

ORAMA MINIMAL FRAMES ARCHITECTURAL CATALOGUE





Orama Architectural Catalogue

Edition 4.0 / 11 · 2017

First Edition 10 · 2014

Technical drawings: **Orama R & D**

Catalogue design: **Role Play** / roleplay.gr

Request digital drawings by contacting us

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INTRODUCTION

2

A completely new system has been elaborated, based on a 20-year experience in aluminum profiles, meeting the highest standards in elegance, comfort and performance.

The system offers the excellent **Uw values** with double and triple glazing which meet the demands of the most critical environments.

All sliding typologies are available including **single, double, and triple track systems** as well as **corner-free** solutions that open your vision to 360 degrees.

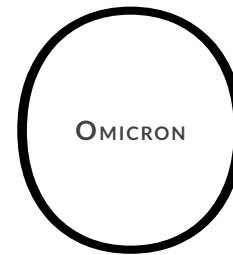
The **high capacity stainless steel rollers and tracks** allow smooth sliding action and extreme ease of movement with large glass areas.

Concealed **electric drives and locks** can be used to increase operating comfort and to increase the security level of the opening.

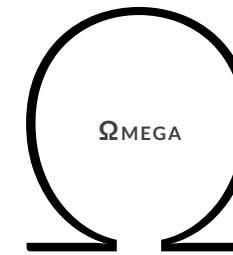
The aluminium windows can be **fully integrated into the wall, ceiling and floor**, which results in a completely invisible frame and increased vision to the outside environment.

The high-quality multi-locking point system developed by ORAMA offers the best possible **burglar resistance** in accordance with European standards.

A new evolution has been created in the concept of drainage, increasing the speed of draining away water.














OMICRON is our standard minimal frames system incorporating all the significant features of the Orama system in a double-glazed setup.




ΩMEGA is an advanced minimal frames system able to deliver higher insulation performance and bigger sizes through thicker triple glazing.



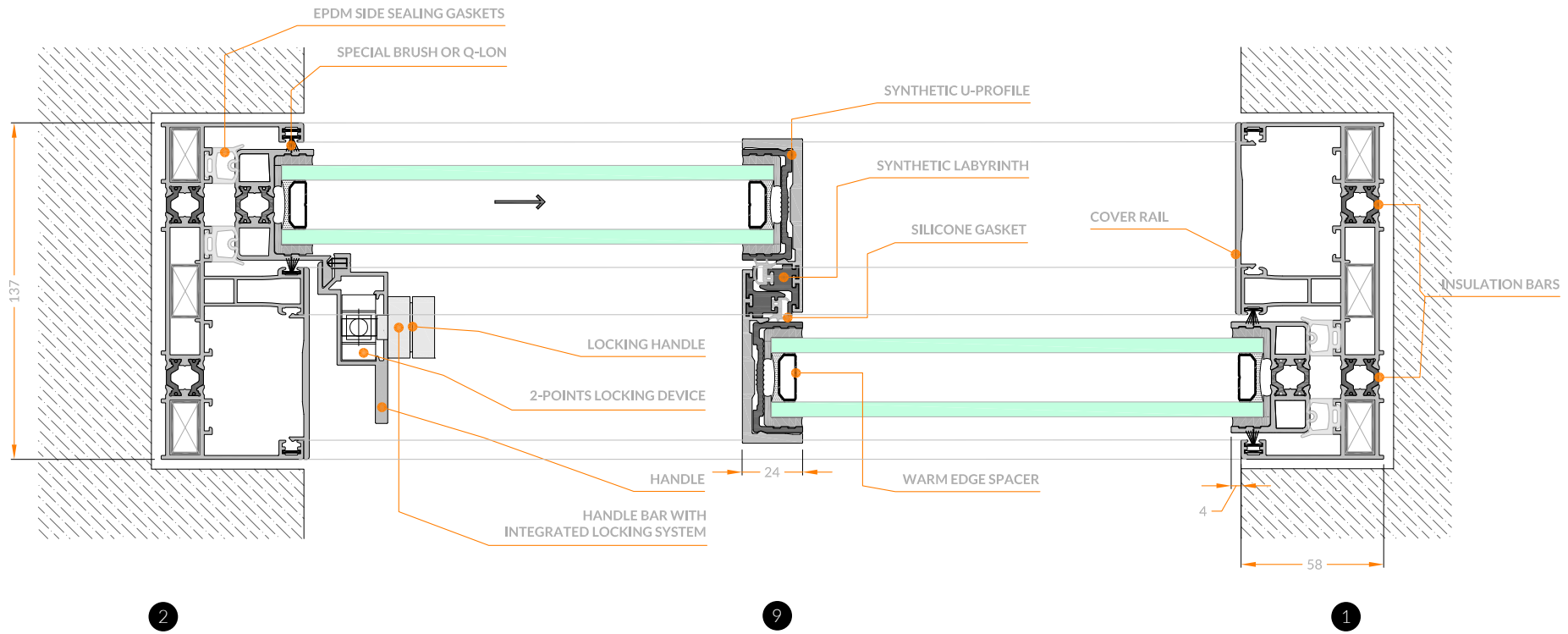
	OMICRON	ΩMEGA	
Facing width	24 - 30mm	24 - 30mm	
Installation flush to the floor	yes	yes	
Installation flush to the ceiling	yes	yes	
Max. leaf height	4.5m	6.5m	
Max. leaf width	3m	3m	
Max. leaf weight	500kg	1000kg	
Max. sliding leaf area	12m ²	16m ²	
Max. fix leaf dimension	18m ²	21m ²	
Motorization	yes	yes	
“Invisible” railing	no	no	
Glass thickness	30 - 36 mm	46 - 54 mm	

· THE ORAMA CERTIFICATES ·

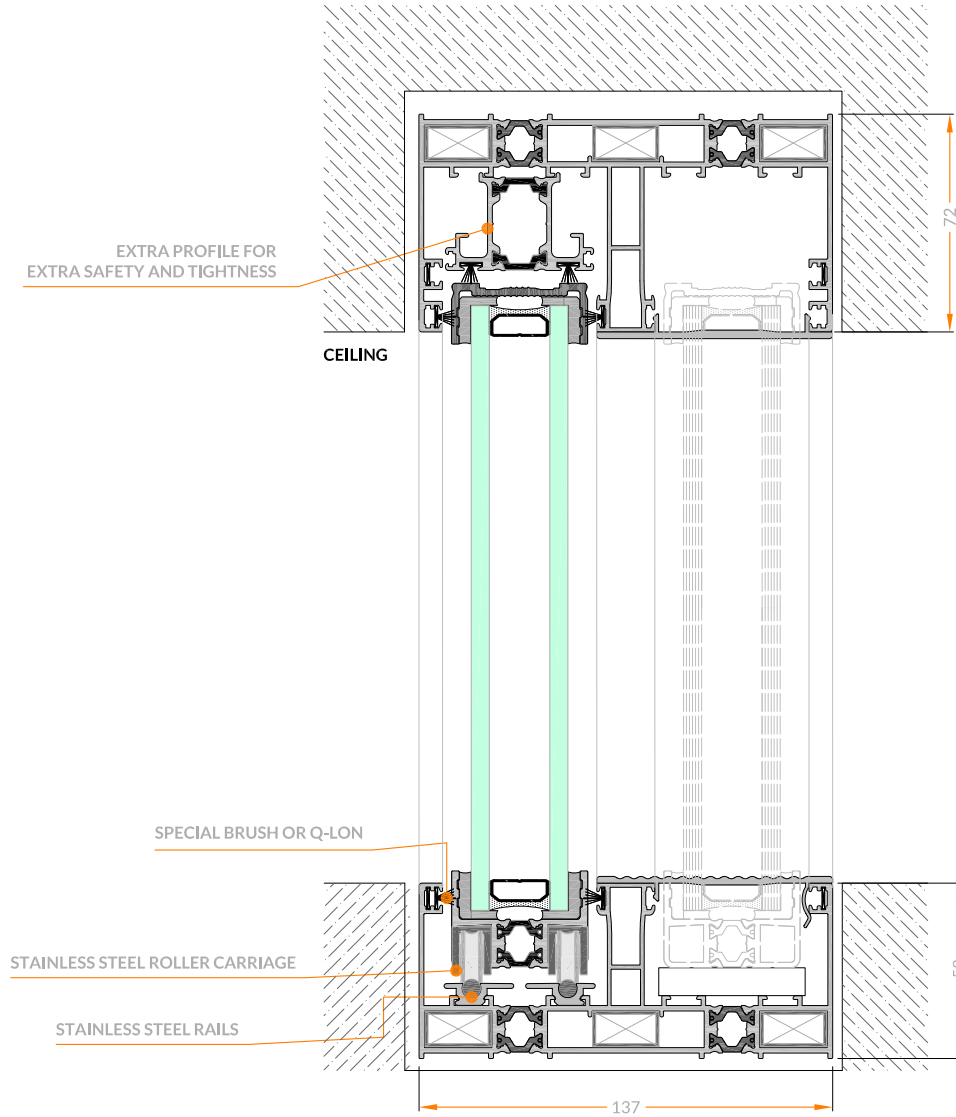
Uw values (depending on glass type & dimension)		From 0,7 to 1,7 W/m ² K
Air permeability		EN 12207 : Class 4
Resistance to rain penetration		EN 12208 : Class 7A
Resistance to wind loads		EN 12210 : Class C5
Sound insulation		up to 42 dB DIN EN ISO 140-3:2005
Resistance to burglary		ENV 1627 WK-2/RC-2 (under testing)
Accessibility		DIN 18040-2 (under testing)

OMICRON • TYPICAL SECTIONS

4.1



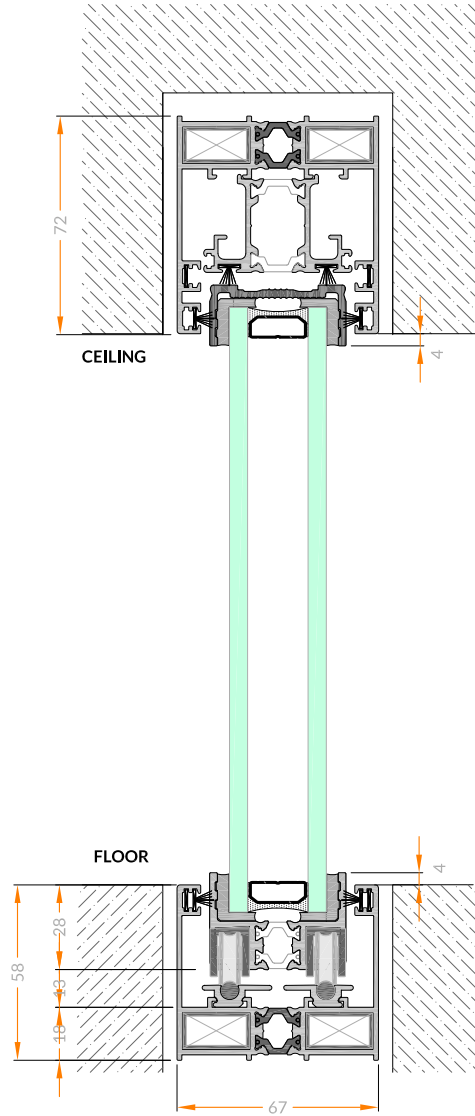
HORIZONTAL SECTION



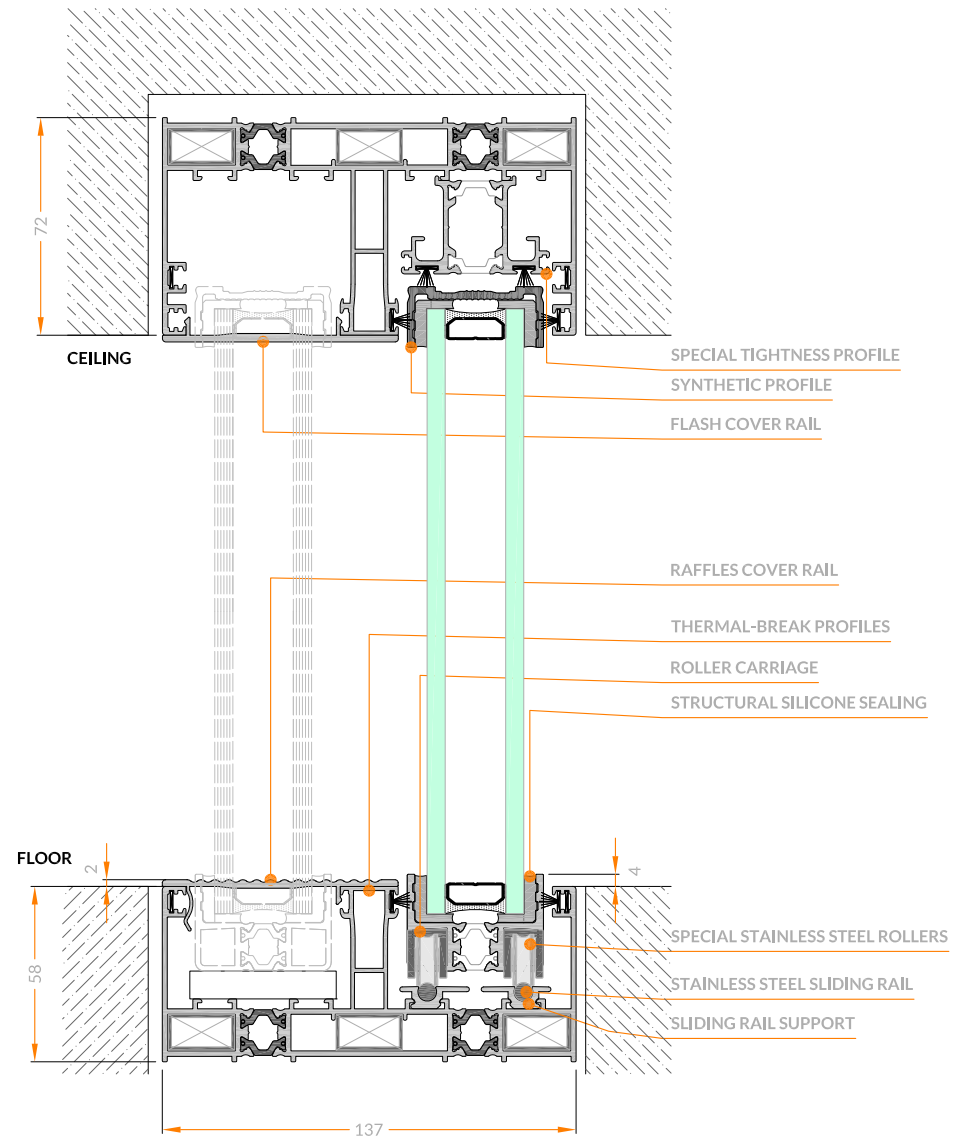
VERTICAL SECTION

OMICRON • MULTI-TRACK FRAMES

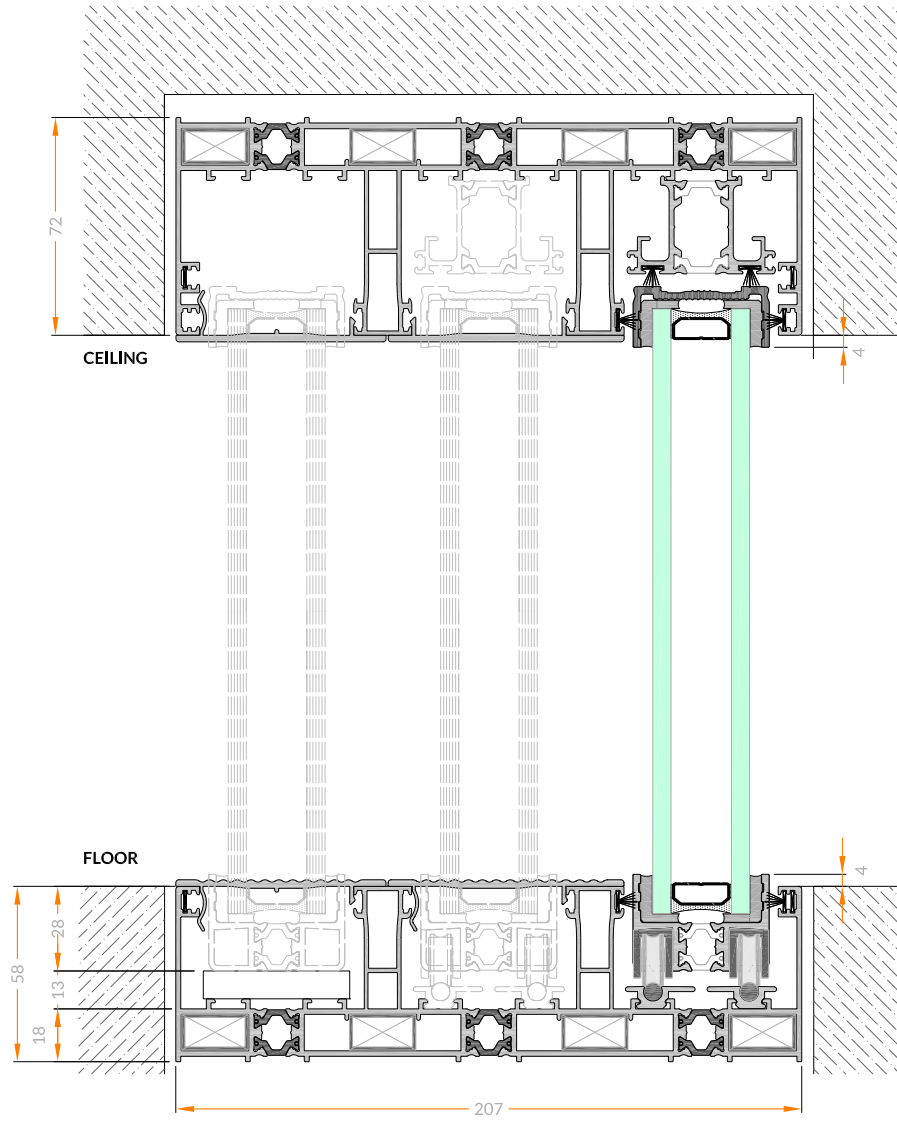
4.2



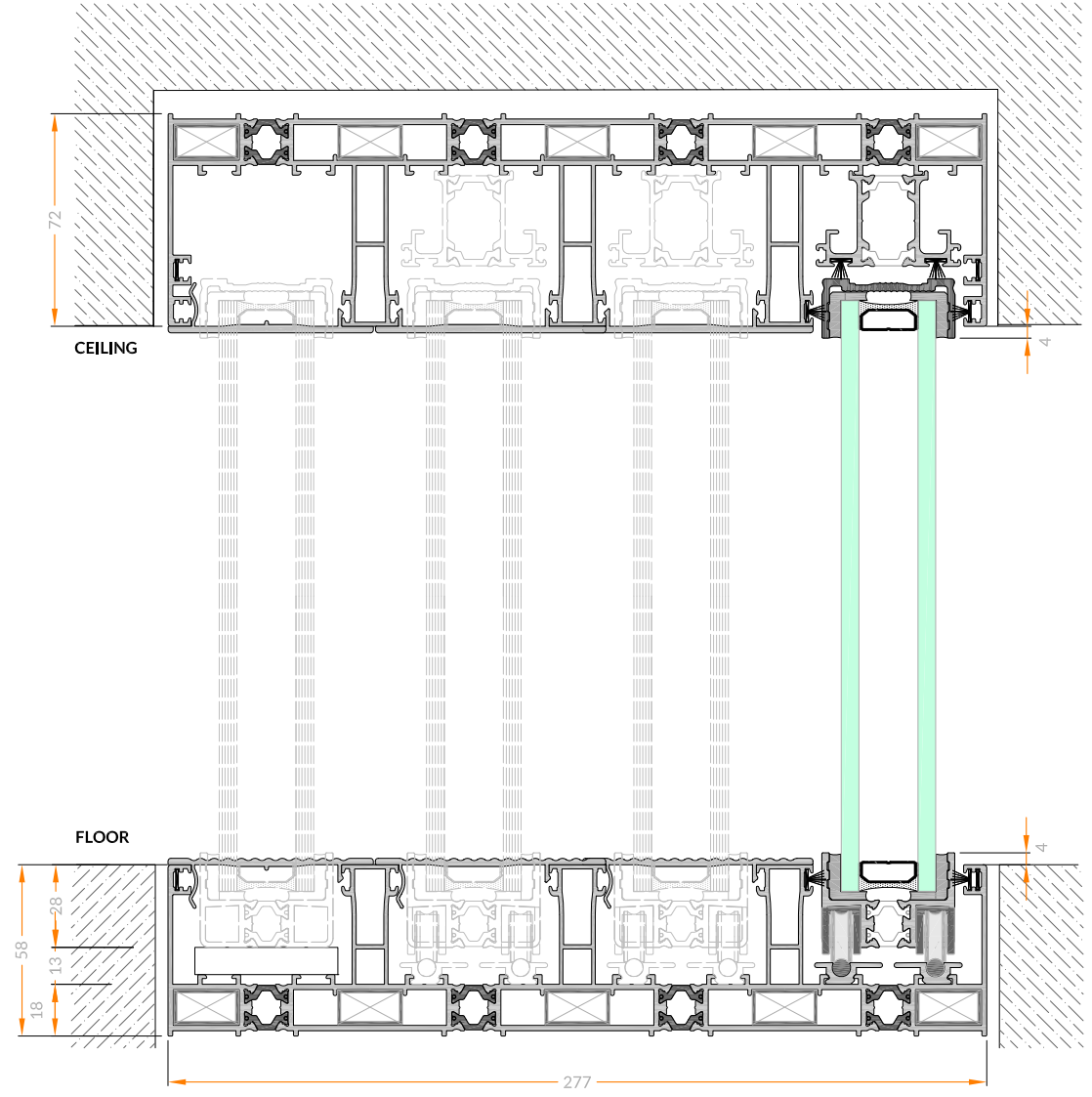
SINGLE TRACK FRAME • SLIDING • FIX



DOUBLE TRACK FRAME • SLIDING • FIX



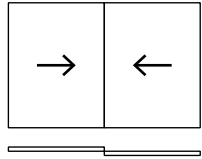
TRIPLE TRACK FRAME · S · S · F



QUADRUPLE TRACK FRAME · S · S · S · F

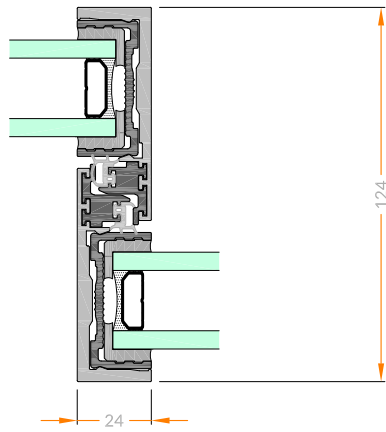
OMICRON • LABYRINTH PROFILES

4.3



Standard sliding frames (different track)

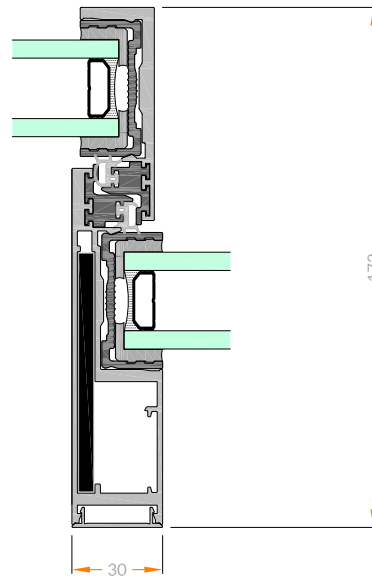
A



9

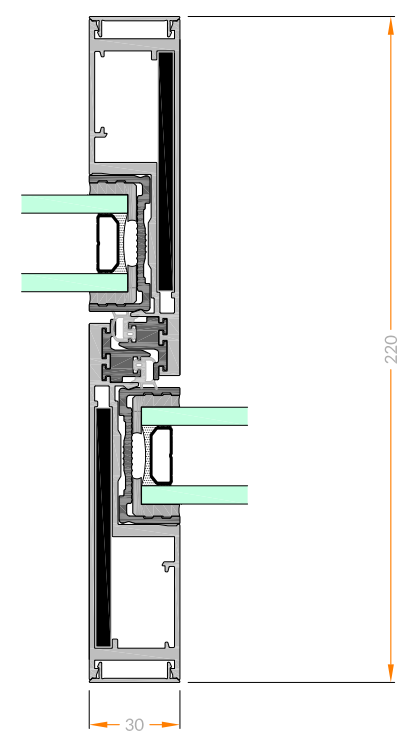
Steel reinforcement when statically required

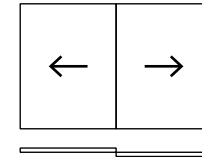
B



10

C

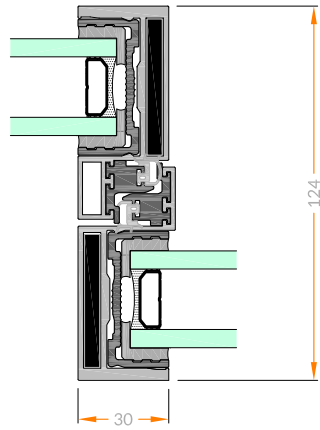




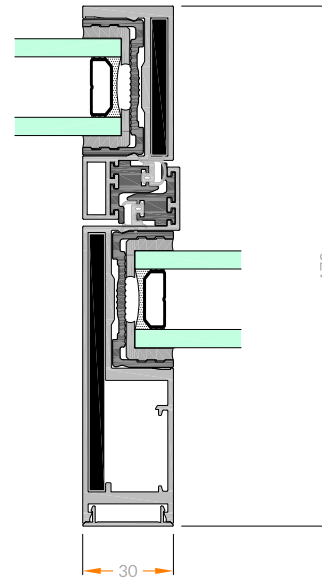
Sliding away
from each other
(different track)

