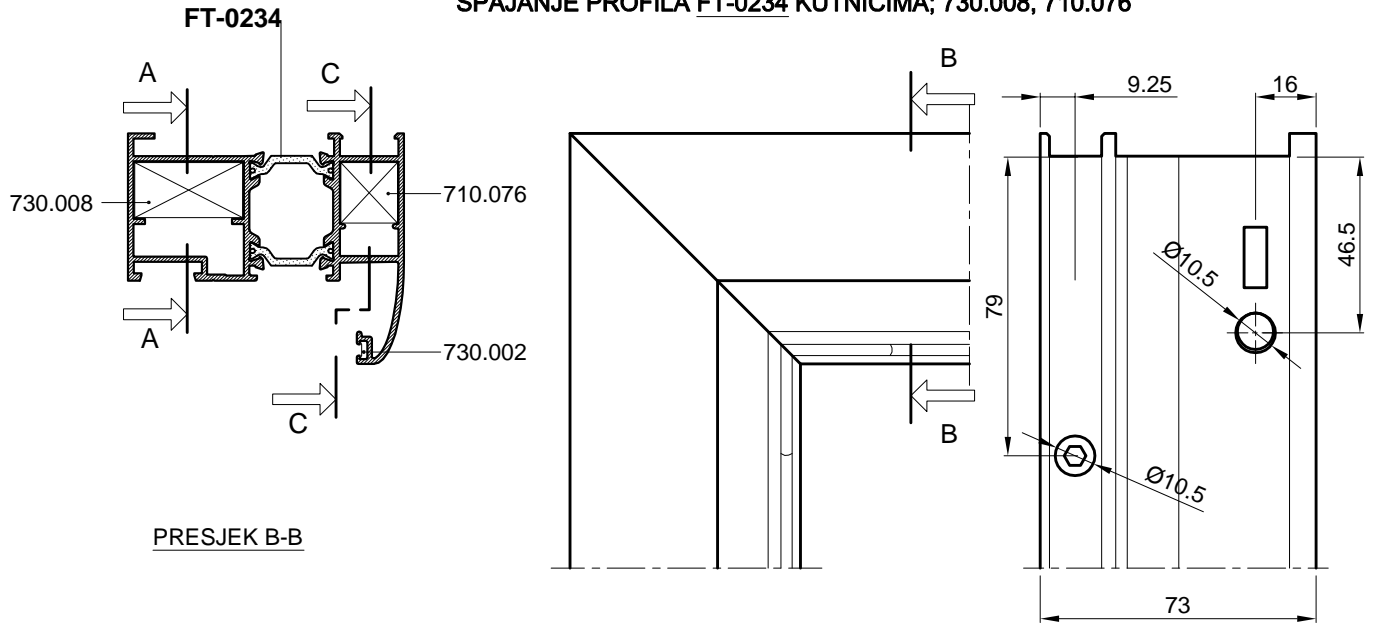
SPAJANJE PROFILA FT-0234 KUTNICIMA; 710.035, 710.040



## SPAJANJE PROFILA FT-0234 KUTNICIMA; 710.075, 710.040

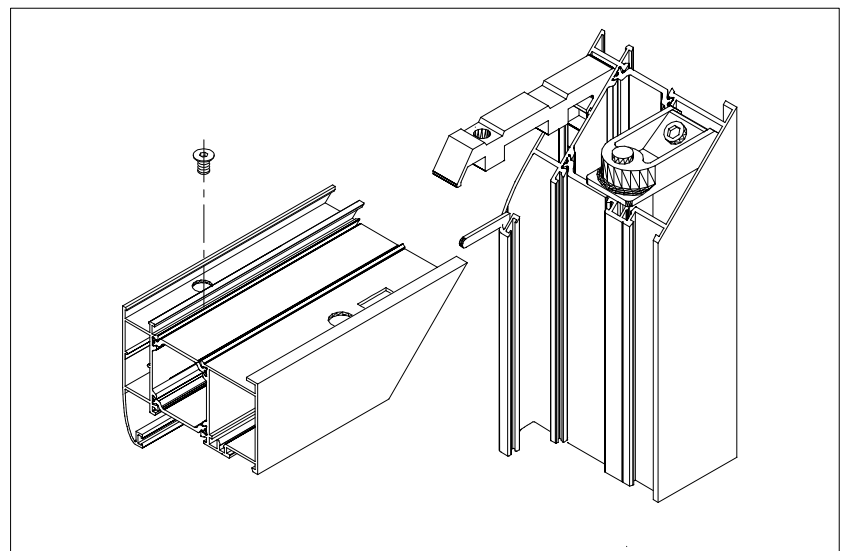
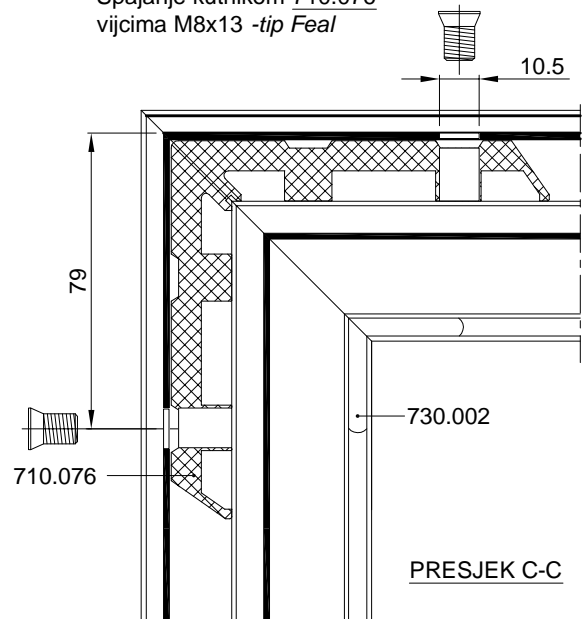
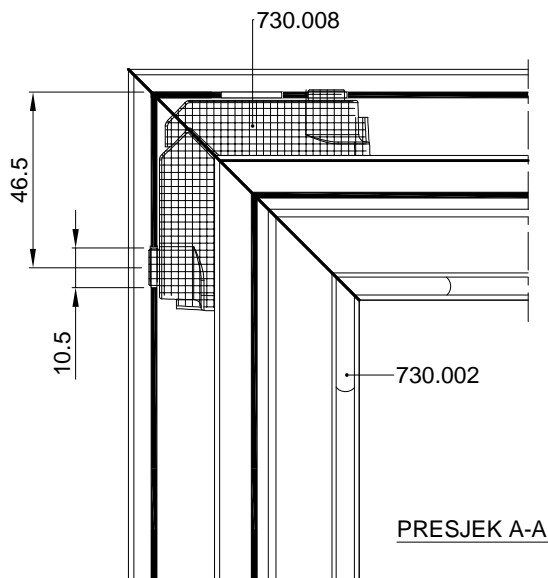


## SPAJANJE PROFILA FT-0234 KUTNICIMA; 730.008, 710.076

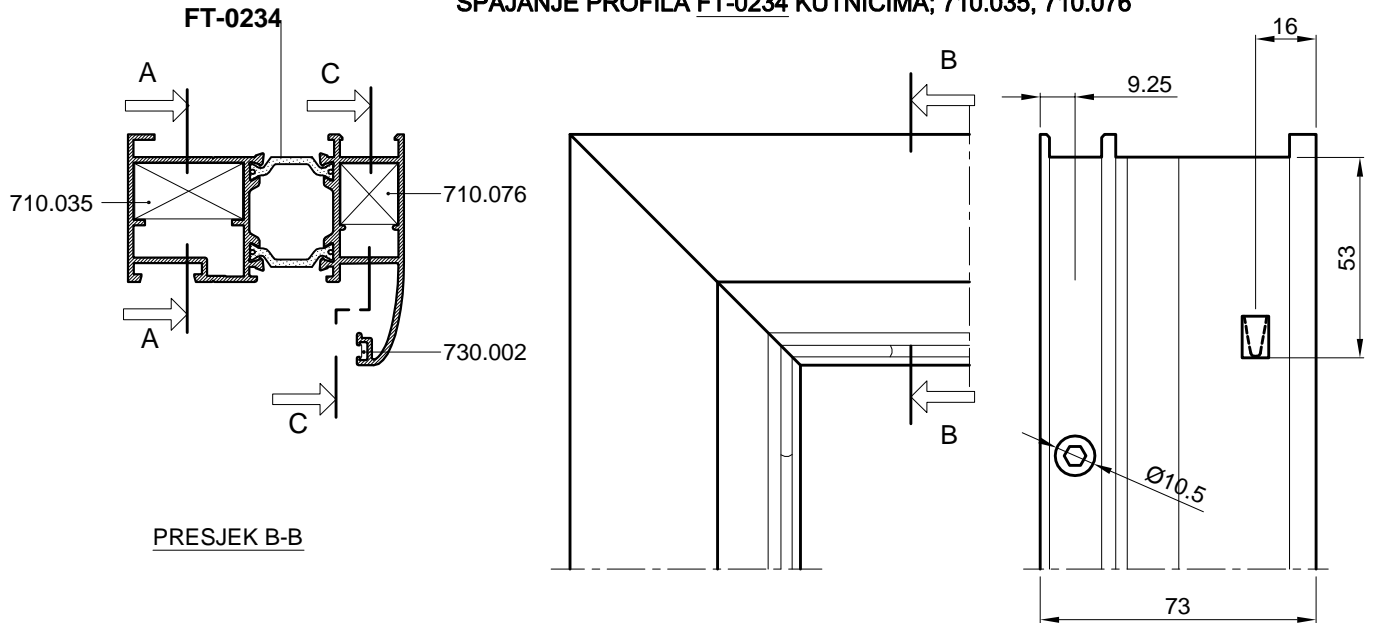


Spajanje kutnikom 730.008 s predobradom štancanja

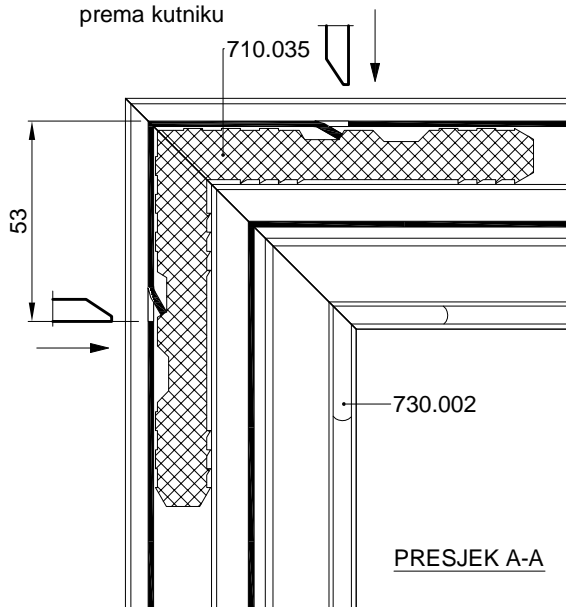
Spajanje kutnikom 710.076 vijcima M8x13 -tip Feal



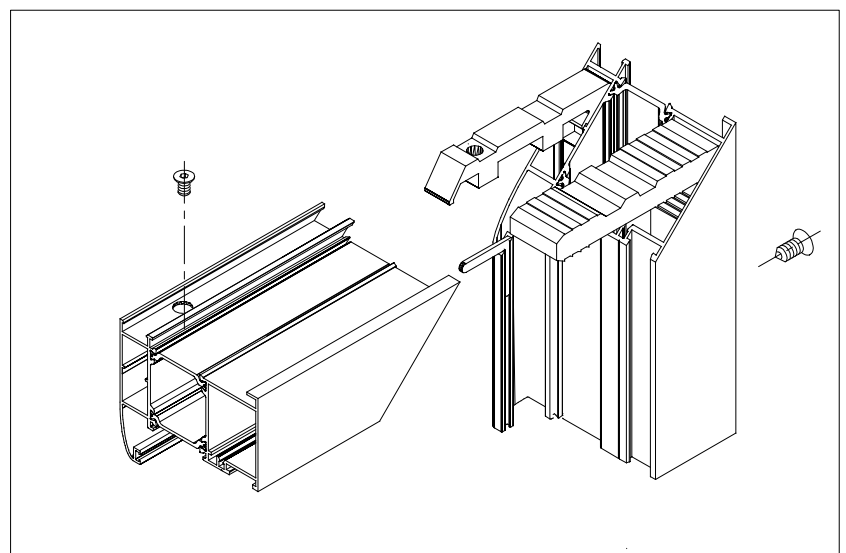
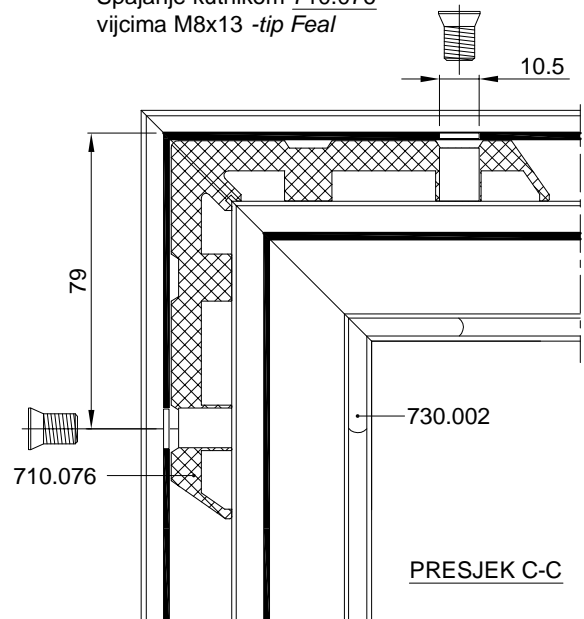
## SPAJANJE PROFILA FT-0234 KUTNICIMA; 710.035, 710.076



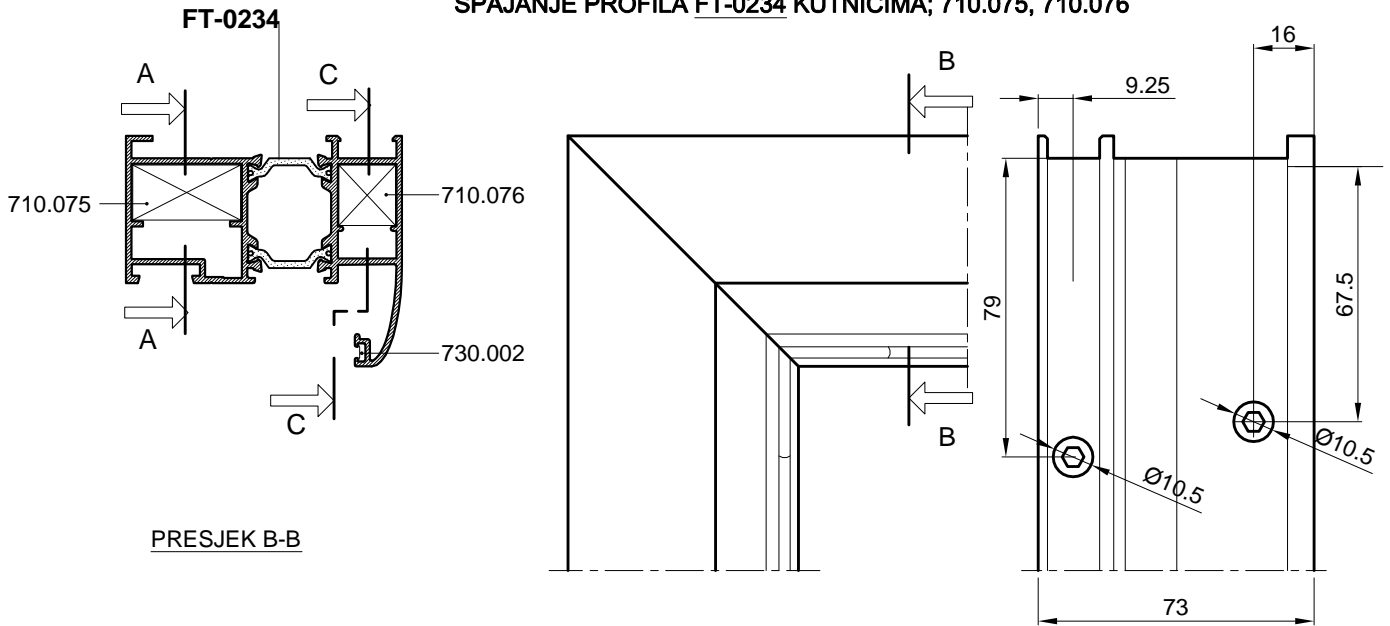
Spajanje kutnikom 710.035  
uprešavanjem stijenke profila  
prema kutniku



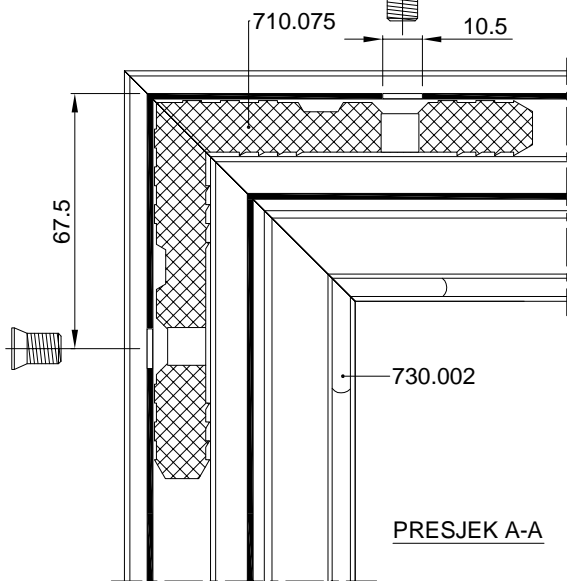
Spajanje kutnikom 710.076  
vijcima M8x13 -tip Feal



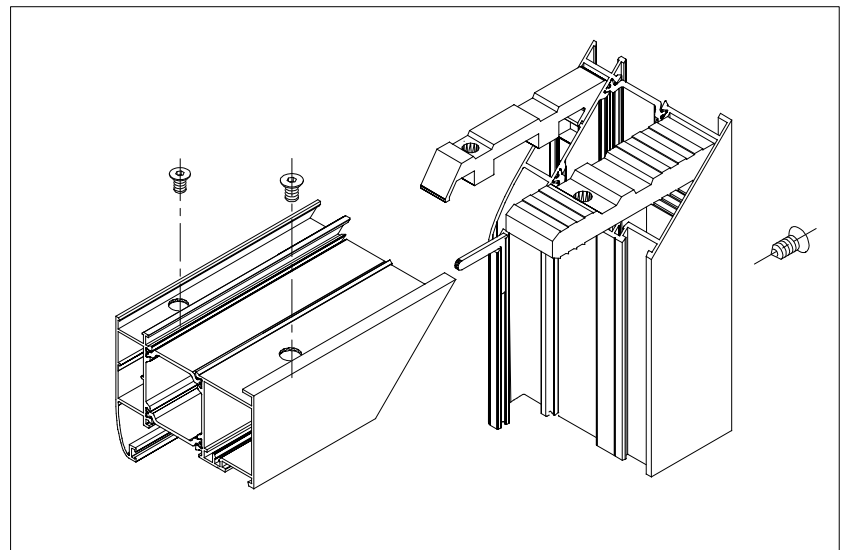
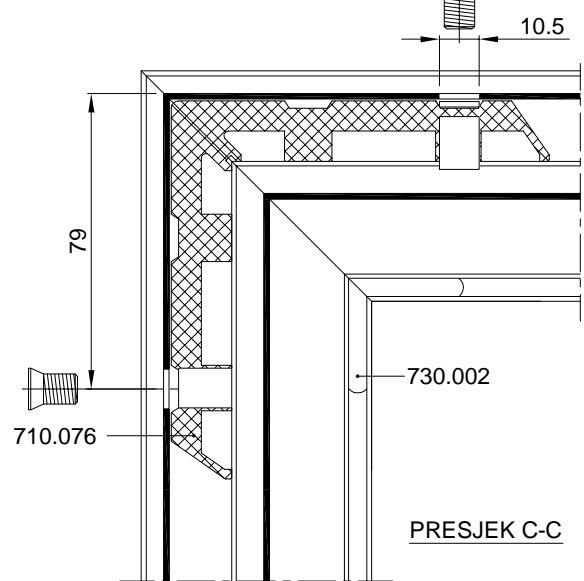
## SPAJANJE PROFILA FT-0234 KUTNICIMA; 710.075, 710.076



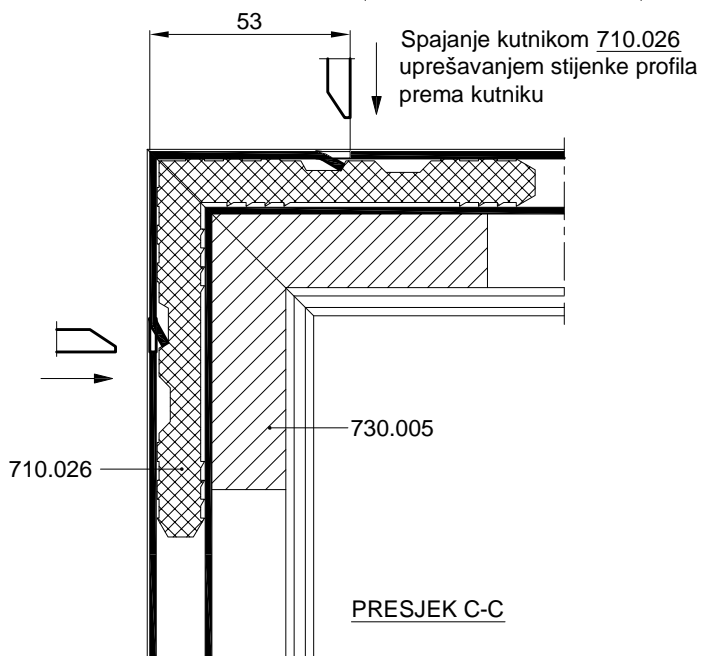
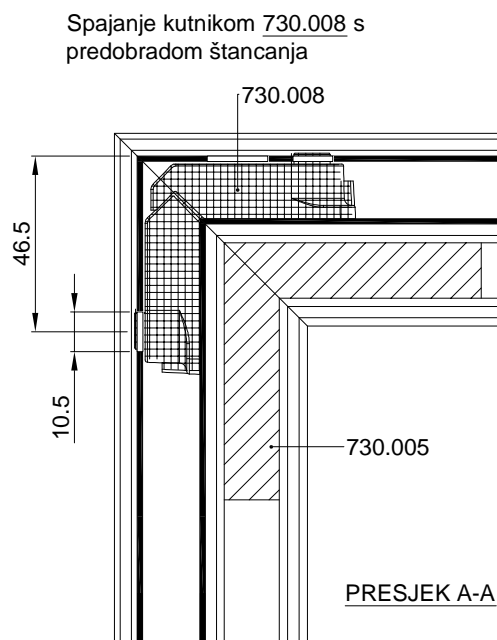
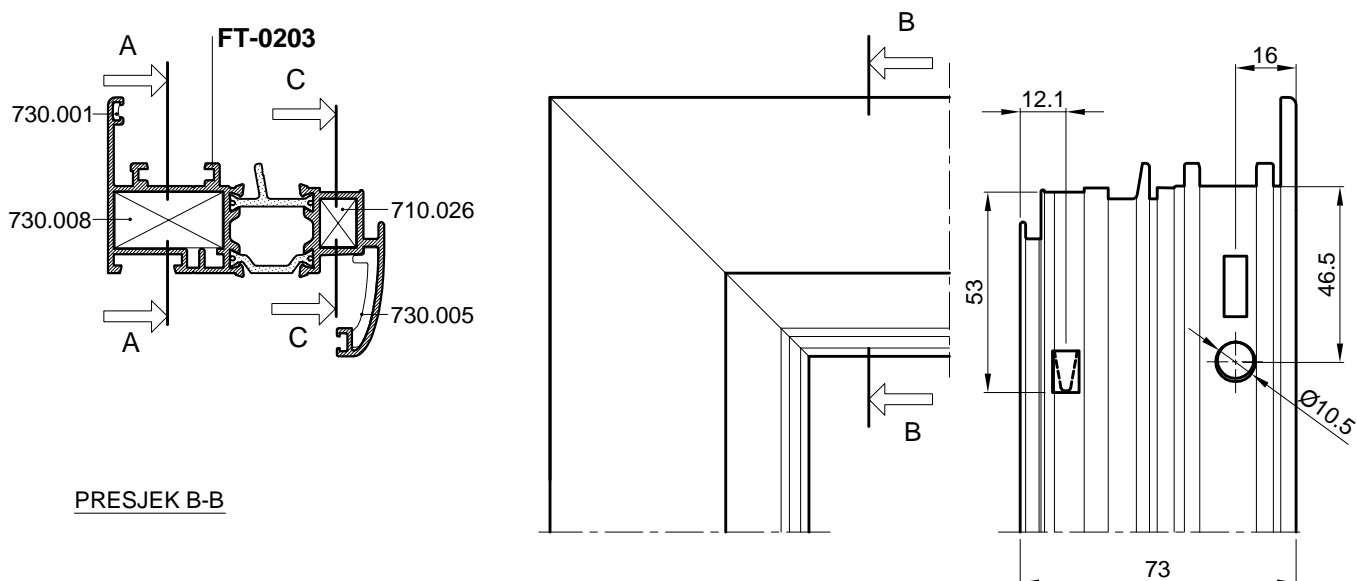
Spajanje kutnikom 710.075 vijcima M8x13 -tip Feal



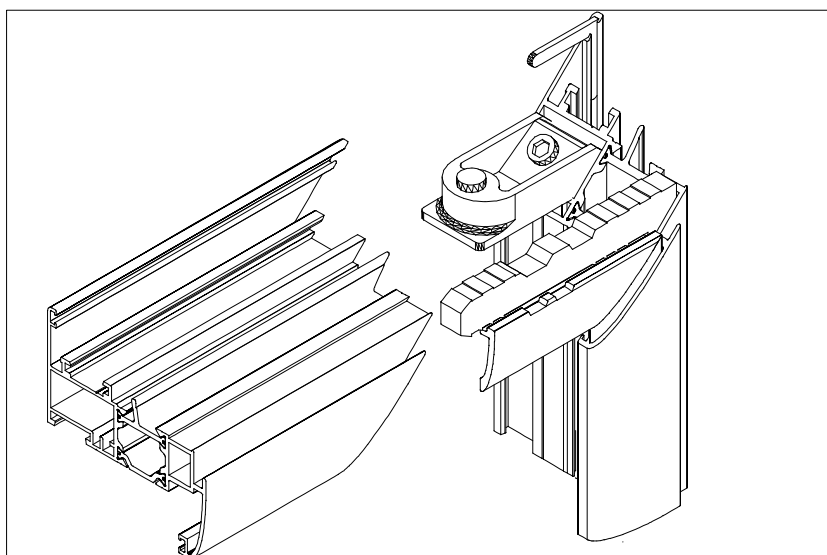
Spajanje kutnikom 710.076 vijcima M8x13 -tip Feal

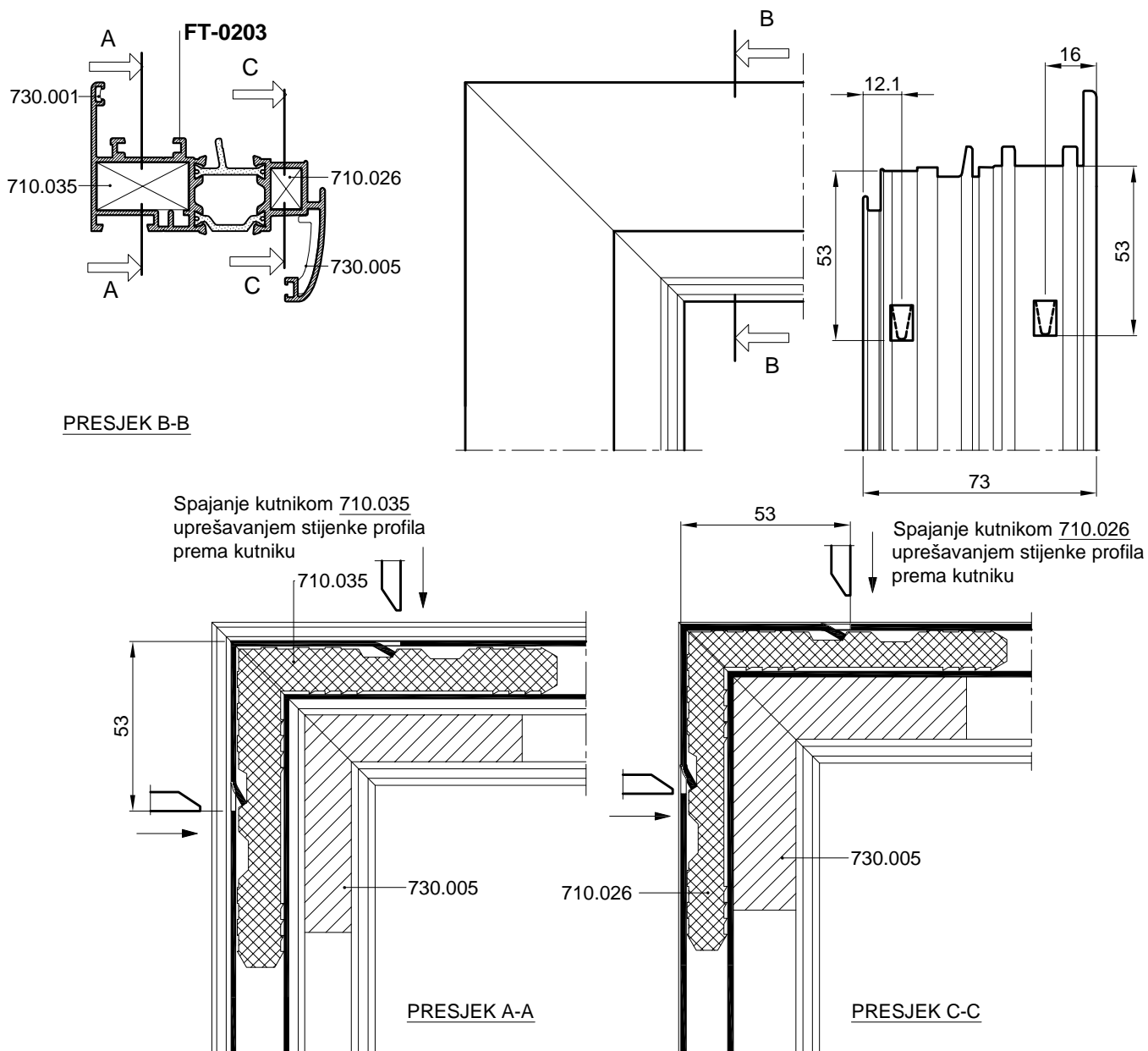


## SPAJANJE PROFILA FT-0203 KUTNICIMA; 730.008, 710.026

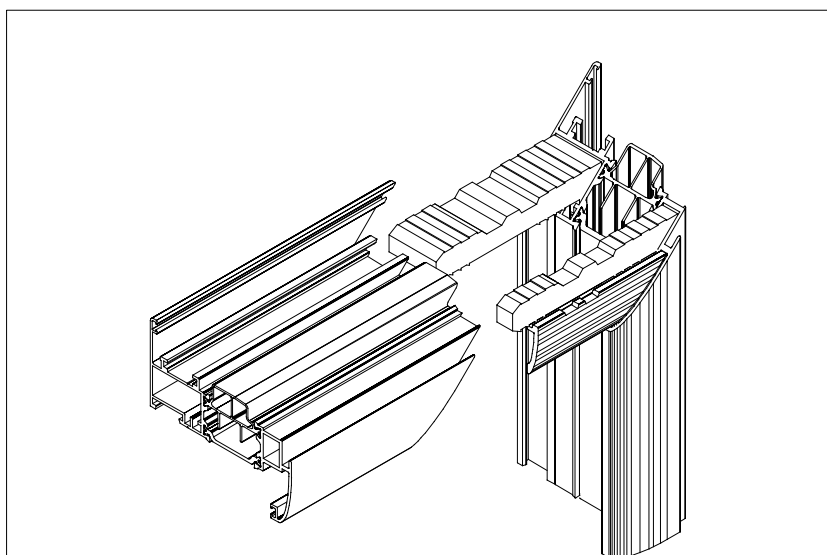


OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL KRILA FT-0221

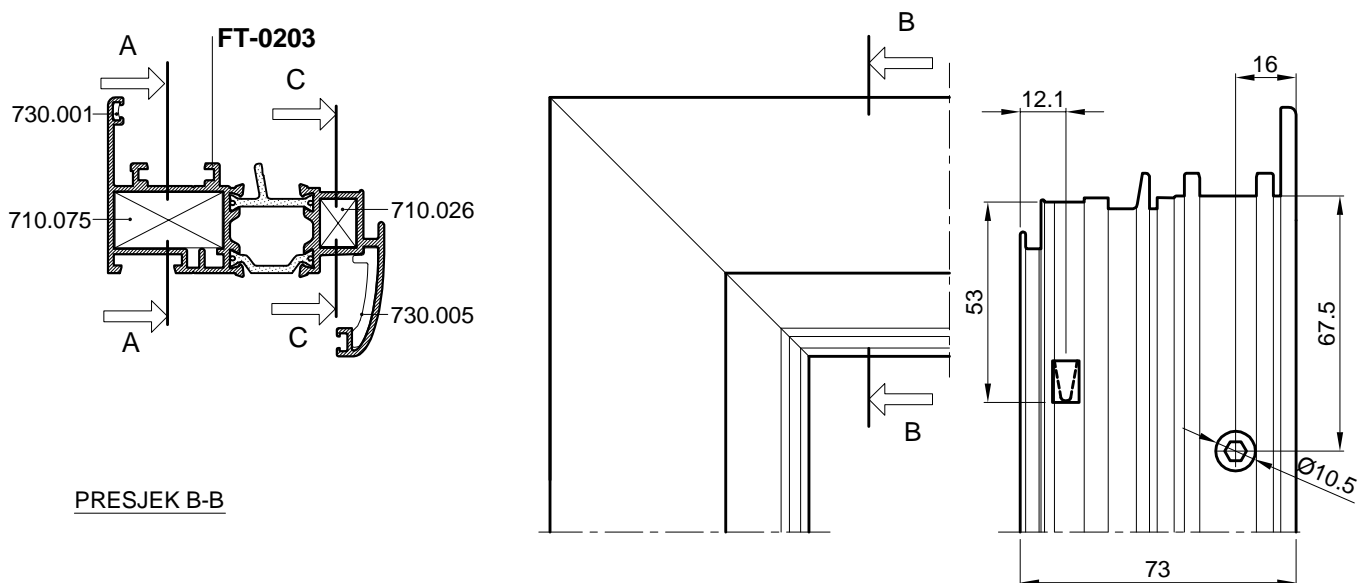


**SPAJANJE PROFILA FT-0203 KUTNICIMA; 710.035, 710.026**


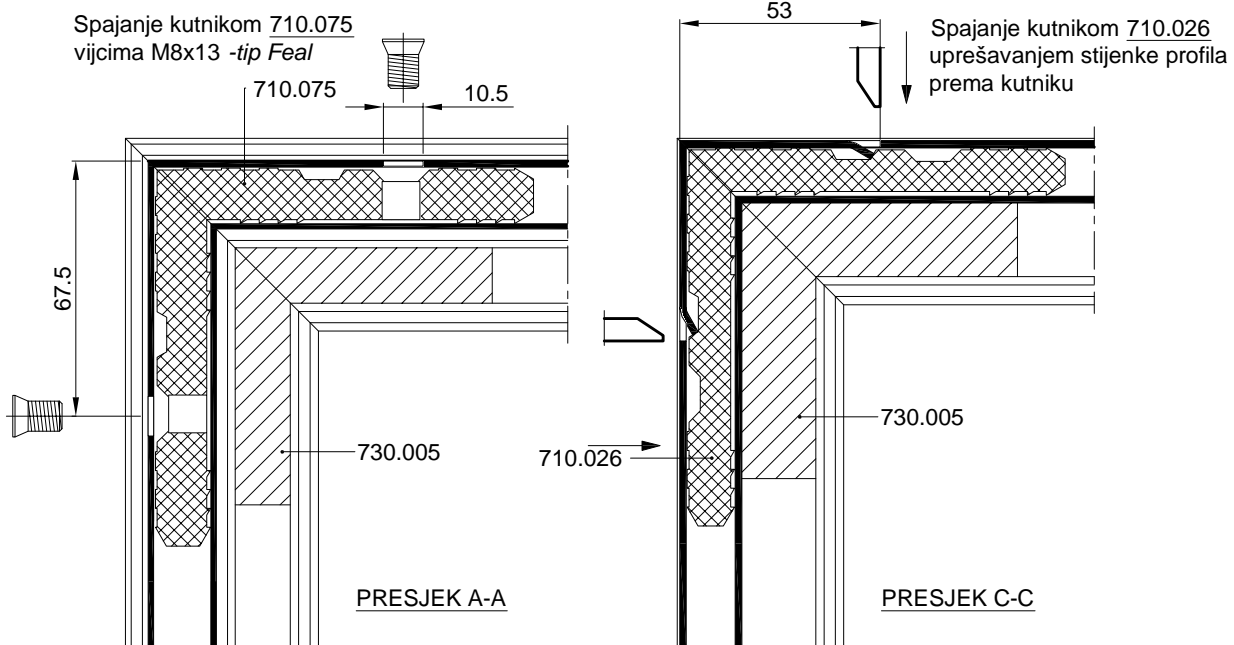
OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL KRILA FT-0221



