



SMART WP 4000



TECHNICAL CATALOGUE | ТЕХНИЧЕСКИ КАТАЛОГ

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ТЕХНИЧЕСКИ КАТАЛОГ
PVC СИСТЕМИ

TECHNICAL CATALOGUE
PVC SYSTEMS

TECHNISCHER KATALOG
PVC SYSTEME

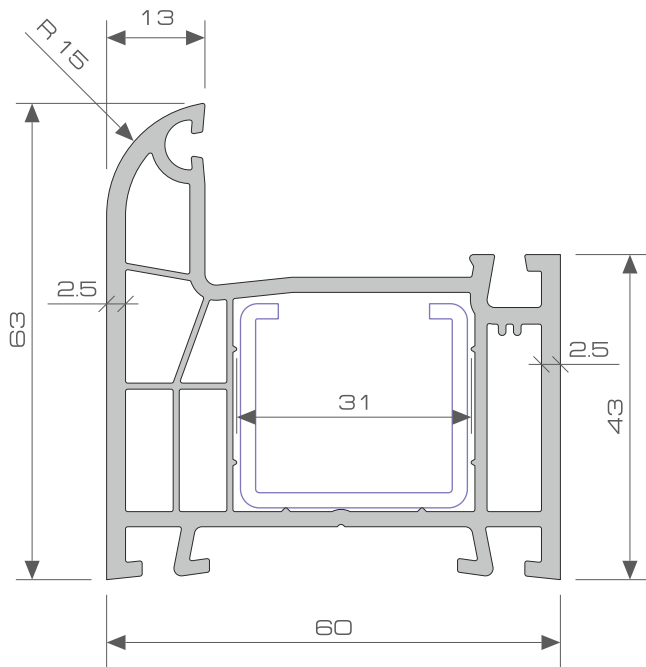
CATALOG TEHNIC
SISTEME PVC





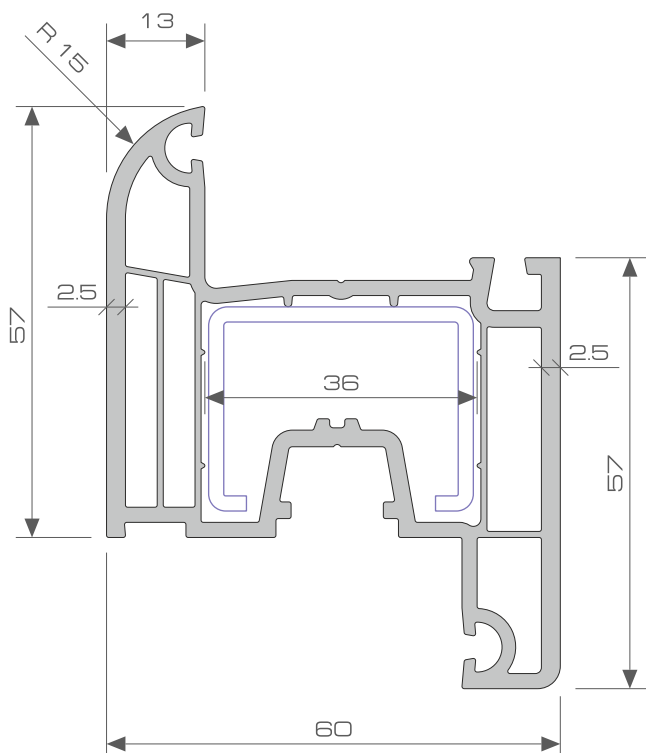
4 - КАМЕРА СИСТЕМА

4-chamber system / 4-Kammer System/
Sistem de 4 camere



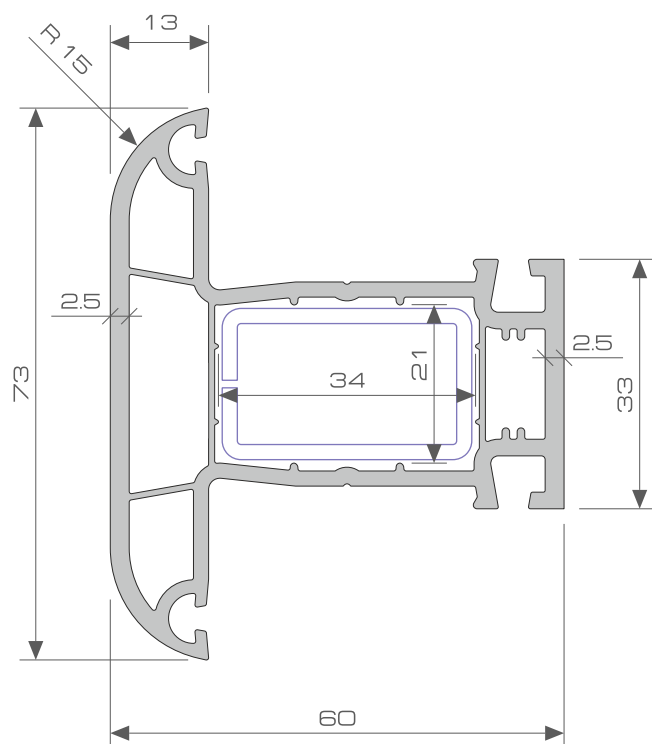
KACA
Rahmenprofil
Frame profile
Profil toc

WP 4001



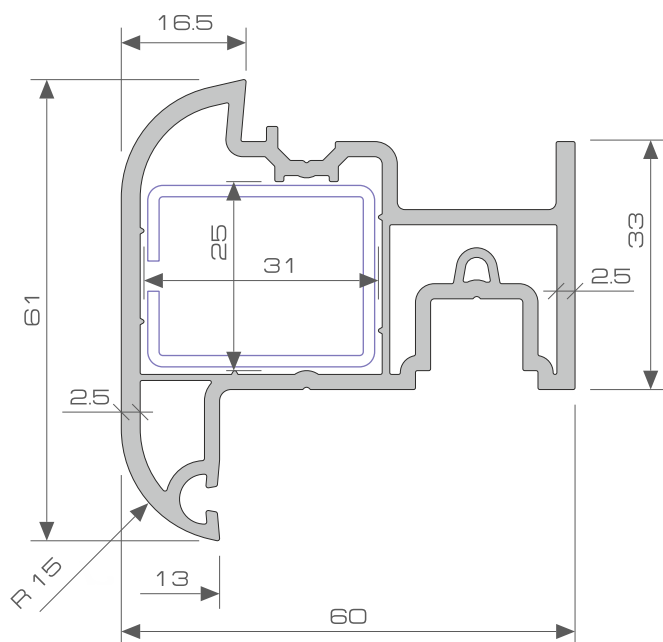
КРИЛО
Flügelprofil
Sash profile
Profil aripa

WP 4002



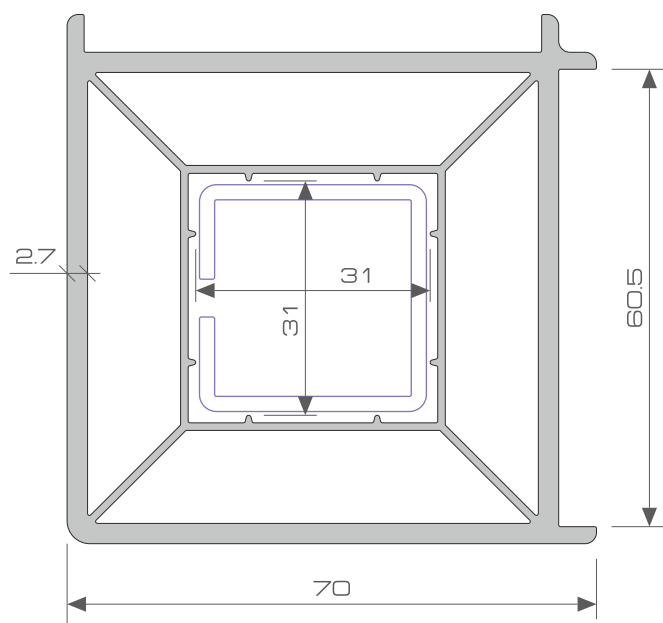
ДЕЛИТЕЛ
Kaempfer
Mullion profile
Profil traversa

WP 3003



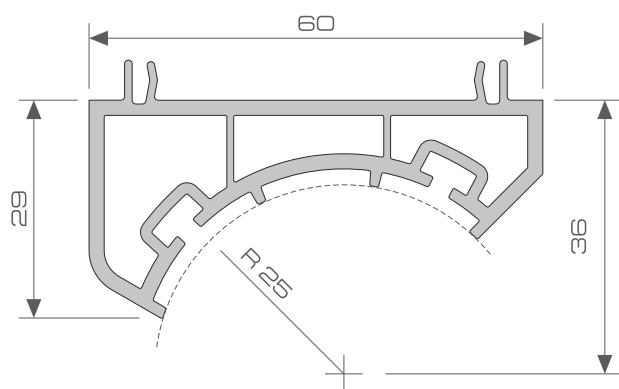
ПОДВИЖЕН ДЕЛИТЕЛ
Stulpprofil
Lap joint profile
Profil invisor

WP 3006



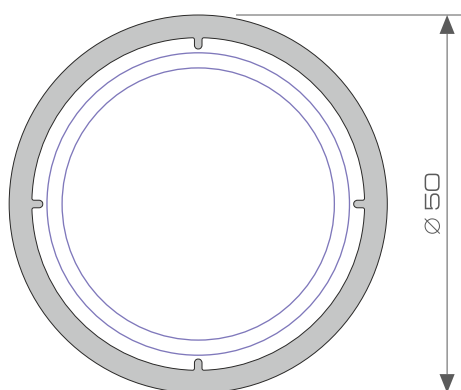
ЪГЛОВ ПРОФИЛ 90°
Eckpfosten
Corner profil
Profil colt 90°

WP 4107



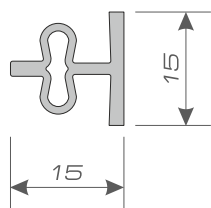
АДАПТОР
Eckprofil variabler winkel
Corner lag profile
Profil adaptor

WP 4109



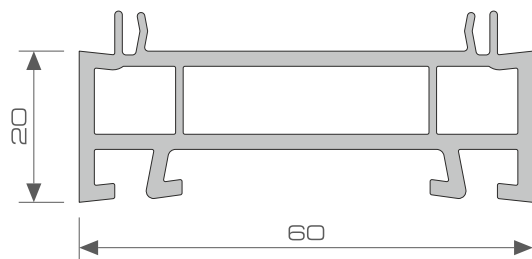
ТРЪБА
Rohr variabler winkel
Pipe profile
Profil teava

WP 4111



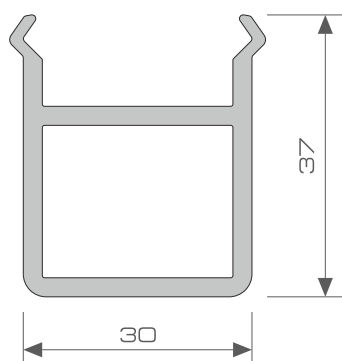
ПРИСЪЕДИНИТЕЛ
Verbindungsprofil
Coupling profile
Profil conector

WP 5012



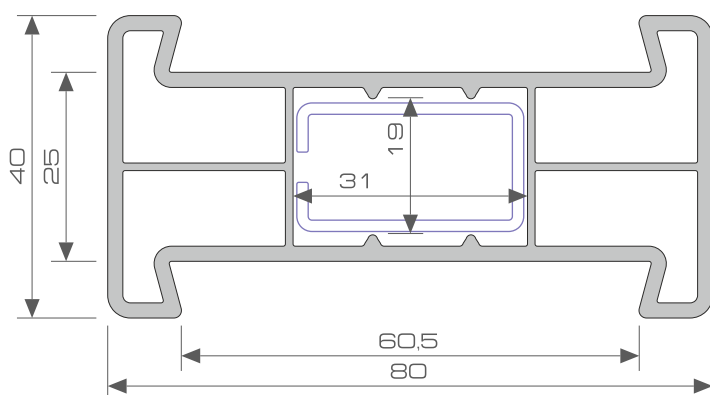
ПРОФИЛ УДЪЛЖИТЕЛ
Verlaengerung
Frame extension
Inversor

