



**Alumil**  
Building excellence every day

**Alumil**  **SMARTIA**  
M35



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### **SMARTIA M35**

is a cost efficient Curtain Wall system that meets the ever increasing trend of minimal design.

Its slender design renders SMARTIA M35 ideal for the demands of Transparent Architecture without compromising high performances and functionality.

When the panoramic view is required, whether it is a shopfront construction or a high rise building, SMARTIA M35 is the right choice.

Make it simple

but significant.





- Basic system width 35mm
- Available in standard version using aluminium caps.
- High thermal insulation thanks to special insulating materials
- Ideal for constructions that seamless appearance is specified, such as shopfronts.
- Moment of Inertia up to 500cm<sup>4</sup> , satisfying any structural demand.
- Glazing infill from 4mm up to 54mm
- Low fabrication cost thanks to accessories and ease of fabrication.
- Effective water evacuation system
- Implementation of various types of hinged windows: projected, parallel projected, tilt and turn and concealed sash.
- Implementation of entrance door systems.



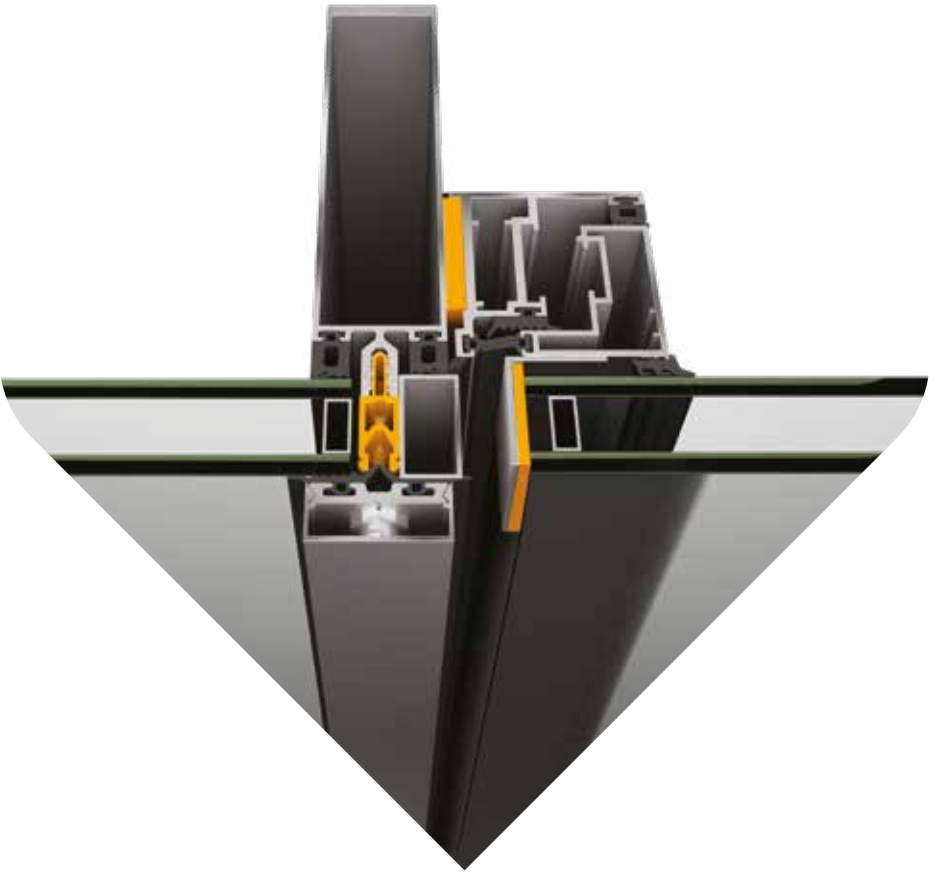


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TECHNICAL

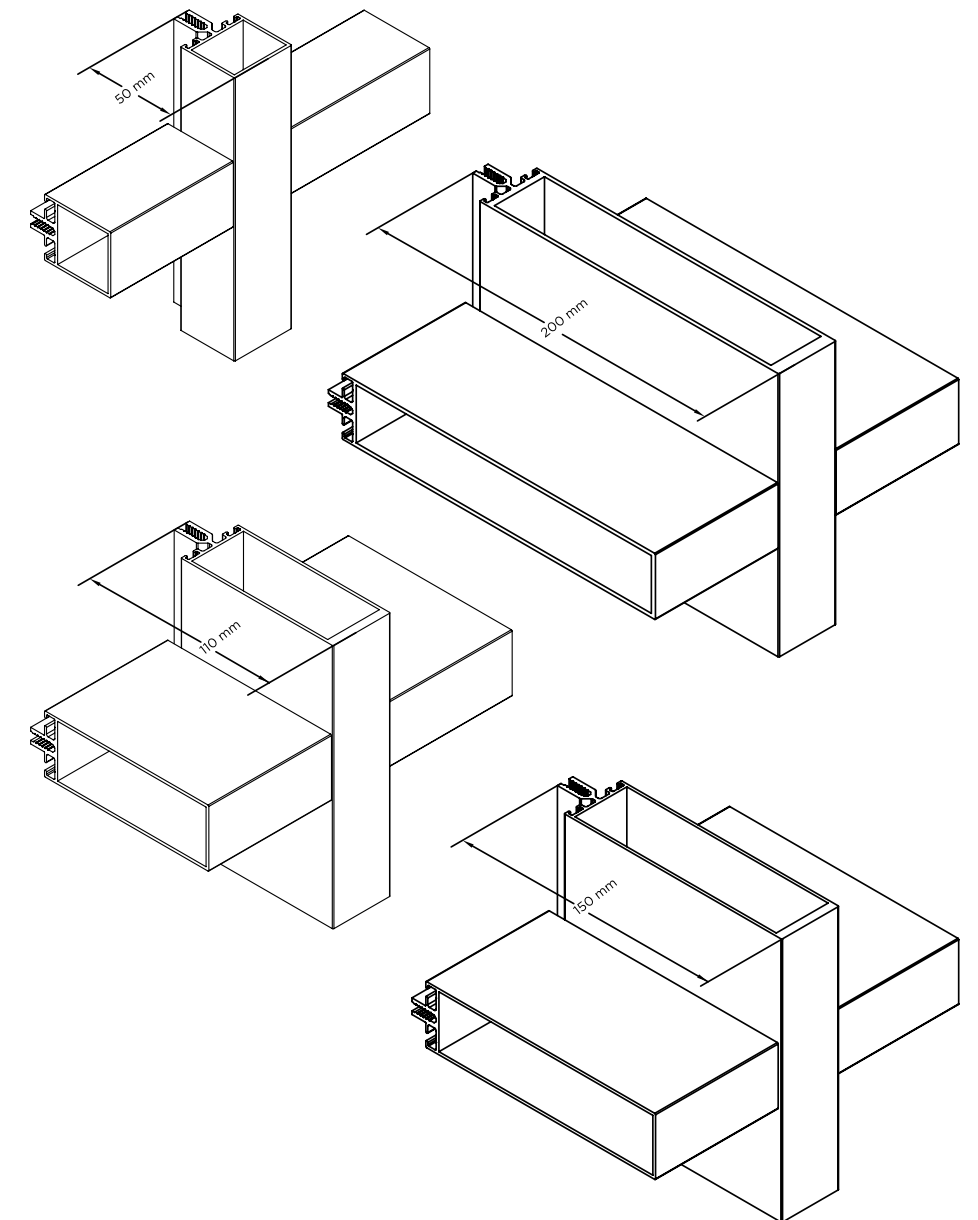
CHARACTERISTICS



VISIBLE	35MM
MULLION DEPTH	20-200MM
TRANSOM WIDTH	16,5-200MM
GLAZING TYPE	STICK WITH EPDM GASKETS
MULLION MOMENTS OF INERTIA	$I_x=540\text{CM}^4$ , $I_y=20\text{CM}^4$
TRANSOM MOMENTS OF INERTIA	$I_x=451\text{CM}^4$ , $I_y=24\text{CM}^4$

Coincident pairs of  
mullion and transom

4 available mullions and  
transoms pairs of the same  
depth, providing a  
**symmetric aesthetic effect.**

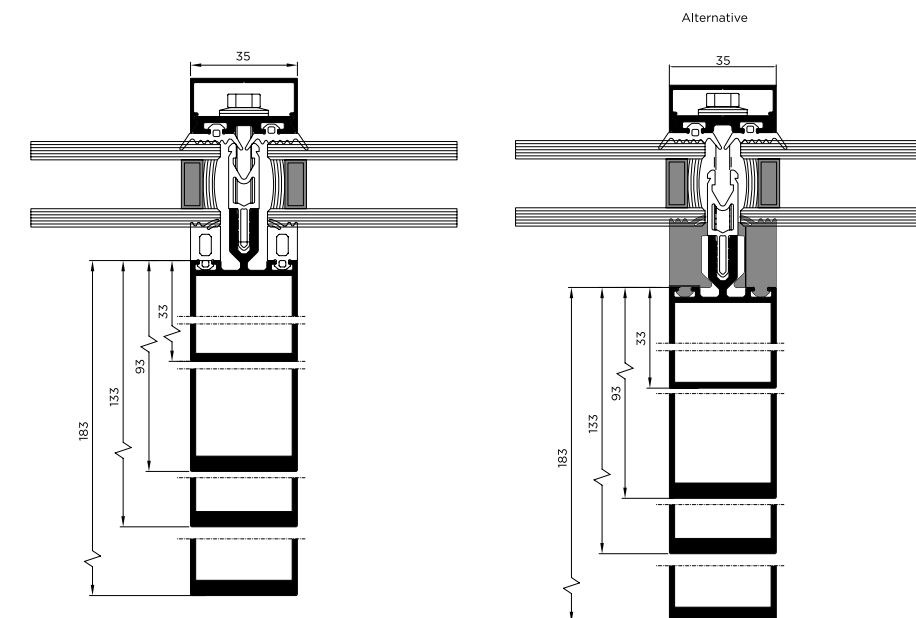




## SYSTEM

### Alternative mullion gasket

The use of a different gasket in the mullion, **bigger than the usual**, transposes glass unit and prevents it from breaking during installation.



