



Building excellence every day



SMARTIA  
S350

[www.alumil.com](http://www.alumil.com)

### What

- Thermally insulated sliding system
- Modern flat design with minimum visible sightlines
- Ease & flexibility of construction
- Of the highest performance for its category



### Why

- A value for money solution for sliding thermally insulated windows & doors
- Follows the architectural trends for less visible aluminium frames
- Gain market share from competitors with similar systems in LSP and residential market



Energy & cost saving  
thanks to the thermally  
insulated profiles

3

Higher sound reduction  
with glazing up to 28mm

4

Maximum  
visibility with  
only 25mm  
sightline

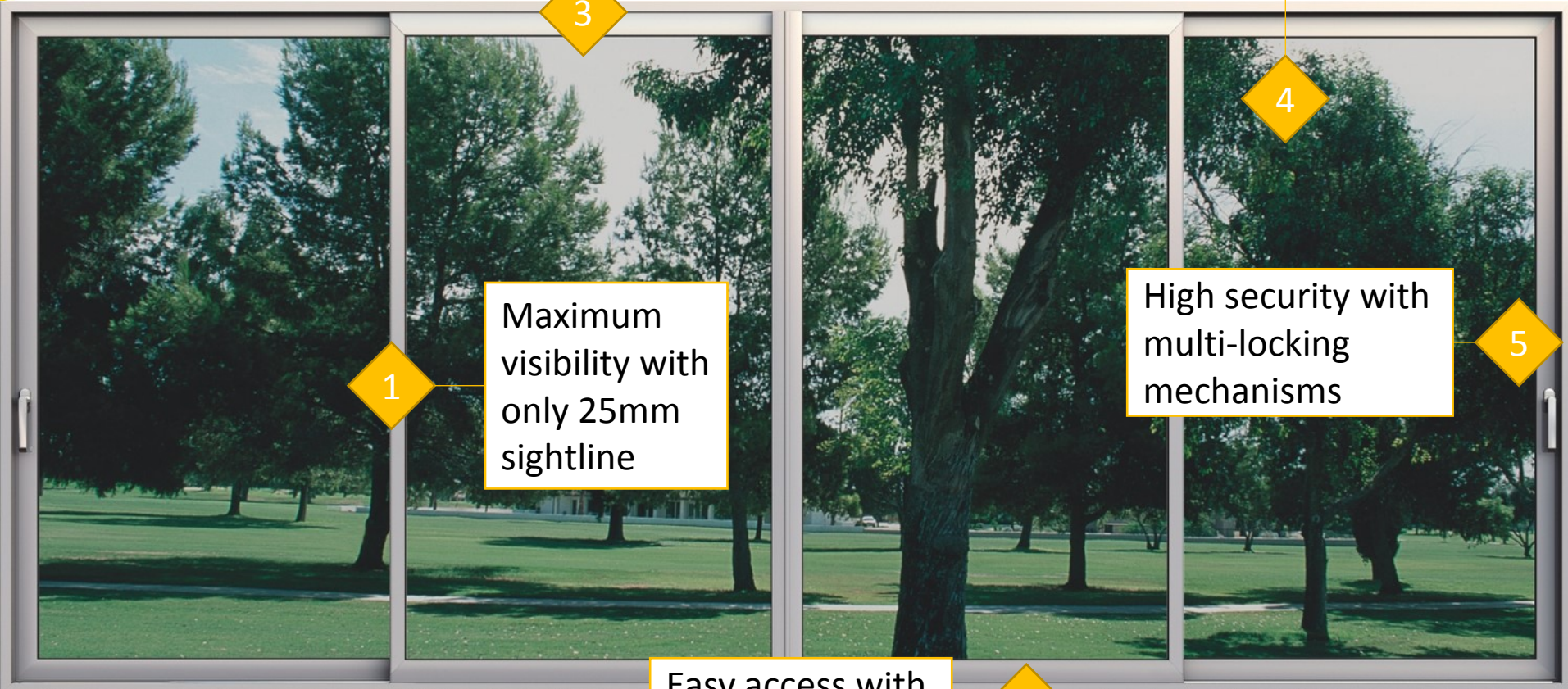
1

High security with  
multi-locking  
mechanisms

5

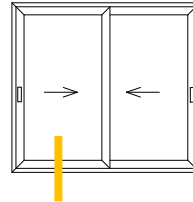
Easy access with  
low threshold

2

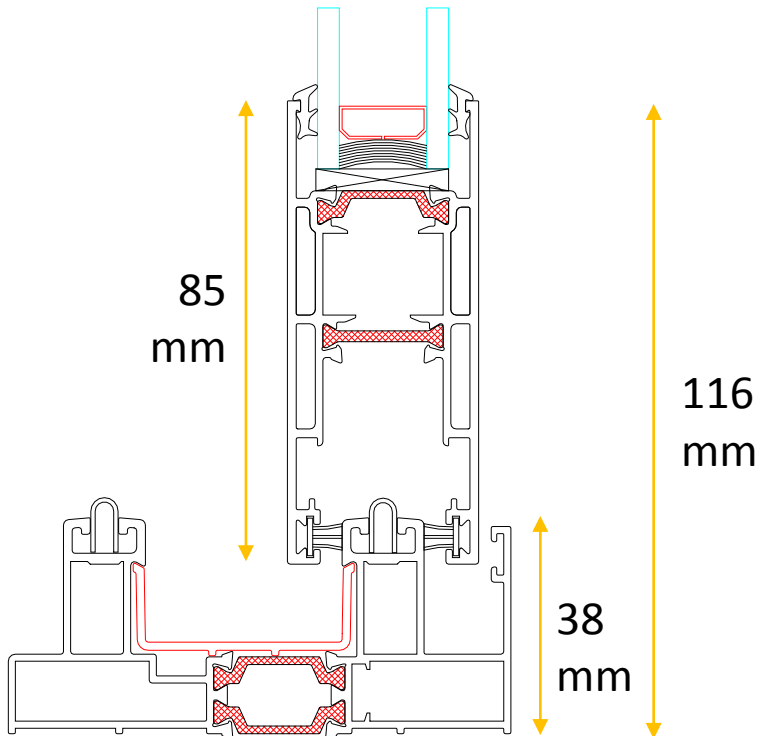


# Benefits

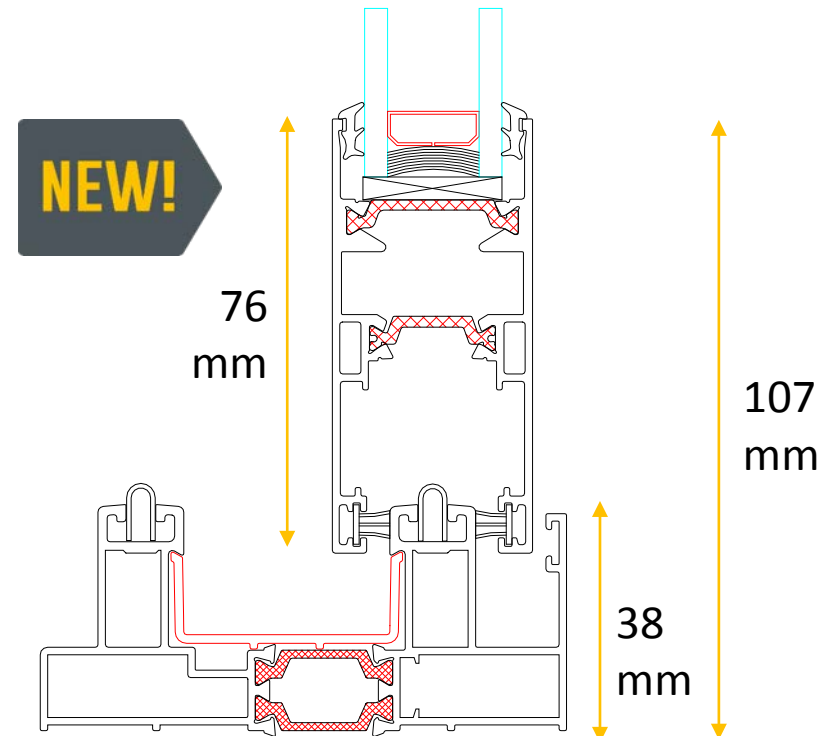




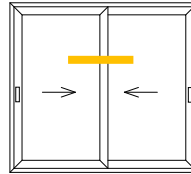
Maximum visibility & sense of freedom



■ Standard sash 85mm

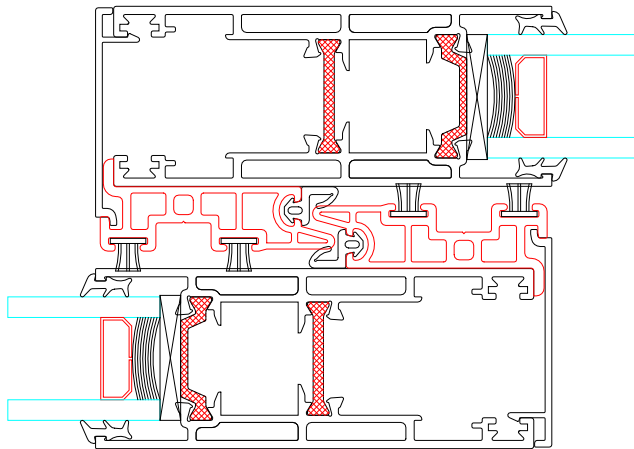


■ Lower sash 76mm

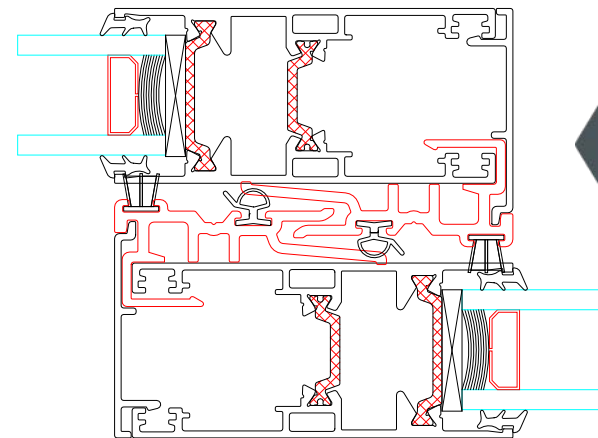


Maximum visibility & sense of freedom

- Standard interlocking profile

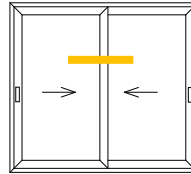


88,5mm



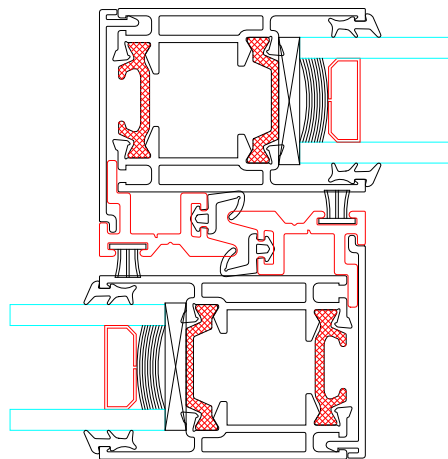
79,5mm

**NEW!**

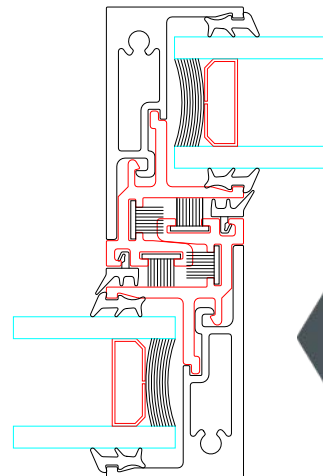


Maximum visibility &  
sense of freedom

- Narrow interlocking profile



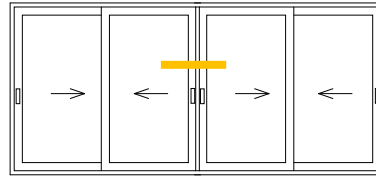
50,5mm



25mm

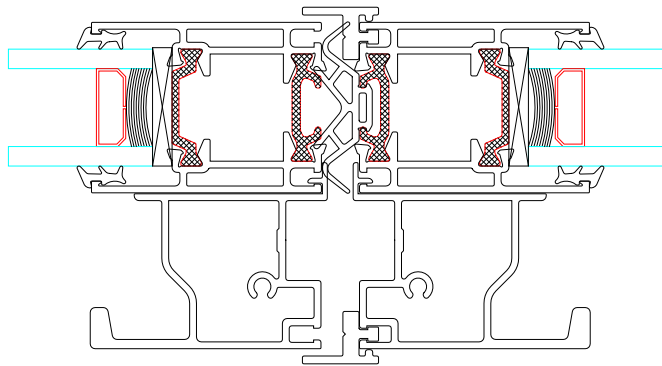
**NEW!**



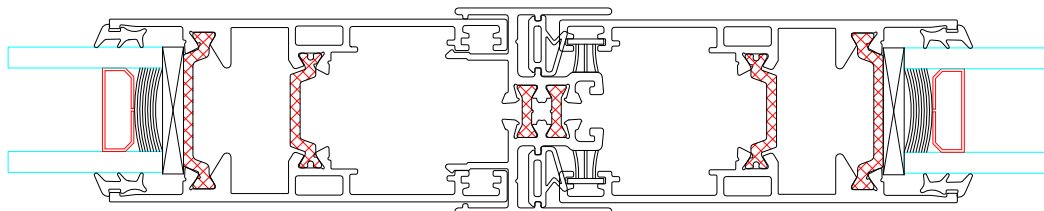


Maximum visibility &  
sense of freedom

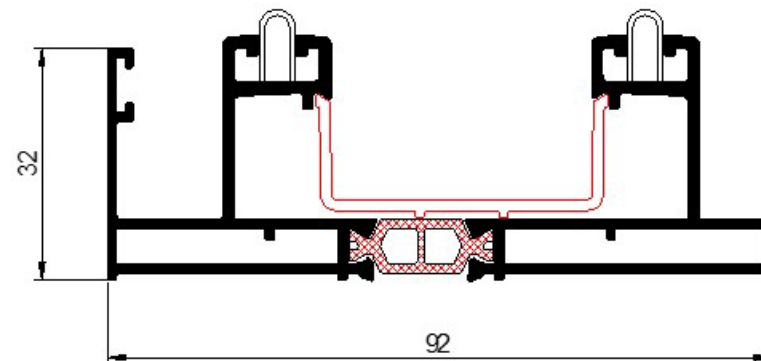
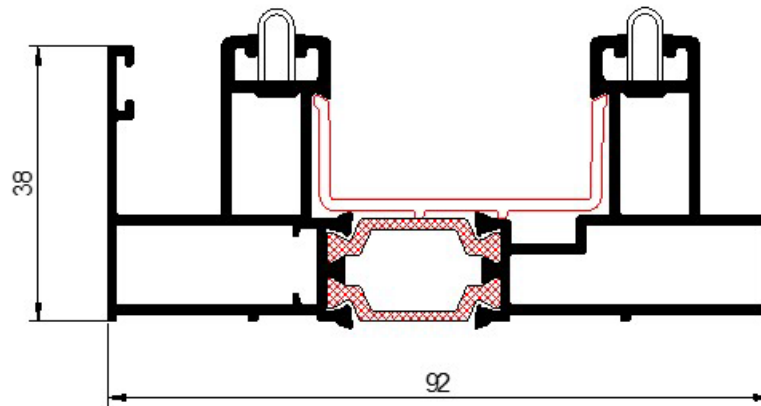
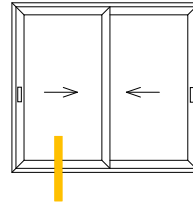
- Adjoining profile



102mm



162mm

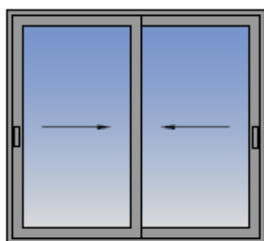