WP 4108



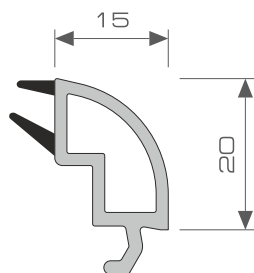
ПОВДИГАЩ ПРОФИЛ

Hebeprofil
Lifting profile
Profil soulband
WP 4123



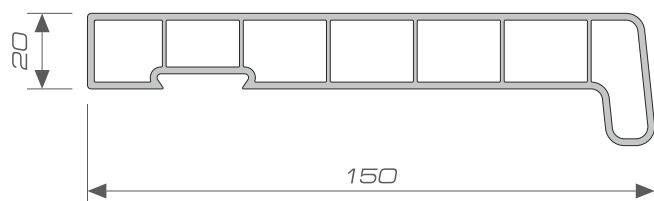
ПРИСЪЕДИНИТЕЛ
Verbindungsprofil
Coupling profile
Profil conector

WP 4113



СТЪКЛОДЪРЖАТЕЛ
Glasleiste
Glass bead
Bagheta

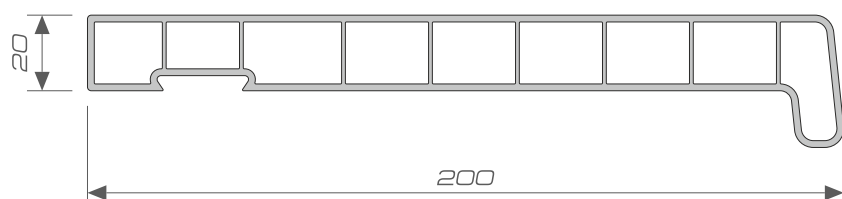
WP 5003



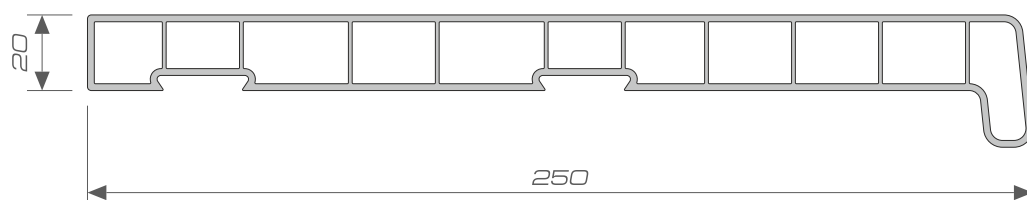
WP 4114

ПОДПРОЗОРЕЧЕН ПРОФИЛ

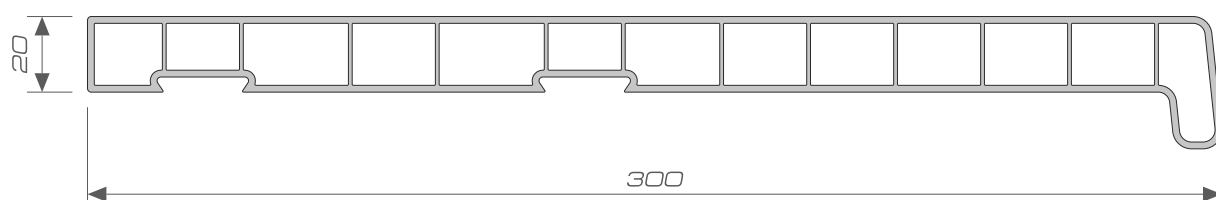
Fensterbank
Under window profile
Profil glaf