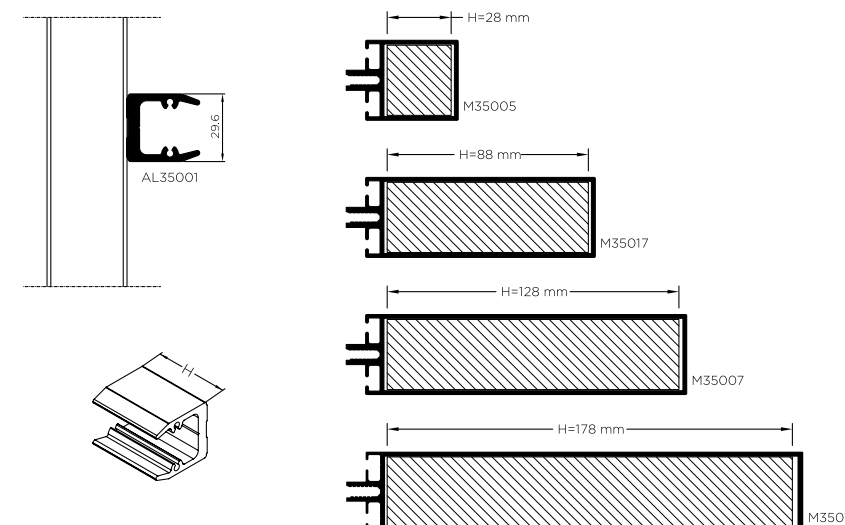
### Transom connection

The use of single profile for each pair of mullion-transom instead of using different set of accessories, **contributes to the system's flexibility**.

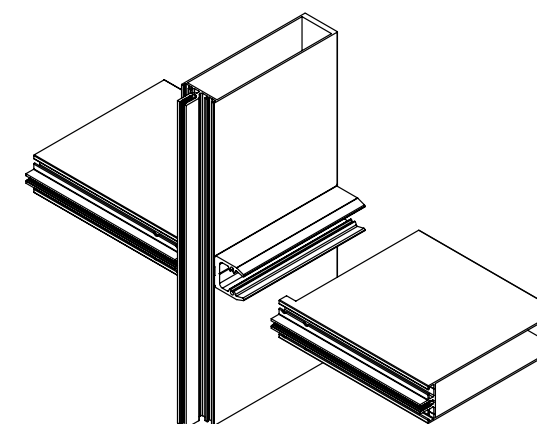
Two alternatives concerning transom milling.

- Using end cap
- Without the use of end cap

#### Transom Connector



#### Transom Milling for Connection without End Caps/



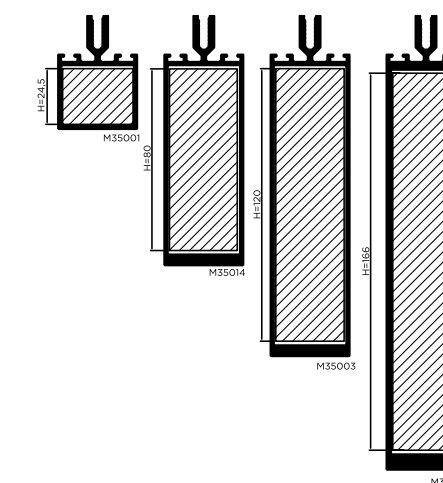
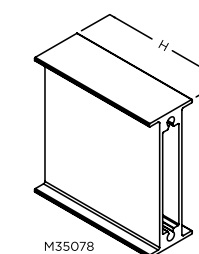


## Mullion connection

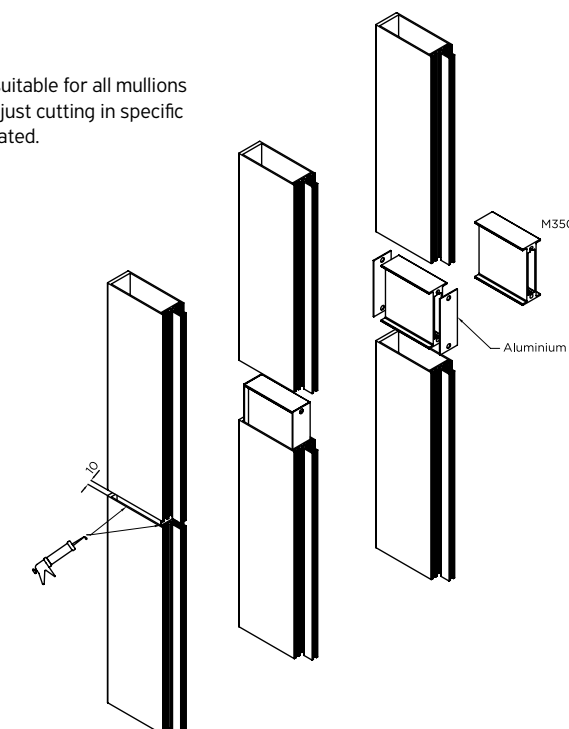
Connection between mullions, **providing safe assembly and installation** for facades that cover whole building envelope and not only shopfronts.



Economy of scales

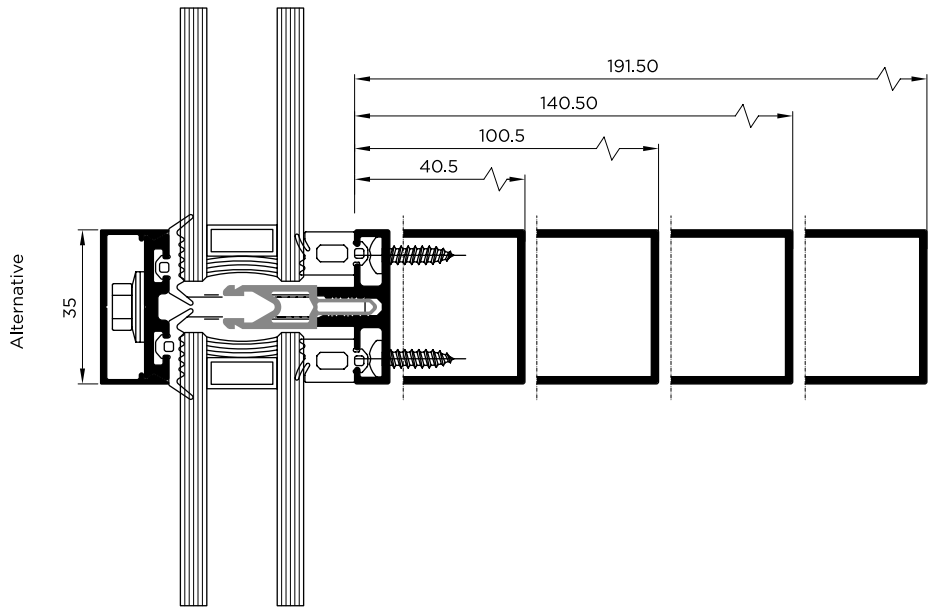
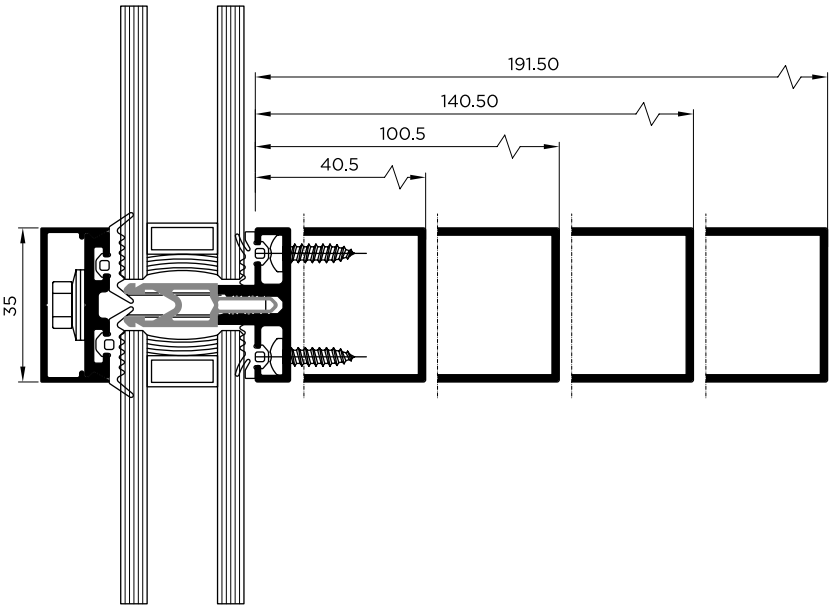
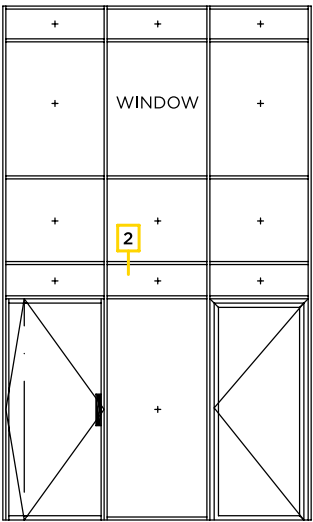
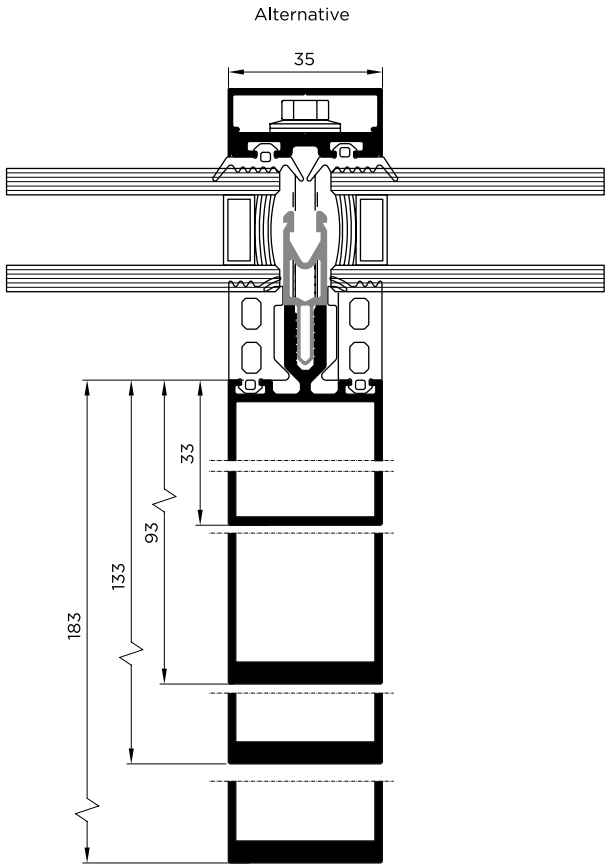
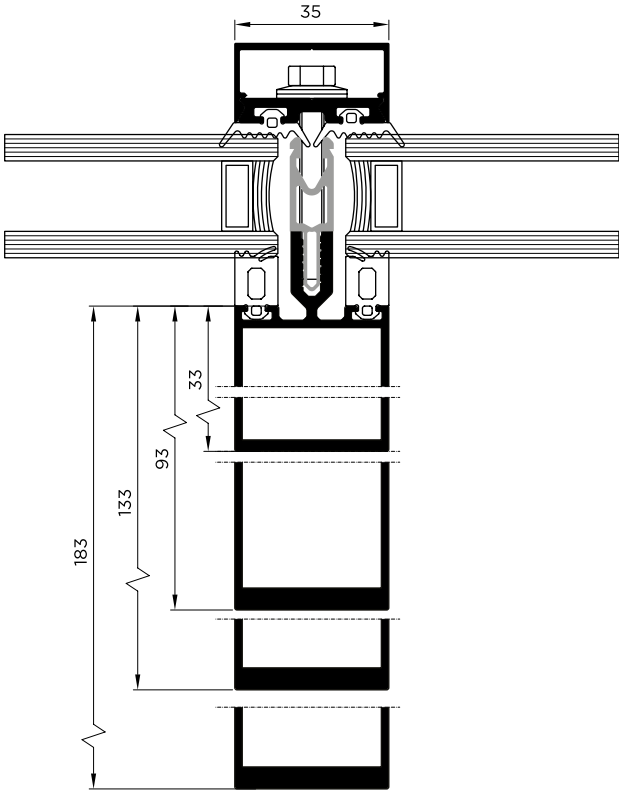
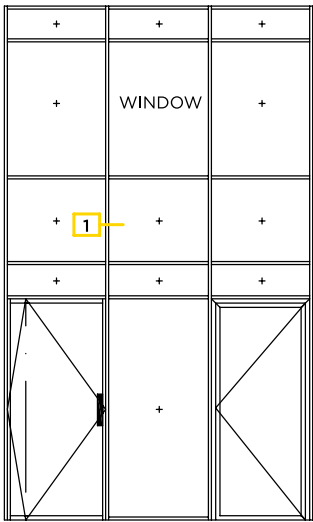


