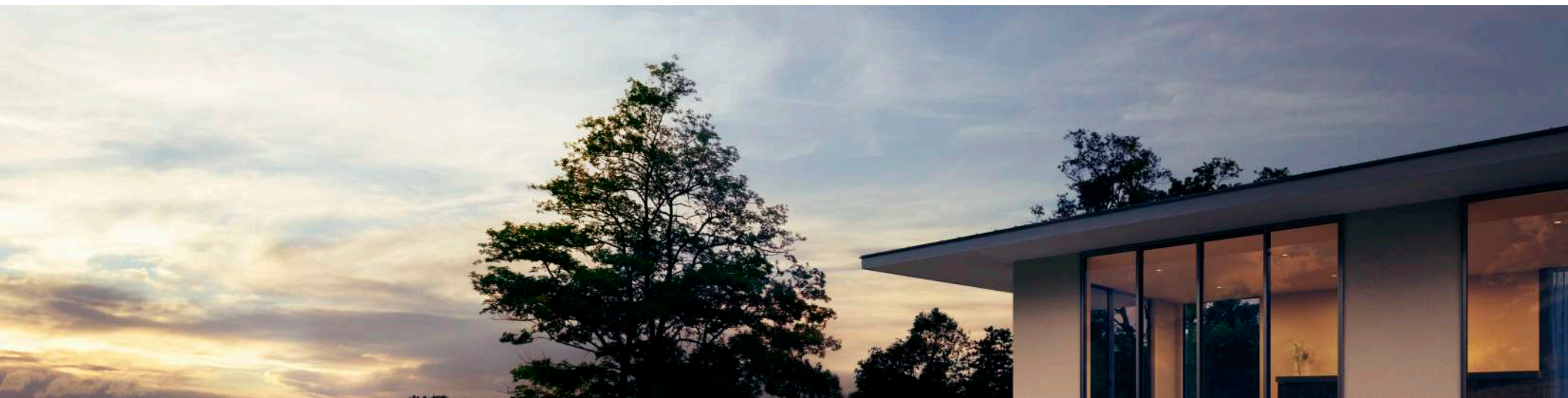


TOSTEM

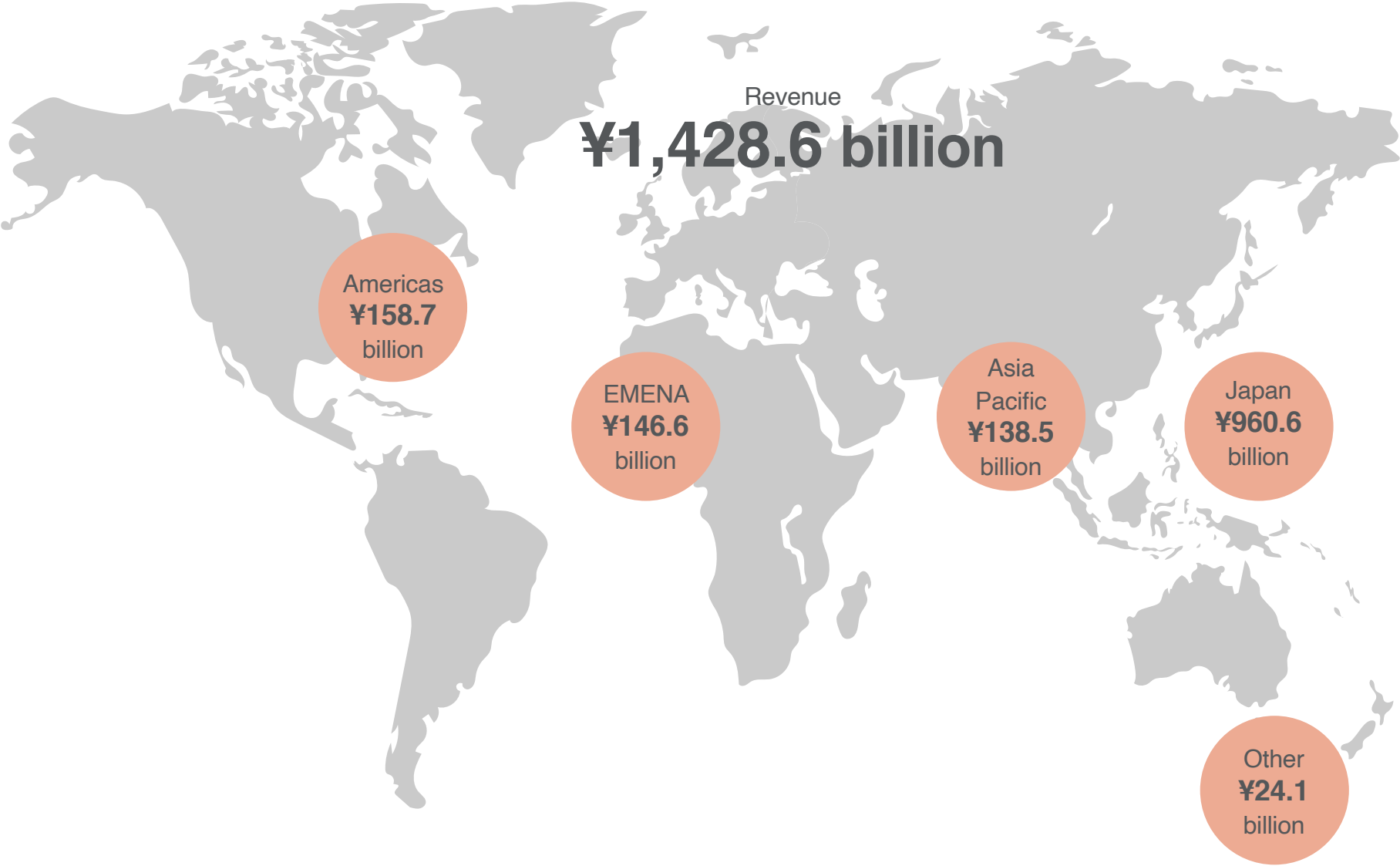


FRAMING THE BEAUTY OF LIVING


YEARS OF WISDOM

CONTENT

| | |
|--|-----|
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People using our products:

over One billion

| | | |
|---|---|---|
| <div>100+</div> <div>YEARS OF HISTORY 1875 >>> 2023</div> <div>Employees Approx.</div> <div>55,000</div> | <div>13,000+</div> <div>PATENTS/ DESIGN RIGHTS OWNED</div> <div>Factories</div> <div>79 in 10 markets</div> | <div>15</div> <div>NUMBER OF PRODUCT BRANDS</div> <div>showrooms</div> <div>111 in 16 countries</div> |
|---|---|---|

Making better homes a reality for everyone, everywhere

|

LIXIL GROUP

A better home is made up of surprisingly simple things – showers and faucets to experience water in new ways; kitchens that unleash creativity; toilets that provide cleanliness and comfort; doors and windows that connect you with the world outside; interiors and exteriors that bring spaces to life; baths to escape in after a long day. We make that possible with pioneering water and housing products. We are proud that our products touch the lives of more than a billion people every day, and believe we have the potential to do so much more.

LIXIL's Purpose is the north star that guides our employees in making decisions and inspires us to become a more agile, entrepreneurial company for sustainable growth. The LIXIL Behaviors are how we engage in our work every day to realize our Purpose. Together, they form the heart of our Corporate Philosophy.


TOSTEM
*American
Standard*

INAX



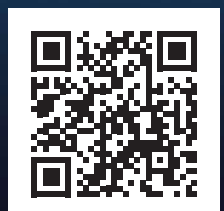
TOSTEM, a leading global brand of windows and doors, is a part of Japan's LIXIL Group. TOSTEM has achieved a significant milestone of 100 years in the industry, marked by its commitment to creating exceptional living spaces that connect people to nature.

The company was founded in 1923 by Takejiro Ushioda as Myokenya Shoten, a wooden fittings retail business, which later expanded to designing and manufacturing aluminum sash windows in 1966. Over the years, TOSTEM has evolved to meet changing customer needs, continuously enhancing the performance and comfort of homes with their durable and high-quality products.

The company's innovations have made a significant impact on the housing industry, with several firsts to their credit.

TOSTEM has now embarked on a new era, where they aim to create responsive window designs that connect people and nature, transforming the art of living inside-out and outside-in.

One Century of Experience.
One Century of Passion.
One Century of Wisdom.





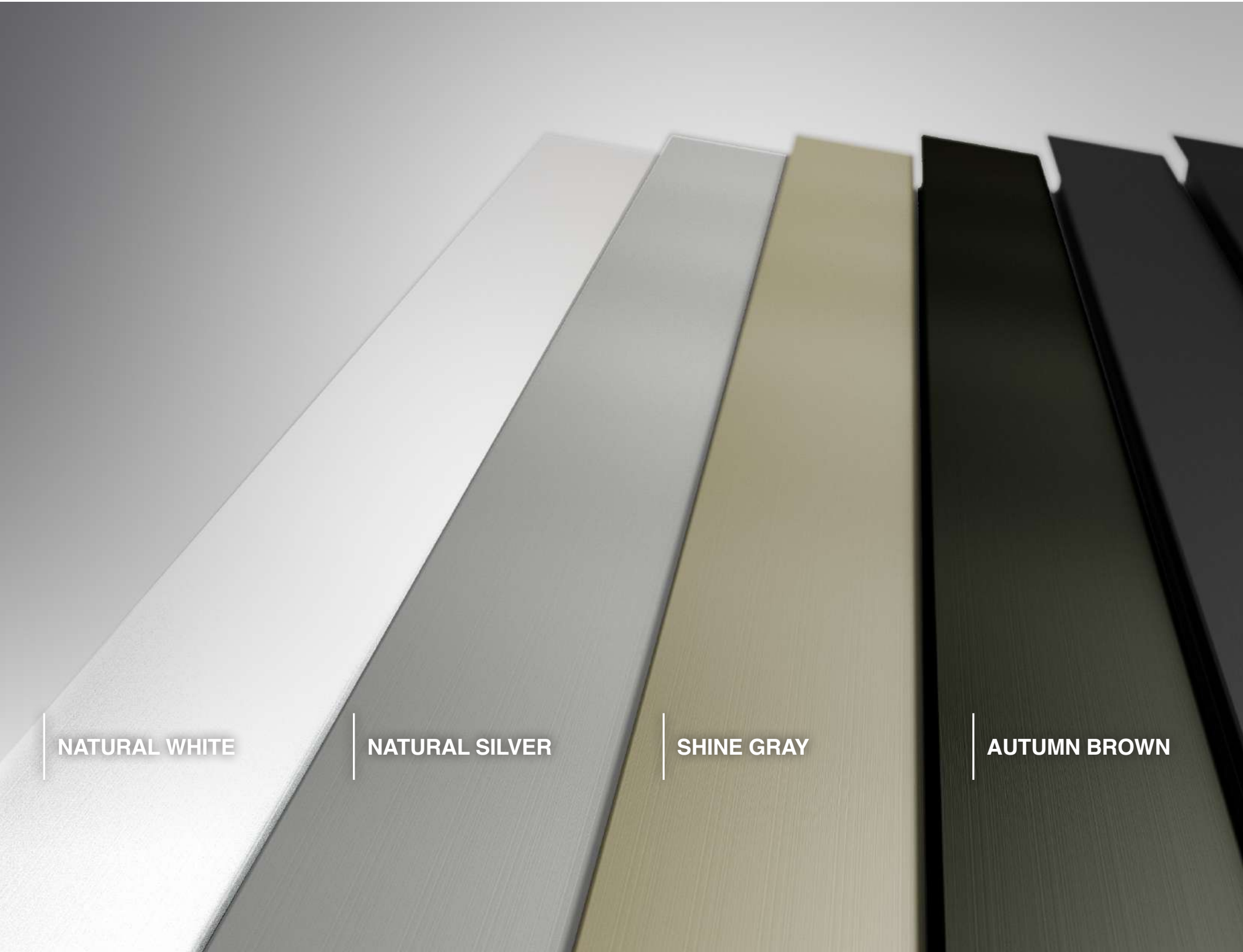
new aluminum color DUSK GRAY

The sun enhancing the scenery, set far away on the horizon. The afterglow of the sky gradually deepens, and the houses blend in with the scenery.

Why is this overlap of ambiguous colors bringing peace of mind? Why we are attracted to the beauty of this color?

Connecting people and nature through windows and doors. Introducing the new color "DUSK GRAY" that blends in and complements your lifestyle.





NATURAL WHITE

NATURAL SILVER

SHINE GRAY

AUTUMN BROWN

Innovation for home & living inspiration.

With people and their better quality of living at our core, we are constantly aware of how they live, by anticipating social change and needs of time. We continually pursue innovation that makes good living a reality for all.

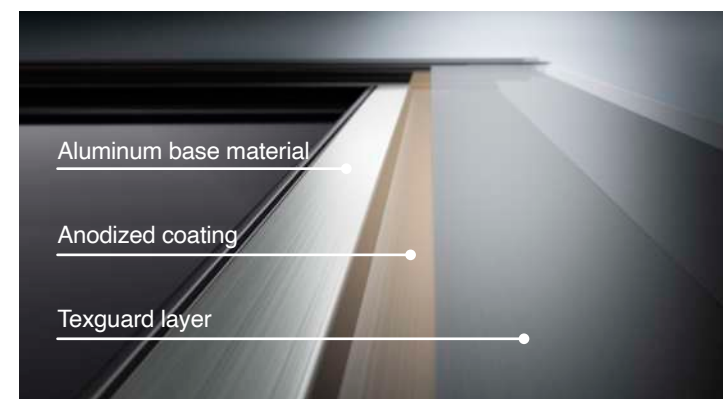
TOSTEM's unique TEXGUARD anodized finish gives a high level of protection, alongside showing the beautiful appearance of natural Aluminum. TOSTEM offers a wide range of color variations, which allows you to enjoy its lifelong beauty, adding happiness to your lifestyle.

BENEFIT OF TEXGUARD

Color retention - TEXGUARD protect the Aluminum against harsh environmental conditions, making the color gloss stay for at least 40 years.

Increased hardness - Dense coating of TEXGUARD improve hardness and provides scratch resistance for the Aluminum surface.

Ease of cleaning - Dust and dirt accumulation resistance quality of TEXGUARD makes the task of cleaning the surface less effort.



DUSK GRAY

NATURAL BLACK

Certification

JIS H 8602: 2010, JIS H 4100: 2015, TIS 218-2520 (1977), TIS 284-2560 (2017), AAMA 612, ISO 9001: 2015, ISO 14001: 2015, ISO 17025: 2018



Design for good living space.

|

We know that home can be and mean so much for people. We design our product to enhance the quality of a space allowing home residents to be connected, to be inspired and to feel comfortable through the harmonious experience to outside.

L-FIT DESIGN

L-Fit is a handle design that “Fits” in with “Living Life.” This standardized design for the handles of windows and entrance doors creates a sense of uniformity and comfort in living space.

L-Fit has been recognized with multiple design awards including the prestigious German Design Award, Red Dot Award, Good Design Award and iF Design Awards.

Experience the perfect combination of design and function with TOSTEM L-Fit.



reddot winner 2022





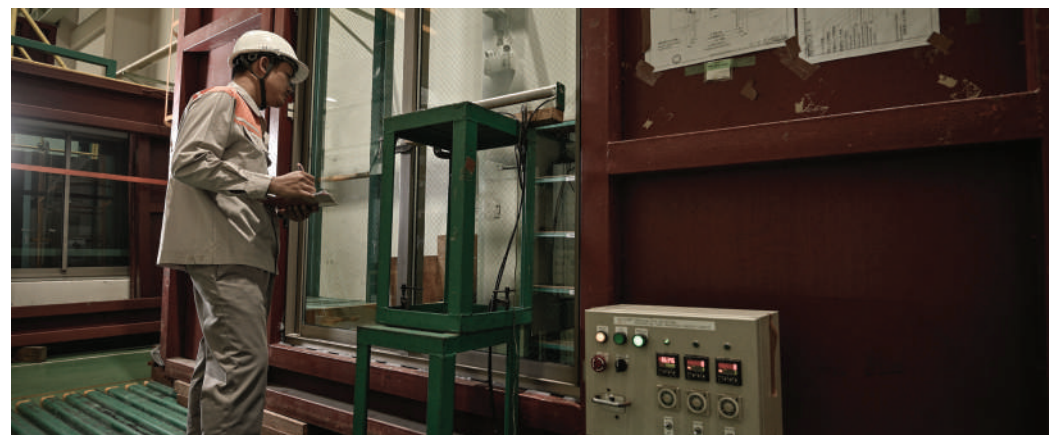
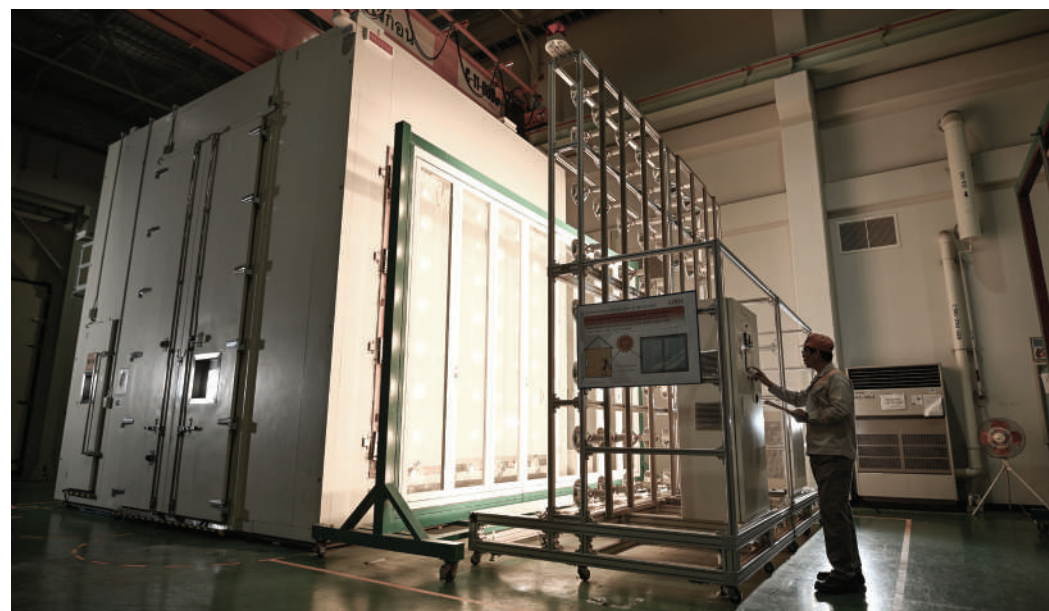
Quality desired by home resident.

|

We consider to ensure quality through the entire process and usage, from the product design development and production. With responsibility and pride, we pursue our production with a commitment to deliver the best quality for all home residents.

QUALITY ASSURANCE

Quality assurance is at the core of TOSTEM's products. Japan is renowned for its rigorous quality control systems, which ensure that products meet international standards such as the Japanese Industrial Standard (JIS) and ASTM International. Tests include water penetration, sound insulation, air leakage, structural performance, durability, environmental, light irradiation, and sunshine weather testing.





PRE-ENGINEERED SYSTEM

TOSTEM's products are designed, manufactured, and assembled using a pre-engineered system that strictly adheres to quality control standards. This system incorporates extrusion dies, aluminum billets, coatings, and hardware assembly processes that are all performed in TOSTEM's factory. The primary advantage of this system is the ability to achieve consistent quality in window production. With just a simple screwdriver, anyone can repeatedly build the same high-quality window system.



1
GIESTA
AIRFLOW



Close



Open

2
AIRFLOW
SLOT
(available for
WE 70)



Close



Open



Harmony with the environment.

We understand the continuous change in nature and climate of the world, the differences in location and space people live in. We exist to create harmony of living through functional performance and aesthetic design, ensuring comfortable living in variety of climates and environment.

TOSTEM AIRFLOW SYSTEM

The perfect solution for a comfortable, harmonious, and safe home. Our high-quality airflow system is designed to provide optimal airflow, reducing indoor pollutants, and ensuring a healthier living space for you and your loved ones. With TOSTEM Airflow System, you can enjoy the benefits of natural ventilation, which helps regulate temperature and humidity levels, reducing the need for artificial cooling systems.

3

AIRFLOW
DOOR



Close



Open

TOSTEM Total Housing Solution

TOSTEM engages in product development, manufacturing, and marketing of a diverse range of home products, such as window sashes, entrance doors, and exterior products. Our product portfolio allows us to provide complete “Lifestyle Solutions” that are flexible, integrated, and coordinated to consumer needs, delivering everyday satisfaction.

ALUMINUM WINDOWS & DOORS

Let our aluminum windows and doors frame your world. Our windows and doors come in a variety of sturdy frames to offer you effortless maintenance, years of satisfied use and of course, a great view.

ENTRANCE DOOR

GIESTA high quality wood-pattern or metallic finish door, equipped with user-friendly handle with high security lock system gives better convenience to both family and visitors and make us feel glad to be home.

ALUMINUM EXTERIOR PRODUCTS

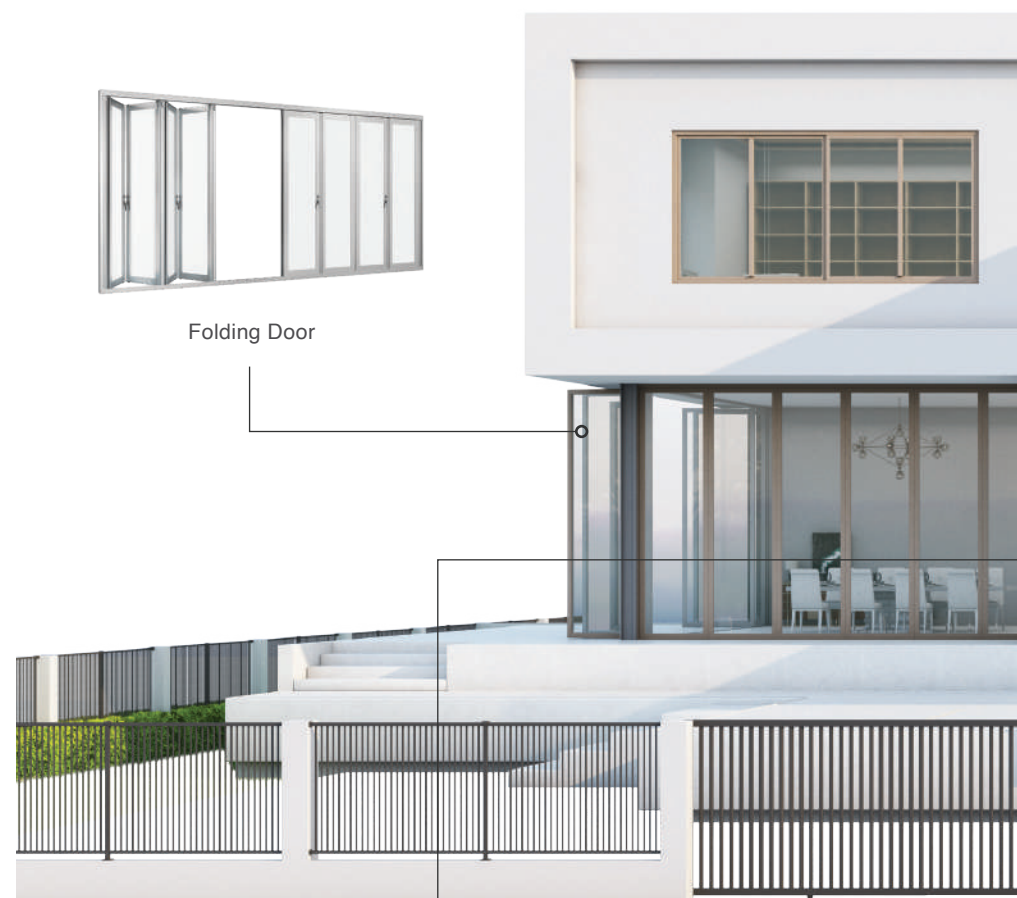
FENCE & GATE is a perfect fencing choice for your residence. Our fence and gate solution will enhance the look, feel and overall value of your property, and provide you with the safety and security that your family needs.

ALUMINUM INTERIOR DOOR

A luxurious and durable choice to divide interior living spaces. Slim design aluminum profiles give a modern accent to your space.



Folding Door



AIRFLOW Door



Interior Series


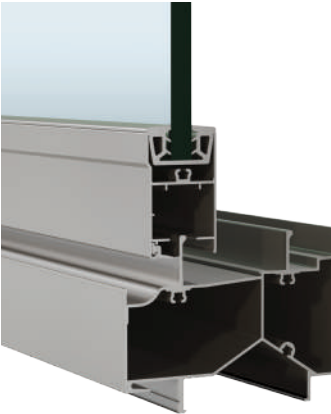

Windows and Doors

Giesta Entrance
Door Series

Aluminum Exterior

TOSTEM

Window and Door Series

| | | FRAME DEPTH, HEIGHT OF SILL |
|------------------|--|--|
| GRANTS SERIES |  | Frame depth : 101.6 / 120 / 178 mm Height of sill : 50 mm |
| | | |
| ATIS SERIES |  | Frame depth : 88 / 131.5 mm Height of sill : 55 mm |
| | | Frame depth : 88 / 131.5 mm Height of sill : 55 mm |
| WE SERIES |  | Frame depth : 72 / 104 mm Height of sill : 35 mm / 50 mm |
| | | Frame depth : 72 / 104 mm Height of sill : 35 mm |
| | | Frame depth : 41 mm Height of sill : 35 mm |

| DESIGN | PERFORMANCE | GLASS APPLICATION |
|--|---|--|
| <div>TraditionalMinimal</div> <div><div></div><div></div><div></div><div></div><div></div></div> | <div>Low-riseHigh-rise</div> <div><div></div><div></div><div></div><div></div><div></div></div> | <div>5 mm (SG)~15mm (LG)~32mm (IGU)</div> <div><div></div><div></div><div></div><div></div><div></div></div> |
| <div>TraditionalMinimal</div> <div><div></div><div></div><div></div><div></div><div></div></div> | <div>Low-riseHigh-rise</div> <div><div></div><div></div><div></div><div></div><div></div></div> | <div>5 mm (SG)~15mm (LG)~32mm (IGU)</div> <div><div></div><div></div><div></div><div></div><div></div></div> |
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GRANTS series

|

MASTERING THE ART OF LIVING SPACE

GRANTS series is designed and engineered to redefine boundary of living space. Unbound the view of the world with panoramic doors. With seamless and innovative designs that allow you to own the breathtaking view of the world.

GRANTS

GRANTS is TOSTEM's flagship series. Its innovative design results in a larger surface area of glass for panoramic views. This takes the standard of Aluminum windows and doors to another level.

SPECIFICATIONS

| | GRANTS | GRANTS FLAT RAIL & CORNER SLIDING DOOR |
|----------------|--|--|
| FRAME DEPTH | 101.6 MM 120 MM (2 TRACKS SLIDING) 178 MM (3 TRACKS SLIDING) | 120 MM (2 TRACKS SLIDING) 178 MM (3 TRACKS SLIDING) |
| HEIGHT OF SILL | 50 MM | |

COLOR



NATURAL WHITE



NATURAL SILVER



SHINE GRAY







AUTUMN BROWN



DUSK GRAY



NATURAL BLACK

| PERFORMANCES | WIND PRESSURE | WATER TIGHTNESS | AIR TIGHTNESS | NOISE INSULATION |
|------------------------|---|---|---|---|
| |  |  |  |  |
| GENERAL GRANTS PRODUCT | 2000PA (ASTM E330) | 300PA (ASTM E300) | 10.7M3/H·M2 (ASTM E283) | T-1: 25DB (JIS) |
| FLAT RAIL SLIDING DOOR | S-1: 500PA (JIS A1515) | W-2: 150PA (JIS A1517) | A-4: 2 (JIS A1516) | T-1: 25DB (JIS) |
| CORNER SLIDING DOOR | S-1: 500PA (JIS A1515) | W-2: 150PA (JIS A1517) | A-4: 2 (JIS A1516) | T-1: 25DB (JIS) |

A PERFECT BALANCE OF LIFE’S PERSPECTIVE



Symmetrical frame design for perfect balance of artistic perspective.



Awning Window



Fixed Window



Casement Window

LESS FOR MORE

Integrated screen system provides less obstructed vision for better view.



Close

Open

Integrated insect screen system combines the best functions to provide obstruction free vision for better view. The insect screen is also designed to be easily removed for maintenance and cleaning.

*For casement and awning window

PERFECT FIT

L-Fit is designed to fit every living style. Create for the most comfort feeling that comes with advanced design and function



GRANTS SERIES

NEW

|

GRANTS

Bonding harmony with the environment, GRANTS Flat Rail Sliding Doors come in vast size up to 4.5 meters high that allow you to own a breathtaking view.



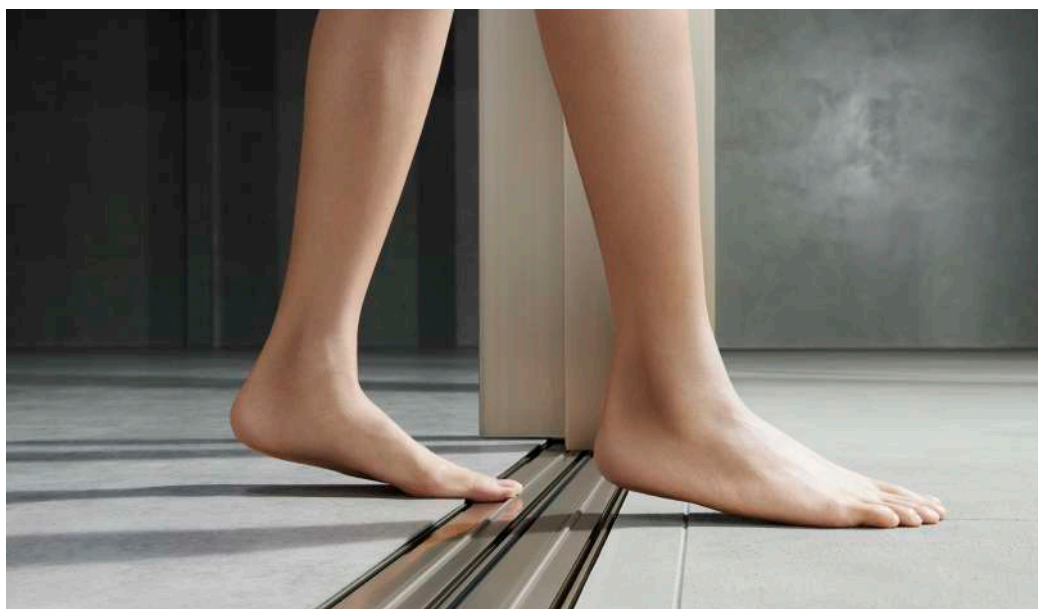
**HEIGHT
UP TO
4.5 METERS**

ABSOLUTE SEAMLESSNESS

Sophisticate design that maximize your view with overlapping design that visually reduce stile by half.

**BUILD FOR BOUNDLESS**

Flat sill rail designed for cleanness and smoothest transition between inside and outside.



GRANTS SERIES

NEW

|

GRANTS CORNER SLIDING DOORS

An innovative solution creates unrestricted panoramic views and the ultimate living space with an open corner



LIMITLESS BEAUTY OF YOUR SPACE.

GRANTS corner sliding doors allow you to open an entire corner of a room to the outside. Perfect for open plan living, maximizing light for spacious space.

GRANTS



Close



Open

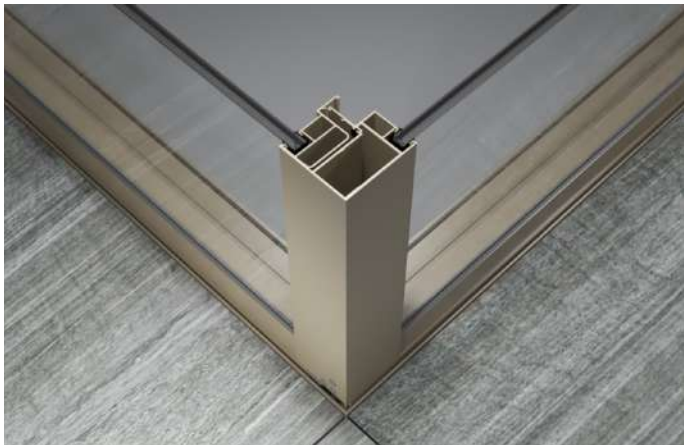
Conventional
(2 slidings+mullion)



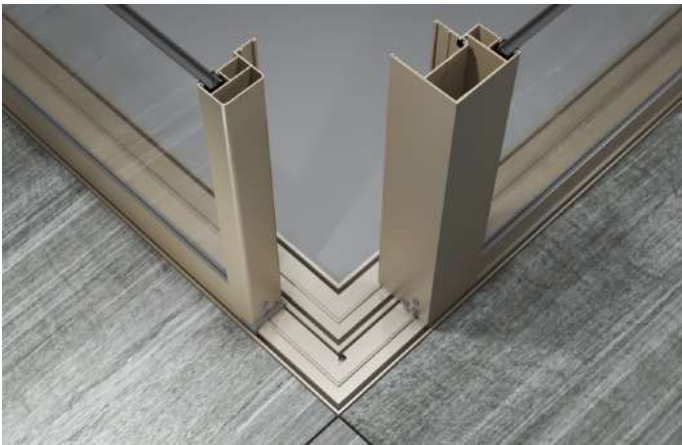
Close



Open



Close



Open

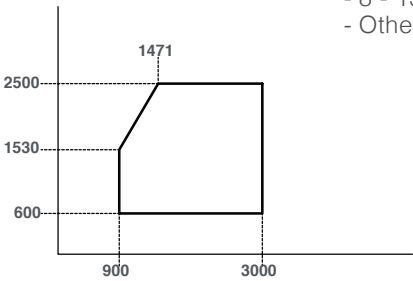
GRANTS

- WINDOW
- DOOR
- OPTION
- MIX

SLIDING WINDOW (2 PANELS ON 2 TRACKS)



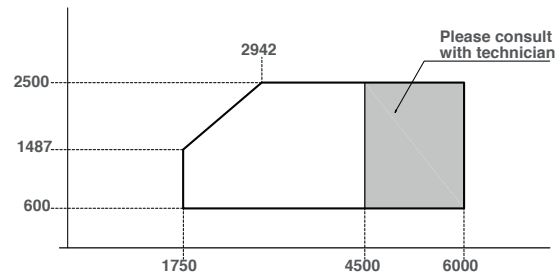
- Handle option
- Select panel position from L/R
- Single slide (L/R) available
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant



SLIDING WINDOW (4 PANELS ON 2 TRACKS)



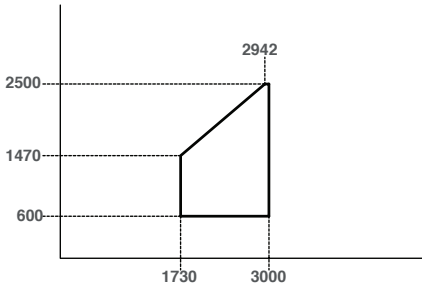
- Handle option
- Select from (SSSS, FSSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant



SLIDING WINDOW (3 PANELS ON 2 TRACKS) SFS



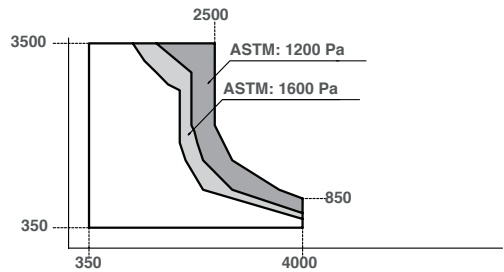
- Handle option
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant



FIXED WINDOW



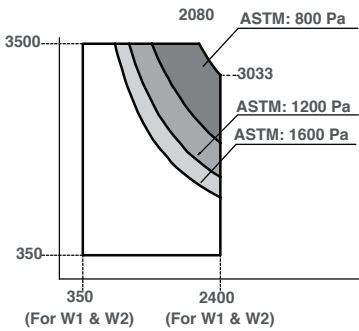
- For oversize fixed windows, please consult with our technician
- Glazing finish
 - 8 - 13.52mm : Glazing bead
 - 25 - 31.52mm : Glazing bead
 - Other glass : Sealant



CORNER FIXED WINDOW



- Only available in SG
- Only available with sealant finish
- Both in/outward corner available



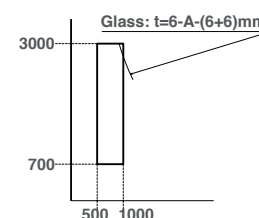
| Inside type | | Outside type | |
|-------------|----|--------------|----|
| Outside | W2 | Outside | W2 |
| Inside | W1 | Inside | W1 |

AWNING WINDOW

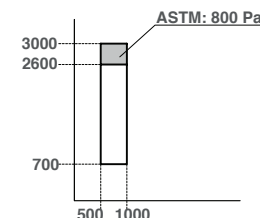


- In case of IG, please consult with our technician for size and performance
- Pleated insect screen available
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - 28 - 31.52mm : Glazing channel
 - Other glass : Sealant

CASEMENT WINDOW (WITH HINGE OR PIVOT)



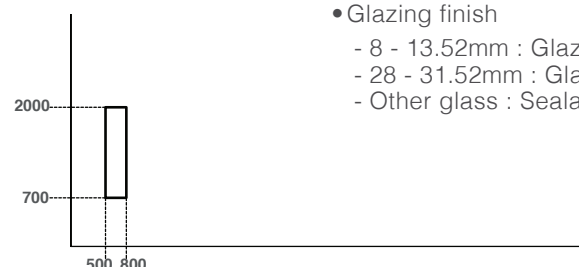
<Hinge type>



<Pivot type>

- Select from L/R
- Pleated insect screen available
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - 28 - 31.52mm : Glazing channel
 - Other glass : Sealant

CASEMENT WINDOW (WITH FRICTION STAY)

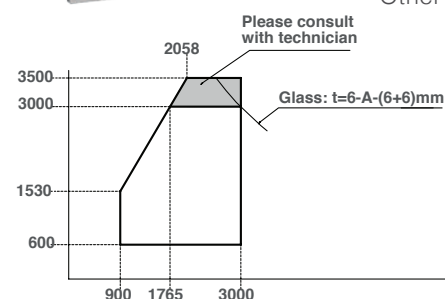


- In case of glass thickness over 8 mm and IG unit please consult with our technician
- Select from L/R
- Pleated insect screen available
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - 28 - 31.52mm : Glazing channel
 - Other glass : Sealant

MIXED & COMBINATION WINDOW

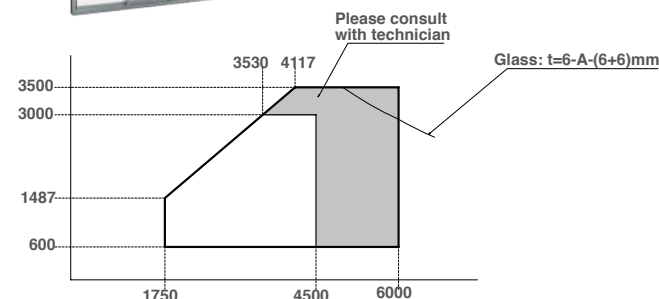
- Mullions are available for various windows and doors, Please consult with our sales representative for selection
- 180° mullion (standard and reinforced)
- 90° mullion (only for outward corner)

SLIDING DOOR (2 PANELS ON 2 TRACKS)



- Handle option
- Select panel position from L/R
- Single slide (L/R) available
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant

SLIDING DOOR (4 PANELS ON 2 TRACKS)



- Handle option
- Select from (SSSS, FSSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant

GRANTS SERIES

SLIDING DOOR (3 PANELS ON 2 TRACKS) SFS



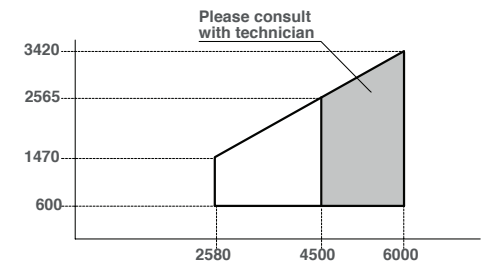
- Handle option
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant



SLIDING DOOR (6 PANELS ON 3 TRACKS)



- Handle option
- Select from (SSSSSS, FSSSSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant



INSECT SCREEN



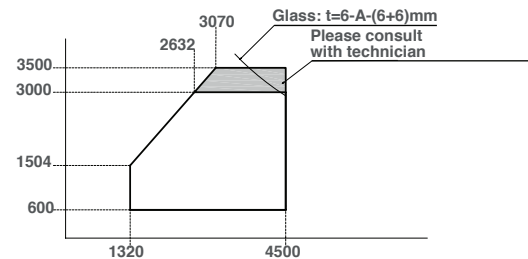
- This insect screen is for awning and casement window



SLIDING DOOR (3 PANELS ON 3 TRACKS)



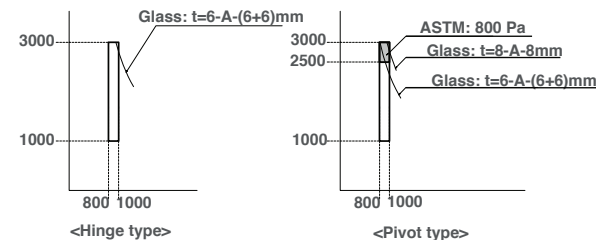
- Handle option
- Select panel position from L/R
- Select from (SSS, FSS, SSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant



OUT-SWING DOOR (SINGLE)



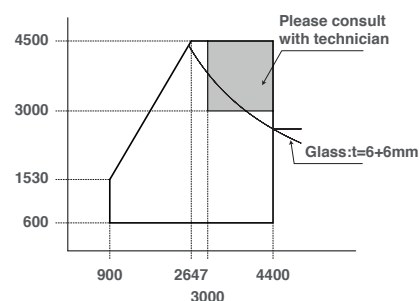
- Pivot hinge option
- Door closer NOT available
- Select from L/R
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - 28 - 31.52mm : Glazing channel
 - Other glass : Sealant



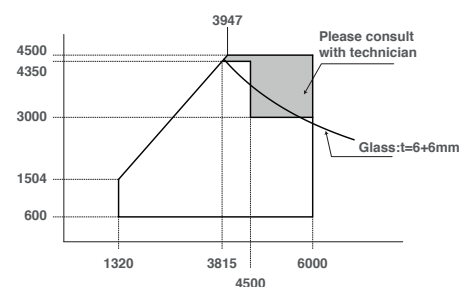
| BOTTOM WINDOWS | TOP WINDOWS | | | |
|--------------------|------------------|--------------------|---------------|---------|
| | Single Awning | Single Casement | Single Fix | Sliding |
| Single Awning | | | • | |
| Single Casement | | | • | |
| Swing Door | | | • | |
| Single Fix | • | • | • | • |
| Double Fix | | | | • |

FLAT RAIL SLIDING DOOR (2 PANELS ON 2 TRACKS)

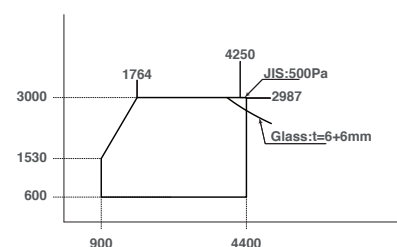
- Handle option
- Select panel position from L/R
- Single slide (L/R) available
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant

**FLAT RAIL SLIDING DOOR (3 PANELS ON 3 TRACKS)**

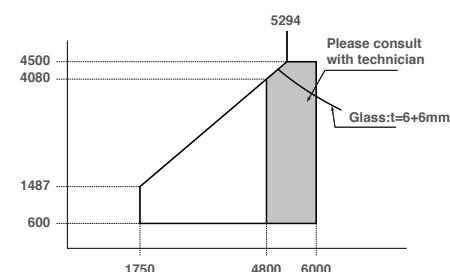
- Handle option
- Select panel position from L/R
- Select from (SSS, FSS, SSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant

**CORNER SLIDING DOOR (2+2 PANELS ON 2 TRACKS)**

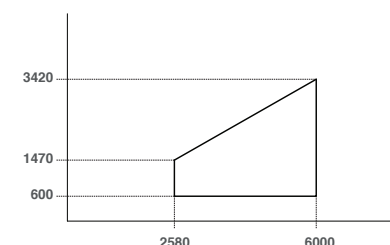
- Outer corner only
- Select from (SS+SS, FS+SF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant

**FLAT RAIL SLIDING DOOR (4 PANELS ON 2 TRACKS)**

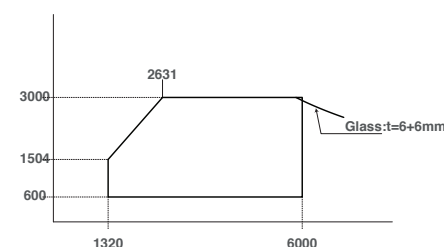
- Handle option
- Select from (SSSS, FSSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant

**FLAT RAIL SLIDING DOOR (6 PANELS ON 3 TRACKS)**

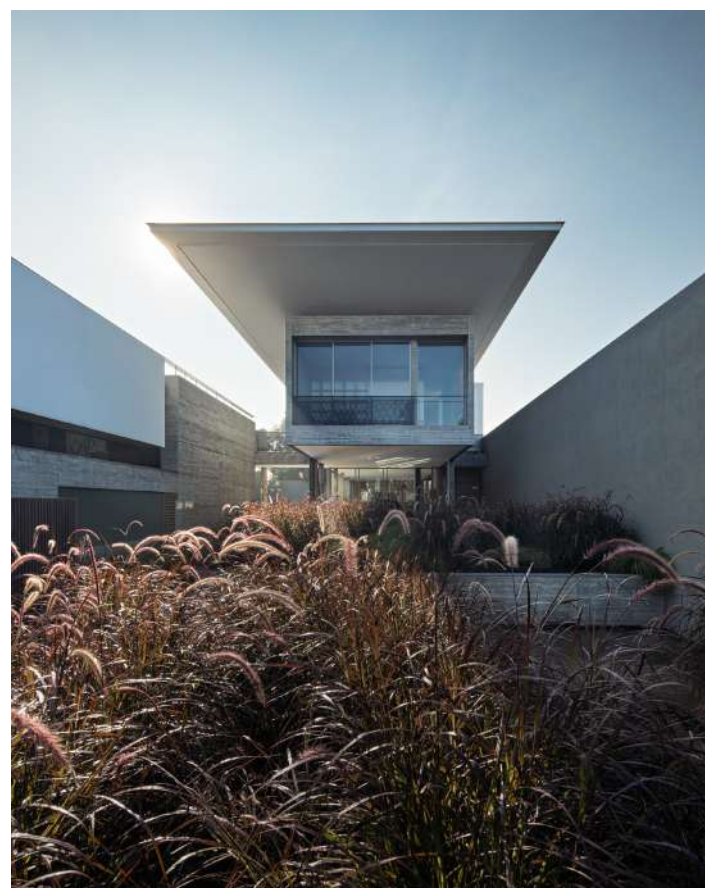
- Handle option
- Select from (SSSSSS, FSSSSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant

**CORNER SLIDING DOOR (3+3 PANELS ON 3 TRACKS)**

- Outer corner only
- Select from (SSS+SSS, FSS+SSF)
- Glazing finish
 - 8 - 13.52mm : Glazing channel
 - Other glass : Sealant







**GRANTS PROJECT
REFERENCE**

PRIVATE HOUSE, INDONESIA









ATIS series

|

**IT IS NOT A WINDOW-FRAME; IT IS
MOVING ART.**

Our end goal is not just window frames.
It is beauty. Because we believe nothing is more
beautiful than life. We invite you to enjoy.



ATIS PLUS

ATIS PLUS offers beautiful windows and doors for your high-rise projects, which has passed rigorous tests based on ASTM and TOSTEM in-house toughness standard.

SPECIFICATIONS

| | |
|-----------------|--|
| FRAME DEPTH | 88 MM 131.5 MM (3 TRACKS SLIDING) |
| HEIGHT OF SILL | 55 MM |
| GLASS THICKNESS | 5,6,8 - 15.52, 22 MM (24, 26 MM FOR FIXED WINDOW) |

COLOR



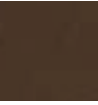
NATURAL
WHITE



NATURAL
SILVER



SHINE
GRAY



AUTUMN
BROWN



DUSK
GRAY



NATURAL
BLACK

PERFORMANCES

WIND
PRESSURE



2000 PA
(ASTM E330)

WATER
TIGHTNESS



300 PA
(ASTM E331)

AIR
TIGHTNESS



10.7M³/H·M²
(ASTM E283)

NOISE
INSULATION



T-1 (25),
T-2 (30)²
(JIS A 1416)

1* Sound performance test has been done in JIS standard controlled environment. Performance will vary by room condition. Please consult with sound insulation specialist.

2* Some specific window types and glasses



SPECIFICATIONS

| | |
|-----------------|---|
| FRAME DEPTH | 88 MM 131.5 MM (3 TRACKS SLIDING) |
| HEIGHT OF SILL | 55 MM |
| GLASS THICKNESS | 5,6,8 - 15.52,22 MM (24, 26 MM FOR FIXED WINDOW) |

ATIS

ATIS is not only esthetically pleasing but has an enormous amount of innovation and technology “build within”. All ATIS products follow the same simple design concept: Seamlessly unites the inside of your home with the outside without taking anything away.



COLOR



NATURAL WHITE



NATURAL SILVER



SHINE GRAY



AUTUMN BROWN



DUSK GRAY



NATURAL BLACK

PERFORMANCES

WIND PRESSURE



S-2 (1200 PA)
(JIS A 1515)

WATER TIGHTNESS



W-3 (250 PA)
(JIS A 1517)

AIR TIGHTNESS



A-4 (2)
(JIS A 1516)

NOISE INSULATION



T-1 (25),
T-2 (30)²
(JIS A 1416)

1* Sound performance test has been done in JIS standard controlled environment. Performance will vary by room condition. Please consult with sound insulation specialist.

2* Some specific window types and glasses

UNIQUE FEATURES

STREAMLINED DESIGN

Seamless design with beautiful
functionality. Smooth lines,
surfaces, and operation.
Works as beautifully as it looks.

CONCEALED HARDWARE



SUB-LOCK



HINGES



BALANCER

* Only available for ATIS series

SLIM MULLION



40 MM MULLION

L-FIT DESIGN HANDLES

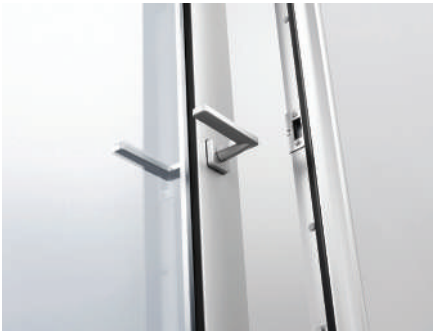


OPERATOR HANDLE

* Only available for ATIS series



CAM-LATCH HANDLE



LEVER HANDLE



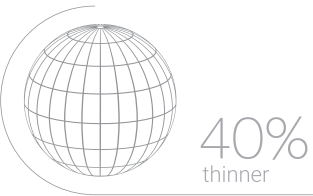
CRESCENT LOCK

SMART INSECT SCREEN



* Only available for ATIS series

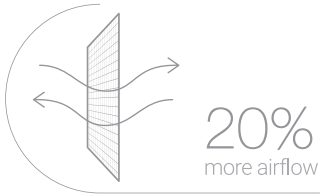
INVISIBLE SCREEN



We use a 40% thinner wire than conventional insect screens. So you get a 20% clearer view.



We have shrunk the space for bugs to squeeze through by 20%, so not even the tiniest gnat can get in.



With more AIRFLOW than conventional insect screens, INVISIBLE SHIELD lets more insect-free AIRFLOW through than any others.

Awning / Casement Window



L-FIT HANDLE



LIMIT ARM FOR SAFETY
(OPTION)



CASEMENT WINDOW
(WITH CAM-LATCH
HANDLE)



CASEMENT WINDOW
(WITH OPERATOR HANDLE)



SMART INSECT SCREEN
SYSTEM



L-FIT DESIGN HANDLE

SLIT WINDOW WITH CHAIN OPERATOR



Specially designed for rooms where you want to keep outside eyes out but let the breeze in.

You can open our slit windows without having to reach up to window height. We help you make the most out of every living area in your home.



