

TOSTEM

PRE-ENGINEERED WINDOWS

PART OF **LIXIL**

LIXIL

Link to Good Living

LIXIL Window Systems Private Limited

Corp. Office: Plot No. 75, Sector 8, IMT Manesar, Gurgaon, Haryana, India - 122050.,
Ph: +91 124 4350000, E-mail: lws.india@LIXIL.com

LIXIL Group Corporation

36F, Kasumigaseki Building,
3-2-5 Kasumigaseki, Chiyoda-ku,
Tokyo 100-6036, Japan
<http://global.LIXIL.co.jp/e>

LIXIL International Pte. Ltd.

8 Temasek Boulevard,
#12-03 Suntec Tower 3, Singapore 038988
Tel : +65 6690 4988 Fax : +65 6690 4986
<http://global.LIXIL.co.jp/e>

TOSTEM Thai Co., Ltd.

60/2 Soi Navanakorn 11,
Moo19 Phaholyothin Road,
Tambon Khlongnueng, Amphoe Khlongluang,
Pathumthani 12120, Thailand
Tel : +66 2529 0474-5 Fax : +66 2909 4487
<http://www.LIXIL.TOSTEM.co.th>

LIXIL Housing Products Manufacturing (Shanghai) Corporation

No14 Building Huabin
Industrial Park 99 Huajia Road
Songjiang Shanghai 201611

LIXIL (Thailand) Public Co., Ltd.

1/6 Moo 1, Phaholyothin Road K.M.32,
Klong Neung, Klong Luang,
Pathumthani 12120, Thailand
Tel : +66 2901 4455 Fax : +66 2901 4488
<http://www.LIXIL.co.th>

PT LIXIL Aluminium Indonesia

JV entity with Rodamas group Jl. Let. Jend. S.
Parman Kav. 32-34 Jakarta 11480, Indonesia
Tel : +62 21 2939 3388
Fax : +62 21 5367 4394
<http://global.LIXIL.co.jp/e>

LIXIL Vietnam Corporation

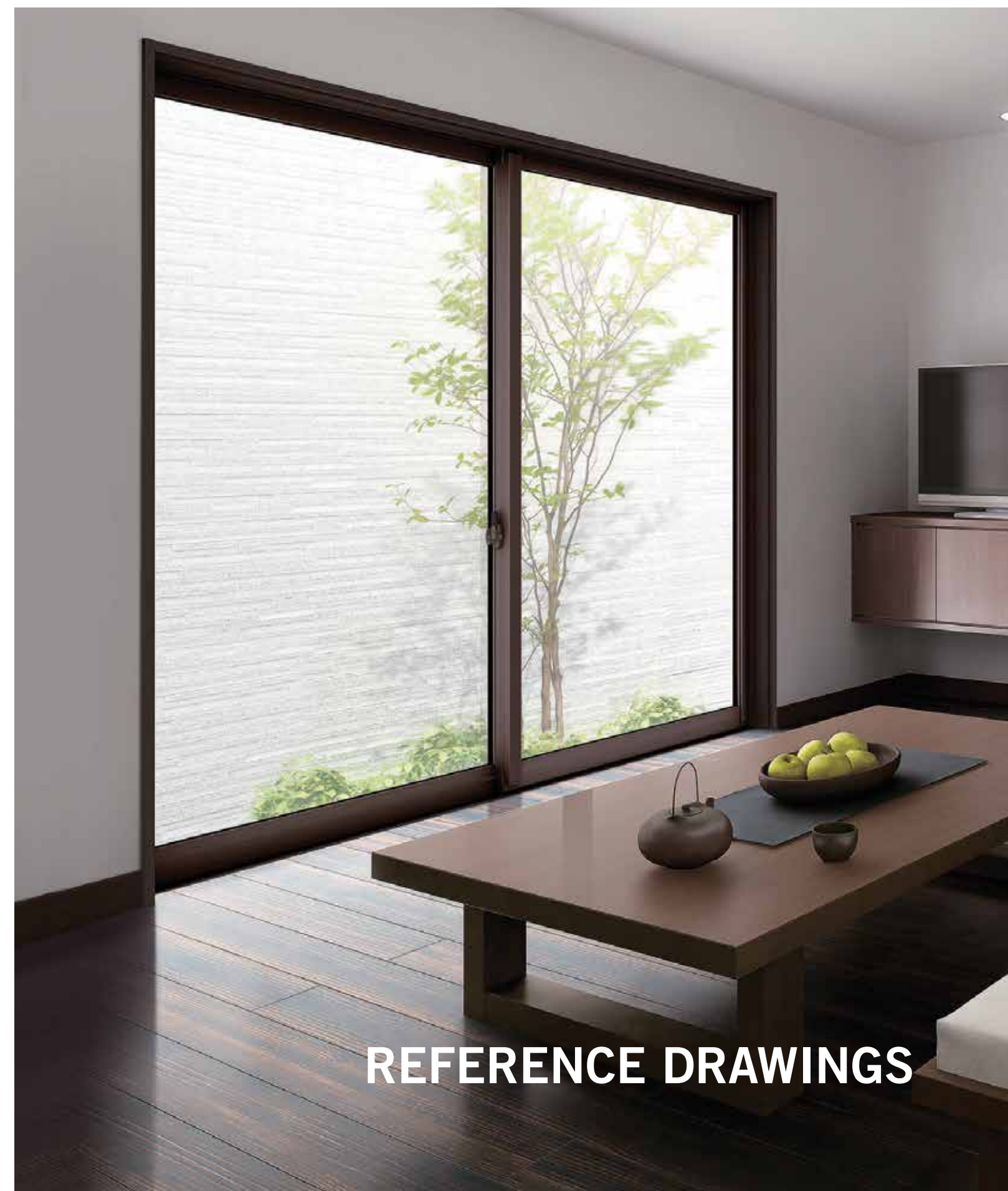
Charm Vit Tower, 18th Floor,
117 Tran Duy Hung, Hanoi, Vietnam
Tel : +84 4 3556 6639
Fax : +84 4 3556 6031
<http://www.INAX.com.vn>

LIXIL Philippines Ltd. Co.

18/F The Pearlbank Centre,
146 Valero Street, Salcedo Village,
Makati City 1227, Philippines
Tel : +63 2893 3113
Fax : +63 2893 9980
<http://americanstandard.com.ph>

LIXIL Taiwan

Rm. 701, 7F., No.225,
Nanjing E. Rd., Zhongshan, Dist.,
Taipei City 104, Taiwan



REFERENCE DRAWINGS

ABOUT LIXIL

Every person on the planet dreams of a better home. LIXIL makes that possible with pioneering housing and water products.

A better home is made up of surprisingly simple things – doors and windows that connect you with the world outside; baths to escape in after a long day; kitchens that unleash creativity; toilets that provide cleanliness and comfort; showers and faucets to experience water in new ways; interiors and exteriors that bring spaces to life.

LIXIL makes better homes a reality for everyone, everywhere.

Drawing on our Japanese heritage, we create and innovate using world-leading technologies to make high quality products that solve everyday, real life challenges.



But the LIXIL difference isn't what we do, it's the way we do it:

Meaningful design. We innovate because we should, not because we can.

Entrepreneurial spirit. Working with partners, experimenting often, and learning fast from failures to move with speed.

Access to all. Adapting existing technologies to meet universal consumer needs.

Responsible business growth. Impacting global issues like sanitation, water conservation and environmental sustainability.

We are proud that our products touch the lives of more than a billion people every day, but there is potential to do so much more.

Being path pavers in consumer centricity uncovers opportunities for real differentiation enabling us to find a unique, clutter breaking proposition. Our deep understanding of our consumers' lives drive us to create truly differentiated products, services and business models. As we continue to expand across Asia Pacific, our endeavor is to reach beyond our current channels and capabilities, to understand existing and undiscovered needs and become relevant to even more people. We will learn, experiment and continue to create solutions for better living spaces for today and tomorrow.

The real work starts now...

LIXIL Link to
Good Living

LIXIL

GROHE

*American
Standard*

INAX

TOSTEM

DXV



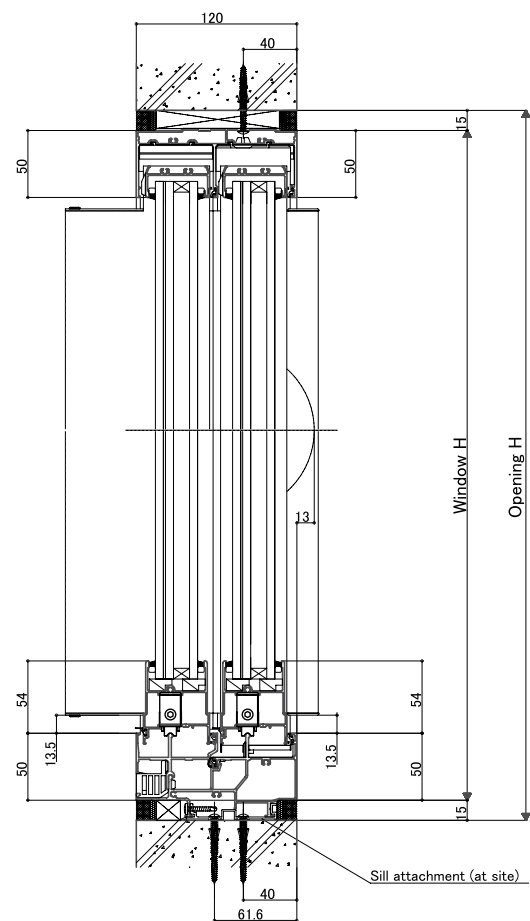
List of Contents	Page
1. Grants	04-05
a. Grants Window Series	06-09
b. Grants Door Series	10-14
c. Grants Combination	15-17
2. WE Plus	18-19
d. WE Plus Window Series	20-21
a. WE Plus Door Series	22-25
b. WE Plus Combination	26-27
3. WE 70	28-29
a. WE 70 Window Series	30-37
b. WE 70 Door Series	38-47
c. WE 70 Combination	48-49
4. P7	50-51
a. P7 Window Series	52-59
b. P7 Door Series	60-65
c. P7 Combination	66-67

GRANTS

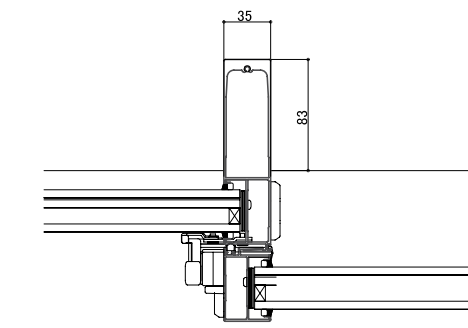
THE BIGGER & BETTER WINDOW



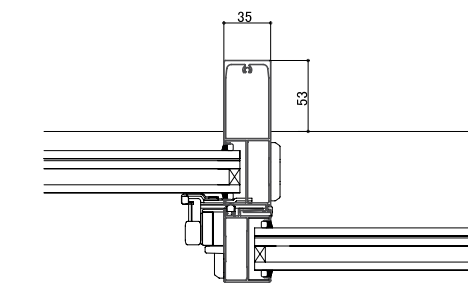
GRANTS WINDOW SERIES



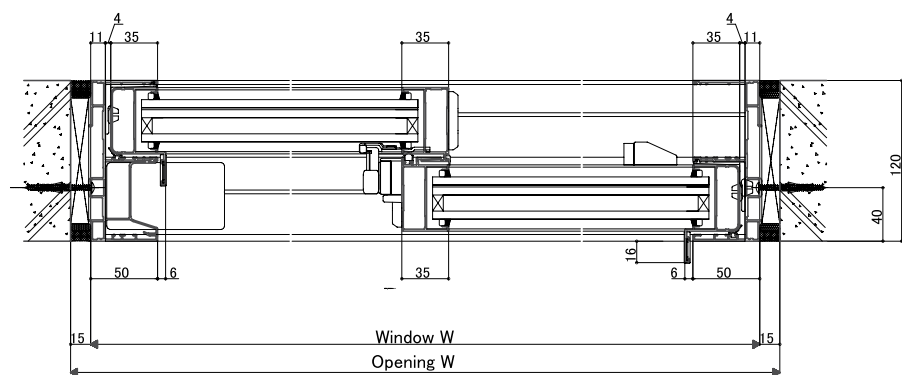
<Vertical section:2 panels sliding window >



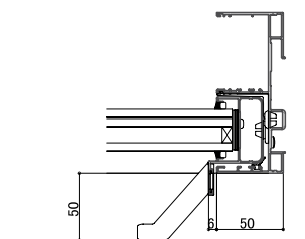
<Stile detail: In case of largest openings>



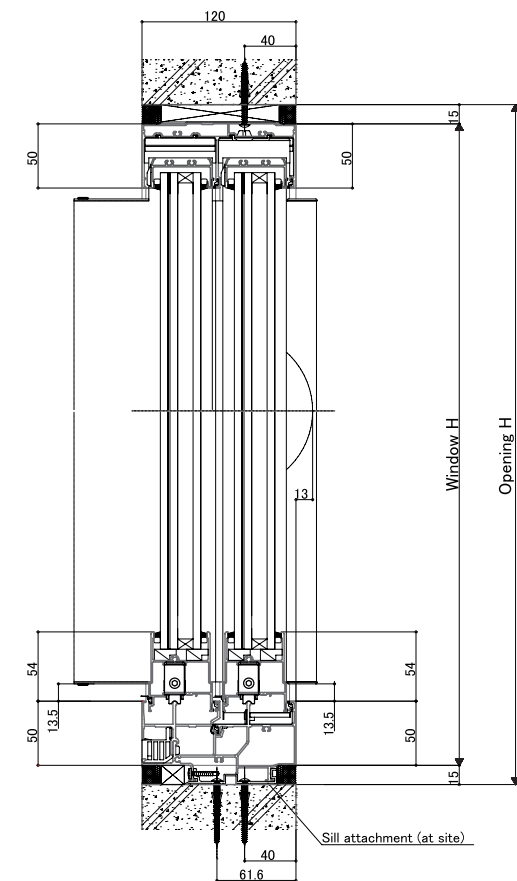
<Stile detail: In case of larger openings>



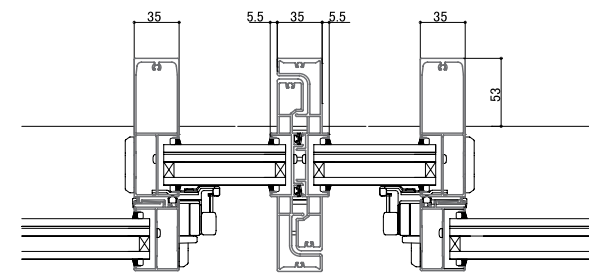
<Horizontal section: 2panels sliding window >



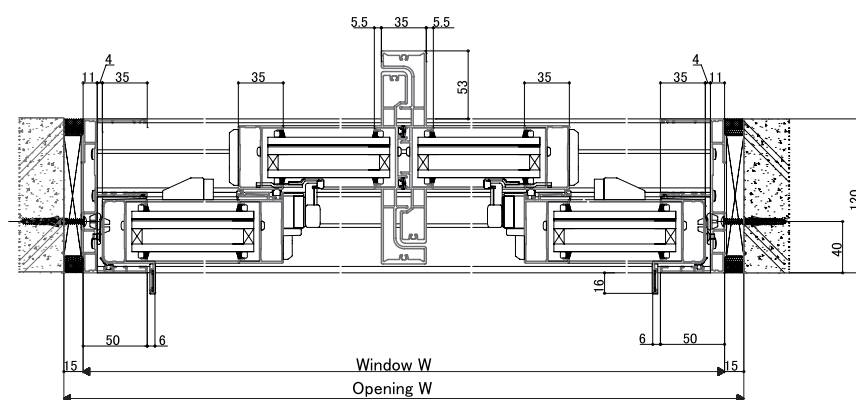
<In case with handle option>



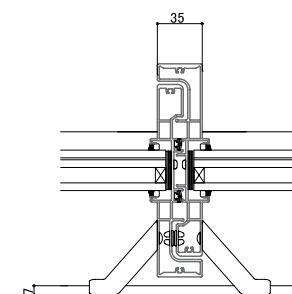
<Vertical section:4 panels sliding window >



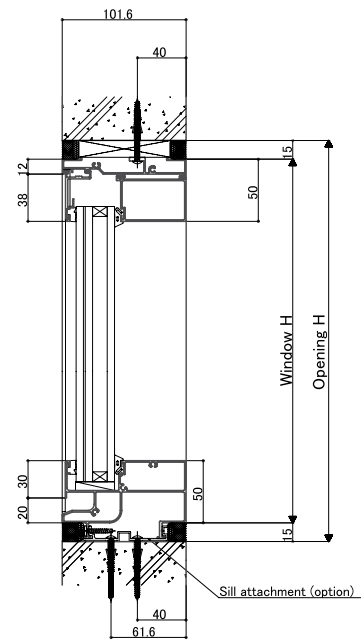
<Stile detail: In case of large openings >



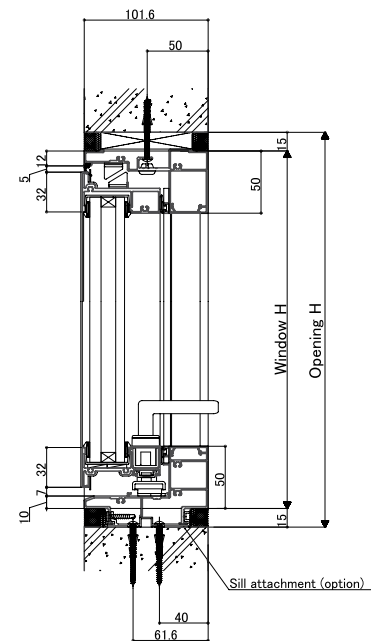
<Horizontal section:4 panels sliding window >



<In case with handle option>

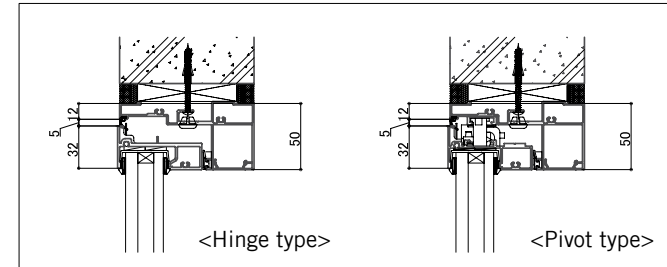


<Vertical section: Fix window><

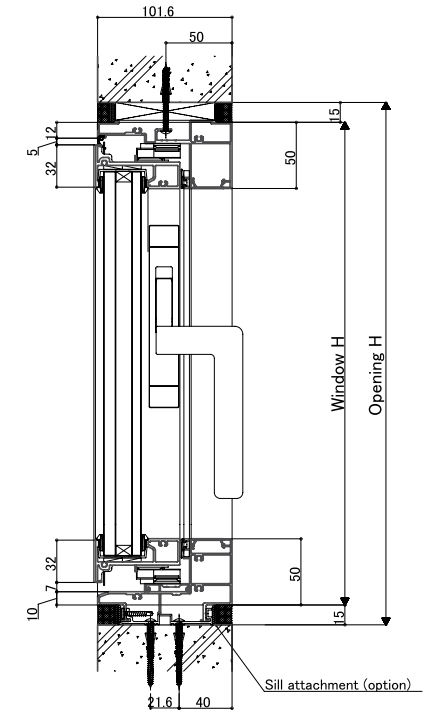
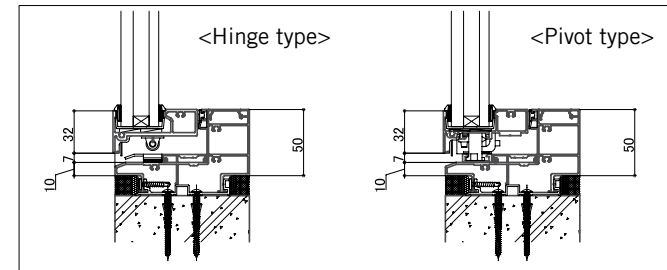


Vertical section: Awning window>

<Head detail>

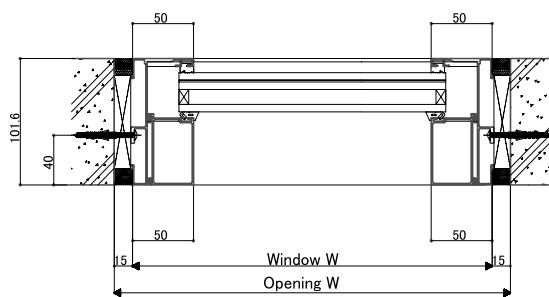
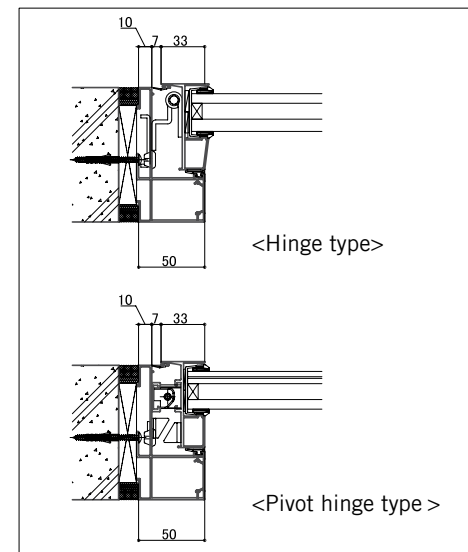


<Sill detail>

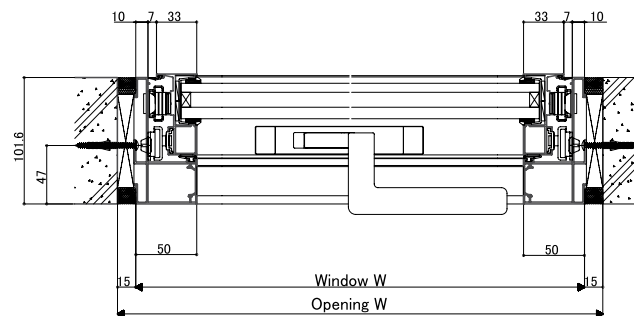


<Vertical section: Casement (with friction stay)>

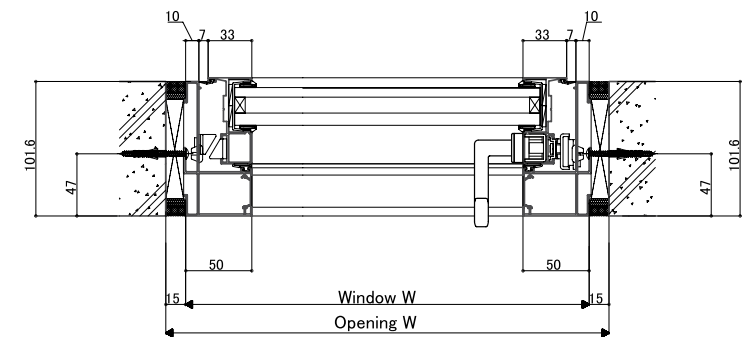
<Jamb detail>



<Horizontal section: Fix window>

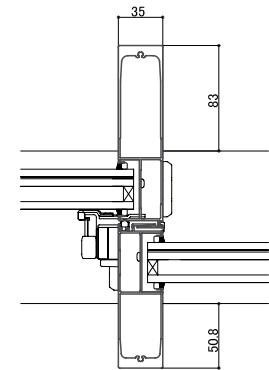


<Horizontal section: Awning window>

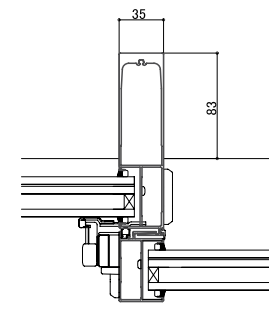


<Horizontal section: Casement (with friction stay)>

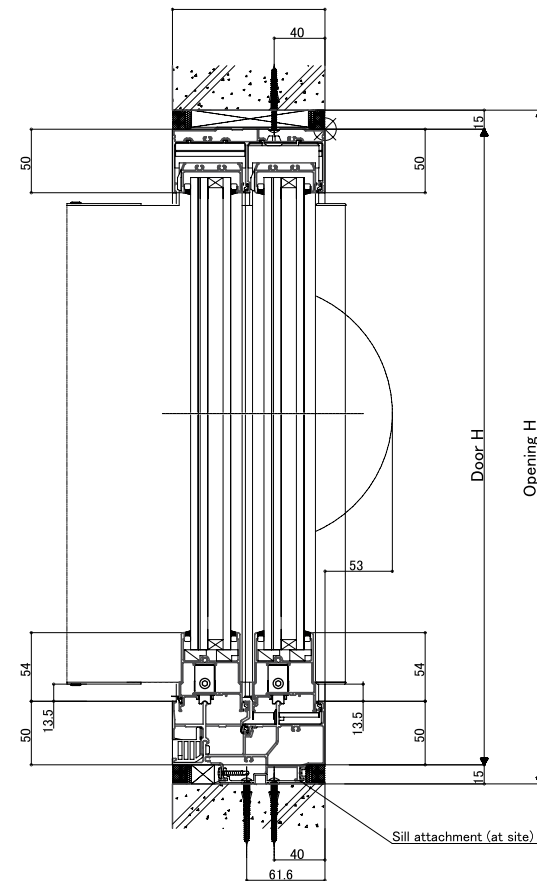
GRANTS DOOR SERIES



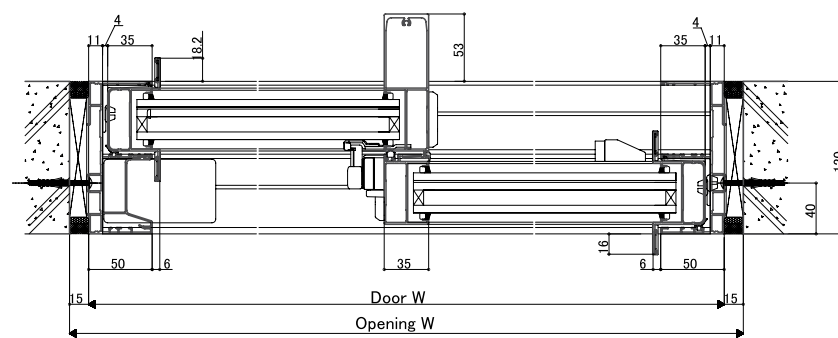
<Stile detail: In case of largest openings >