4.3

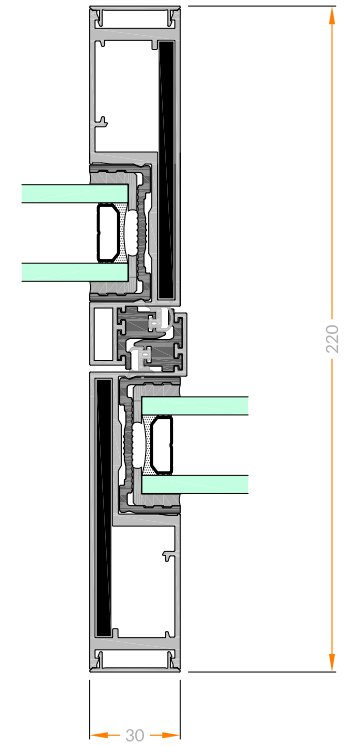
E



D



F

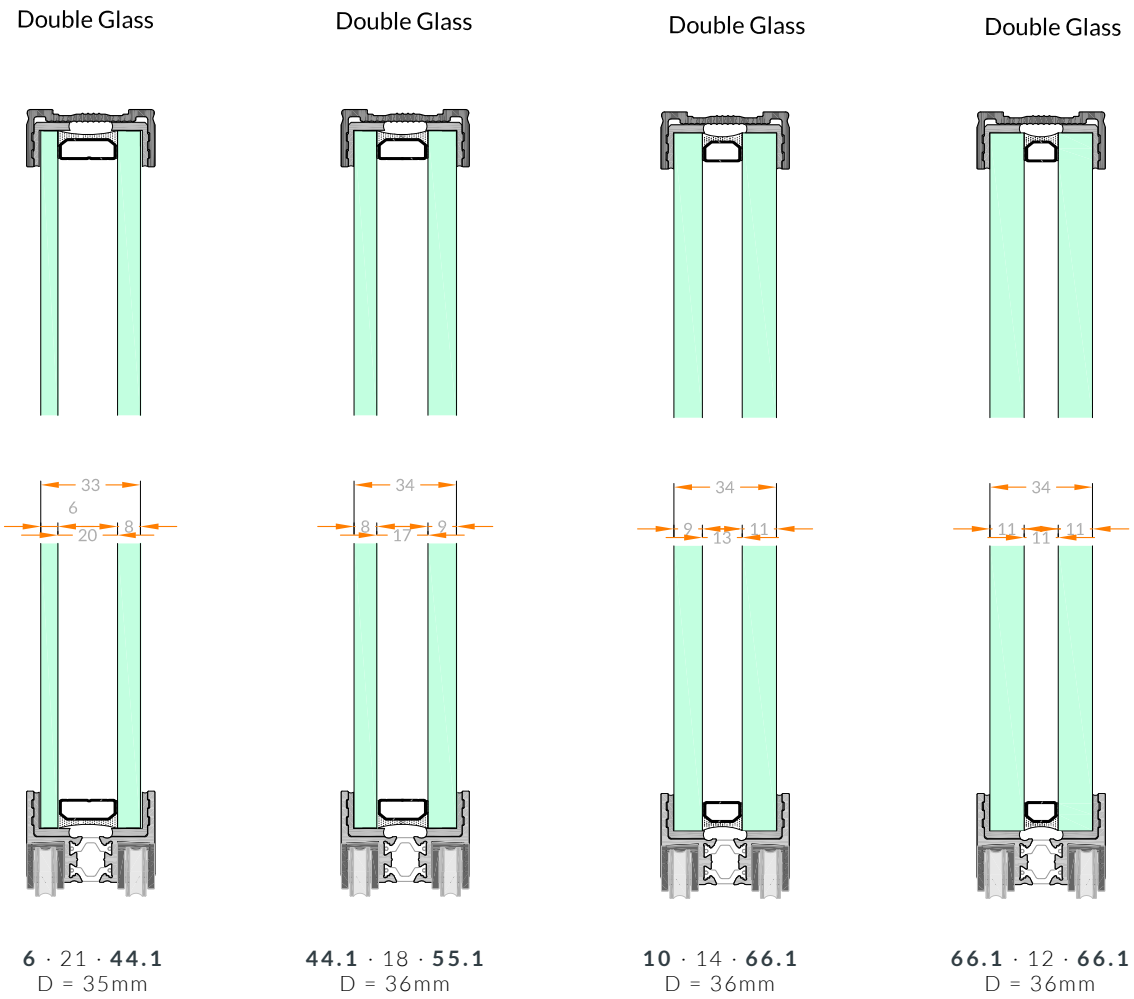


Steel reinforcement
when statically required

12

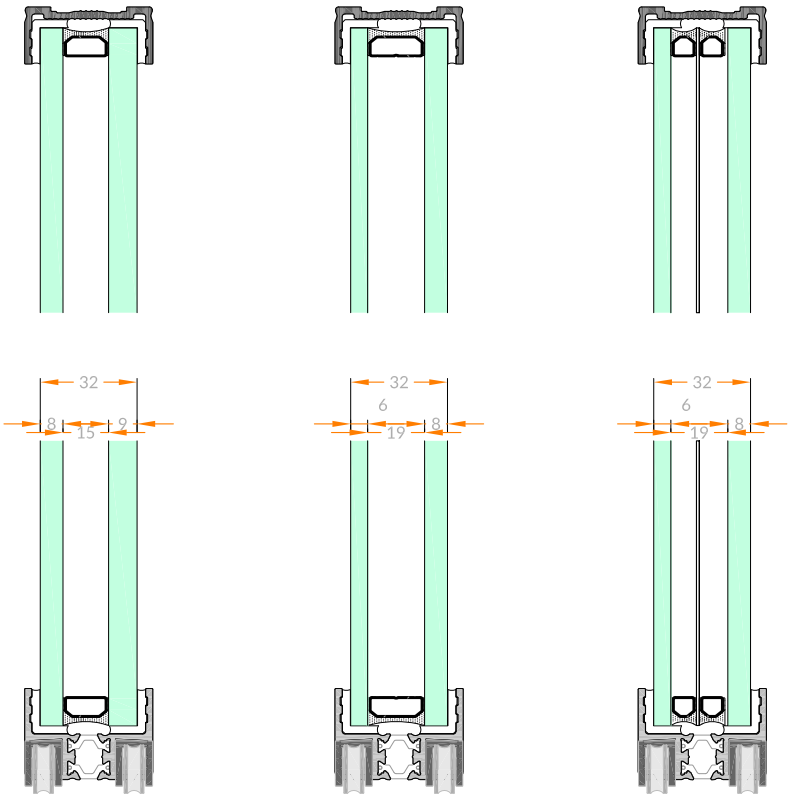
OMICRON • GLASS COMBINATIONS (from 30mm - max 36mm)

4.4



VERTICAL SECTIONS

HEAT MIRROR GLASS



44.1 · 16 · 10
D = 34mm

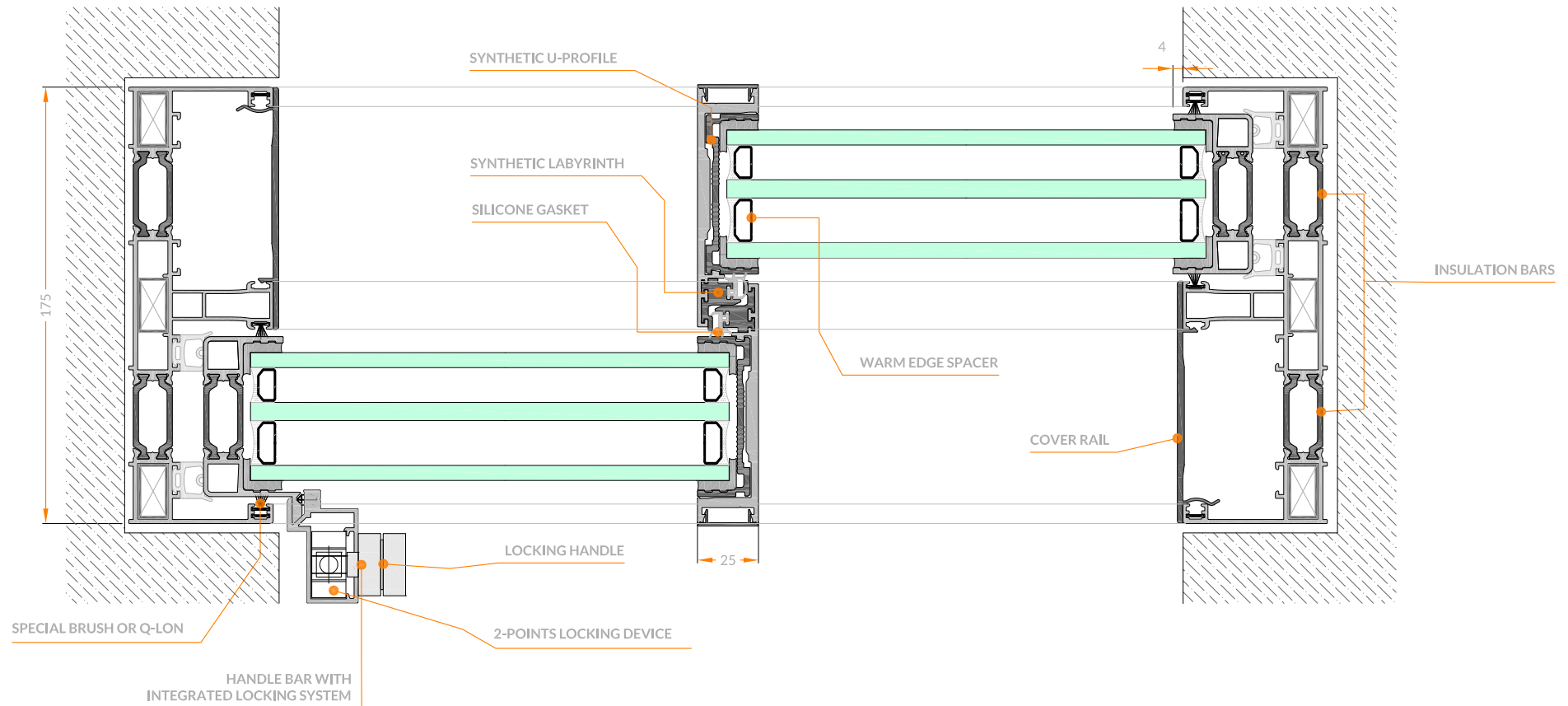
6 · 20 · 44.1
D = 34mm

6 · 9 · HM · 9 · 44.1
D = 34mm

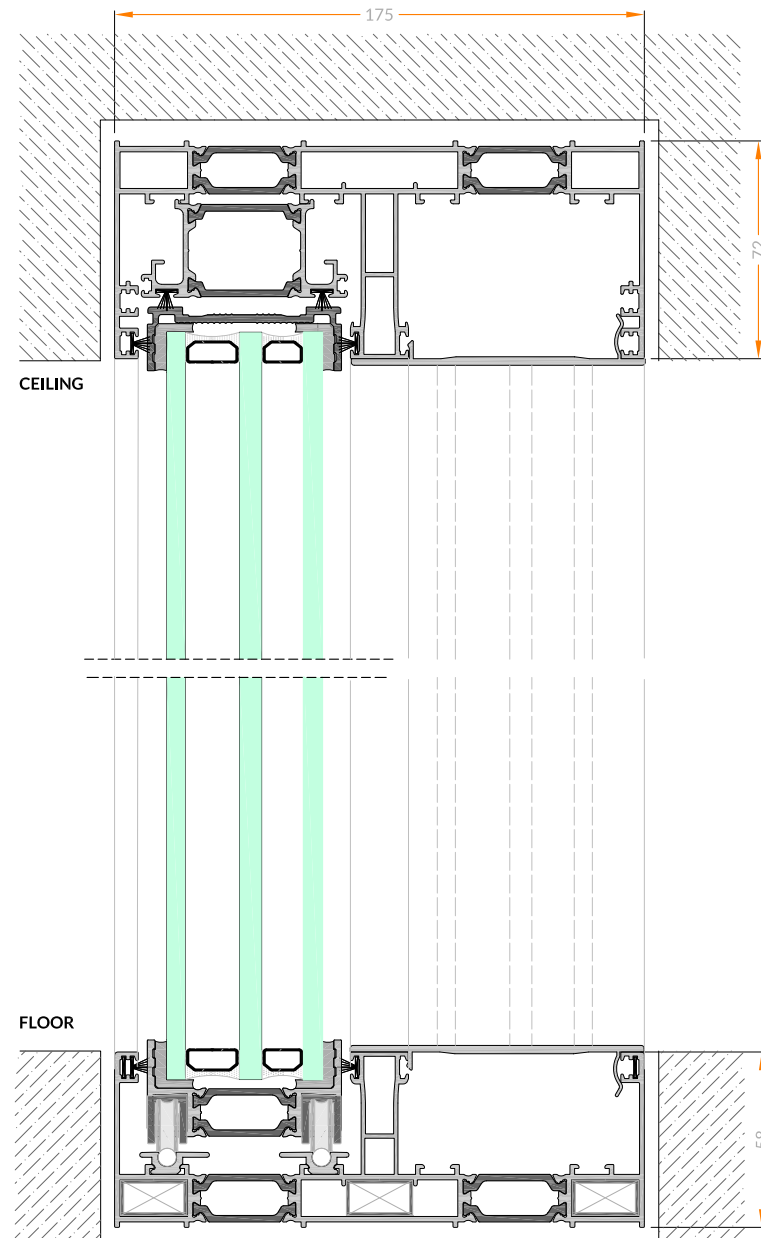
VERTICAL SECTIONS

ΩMEGA • TYPICAL SECTIONS

5.1

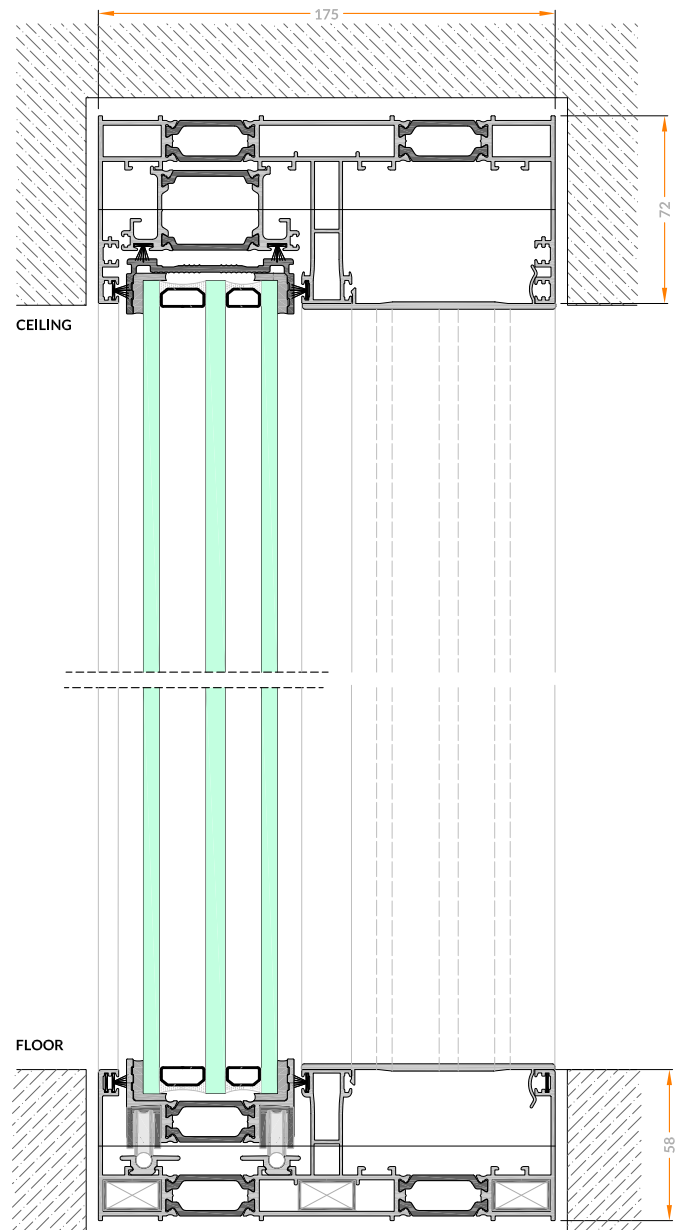
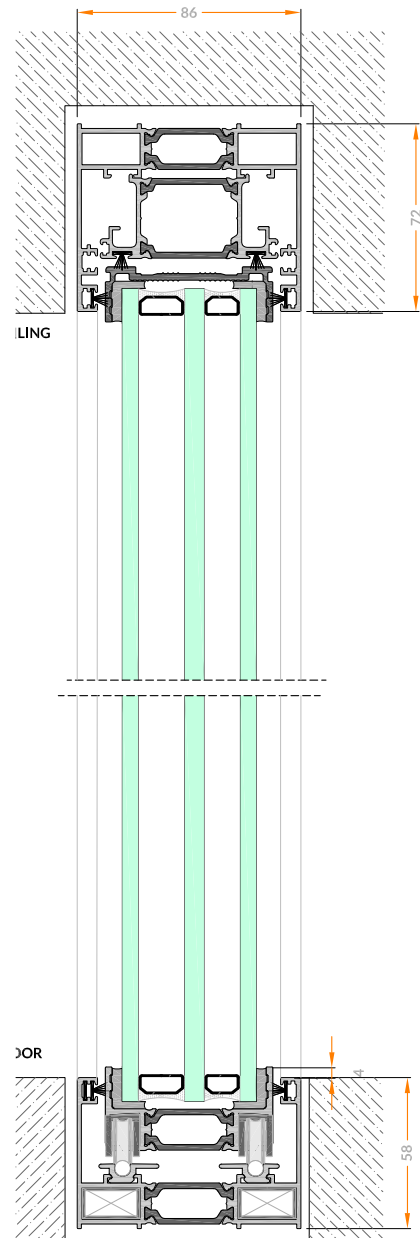


HORIZONTAL SECTION

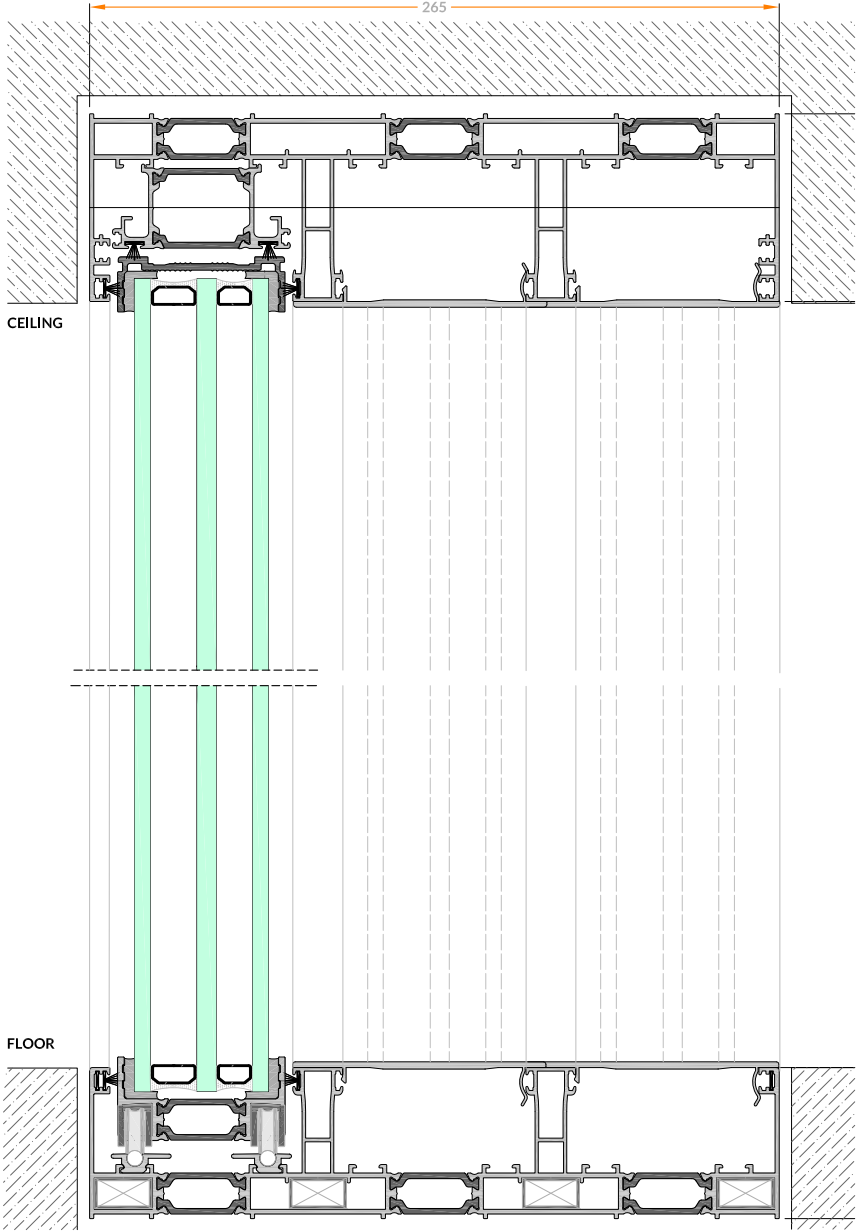


VERTICAL SECTION

5.2



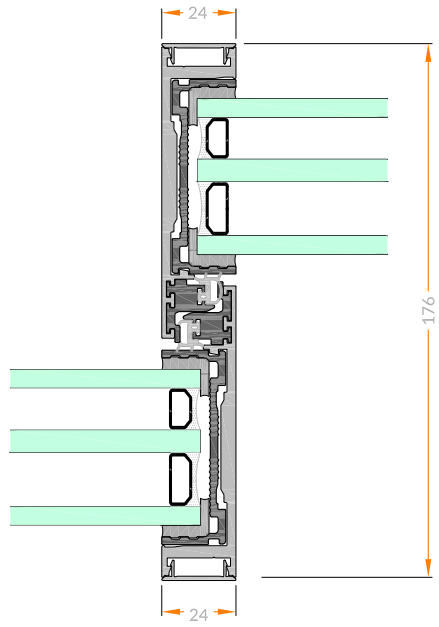
VERTICAL SECTIONS



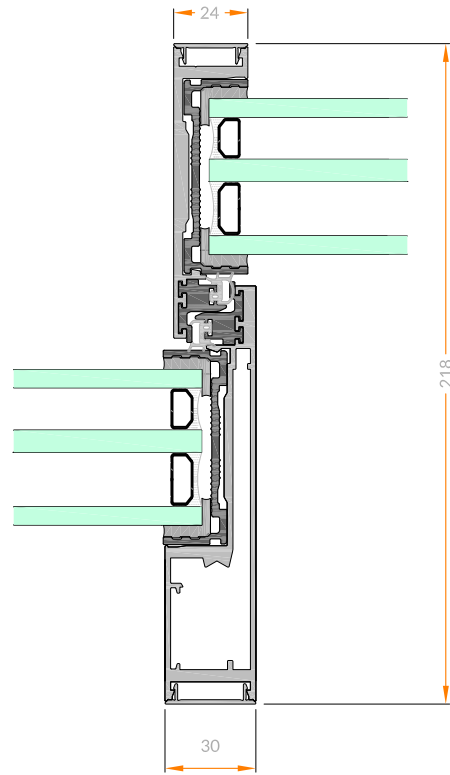
VERTICAL SECTION

5.3

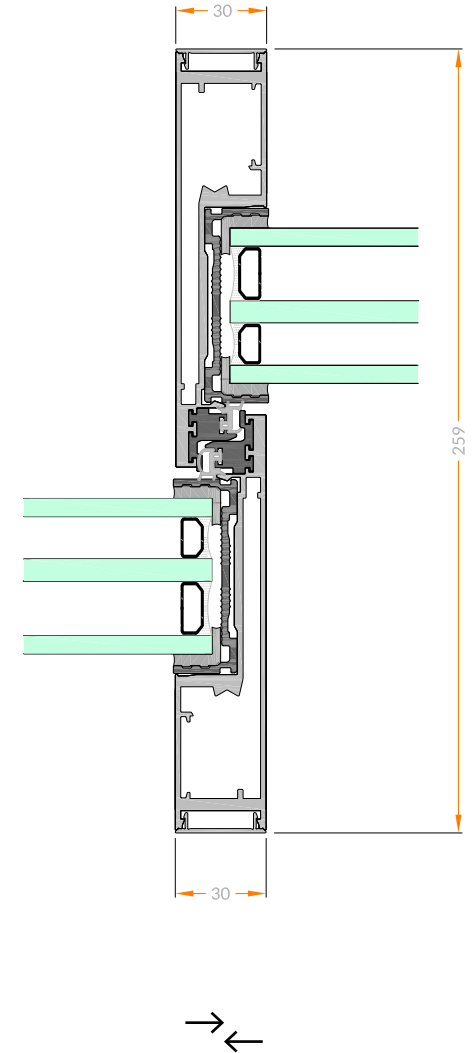
A

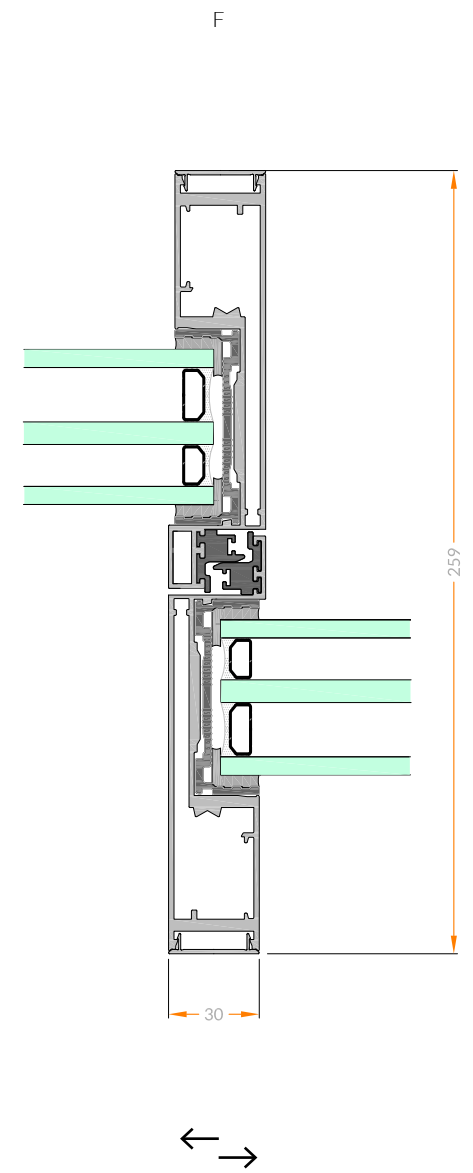
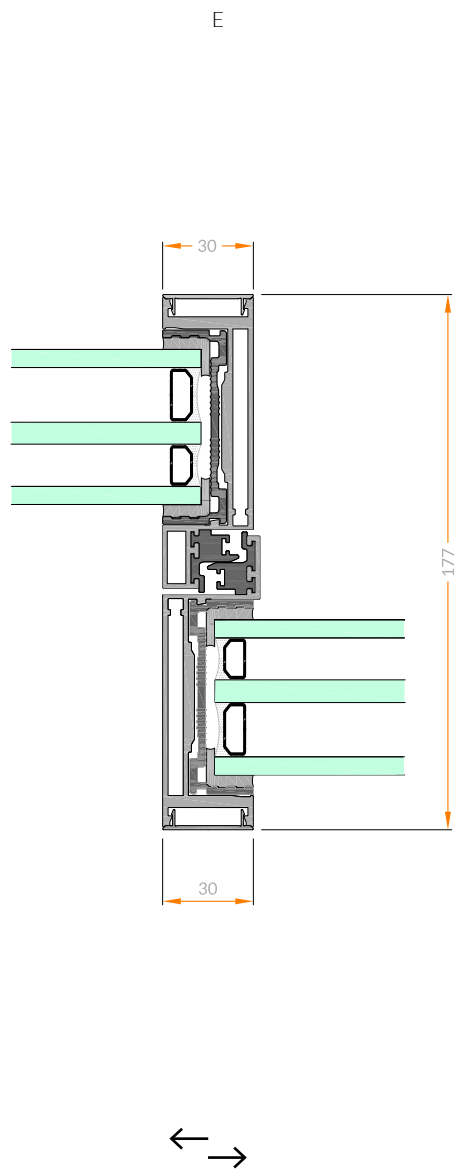
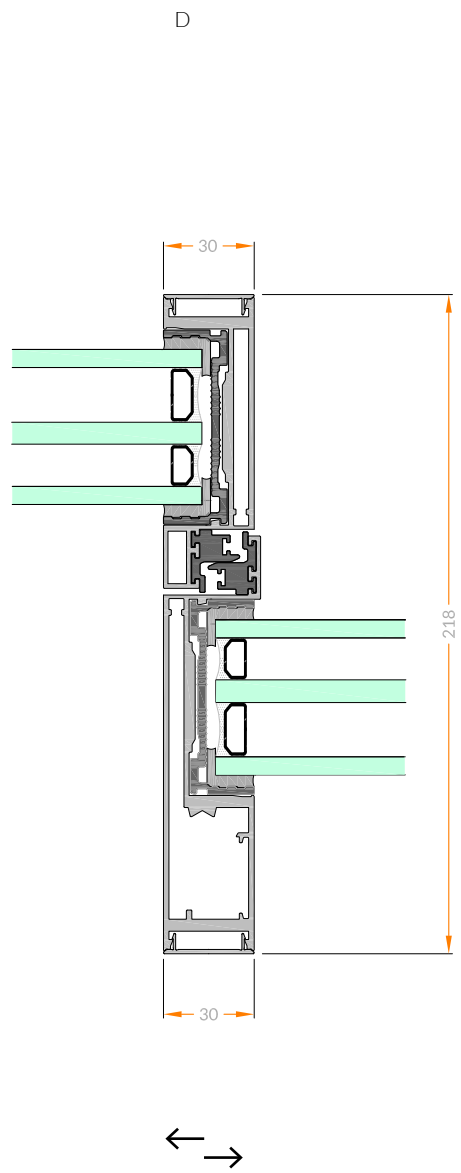