This profile is suitable for all mullions of the system, just cutting in specific height as indicated.



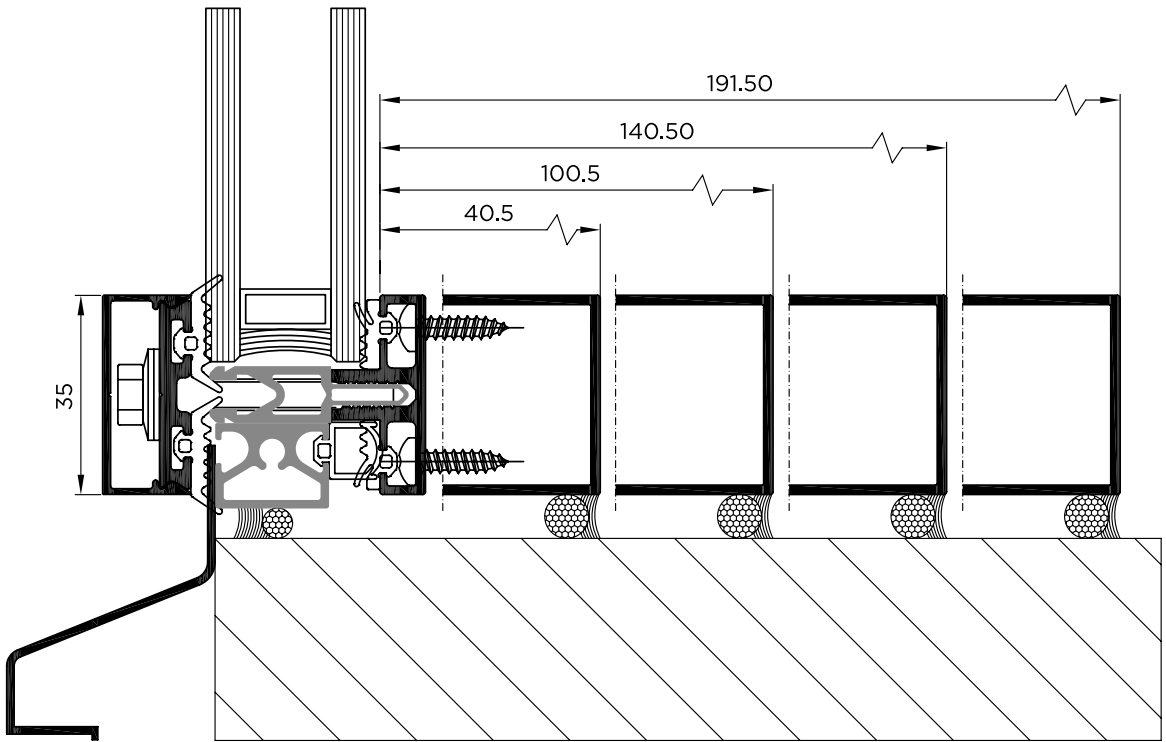
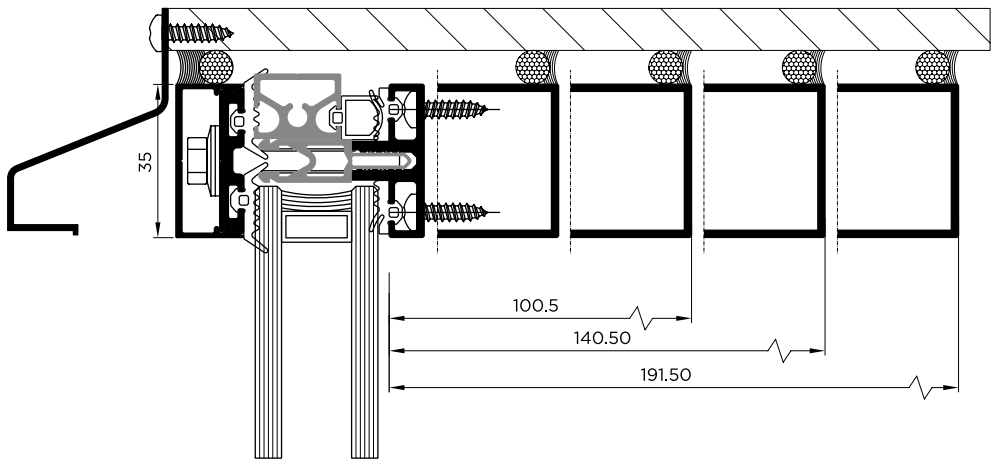
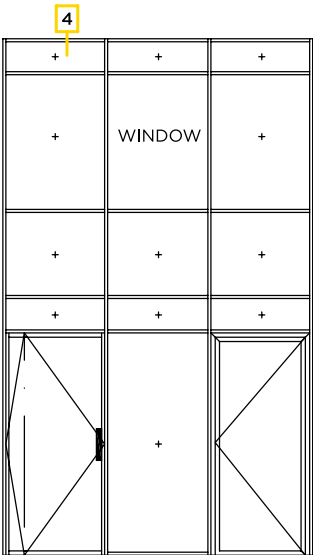
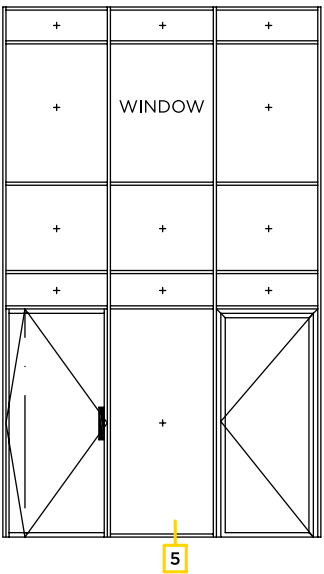
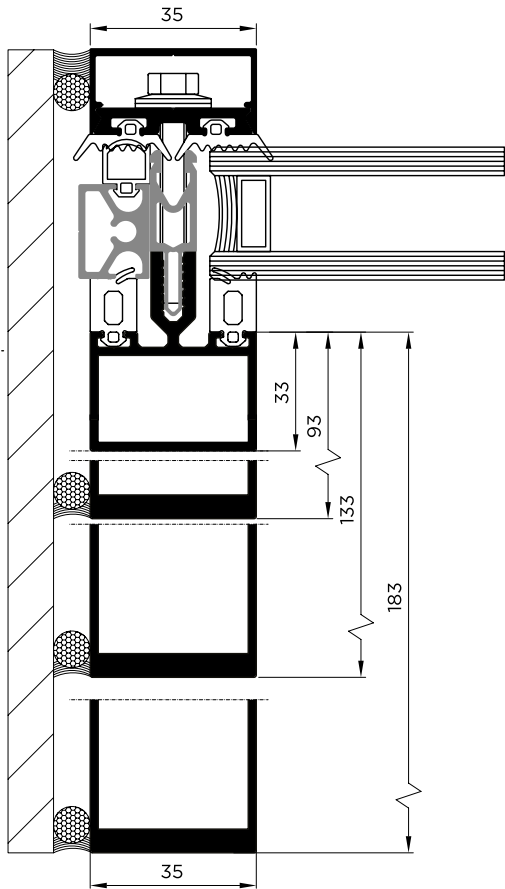
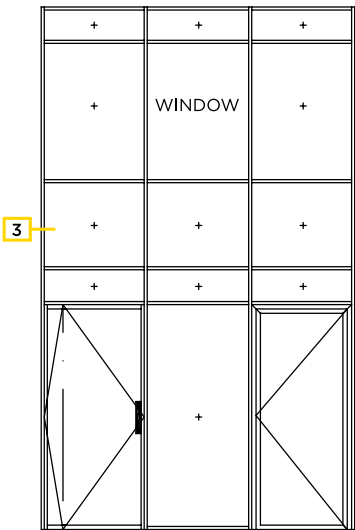