Tilt & Slide Window

LOCK DEVICE



SAFETY STOPPER



CONCEALED POWER SUPPORT SYSTEM



SLIDING INSECT SCREEN (OUTSIDE)



CLOSED POSITION



TILTED POSITION



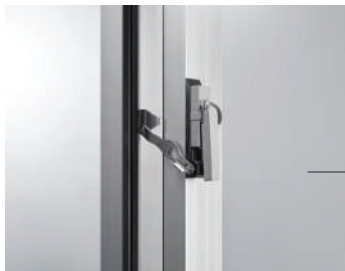
OPENED POSITION



Sliding Window / Door



ALUMINUM PROFILE HANDLE



LIMIT ARM (OPTION)



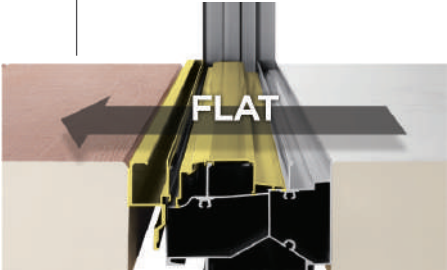
FLAT ATTACHMENT (OPTION)



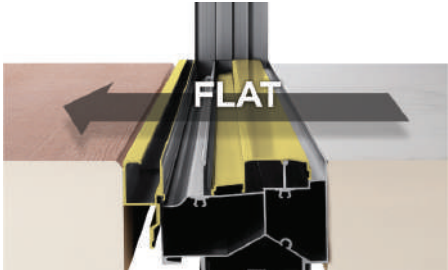
SAFE FOR EVERYONE



DETACHABLE



FOR OUTER RAIL
(OUTER PANEL
FIXED)



FOR INNER RAIL
(INNER PANEL
FIXED)

Swing Door



CONCEALED FRICTION ARM



CONCEALED HINGES



L-FIT DESIGN HANDLE AND LOCK SET

<CONVENTIONAL>

<ATIS>



DOUBLE SWING DOOR WITH MAXIMIZED GLASS AREA (RECOMMENDED FOR LOW-RISE PROJECTS)

ATIS PLUS

- WINDOW
- DOOR
- OPTION
- MIX

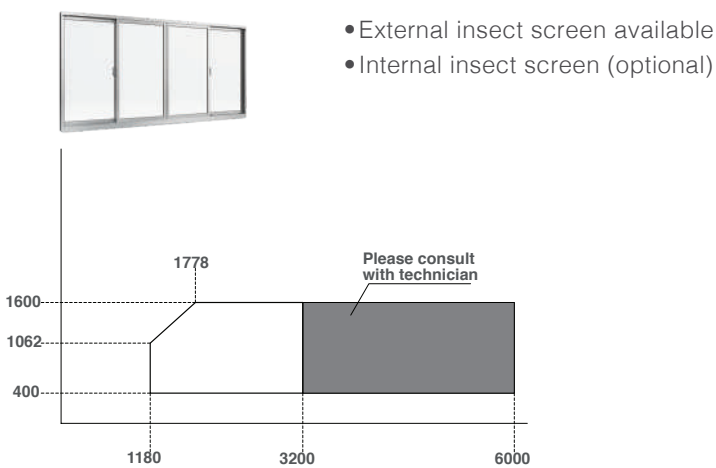
Glazing Channel & Bead availability

Channel : Sliding, Casement, Awning, Swing door, Tilt & Slide

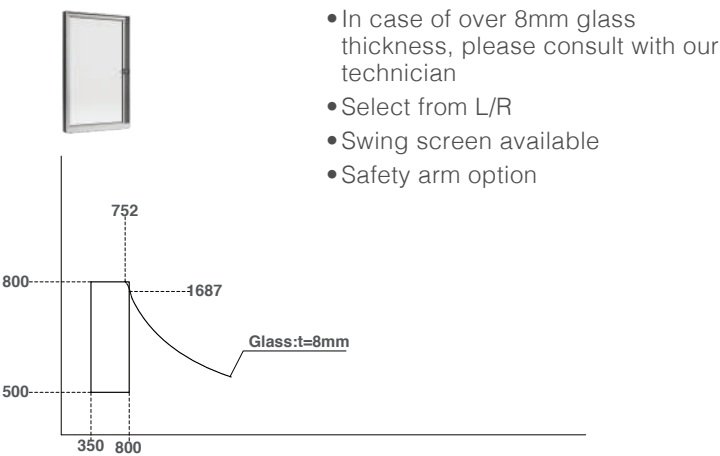
Bead : FIX

| | | | | | | | | |
|---------|-------|-------|----|-------|-------|------|----|-------|
| Type | 5 | 6 | 8 | 8.38 | 8.76 | 9.52 | 10 | 10.38 |
| Channel | O | O | O | O | O | O | O | O |
| Bead | O | O | O | - | - | - | O | O |
| Type | 10.76 | 11.52 | 12 | 13.52 | 15.52 | 22 | 24 | 26 |
| Channel | O | O | O | O | O | O | - | - |
| Bead | O | O | O | O | O | O | O | O |

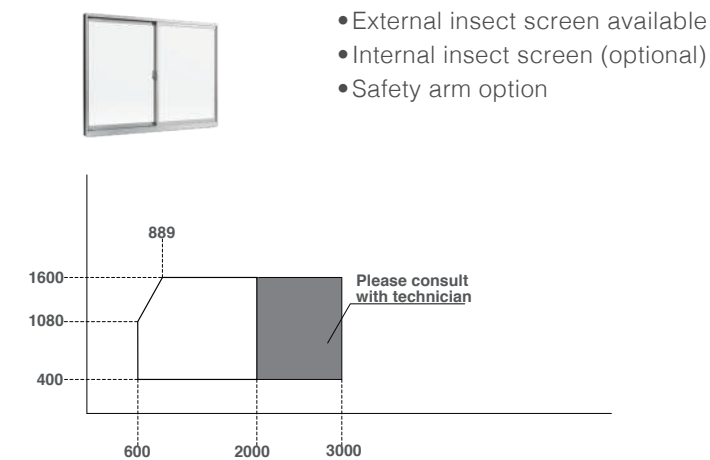
SLIDING WINDOW (4 PANELS ON 2 TRACKS)



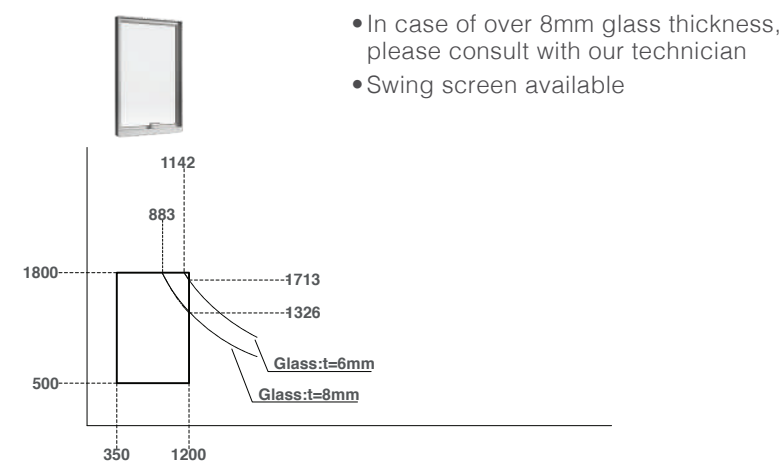
CASEMENT WINDOW (WITH SUBLOCK)



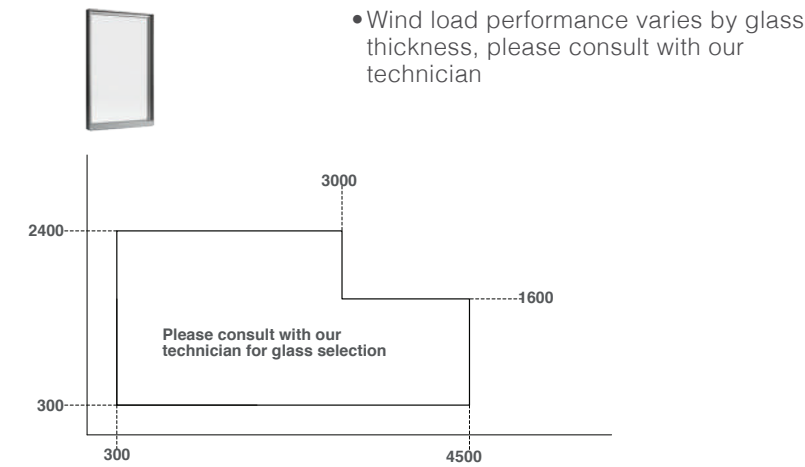
SLIDING WINDOW (2 PANELS ON 2 TRACKS)



AWNING WINDOW (WITH SUBLOCK)



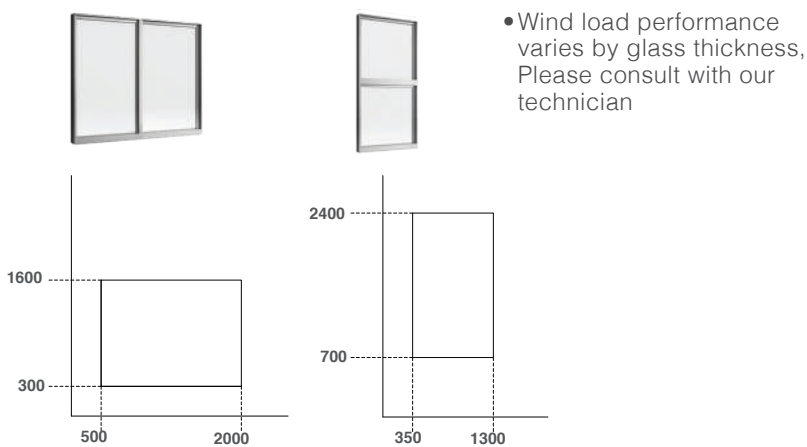
FIXED WINDOW



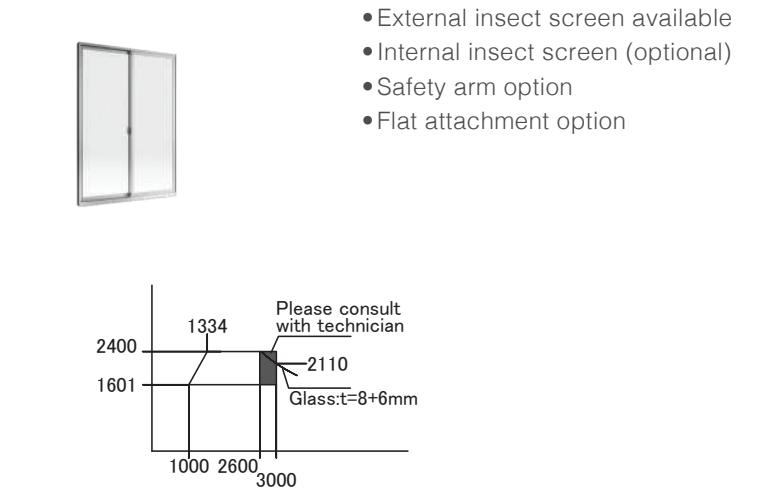
CORNER FIXED WINDOW



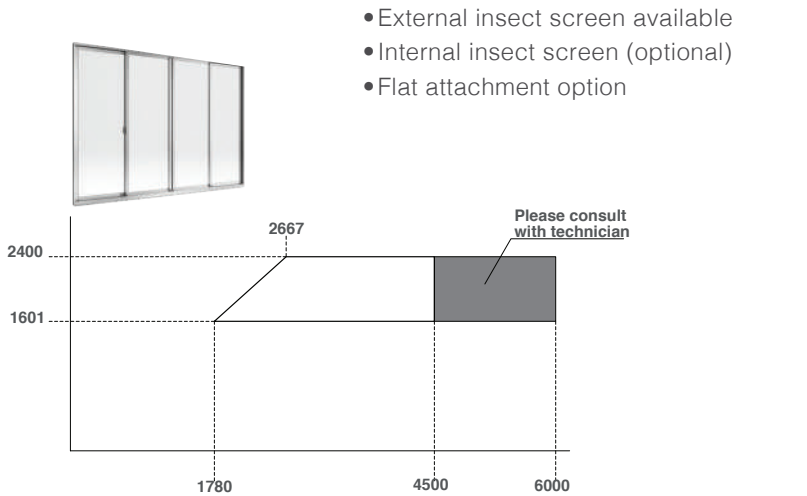
FIX UNIT VARIATION



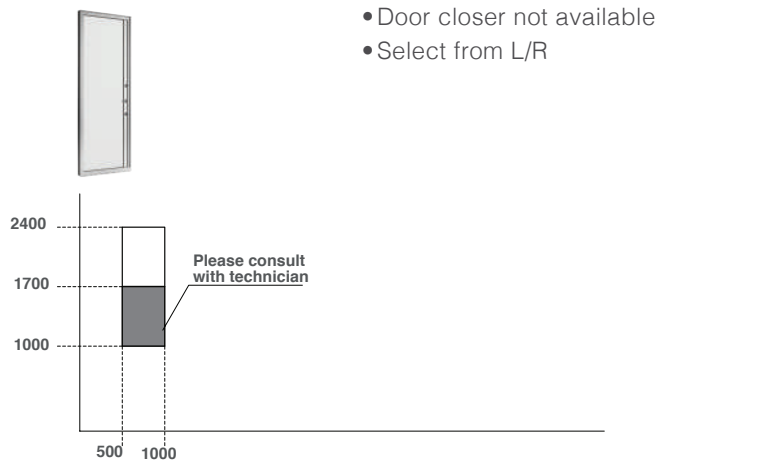
SLIDING DOOR (2 PANELS ON 2 TRACKS)



SLIDING DOOR (4 PANELS ON 2 TRACKS)



OUT-SWING DOOR (SINGLE)



MIXED & COMBINATION WINDOW

- Mullions and Transoms are available for various windows and doors, Please consult with our sales representative for selection 180° mullion (standard and reinforced)

ATIS

- WINDOW
- DOOR
- OPTION
- MIX

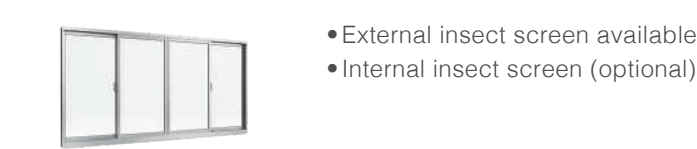
Glazing Channel & Bead availability

Channel : Sliding, Casement, Awning, Swing door, Tilt & Slide

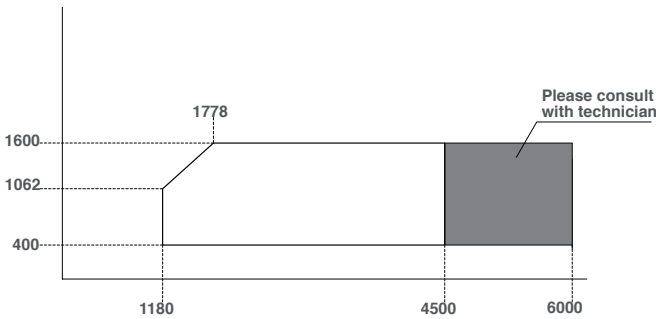
Bead : FIX

| | | | | | | | | |
|---------|-------|-------|----|-------|-------|------|----|-------|
| Type | 5 | 6 | 8 | 8.38 | 8.76 | 9.52 | 10 | 10.38 |
| Channel | O | O | O | O | O | O | O | O |
| Bead | O | O | O | - | - | - | O | O |
| Type | 10.76 | 11.52 | 12 | 13.52 | 15.52 | 22 | 24 | 26 |
| Channel | O | O | O | O | O | O | - | - |
| Bead | O | O | O | O | O | O | O | O |

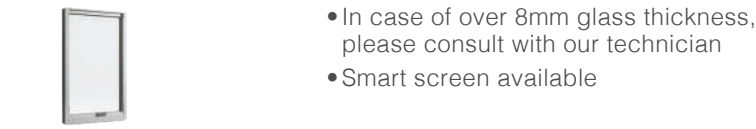
SLIDING WINDOW (4 PANELS ON 2 TRACKS)



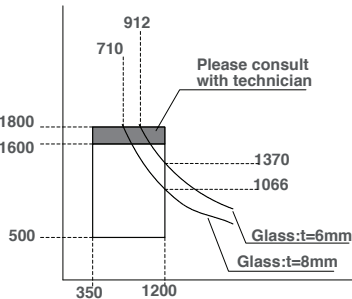
- External insect screen available
- Internal insect screen (optional)



AWNING OPERATOR WINDOW



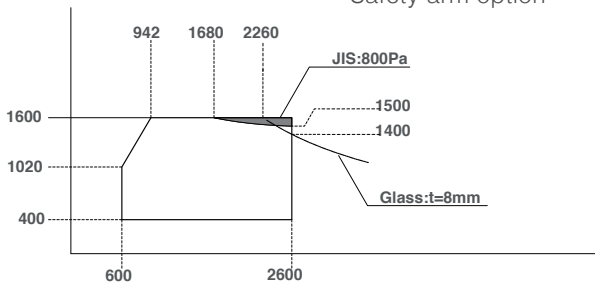
- In case of over 8mm glass thickness, please consult with our technician
- Smart screen available



SLIDING WINDOW (2 PANELS ON 2 TRACKS)



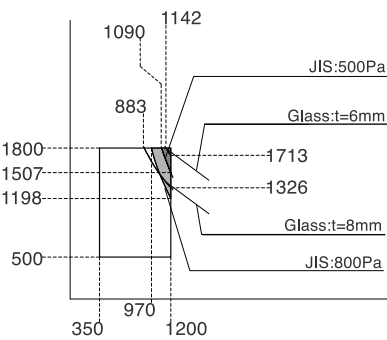
- In case of over 8mm glass thickness, please consult with our technician
- External insect screen available
- Internal insect screen (optional)
- Safety arm option



AWNING WINDOW (SINGLE LOCK)



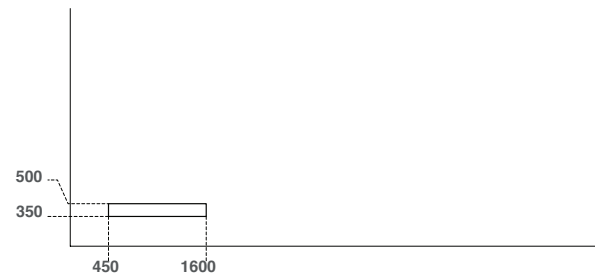
- In case of over 8mm glass thickness, please consult with our technician
- Swing screen available



AWNING SLIT WINDOW



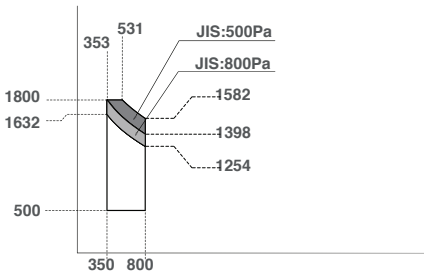
- In case of over 8mm glass thickness, please consult with our technician
- Smart screen available
- Select from Pully chain or orbit handle



CASEMENT WINDOW (SINGLE LOCK)



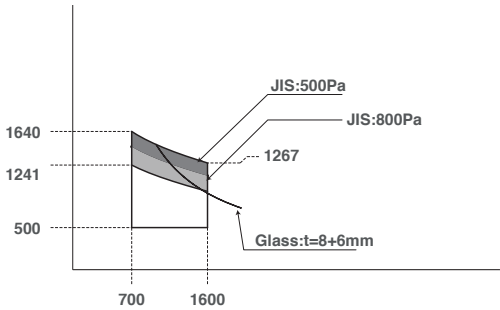
- In case of over 8mm glass thickness, please consult with our technician
- Select from L/R
- Swing screen available
- Safety arm option



DOUBLE CASEMENT WINDOW



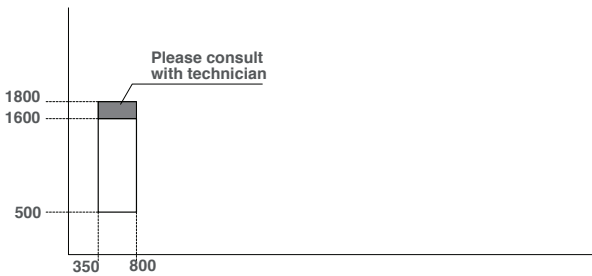
- In case of over 15mm glass thickness, please consult with our technician
- Swing screen available



CASEMENT OPERATOR WINDOW



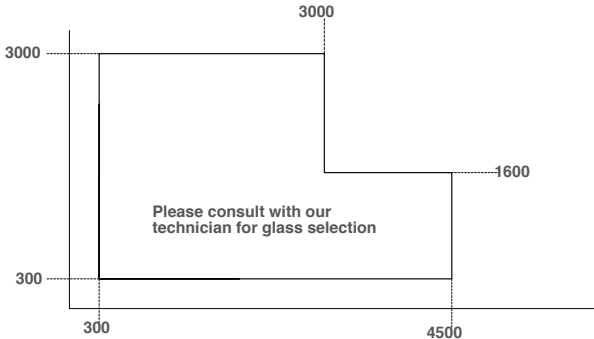
- In case of over 8mm glass thickness, please consult with our technician
- Select from L/R
- Smart screen available
- Safety arm option



FIXED WINDOW



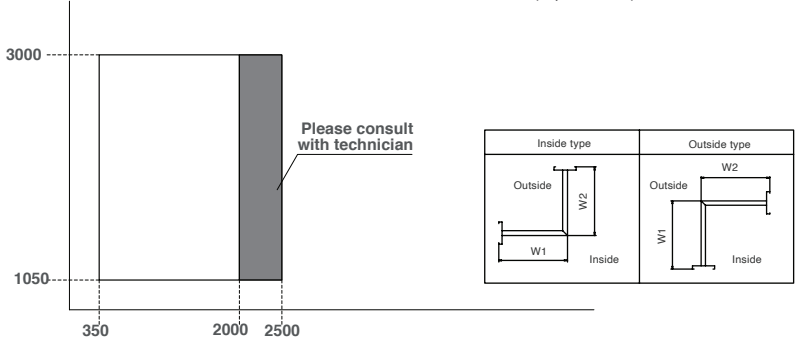
- Wind load performance varies by glass thickness, please consult with our technician



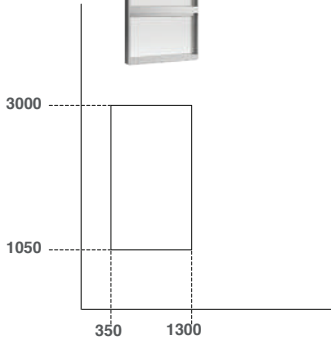
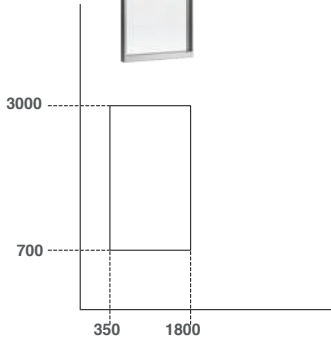
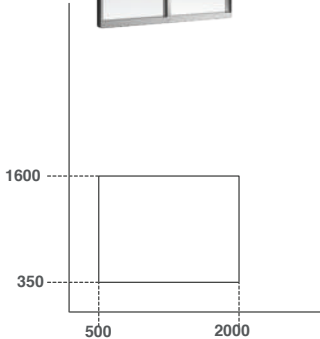
CORNER FIXED WINDOW



- Only available in SG
- Only available with sealant finish
- Both in/outward corner available
- Middle bar (optional)



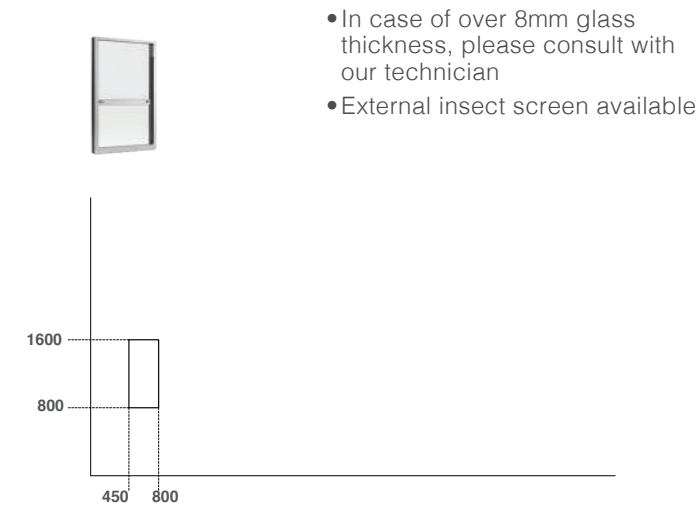
FIX UNIT VARIATION



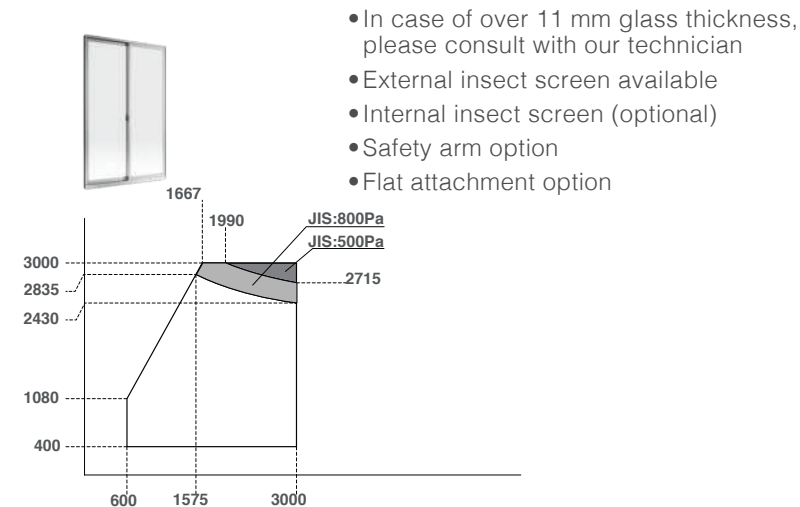
- Wind load performance varies by glass thickness, please consult with our technician

ATIS SERIES

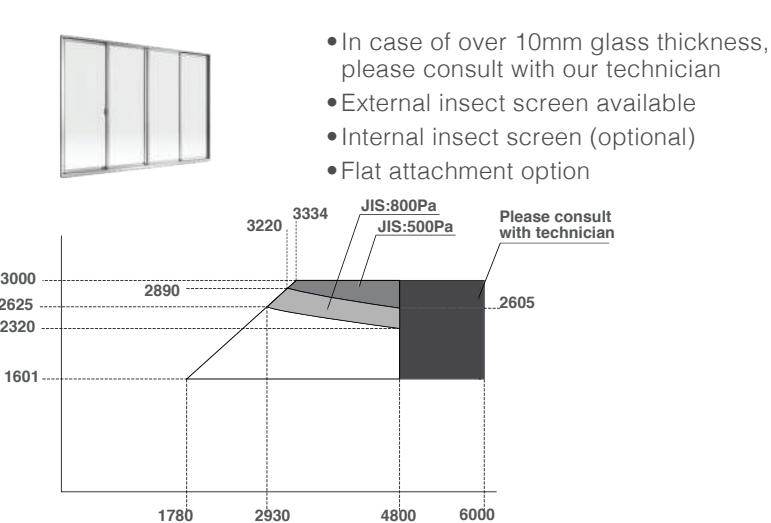
TILT & SLIDE



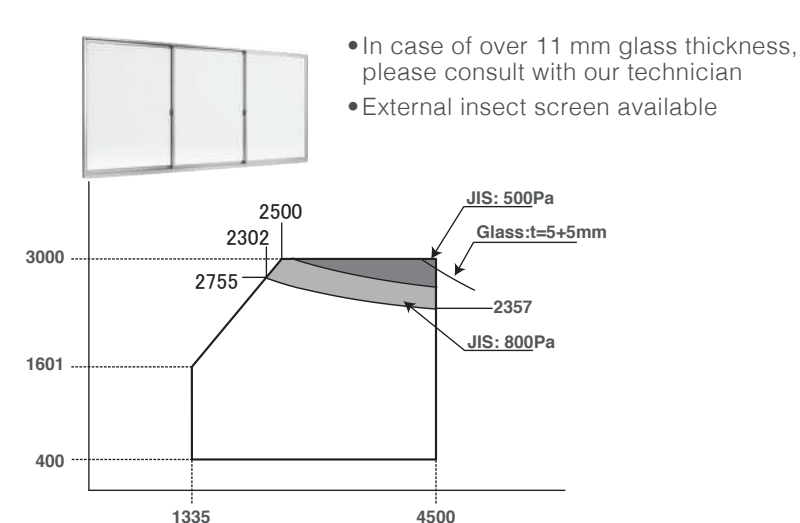
SLIDING DOOR (2 PANELS ON 2 TRACKS)



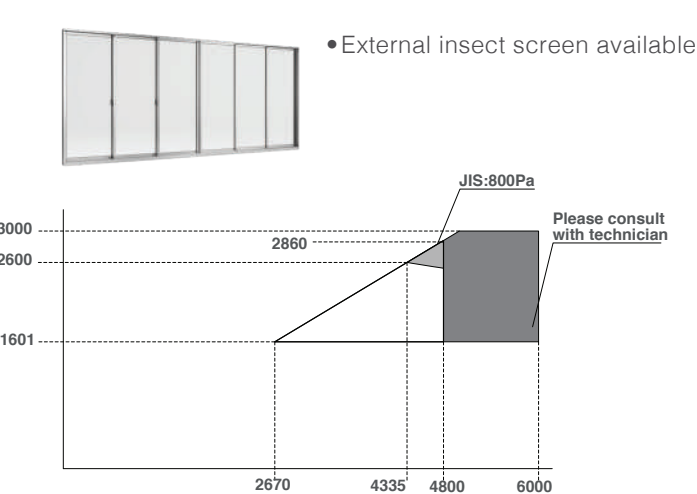
SLIDING DOOR (4 PANELS ON 2 TRACKS)



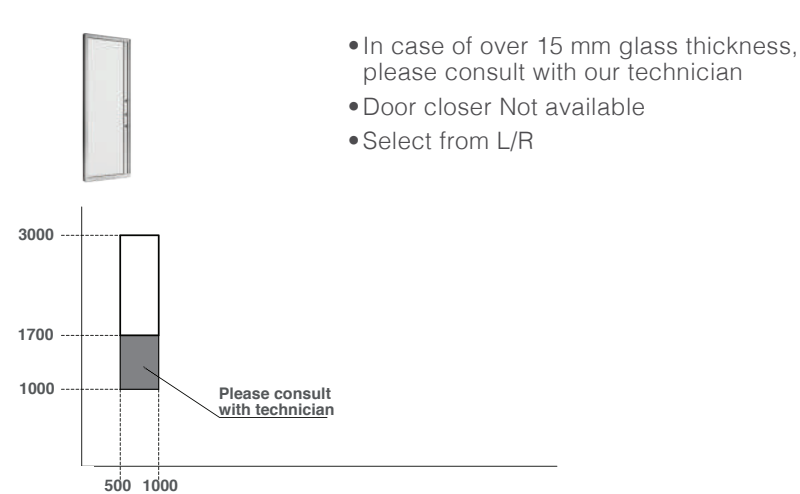
SLIDING DOOR (3 PANELS ON 3 TRACKS)



SLIDING DOOR (6 PANELS ON 3 TRACKS)



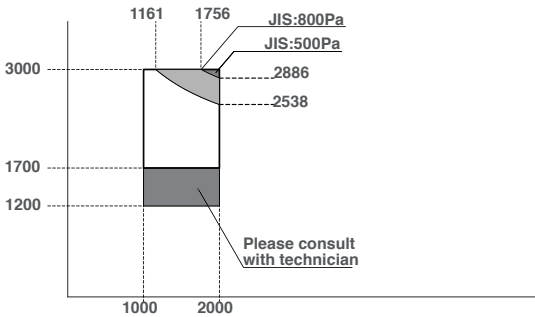
OUT-SWING DOOR (SINGLE)



OUT-SWING DOOR (DOUBLE)



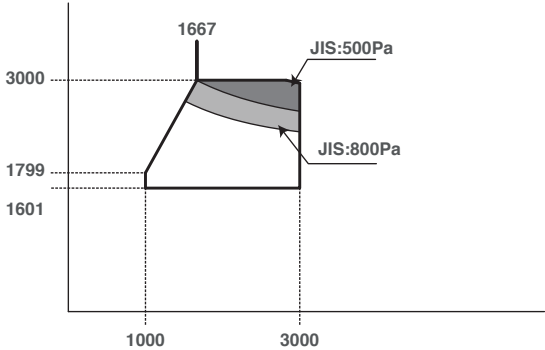
- In case of over 13 mm glass thickness, please consult with our technician
- Door closer Not available
- Select from L/R



ENTRANCE SLIDING DOOR (2 PANELS)



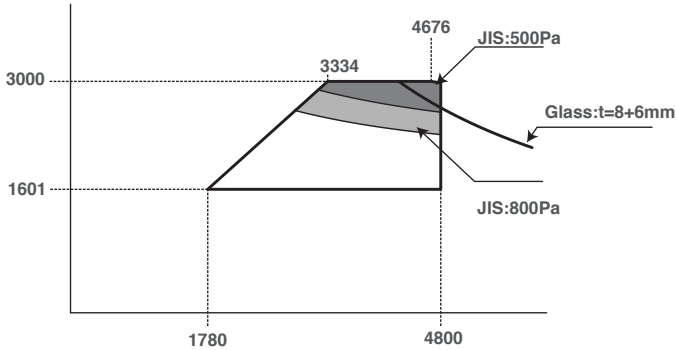
- External insect screen available
- Flat attachment option



ENTRANCE SLIDING DOOR (4 PANELS)



- In case of over 15mm glass thickness, please consult with our technician
- External insect screen available
- Flat attachment option



MIXED & COMBINATION WINDOW

- Mullions and Transoms are available for various windows and doors, Please consult with our sales representative for selection
- 180° mullion (standard and reinforced)
- 90° mullion (only for outward corner)





**ATIS PROJECT
REFERENCE**

PRIVATE HOUSE, THAILAND









WE series

|

Discover Japan's quality and craftsmanship with TOSTEM WE series. Our high-performing products elevate everyday living with superior functionality.

WE series

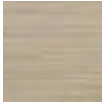
COLOR



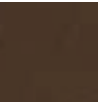
NATURAL WHITE



NATURAL SILVER



SHINE GRAY



AUTUMN BROWN



DUSK GRAY



NATURAL BLACK

WE PLUS

WE PLUS has passed rigorous tests based on ASTM, and TOSTEM in-house’s toughest standards. Available in various designs with a maximum height of 3 meters to satisfy various designers’ needs in high-rise market.



SPECIFICATIONS

| | |
|-----------------|------------------------------------|
| FRAME DEPTH | 72 MM 104 MM (3 TRACKS SLIDING) |
| HEIGHT OF SILL | 35 MM 50 MM (ALL SLIDINGS) |
| GLASS THICKNESS | 5, 6, 8 MM |

PERFORMANCES

| | | | |
|-----------------------|----------------------|---|--------------------|
| WIND PRESSURE | WATER TIGHTNESS | AIR TIGHTNESS | NOISE INSULATION |
| | | | |
| 1600Pa (ASTM E330) | 240Pa (ASTM E300) | 10.7M ³ /H·M ² (ASTM E283) | T-1: 25DB (JIS) |

* Sound performance test has been done in JIS standard controlled environment. Performance will vary by room condition. Please consult with sound insulation specialist.

WE 70

WE 70 series brings legendary TOSTEM quality to everyday life. Built for the mass market, yet maintaining strict quality standards. The WE 70 series is priced within everyone’s reach.



SPECIFICATIONS

| | |
|-----------------|------------------------------------|
| FRAME DEPTH | 72 MM 104 MM (3 TRACKS SLIDING) |
| HEIGHT OF SILL | 35 MM |
| GLASS THICKNESS | 5, 6, 8 MM |

PERFORMANCES

| | | | |
|-----------------------------|-----------------------------|--------------------------|--------------------------|
| WIND PRESSURE | WATER TIGHTNESS | AIR TIGHTNESS | NOISE INSULATION |
| | | | |
| S-1 (800PA) (JIS A 1515) | W-2 (150PA) (JIS A 1517) | A-3 (10) (JIS A 1516) | T-1 (25) (JIS A 1416) |

* Sound performance test has been done in JIS standard controlled environment. Performance will vary by room condition. Please consult with sound insulation specialist.

WE 40

WE 40 series, windows bring legendary TOSTEM quality to everyday life. Built for the mass market, they maintain strict quality standards.



SPECIFICATIONS

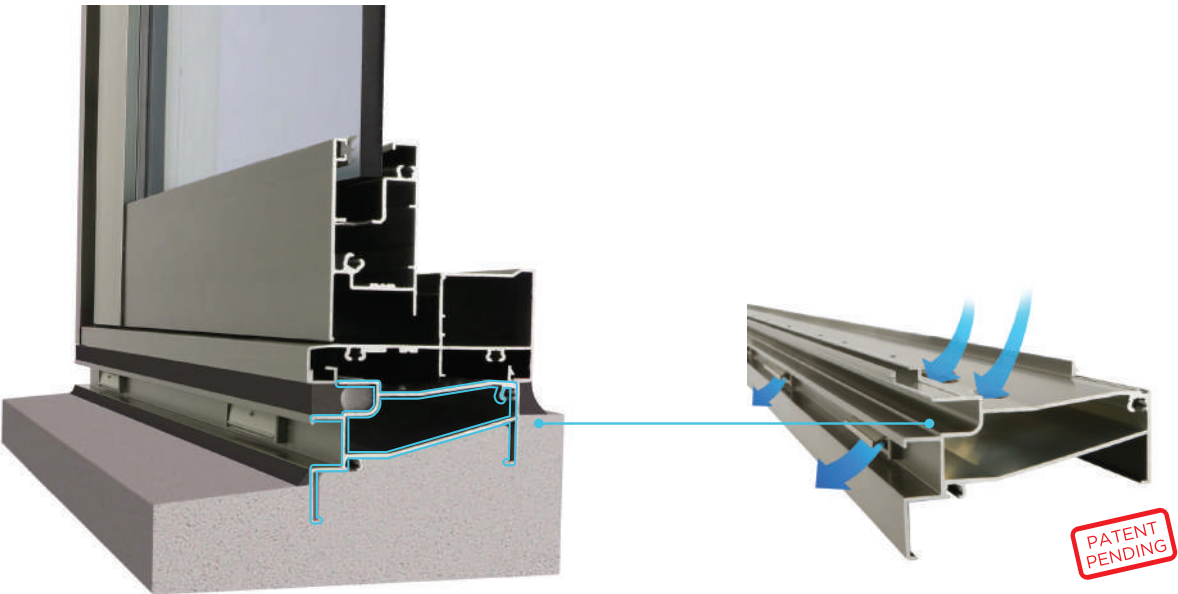
| | |
|-----------------|---------|
| FRAME DEPTH | 41 MM |
| HEIGHT OF SILL | 35 MM |
| GLASS THICKNESS | 5, 6 MM |

PERFORMANCES

| | | | |
|-------------------------|-----------------------------|--------------------------|---------------------|
| WIND PRESSURE | WATER TIGHTNESS | AIR TIGHTNESS | NOISE INSULATION |
| | | | |
| (500PA) (JIS A 1515) | W-1 (100PA) (JIS A 1517) | A-3 (10) (JIS A 1516) | N/A (JIS A 1416) |

* Sound performance test has been done in JIS standard controlled environment. Performance will vary by room condition. Please consult with sound insulation specialist.

UNIQUE FEATURES



PRE-INSTALLED SILL ATTACHMENT FOR PRE-CAST CONCRETE (OPTION)

Attachment allows stability around windows for a longer time against the aged deterioration of a sealant. In case of water entry from outside sealant, attachment prevents water from penetrating inside.

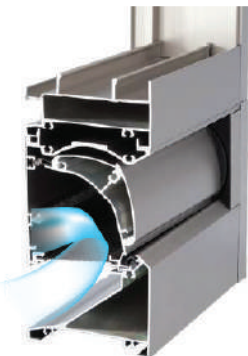
* Only available for WE PLUS

watertight sill with drainage devices

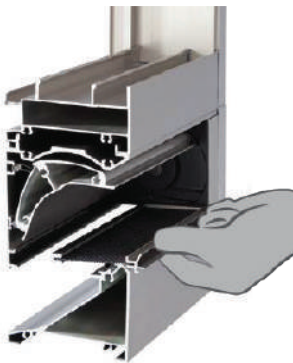
AIRFLOW SLOT



Smooth operation
with bearing rollers



Air tightness:
JIS A-3 when
closed



Detachable
insect screen for
cleaning

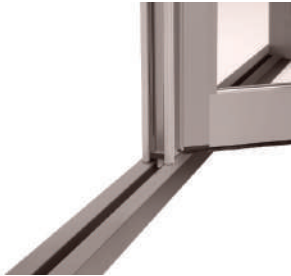
* Available with all windows



UNIQUE FEATURES



Watertight sill with drainage system



Flat sill is available and allows barrier-free passage



Smart designs prevent finger injuries



Hinge-less design

PRODUCT VARIETY (INSIDE VIEW)

| PANELS | ONE WAY | BOTH WAYS | CENTER |
|-----------|---------|-----------|--------|
| 4 PANELS | | | |
| 6 PANELS | | | |
| 8 PANELS | | | |
| 12 PANELS | | | |
| 16 PANELS | | | |

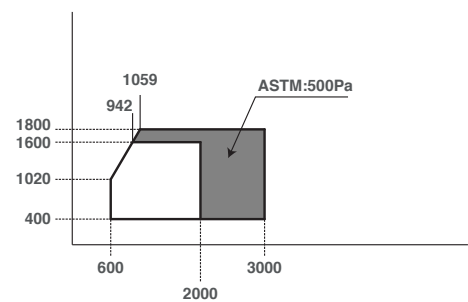
WE PLUS

- WINDOW
- DOOR
- OPTION
- MIX

SLIDING WINDOW (2 PANELS ON 2 TRACKS)



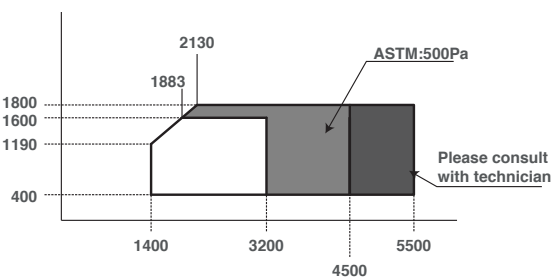
- Inside insect screen available



SLIDING WINDOW (4 PANELS ON 2 TRACKS)



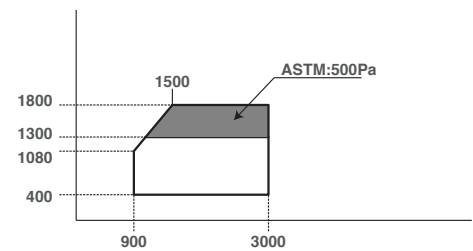
- Inside insect screen available



SLIDING WINDOW (3 PANELS ON 3 TRACKS)



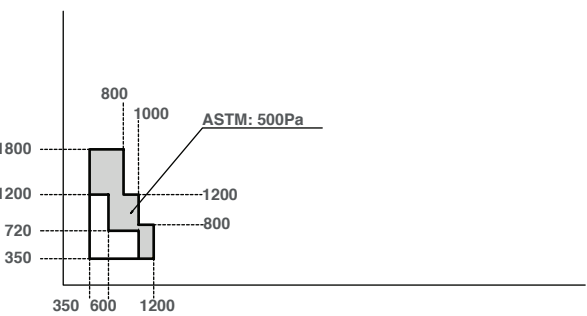
- Inside insect screen available



AWNING WINDOW (SINGLE LOCK)



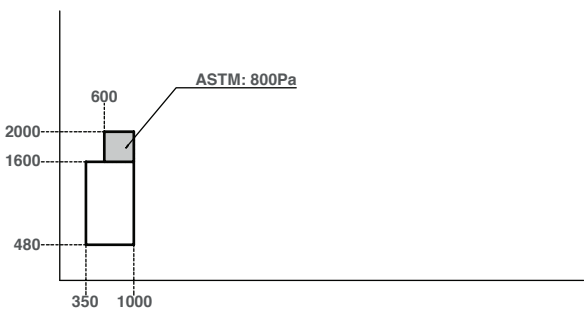
- Insect screen available



AWNING WINDOW (MULTI LOCK)



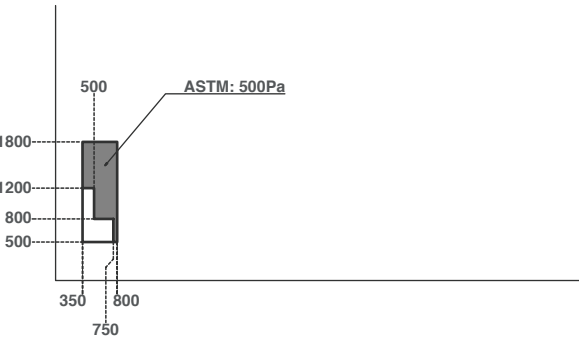
- Insect screen NOT available



CASEMENT WINDOW (SINGLE LOCK)



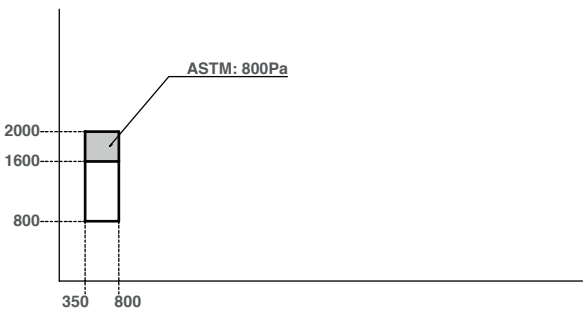
- Insect screen available
- Select from L/R
- Safety arm (Optional)



CASEMENT WINDOW (MULTI LOCK)



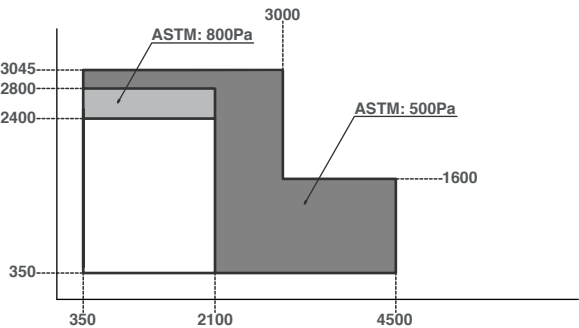
- Insect screen NOT available
- Select from L/R
- Safety arm (Optional)



FIXED WINDOW



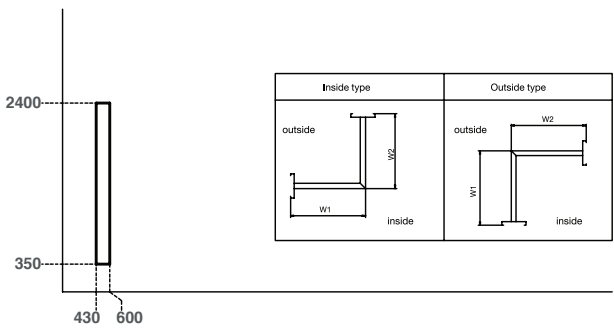
- Wind load performance varies by glass thickness, please consult with our technician



CORNER FIXED WINDOW



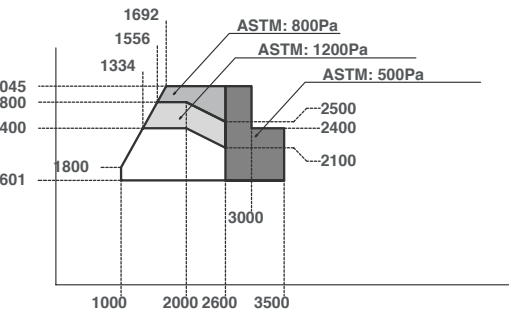
- Available only in outward corner
- Middle bar (optional)



SLIDING DOOR (2 PANELS ON 2 TRACKS)



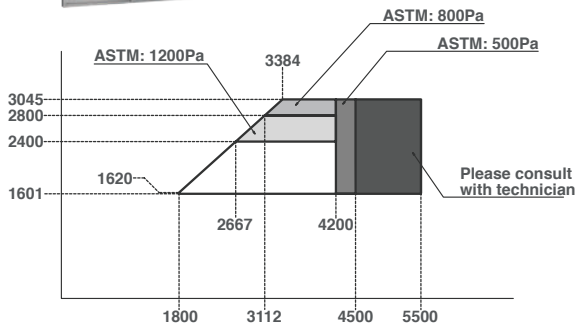
- Sill options (standard & floor finish)
- Inside insect screen available



SLIDING DOOR (4 PANELS ON 2 TRACKS)



- Sill options (standard & floor finish)
- Inside insect screen available

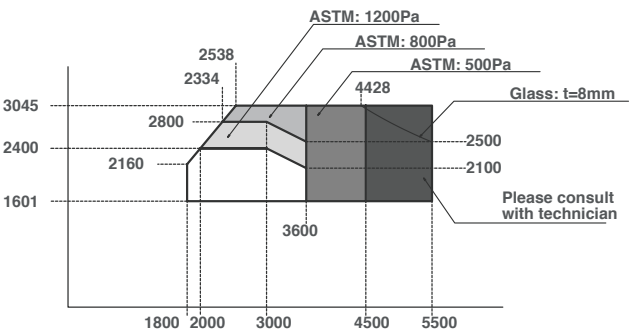


WE SERIES

SLIDING DOOR (3 PANELS ON 3 TRACKS)

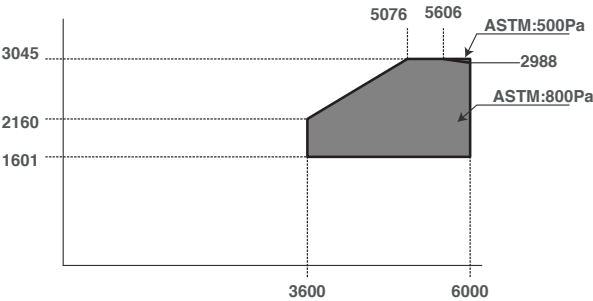


- Sill options (standard & floor finish)
- Inside insect screen available



SLIDING DOOR (6 PANELS ON 3 TRACKS)

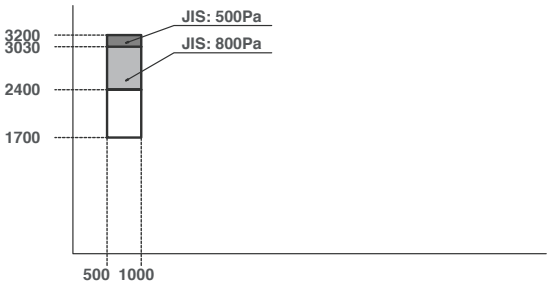
- Sill options (standard & floor finish)
- Inside insect screen available



OUT – SWING DOOR (SINGLE)



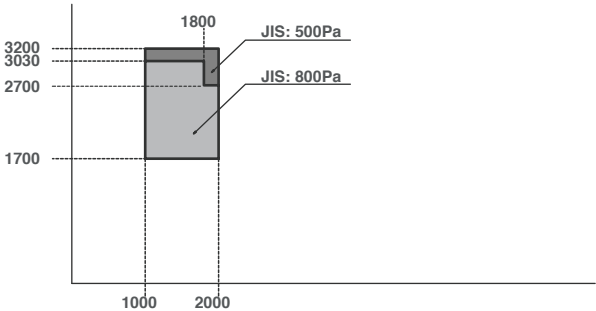
- Select from L/R
 - Sill option (with/without sill)
 - Door closer (optional)
- * in case of non-sill, no air and water performance determined



OUT-SWING DOOR (DOUBLE)



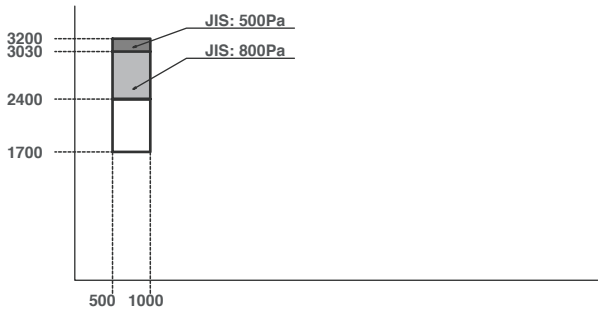
- Select from L/R
 - Sill option (with/without sill)
 - Door closer (optional)
- * in case of non-sill, no air and water performance determined



IN-SWING DOOR (SINGLE)



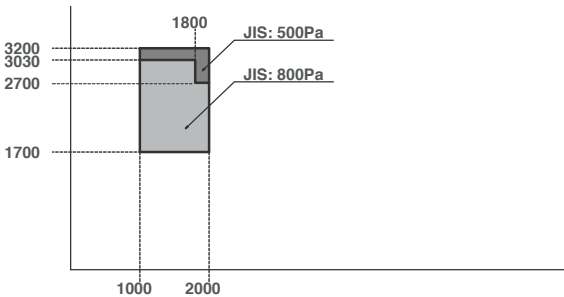
- Select from L/R
- Door closer (optional)
- Only available with Non-sill
- No water & air-tightness performance determined



IN-SWING DOOR (DOUBLE)



- Select from L/R
- Door closer (optional)
- Only available with Non-sill
- No water & air-tightness performance determined



MIXED & COMBINATION WINDOW

- Mullions and transoms are available for each windows and doors, Please consult with our sales representative for selection
- 180° mullion (standard and reinforced)
- 90° mullion (only for outward corner)
- Transom (standard and reinforced)

UNIT WINDOWS

| Bottom Windows | Top Windows | | |
|-----------------|---------------|-----------------|-------------|
| | Single Awning | Single Casement | 1 Panel Fix |
| SINGLE AWNING | | | • |
| SINGLE CASEMENT | | | • |
| 1 PANEL FIX | • | • | • |

WE 70

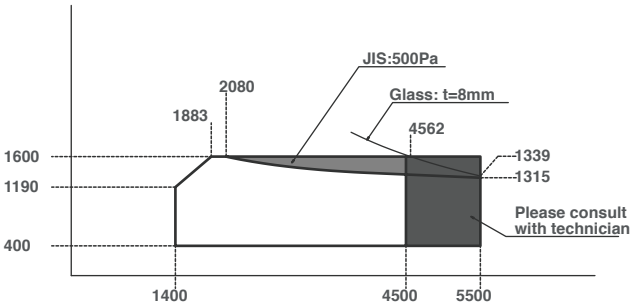
- WINDOW
- DOOR
- OPTION
- MIX

- Airflow slots are available for windows only
- Windows on top of airflow slot shall be less than 25Kg.
- Maximum length of airflow slot is 1500mm
(For windows wider than 1500mm, use 2 or 3 airflow slots)

SLIDING WINDOW (4 PANELS ON 2 TRACKS)



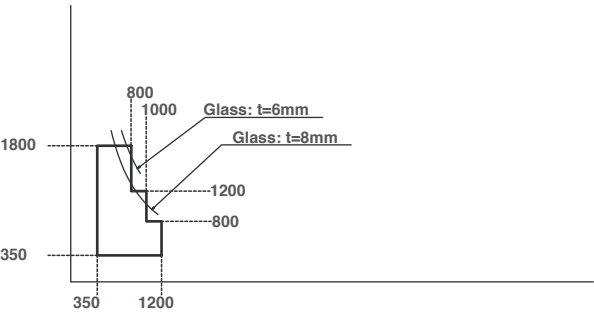
- Internal insect screen available
- External insect screen available with a special order



AWNING WINDOW



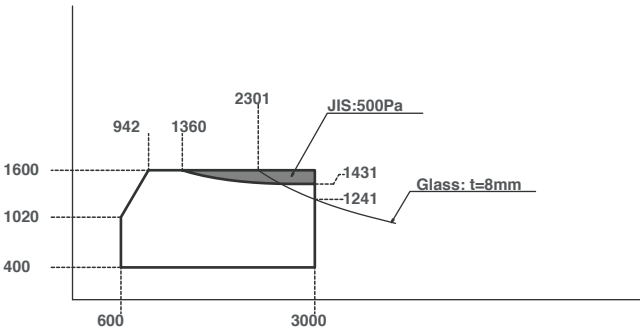
- Insect Screen available



SLIDING WINDOW (2 PANELS ON 2 TRACKS)



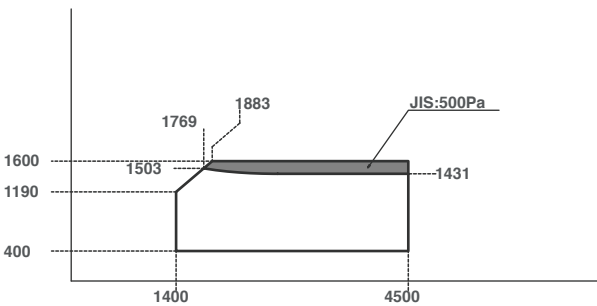
- Internal insect screen available
- External insect screen available with a special order
- Single sliding available (L/R)



SLIDING WINDOW (3 PANELS ON 2 TRACKS) SFS



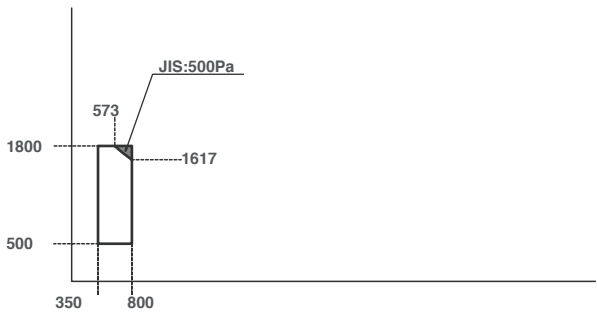
- Internal insect screen available
- External insect screen available with a special order



CASEMENT WINDOW



- Select from L/R
- Insect screen available

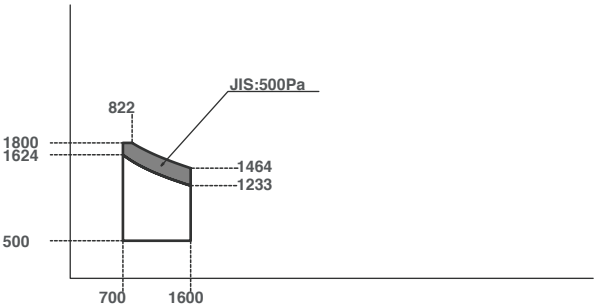


WE SERIES

DOUBLE CASEMENT WINDOW



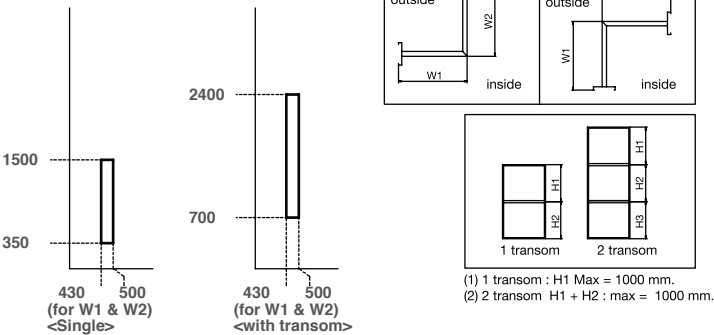
- Insect Screen available



CORNER FIXED WINDOW



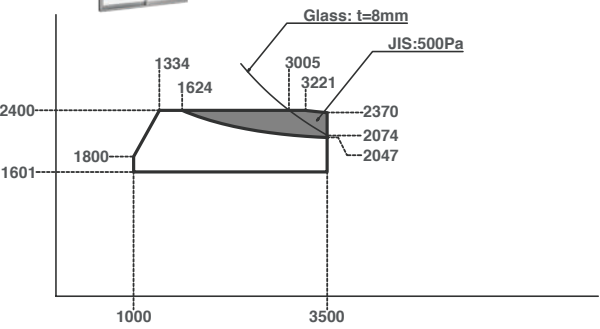
- Both In/outward corner available
- Middle bar (optional)



SLIDING DOOR (2 PANELS ON 2 TRACKS)



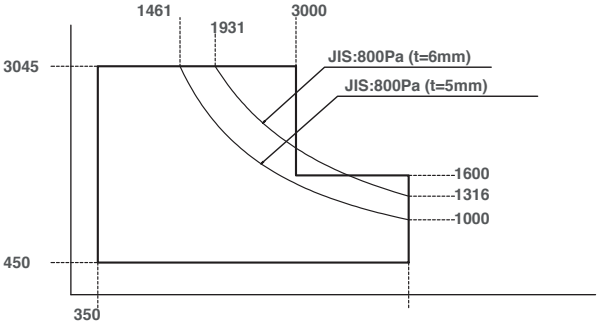
- Sill options (standard & floor finish)
- Single sliding available (L/R)
- Insect screen available (internal)



FIXED WINDOW



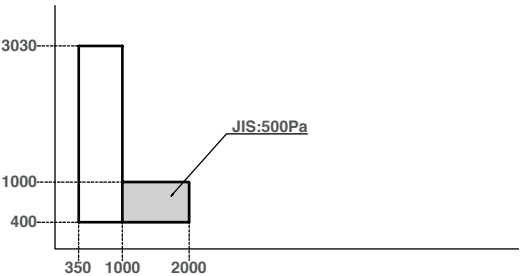
- Up to 4 fixed windows with unitized mullion
- Wind load performance varies by glass thickness Please consult with our technician



ALUMINUM LOUVER



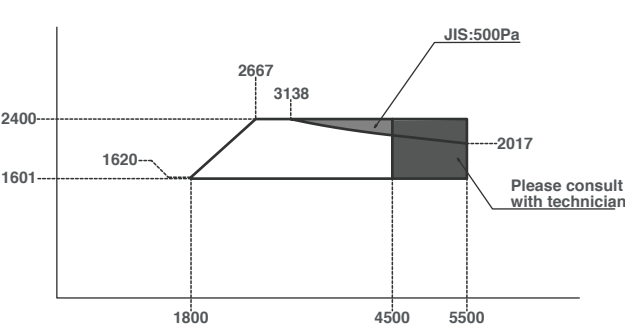
- No performance determined



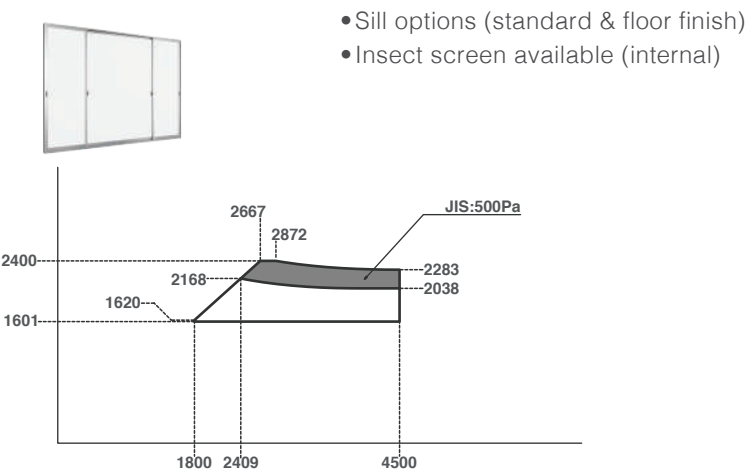
SLIDING DOOR (4 PANELS ON 2 TRACKS)



