



# ESSENTIAL WP 3000

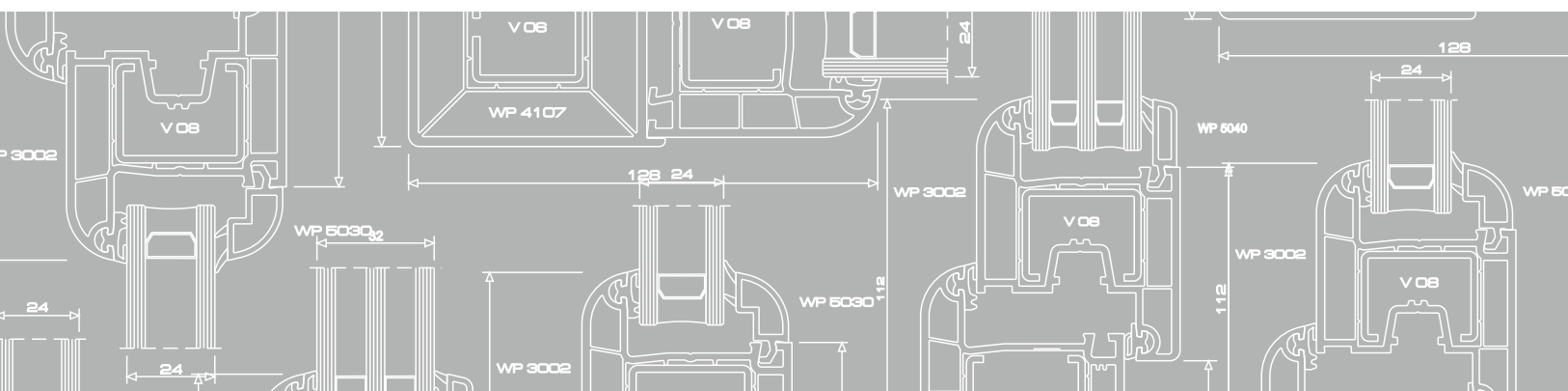


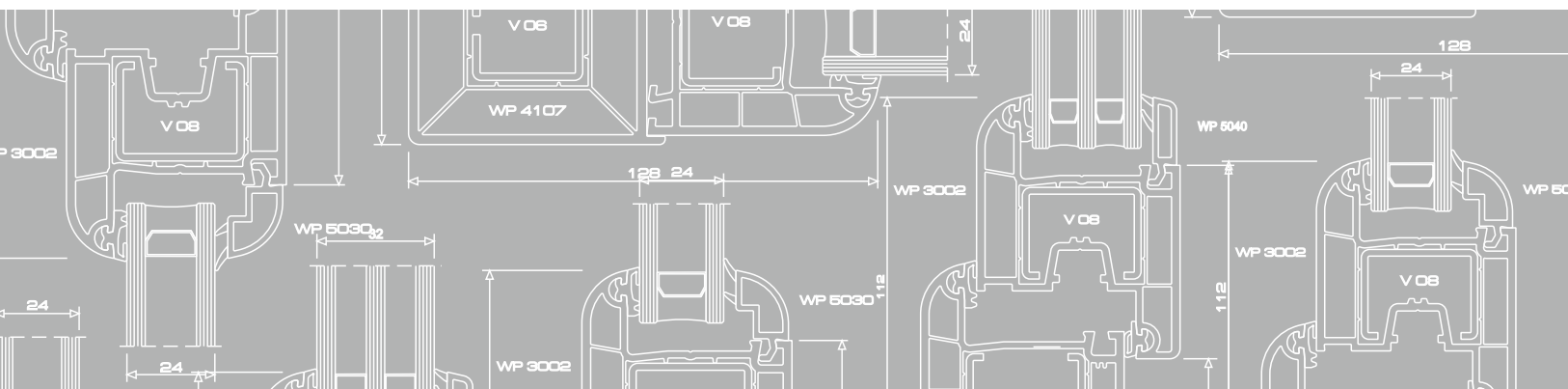
TECHNICAL CATALOGUE

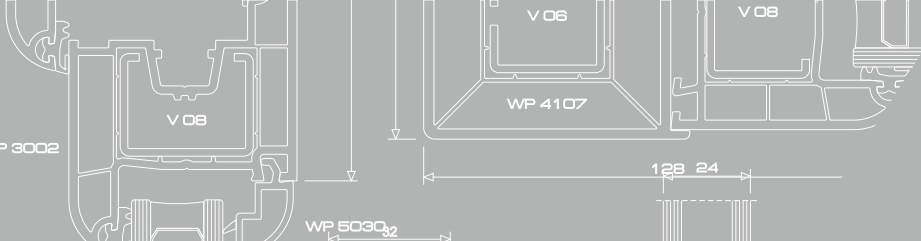
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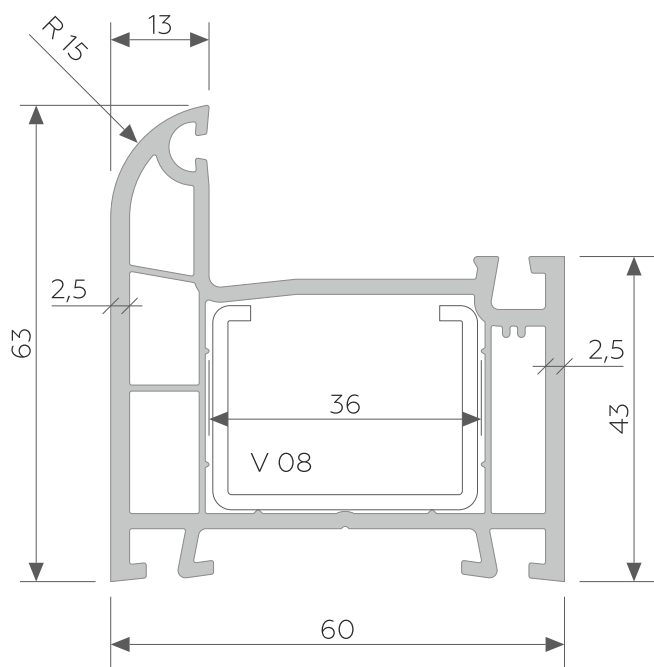
## TECHNICAL CATALOGUE PVC SYSTEM ESSENTIAL WP3000





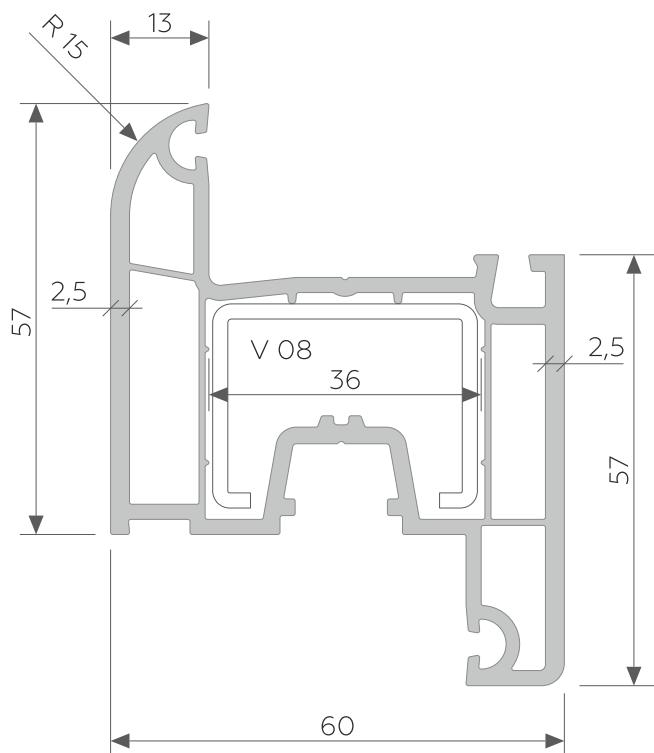


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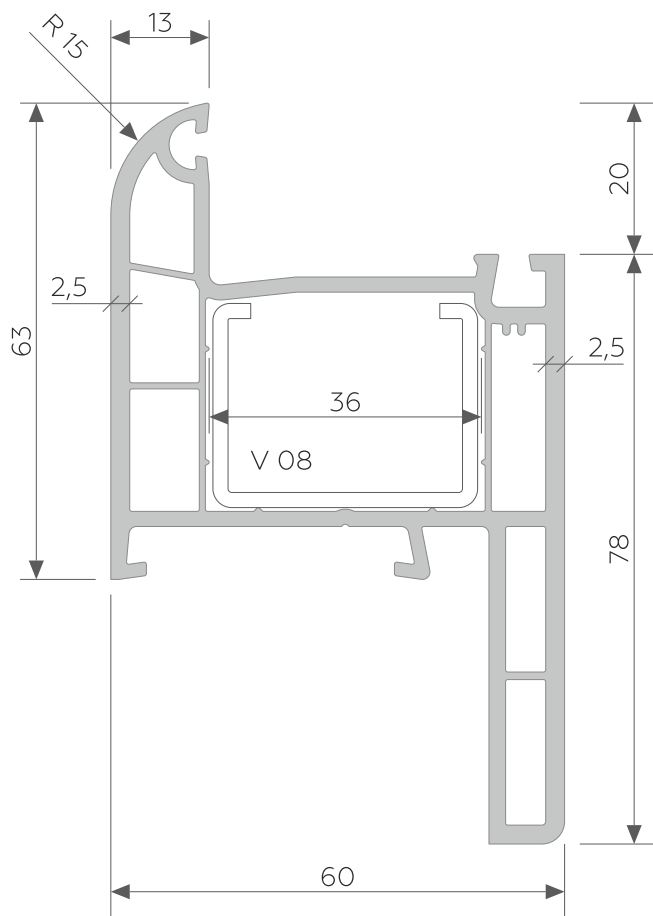
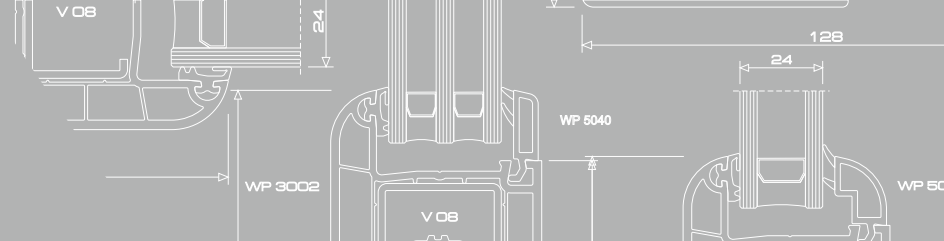
Frame profile

WP 3001  
ESSENTIAL



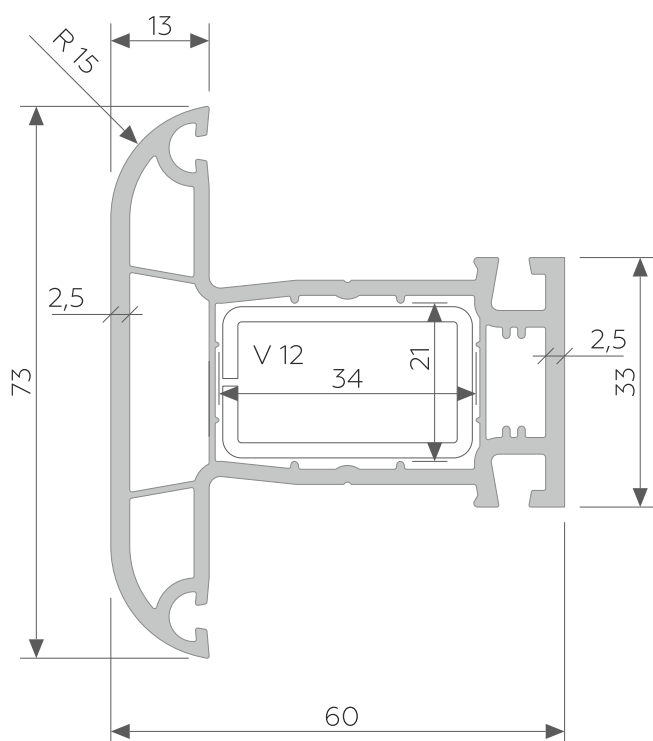
Sash profile

WP 3002  
ESSENTIAL



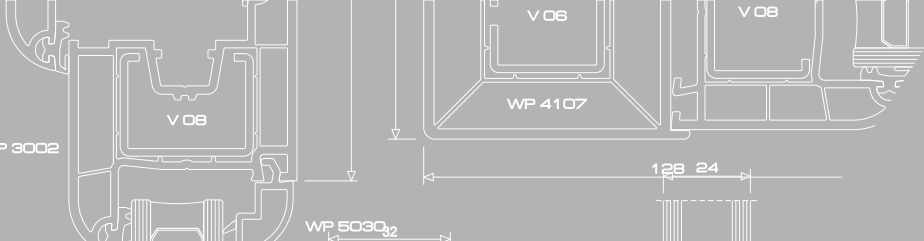
Frame profile

WP 3035  
ESSENTIAL

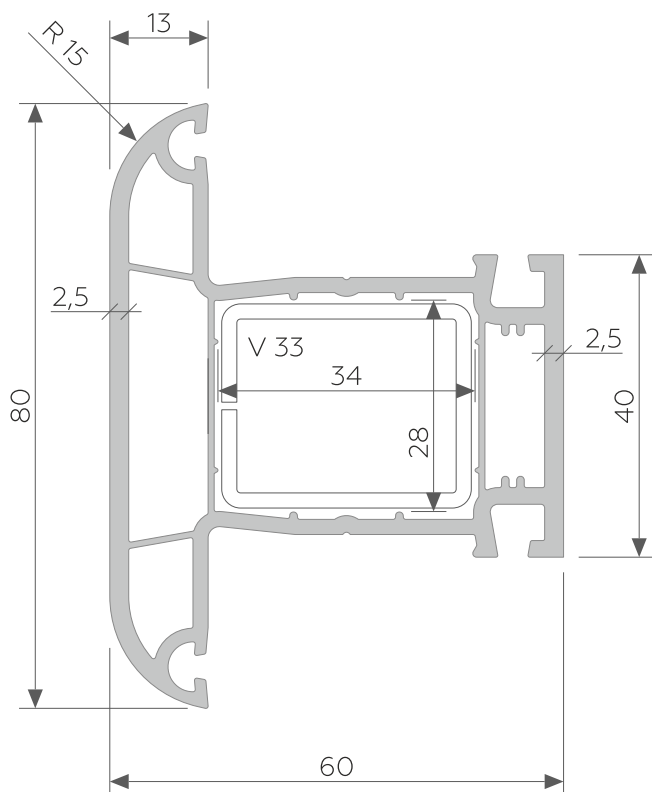


Million profile

WP 3003  
ESSENTIAL

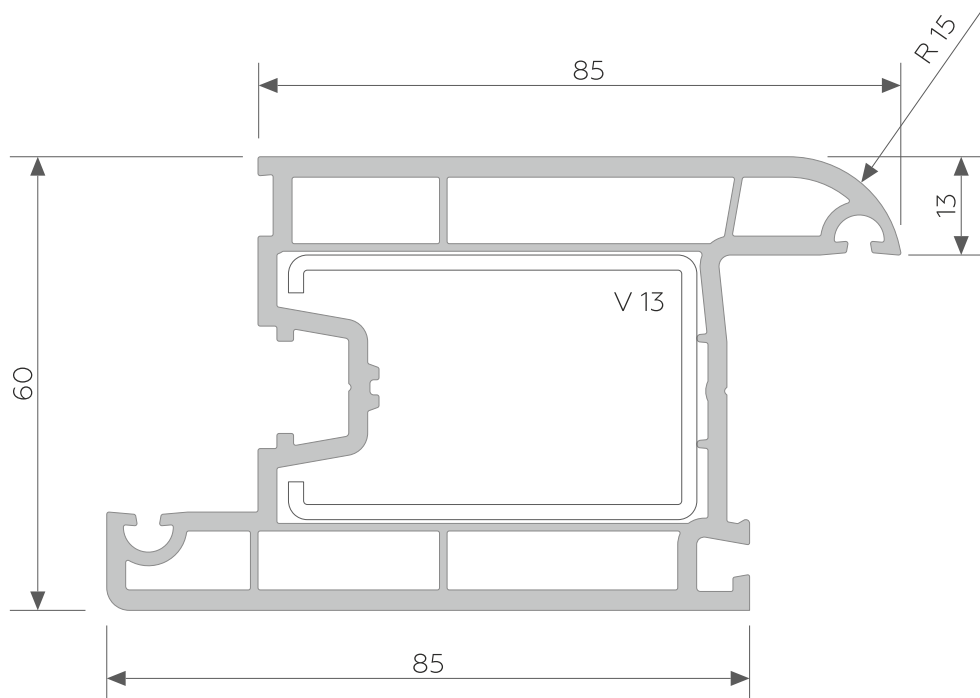


# ESSENTIAL WP 3000



Million Profile

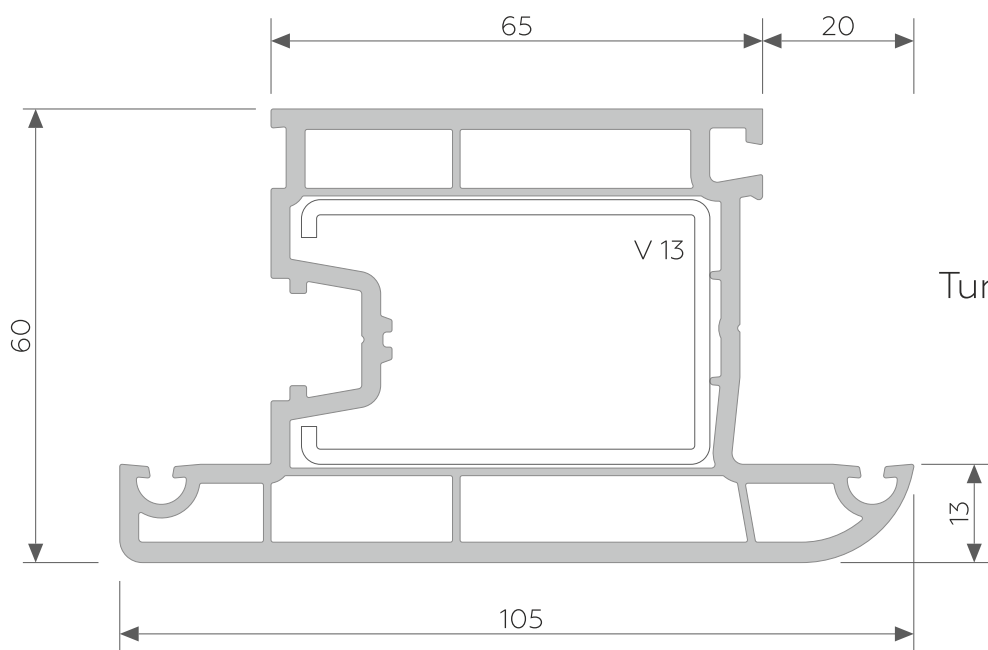
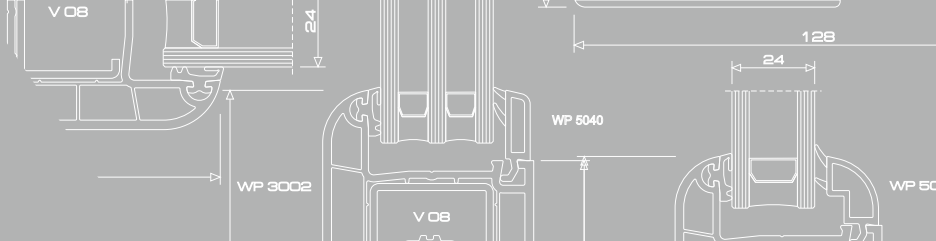
WP 3033  
ESSENTIAL