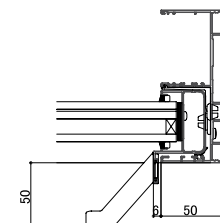
<Stile detail: In case of larger openings >



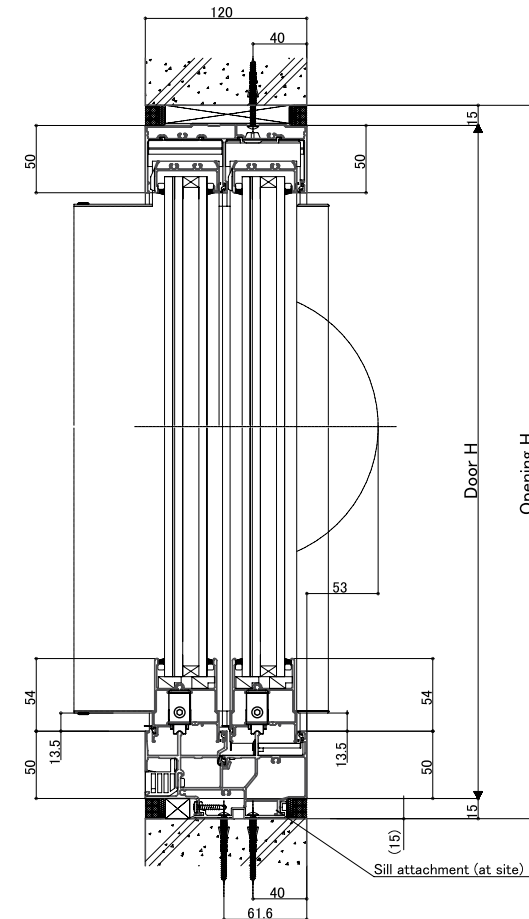
<Vertical section: 2 panels sliding door>



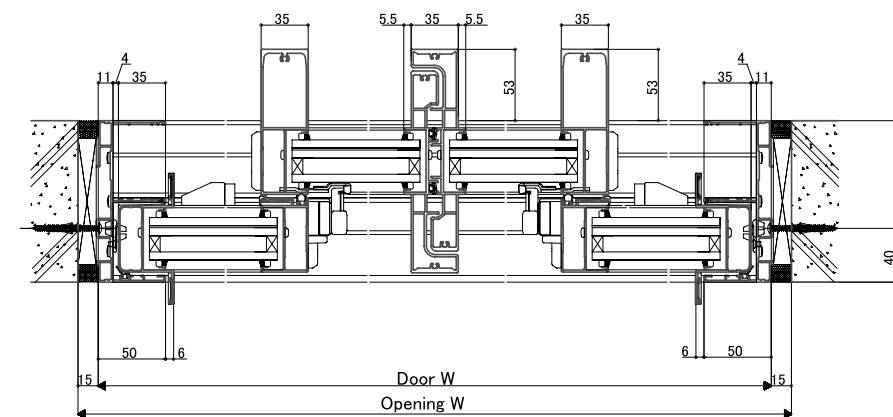
<Horizontal section: 2 panels sliding door>



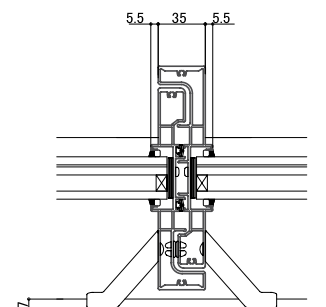
<In case with handle option>



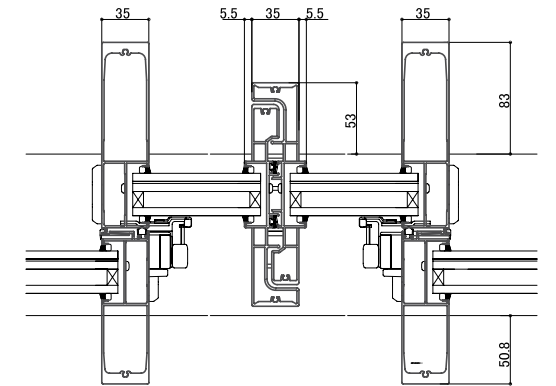
<Vertical section: 4 panels sliding door>



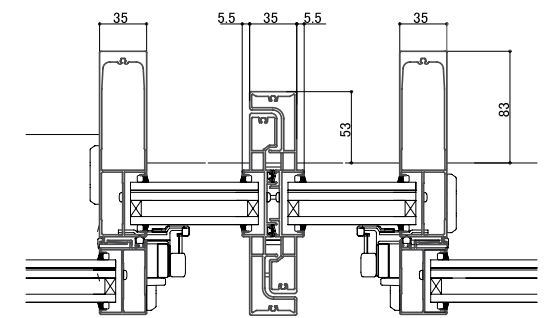
<Horizontal section: 4 panels sliding door>



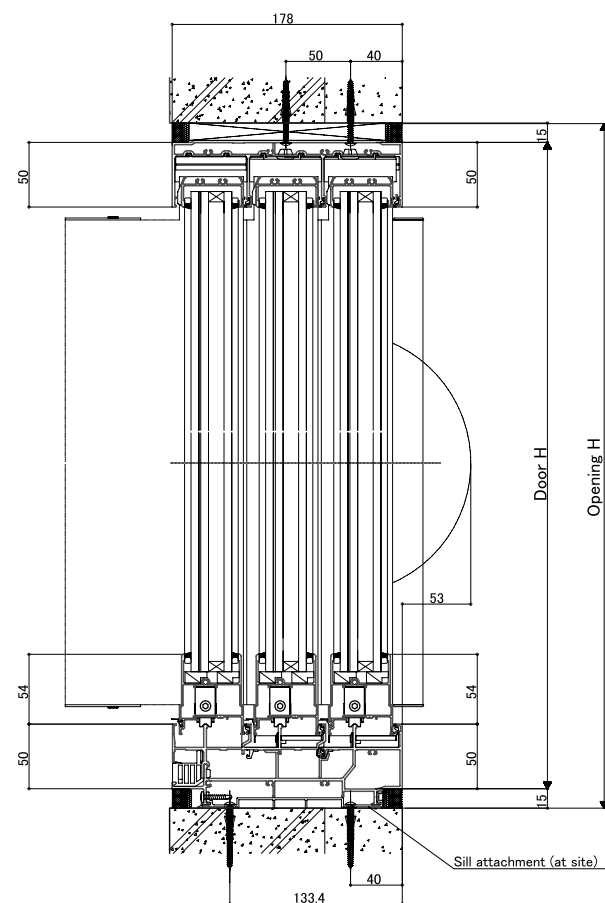
<In case with handle option>



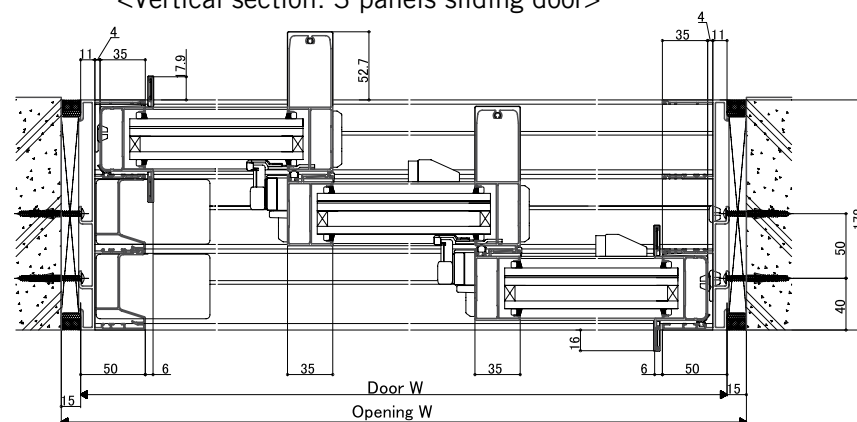
<Stile detail: In case of largest openings >



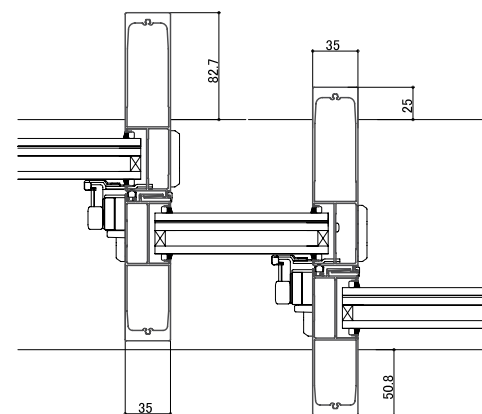
<Stile detail: In case of larger openings >



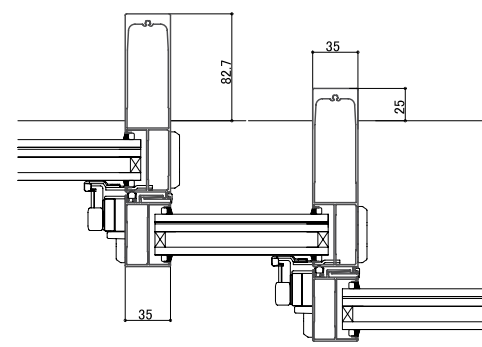
<Vertical section: 3 panels sliding door>



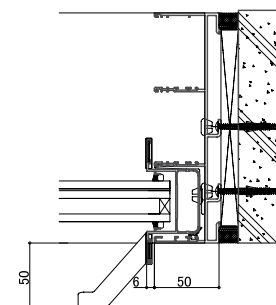
<Horizontal section: 3 panels sliding door>



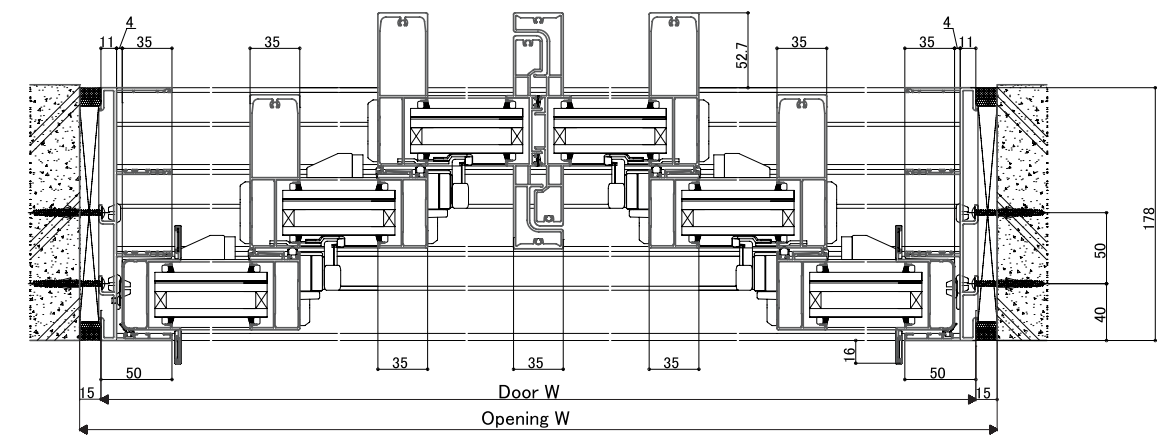
<Stile detail: In case of largest openings>



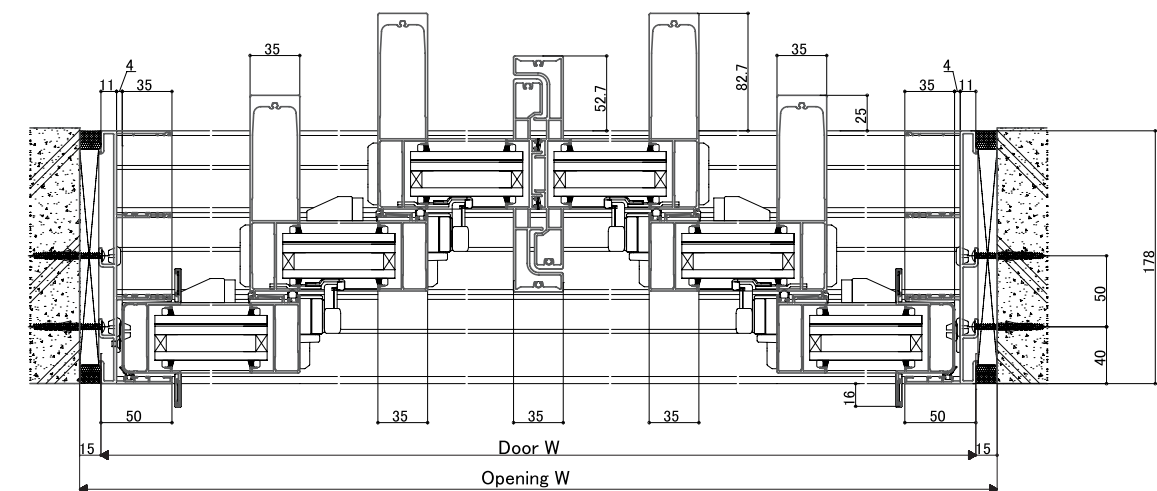
<Stile detail: In case of largest openings >



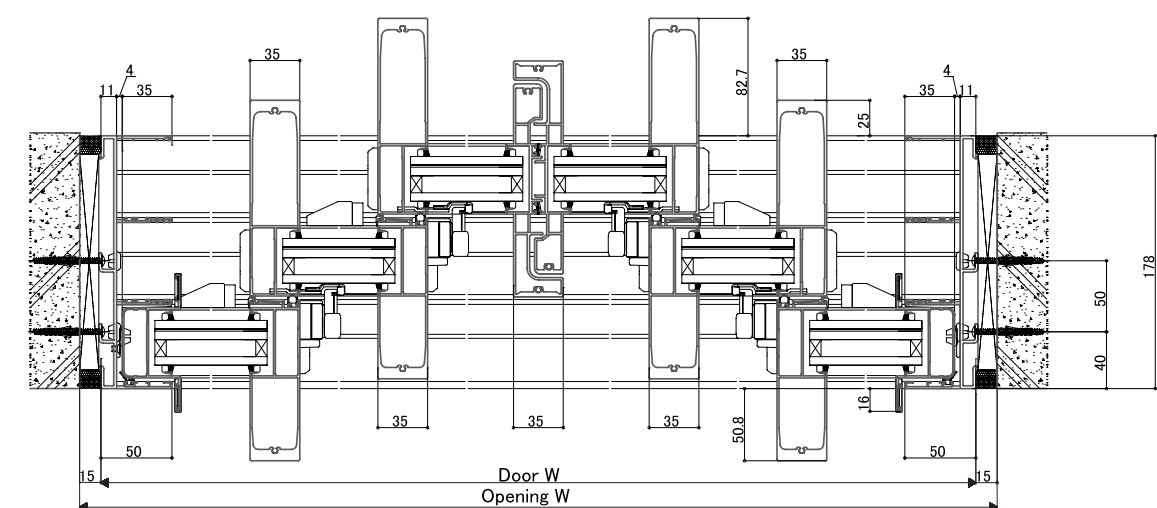
<In case with handle option>



<Horizontal section: 6 panels sliding door>

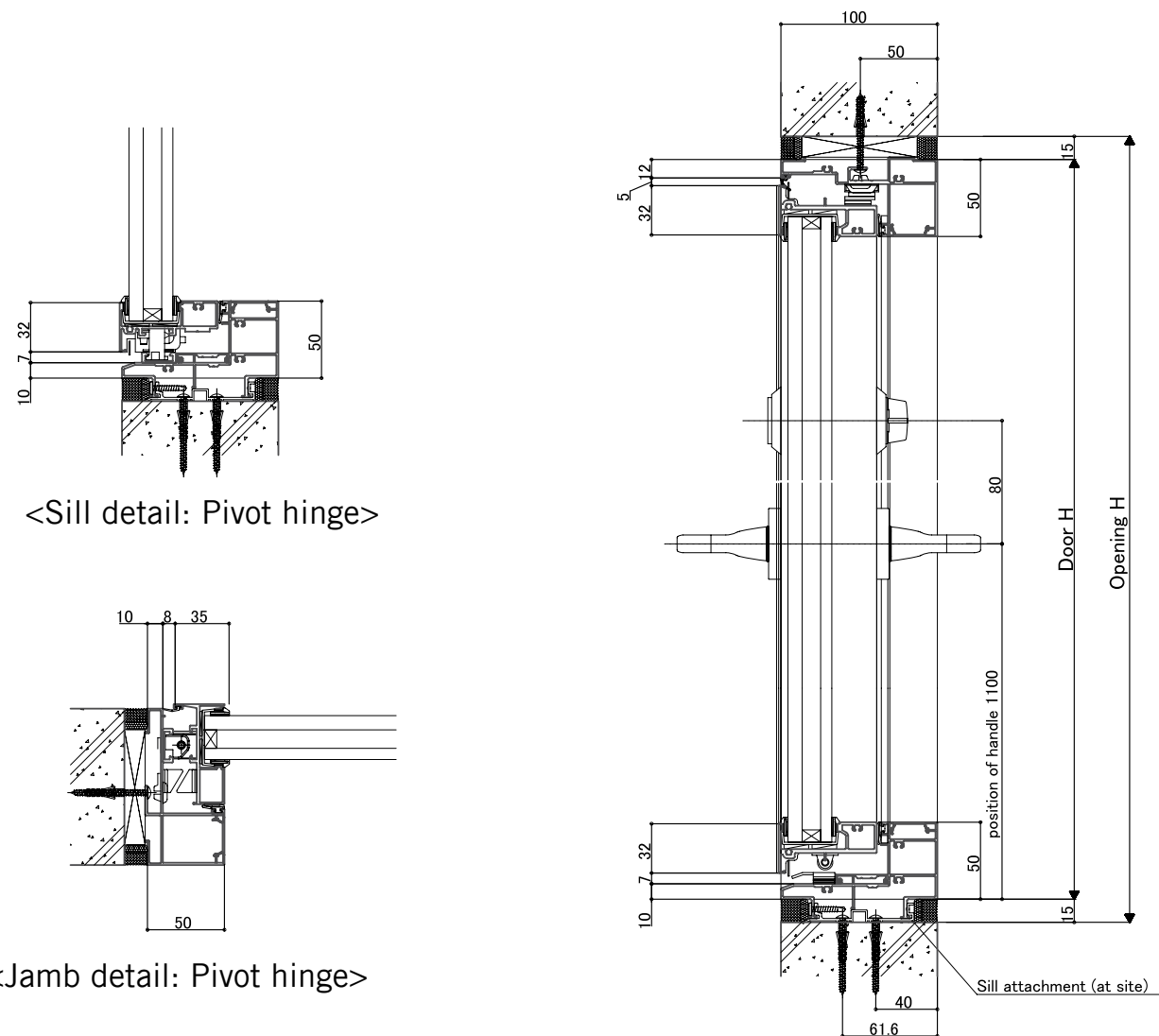


<Horizontal section: 6 panels sliding door (larger) >

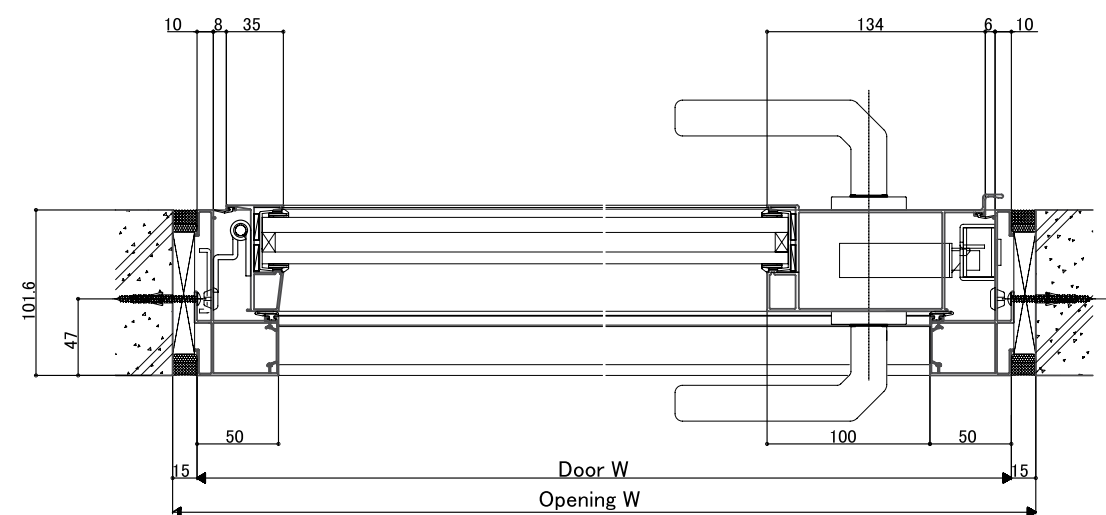


<Horizontal section: 6 panels sliding door (largest) >

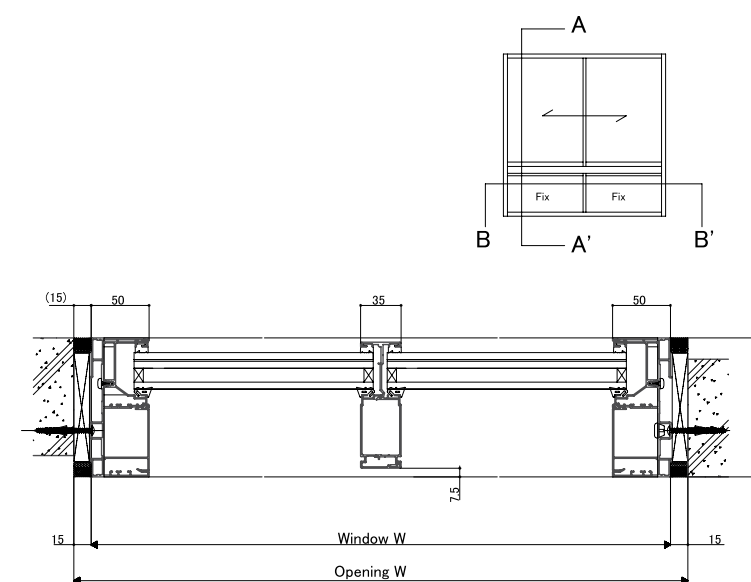
GRANTS COMBINATION



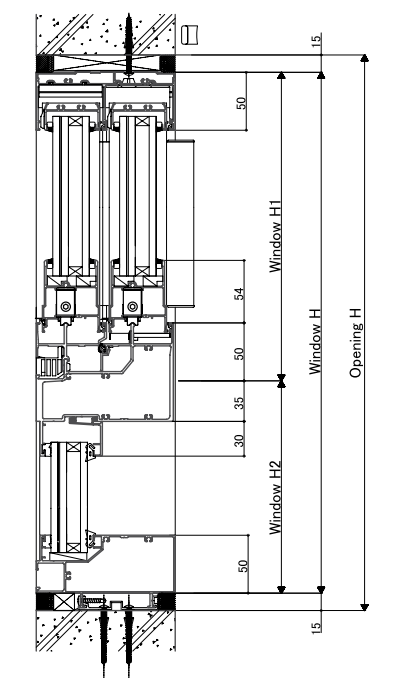
<Vertical section: Single out-swing door>



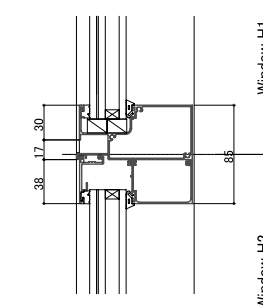
<Horizontal section: Single out-swing door>