## SPAJANJE PROFILA FT-0203 KUTNICIMA; 710.075, 710.026



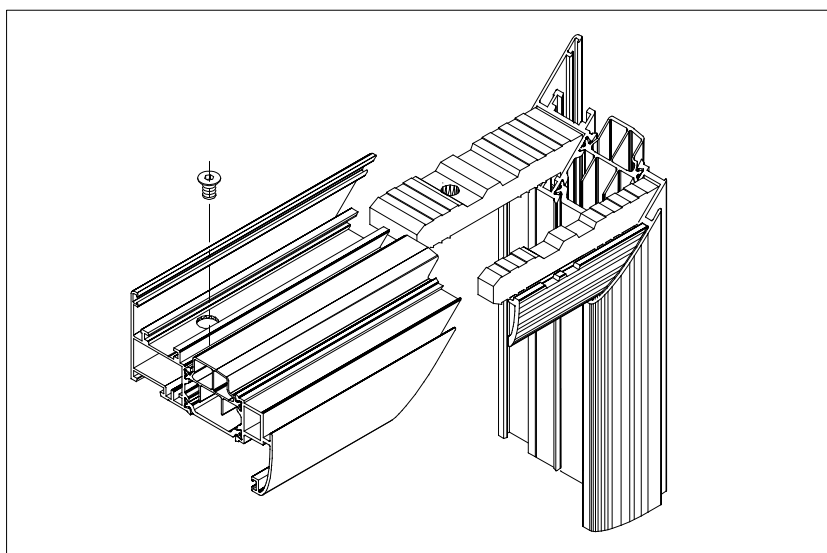
PRESJEK B-B



PRESJEK A-A

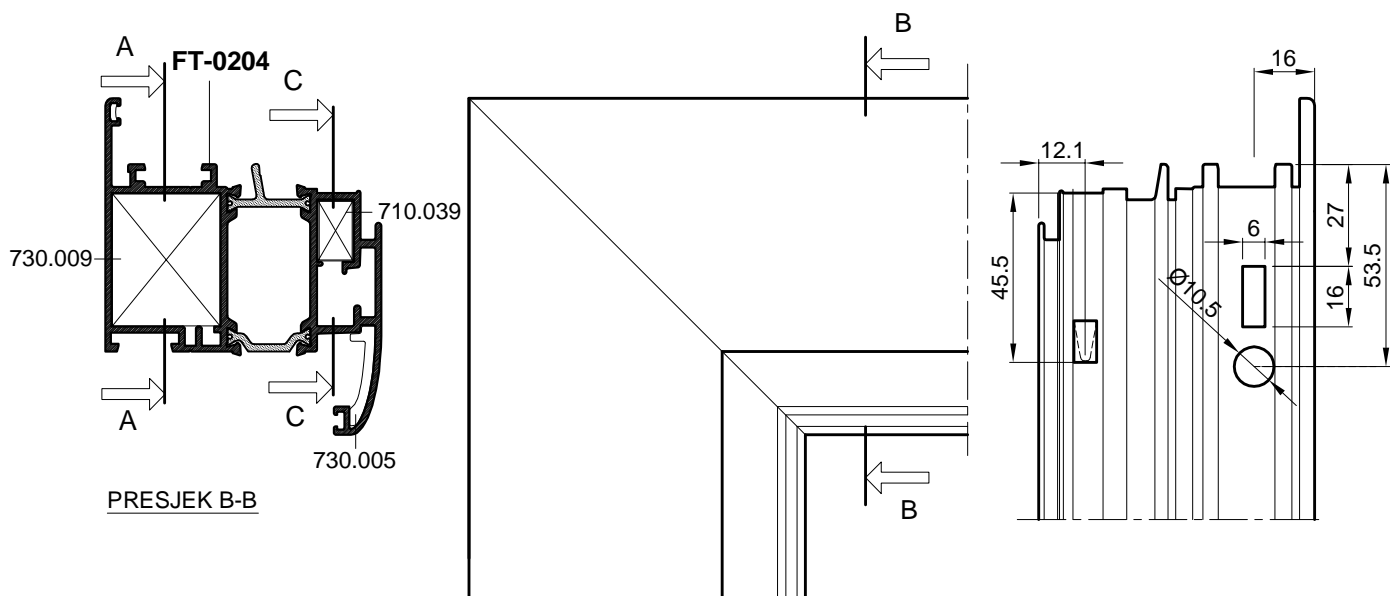
PRESJEK C-C

OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL KRILA FT-0221

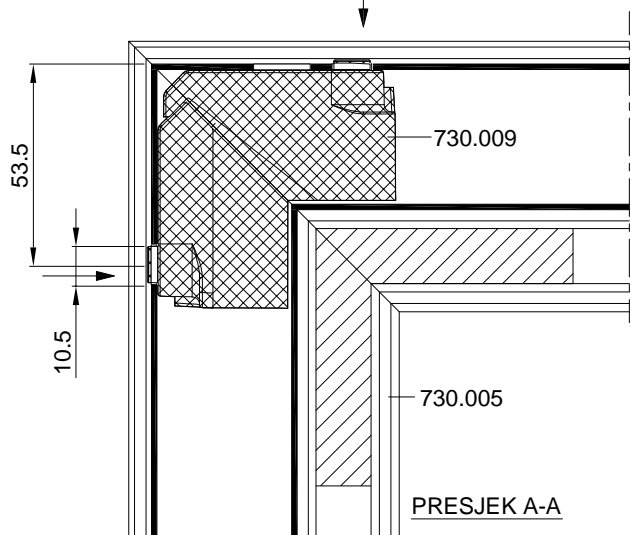




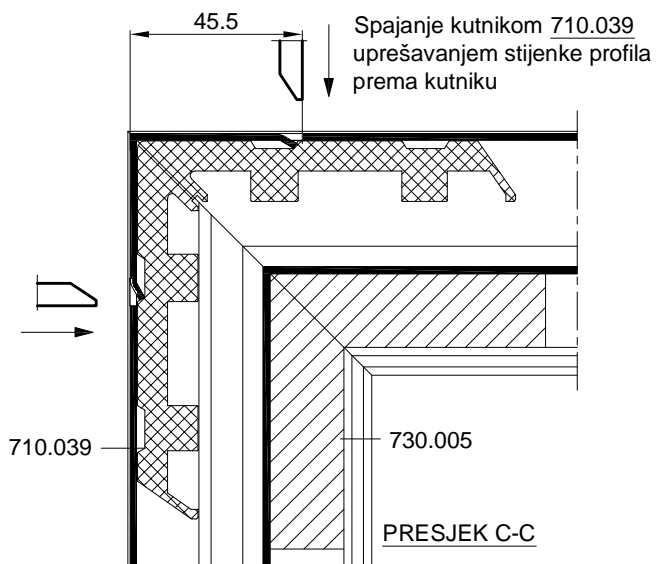
## SPAJANJE PROFILA FT-0204 KUTNICIMA; 730.009, 710.039



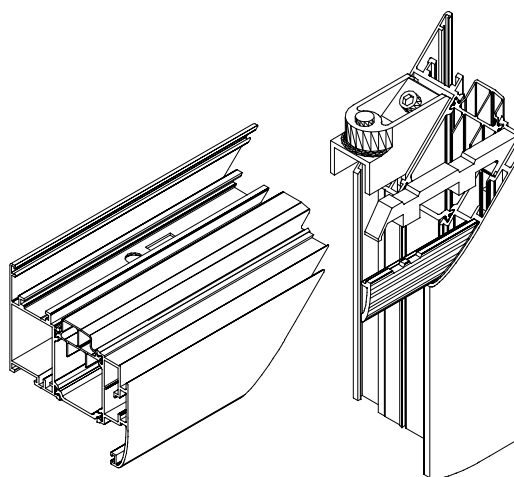
Spajanje kutnikom 730.009 s predobradom štancanja



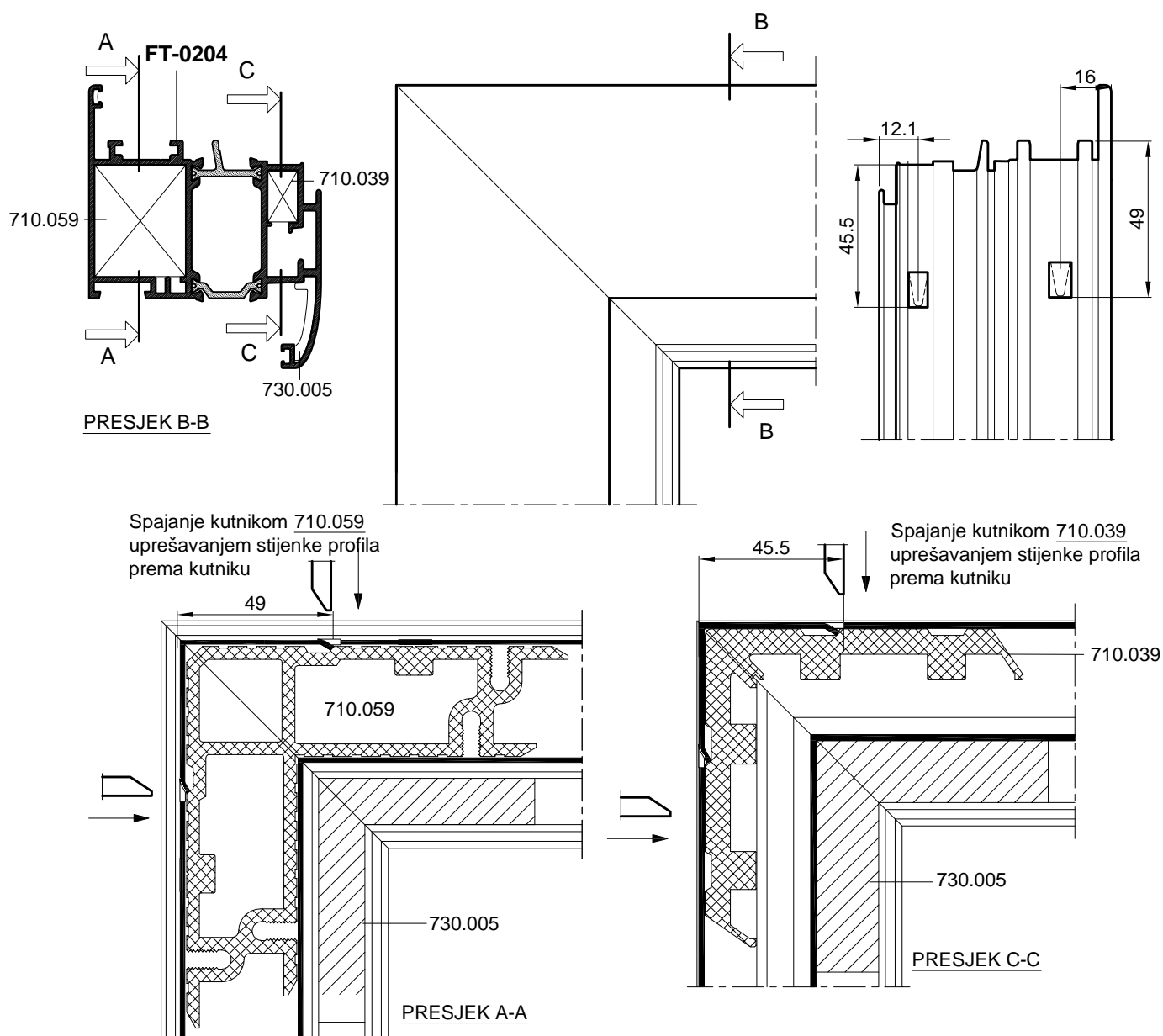
Spajanje kutnikom 710.039 uprešavanjem stijenke profila prema kutniku



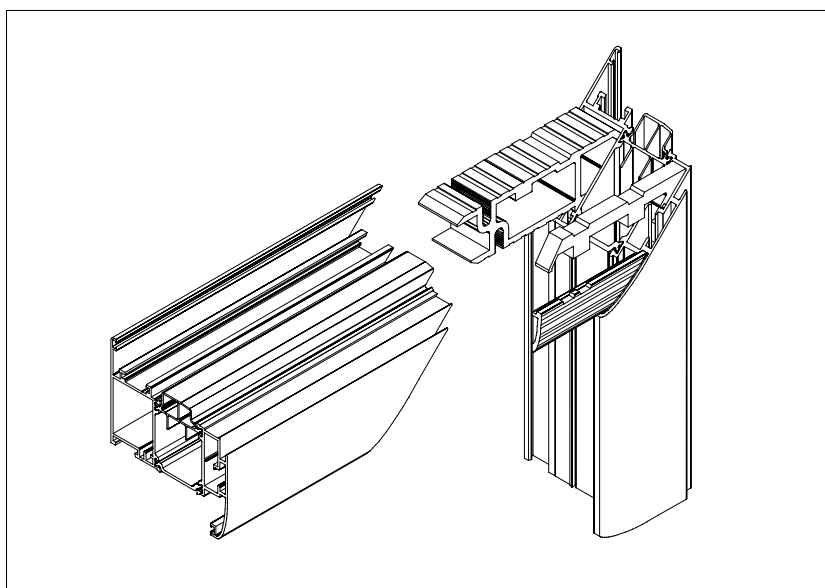
OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL KRILA FT-0230



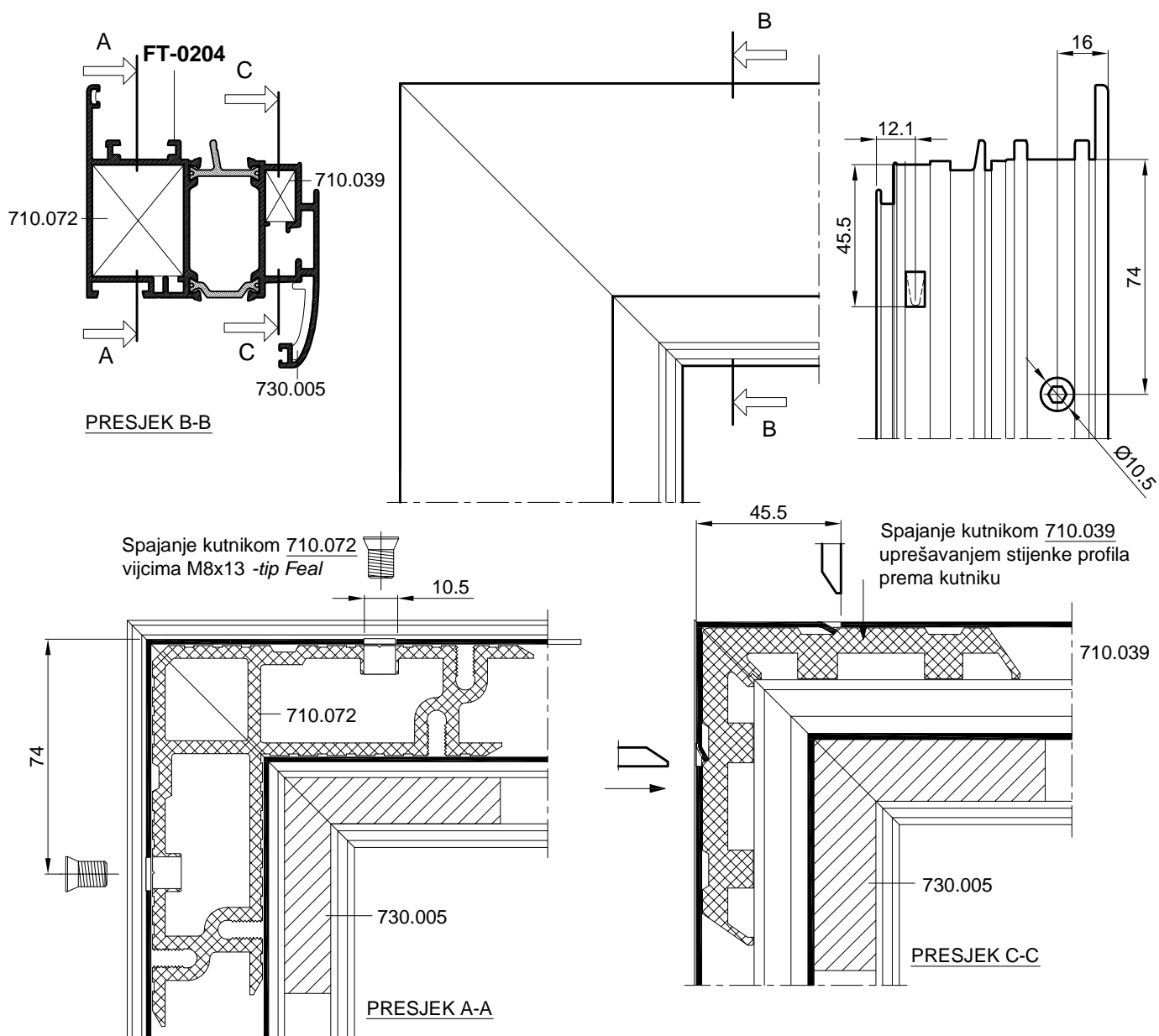
## SPAJANJE PROFILA FT-0204 KUTNICIMA; 710.059, 710.039



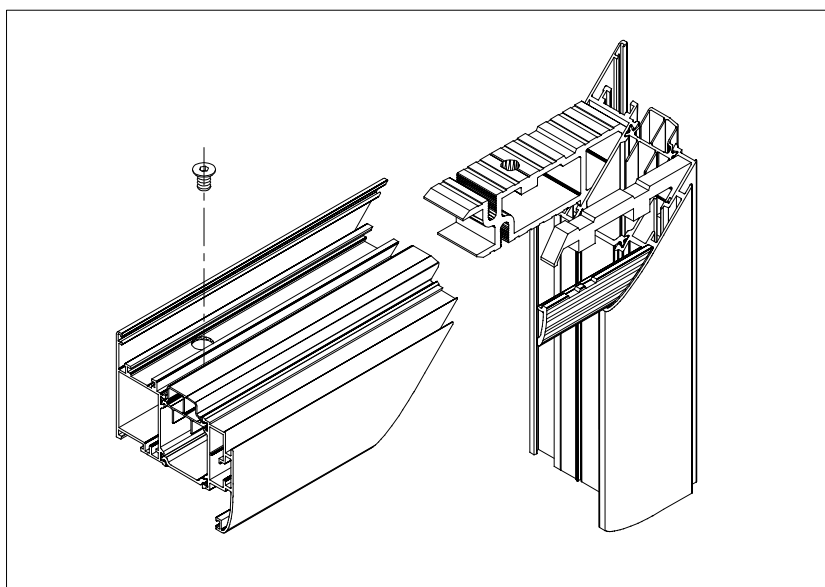
OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL KRILA FT-0230



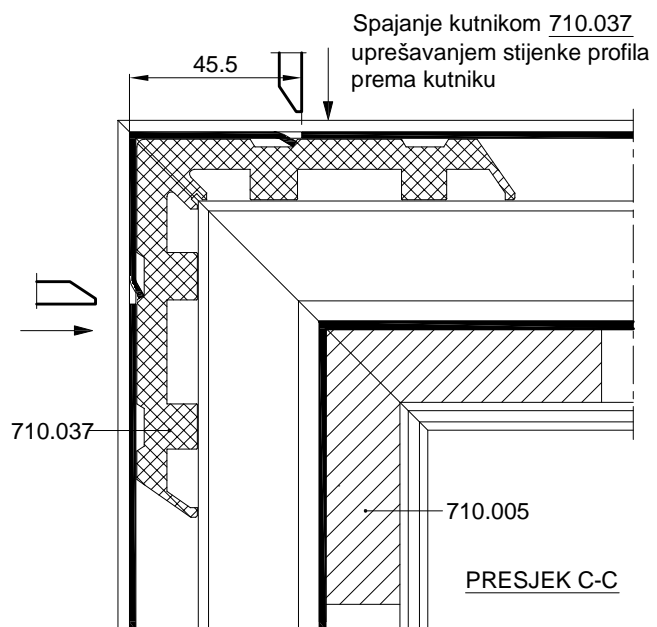
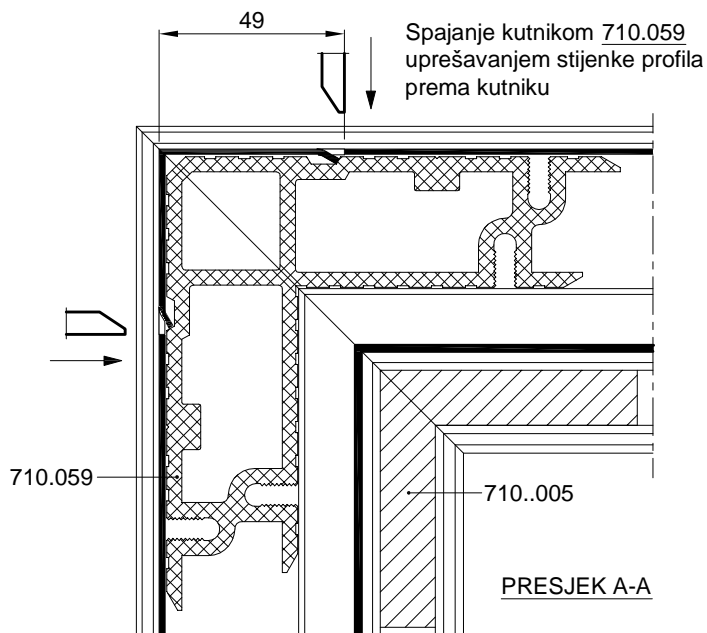
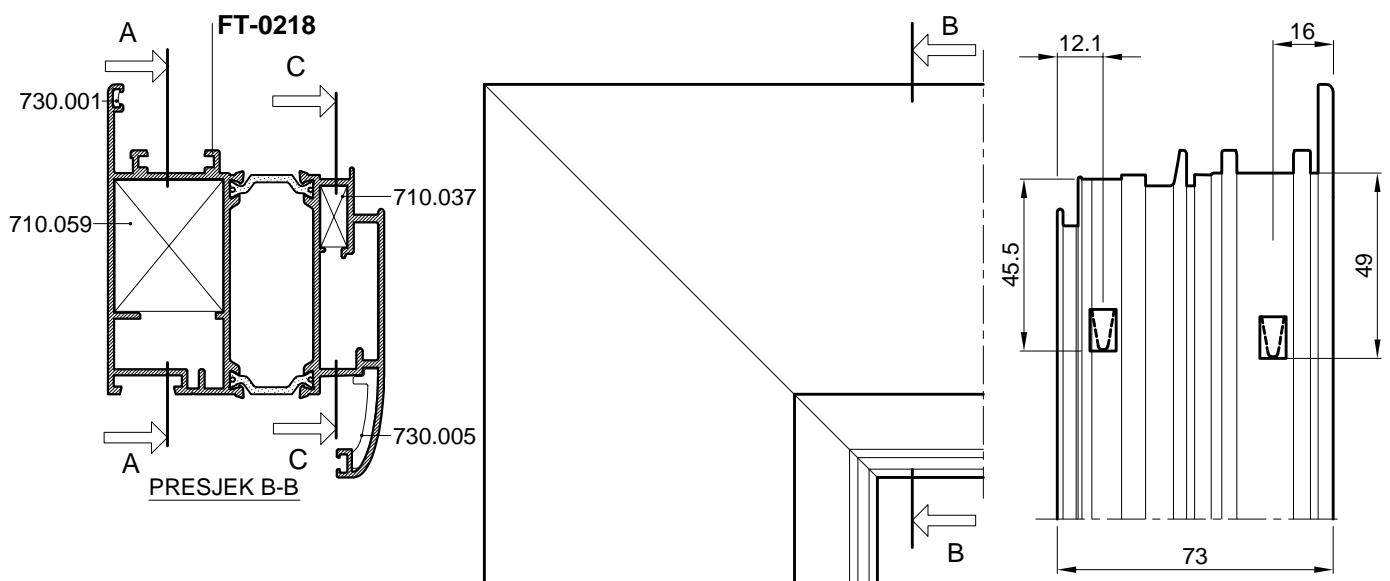
## SPAJANJE PROFILA FT-0204 KUTNICIMA; 710.072, 710.039



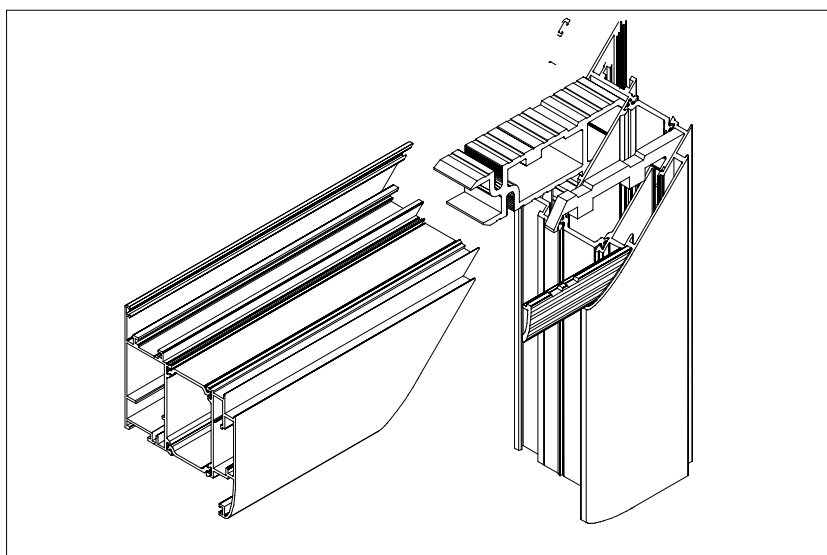
OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL KRILA FT-0230



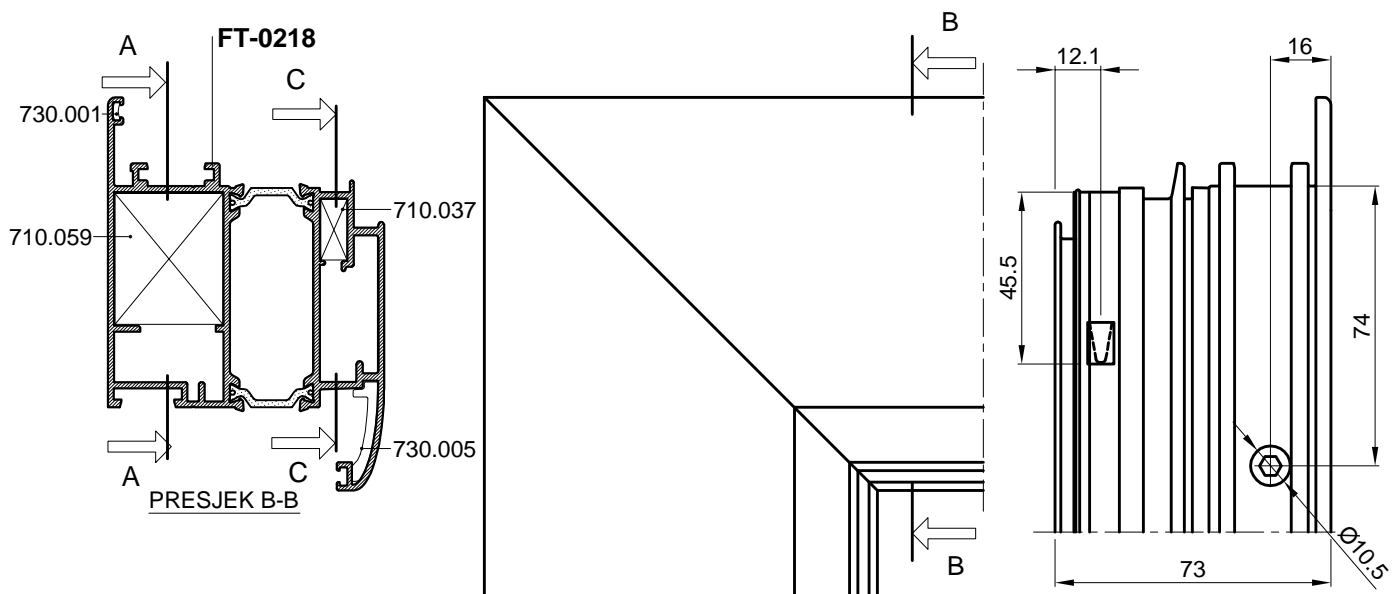
SPAJANJE PROFILA FT-0218 KUTNICIMA; 710.059, 710.037



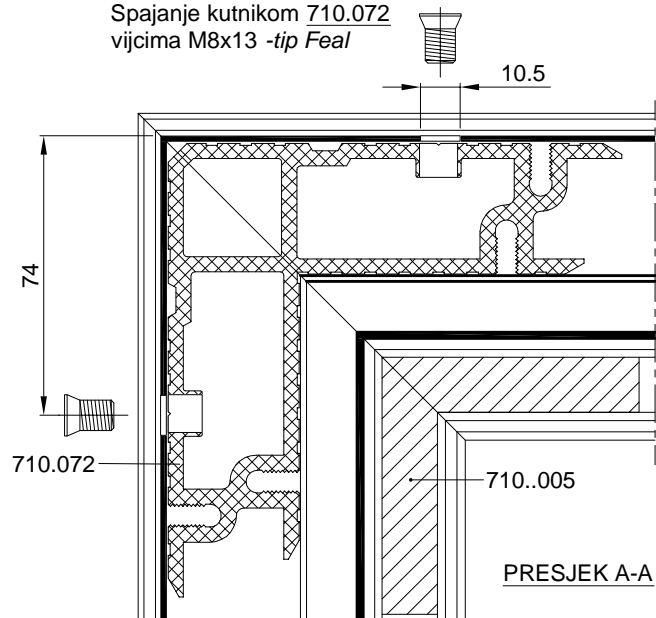
PRESJEK A-A



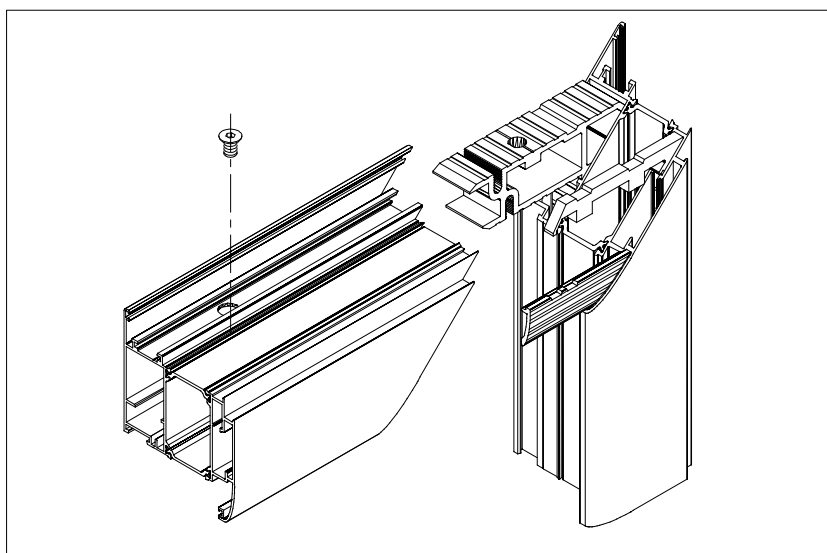
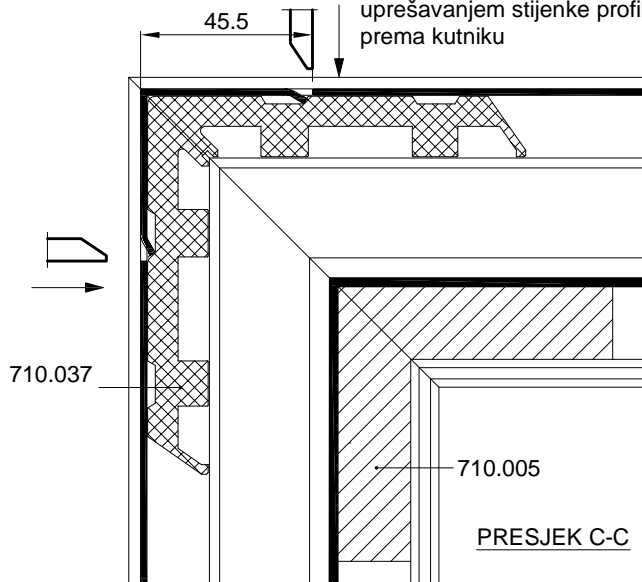
## SPAJANJE PROFILA FT-0218 KUTNICIMA; 710.072, 710.037



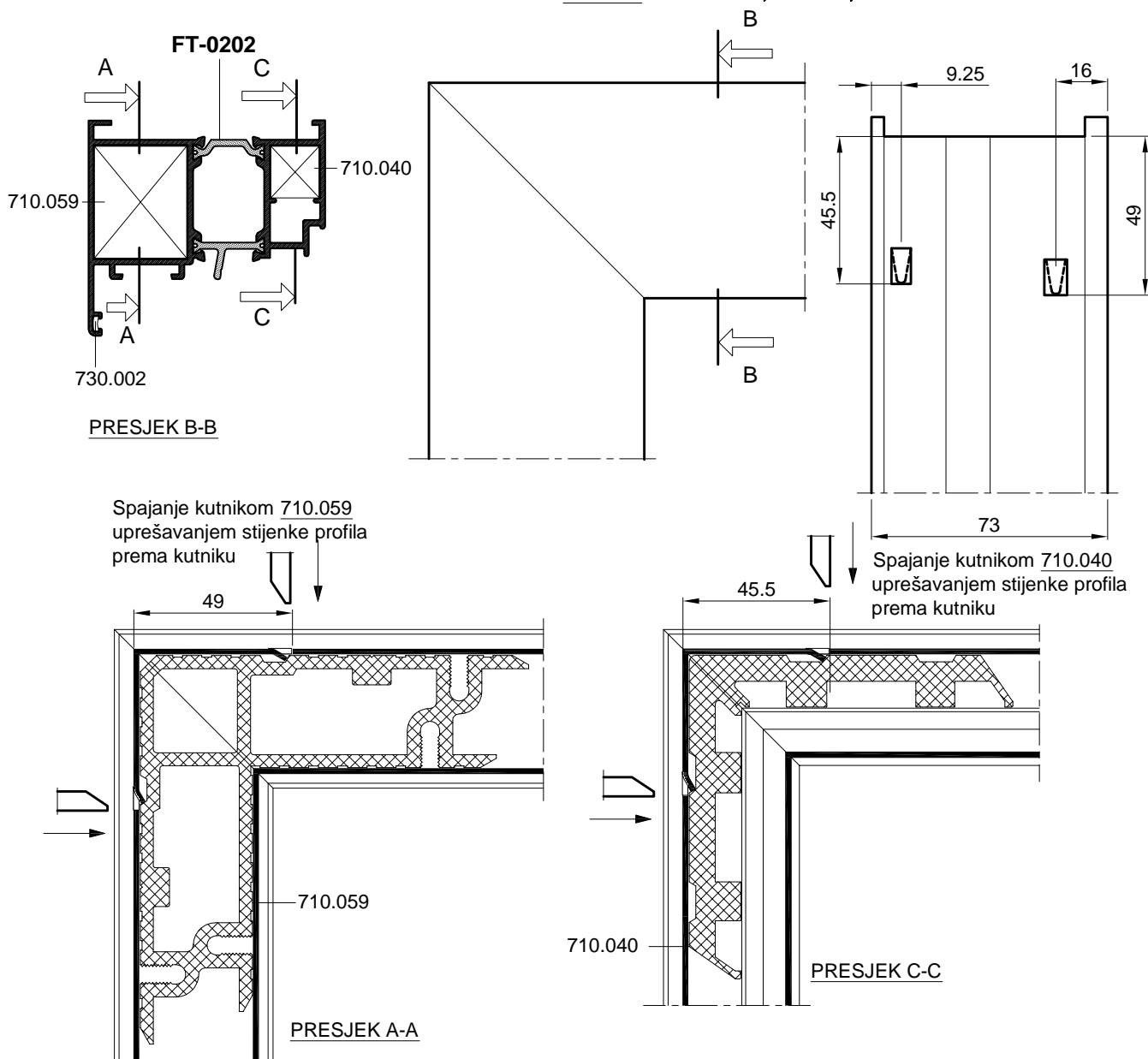
Spajanje kutnikom 710.072 vijcima M8x13 -tip Feal