Door sash profile

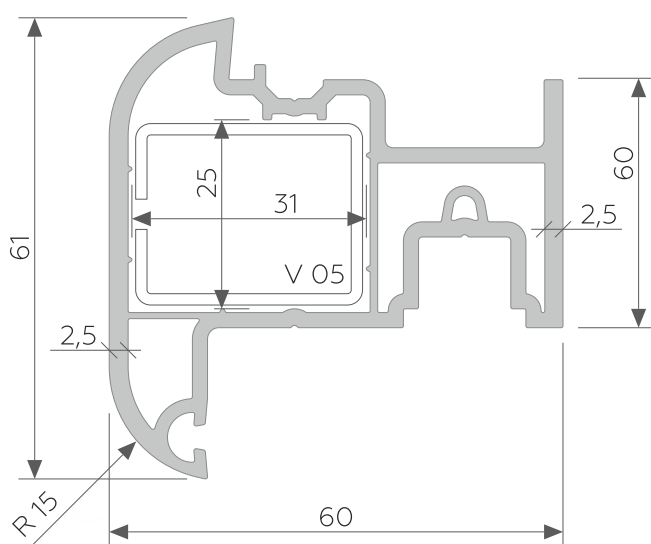
WP 3004  
ESSENTIAL

# ESSENTIAL WP 3000



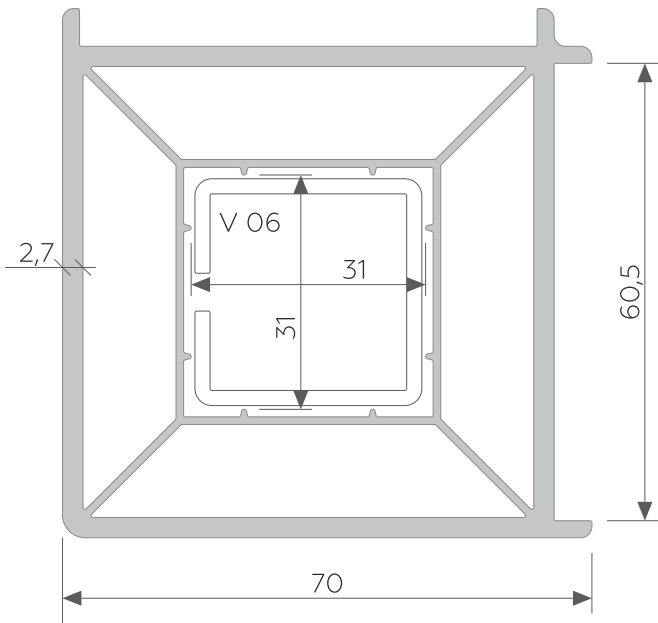
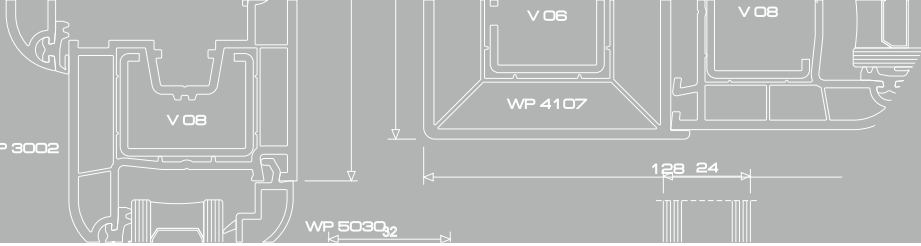
Turned over sash profile

WP 3005  
ESSENTIAL



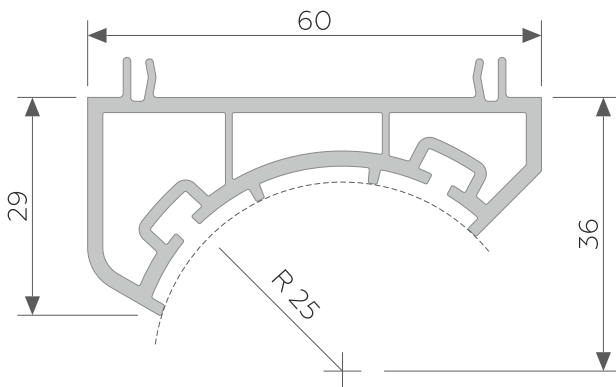
Lap joint profile

WP 3006  
ESSENTIAL



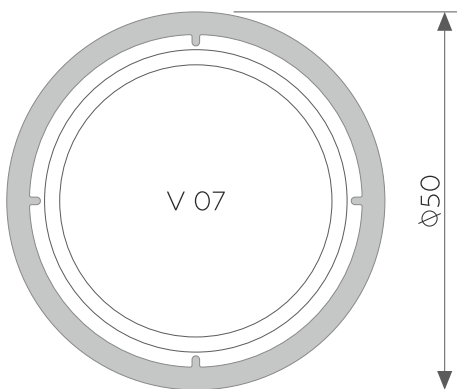
Corner profile 90°

WP 4107  
SMART



Corner lag profile

WP 4109  
SMART

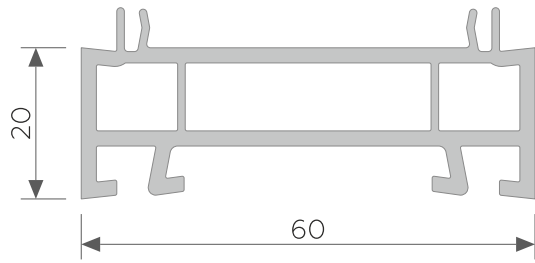
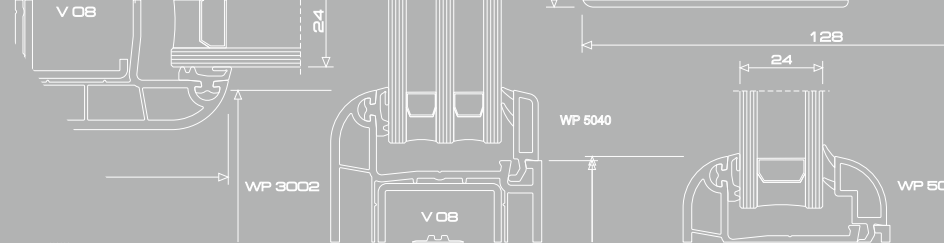


Pipe profile

WP 4111  
SMART



# ESSENTIAL WP 3000



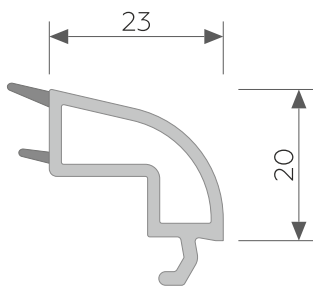
Frame extension

WP 4108  
SMART



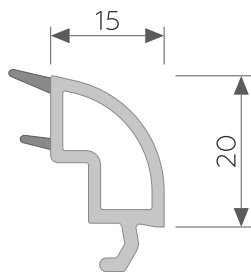
Coupling profile

WP 5012  
ENERGY



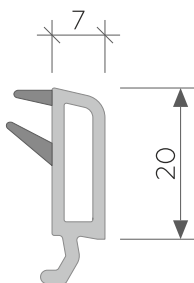
Glass bead 16mm

WP 5020  
ENERGY



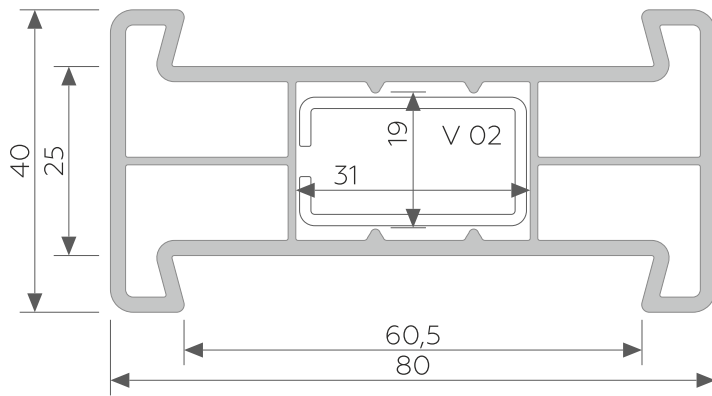
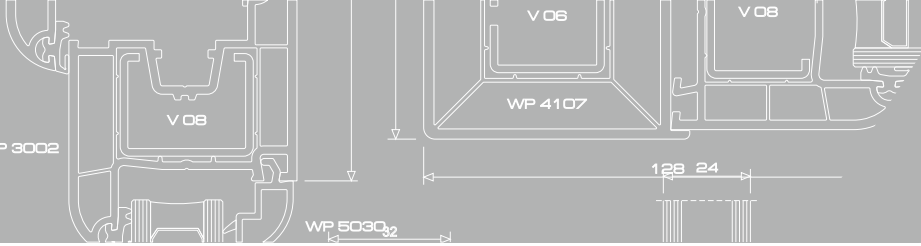
Glass bead 24mm

WP 5030  
ENERGY



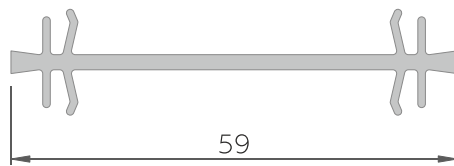
Glass bead 32mm

WP 5040  
ENERGY



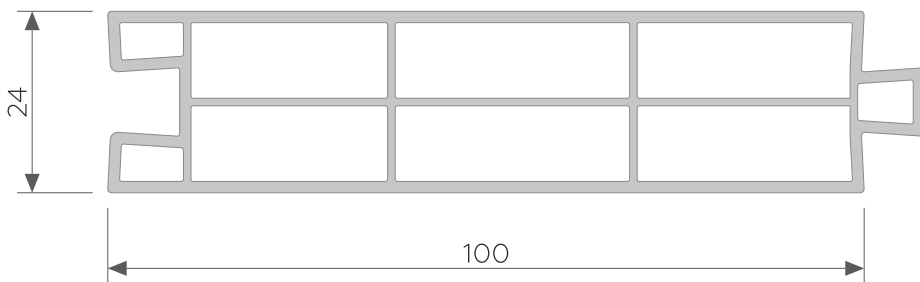
Coupling profile

WP 4113  
SMART



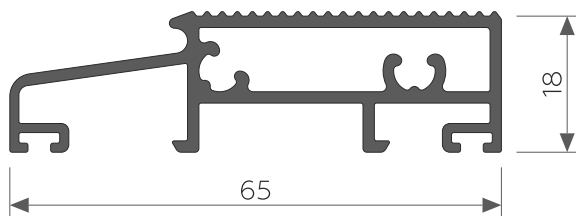
Coupling profile

WP 4112  
SMART



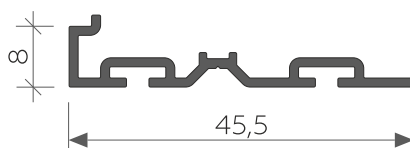
PVC Panel 24mm

WP 4119  
SMART



Aluminium door-sill

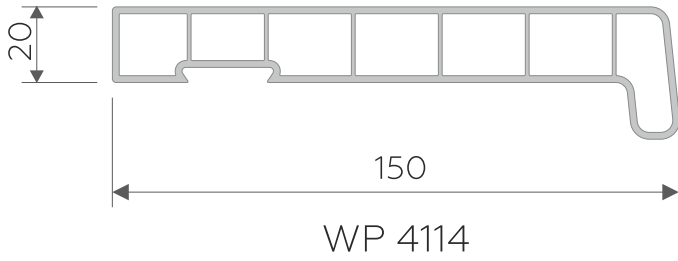
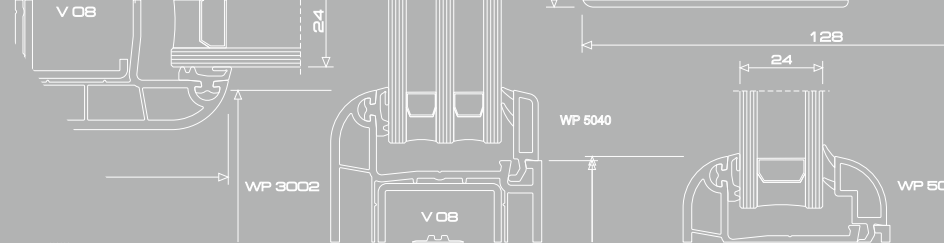
WP 4065  
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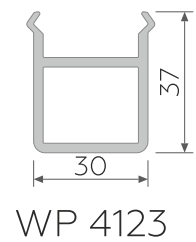
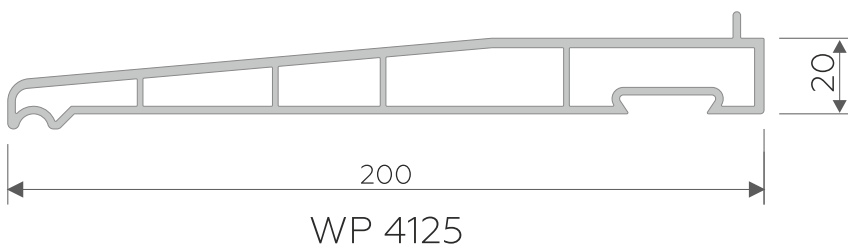
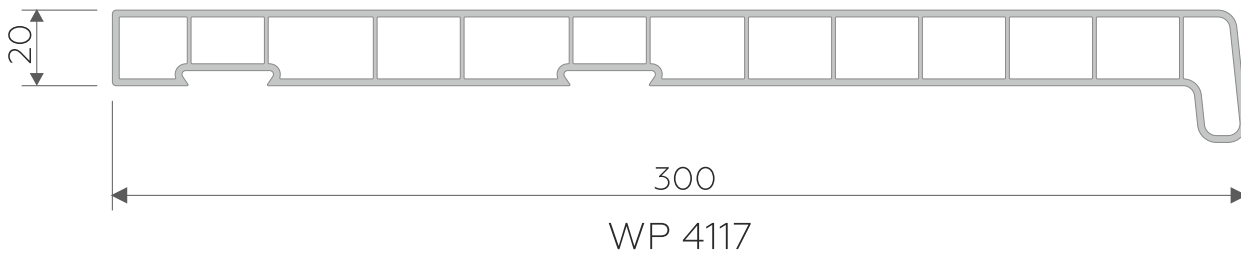
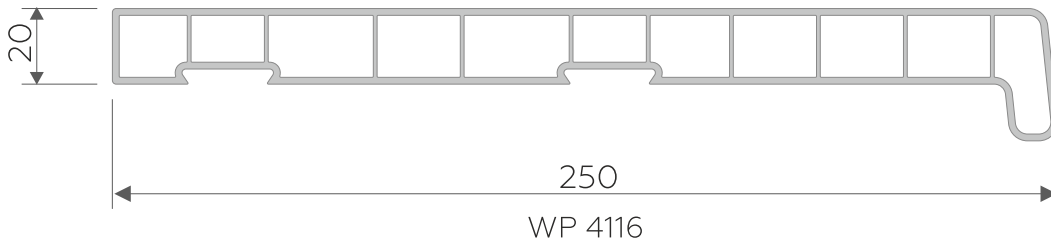
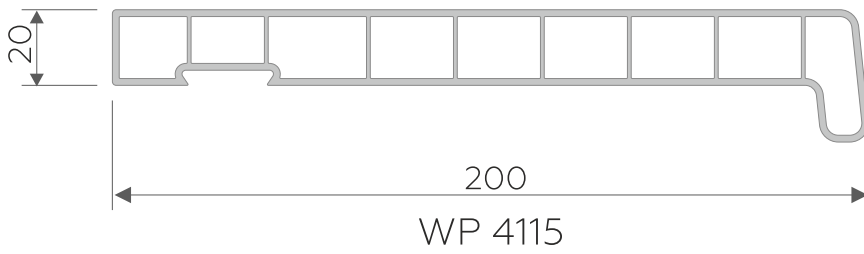
Additional profile for door

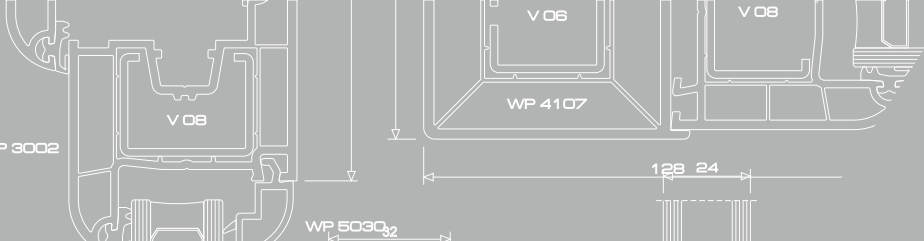
WP 4066  
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# ESSENTIAL WP 3000