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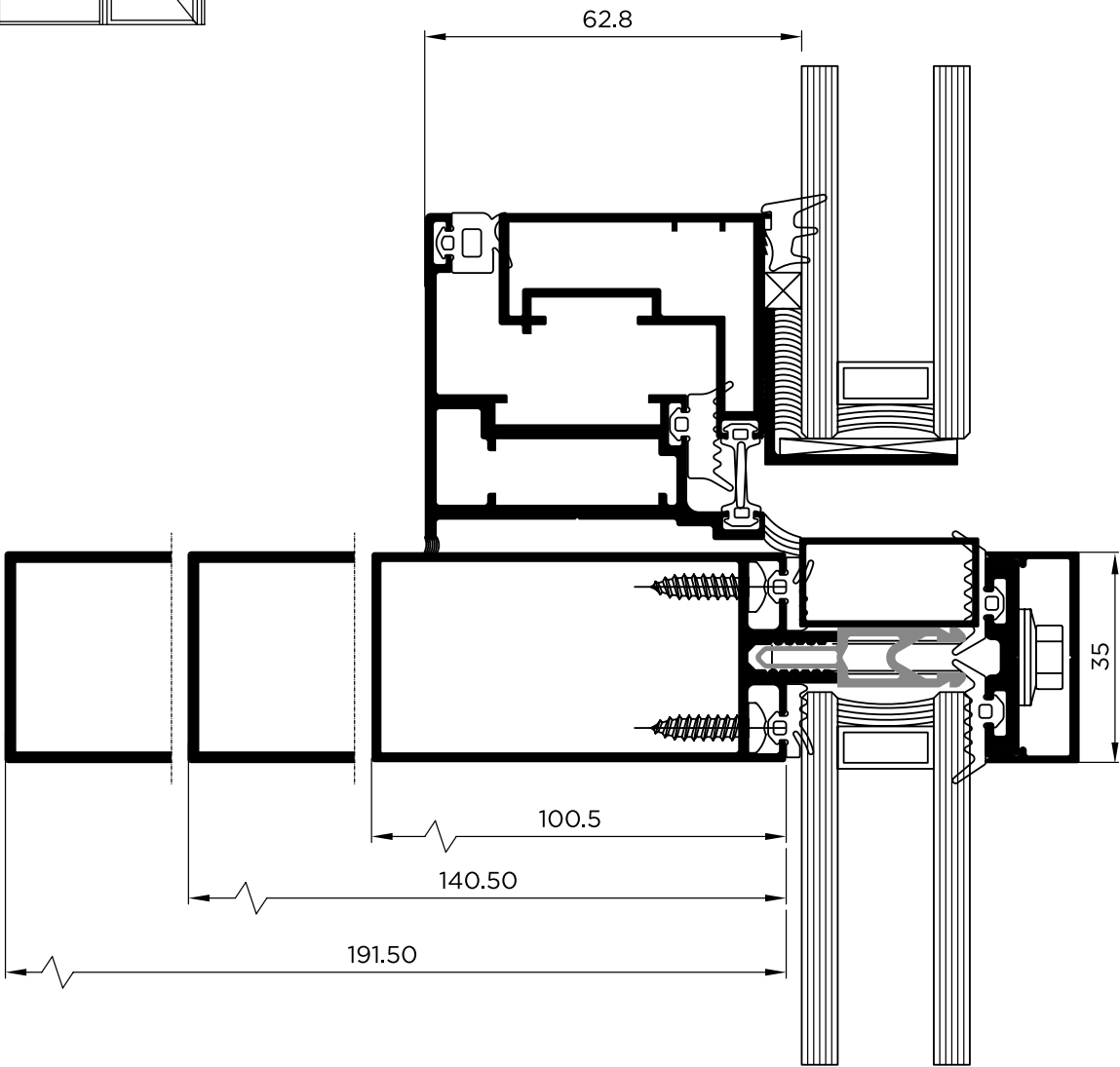
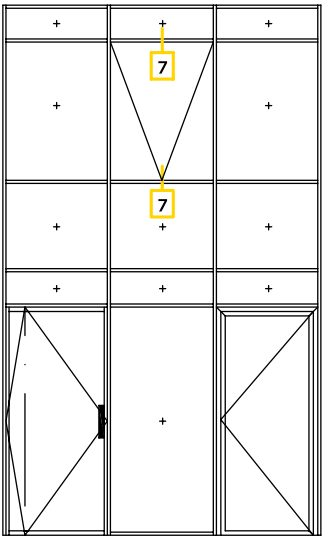
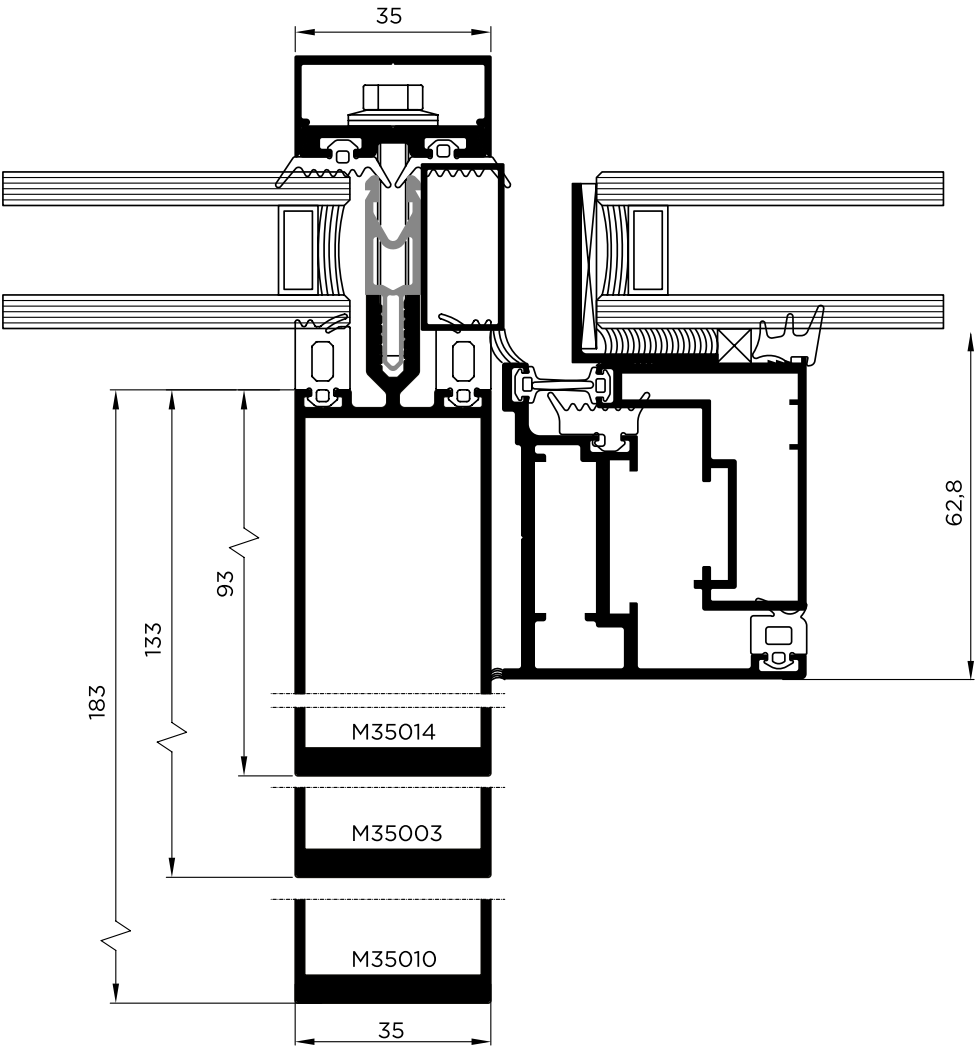
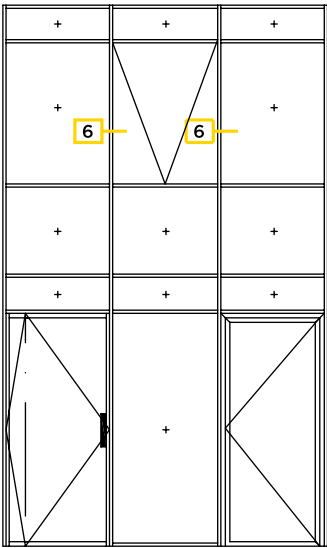