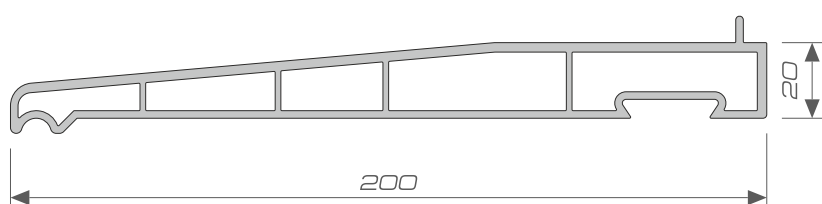
WP 4115



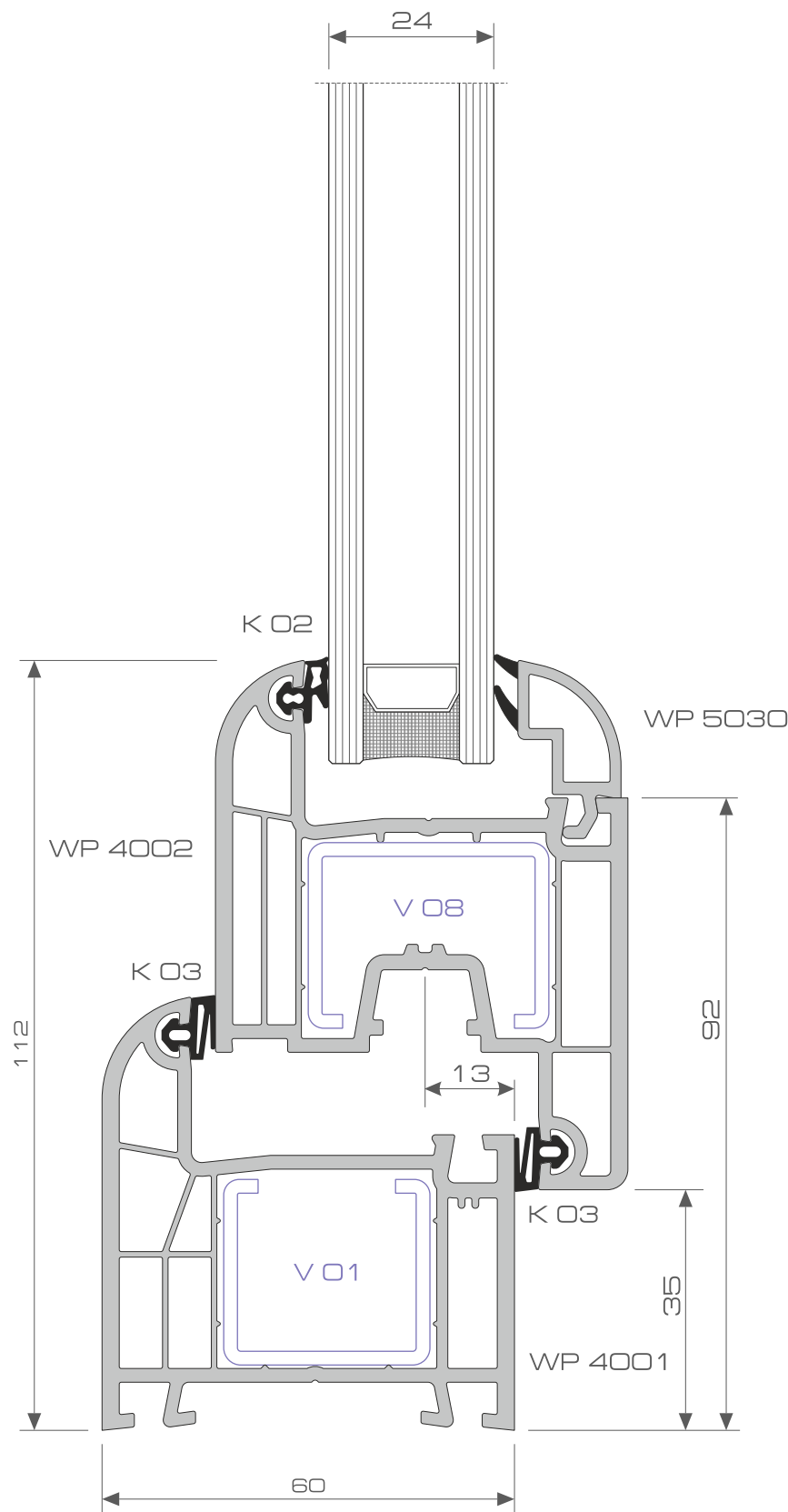
WP 4116

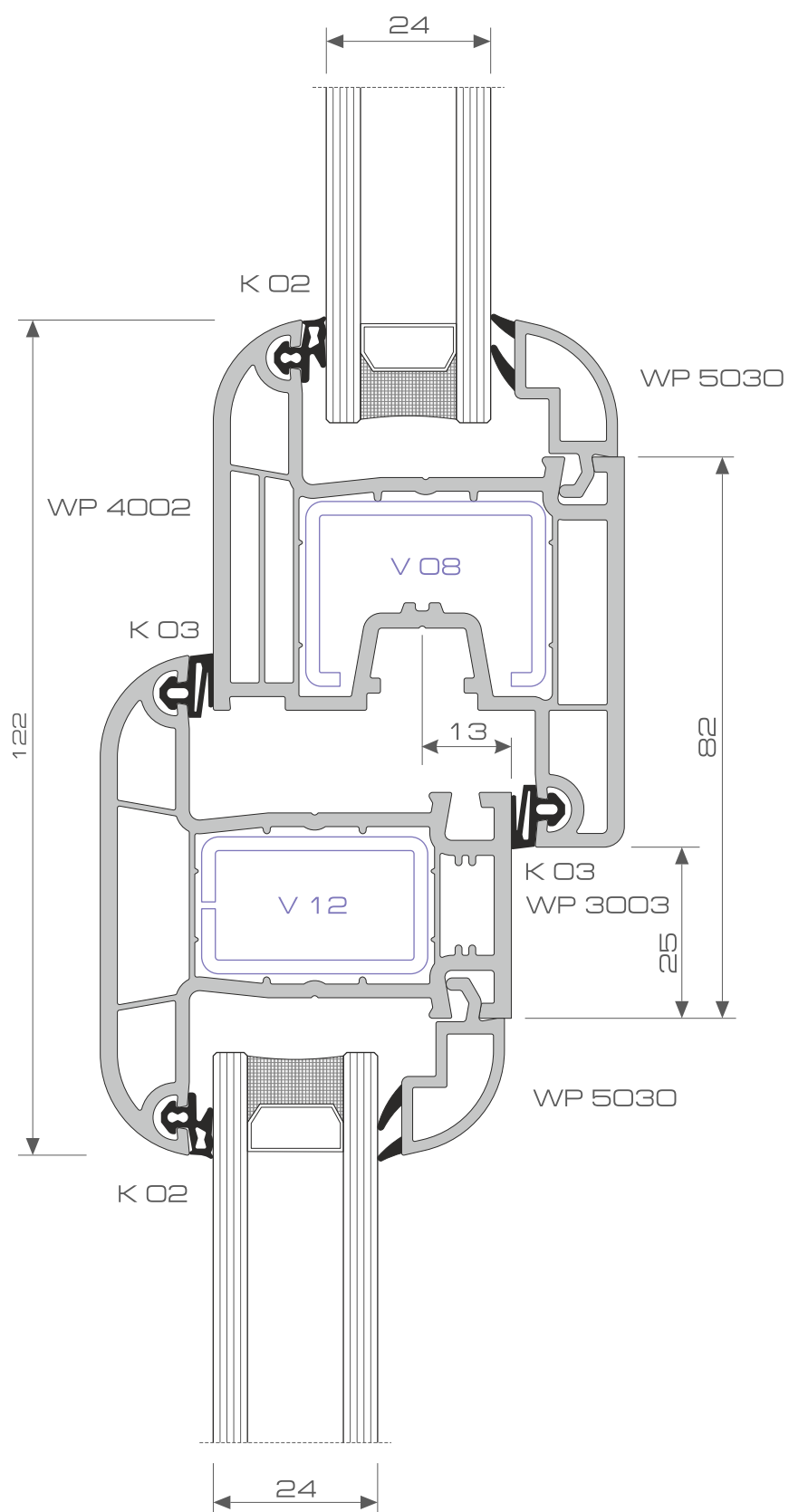


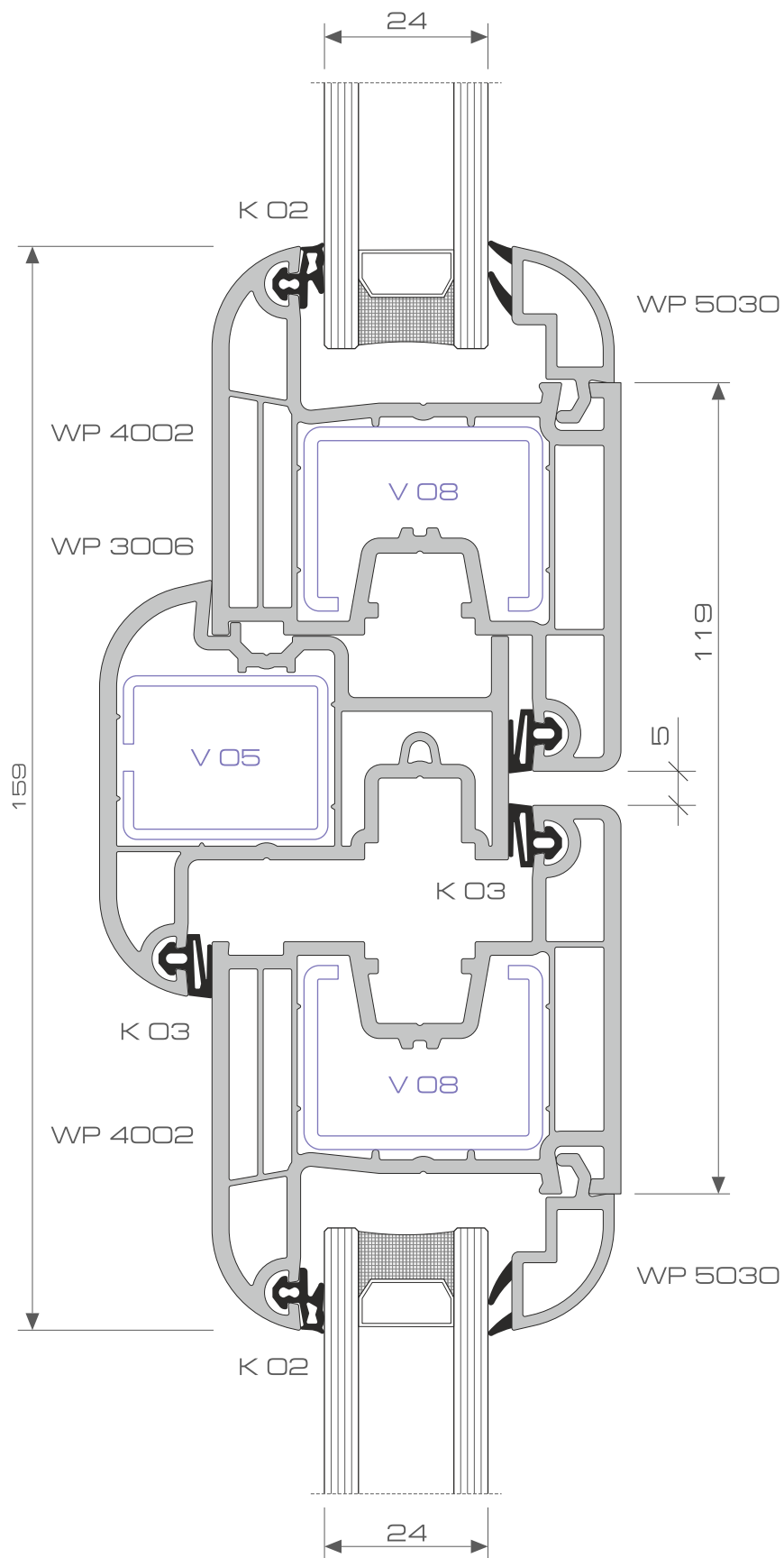
WP 4117

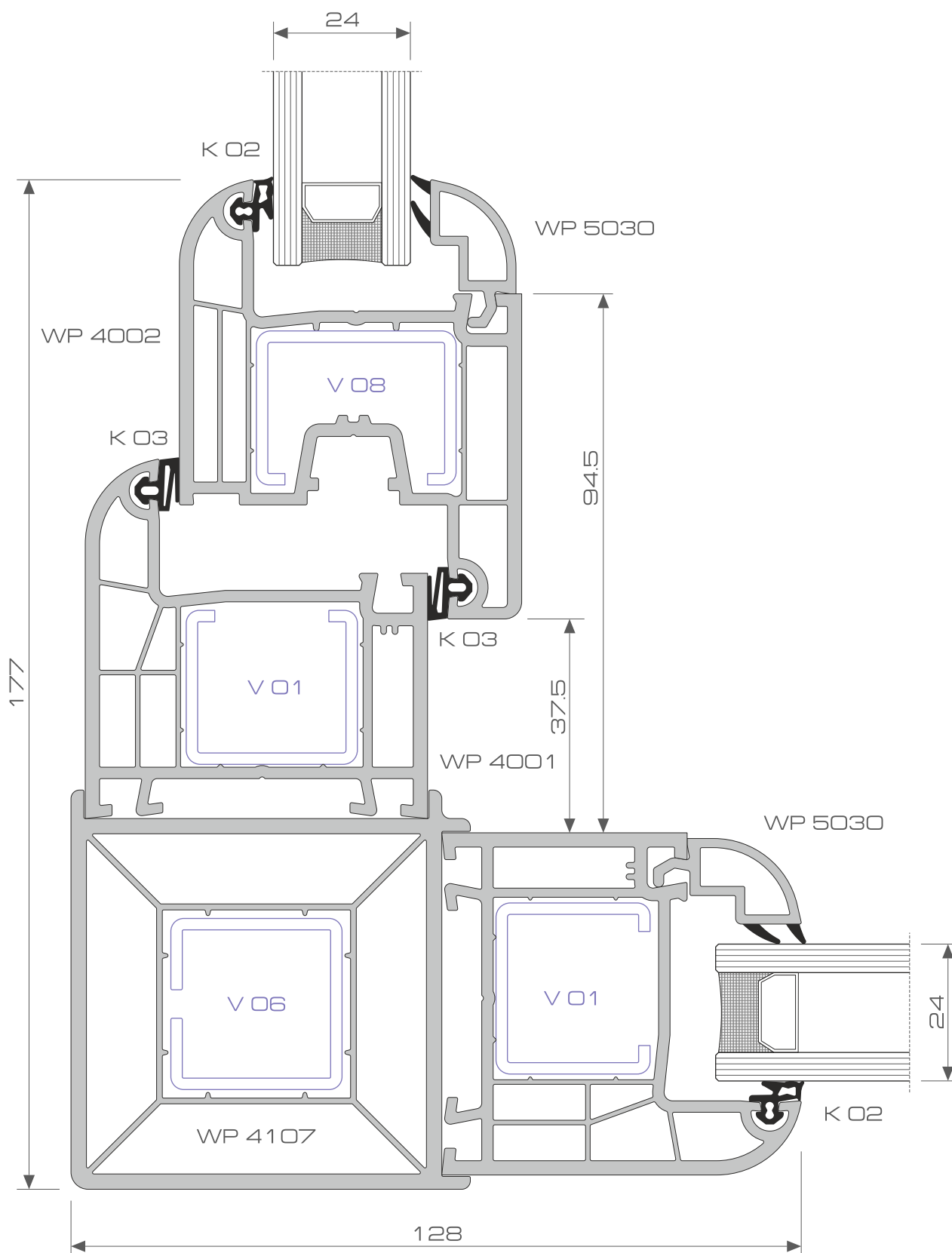