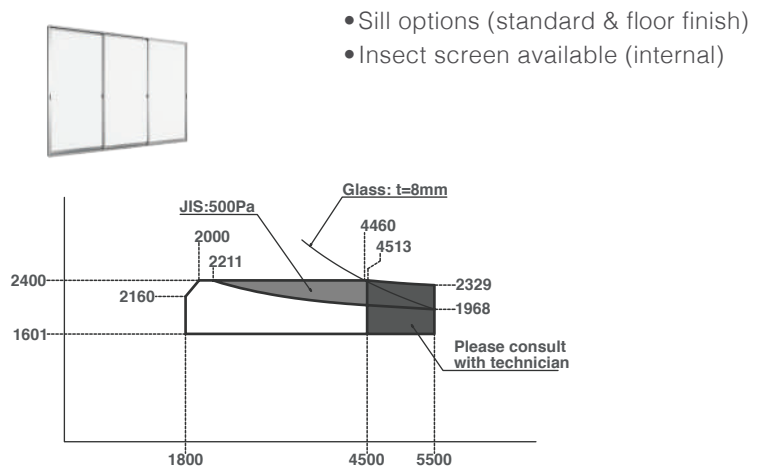
- Sill options (standard & floor finish)
- Insect screen available (internal)



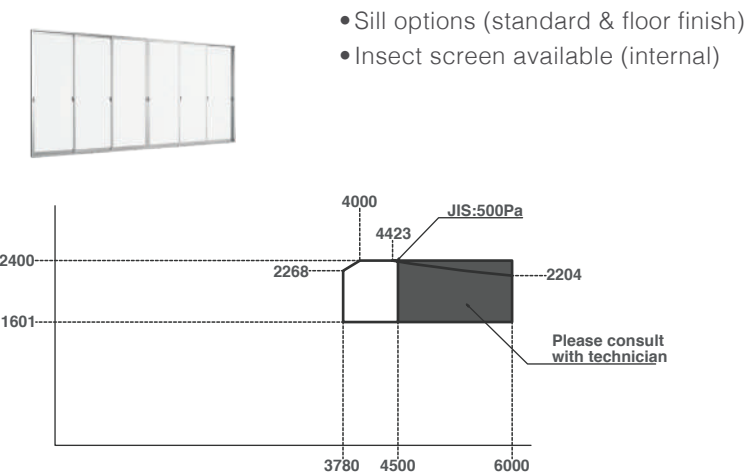
SLIDING DOOR (3 PANELS ON 2 TRACKS) SFS



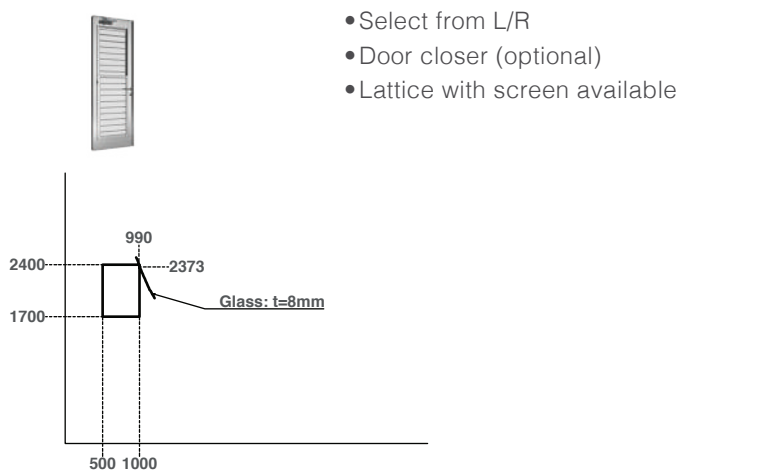
SLIDING DOOR (3 PANELS ON 3 TRACKS)



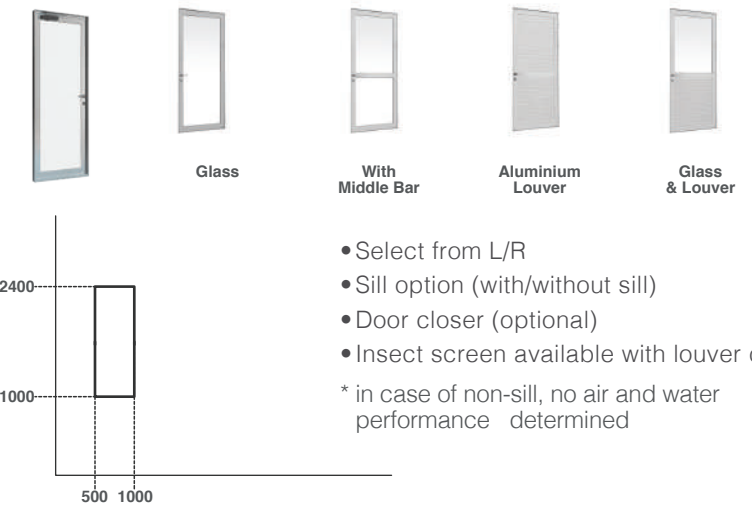
SLIDING DOOR (6 PANELS ON 3 TRACKS)



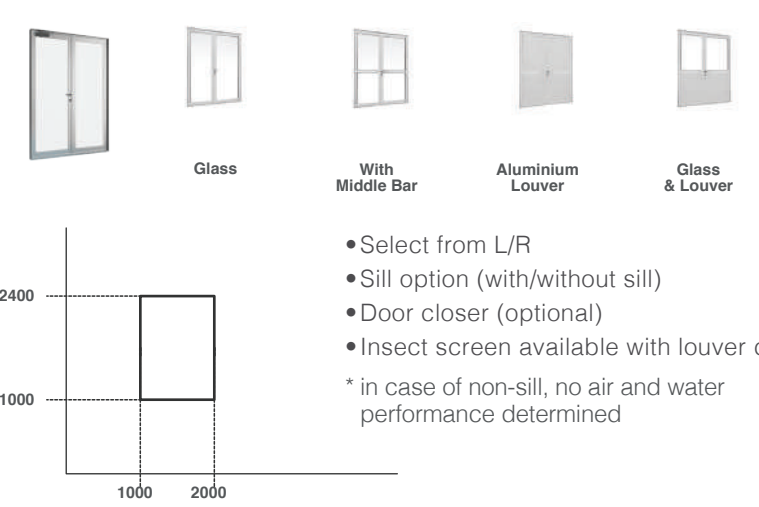
AIRFLOW DOOR



OUT-SWING DOOR (SINGLE)

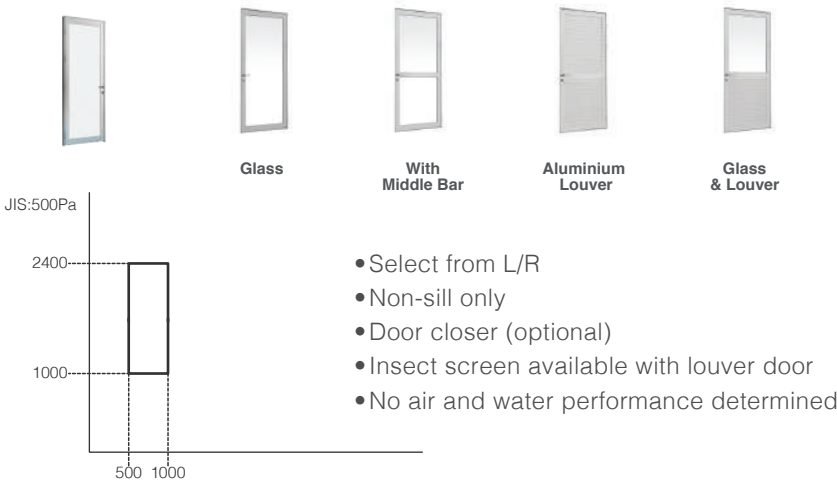


OUT-SWING DOOR (DOUBLE)

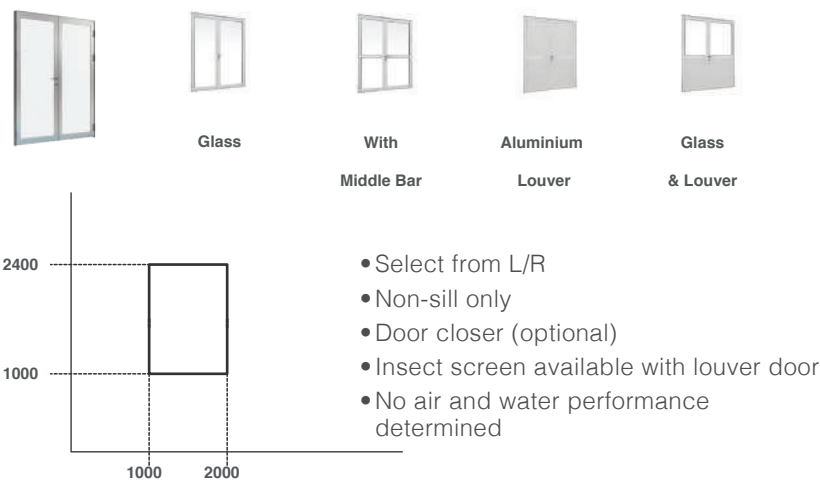


WE SERIES

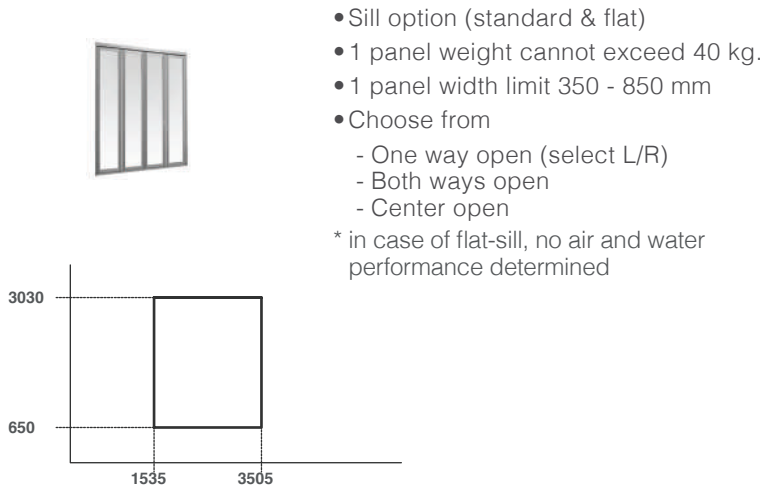
IN-SWING DOOR (SINGLE)



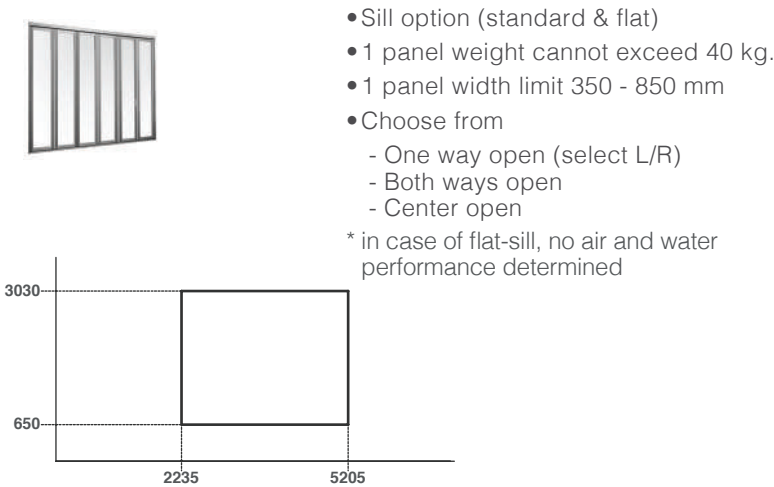
IN-SWING DOOR (DOUBLE)



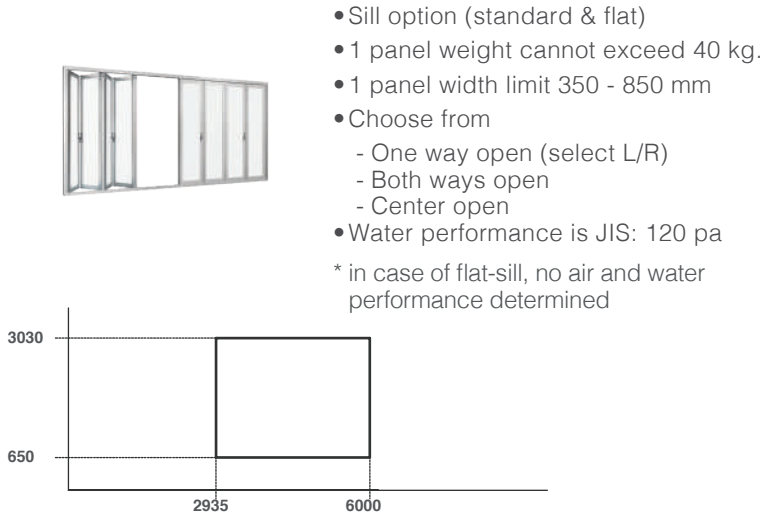
FOLDING DOOR (4 PANELS)



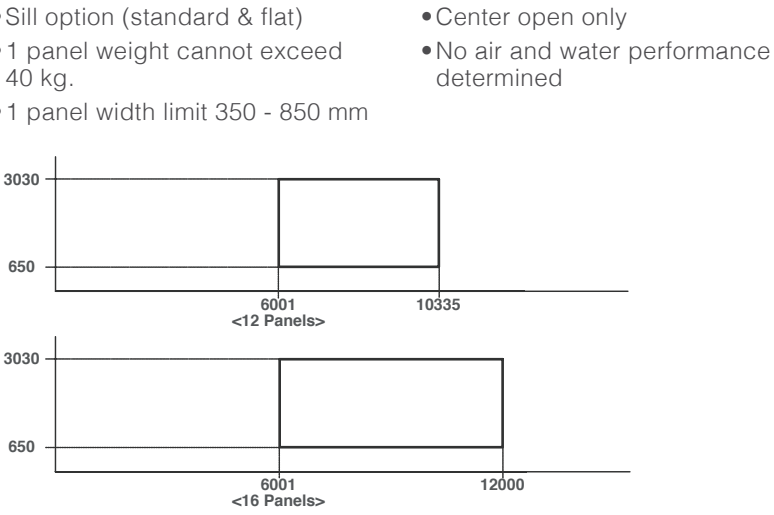
FOLDING DOOR (6 PANELS)



FOLDING DOOR (8 PANELS)



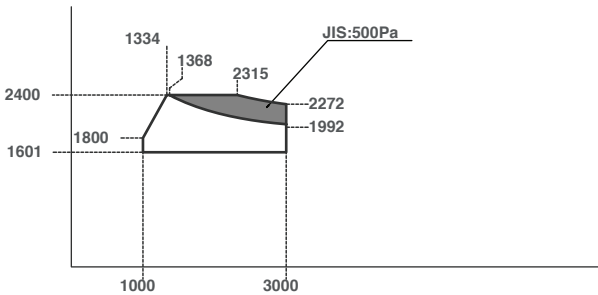
FOLDING DOOR (12,16 PANELS)



ENTRANCE SLIDING DOOR (2 PANELS ON 2 TRACKS)



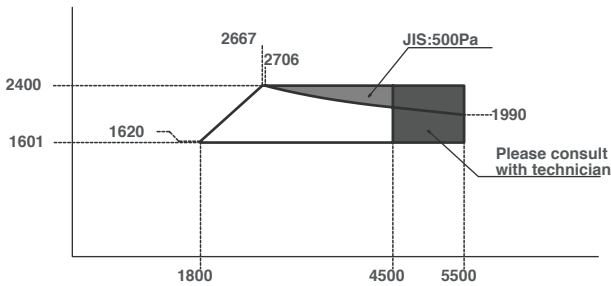
- Sill options (standard & floor finish)
- Single sliding available (L/R)
- External Insect screen available



ENTRANCE SLIDING DOOR (4 PANELS ON 2 TRACKS)



- Sill options (standard & floor finish)
- External Insect screen available



WE SERIES

MIXED & COMBINATION WINDOW

- Mullions and transoms are available for each windows and door, please consult with our sales representative for selection
- 180o mullion (standard)
- 90o mullion (only for outward corner)
- Transom (standard)

UNIT WINDOWS

| BOTTOM WINDOWS | TOP WINDOWS | | | | | | | | | | | |
|---|--|--|--|---------------|-----------------|-----------------|-------------|--------------|--------------|--------------|--------------------|-------------------|
| | Sliding Window (2 Panels on 2 Tracks) | Sliding Window (4 Panels on 2 Tracks) | Sliding Window (3 Panels on 2 Tracks) SFS | Single Awning | Single Casement | Double Casement | 1 Panel Fix | 2 Panels Fix | 3 Panels Fix | 4 Panels Fix | Outward-Corner Fix | Inward-Corner Fix |
| SLIDING WINDOW (2 PANELS ON 2 TRACKS) | | | | | | | • | • | | | | |
| SLIDING WINDOW (4 PANELS ON 2 TRACKS) | | | | | | | | • | • | • | | |
| SLIDING WINDOW (3 PANELS ON 2 TRACKS) SFS | | | | | | | | • | • | • | | |
| SINGLE AWNING | | | | | | | • | | | | | |
| SINGLE CASEMENT | | | | | | | • | | | | | |
| DOUBLE CASEMENT | | | | | | | • | • | | | | |
| 1 PANEL FIX | • | | | • | • | • | • | | | | | |
| 2 PANELS FIX | • | • | • | | | • | | • | • | • | | |
| 3 PANELS FIX | | • | • | | | | • | • | • | • | | |
| 4 PANELS FIX | | • | • | | | | • | • | • | • | | |
| OUTWARD-CORNER FIX | | | | | | | | | | | • | |
| INWARD-CORNER FIX | | | | | | | | | | | | • |

UNIT DOORS

| BOTTOM DOORS | TOP WINDOWS | | | |
|---|-------------|--------------|--------------|--------------|
| | 1 Panel Fix | 2 Panels Fix | 3 Panels Fix | 4 Panels Fix |
| SLIDING DOOR (2 PANELS ON 2 TRACKS) | • | • | | |
| SLIDING DOOR (4 PANELS ON 2 TRACKS) | | • | • | • |
| SLIDING DOOR (3 PANELS ON 2 TRACKS) SFS | | • | • | • |
| 2 PANELS FIX | | • | • | • |
| 3 PANELS FIX | | • | • | • |
| 4 PANELS FIX | | • | • | • |
| SWING DOOR (SINGLE) | • | | | |
| SWING DOOR (DOUBLE) | | • | | |

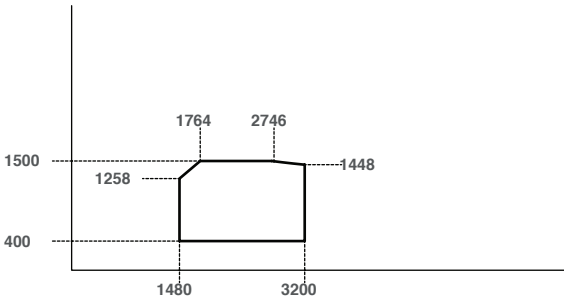
WE 40

WINDOW

CENTER SLIDING WINDOW



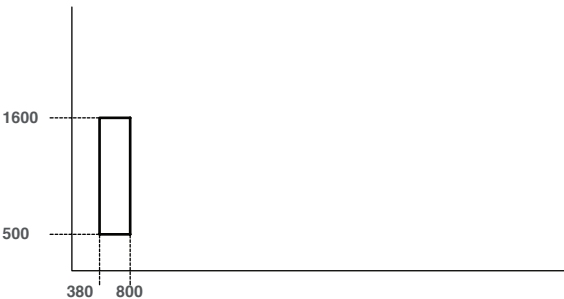
- External fixed insect screen available



CASEMENT WINDOW



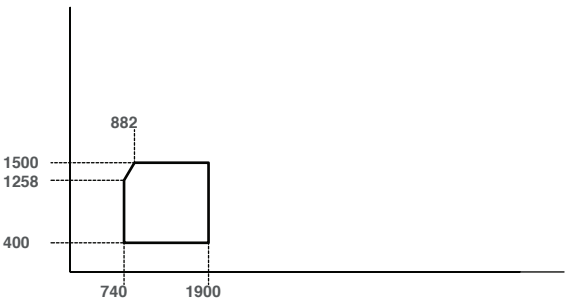
- Insect screen NOT available



SINGLE SLIDING WINDOW



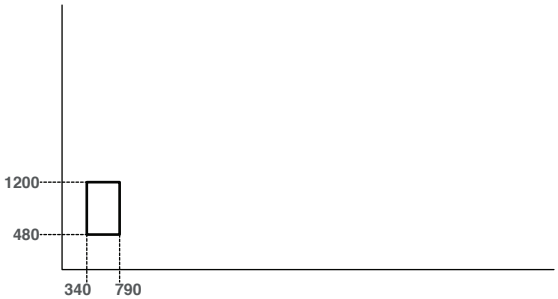
- Select from L/R
- External fixed insect screen available



AWNING WINDOW



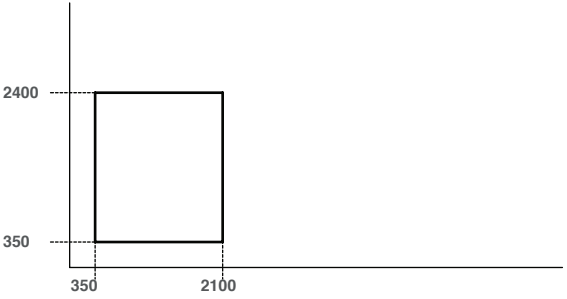
- Insect screen NOT available



FIXED WINDOW



- Wind load performance varies by glass thickness. Please consult with our technician

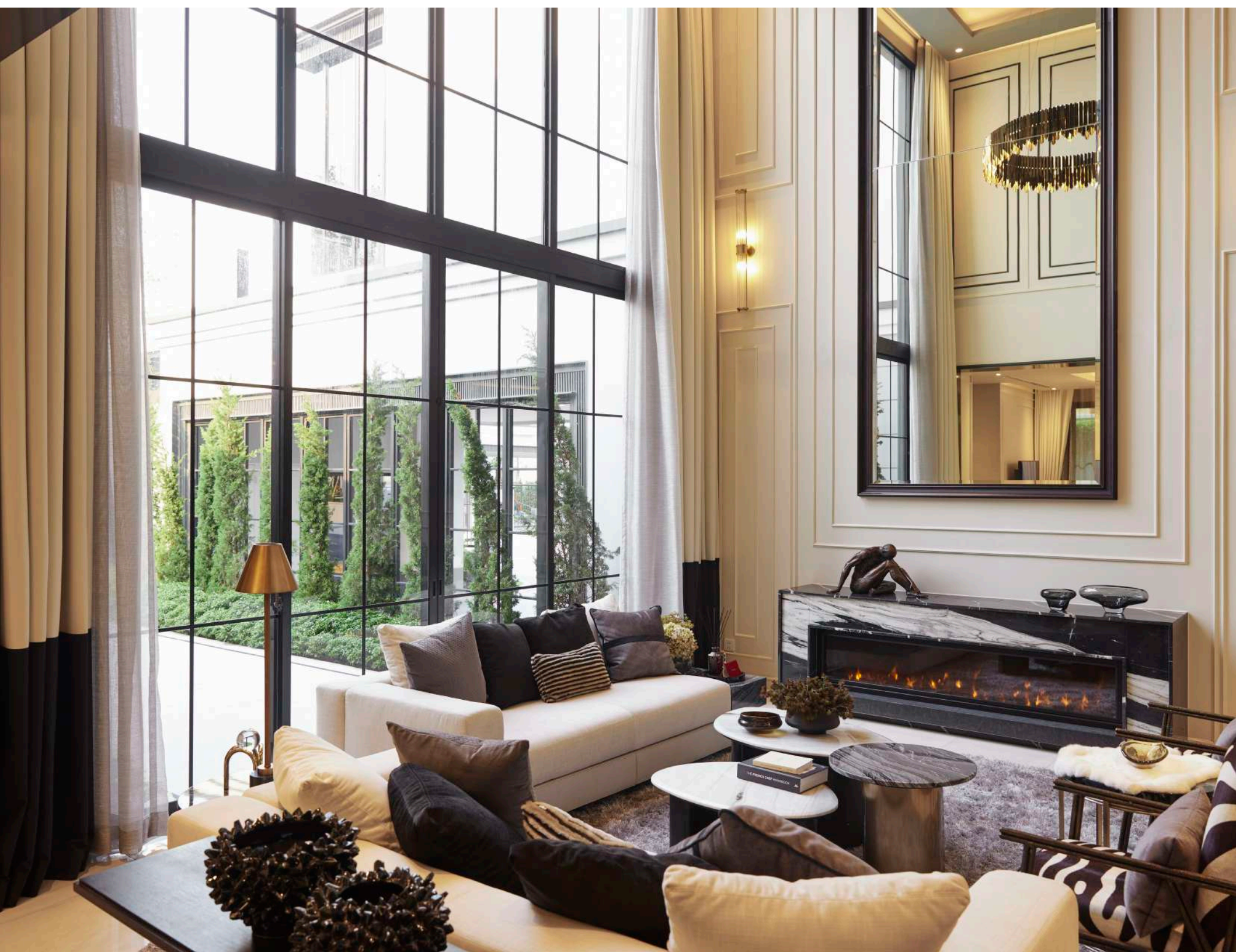


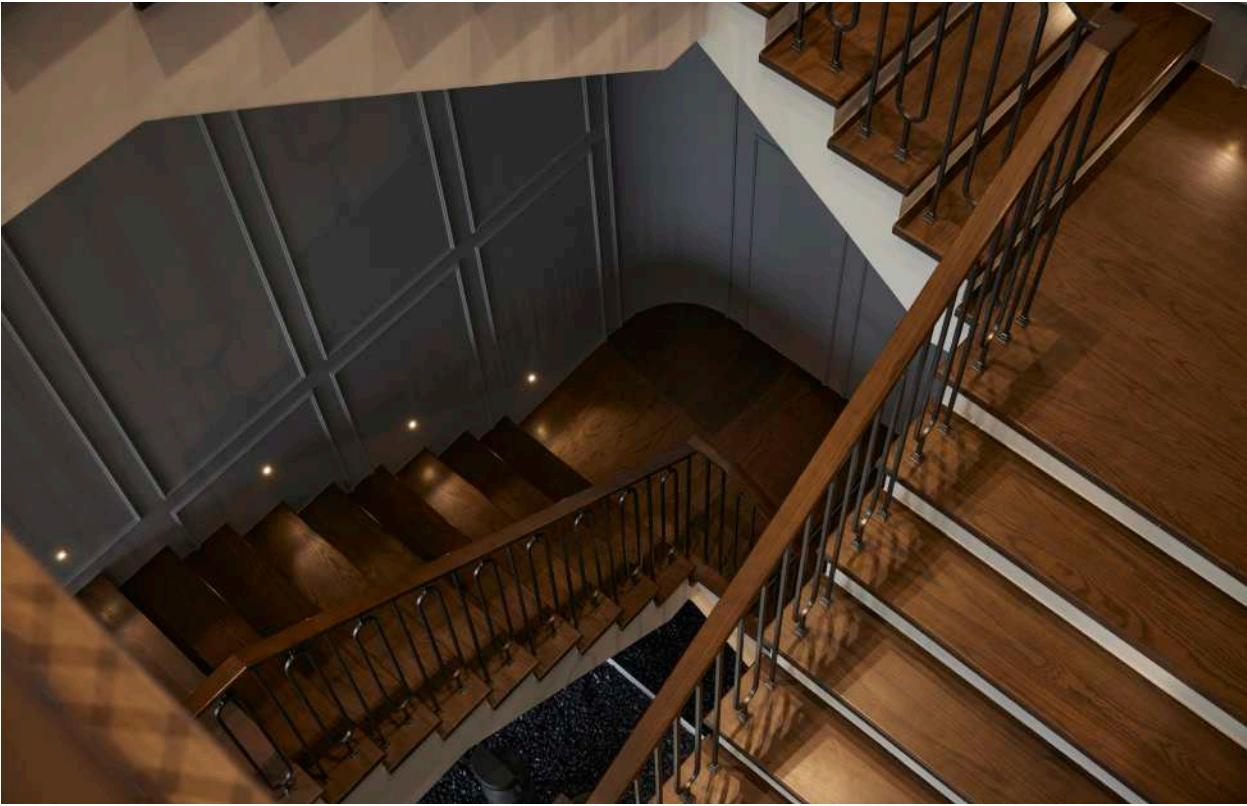
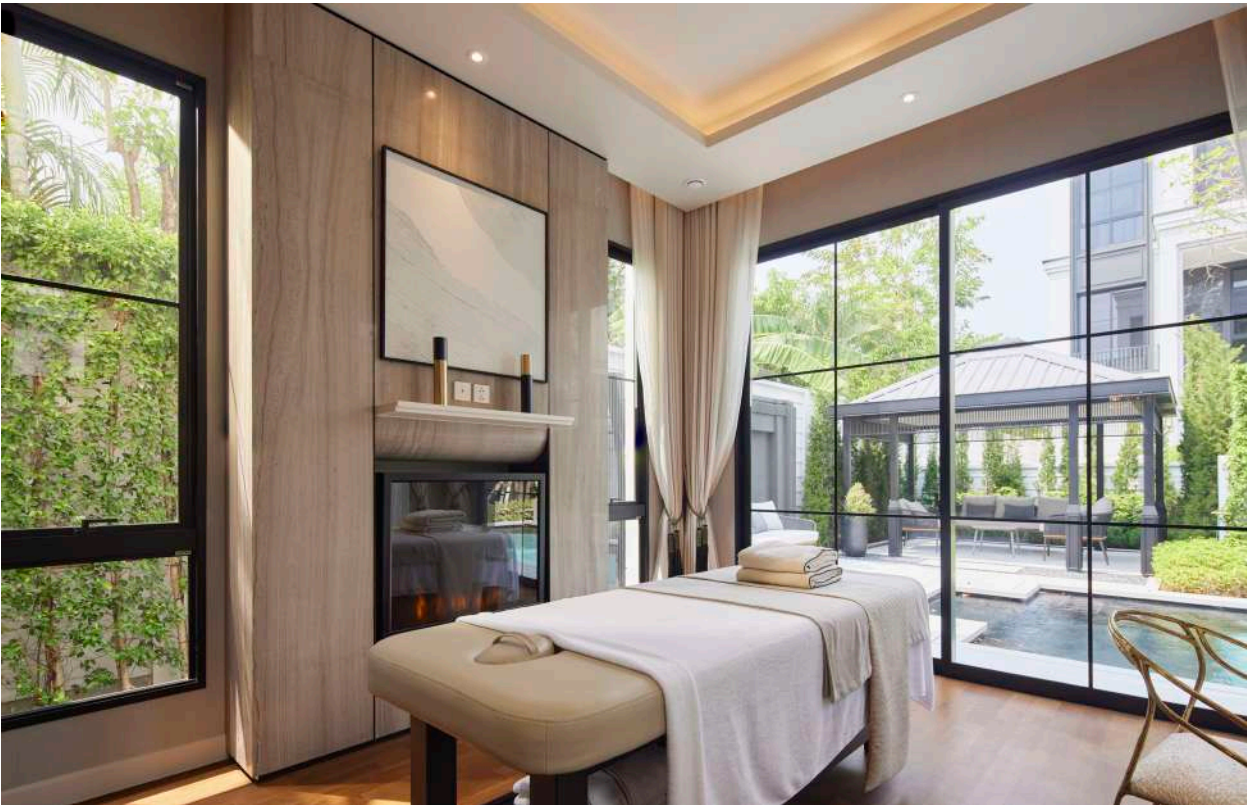


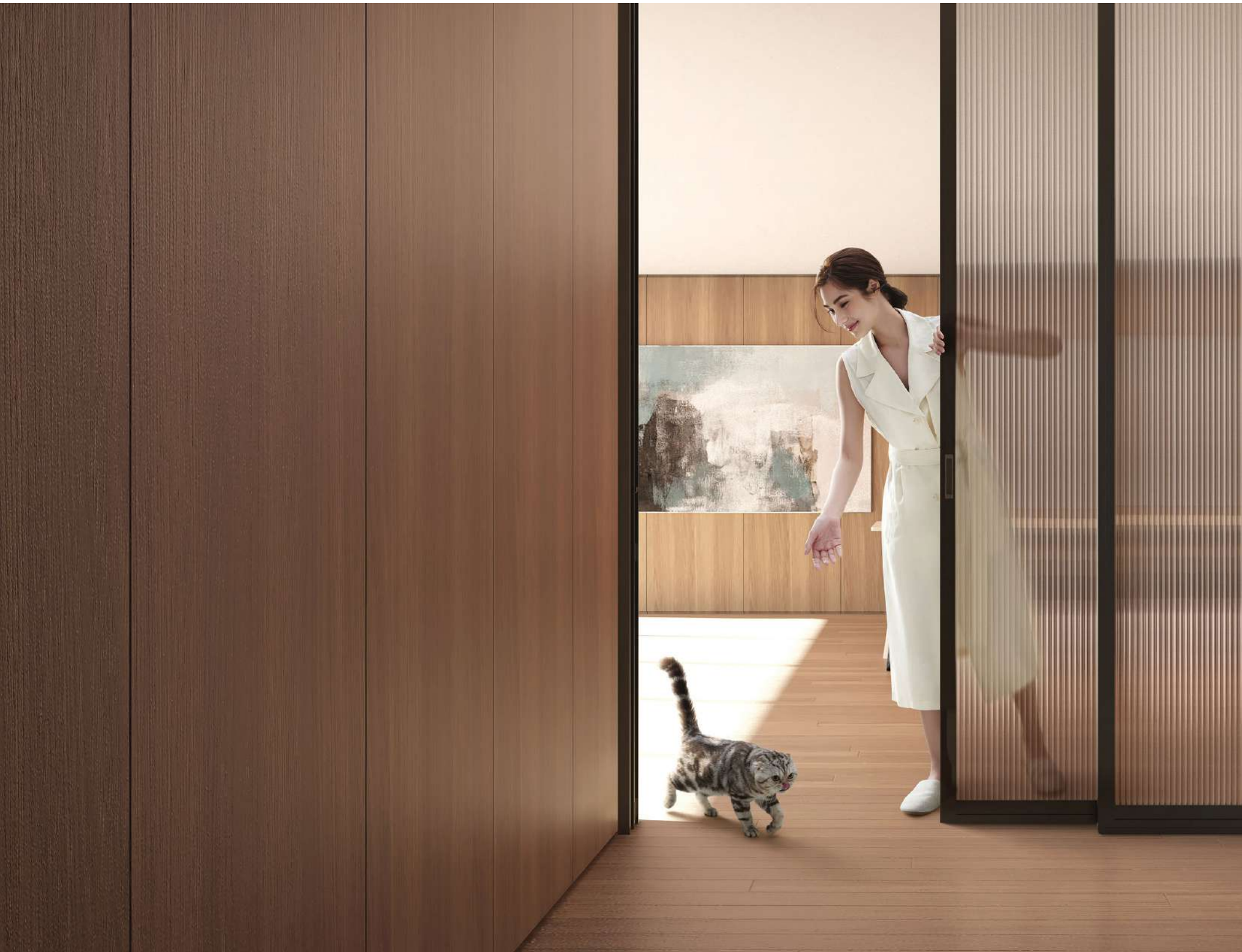


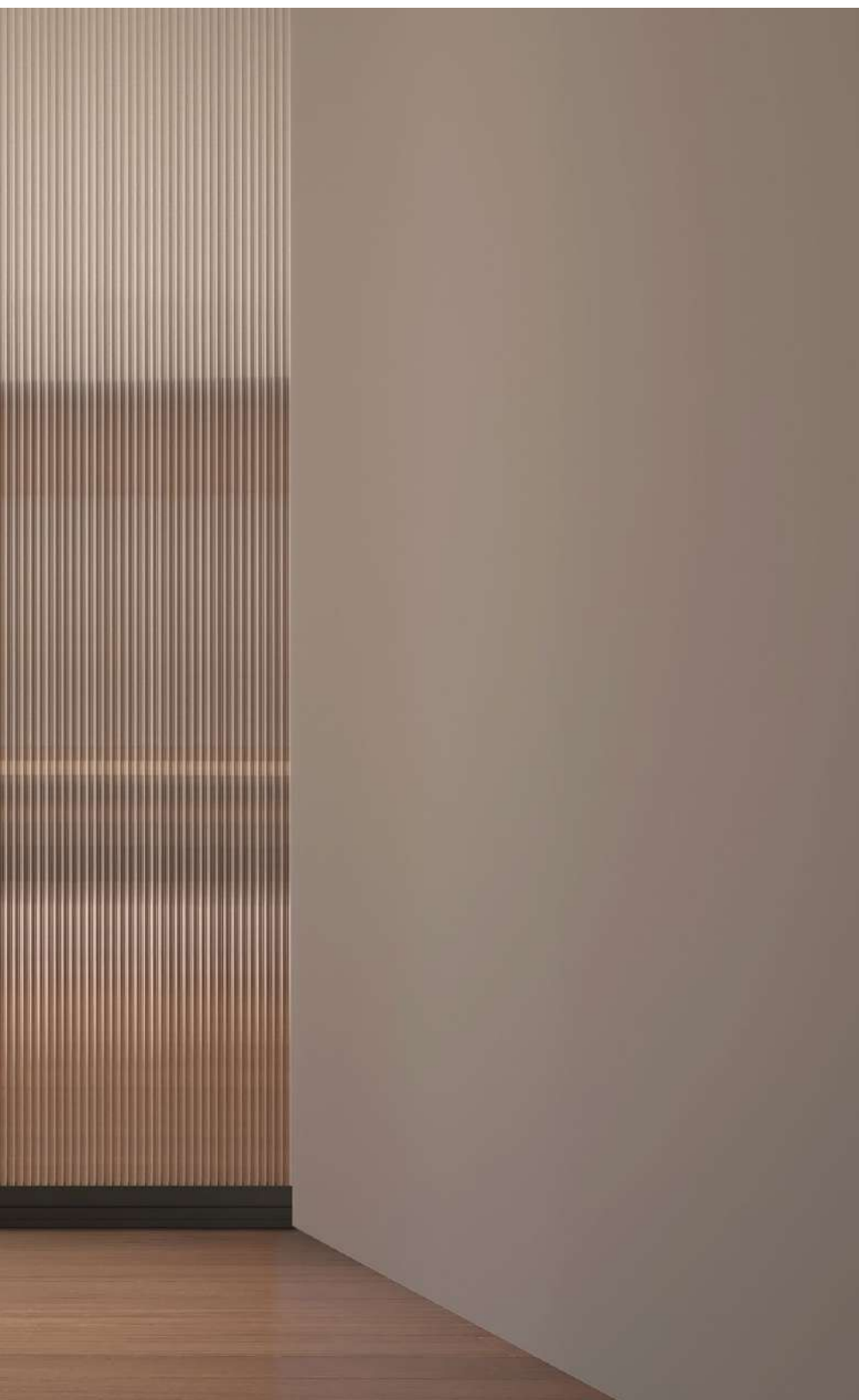
**WE SERIES
PROJECT REFERENCE**

MALTON GATES, THAILAND









INTERIOR **series**

INTERIOR series

INTERIOR Series, a luxurious and durable choice to divide interior living spaces. Available are the hanging type without floor track, sliding type with floor track, and swing type. Slim design Aluminum profiles give a modern accent to your space.

SPECIFICATIONS

| | | HANGING DOOR | PARTITION DOOR |
|-----------------|----------|-----------------------------|----------------------|
| Frame Depth | 1 track | Top 47.2 mm Jamb 49.1 mm | 72 mm (2 tracks) |
| | 2 tracks | Top 88.5 mm Jamb 90.4 mm | 104 mm (3 tracks) |
| Height of Sill | | No sill | 20 mm |
| Glass Thickness | | 5, 6, 8 mm | 5, 6, 8 mm |

COLOR



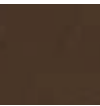
NATURAL WHITE



NATURAL SILVER



SHINE GRAY



AUTUMN BROWN



DUSK GRAY



NATURAL BLACK

FEATURES

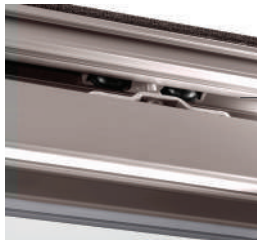
EFFORTLESS MOVEMENT



SAFETY



UNIQUE FEATURES



DURABLE ROLLERS FOR SMOOTH OPERATION



SILL-LESS DESIGN PROVIDES SAFETY AND COMFORT FOR ALL



SOFT CLOSE FOR EXTRA SAFETY (OPTION)



PULL (STANDARD)



HANDLE & LOCK-SET (OPTION IN SILVER ONLY)

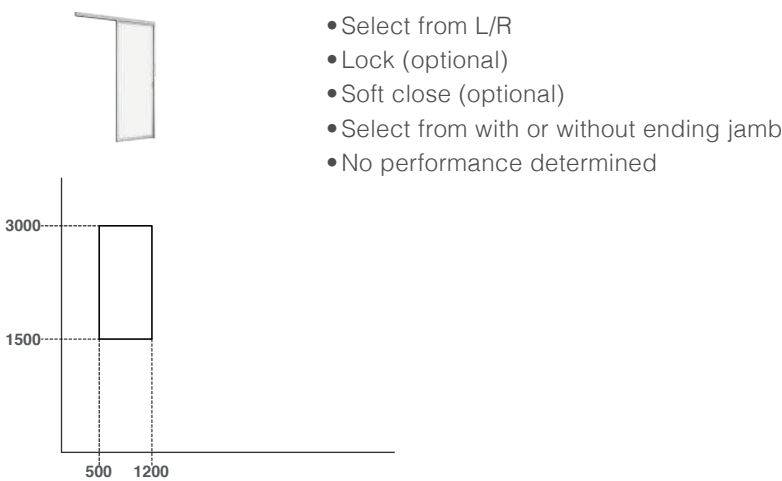


PANEL GUIDE PIECE TO PREVENT PANEL FROM SHAKING WHEN SLIDING

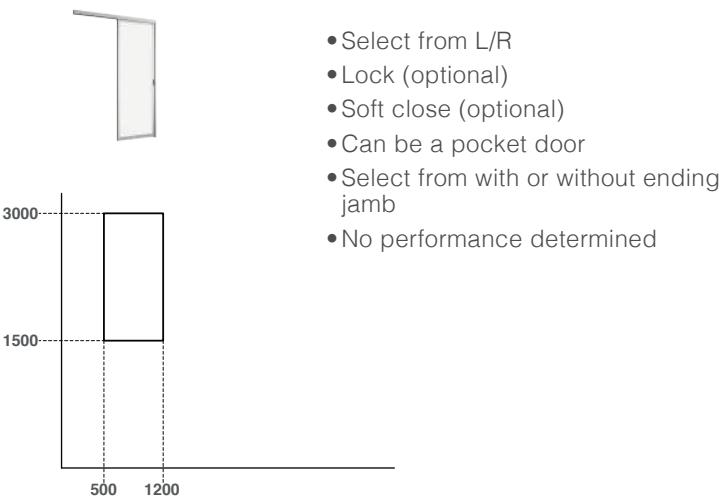
INTERIOR series

- WINDOW
- DOOR
- OPTION
- MIX

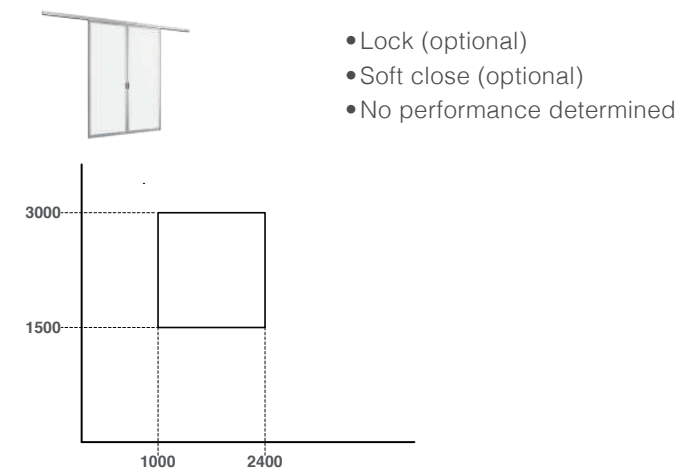
ON-WALL HANGING DOOR (1 PANEL ON 1 TRACK)



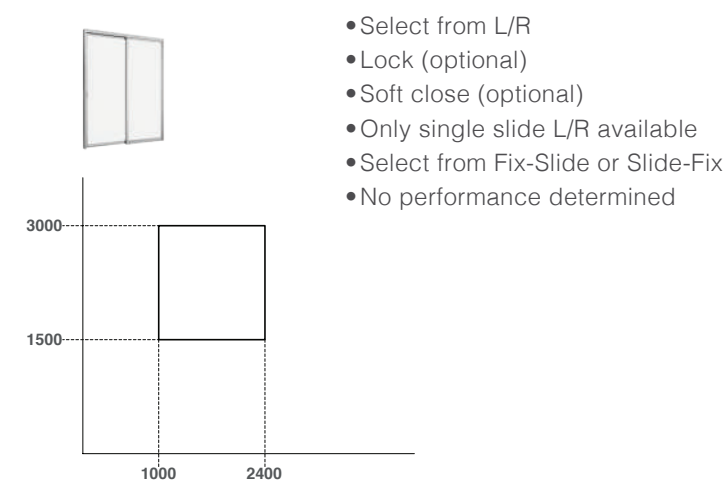
IN-WALL HANGING DOOR (1 PANEL ON 1 TRACK)



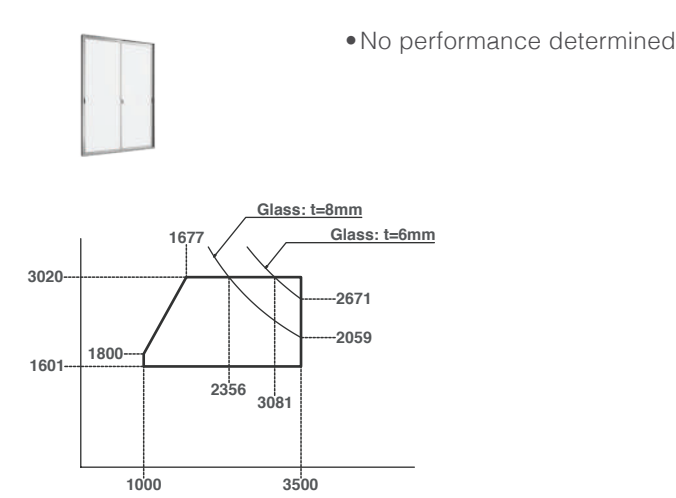
ON-WALL HANGING DOOR (2 PANELS ON 1 TRACK)



HANGING DOOR (2 PANELS ON 2 TRACKS)



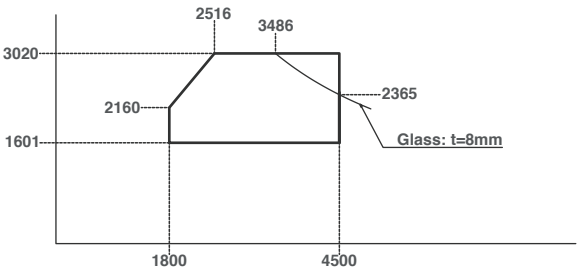
PARTITION DOOR (2 PANELS ON 2 TRACKS)



PARTITION DOOR (3 PANELS ON 3 TRACKS)



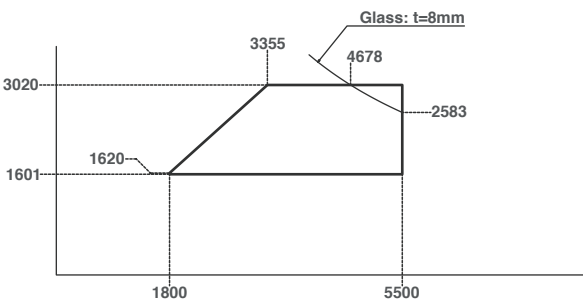
•No performance determined



PARTITION DOOR (4 PANELS ON 2 TRACKS)



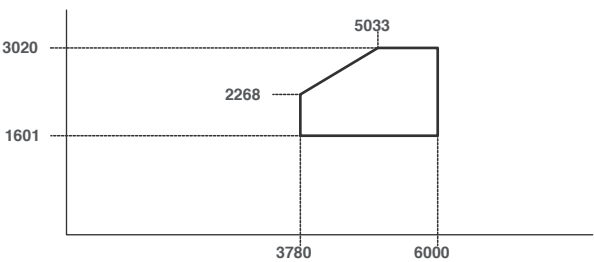
•No performance determined



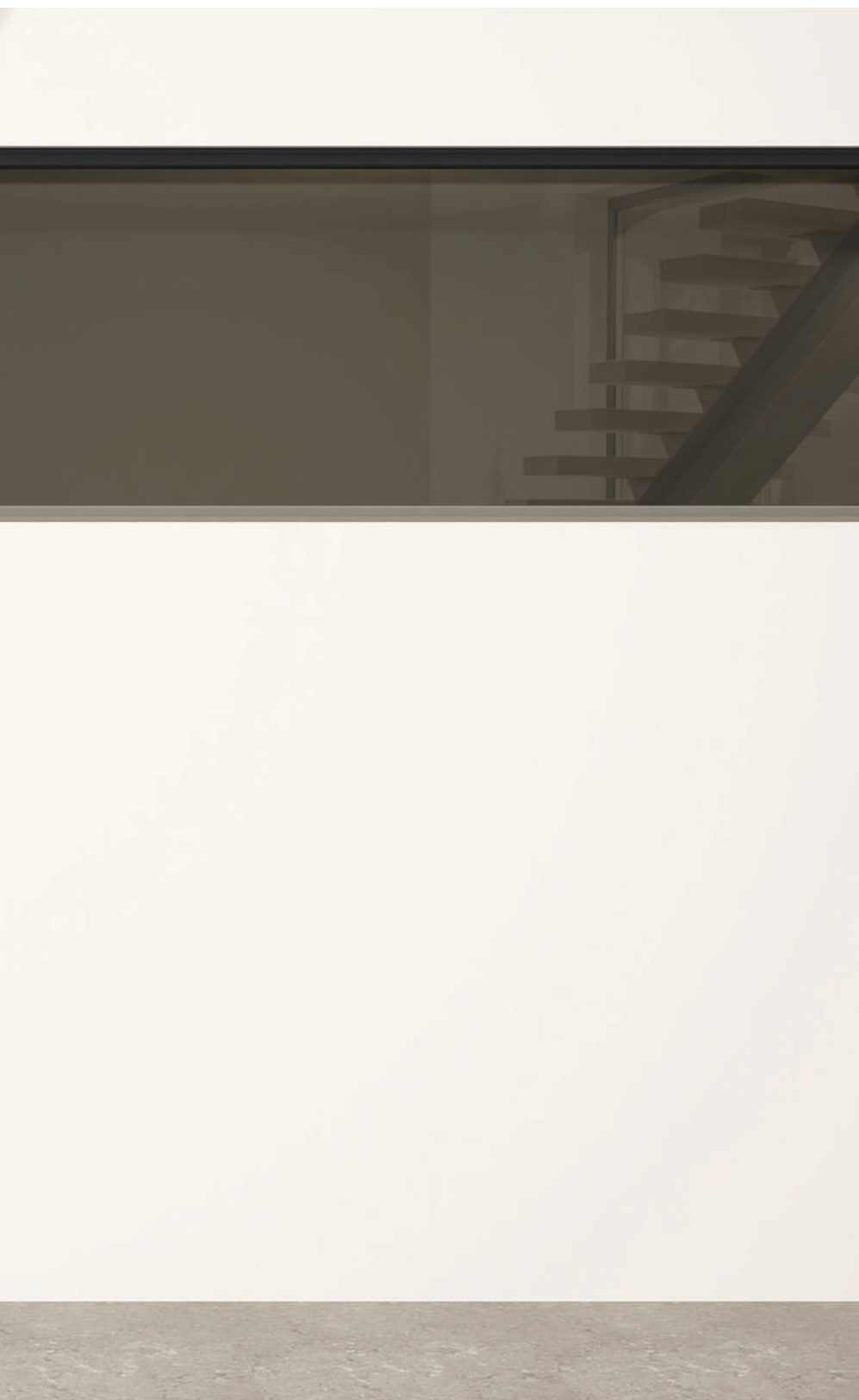
PARTITION DOOR (6 PANELS ON 3 TRACKS)



•No performance determined







ENTRANCE DOOR

GIESTA Series

High quality wood-pattern or metallic finish-doors equipped with user-friendly handle with high security lock system gives better convenience to both family and visitors and make us feel glad to be home.