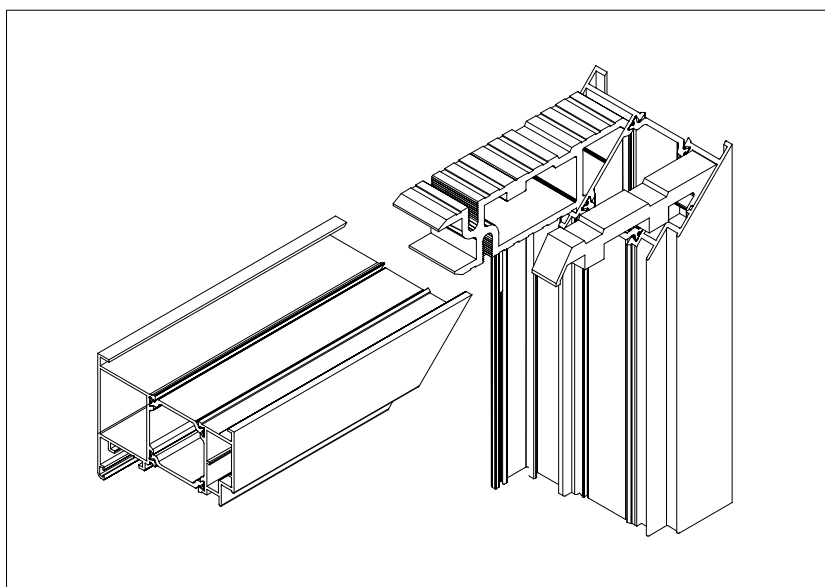
Spajanje kutnikom 710.037 uprešavanjem stijenke profila prema kutniku



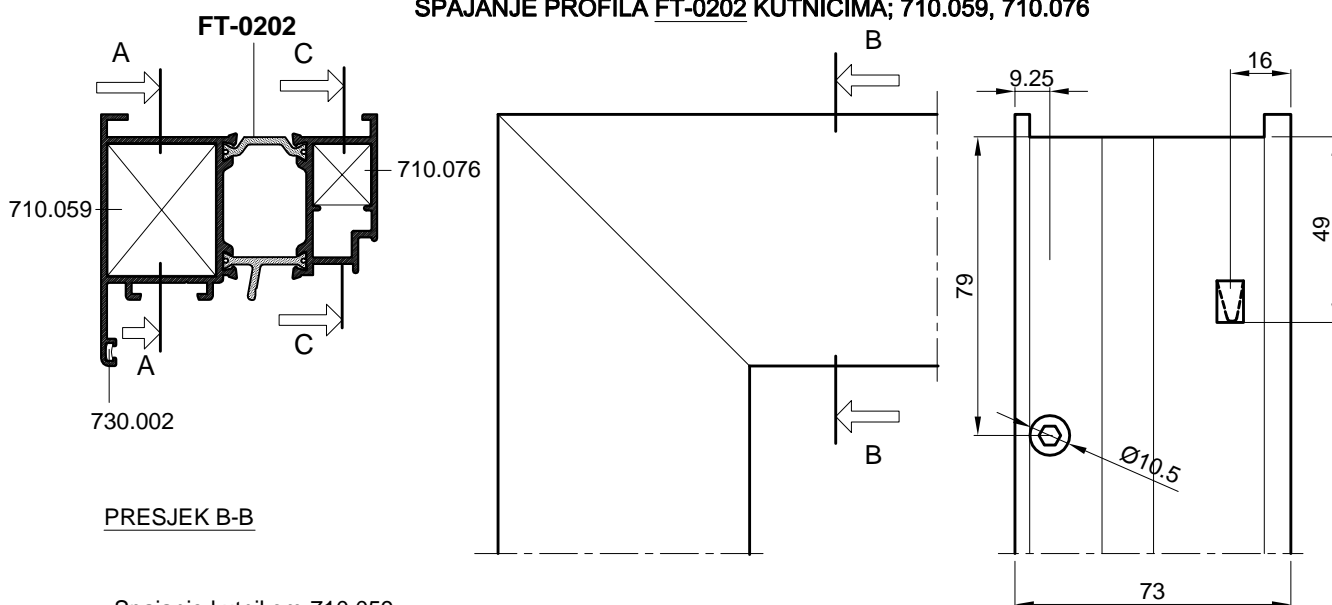
## SPAJANJE PROFILA FT-0202 KUTNICIMA; 710.059, 710.040



OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL RAMA FT-0215 I FT-0220

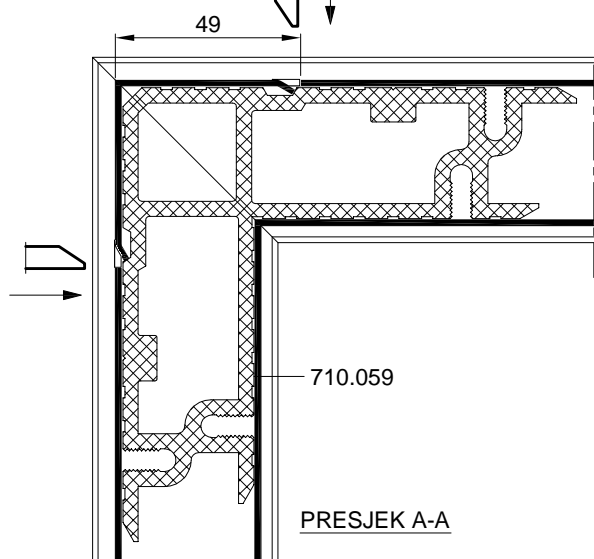


## SPAJANJE PROFILA FT-0202 KUTNICIMA; 710.059, 710.076



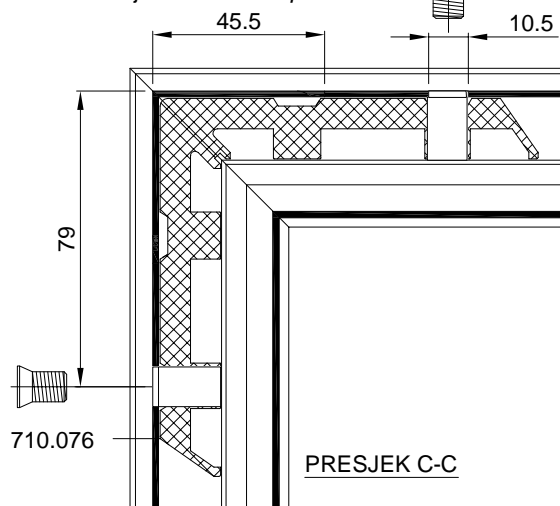
PRESJEK B-B

Spajanje kutnikom 710.059  
uprešavanjem stijenke profila  
prema kutniku



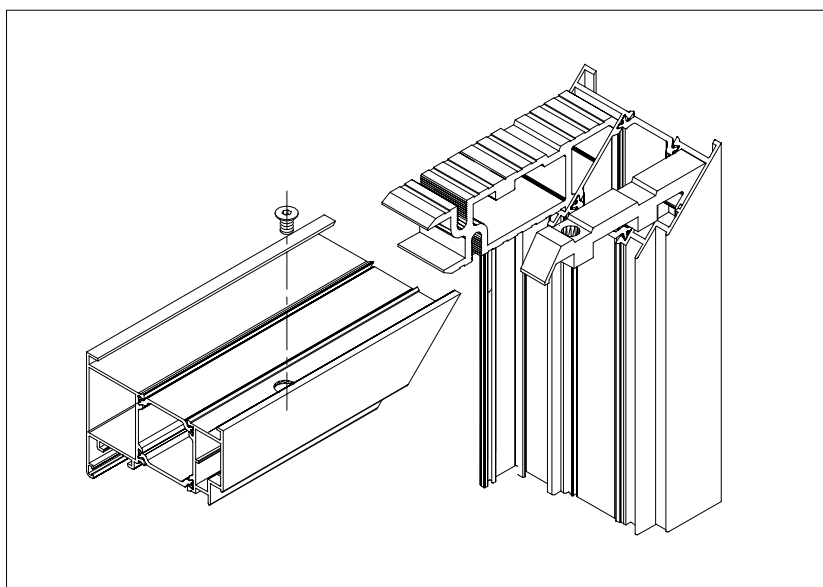
PRESJEK A-A

Spajanje kutnikom 710.076  
vijcima M8x13 -tip Feal

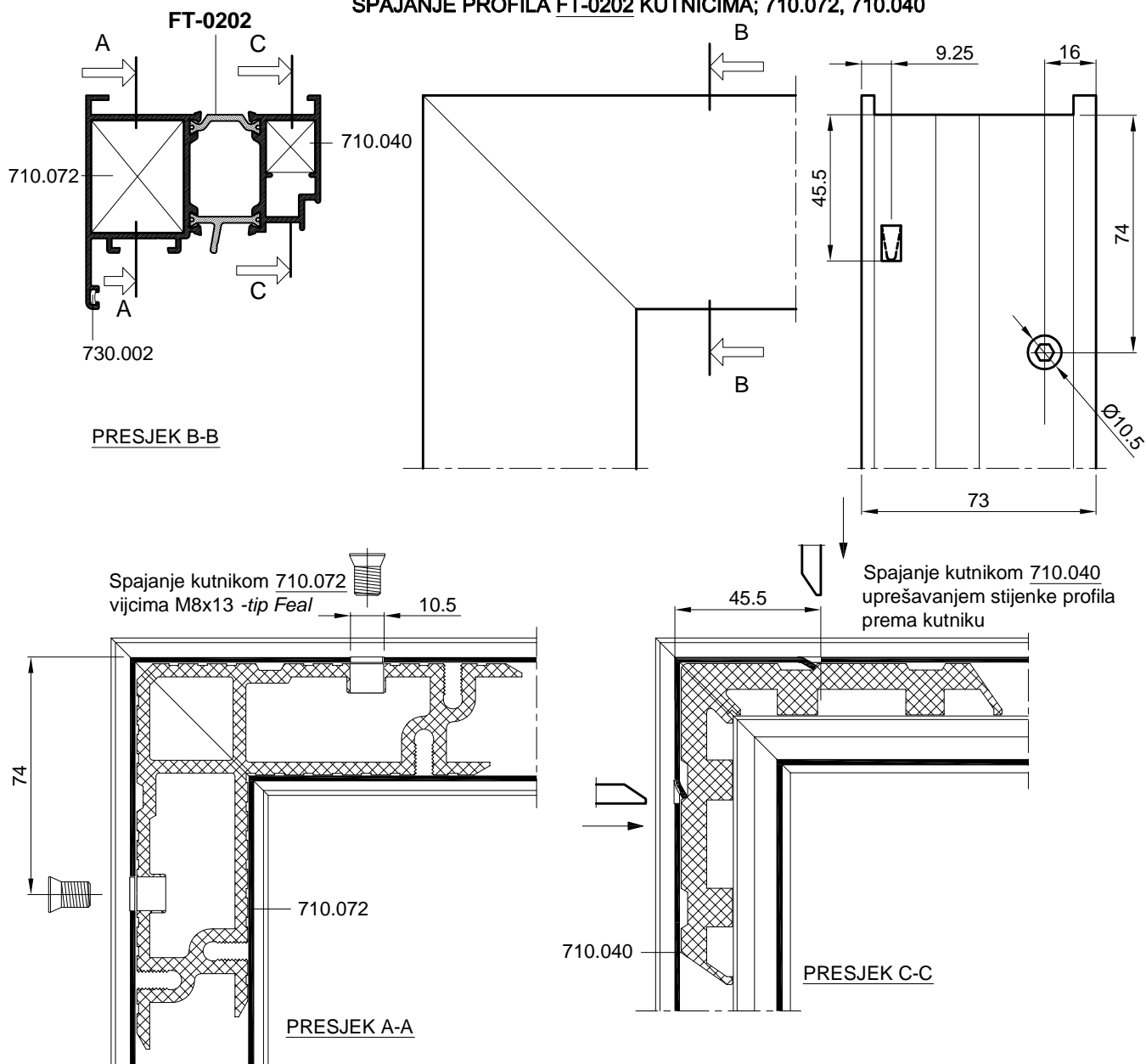


PRESJEK C-C

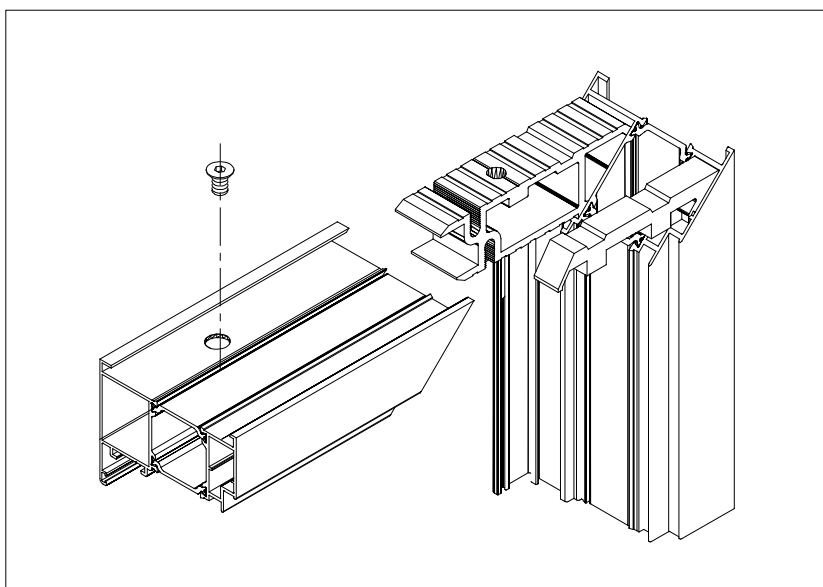
OVAJ RASPORED I NAČIN SPAJANJA  
KUTNICIMA PRIMJENJIV JE I NA PROFIL  
RAMA FT-0215 I FT-0220



## SPAJANJE PROFILA FT-0202 KUTNICIMA; 710.072, 710.040

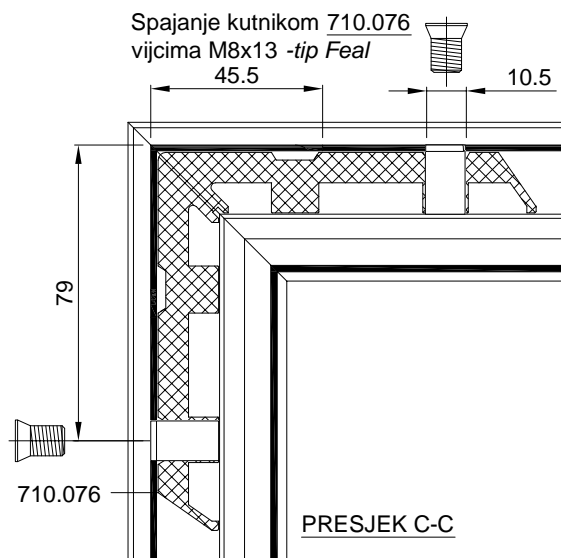
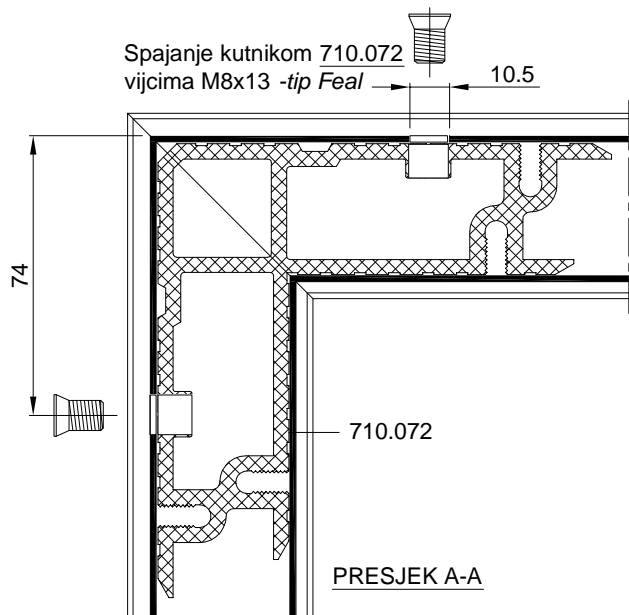
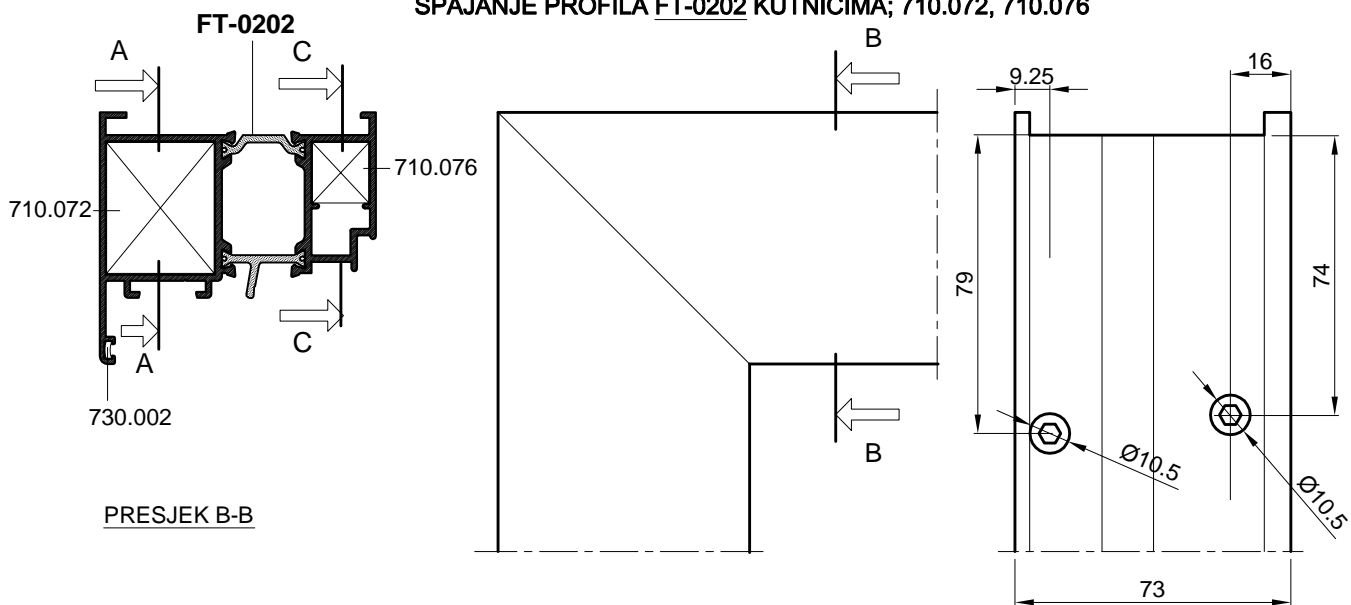


OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL RAMA FT-0215 I FT-0220

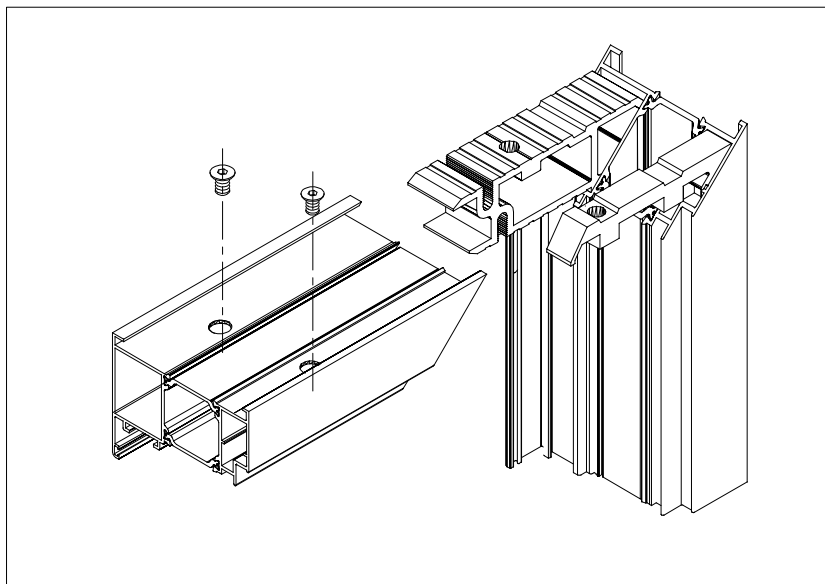




## SPAJANJE PROFILA FT-0202 KUTNICIMA; 710.072, 710.076

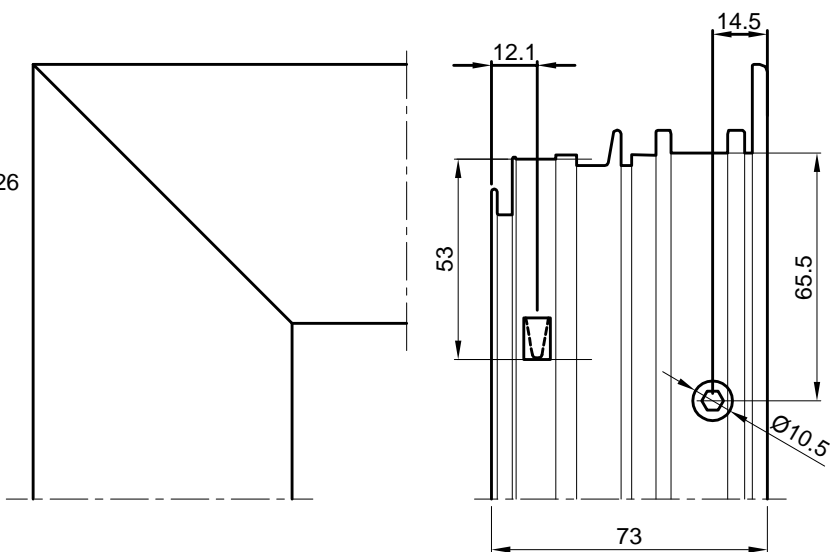
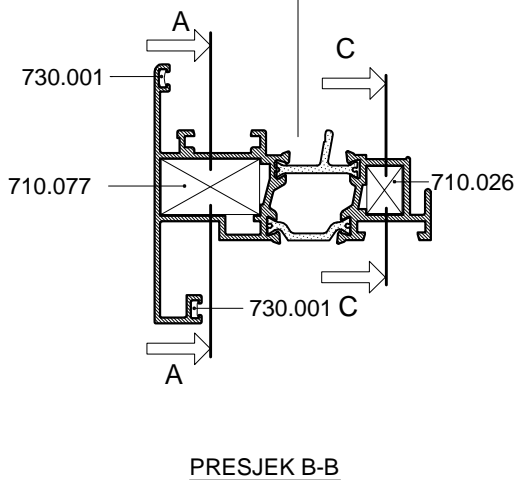


OVAJ RASPORED I NAČIN SPAJANJA KUTNICIMA PRIMJENJIV JE I NA PROFIL RAMA FT-0215 I FT-0220

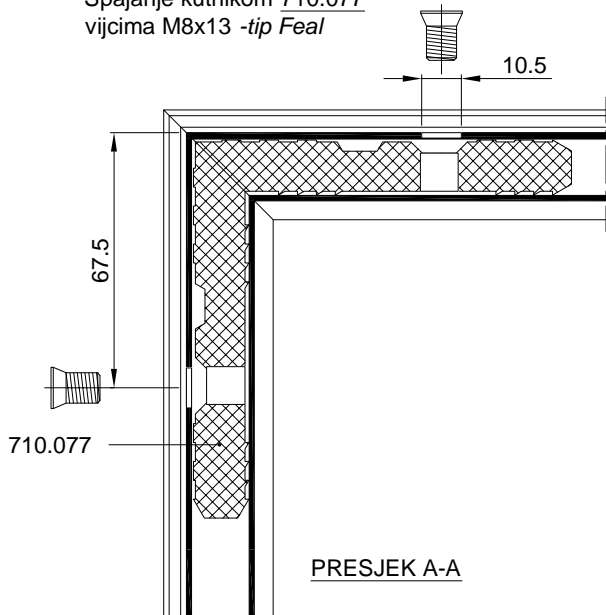


FT-0262

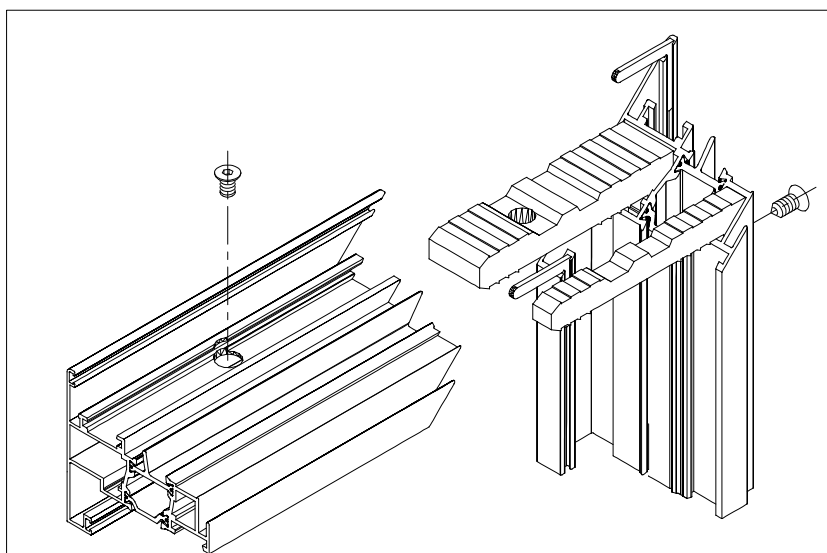
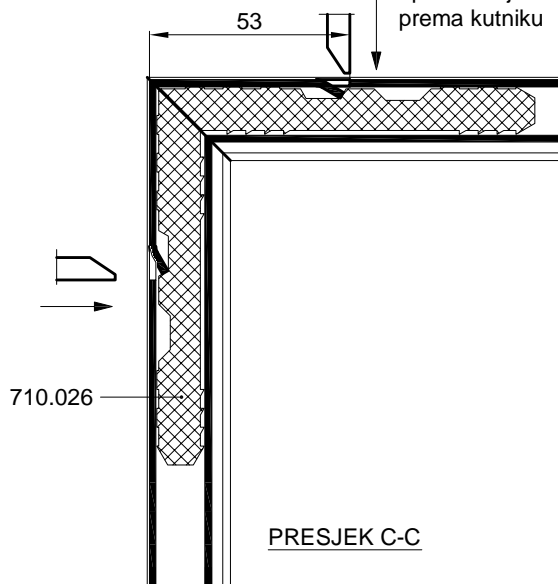
SPAJANJE PROFILA FT-0262 KUTNICIMA; 710.077, 710.026



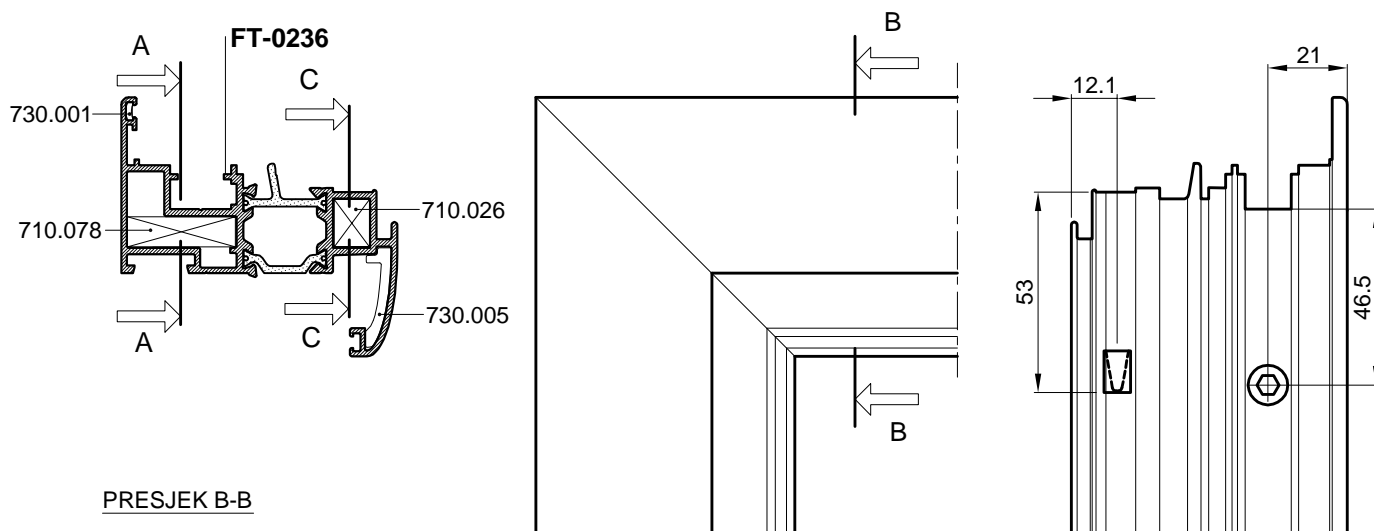
Spajanje kutnikom 710.077 vijcima M8x13 -tip Feal



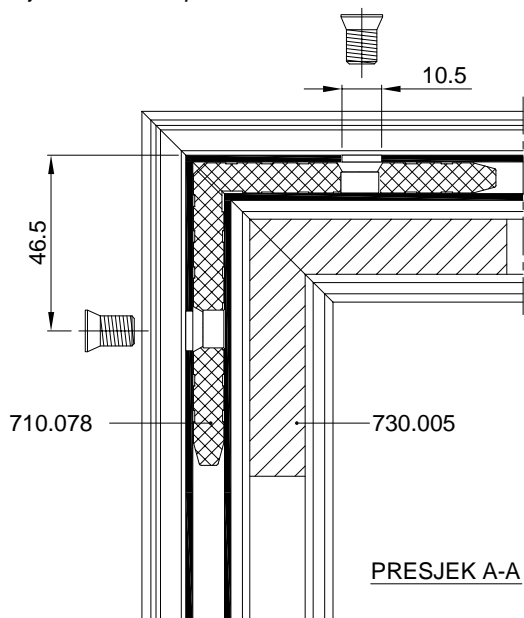
Spajanje kutnikom 710.026 uprešavanjem stijenke profila prema kutniku



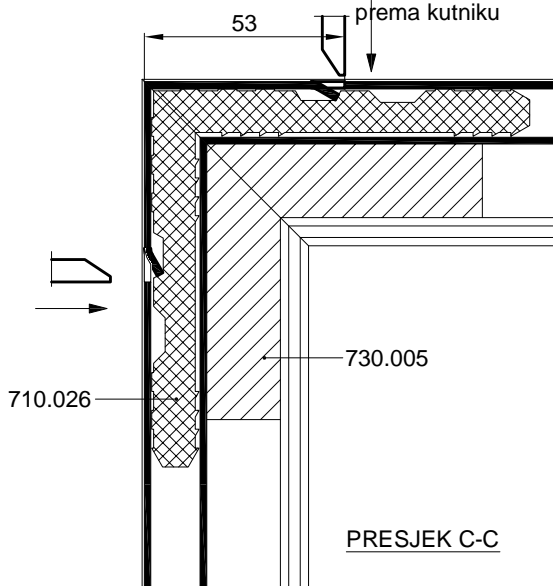
## SPAJANJE PROFILA FT-0236 KUTNICIMA; 710.078, 710.026



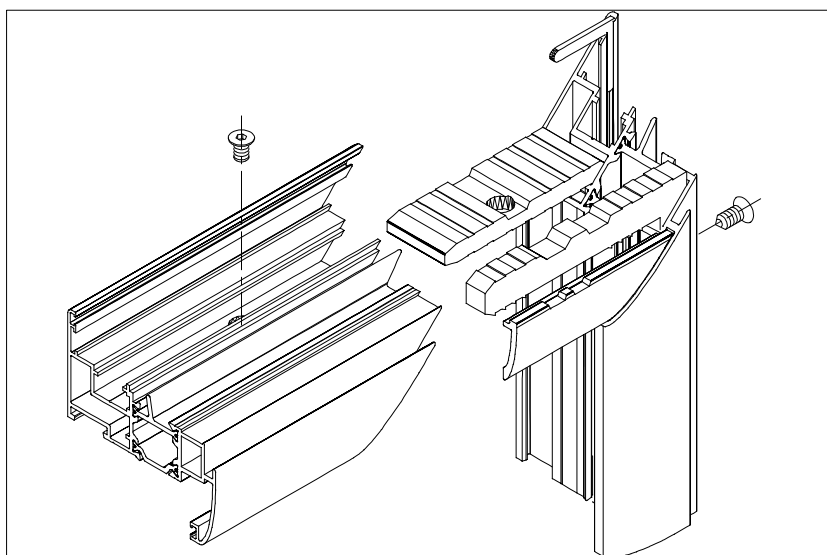
Spajanje kutnikom 710.078  
vijcima M8x13 -tip Feal



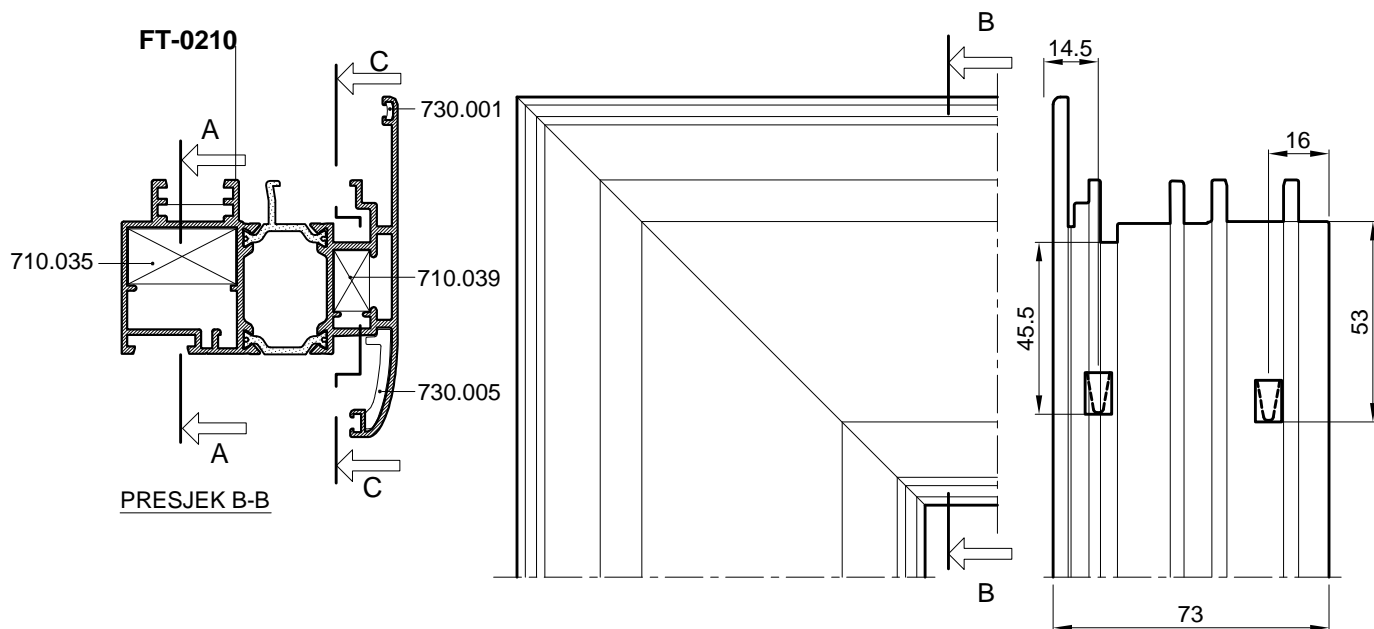
Spajanje kutnikom 710.026  
uprešavanjem stijenke profila  
prema kutniku



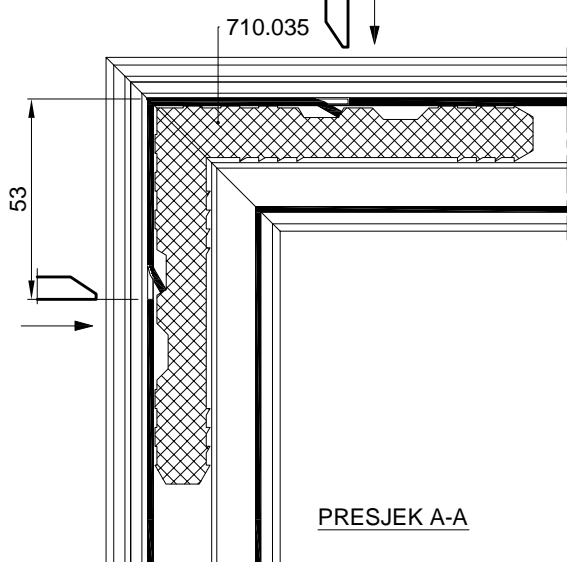
OVAJ RASPORED I NAČIN SPAJANJA  
KUTNICIMA PRIMJENJIV JE I NA PROFIL  
KRILA FT-0239



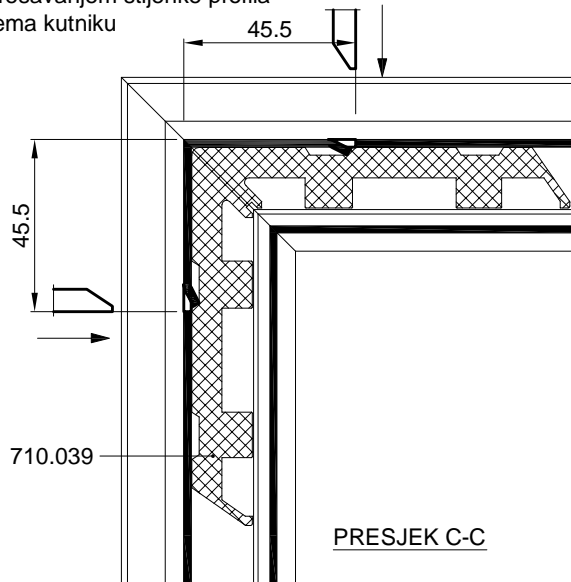
## SPAJANJE PROFILA FT-0210 KUTNICIMA; 710.035, 710.039