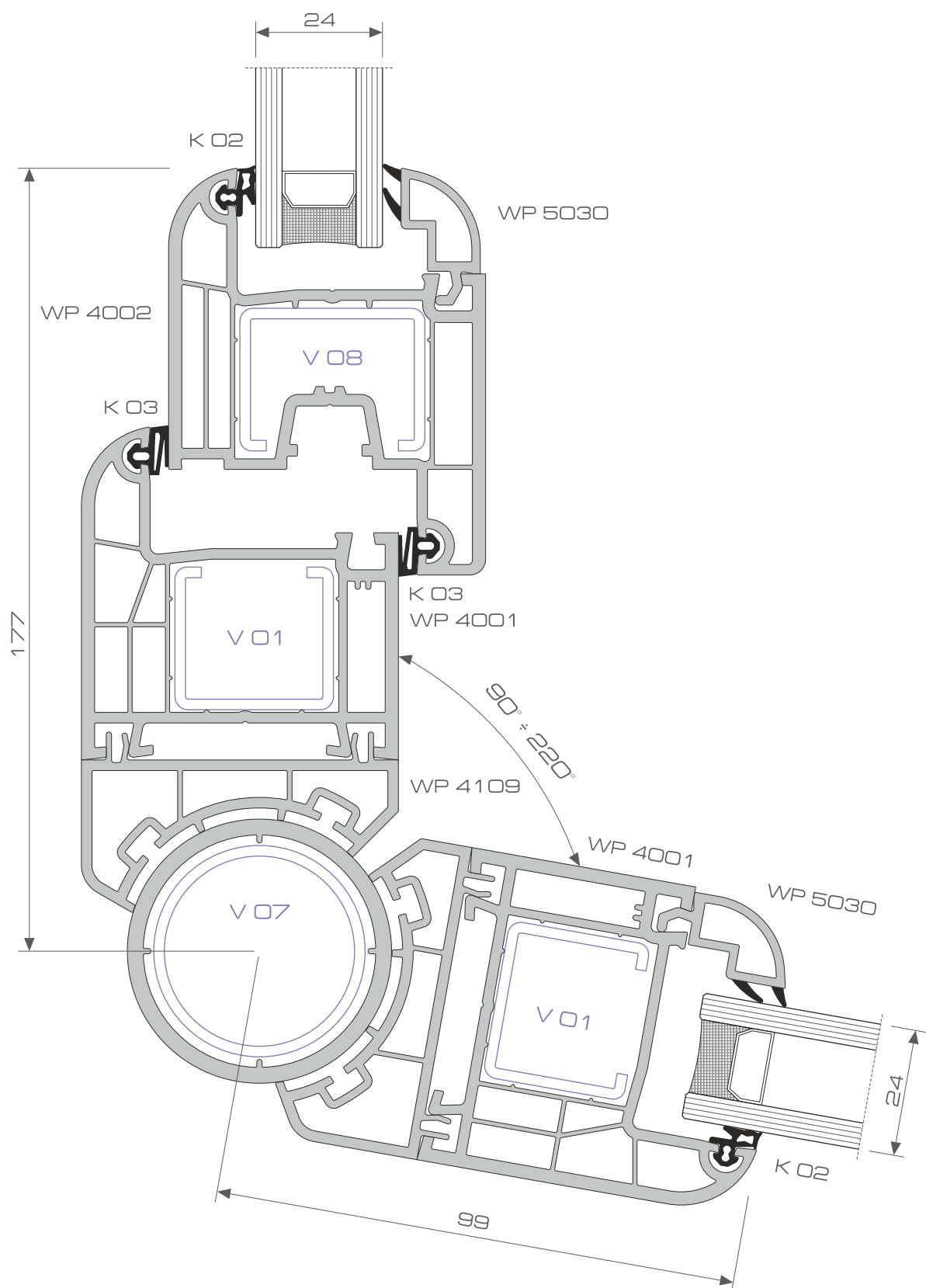
WP 4125

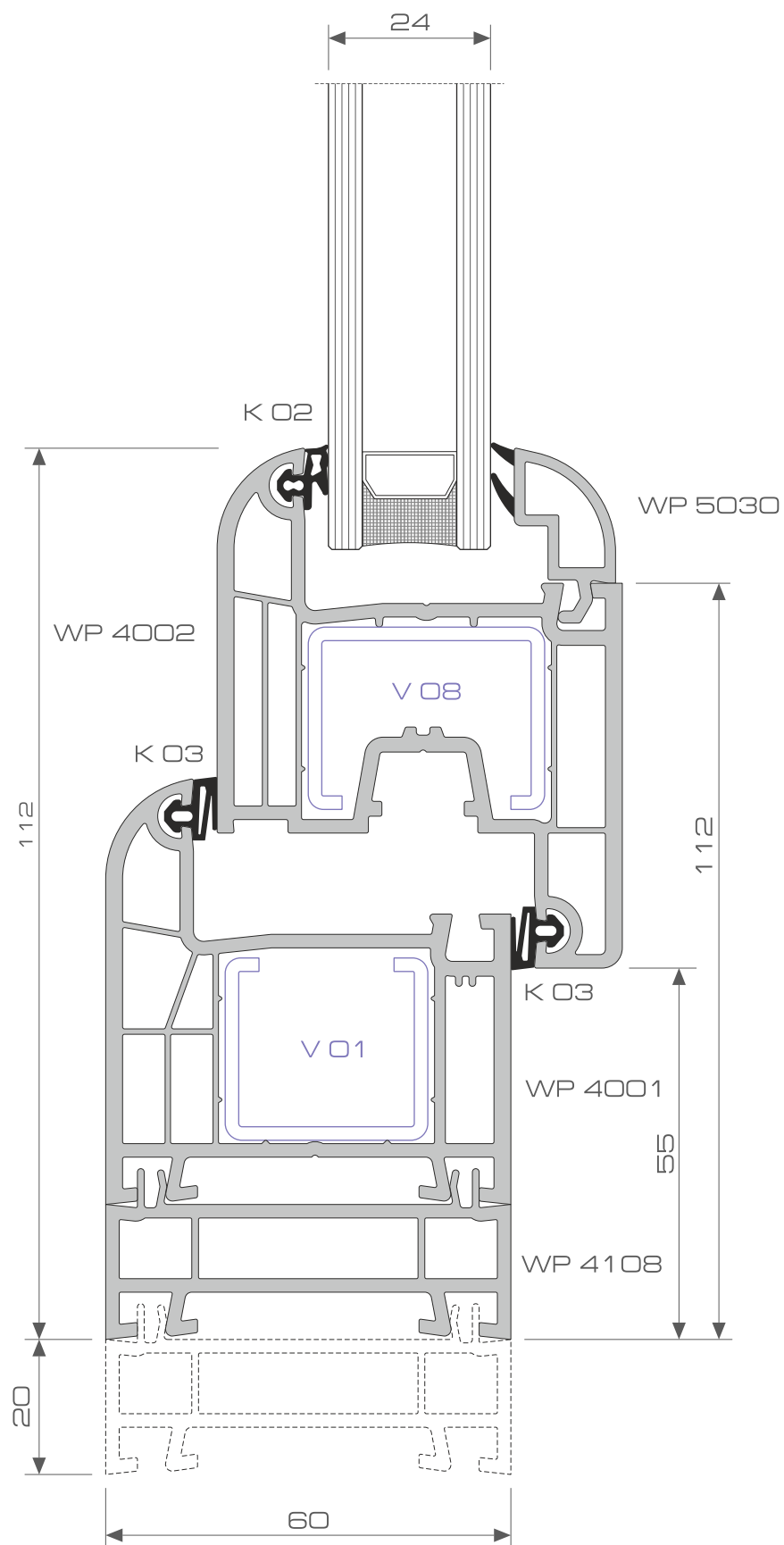


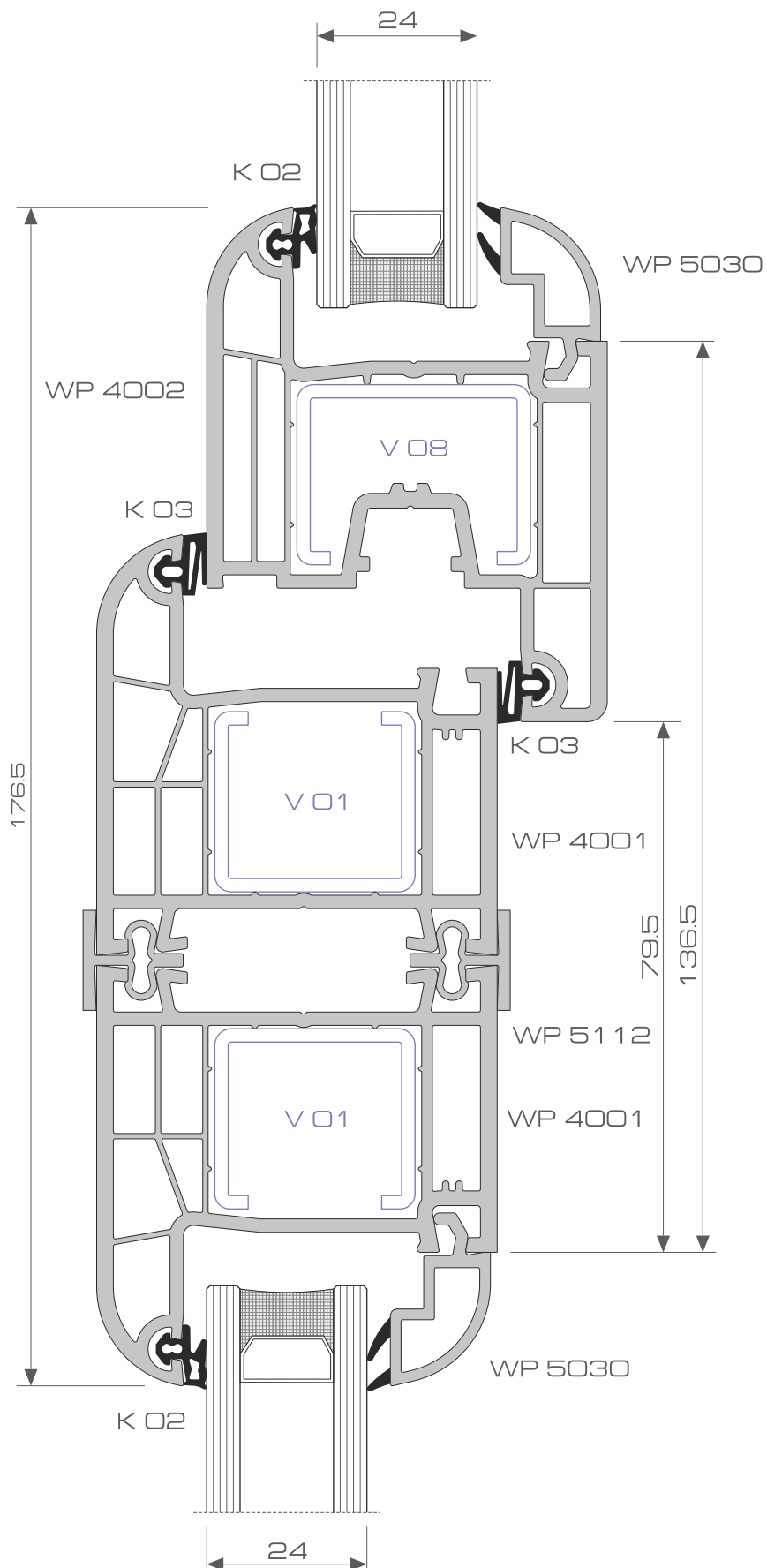


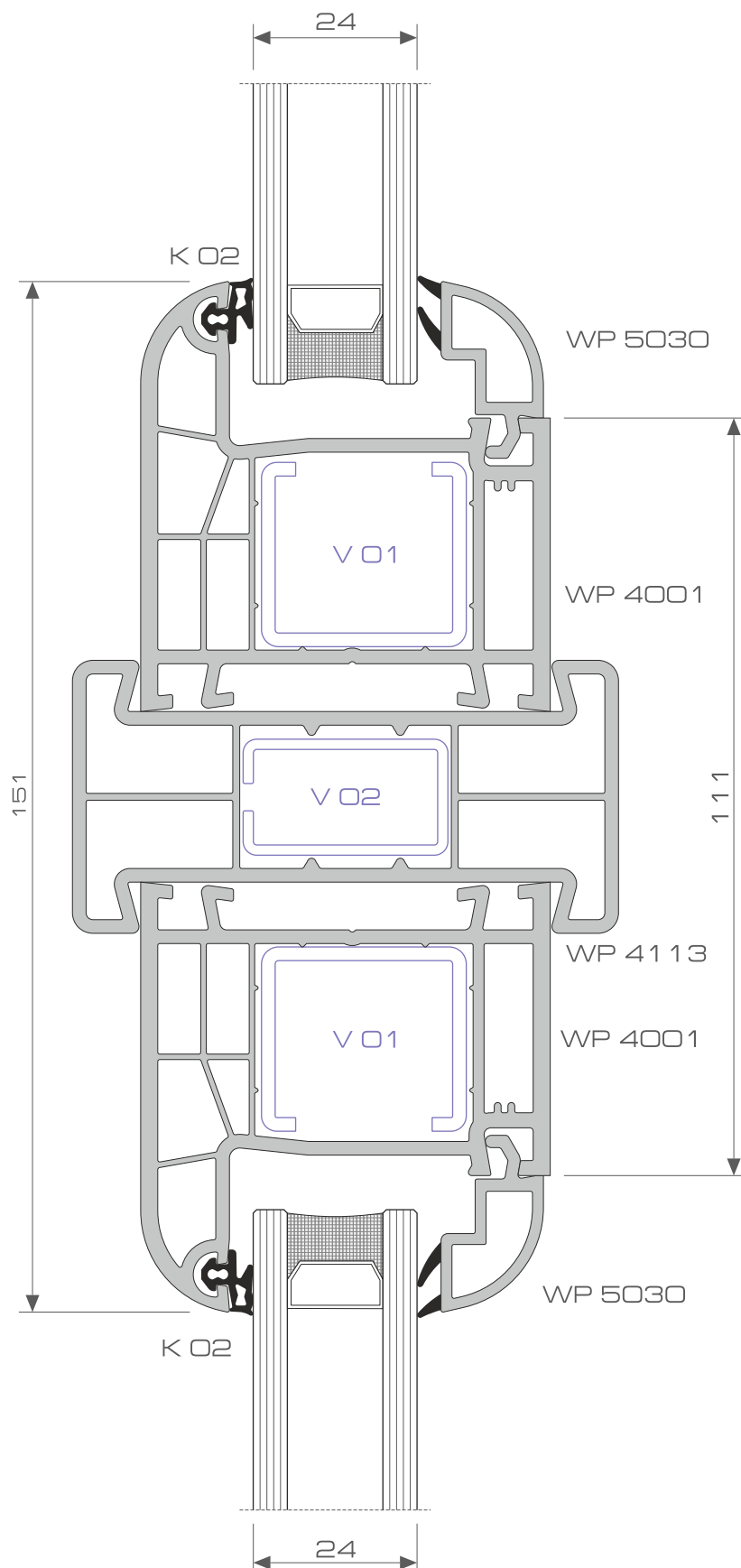


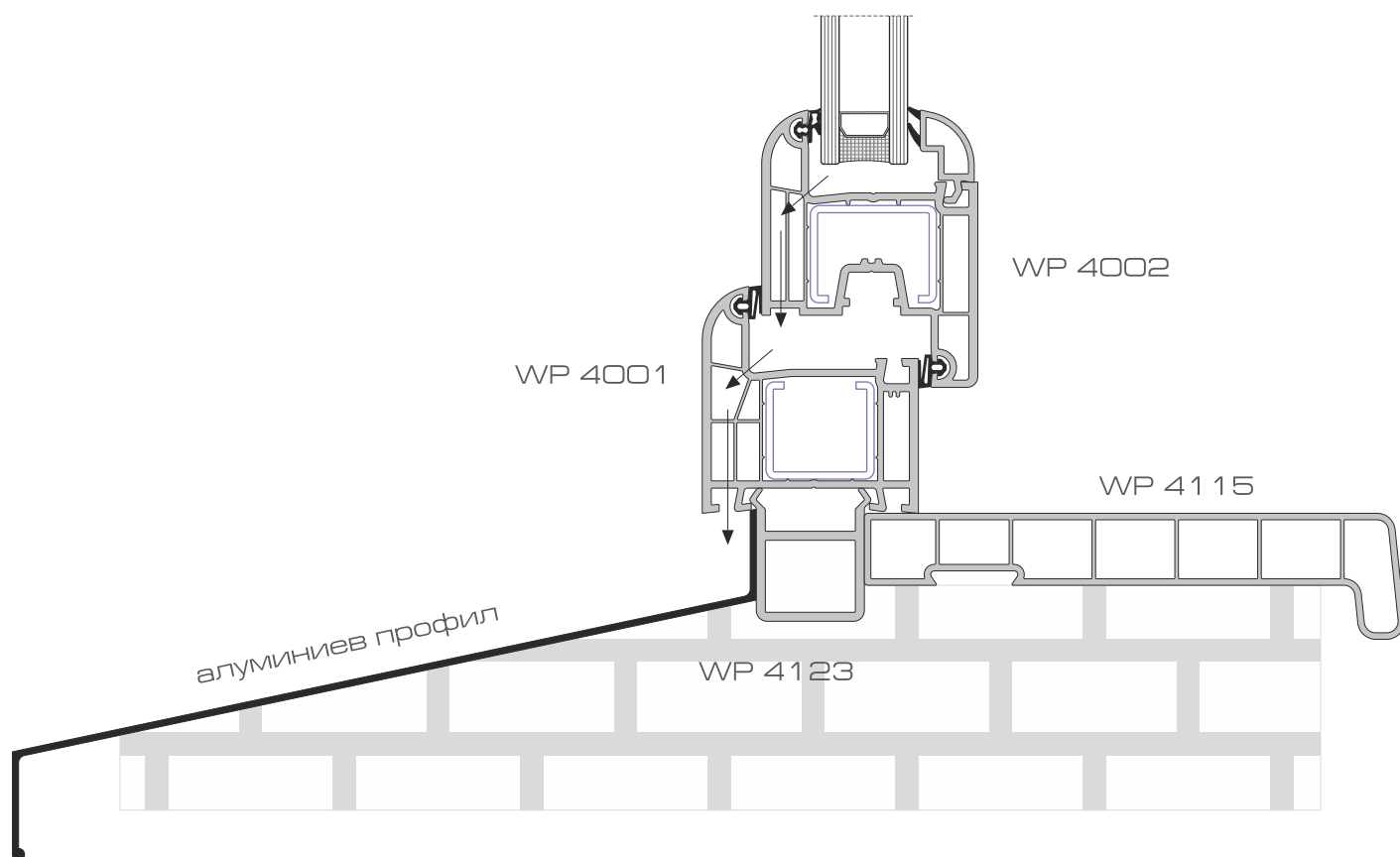
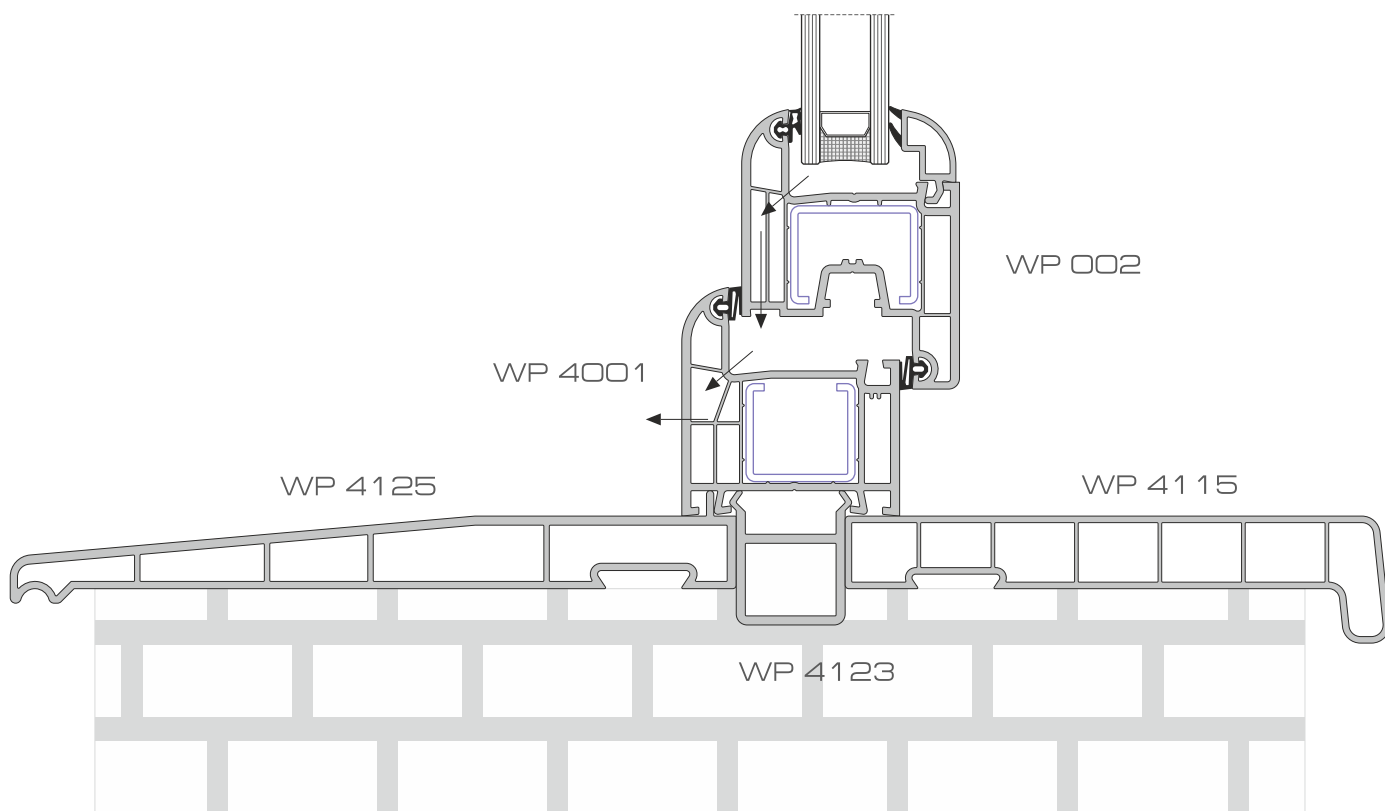