UNIQUE FEATURES

SPECIFICATIONS

| | |
|----------------|---|
| FRAME DEPTH | 101.6 MM |
| HEIGHT OF SILL | OUT-SWING 50 MM |
| | IN-SWING OUTSIDE 30 / INSIDE 14 MM |
| DOOR FRAME | TOP AND SIDE FRAME <ul style="list-style-type: none">WOOD PATTERN TYPE: WOOD PATTERN RESIN SHEET, WRAPPING ON ALUMINUM PROFILE WITH SYNTHETIC RUBBERPAINTED TYPE : ANODIZED ALUMINUM PROFILE |
| | SILL ANODIZED ALUMINUM PROFILE |
| DOOR PANEL | EXTERNAL SHEET <ul style="list-style-type: none">WOOD PATTERN TYPE : (EXTERNAL) RESIN LAMINATED SHEET/ (INTERNAL) ANTI-RUST EPOXY COATINGPOLYSTYRENE (EPS FOAM) |
| | INSULATING GLASS THICKNESS 23 MM (CLEARED 3+AIR GAP 16+PATTERNED GLASS 4) |

PERFORMANCES

WIND
PRESSURE



S-2 (1200PA)
(JIS A 1515)

WATER
TIGHTNESS



W-2 (150PA)
(JIS A 1517)

AIR
TIGHTNESS



A-4 (2)
(JIS A 1516)

NOISE
INSULATION



N/A
(JIS A 1416)



Simple and Minimalistic



P01

P02

P03

COLORS



TURIN
PINE



CREA
MOCHA



CREA
RUSK



TEAK



POLISH
SILVER


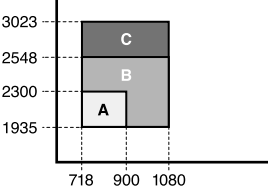
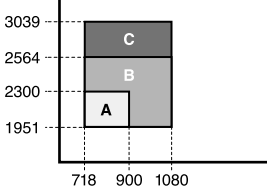
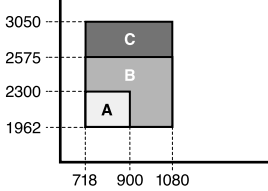


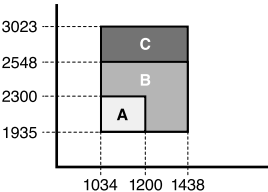
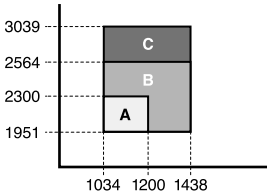
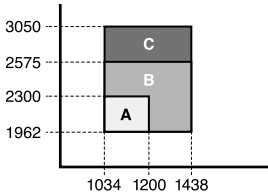

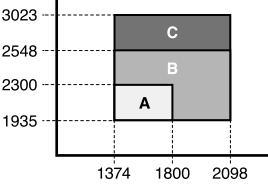
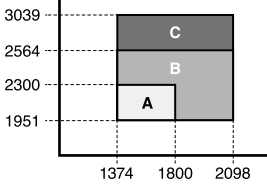
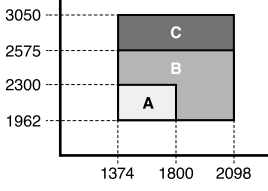


SILKY
WHITE


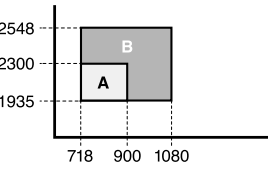
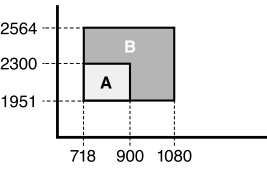
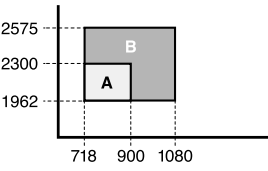


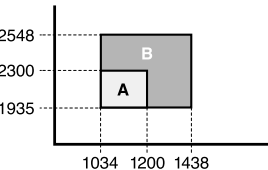
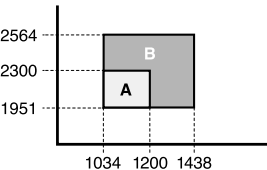
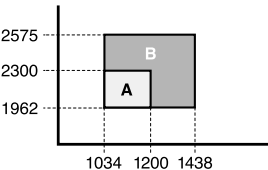

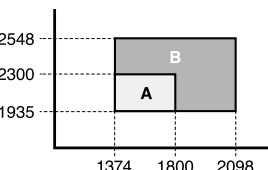
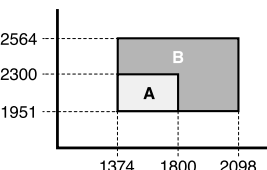
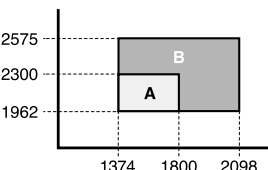


AUTUMN
BROWN



| WOOD PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|---|--|---|---|
| Single  |  |  |  |
| With Sidelight Width of sidelight [SW] $1034 \leq W \leq 1248 : SW = 304$ $1249 \leq W \leq 1438 : SW = 346$   |  |  |  |
| Double  |  |  |  |



| ALUMINUM PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|---|--|---|---|
| Single  |  |  |  |
| With Sidelight Width of sidelight [SW] $1034 \leq W \leq 1248 : SW = 304$ $1249 \leq W \leq 1438 : SW = 346$   |  |  |  |
| Double  |  |  |  |

* A, B, C indicates price changing points. (A<B<C)



Modern but Traditional



D01

D02

D03

COLORS



TURIN
PINE



CREA
MOCHA


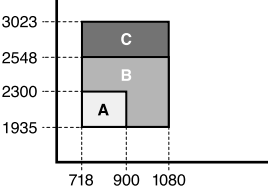
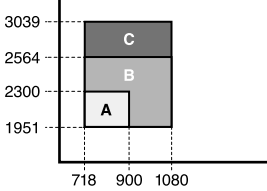
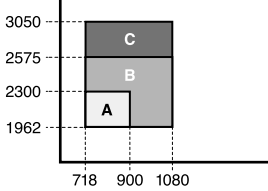


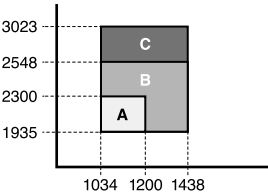
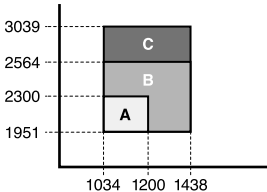
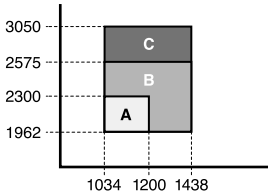

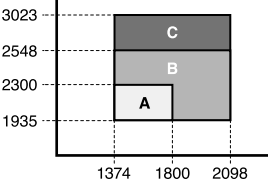
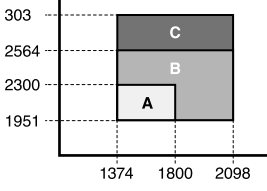
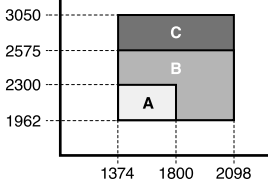


CREA
RUSK







TEAK



| WOOD PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|---|--|---|---|
| Single  |  |  |  |
| With Sidelight Width of sidelight [SW] 1034 ≤ W ≤ 1248 : SW = 304 1249 ≤ W ≤ 1438 : SW = 346   |  |  |  |
| Double  |  |  |  |



| ALUMINUM PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|---|--------------------|----------|-----------|
| Single  | N/A | N/A | N/A |
| With Sidelight Width of sidelight [SW] 1034 ≤ W ≤ 1248 : SW = 304 1249 ≤ W ≤ 1438 : SW = 346   | N/A | N/A | N/A |
| Double  | N/A | N/A | N/A |

* A, B, C indicates price changing points. (A<B<C)



Glass with Style



G01 G02 G03 G04


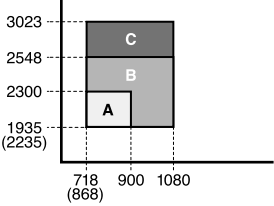
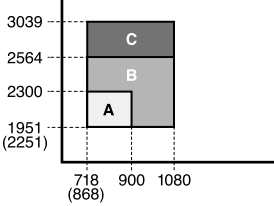
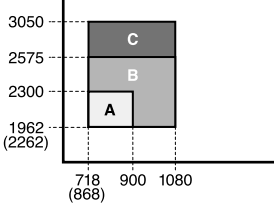


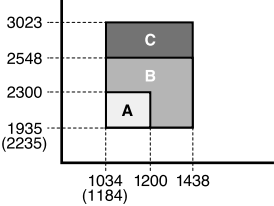
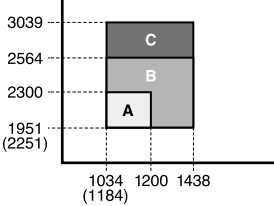
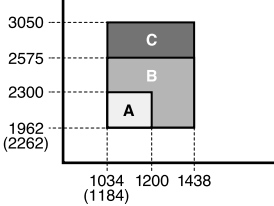

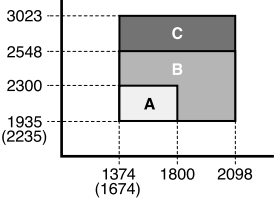
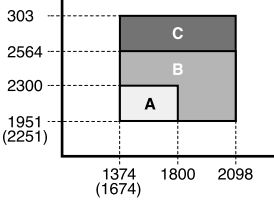
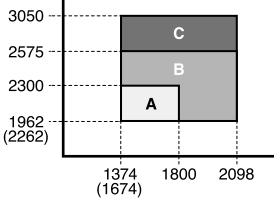
COLORS



TURIN
PINE CREA
MOCHA CREA
RUSK TEAK


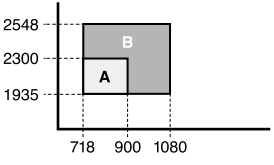
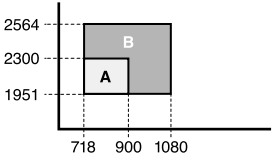
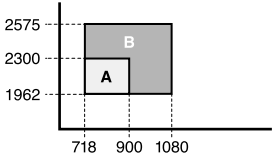


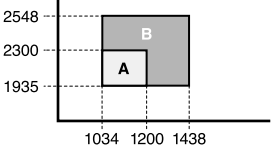
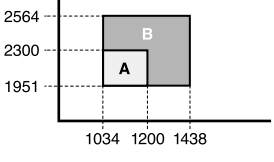
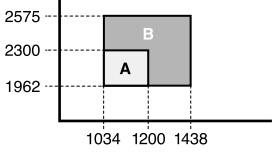

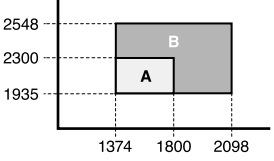
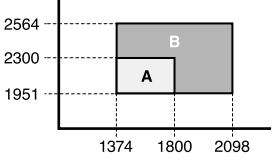
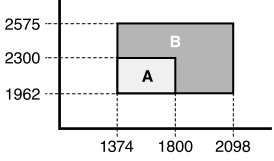
POLISH
SILVER SILKY
WHITE AUTUMN
BROWN



| WOOD PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|---|---|--|--|
| Single  |  |  |  |
| With Sidelight Width of sidelight [SW] (1184) $1034 \leq W \leq 1248$: SW = 304 $1249 \leq W \leq 1438$: SW = 346   With glass Without glass |  |  |  |
| Double  |  |  |  |

* Dimension indicated in () are the minimum dimension for G01 design



| ALUMINUM PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|--|--|---|---|
| Single  |  |  |  |
| With Sidelight Width of sidelight [SW] $1034 \leq W \leq 1248$: SW = 304 $1249 \leq W \leq 1438$: SW = 346   With glass Without glass |  |  |  |
| Double  |  |  |  |

* A, B, C indicates price changing points. (A<B<C)
Aluminum pattern not available for G01



Comfort with Minimal design



A01

COLORS



TURIN
PINE



CREA
MOCHA

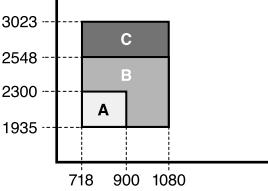
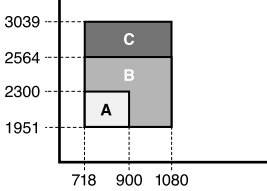
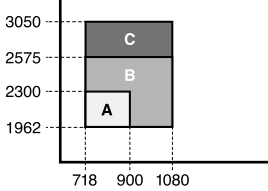


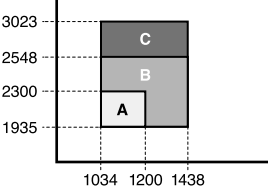
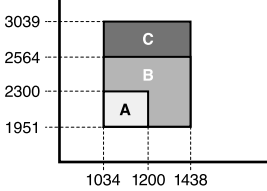
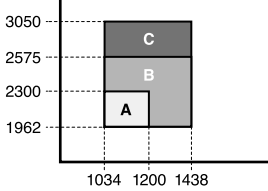



CREA
RUSK



TEAK



| WOOD PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|---|--|---|---|
| Single  |  |  |  |
| With Sidelight Width of sidelight [SW] 1034 ≤ W ≤ 1248 : SW = 304 1249 ≤ W ≤ 1438 : SW = 346   |  |  |  |
| Double  | N/A | N/A | N/A |



| ALUMINUM PATTERN | IN-SWING (NO SILL) | IN-SWING | OUT-SWING |
|---|--------------------|----------|-----------|
| Single  | N/A | N/A | N/A |
| With Sidelight Width of sidelight [SW] 1034 ≤ W ≤ 1248 : SW = 304 1249 ≤ W ≤ 1438 : SW = 346   | N/A | N/A | N/A |
| Double  | N/A | N/A | N/A |

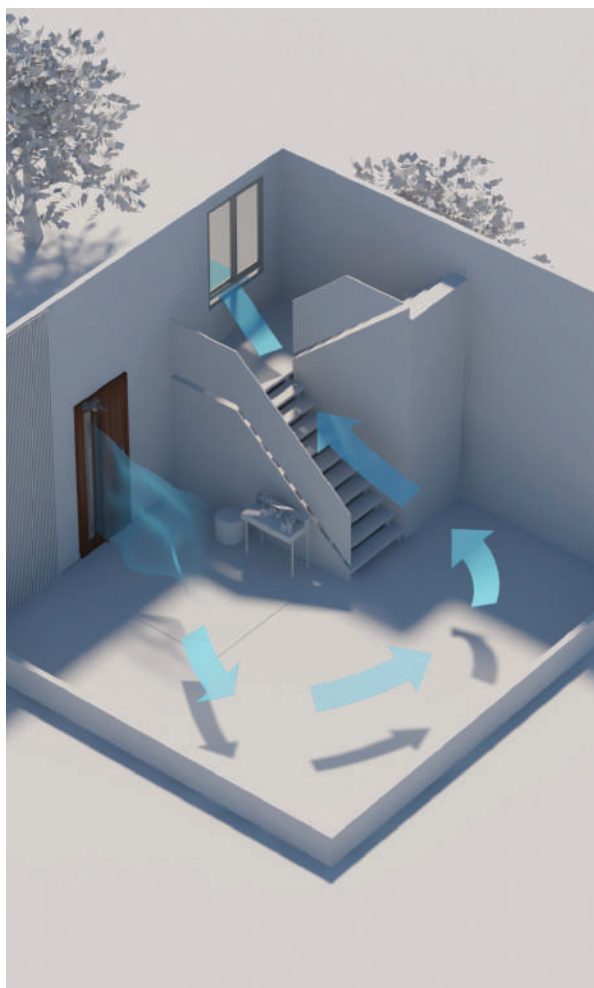
* A, B, C indicates price changing points. (A<B<C)

GIESTA AIRFLOW

|

A PERFECT SOLUTION FOR YOUR OWN COMFORT WITH MINIMAL DESIGN

The Giesta AIRFLOW series offers a high-performance wooden pattern steel door with an integrated AIRFLOW window and insect screen. It allows for air circulation to cool the living space, reduce humidity, and remove unpleasant odors. The ventilation panel is wide enough to let the air flow in easily but too small to be entered from, providing added security with a multi-lock function. Giesta AIRFLOW is Japanese Industrial Standards (JIS) certified and has won Japan's KIDS Design Award for its user-friendly and child safety design.



Provide passive ventilation environment



Complete air flow with security



Keep mosquito and pest away
from your home

SIMPLE OPEN/ CLOSE OPERATION

AIRFLOW window is swing-in and can lock and unlock easily by using single lock handle to control 2 locks (Multi-lock). Open-close smoothly with high performance hinge.



LIFT LOCK HANDLE TO UNLOCK



PULL DOWN LOCK HANDLE FOR VENTILATION

EASY TO CLEAN

Deep clean every corner without removing any part by spraying water from garden hose to insect screen from outside the room (please make sure that the AIRFLOW window and the door is completely closed)

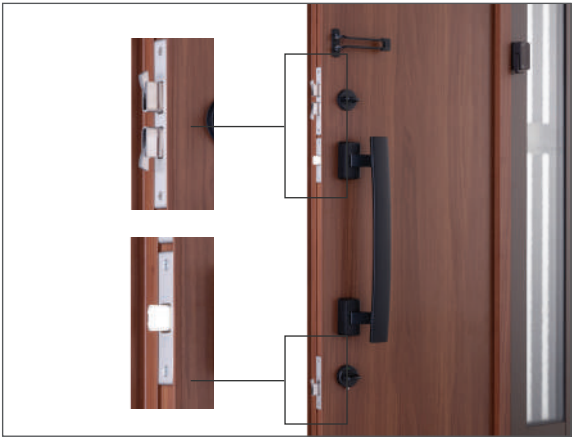


ENTRANCE DOOR

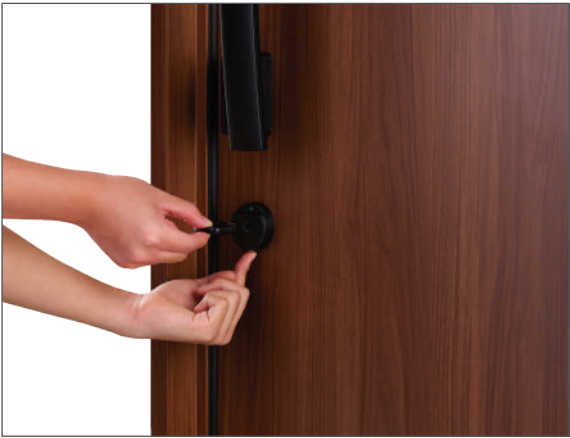
UNIQUE FEATURES



Push-Pull bar handle easy to operate just push or pull after unlock to open the door



2 locks that control 3 latches



Remove inside key head to prevent from unlock in case of burglary



Lock-unlock with ease with reversible key

















Frame sealed with rubber for watertight and anti-pinch















Door filled with insulation material for heat prevention and noise insulation



Handles

| BAR HANDLE TYPE A | BAR HANDLE TYPE F | LEVER HANDLE TYPE K | LEVER HANDLE TYPE L |
|---|--|---|---|
|   |   |  |  |
| OUTSIDEINSIDE | OUTSIDEINSIDE | OUTSIDE&INSIDE | OUTSIDE&INSIDE |
|   |   |   |   |
| BLAST SILVER SILKY MATTE BLACK | BLAST SILVER SILKY MATTE BLACK | BLAST SILVER SATIN GOLD | BLAST SILVER SILKY MATTE BLACK |
| Apply for Out-Swing door only | Apply for Out-Swing door only | Apply for both Out-Swing and In-Swing door | Apply for both Out-Swing and In-Swing door |

| DIGITAL HANDLE | DIGITAL HANDLE | BAR HANDLE TYPE V |
|---|--|---|
|   |   |   |
| OUTSIDEINSIDE | OUTSIDEINSIDE | OUTSIDEINSIDE |
|   |   |   |
| SILVER BLACK | SILVER BLACK | SILVER BLACK |
| Apply for both Out-Swing and In-Swing door | Apply for Out-Swing door only | Apply for In-Swing door only |

Accessories

OUT-SWING DOOR

DOOR CLOSER




AUTUMN BROWN


SHINE GRAY


NATURAL WHITE

ALUMINUM

DOOR GUARD




BLAST SILVER


SATIN GOLD


SILKY MATTE BLACK

ALUMINUM

IN-SWING DOOR

DOOR CLOSER




AUTUMN BROWN


SHINE GRAY

ALUMINUM

DOOR GUARD




SILVER

ALUMINUM

CYLINDER LOCK & KEY

CYLINDER LOCK





OUTSIDE

INSIDE

THUMB TURN IS IN HANDLE
BOX CYLINDER
CONSTRUCTION KEYS: 3
OWNER KEYS: 5


BLAST SILVER


SATIN GOLD


SILKY MATTE BLACK

STEEL

ALUMINUM EXTERIOR





FENCE & GATE EXTERIOR

FENCE & GATE is a perfect fencing choice for your residence.

Our fence and gate solutions will enhance the look, feel and overall value of your property, while providing safety and security your family.

FEATURES



ULTRA
LIGHTWEIGHT



IMPACT TEST



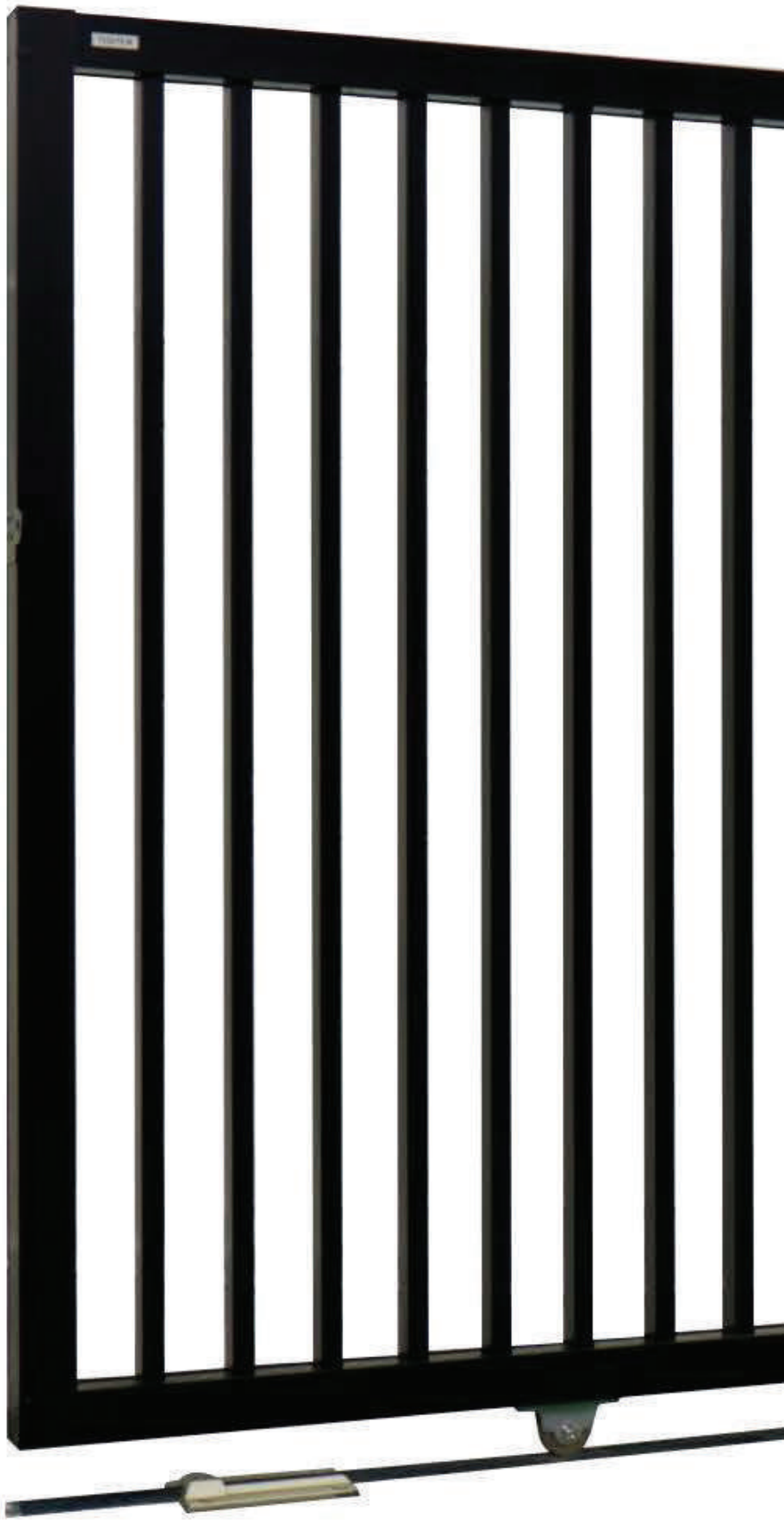
EFFORTLESS
MOVEMENT



LOW
MAINTENANCE




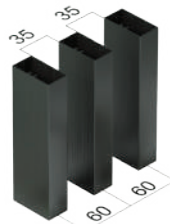
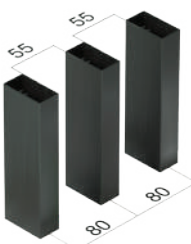
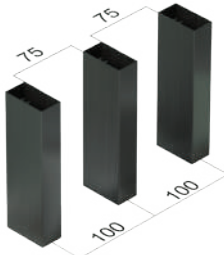

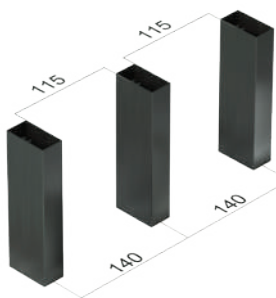

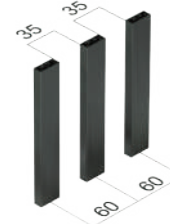
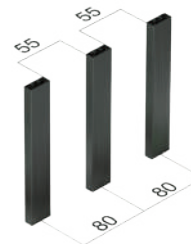
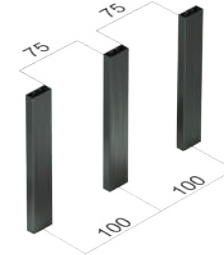
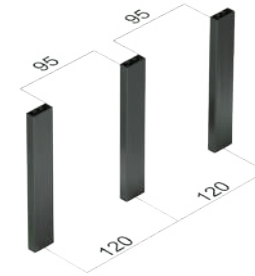
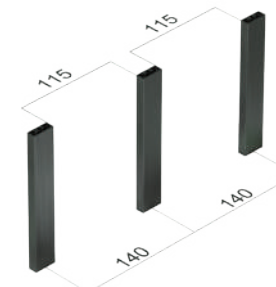
ANTI-RUST
DURABILITY



COLOR



LATTICE PATTERN

| SHAPE OF LATTICE | PITCH 60 | PITCH 80 | PITCH 100 | PITCH 120 | PITCH 140 |
|--|---|--|---|---|---|
| Sliding gate  |  |  |  |  |  |
| Folding gate Swing gate Fence  |  |  |  |  |  |

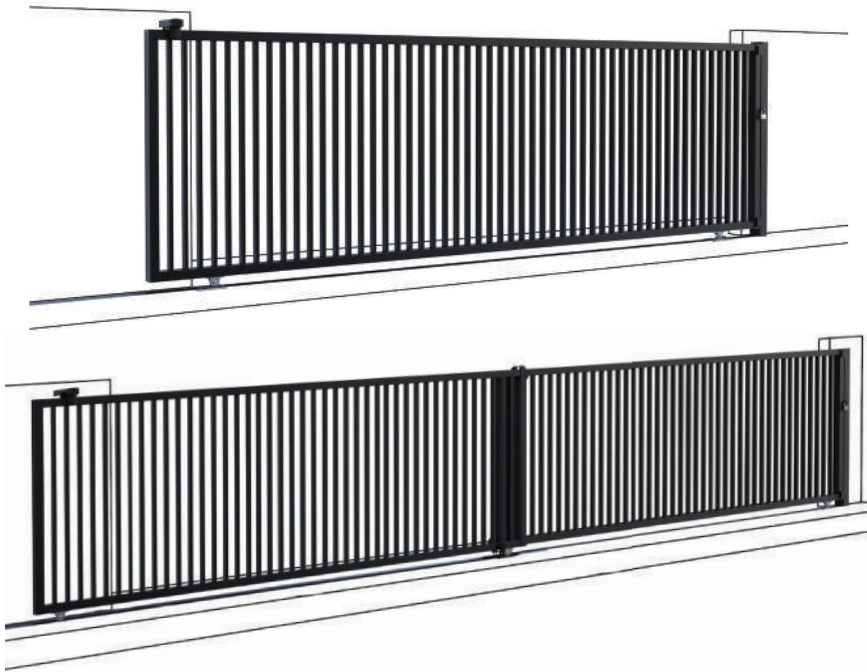
SLIDING Gate

| SINGLE SLIDING GATE | MINIMUM | MAXIMUM |
|-------------------------|----------|----------|
| WIDTH (OPENING WIDTH) | 2,100 MM | 5,600 MM |
| HEIGHT (PRODUCT HEIGHT) | 1,200 MM | 2,000 MM |

* please see reference drawing for detail

| DOUBLE SLIDING GATE | MINIMUM | MAXIMUM |
|-------------------------|----------|----------|
| WIDTH (OPENING WIDTH) | 5,000 MM | 8,000 MM |
| HEIGHT (PRODUCT HEIGHT) | 1,200 MM | 1,600 MM |

* please see reference drawing for detail



UNIQUE FEATURES



Square pipe design provides strength and durability



Durable stainless-steel wheel and track enable light and smooth gliding.



Wheel stopper ensures stop and hold when gate is closed



Panel guide for safety to hold panel when gliding for single panel type



Panel guide to hold both panels when gliding for safety for double panels type



FOLDING Gate

| 4 PANELS FOLDING GATE | MINIMUM | MAXIMUM |
|-------------------------|----------|----------|
| WIDTH (OPENING WIDTH) | 3,000 MM | 4,900 MM |
| HEIGHT (PRODUCT HEIGHT) | 1,200 MM | 1,600 MM |

* please see reference drawing for detail

| 6 PANELS FOLDING GATE | MINIMUM | MAXIMUM |
|-------------------------|----------|----------|
| WIDTH (OPENING WIDTH) | 4,300 MM | 6,000 MM |
| HEIGHT (PRODUCT HEIGHT) | 1,200 MM | 1,600 MM |

* please see reference drawing for detail



UNIQUE FEATURES



Hinges



Rollers



Drop rod

SWING Gate

| SINGLE SWING GATE | MINIMUM | MAXIMUM |
|-------------------------|----------|----------|
| WIDTH (OPENING WIDTH) | 600 MM | 1,100 MM |
| HEIGHT (PRODUCT HEIGHT) | 1,200 MM | 1,600 MM |

* please see reference drawing for detail

| DOUBLE SWING GATE | MINIMUM | MAXIMUM |
|-------------------------|----------|----------|
| WIDTH (OPENING WIDTH) | 1,080 MM | 2,080 MM |
| HEIGHT (PRODUCT HEIGHT) | 1,200 MM | 1,600 MM |

* please see reference drawing for detail



UNIQUE FEATURES



Hinges



Drop rod

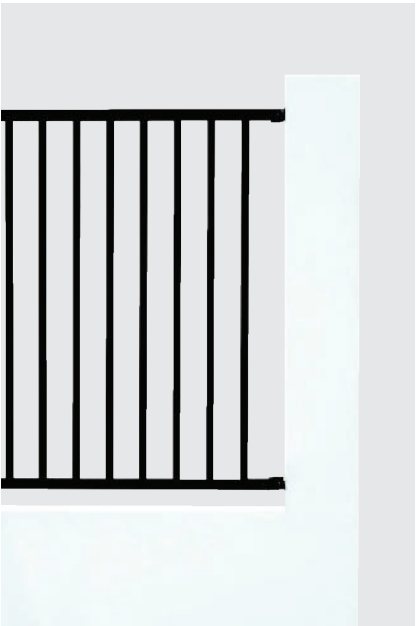
FENCE

| | MINIMUM | MAXIMUM |
|-------------------------|---------|----------|
| WIDTH (OPENING WIDTH) | 500 MM | 2,000 MM |
| HEIGHT (PRODUCT HEIGHT) | 600 MM | 1,200 MM |

* *please see reference drawing for detail



UNIQUE FEATURES



Minimalist slim design yet sturdy. Wall anchor can be adjusted up to 7.5 mm



Straight and corner type fence jointer available. Adjustable from 90-180 degrees



Fence post with concrete surface mount with cover. Set-in-concrete type also available

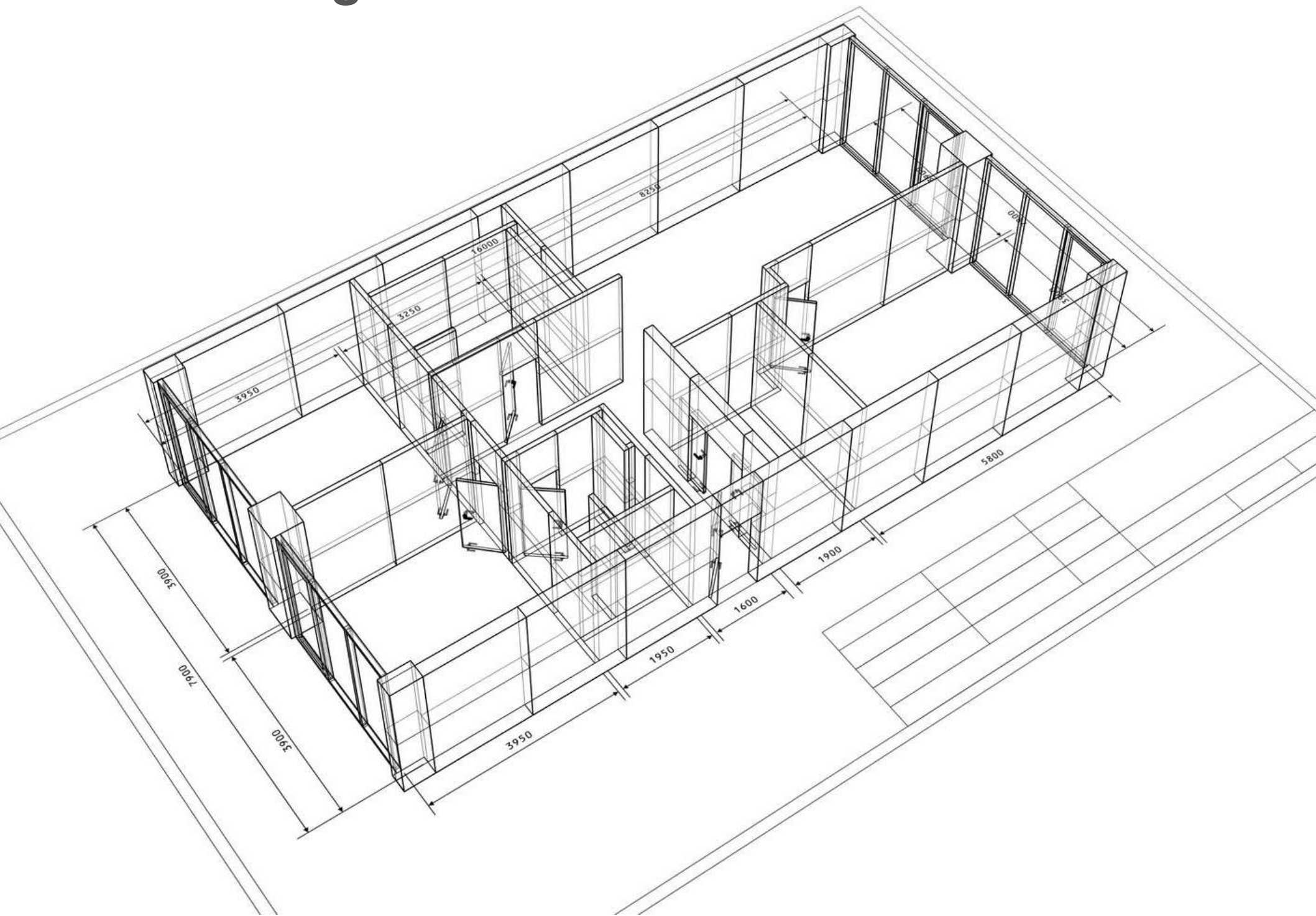




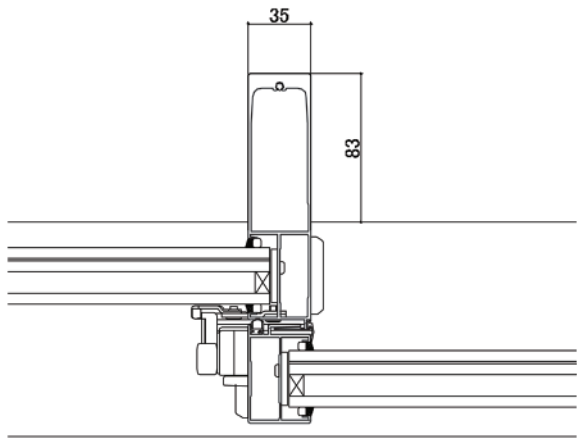
**EXTERIOR PROJECT
REFERENCE**

88 LAND AND HOUSE HILLSIDE, THAILAND

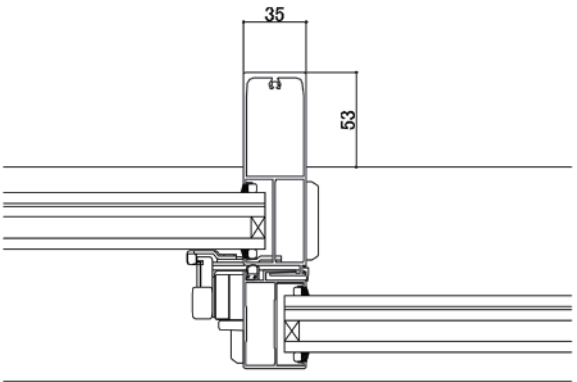
Reference DRawings



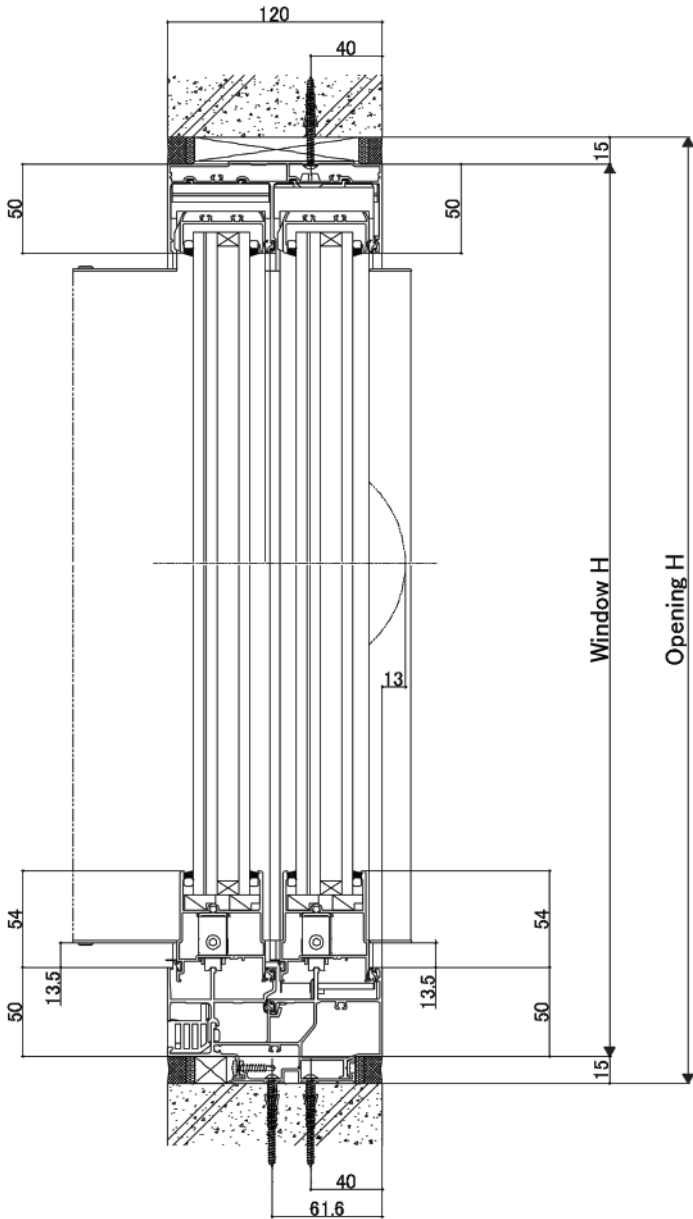
GRANTS WINDOW SERIES



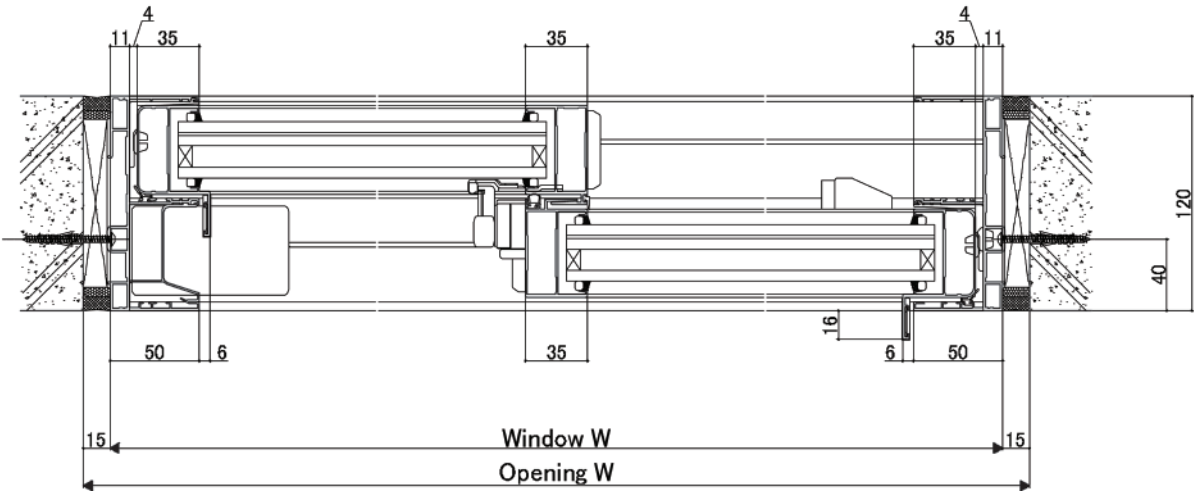
< Meeting stile detail: In case of largest openings >



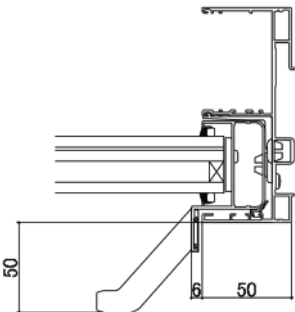
< Meeting stile detail: In case of largest openings >



< Vertical section: 2 panels sliding window >

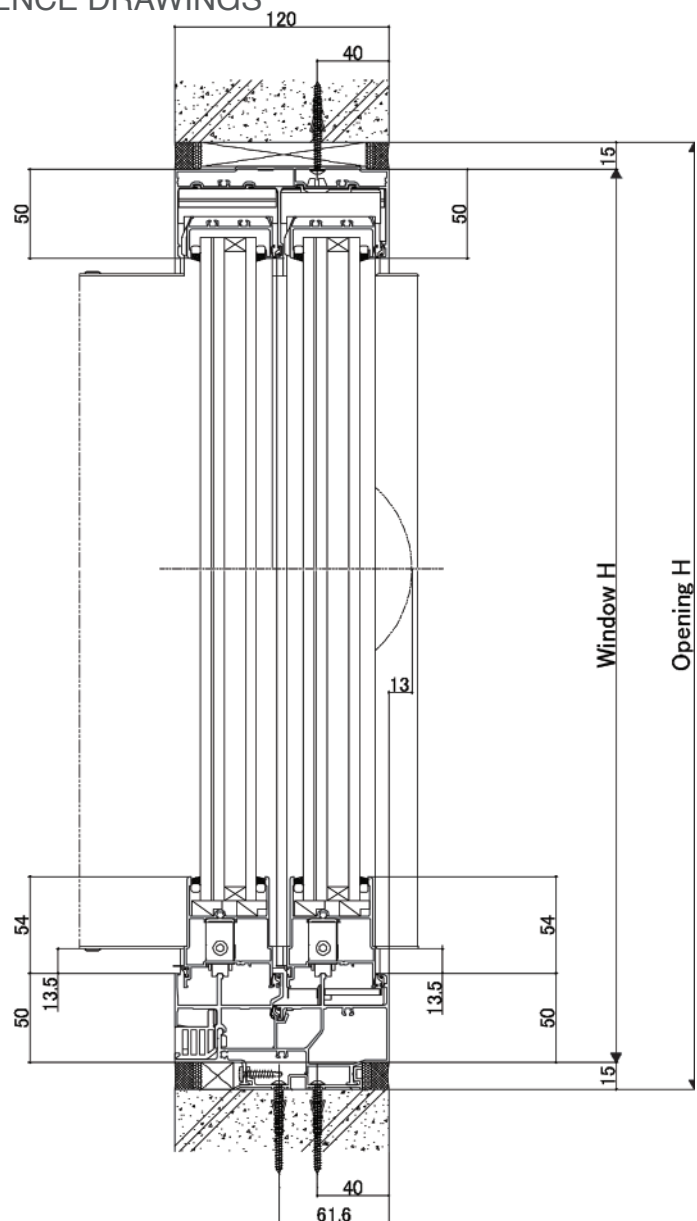


< Horizontal section: 2 panels sliding window >

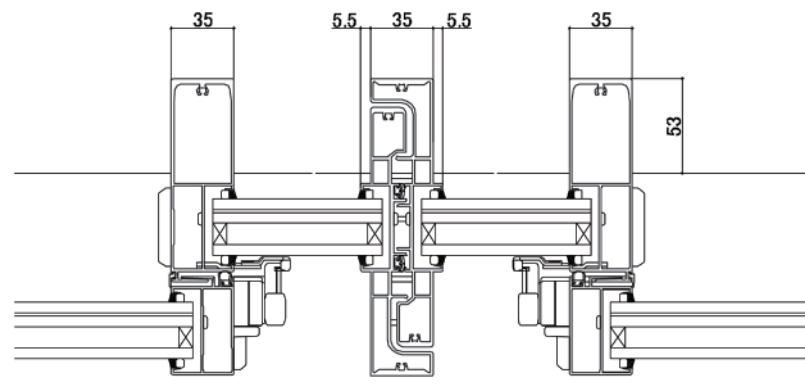


< In case with handle option >

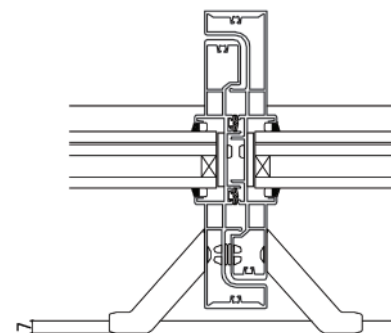
REFERENCE DRAWINGS



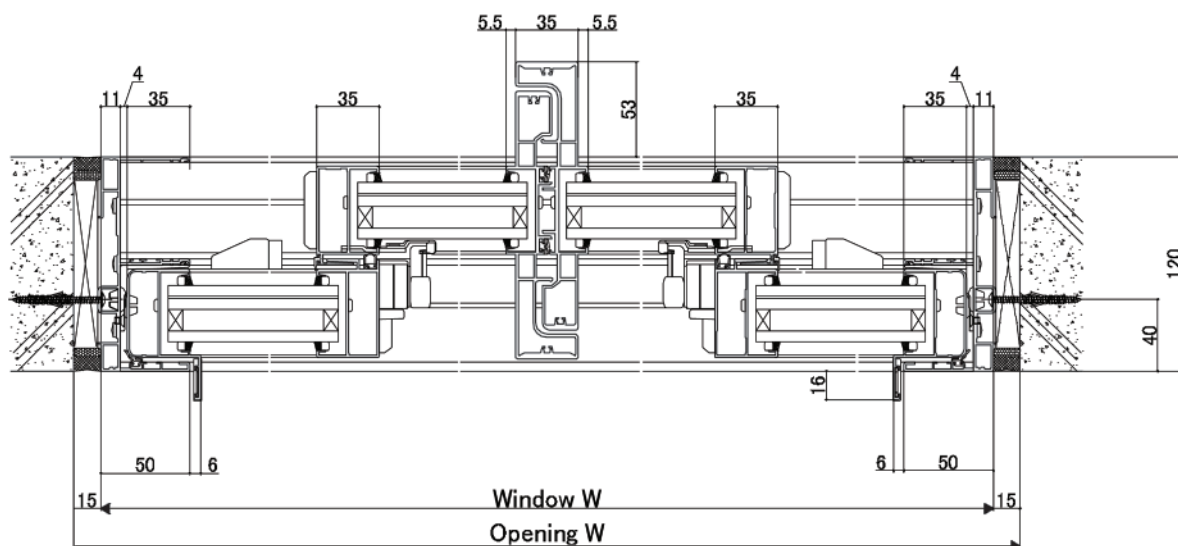
< Vertical section: 4 panels sliding window >



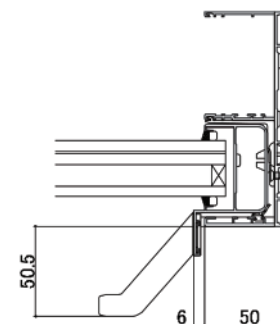
< Stiles detail: In case of large openings >



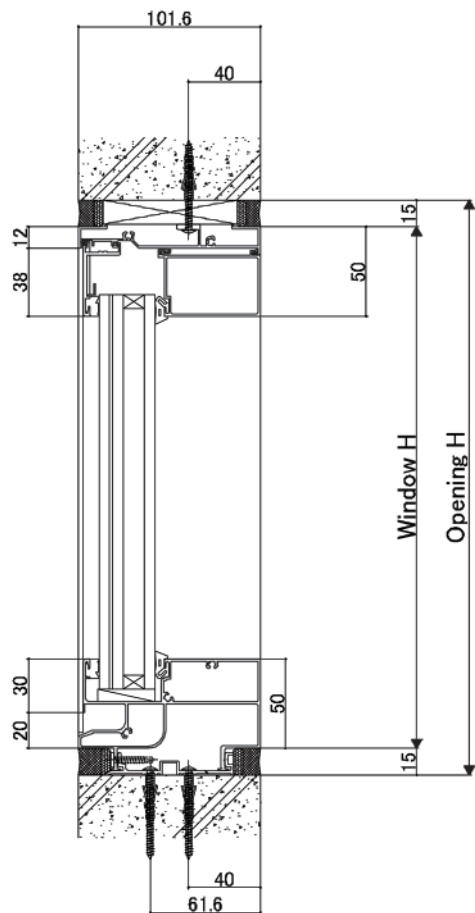
< In case with handle option > (Butting stile)



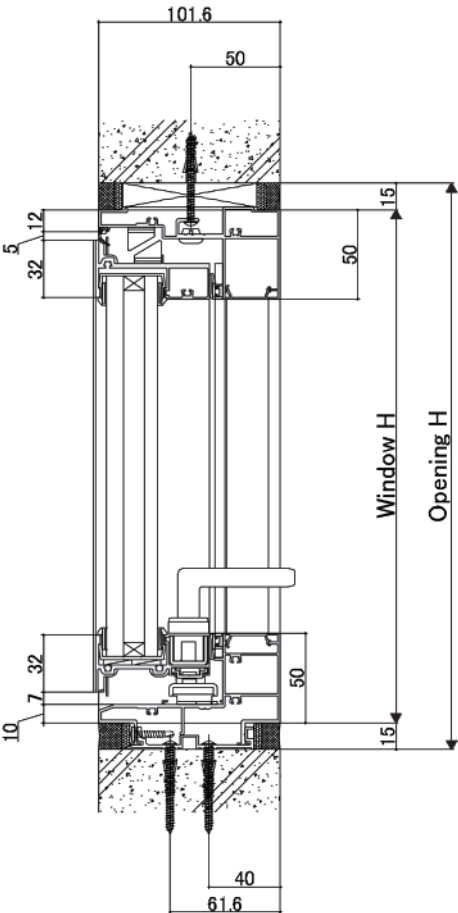
< Horizontal section: 4 panels sliding window >



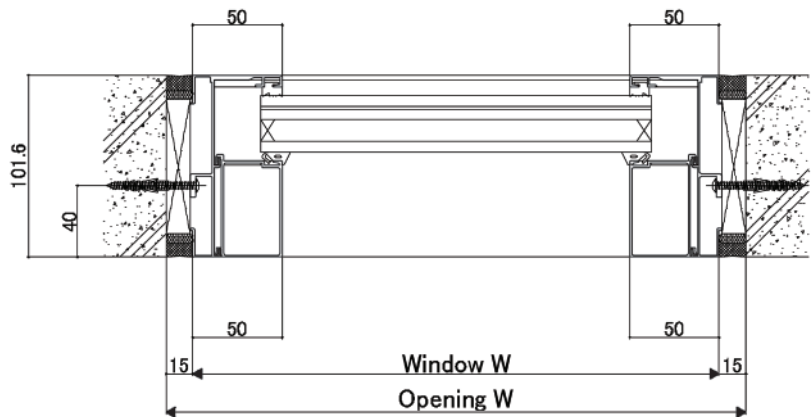
< In case with handle option > (Stile)



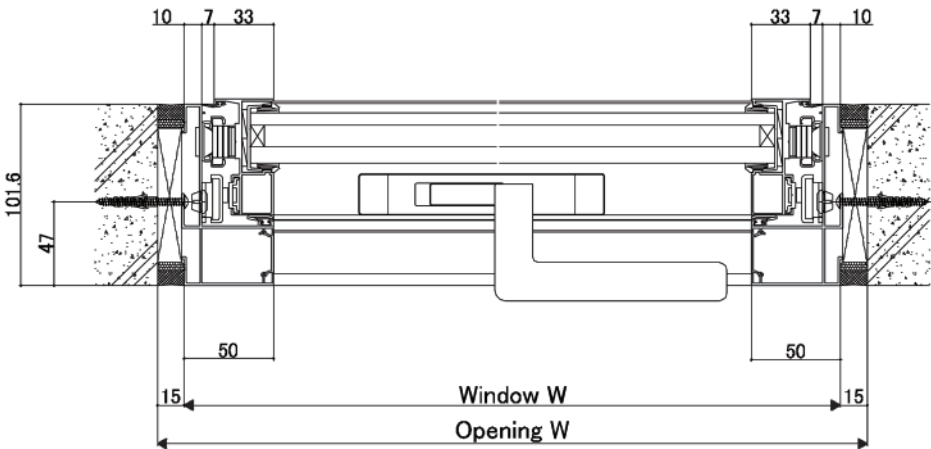
< Vertical section: Fixed window >



< Vertical section: Awning window >



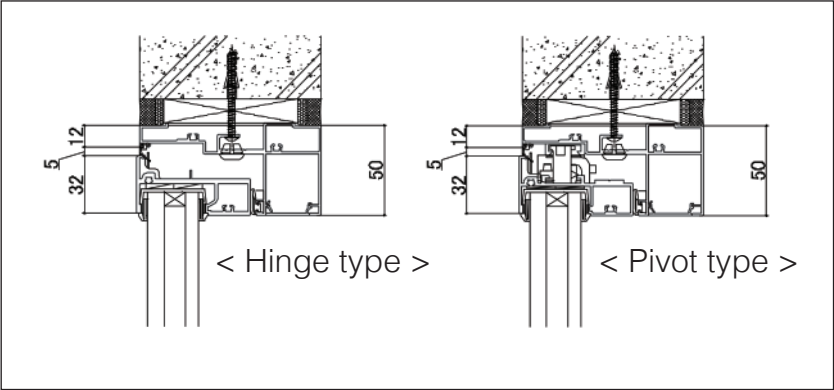
< Horizontal section: Fixed window >



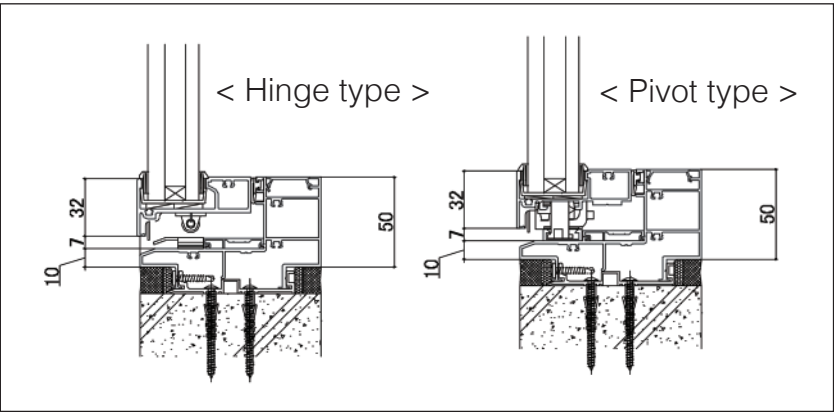
< Horizontal section: Awning window >

REFERENCE DRAWINGS

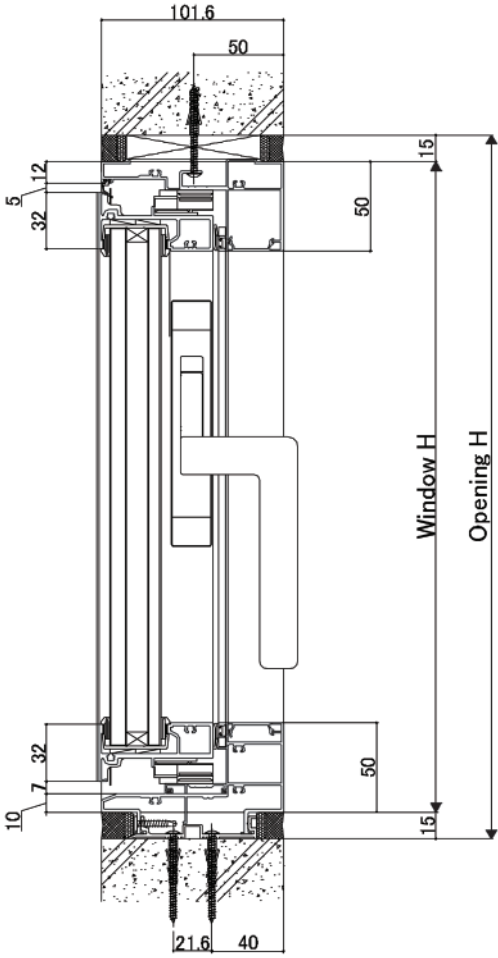
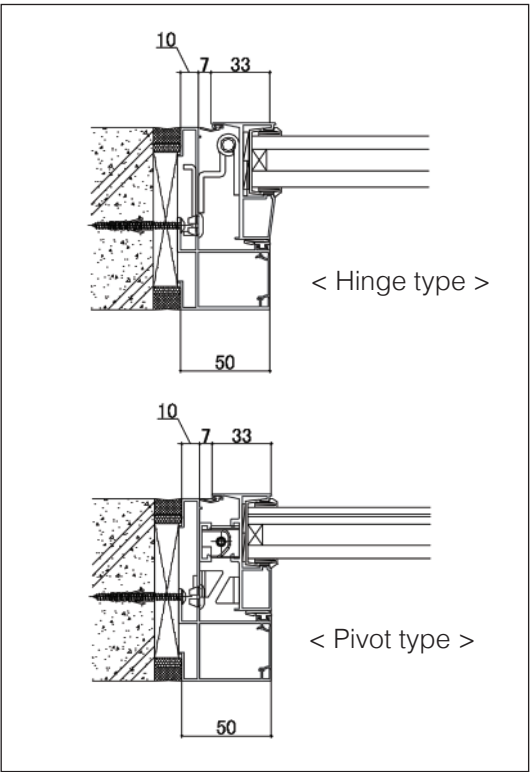
< Head detail >