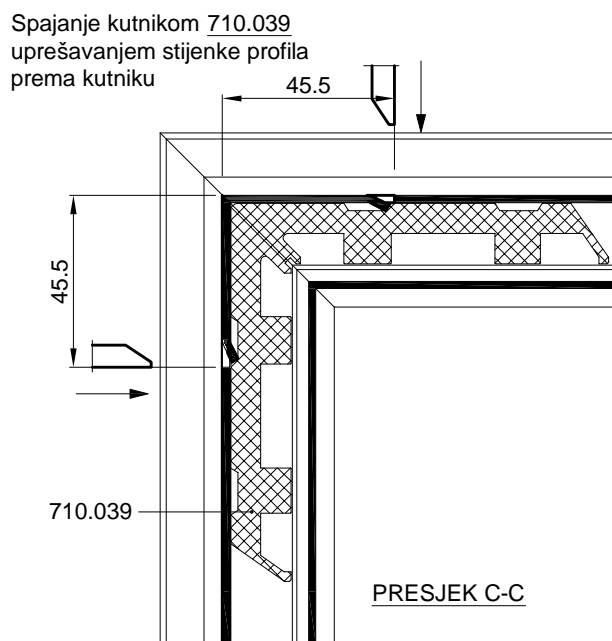
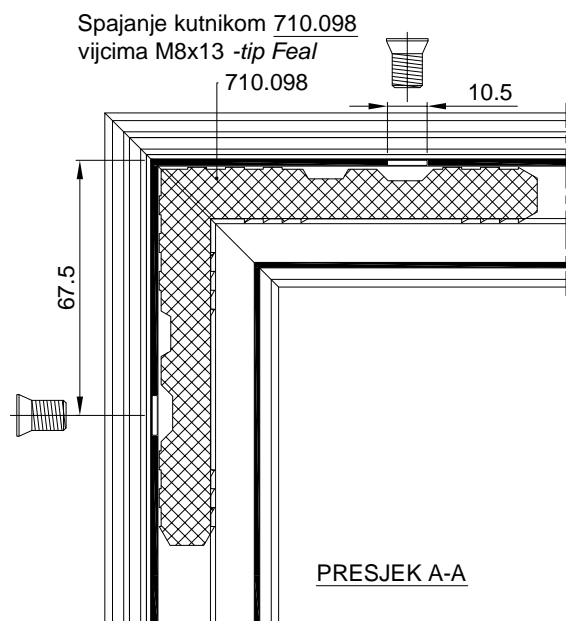
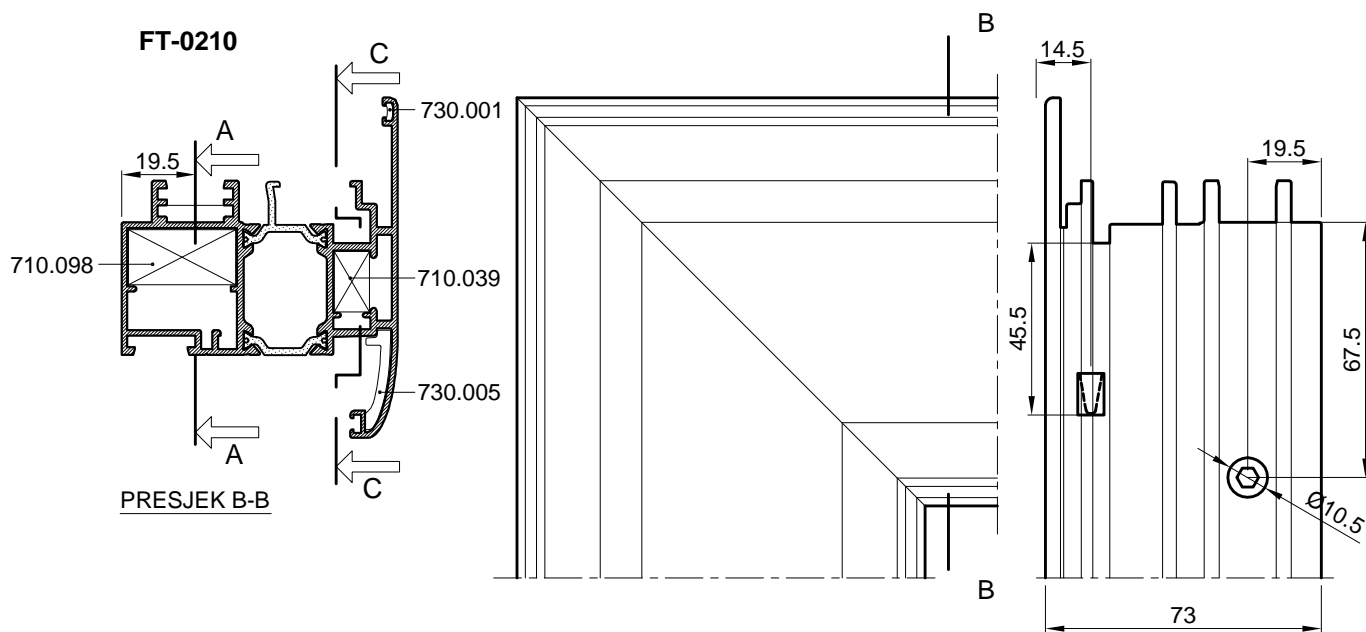
Spajanje kutnikom 710.035  
uprešavanjem stijenke profila  
prema kutniku



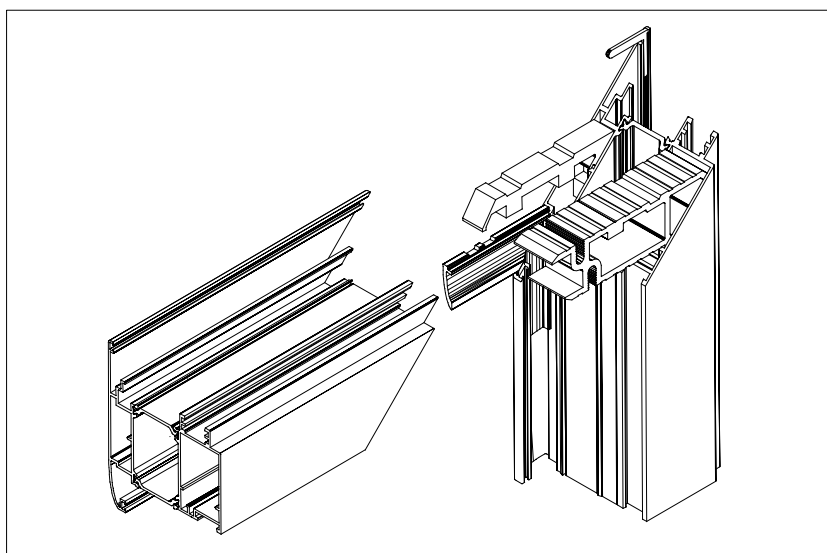
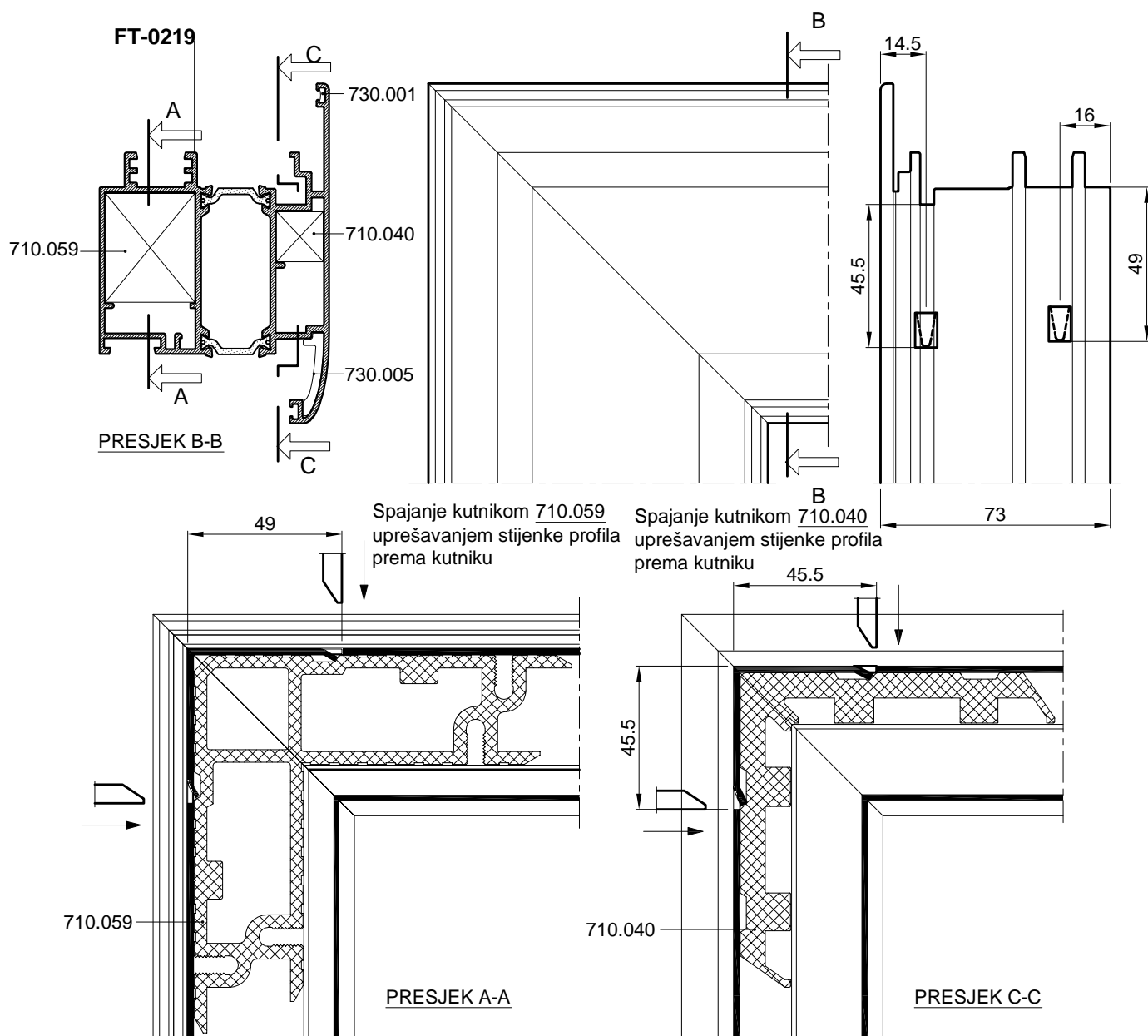
Spajanje kutnikom 710.039  
uprešavanjem stijenke profila  
prema kutniku



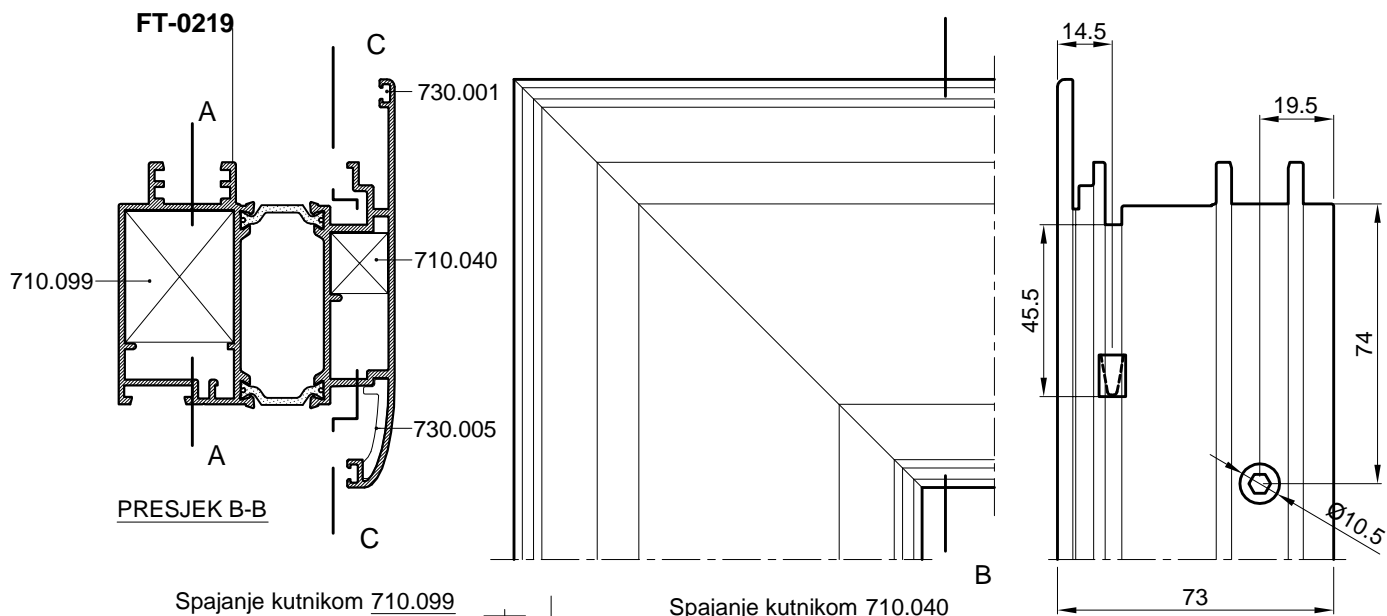
SPAJANJE PROFILA FT-0210 KUTNICIMA; 710.098, 710.039



## SPAJANJE PROFILA FT-0219 KUTNICIMA; 710.059, 710.040

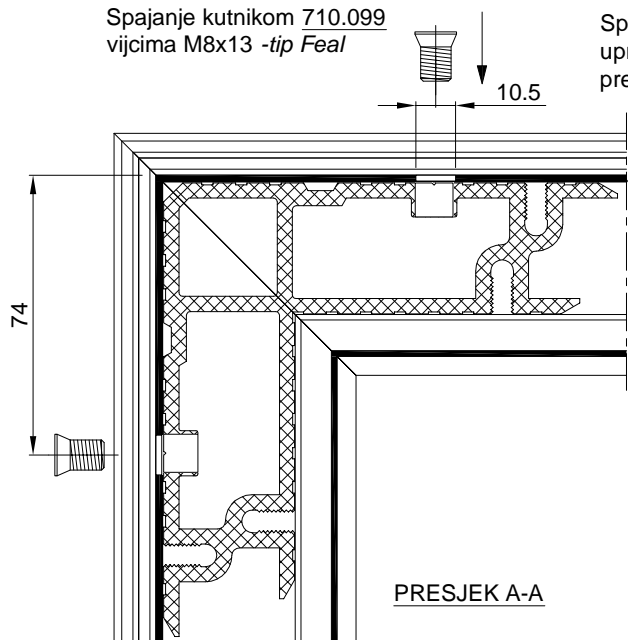


SPAJANJE PROFILA FT-0219 KUTNICIMA; 710.099, 710.040

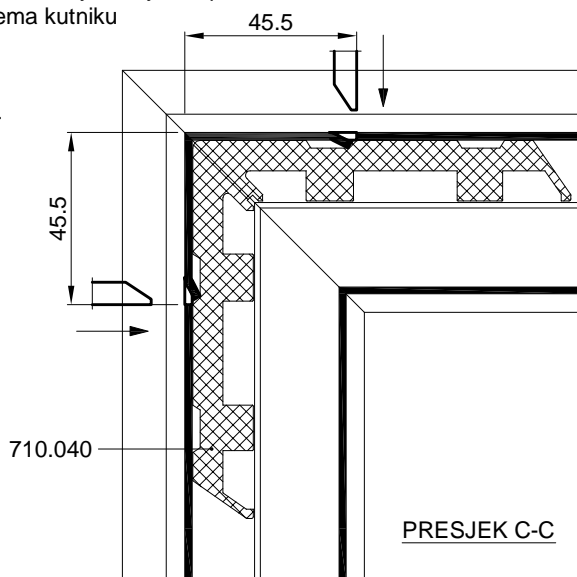


Spajanje kutnikom 710.099 vijcima M8x13 -tip Feal

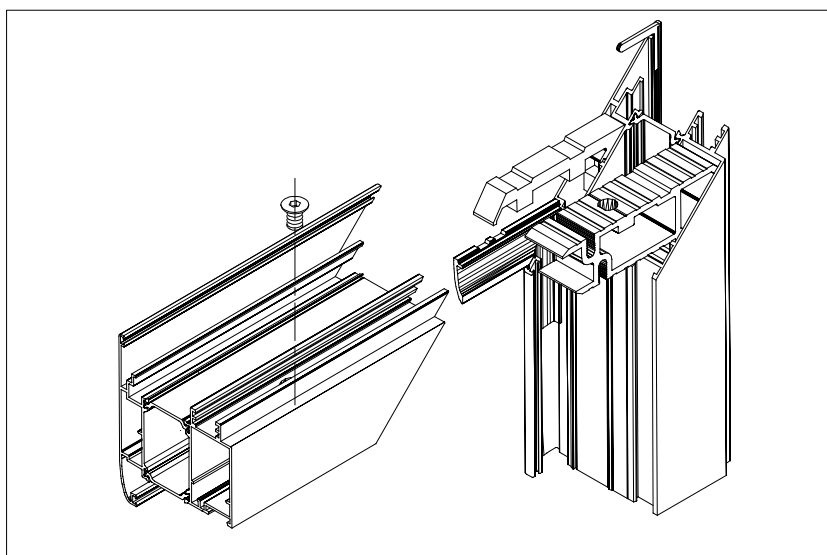
Spajanje kutnikom 710.040 uprešavanjem stijenke profila prema kutniku

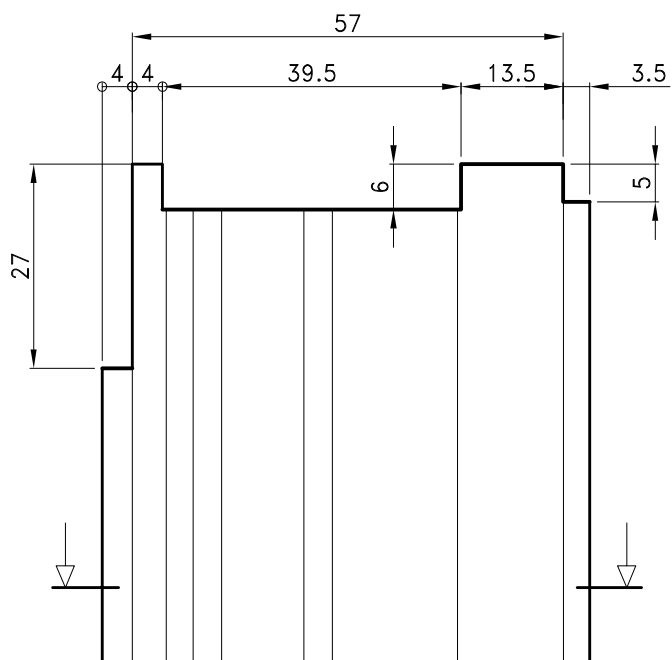


PRESJEK A-A

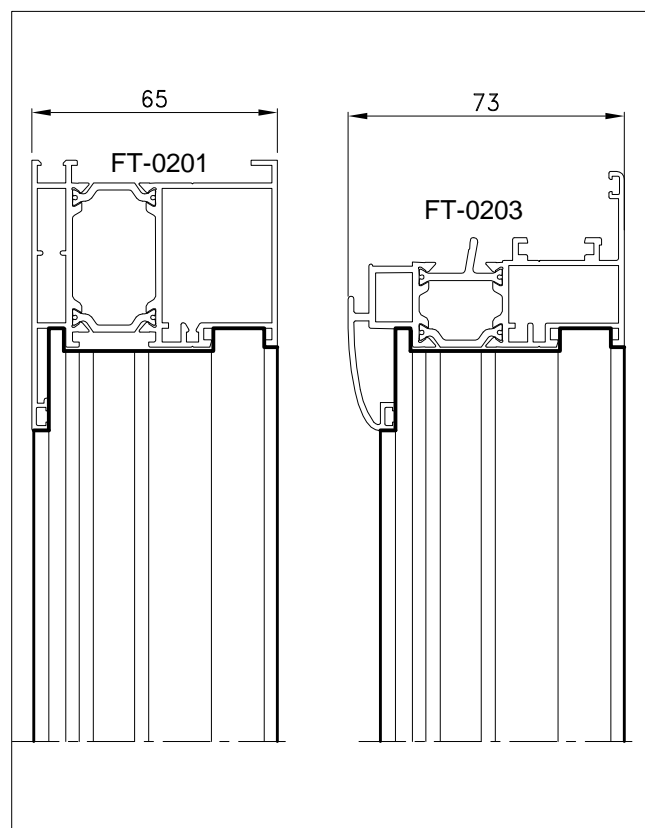
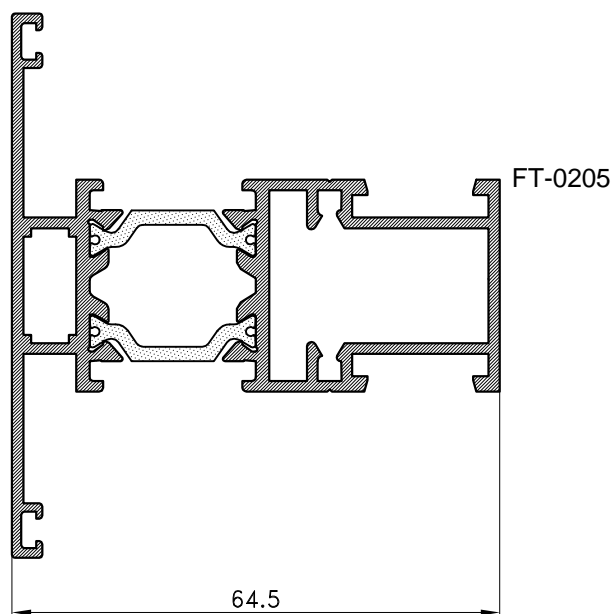


PRESJEK C-C

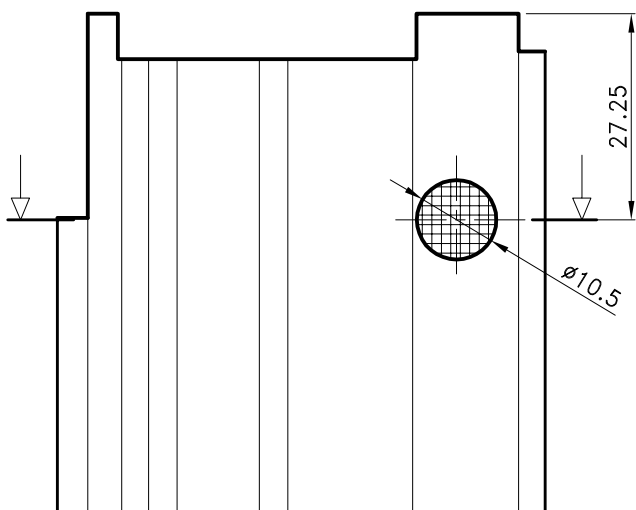




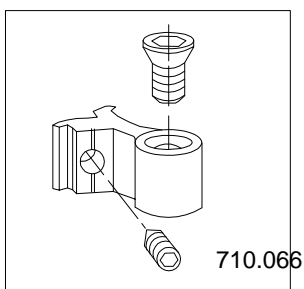
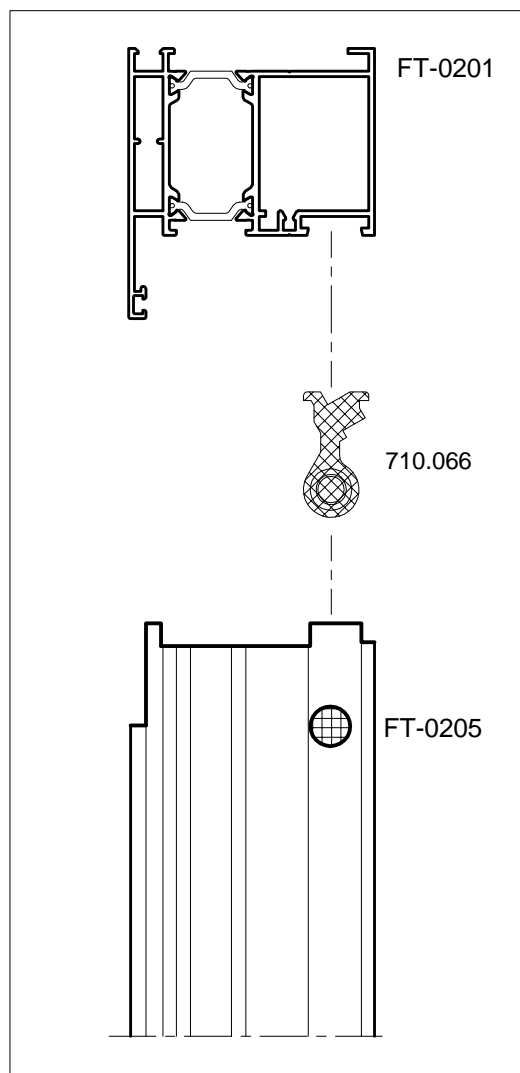
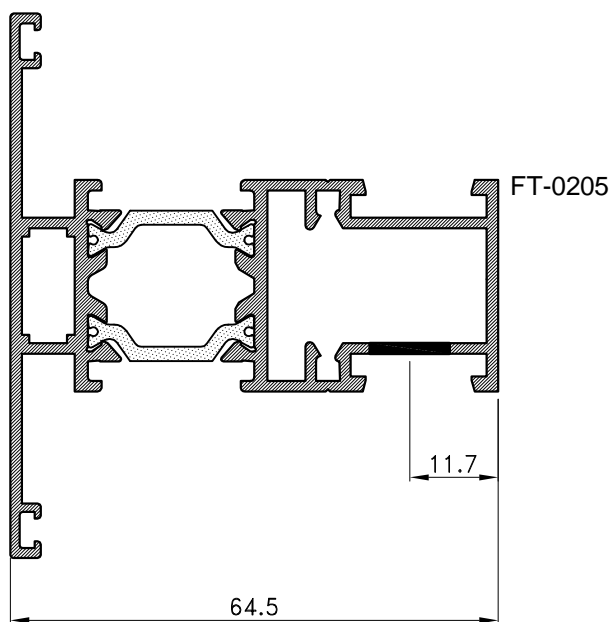
OBRADA PROFILA PREČKE FT-0205  
 FT-0206  
 FT-0207  
 FT-0208  
 PREMA PROFILIMA RAMA, PREČKE I KRILA

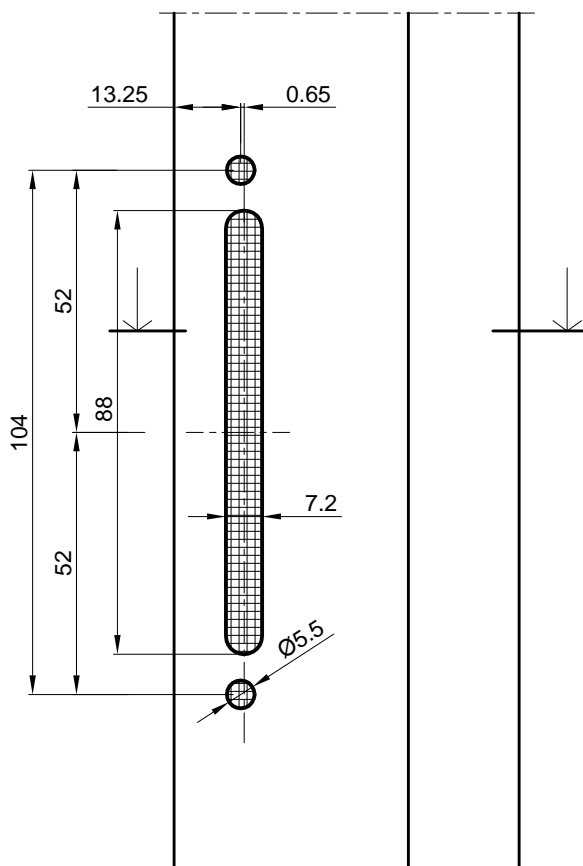




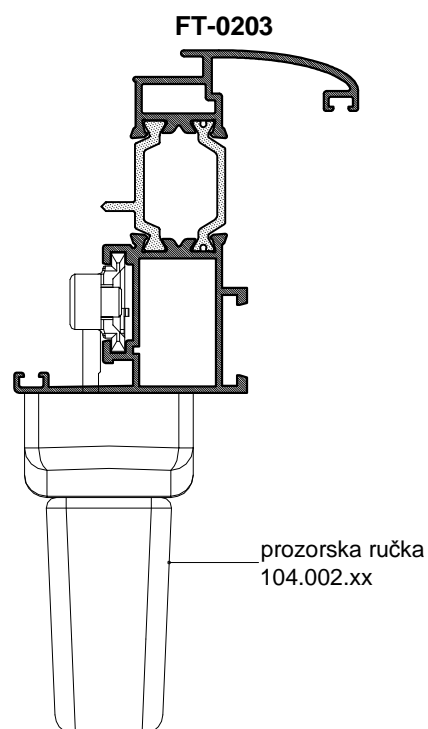
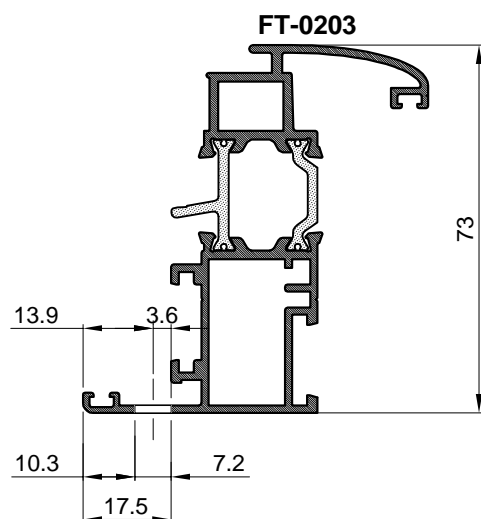