**NEW!**

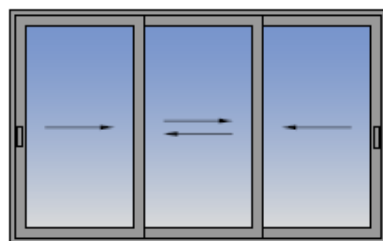
### Easy & safe access

- Standard frame 38mm
- Alternative use of low frame 32mm ideal for renovations
- The only change is the height of the chambers
- All sashes are applicable with both frames

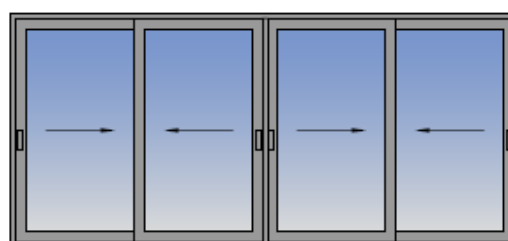
### Available typologies



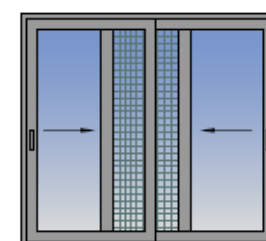
Double horizontal sliding sash



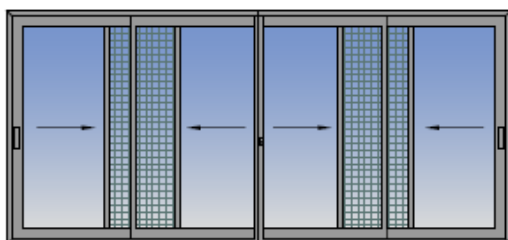
Triple horizontal sliding sash



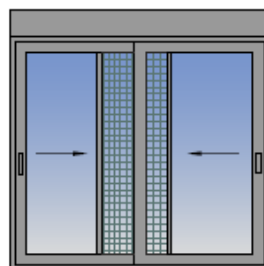
Four horizontal sliding sashes meeting stile



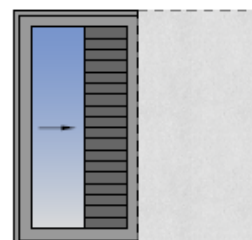
Double horizontal sliding sash with fly-screen



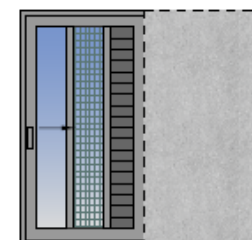
Four horizontal sliding sashes meeting stile with fly-screen



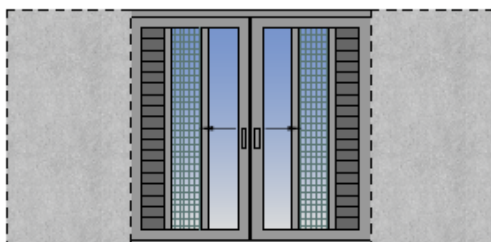
Double horizontal sliding sash with fly-screen & rolling shutter



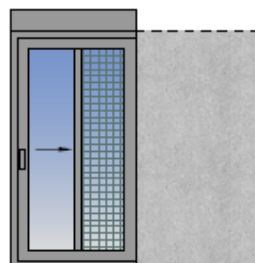
Single horizontal sliding pocket sash with shutter



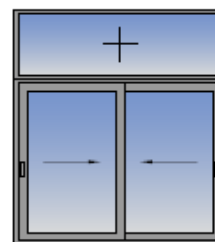
Single horizontal sliding pocket sash with fly-screen & shutter



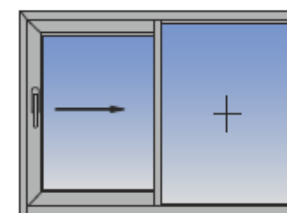
Double horizontal sliding pocket sash with fly-screen & shutter



Single horizontal sliding pocket sash with fly-screen & rolling shutter



Double horizontal sliding sash with fanlight



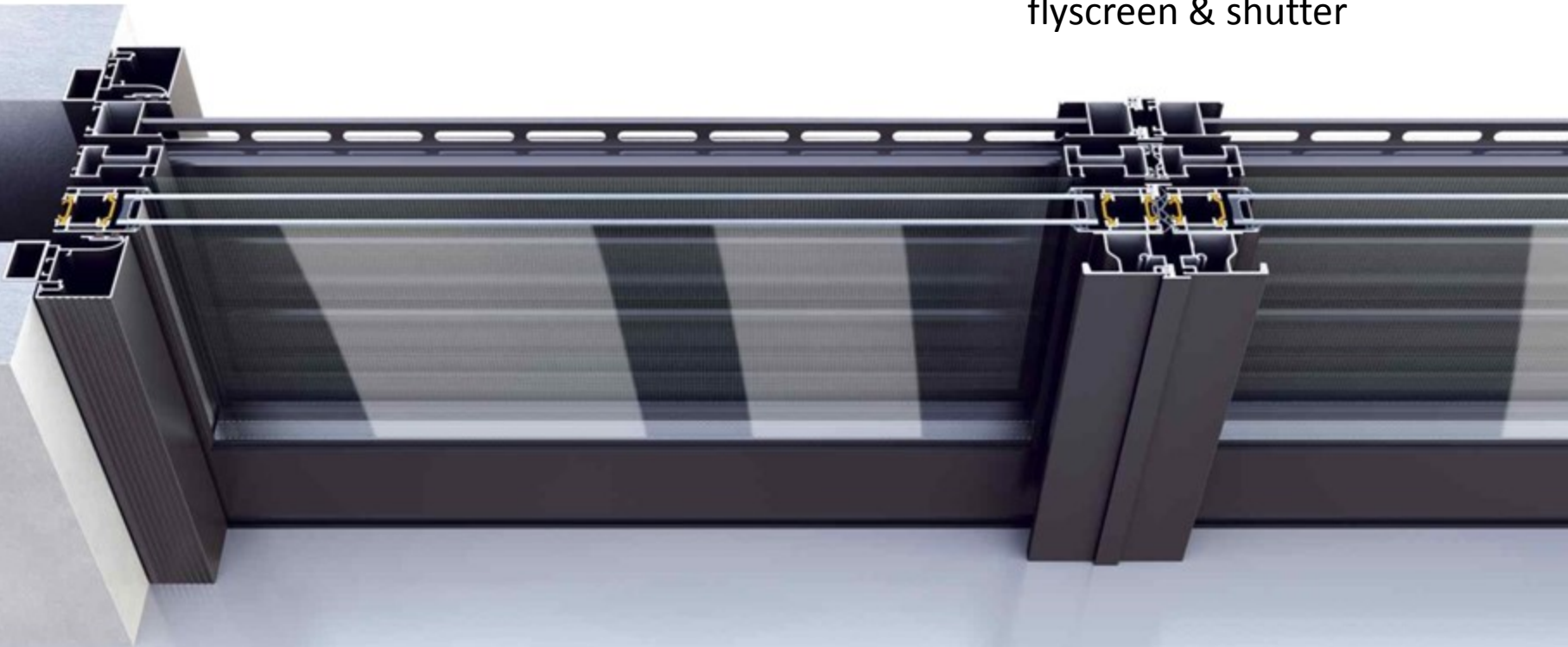
Single horizontal sliding sash with fixed light

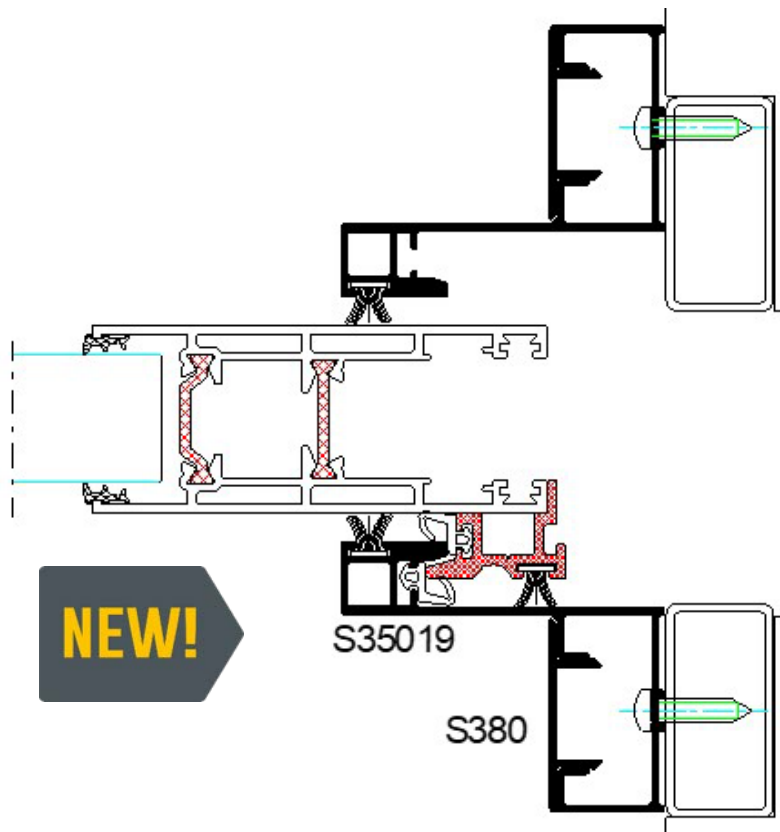


## Pocket typologies

---

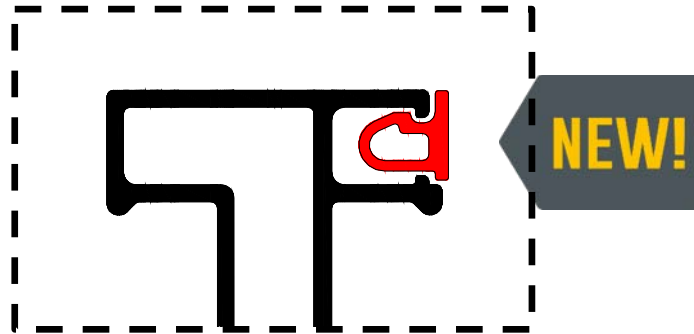
- Sash slides into the wall cavity
- Ideally combined with sliding flyscreen & shutter





## Pocket typologies

- Updated pocket cover profile that creates a hook with the pvc profile
  - ✓ Improved sealing with 2 rows of gaskets and brushes
  - ✓ Improved thermal insulation between wall and sash
  - ✓ Improved aesthetics between wall and sash



## Flyscreen

Two types of flyscreens for standard sash:

- Heavy duty S490
- Light M868

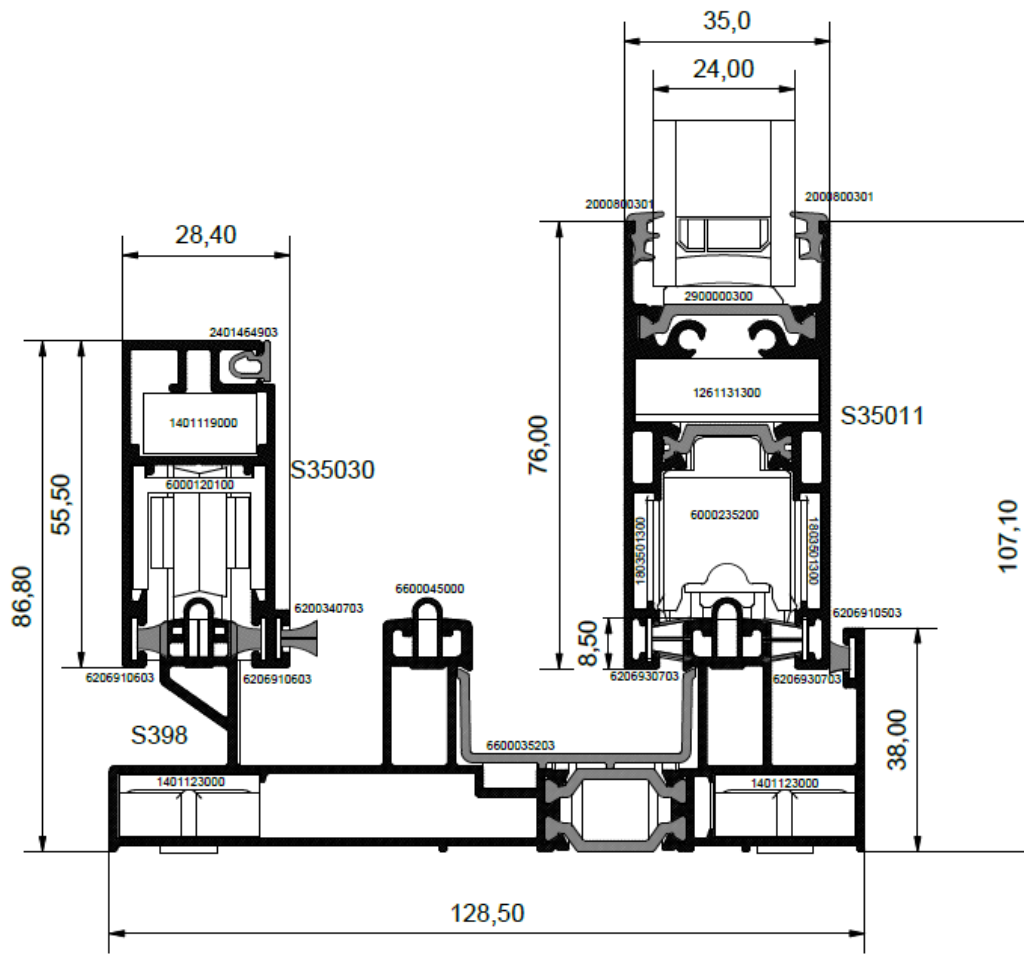
PVC accessory to hold the insect screen fabric for:

- ✓ High aesthetics
- ✓ Improved fabric stretch

Available in 3m bars



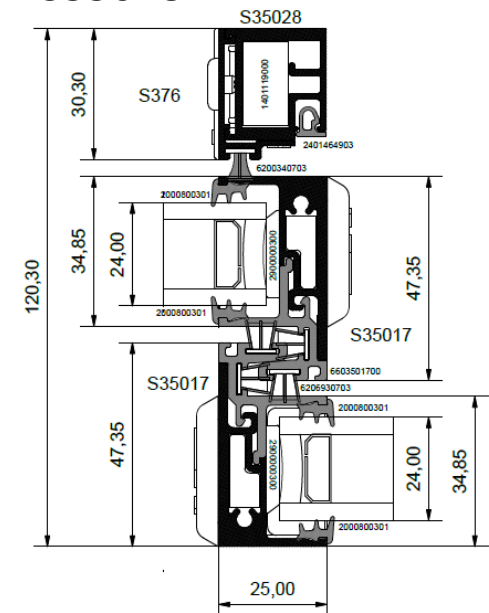




## Flyscreen

Flyscreens for lower sash:

- Heavy duty S35030
- Narrow interlocking 25mm S35028





## Rolling shutter

- Ideally combined with rolling shutter system M13800
- Unified thermal insulating zone
- Special design for pocket sliding typologies to easily visit & repair the rolling shutter

## Certifications

	Air permeability EN 1026, EN12207	CLASS 4
	Watertightness EN 1027, EN 12208	CLASS 7A
	Resistance to wind load EN 12210, EN 12211	CLASS C2/B3
	Thermal Insulation EN 10077-2	$U_f$ from 2,9 to 4,8 W/m <sup>2</sup> K
	Sound reduction EN 14351, EN 717	$R_w$ (C;Ctr) = 28 (-1;-1)dB

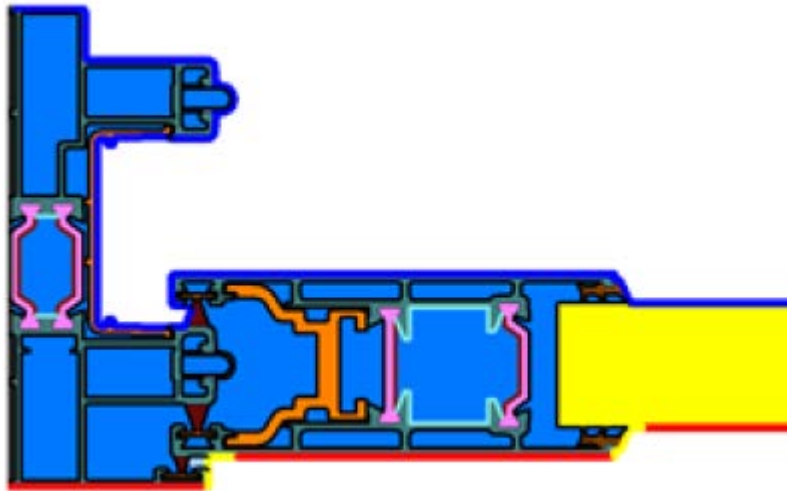


ARISTOTLE  
UNIVERSITY OF  
THESSALONIKI





## Thermal Insulation



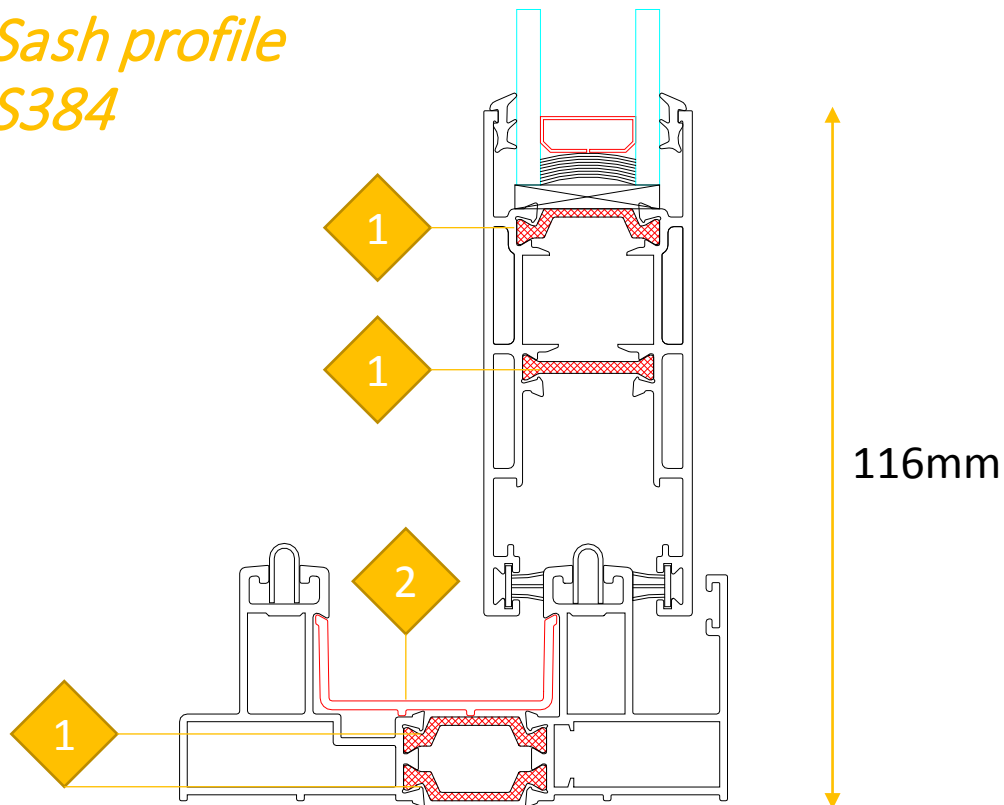
	U <sub>g</sub> = 1,3	U <sub>g</sub> = 1,1	U <sub>g</sub> = 1,0
U <sub>w</sub>	1,89	1,73	1,66
For a 2-sash typology 3,00m x 2,20m (W x H) and psi = 0,036			



Attention to  
detail

---

### Sash profile S384

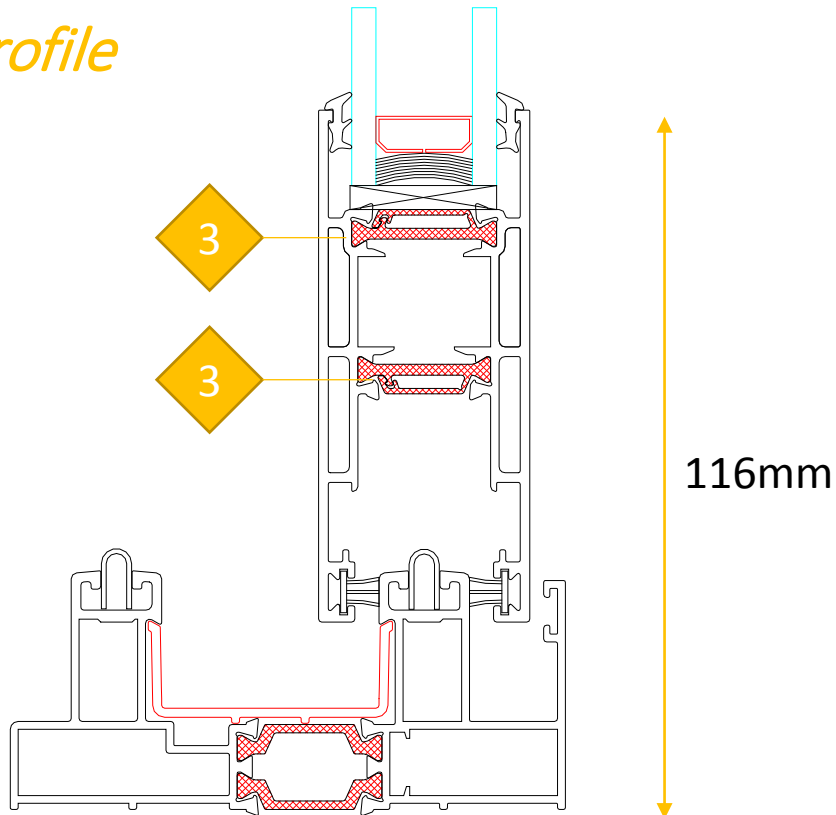


## Energy & cost saving

Thermal insulated profiles

1. Fiberglass reinforced polyamides 24 & 22 mm width
2. PVC profiles perimetrically of the frame (same for standard and low frame)

### Sash profile S390



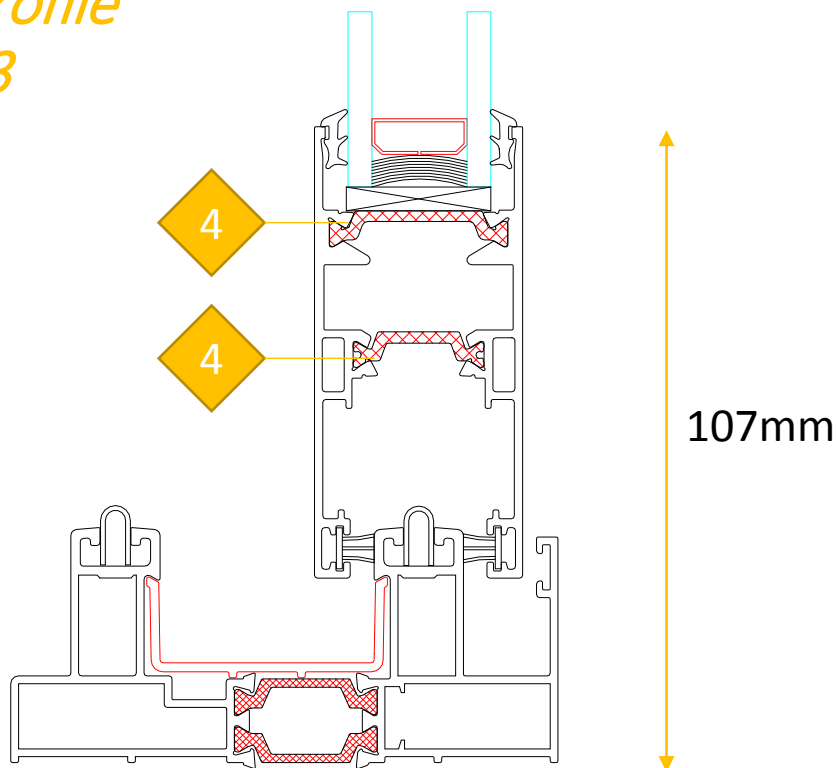
## Energy & cost saving

Thermal insulated profiles

3. Alternative use of sash with anti-distorsion fiberglass reinforced polyamides 24 mm width ideal for dark frames (reduces banana effect due to high temperature differences)