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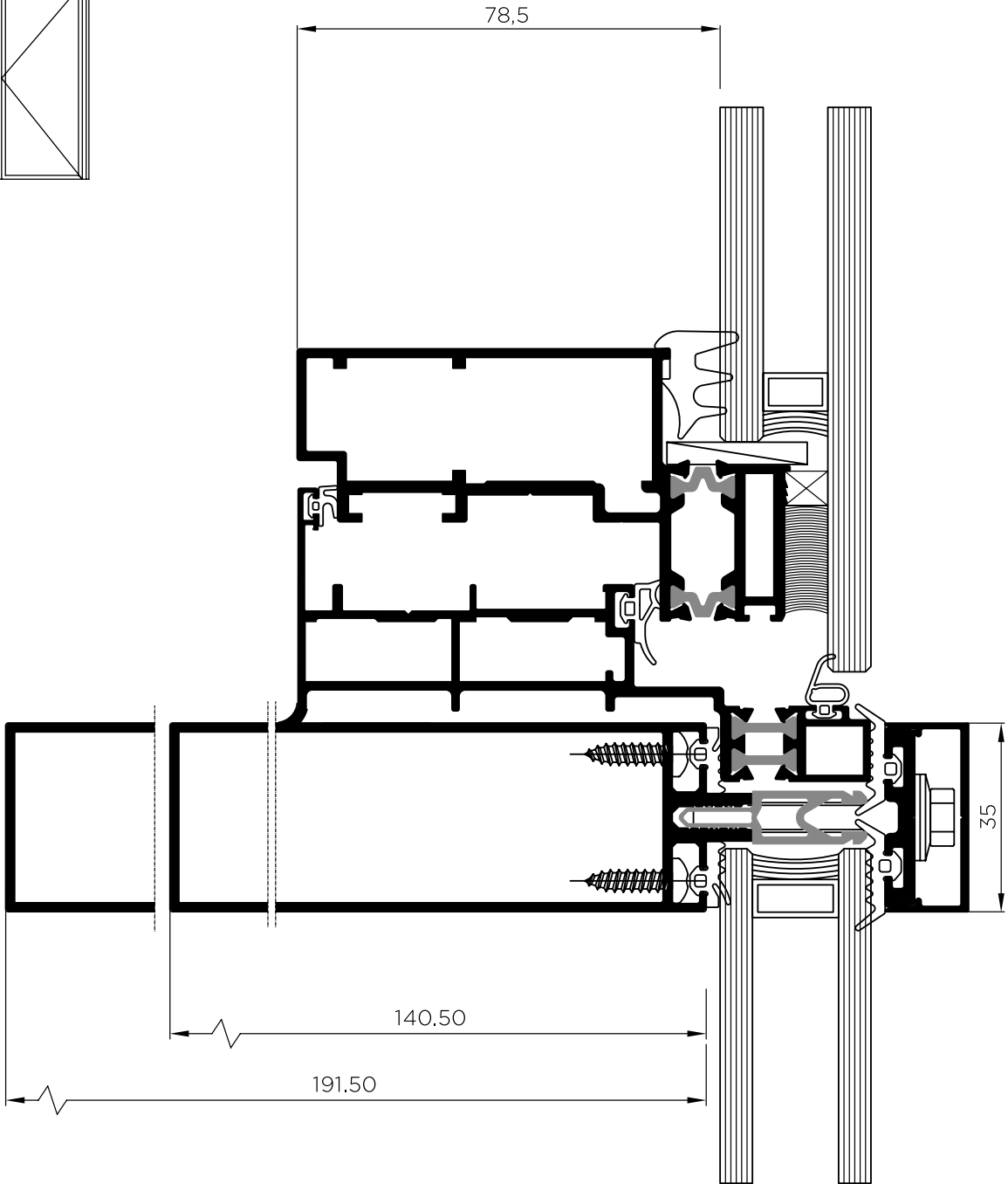
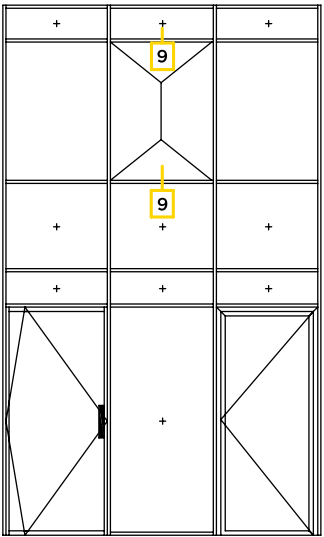
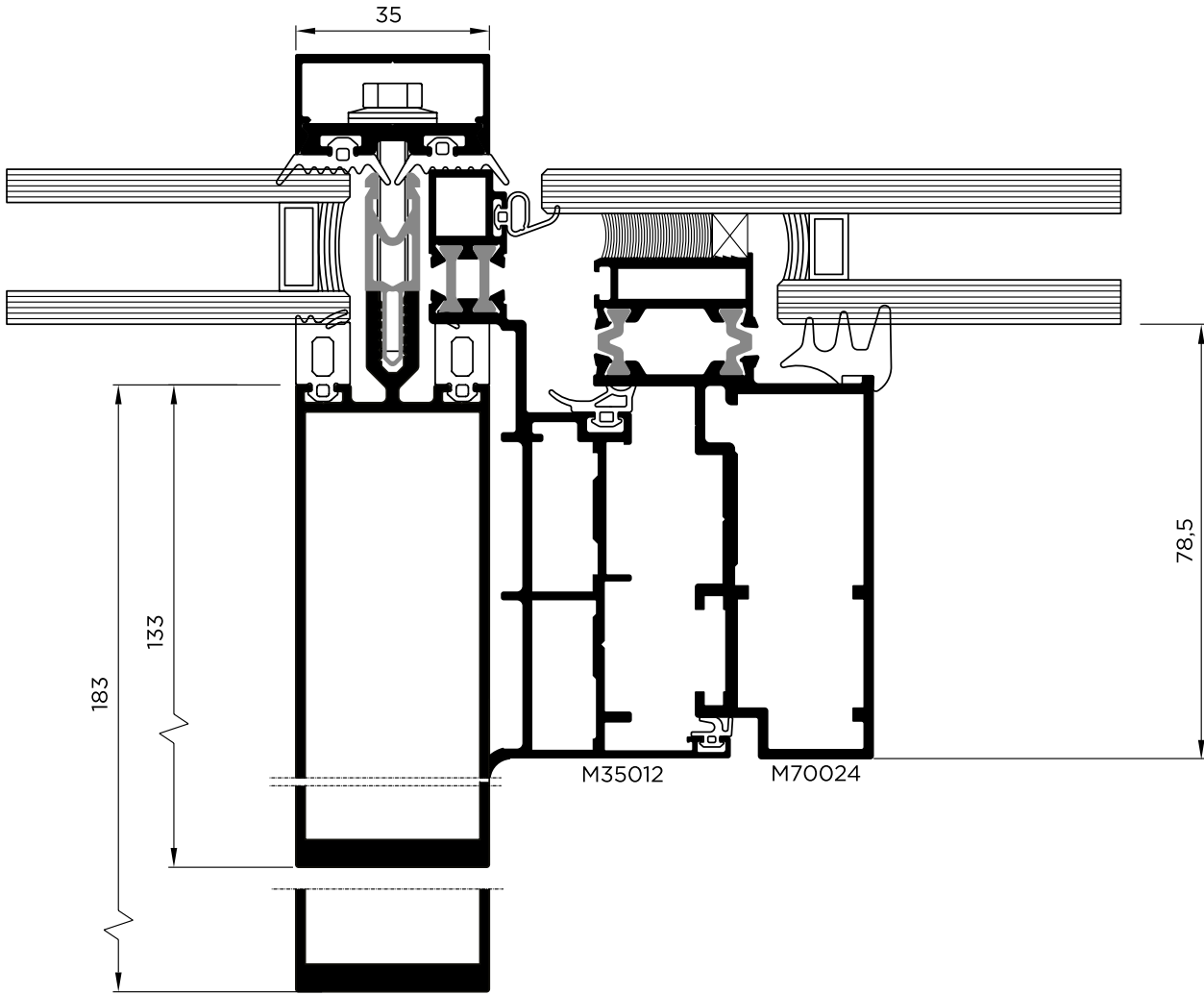
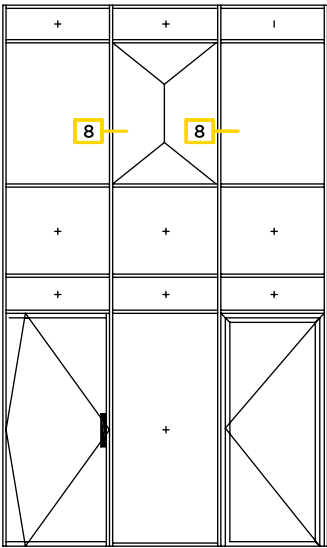


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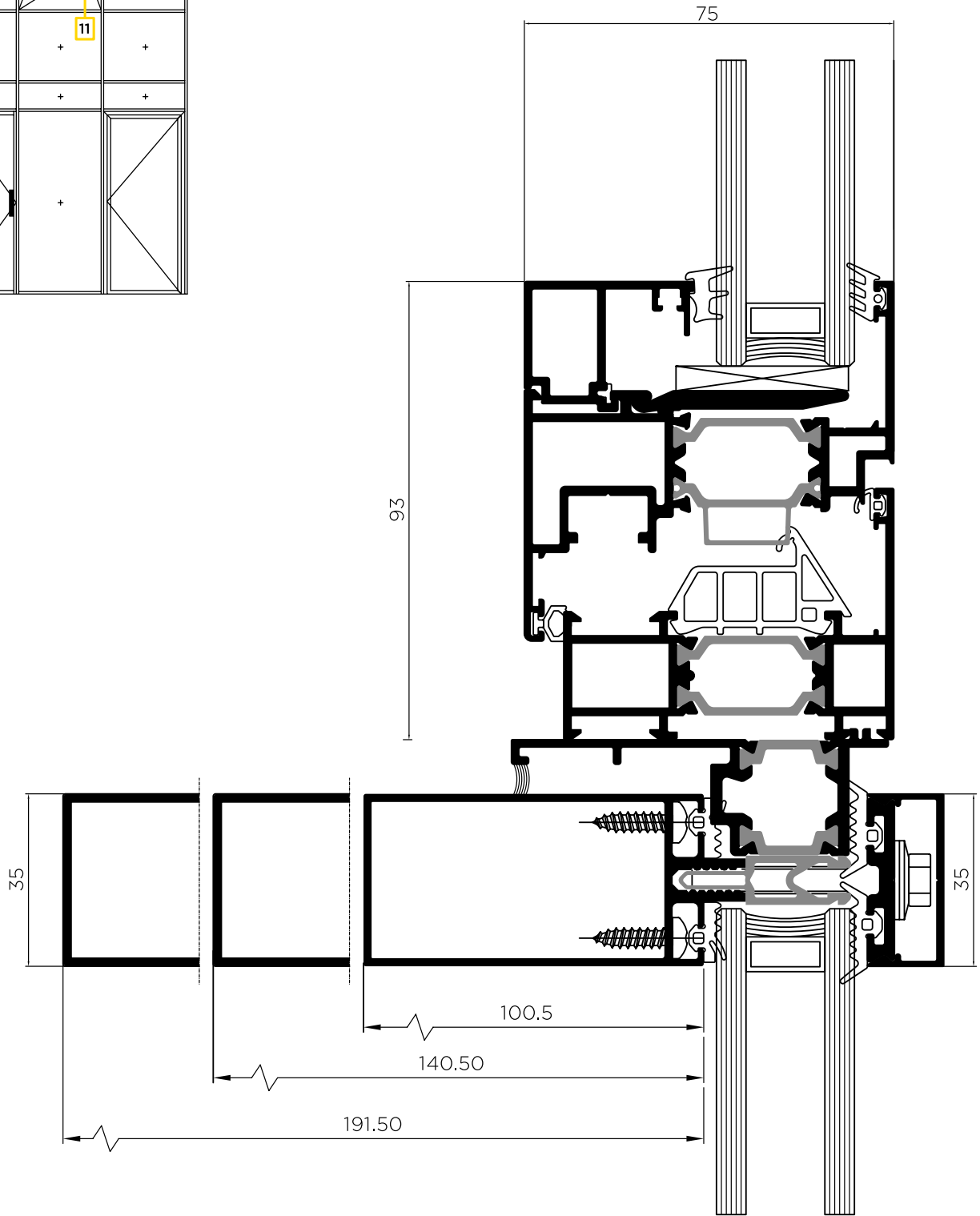
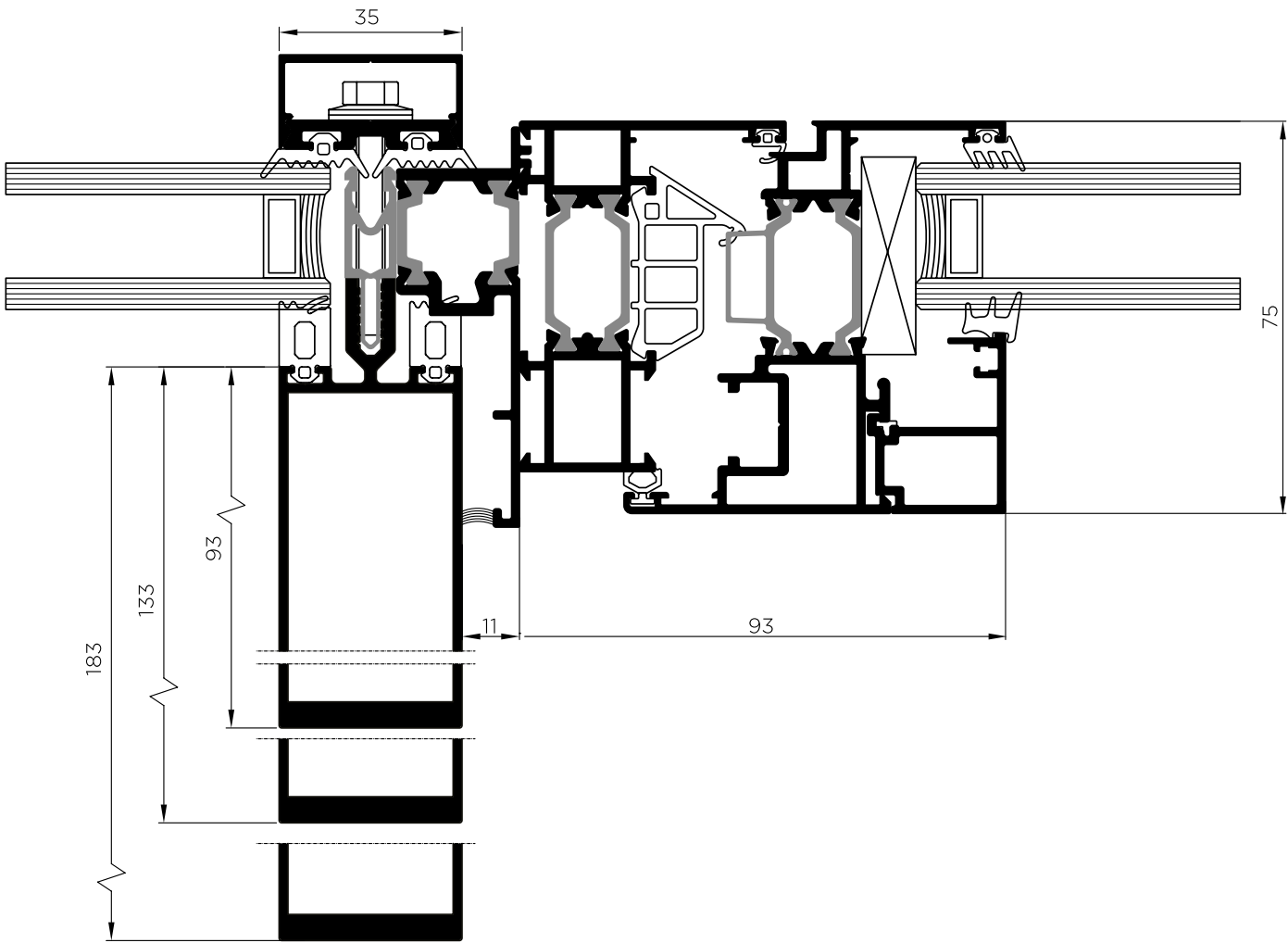
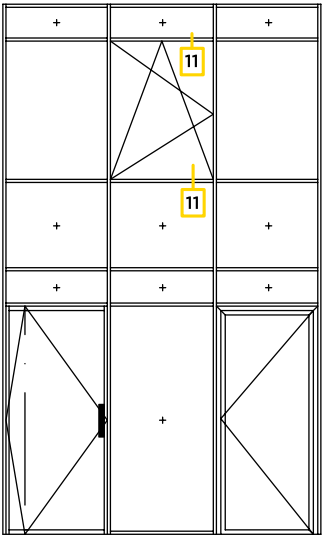
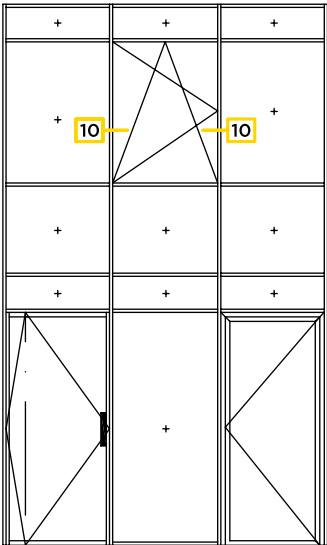