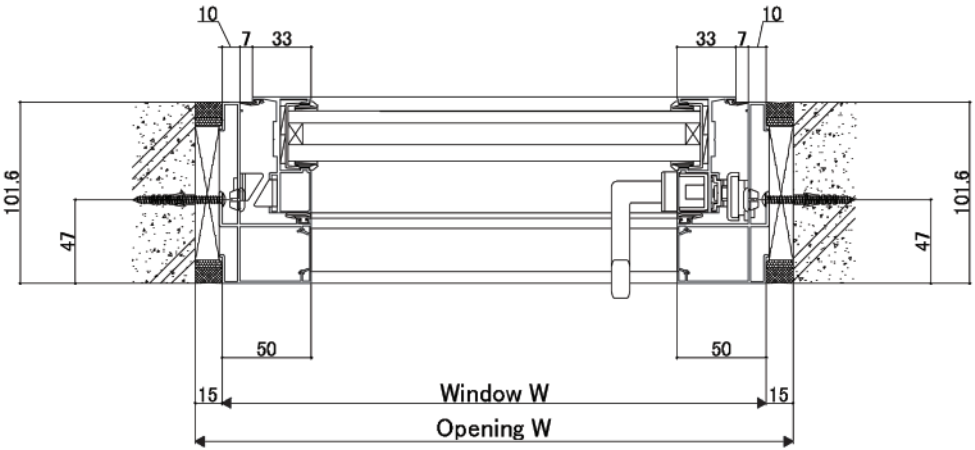
< Sill detail >



< Jamb detail >

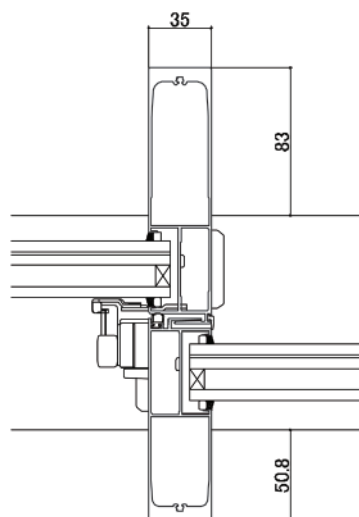


< Vertical section: Casement (with friction stay) >

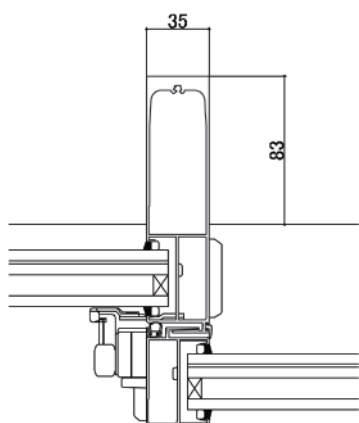


< Horizontal section: Casement (with friction stay) >

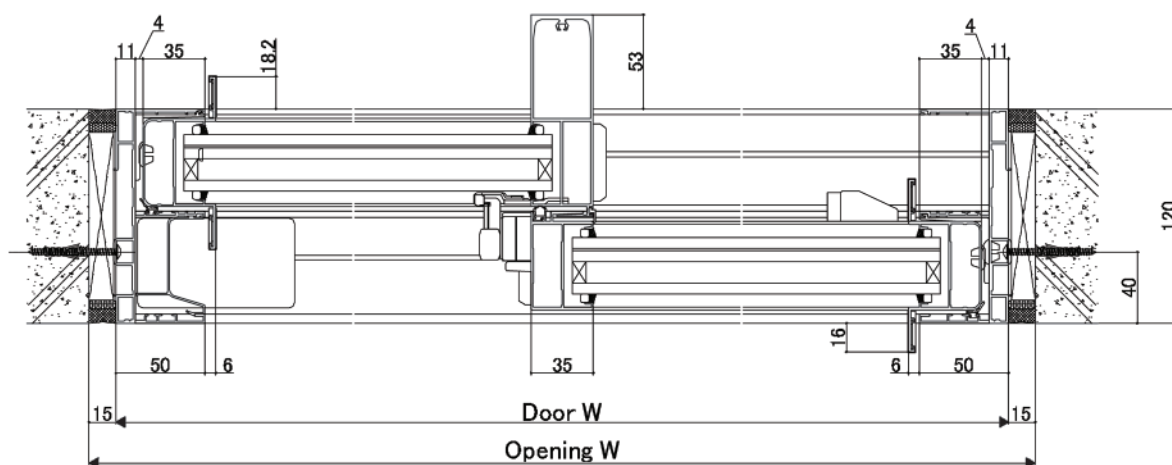
GRANTS DOOR SERIES



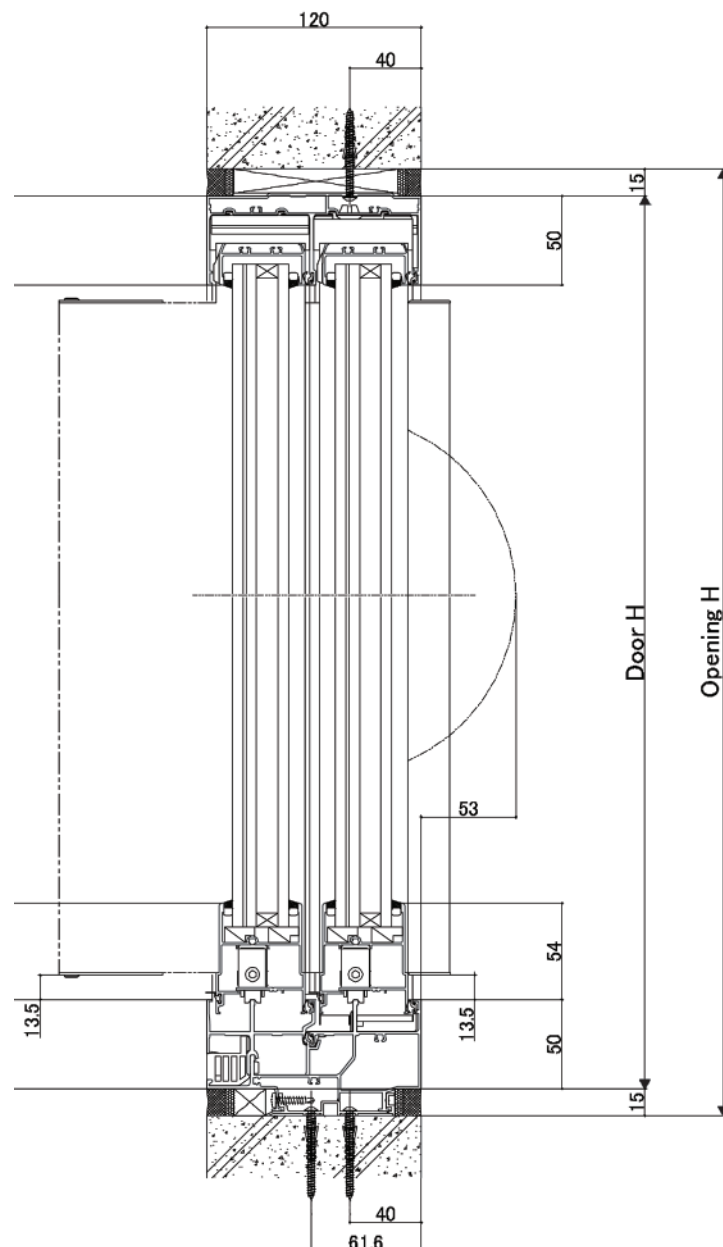
< Meeting stile detail: In case of largest openings >



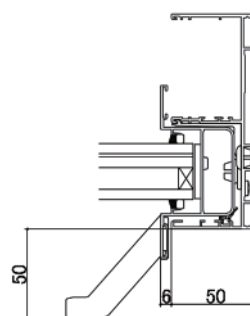
< Meeting stile detail: In case of larger openings >



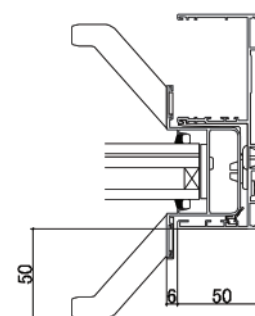
< Horizontal section: 2 panels Sliding door >



< Vertical section: 2 panels Sliding door >



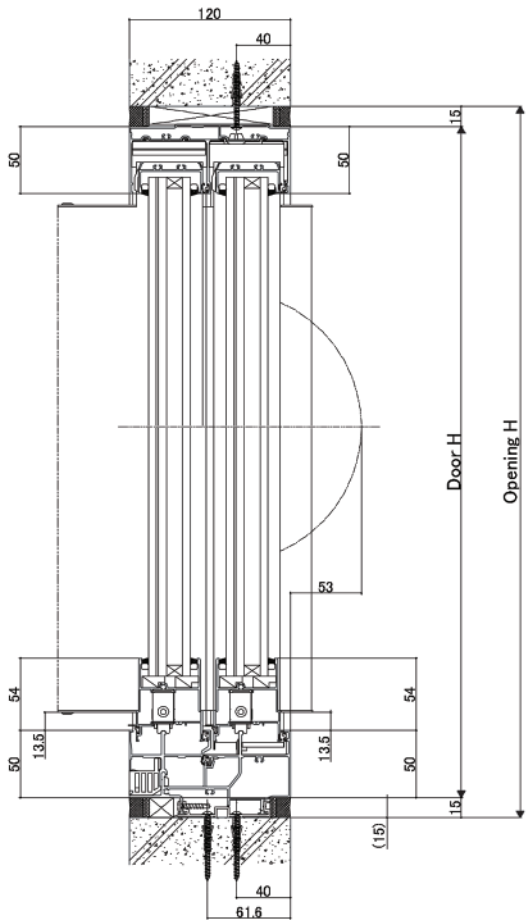
< Inside only >



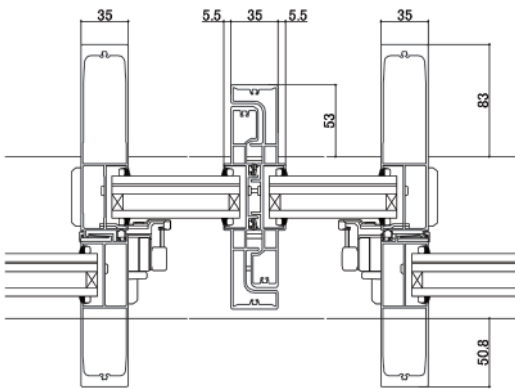
< Inside & Outside >

< In case with handle option >

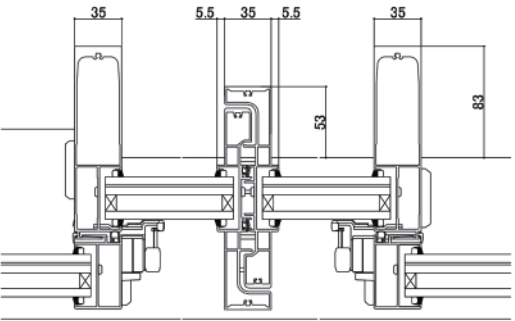
REFERENCE DRAWINGS



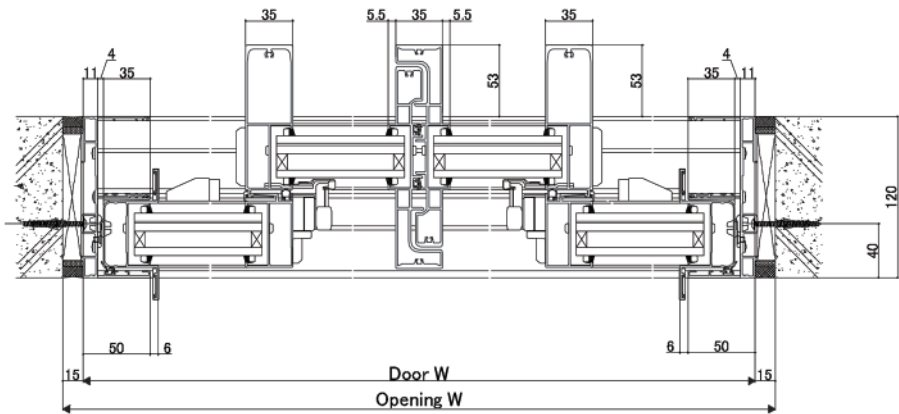
< Vertical section: 4 panels sliding door >



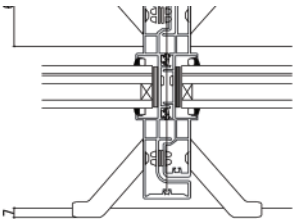
< Stiles detail: In case of largest openings >



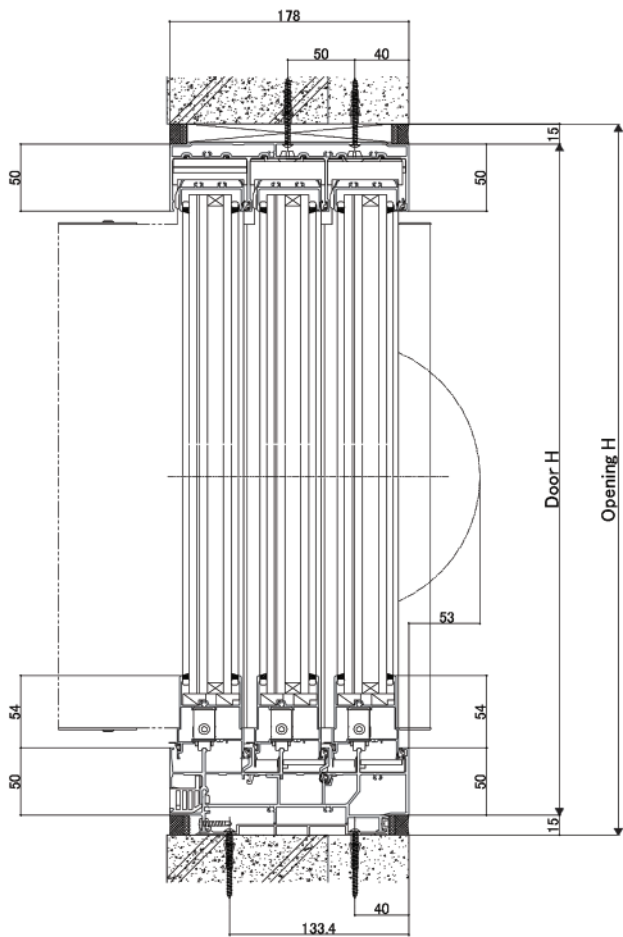
< Stiles detail: In case of larger openings >



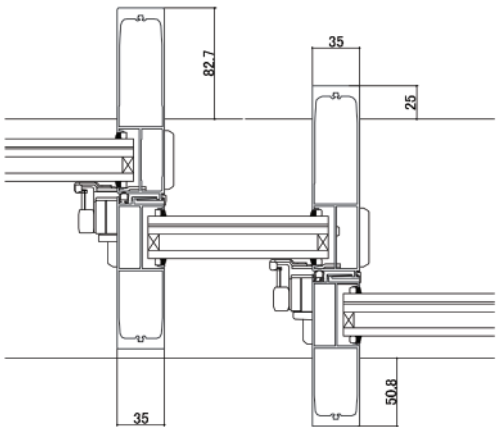
< Horizontal section: 4 panels sliding door >



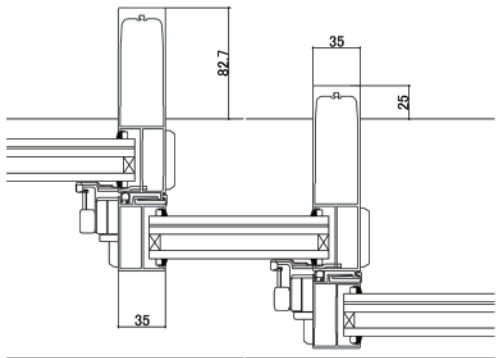
< In case with handle option >



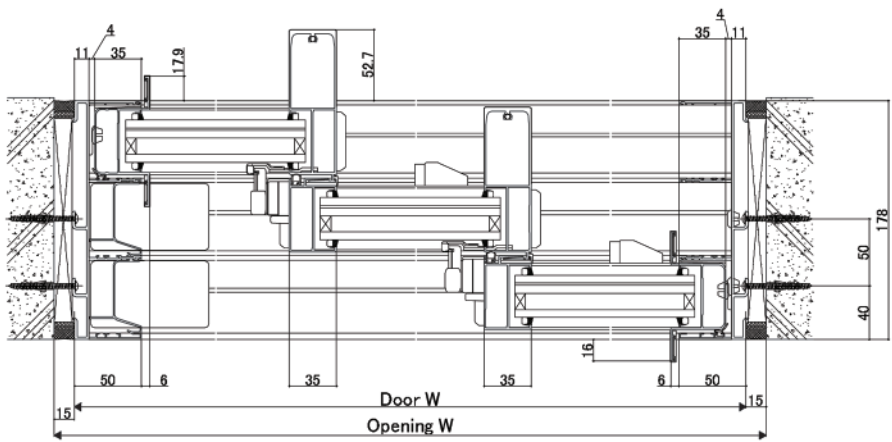
< Vertical section: 3 panels sliding door >



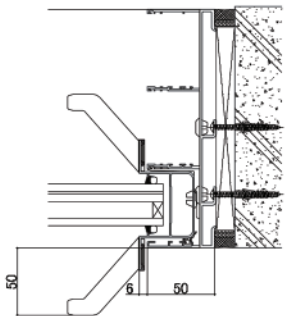
< Stiles detail: In case of largest openings >



< Stiles detail: In case of largest openings >

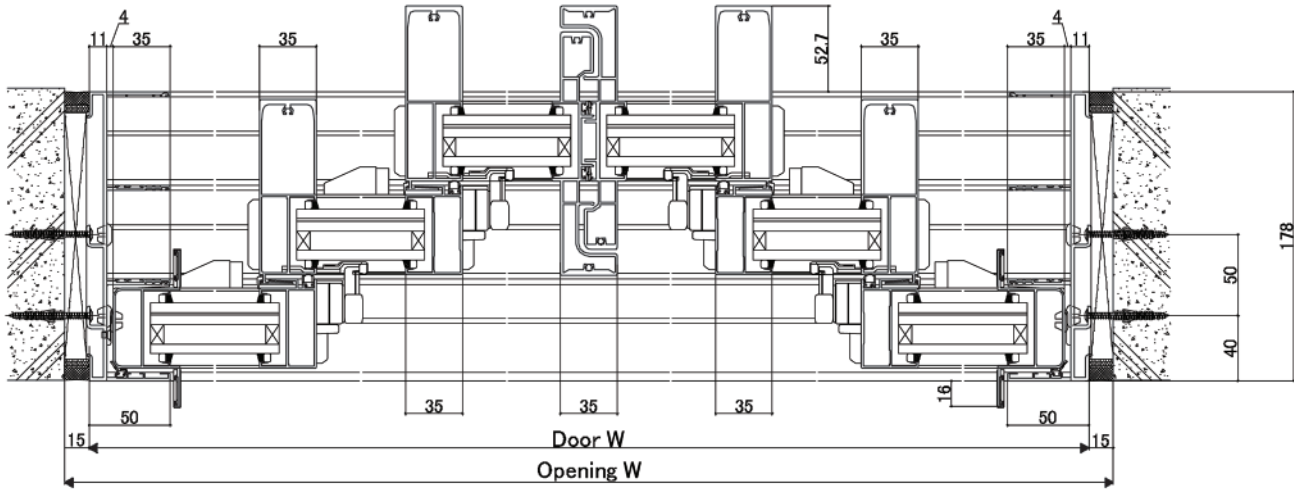


< Horizontal section: 3 panels sliding door >

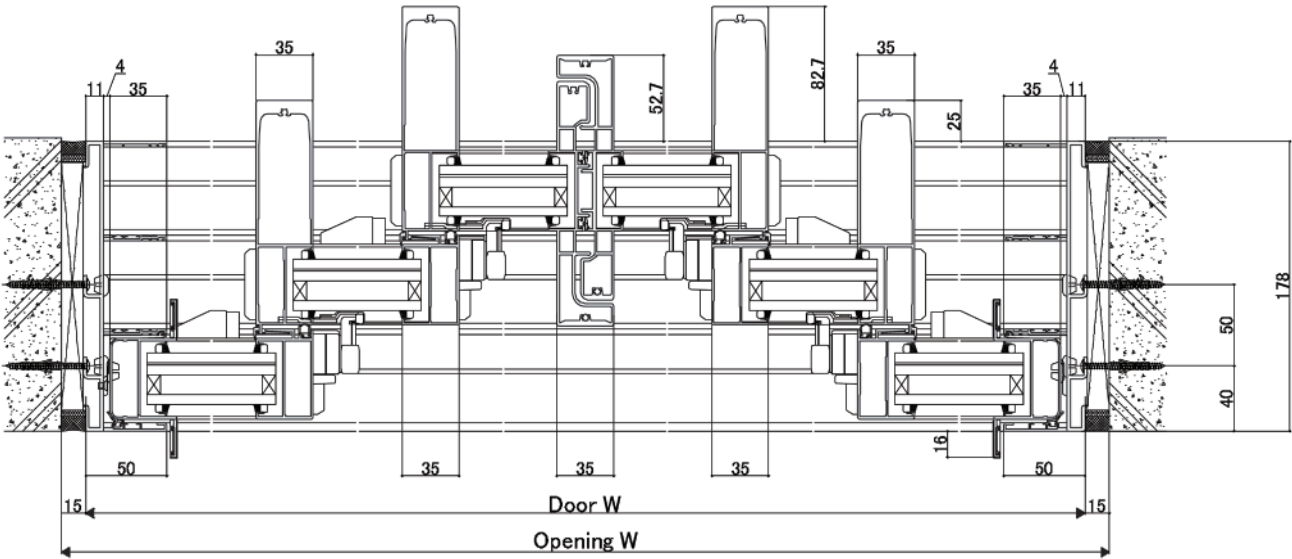


< In case with handle option >

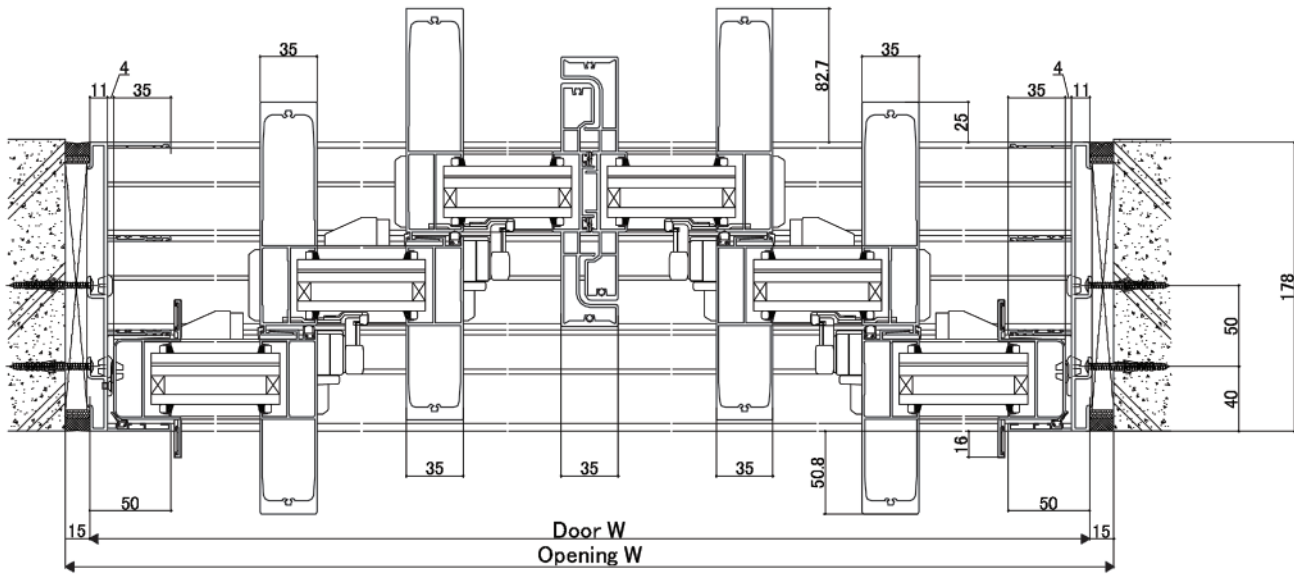
REFERENCE DRAWINGS



< Horizontal section: 6 panels sliding door >



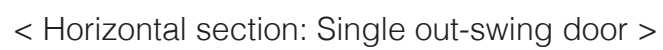
< Horizontal section: 6 panels sliding door (larger) >



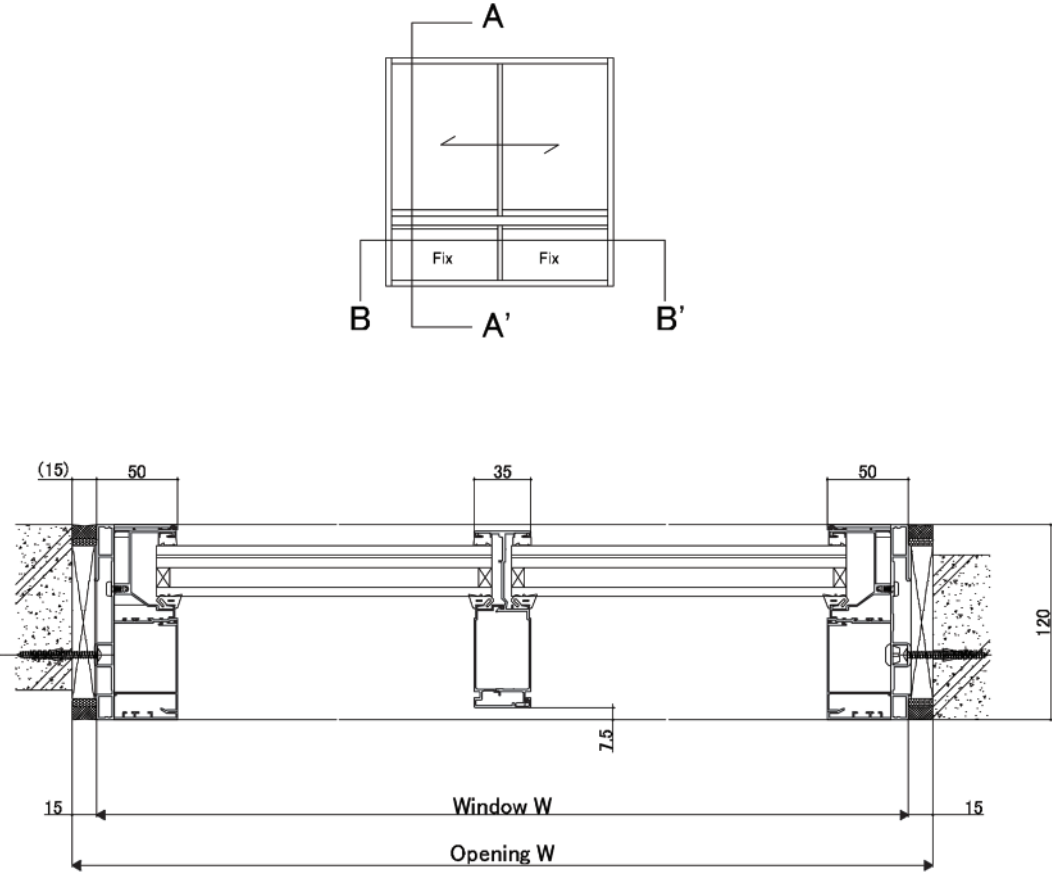
< Horizontal section: 6 panels sliding door (largest) >

Technical drawing of a door cross-section showing dimensions and components. The drawing includes the following dimensions and labels:

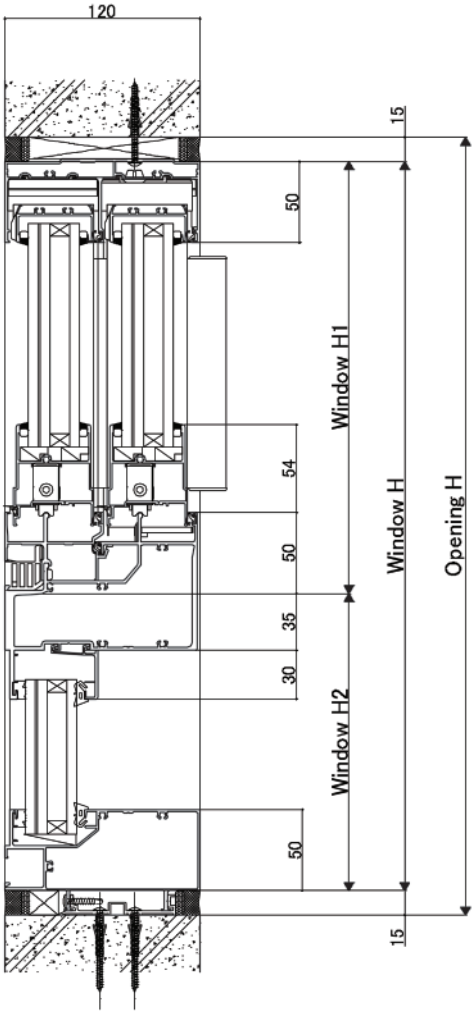
- Top width: 100
- Top right width: 50
- Top left width: 5, 12, 32
- Top right height: 50
- Top right corner: 15
- Door height: Door H
- Opening height: Opening H
- Position of handle: position of handle 1100
- Bottom right width: 80
- Bottom right height: 50
- Bottom right corner: 15
- Bottom left width: 10, 7, 32
- Bottom left height: 40
- Bottom left corner: 61.6



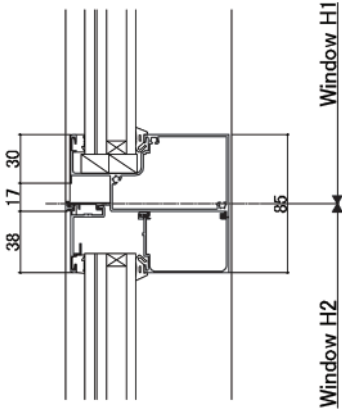
GRANTS COMBINATION



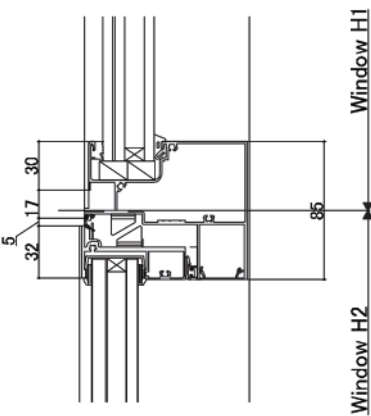
< Horizontal section: Sliding/Fixed B-B' >



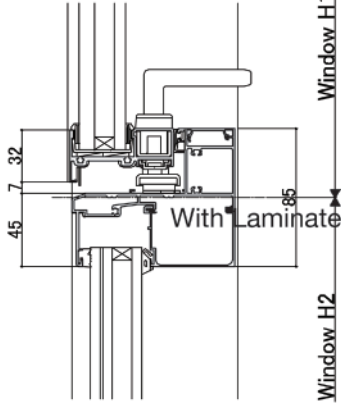
< Vertical section: Sliding/Fixed A-A' >



< Vertical: Fixed/Fixed transom >

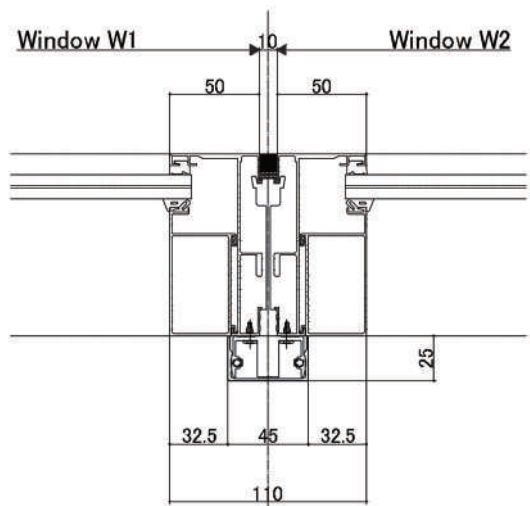


< Vertical: Fixed/Projection transom >

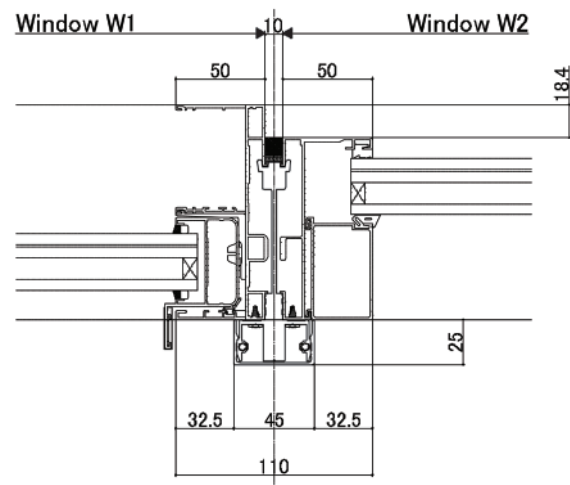


< Vertical: Projection/Fixed transom >

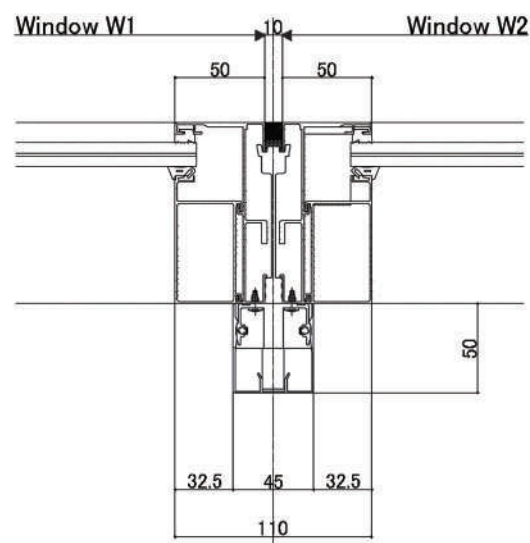
REFERENCE DRAWINGS



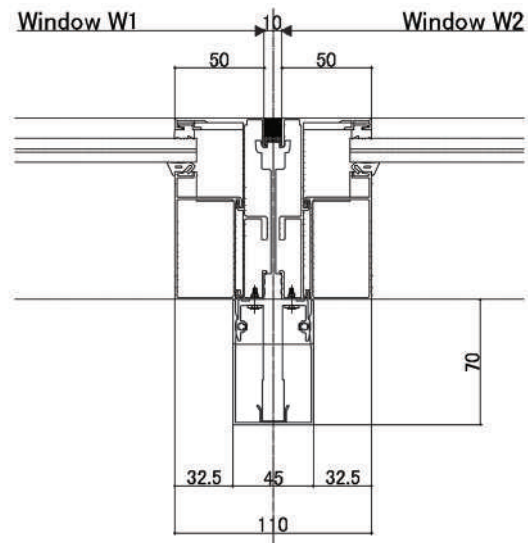
< Mullion type A >



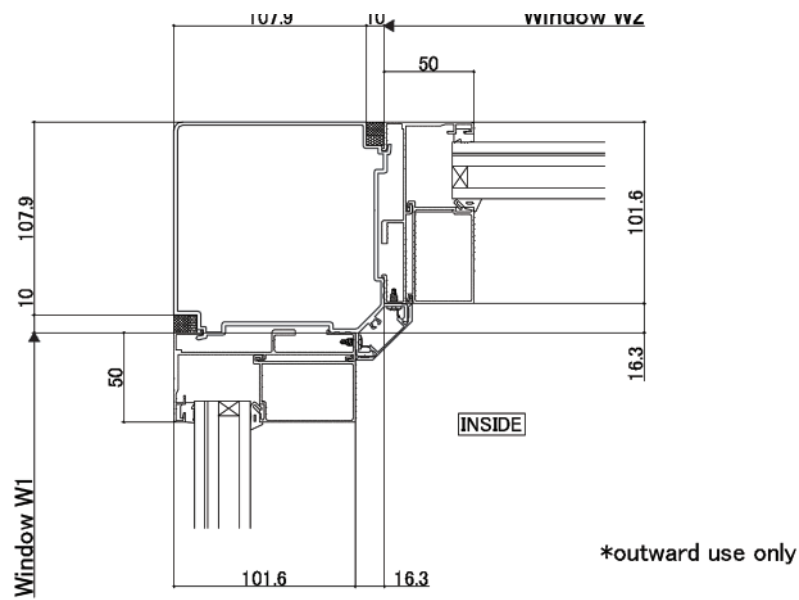
< Mullion type A with sliding window >



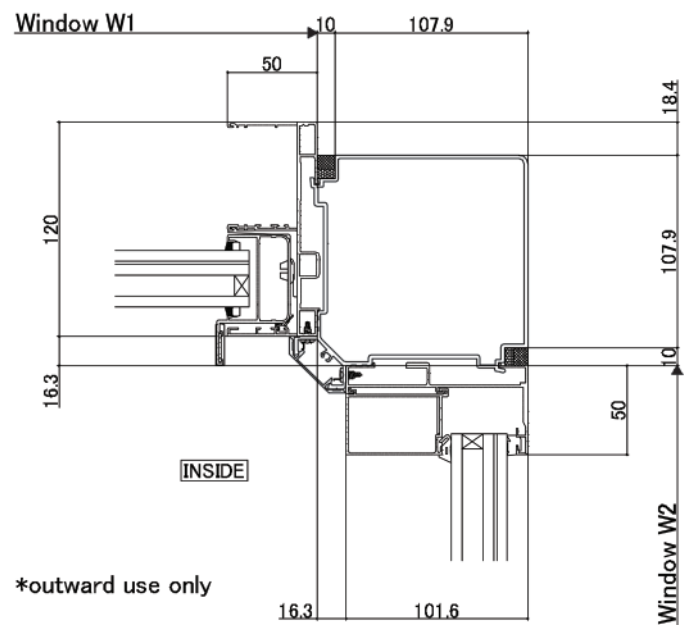
< Mullion type B >



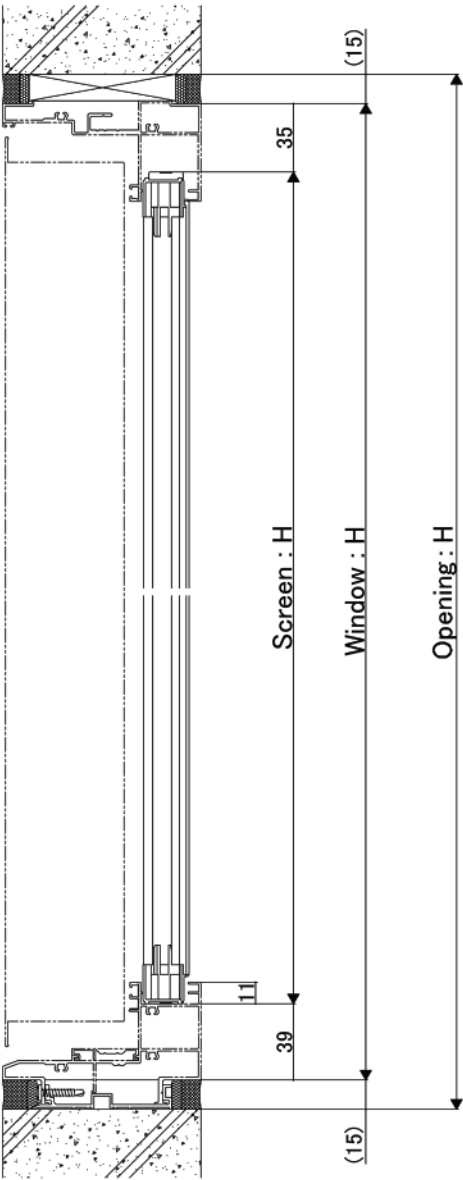
< Mullion type C >



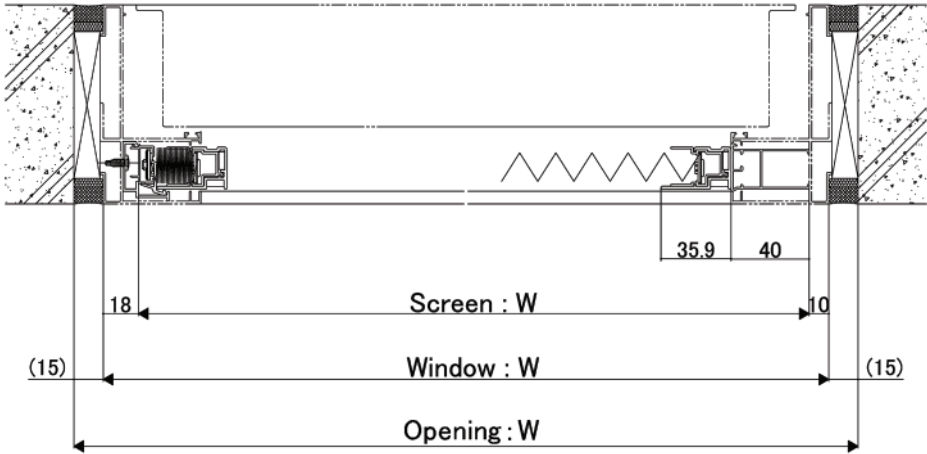
< Corner mullion >



< Corner mullion with sliding window >

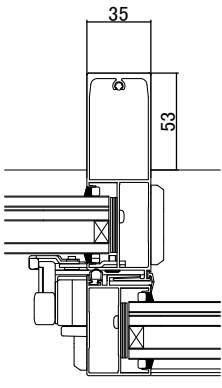


< Vertical section: Awning & Casement >

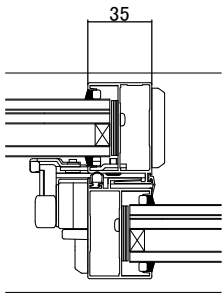


< Horizontal section: Awning & Casement >

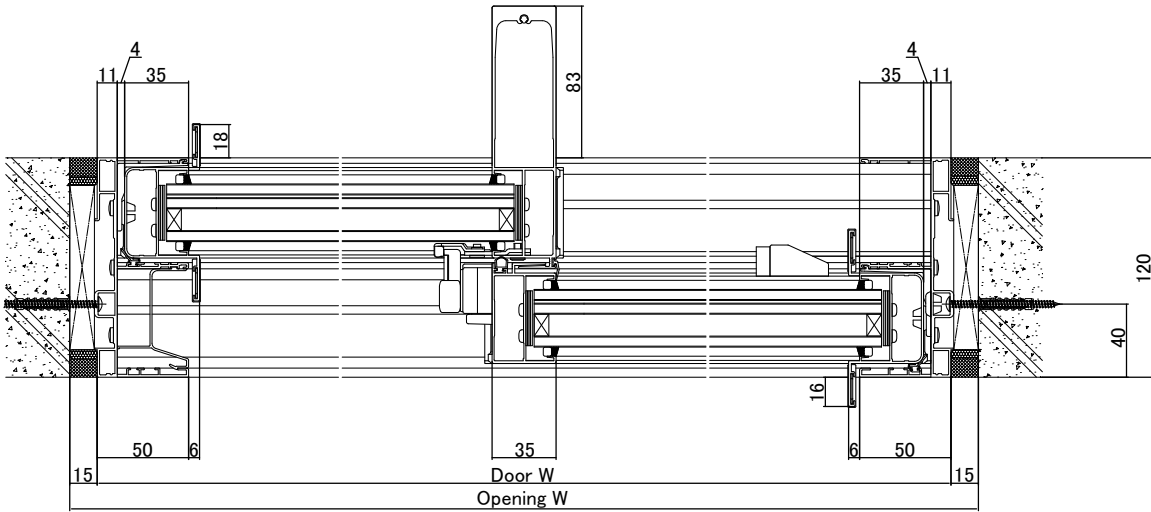
GRANTS SLIDING DOOR FLAT RAIL



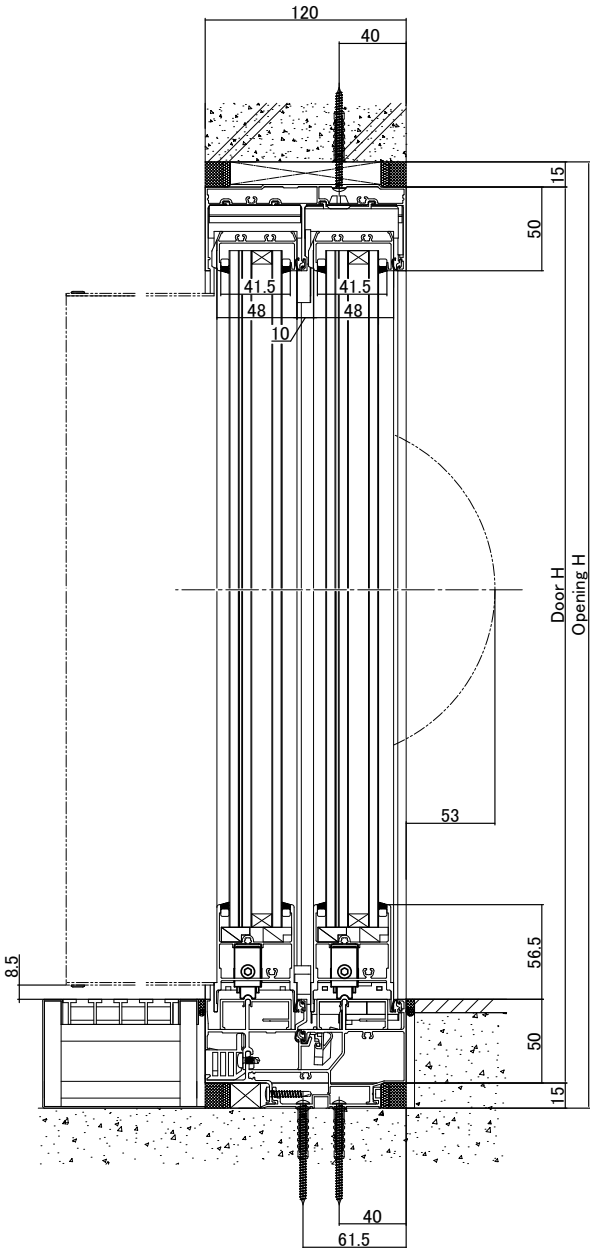
< In case of smaller openings >



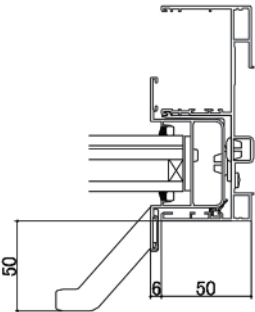
<In case of smallest openings>



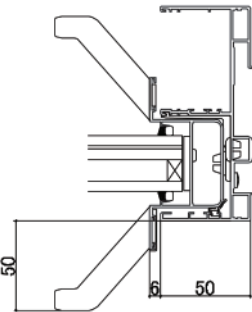
< Horizontal section : 2 panels Sliding door >



< Vertical section : 2 panels Sliding door >



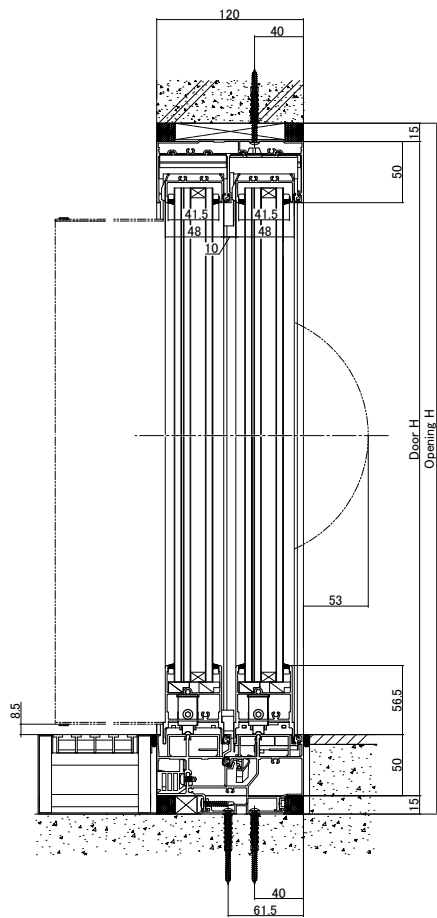
< Inside only >



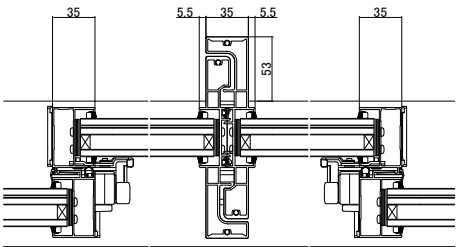
< Inside & Outside >

< In case with handle option >

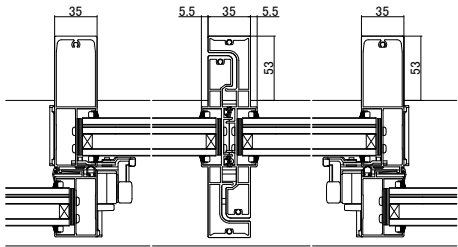
REFERENCE DRAWINGS



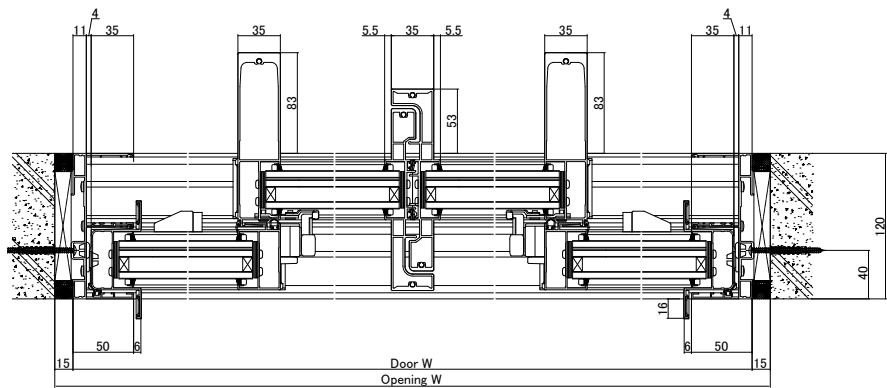
< Vertical section : 4 panels Sliding door >



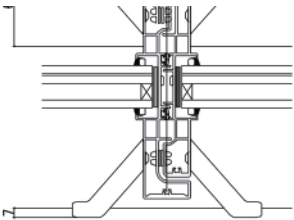
< In case of smallest openings >



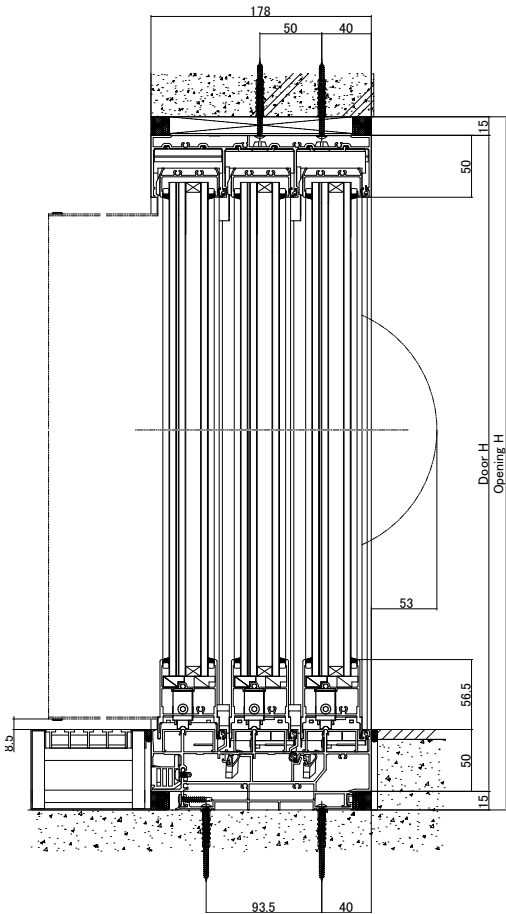
< In case of smaller openings >



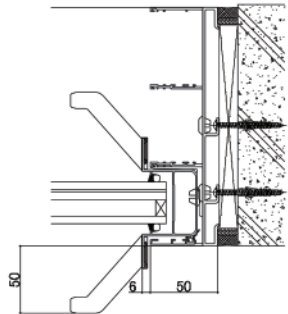
< Horizontal section : 4 panels Sliding door >



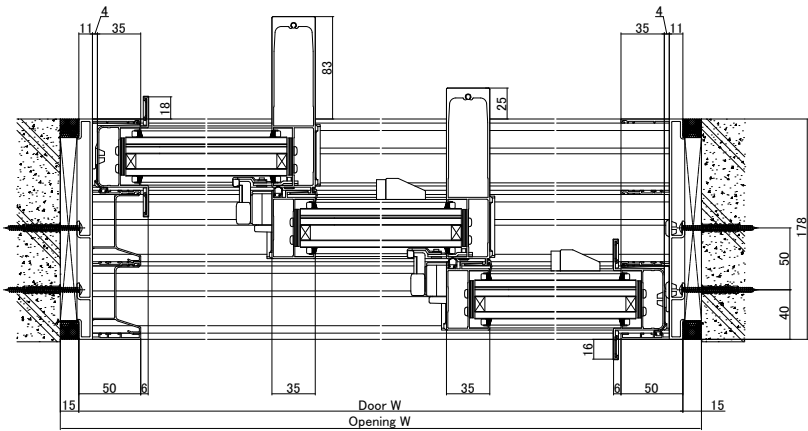
< In case with handle option >



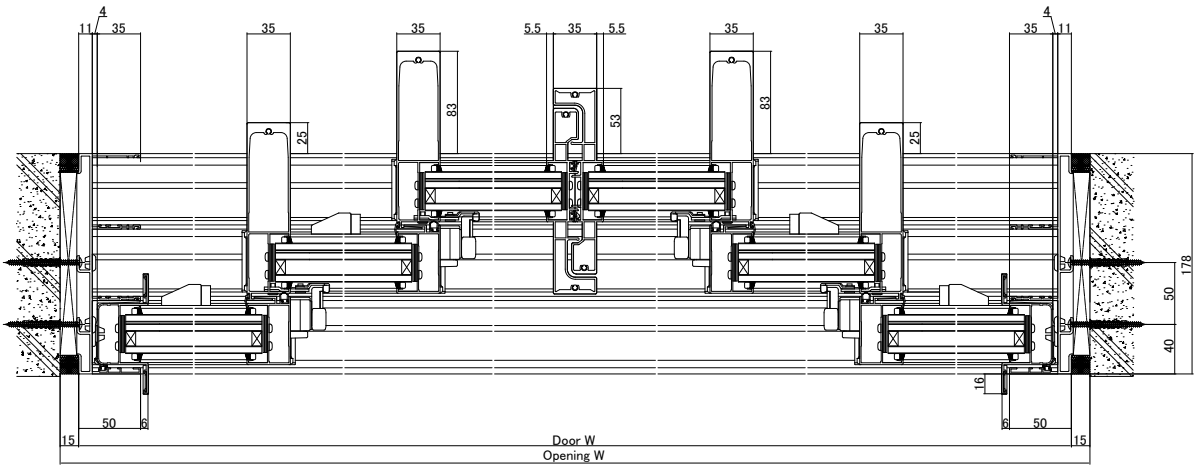
< Vertical section : 3 panels Sliding door >



< In case with handle option >

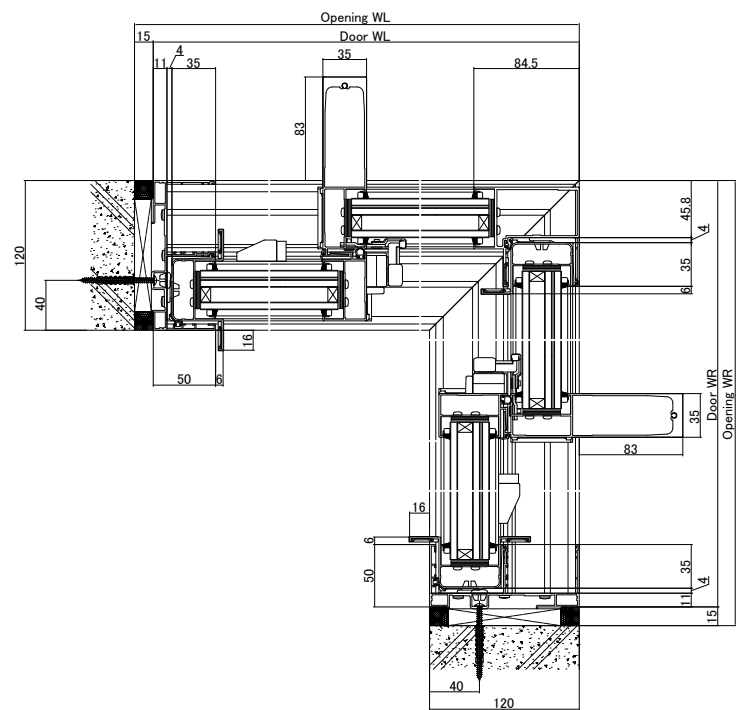


< Horizontal section : 3 panels Sliding door >

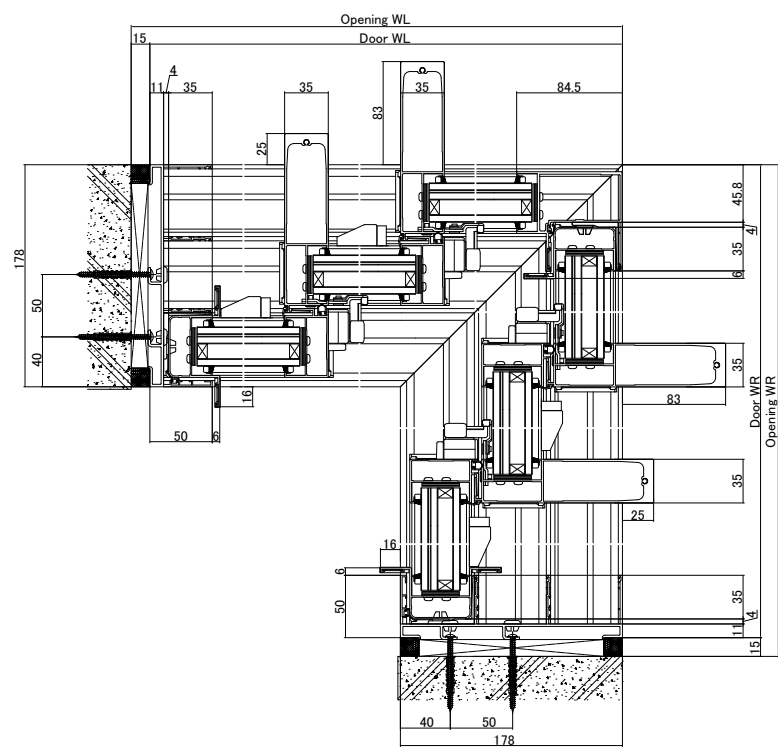


< Horizontal section : 6 panels Sliding door >

REFERENCE DRAWINGS

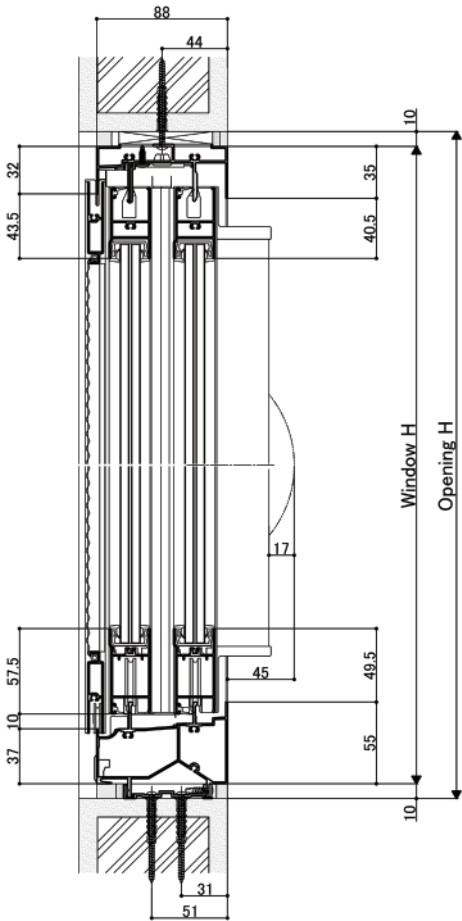


< Horizontal section : 2+2 panels Corner Sliding door >

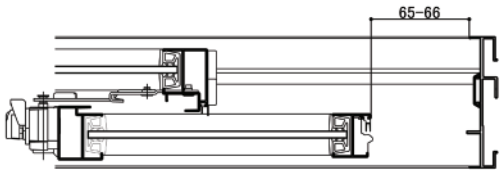


< Horizontal section : 3+3 panels Corner Sliding door >

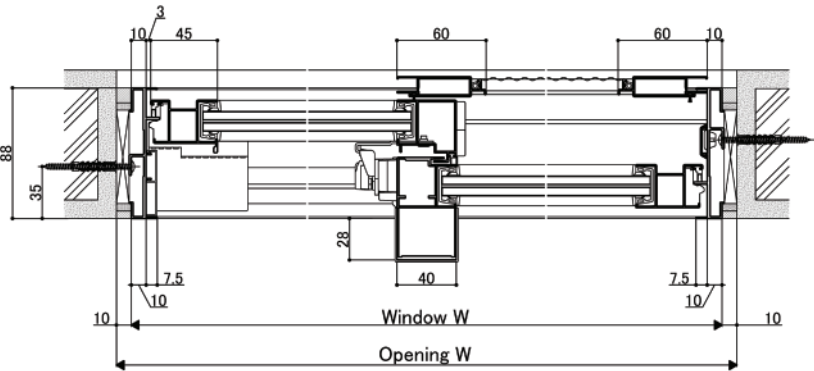
ATIS PLUS WINDOW SERIES



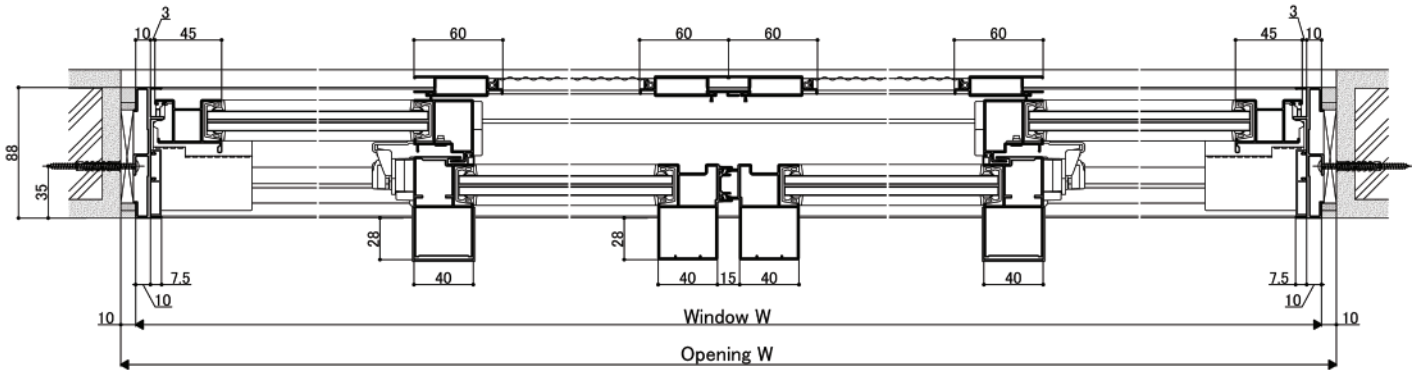
< Vertical section: 2 and 4 panels sliding window >