B



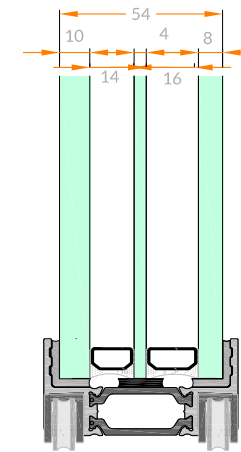
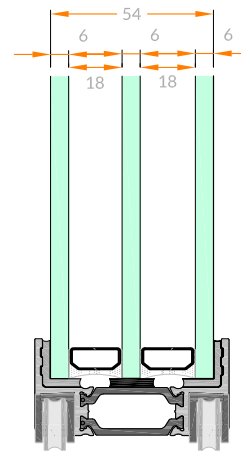
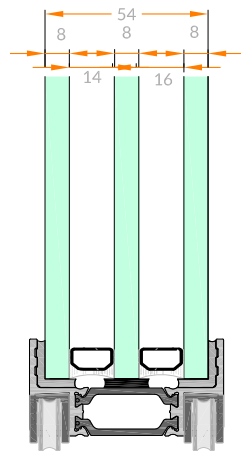
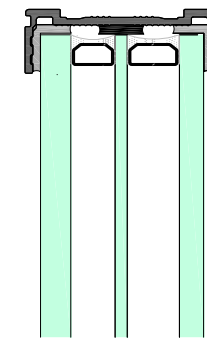
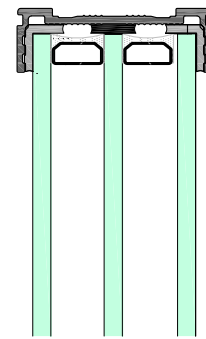
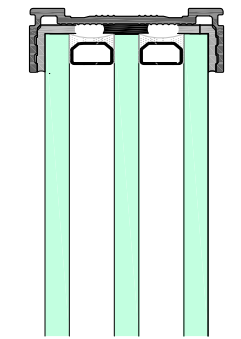
C





ΩMEGA • GLASS COMBINATIONS (from 49mm - max 54mm)

5.4

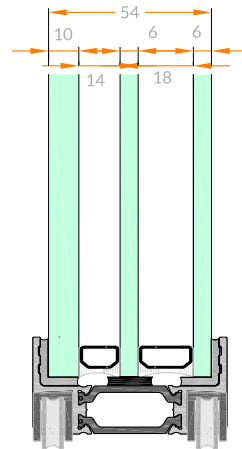
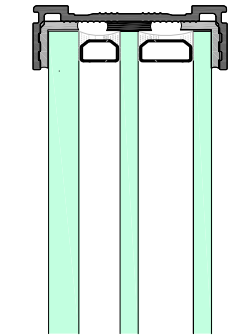


8 · 14 · 8 · 16 · 8
D = 54mm

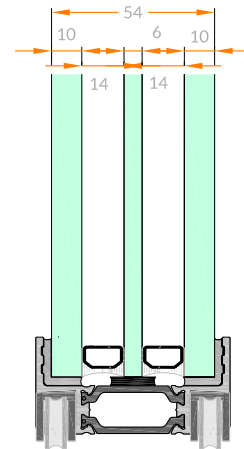
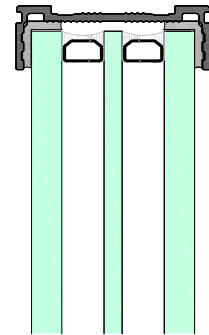
6 · 18 · 6 · 18 · 6
D = 54mm

10 · 14 · 4 · 14 · 8
D = 54mm

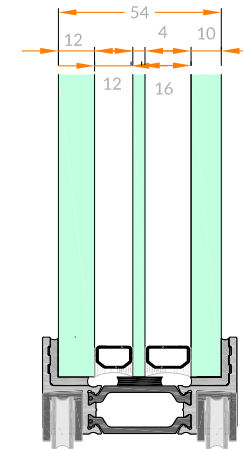
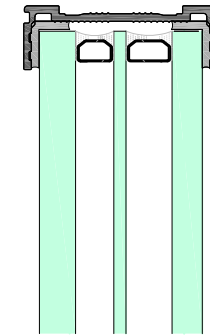
VERTICAL SECTIONS



10 · 14 · 6 · 18 · 6
D = 54mm



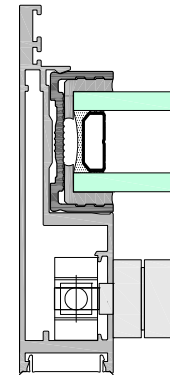
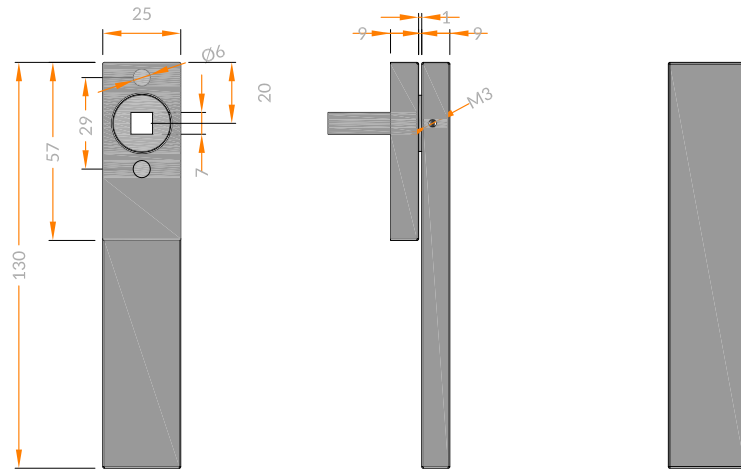
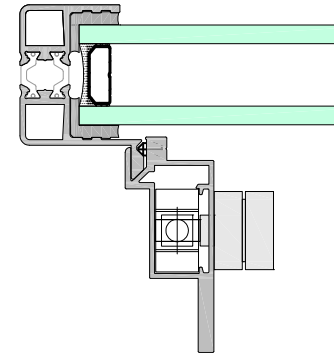
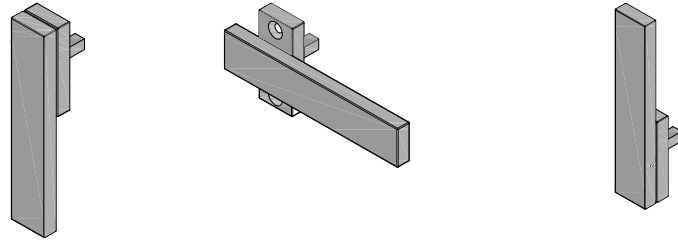
10 · 14 · 6 · 14 · 10
D = 54mm

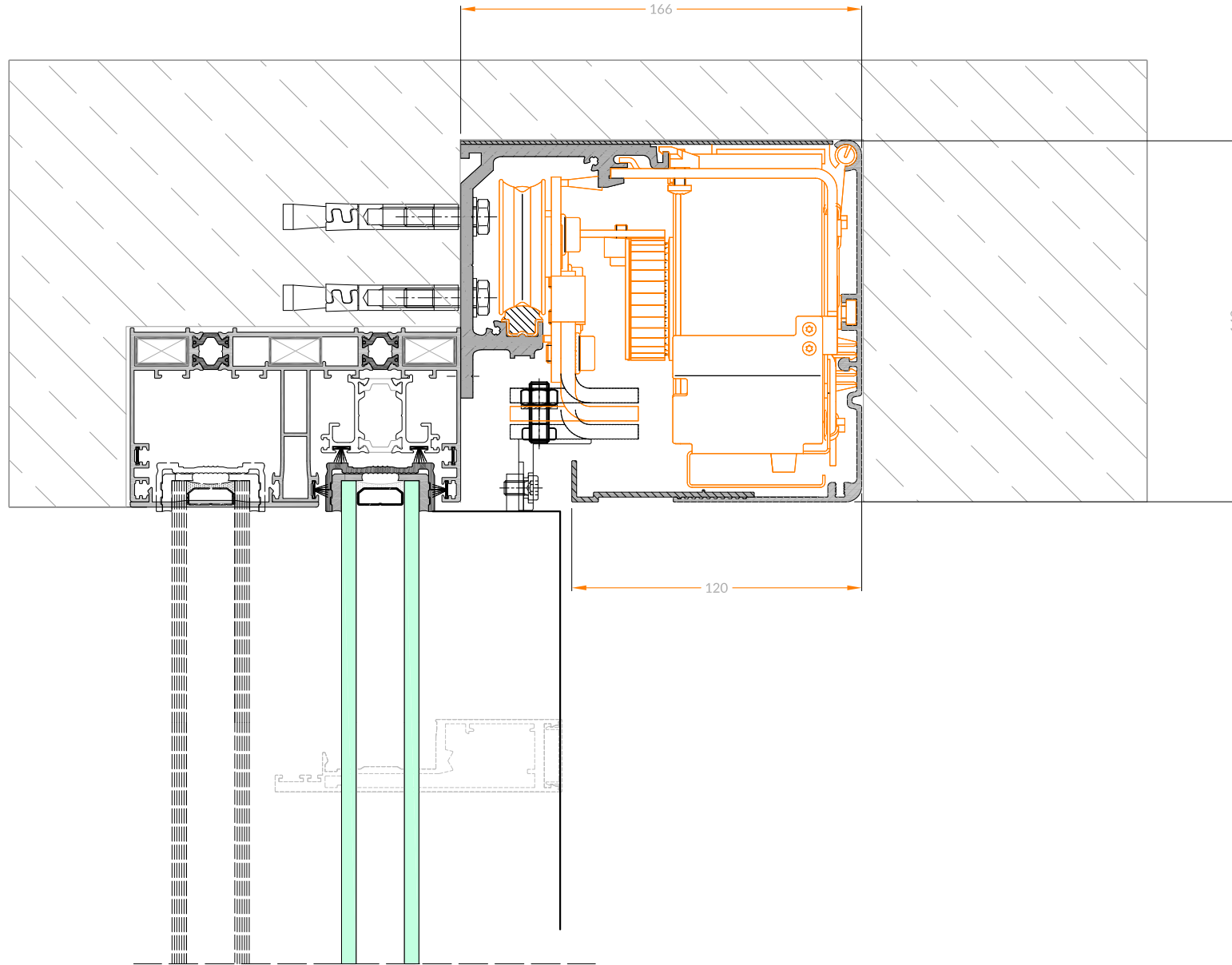


12 · 12 · 4 · 16 · 10
D = 54mm

HANDLE

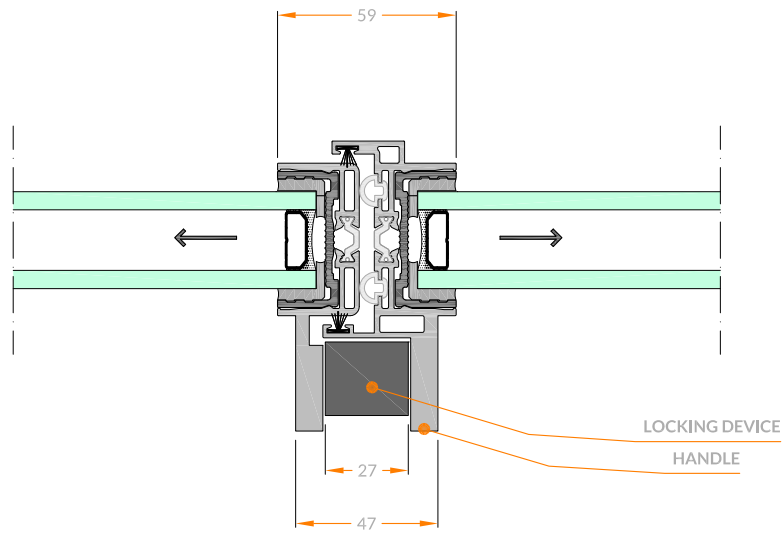
6



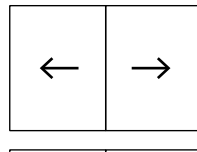


LOCKING DEVICES

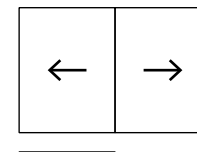
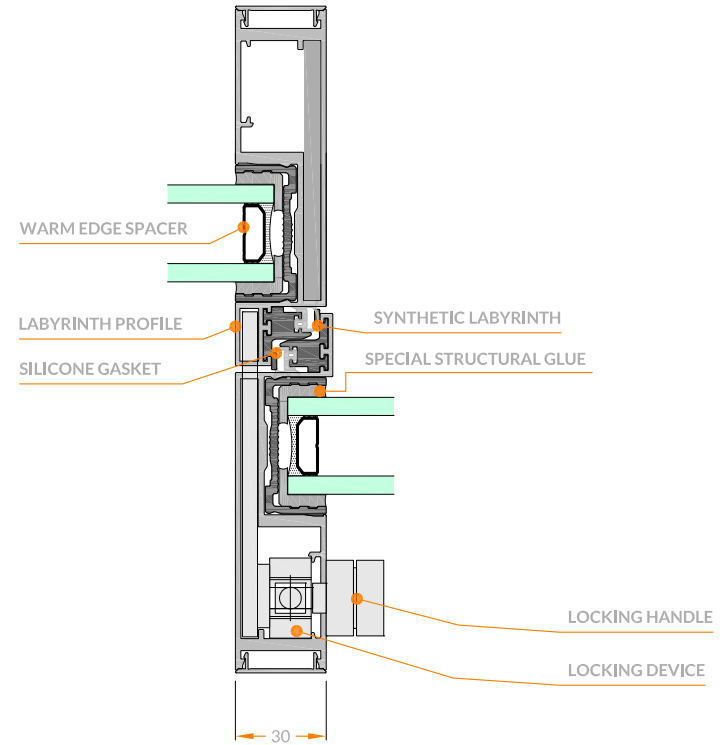
8.1



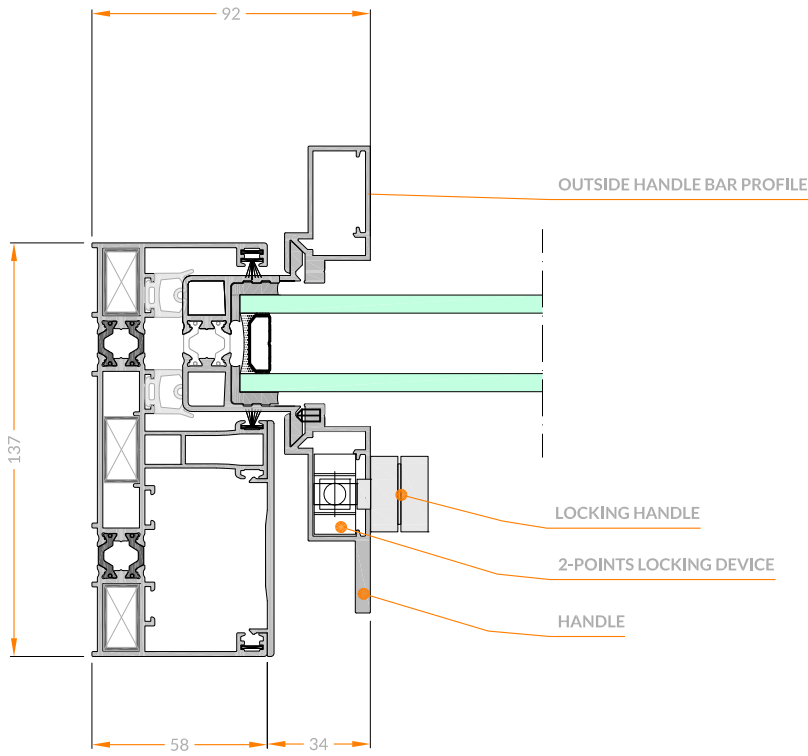
13



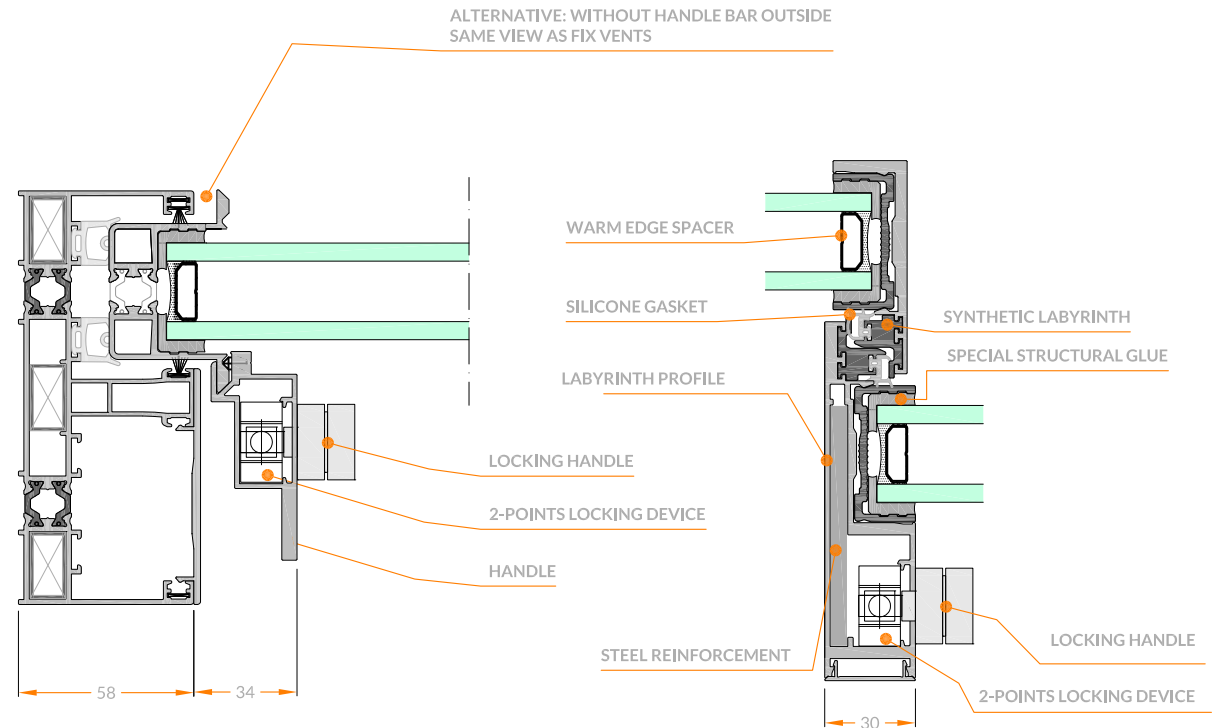
Sliding away from each other (same track)



Sliding away from each other (different track)



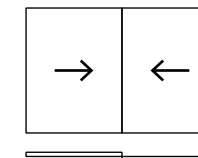
Side handle
Inside & outside



2

11

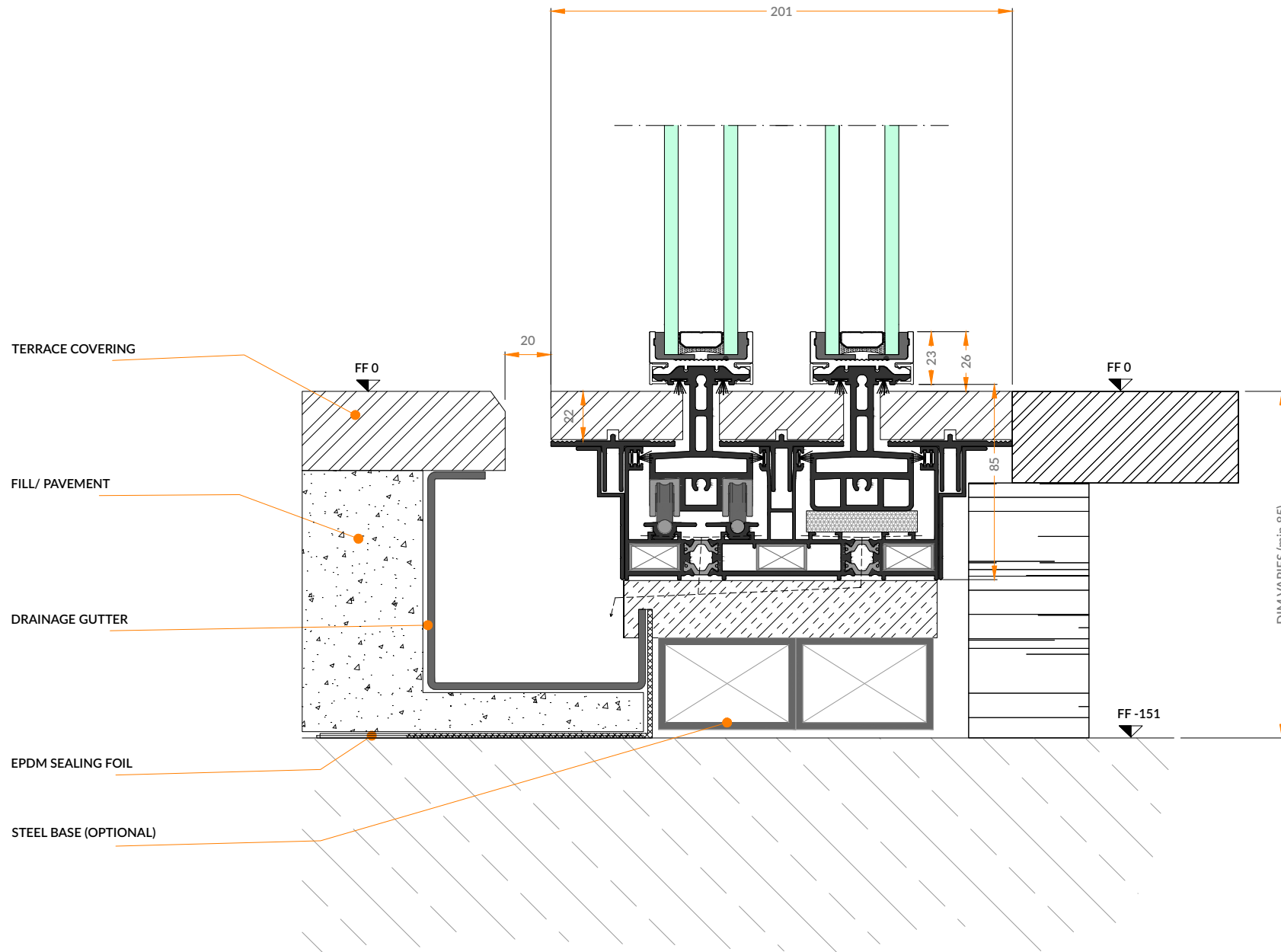
Side handle
Inside only



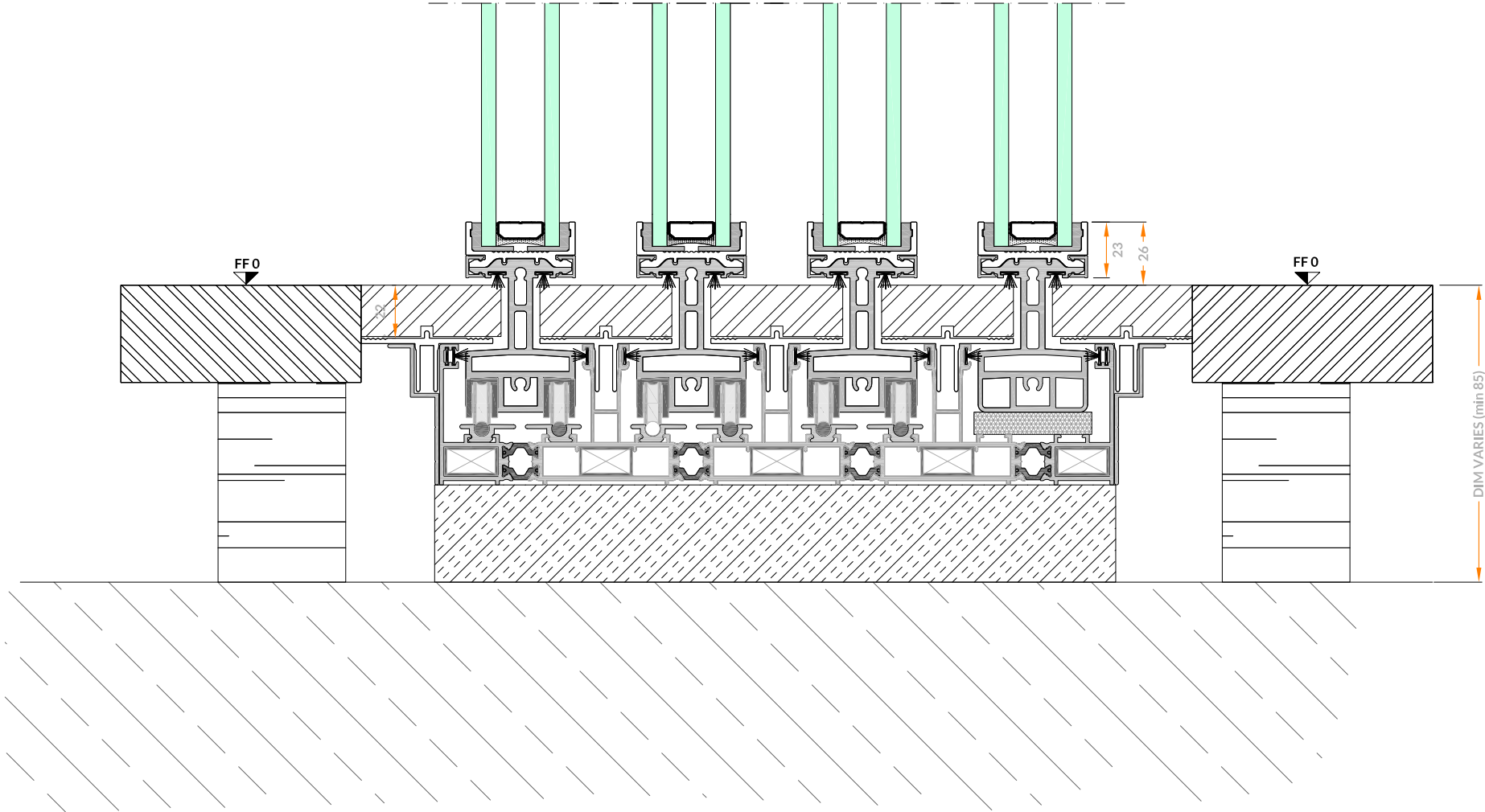
Successive
sliding frames
(different track)