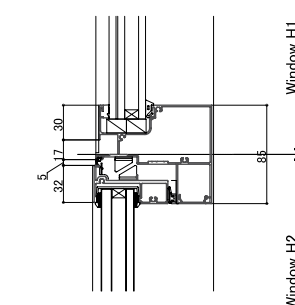
<Horizontal section: Sliding/Fix B-B'>



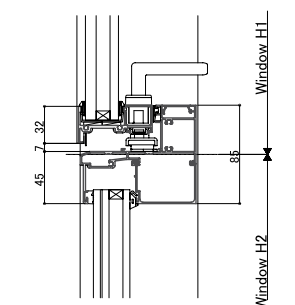
<Vertical section: Sliding/Fix A-A'>



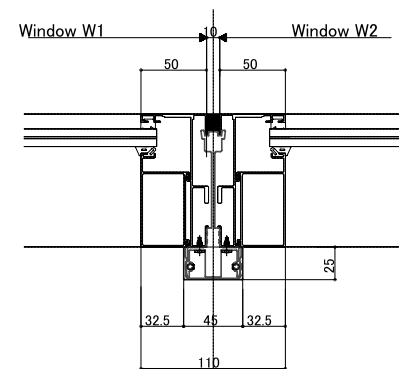
<Vertical: Fix/Fix transom><



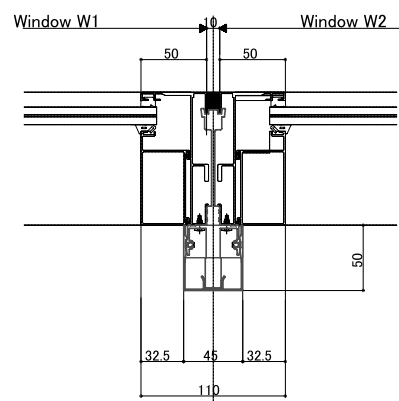
Vertical: Fix/Projection transom>



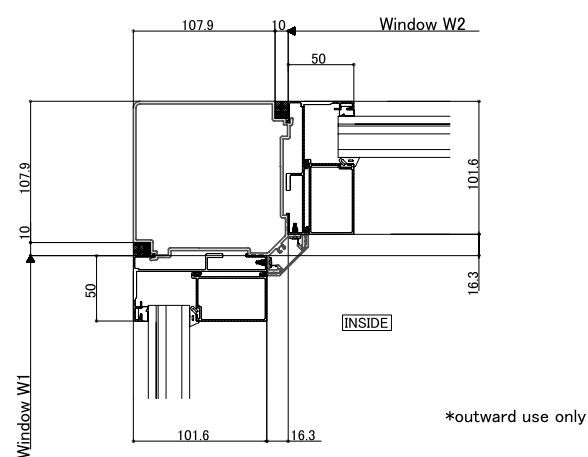
<Vertical: Projection/Fix transom>



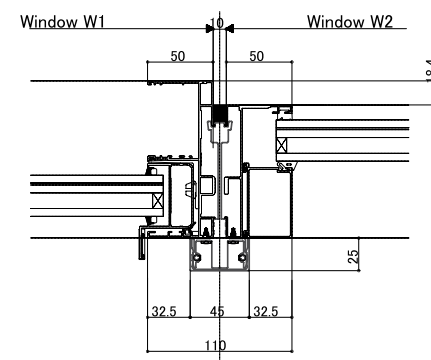
<Mullion type A>



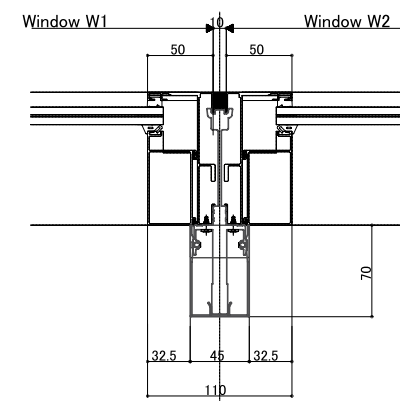
<Mullion type B>



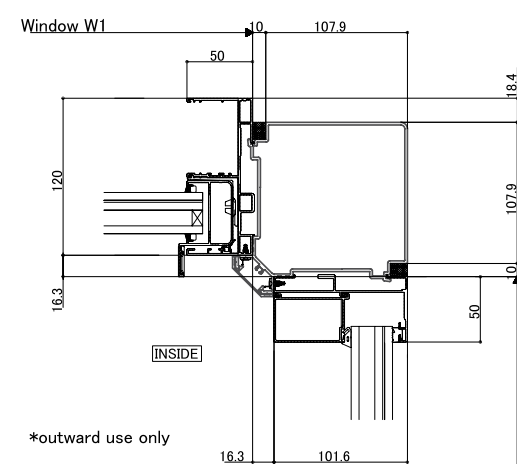
<Corner mullion>



<Mullion type A with sliding window>



Mullion type C>



<Corner mullion with sliding window>

indow W2

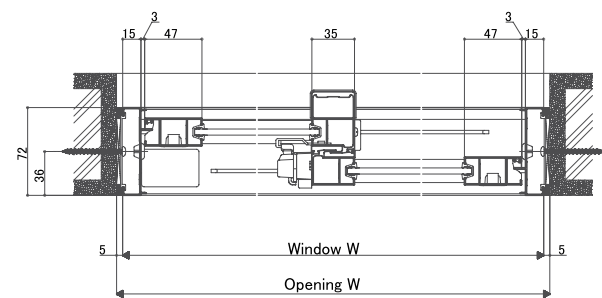


WE PLUS

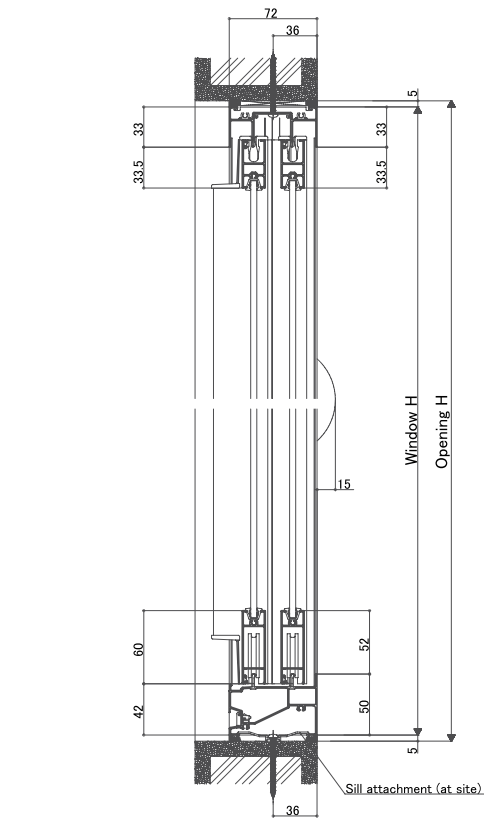
VERSATILE PRODUCT FOR HIGH-RISE



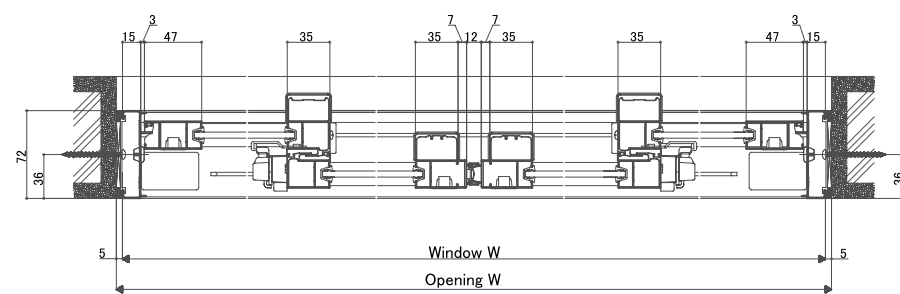
WE PLUS WINDOW SERIES



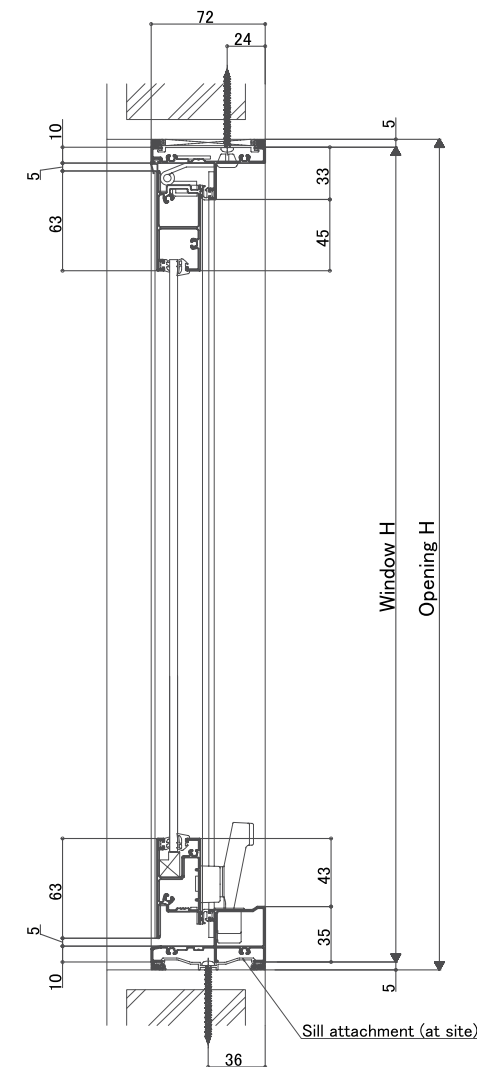
<Horizontal section: 2 panels sliding window>



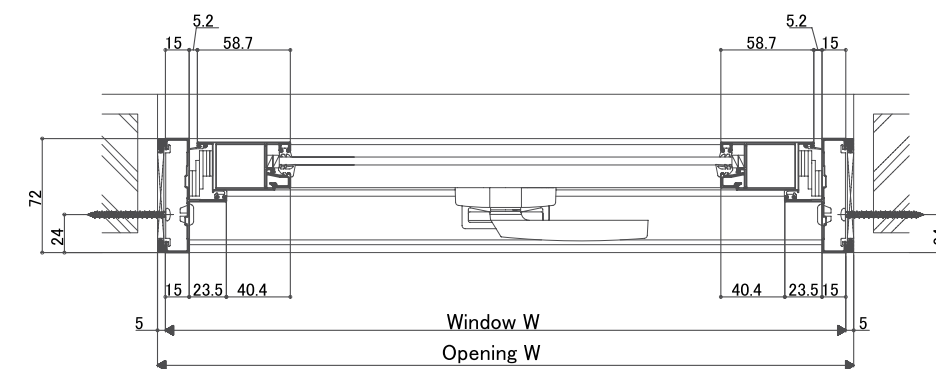
<Vertical section: 2 and 4 panels sliding window>



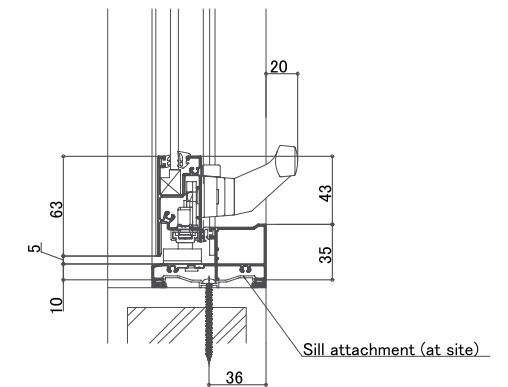
<Horizontal section: 4 panels sliding window>



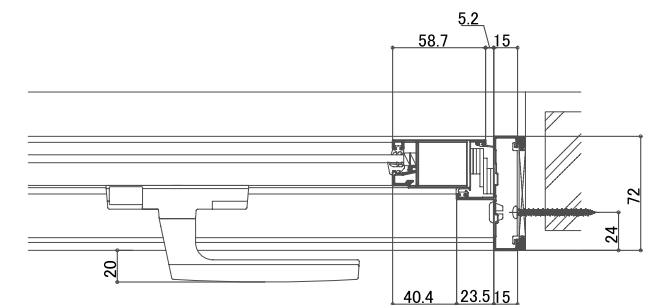
<Vertical section: Awning (single lock)>



<Horizontal section: Awning (single lock)>

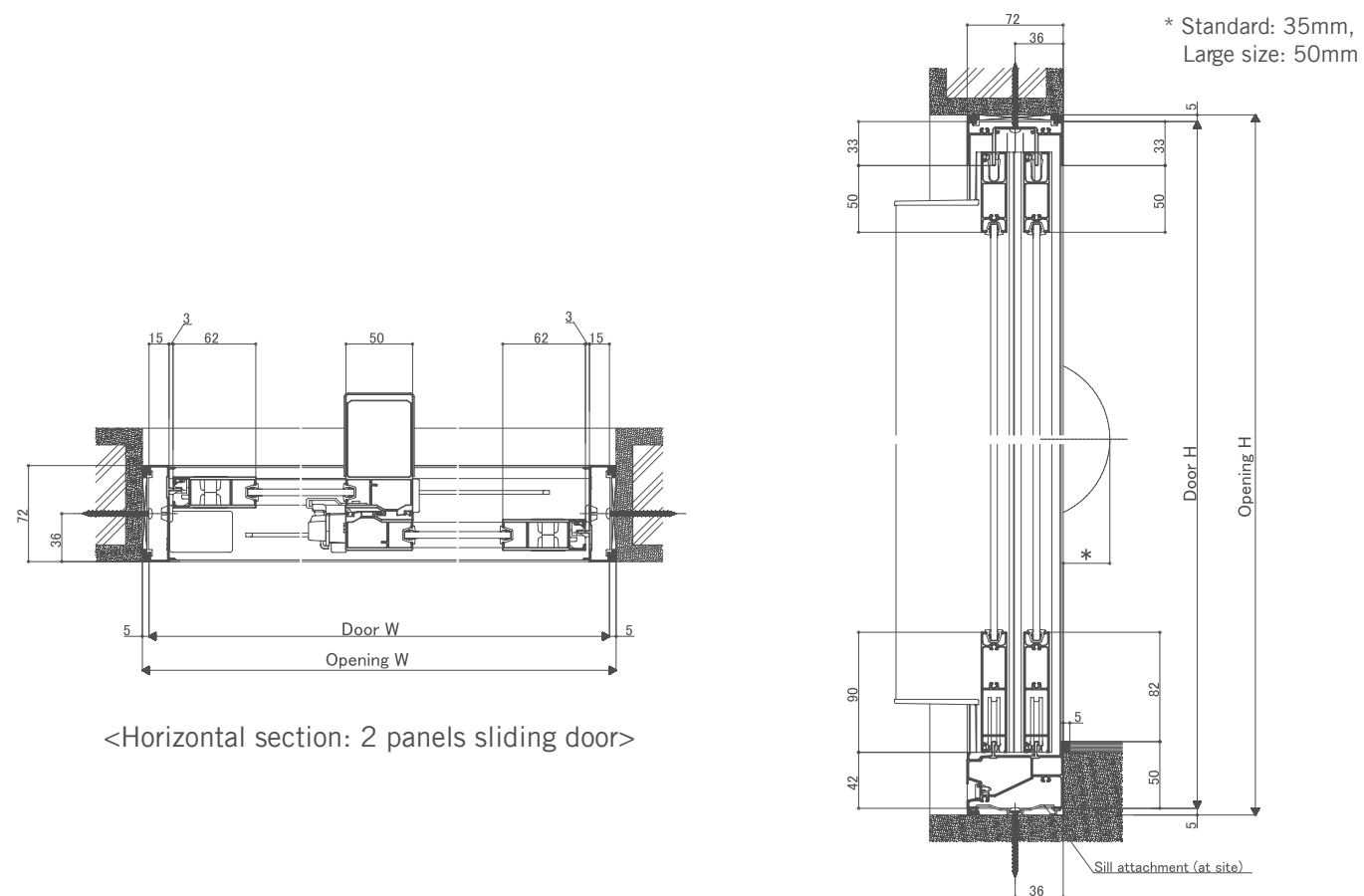


<Multi lock bottom detail>



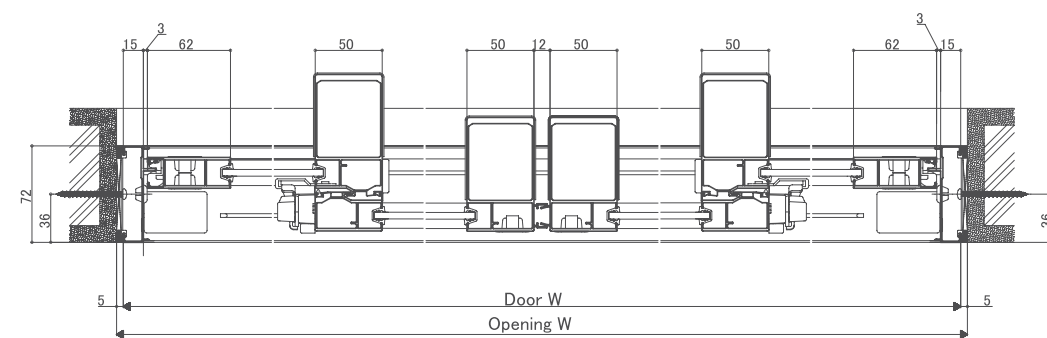
<Multi lock jamb detail>

WE PLUS DOOR SERIES

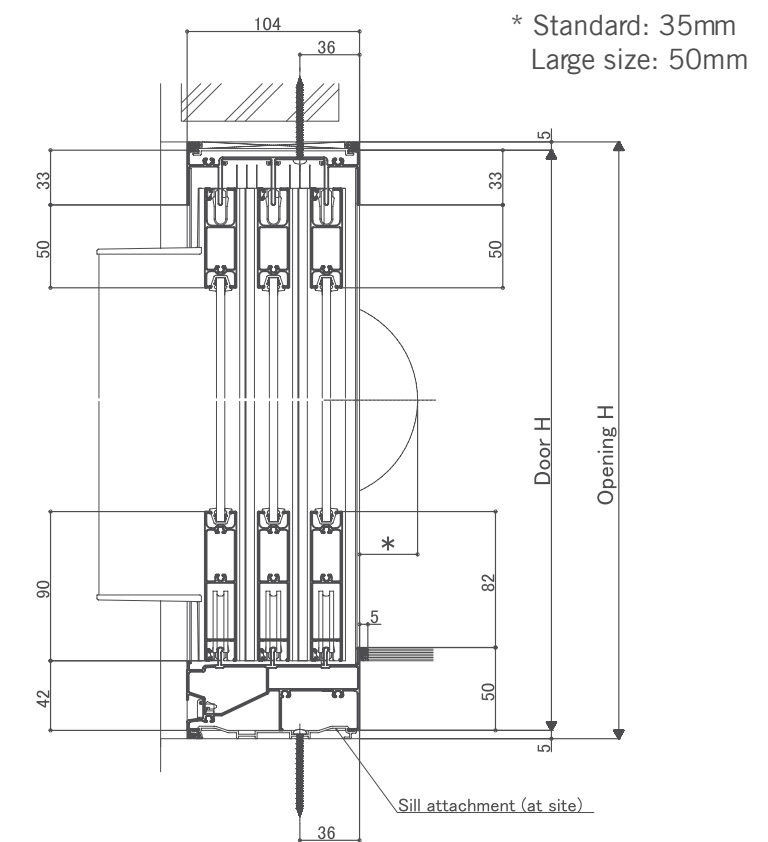


<Horizontal section: 2 panels sliding door>

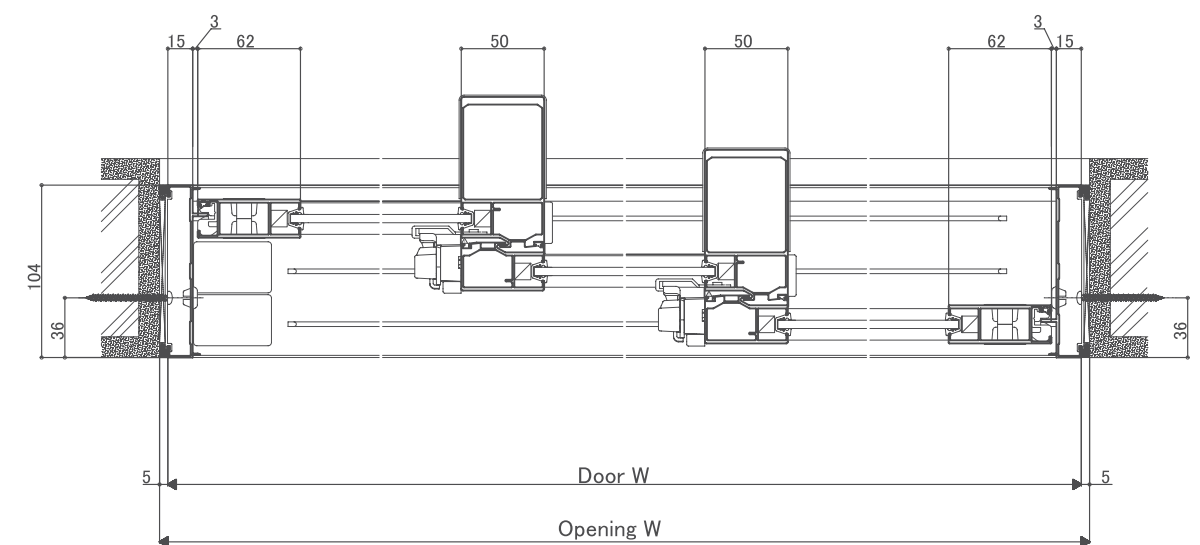
<Vertical section: 2 and 4 panels sliding door>



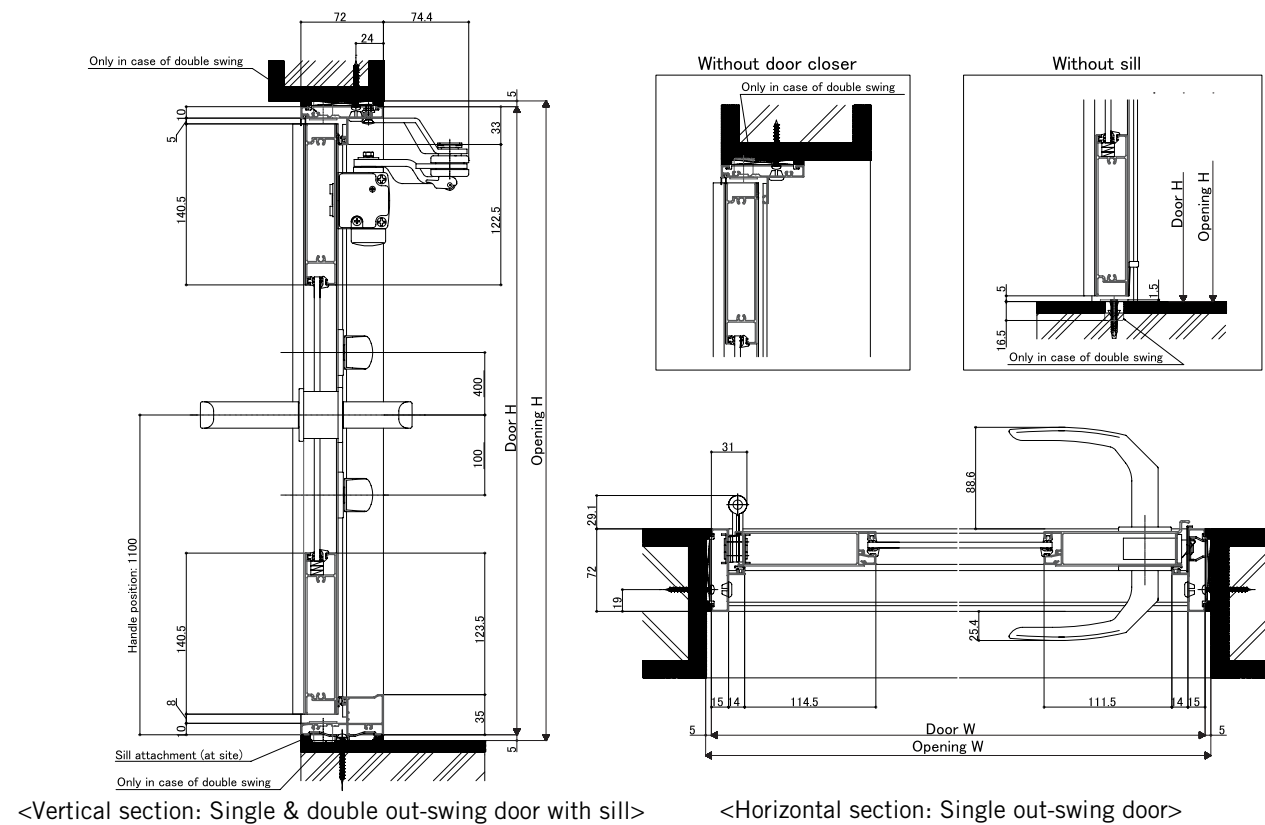
<Horizontal section: 4 panels sliding door>



<Vertical section: 3 panels sliding door>

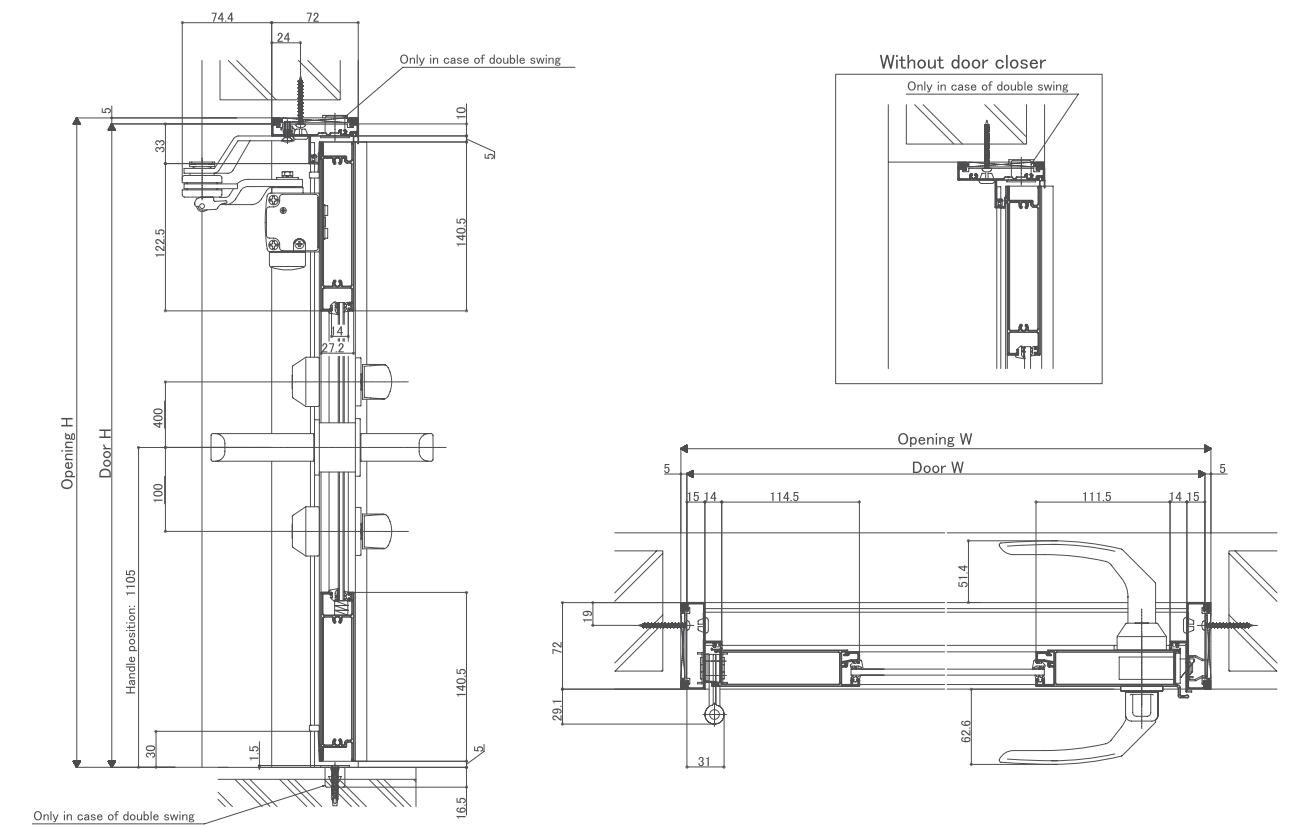
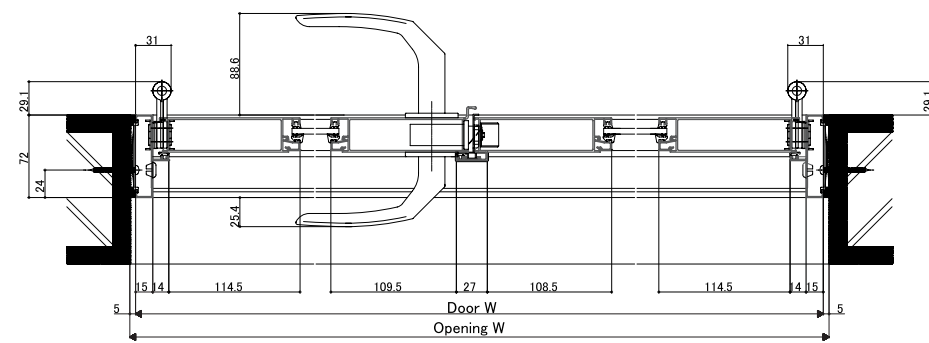