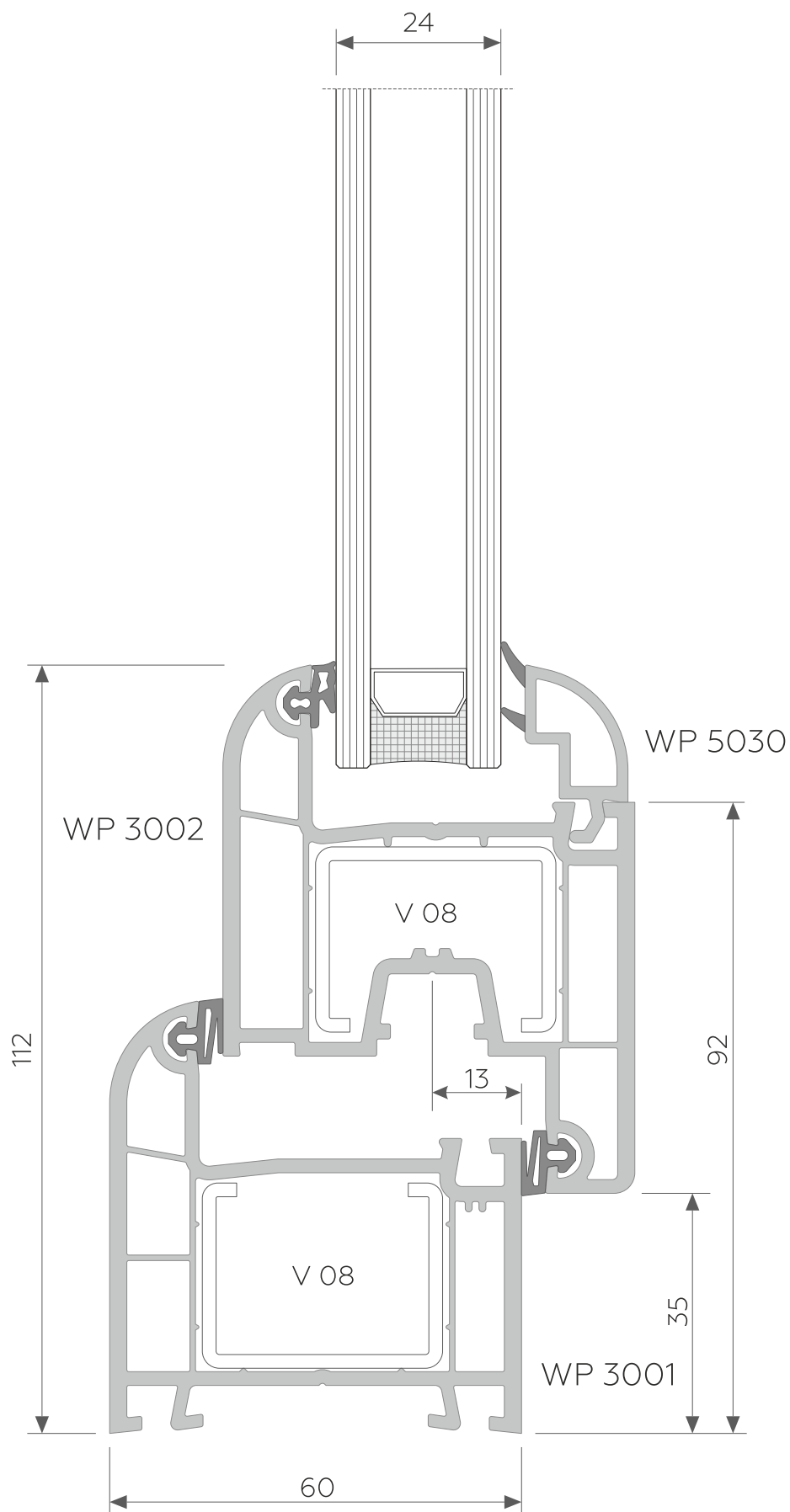
Under window profile



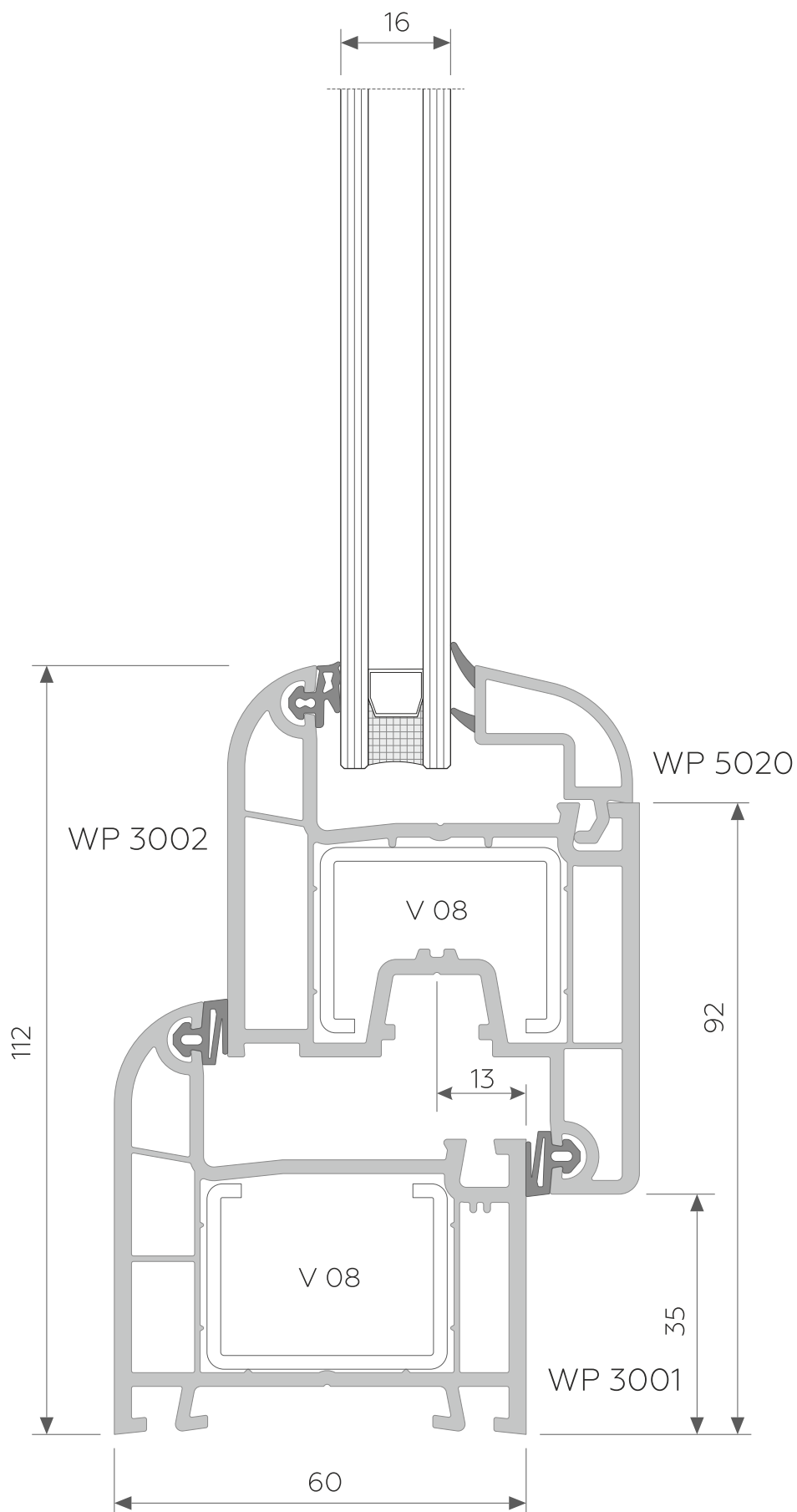


# ESSENTIAL WP 3000

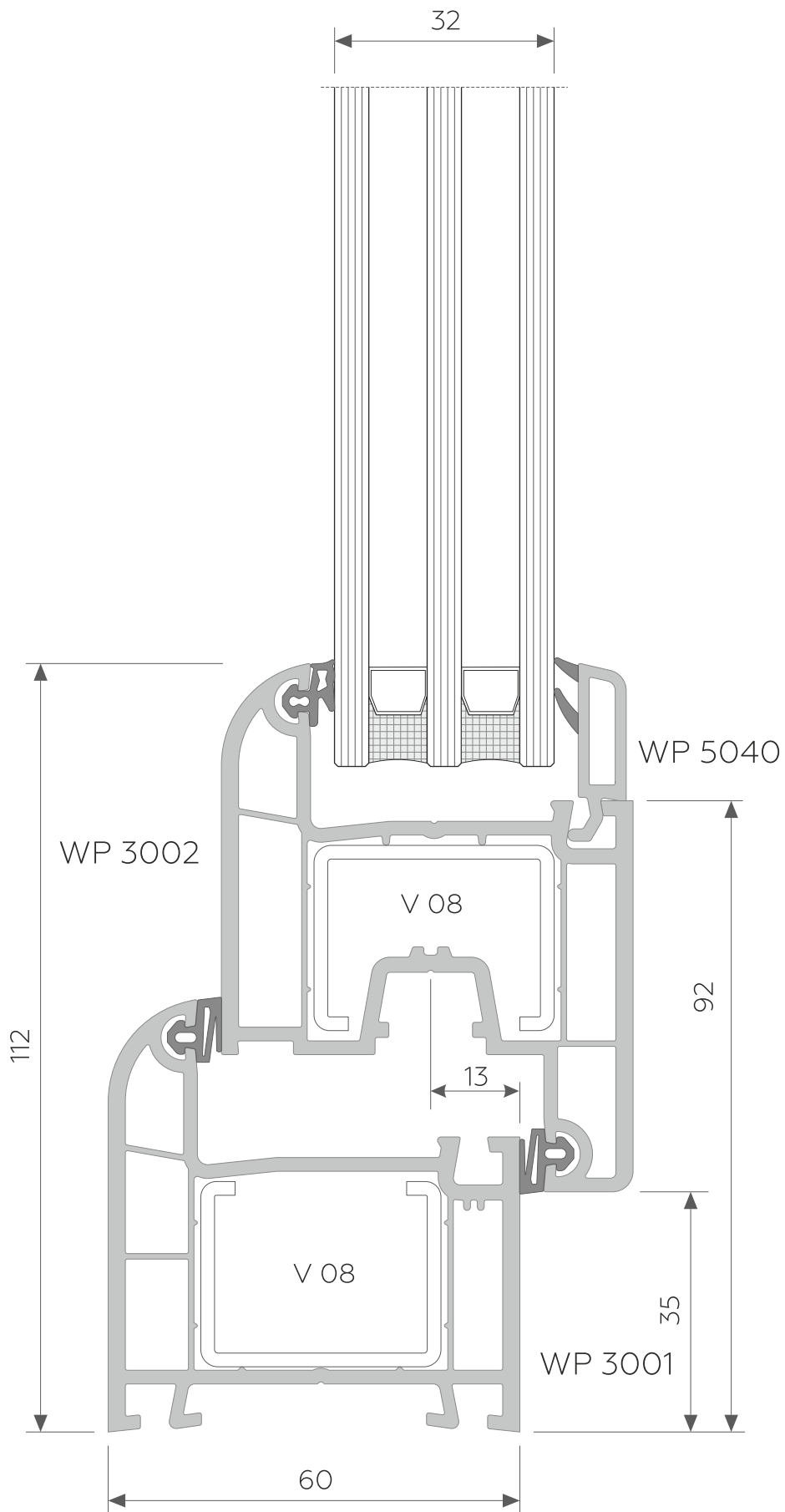
Assemblies



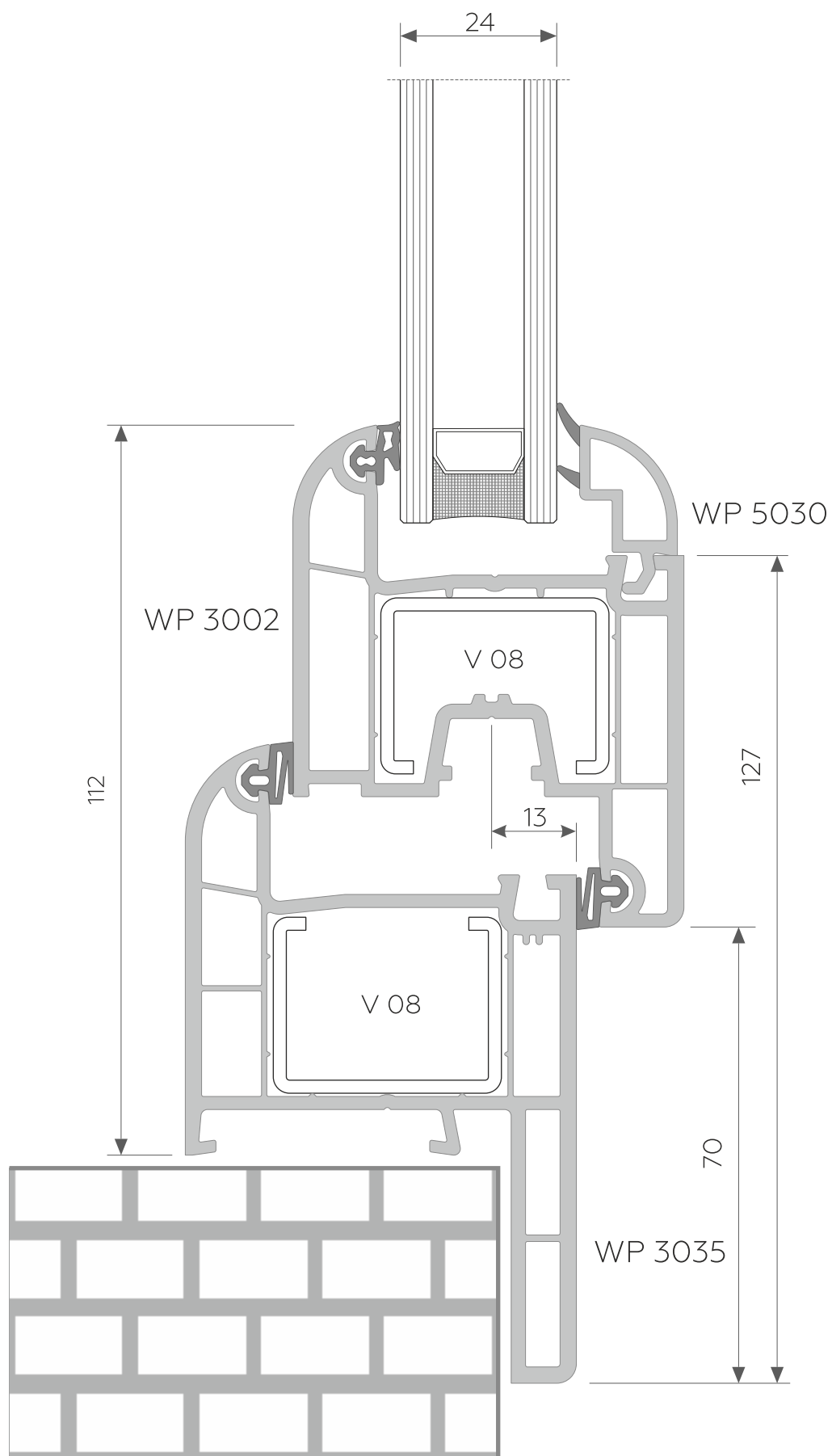
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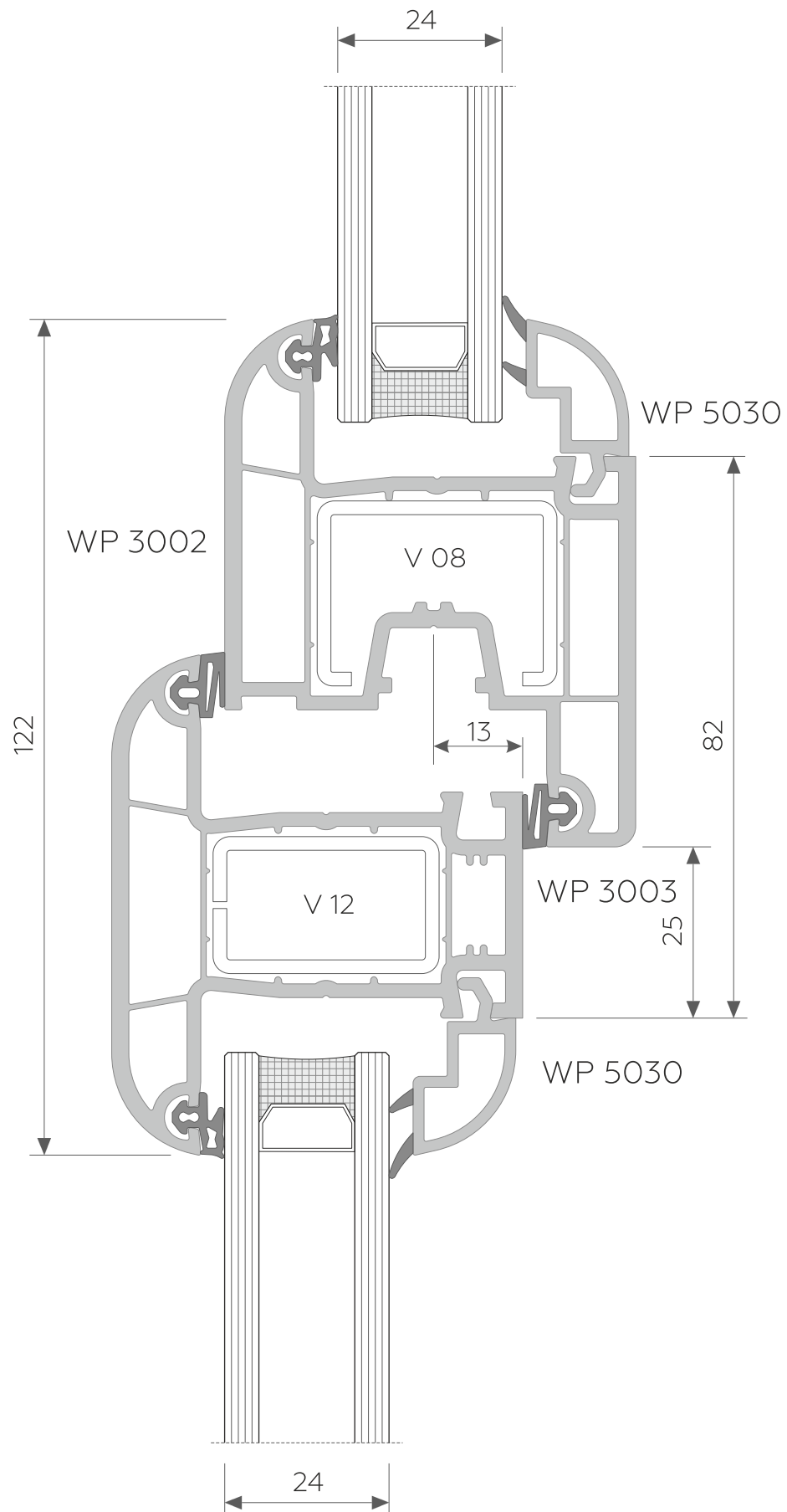
# ESSENTIAL WP 3000