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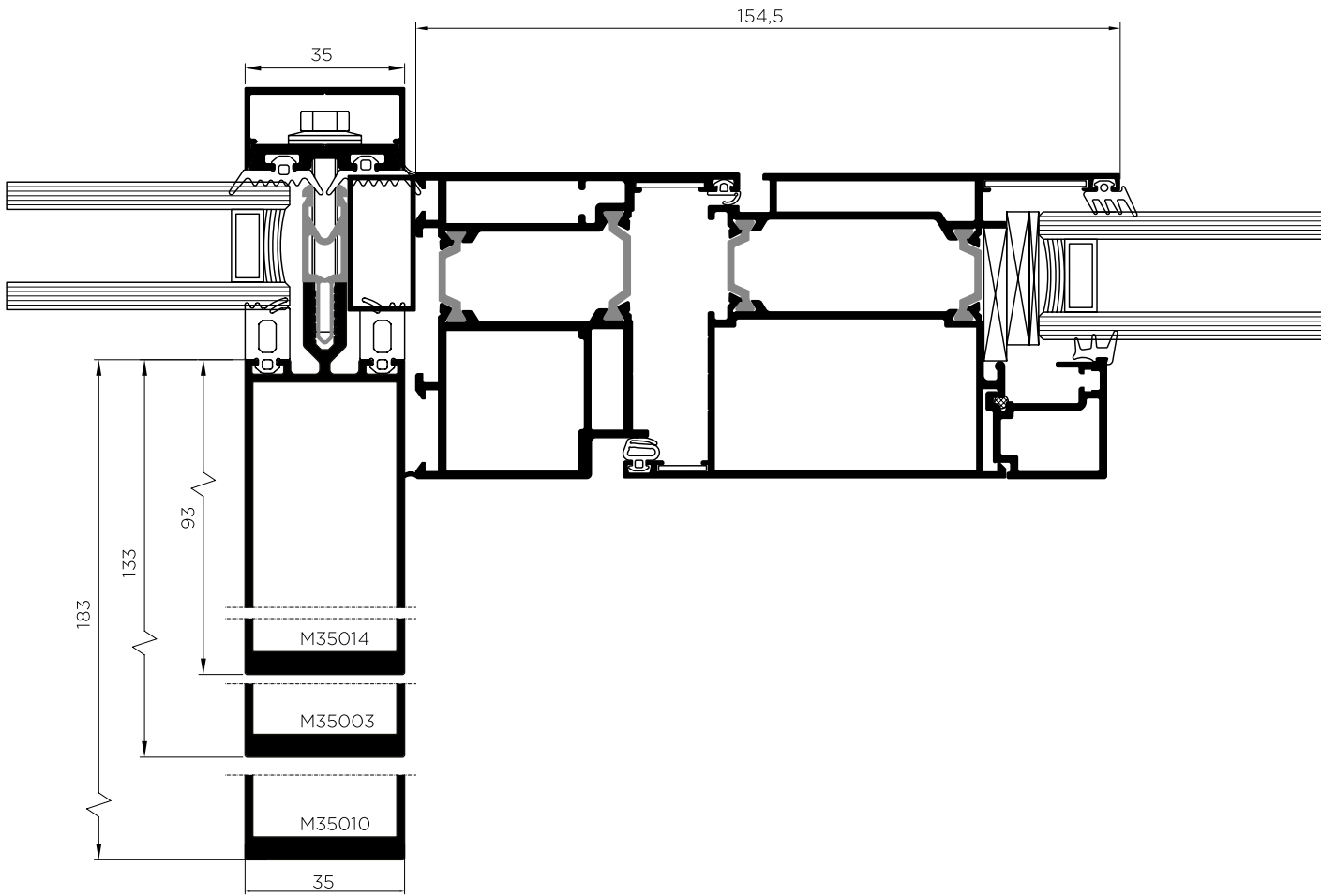
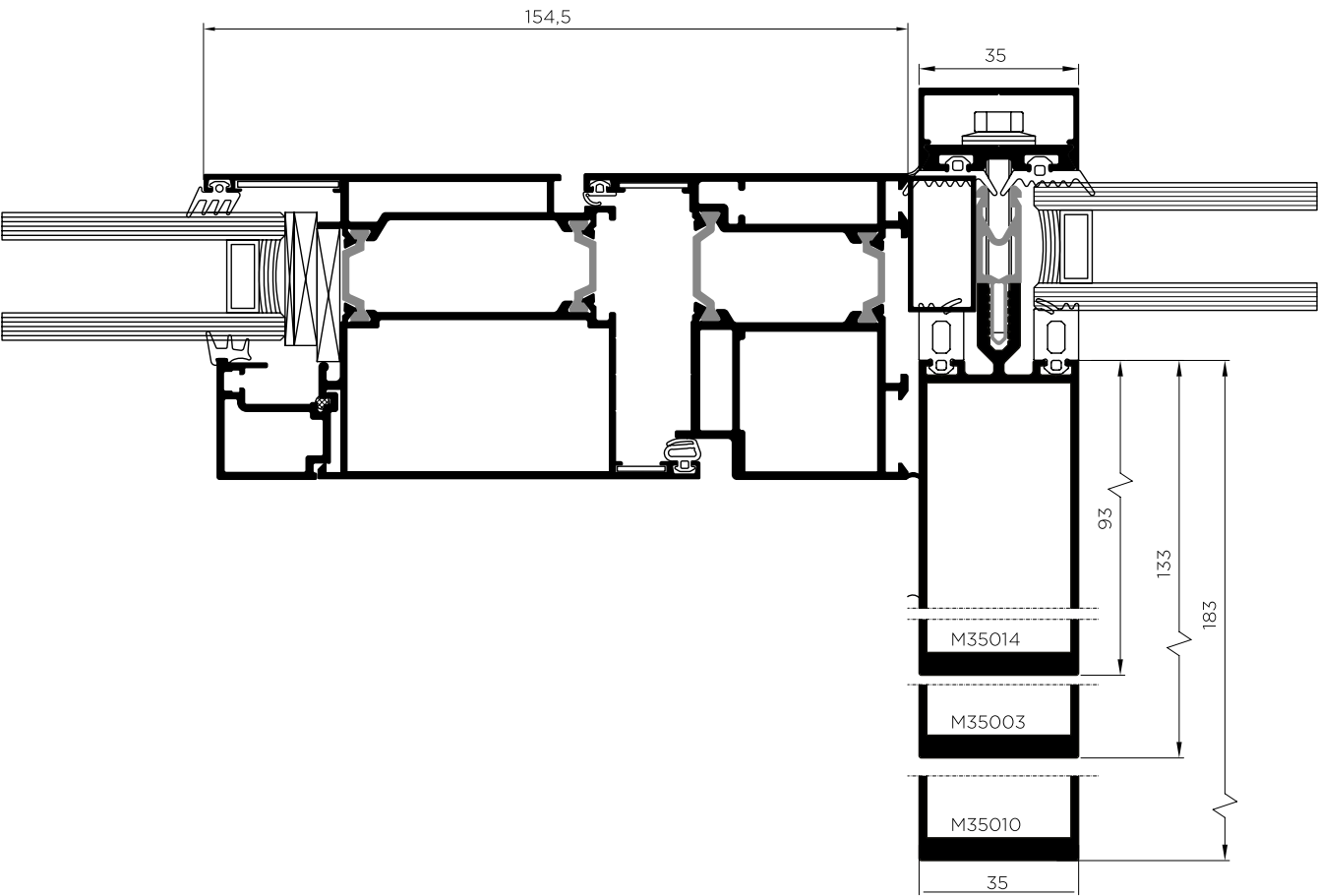
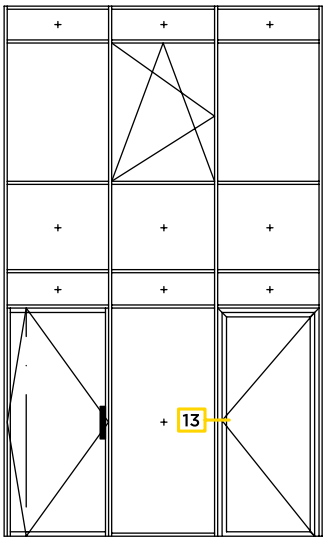
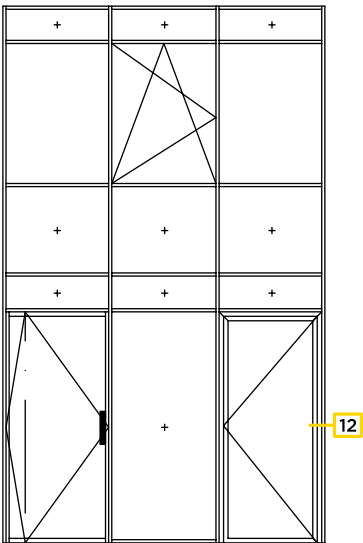