OMICRON • INVISIBLE BASE

9.1



SYNTHETIC BASE WITH SUB-FRAME

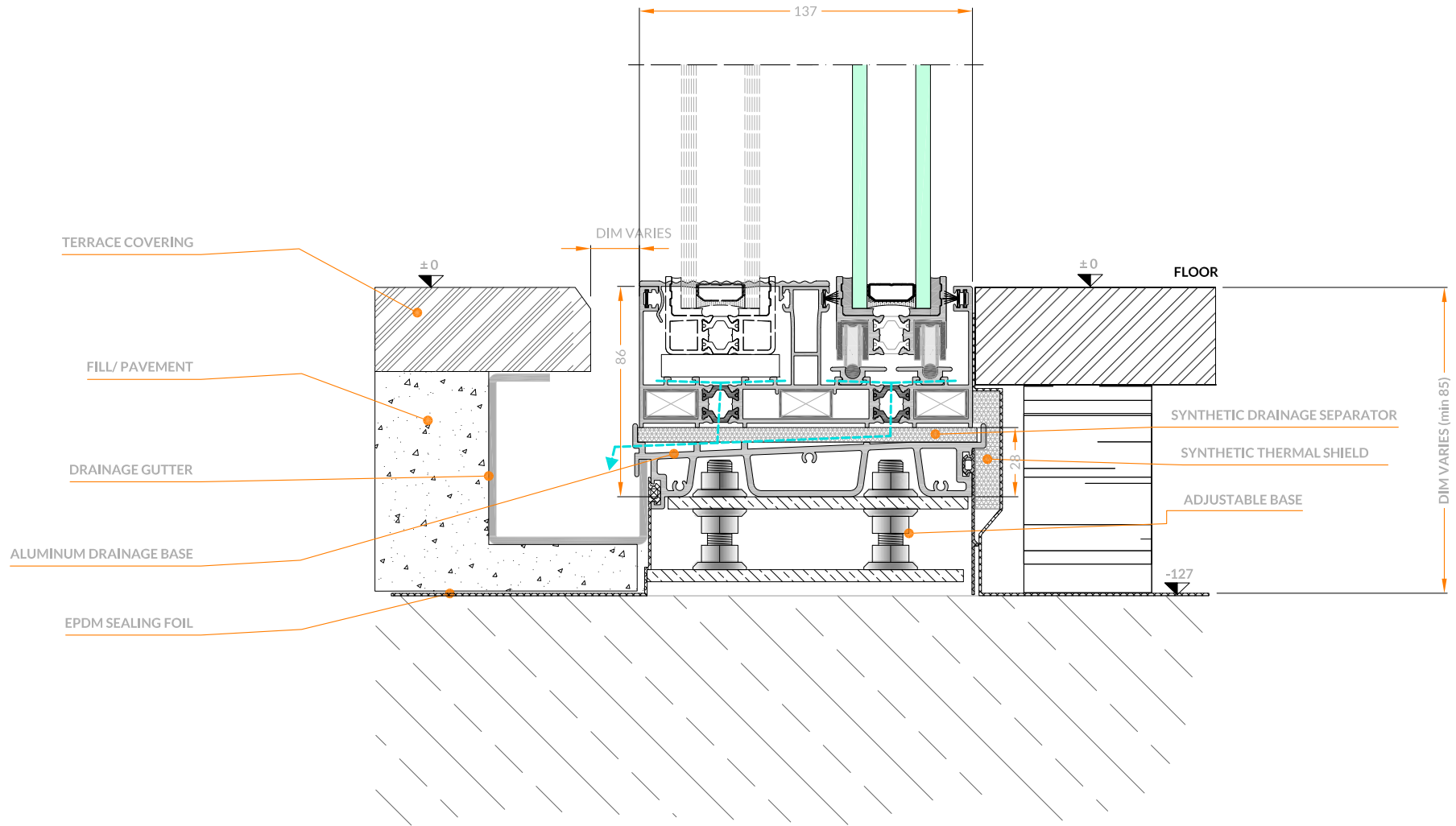


9.2

SYNTHETIC BASE WITH SUB-FRAME

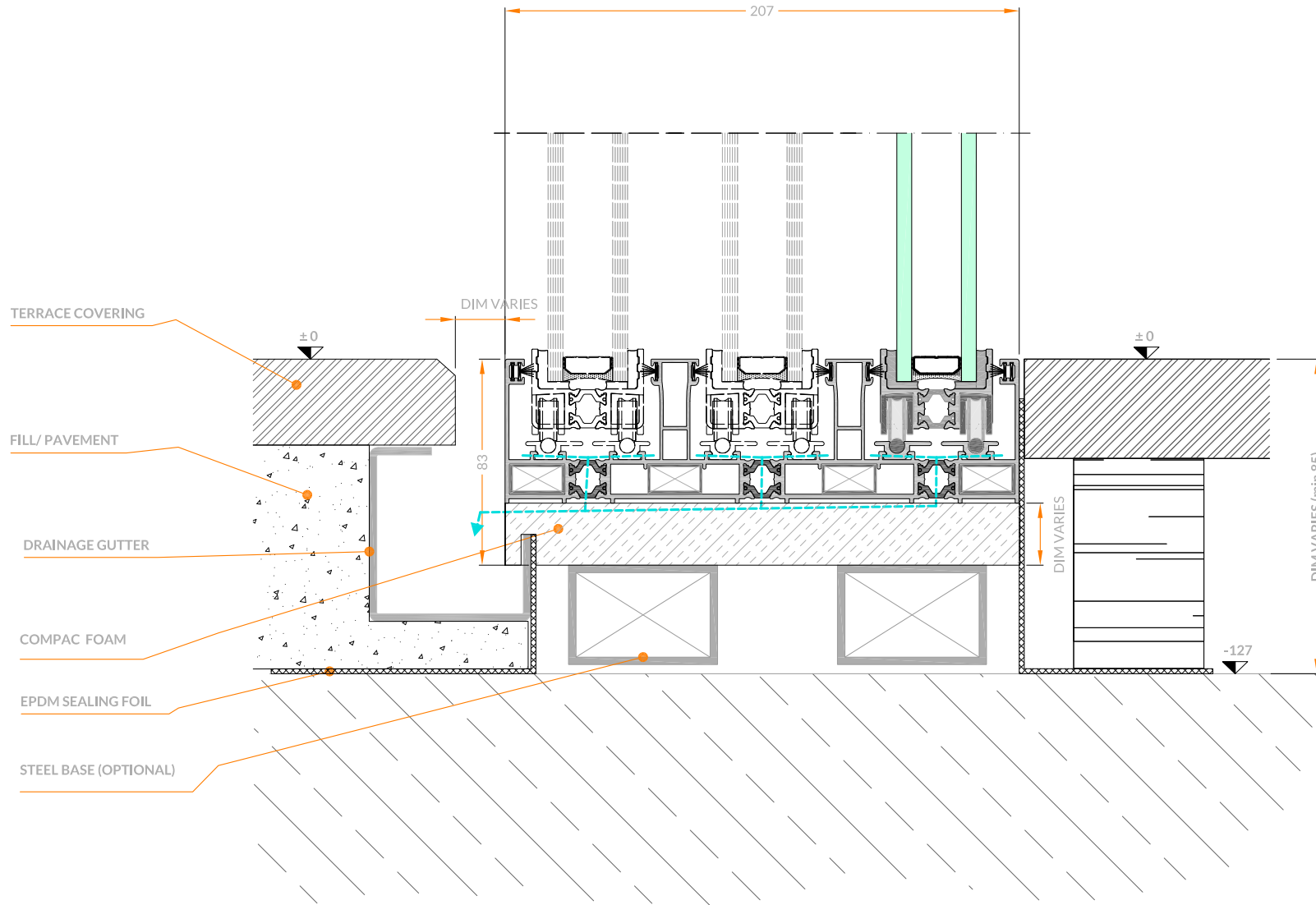
BASE SECTIONS

9.3



ALUMINUM BASE WITH ADJUSTABLE SUPPORT

BASE SECTIONS

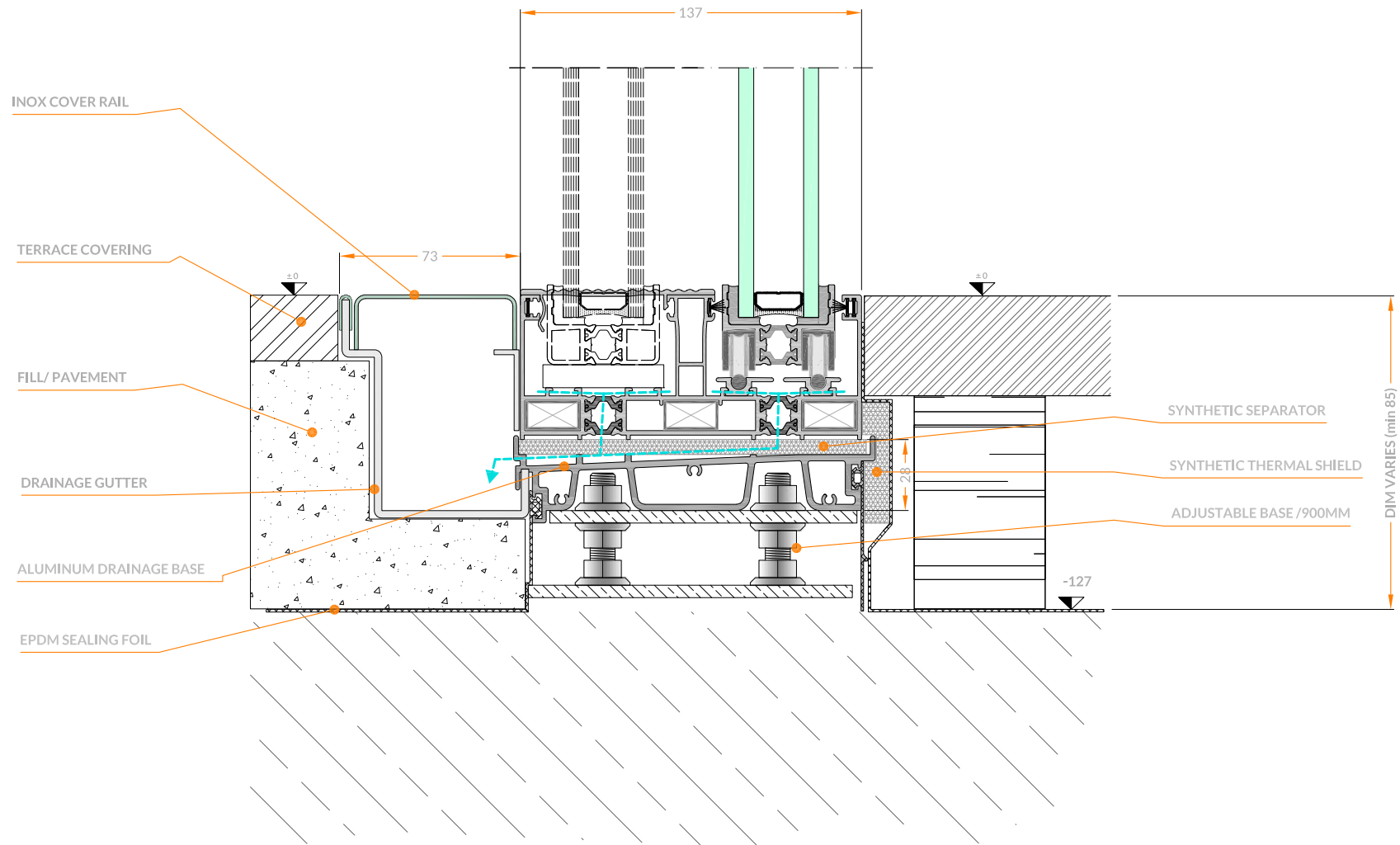


9.4

SYNTHETIC BASE WITH SUB-FRAME

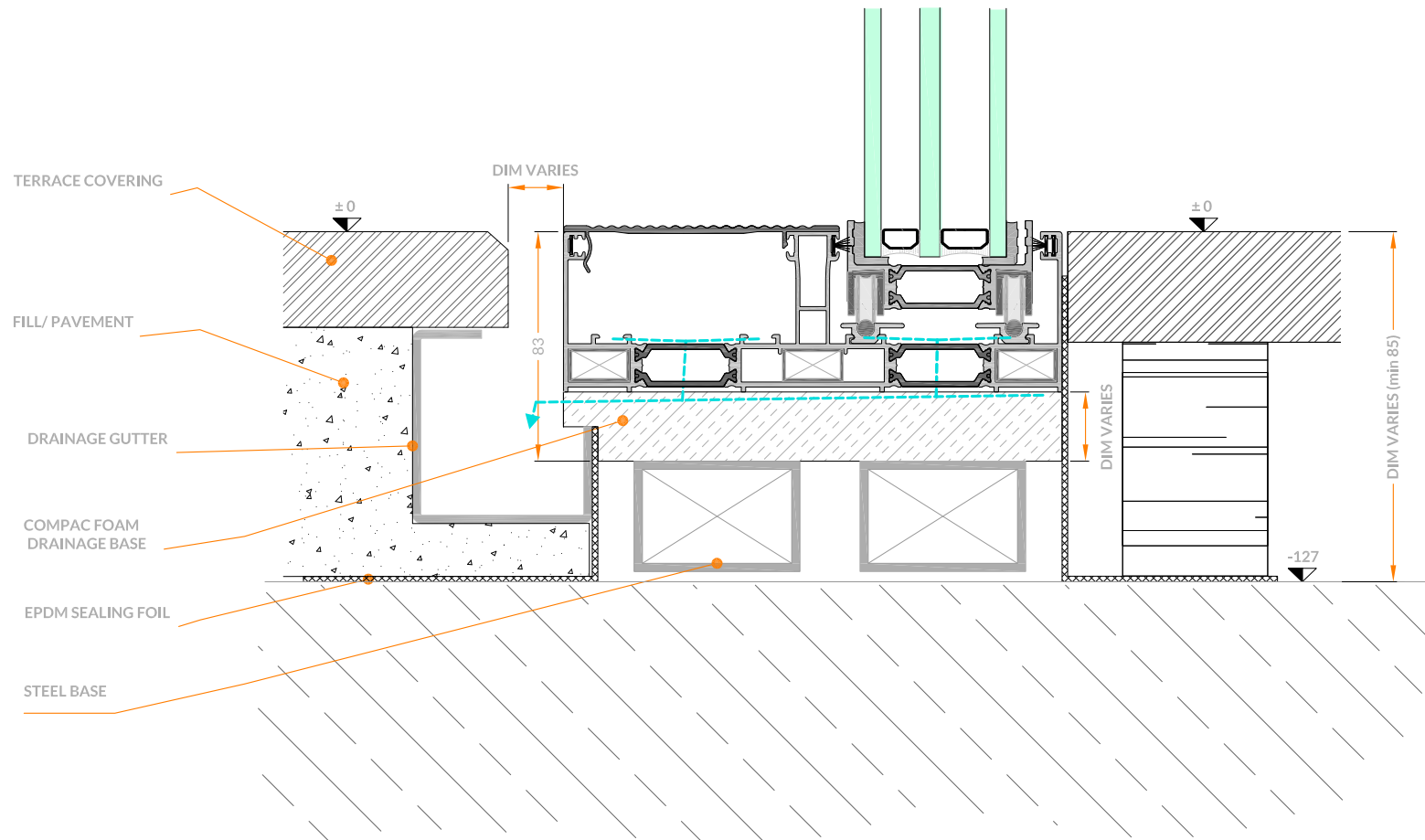
BASE SECTIONS

9.5



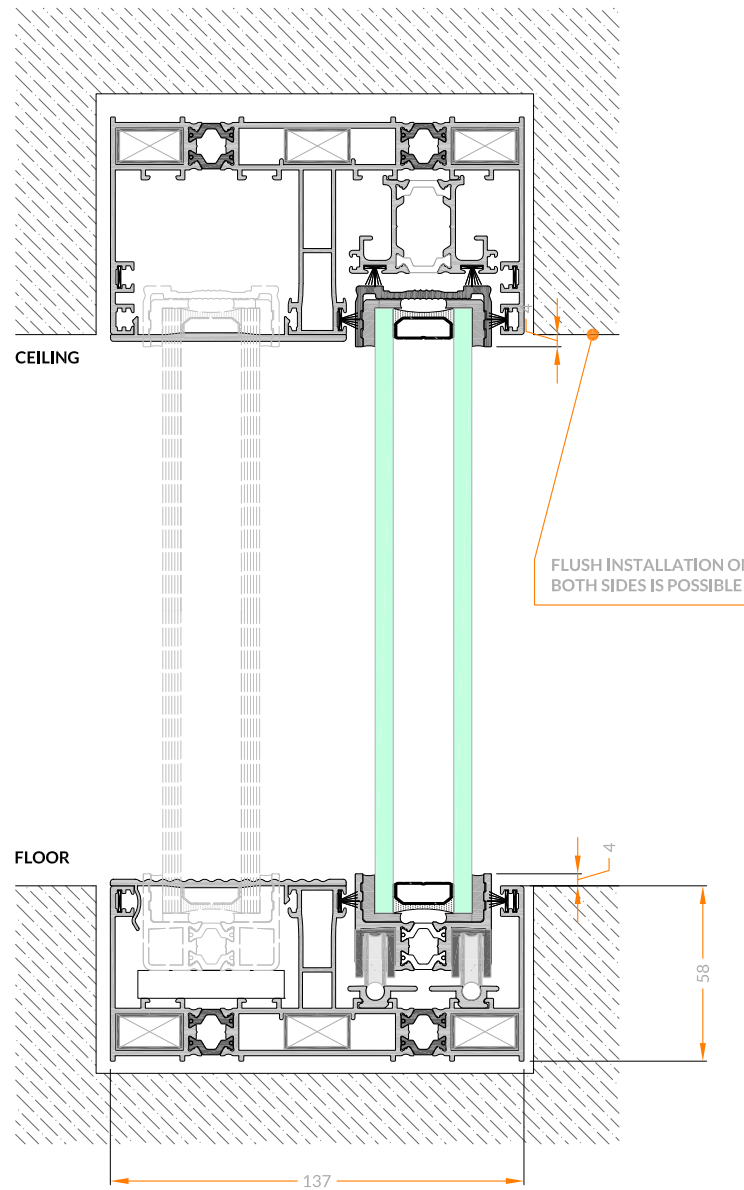
ALUMINUM BASE WITH ADJUSTABLE SUPPORT B

BASE SECTIONS

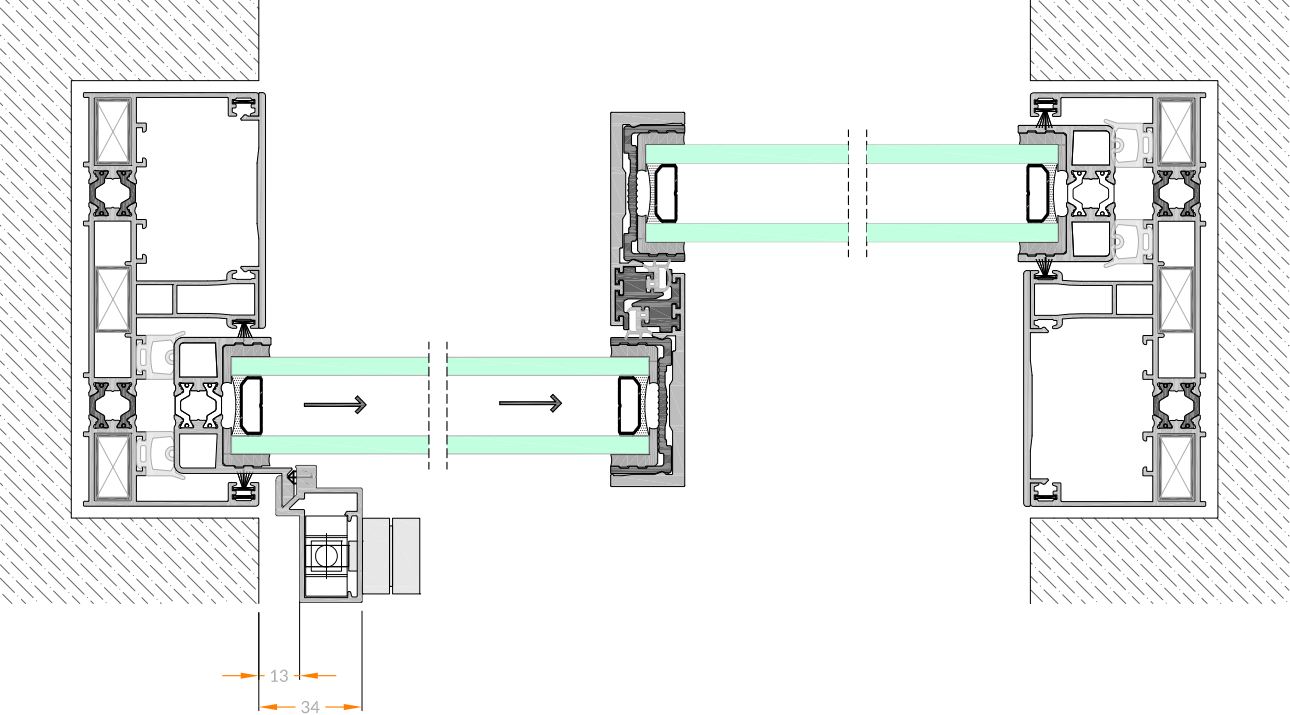


INSTALLATION MODES

10.1



VERTICAL SECTION



HORIZONTAL SECTION

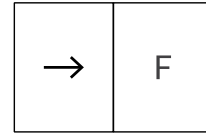
MAIN FRAME SOLUTIONS



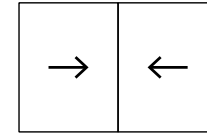
SINGLE FIX
11.1



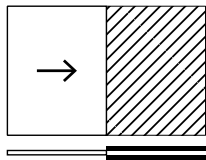
DOUBLE FIX
11.2



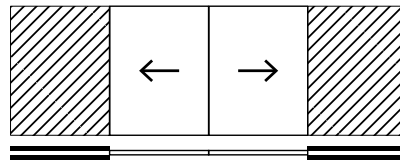
SLIDING FIX
11.3



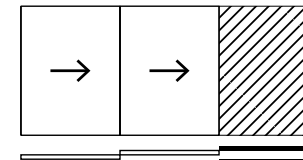
DOUBLE SLIDING
11.4



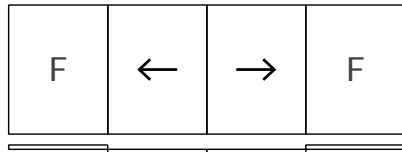
POCKET · SINGLE TRACK
11.5



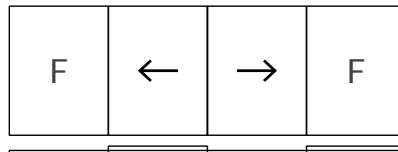
POCKET · SINGLE TRACK
11.5



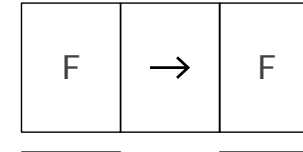
POCKET · DOUBLE TRACK
111.6



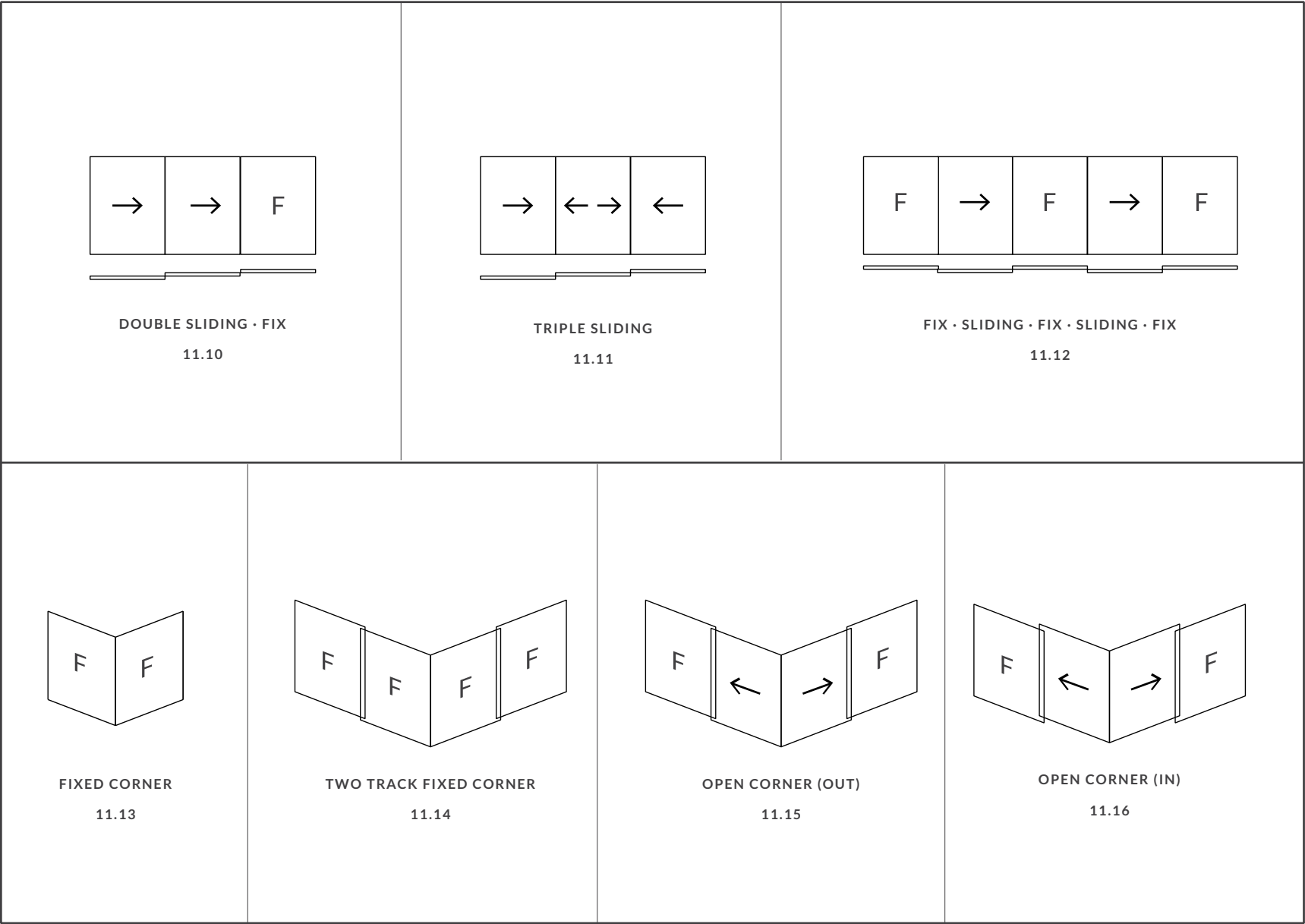
FIX · DOUBLE SLIDING · FIX
11.7



FIX · DOUBLE SLIDING · FIX
11.8

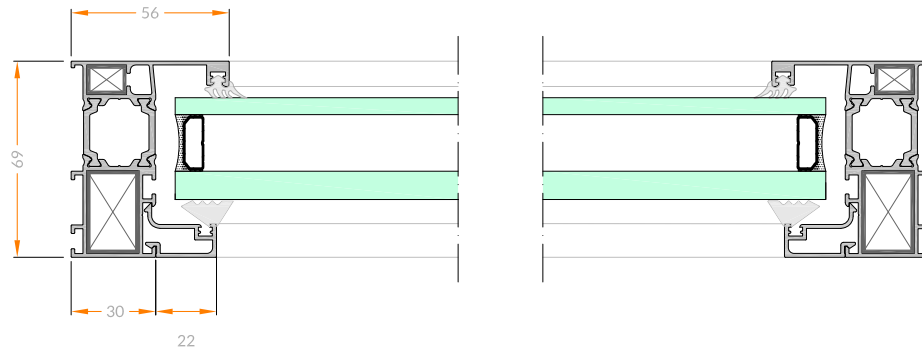


FIX · SLIDING · FIX
11.9

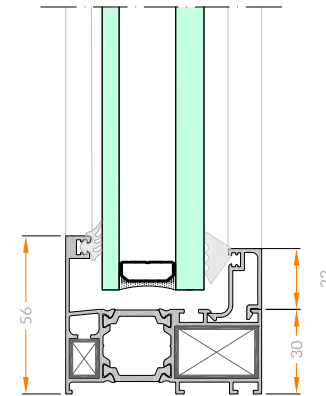
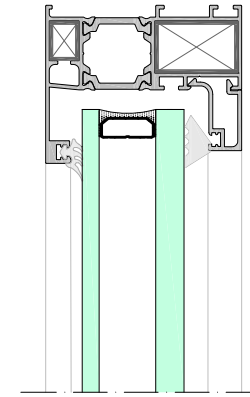