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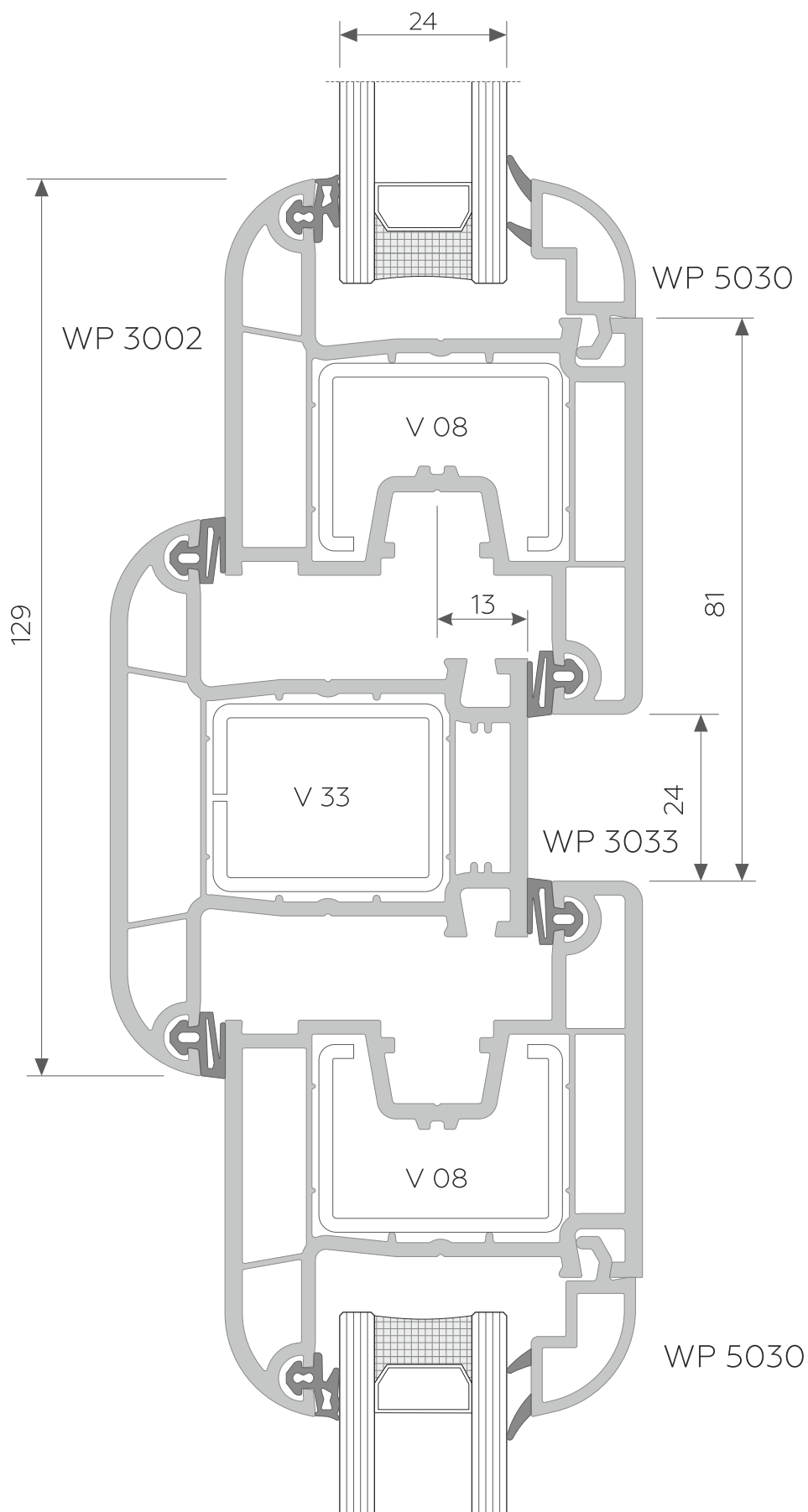


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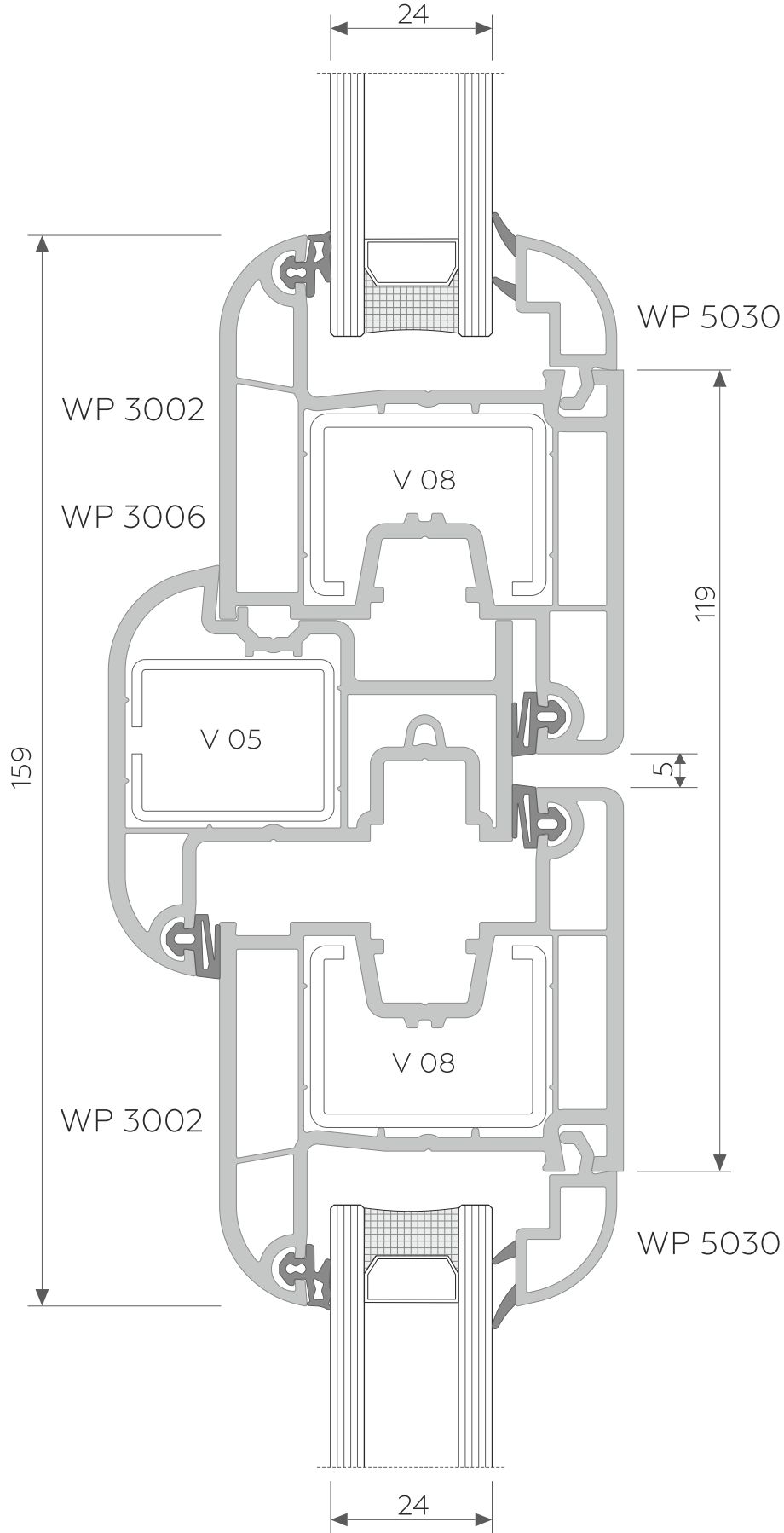




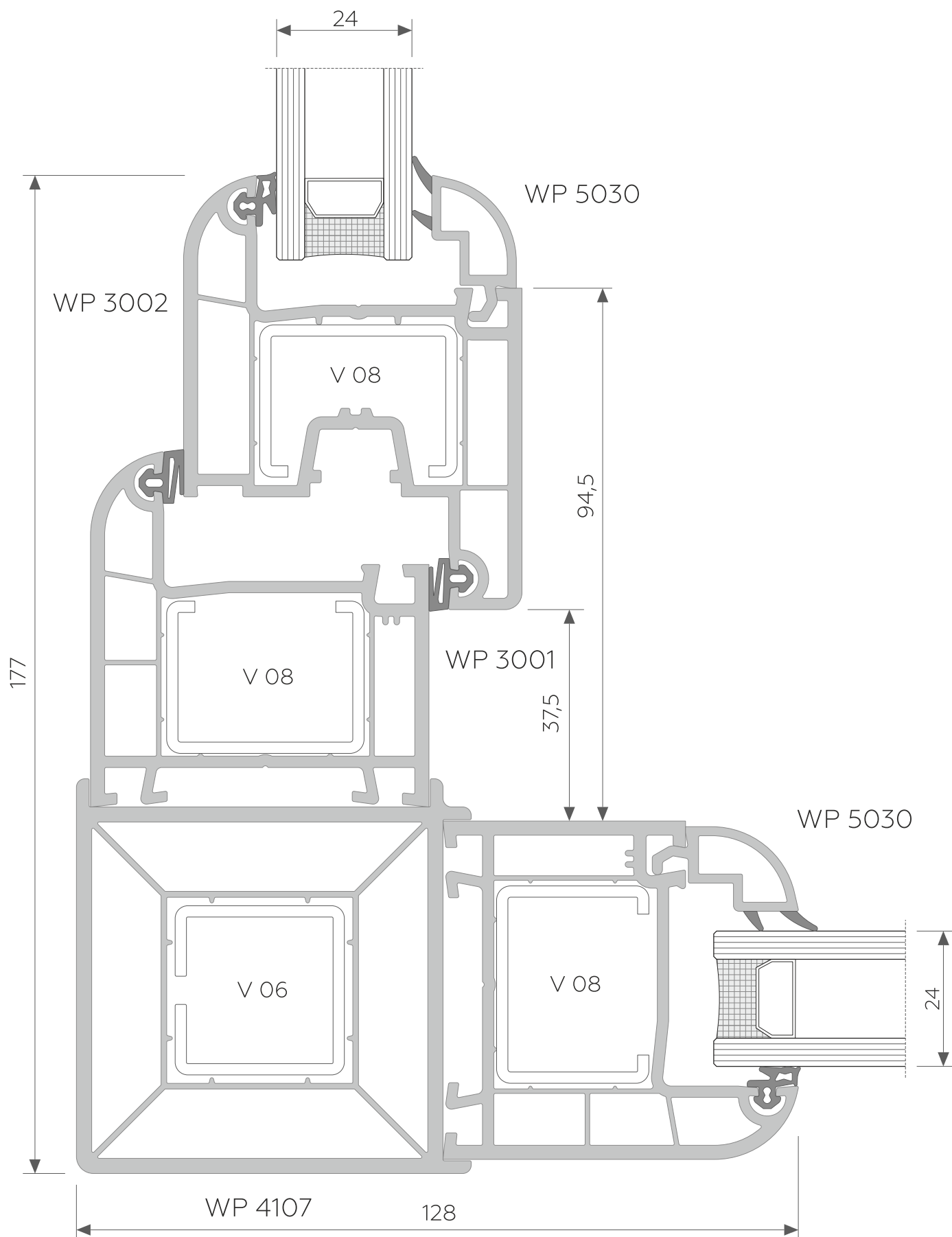
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ESSENTIAL WP 3000

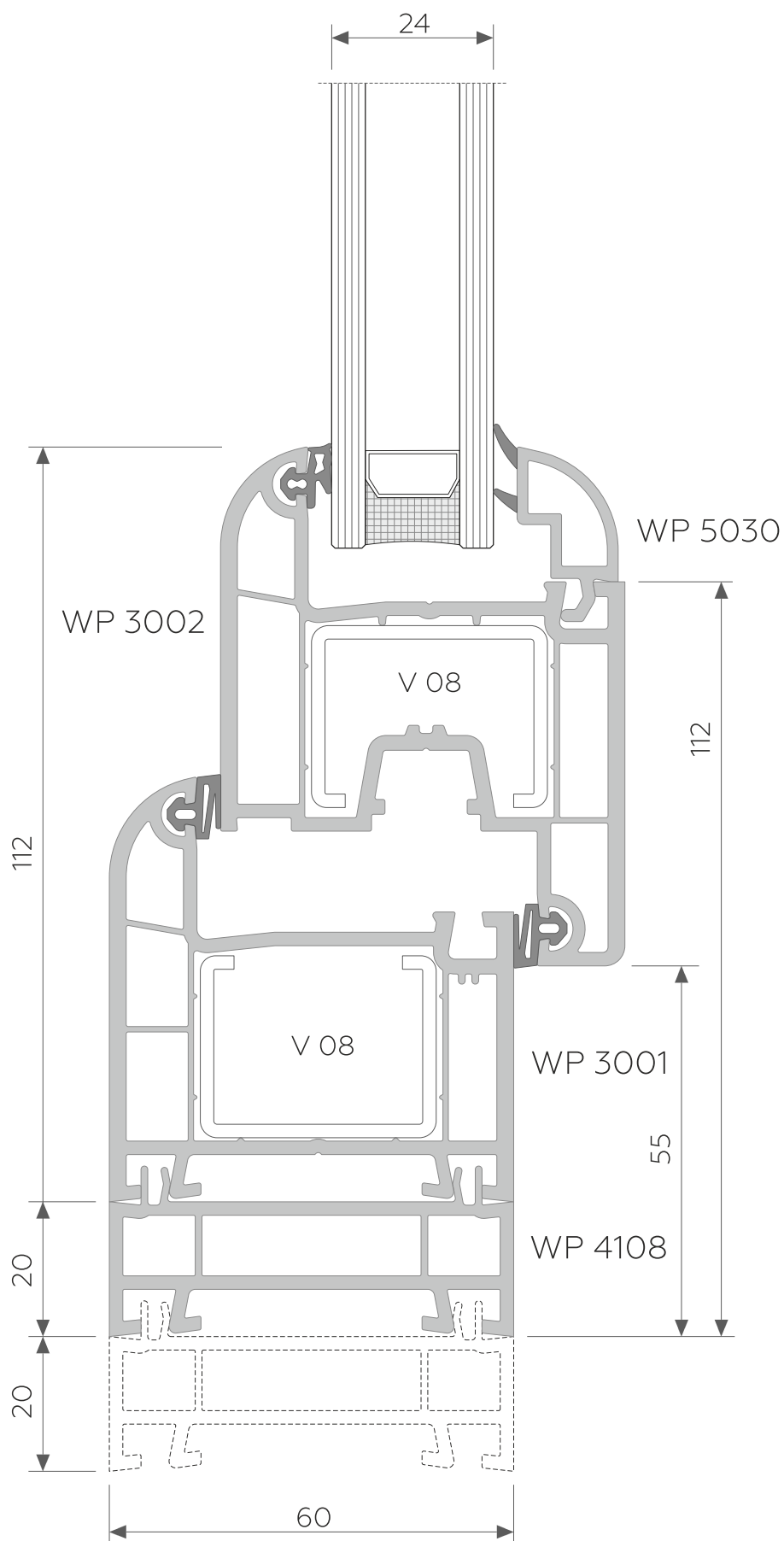


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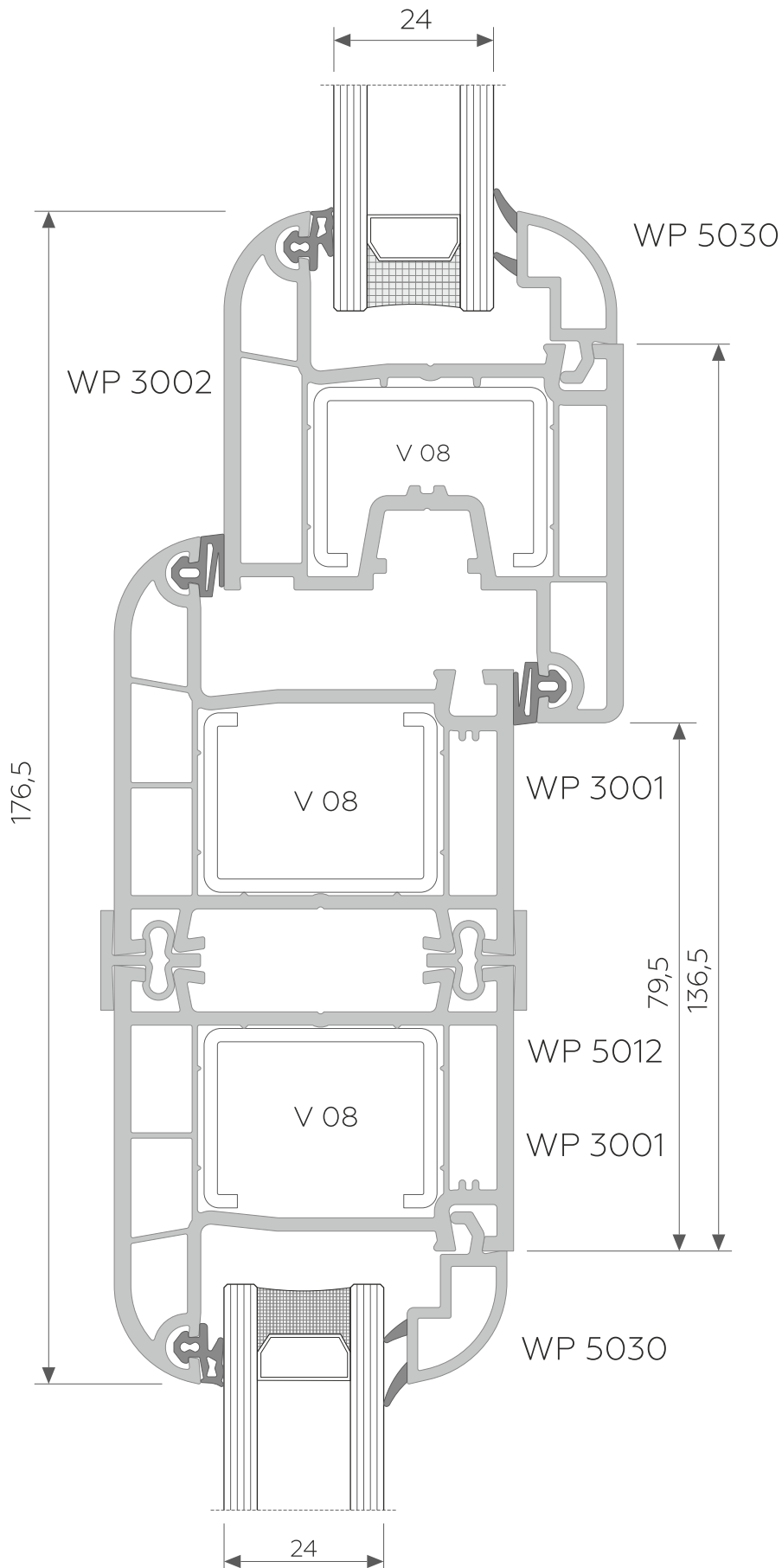