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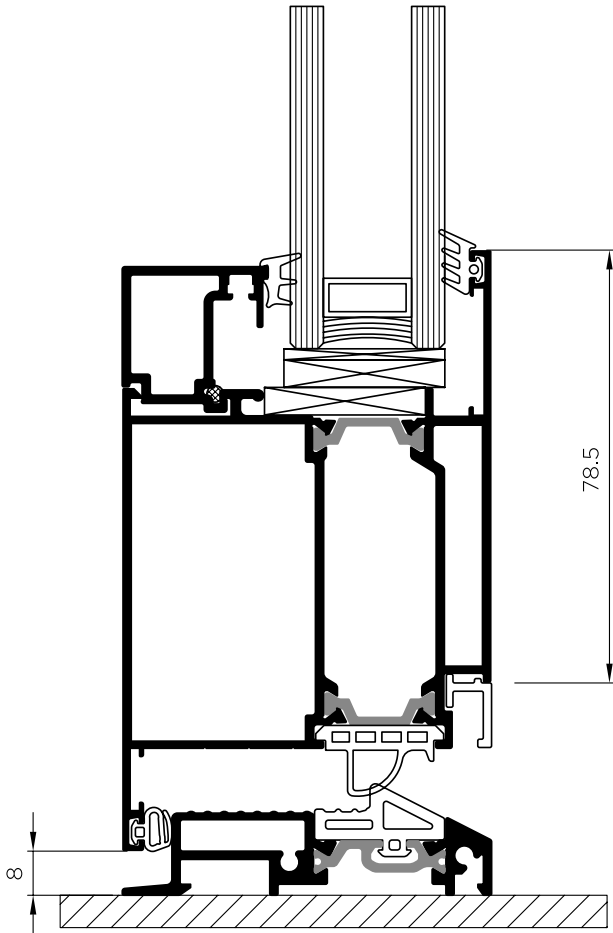
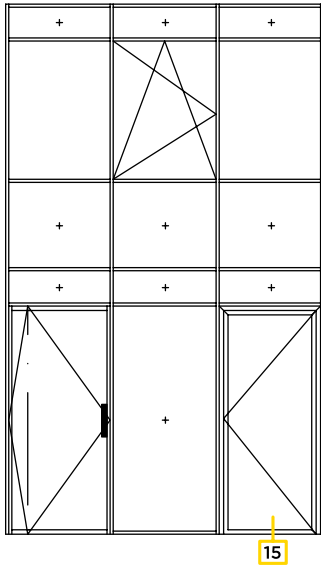
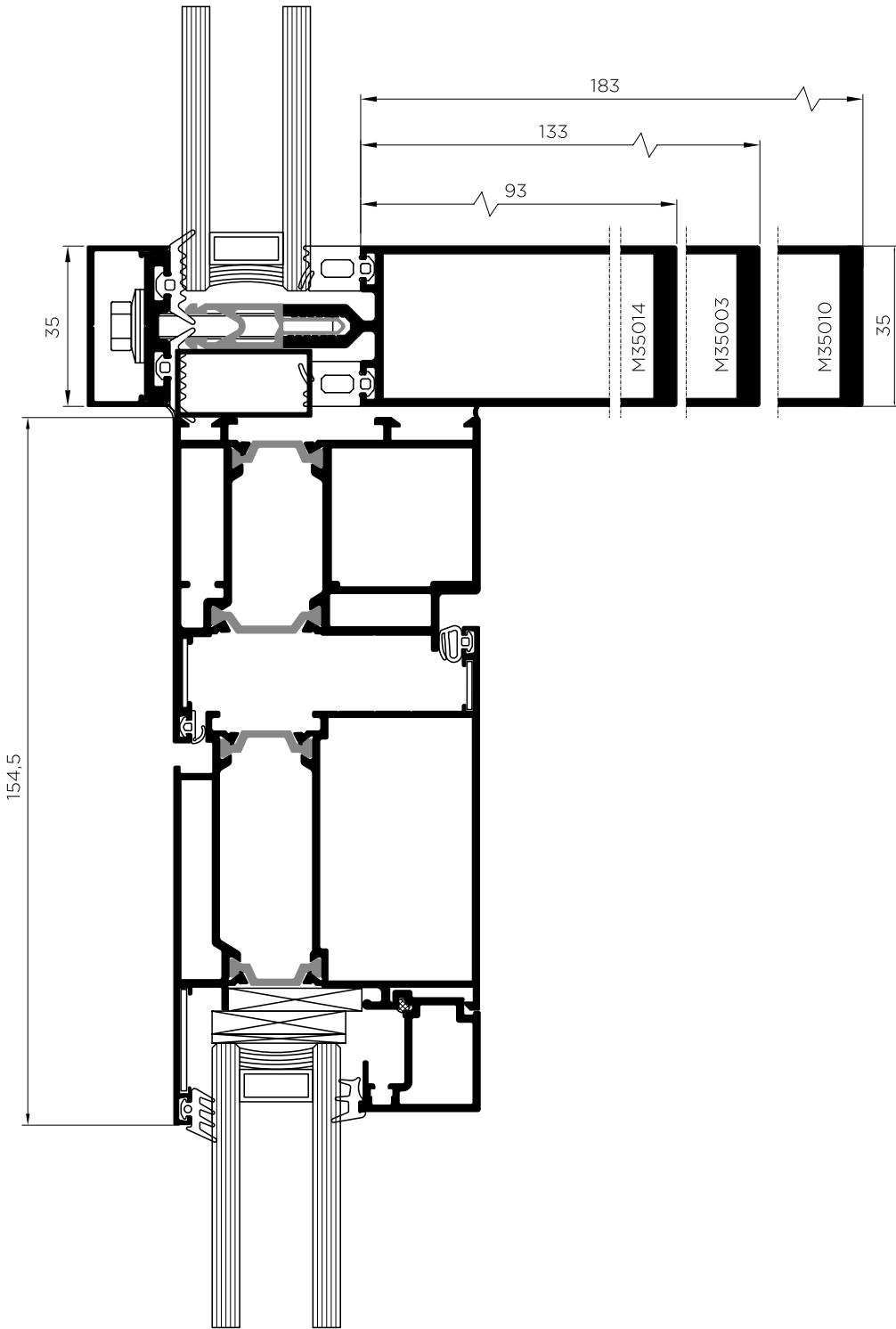
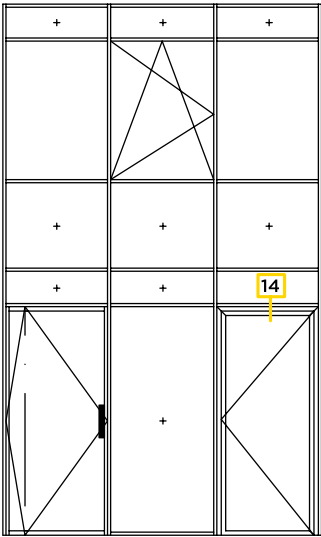