### *Sash profile S35013*

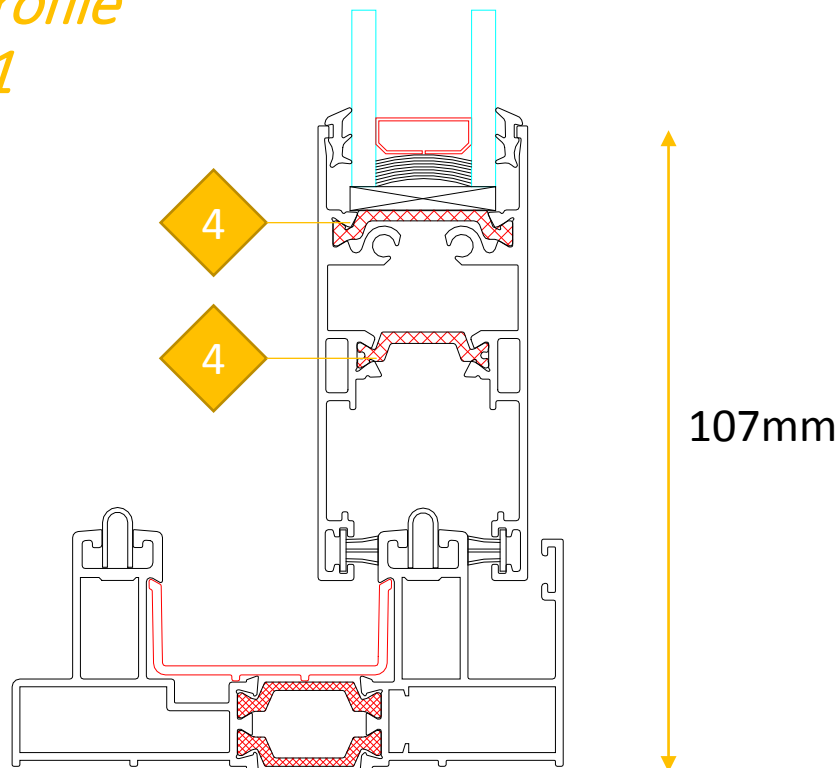


## Energy & cost saving

Thermal insulated profiles

4. Alternative use of smaller sash with fiberglass reinforced polyamides 30 & 22 mm width

### *Sash profile S35011*

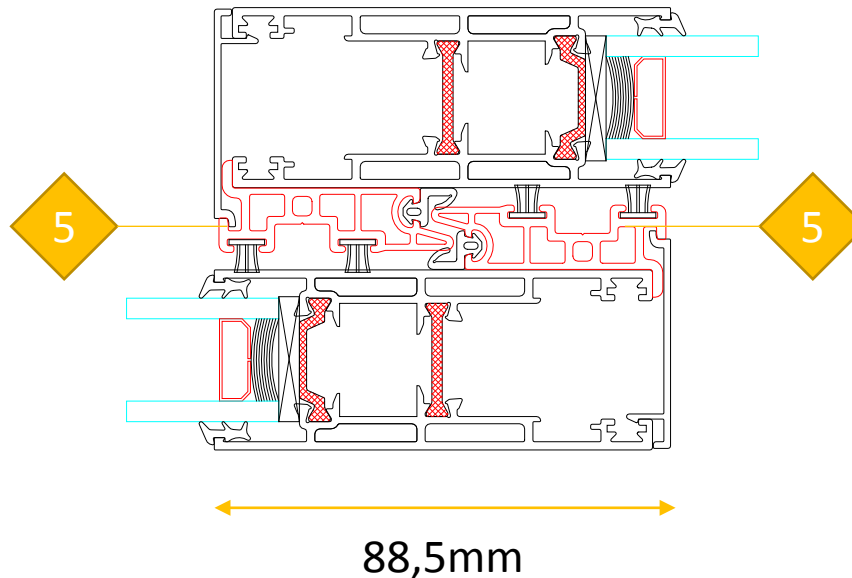


## Energy & cost saving

Thermal insulated profiles

4. Alternative use of smaller sash - compatible with narrow interlocking profile 25mm - with fiberglass reinforced polyamides 30 & 22 mm width

### *Interlocking profile S384, S390*



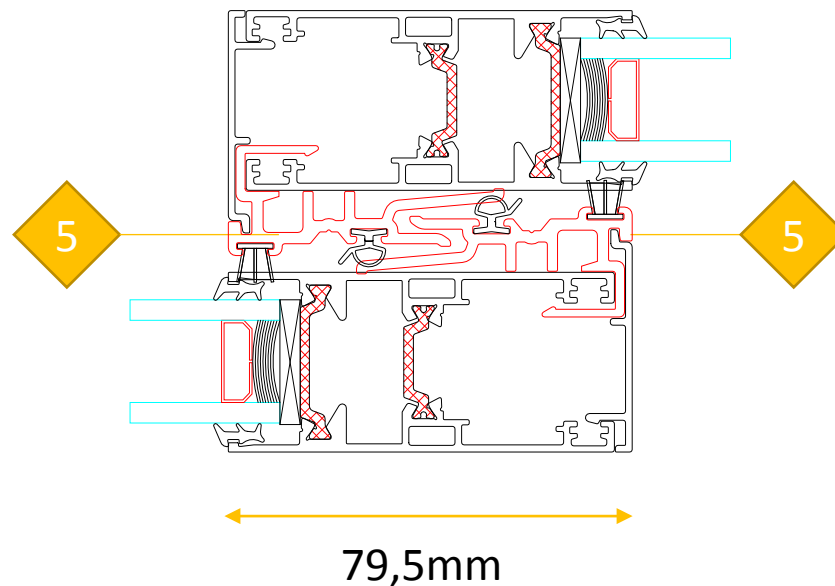
### Energy & cost saving

Thermal insulated profiles

- 5. PVC profiles at the interlocking profile

Compatible with sash profiles S384, S390

*Interlocking profile  
S35011, S35013*



### Energy & cost saving

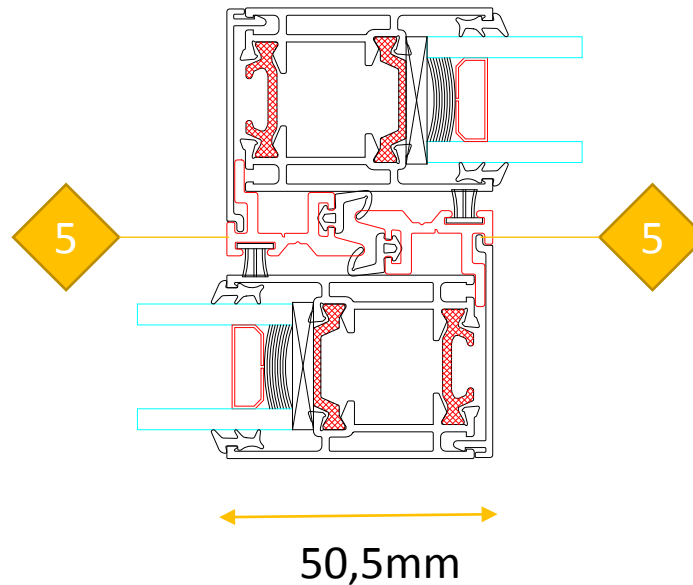
Thermal insulated profiles

5. PVC profiles at the interlocking profile

Compatible with sash profiles S35011, S35013



### *Interlocking profile S356*



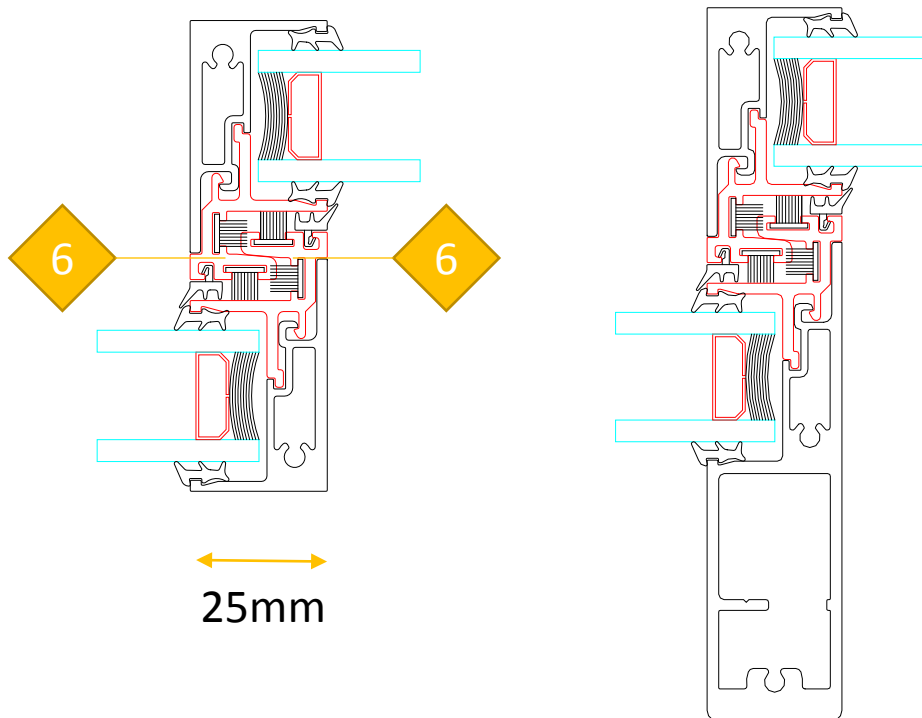
### Energy & cost saving

Thermal insulated profiles

5. PVC profiles at the narrow interlocking profile

Compatible with sash profiles S384, S390

## *Interlocking profile S35017, S35027*



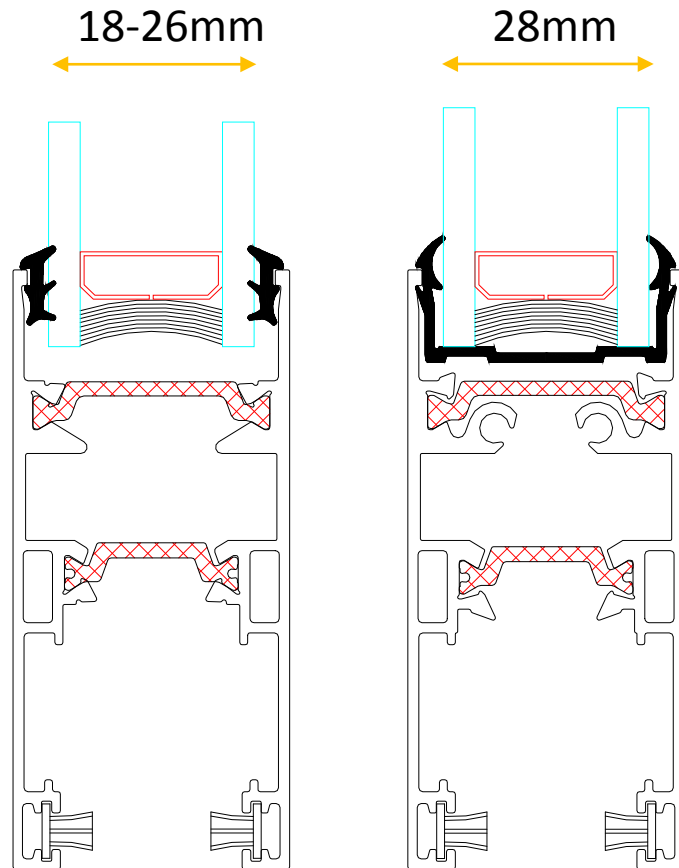
## Energy & cost saving

Thermal insulated profiles

5. PVC profiles at the narrow interlocking profile

Available as an accessory & easily placed by the fabricator

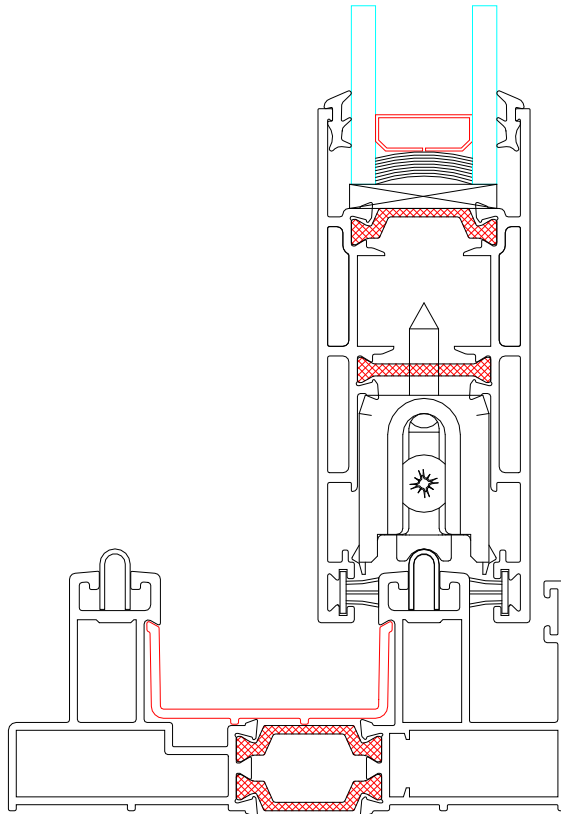
Compatible with sash profile S35011



## Glazing

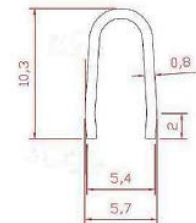
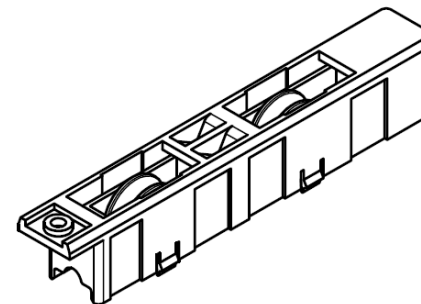
2 types of double glazing with the use of:

- Wedges up to 26mm glazing thickness
- 'U shape' gasket up to 28mm glazing thickness
- Analytical glazing list available at the system's technical catalog



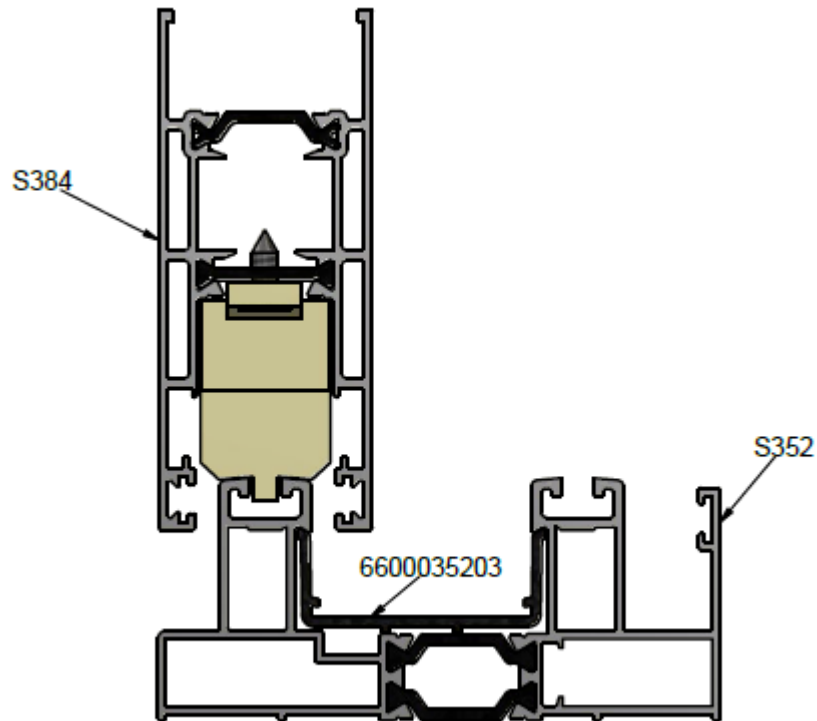
### Gliding

- Double rollers with maximum weight up to 180 Kg per sash
- Adjustable rollers for easier installation & maintenance
- U-type stainless steel rail





## Fixed lights



- Use of special spacers fixed at the bottom of the sash
- Available for all sash profiles

Functionality  
& credibility

---





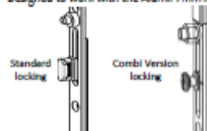
### MULTI POINT LOCK FOR SLIDING SYSTEMS

#### FUNCTION

Lock for Alumil sliding systems with multiple locking points and cylinder lock option

#### TECHNICAL FEATURES

- Perfect fit for all sliding Alumil systems
- From 1 to 4 locking points
- Available version with euro profile cylinder hole
- Two available gear buckets 7.5 and 15mm
- Large oval locking points with optional "antlift" accessory for enhanced security
- Combi version available with round pins
- Designed to work with the Alumil 7mm handle



Striker with antiR



BS 7,5mm



BS 15mm



#### MATERIALS

- Steel main body and locking points
- Zamak parts

#### SURFACE COATING

- Zamak die-casting components are subjected to anodizing surface treatment and an additional silver-colored coating

#### CERTIFICATION

- Durability: Grade 3 - 25.000 test cycles [EN 13126-1/19]
- Corrosion resistance:
  - Hardware set: Grade 3 - high - 96h [EN 1670]
  - Individual zinc die-cast component with bichromating treatment: Grade 5 - >1.000h salt-spray test [EN 1670, EN 9227 based on EN 13126-1:2011]
- Alumil 5 Year Guarantee

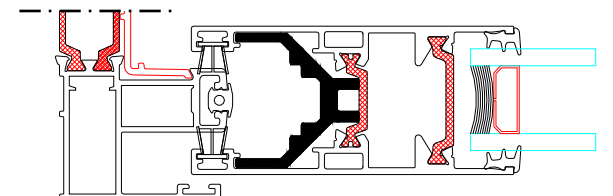
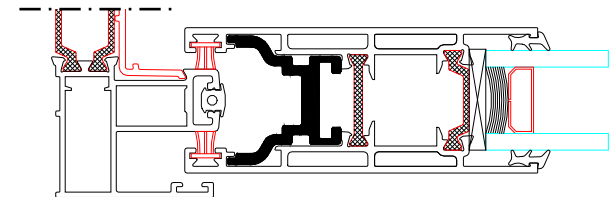
#### CODES & DESCRIPTIONS

EX-4405050901	SLIDING LOCK 1 POINT 120 mm BS7,5
EX-9100001871	SLIDING LOCK 2 POINTS 800 mm BS7,5
EX-6308310011	SLIDING LOCK 2 POINTS 1000 mm BS7,5
EX-4163831800	SLIDING LOCK 3 POINTS 1800 mm BS7,5
EX-6309540311	SLIDING LOCK 1 POINT 300 mm BS15
EX-4404064100	SLIDING LOCK 2 POINTS 800 mm BS15
EX-6309541000	SLIDING LOCK 2 POINTS 1000 mm BS15
EX-4404164100	SLIDING LOCK 2 POINTS 1800 mm BS15
EX-4409542600	SLIDING LOCK 4 POINTS 1600 mm BS15
EX-6309540411	SLIDING LOCK 3 POINTS 1800 mm BS15
EX-6301538800	SLIDING LOCK 2 POINTS 1600 mm BS15 WITH CYLINDER HOLE

EX-4161000000	SLIDING LOCK 1 POINT COMBI 120 mm BS15
EX-4166400600	SLIDING LOCK 2 POINTS COMBI 600 mm BS15
EX-4166403100	SLIDING LOCK 3 POINTS COMBI 1000 mm BS15
EX-4166403600	SLIDING LOCK 4 POINTS COMBI 1600 mm BS15
EX-6308800011	SLIDING LOCK STRIKER SILVER STRAIGHT BACK
EX-6304064301	SLIDING LOCK STRIKER SILVER CONE BACK
EX-6301819601	SLIDING LOCK EXTRA ANTLIFT STRIKER

## Locking mechanism

- Multi-point lock
- Wide range of locks from 300 mm sash height (developed specific for ALUMIL)



# Alumil

## Functionality & credibility

SMARTIA  
S350


**CERTIFICATION DATA SHEET**  
ACCESSORIES & PARTS

### MULTI POINT LOCK INOX WITH HOOKS FOR SLIDING SYSTEMS

**FUNCTION**  
Sliding lock with stainless steel faceplate and hooks for Alumil sliding systems with multiple locking points and cylinder lock option

**TECHNICAL FEATURES**

- Single-point, two-point or three-point lock configurations
- Hook bolt design draws the door closed against the seals
- Hook bolts ensure the highest security by not allowing sash to be lifted out of the guide rails
- Integrated mishandling device (WOSD) prevents crushing bolts on strikers
- Anti-pick security feature
- A version with cylinder hole is available for enhanced security
- Works with Alumil 7mm handles

**MATERIALS**

- Stainless steel faceplate
- Stainless steel hooks
- Die cast Zinc alloy mechanism with stainless springs

**SURFACE COATING**

- Brushed stainless steel

**CERTIFICATION**

- Alumil 5 Year Guarantee




**CODES & DESCRIPTIONS**

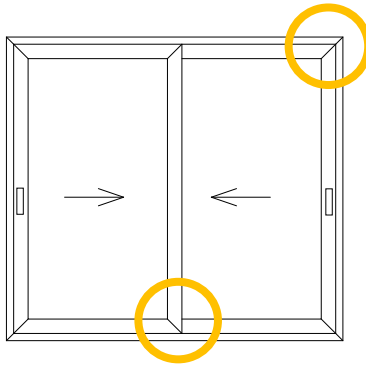
EX-6300990100	SLIDING LOCK 1 POINT 150 mm BS15 WITH HOOKS INOX
EX-6300990200	SLIDING LOCK 2 POINTS 600 mm BS15 WITH HOOKS INOX
EX-6300990300	SLIDING LOCK 3 POINTS 1000 mm BS15 WITH HOOKS INOX
EX-6300990400	SLIDING LOCK 3 POINTS 1000 mm BS15 WITH HOOKS INOX WITH CYLINDER HOLE
EX-6300111300	SLIDING LOCK WITH HOOKS STRIKER INOX

## Locking mechanism

- Multi-point lock with hooks
- Available only for standard sash 85mm



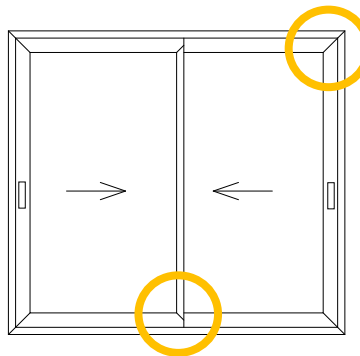
1



Standard  
interlocking  
profile

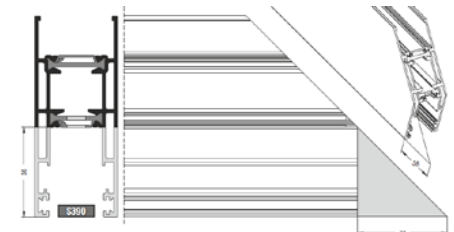
2

Narrow  
interlocking  
profile 50,5mm

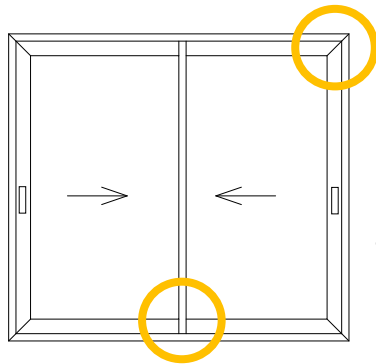


## Sash assembly

- Sash 45° connection perimetrically
- Compatible with all sash profiles
- Sash 45° connection
- Interlocking profile 45°/90° connection
- Compatible only with sash profiles S384 & S390



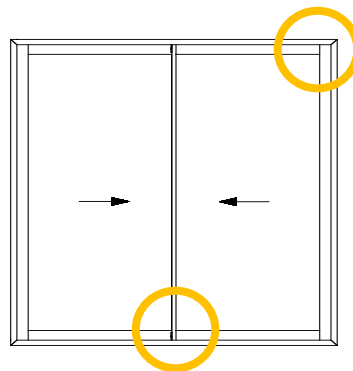
3



Narrow  
interlocking  
profile 25mm

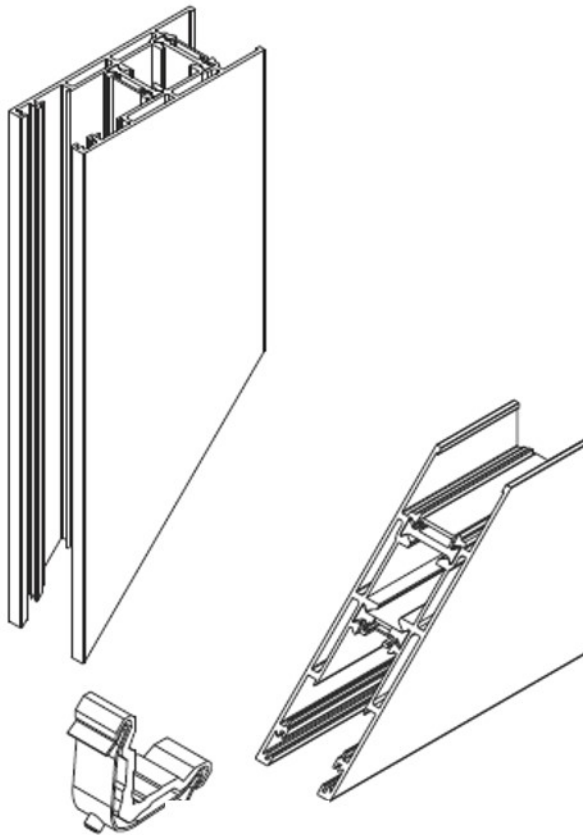
4

Standard or Narrow  
interlocking 25mm  
with 28mm glazing



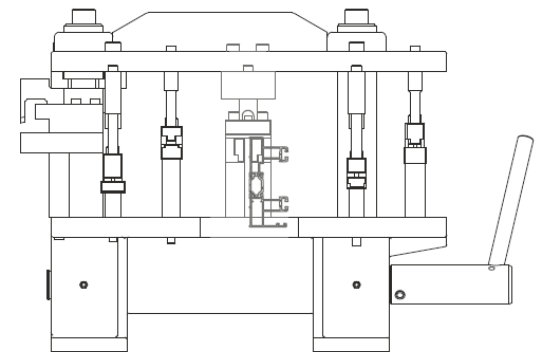
## Sash assembly

- Sash 45° connection
  - Interlocking profile 90° connection
  - Compatible only with sash profile S35011
- 
- Sash 90° connection
  - Interlocking profile 90° connection
  - Compatible only with sash profile S35011