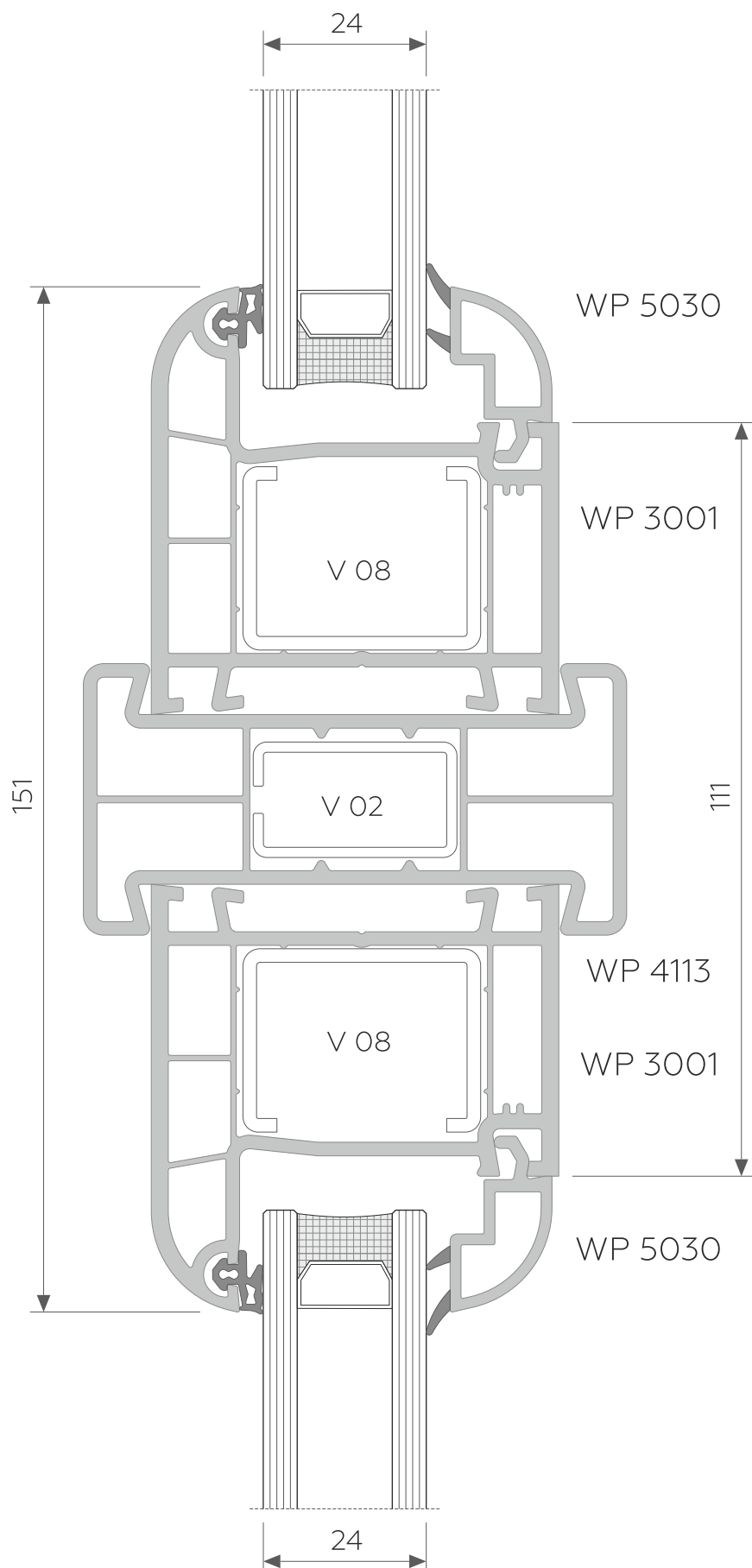
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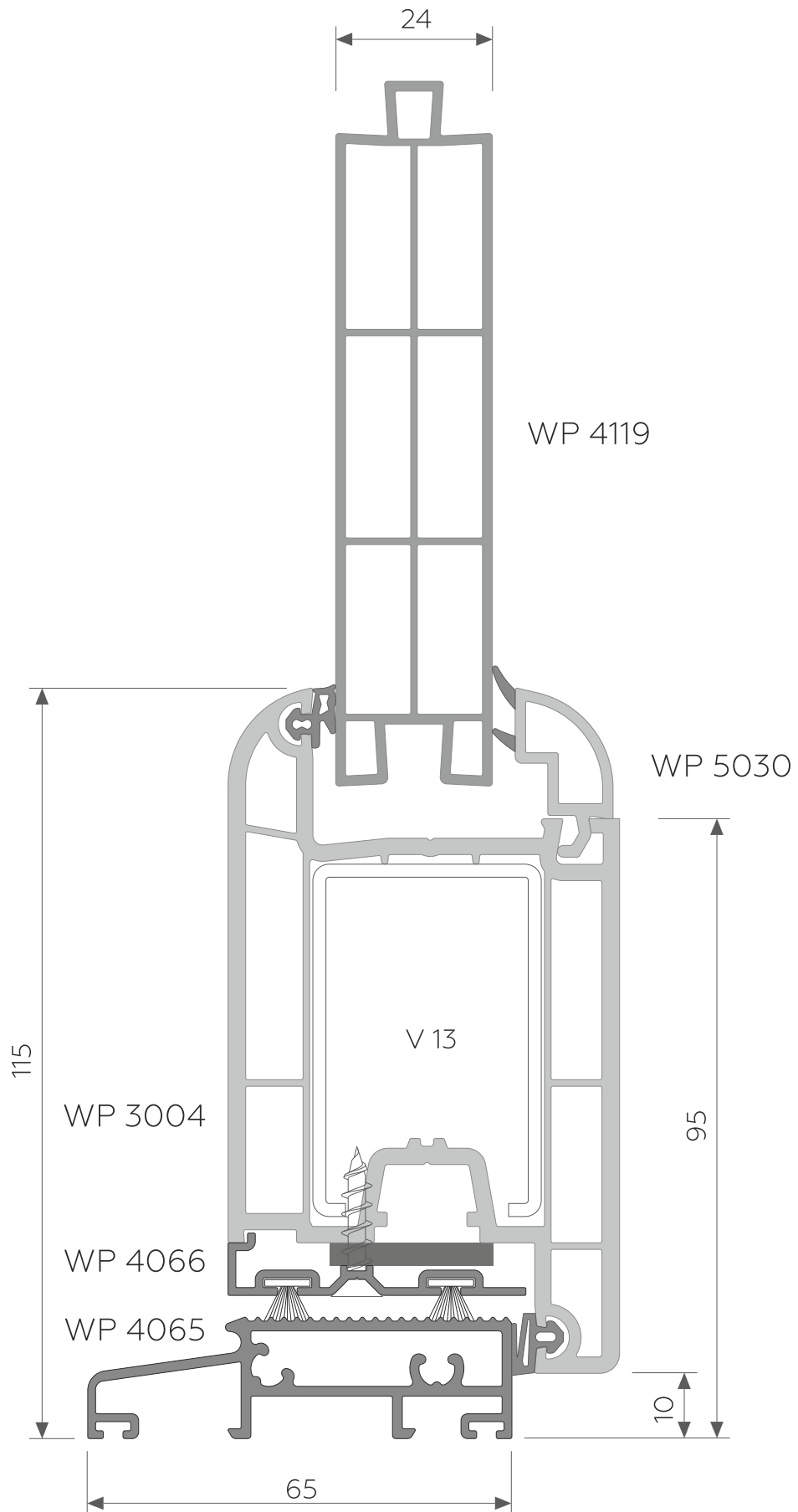
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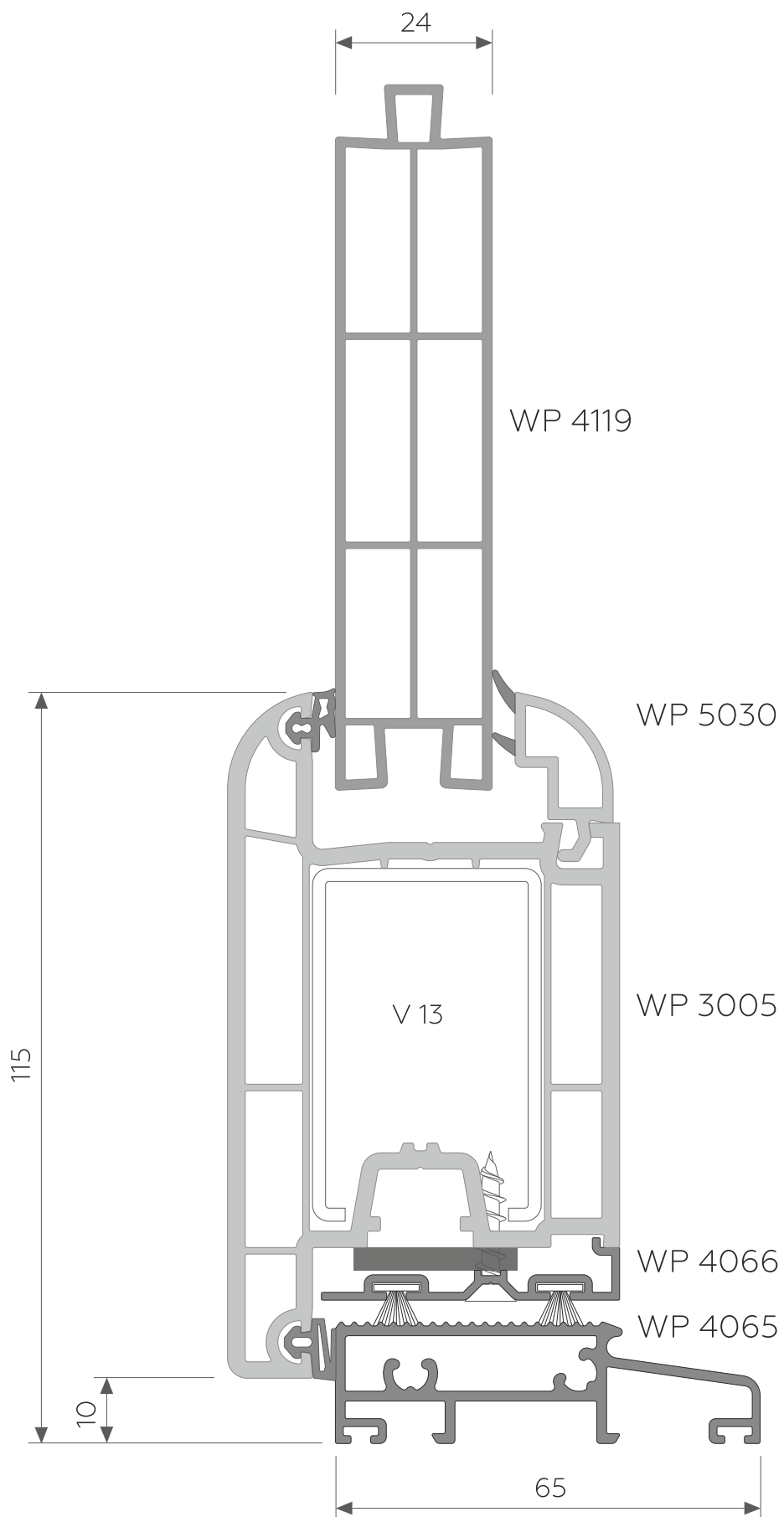


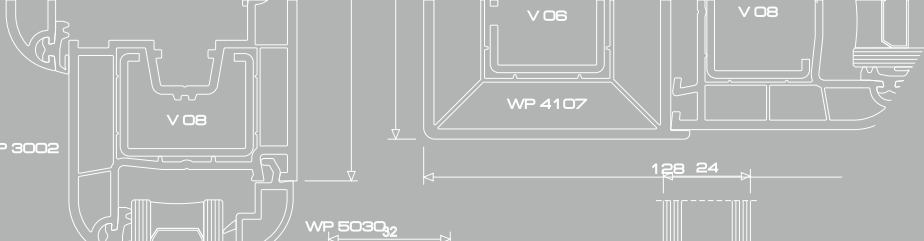
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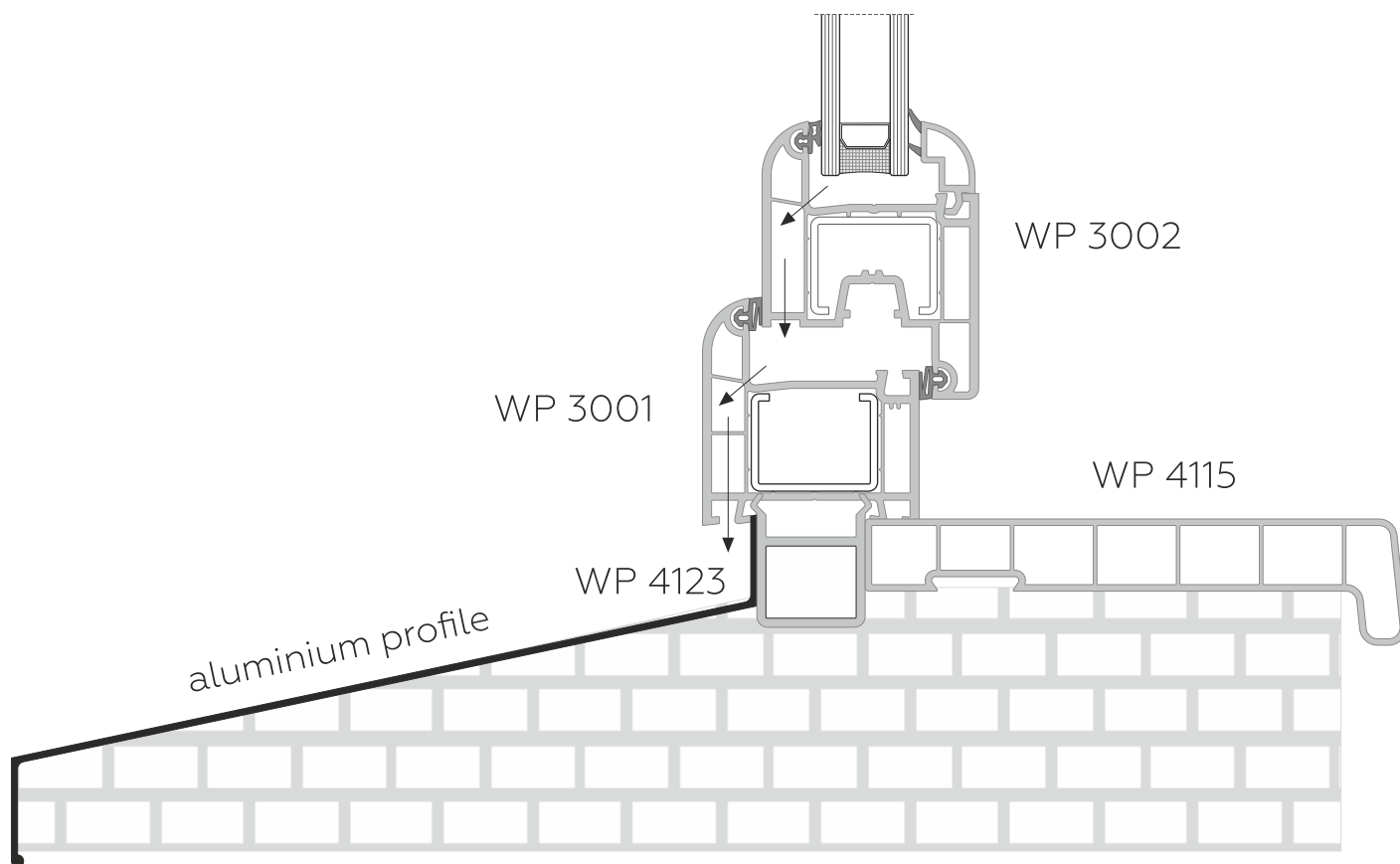
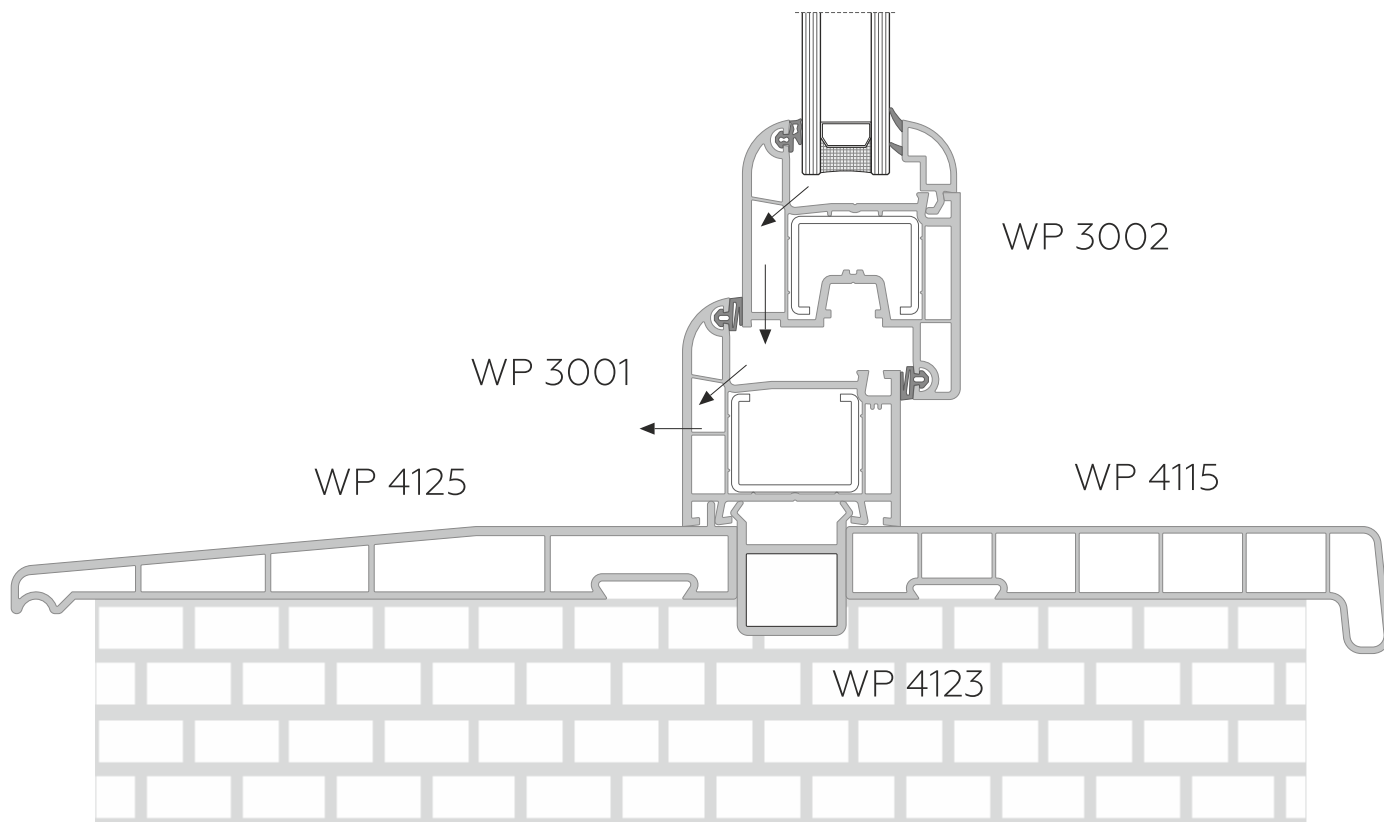