<Horizontal section: 3 panels sliding door>



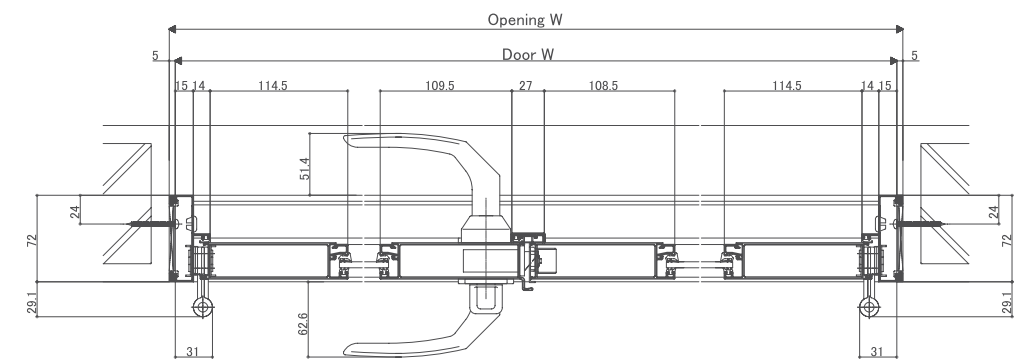
<Vertical section: Single & double out-swing door with sill>

<Horizontal section: Single out-swing door>



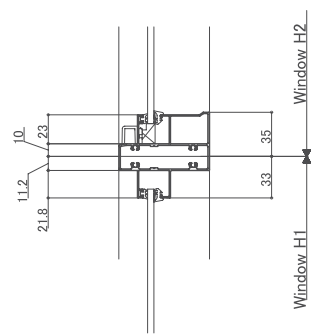
<Vertical section: Single & double in-swing door>

<Horizontal section: Single in-swing door>

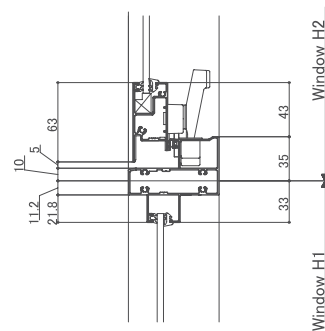


<Horizontal section: Double in-swing door>

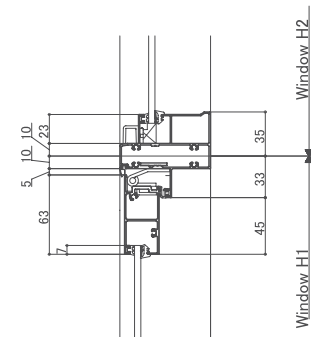
WE PLUS COMBINATION



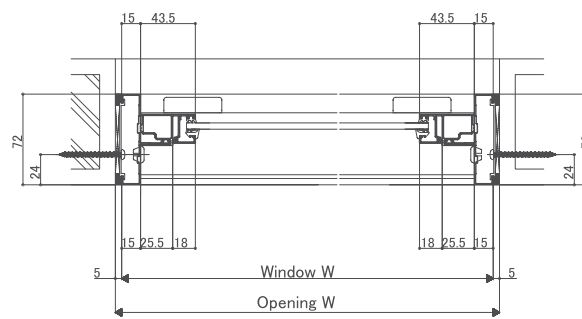
<Vertical: Fix/Fix transom>



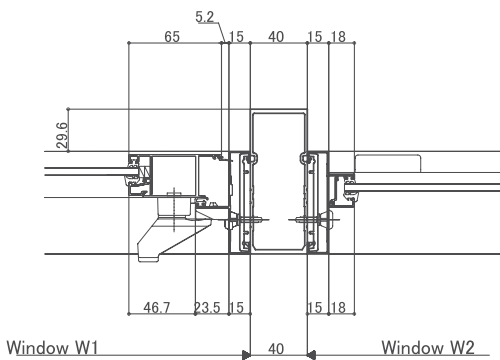
<Vertical: Projection/Fix transom>



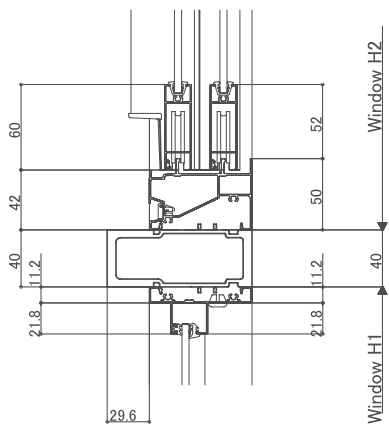
<Vertical: Fix/Projection transom>



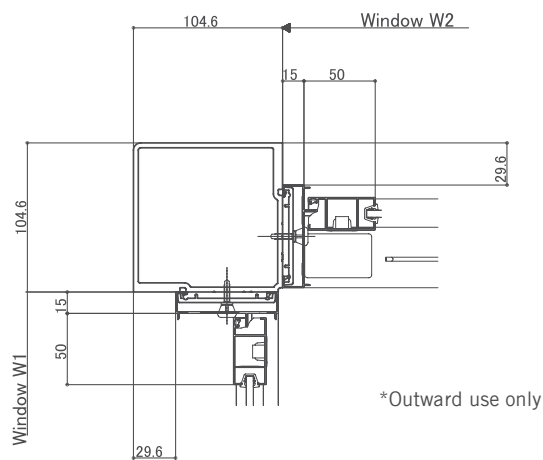
<Horizontal section window> : Combination fix



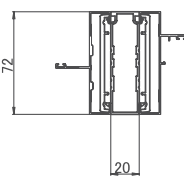
<Mullion (medium)>



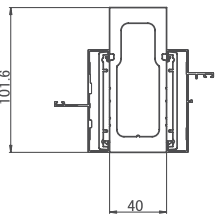
<Transom (Large)>



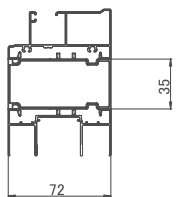
<Corner mullion (Large)>



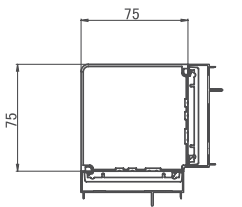
<Mullion (Small)>



<Mullion (Large)>



<Transom (Small)>

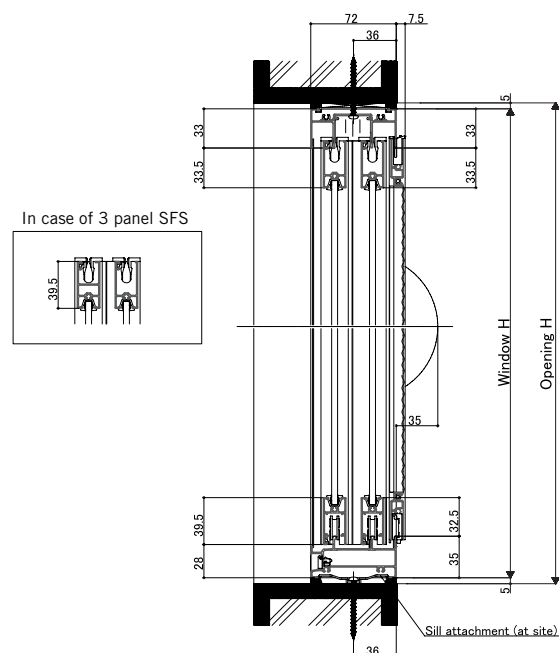


<Corner mullion (Small)>

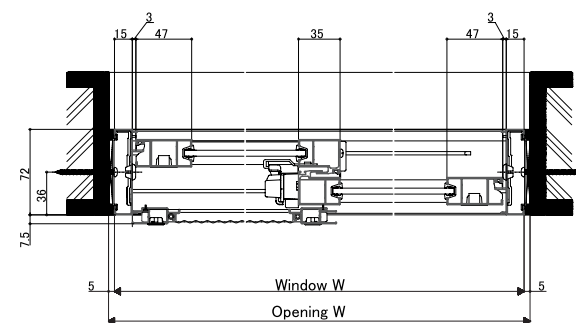
WE70



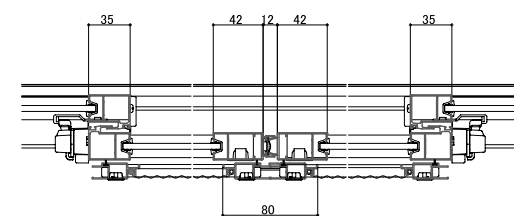
WE70 WINDOW SERIES



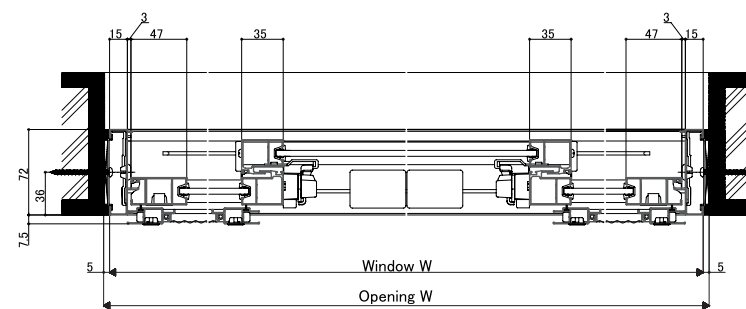
<Vertical section: 2, 4 and SFS 3 panels sliding window>



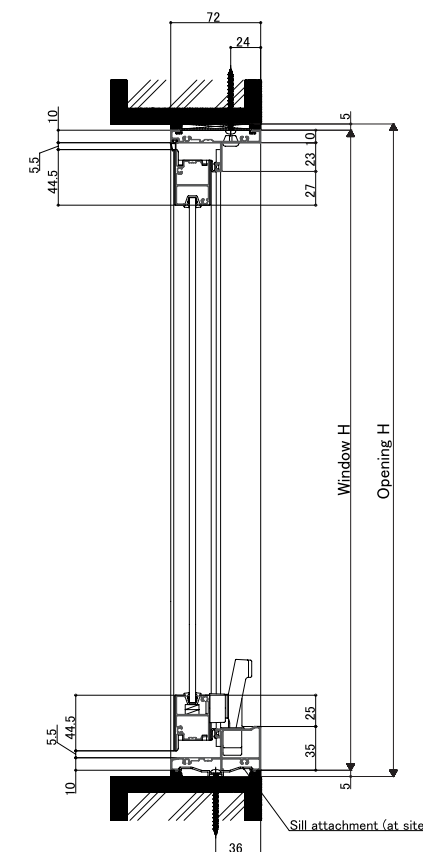
<Horizontal section: 2 panels sliding window>



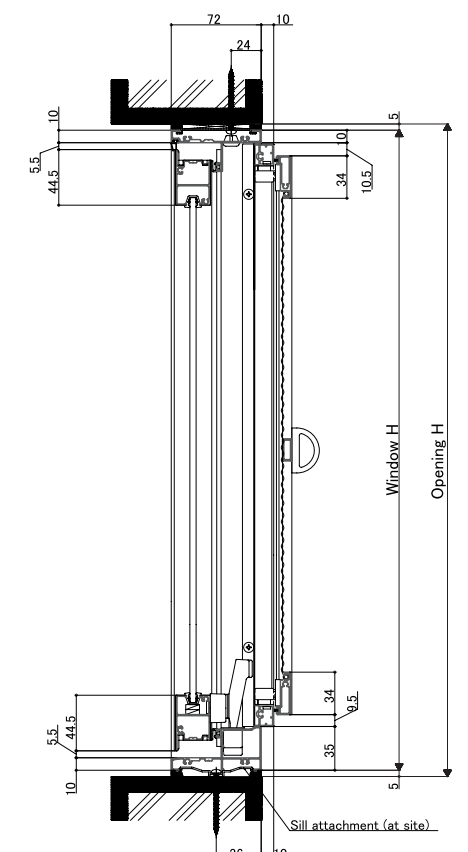
<Horizontal section: 4 panels sliding window>



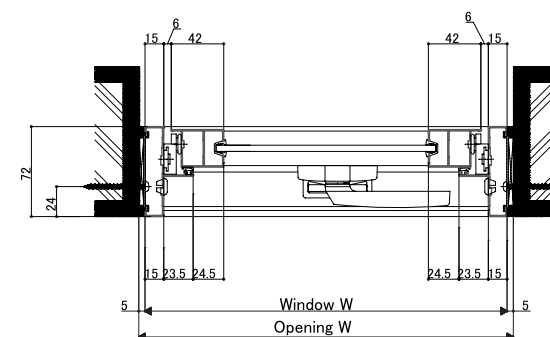
<Horizontal section: SFS 3 panels sliding window>



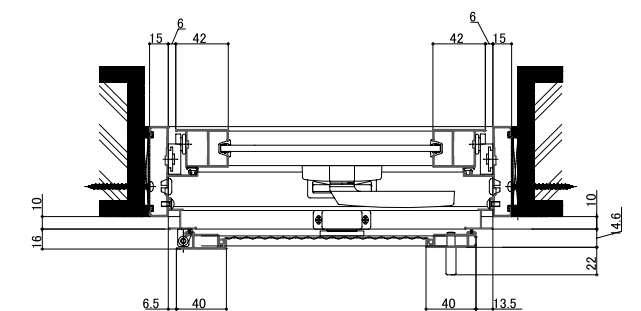
<Vertical section: Awning window>



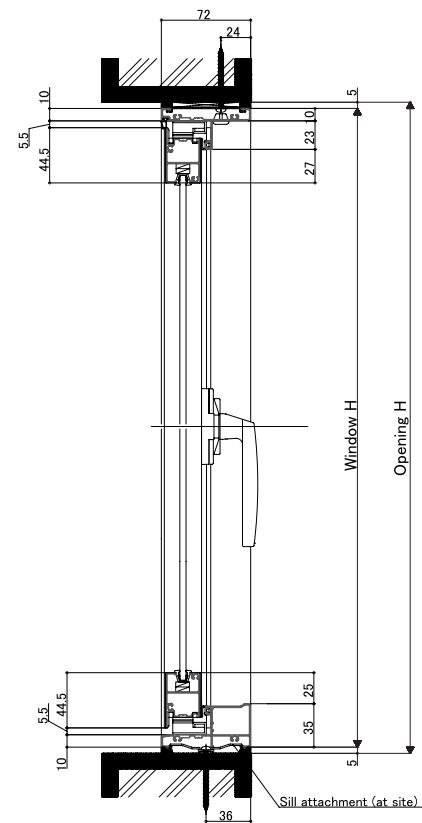
<Vertical section: Awning with screen>



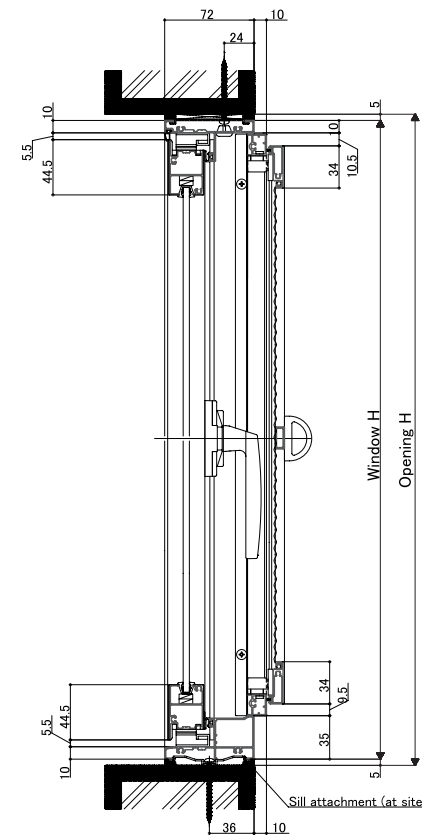
<Horizontal section: Awning window >



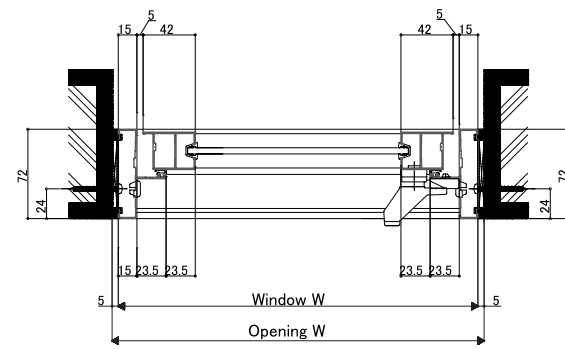
<Horizontal section: Awning with screen>



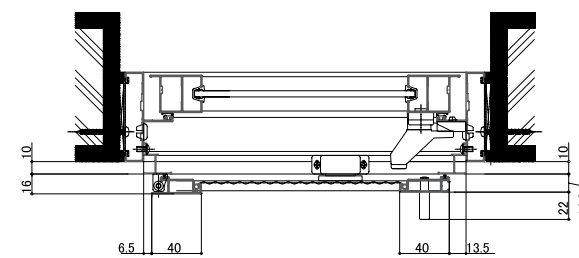
<Vertical section: Casement window>



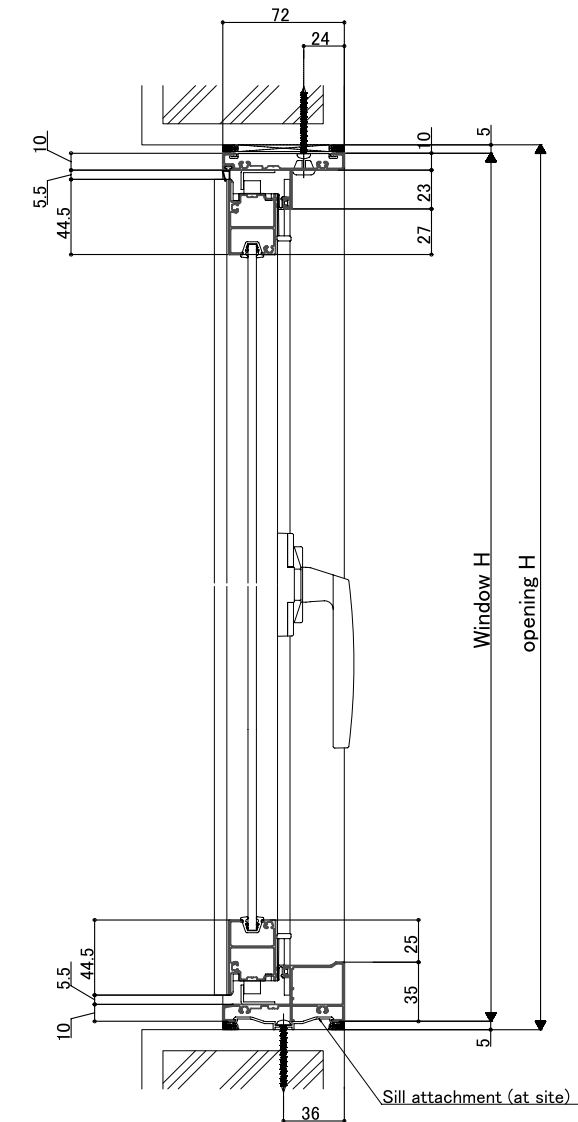
<Vertical section: Casement with scr een>



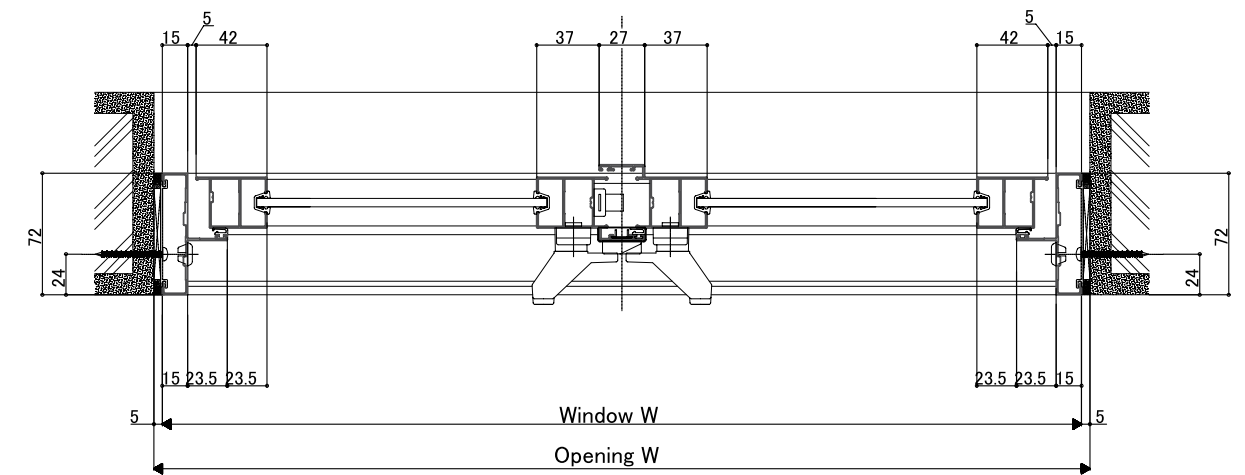
<Horizontal section: Casement window>



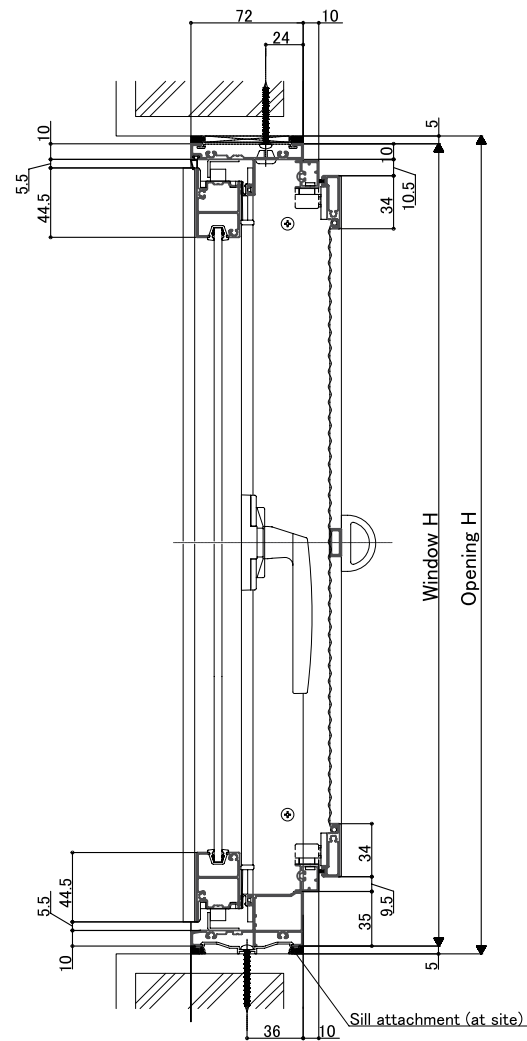
<Horizontal section: Casement with scr een>



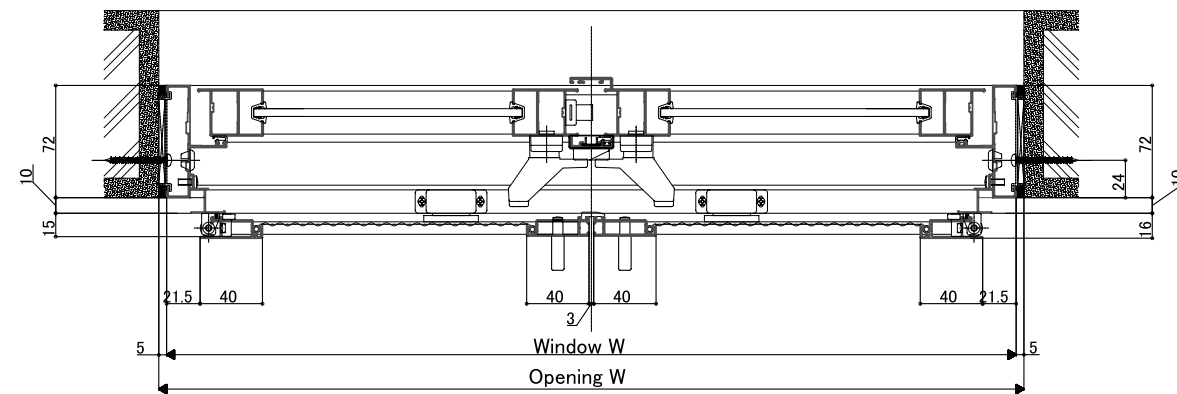
<Vertical section: Double casement window>