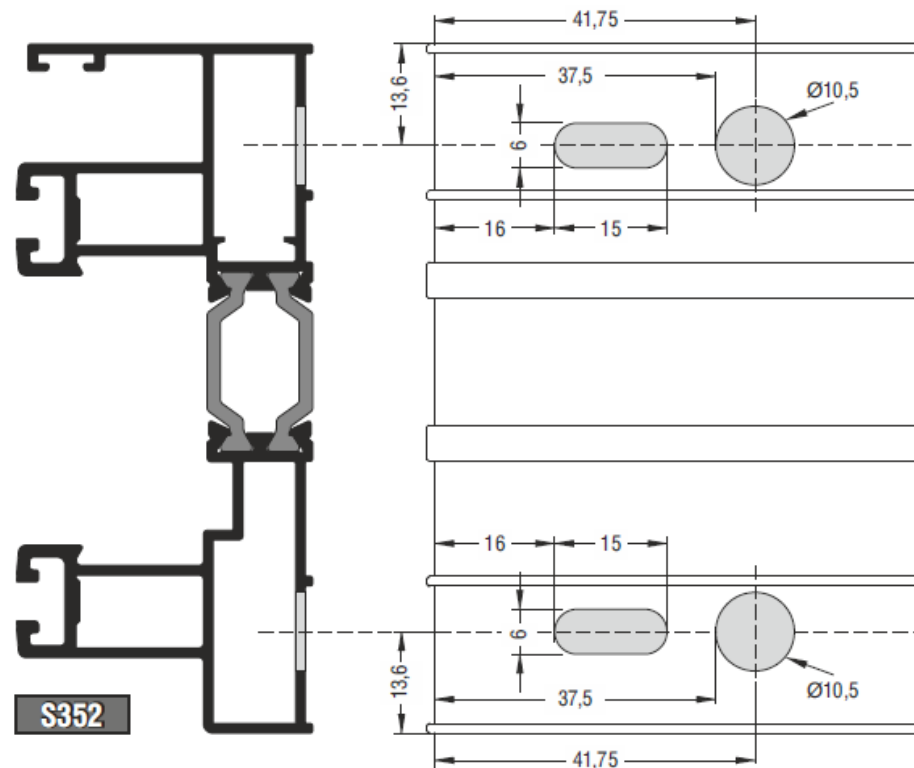


### Sash assembly

- Sash 45° connection with mechanical corners
- Punching machine for mechanical corners treatment

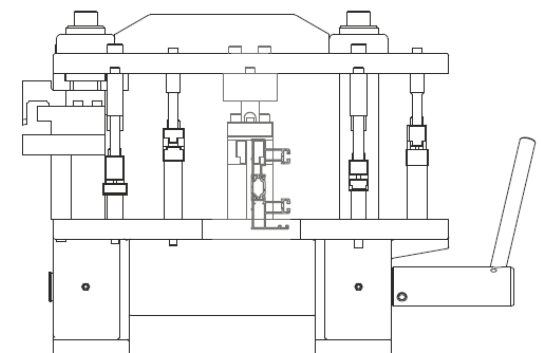


800-00-350-00



## Frame assembly

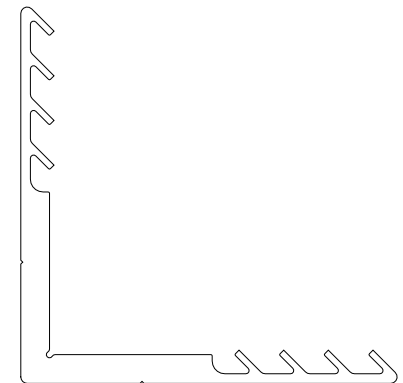
- Standard frame 45° connection with mechanical corners
- Punching machine for mechanical corners treatment

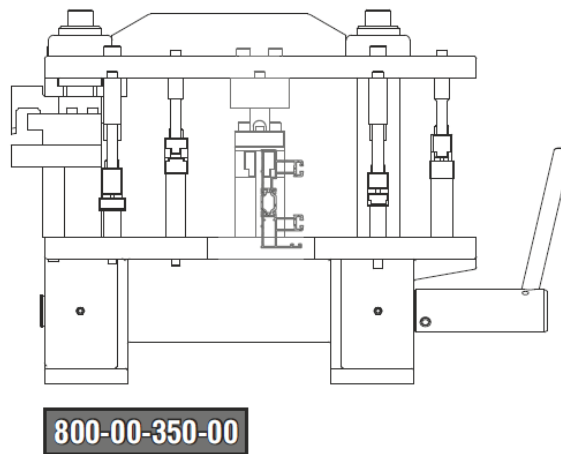


800-00-350-00

## Frame assembly

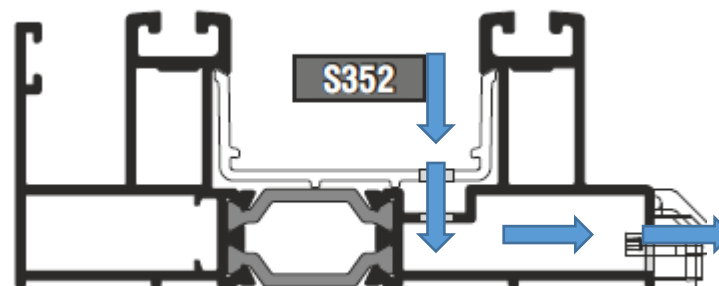
- Low frame 45° connection with force fitting corners
- New patented corner design by Alumil
- No treatment needed



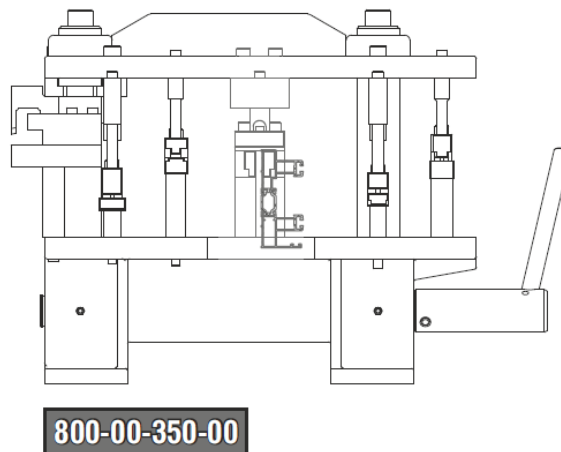


### Water evacuation

- Standard frame
- The water follows its way out through the chamber of the frame
- Punching machine for frame's weep holes treatment

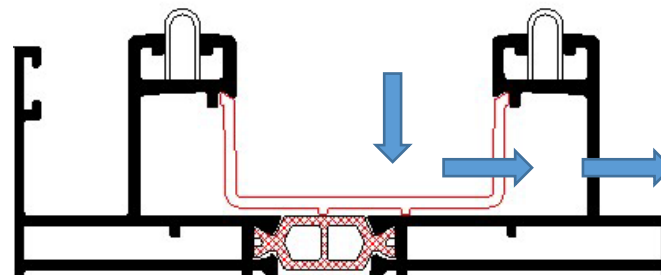






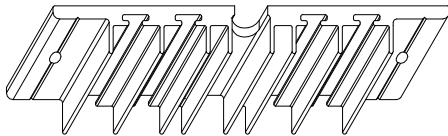
## Water evacuation

- Low frame
- The water follows its way out through the rail wing
- Existing punching machine can be used for frame's weep holes treatment

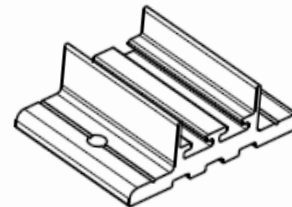
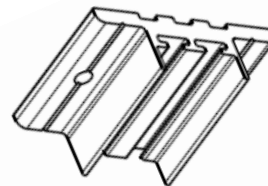


## Central sealing

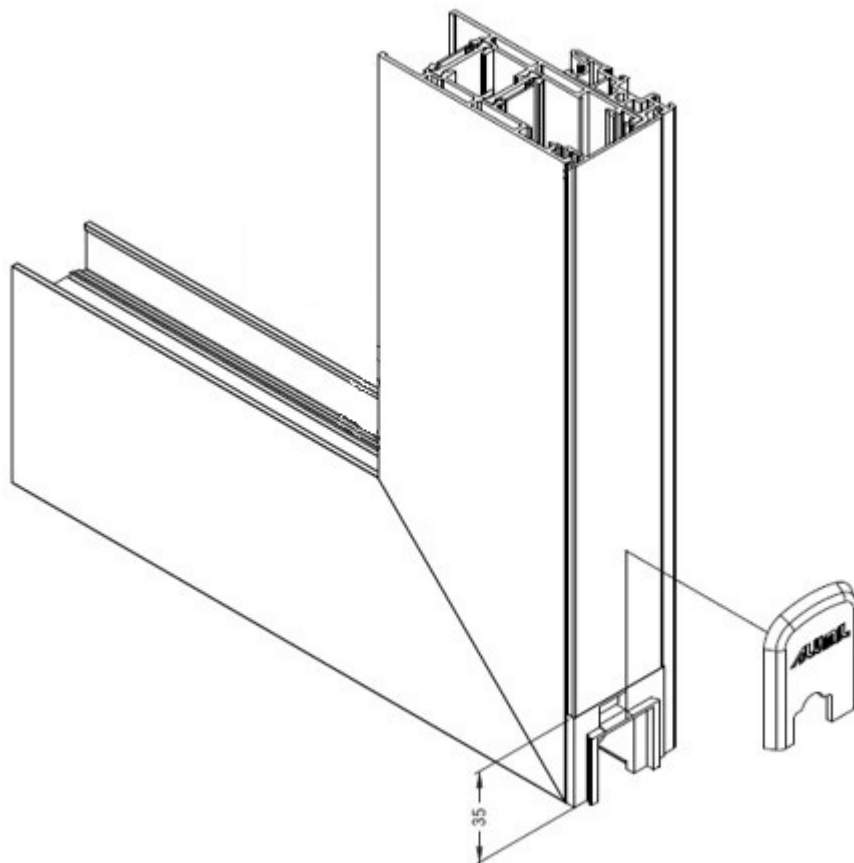
- Set of elastic central seals for the upper & bottom frame
- Same accessories used for the standard and low frame