FIX FRAME

11.1



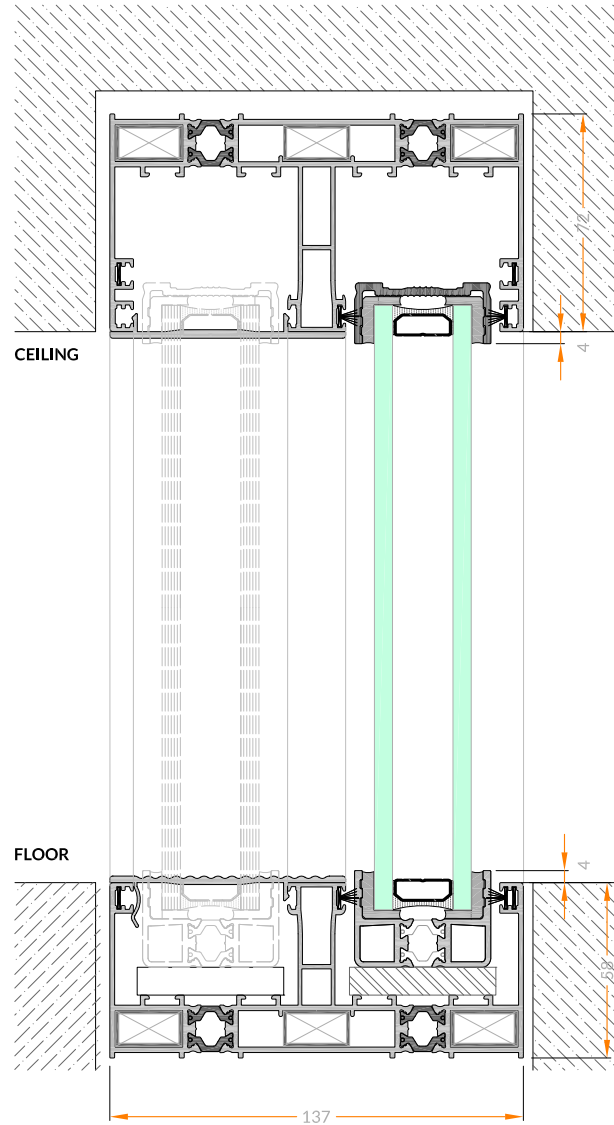
HORIZONTAL SECTION



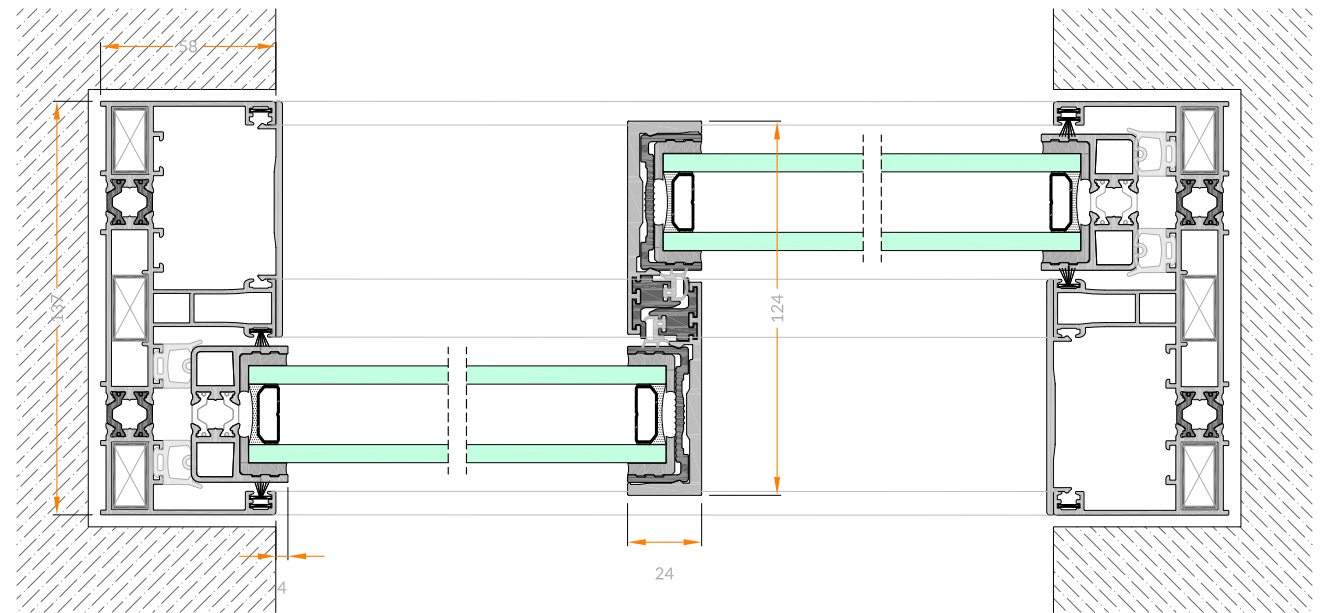
VERTICAL SECTION



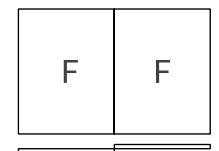
DOUBLE FIX FRAME



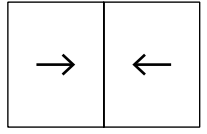
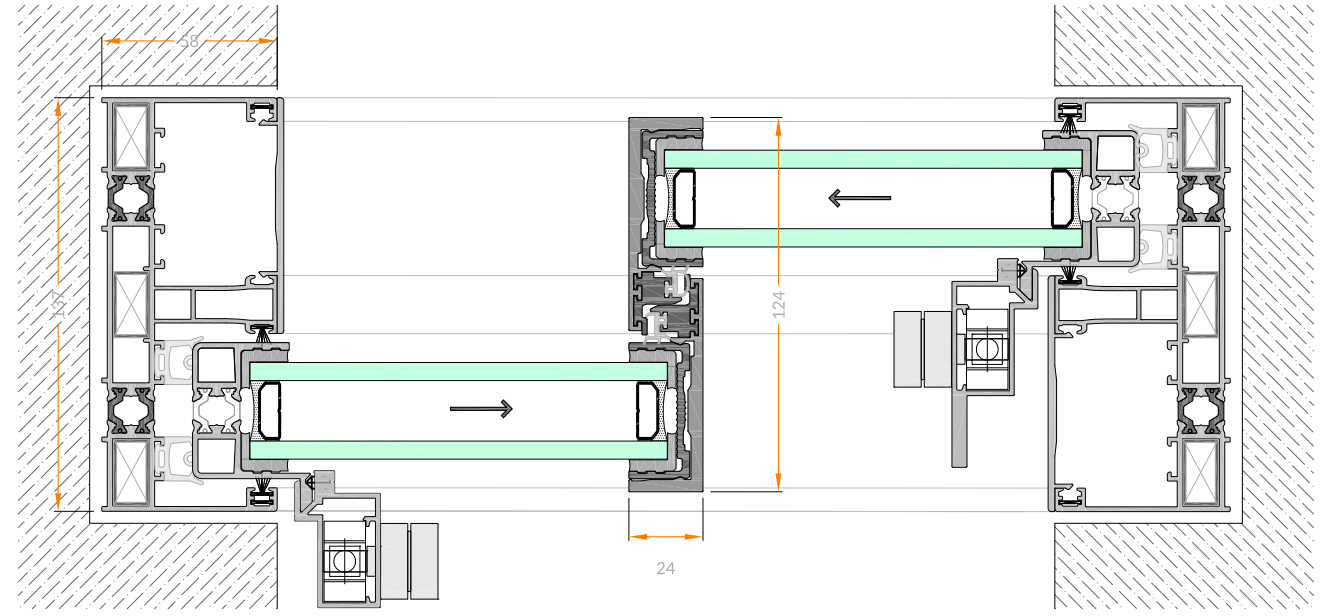
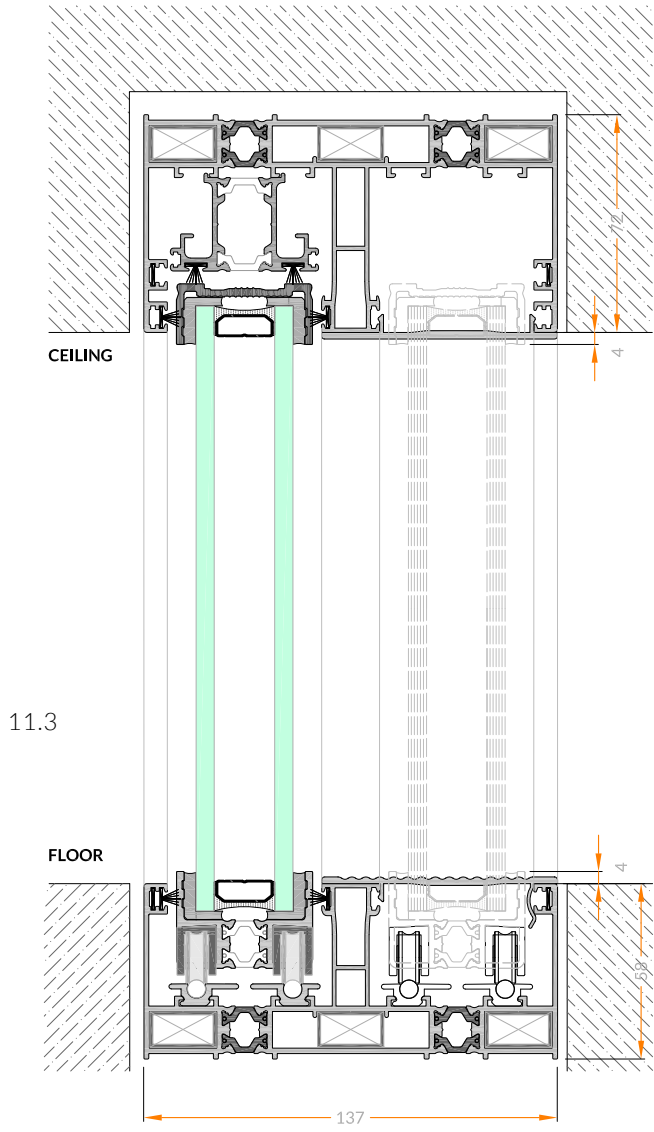
VERTICAL SECTION



HORIZONTAL SECTION

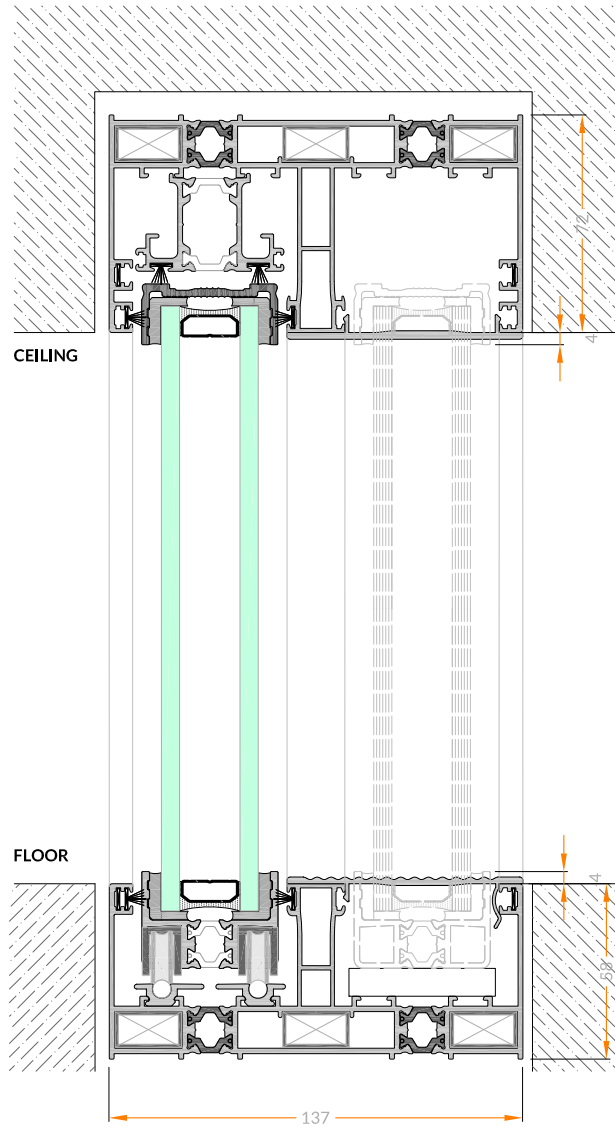


DOUBLE SLIDING FRAME

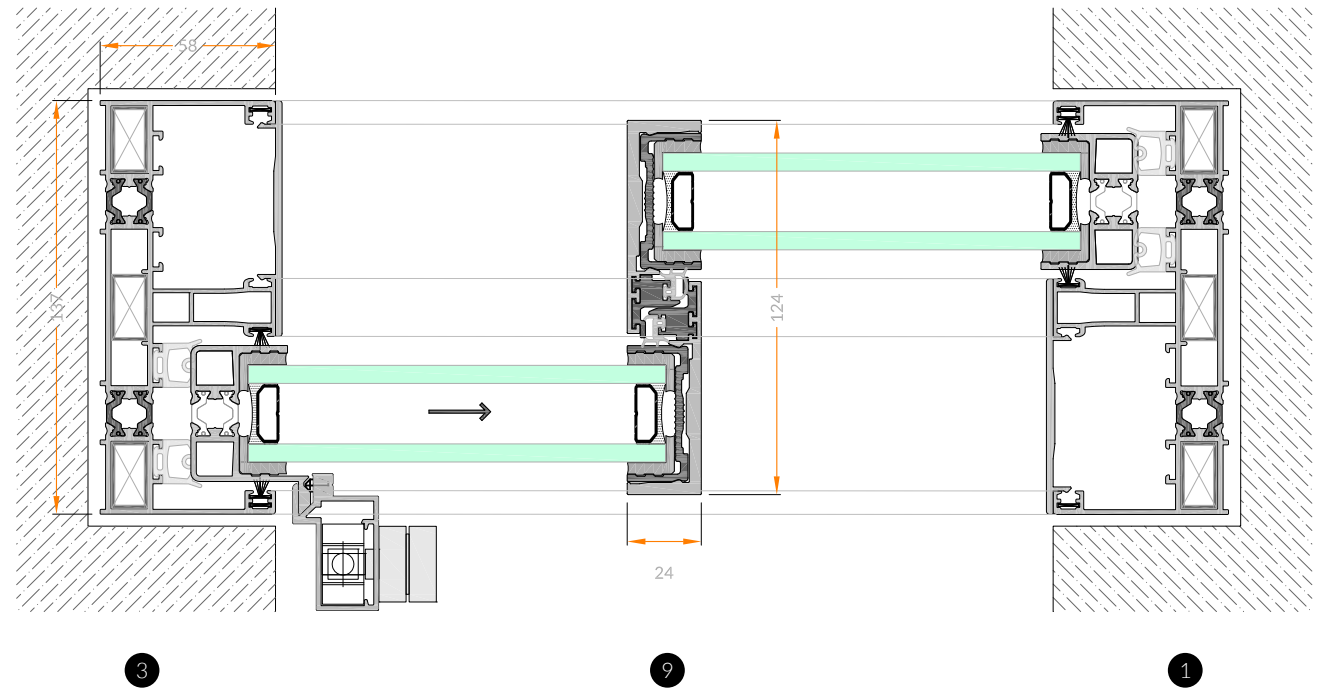


VERTICAL SECTION

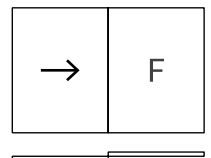
HORIZONTAL SECTION



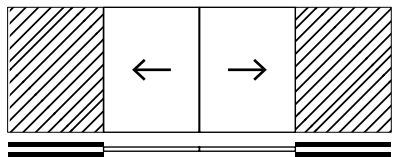
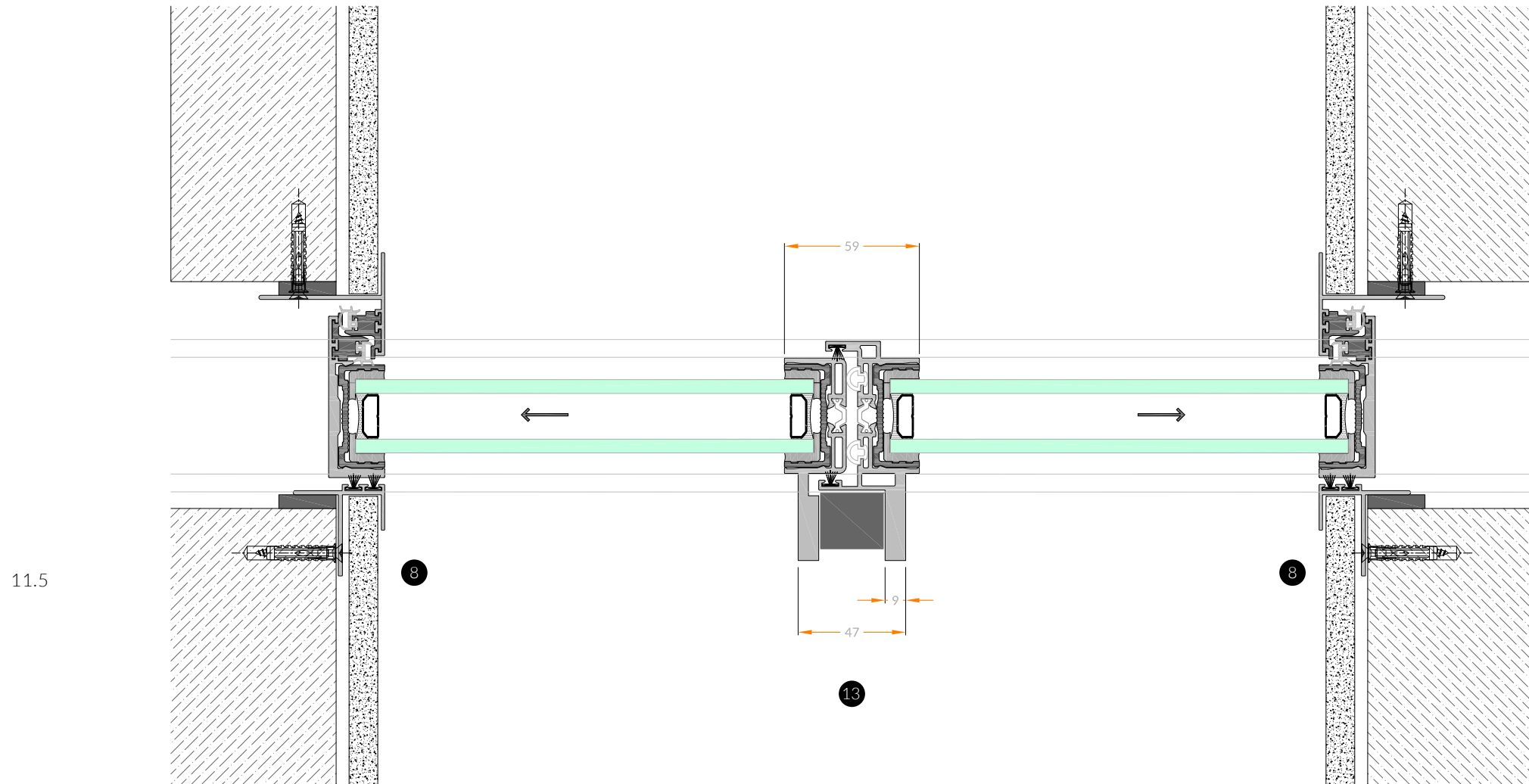
VERTICAL SECTION



HORIZONTAL SECTION

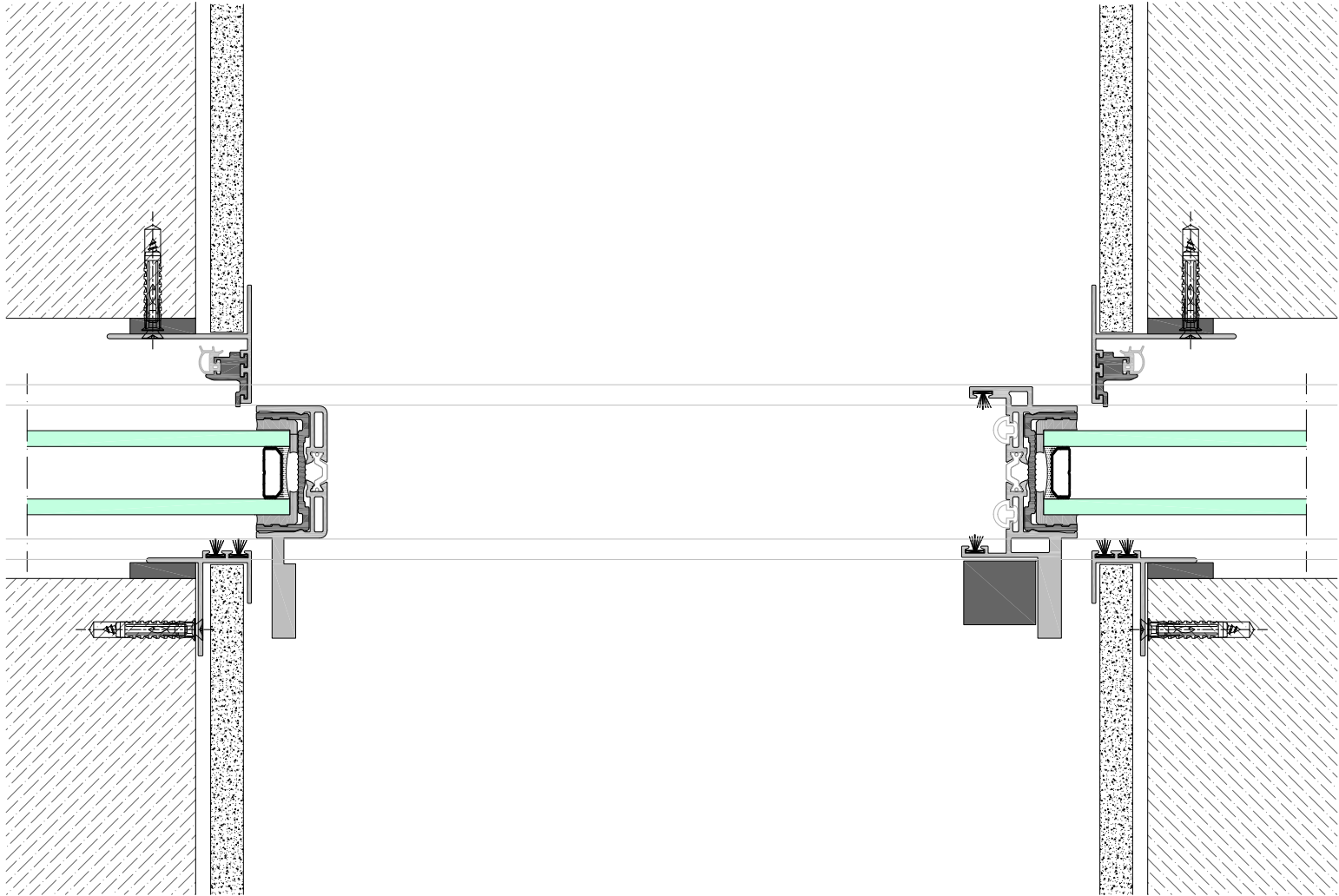


POCKET WINDOWS · SINGLE TRACK



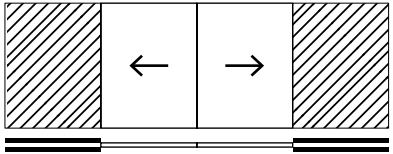
HORIZONTAL SECTION · CLOSED

POCKET WINDOWS · SINGLE TRACK



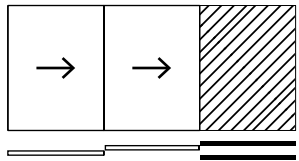
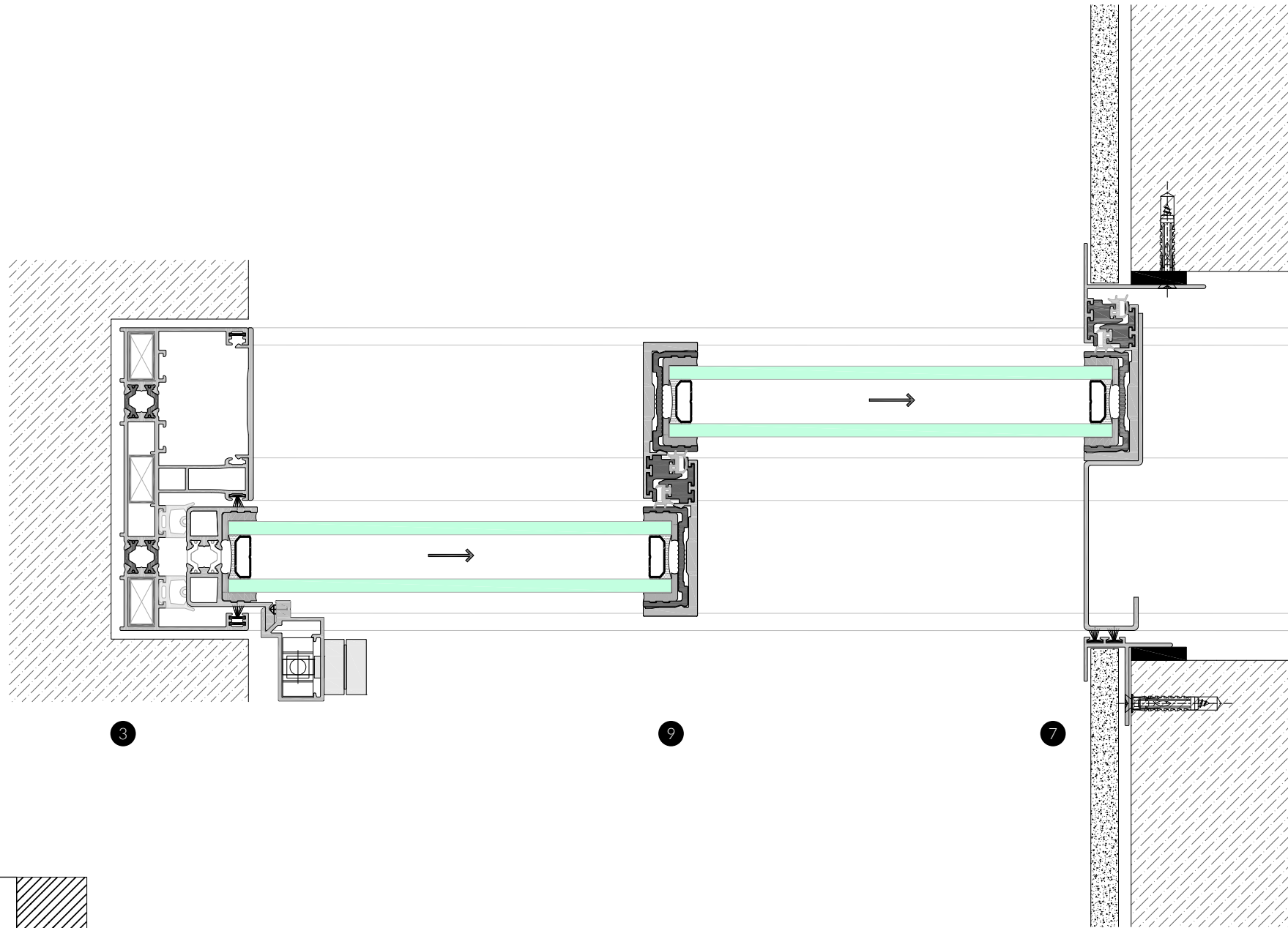
11.5

HORIZONTAL SECTION · OPEN



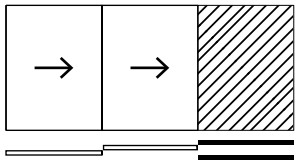
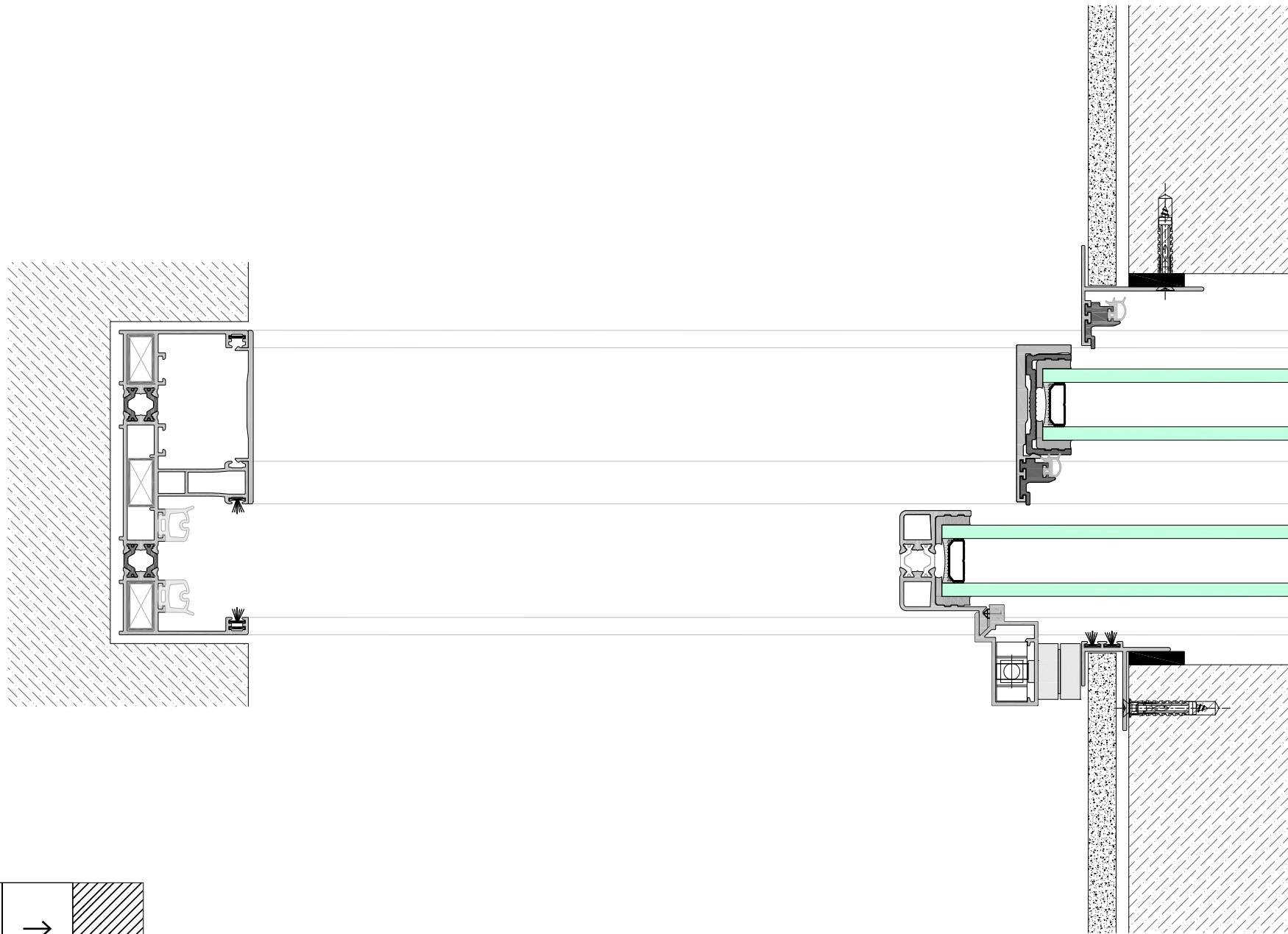
POCKET WINDOWS · DOUBLE TRACK