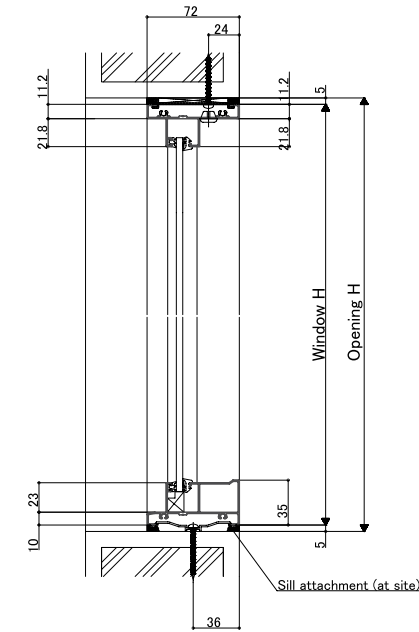
<Horizontal section: Double casement window>



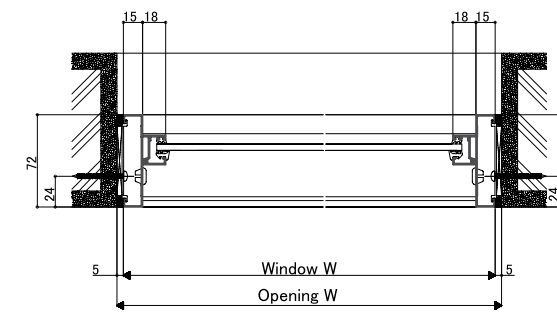
<Vertical section: Double casement with screen>



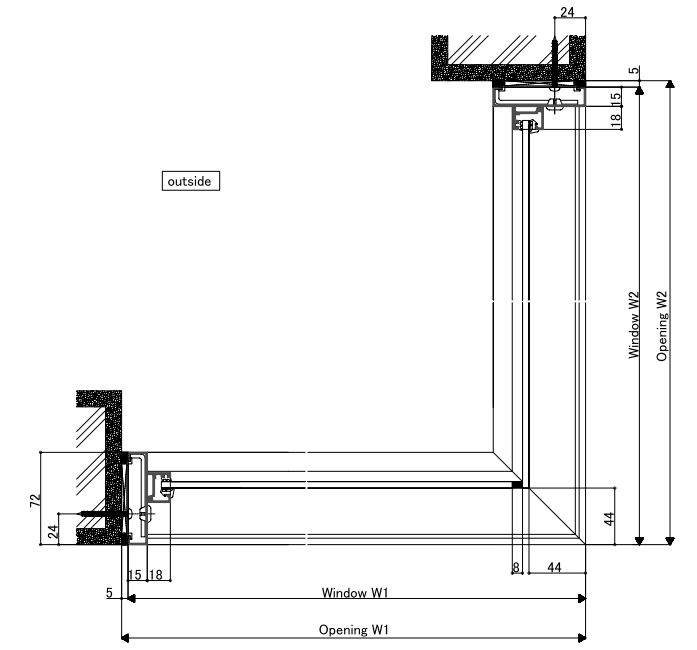
<Horizontal section: Double casement with screen>



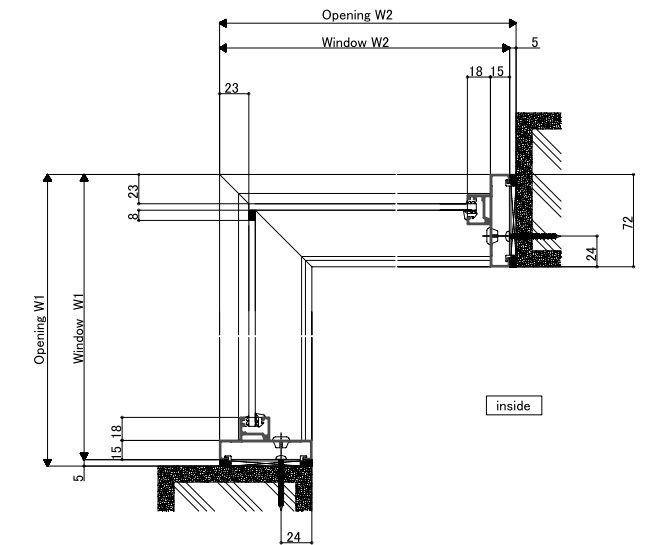
<Vertical section: Single and corner fix window>



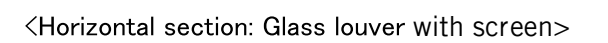
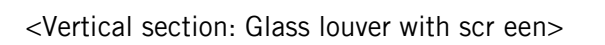
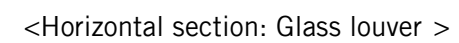
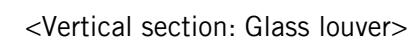
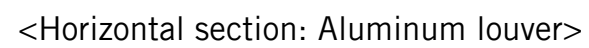
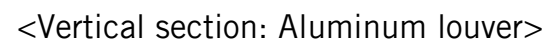
<Horizontal section: Single fix window>



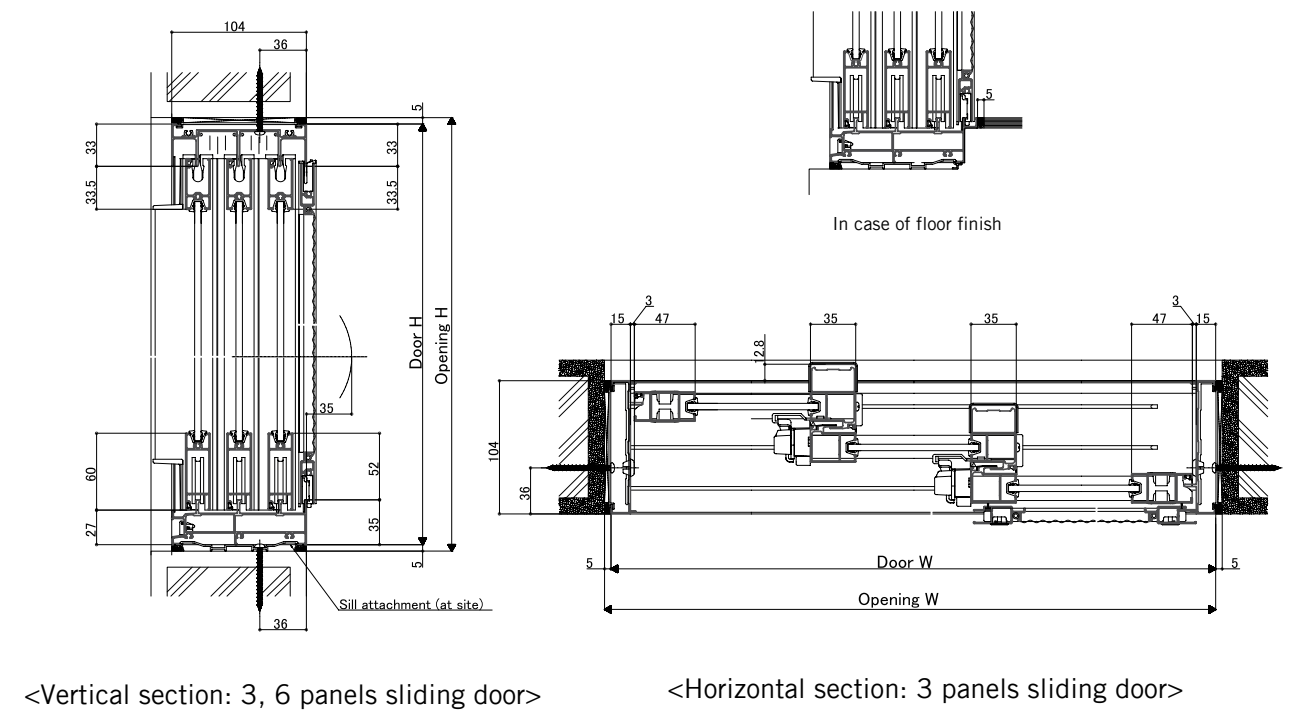
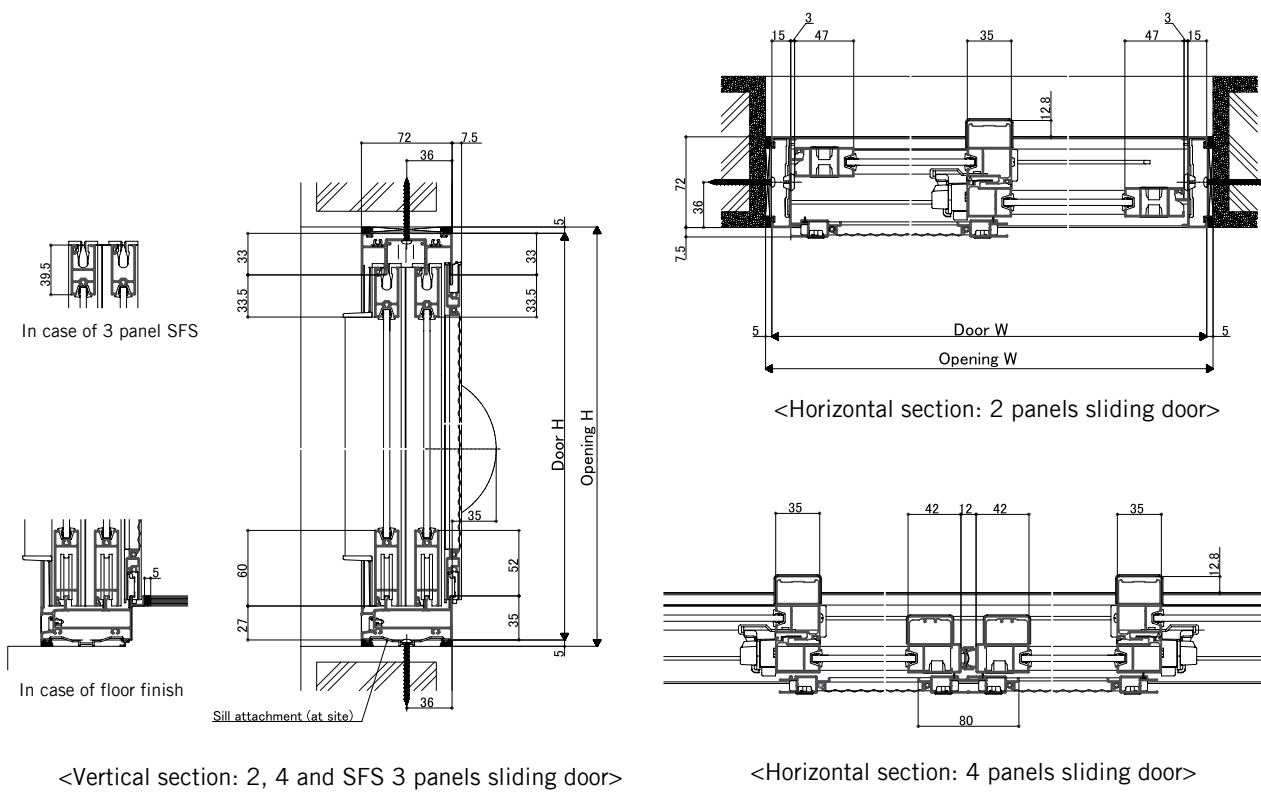
<Horizontal section: Inward fix window>

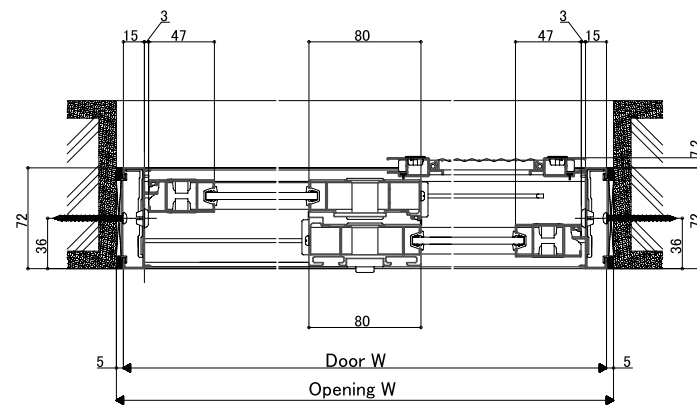


<Horizontal section: Outward fix window>

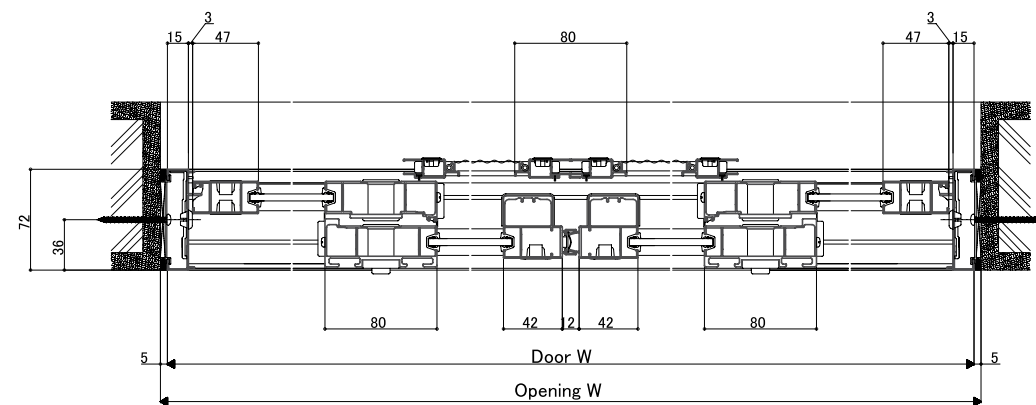


WE70 DOOR SERIES





<Vertical section: 2 and 4 panels entrance sliding door>

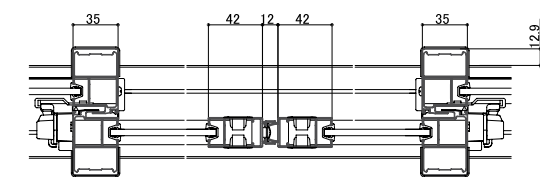


Technical drawing of a door profile cross-section. The drawing shows a vertical profile with various internal components and dimensions. Key dimensions include: 72 (top width), 36 (top flange width), 5 (top flange thickness), 33 (top flange height), 33.5 (top flange depth), 35 (top flange radius), 52 (top flange height), 20 (top flange width), 36 (bottom flange width), 5 (bottom flange thickness), 33 (bottom flange height), 33.5 (bottom flange depth), 35 (bottom flange radius), 52 (bottom flange height), 20 (bottom flange width). The drawing also shows a door handle and a door hinge. The text 'Door H' and 'Opening H' is visible on the right side.

Technical drawing of a door handle assembly, labeled '100'. The drawing shows a side view of the handle with a width dimension of 35 mm indicated at the top. The handle is mounted on a door, with the mounting plate and handle body clearly visible. The drawing is a black and white line drawing.

Technical drawing of a door cross-section. The drawing shows a door with a central handle and lock mechanism. Dimensions are indicated in millimeters (mm). The total height of the door is 72 mm. The height of the handle assembly is 36 mm. The width of the door is labeled as 'Door W'. The width of the opening is labeled as 'Opening W'. The drawing also shows the door's internal structure, including the handle and lock mechanism.

<Horizontal section: 2 panels partition door >



Technical drawing of a door assembly showing dimensions and components. The drawing includes a side view of the door with various dimensions and a cross-section view of the door frame and door assembly.

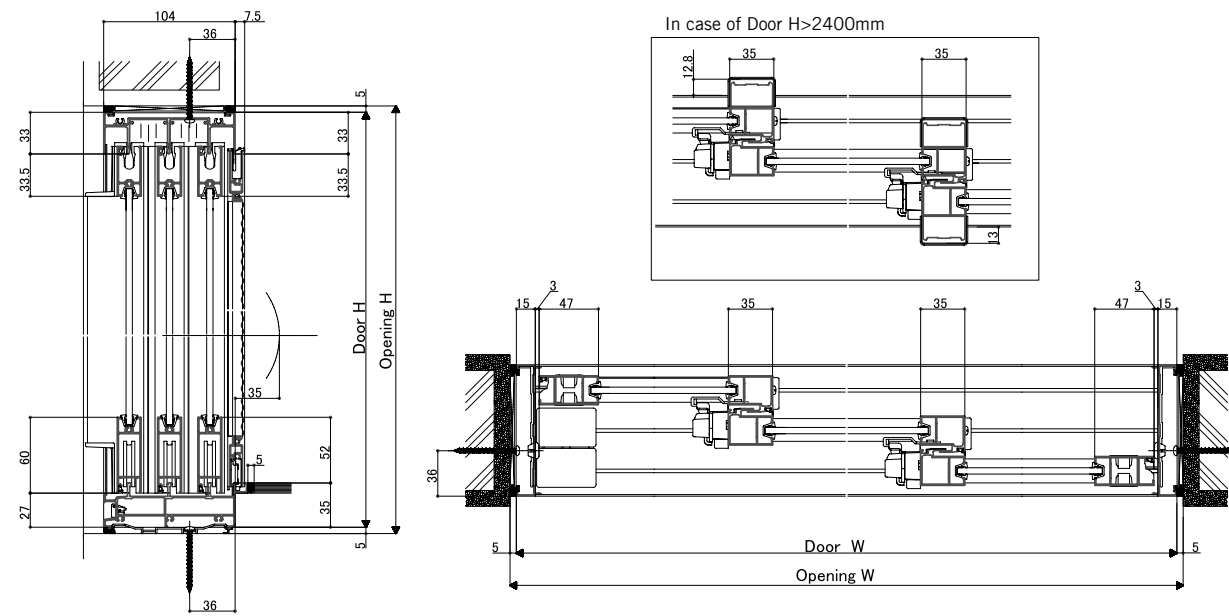
Dimensions:

- Door W: 42
- Opening W: 35
- Door H: 72
- Opening H: 36
- Door Frame Thickness: 5
- Door Frame Width: 15
- Door Frame Height: 47
- Door Frame Depth: 3
- Door Frame Width (Right): 47
- Door Frame Height (Right): 15
- Door Frame Depth (Right): 3
- Door Frame Width (Left): 15
- Door Frame Height (Left): 47
- Door Frame Depth (Left): 3

Components:

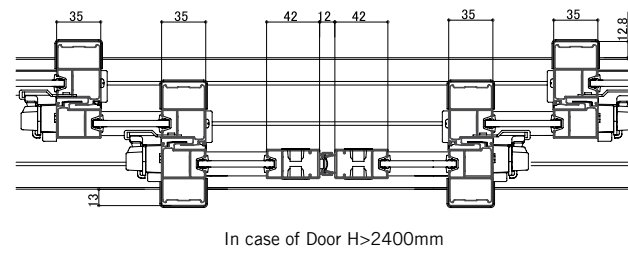
- Door Frame
- Door
- Door Panel
- Door Frame Assembly
- Door Frame Assembly (Right)
- Door Frame Assembly (Left)

<Horizontal section: 4 panels partition door>

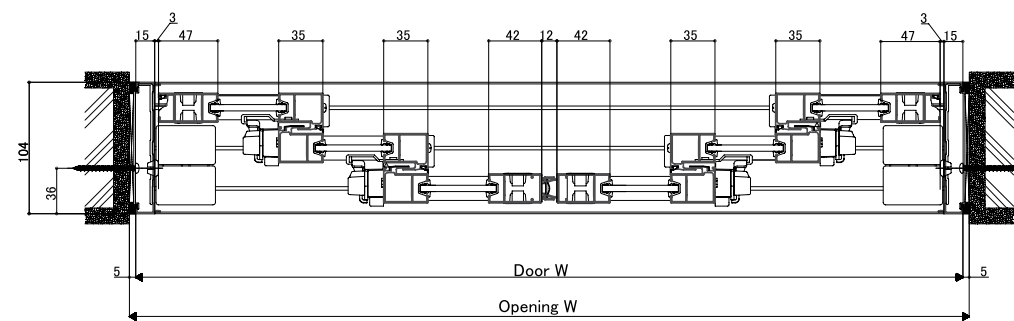


<Vertical section: 3 and 6 panels partition door>

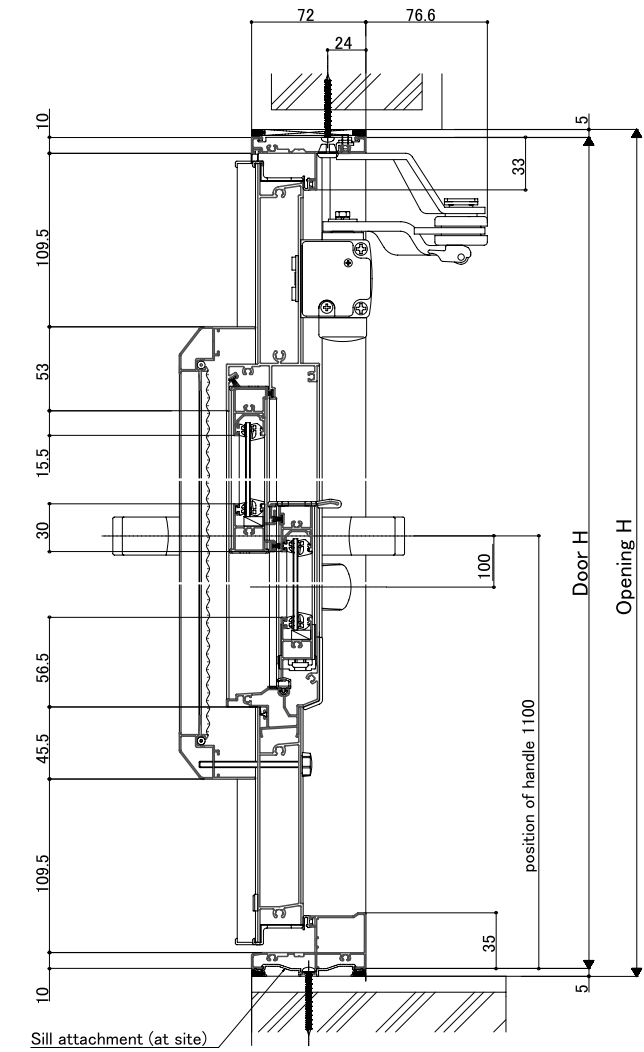
<Horizontal section: 3 panels partition door>



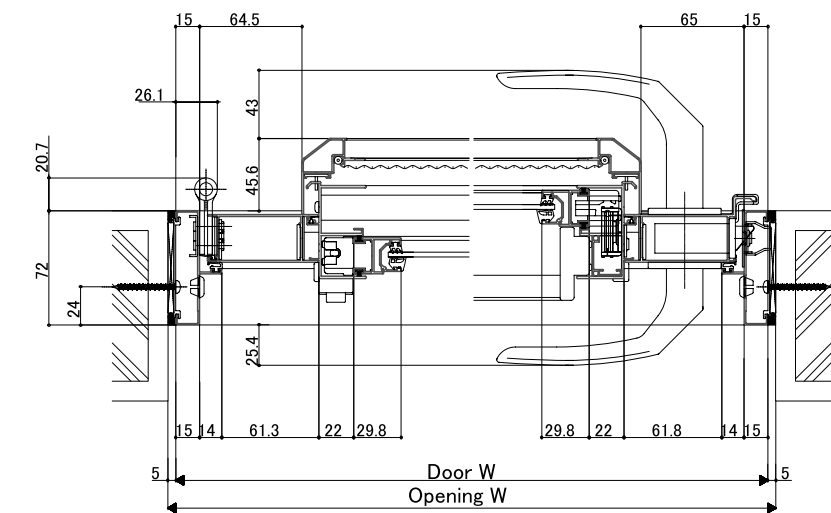
In case of Door H > 2400mm



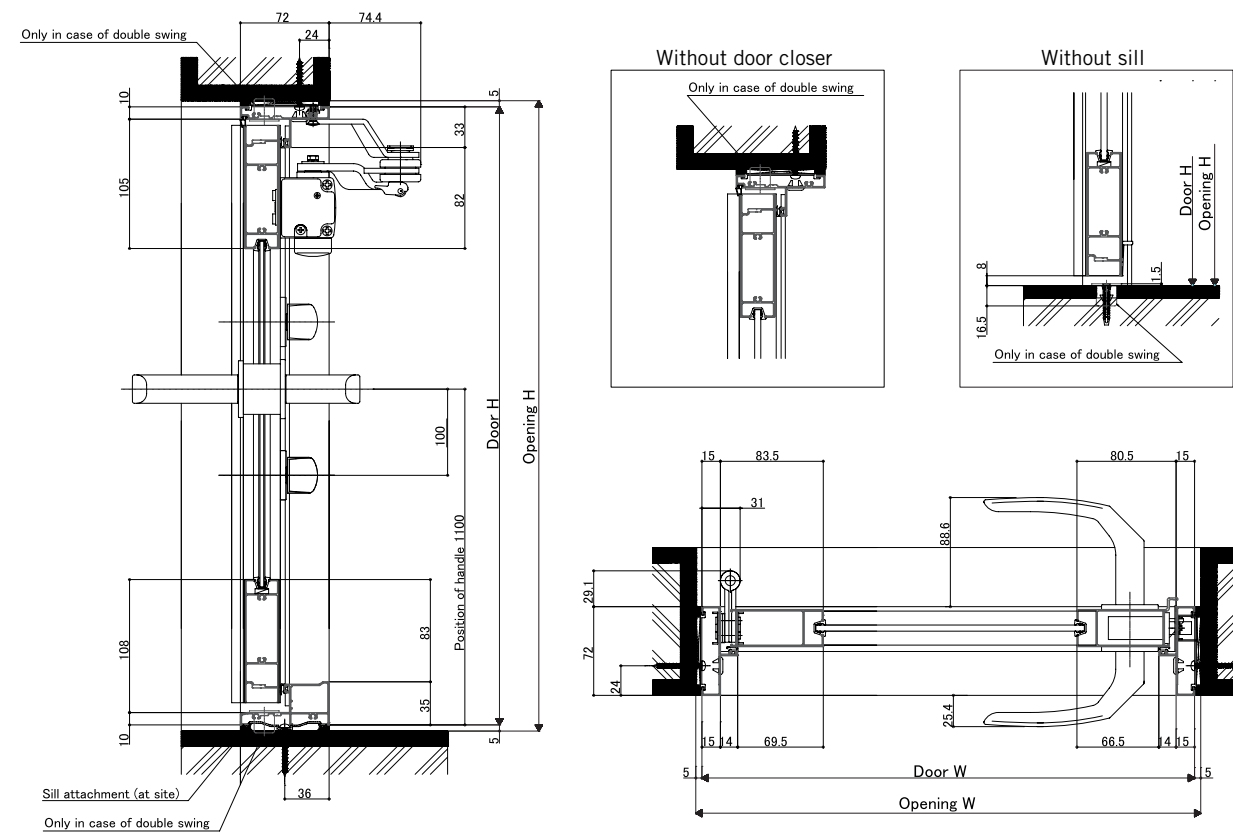
<Horizontal section: 6 panels partition door>