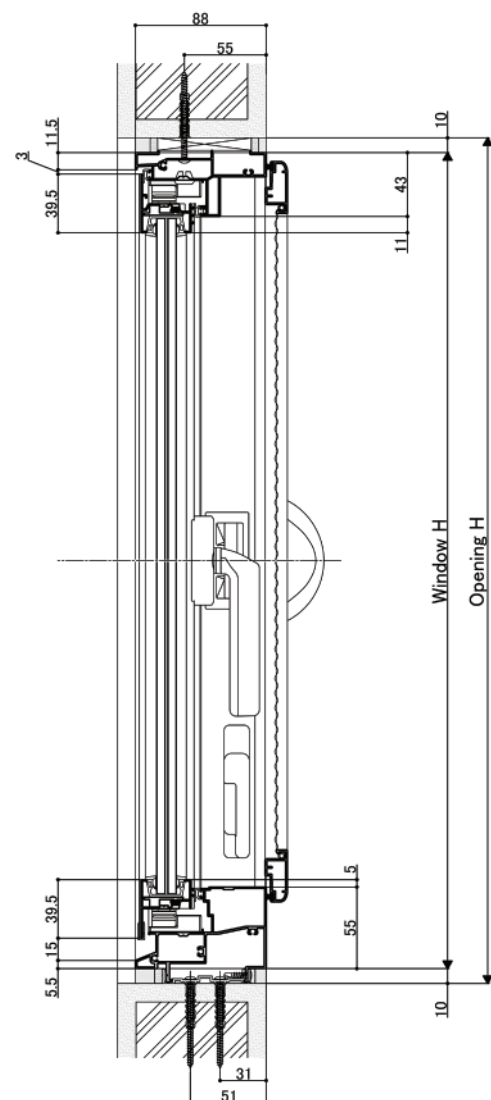
< Options (limit arm) Jamb detail >



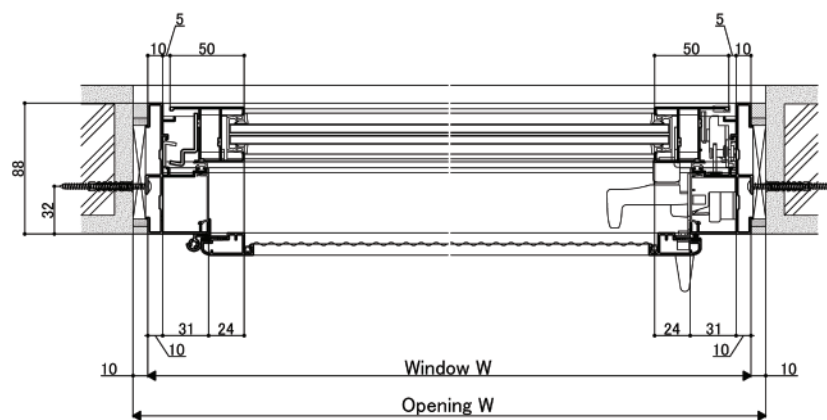
< Horizontal section: 2 panels sliding window >



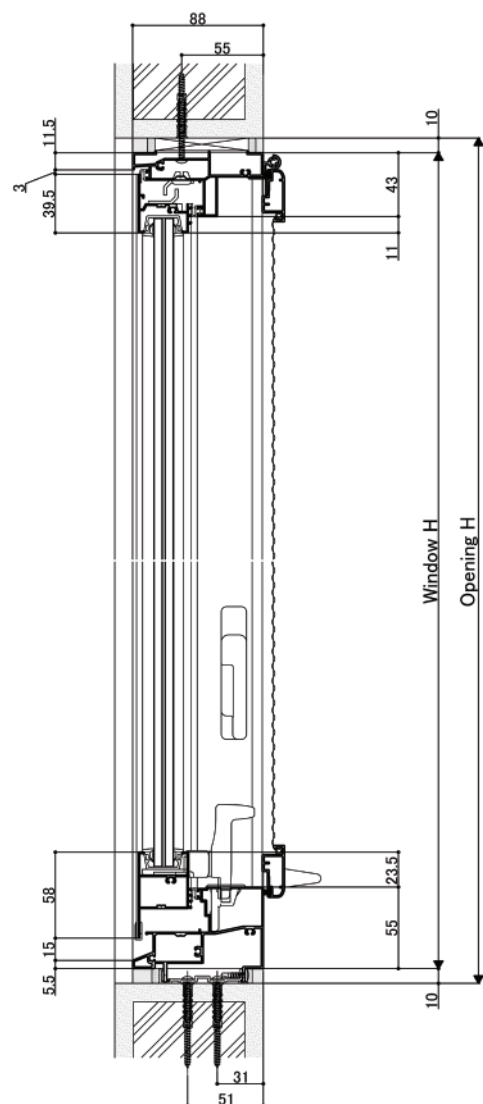
< Horizontal section: 4 panels sliding window >



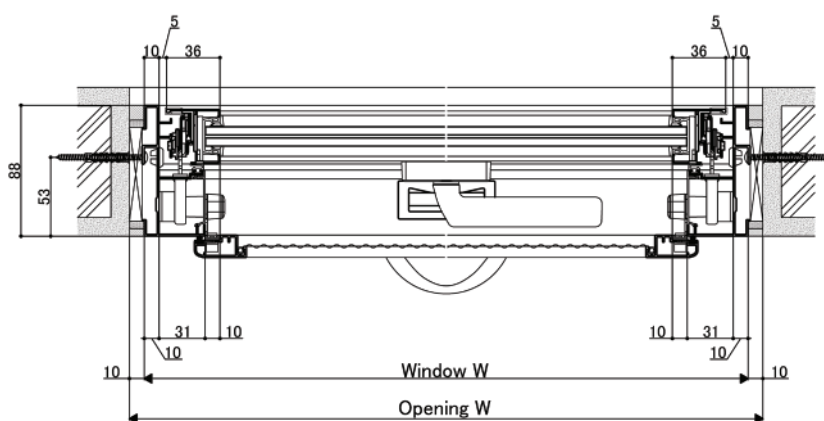
< Vertical section: Casement window (Multi-lock) with screen >



< Horizontal section: Casement with screen >

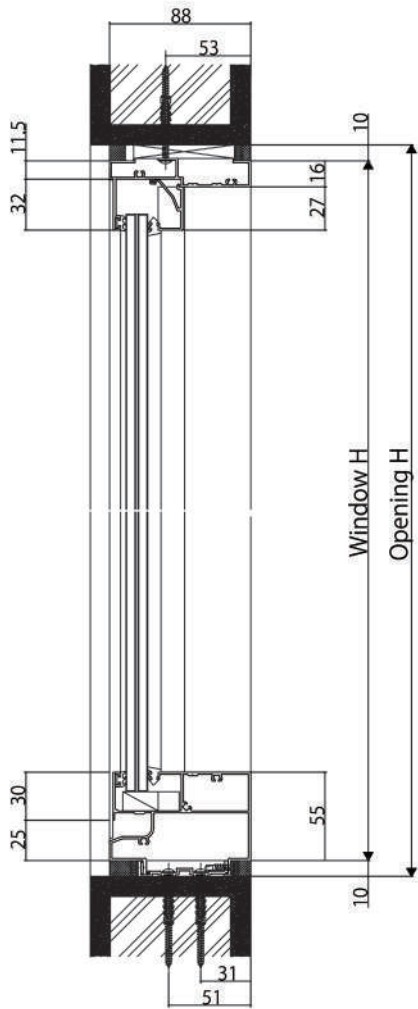


< Vertical section: Awning window (Multi-lock) with screen >

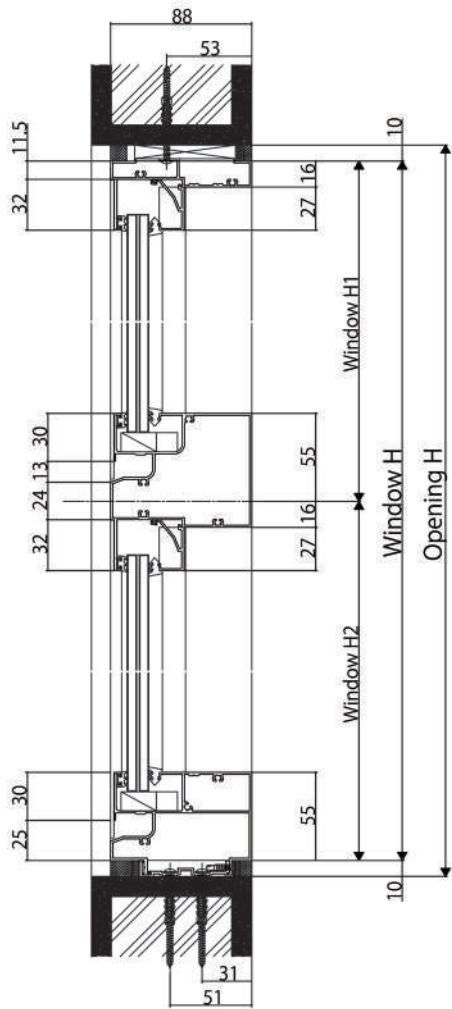


< Horizontal section: Awning with screen >

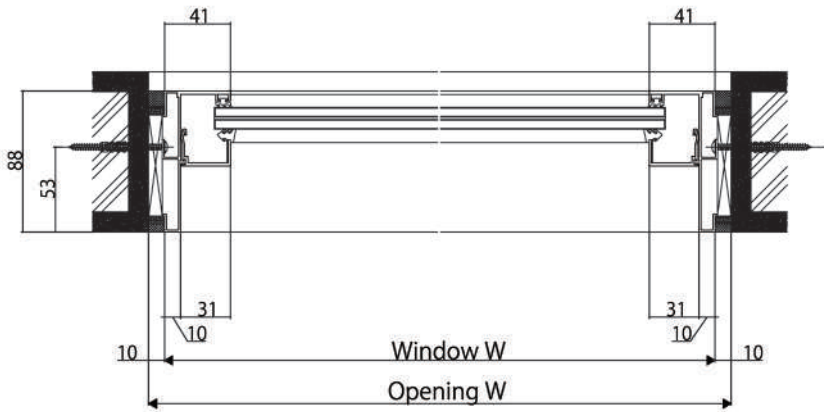
REFERENCE DRAWINGS



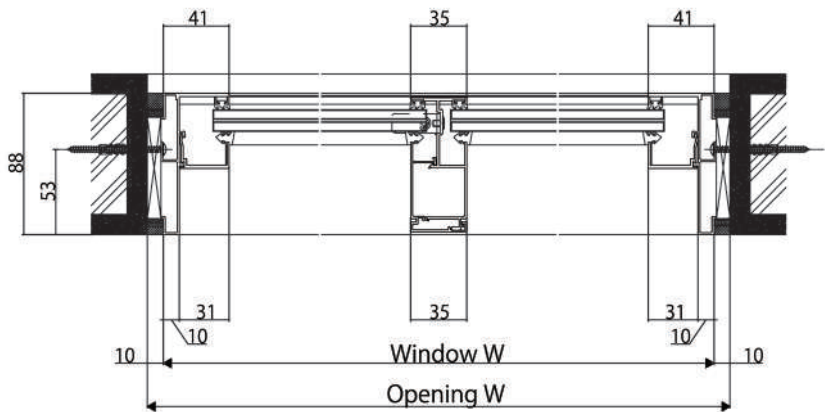
< Vertical section: Single fixed window >



< Vertical section: Fixed window with transom >

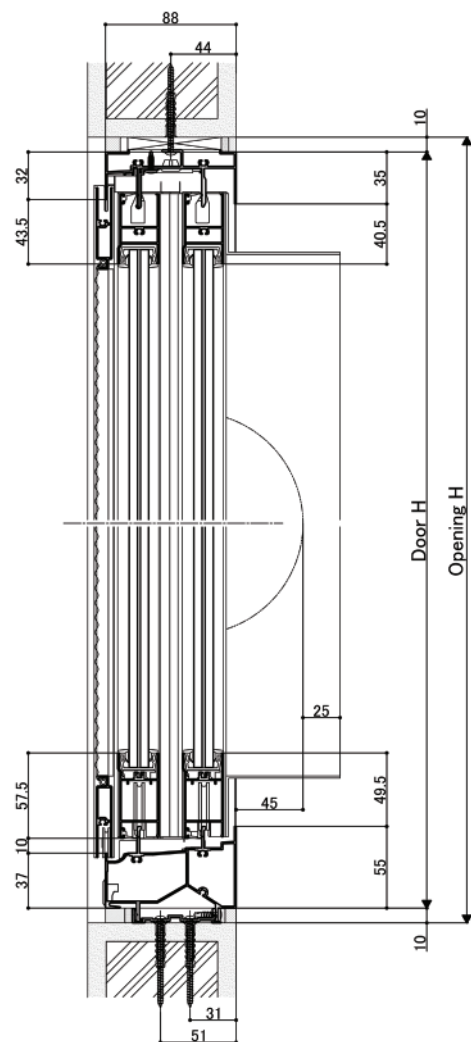


< Horizontal section: Single fixed window >

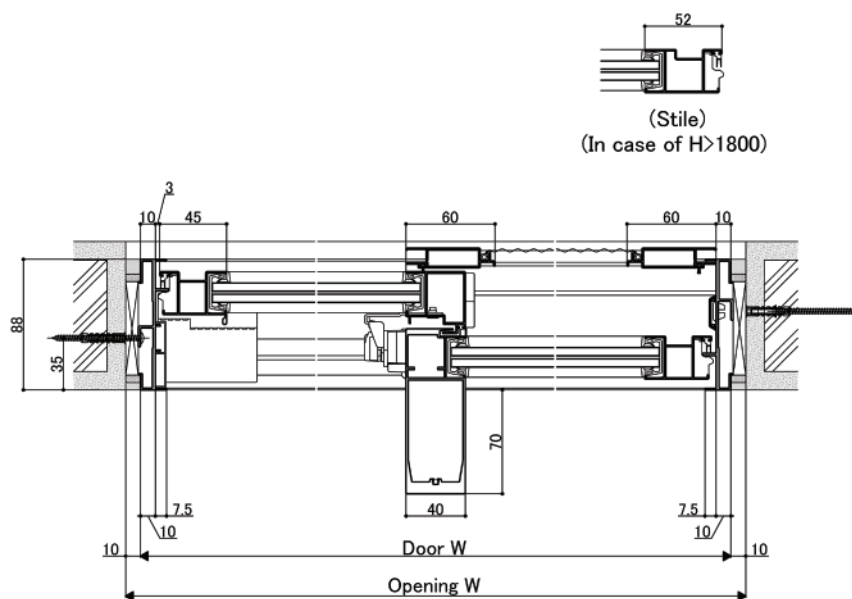


< Horizontal section: Fixed window with mullion >

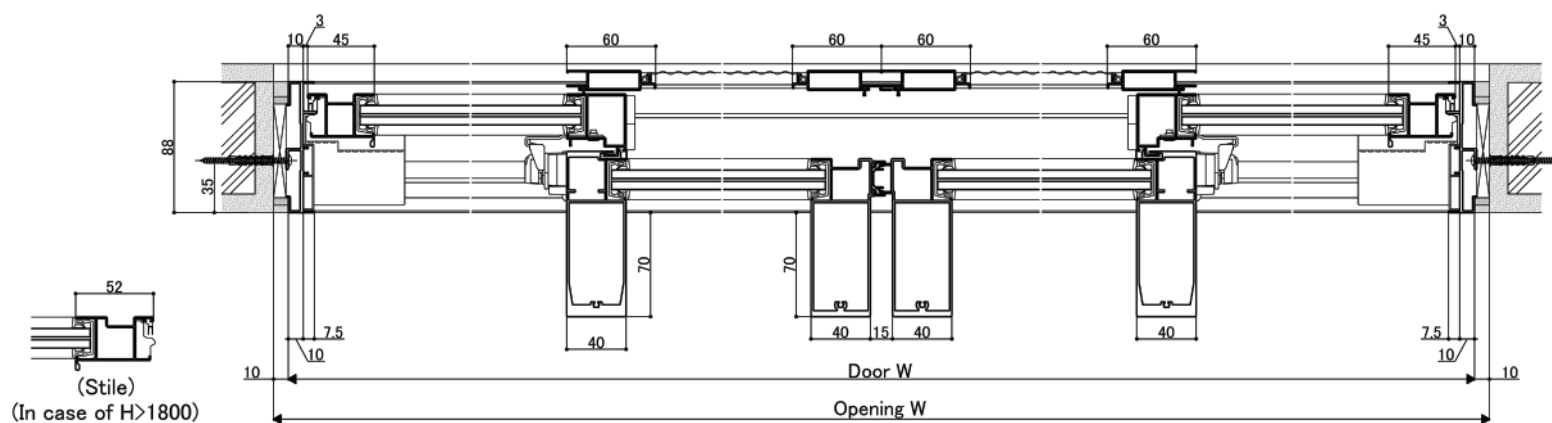
ATIS PLUS DOOR SERIES



< Vertical section: 2 and 4 panels sliding door >

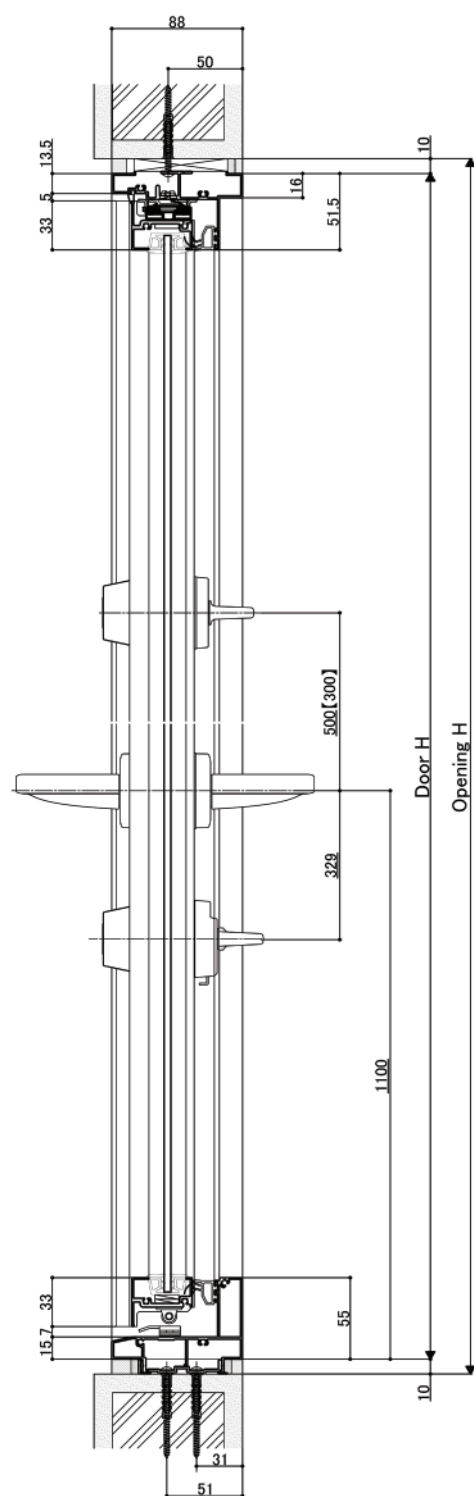


< Horizontal section: 2 panels sliding door >



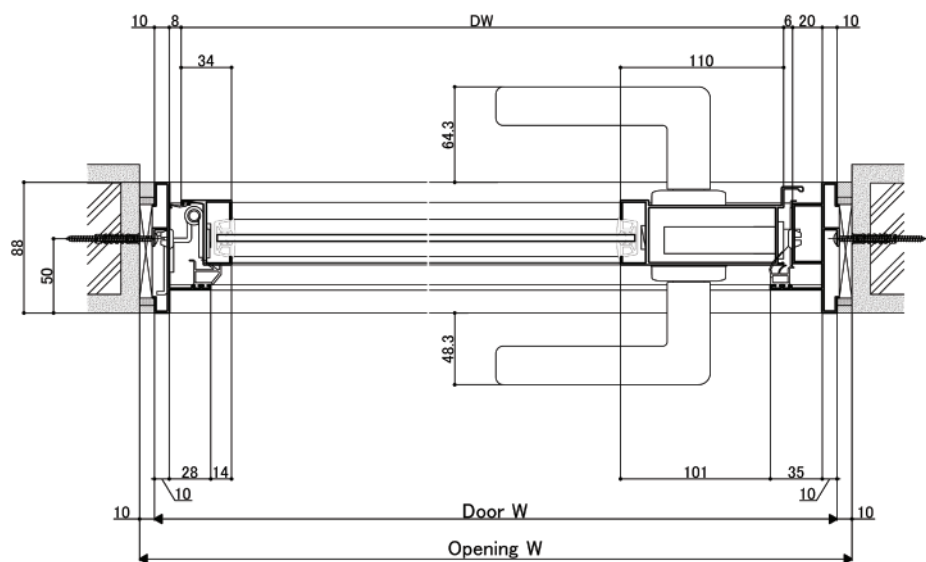
< Horizontal section: 4 panels sliding door >

REFERENCE DRAWINGS



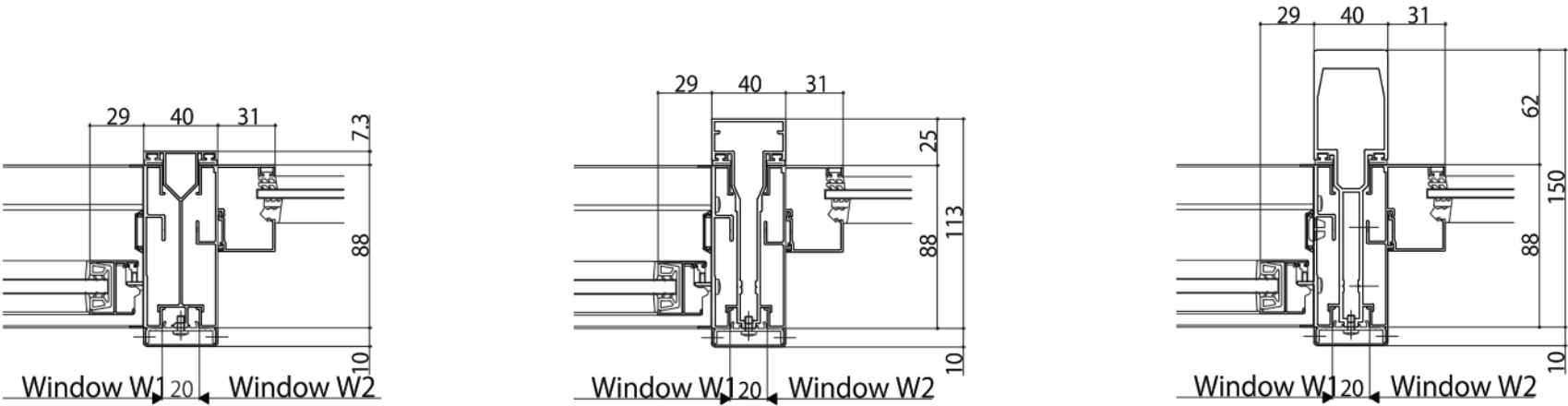
【】 In case $H \leq 2000$

< Vertical section: Single Out-swing door >



< Horizontal section: Single Out-swing door >

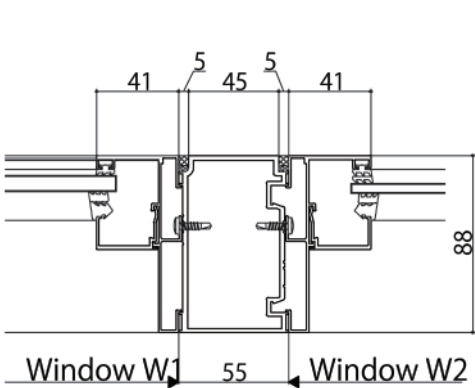
ATIS PLUS COMBINATION



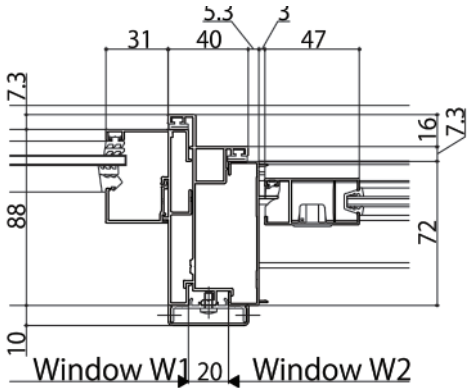
Mullion 180 A Type

Mullion 180 B Type

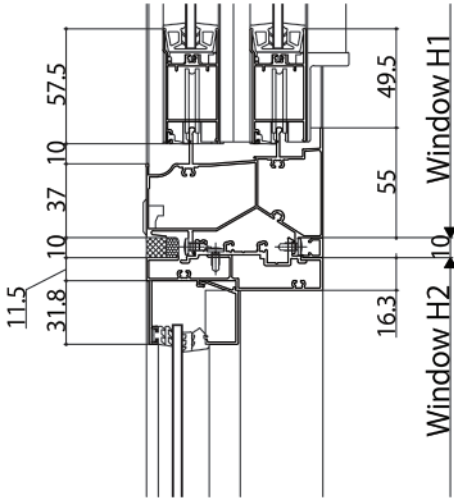
Mullion 180 C Type



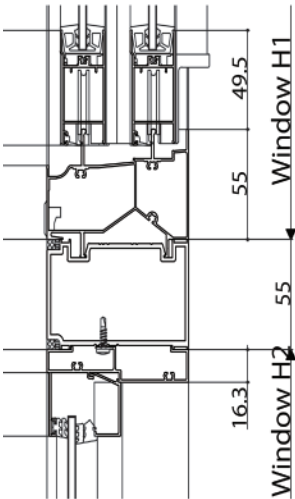
Reinforcement Mullion 180



< Horizontal section: Mullion 180 for WE combination >

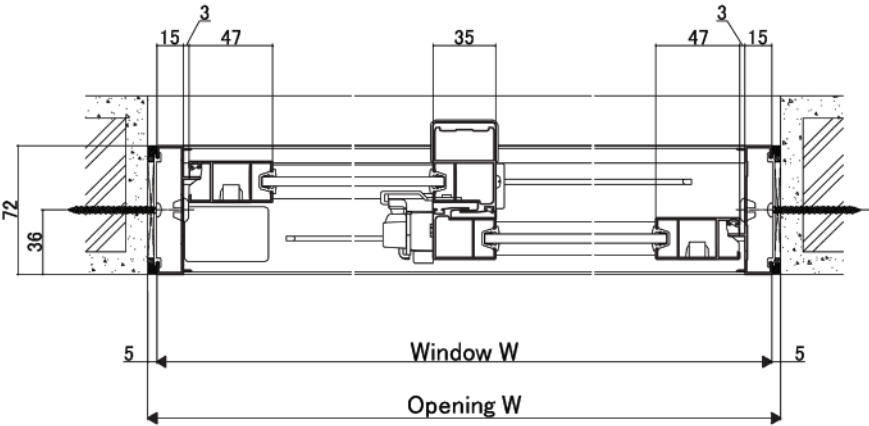


Transom A (88 mm)

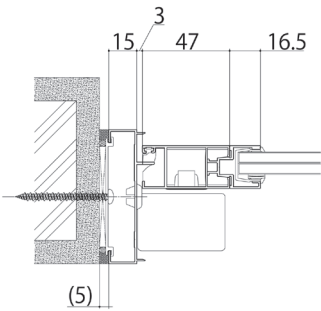


Reinforcement Transom

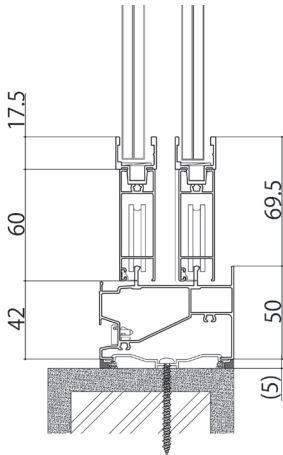
WE PLUS WINDOW SERIES



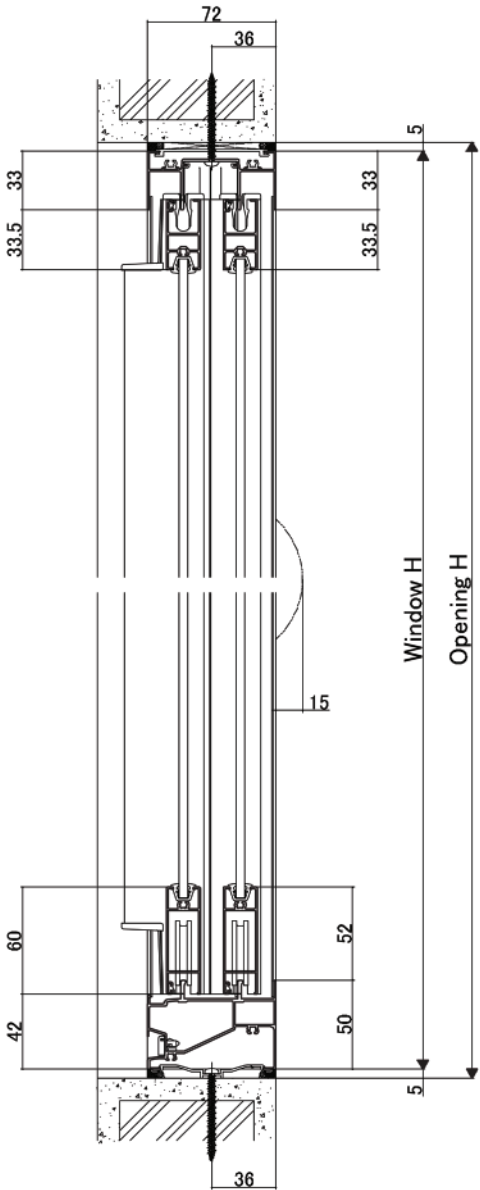
< Horizontal section: Fixed window with mullion >



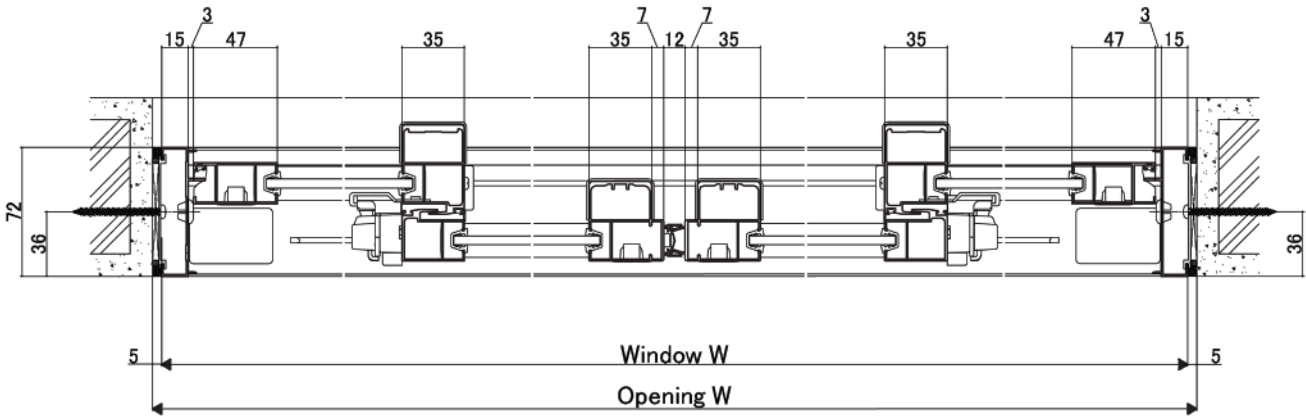
<With laminate>



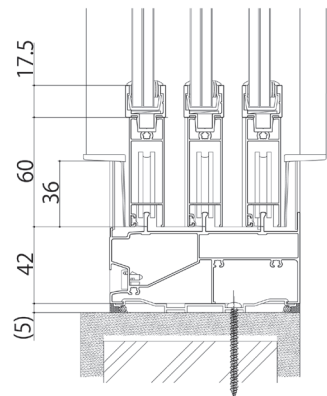
<With laminate>



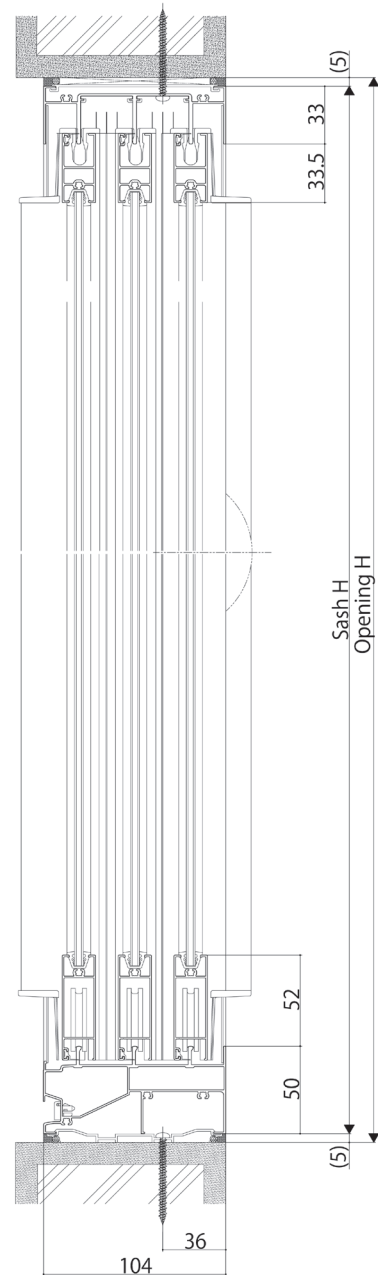
< Vertical section: 2 and 4 panels sliding window >



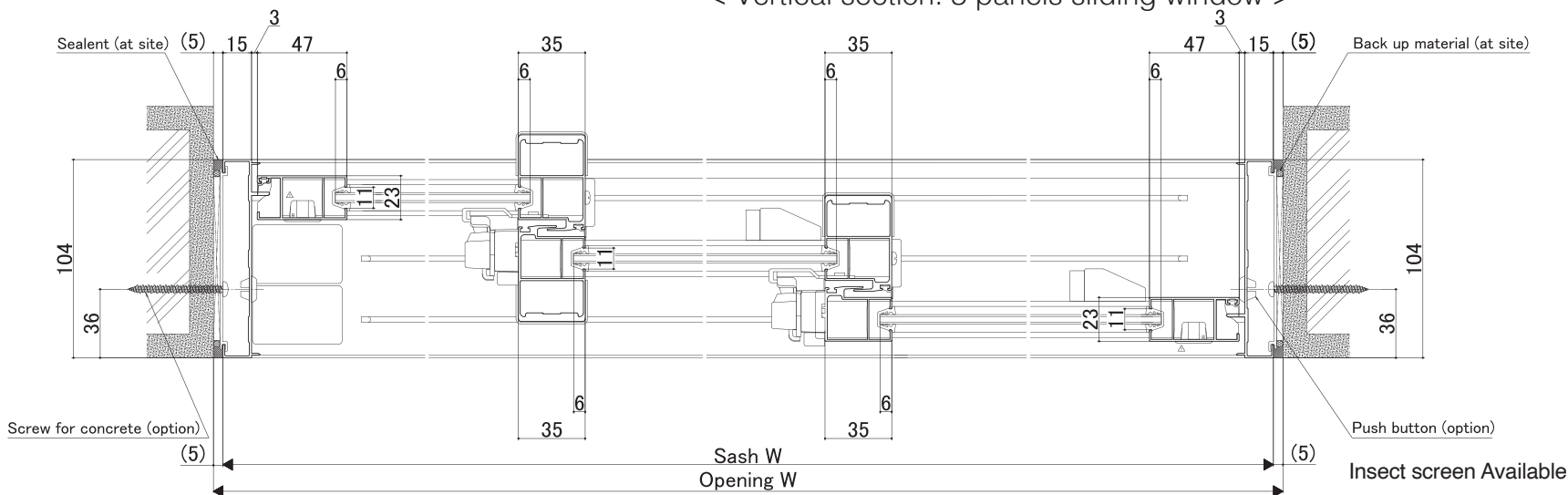
< Horizontal section: 4 panels sliding window >



< With laminate >

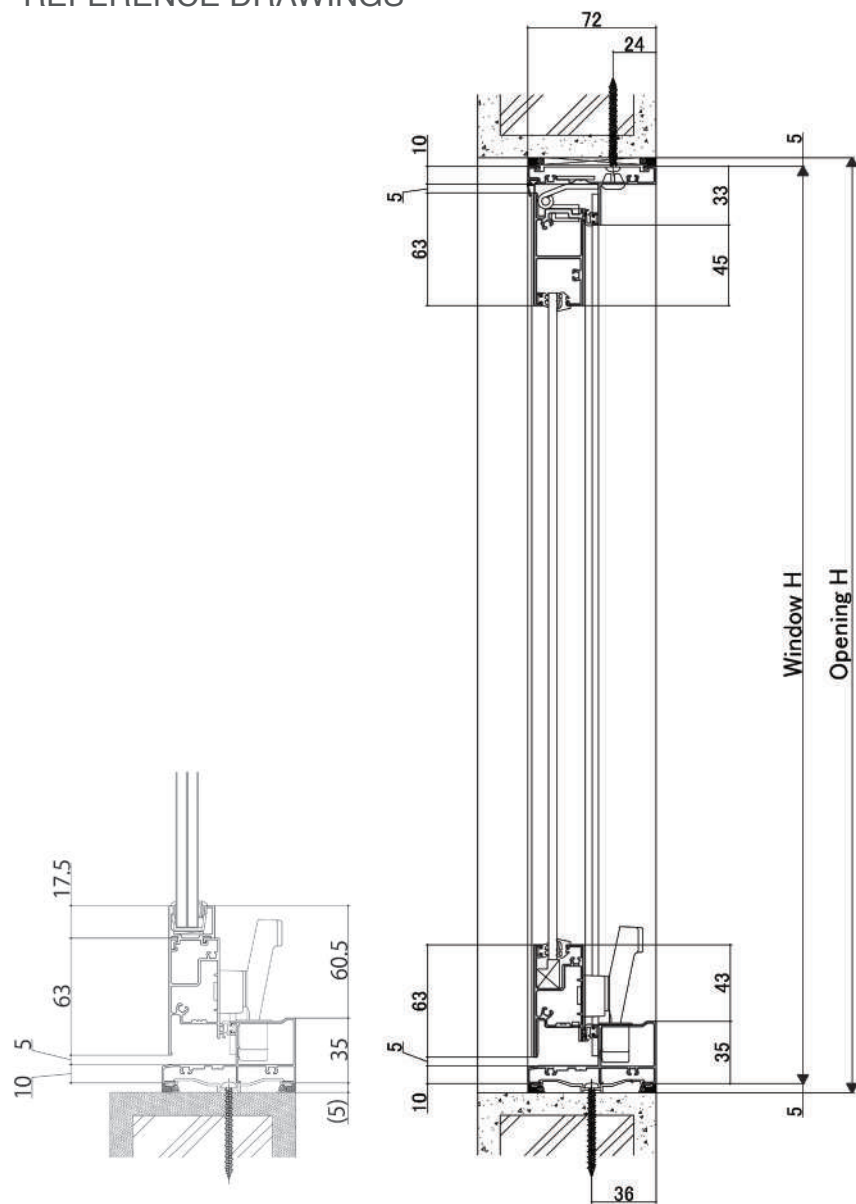


< Vertical section: 3 panels sliding window >

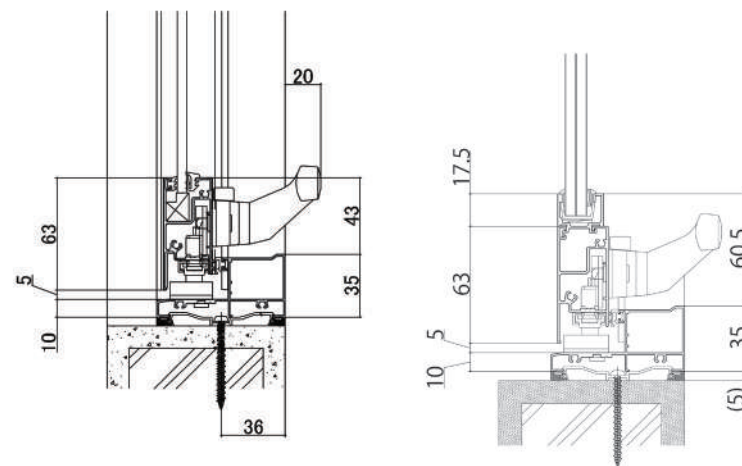


< Horizontal section: 3 panels sliding window >

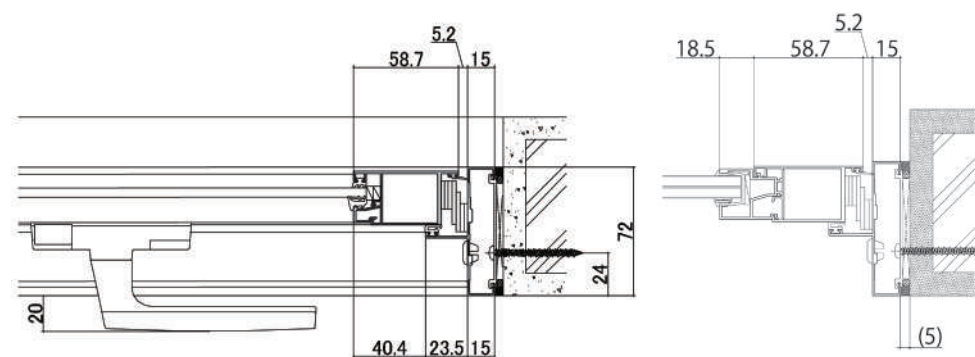
REFERENCE DRAWINGS



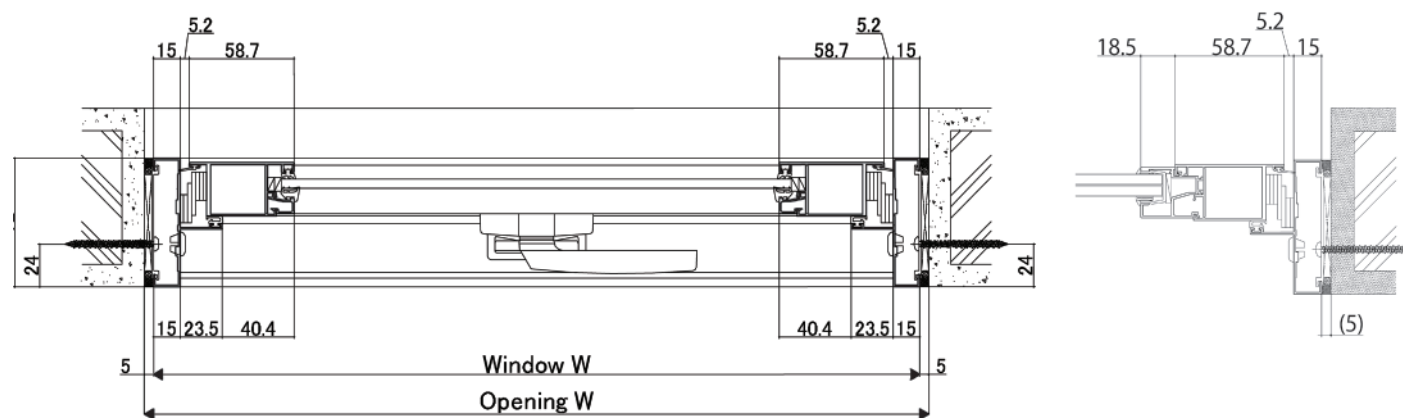
< Vertical section: Awning (single lock) >



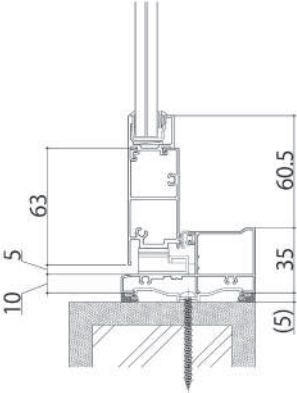
< Multi lock bottom detail >



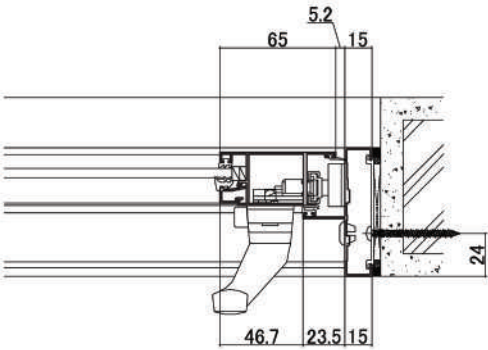
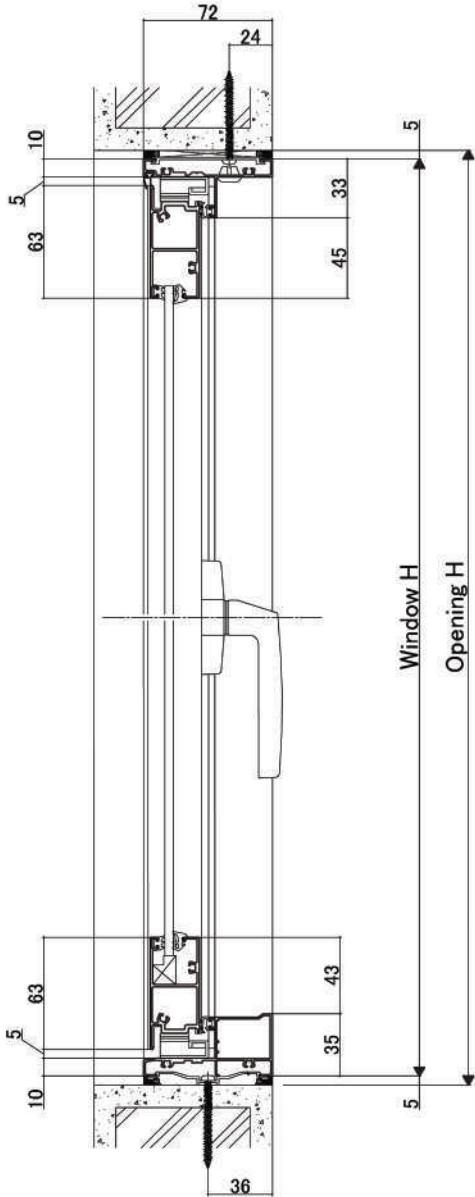
< Multi lock jamb detail >



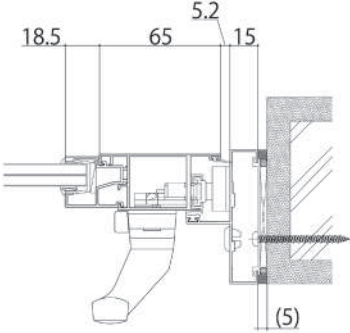
< Horizontal section: Awning (single lock) >



< Horizontal section: Casement (single lock) >



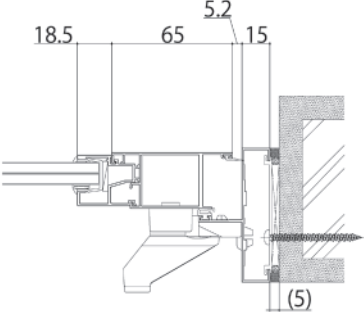
< Multi lock bottom detail >



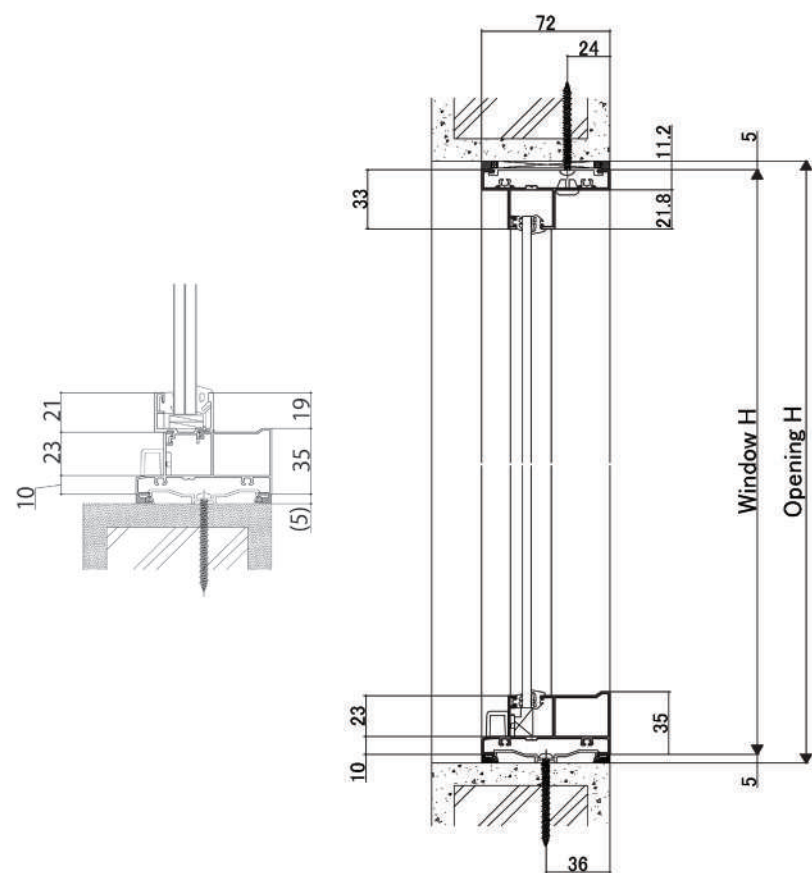
< Multi lock jamb detail >



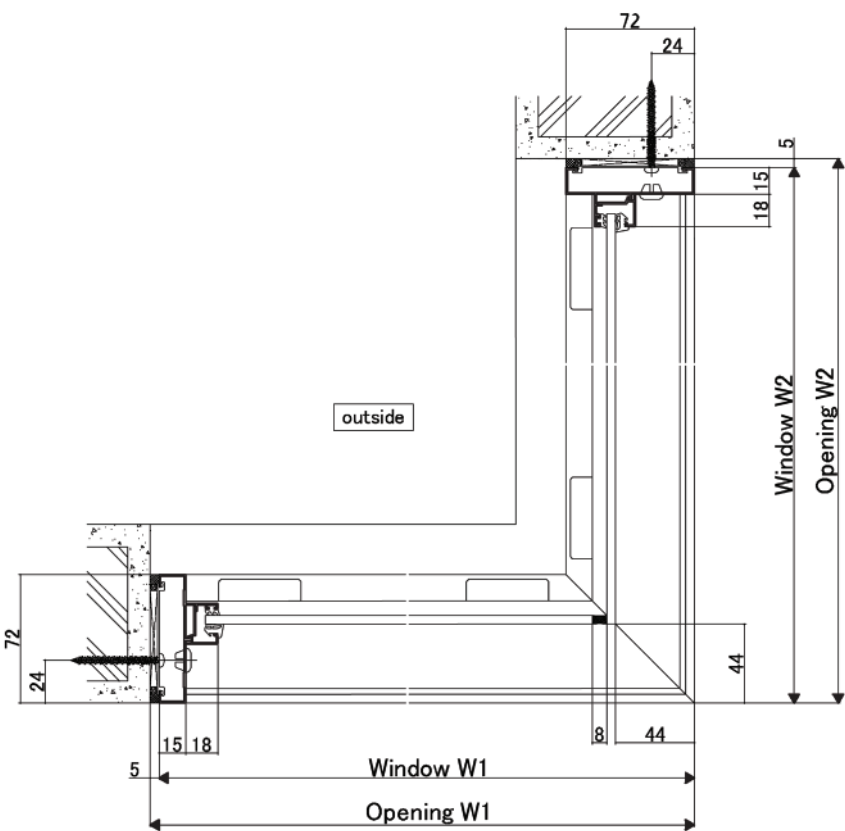
< Vertical section: Casement (single lock) >



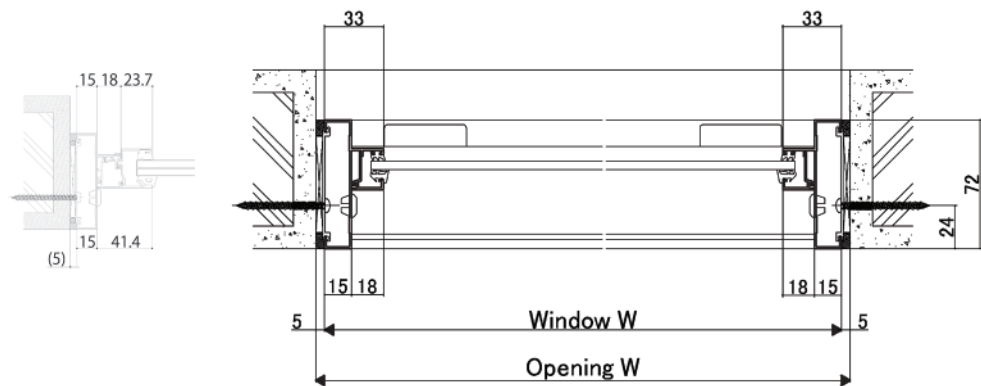
REFERENCE DRAWINGS



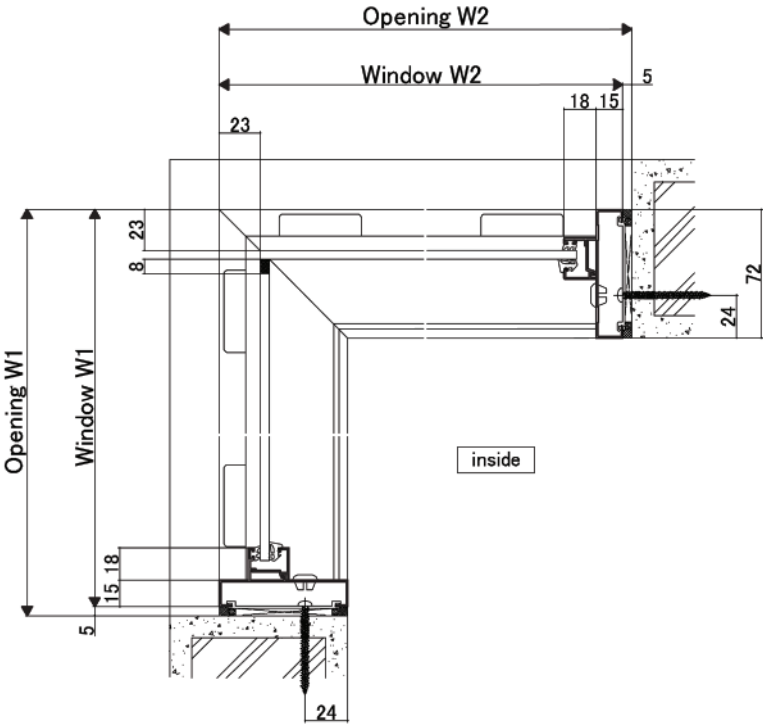
< Vertical section: Single and corner fixed window >