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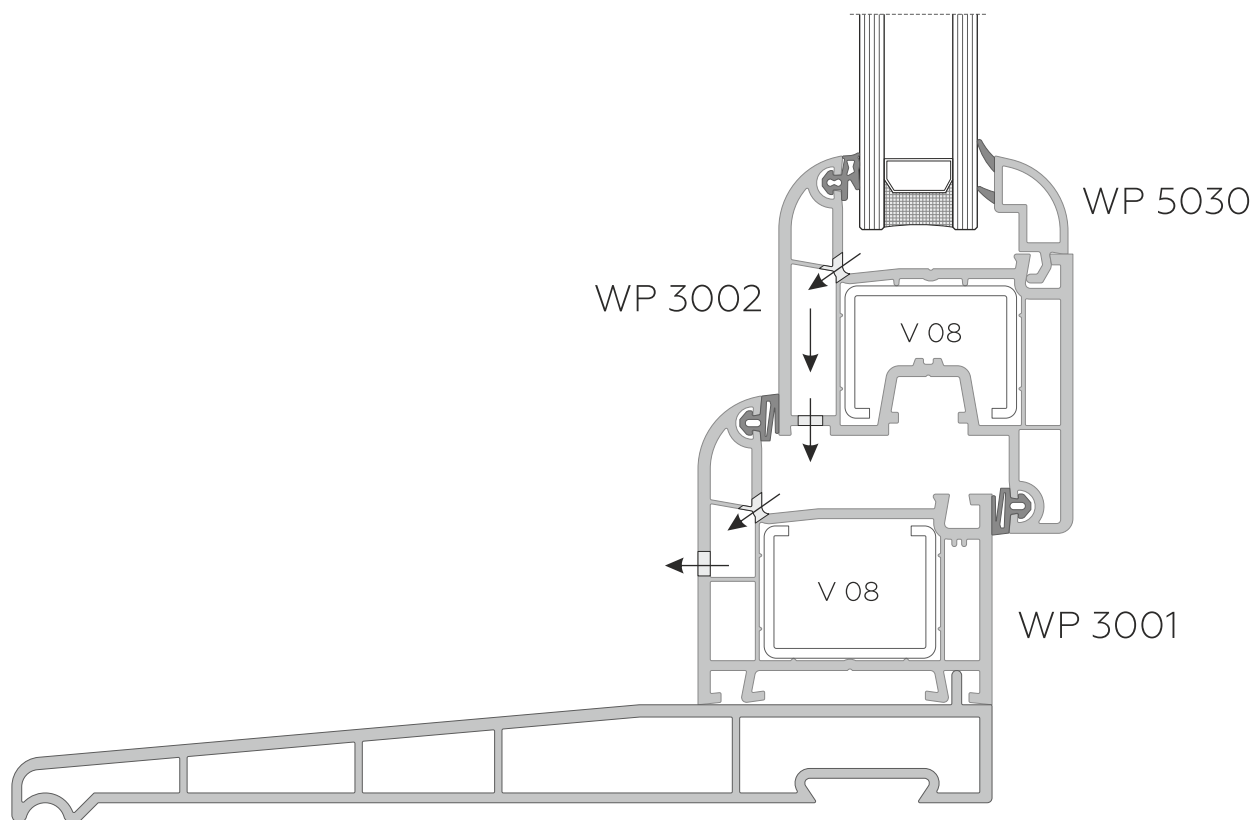
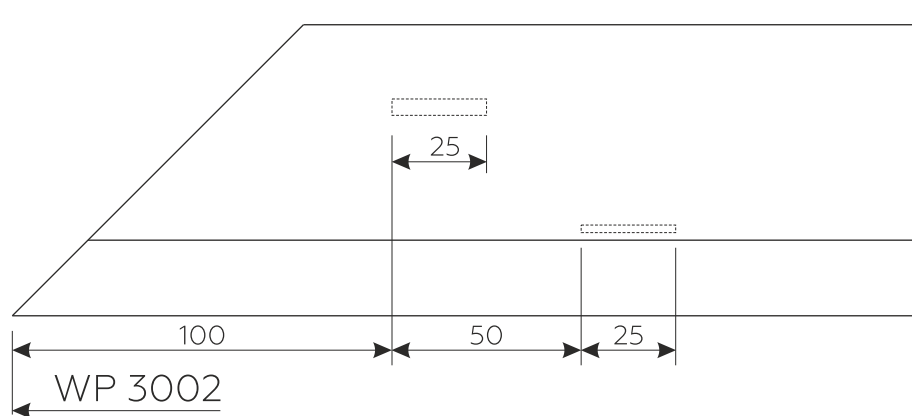
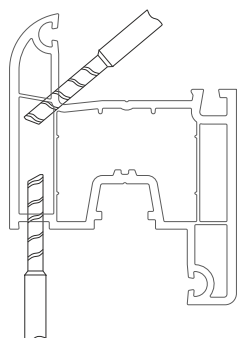
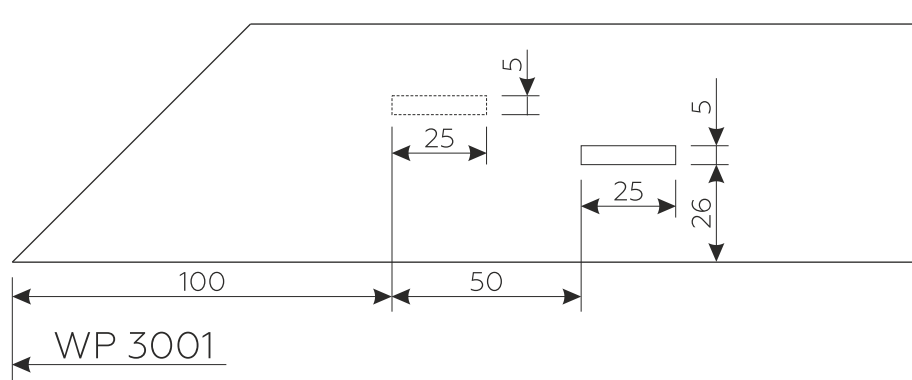
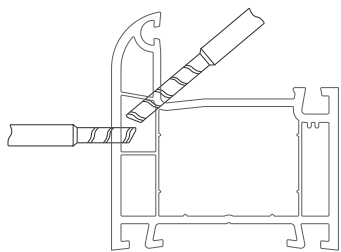
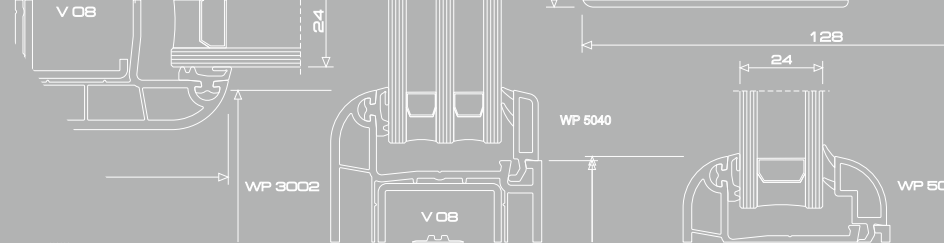


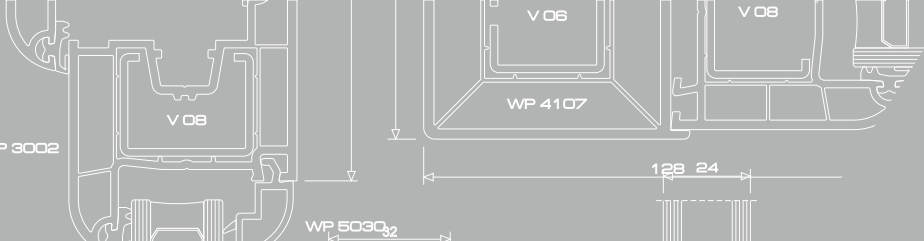
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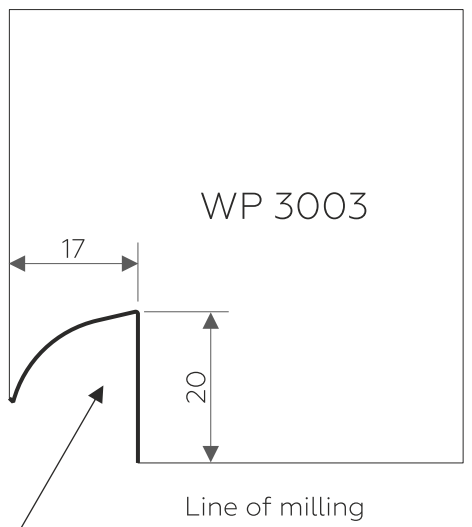
Drainage diagram



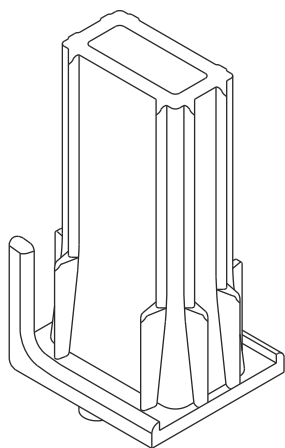


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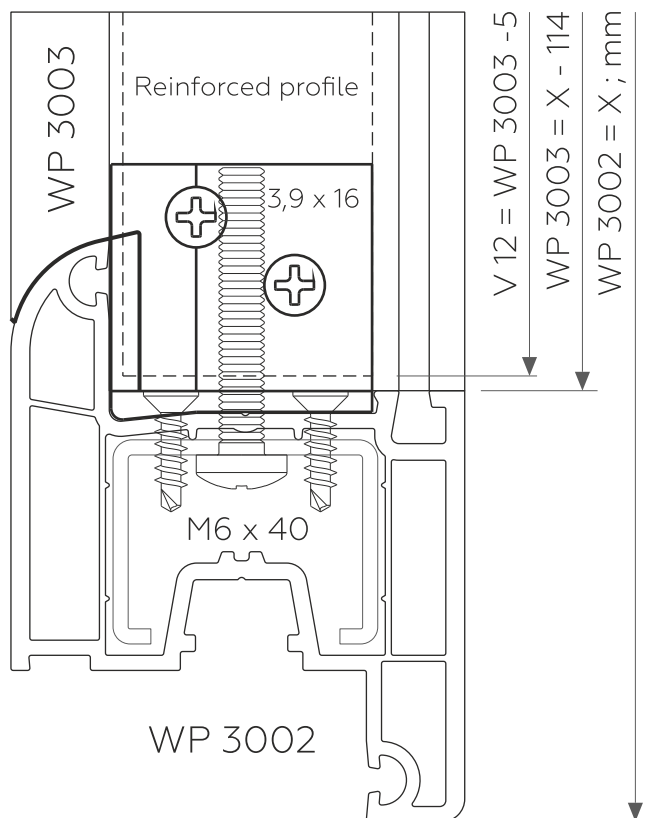
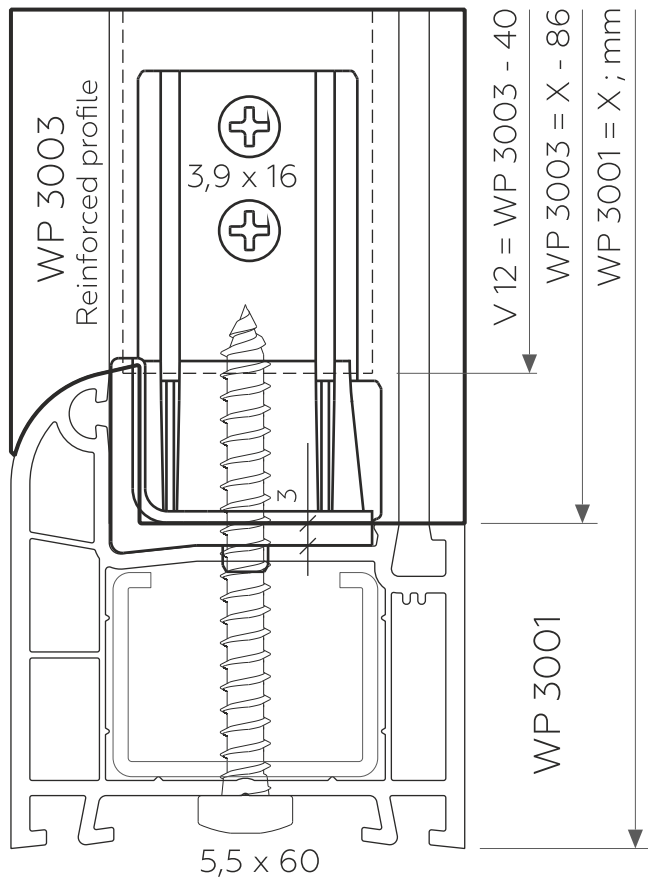
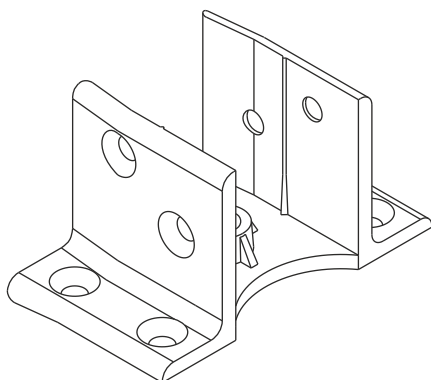
Mullion milling