<Vertical section: Ventilation Door>

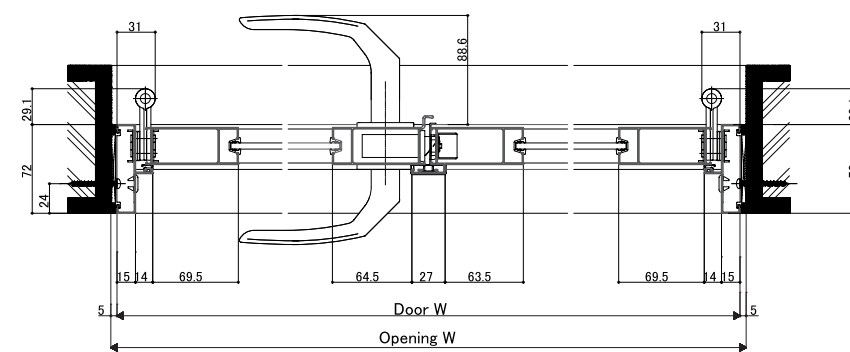


<Horizontal section: Ventilation Door>

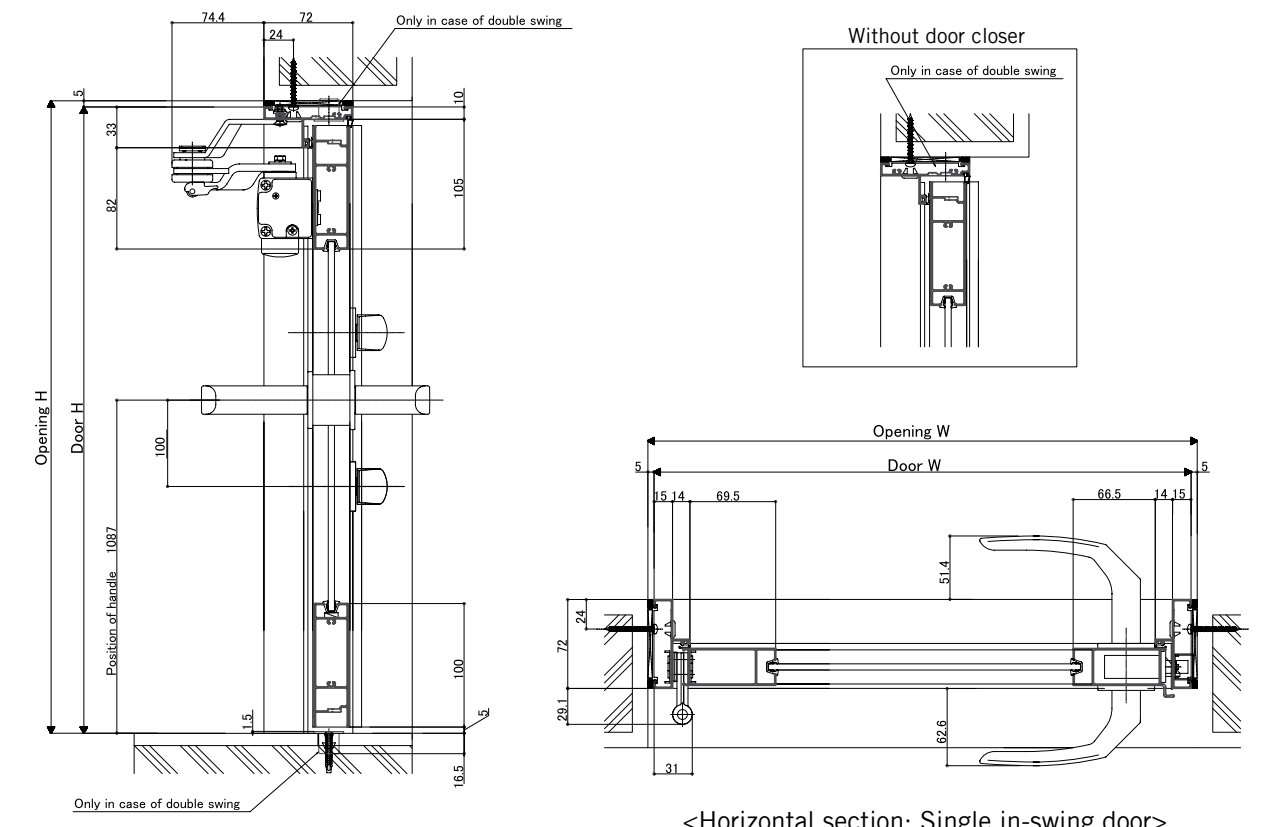


<Vertical section: Single & double out-swing door with sill>

<Horizontal section: Single out-swing door>

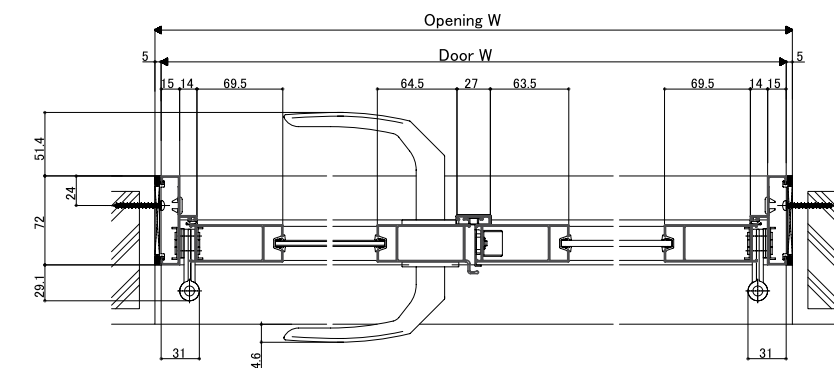


<Horizontal section: Double out-swing door>

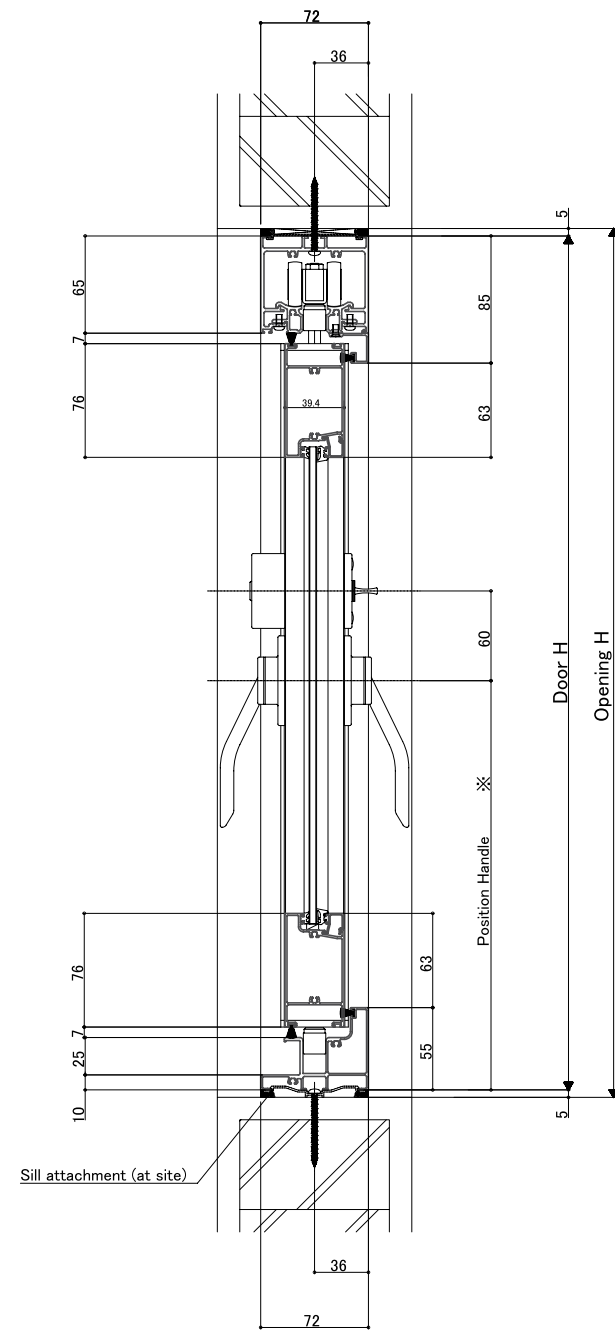


<Vertical section: Single & double in-swing door>

<Horizontal section: Single in-swing door>

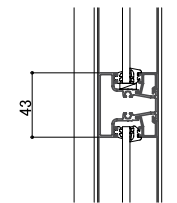


<Horizontal section: Double in-swing door>

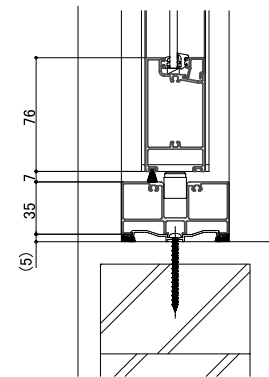


<Vertical section: Folding Door>

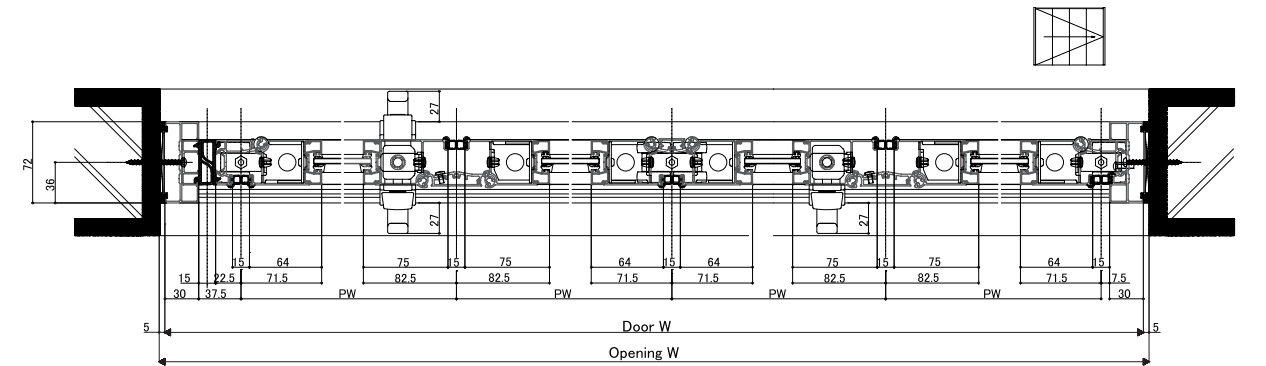
	※ Handle Position
$H > 1600$	1100
$H \leq 1600$	$H/2-15$