Drainage diagram / Abwasserungsschema / Schema pentru scurgere apa

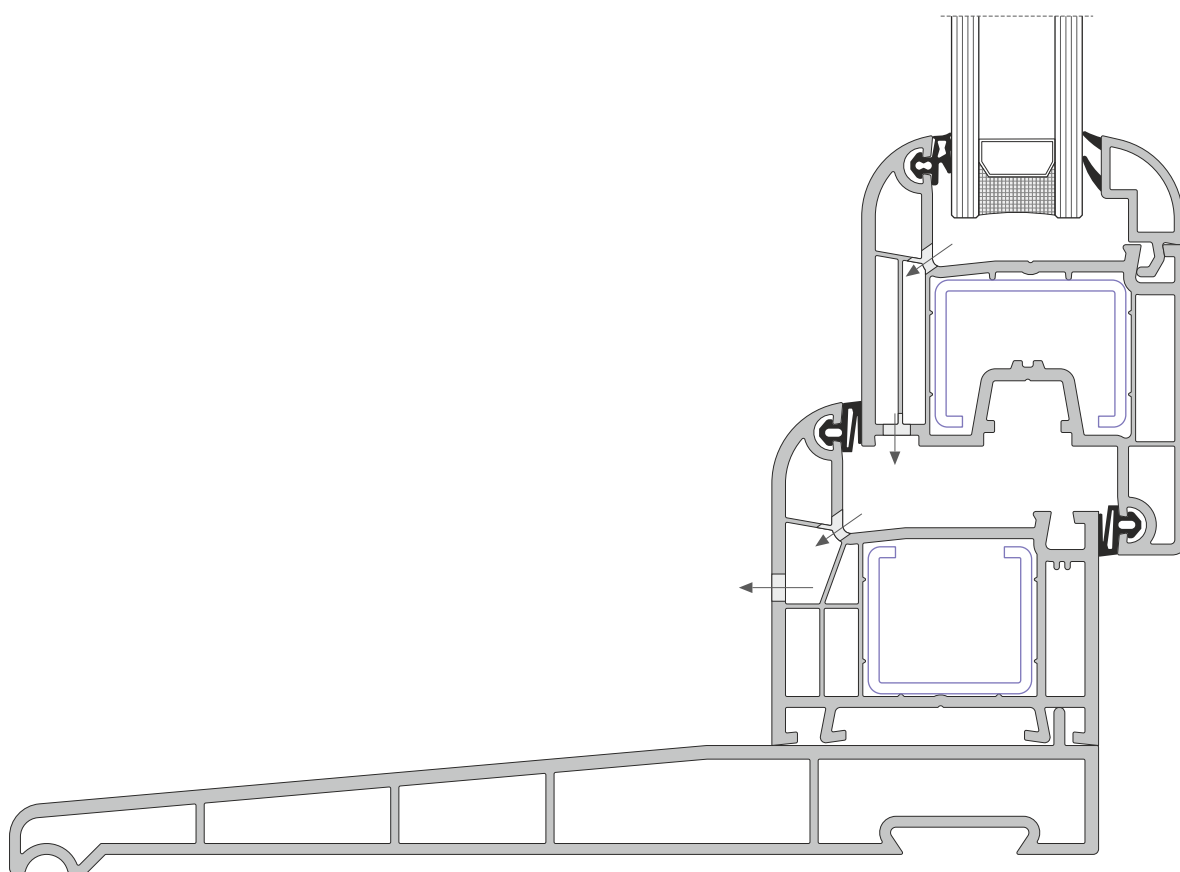
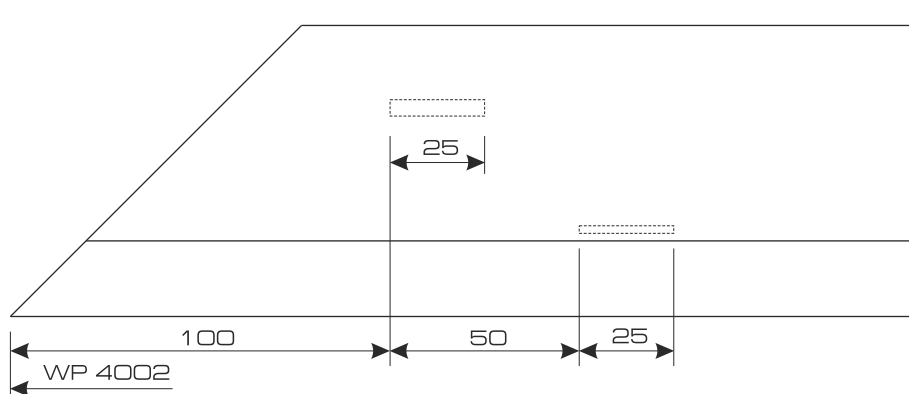
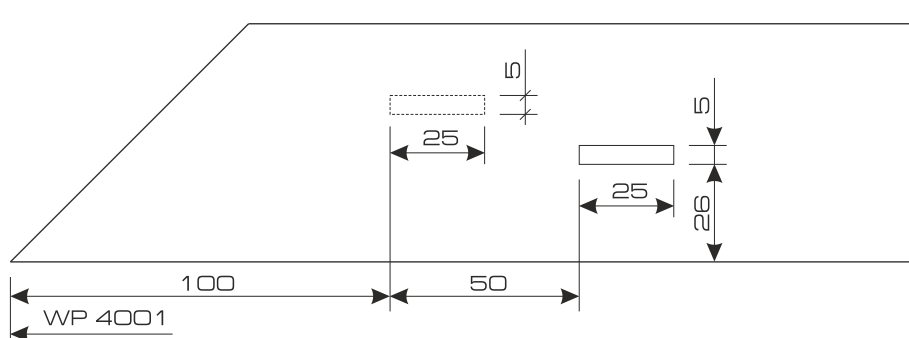
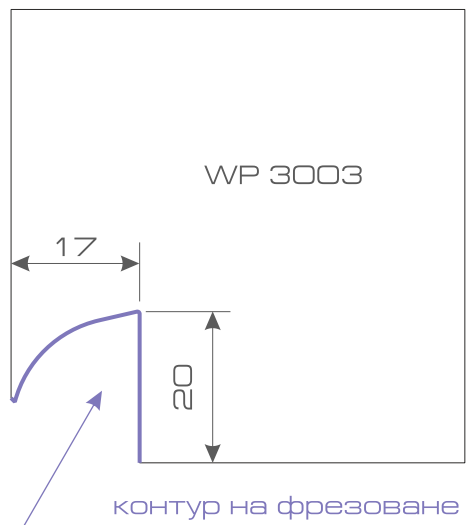