11.6



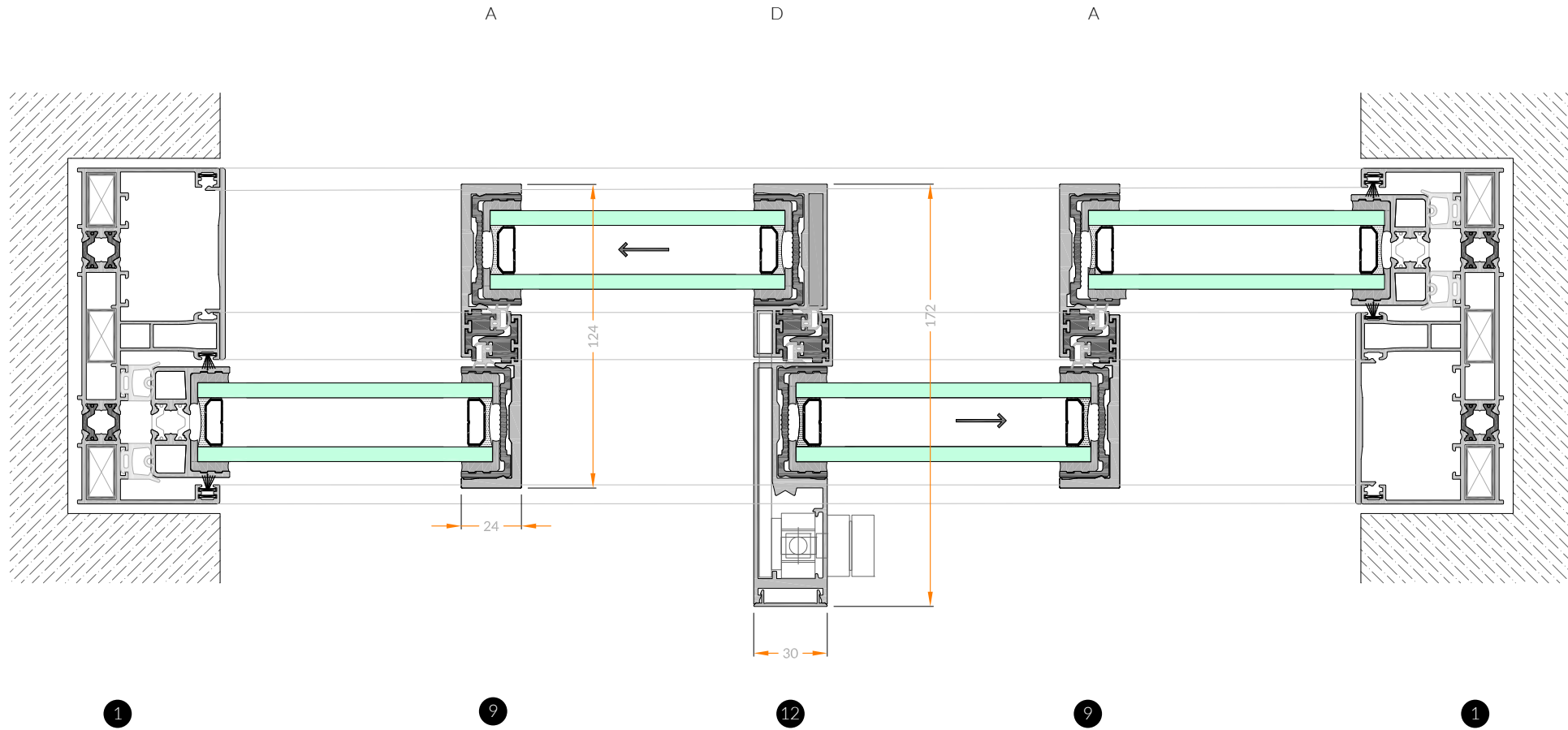
HORIZONTAL SECTION · OPEN

POCKET WINDOWS · DOUBLE TRACK

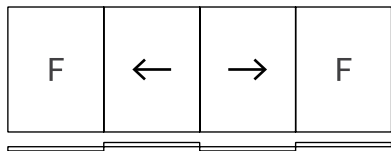


HORIZONTAL SECTION · CLOSED

FIX · DOUBLE SLIDING · FIX (ALTERNATE)

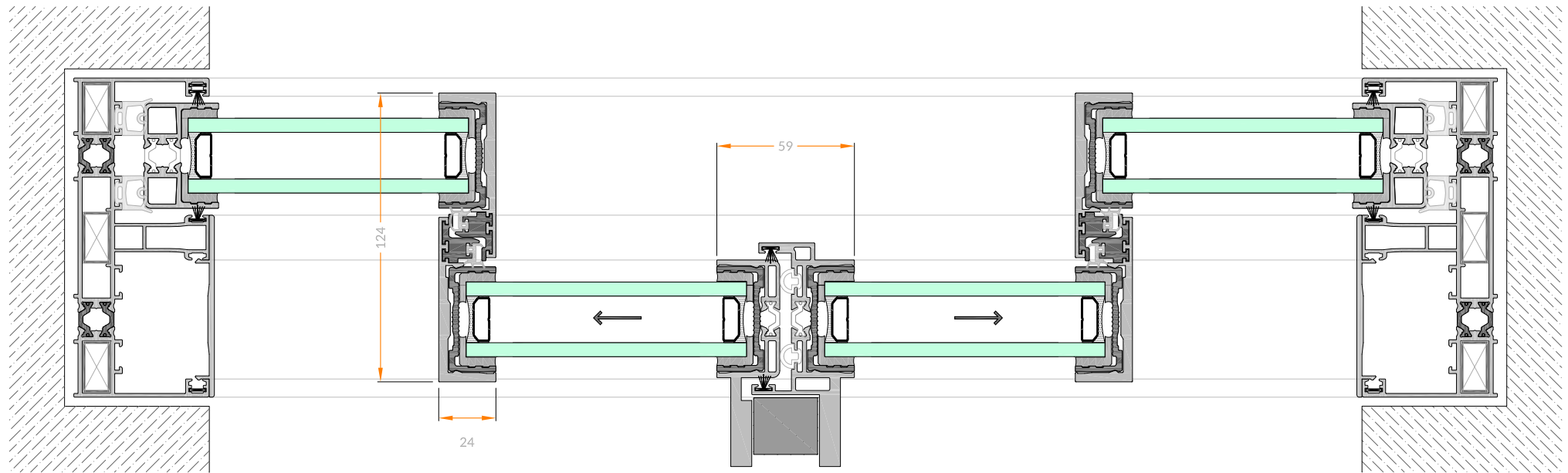


11.7



4-POINT LOCKING DEVICE UNDER DEVELOPMENT

FIX · DOUBLE SLIDING IN THE SAME TRUCK · FIX



1

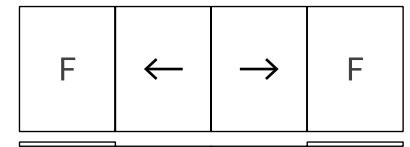
9

13

9

1

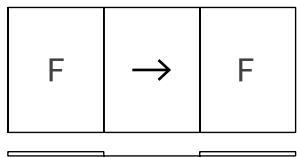
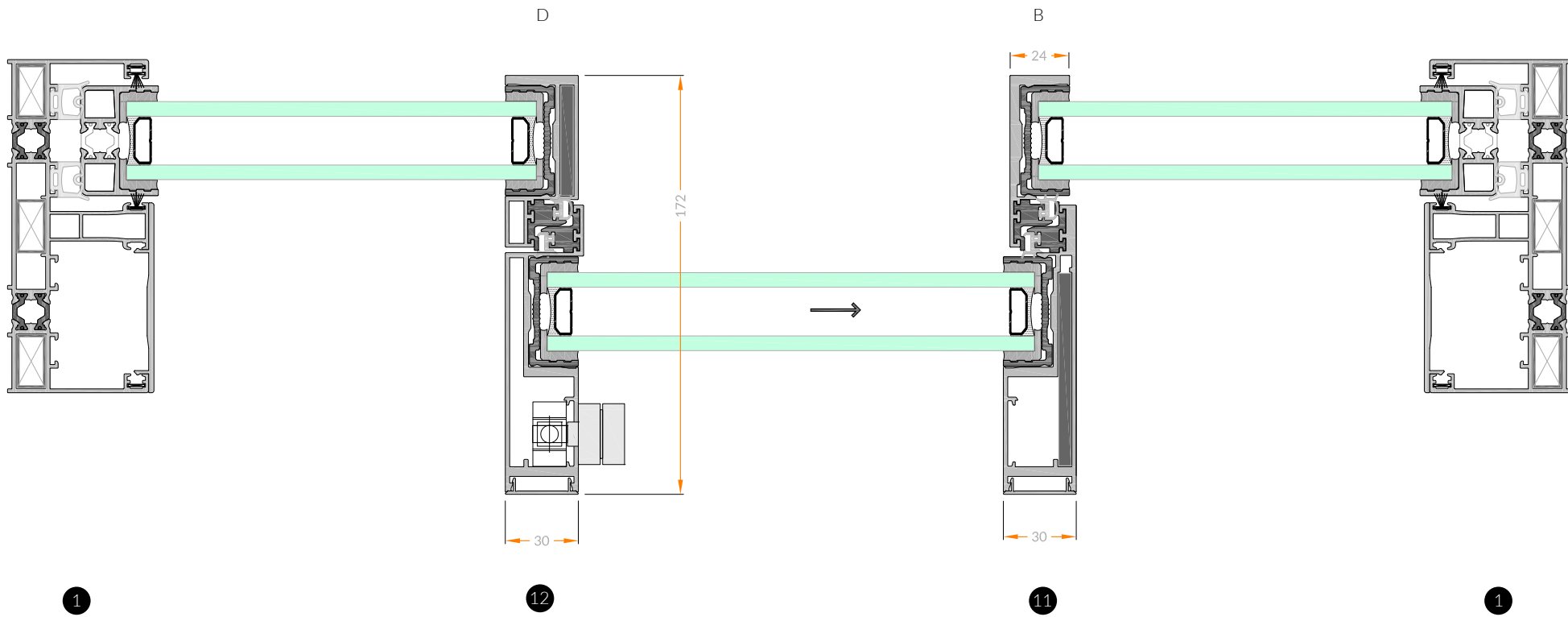
11.8



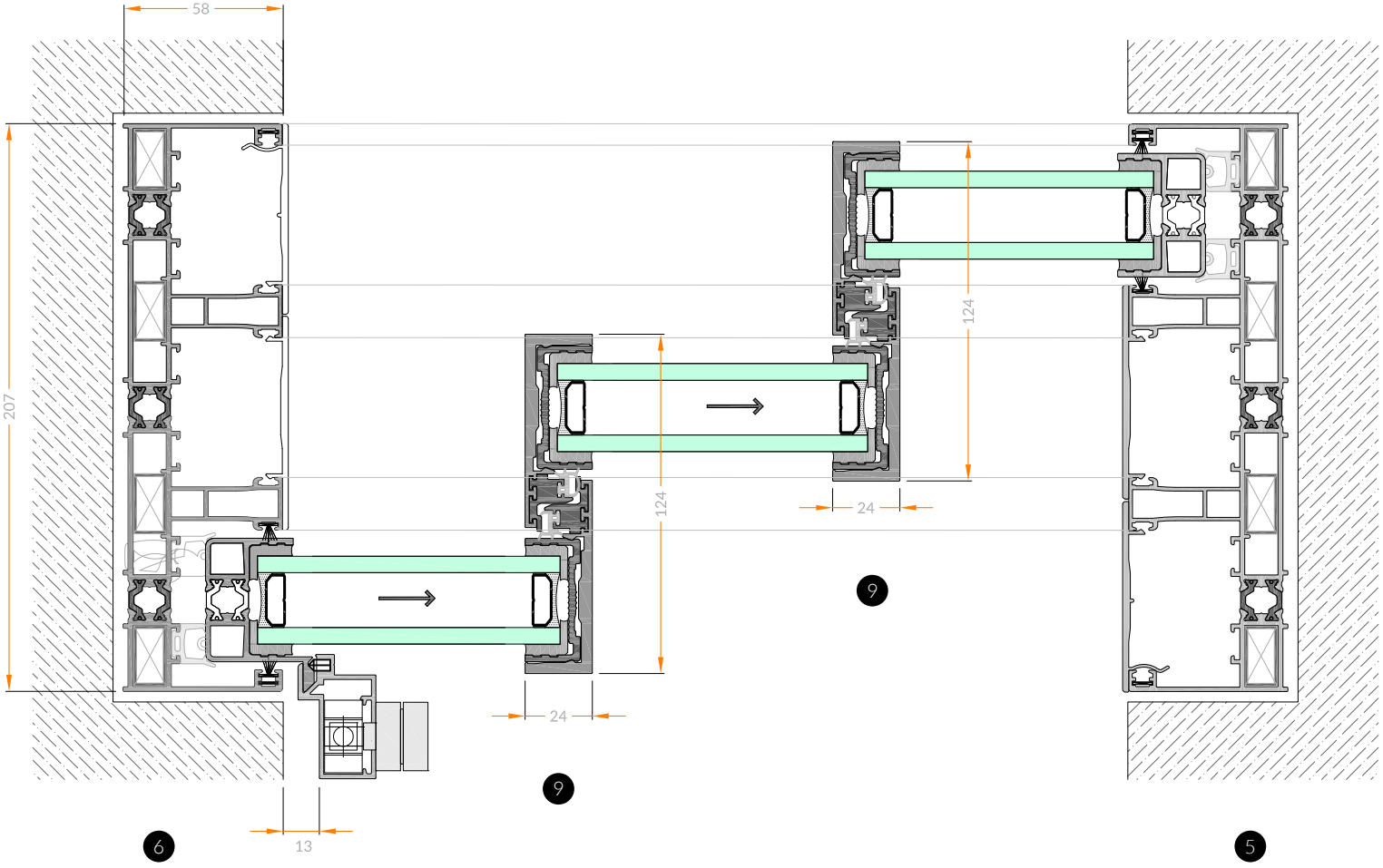
HORIZONTAL SECTION

FIX · SLIDING · FIX

11.9

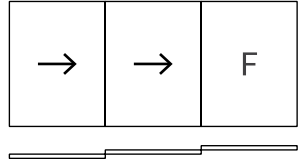


HORIZONTAL SECTION

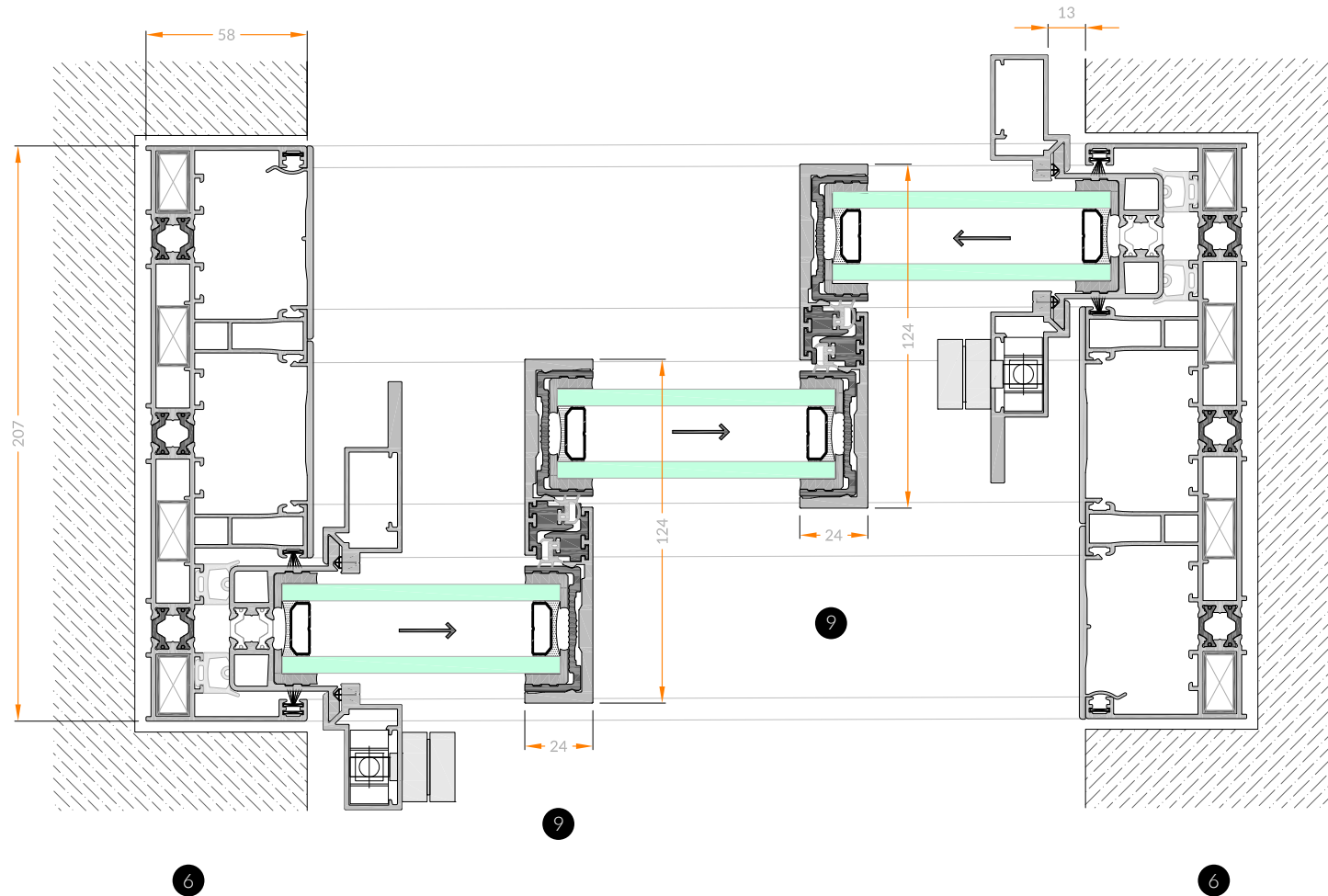


11.10

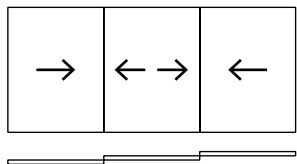
HORIZONTAL SECTION



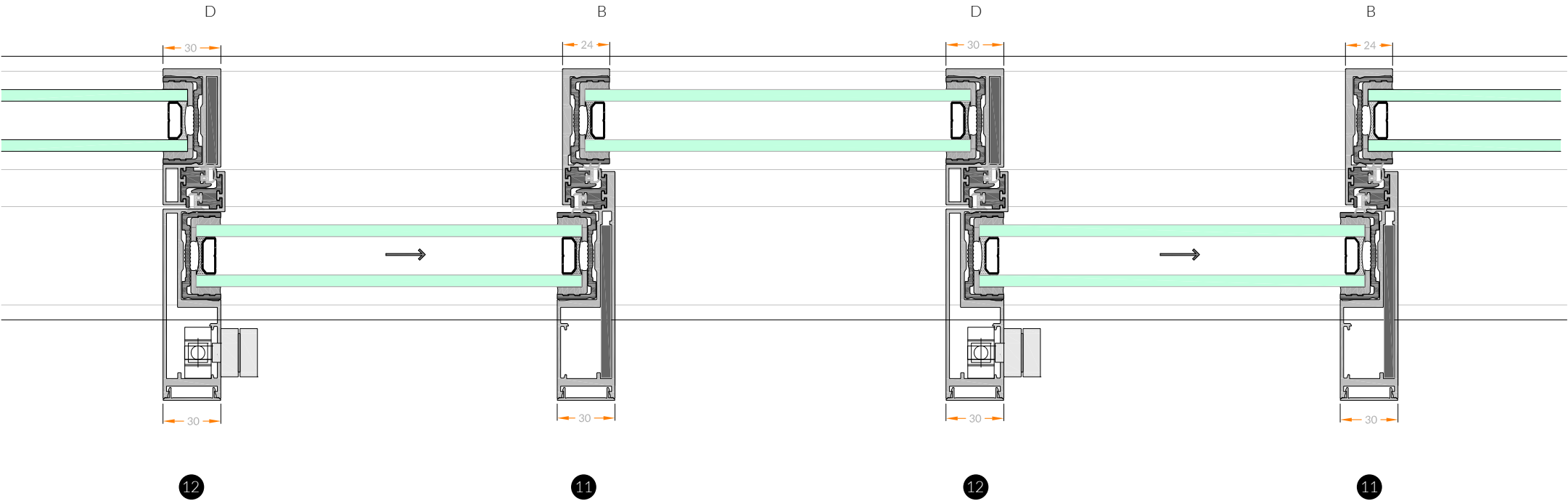
TRIPLE SLIDING



11.11



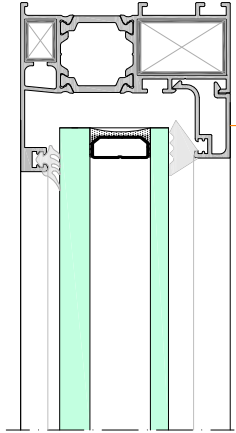
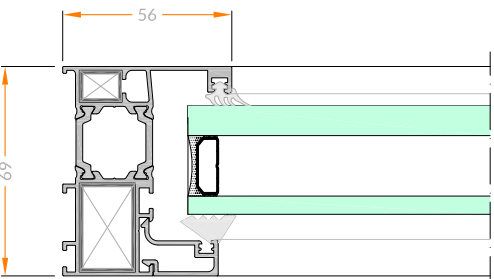
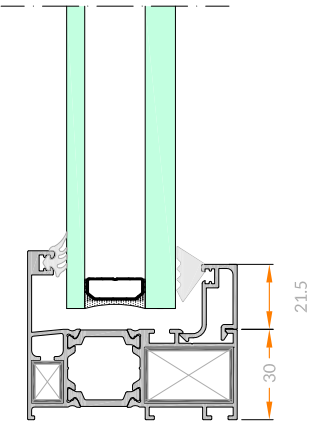
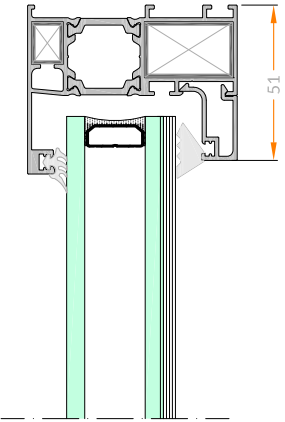
HORIZONTAL SECTION



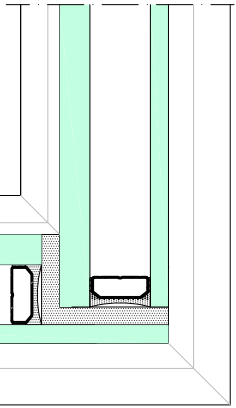
HORIZONTAL SECTION



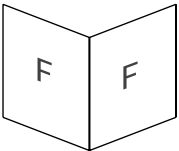
SINGLE CORNER FRAME



GLAZING BEADS TO THE OUTER SIDE



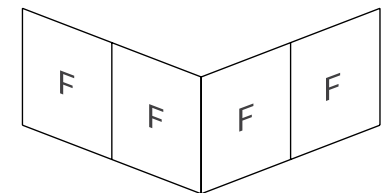
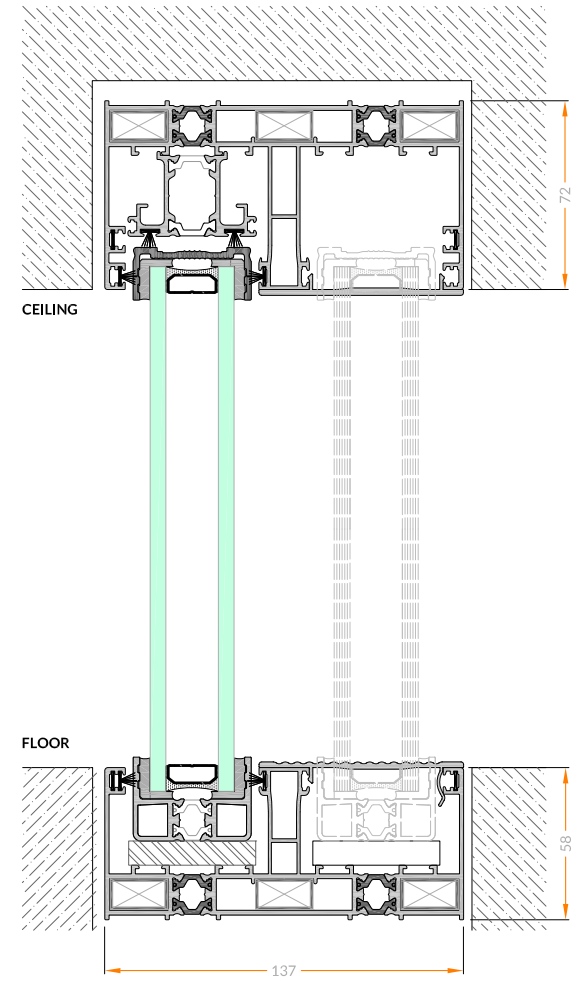
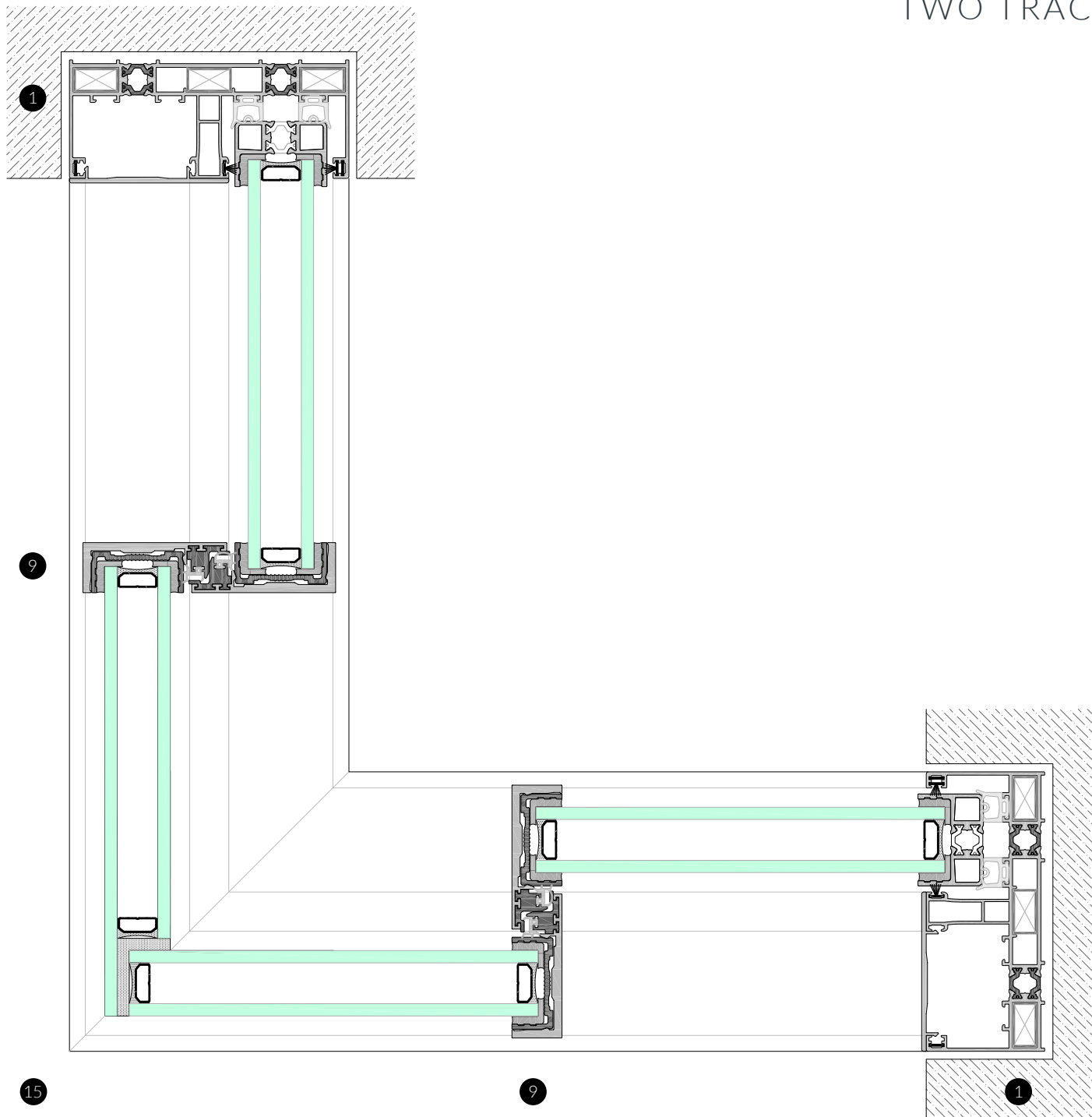
11.13