< Horizontal section: Inward fixed window >

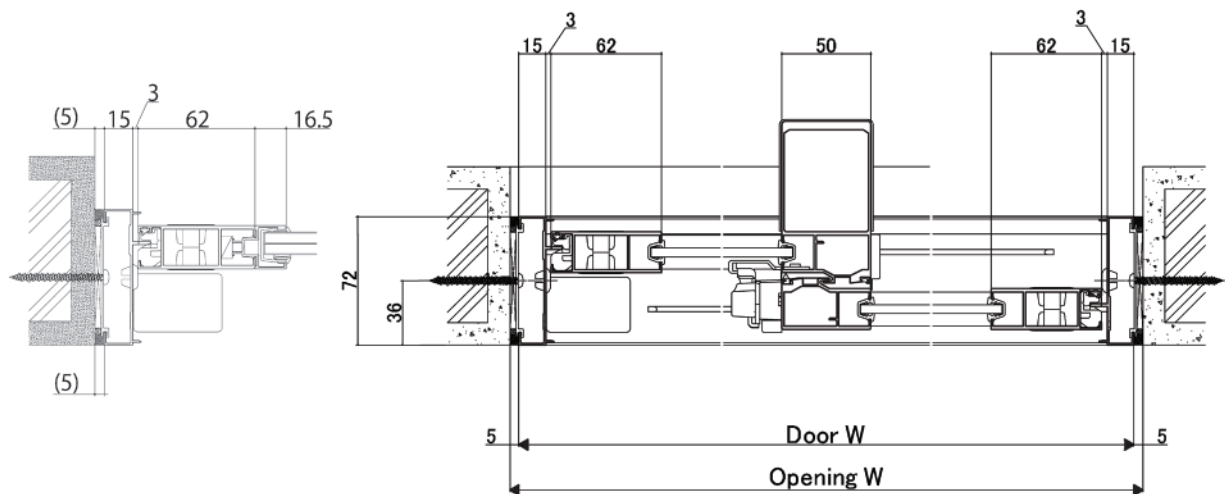


< Horizontal section: Outward fixed window >

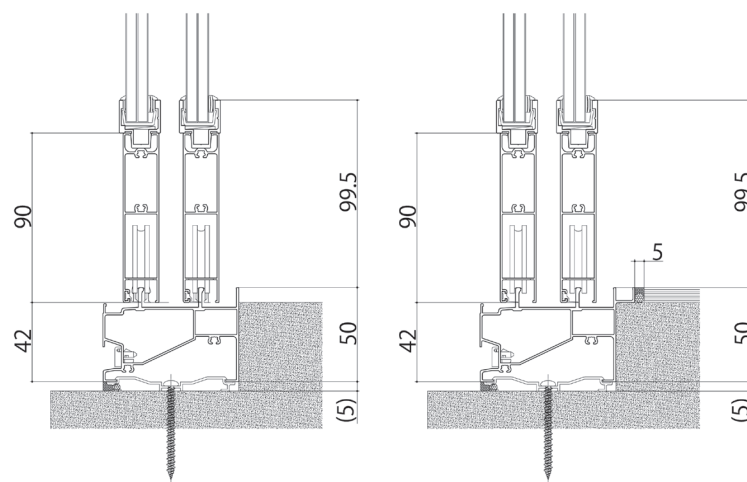


< Horizontal section: Outward fixed window >

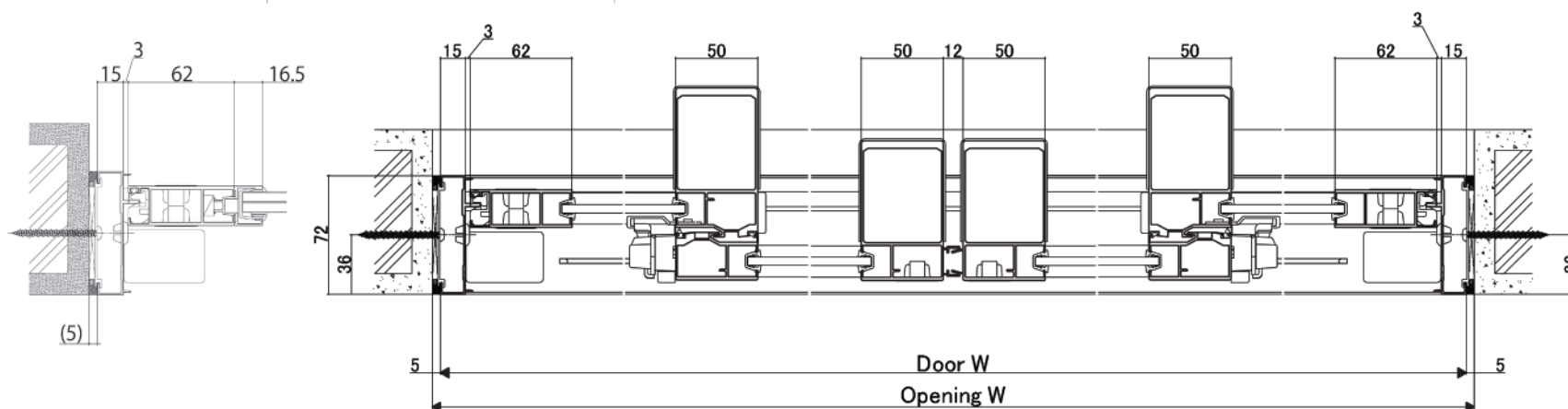
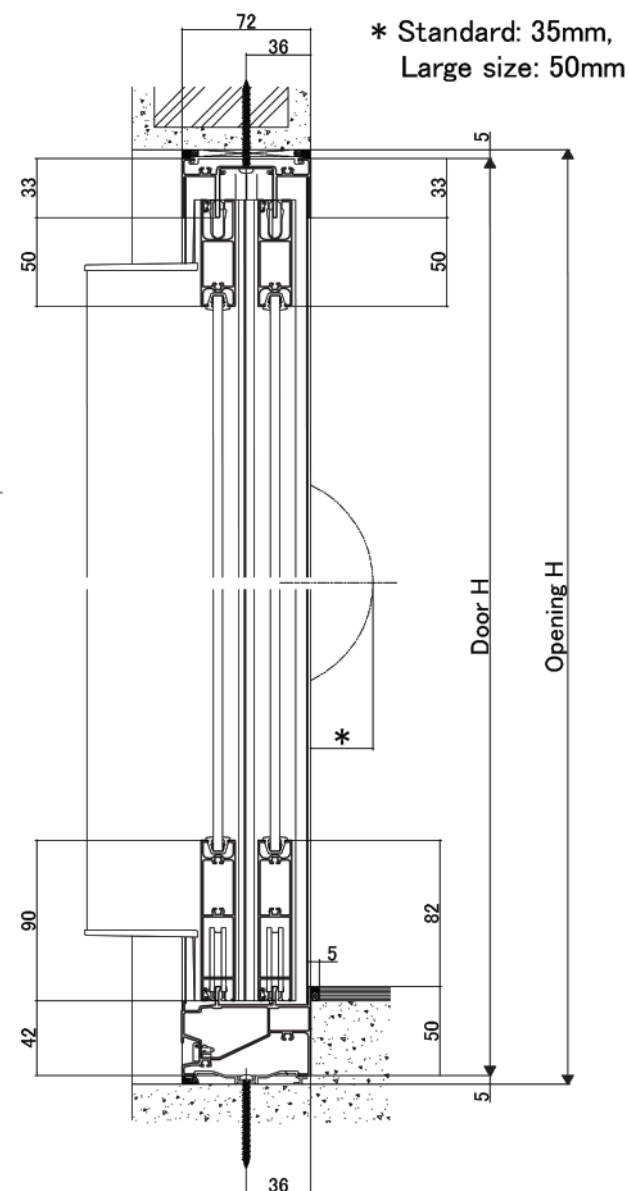
WE PLUS DOOR SERIES



< Horizontal section: 2 panels sliding door >

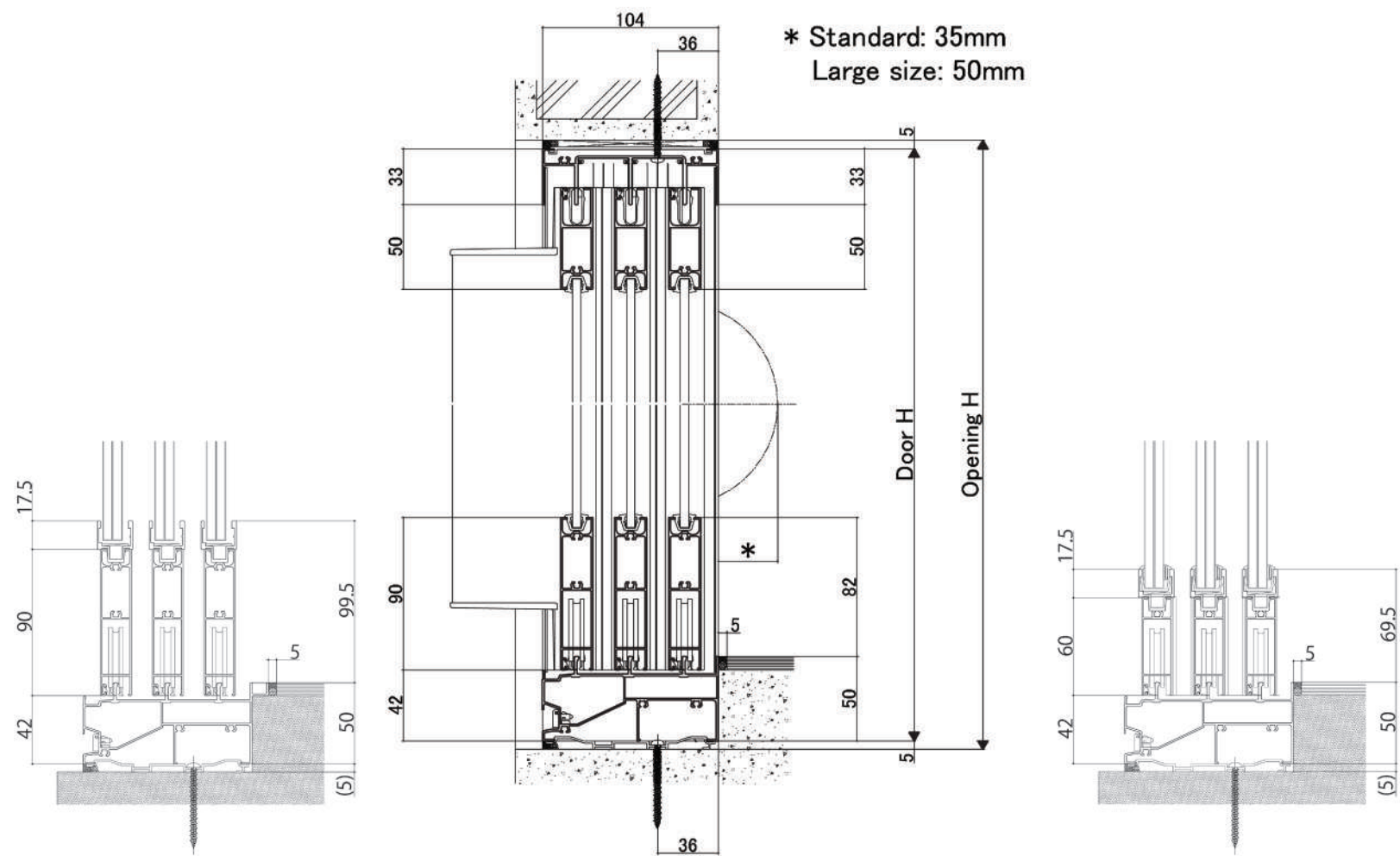


< Vertical section: 2 and 4 panels sliding door >

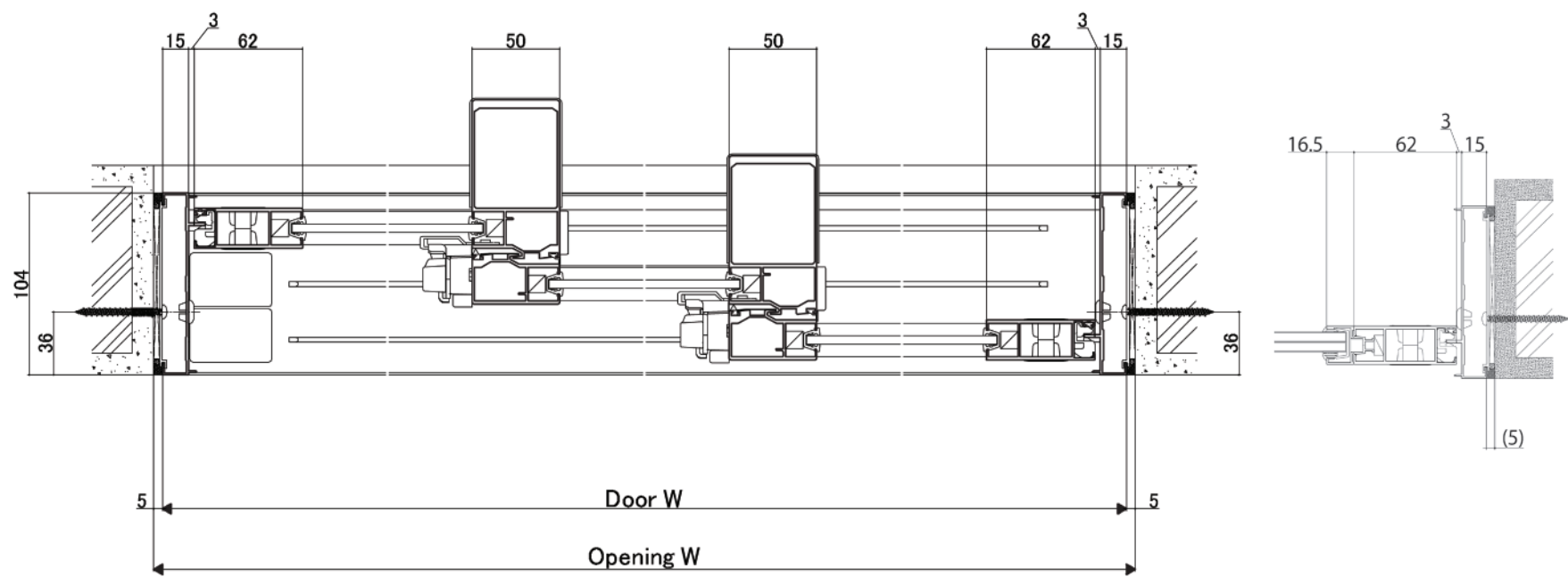


< Horizontal section: 4 panels sliding door >

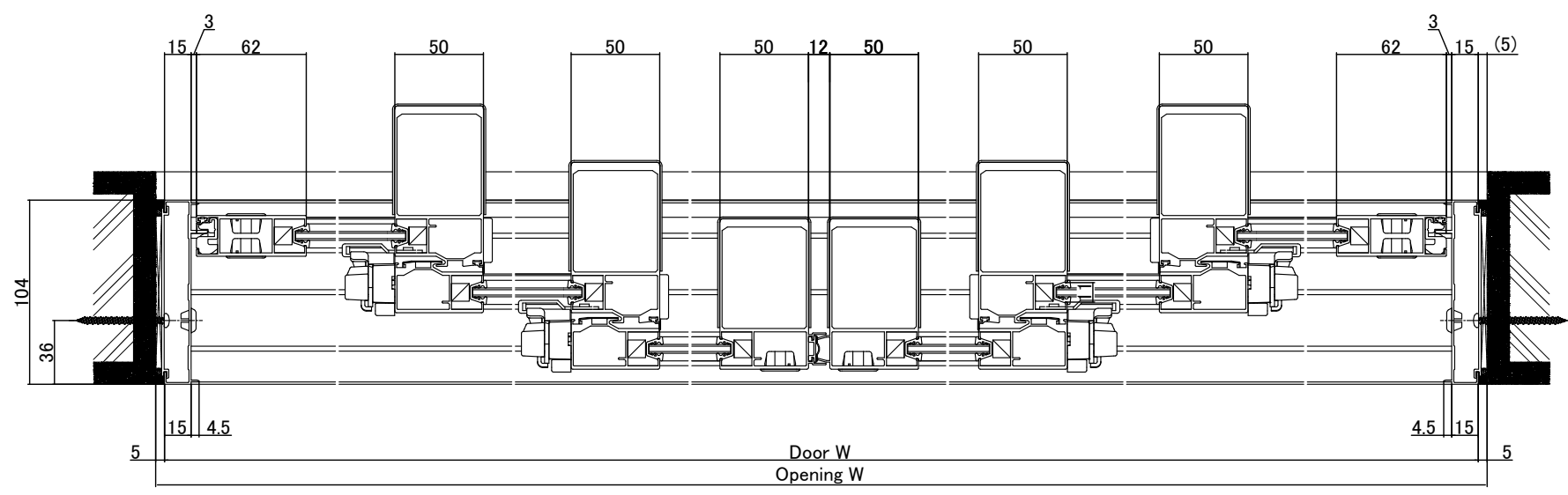
REFERENCE DRAWINGS



< Vertical section: 3 panels sliding door >

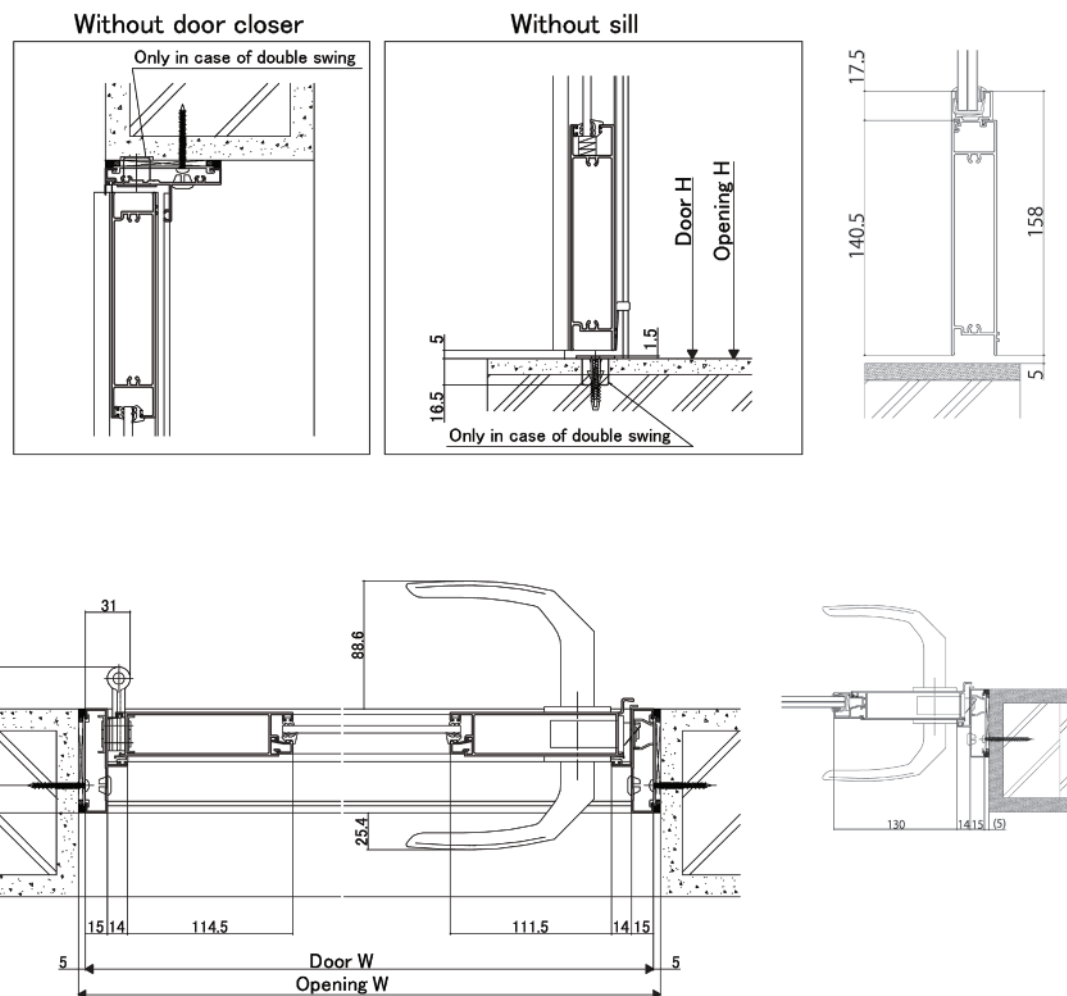
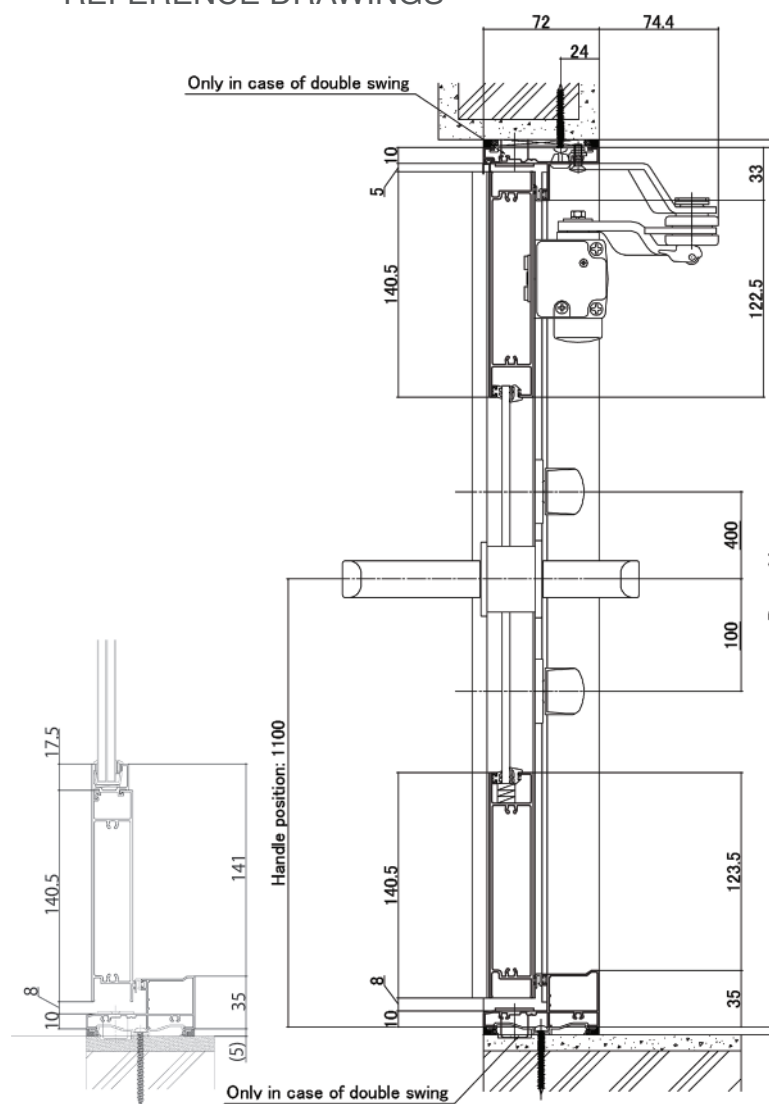


< Horizontal section: 3 panels sliding door >



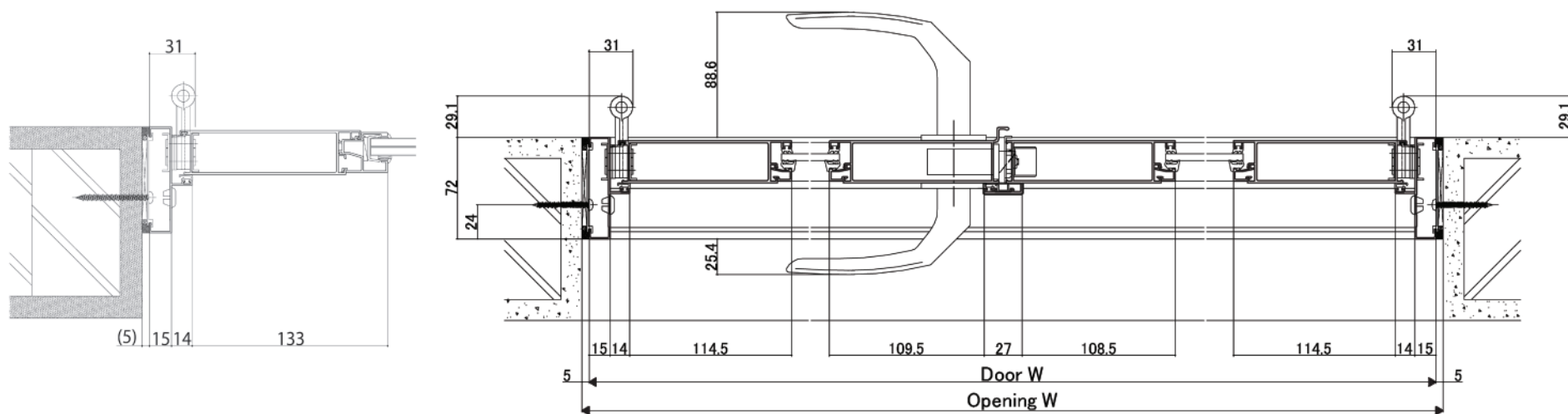
< Horizontal section : 6 panels Sliding door >

REFERENCE DRAWINGS

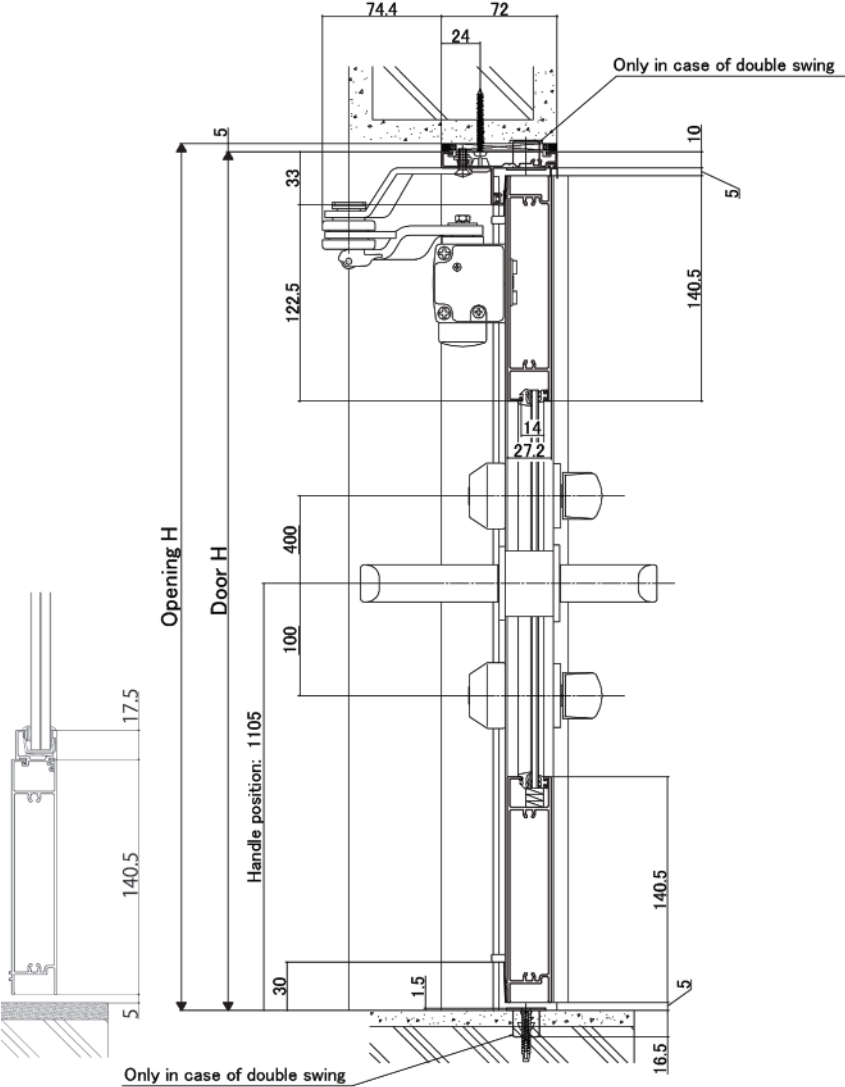


< Vertical section: Single & double out-swing door with sill >

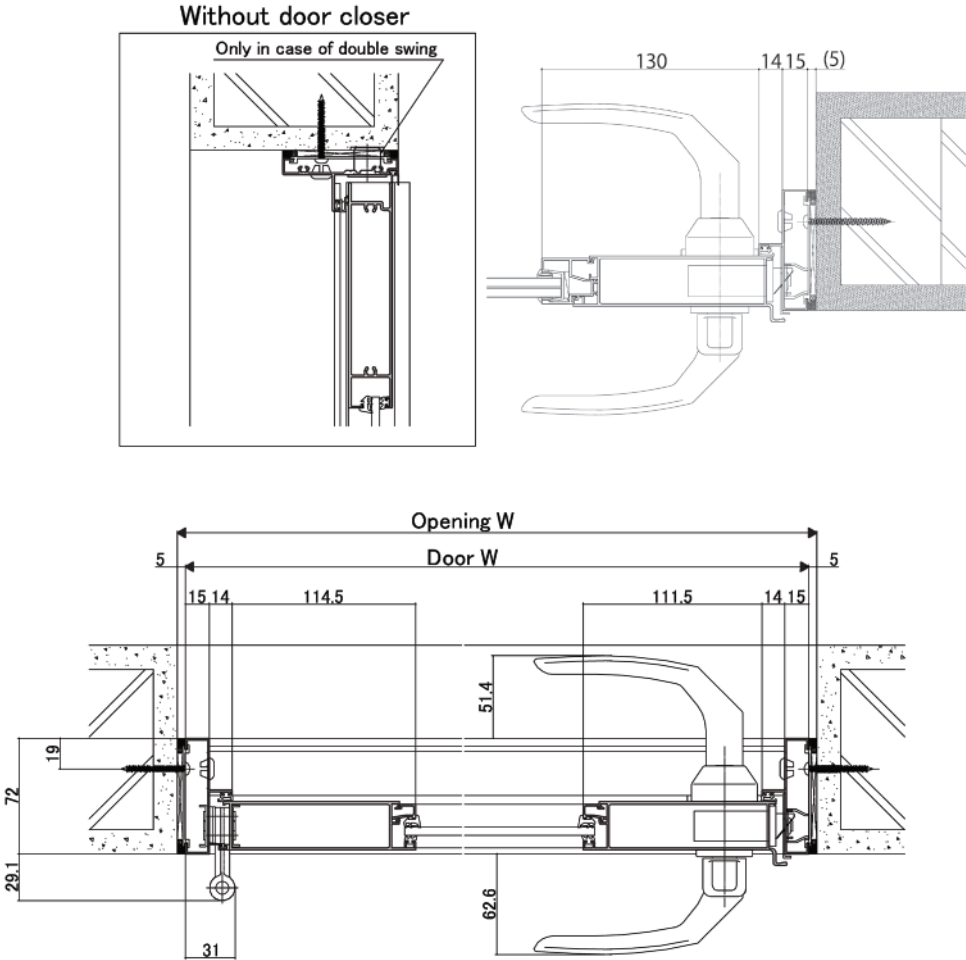
< Horizontal section: Single out-swing door >



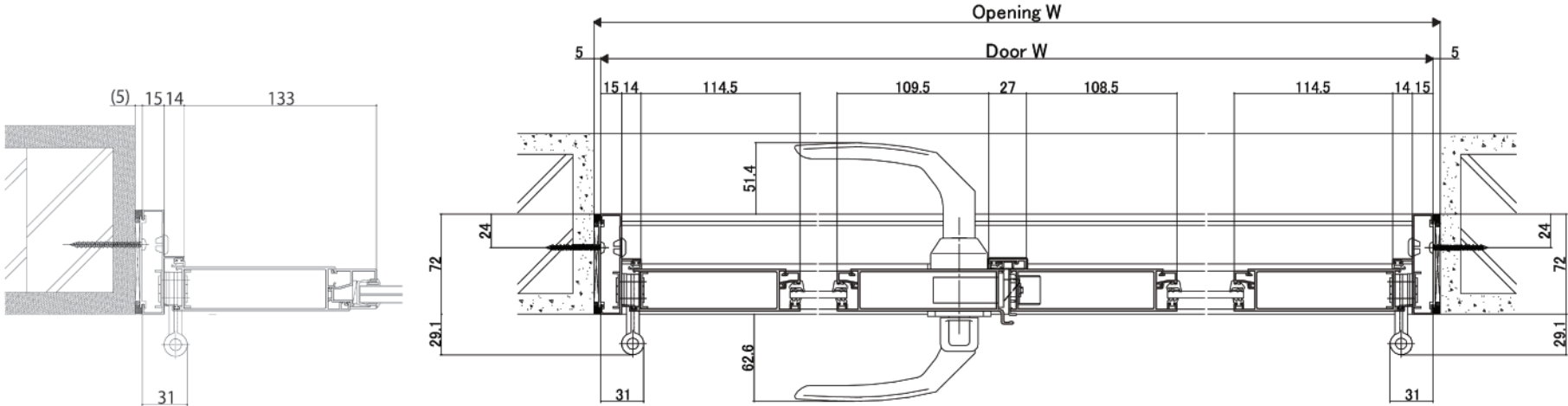
< Horizontal section: Double out-swing door >



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

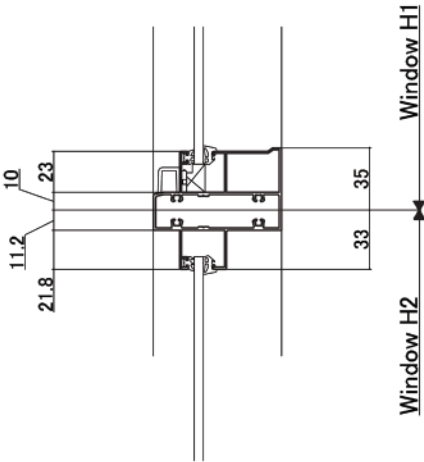


< Horizontal section: Single in-swing door >

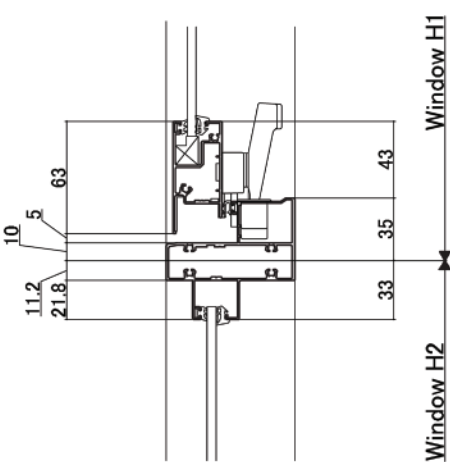


< Horizontal section: Double in-swing door >

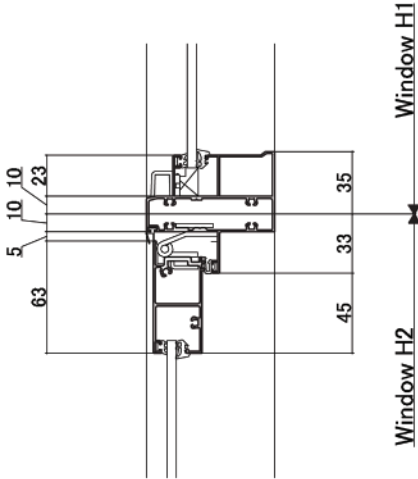
WE PLUS COMBINATION



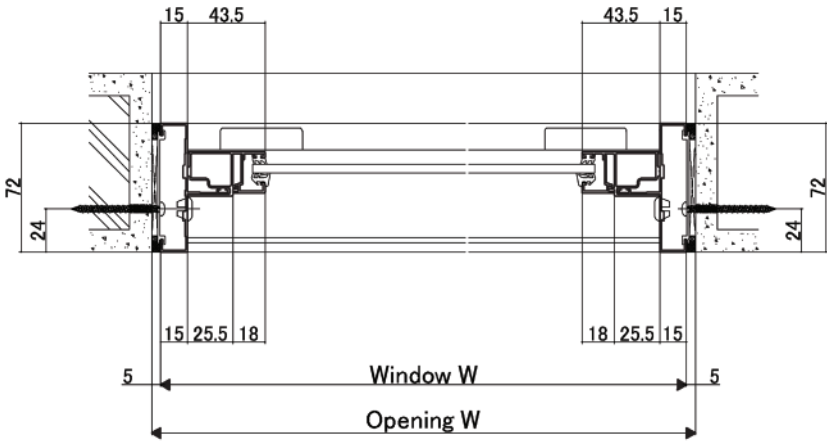
< Vertical: Fixed/Fixed transom >



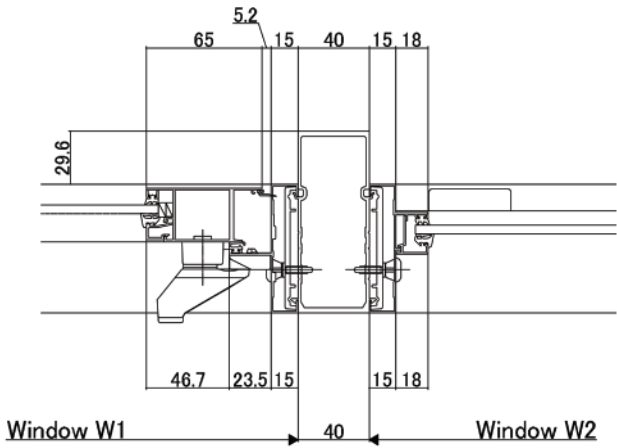
< Vertical: Projection/Fixed transom >



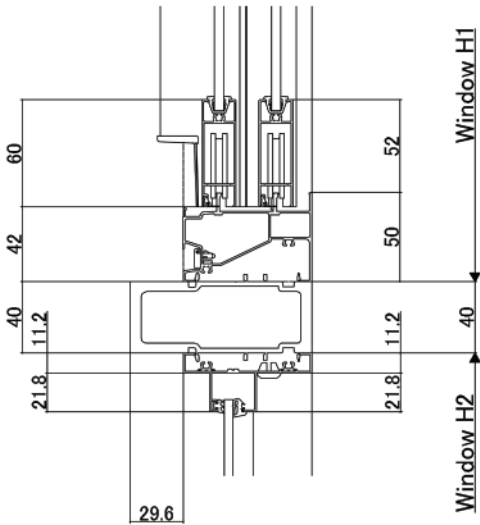
< Vertical: Fixed/Projection transom >



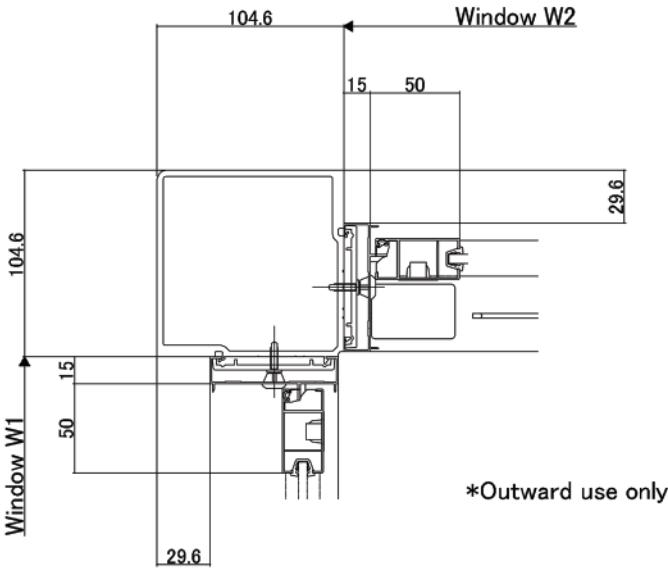
< Horizontal section: Combination fixed window >



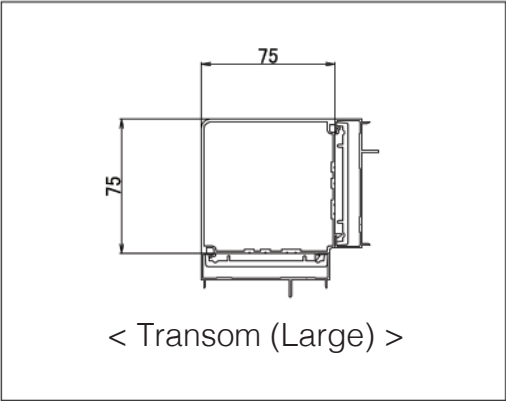
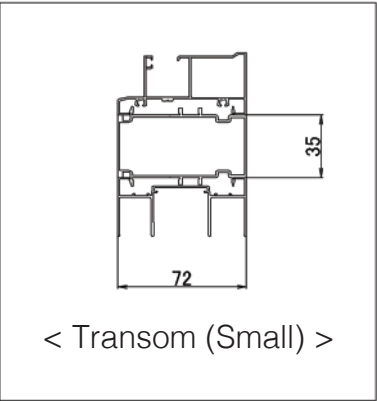
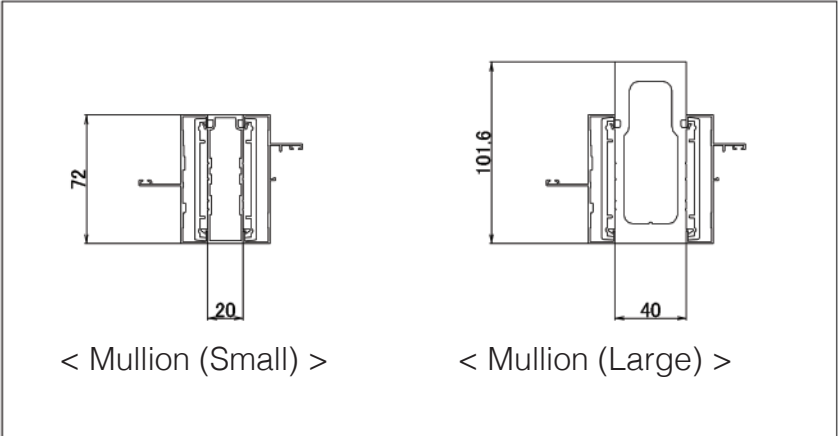
< Corner mullion (Large) >



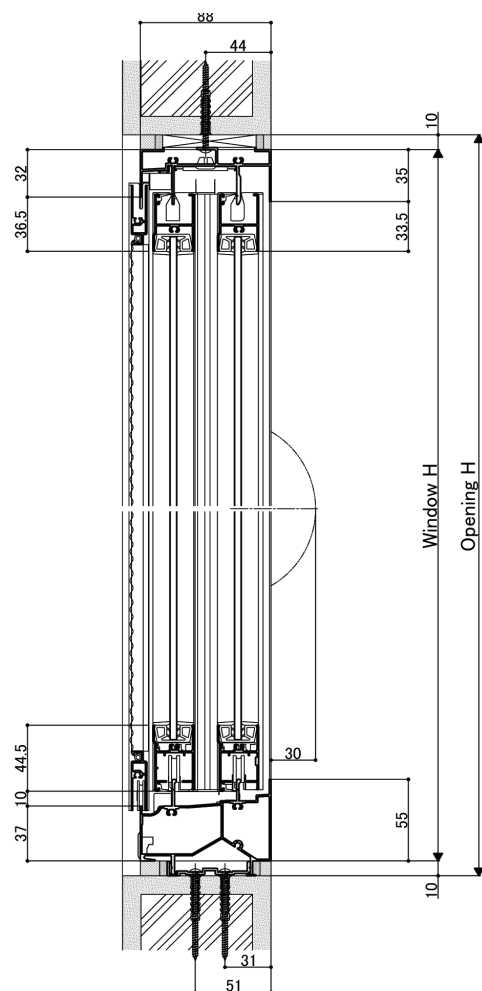
< Corner mullion (Large) >



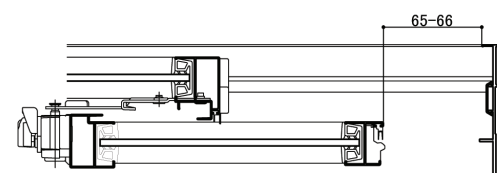
< Corner mullion (Large) >



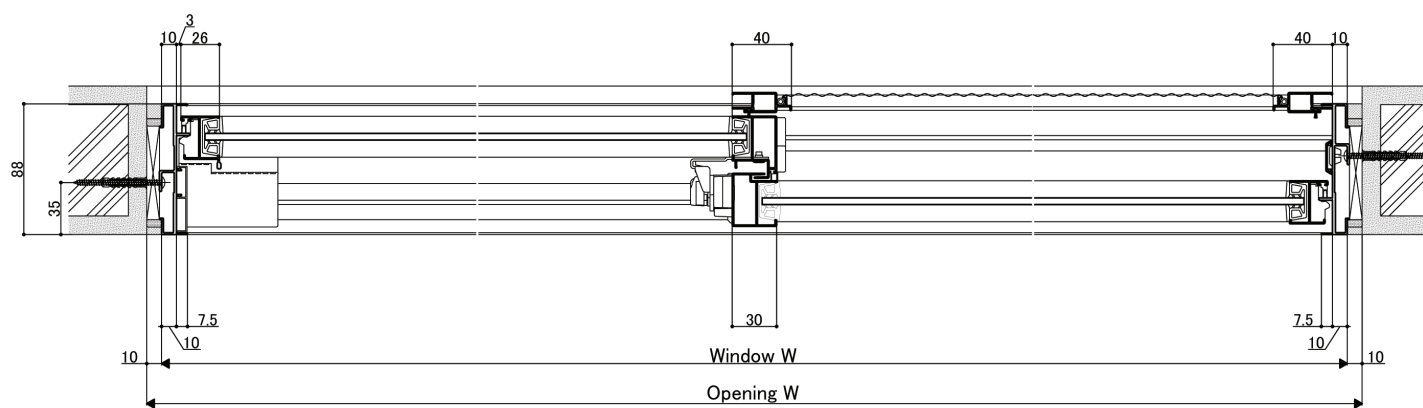
ATIS WINDOW SERIES



< Vertical section: 2 panels sliding window >

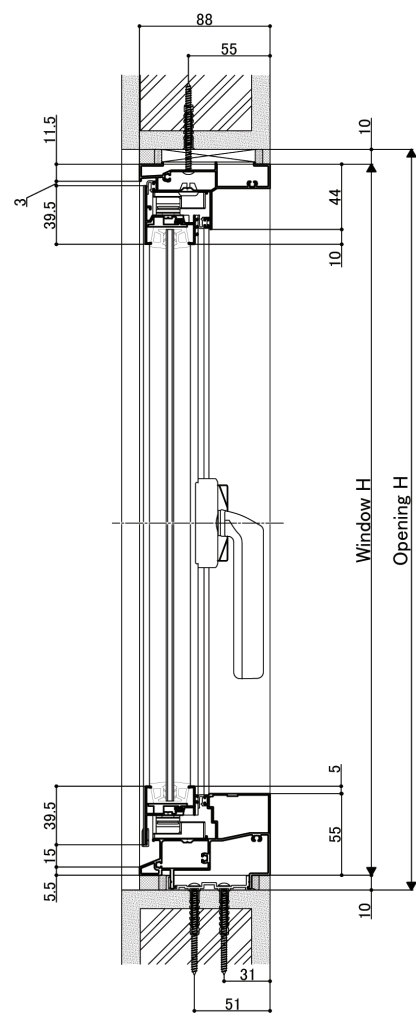


< Option (limit arm) Jamb detail >

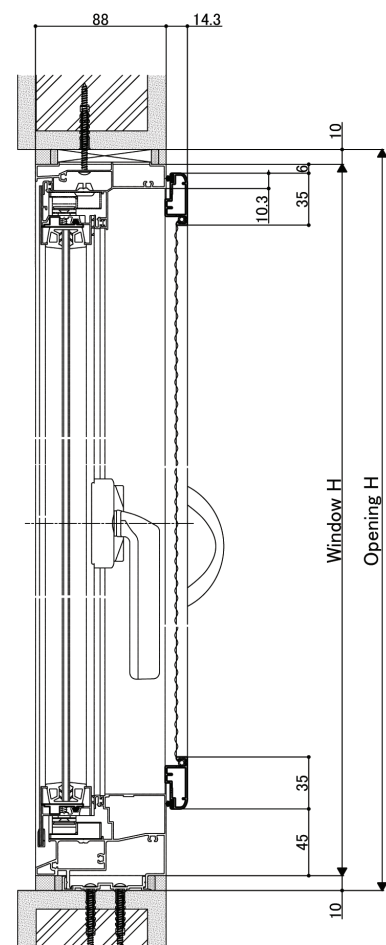


< Horizontal section: 2 panels sliding window >

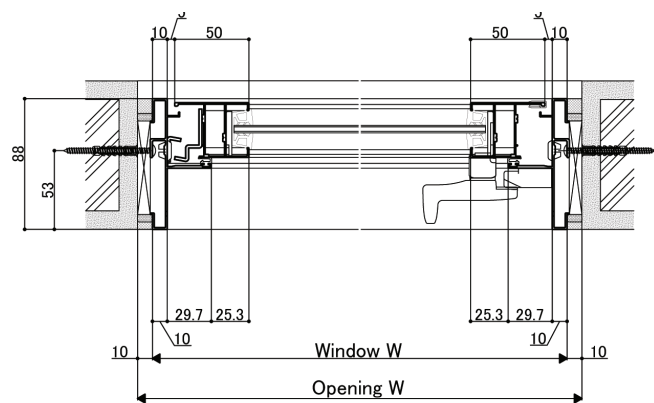
REFERENCE DRAWINGS



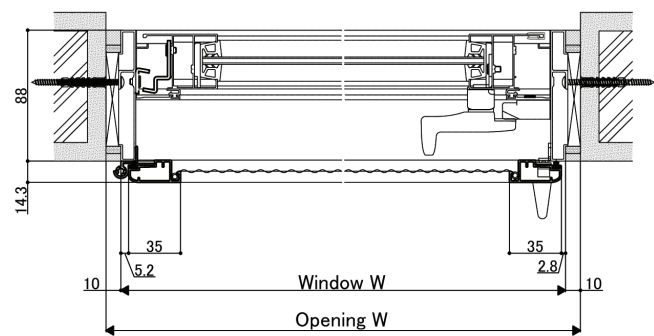
< Vertical section: Casement window (Single lock) >



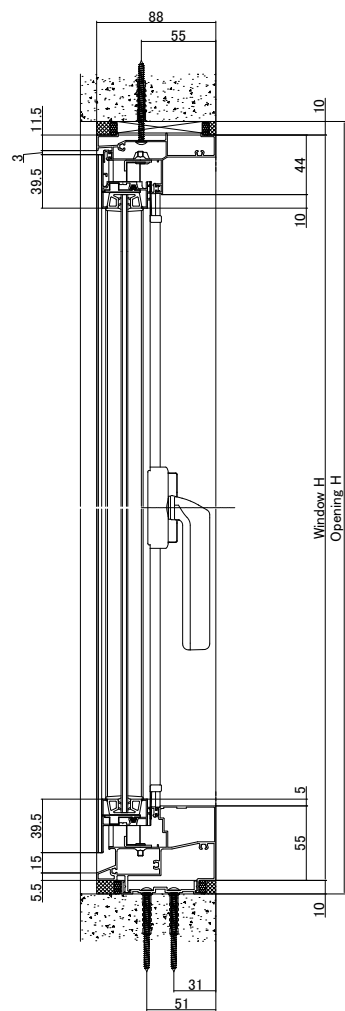
< Vertical section: Casement with screen >



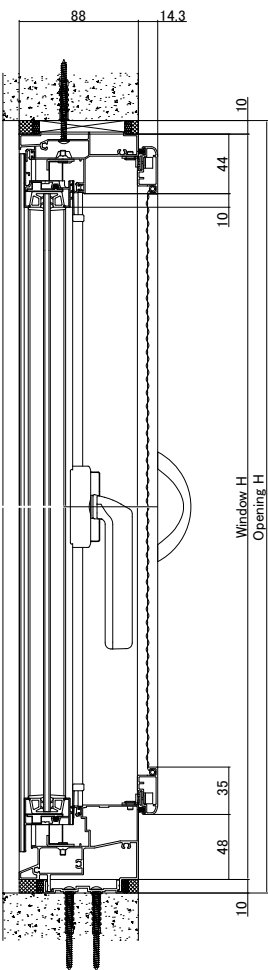
< Horizontal section: Casement window (Single lock) >



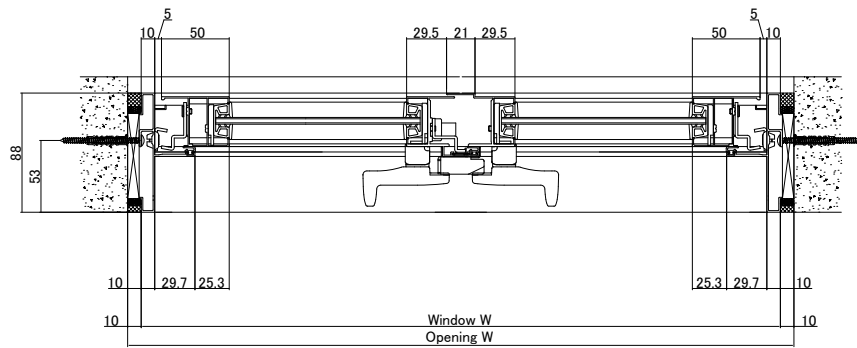
< Horizontal section: Casement with screen >



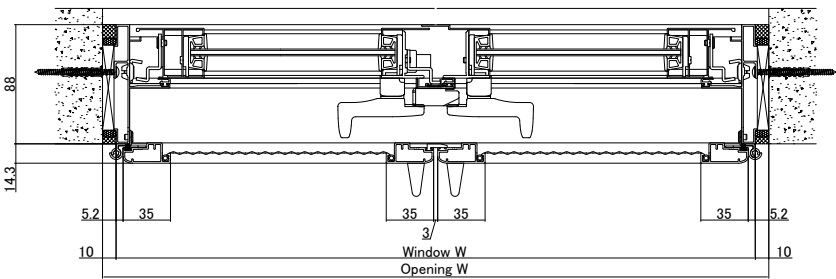
< Vertical section Double Casement Window >



< Vertical section Double Casement Window with Screen >

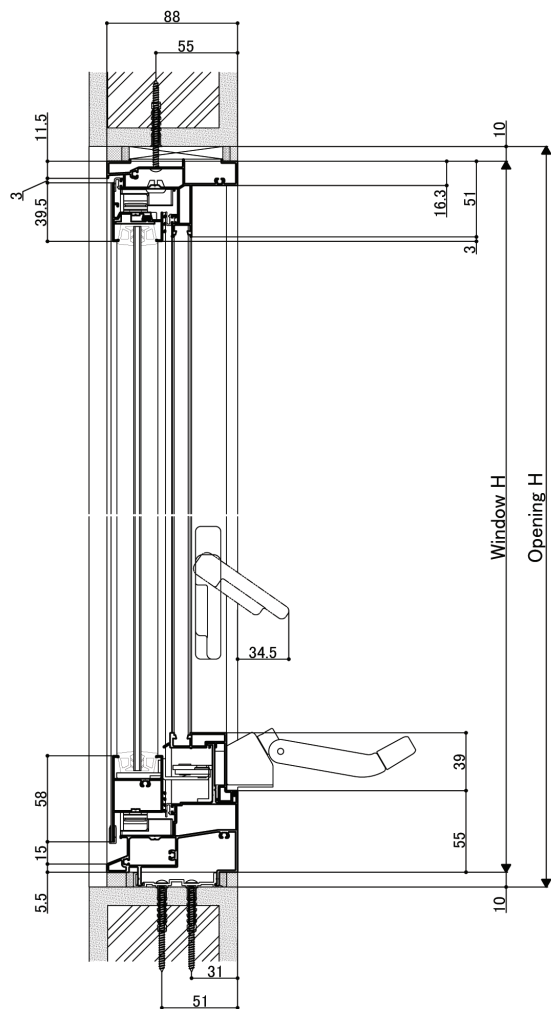


< Horizontal section: Double Casement Window >

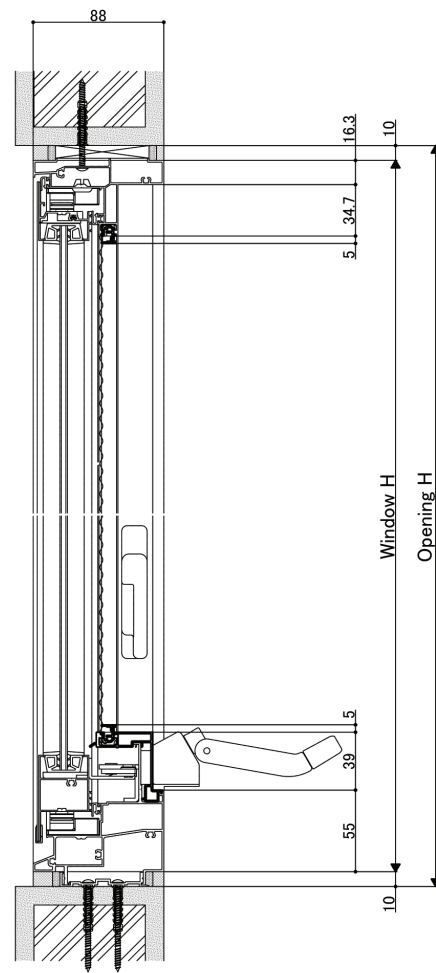


< Horizontal section: Double Casement Window with Screen >

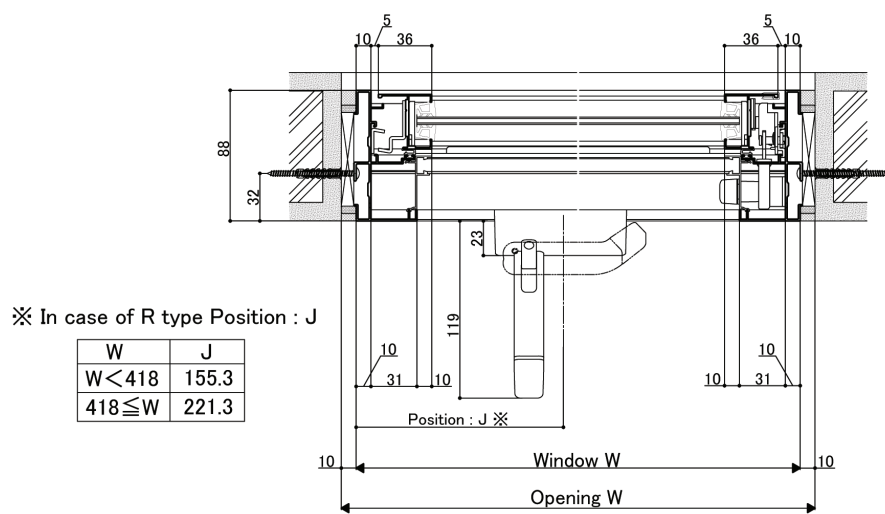
REFERENCE DRAWINGS



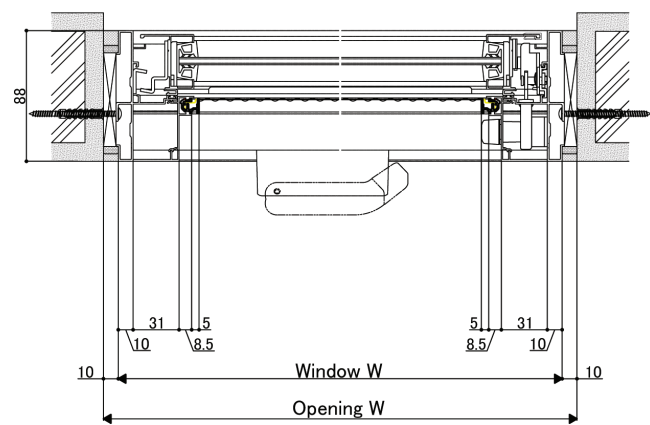
< Vertical section: Casement operator window >