- Standard interlocking profile

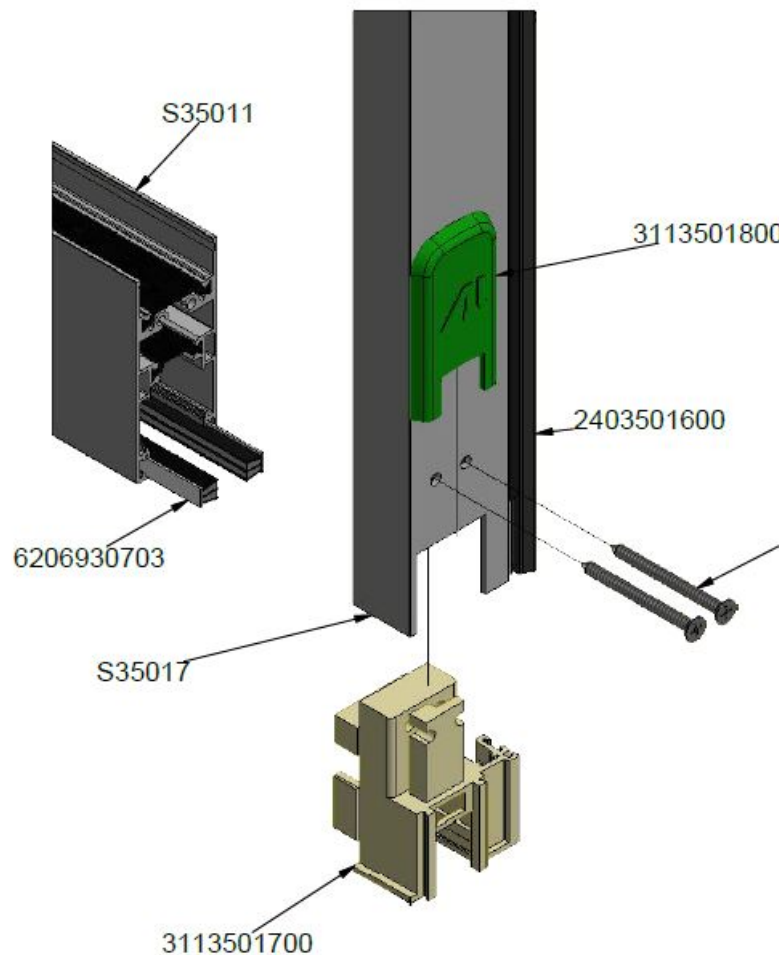


- Narrow interlocking profile 25mm



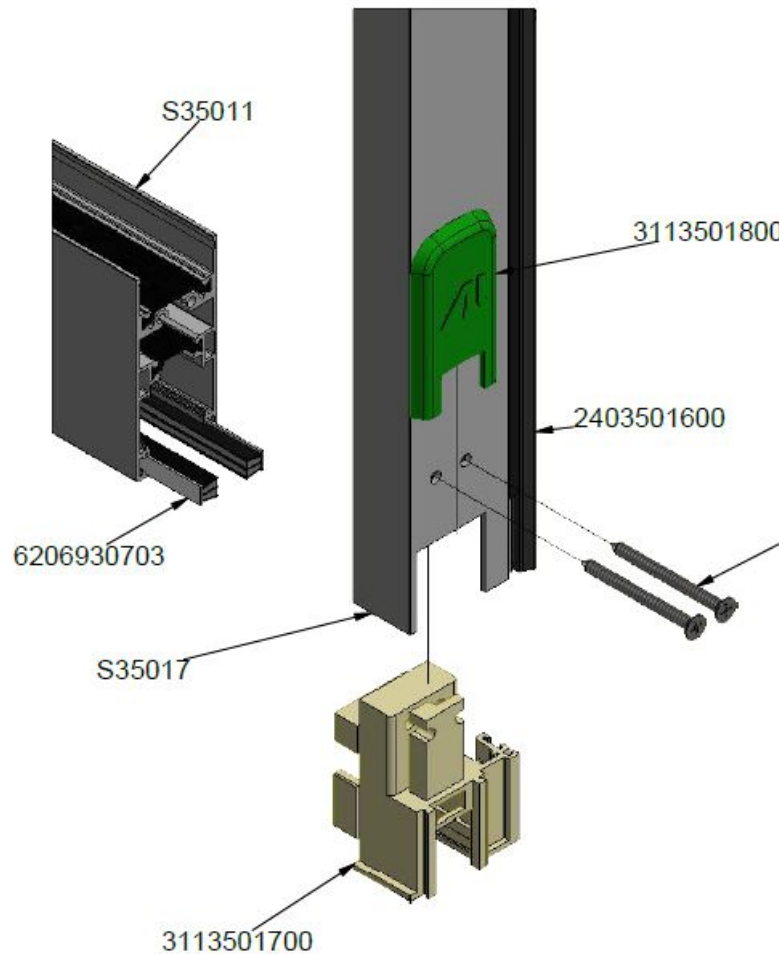
## Interlock assembly

- Special design of end caps when the same sash is used perimetrically
- No treatment needed for the cover of the interlocking profile
- Straight cut of the cover profile
- Easier and faster fabrication



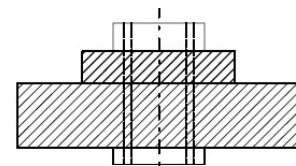
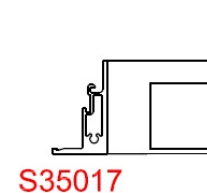
## Interlock assembly

- Special design of end caps when the narrow interlocking profile 25mm is used
- The caps are also connectors between the interlocking profile & the horizontal sash
- No treatment needed for the horizontal sash

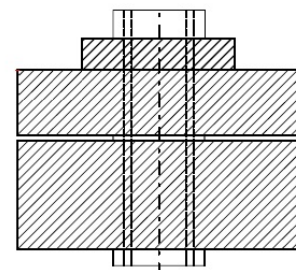
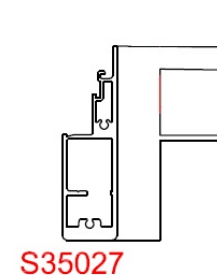


## Interlock assembly

- Milling tool available
- Same tool with an add-on accessory for the reinforced interlocking profile



S35017



S35027

## Machinings's guide

---

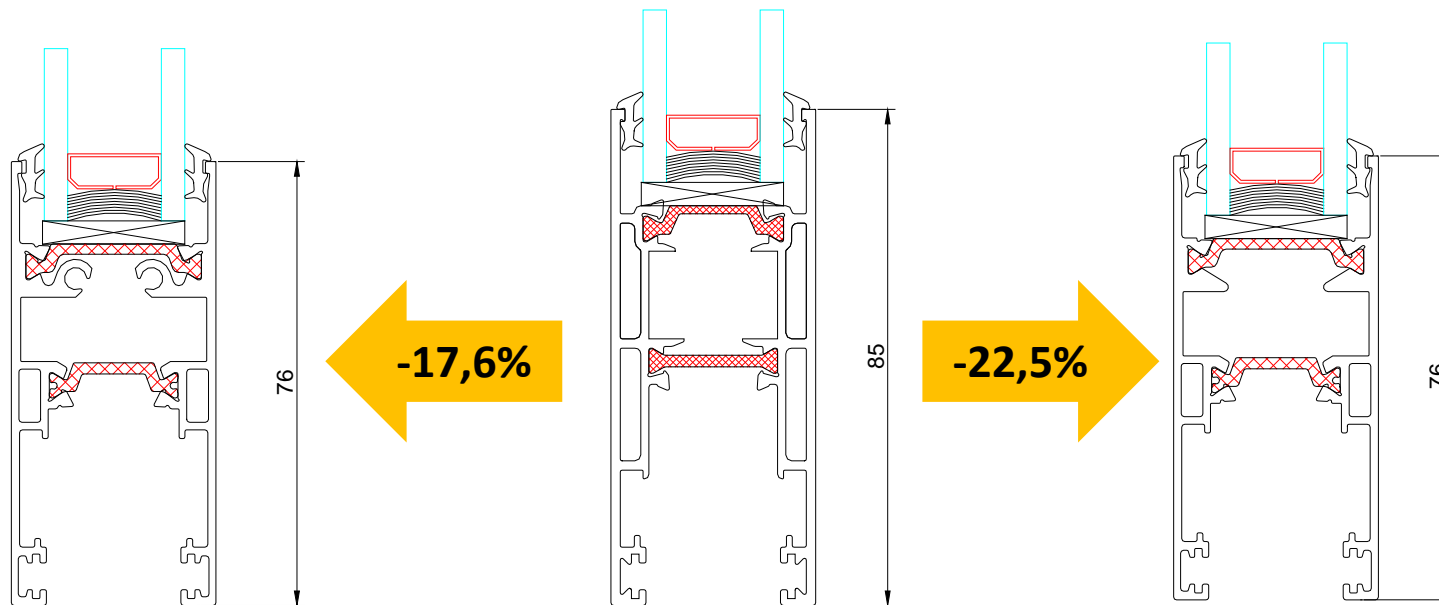
	S350 old	S350 new
Sash's Corner machining	Yes	Yes
Frame's Corner machining	Yes	No
Standard interlocking Profile's machining	No	No
Narrow interlocking Profile's machining	No	Yes