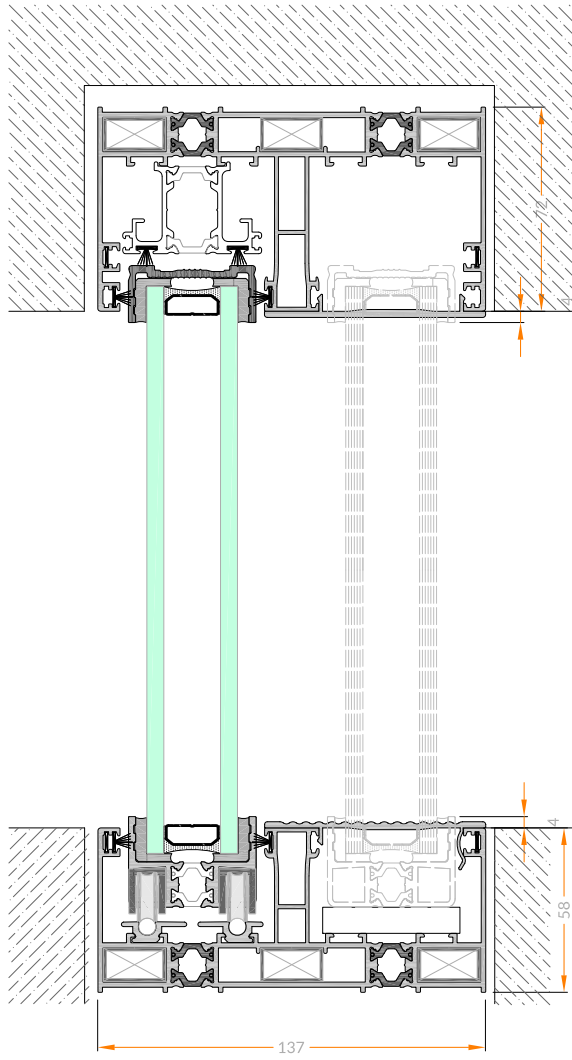
VERTICAL SECTION

HORIZONTAL SECTION

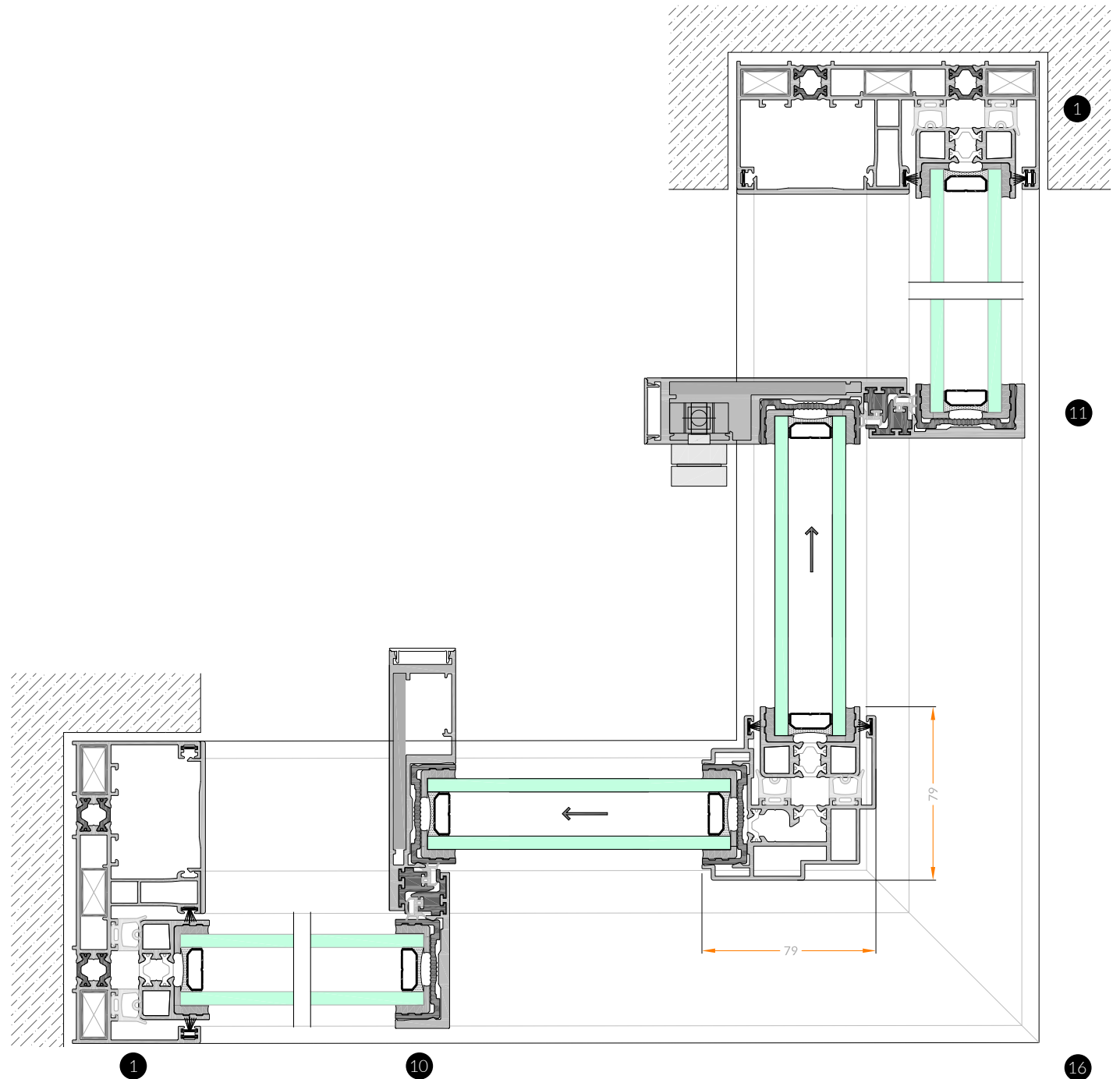
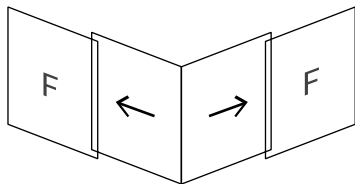
TWO TRACK CLOSED CORNER FRAMES



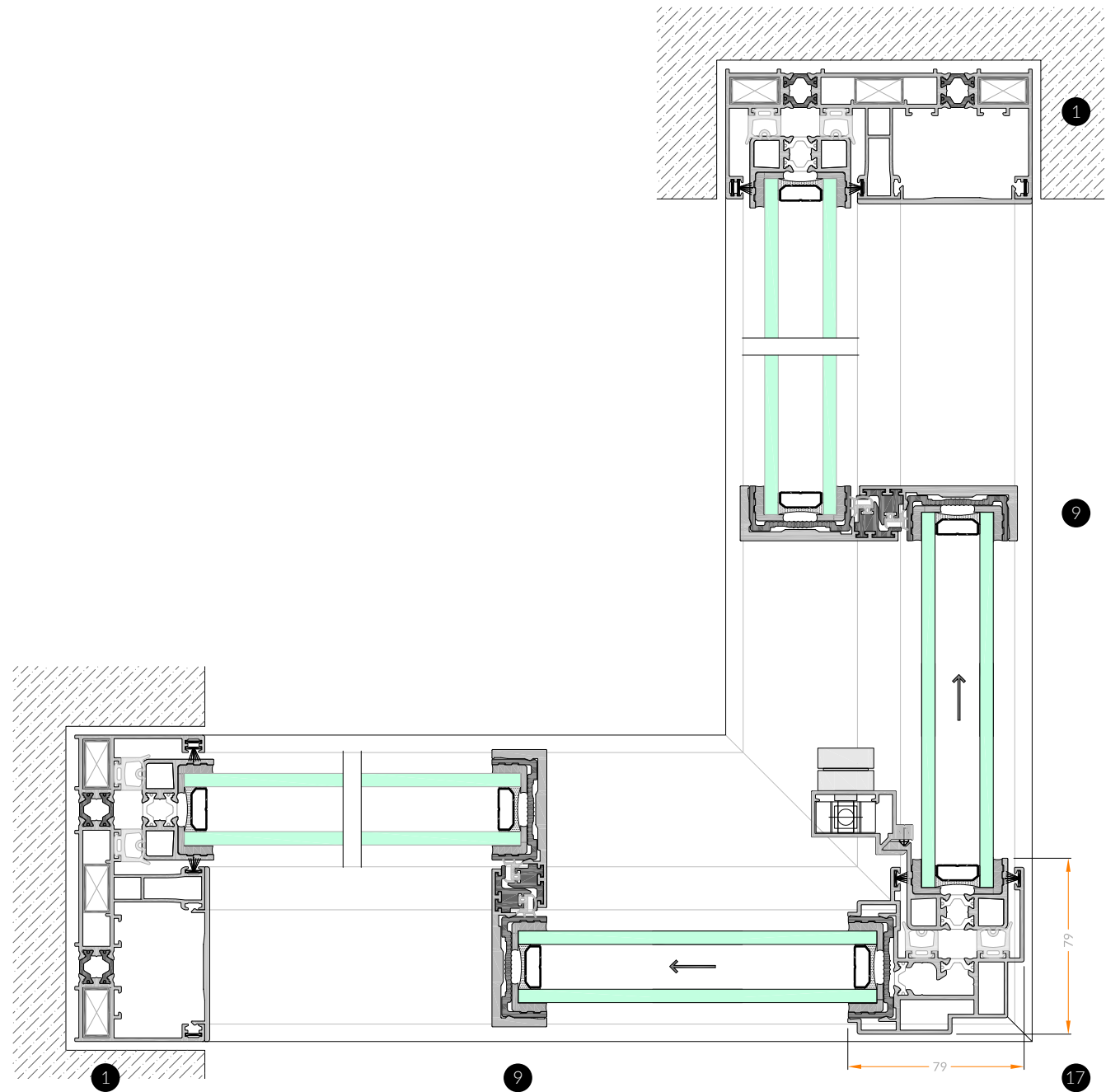
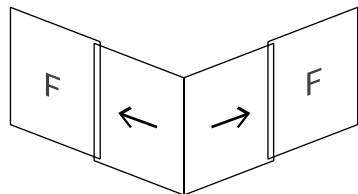
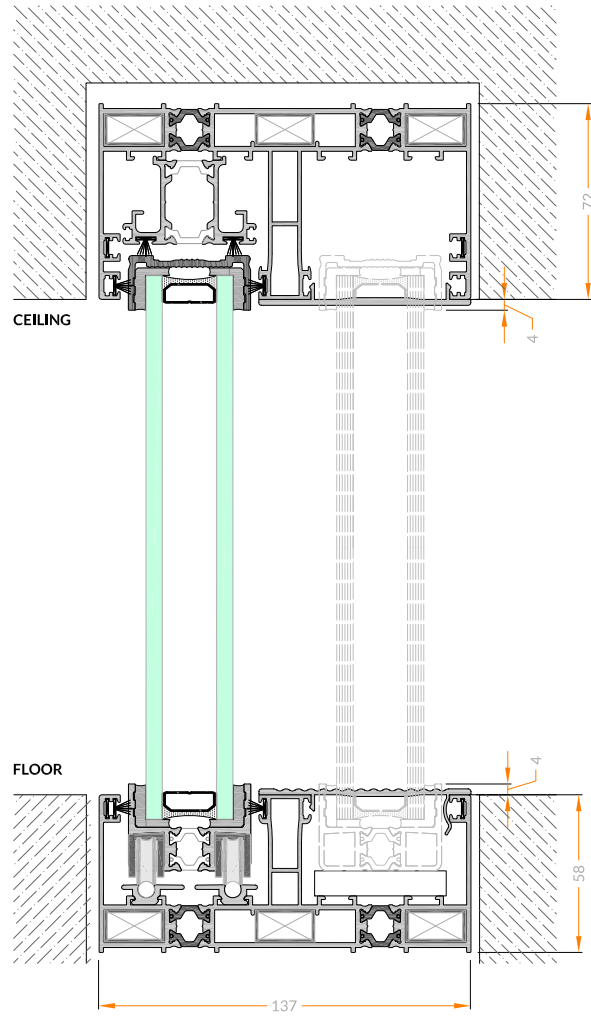
TWO TRACK OPEN CORNER FRAMES (SLIDING INSIDE)



11.15

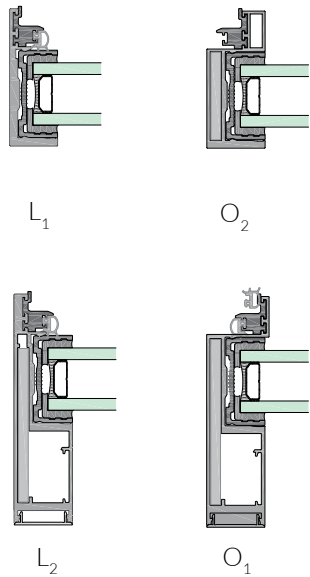
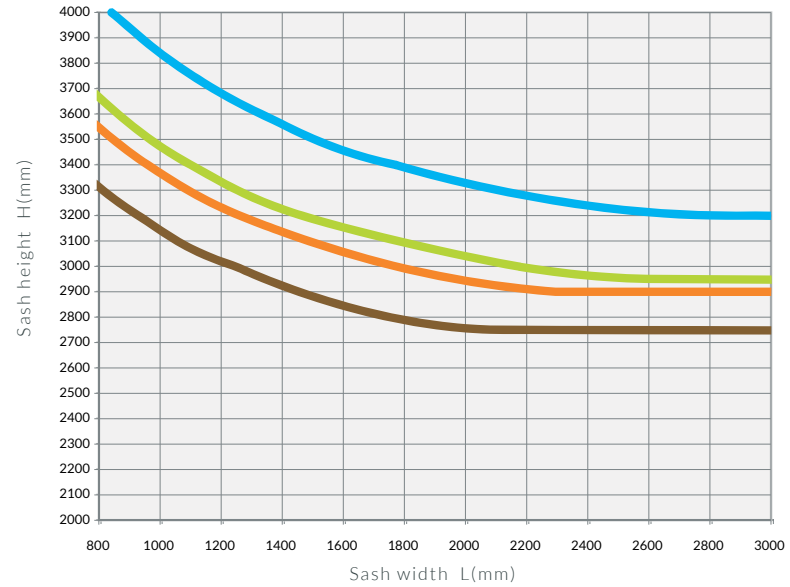
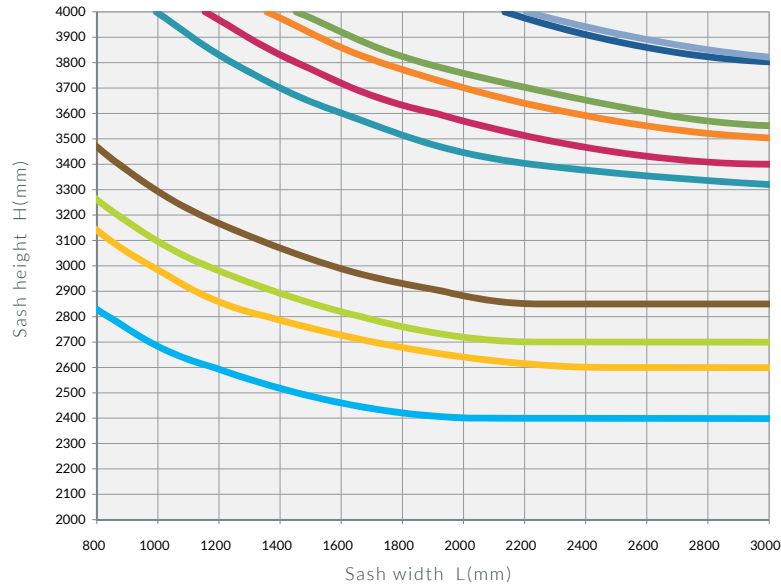


TWO TRACK OPEN CORNER FRAMES (SLIDING OUTSIDE)



WIND LOAD DIAGRAMS

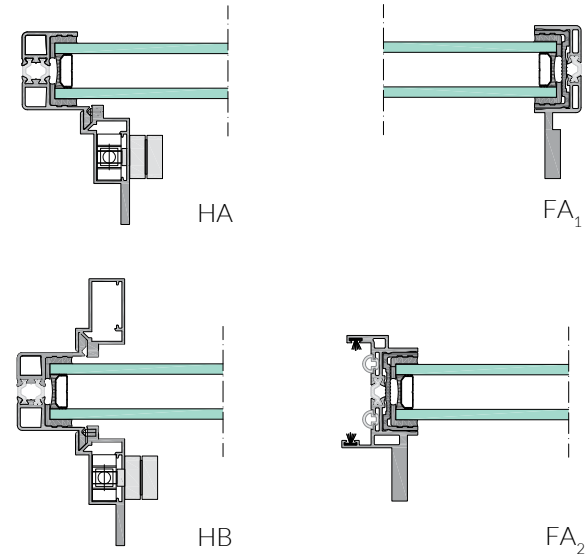
0,5
kN/m²



OMICRON

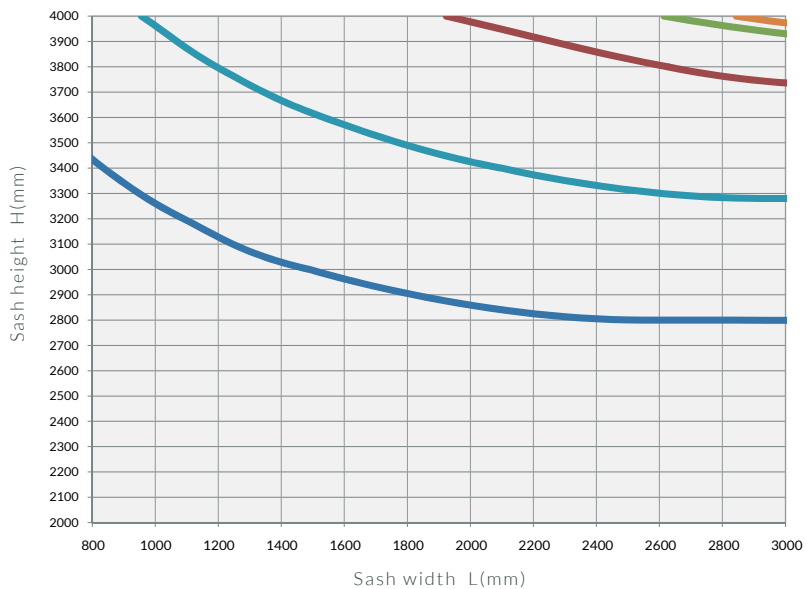
- O₁ + Steel reinf. —
- L₂ + Steel reinf. —
- L₂ —
- O₁ —
- L₂ + Alum. reinf. —
- O₂ —
- O₂ + Steel reinf. —
- O₂ + Alum. reinf. —
- O₁ + Alum. reinf. —
- L₁ —

- HA
- FA₁
- HB
- FA₂









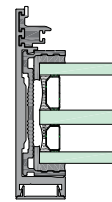
103
Km/h

WIND LOAD DIAGRAMS

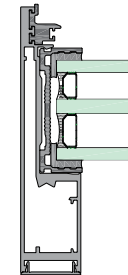


ΩMEGA

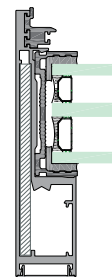
-  D
-  C
-  B + Steel reinf.
-  B + Alum. reinf.
-  B
-  A



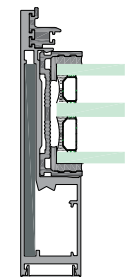
A



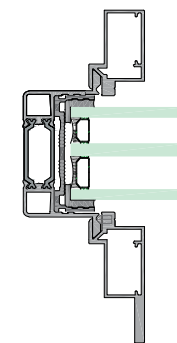
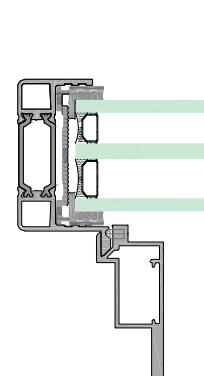
B



B + Alum. reinf.

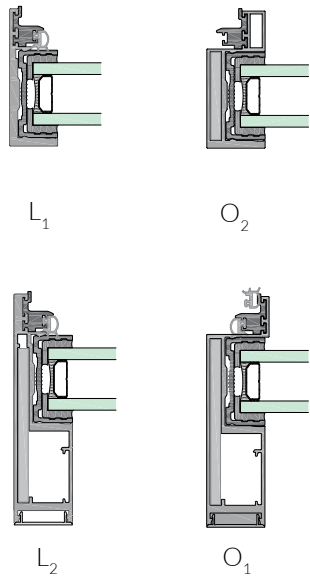
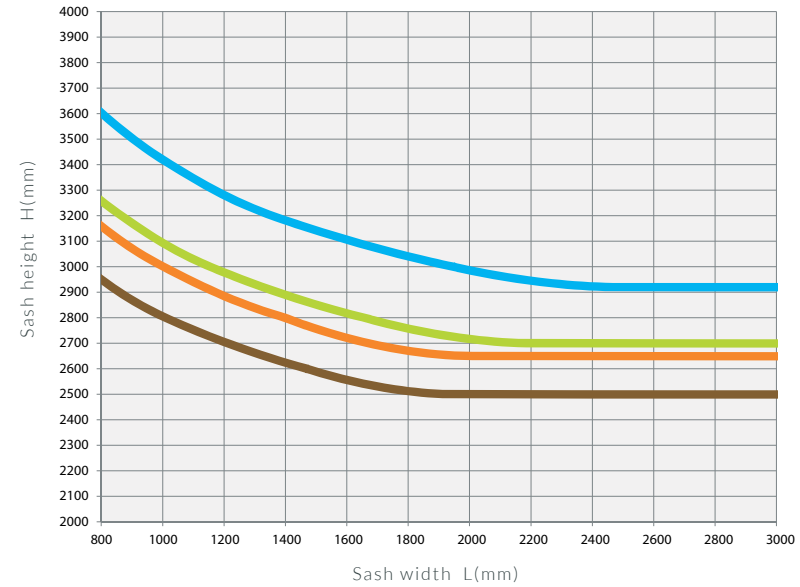
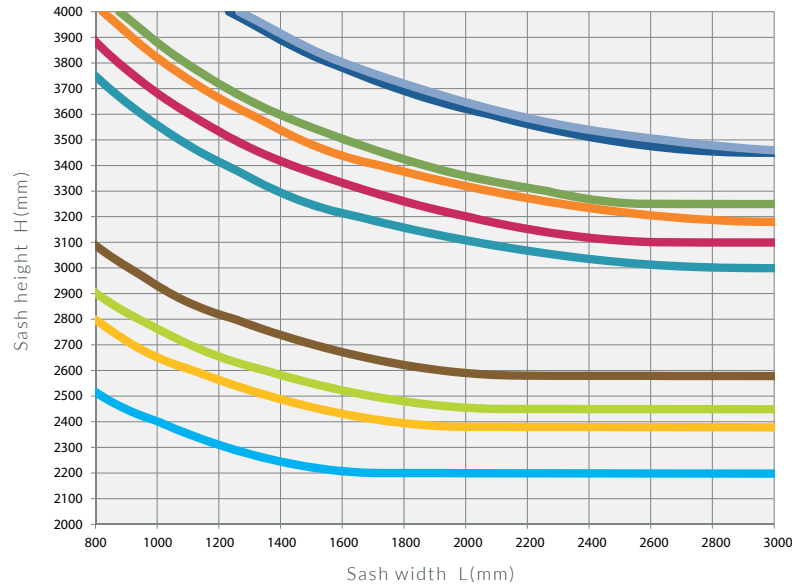


B + Steel reinf.



WIND LOAD DIAGRAMS

0,8
kN/m²



OMICRON

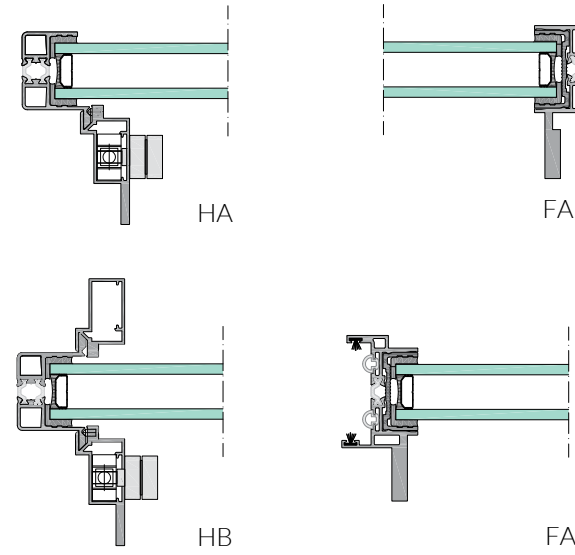
- O₁ + Steel reinf. —
- L₂ + Steel reinf. —
- L₂ —
- O₁ —
- L₂ + Alum. reinf. —
- O₂ —
- O₂ + Steel reinf. —
- O₂ + Alum. reinf. —
- O₁ + Alum. reinf. —
- L₁ —

HA

FA₁

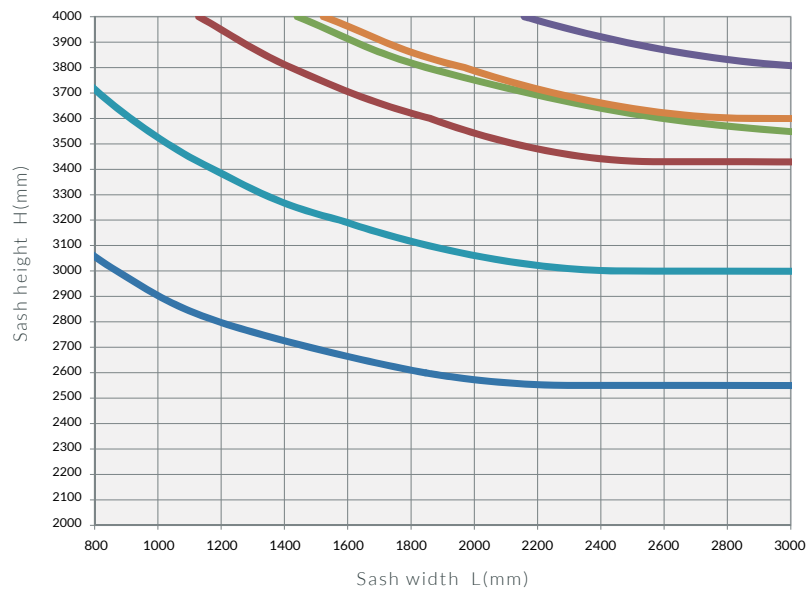
HB

FA₂









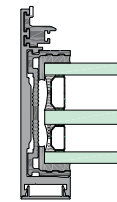
130
Km/h

WIND LOAD DIAGRAMS

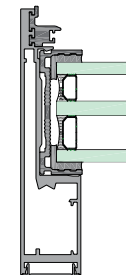


ΩMEGA

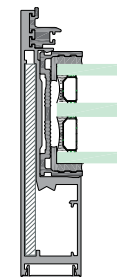
-  D
-  C
-  B + Steel reinf.
-  B + Alum. reinf.
-  B
-  A



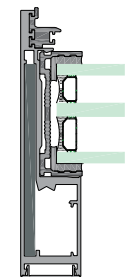
A



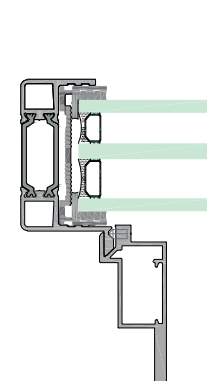
B



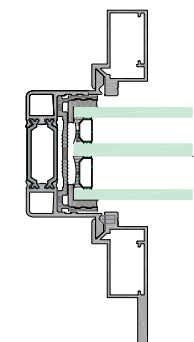
B + Alum. reinf.