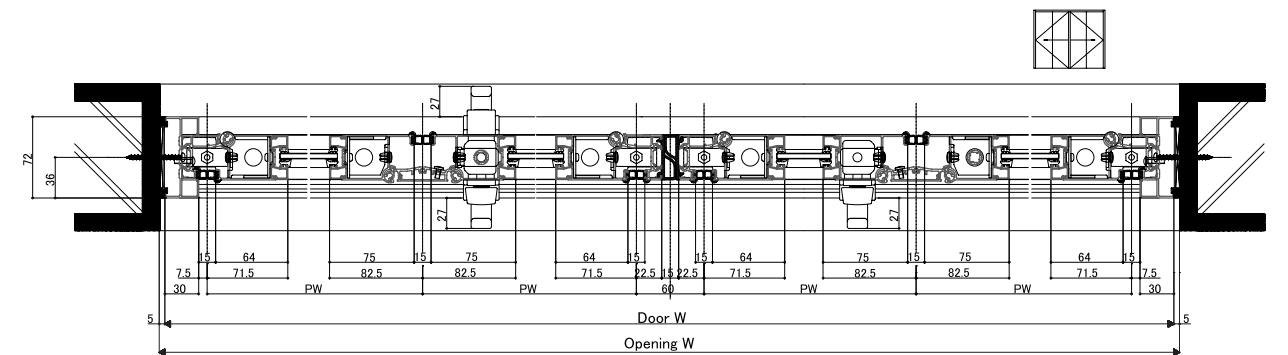
<Vertical section: With middle bar>



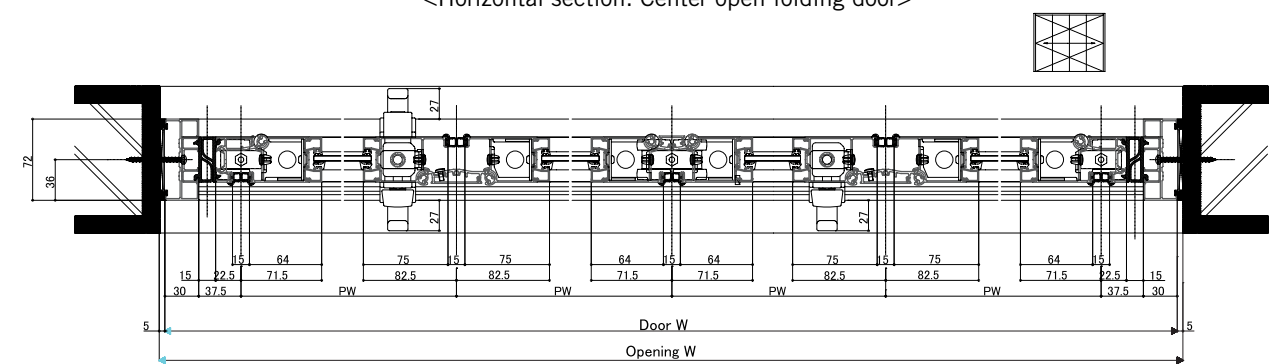
<Vertical section: Flat sill>



<Horizontal section: One way open folding door>

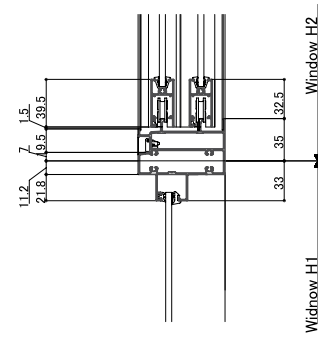


<Horizontal section: Center open folding door>

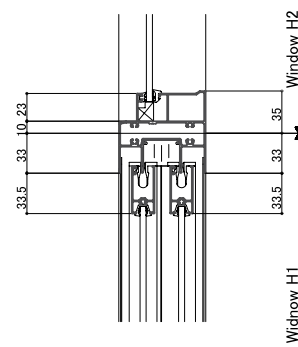


<Horizontal section: Both way open folding door>

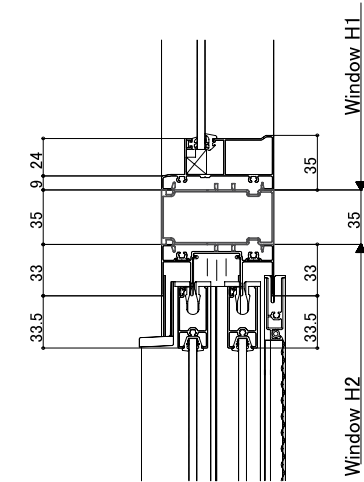
WE70 COMBINATION



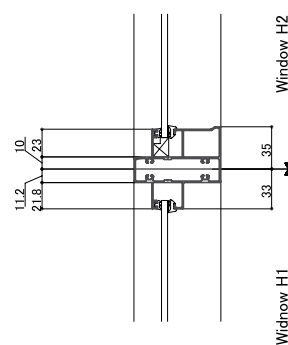
<Vertical section: Sliding/Fix transom>



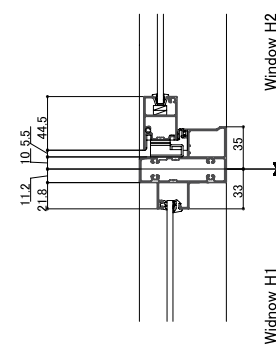
<Vertical section: Fix/Sliding transom>



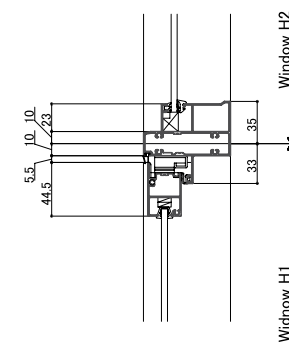
<Transom>



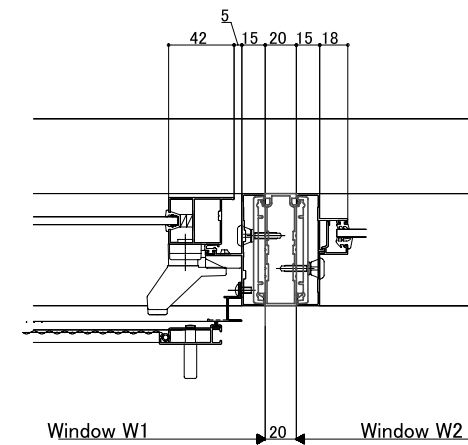
<Vertical: Fix/Fix transom>



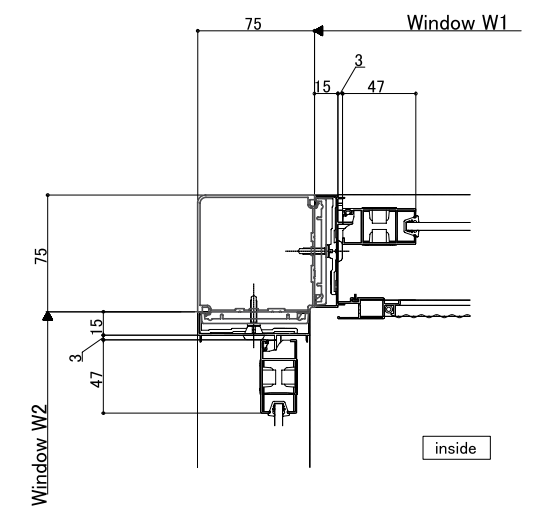
<Vertical: Projection/Fix transom>



<Vertical: Fix/Projection transom>



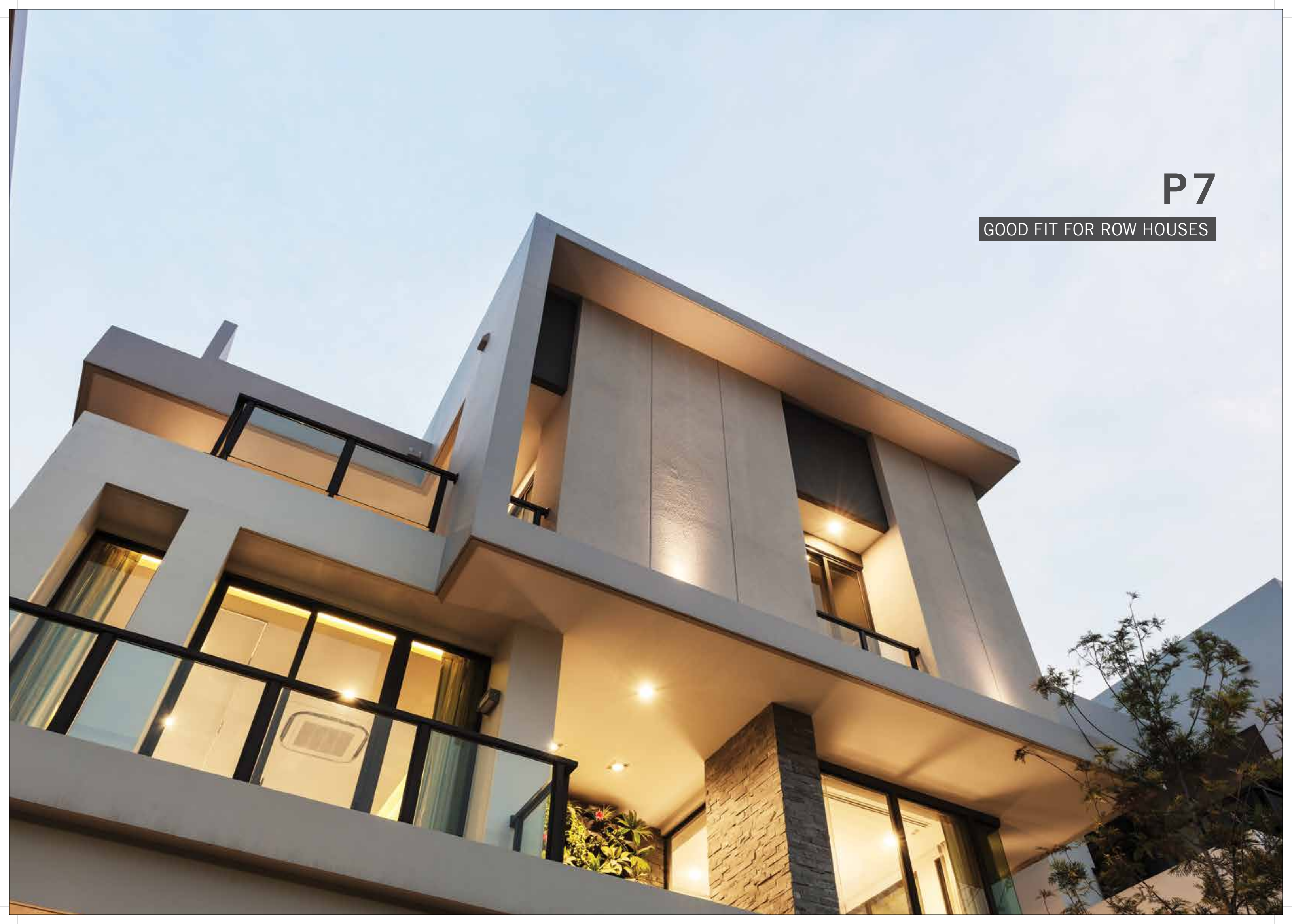
<Mullion>



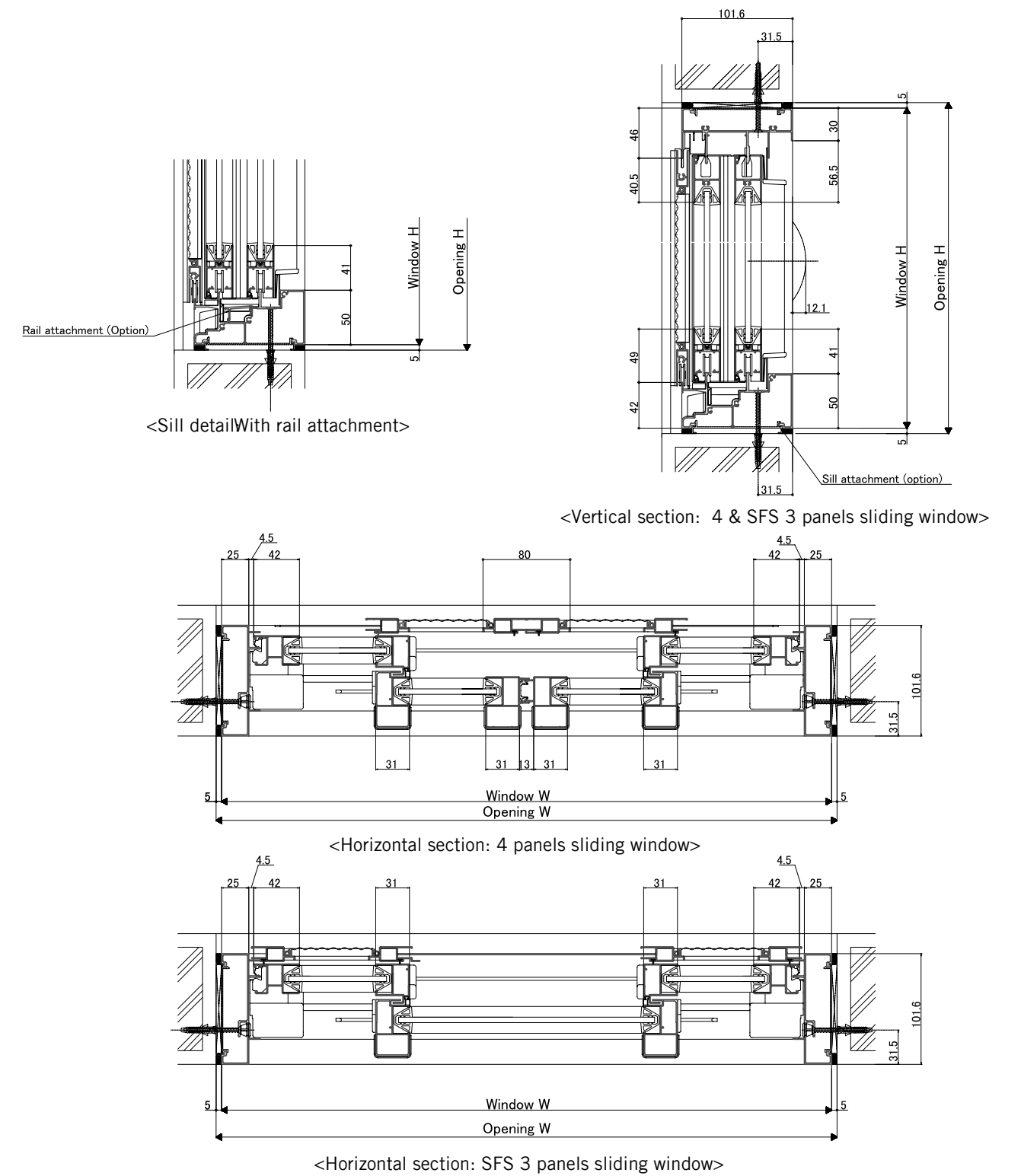
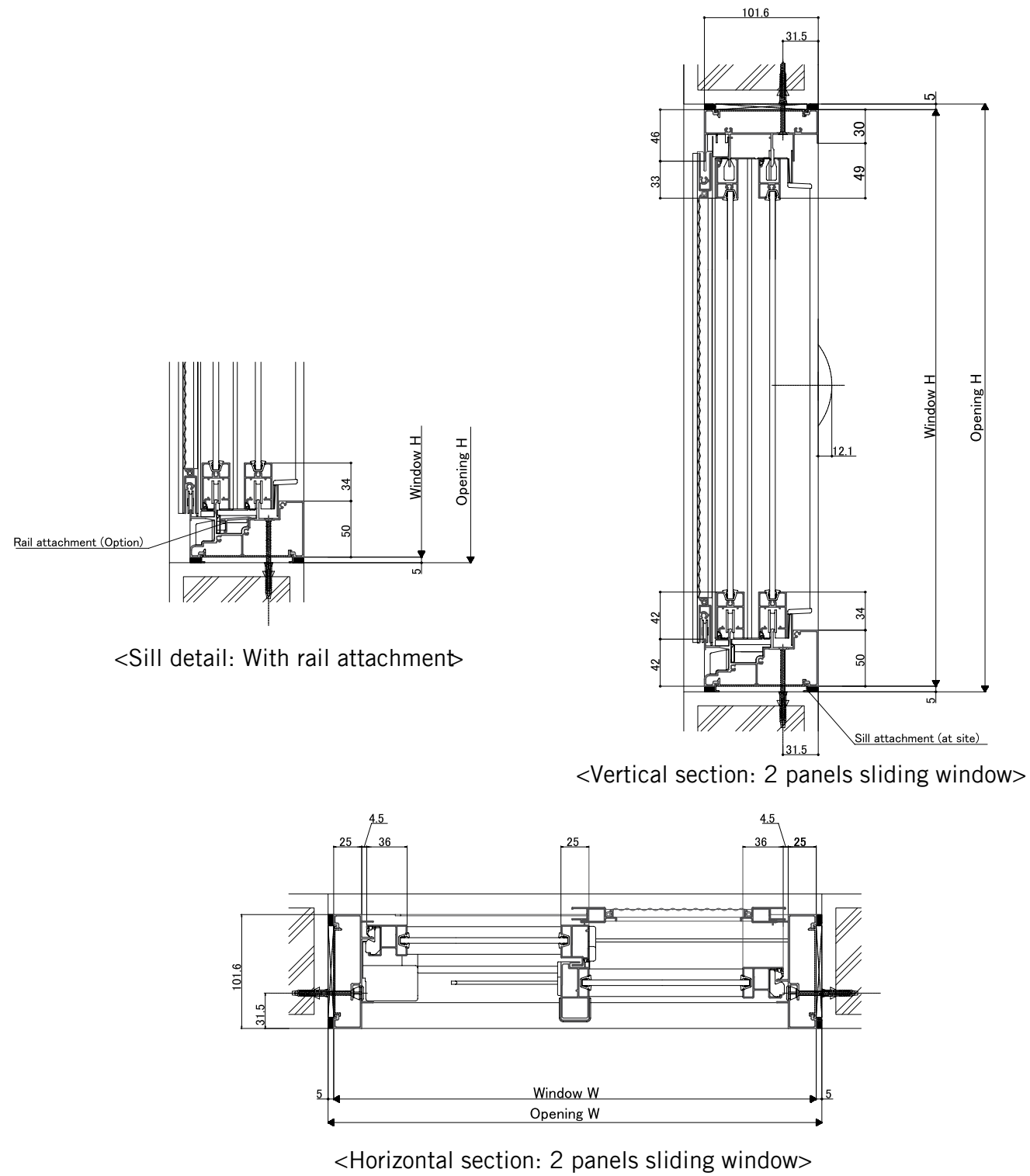
<Cor ner mullion>

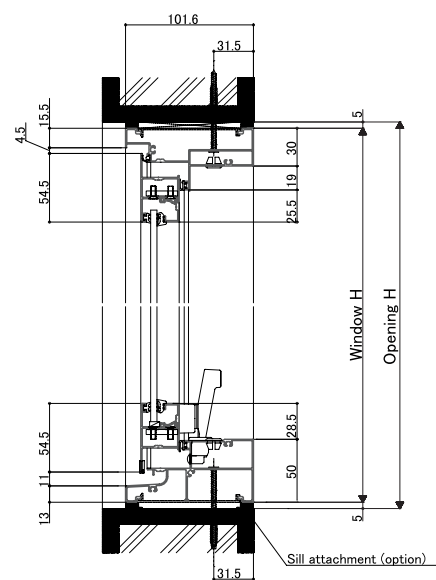
P7

GOOD FIT FOR ROW HOUSES

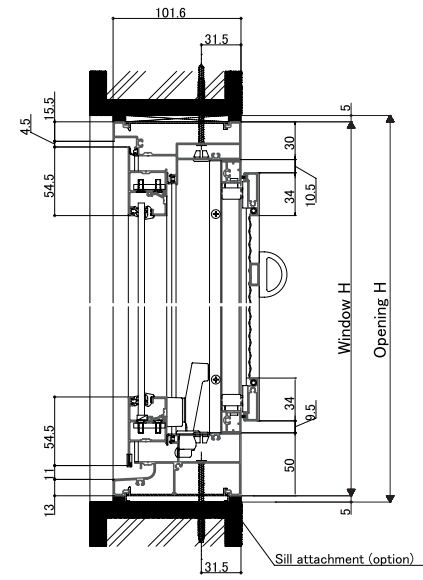


P7 WINDOW SERIES

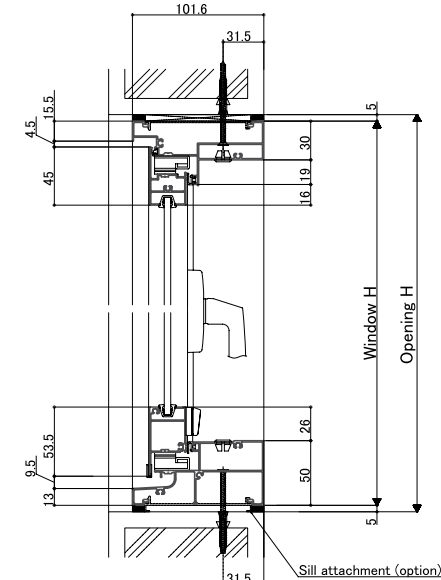




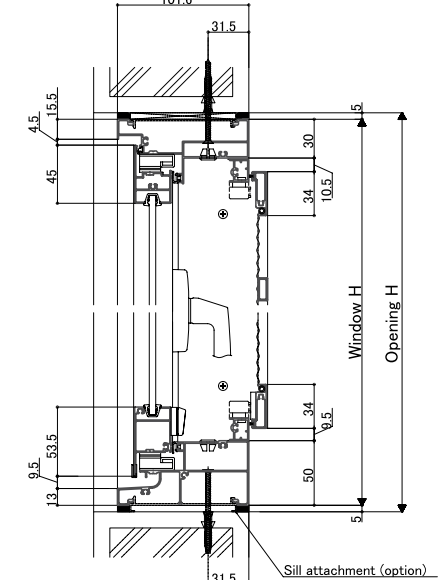
<Vertical section: Awning window>



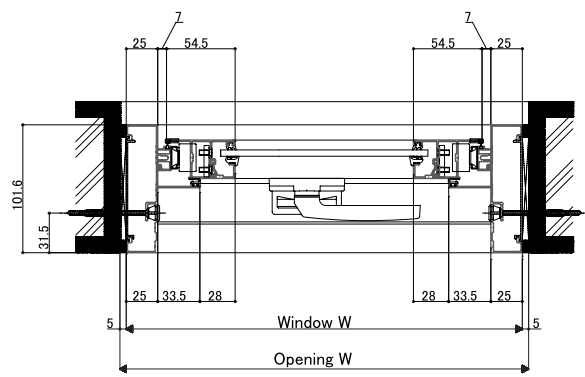
<Vertical section: Awning with screen>



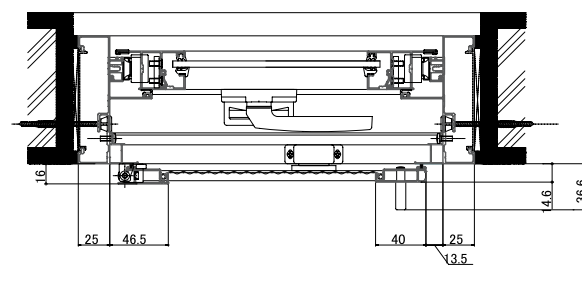
<Vertical section: Casement window>



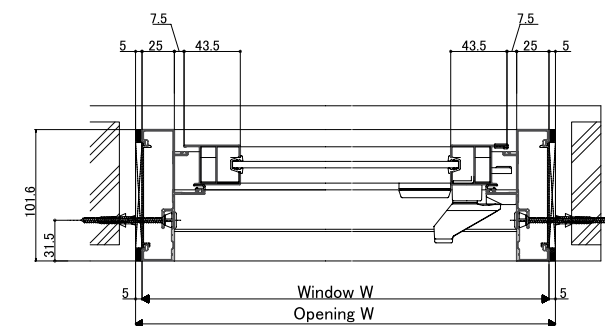
<Vertical section: Casement with screen>



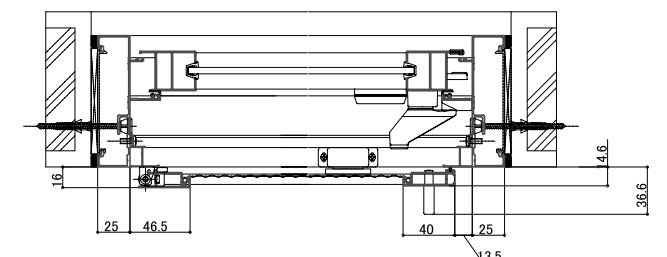
<Horizontal section: Awning window>



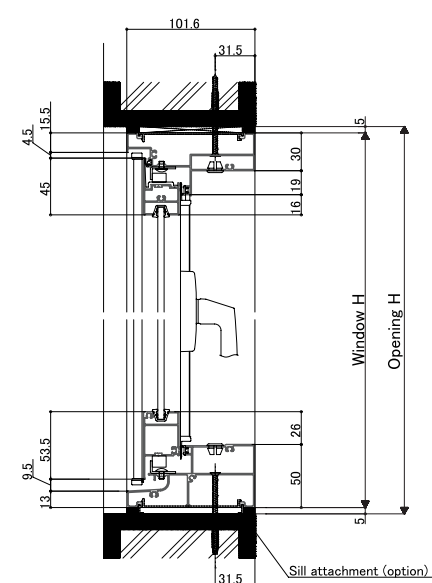
<Horizontal section: Awning with screen>



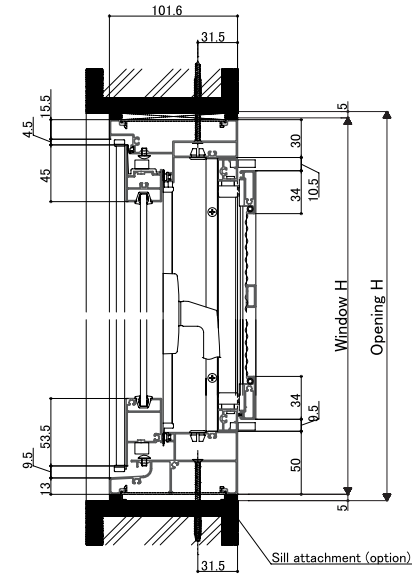
<Horizontal section: Casement window>



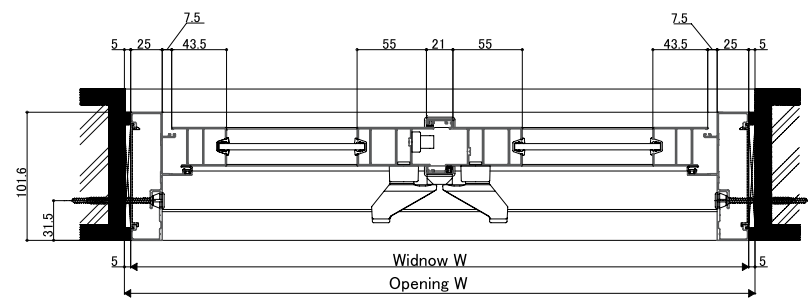
<Horizontal section: Casement with screen>



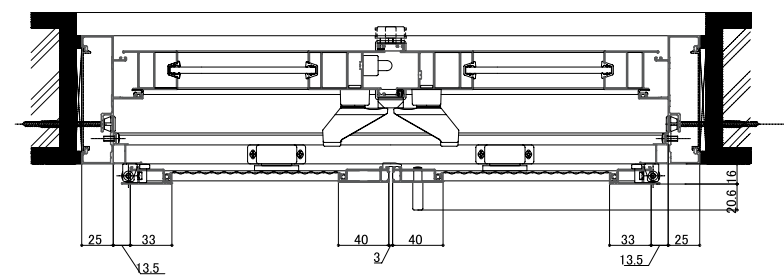
<Vertical section: Double casement window>



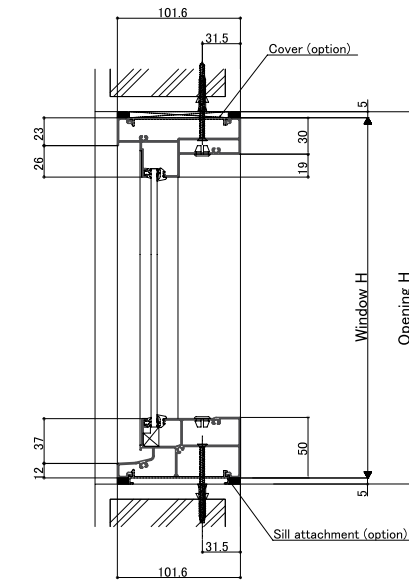
<Vertical section: Double casement with screen>



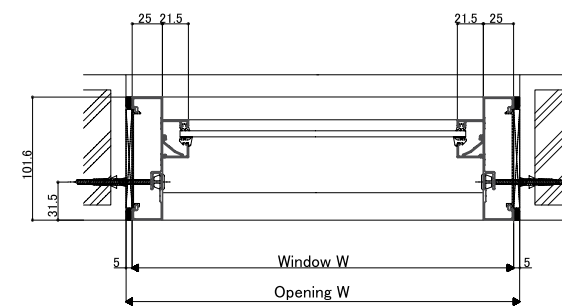
<Horizontal section: Double casement window>



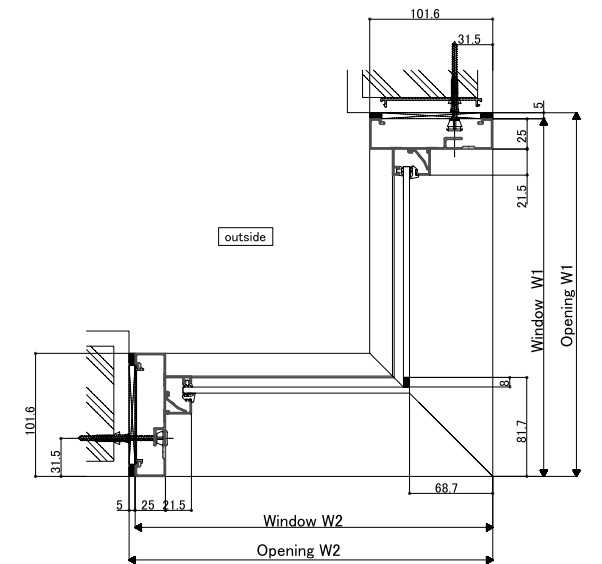
<Horizontal section: Double casement with screen>



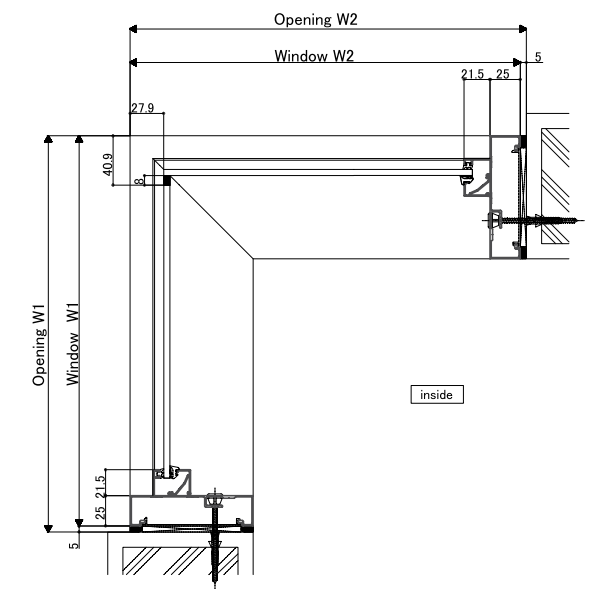
<Vertical section: Single and corner fix window>



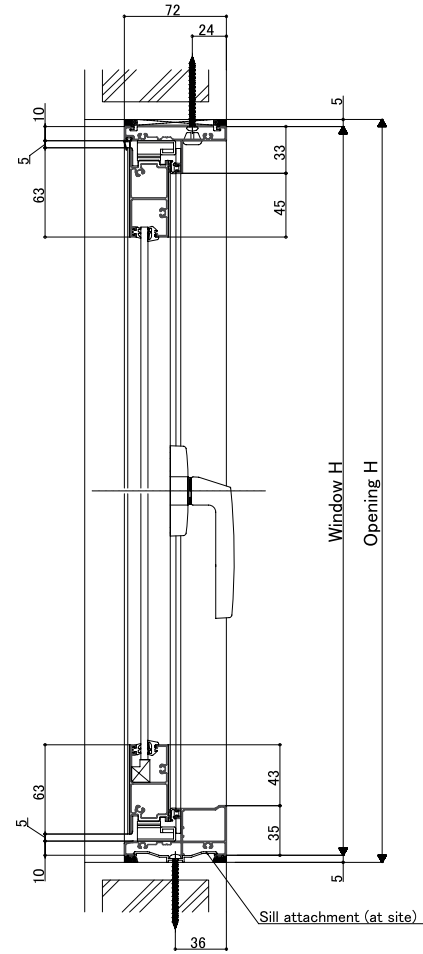
<Horizontal section: Single fix window>



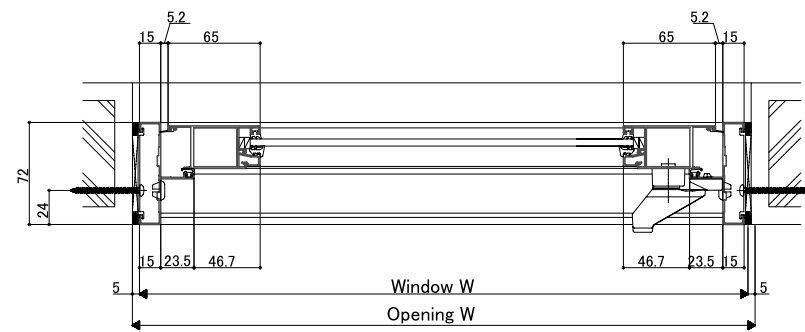
<Horizontal section: Inward fix window>



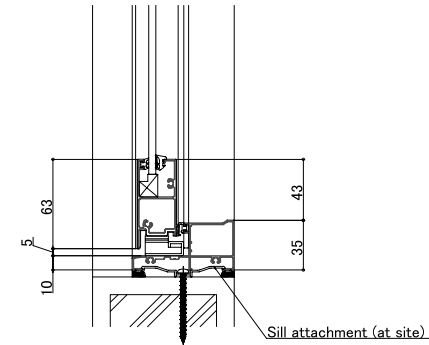
<Horizontal section: Outward fix window>



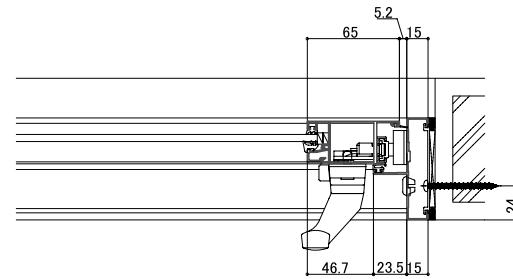
<Vertical section: Casement (single lock)>



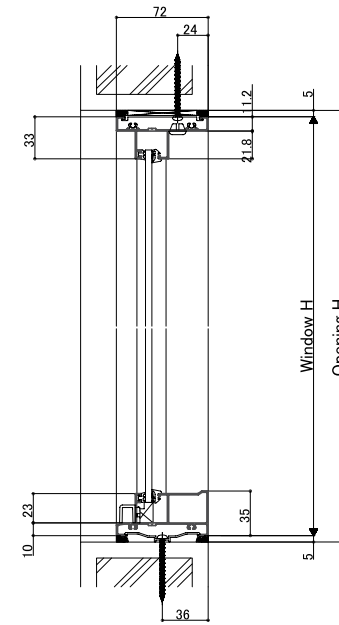
<Horizontal section: Casement (single lock)>



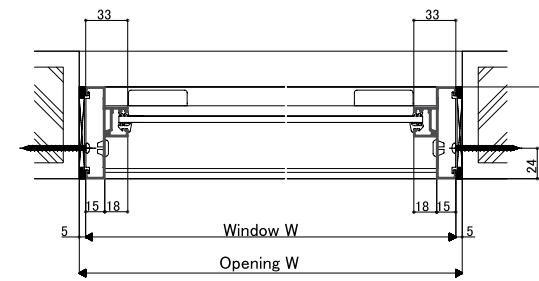
<Multi lock bottom detail>



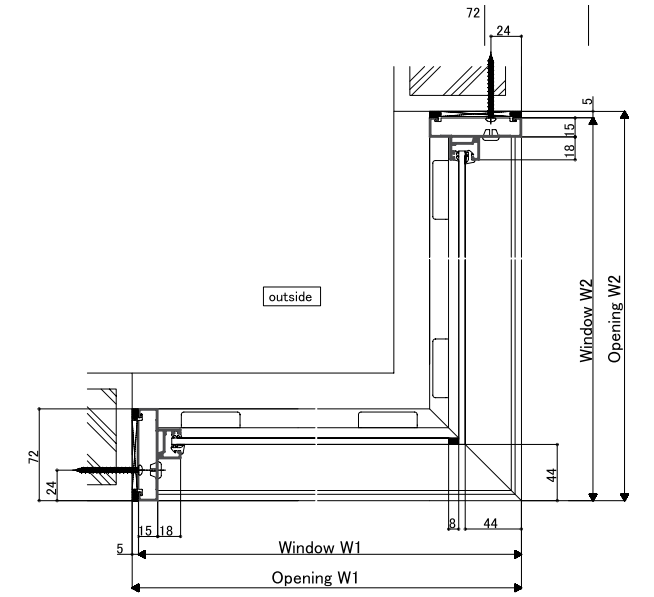
<Multi lock jamb detail>



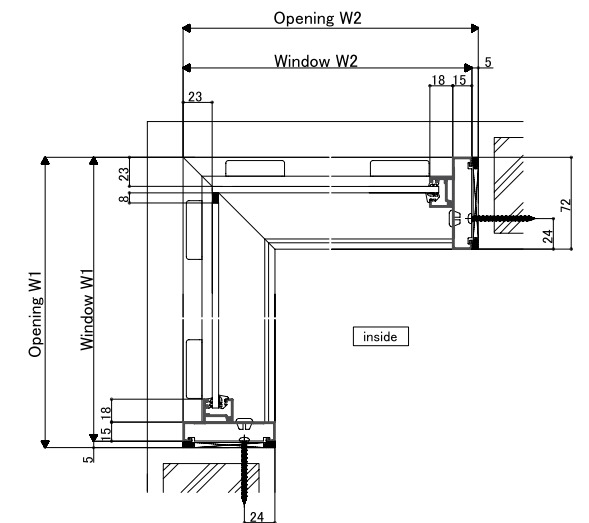
<Vertical section: Single and corner fix window>



<Horizontal section: Single fix window>

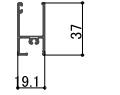
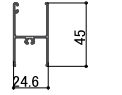
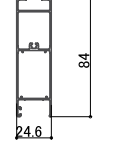
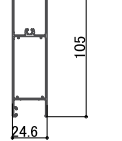


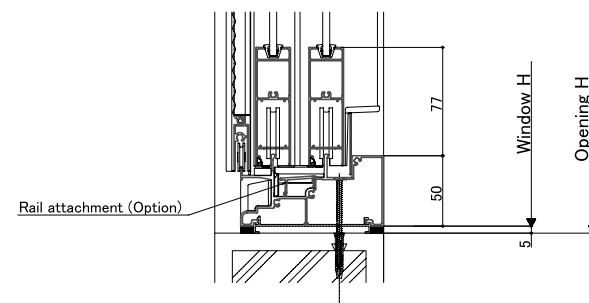
<Horizontal section: Inward fix window>



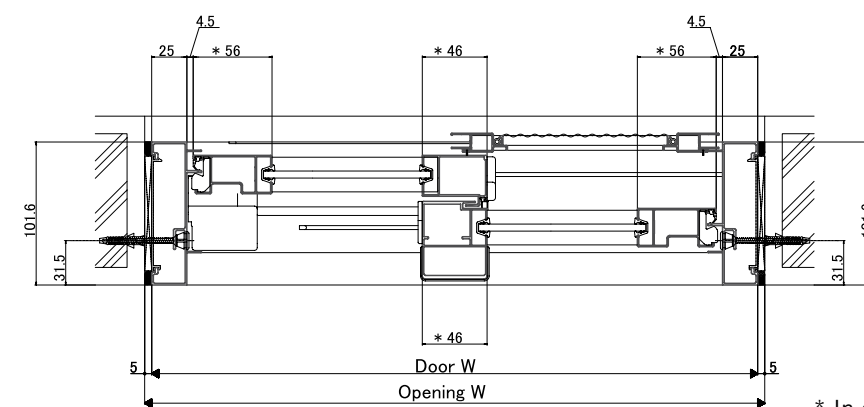
<Horizontal section: Outward fix window>