Plastic joint

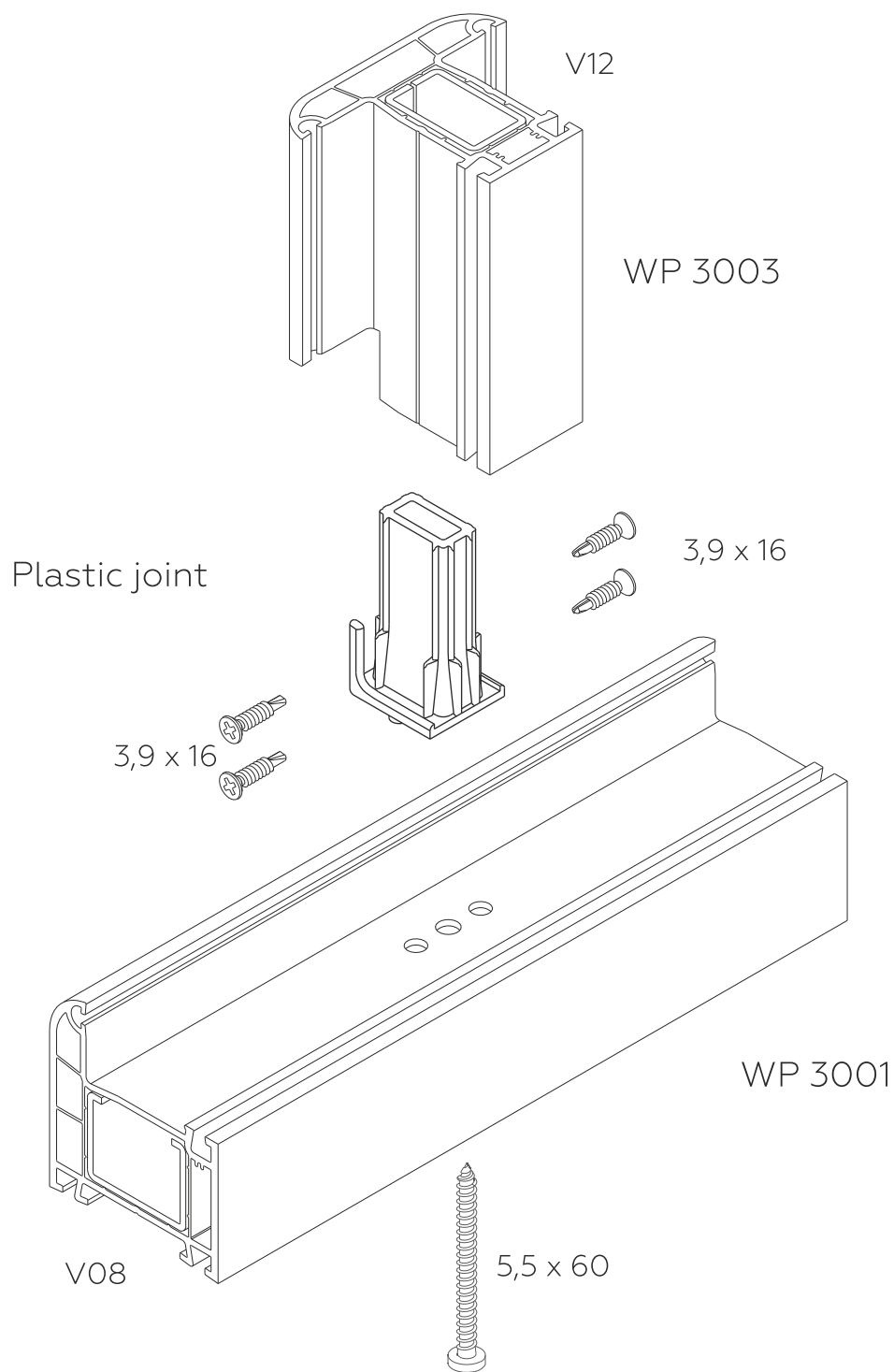
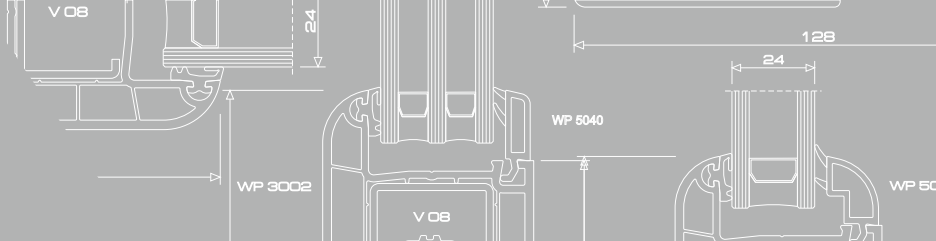


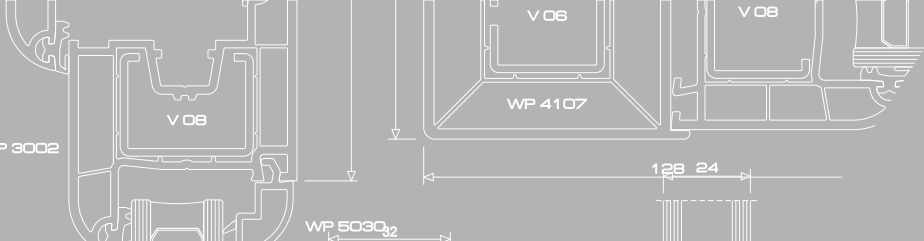
Metal joint



# ESSENTIAL WP 3000

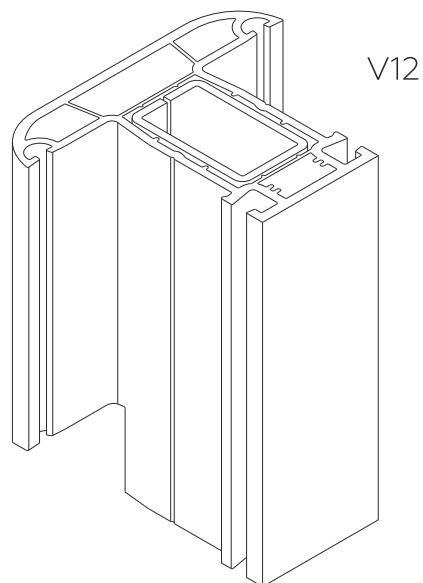
Scheme Mullion - Frame



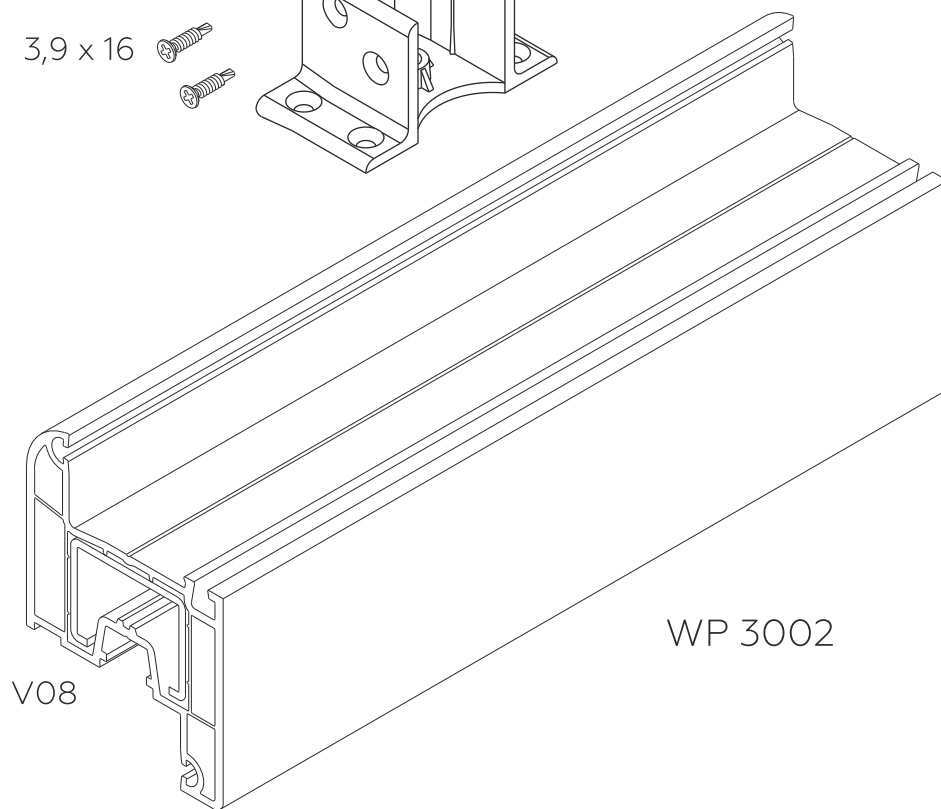
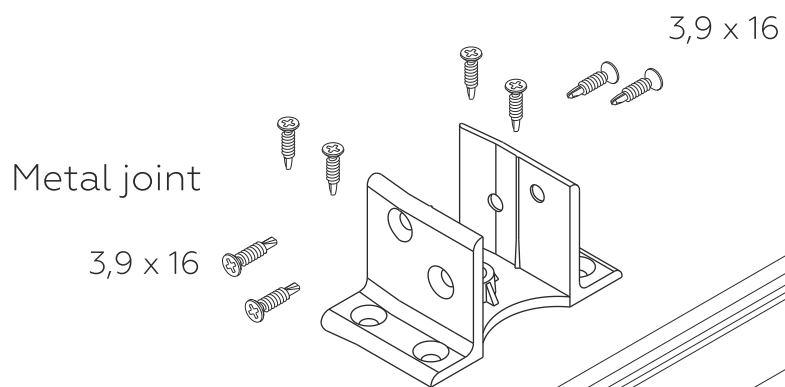


# ESSENTIAL WP 3000

Scheme mullion - mullion



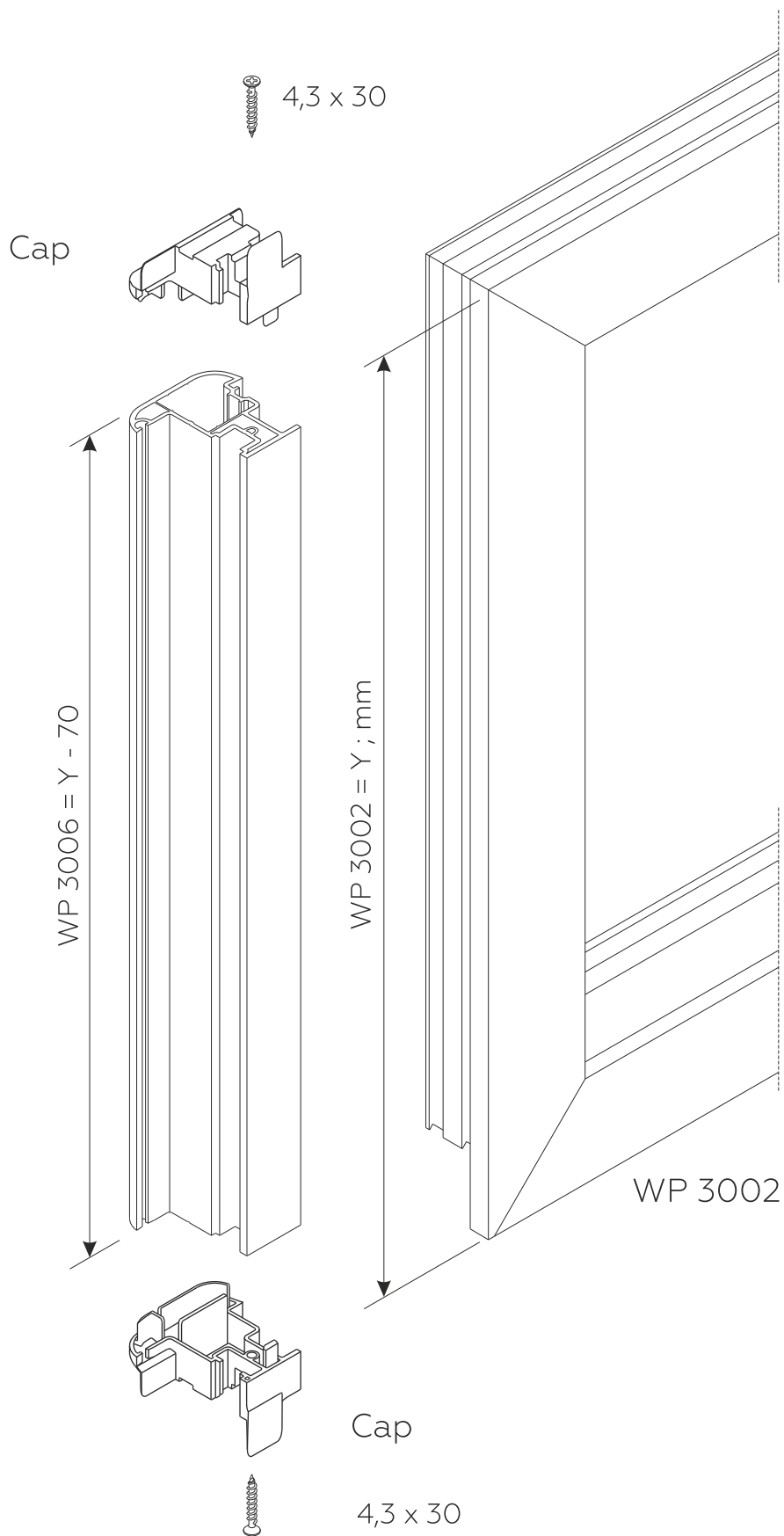
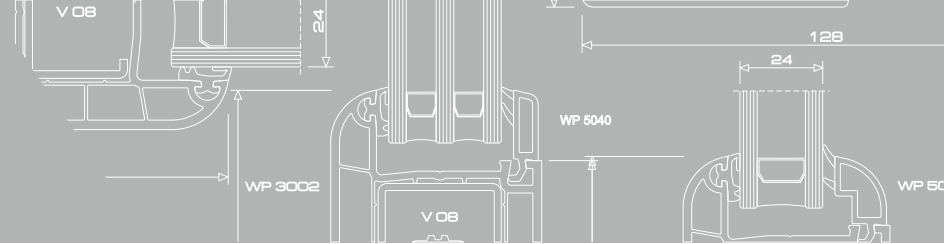
WP 3003



WP 3002


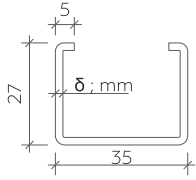
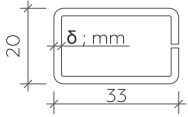
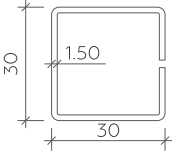
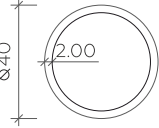
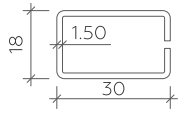
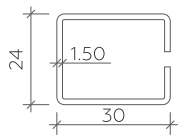
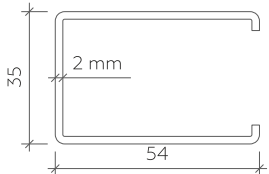
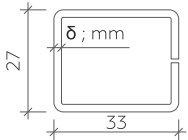
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Scheme Lap joint profile



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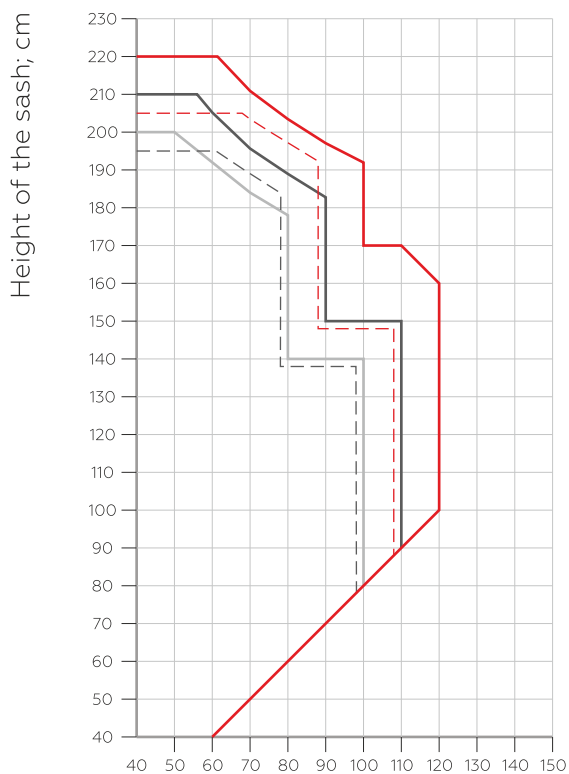
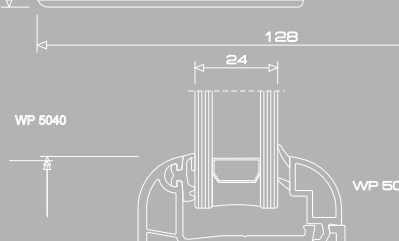
## Reinforcement profiles

Code	PVC profile	Reinforced profiles		Inertia moment
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			$I_x = 1,33 \text{ cm}^4$ $I_y = 1,76 \text{ cm}^4$
V13	WP 3004 WP 3005			$I_x = 6,47 \text{ cm}^4$ $I_y = 9,29 \text{ cm}^4$
V33	WP 3033		$\delta = 1,5$	$I_x = 1,88 \text{ cm}^4$ $I_y = 2,53 \text{ cm}^4$
			$\delta = 2$	$I_x = 2,39 \text{ cm}^4$ $I_y = 3,23 \text{ cm}^4$

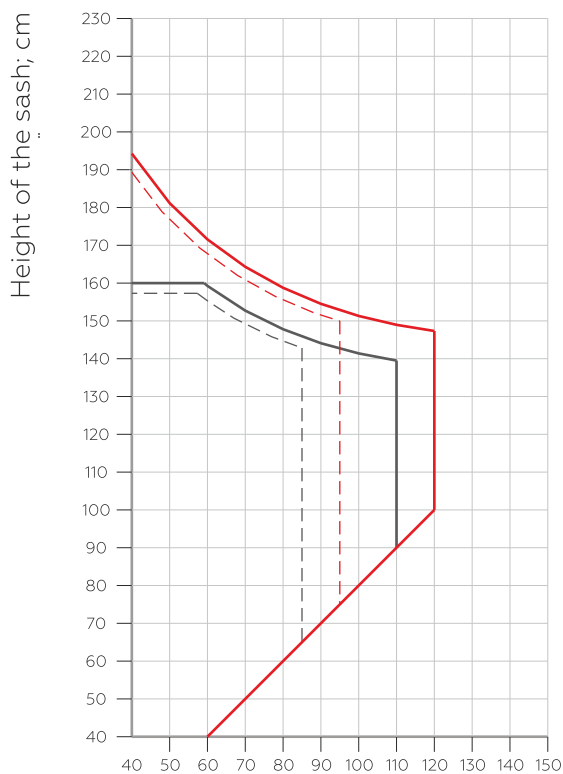


# ESSENTIAL WP 3000

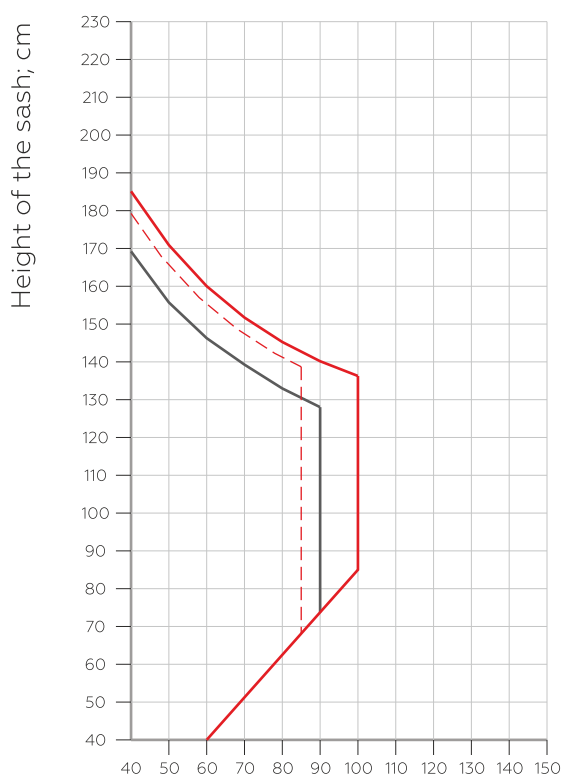
Graphics for finding the maximum size of the sashes