OBRADA PROFILA PREČKE  
ZA VEZNIK 710.066

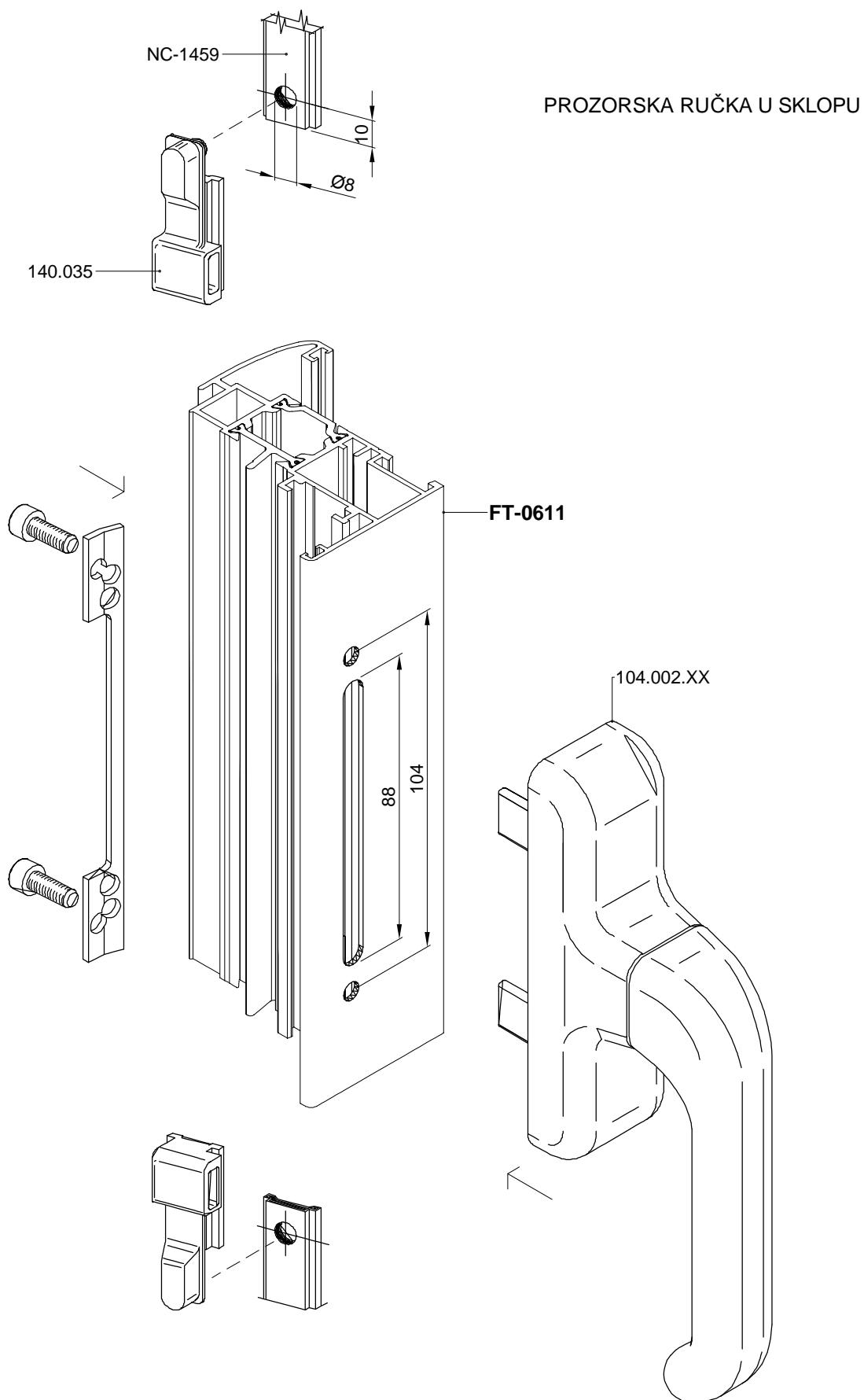




OBRADA PROZORSKOG PROFILA KRILA  
ZA UGRADNJU RUČKE

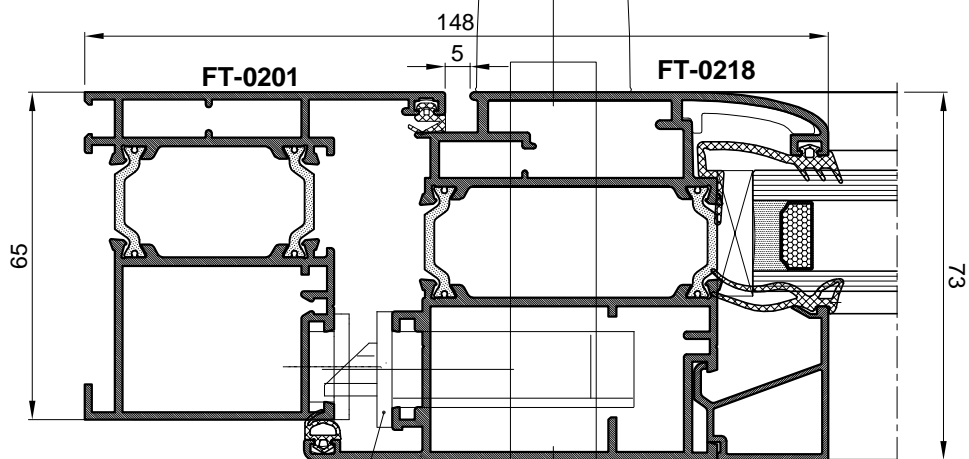


- ZA ZAOKRETNO I OTKLOPNO-ZAOKRETNO OTVARANJE
- OBRADA JE ISTA ZA SVE PROFILE KRILA ZA PROZORE



PRIKAZ BRAVE, ULOŠKA BRAVE I  
RUČKE (stublina) U SKLOPU VRATA

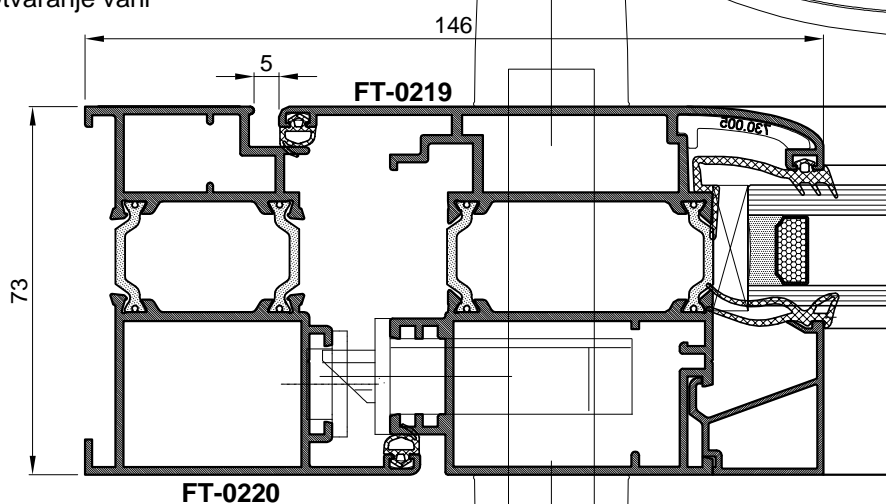
Otvaranje unutra



brava 35 mm  
124.001

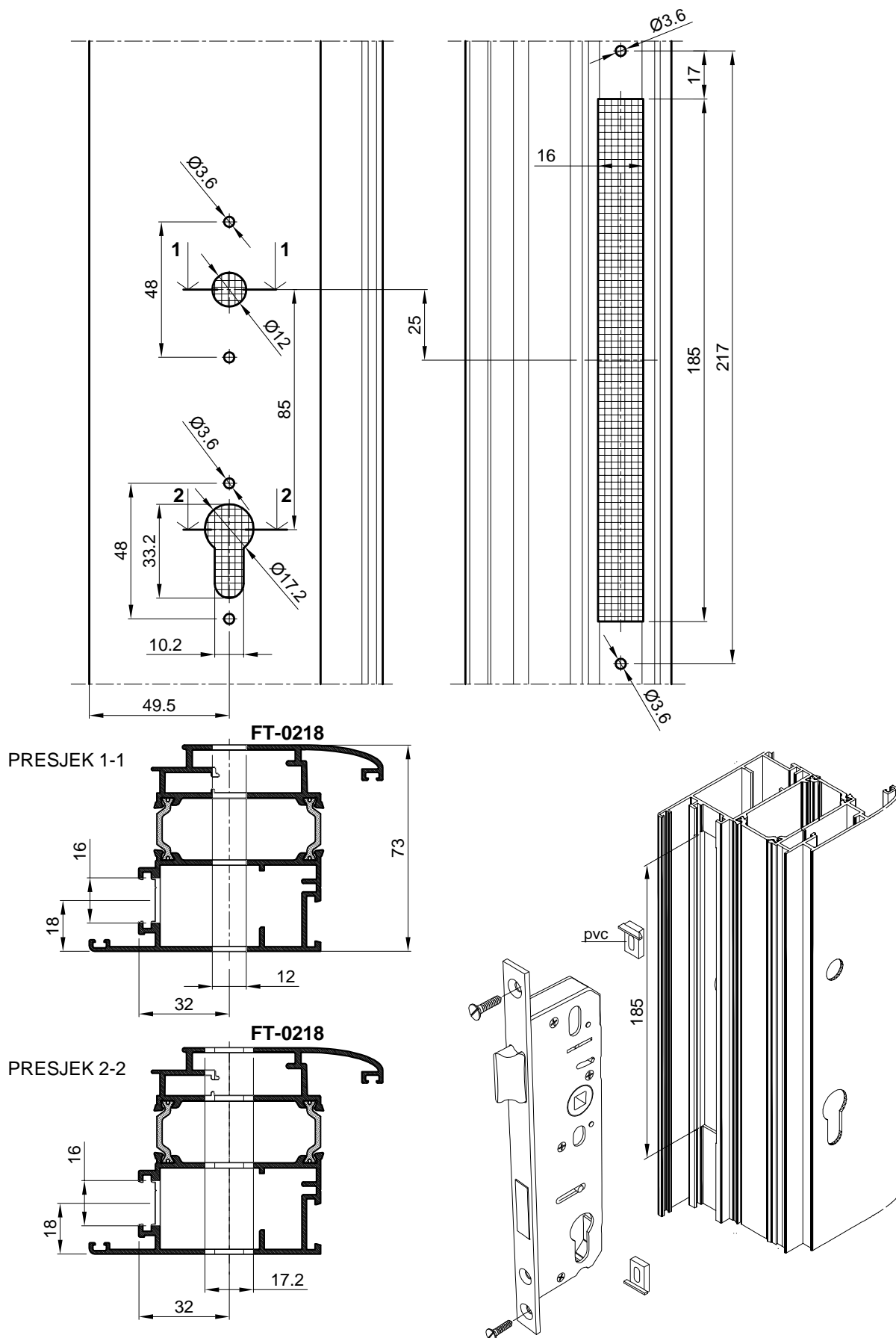
ručka za vrata  
104.001

Otvaranje vani

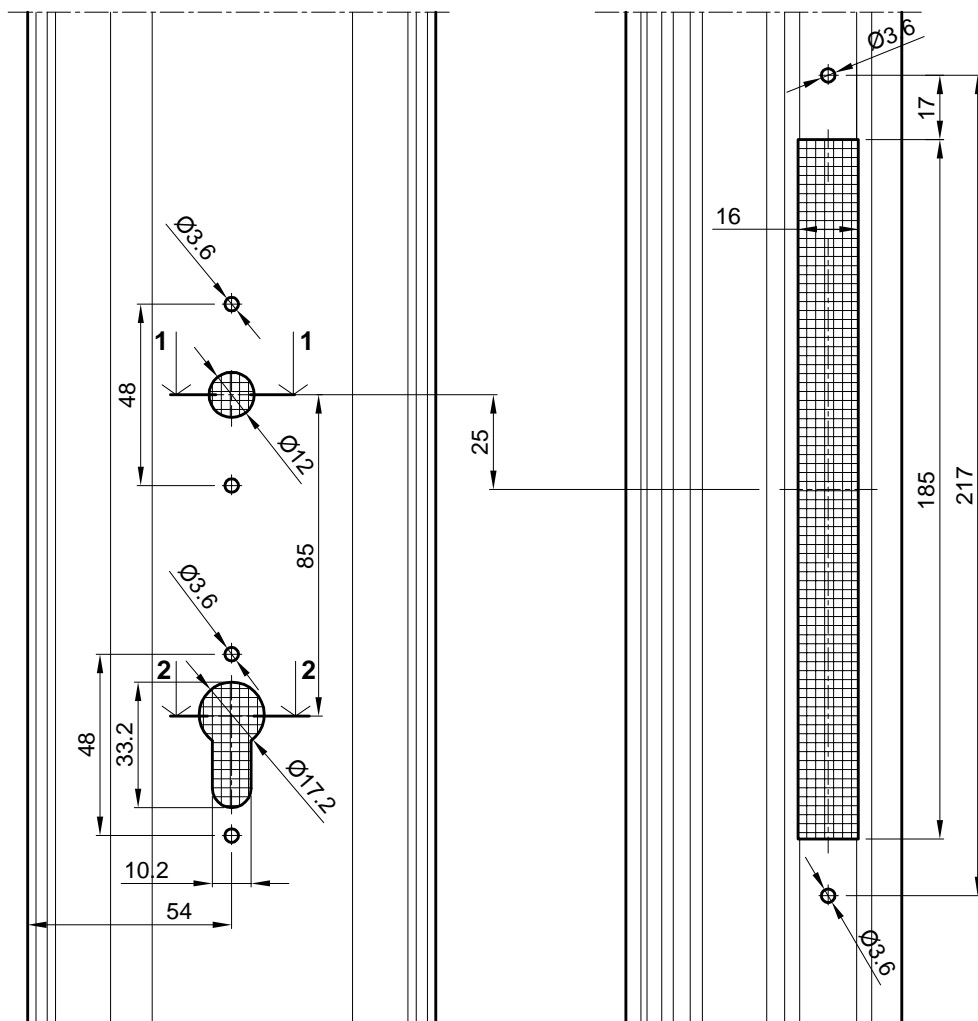


uložak za bravu  
124.002

## OBRADA PROFILA KRILA VRATA (otvaranje unutra) ZA BRAVU 124.001 I RUČKU 104.001 (stublina)

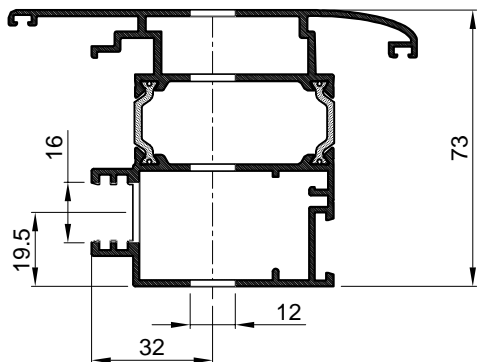


OBRADA PROFILA KRILA VRATA (otvaranje vani) ZA BRAVU 124.001 I RUČKU 104.001(stublina)



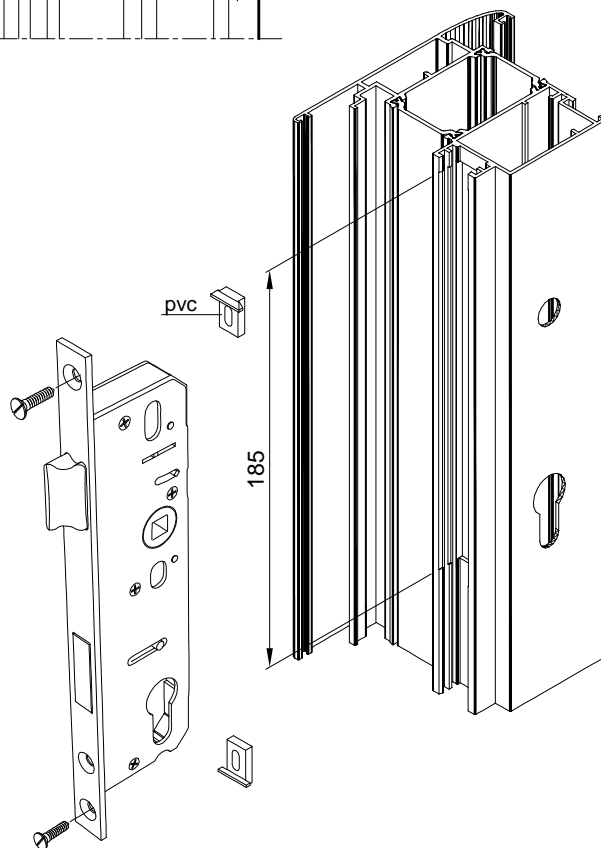
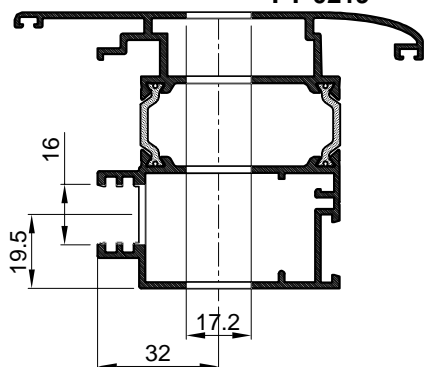
PRESJEK 1-1

FT-0219

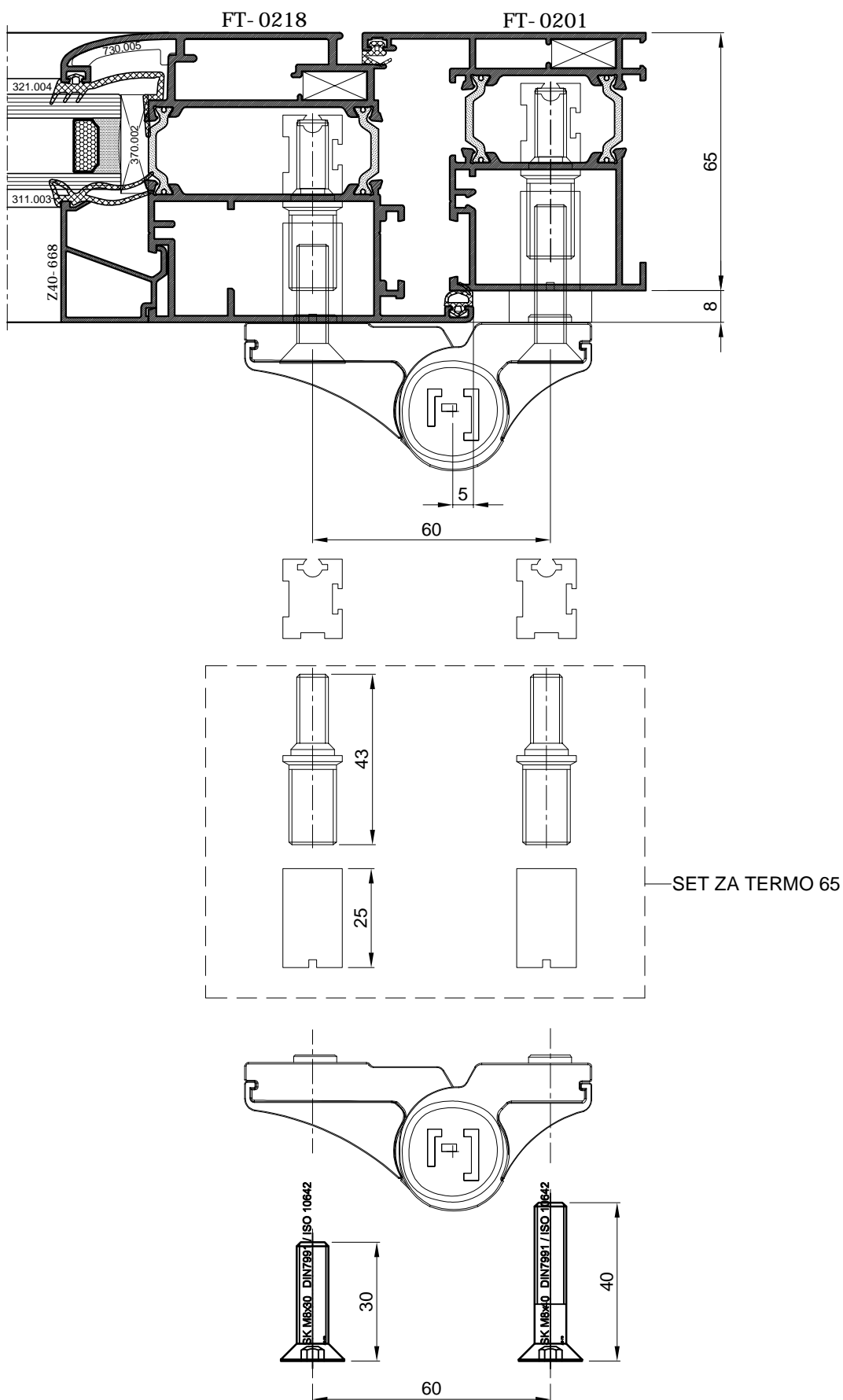


PRESJEK 2-2

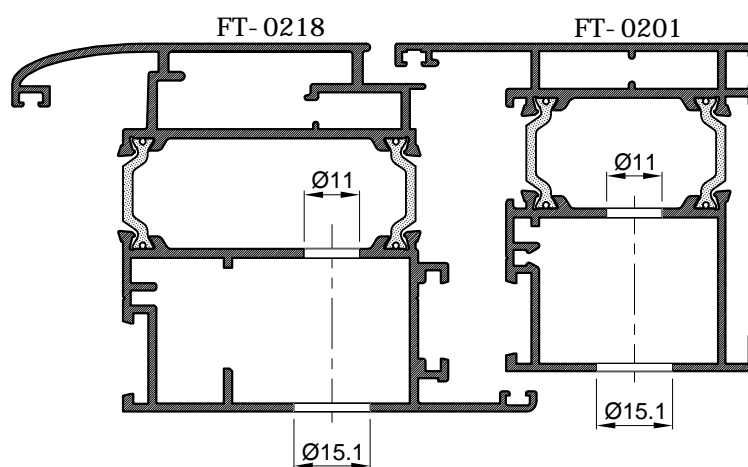
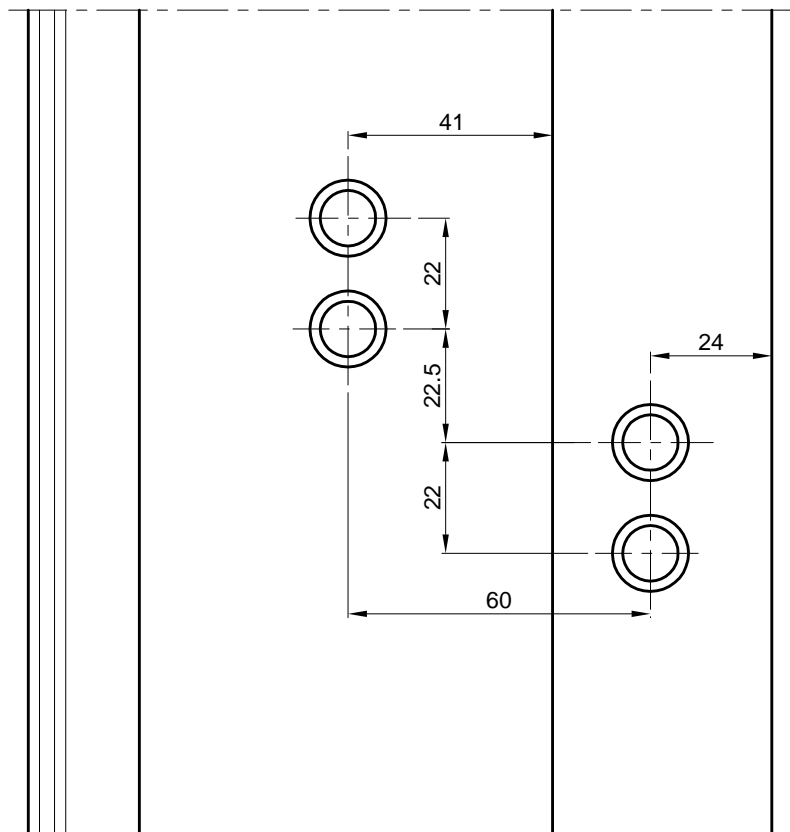
FT-0219



SET USADNIH BAGLAMA- OSNO 60 mm-OTVARANJE UNUTRA

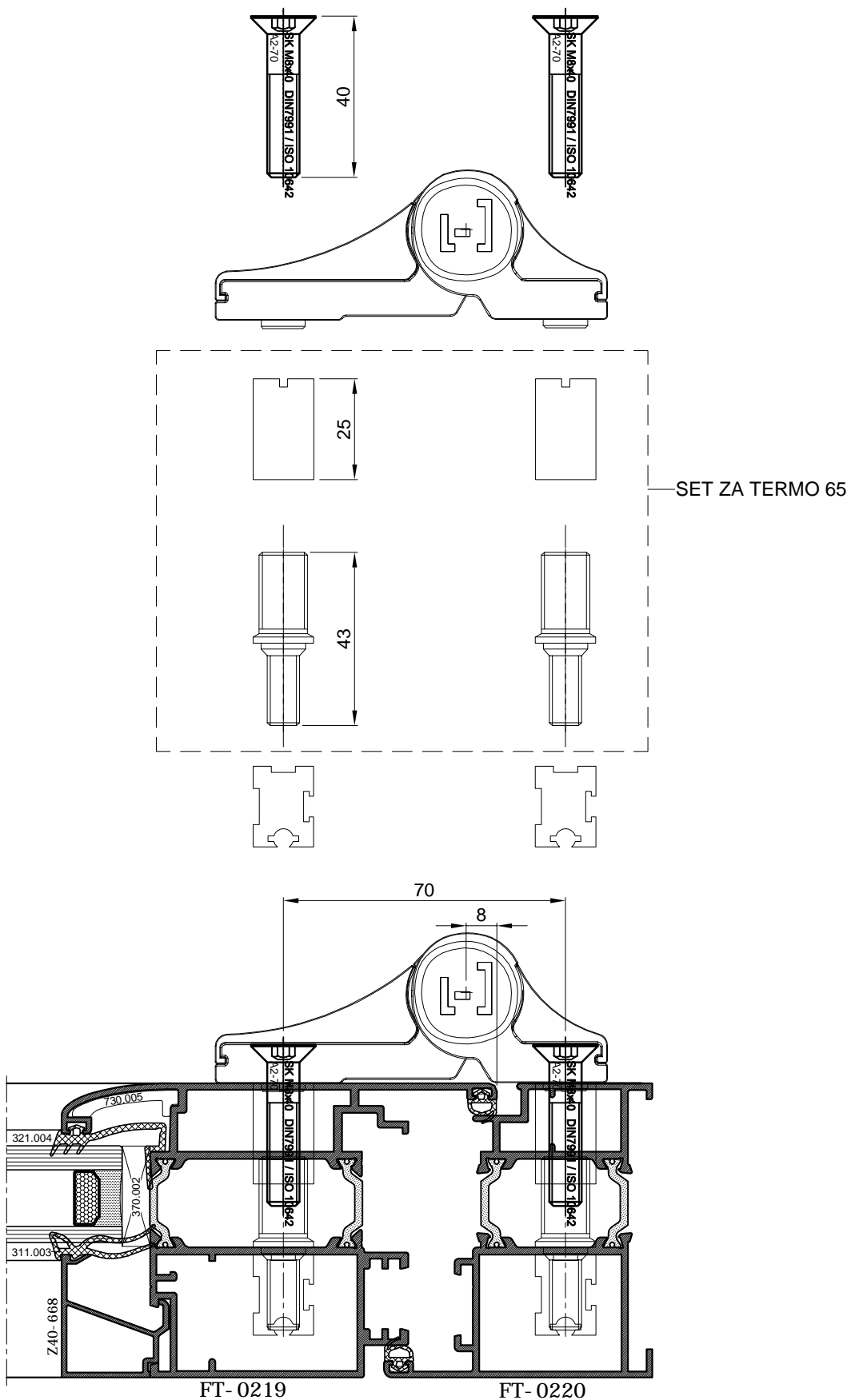


OBRADA ZA SET USADNIH BAGLAMA- OSNO 60 mm-OTVARANJE UNUTRA

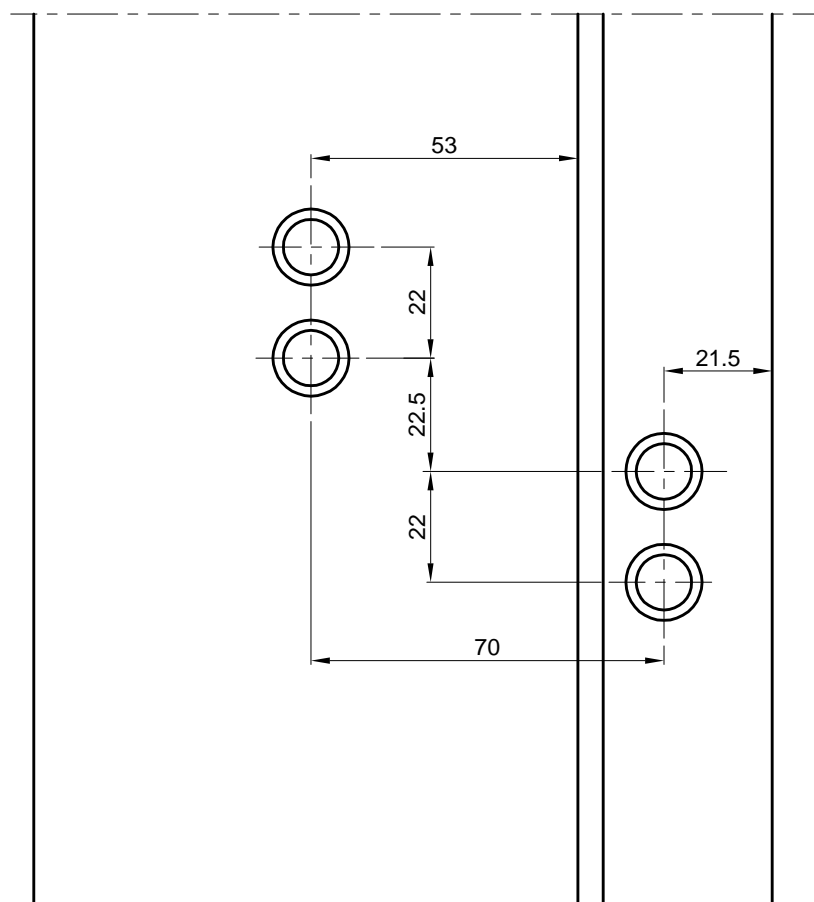
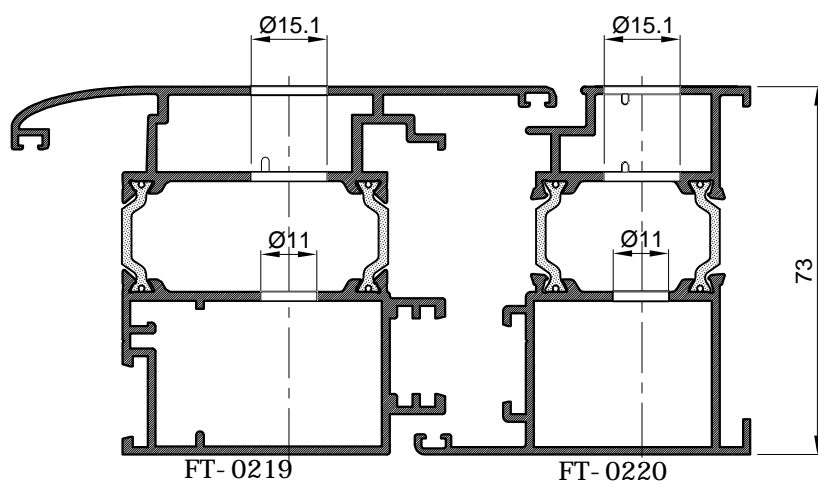




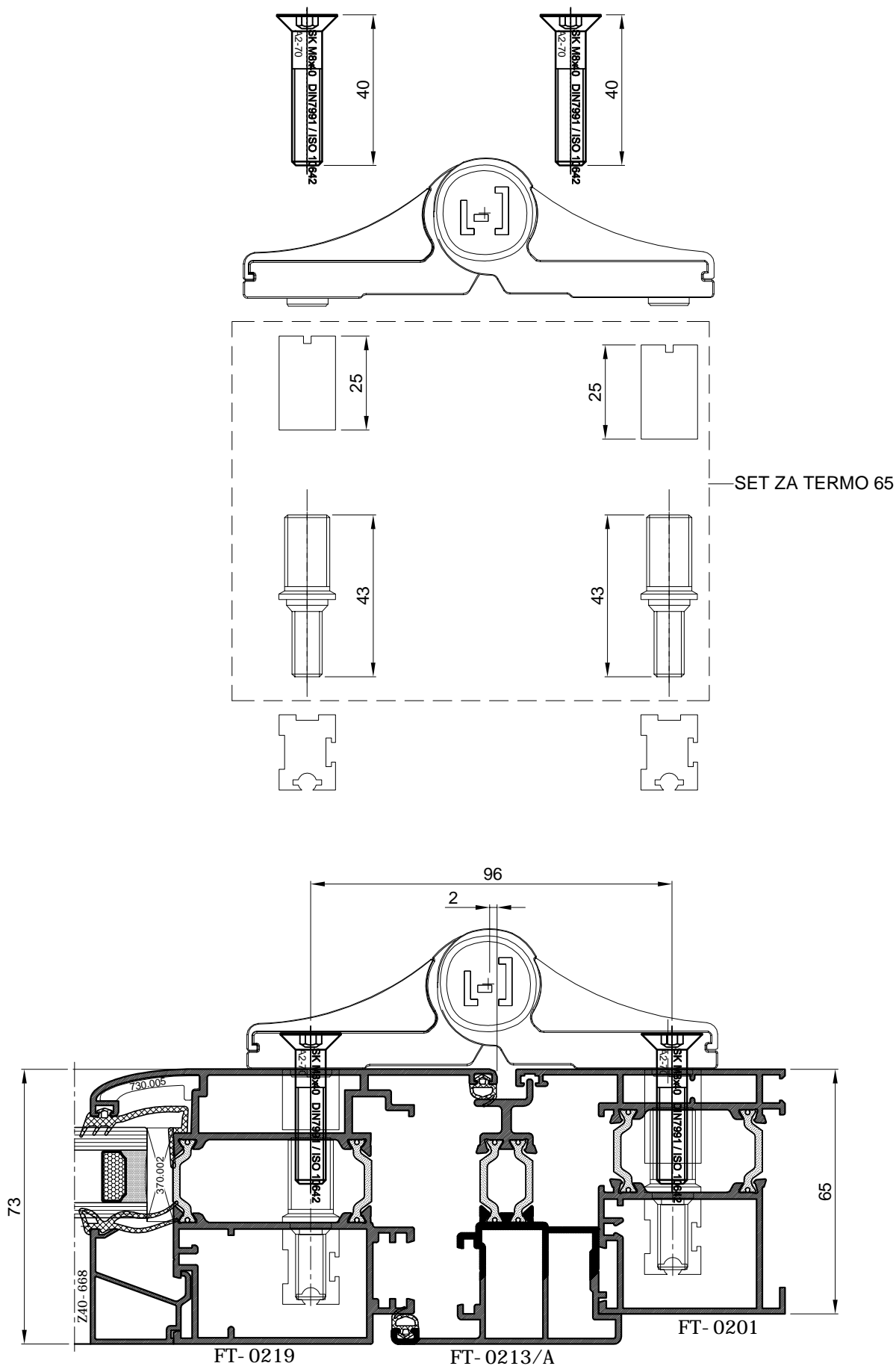
SET USADNIH BAGLAMA- OSNO 70 mm-OTVARANJE VANI



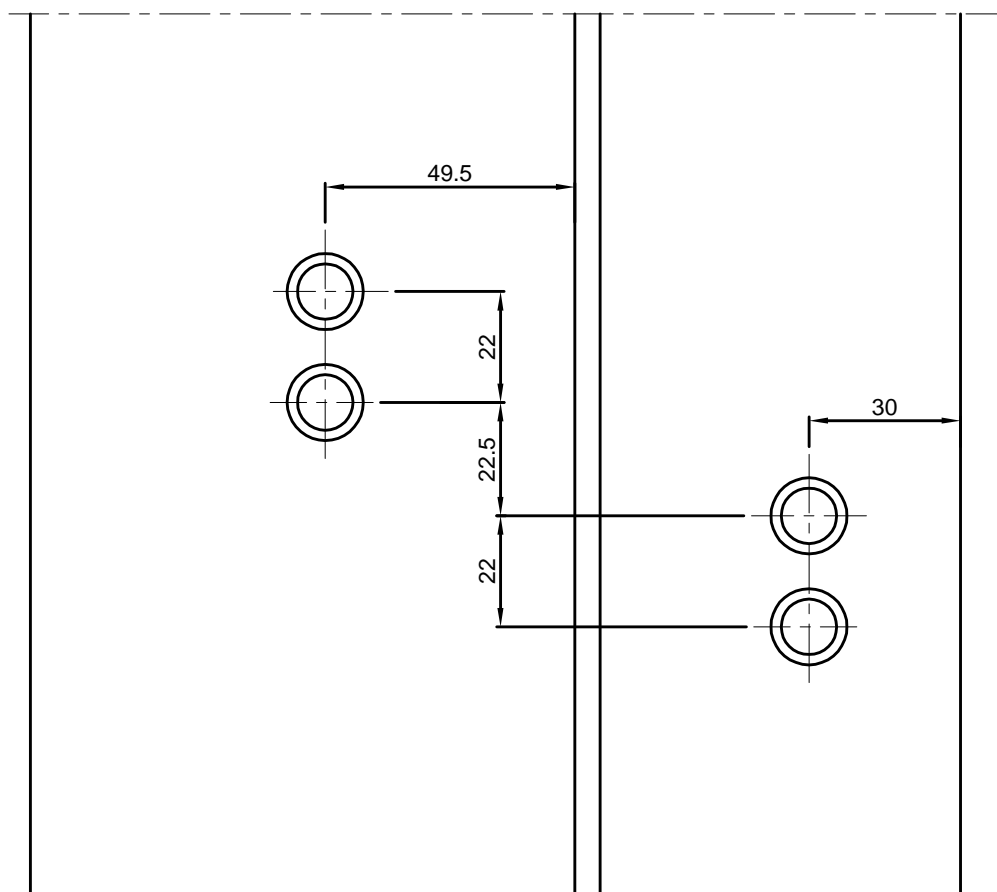
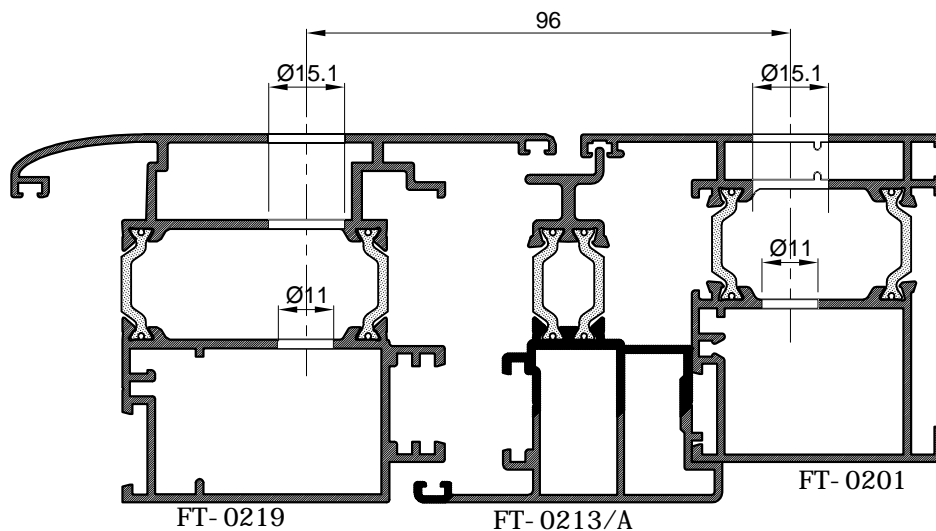
OBRADA ZA SET USADNIH BAGLAMA- OSNO 70 mm-OTVARANJE UNUTRA



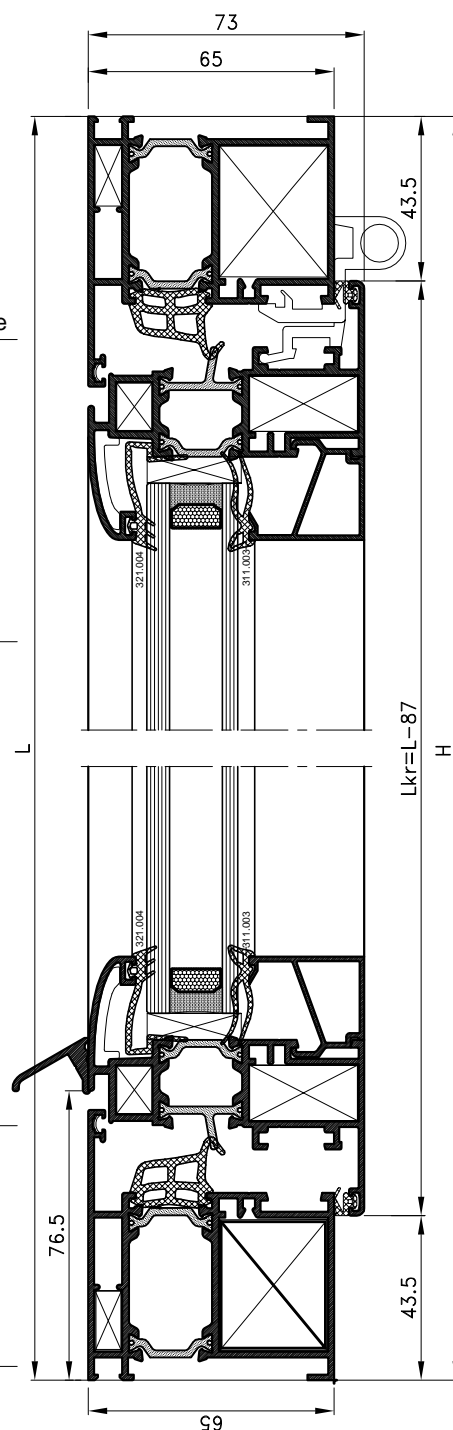
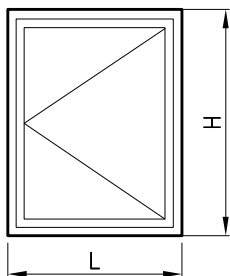
SET USADNIH BAGLAMA- OSNO 96 mm-OTVARANJE VANI