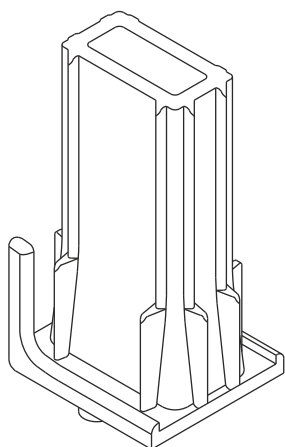
СХЕМА ЗА ФРЕЗОВАНЕ НА ДЕЛИТЕЛ

Mullion milling / Kaempferfrasenschema / Schema pentru frezarea traversei



контур на фрезование
line of milling
Fräsekontur
contur pentru frezare

пластмасова сглобка
plastic joint
Plastikzusammensetzung
conector din plastic



метална сглобка
metal joint
Metallzusammensetzung
conector metalic

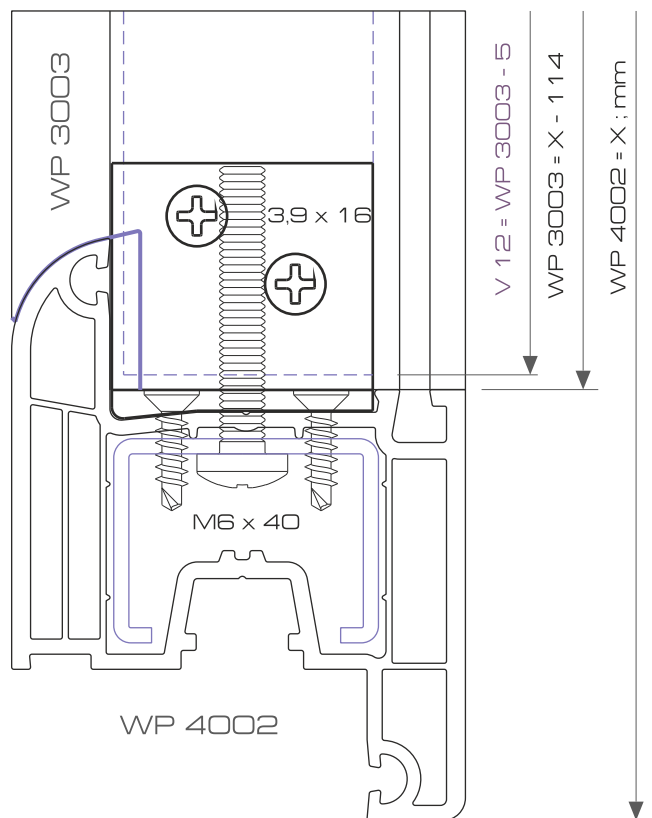
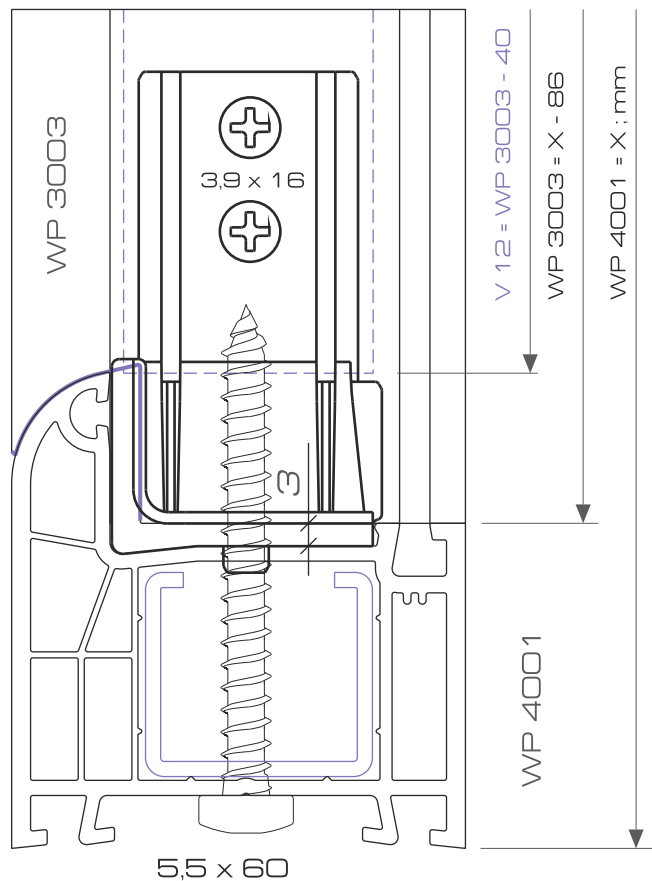
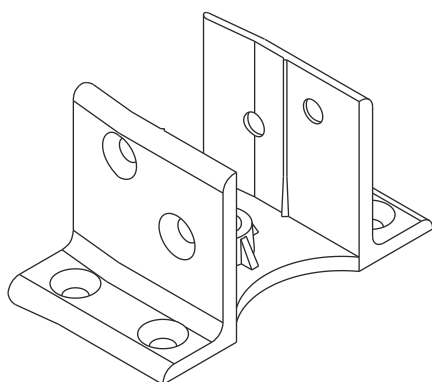


СХЕМА ДЕЛИТЕЛ - КАСА

Schema Kaempfer - Rahmen / Scheme mullion - frame

Schema de montaj traversa - toc

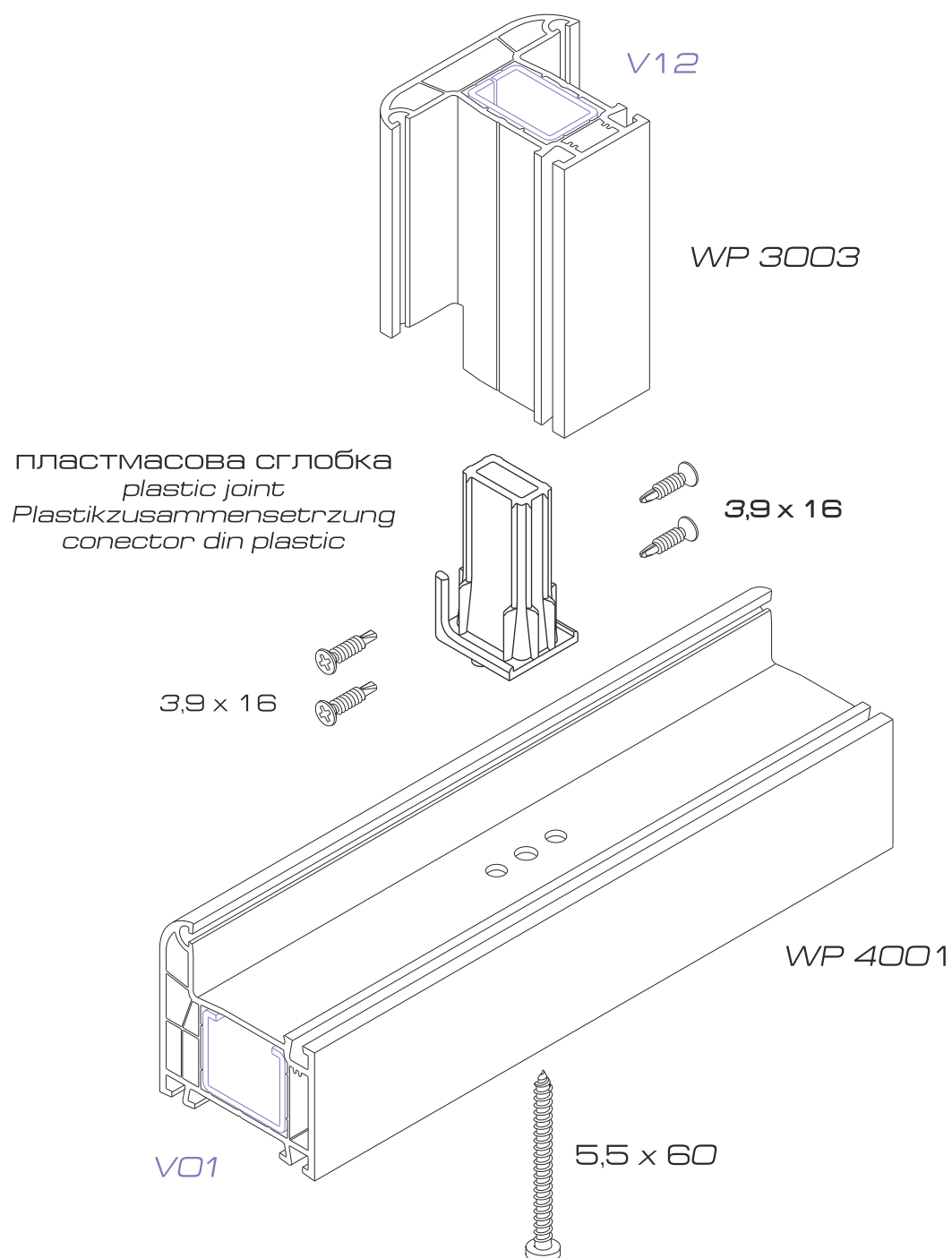


СХЕМА ДЕЛИТЕЛ - КРИЛО

Schema Kaempfer - Fluegel

Scheme mullion - sash

Schema de montaj traversa - aripa

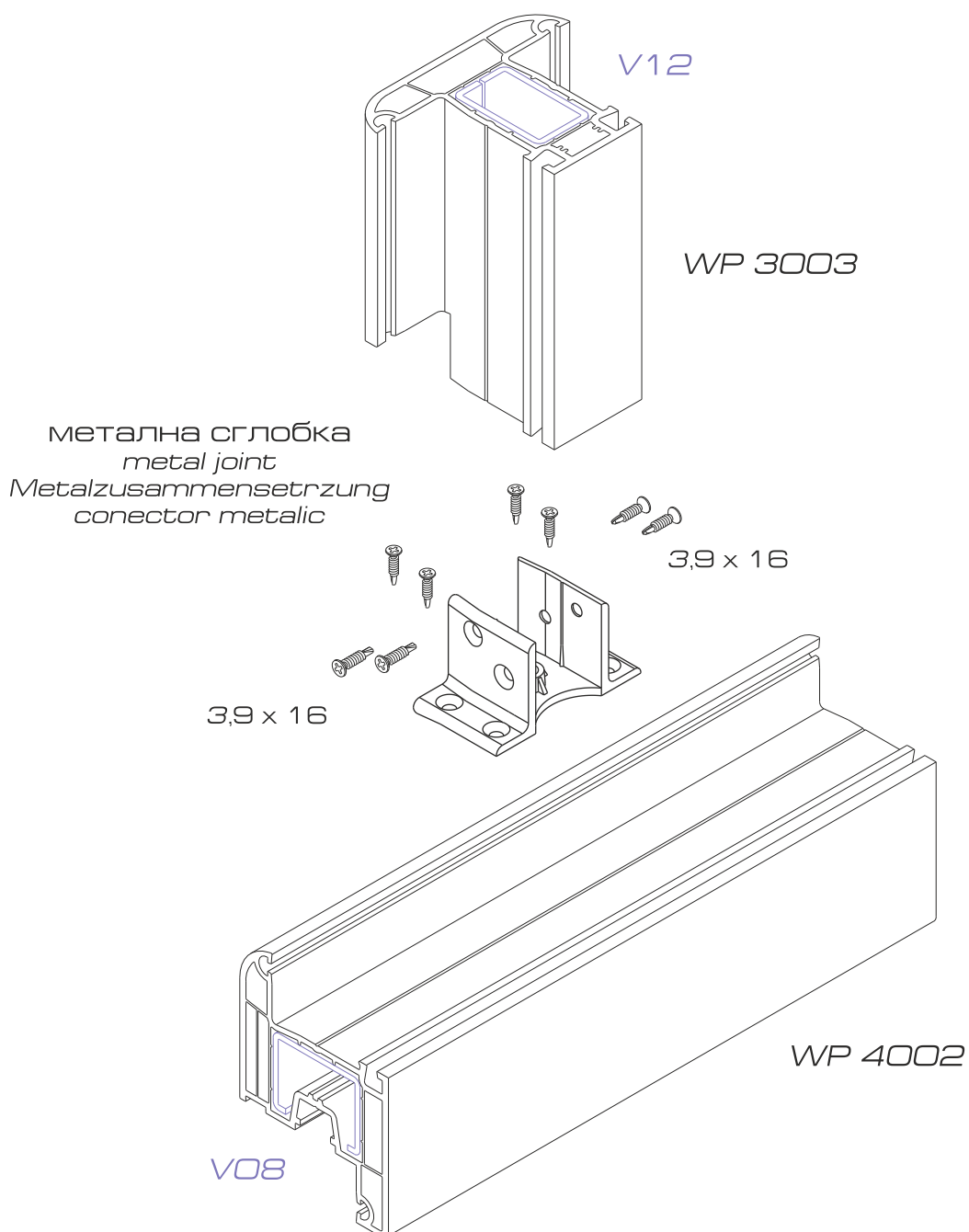
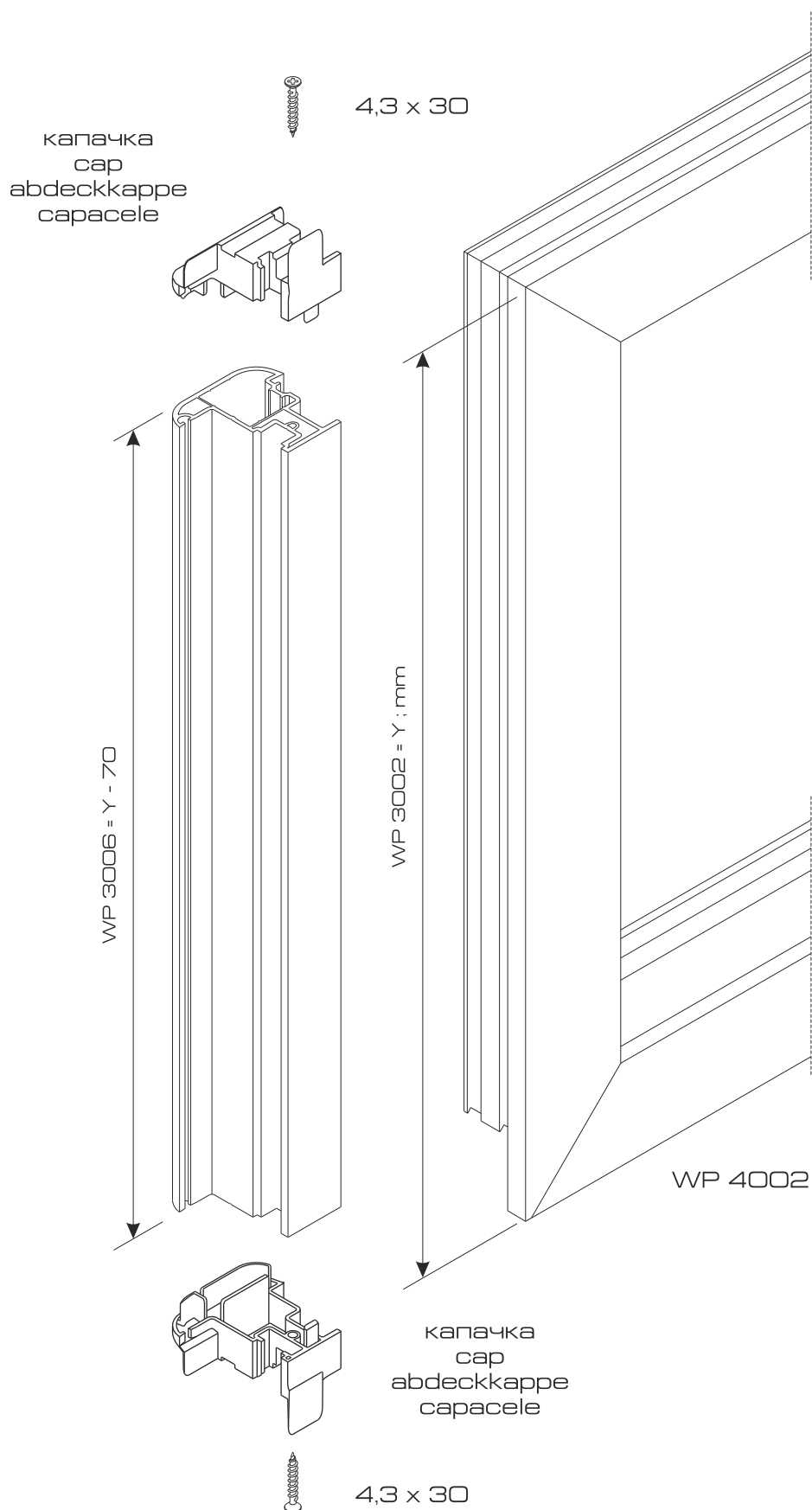