Graphic 2 Width of the sash; cm



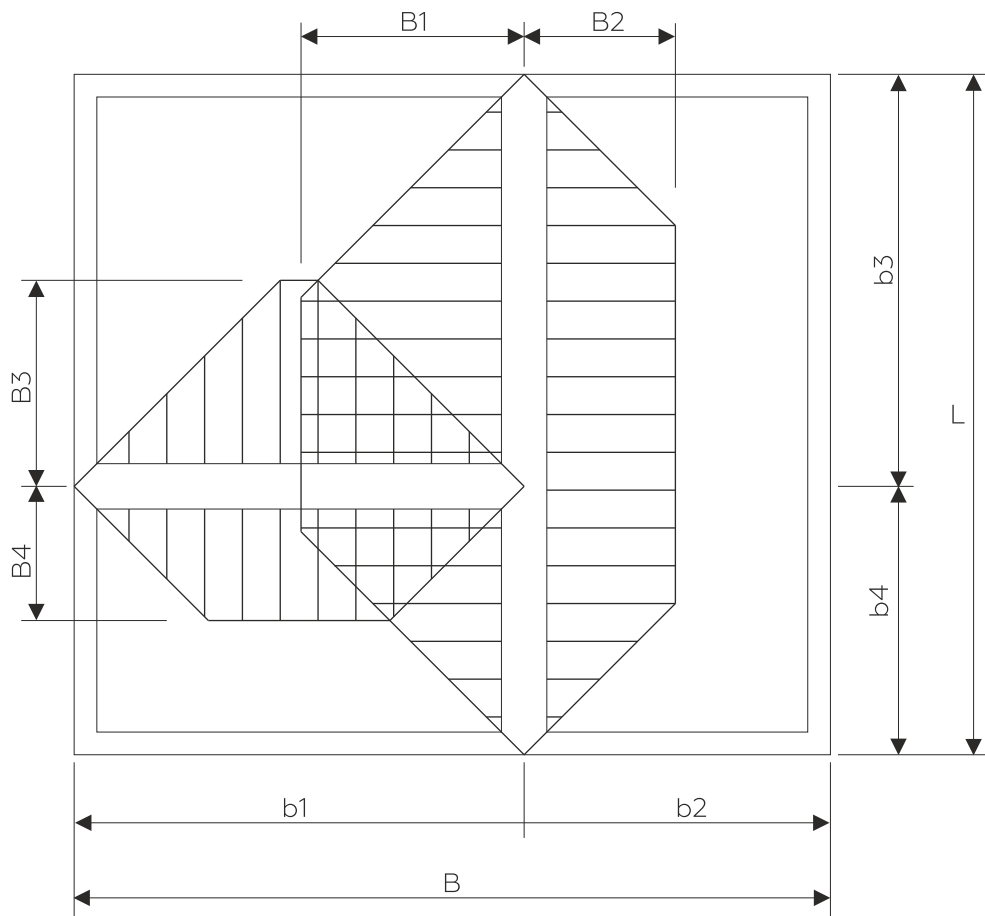
Graphic 1 Width of the sash; cm



Graphic 3 Width of the sash; cm

- V08 / 2,0 mm /  $I_x - 1,51 \text{ cm}^4$  ;  $I_y = 3,53 \text{ cm}^4$
- V08 / 1,5 mm /  $I_x - 1,24 \text{ cm}^4$  ;  $I_y = 2,80 \text{ cm}^4$
- V08 / 1,2 mm /  $I_x - 1,02 \text{ cm}^4$  ;  $I_y = 2,32 \text{ cm}^4$

The graphics for choosing reinforcement profiles for laminated profiles are with dotted line.



Calculating the moment of inertia

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

**W**- Wind pressure N/mm<sup>2</sup>

Height of the building 0-8m: **W** = 600 Pa

**W**=0,0006 N/mm<sup>2</sup>

Height of the building 8-20m: **W** = 960 Pa

**W**=0,0096 N/mm<sup>2</sup>

Height of the building 20-100m: **W** = 1320 Pa

**W**=0,00132 N/mm<sup>2</sup>

Height of the building 20-100m: **W** = 1320 Pa

**W**=0,00132 N/mm<sup>2</sup>

**L** - Height; cm

**B** - Width; cm

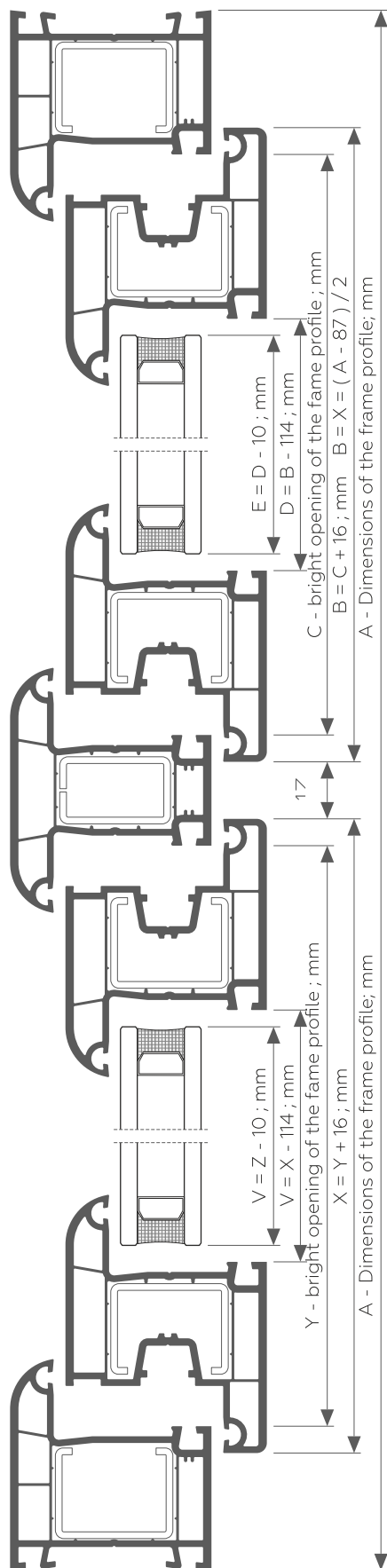
**E** - Elasticity module

**E**<sub>steel</sub> = 210 000 N/mm<sup>2</sup>

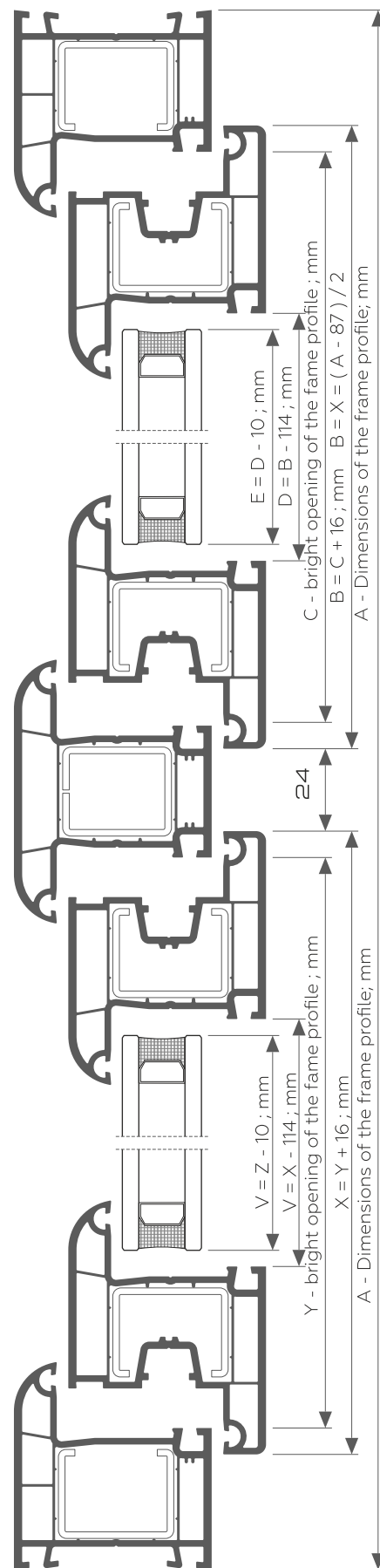
**E**<sub>aluminium</sub> = 70 000 N/mm<sup>2</sup>

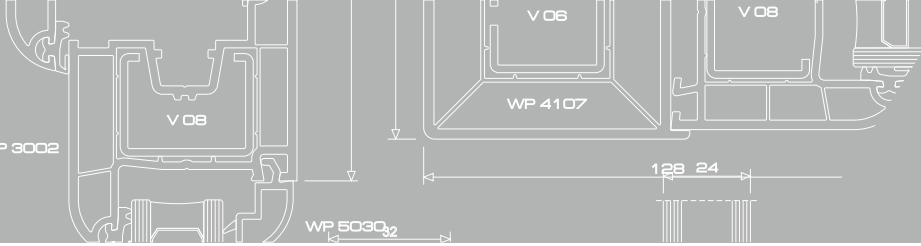
**f**- Slack eligibility (f=L/300; f<0,8 cm)

Double open window with million WP 3003 ESSENTIAL

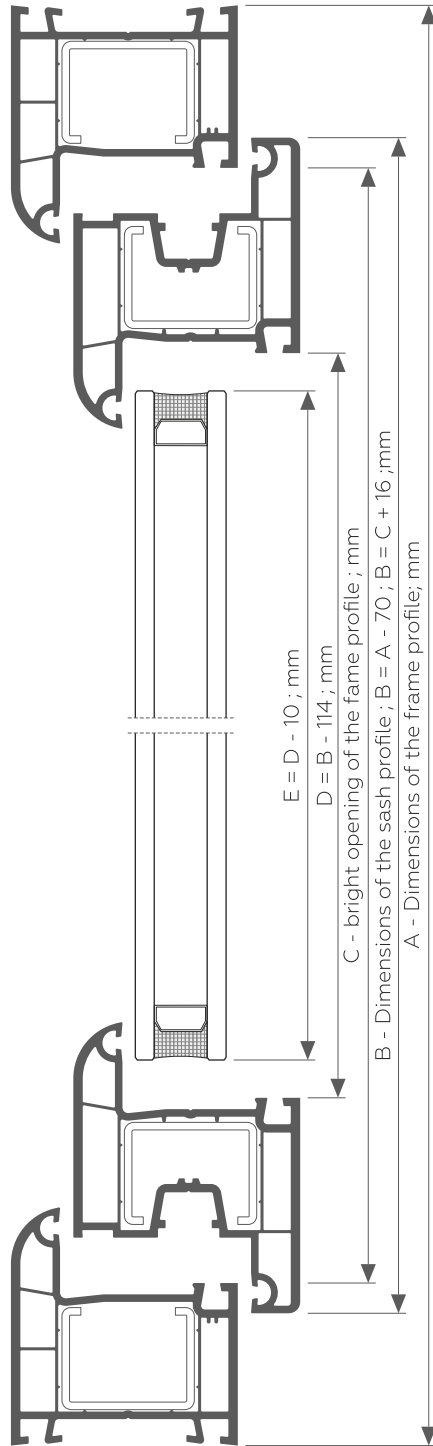


Double open window with million WP 3003 ESSENTIAL

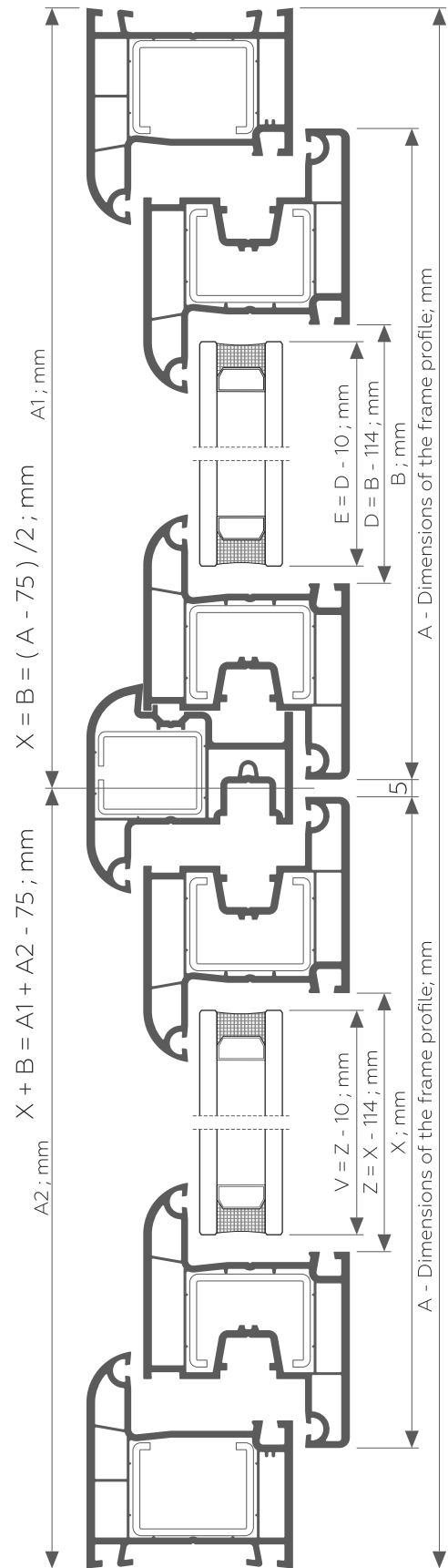




A single open window

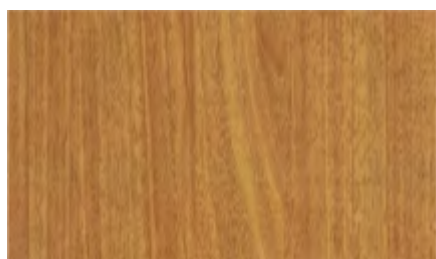
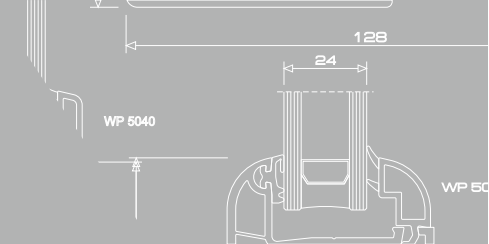


Double open window with a lap joint profile



# ESSENTIAL WP 3000

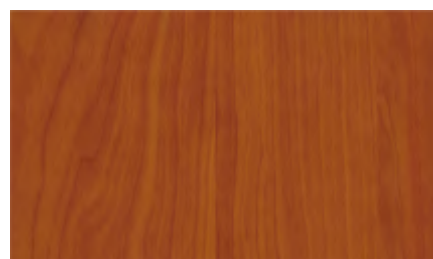
Profiles with laminate and arcs



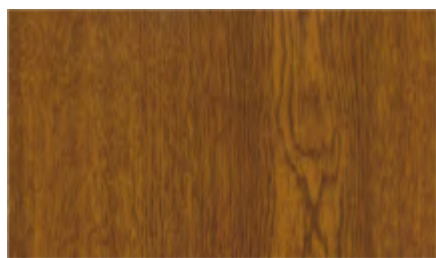
Light walnut



Dark walnut



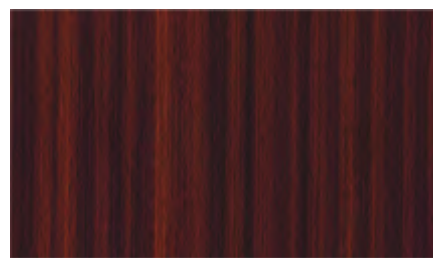
Cherry



Golden oak



Dark oak

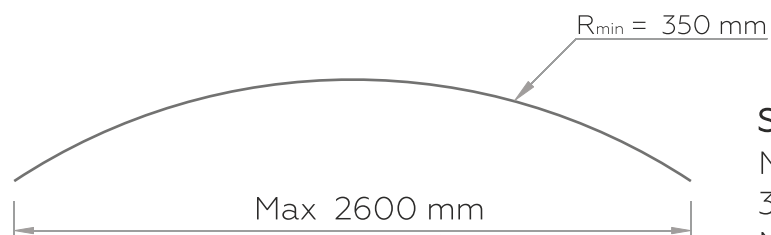


Mahogany



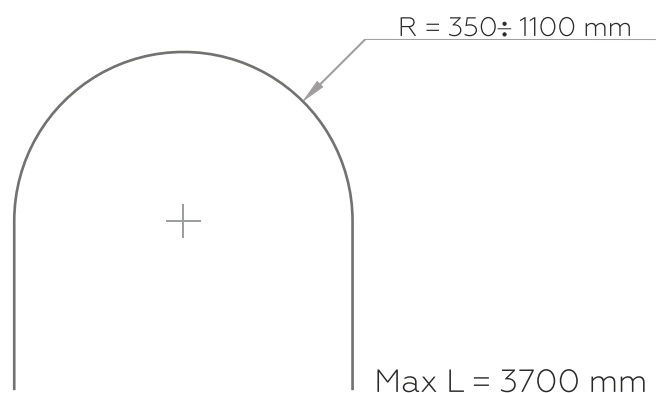
### Arcs:


Minimum radius of the arc:  
350mm.  
Maximum length of the chord:  
2600 mm.



### Semicircles:

Minimum radius of the semicircle:  
350mm.  
Maximum radius:  
1100mm.  
Maximum length of the curve together  
with the two verticals:  
3700 mm.





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