P7 DOOR SERIES

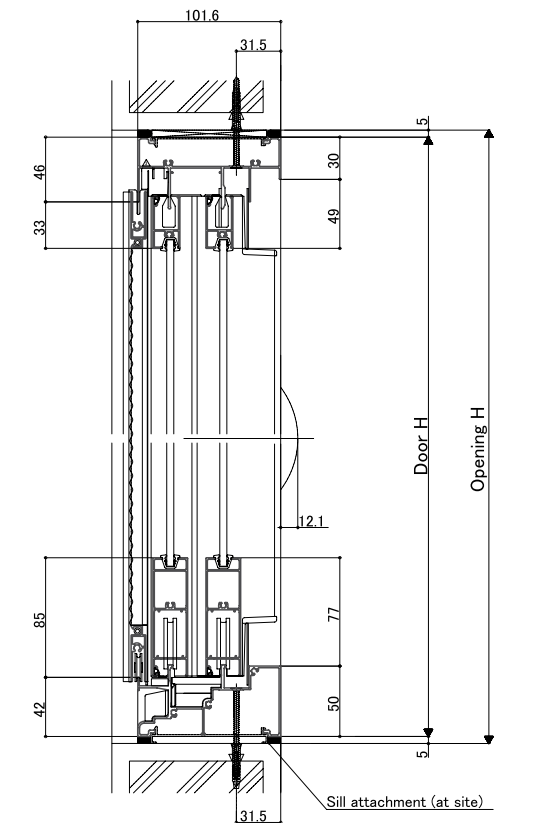
	Standard	Large size
Top Rail		
Bottom Rail		



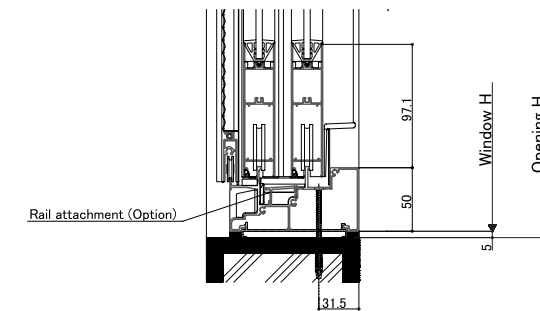
<Sill detail: With rail attachment>



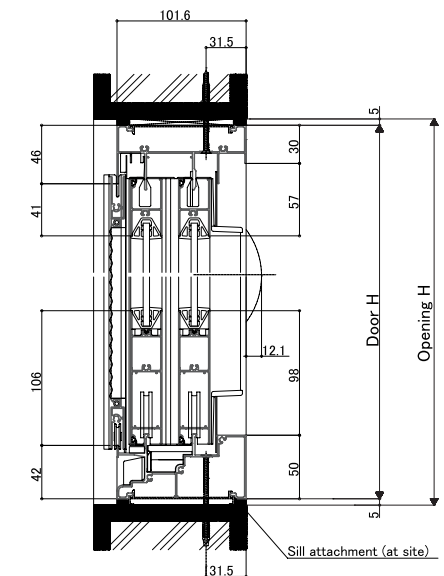
<Horizontal section: 2 panels sliding door>



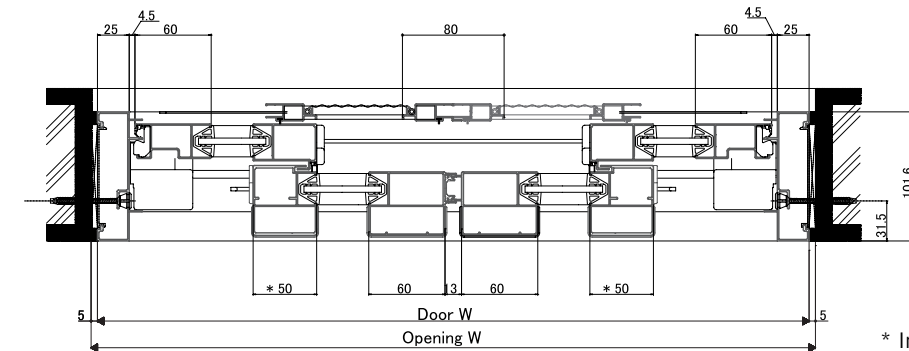
<Vertical section: 2 panels sliding door>



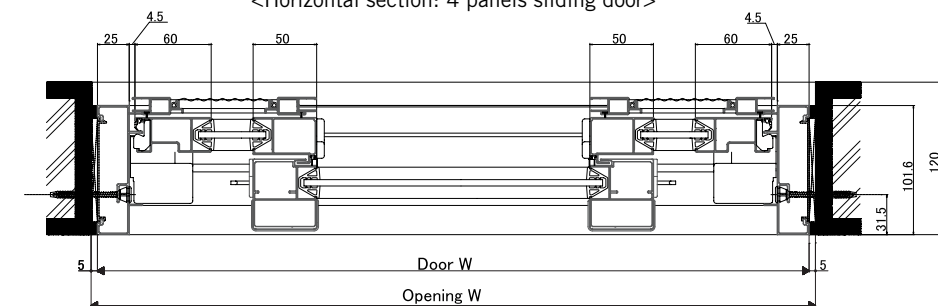
<Sill detail: With rail attachment>



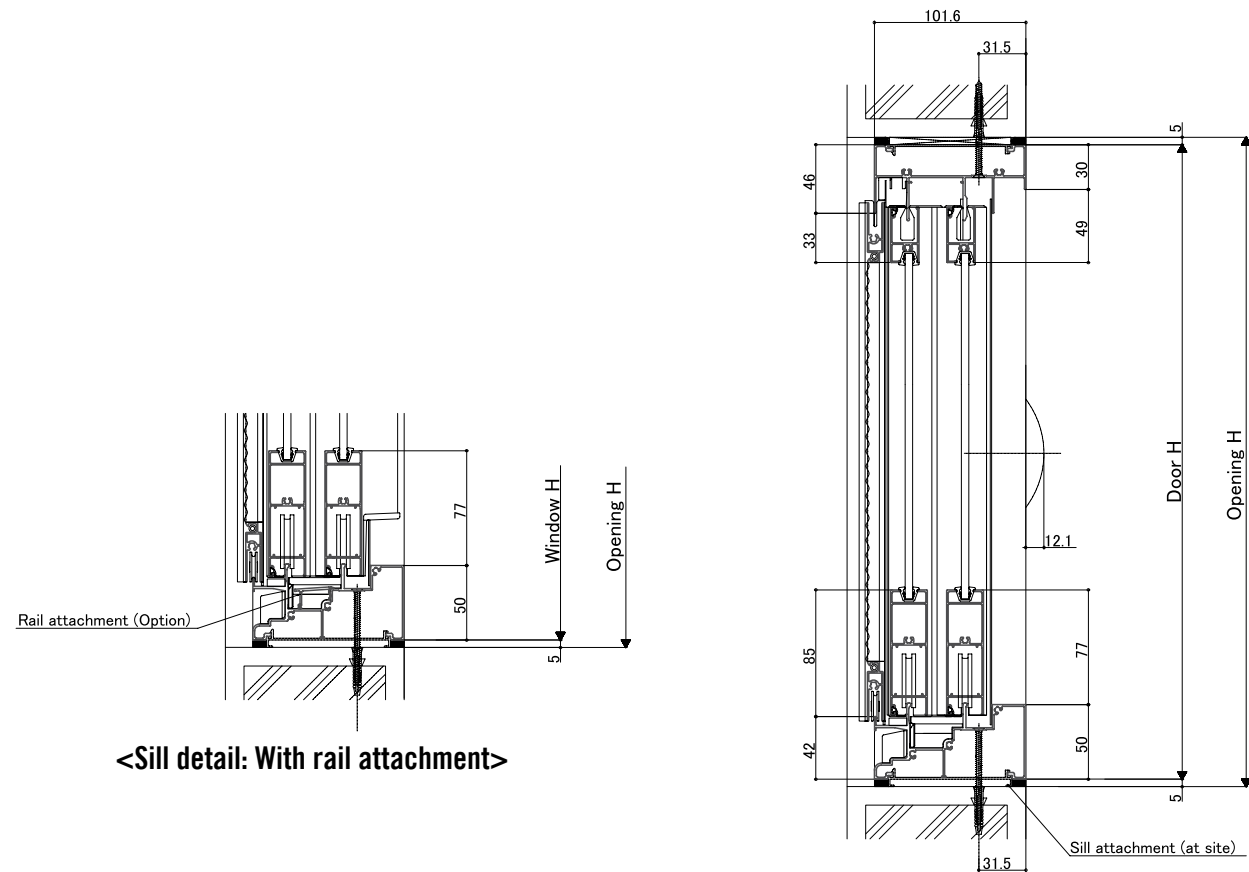
<Vertical section: 4 & SFS 3 panels sliding door>



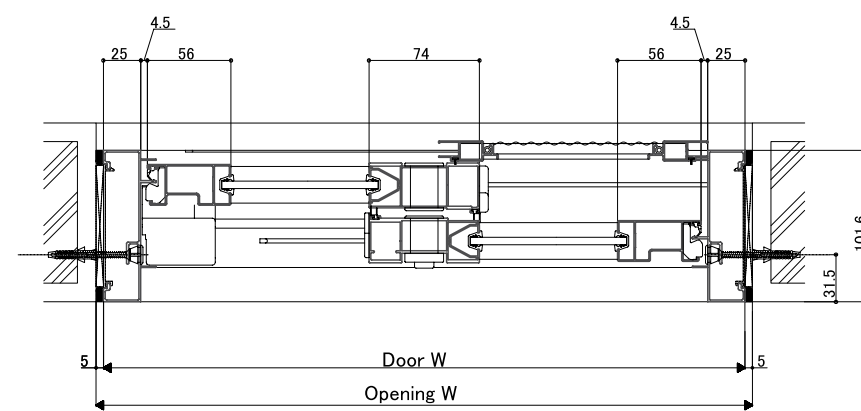
<Horizontal section: 4 panels sliding door>



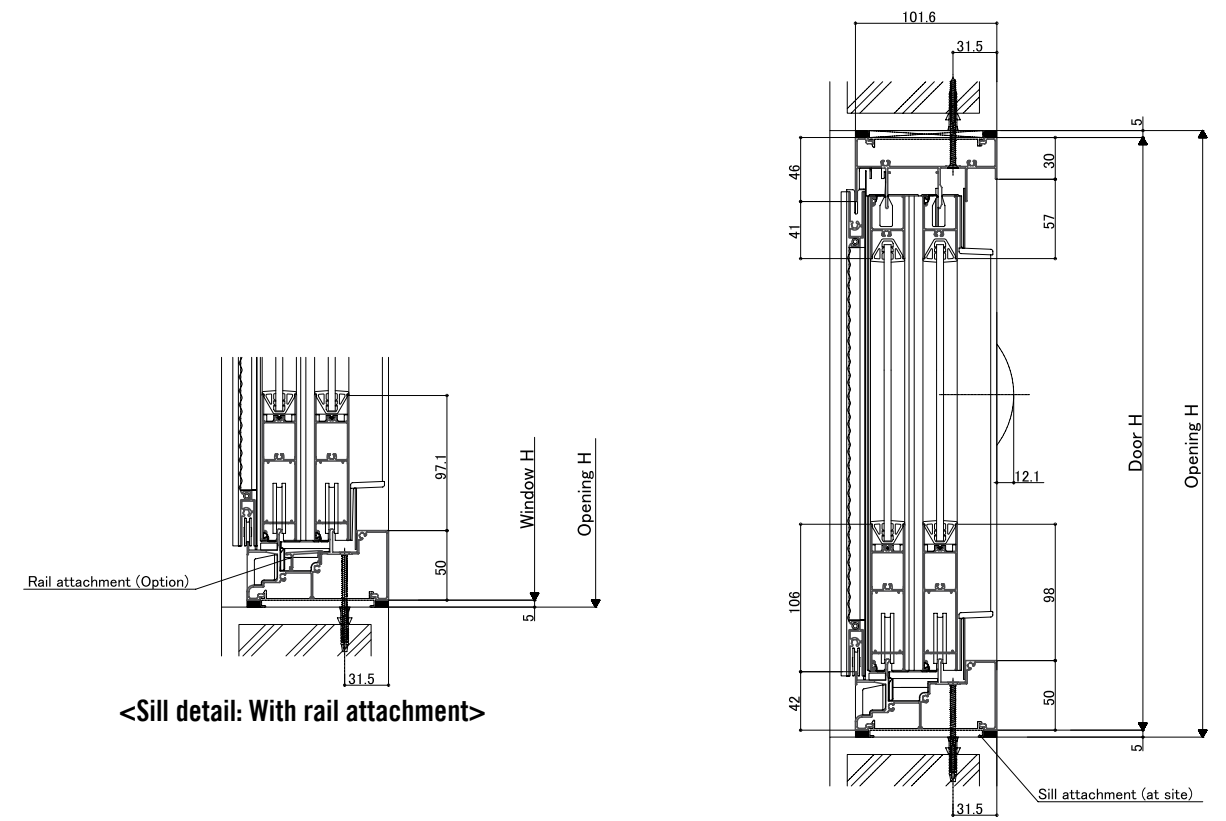
<Horizontal section: SFS 3 panels sliding door>



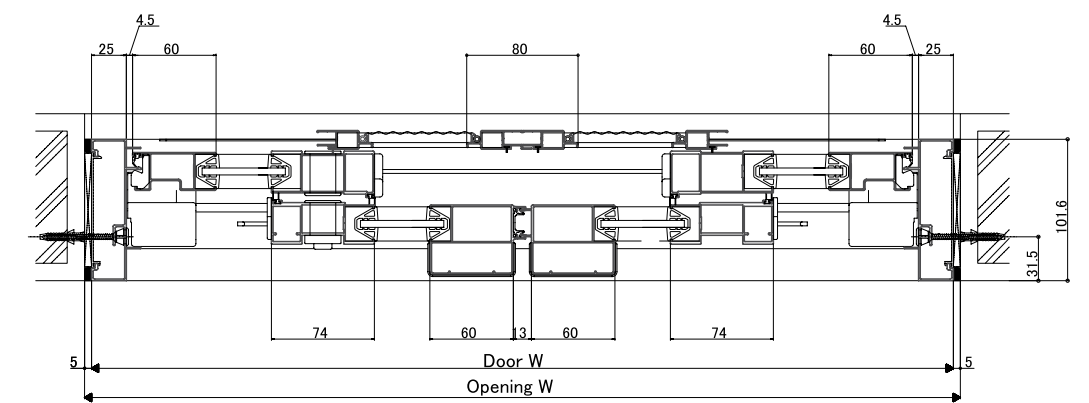
<Vertical section: 2 panels sliding entrance door>



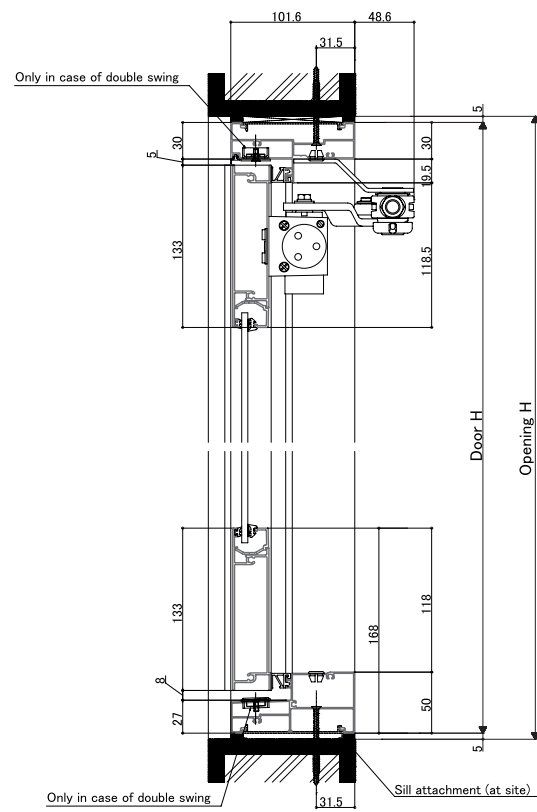
<Horizontal section: 2 panels sliding entrance door>



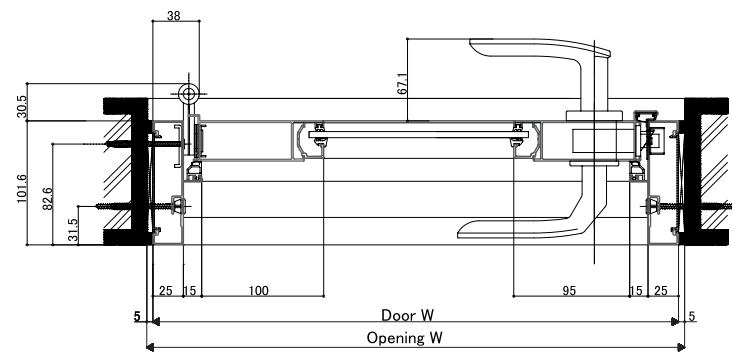
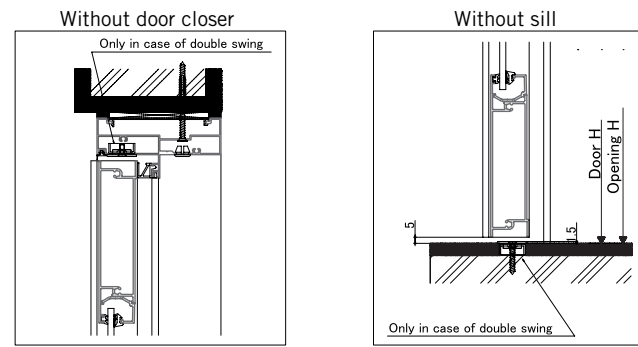
<Vertical section: 4 panels sliding entrance door>



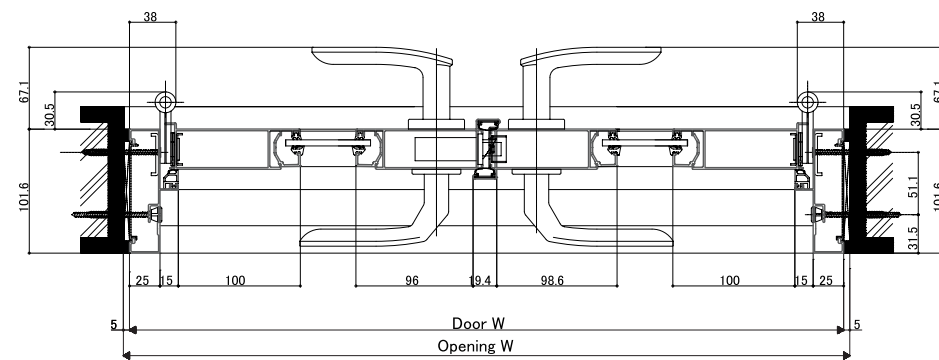
<Horizontal section: 4 panels sliding entrance door>



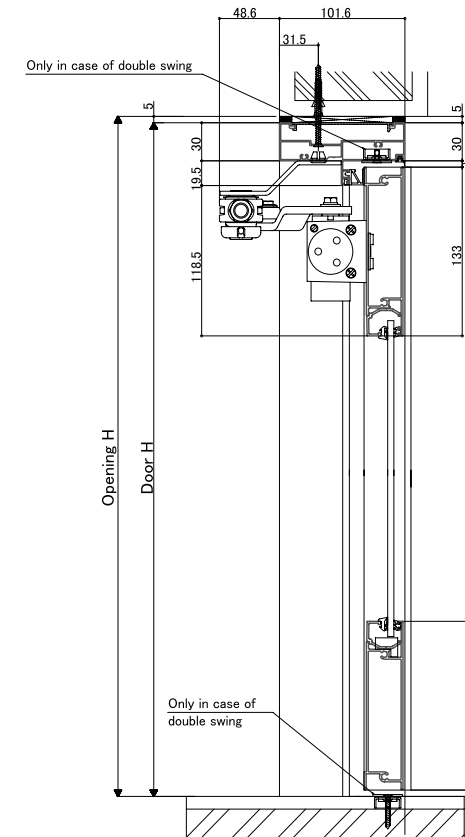
<Vertical section: Single & double out-swing door with sill>



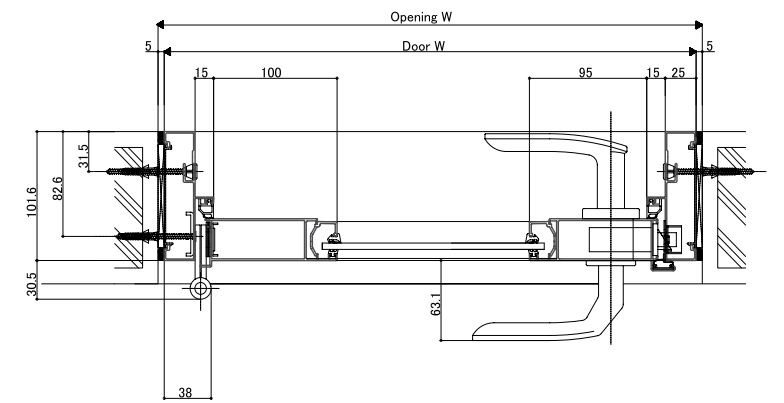
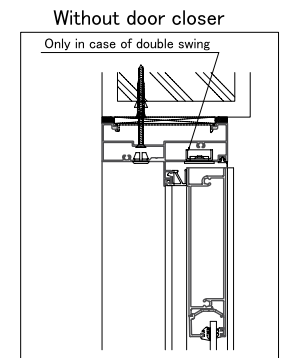
<Horizontal section: Single out-swing door>



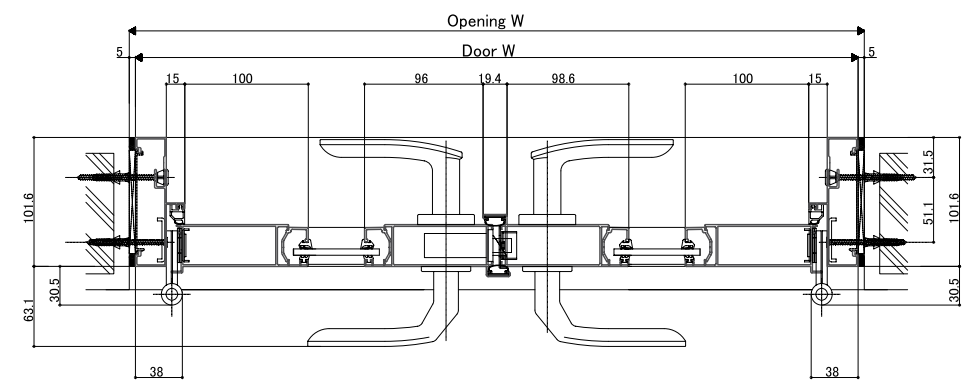
<Horizontal section: Double out-swing door>



<Vertical section: Single & double in-swing door>

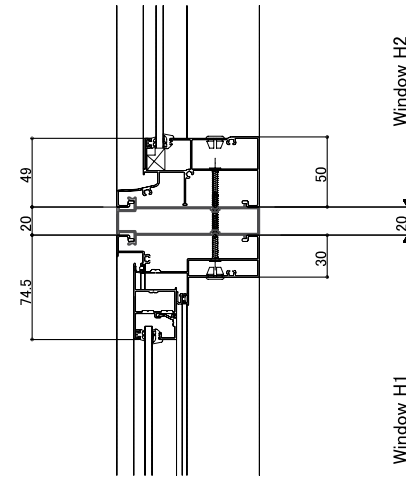


<Horizontal section: Single in-swing door >

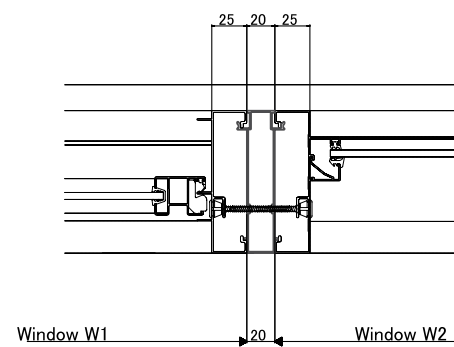


<Horizontal section: Double in-swing door>

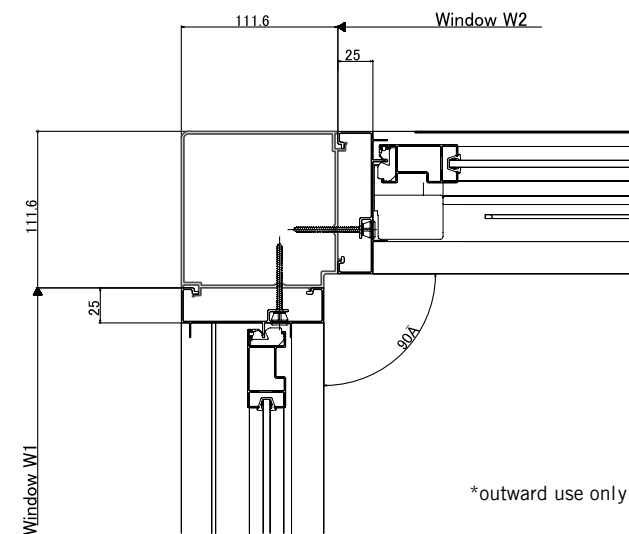
P7 COMBINATION



<Vertical section: Transom>



<Horizontal section: Mullion>



<Horizontal section: Corner mullion>