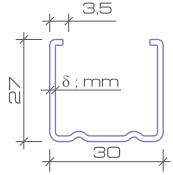
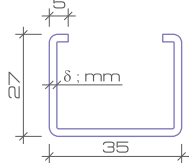
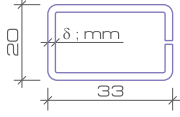
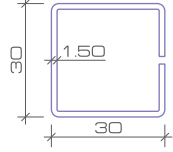
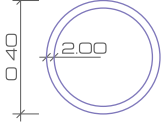
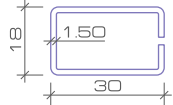
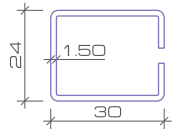
СХЕМА ПОДВИЖЕН ДЕЛИТЕЛ

Schema Stulpkaempfer
Scheme lap joint profile
Schema de montaj inversor



УСИЛВАЩИ ПРОФИЛИ

Verstaerkungsprofile
Reinforced profiles
Armature

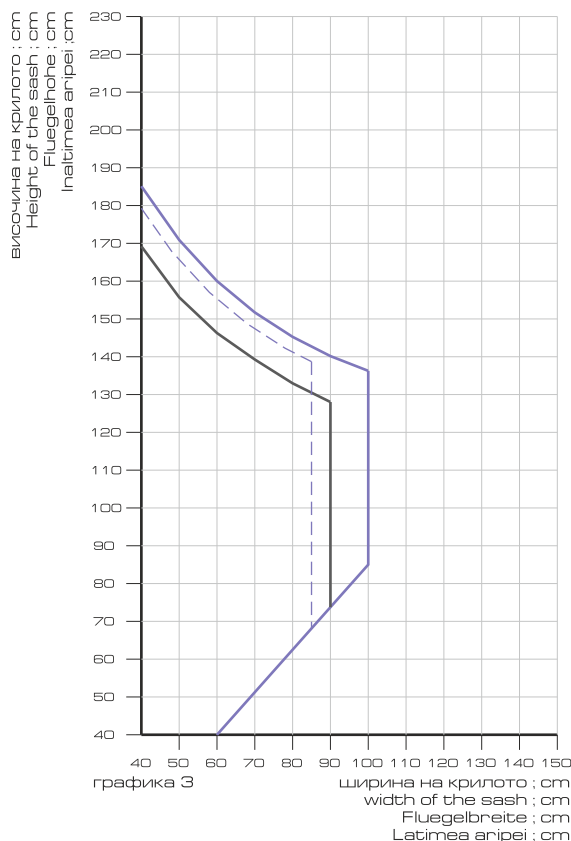
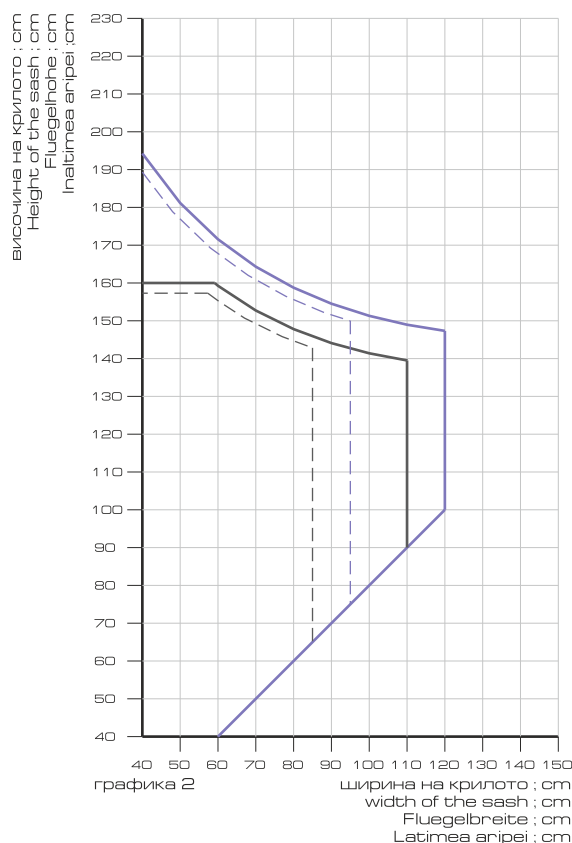
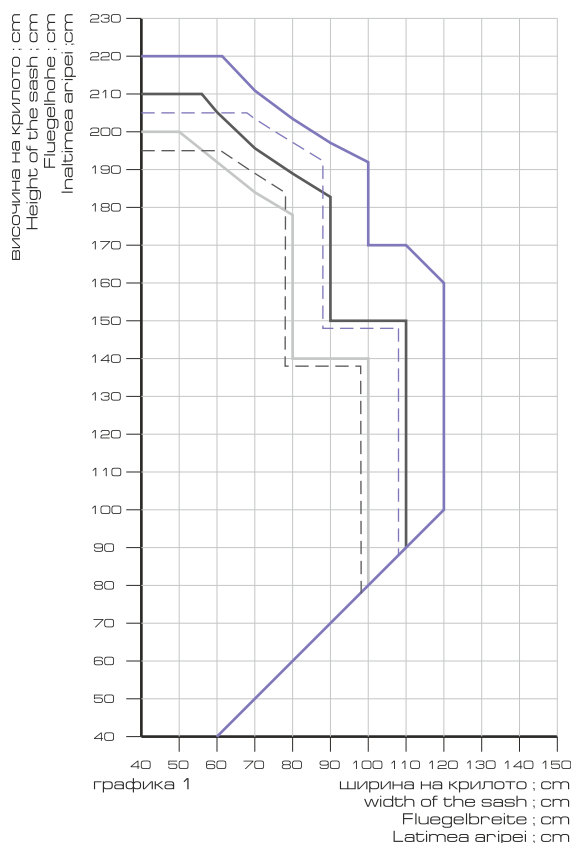
Код	PVC Профил	Усилващ профил	 Инерционен момент	
V01	WP 4101		$\delta = 1,5$	$I_x = 1,04 \text{ cm}^4$ $I_y = 1,93 \text{ cm}^4$
			$\delta = 2$	$I_x = 1,27 \text{ cm}^4$ $I_y = 2,43 \text{ cm}^4$
V08	WP 3001 WP 3002		$\delta = 1,5$	$I_x = 1,22 \text{ cm}^4$ $I_y = 2,80 \text{ cm}^4$
			$\delta = 2$	$I_x = 1,51 \text{ cm}^4$ $I_y = 3,53 \text{ cm}^4$
V12	WP 3003		$\delta = 1,5$	$I_x = 0,94 \text{ cm}^4$ $I_y = 2,04 \text{ cm}^4$
			$\delta = 2$	$I_x = 1,16 \text{ cm}^4$ $I_y = 2,56 \text{ cm}^4$
V06	WP 4107		$I_x = 2,19 \text{ cm}^4$ $I_y = 2,25 \text{ cm}^4$	
V07	WP 4111		$I_x = 4,32 \text{ cm}^4$ $I_y = 4,32 \text{ cm}^4$	
V02	WP 4113		$I_x = 0,67 \text{ cm}^4$ $I_y = 1,46 \text{ cm}^4$	
V05	WP 3006		$I_x = 1,33 \text{ cm}^4$ $I_y = 1,76 \text{ cm}^4$	

УСИЛВАЩИ ПРОФИЛИ

Графики за определяне максималните размери на крилата

Graphiken zur Bestimmung der maximalen Fluegelgrosse

Grafice pentru definirea marimii maxime ale aripilor



- V08 / 2,0 mm / $I_x = 1,51 \text{ cm}^4$; $I_y = 3,53 \text{ cm}^4$
- - V08 / 1,5 mm / $I_x = 1,22 \text{ cm}^4$; $I_y = 2,80 \text{ cm}^4$
- ... V08 / 1,2 mm / $I_x = 1,02 \text{ cm}^4$; $I_y = 2,32 \text{ cm}^4$

Изчисляване на необходимият инерционен момент

Calculation of the moment of inertia

Traagheitsmomentberechnungsformel

Calcularea momentului inert necesar

$$I_H = \frac{W \cdot L^4 \cdot B/2}{1920 \cdot E \cdot f} \left[25 - 40 \left(\frac{B}{L} \right)^2 + 16 \left(\frac{B}{L} \right)^4 \right] ; \text{cm}^4$$

W - ветрово натоварване/ wind pressure/
Winddruck/intensitatea vantului ; N/mm²

височина на сградата/ height of the building/
Gebaudehohe/ Inaltimea cladirii 0 - 8 m - **W** = 600 Pa
W = 0,0006 N/mm² - графика 1

височина на сградата/ height of the building/
Gebaudehohe/ Inaltimea cladirii 8 - 20 m - **W** = 960 Pa
W = 0,0096 N/mm² - графика 2

височина на сградата/ height of the building/
Gebaudehohe/ Inaltimea cladirii 20 - 100 m - **W** = 1320 Pa
W = 0,00132 N/mm² - графика 3