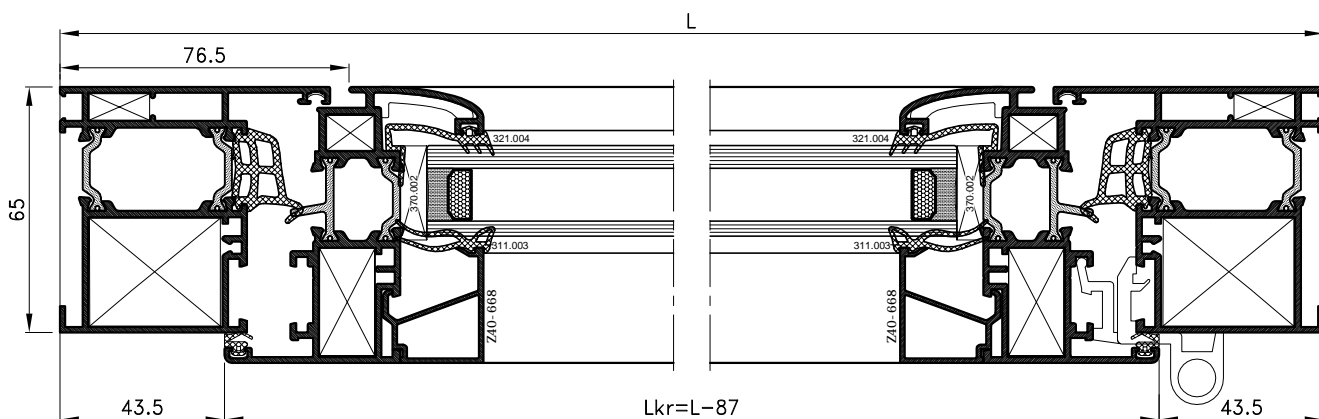
OBRADA ZA BAGLAMA - OSNO 96 - OTVARANJE VANI

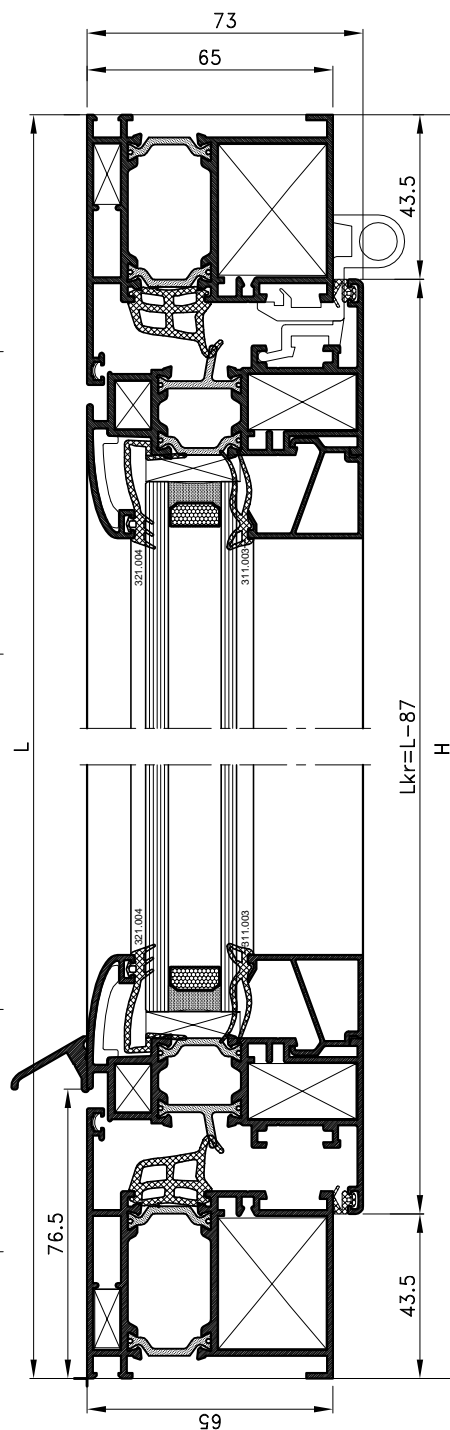
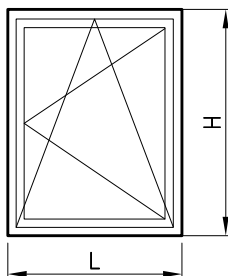


REZNE LISTE

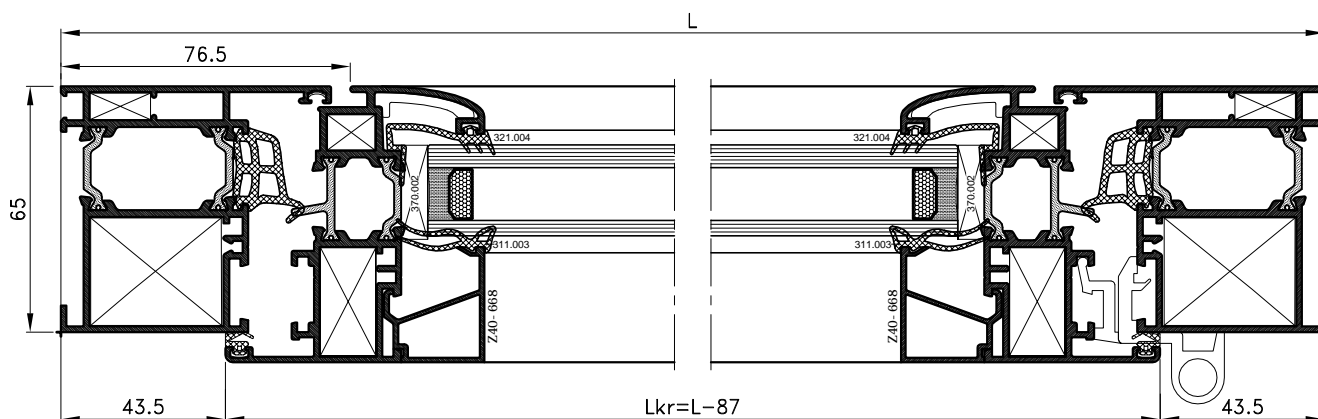


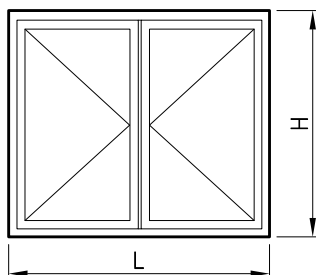
PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0203	vodoravnica krila	2	L-87	45-45
FT-0203	okomica krila	2	H-87	45-45
Z40-0668	vodoravna lajsna	2	L-180	90-90
Z40-0668	okomita lajsna	2	H-224	90-90
NC-1459	klizač			90-90
Z40-657	okapnica	1	L-153	90-90
<b>OKOVI</b>		<b>kom</b>		
730.009	osnovni kutnik	4		
730.008	osnovni kutnik	4		
710.037	pomoćni kutnik	4		
710.026	pomoćni kutnik	4		
730.001	pomoćni kutnik	4		
730.002	pomoćni kutnik	4		
730.005	pomoćni kutnik	4		
111.001.XX	šarka	2		
104.002.XX	ručka prozora	1		
143.004	veza ručke i klizača	par		
143.001	zapinjač	2		
143.003	jednostrani prihvat zapinjača	2		
373.003	maska za drenažni otvor	2		
<b>BRTVE</b>		<b>kom</b>	<b>mjera</b>	
331.001	srednja brtva		2L+2H	
321.001	brtva na spoju profila		2L+2H	
311.003	brtva prema staklu		2L+2H	
321.004	brtva prema staklu		2L+2H	
344.001	kutni umetak	4		
<b>STAKLO</b>		<b>kom</b>	<b>mjera</b>	
24 mm		1	L-194 x H-194	



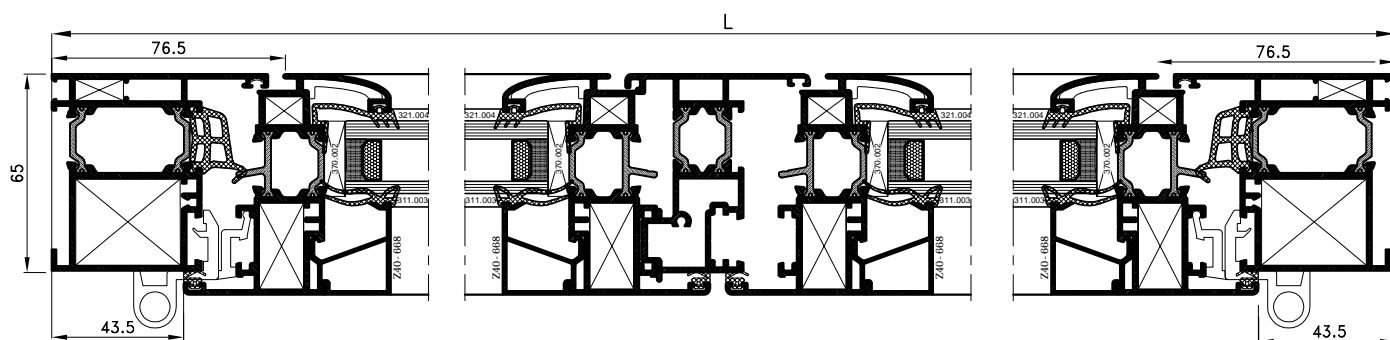
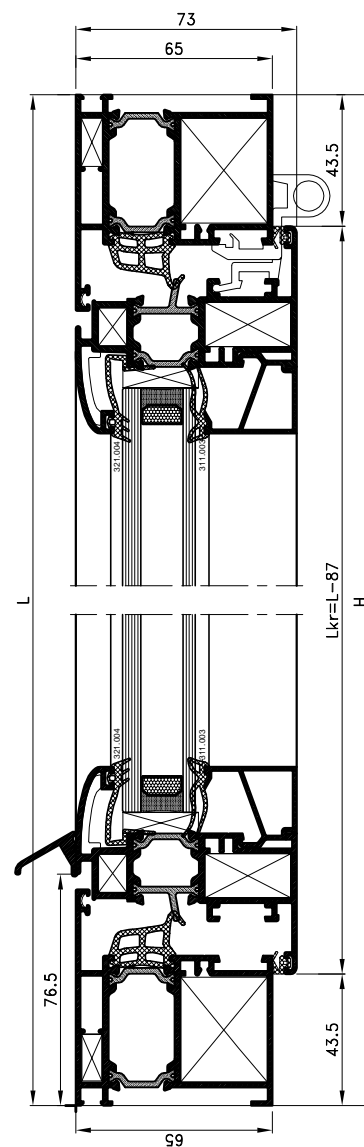


PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0203	vodoravnica krila	2	L-87	45-45
FT-0203	okomica krila	2	H-87	45-45
Z40-0668	vodoravna lajsna	2	L-180	90-90
Z40-0668	okomita lajsna	2	H-224	90-90
NC-1459	klizač			90-90
Z40-657	okapnica	1	L-153	90-90
<b>OKOVI</b>		<b>kom</b>		
730.009	osnovni kutnik	4		
730.008	osnovni kutnik	4		
710.037	pomoćni kutnik	4		
710.026	pomoćni kutnik	4		
730.001	pomoćni kutnik	4		
730.002	pomoćni kutnik	4		
730.005	pomoćni kutnik	4		
	dry-kip mehanizam	1		
373.003	maska za drenažni otvor	2		
<b>BRTVE</b>		<b>kom</b>	<b>mjera</b>	
331.001	srednja brtva		2L+2H	
321.001	brtva na spoju profila		2L+2H	
311.003	brtva prema staklu		2L+2H	
321.004	brtva prema staklu		2L+2H	
344.001	kutni umetak	4		
<b>STAKLO</b>		<b>kom</b>	<b>mjera</b>	
24 mm		1	L-194 x H-194	

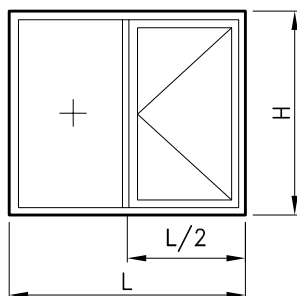




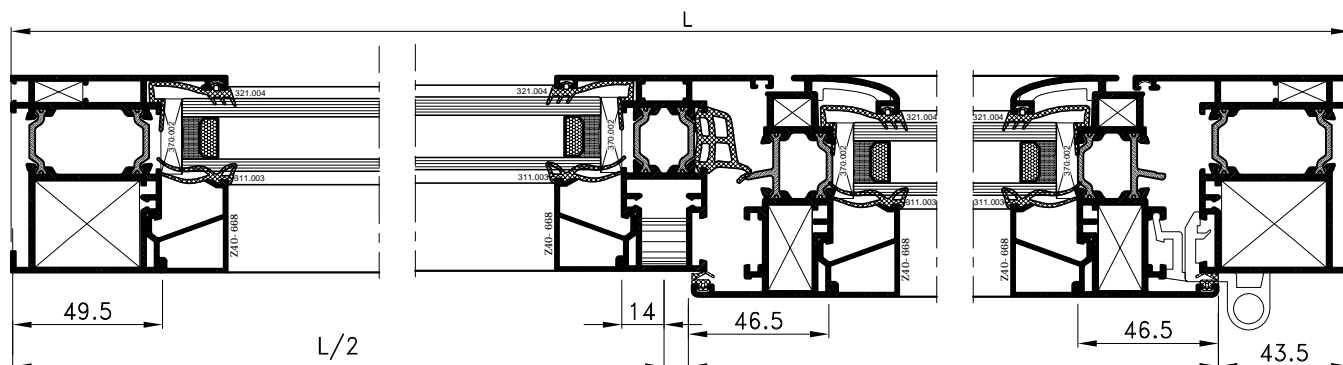
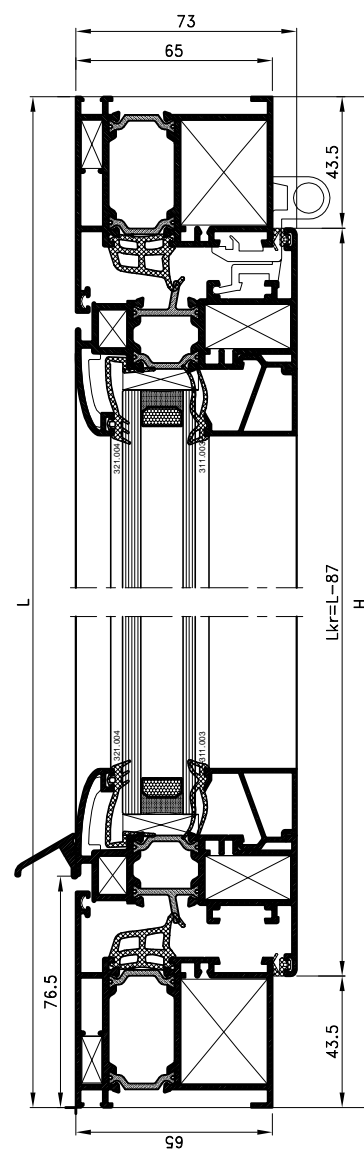
PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0203	vodoravnica krila	4	(L-92)/2	45-45
FT-0203	okomica krila	4	H-87	45-45
FT-0211	profil za okretanje	1	H-155	90-90
Z40-0668	vodoravna lajsna	4	Lkr-93	90-90
Z40-0668	okomita lajsna	4	Hkr-137	90-90
NC-1459	klizač			90-90
Z40-657	okapnica	1	Lkr1-66	90-90
Z40-657	okapnica	1	Lkr2-66	90-90
<b>OKOVI</b>		kom		
730.009	osnovni kutnik	4		
730.008	osnovni kutnik	8		
710.037	pomoćni kutnik	4		
710.026	pomoćni kutnik	8		
730.001	pomoćni kutnik	8		
730.002	pomoćni kutnik	4		
730.005	pomoćni kutnik	8		
111.001.XX	šarka	4		
104.002.XX	ručka prozora	1		
143.004	veza ručke i klizača	par		
143.001	zapinjač	2		
143.006	fiksni zapinjač	2		
143.003	jednostrani prihvat zapinjača	4		
373.003	maska za drenažni otvor	2		
363.001	umetak profila za okr.	par		
<b>BRTVE</b>		kom	mjera	
331.001	srednja brtva		2L+3H	
321.001	brtva na spoju profila		2L+4H	
311.003	brtva prema staklu		2L+4H	
321.004	brtva prema staklu		2L+4H	
344.001	kutni umetak	4		
<b>STAKLO</b>		kom	mjera	
24 mm		2	(L-306)/2 x H-194	

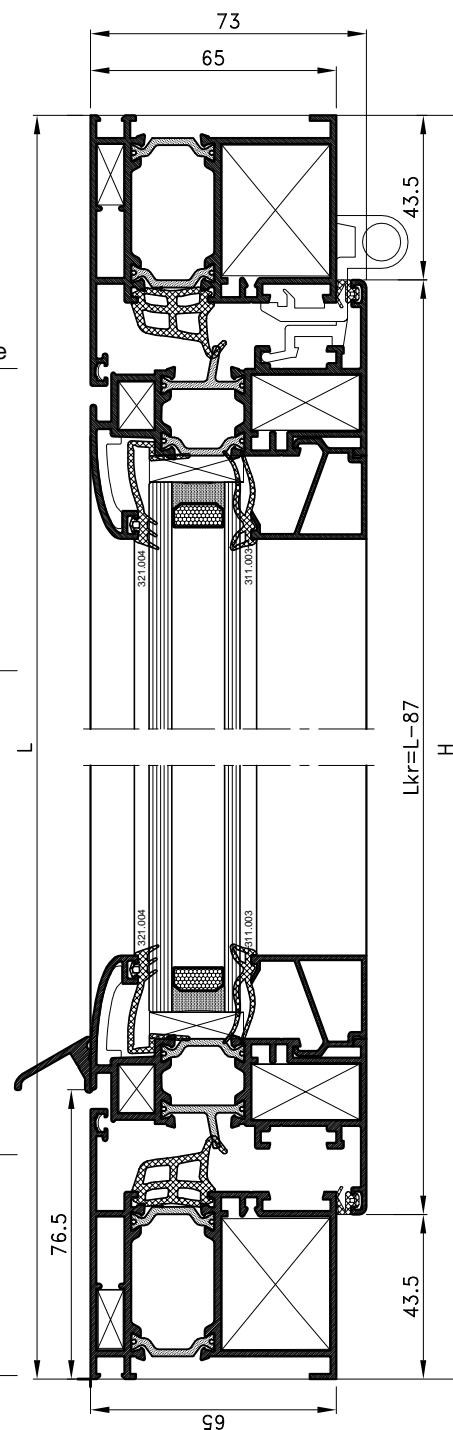
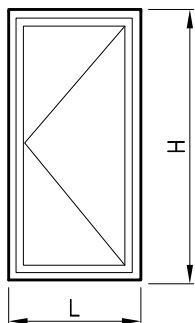




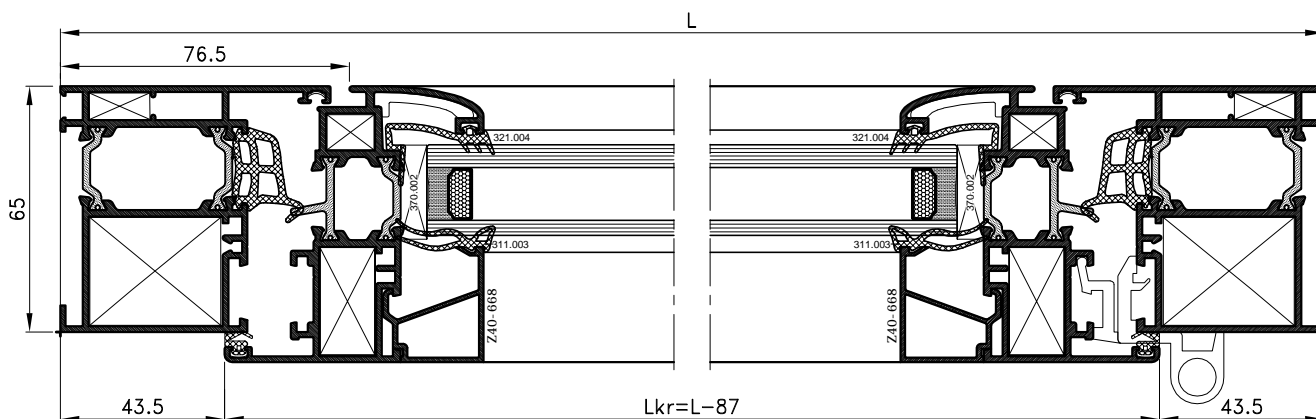


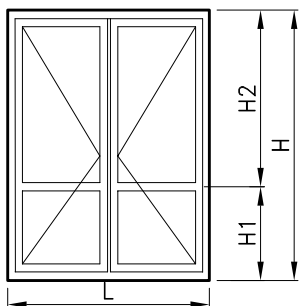
PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0203	vodoravnica krila	2	L/2-51.5	45-45
FT-0203	okomica krila	2	H-87	45-45
FT-0205	prečka	1	H-89	90-90
Z40-0668	vodoravna lajsna	4	Lkr-93	90-90
Z40-0668	okomita lajsna	4	Hkr-137	90-90
Z40-0668	vodoravna lajsna	4	(L/2)-63.5	90-90
Z40-0668	okomita lajsna	4	H-143	90-90
NC-1459	klizač			90-90
Z40-657	okapnica	1	Lkr-66	90-90
<b>OKOVI</b>		<b>kom</b>		
730.009	osnovni kutnik	4		
730.008	osnovni kutnik	4		
710.037	pomoćni kutnik	4		
710.026	pomoćni kutnik	4		
730.001	pomoćni kutnik	4		
730.002	pomoćni kutnik	4		
730.005	pomoćni kutnik	4		
111.001.XX	šarka	2		
104.002.XX	ručka prozora	1		
143.004	veza ručke i klizača	par		
143.001	zapinjač	2		
143.003	jednostrani prihvat zapinjača	2		
373.003	maska za drenažni otvor	2		
710.066	veznik	2		
<b>BRTVE</b>		<b>kom</b>	<b>mjera</b>	
331.001	srednja brtva		L+2H	
321.001	brtva na spoju profila		L+2H	
311.003	brtva prema staklu		2L+4H	
321.004	brtva prema staklu		2L+4H	
344.001	kutni umetak	4		
<b>STAKLO</b>		<b>kom</b>	<b>mjera</b>	
24 mm		1	L/2-158.5 x H-194	
24 mm		1	L/2-77.5 x H-113	





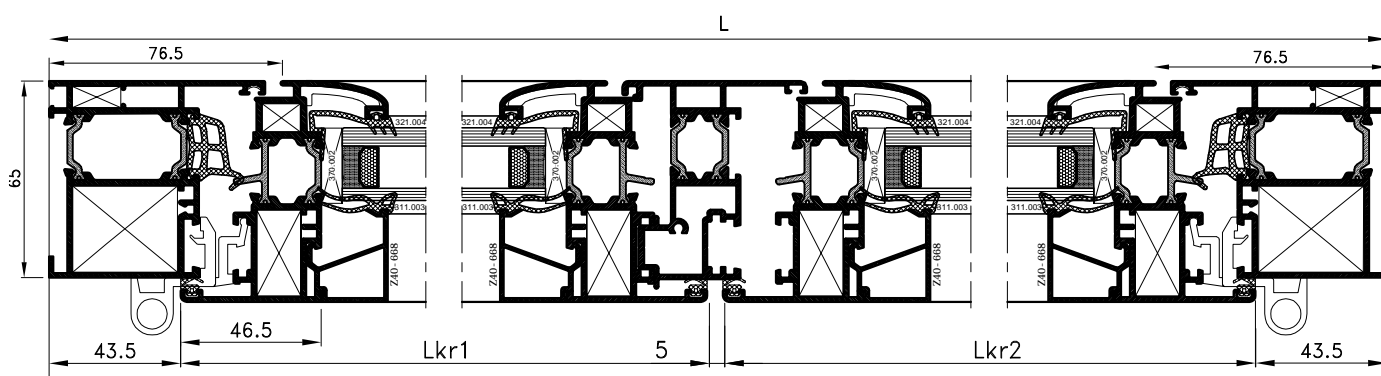
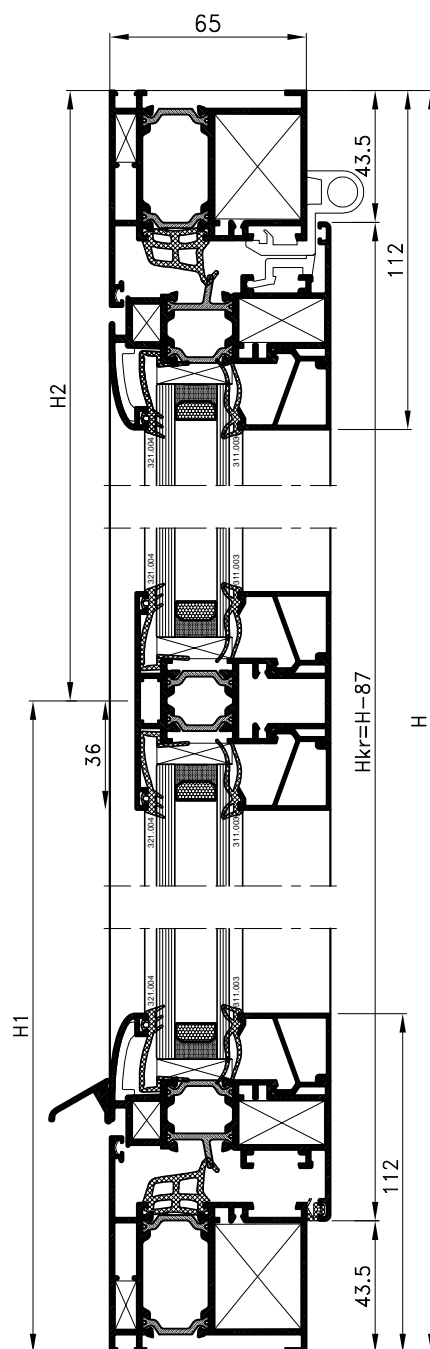
PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0203	vodoravnica krila	2	L-87	45-45
FT-0203	okomica krila	2	H-87	45-45
Z40-0668	vodoravna lajsna	2	Lkr-93	90-90
Z40-0668	okomita lajsna	2	Hkr-137	90-90
NC-1459	klizač			90-90
Z40-657	okapnica	1	Lkr-66	90-90
OKOVI		kom		
710.072	osnovni kutnik	4		
730.008	osnovni kutnik	4		
710.037	pomoćni kutnik	4		
710.026	pomoćni kutnik	4		
730.001	pomoćni kutnik	4		
730.002	pomoćni kutnik	4		
730.005	pomoćni kutnik	4		
111.001.XX	šarka	2		
104.002.XX	ručka prozora	1		
143.004	veza ručke i klizača	par		
143.001	zapinjač	2		
143.003	jednostrani prihvat zapinjača	2		
373.003	maska za drenažni otvor	2		
BRTVE		kom	mjera	
331.001	srednja brtva		2L+2H	
321.001	brtva na spoju profila		2L+2H	
311.003	brtva prema staklu		2L+2H	
321.004	brtva prema staklu		2L+2H	
344.001	kutni umetak	4		
STAKLO		kom	mjera	
24 mm		1	L-194 x H-194	

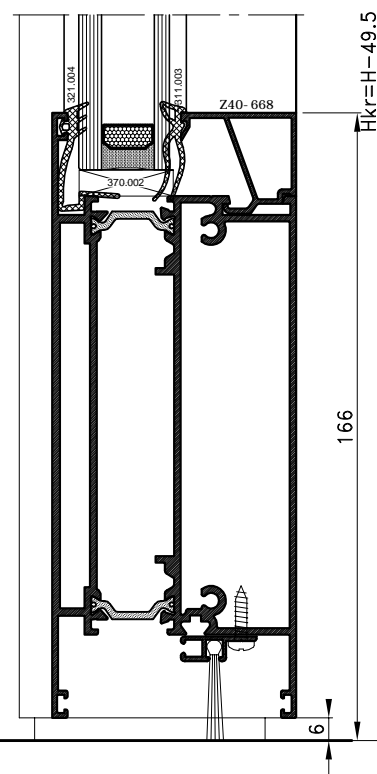
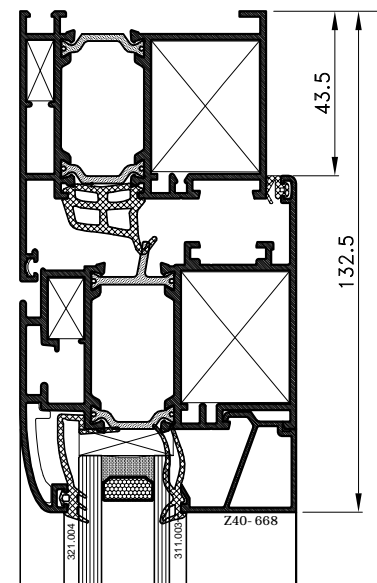
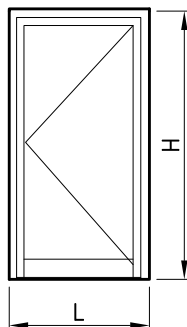




PROFILI

PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0203	vodoravnica krila	4	(L-92)/2	45-45
FT-0203	okomica krila	4	H-87	45-45
FT-0205	prečka	2	(L-258)/2	90-90
FT-0211	profil za okretanje	1	H-155	90-90
Z40-0668	vodoravna lajsna	8	Lkr-93	90-90
Z40-0668	okomita lajsna	4	H1-148	90-90
Z40-0668	okomita lajsna	4	H2-148	90-90
NC-1459	klizač			90-90
Z40-657	okapnica	1	Lkr1-66	90-90
Z40-657	okapnica	1	Lkr2-66	90-90
<b>OKOVI</b>		kom		
710.072	osnovni kutnik	4		
730.008	osnovni kutnik	8		
710.037	pomoćni kutnik	4		
710.008	pomoćni kutnik	8		
730.001	pomoćni kutnik	8		
730.002	pomoćni kutnik	4		
730.005	pomoćni kutnik	8		
710.066	veznik	4		
111.001.XX	šarka	6		
104.002.XX	ručka prozora	1		
143.004	veza ručke i klizača	par		
143.001	zapinjač	2		
143.005	fiksni zapinjač	2		
143.003	jednostrani prihvat zapinjača	4		
373.003	maska za drenažni otvor	2		
363.001	umetak profila za okr.	par		
710.069	dodatni veznik za prečku	4		
<b>BRTVE</b>		kom	mjera	
331.001	srednja brtva		2L+3H	
321.001	brtva na spoju profila		2L+4H	
311.003	brtva prema staklu		4L+4H	
321.004	brtva prema staklu		4L+4H	
344.001	kutni umetak	4		
<b>STAKLO</b>		kom	mjera	
24 mm		2	Lkr-107 x H1-118	
24 mm		2	Lkr-107 x H2-118	



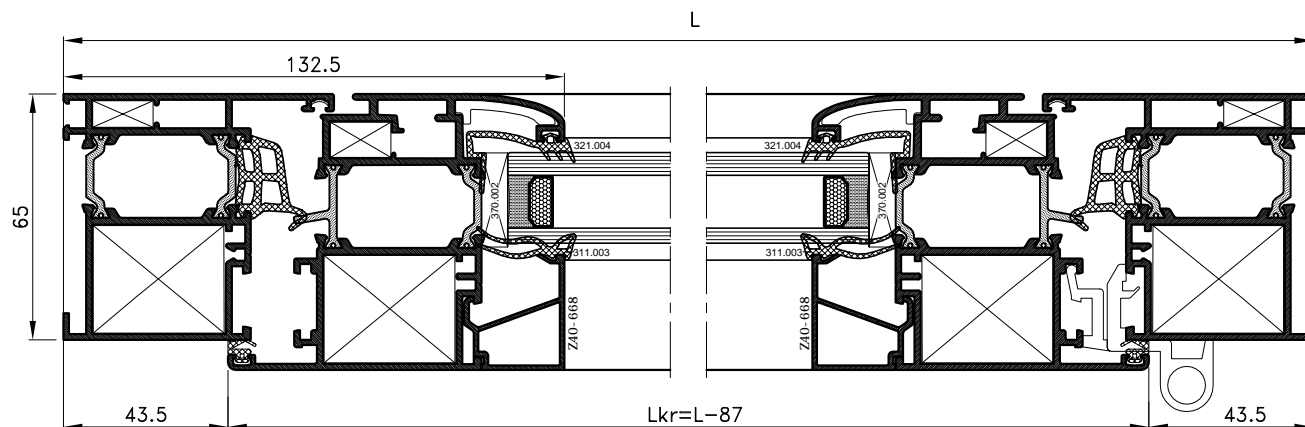


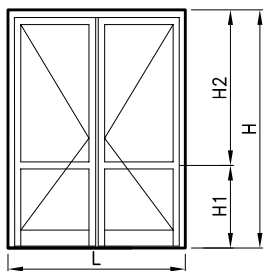
PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	1	L	45-45
FT-0201	okomica okvira	2	H	45-90
FT-0204	vodoravnica krila	1	Lkr=L-87	45-45
FT-0208	vodoravnica krila-parapet	1	Lkr-124	90-90
FT-0204	okomica krila	2	H-49.5	45-90
Z40-0668	vodoravna lajsna	2	Lkr-134	90-90
Z40-0668	okomita lajsna	2	H-298.5	90-90
Z40-657	okapnica	1	L-153	90-90

OKOVI		kom	
710.072	osnovni kutnik	4	
710.037	pomoćni kutnik	2	
710.039	pomoćni kutnik	2	
730.001	pomoćni kutnik	2	
730.002	pomoćni kutnik	2	
730.005	pomoćni kutnik	2	
114.001.XX	šarka	2	
710.070	dodatni veznik	2	
124.001	brava	1	
124.003	šild za vrata	1	
104.001.XX	ručka	par	
124.002	uložak za bravu	1	

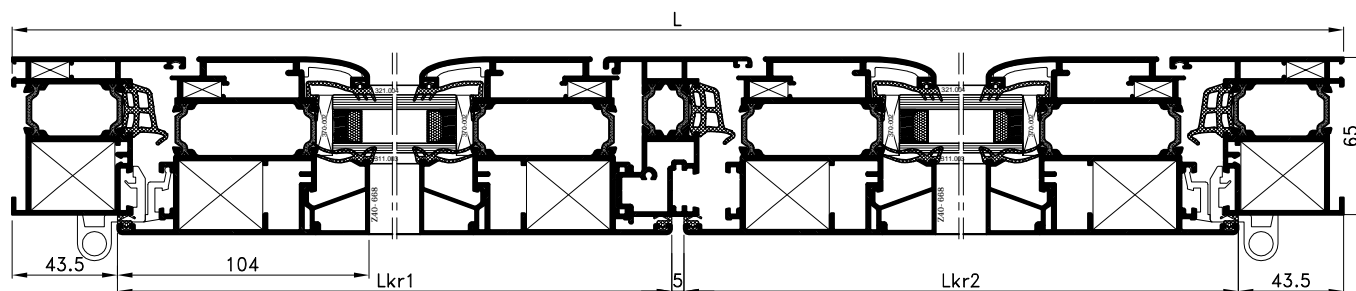
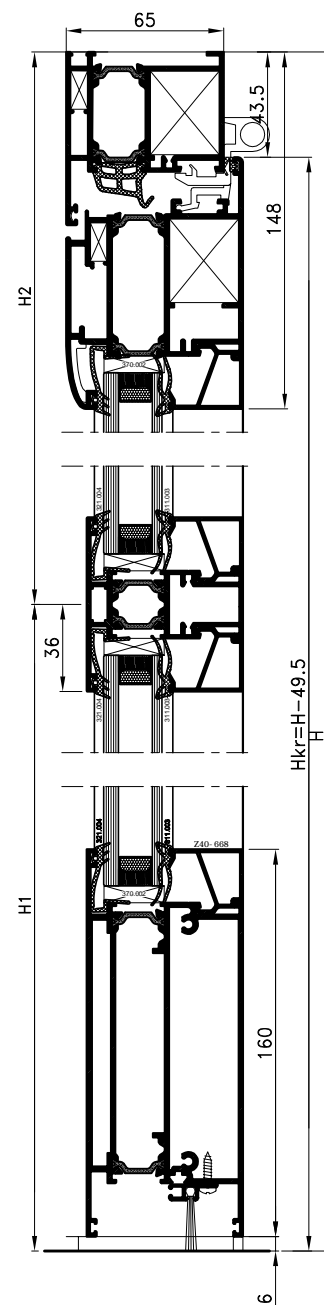
BRTVE		kom	mjera
331.001	srednja brtva		2L+2H
321.001	brtva na spoju profila		L+2H
311.003	brtva prema staklu		2L+2H
321.004	brtva prema staklu		2L+2H
344.001	kutni umetak	2	
521.001	držač četkaste brtve	1	
347.001	četkasta brtva	1	