B + Steel reinf.



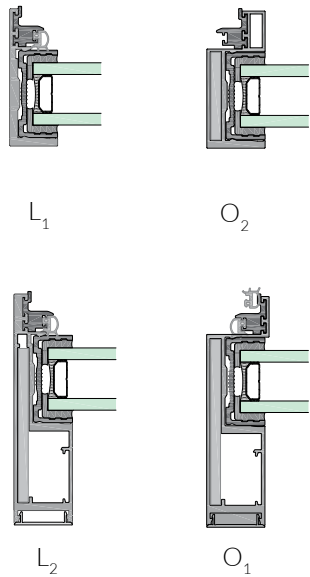
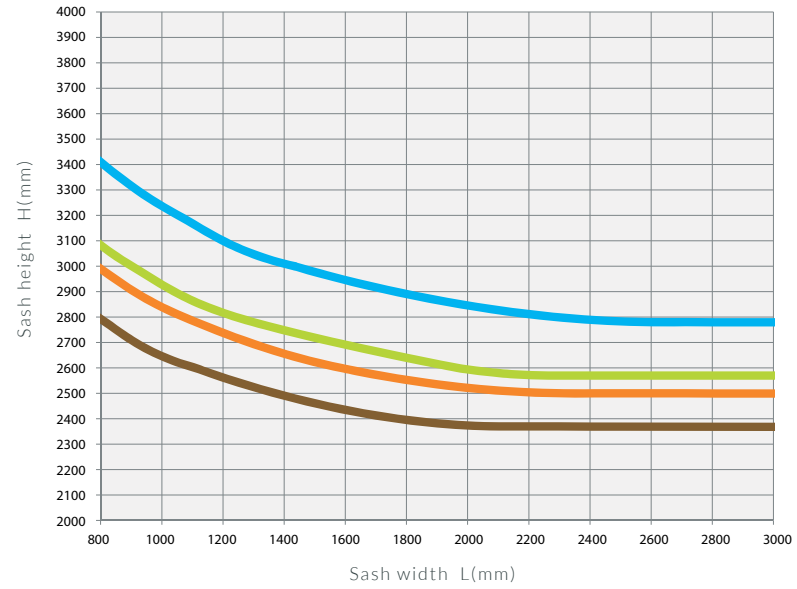
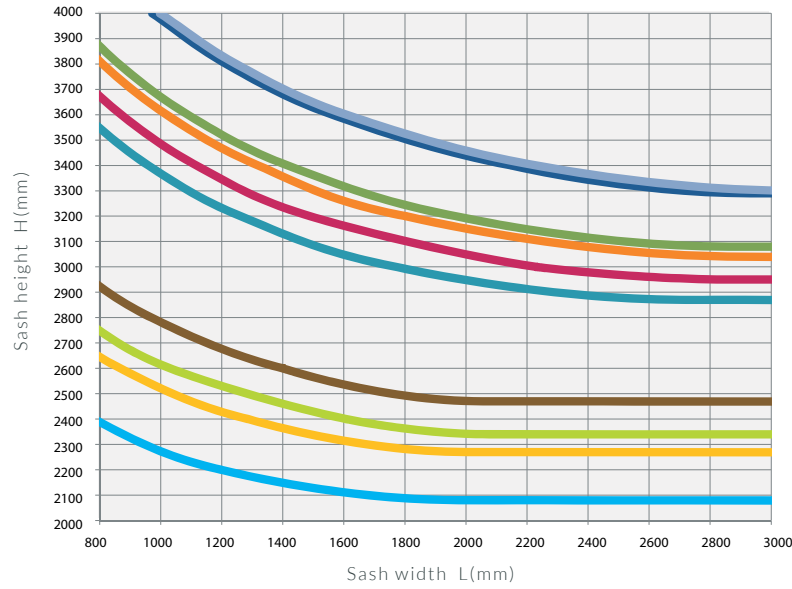
C



D

WIND LOAD DIAGRAMS

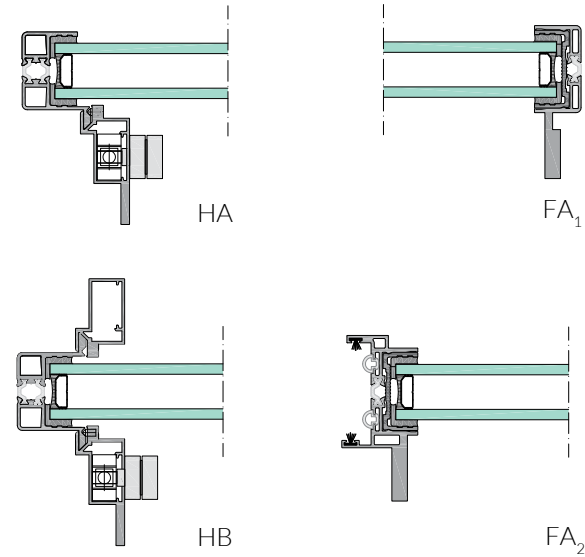
1,0
kN/m²



OMICRON

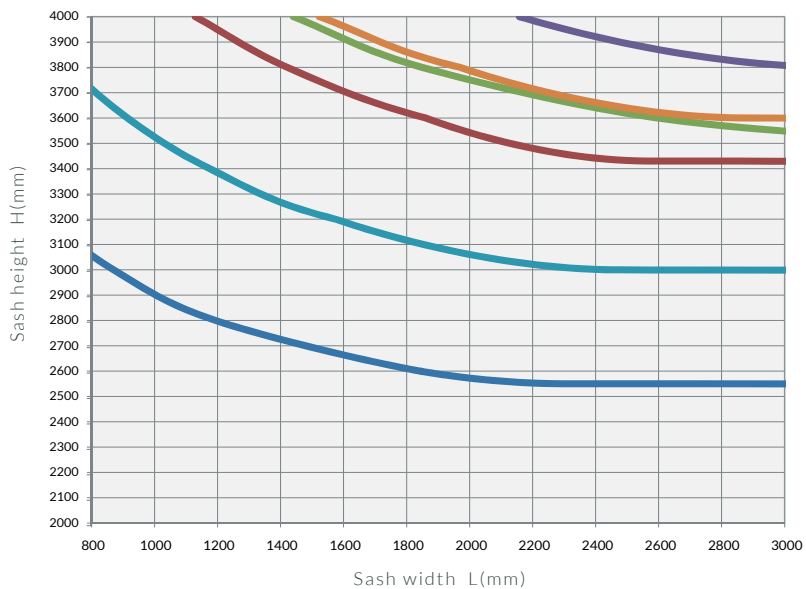
- O₁ + Steel reinf. —
- L₂ + Steel reinf. —
- L₂ —
- O₁ —
- L₂ + Alum. reinf. —
- O₂ —
- O₂ + Steel reinf. —
- O₂ + Alum. reinf. —
- O₁ + Alum. reinf. —
- L₁ —

- HA
- FA₁
- HB
- FA₂









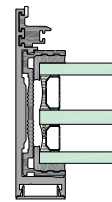
145
Km/h

WIND LOAD DIAGRAMS

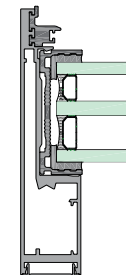


ΩMEGA

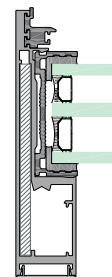
-  D
-  C
-  B + Steel reinf.
-  B + Alum. reinf.
-  B
-  A



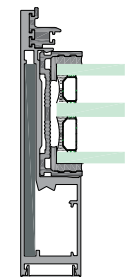
A



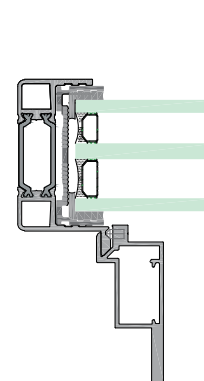
B



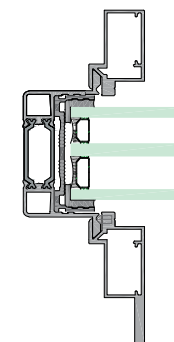
B + Alum. reinf.



B + Steel reinf.



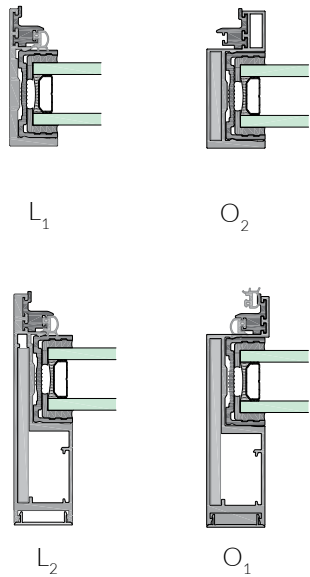
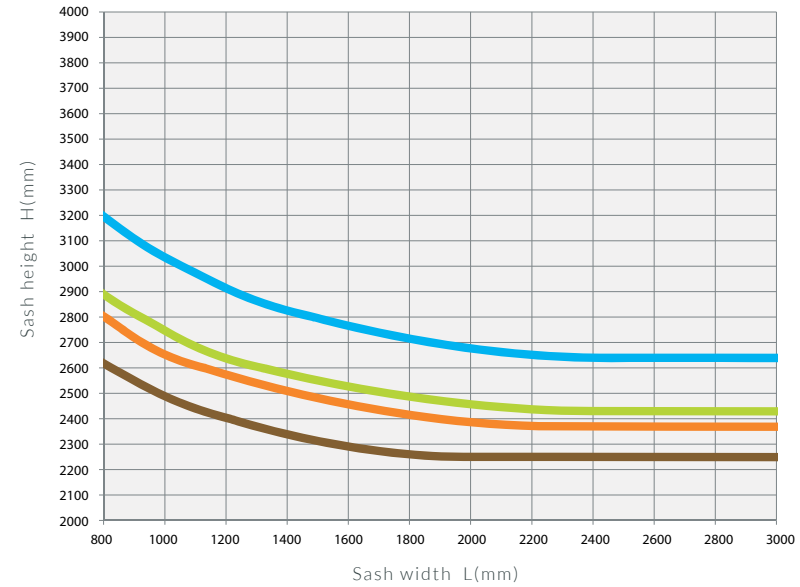
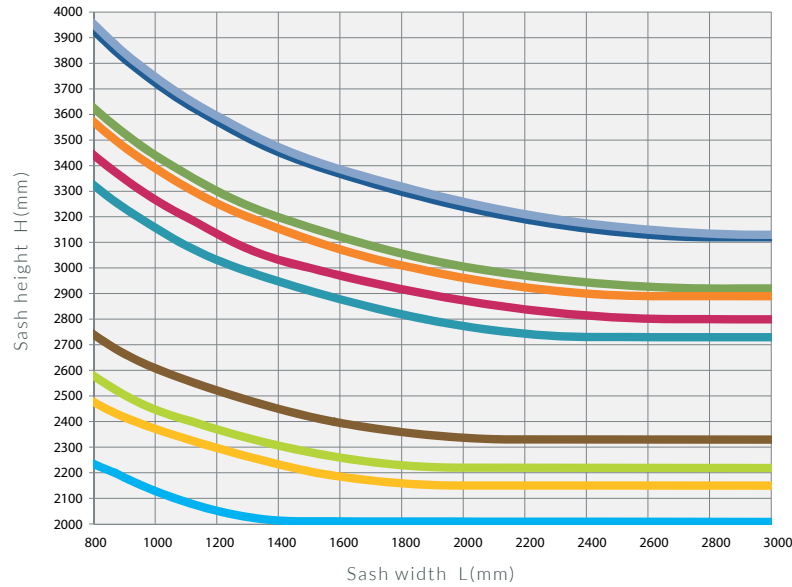
C



D

WIND LOAD DIAGRAMS

1,3
kN/m²



OMICRON

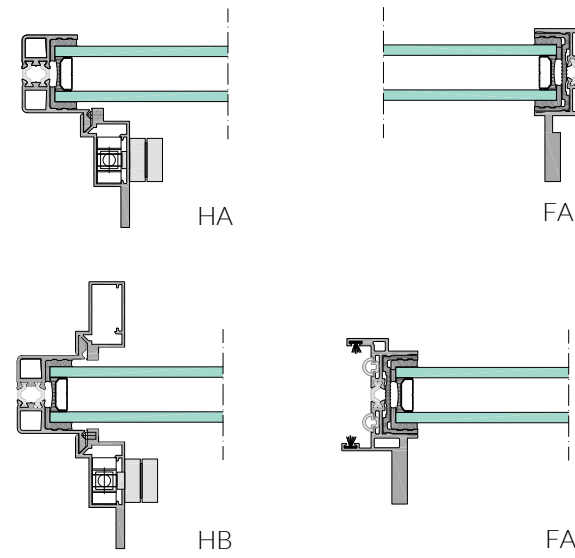
- O₁ + Steel reinf. —
- L₂ + Steel reinf. —
- L₂ —
- O₁ —
- L₂ + Alum. reinf. —
- O₂ —
- O₂ + Steel reinf. —
- O₂ + Alum. reinf. —
- O₁ + Alum. reinf. —
- L₁ —

HA

FA₁

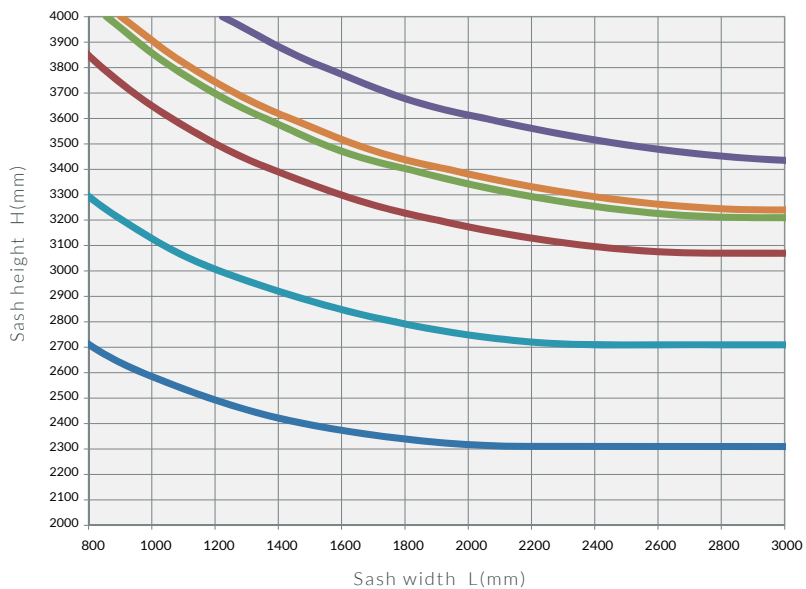
HB

FA₂



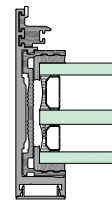
164
Km/h

WIND LOAD DIAGRAMS

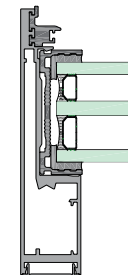


ΩMEGA

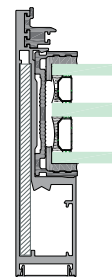
- D
- C
- B + Steel reinf.
- B + Alum. reinf.
- B
- A



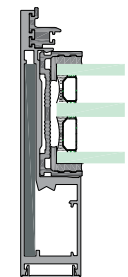
A



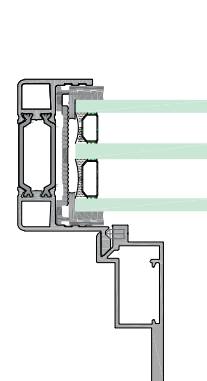
B



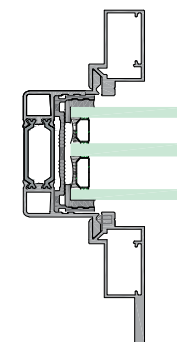
B + Alum. reinf.



B + Steel reinf.



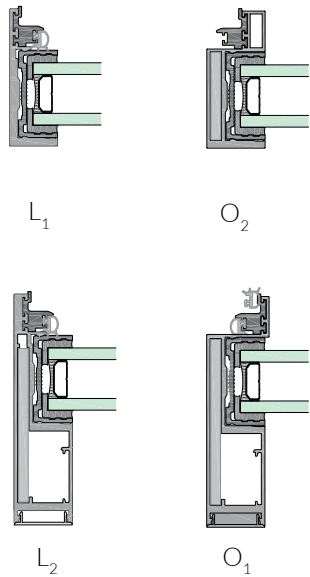
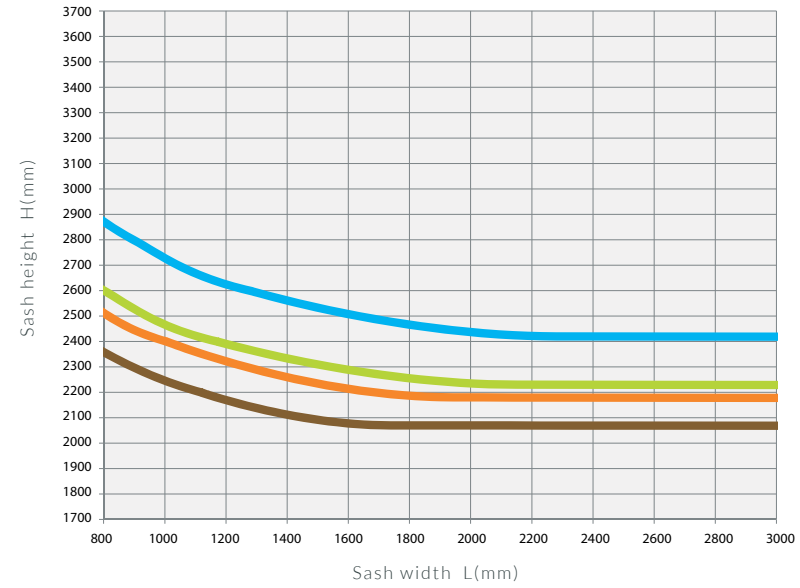
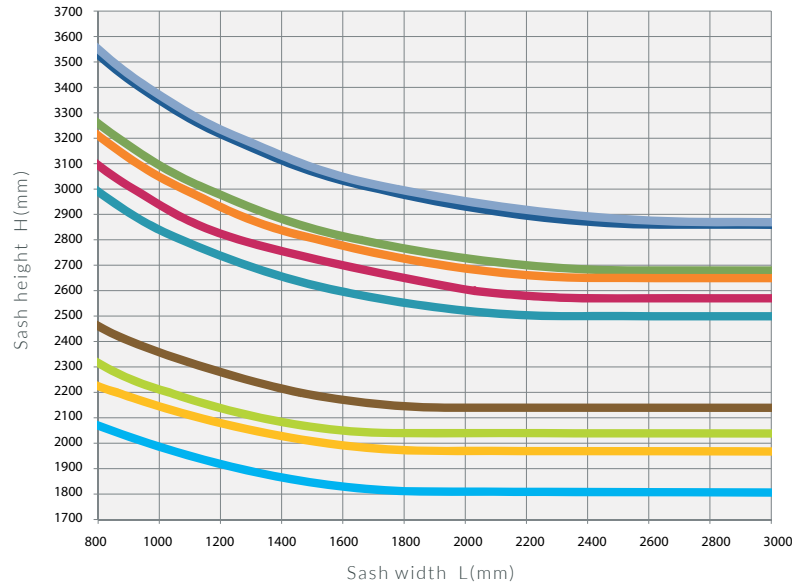
C



D

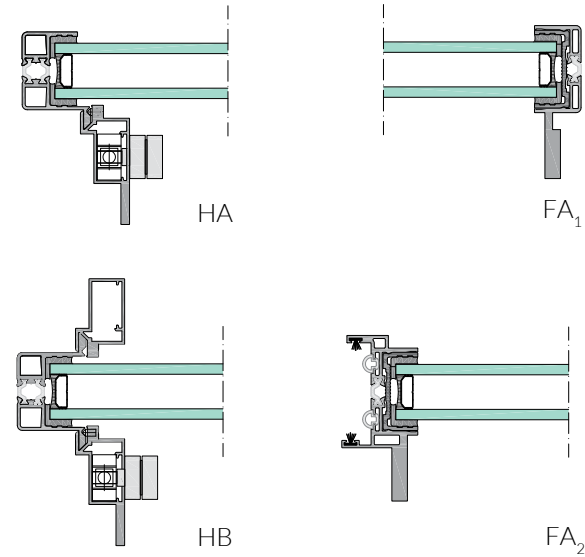
WIND LOAD DIAGRAMS

2,0
kN/m²



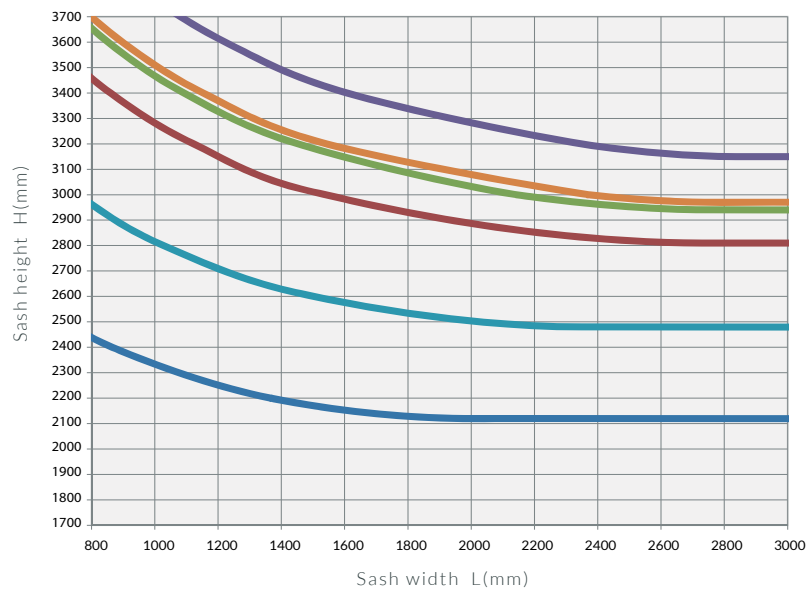
OMICRON

- O₁ + Steel reinf.
- L₂ + Steel reinf.
- L₂
- O₁
- L₂ + Alum. reinf.
- O₂
- O₂ + Steel reinf.
- O₂ + Alum. reinf.
- O₁ + Alum. reinf.
- L₁



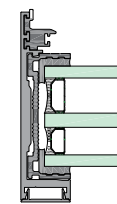
200
Km/h

WIND LOAD DIAGRAMS

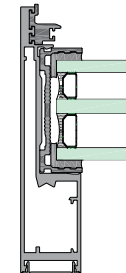


ΩMEGA

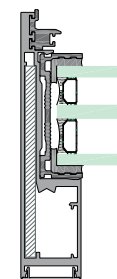
- D
- C
- B + Steel reinf.
- B + Alum. reinf.
- B
- A



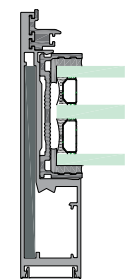
A



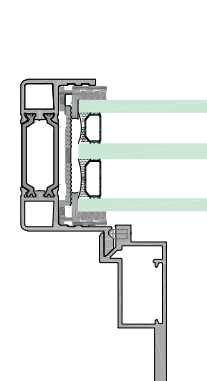
B



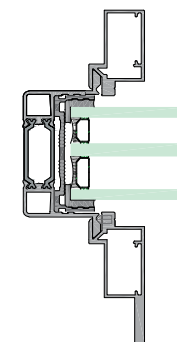
B + Alum. reinf.



B + Steel reinf.

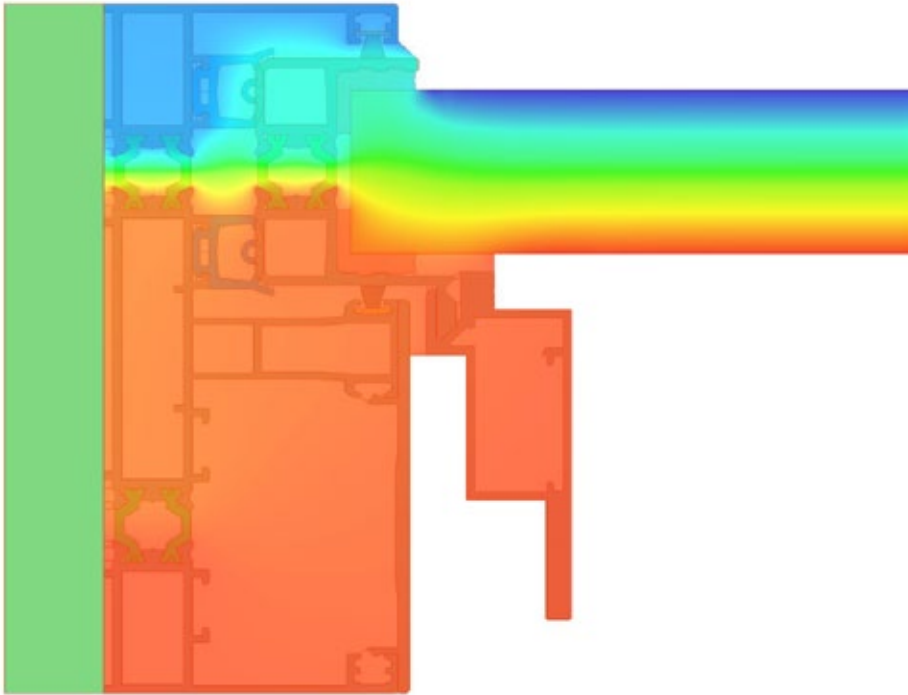


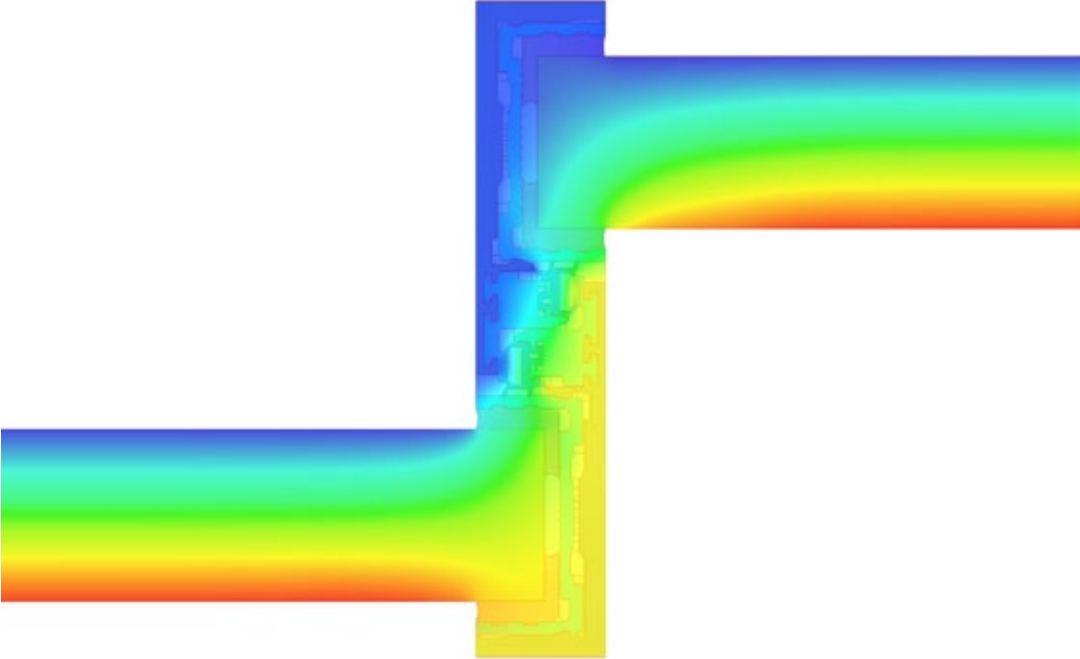
C



D

OMICRON • THERMAL PERFORMANCE





UW VALUES 0,7 - 1.7 W/M2K DEPENDING ON THE UG