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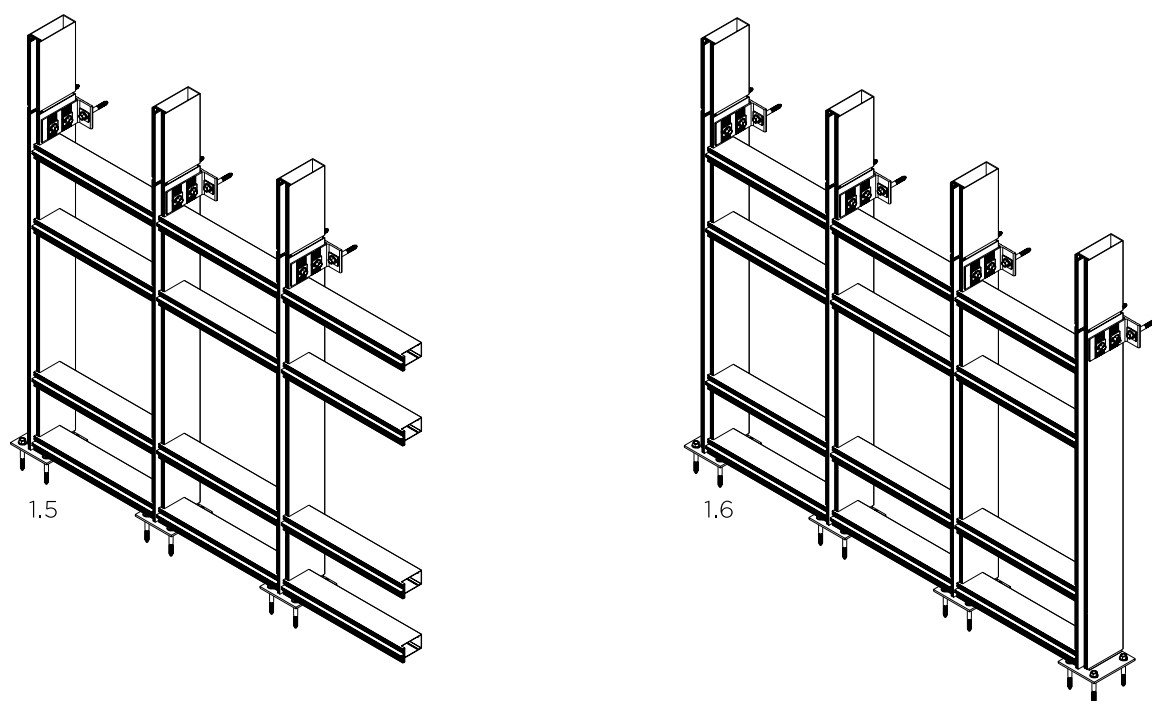
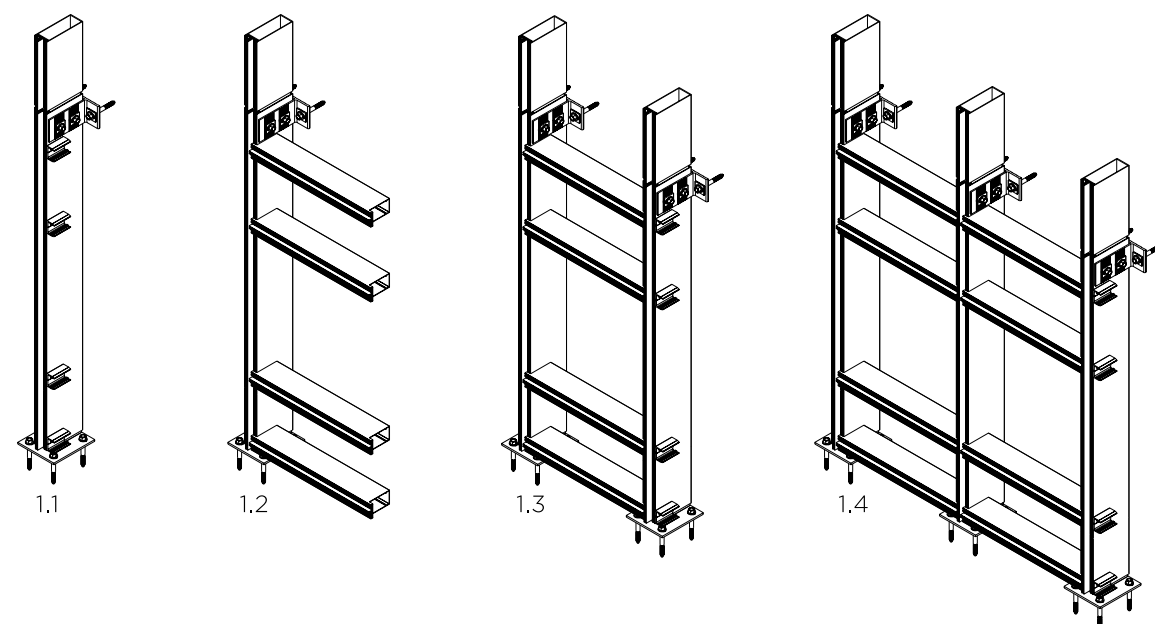
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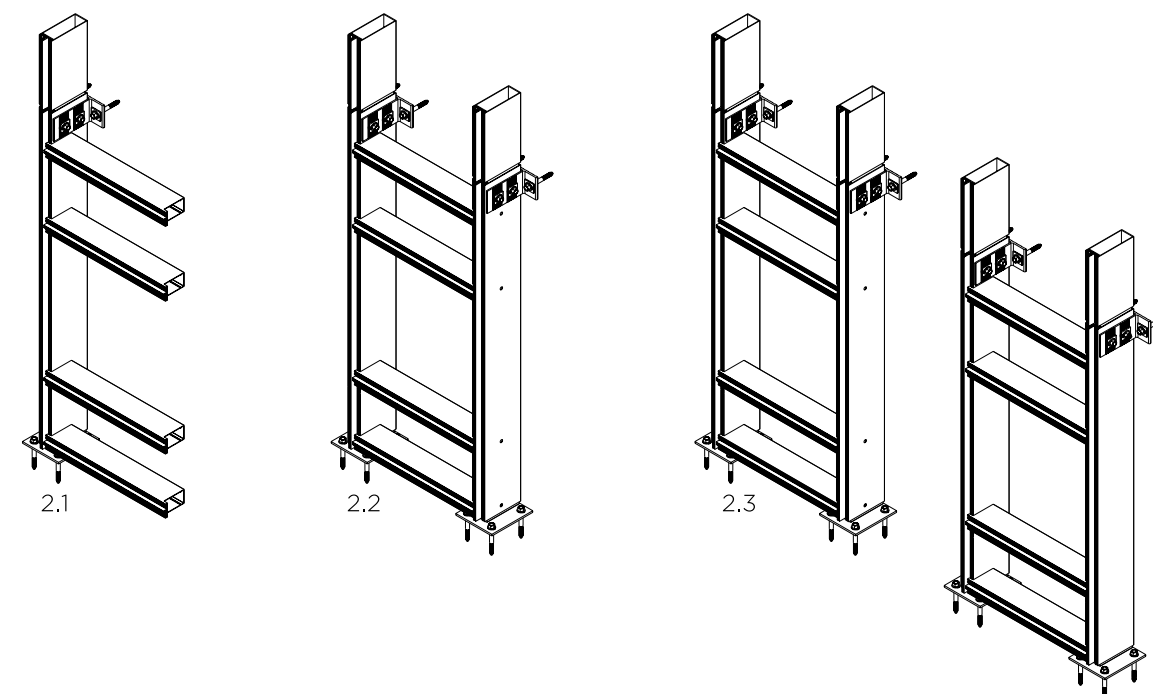


# Installation

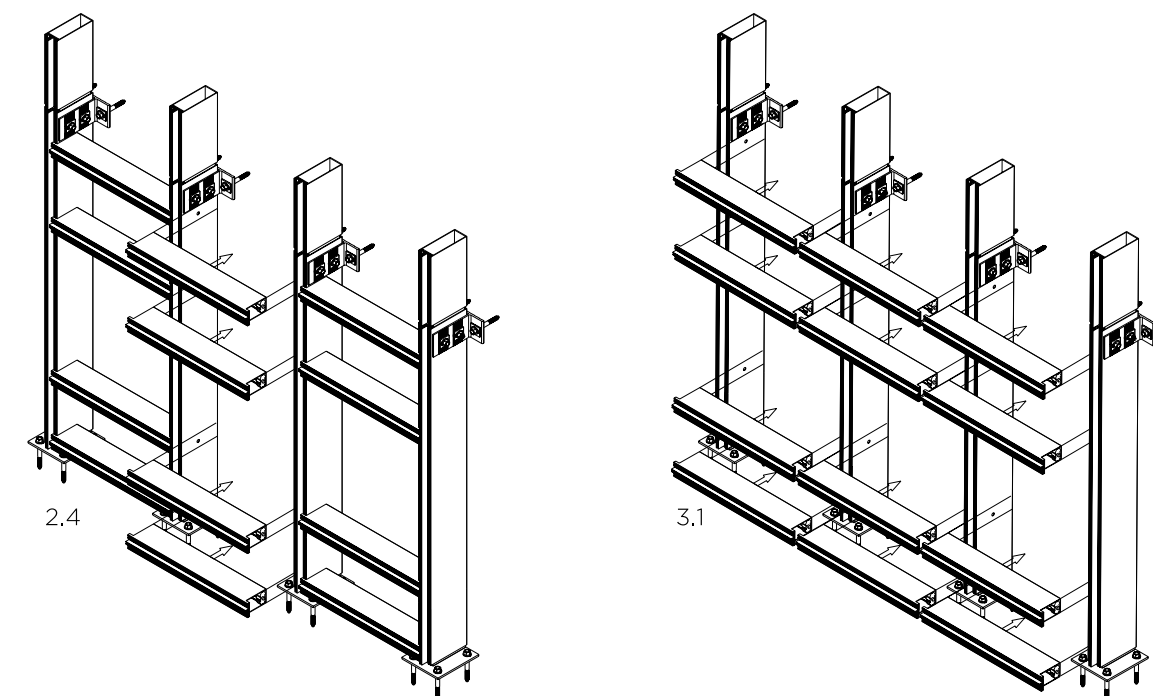
## 1. Assembly Mullion - Transoms - Mullion



## 2. Assembly Ladder Elements







## 3. Assembly Transoms



# Table of performance

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CERTIFICATION		CLASSIFICATION				
	<b>WATER TIGHTNESS</b> EN 12154	R4 (150 Pa)	R5 (300 Pa)	R6 (450 Pa)	R7 (600 Pa)	<b>RE1050</b> (1050 Pa)
	<b>AIR PERMEABILITY</b> EN 12152	A1 (150 Pa)	A2 (300 Pa)	A3 (450 Pa)	A4 (600 Pa)	<b>AE</b> (> 600 Pa)
	<b>WIND LOAD RESISTANCE</b> MAX TEST PRESSURE EN 13116	<b>DESIGN LOAD</b> ±1600Pa			<b>SAFETY LOAD</b> ±2400Pa	
	<b>THERMAL INSULATION</b> EN 12631	U <sub>f</sub> down to 1,2 W/m²K depending on the profile combinations and glazing thickness				





ALUMIL  
MIDDLE EAST DMCC

Mazaya Business Avenue BB1  
29th Floor, Office #2907  
Jumeirah Lakes Towers, Dubai, UAE  
TEL.: +971 4 4425930  
FAX: +971 4 4416528  
EMAIL: marketing.uae@alumil.com  
[www.alumil.ae](http://www.alumil.ae)

ALUMIL  
HEADQUARTERS

Kilkis Industrial Area  
Kilkis - GR 61100  
TEL.: +30 23410 79300  
FAX.: +30 23410 71988  
E-MAIL.: info@alumil.com



**ALUMIL  
MIDDLE EAST DMCC**

MAZAYA BUSINESS AVENUE BB 1  
29TH FLOOR, OFFICE #2907  
JUMEIRAH LAKES TOWERS,  
DUBAI, UAE  
**TEL.:** +971 4 4425930  
**FAX:** +971 4 4416528  
**EMAIL:** marketing.uae@alumil.com

**ALUMIL  
HEAD OFFICES  
& SHOWROOM - THESSALONIKI**

GOGOUSI 8, EFKARPIA  
THESSALONIKI - GR 56429  
**TEL.:** +30 2313 011000  
**FAX:** +30 2310 692473  
**E-MAIL:** info@alumil.com

**[www.alumil.ae](http://www.alumil.ae)**

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