STAKLO		kom	mjera
24 mm		1	L-194 x H-248



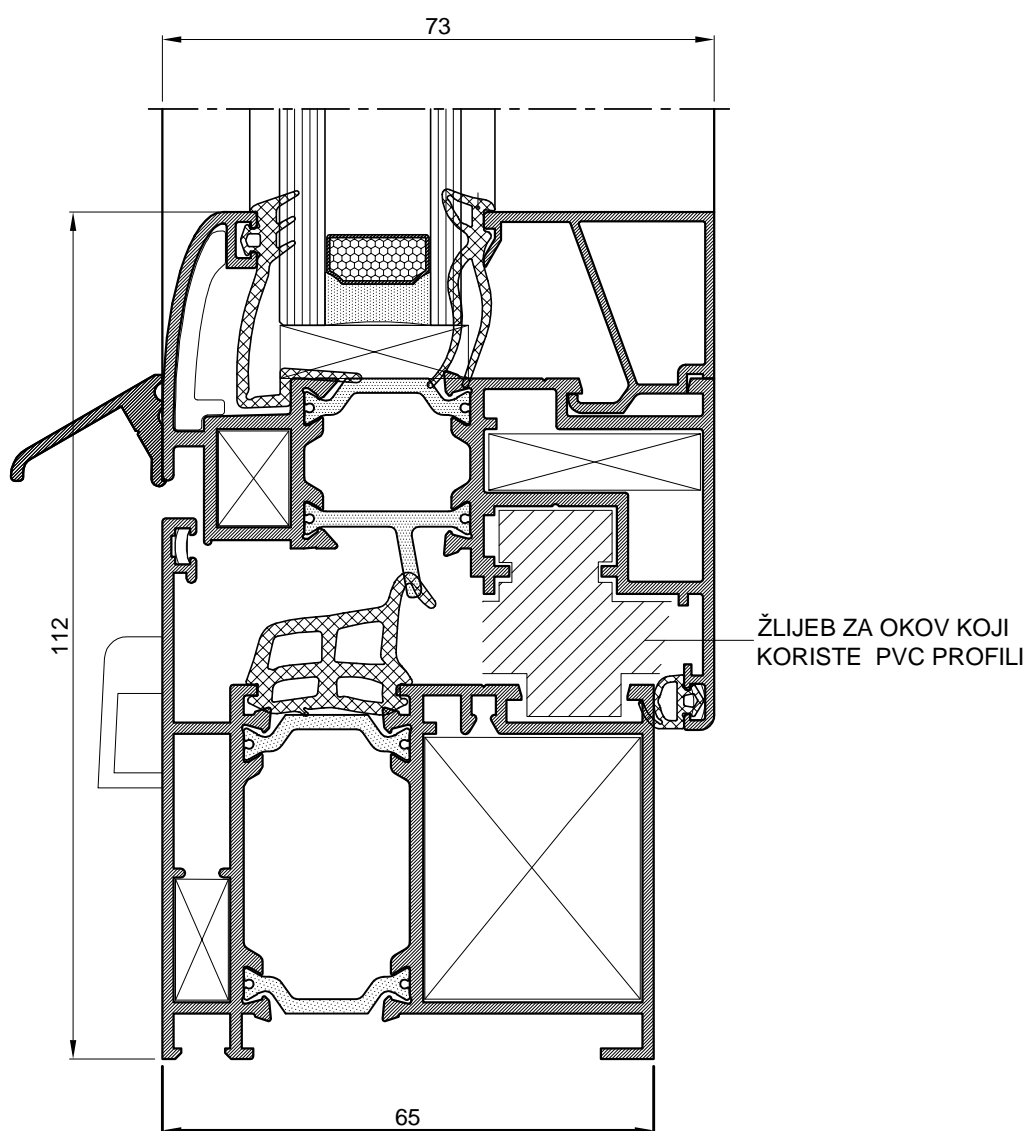


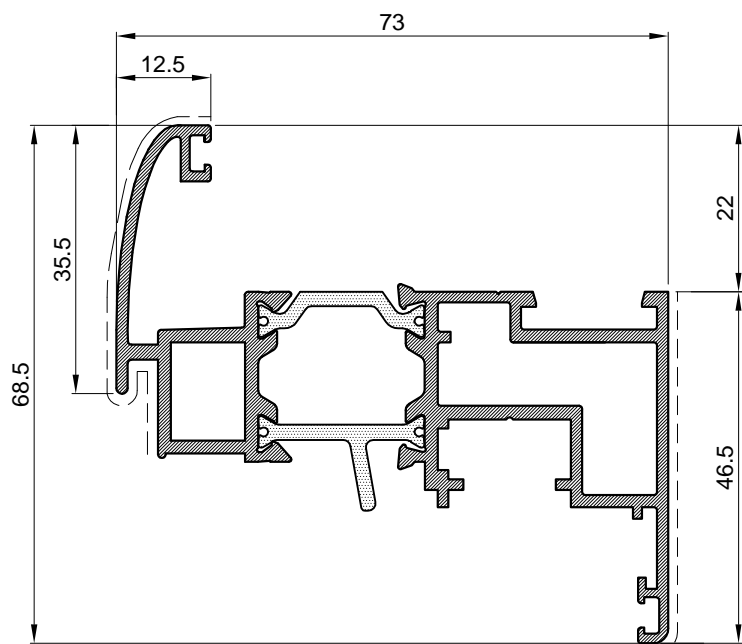
PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0208	vodoravnica krila-parapet	2	Lkr-156	90-90
FT-0201	okomica okvira	2	H	45-45
FT-0218	vodoravnica krila	2	(L-92)/2	45-45
FT-0218	okomica krila	4	H-49,5	45-45
FT-0205	prečka	2	(L-258)/2	90-90
FT-0211	profil za okretanje	1	H-155	90-90
Z40-0668	vodoravna lajsna	8	Lkr-93	90-90
Z40-0668	okomita lajsna	4	H1-148	90-90
Z40-0668	okomita lajsna	4	H2-148	90-90
NC-1459				90-90
OKOVI	klizač	kom		
710.072	osnovni kutnik	6		
710.037	pomoćni kutnik	2		
710.026	pomoćni kutnik	4		
710.069	dodatni veznik za prečku	4		
710.070	dodatni veznik za prečku	4		
730.001	pomoćni kutnik	8		
730.002	pomoćni kutnik	4		
730.005	pomoćni kutnik	4		
710.066	veznik	12		
111.001.XX	šarka	6		
104.002.XX	ručka prozora	1		
143.004	veza ručke i klizača	par		
143.006	zapinjač-krakun vanjski	1		
373.003	maska za drenažni otvor	2		
363.001	umetak profila za okr.	par		
124.002	uložak za bravu	1		
124.001	brava	1		
BRTVE		kom	mjera	
331.001	srednja brtva		2L+3H	
321.001	brtva na spoju profila		2L+4H	
311.003	brtva prema staklu		4L+4H	
321.004	brtva prema staklu		4L+4H	
344.001	kutni umetak	2		
521.001	držač četkaste brtve	1+1		
347.001	četkasta brtva	1+1		
STAKLO		kom	mjera	
24 mm		2	Lkr-179,2 x H1-172	
24 mm		2	Lkr-179,2 x H2-151	



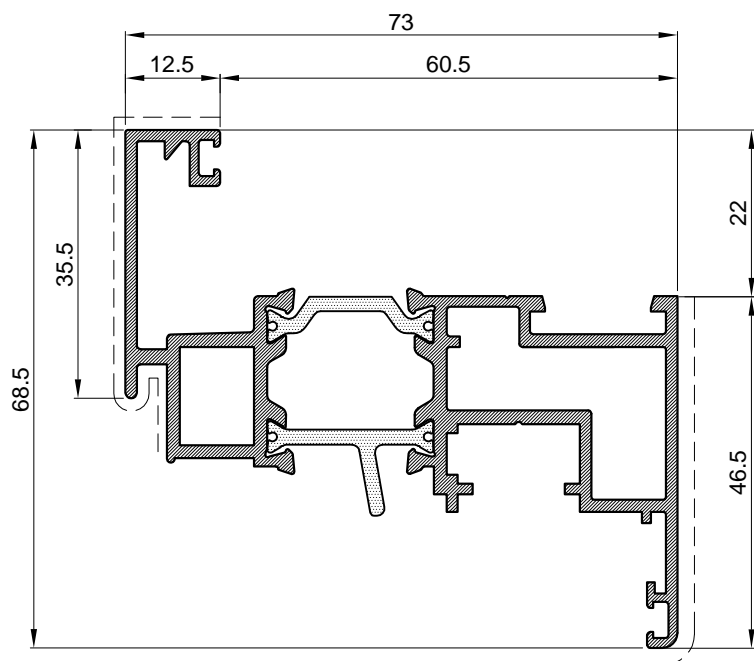
# PROFILI KOJI KORISTE OKOV ZA PVC

PROFILI SA ŽLIJEBOM ZA PRIHVAT OKOVA  
OD PVC BRAVARIJE /13 mm/



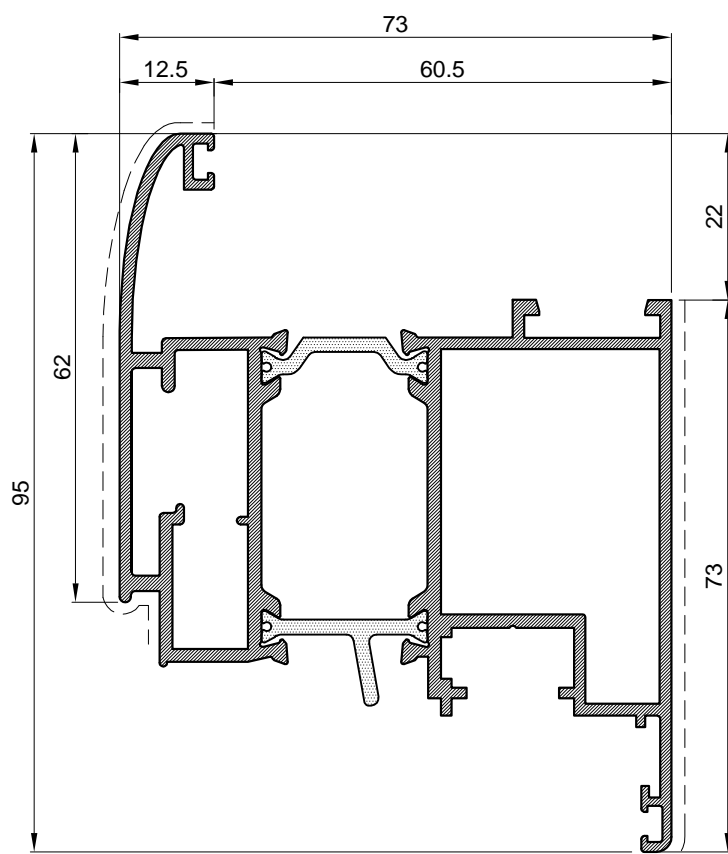


Profil krila		
Art.-Br.	<b>FT-0236</b>	
Težina	kg/m	<b>1.517</b>
Opseg	mm	420
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	25.8
	I <sub>y</sub> (cm <sup>4</sup> )	7.8
	W <sub>x</sub> (cm <sup>4</sup> )	6.77
	W <sub>y</sub> (cm <sup>4</sup> )	2.17
Dužina isporuke	mm	6500

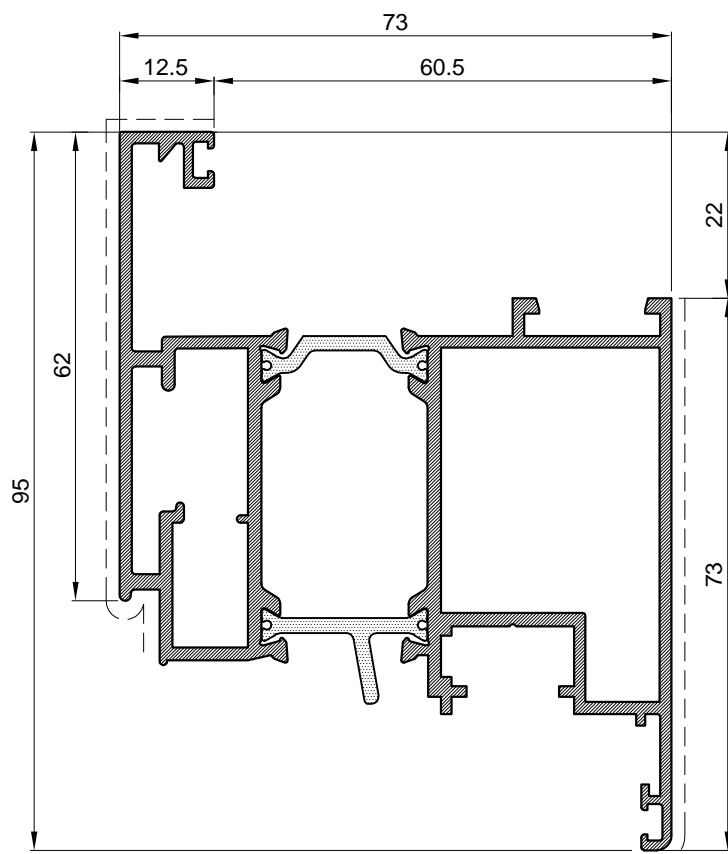


Profil krila		
Art.-Br.	<b>FT-0239</b>	
Težina	kg/m	<b>1.543</b>
Opseg	mm	415
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	21.3
	I <sub>y</sub> (cm <sup>4</sup> )	6.2
	W <sub>x</sub> (cm <sup>4</sup> )	5.18
	W <sub>y</sub> (cm <sup>4</sup> )	1.67
Dužina isporuke	mm	6500

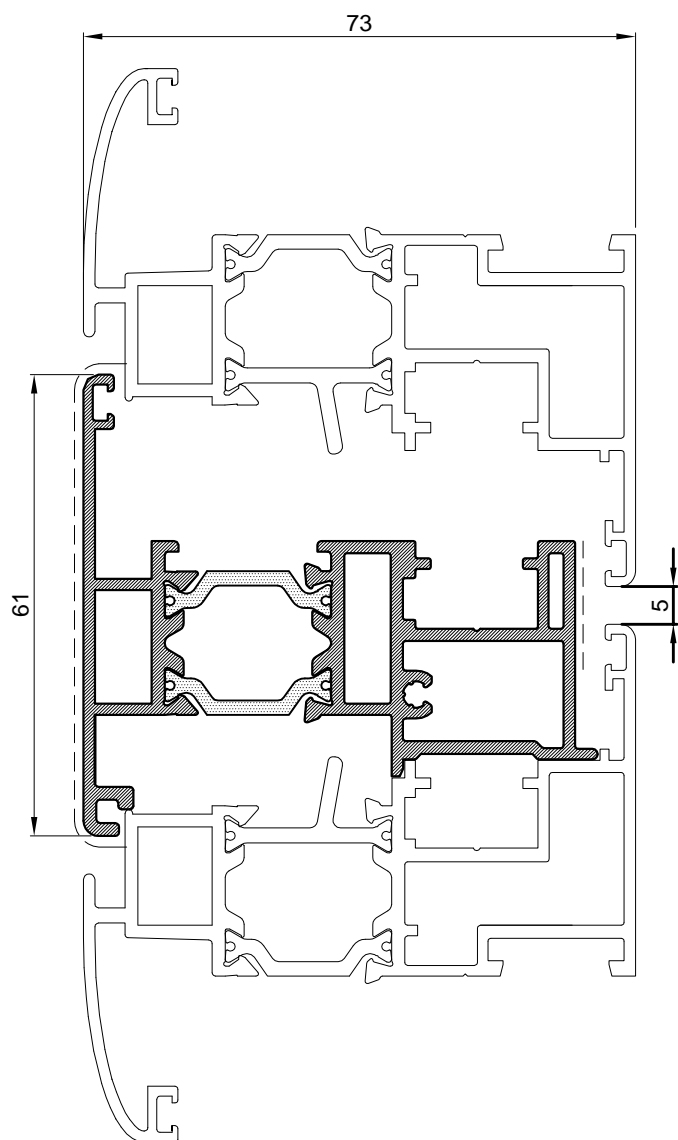




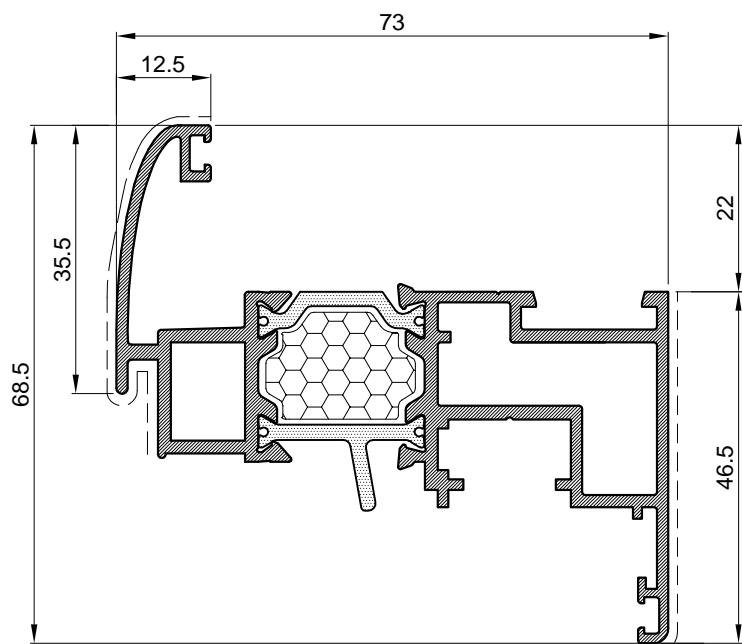
Profil krila		
Art.-Br.	<b>FT-0244</b>	
Težina	kg/m	<b>2.016</b>
Opseg	mm	471
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	30.46
	I <sub>y</sub> (cm <sup>4</sup> )	47.05
	W <sub>x</sub> (cm <sup>4</sup> )	6.36
	W <sub>y</sub> (cm <sup>4</sup> )	12.39
Dužina isporuke	mm	6500



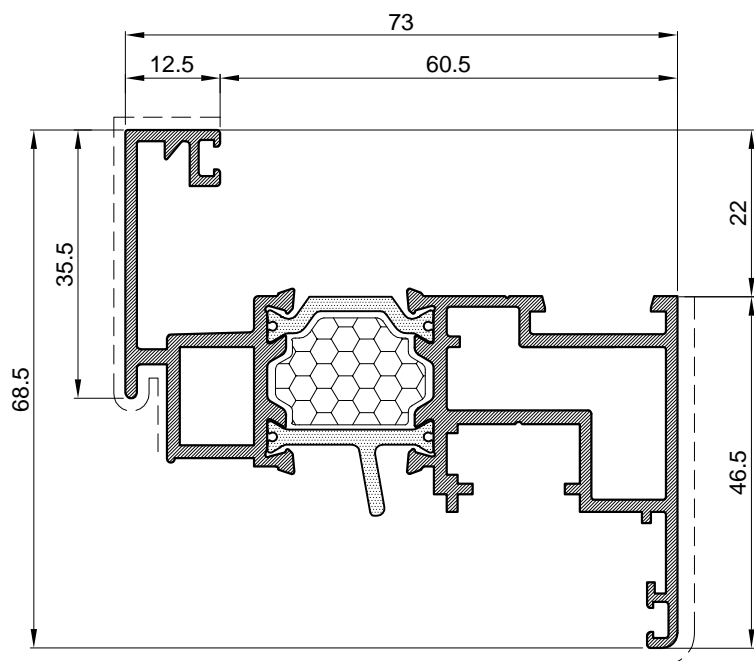
Profil krila		
Art.-Br.	<b>FT-0246</b>	
Težina	kg/m	<b>2.046</b>
Opseg	mm	476
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	32.66
	I <sub>y</sub> (cm <sup>4</sup> )	48.51
	W <sub>x</sub> (cm <sup>4</sup> )	6.82
	W <sub>y</sub> (cm <sup>4</sup> )	12.59
Dužina isporuke	mm	6500



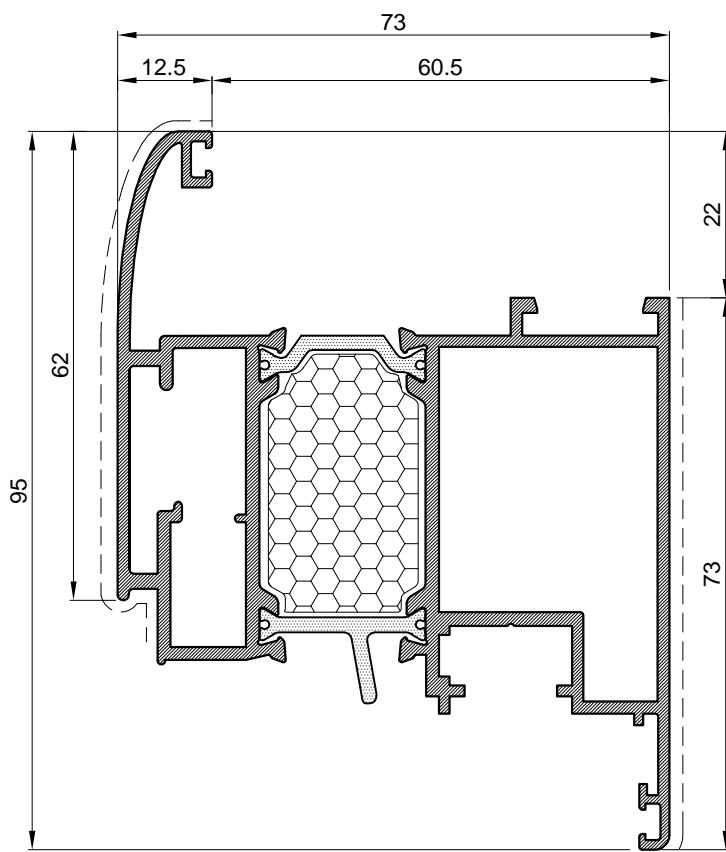
Profil krila		
Art.-Br.	<b>FT-0237</b>	
Težina	kg/m	<b>1.506</b>
Opseg	mm	350
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	21.2
	I <sub>y</sub> (cm <sup>4</sup> )	6.1
	W <sub>x</sub> (cm <sup>4</sup> )	5.18
	W <sub>y</sub> (cm <sup>4</sup> )	1.65
Dužina isporuke	mm	6500



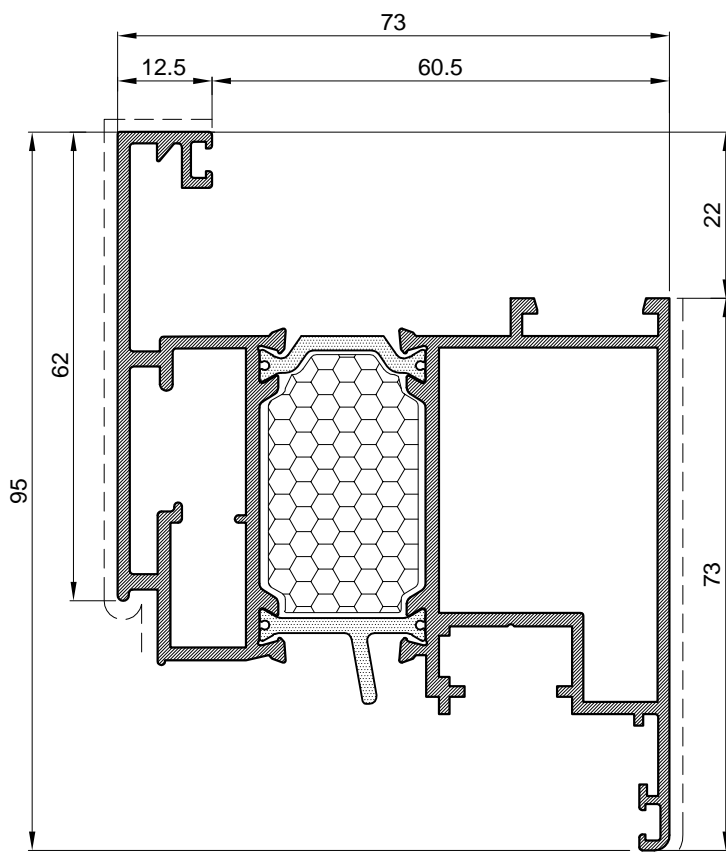
Profil krila		
Art.-Br.	<b>FT-0236 F</b>	
Težina	kg/m	<b>1.517</b>
Opseg	mm	420
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	25.8
	I <sub>y</sub> (cm <sup>4</sup> )	7.8
	W <sub>x</sub> (cm <sup>4</sup> )	6.77
	W <sub>y</sub> (cm <sup>4</sup> )	2.17
Dužina isporuke	mm	6500



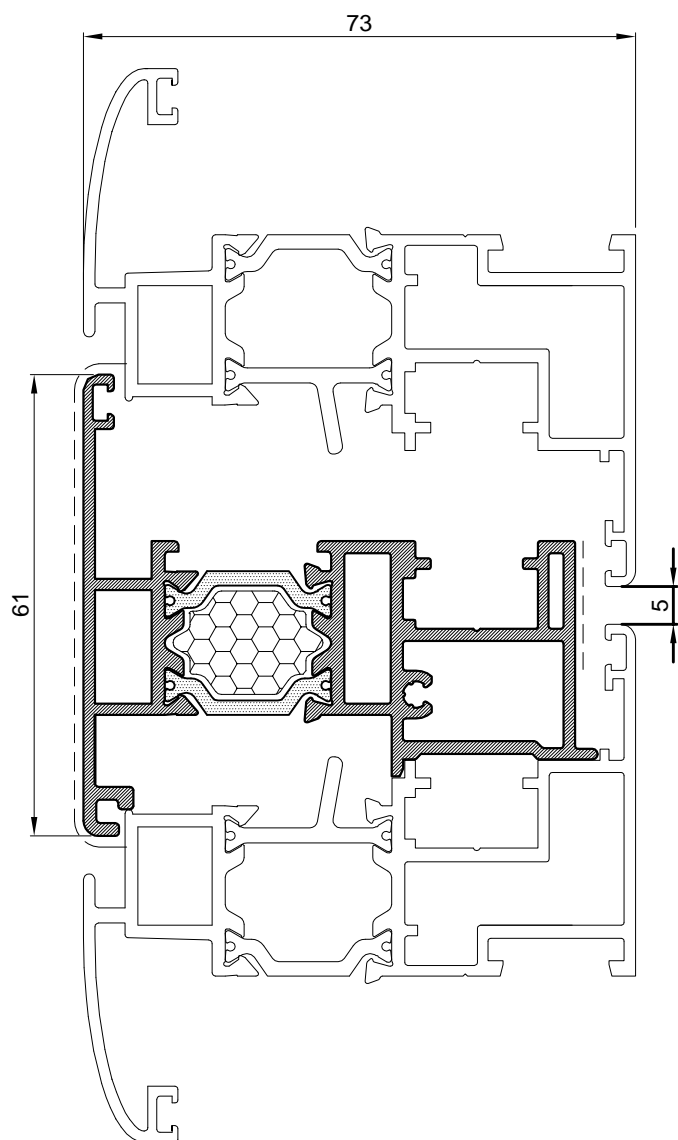
Profil krila		
Art.-Br.	<b>FT-0239 F</b>	
Težina	kg/m	<b>1.543</b>
Opseg	mm	415
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	21.3
	I <sub>y</sub> (cm <sup>4</sup> )	6.2
	W <sub>x</sub> (cm <sup>4</sup> )	5.18
	W <sub>y</sub> (cm <sup>4</sup> )	1.67
Dužina isporuke	mm	6500



Profil krila		
Art.-Br.	<b>FT-0244 F</b>	
Težina	kg/m	<b>2.016</b>
Opseg	mm	471
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	30.46
	I <sub>y</sub> (cm <sup>4</sup> )	47.05
	W <sub>x</sub> (cm <sup>4</sup> )	6.36
	W <sub>y</sub> (cm <sup>4</sup> )	12.39
Dužina isporuke	mm	6500

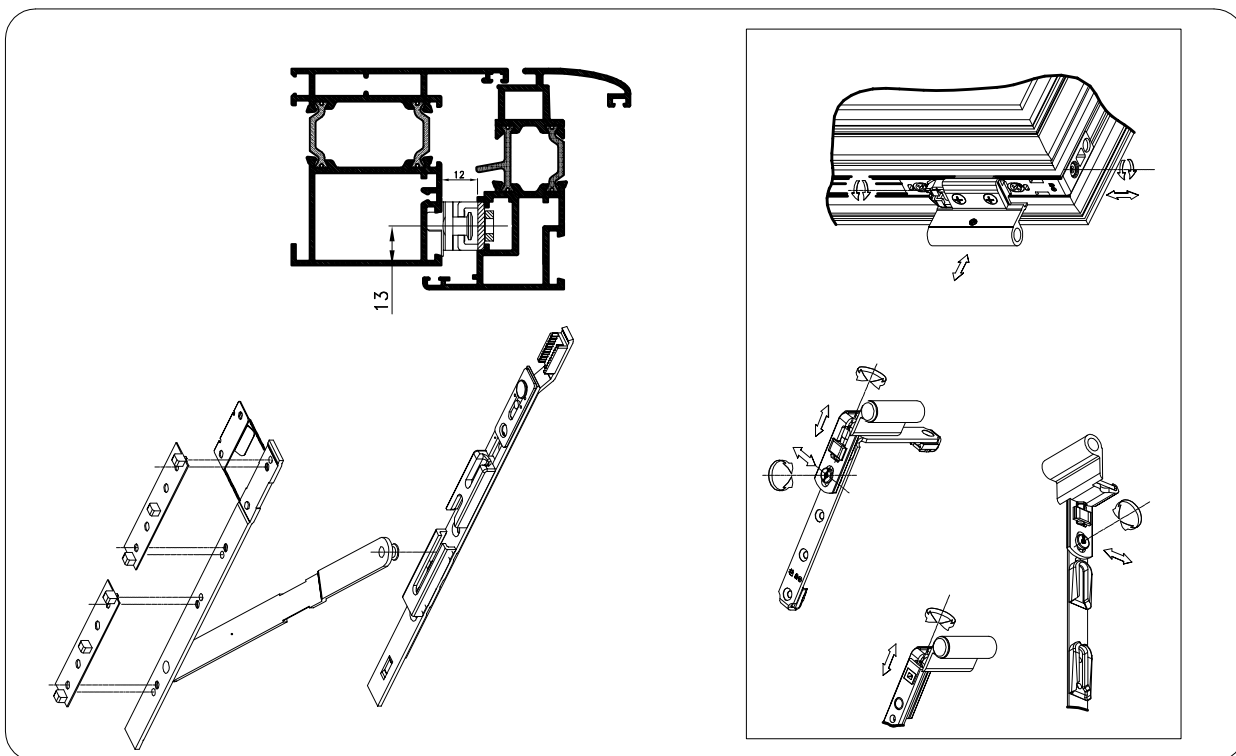
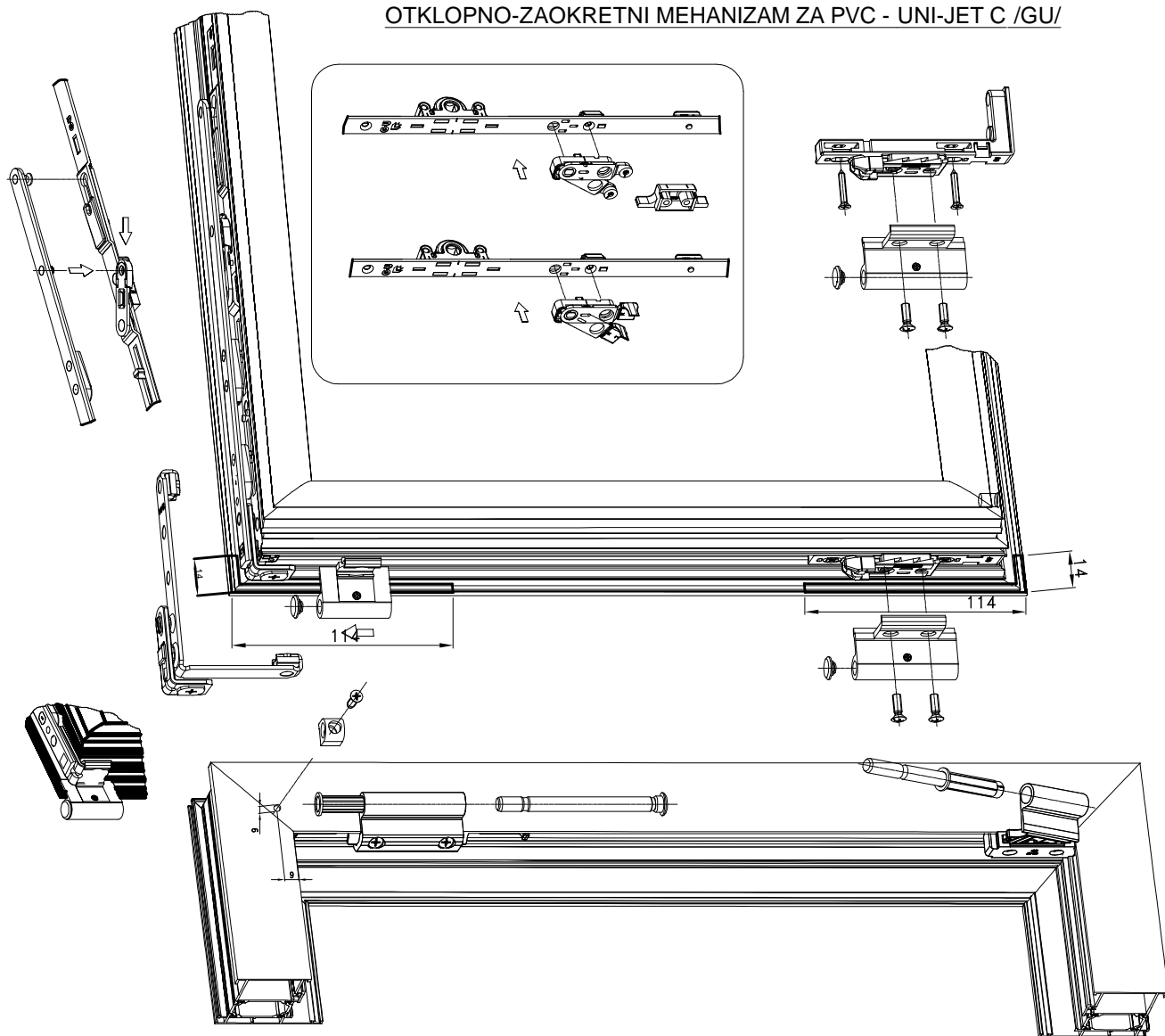


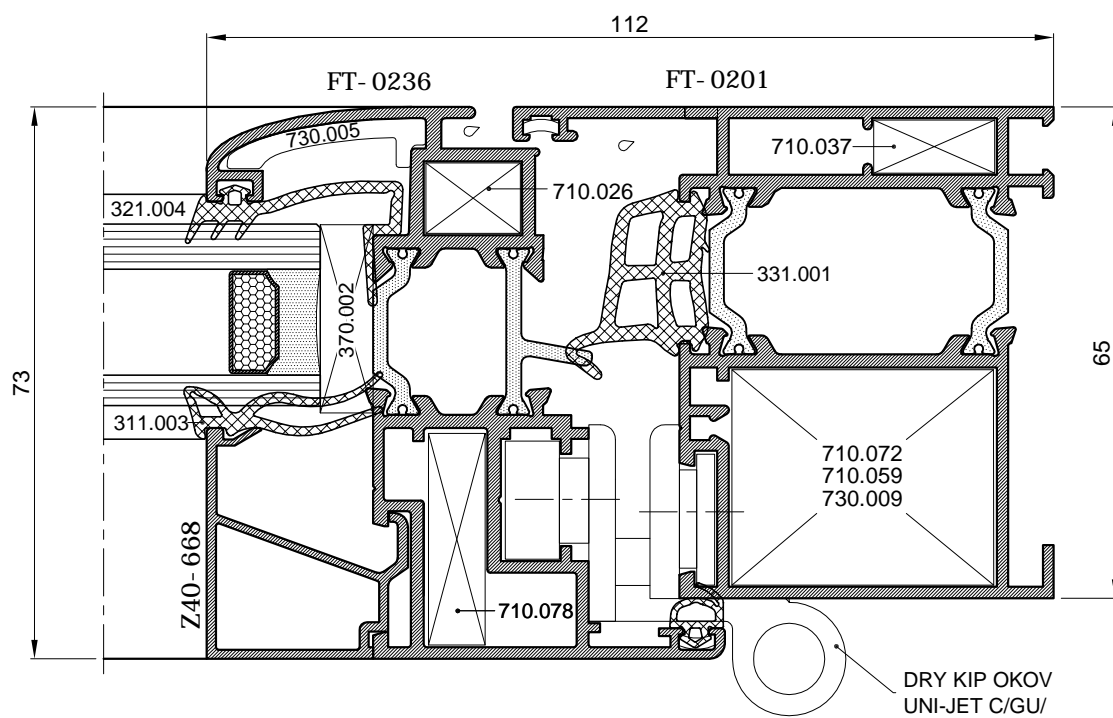
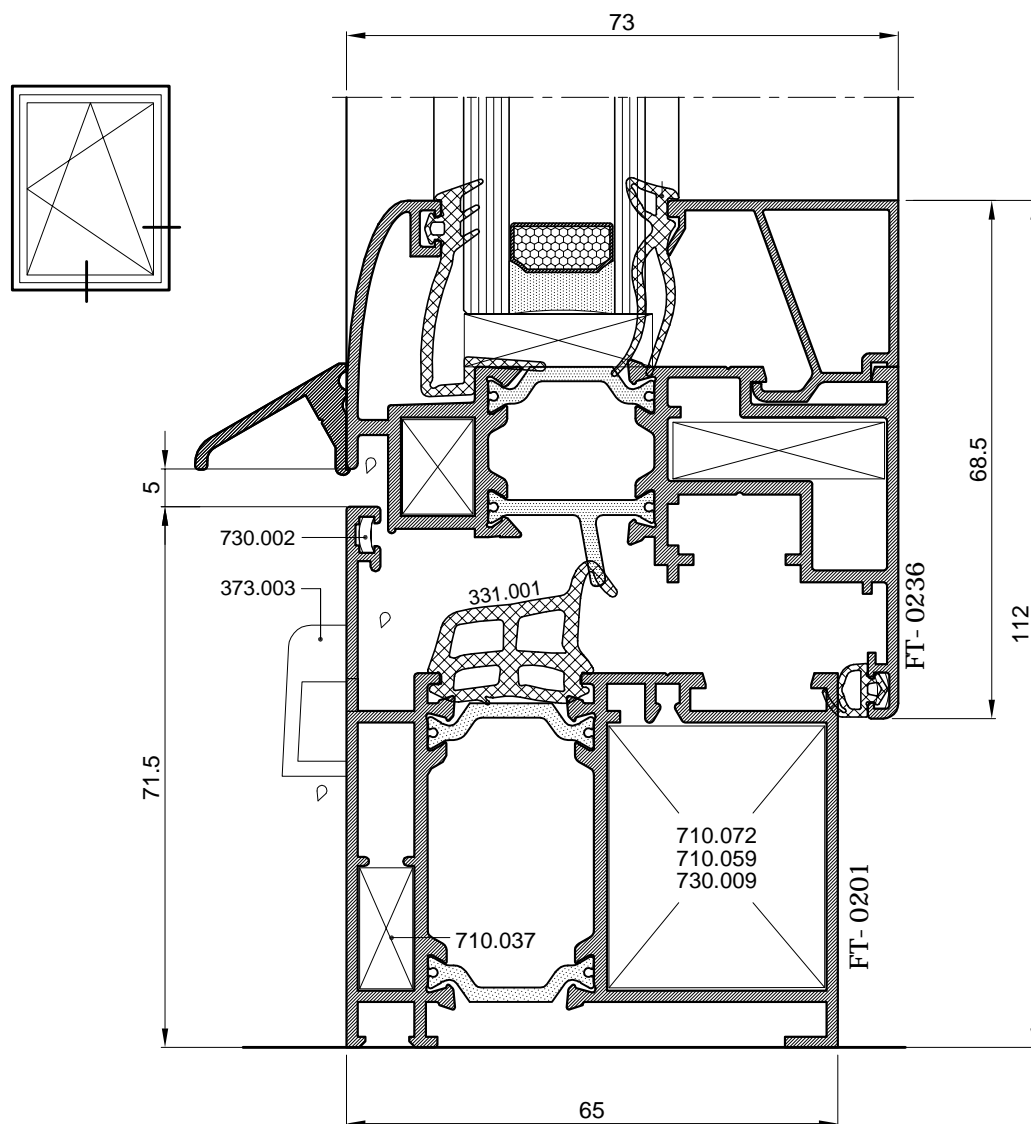
Profil krila		
Art.-Br.	<b>FT-0246 F</b>	
Težina	kg/m	<b>2.046</b>
Opseg	mm	476
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	32.66
	I <sub>y</sub> (cm <sup>4</sup> )	48.51
	W <sub>x</sub> (cm <sup>4</sup> )	6.82
	W <sub>y</sub> (cm <sup>4</sup> )	12.59
Dužina isporuke	mm	6500