# Comparisons



## Sash



S35011

1,348Kg/m

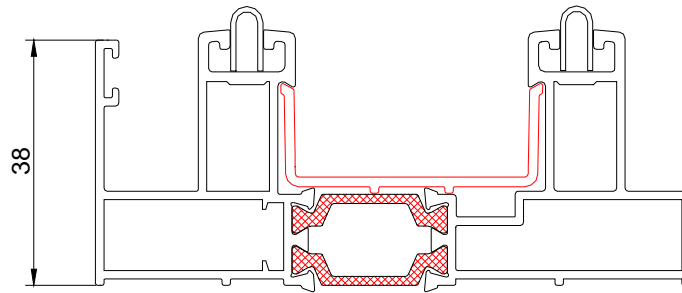
S384

1,637Kg/m

S35013

1,268Kg/m

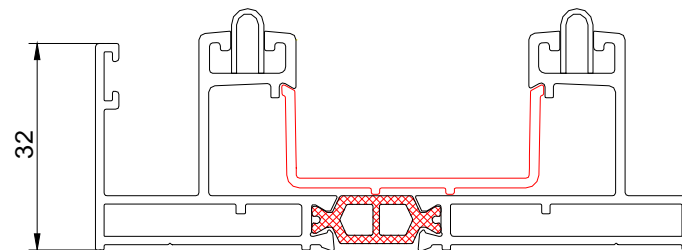
## Frame



S352

1,610Kg/m

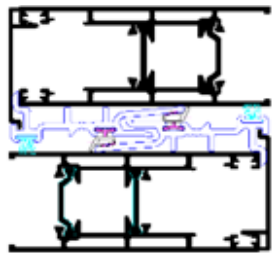
**-15,3%**



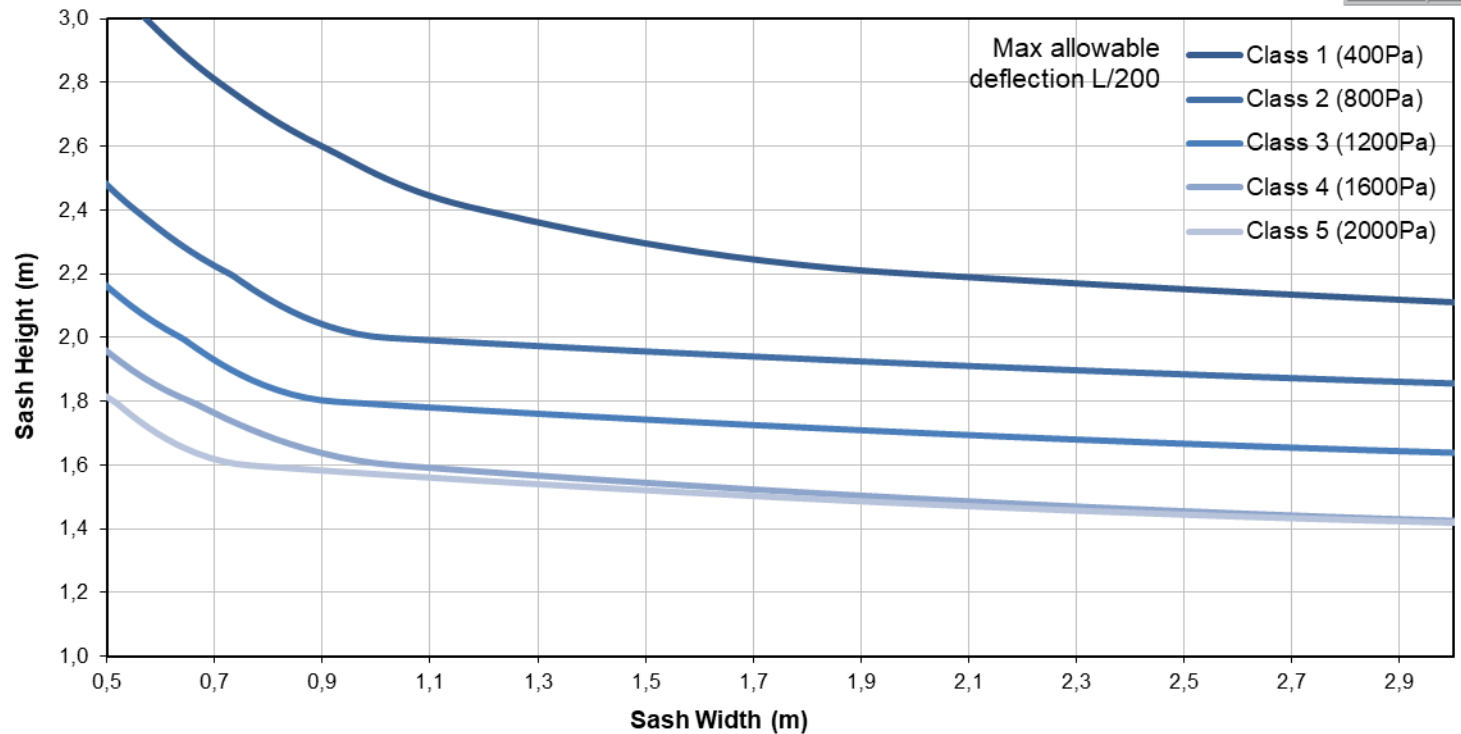
S35352

1,363Kg/m

## Maximum dimensions

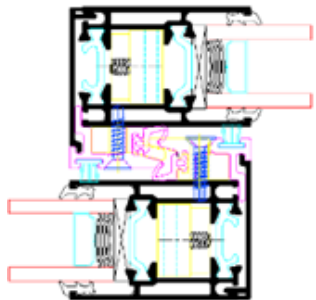
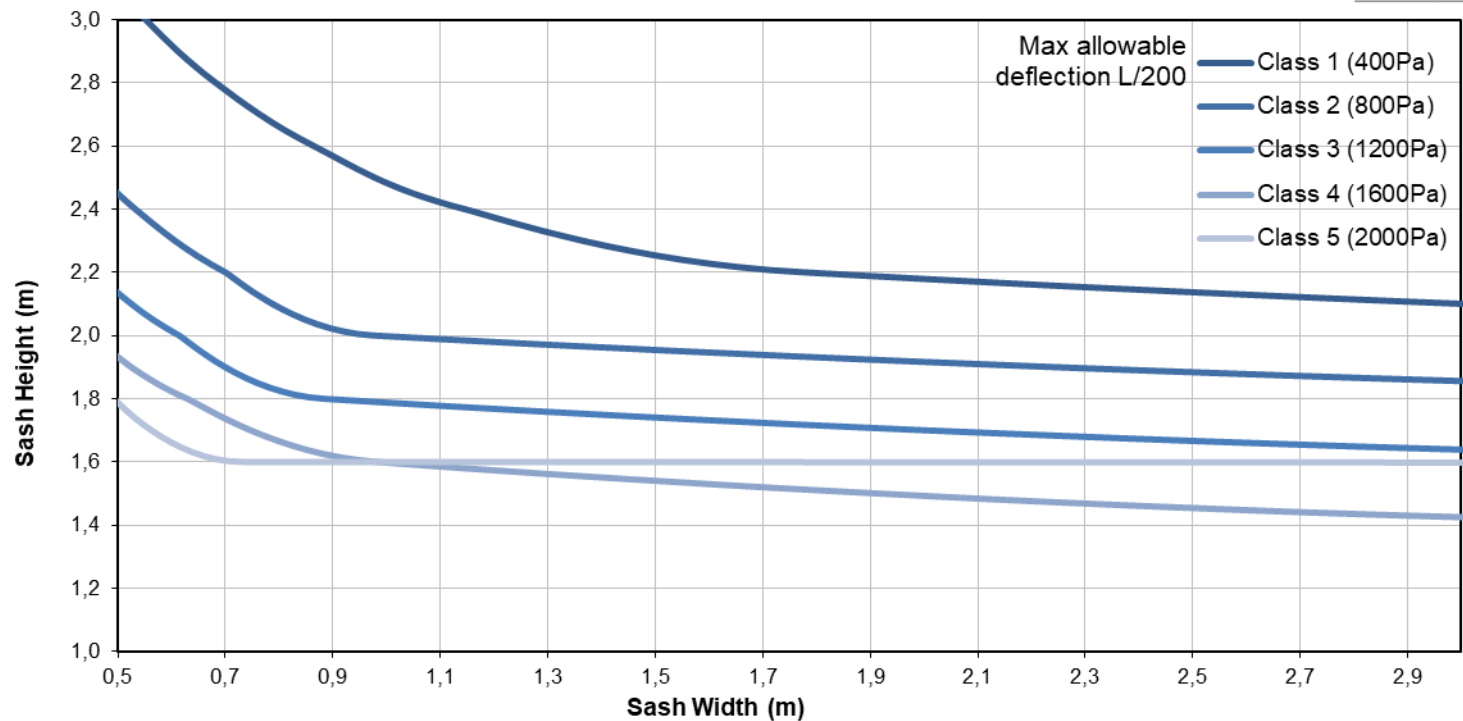


**lx=24,3**



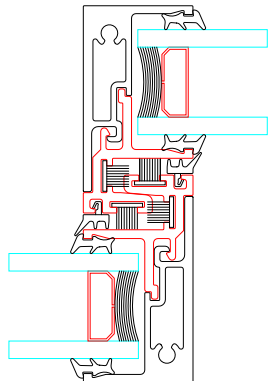
### Maximum dimensions

$I_x=23,4$



## Maximum dimensions

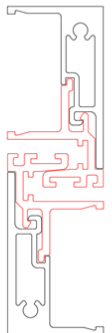
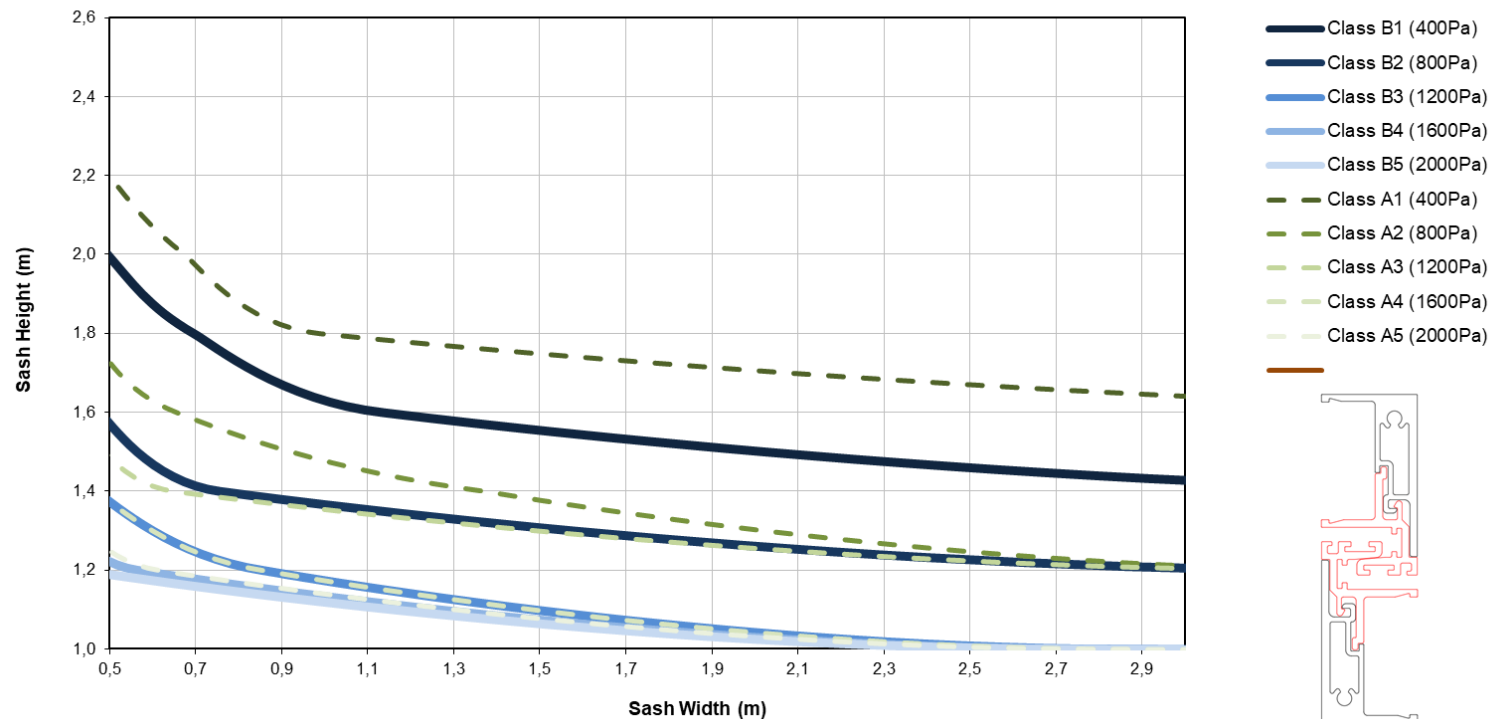
$l_x=6,4$



Class B ... L/200 deflection limit  
Class A ... L/150 deflection limit

Maximum Panel Dimensions For Given Wind Pressure

S35017 - S35017



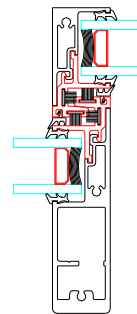
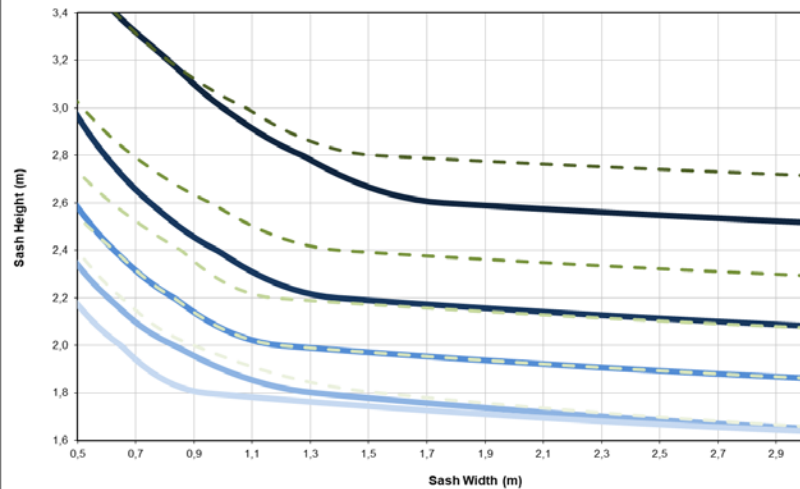


## Maximum dimensions

Class B ... L/200 deflection limit  
Class A ... L/150 deflection limit

Maximum Panel Dimensions For Given Wind Pressure

S35017 - S35027

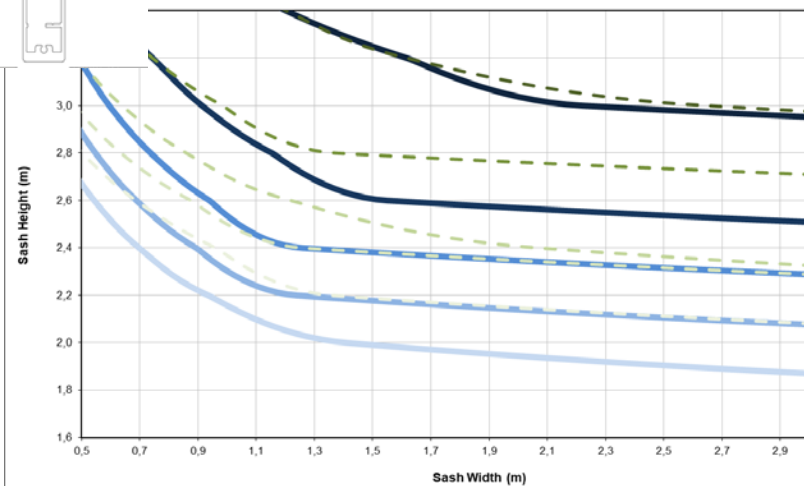


$l_x=41,1$

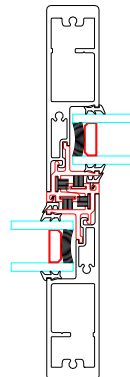
ction limit  
ction limit

Maximum Panel Dimensions For Given Wind Pressure

S35027 - S35027



$l_x=75,8$





- Standard frame
- Standard sash
- Narrow interlocking profile 50mm

### SMARTIA S350

### SMARTIA S350 LT

- Low frame
- Low sash
- Narrow interlocking profile 25mm



### PPM – [Product's data comparison](#)

PRODUCT PORTFOLIO MANAGEMENT

Home \ Sales Consulting \ Products' Data \ Systems Comparison

Product Category  
Sliding systems

Select a Company for comparison  
Alumil

Select Company Product  
S350

Select a Company for comparison  
Alumil




Select Company Product  
S440

Select a Company for comparison  
Alumil

Select Company Product  
S560

Select a Company for comparison

Select Company Product

Display Order	Characteristic	Sub Characteristic	Alumil S350	Alumil S440	Alumil S560
					

## PPM – [Competition comparison](#)

PRODUCT PORTFOLIO MANAGEMENT

Home \ Sales Consulting \ Alumil-Competition Comparison - Spec. Charact.

PDF

New Entry

Q

Search: All Text Columns

Go

Actions

Competitor equals Etem

OldReviewed

<input type="checkbox"/>	Lang	Point of Compare	Status	System cat
<input type="checkbox"/>	EN	Adjoining profiles	New Information - To be Reviewed	Sliding systems
<input type="checkbox"/>	EN	Adjoining profiles	New Information - To be Reviewed	Sliding systems
<input type="checkbox"/>	EN	Certifications	New Information - To be Reviewed	Sliding systems
<input type="checkbox"/>	EN	Frames	New Information - To be Reviewed	Sliding systems
<input type="checkbox"/>	EN	Frames	New Information - To be Reviewed	Sliding systems
<input type="checkbox"/>	EN	Frame-Sash	New Information - To be Reviewed	Sliding systems

### Available comparisons

- Aluminio SL200
- Elvial 6500
- Etem E32
- Etem E52
- Europa ESS34
- Exalco Albio225

Alumil	Alumil Characteristics	Competitor
Etem E32	Standard meeting stile section 102mm width	Etem
Etem E52	Standard meeting stile section 116mm	Etem
Europa ESS34	For the 2-sash typology the performance	Etem
Exalco Albio225	Standard frame 38 mm Low frame 32 mm	Etem
	Standard frame height 38mm Low frame height 32mm	Etem
	Standard sash height 85mm (available also with anti-bimetal	Etem

	Fabricators	Architects	Home owners
Modern <b>design</b>	✓	✓	✓
Wide <b>range</b> of solutions	✓	✓	✓
Increased <b>clientele</b>	✓	✓	
<b>Differentiation</b>		✓	
<b>Green</b> buildings design		✓	
Cost & energy <b>saving</b>			✓
Ease of <b>use</b>			✓
Long-lasting <b>functionality</b>	✓		✓
<b>Coziness</b>			✓
Easy <b>fabrication</b>	✓		



**Alumil**

**SMARTIA**  
S350





## Summarize

The new solutions of SMARTIA S350 - S350 LT - offer:

- ✓ Advanced modern aesthetics
- ✓ Same thermal & sealing performance with older version
- ✓ Easy and fast fabrication
- ✓ Less cost with common accessories
- ✓ Ideal solution for large scale projects
- ✓ Ideal solution for renovations with low frame



Building excellence every day

Thank you  
for your attention

[www.alumil.com](http://www.alumil.com)