L - височина/ height/Hohe/ inaltime ; cm

B - ширина/ width/ Breite/ latime ; cm

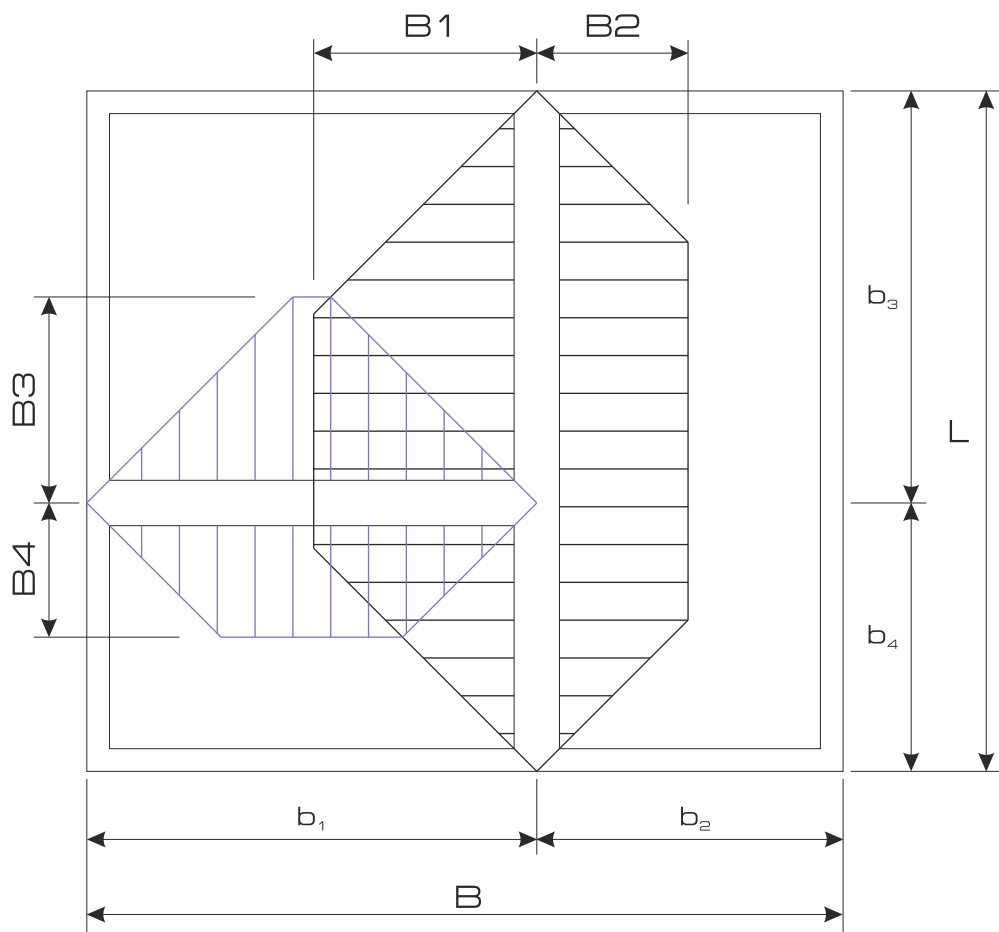
E - модул на еластичност/ elasticity module/
Elastizitatsmodul/ modulul elasticitatii ($E_{cr} = 210\,000 \text{ N/mm}^2$)

f - допустимо провисване/ slack eligibility/zulassige
Durchbiegung/ arcuirea admisa ($f = L/300$; $f \leq 0,8 \text{ cm}$)

С прекъснатата линия са графиките за избор на усилващ профил при ламиниран профил
The graphics for choosing reinforced profiles for laminated profiles are with dotted line
Die gestrichene Linie kennzeichnet die benoetigte Armierung bei laminiertem Profil
Cu linia punctata sunt indicate graficele pentru alegerea armaturii pentru profilul laminat

ОПРЕДЕЛЯНЕ НА НЕОБХОДИМИЯ ИНЕРЦИОНЕН МОМЕНТ

Calculation of the moment of inertia
 Trägheitsmomentberechnungsformel
 Calcularea momentului inert necesar



$$I_H = \frac{W \cdot L^4 \cdot B}{1920 \cdot E \cdot f} \left[25 - 40 \left(\frac{B}{L} \right)^2 + 16 \left(\frac{B}{L} \right)^4 \right] ; \text{cm}^4$$

W - ветрово натоварване/ wind pressure/Winddruck/intensitatea vantului ; N/mm²

височина на сградата/ height of the building/Gebaudehohe/ Inaltimea cladirii
 0 - 8 m - W = 600 Pa = 0,0006 N/mm²

височина на сградата/ height of the building/Gebaudehohe/ Inaltimea cladirii
 8 - 20 m - W = 960 Pa = 0,0096 N/mm²

височина на сградата/ height of the building/Gebaudehohe/ Inaltimea cladirii
 20 - 100 m - W = 1320 Pa = 0,00132 N/mm²

L - височина/ height/Hohe/ inaltime ; cm

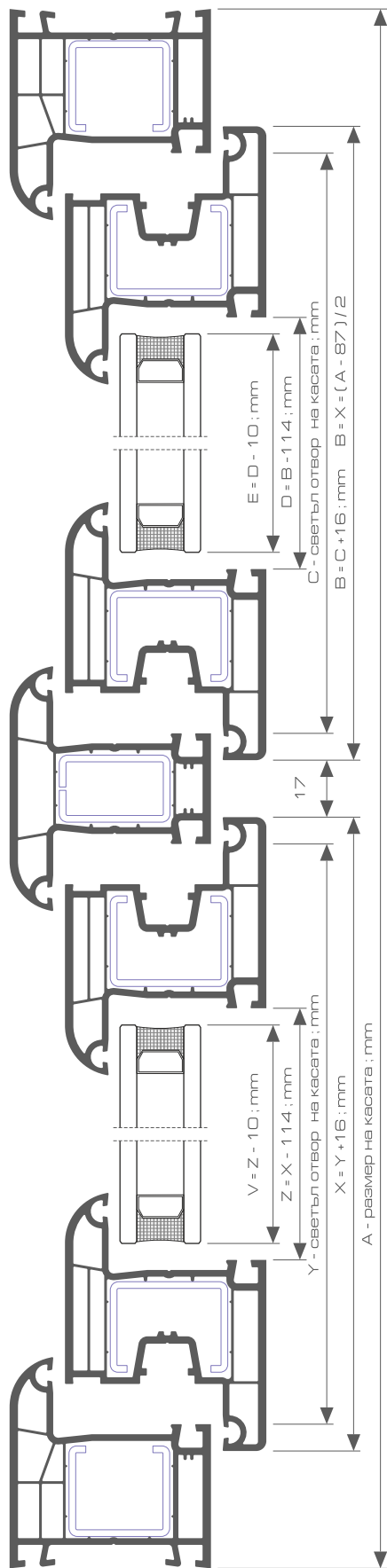
B - ширина/ width/ Breite/ latime ; cm $B = b_x / 2$; b_x - ширина на клетката ; cm

E - модул на еластичност/ elasticity module/ Elastizitatsmodul/ modulul elasticitatii
 (E_{стомана} - 210 000 N / mm²)

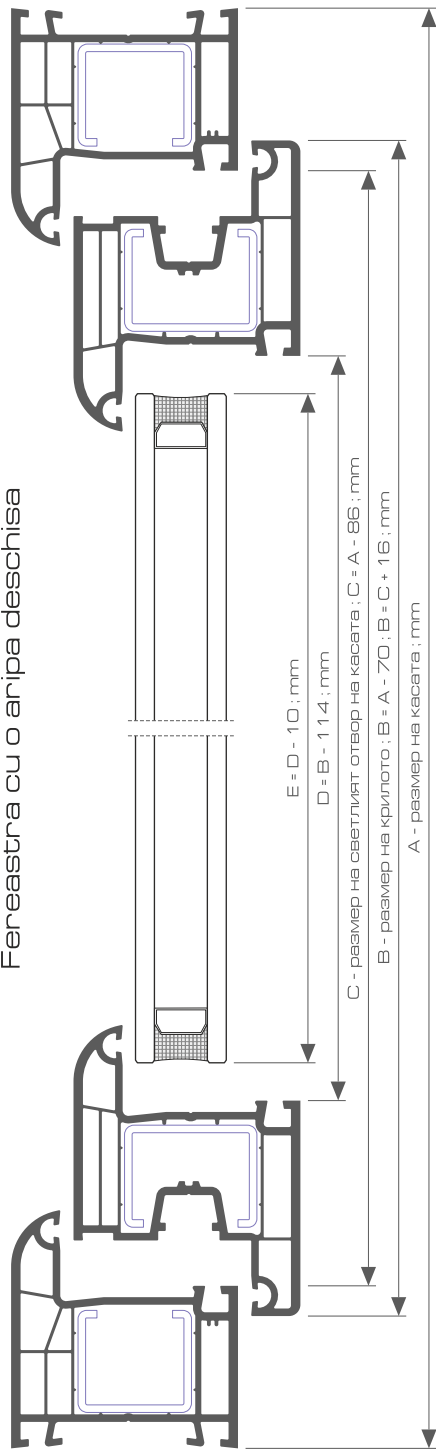
E - модул на еластичност/ elasticity module/ Elastizitatsmodul/ modulul elasticitatii
 (E_{алуминий} - 70 000 N / mm²)

f - допустимо провисване/ slack eligibility/zulassige Durchbiegung/ arcuarea admisa
 (f = L/300 ; f ≤ 0,8 cm)

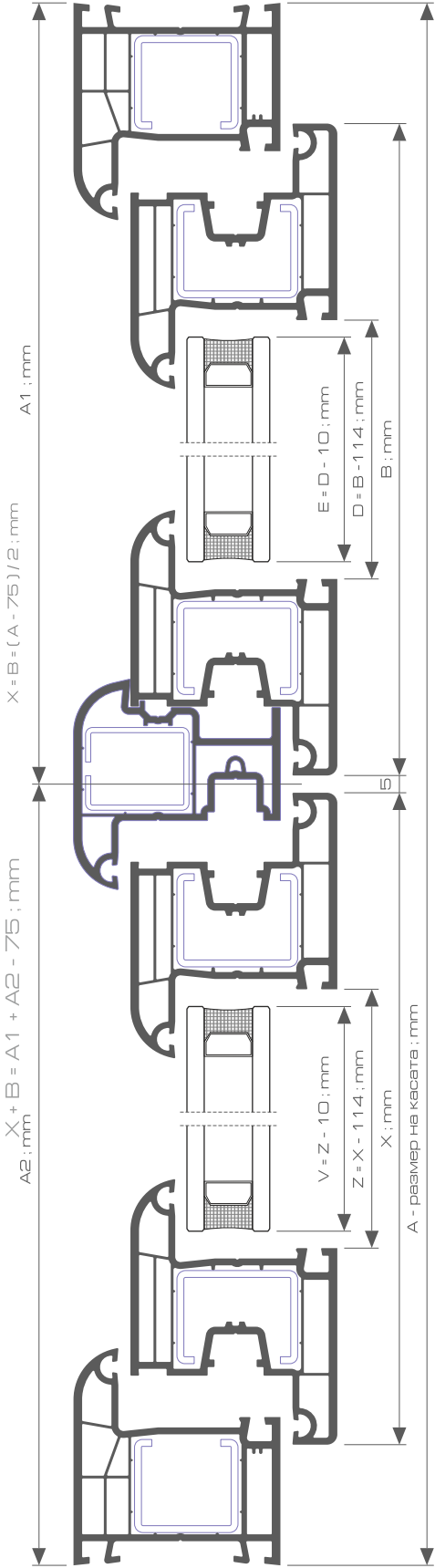
Прозорец с две крила с делител
Zweiflügeliges Fenster mit Kaempfer
Double open window with mullion
Fereastra cu doua aripi cu traversa



Прозорец с едно отваряемо крило
Einflügeliges Fenster
A single open window
Fereastra cu o aripa deschisa



Прозорец с две крила с подвижен делител
Zweiflügeliges Stulpfenster
Double open window with a lap joint profile
Fereastră cu două aripi cu inversor



ПРОФИЛИ С ЛАМИНИРАНО ПОКРИТИЕ

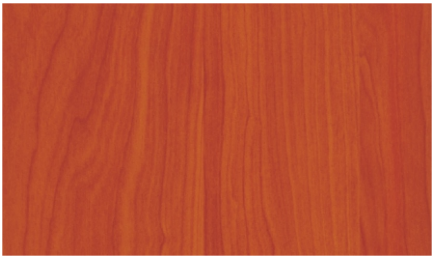
Profile mit laminiertem Beschlag
Profiles with polish cover
Profile laminate



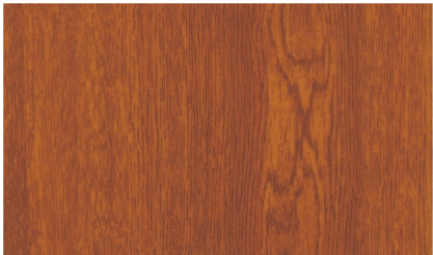
светъл орех
nussbaum hell
light walnut
nuc deschis



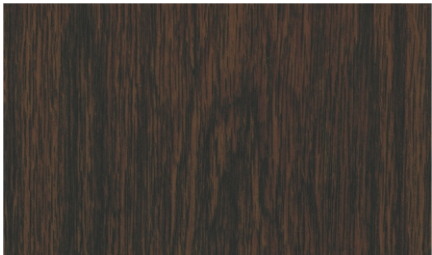
тъмен орех
nussbaum dunkel
dark walnut
nuc inchis



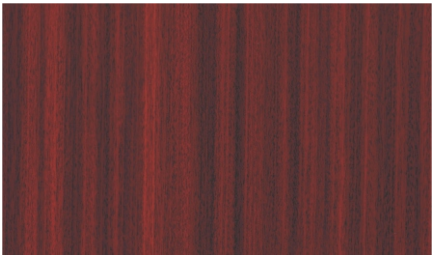
череша
kirschbaum
cherry
cires



златен дъб
goldeiche
golden oak
stejar auriu



тъмен дъб
dunkeleiche
dark oak
stejar inchis



махагон
mahagoni
mahogany
mahon

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