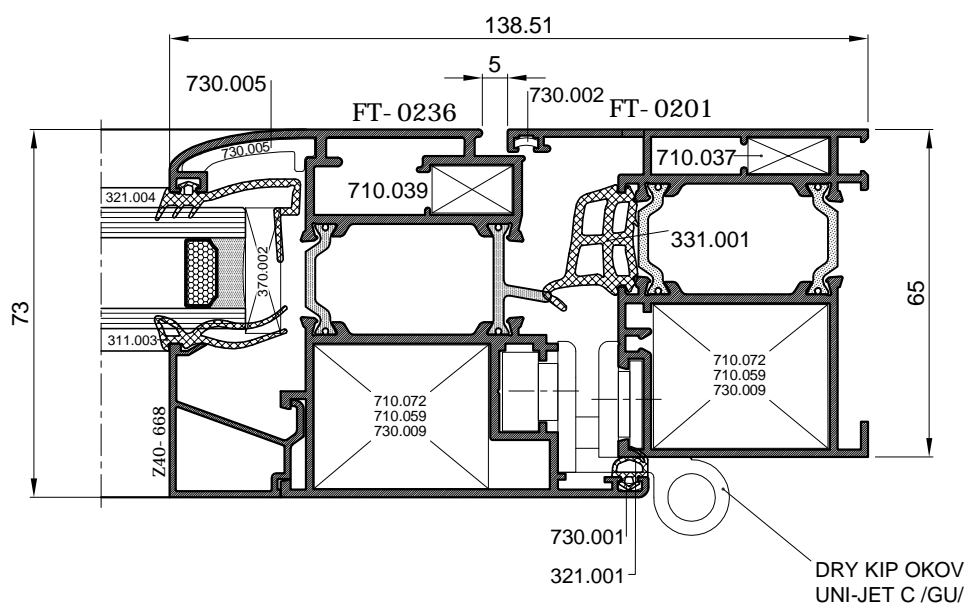
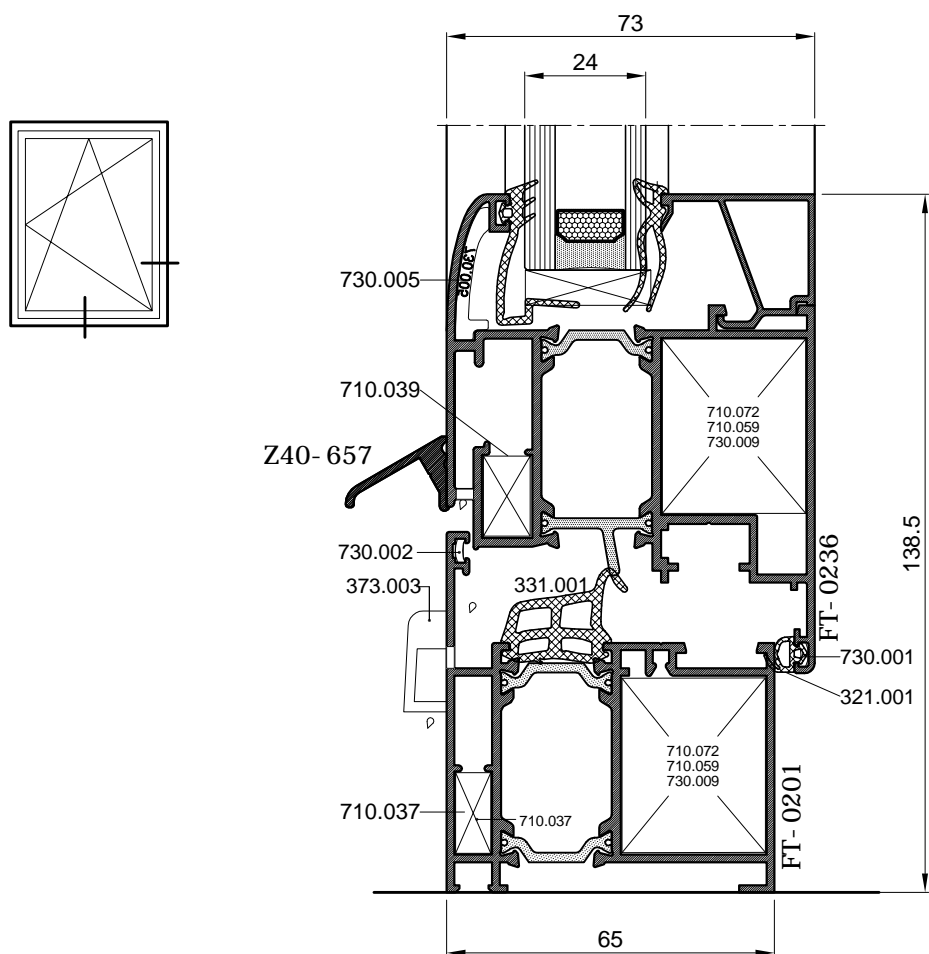


Profil krila		
Art.-Br.	<b>FT-0237 F</b>	
Težina	kg/m	<b>1.506</b>
Opseg	mm	350
Moment inercije	I <sub>x</sub> (cm <sup>4</sup> )	21.2
	I <sub>y</sub> (cm <sup>4</sup> )	6.1
	W <sub>x</sub> (cm <sup>4</sup> )	5.18
	W <sub>y</sub> (cm <sup>4</sup> )	1.65
Dužina isporuke	mm	6500

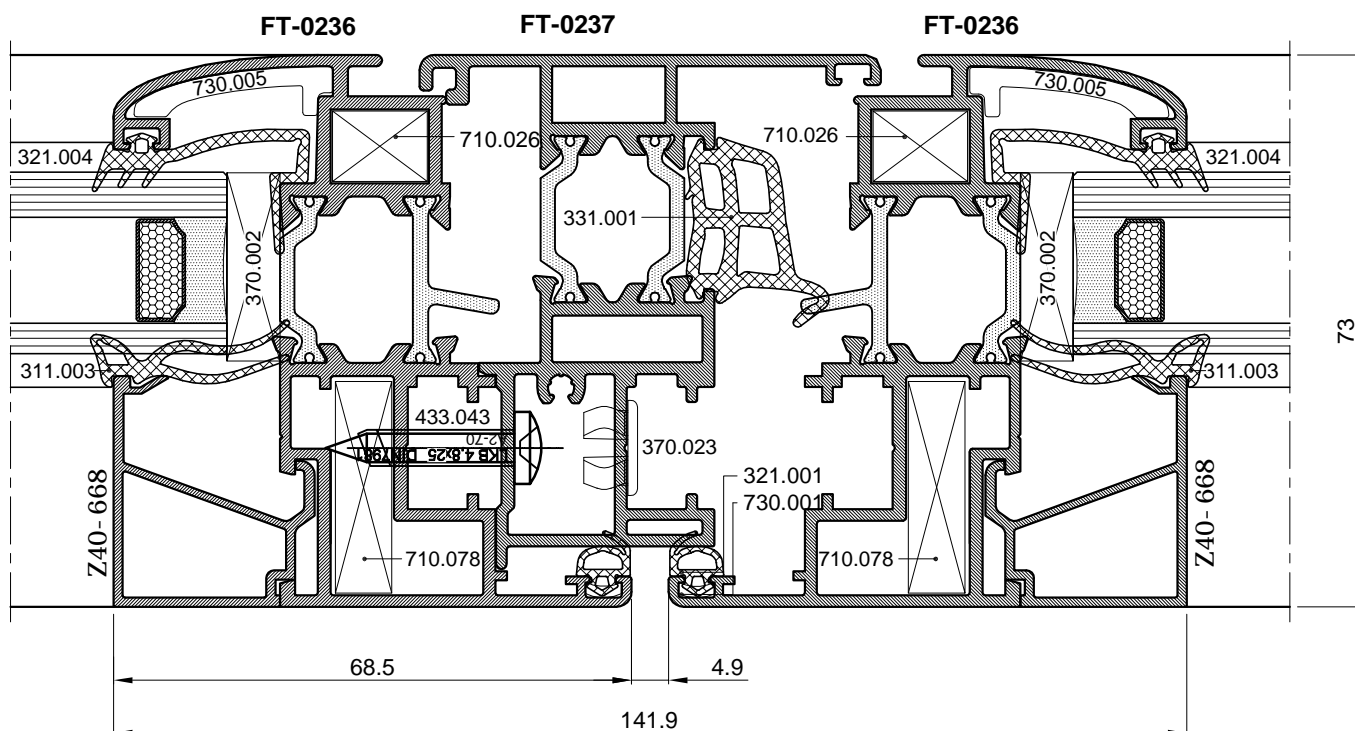
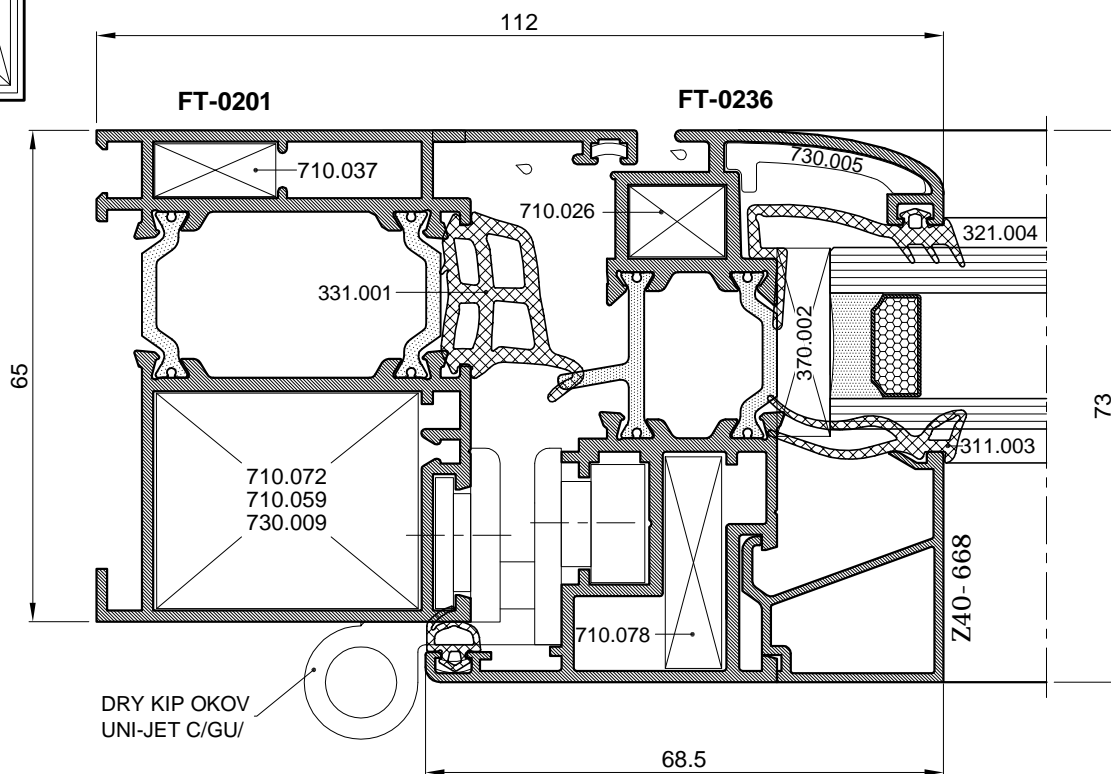
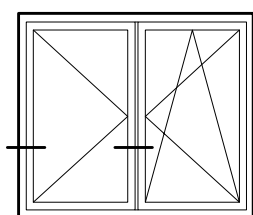
OTKLOPNO-ZAOKRETNI MEHANIZAM ZA PVC - UNI-JET C /GU/

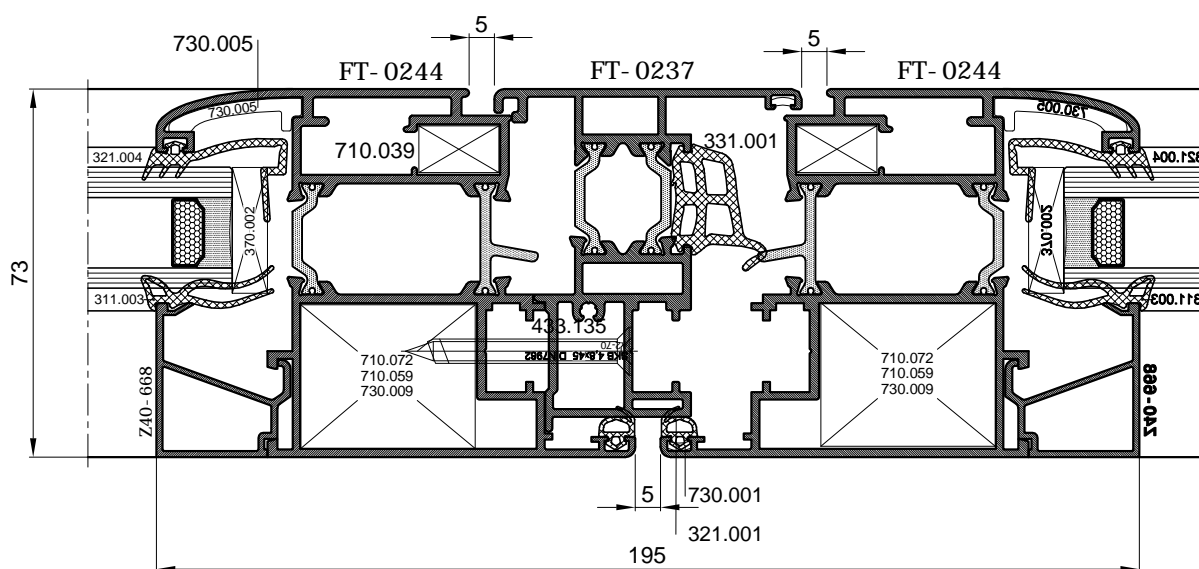
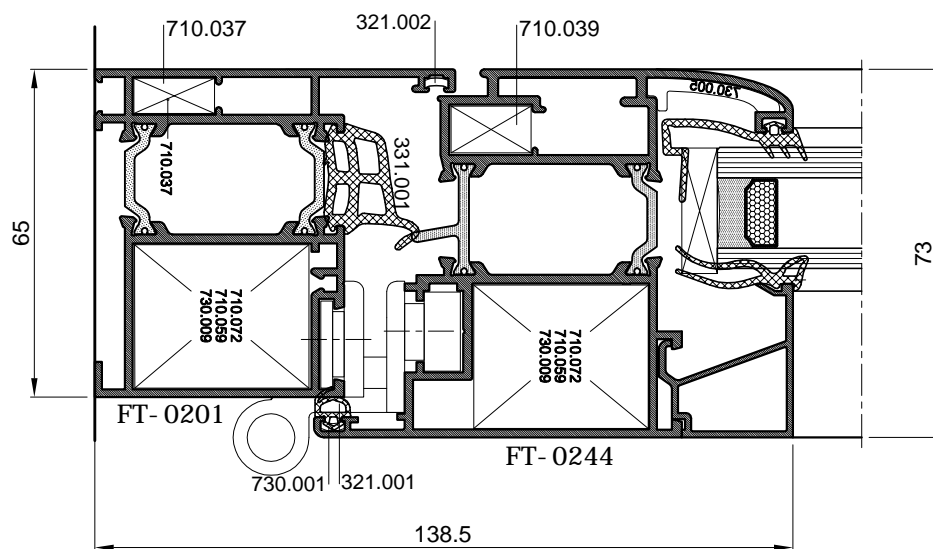
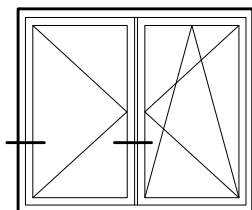




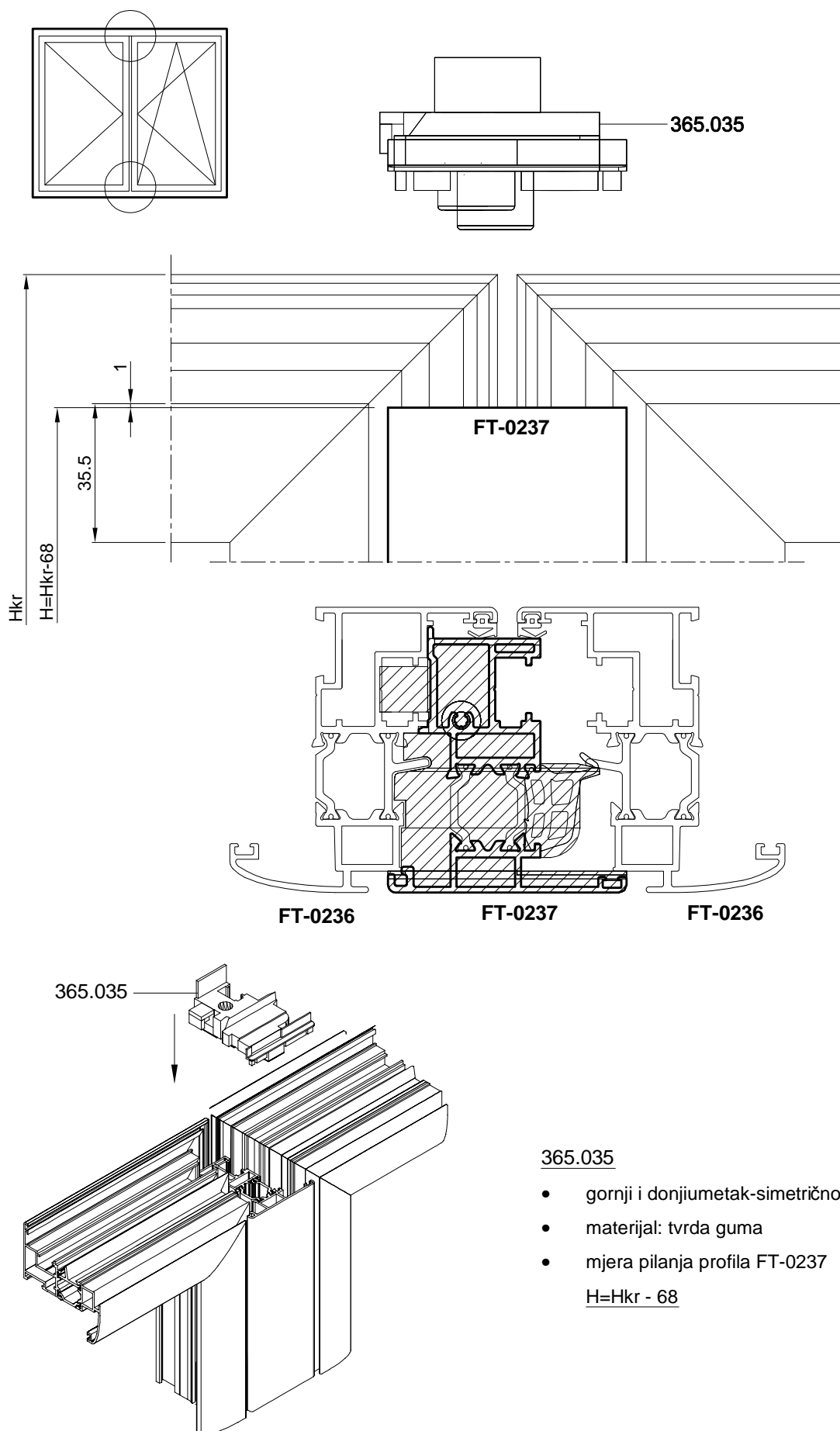


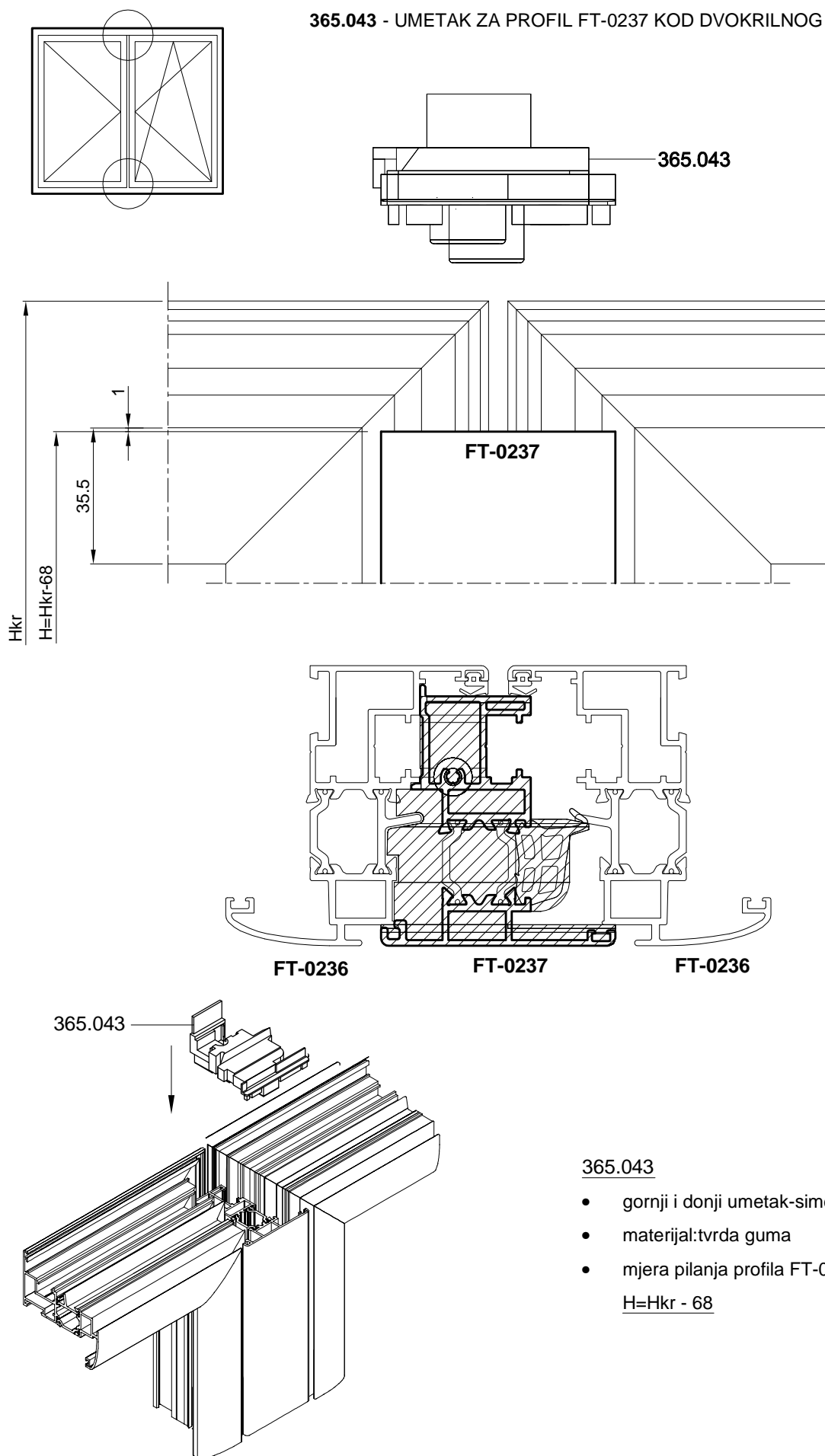






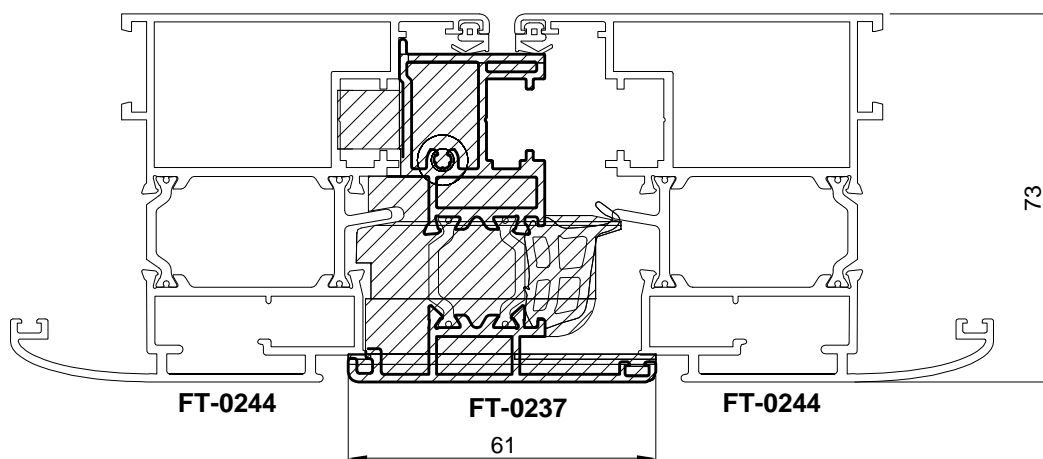
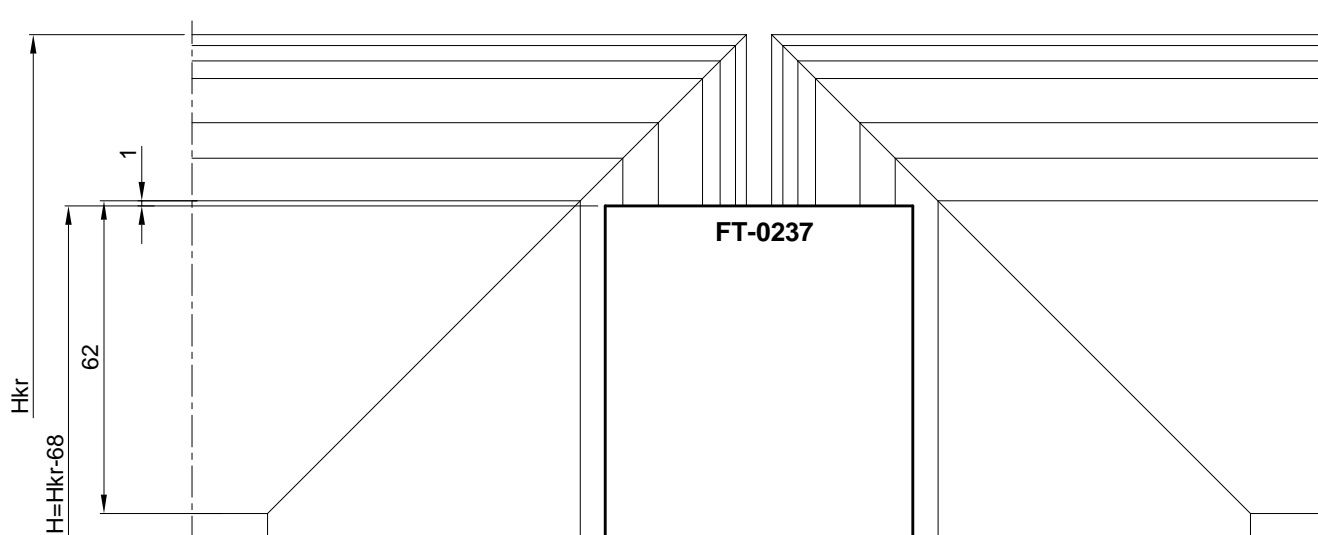
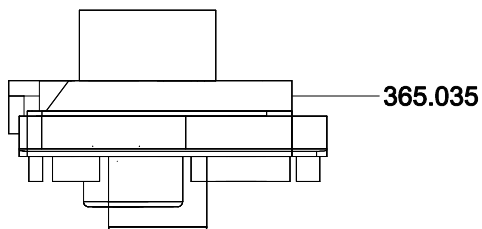
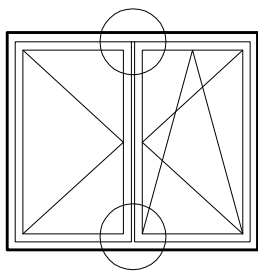
## 365.035 - UMETAK ZA PROFIL FT-0237 KOD DVOKRILNOG OTVARANJA



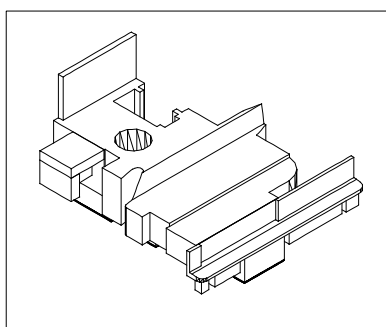
**365.043 - UMETAK ZA PROFIL FT-0237 KOD DVOKRILNOG OTVARANJA**

**365.043**

- gornji i donji umetak-simetrično
- materijal: tvrda guma
- mjera pilanja profila FT-0237  
H=Hkr - 68

## 365.035 - UMETAK ZA PROFIL FT-0237 KOD DVOKRILNOG OTVARANJA

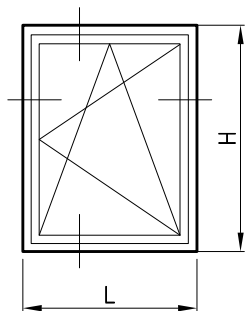


365.035


**365.035**

- gornji i donji umetak-simetrično
- materijal: tvrda guma
- mjera pilanja profila FT-0237

$$H = H_{kr} - 68$$

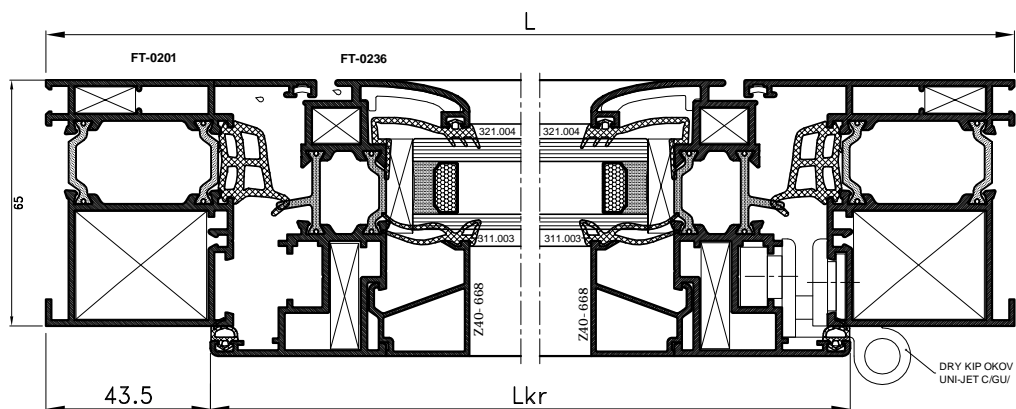
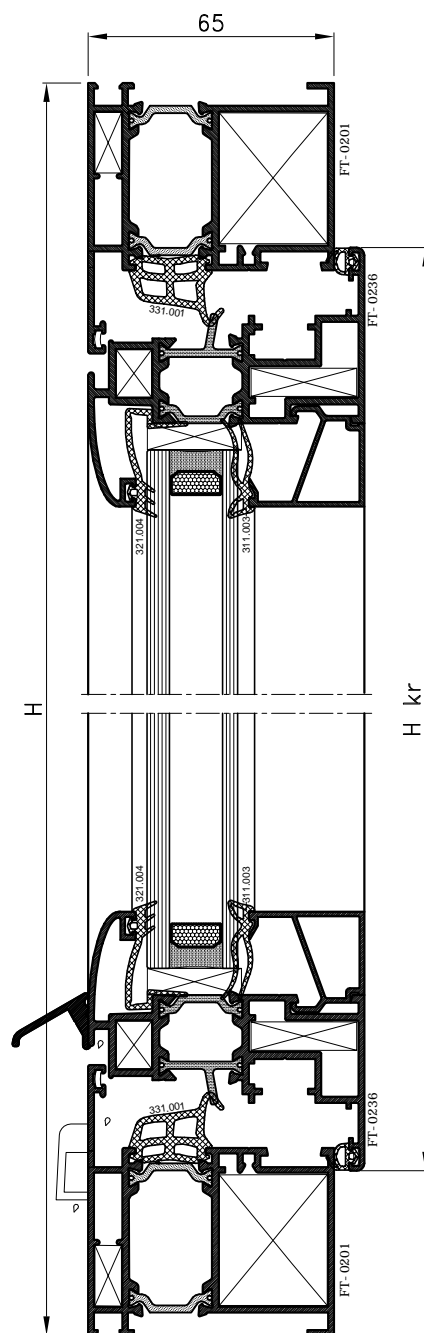


PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0236	vodoravnica krila	2	Lkr=L-87	45-45
FT-0236	okomica krila	2	Hkr=H-87	45-45
Z40-0668	vodoravna lajsna	2	Lkr-93	90-90
Z40-0668	okomita lajsna	2	Hkr-137	90-90

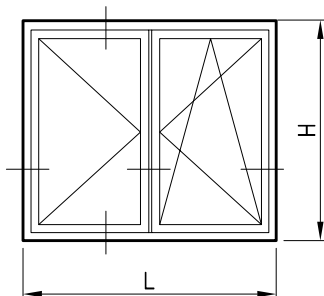
OKOVI		kom	
730.009	kutnik rama	4	
710.040	pomoćni kutnik rama	4	
730.002	pomoćni kutnik rama	4	
710.078	kutnik krila	4	
710.026	pomoćni kutnik krila	4	
730.005	pomoćni kutnik krila	4	
730.001	pomoćni kutnik krila	4	
Otklopno-zaokretni okov		1	
UNI-JET C /GU/			
373.003	maska za drenažni otvor	2	

BRTVE		kom	mjera
331.001	srednja brtva		2L+2H
321.001	brtva u krilu		2L+2H
311.003	brtva prema staklu		2L+2H
321.004	brtva prema staklu		2L+2H
331.001	kutni umetak	4	

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







PROFILI		kom	mjera	pilanje
FT-0201	vodoravnica okvira	2	L	45-45
FT-0201	okomica okvira	2	H	45-45
FT-0236	vodoravnica krila	4	$L_{kr}=(L-92)/2$	45-45
FT-0236	okomica krila	4	$H_{kr}=H-87$	45-45
FT-0237	profil za okretanje	1	Hkr-68	90-90
Z40-0668	vodoravna lajsna	4	Lkr-93	90-90
Z40-0668	okomita lajsna	4	Hkr-137	90-90
OKOVI		kom		
730.009	kutnik rama	4		
710.040	pomoćni kutnik rama	4		
730.002	pomoćni kutnik rama	4		
710.078	kutnik krila	8		
710.026	pomoćni kutnik krila	8		
730.005	pomoćni kutnik krila	8		
730.001	pomoćni kutnik krila	8		
	Otklopno-zaokretni okov za dvokrilno UNI JET C /GU/	1		
373.003	maska za drenažni otvor	2		
710.039	čep-umetak za FT-0237	par		
BRTVE		kom	mjera	
331.001	srednja brtva		2L+3H	
321.001	brtva u krilu		2L+4H	
311.003	brtva prema staklu		2L+4H	
321.004	brtva prema staklu		2L+4H	
331.001	kutni umetak	4		
STAKLO		kom	mjera	
30 mm		1	Lkr-107 x Hkr-107	