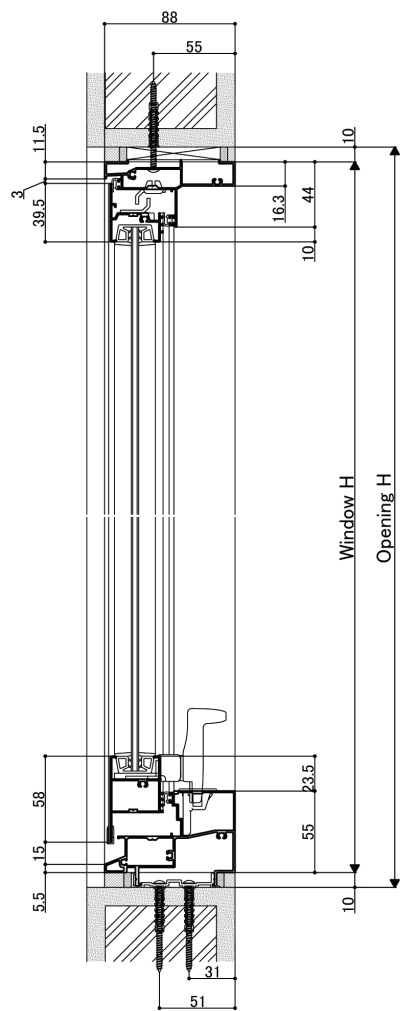
< Vertical section: Casement with screen >



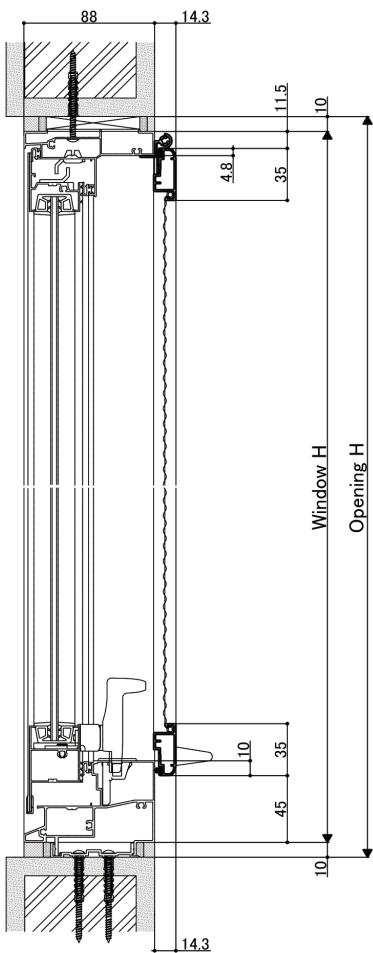
< Horizontal section: Casement operator window >



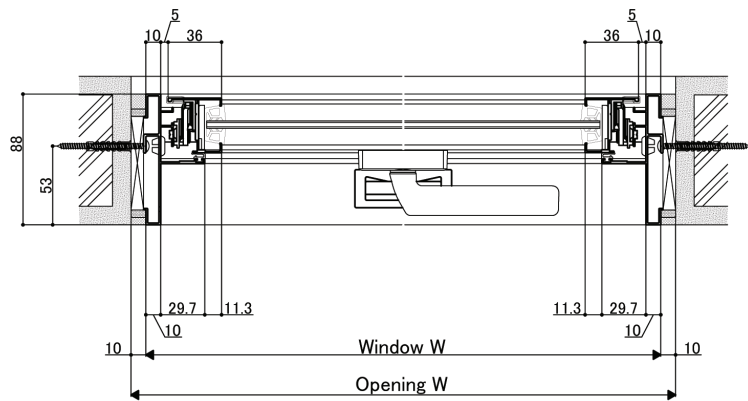
< Horizontal section: Casement with screen >



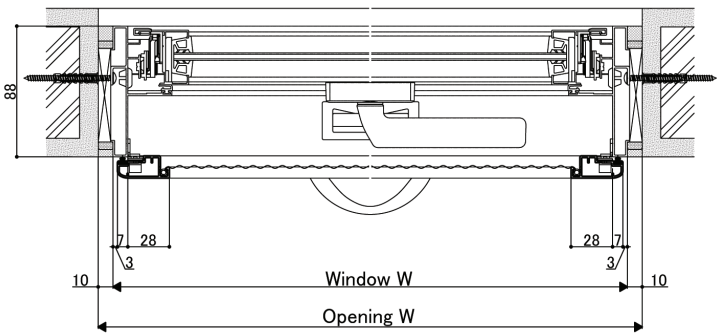
< Vertical section: Awning window (Single lock) >



< Vertical section: Awning with screen >

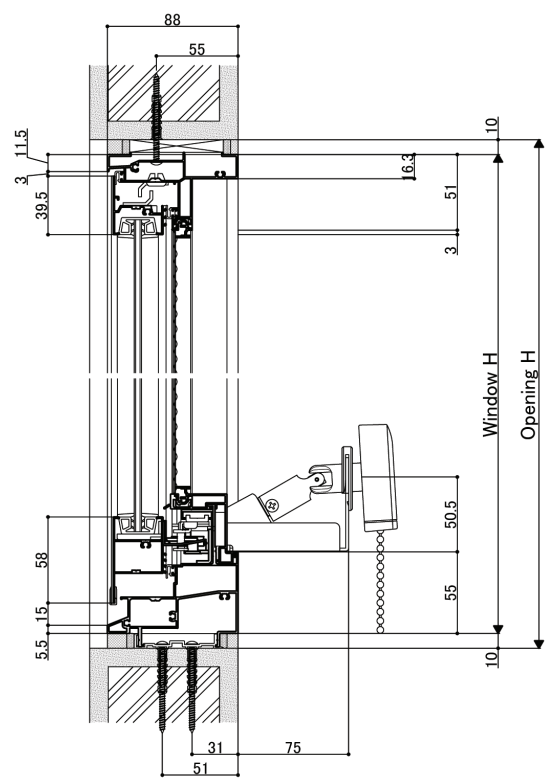


< Horizontal section: Awning window (Single lock) >

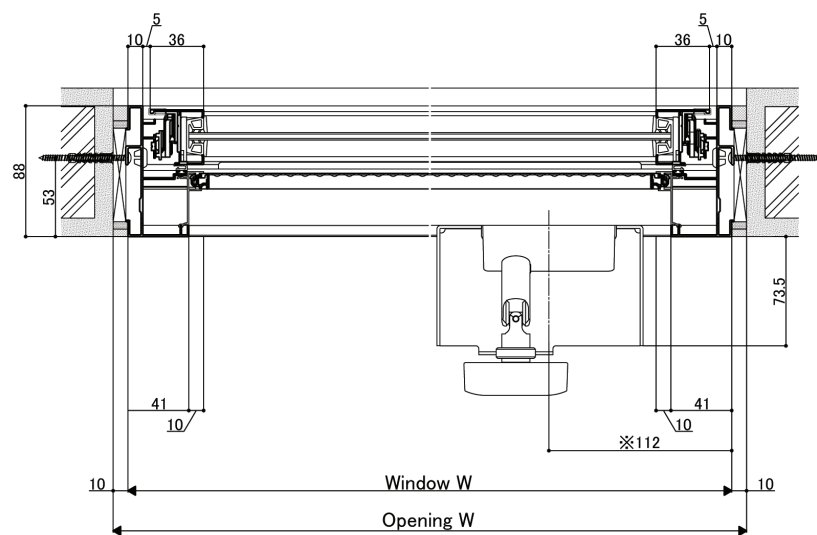


< Horizontal section: Awning with screen >

REFERENCE DRAWINGS

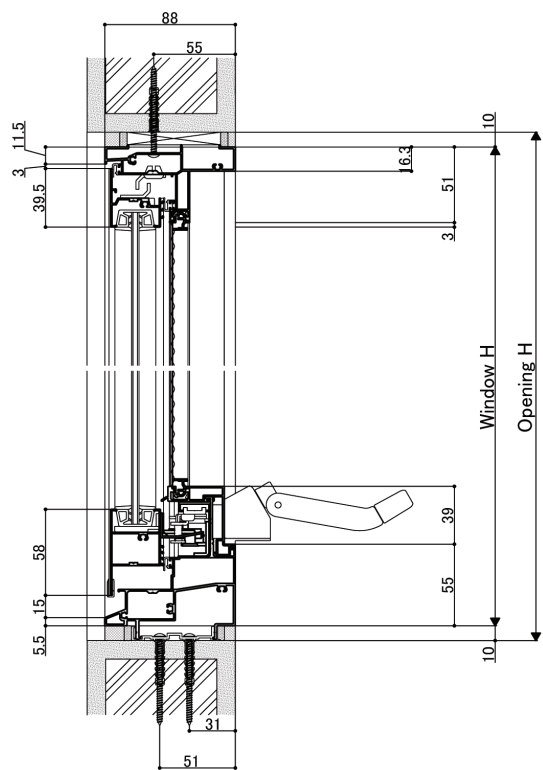


< Vertical section: Awning Slit window (chain set) >

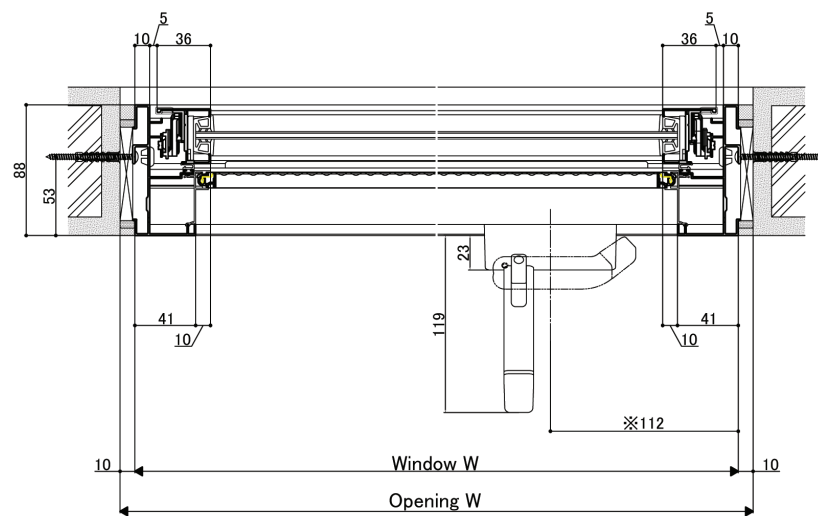


※ In case of R type

< Horizontal section: Awning Slit window (chain set) >

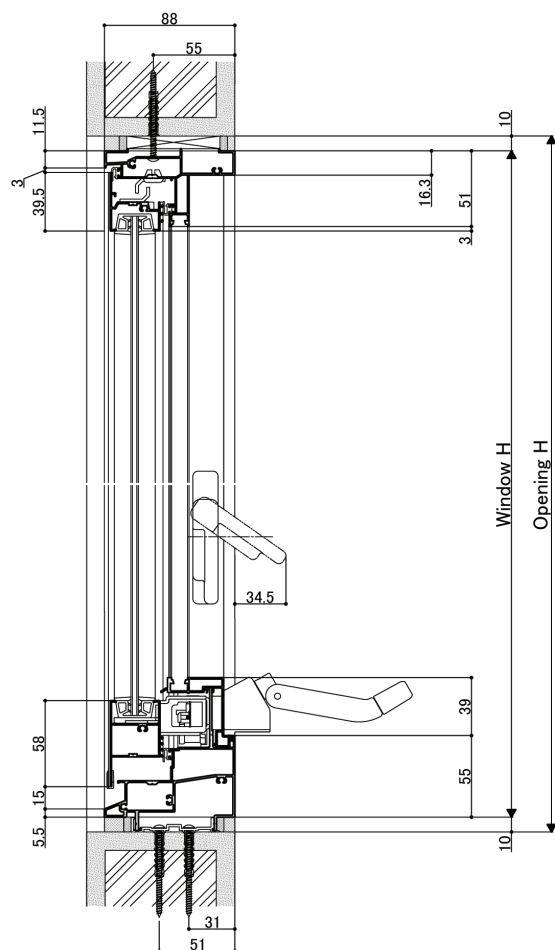


< Vertical section: Awning Slit window (operator set) >

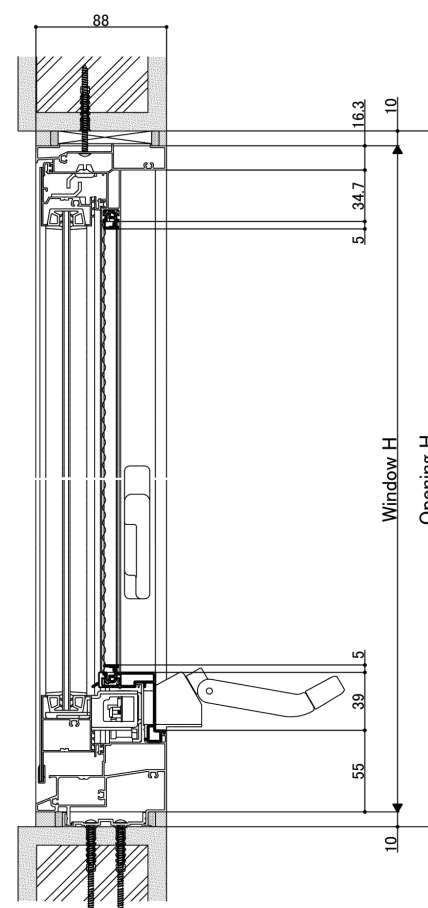


※ In case of R type

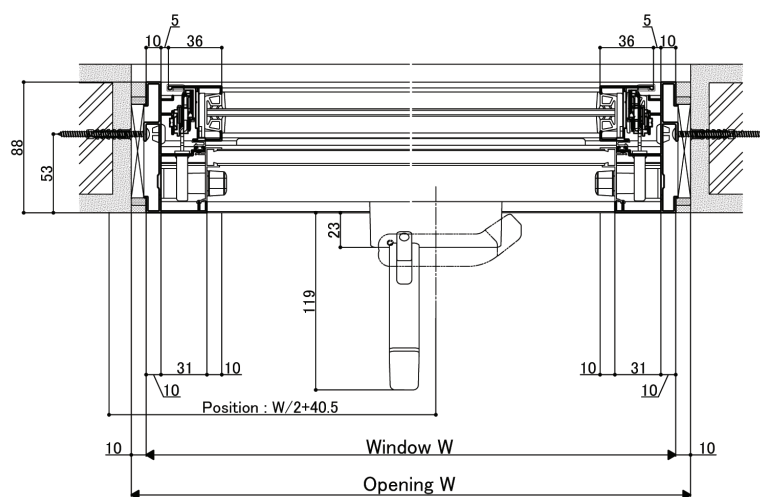
< Horizontal section: Awning Slit window (operator set) >



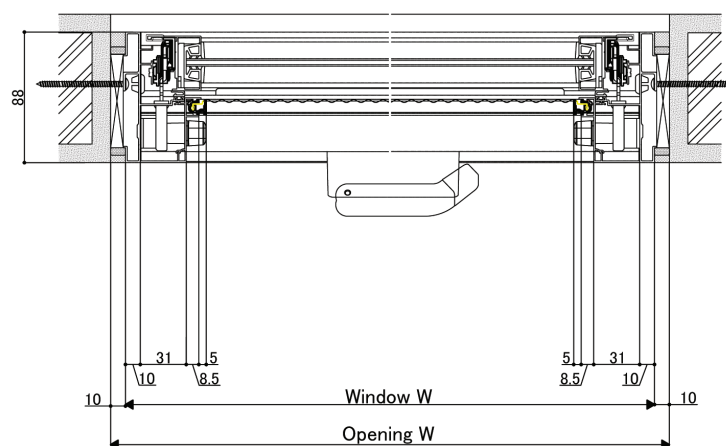
< Vertical section: Awning operator window >



< Vertical section: Awning operator window with screen >

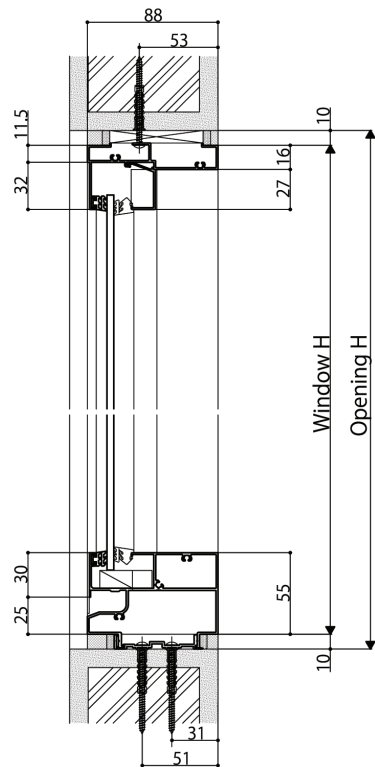


< Horizontal section: Awning operator window >

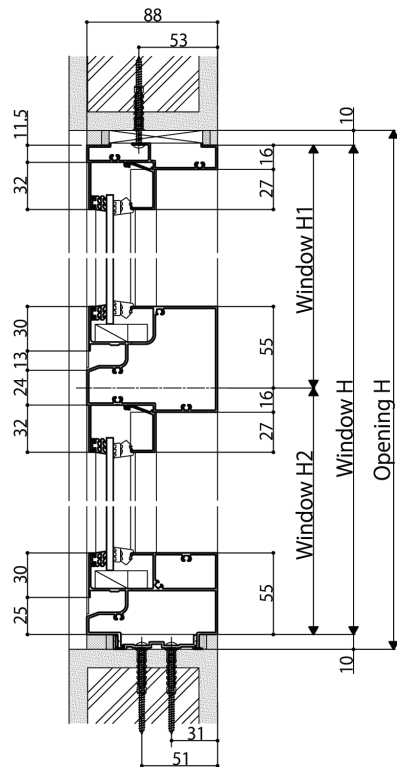


< Horizontal section: Awning operator window with screen >

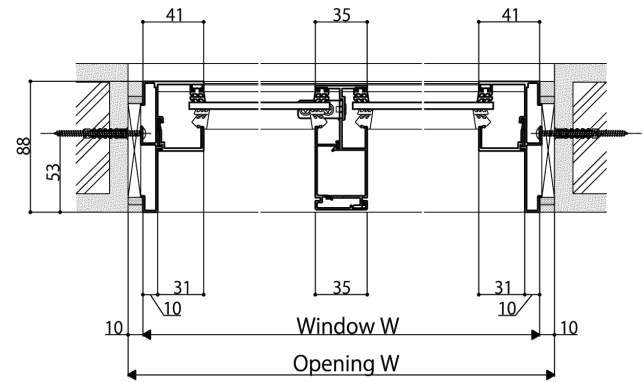
REFERENCE DRAWINGS



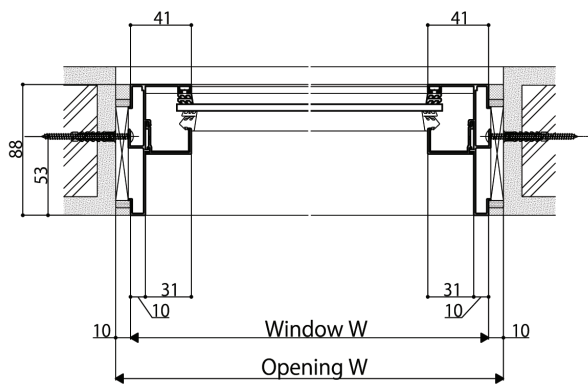
< Vertical section:
Single and corner fixed window >



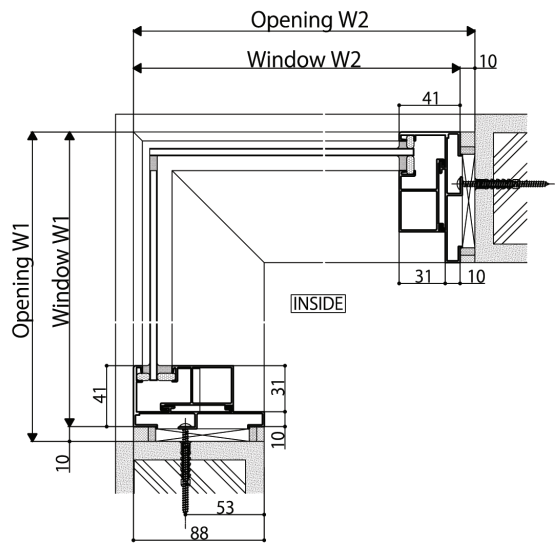
< Vertical section:
Fixed window with transom >



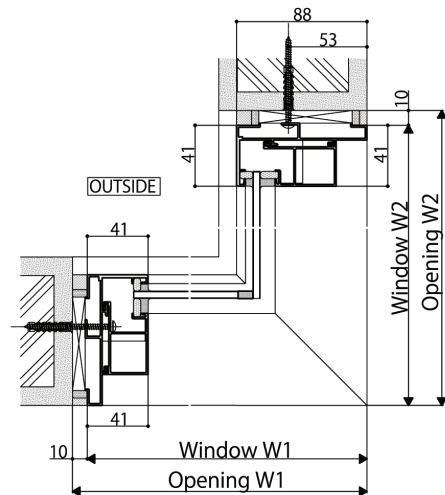
< Horizontal section:
Fixed window with mullion >



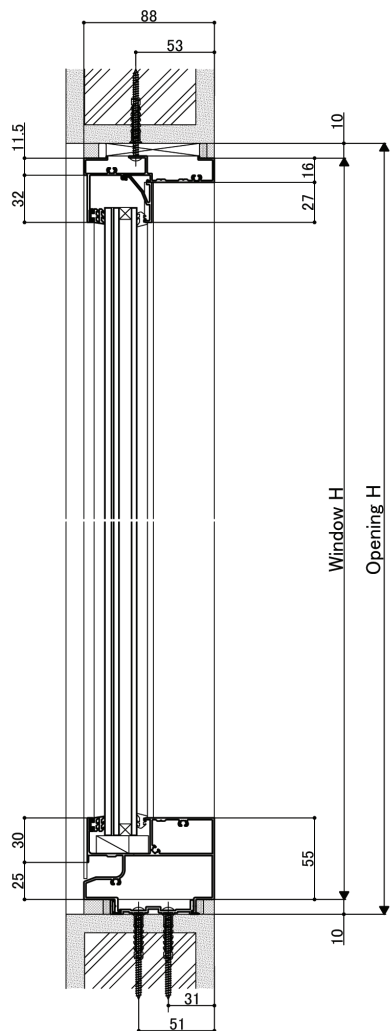
< Horizontal section:
Single fixed window >



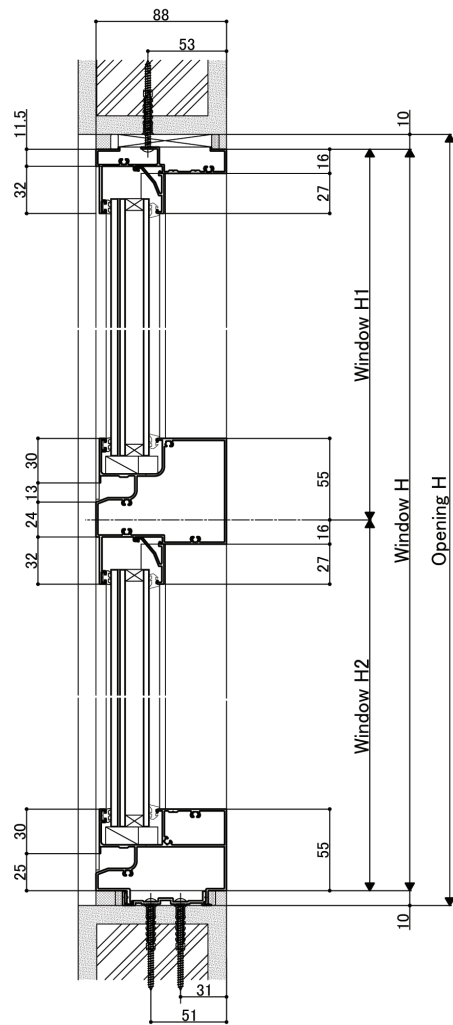
< Horizontal section:
Outward fixed window >



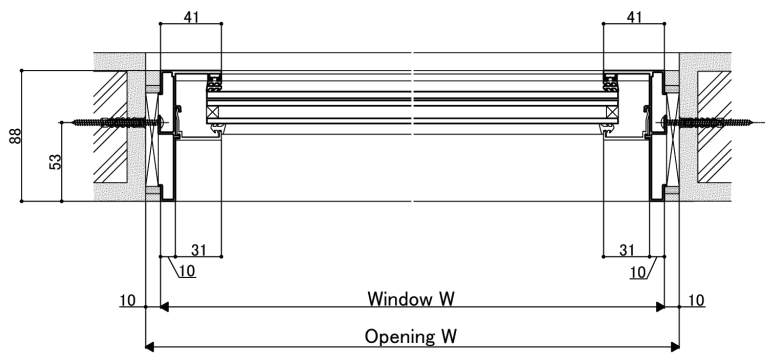
< Horizontal section:
Inward fixed window >



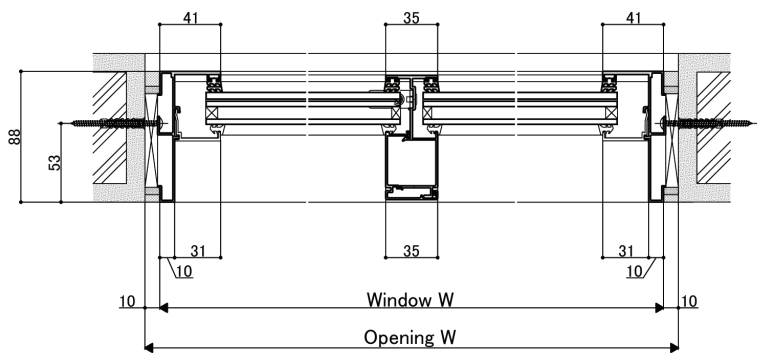
< Vertical section: Single fixed window (IG unit) >



< Vertical section: Fixed window with transom (IG unit) >

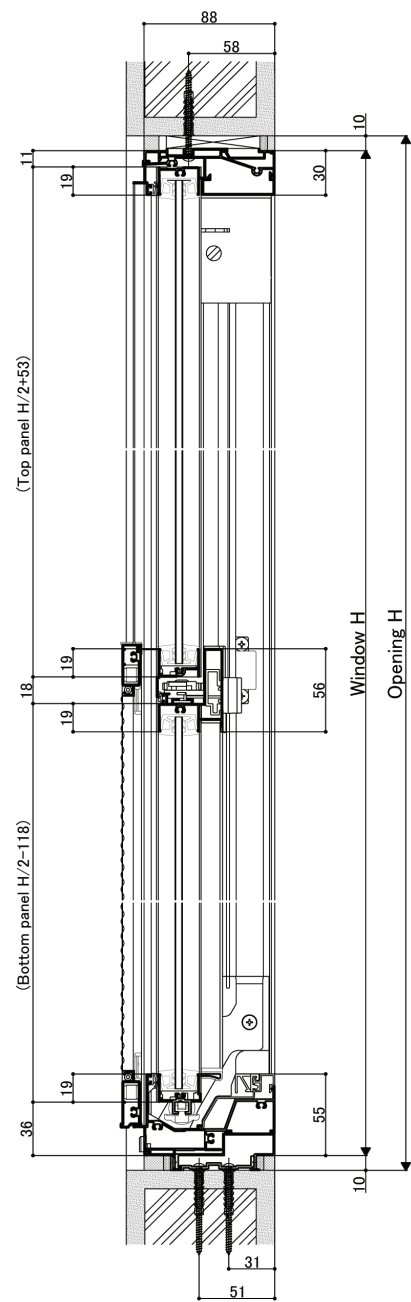


< Horizontal section: Single fixed window (IG unit) >

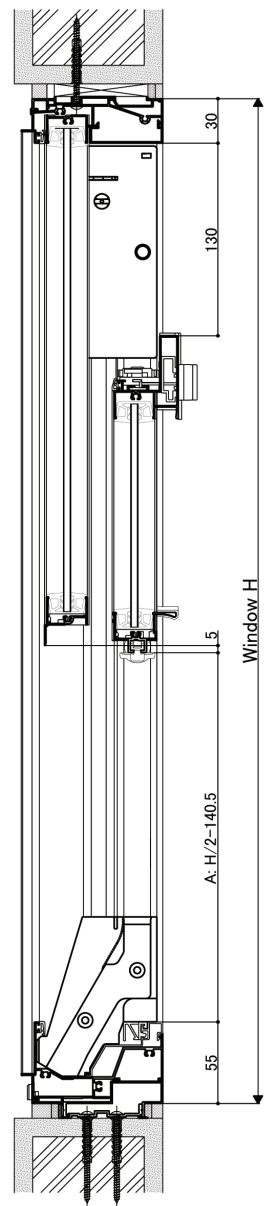


< Horizontal section: Fixed window with mullion (IG unit) >

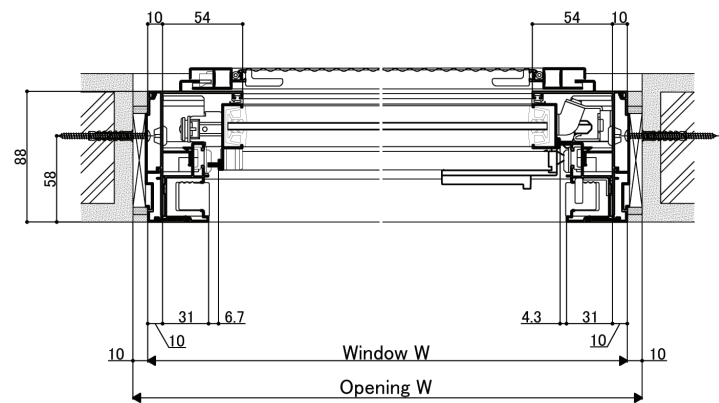
REFERENCE DRAWINGS



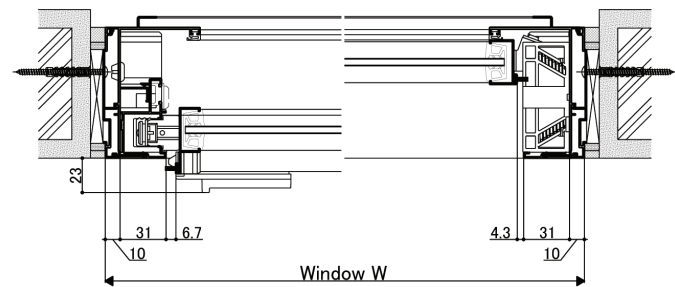
< Vertical section: Tilt & Slide >



< Vertical section: Tilt & Slide open position >

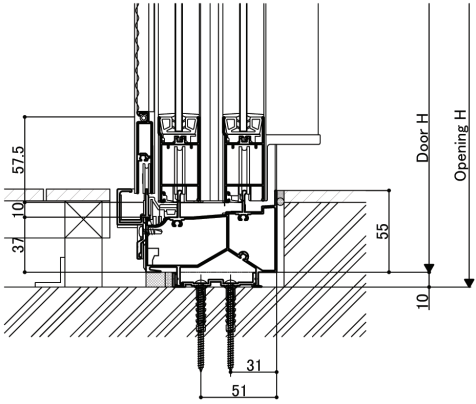
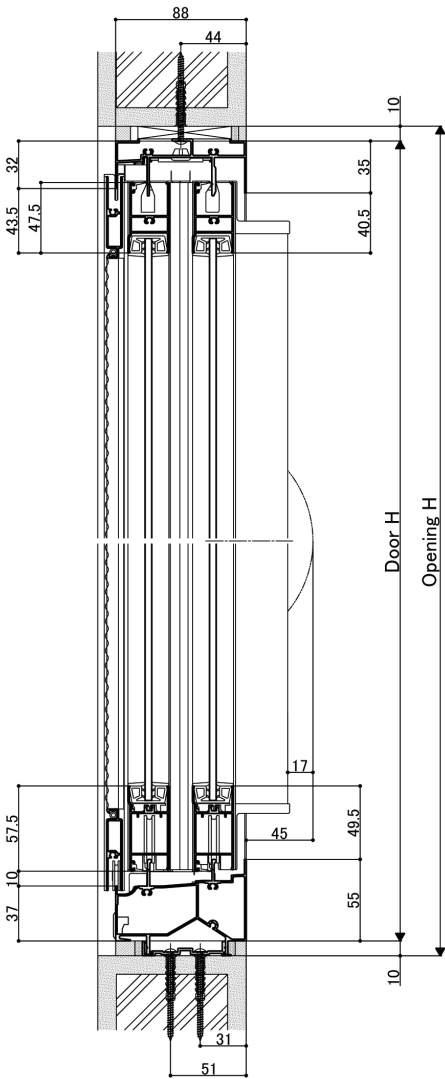


< Horizontal section: Tilt & Slide >

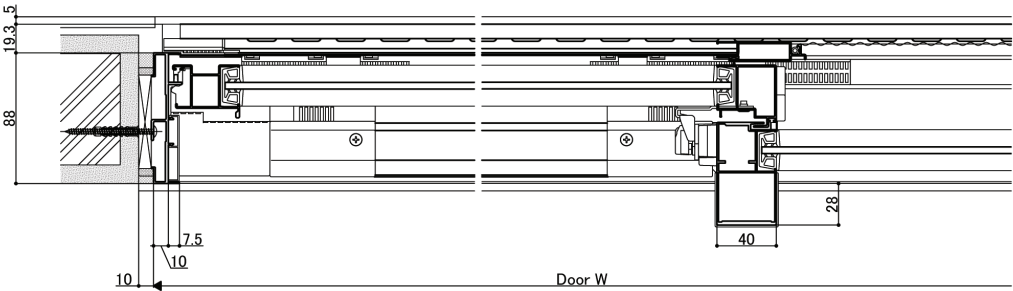


< Horizontal section: Tilt & Slide open position >

ATIS DOOR SERIES

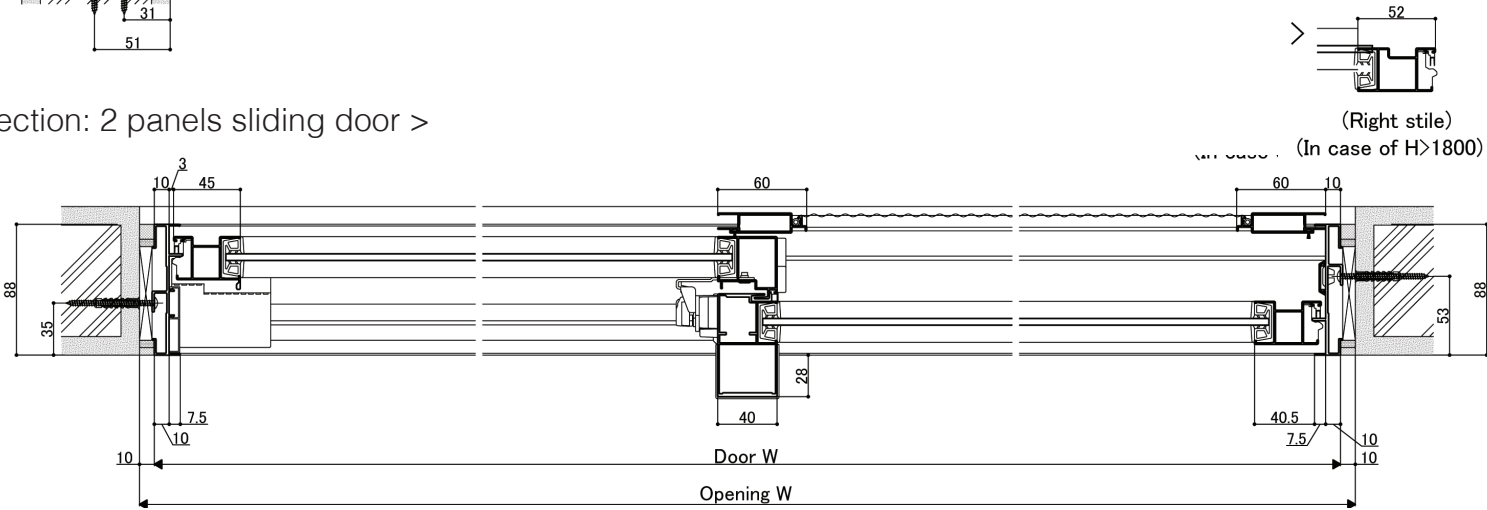


< Vertical section: Barrier flat sill option >



< Horizontal section: Barrier flat sill option >

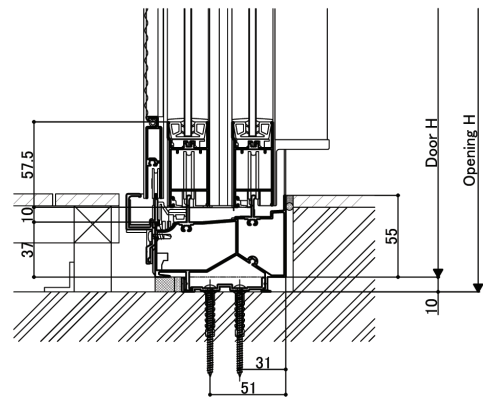
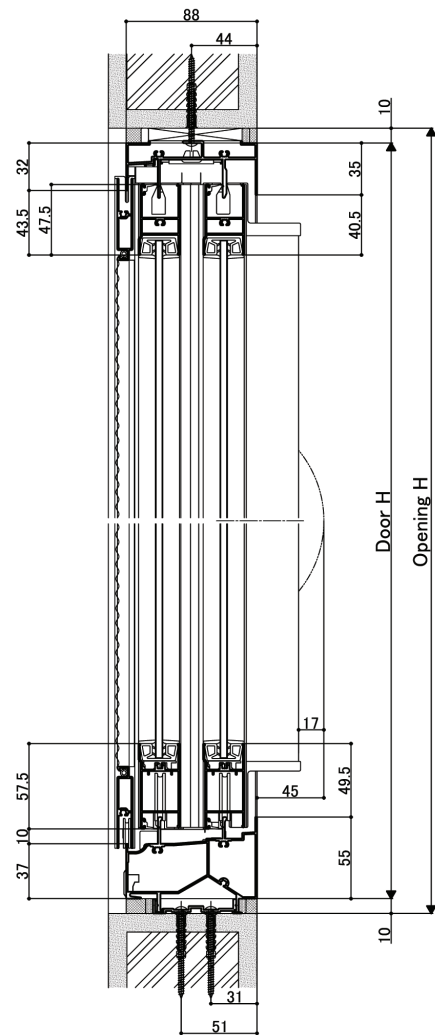
< Vertical section: 2 panels sliding door >



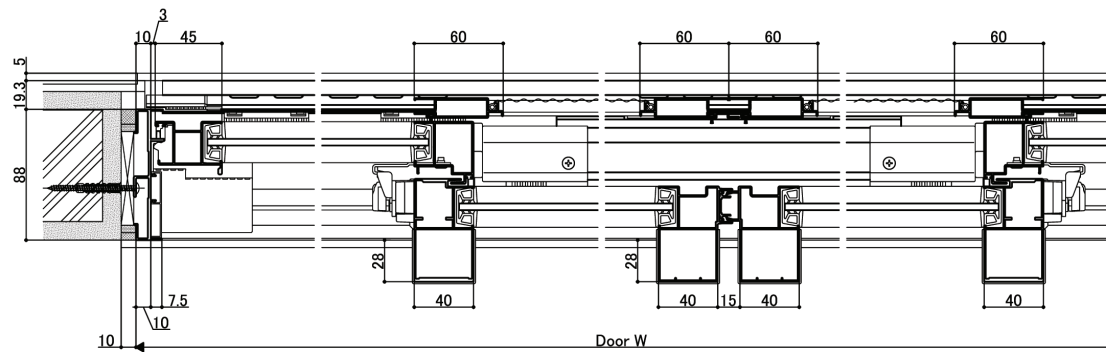
(Right stile)
(In case of H>1800)

< Horizontal section: 2 panels sliding door >

REFERENCE DRAWINGS

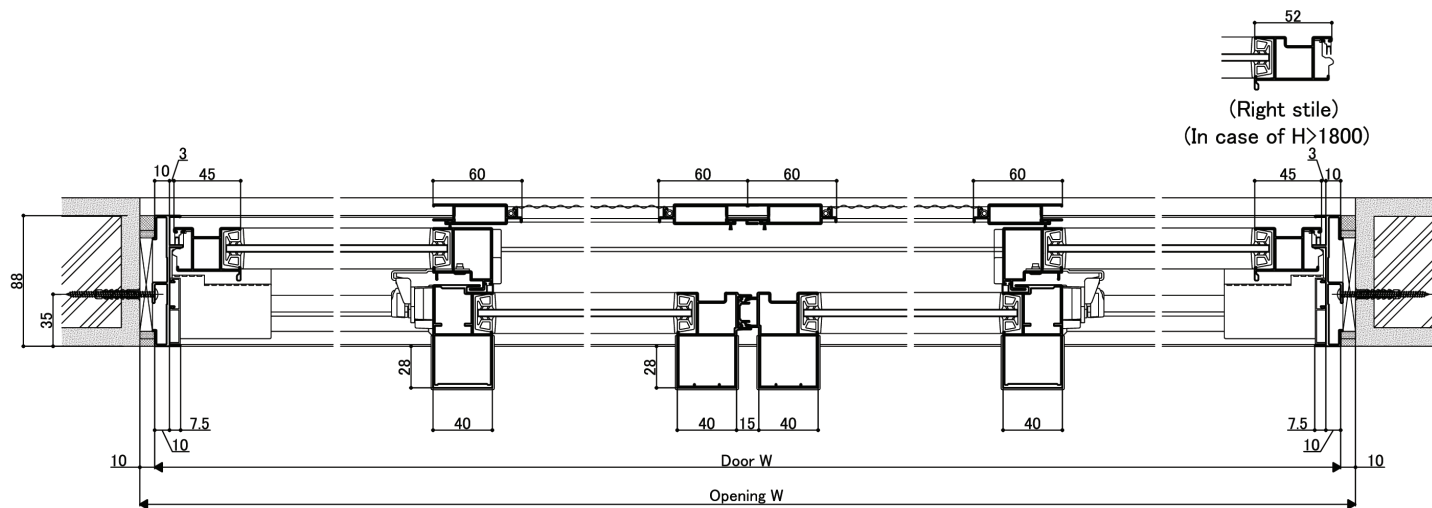


< Vertical section: Barrier flat sill option >

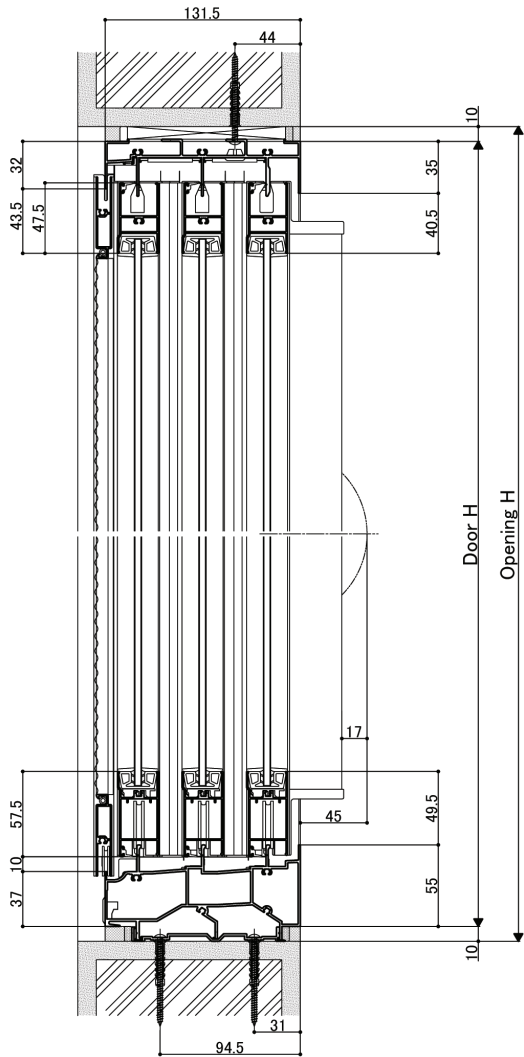


< Vertical section: 4 panels sliding door >

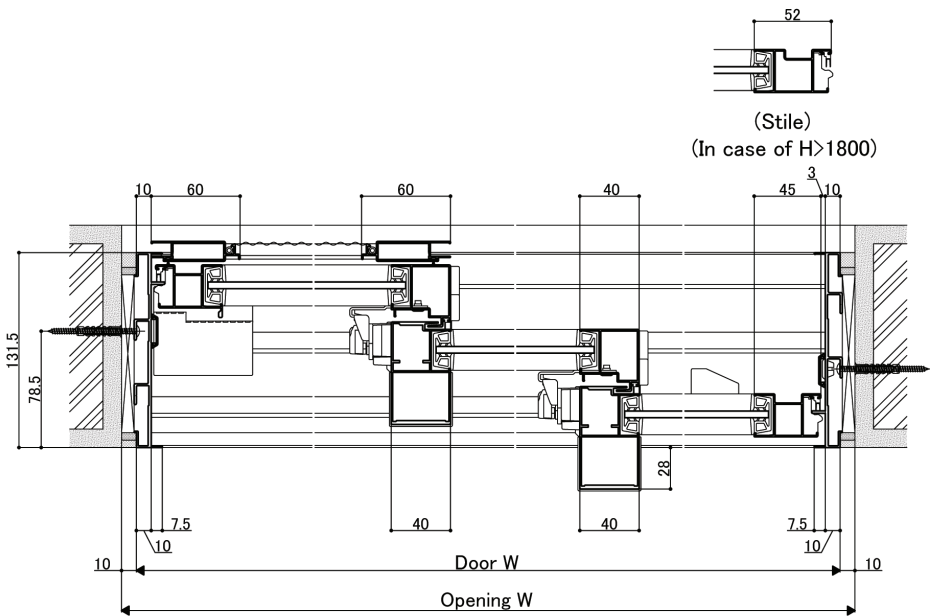
< Horizontal section: Barrier flat sill option >



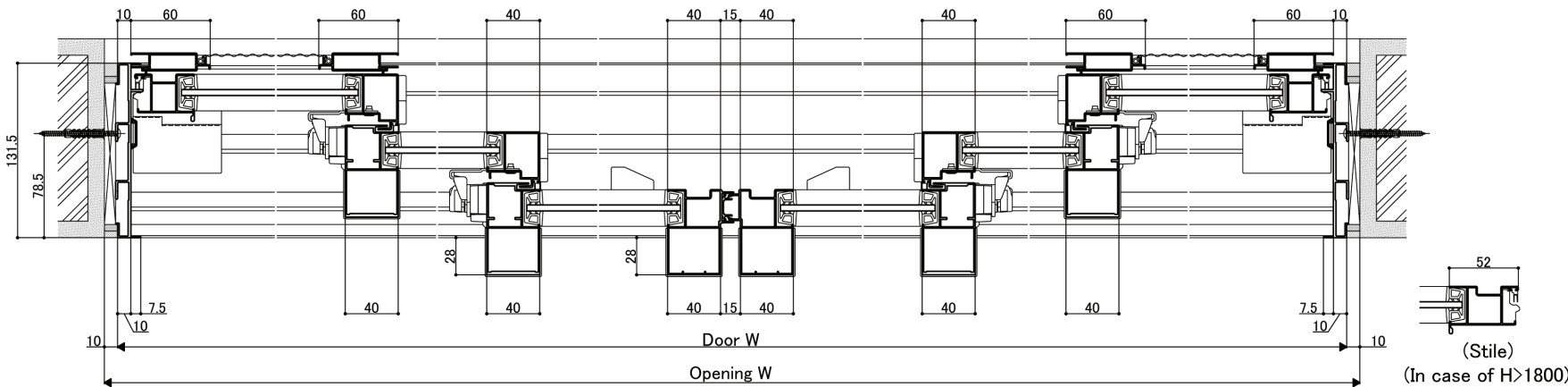
< Horizontal section: 4 panels sliding door >



< Vertical section: 3 and 6 panels sliding door >

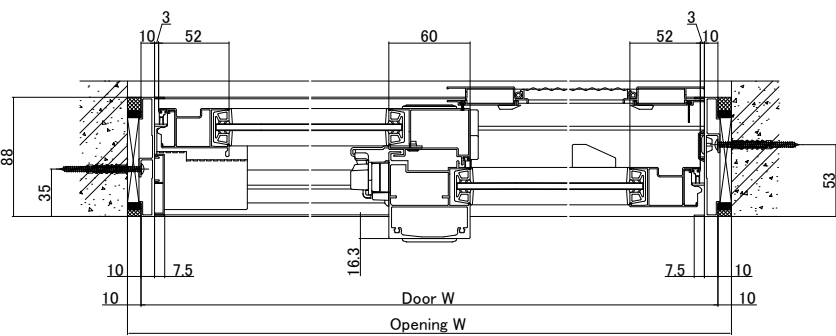
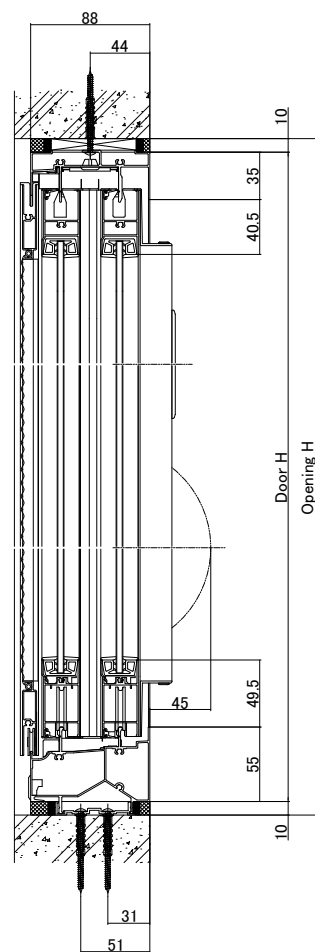


< Horizontal section: 3 panels sliding door >

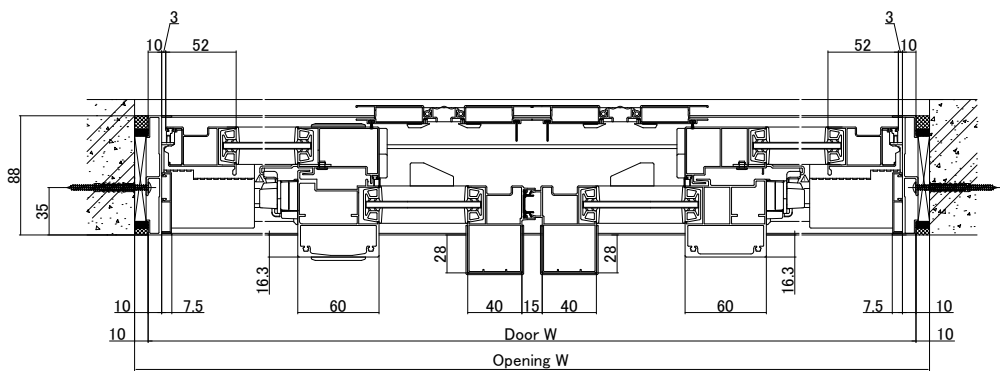


< Horizontal section: 6 panels sliding door >

REFERENCE DRAWINGS

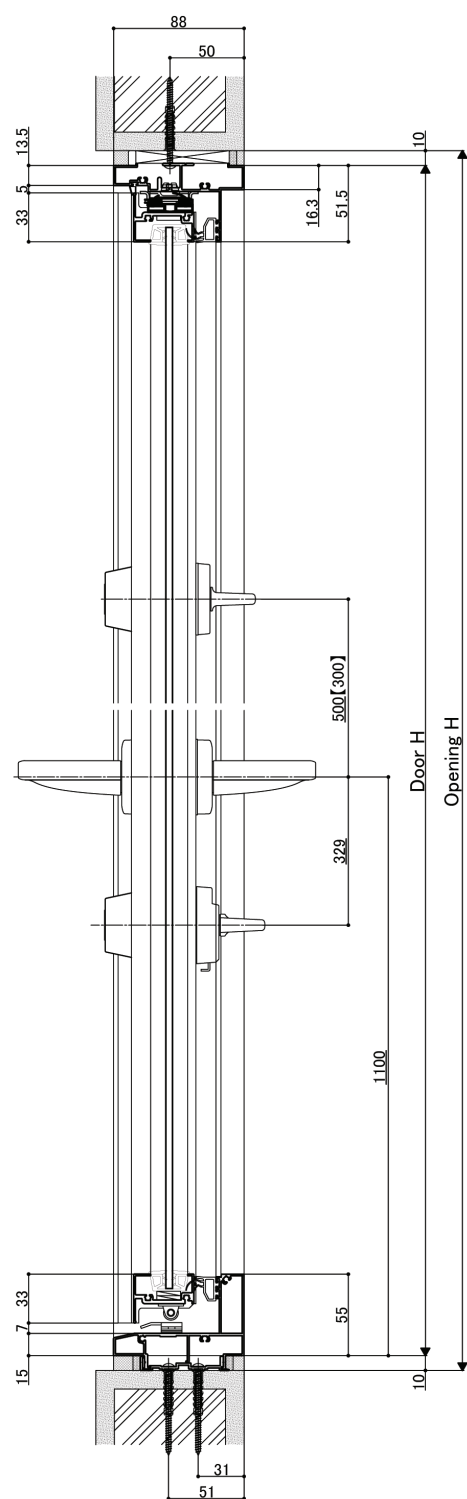


< Horizontal section: 2 panels Entrance Sliding dDoor >



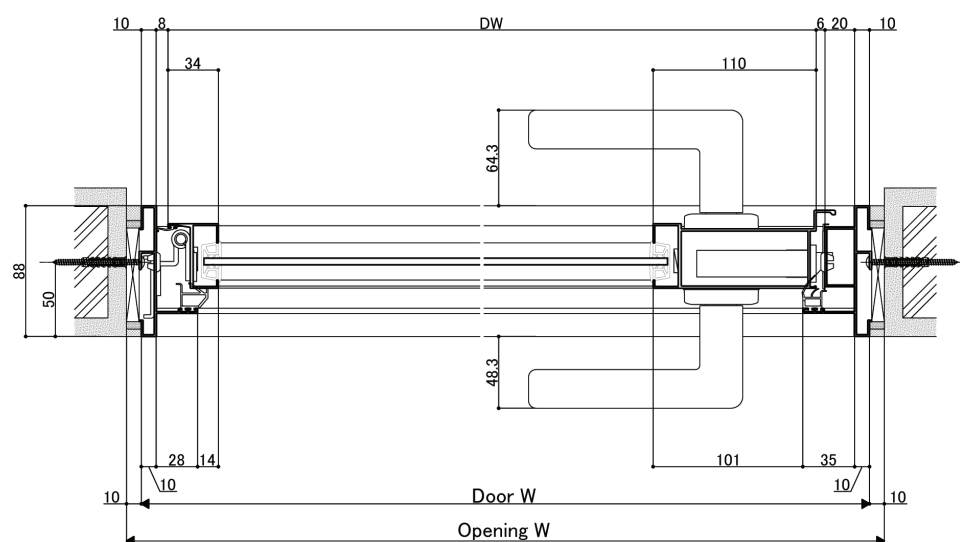
< Horizontal section : 4 panels Entrance Sliding Door>

< Vertical section: 2 and 4 panels Entrance Sliding Door >

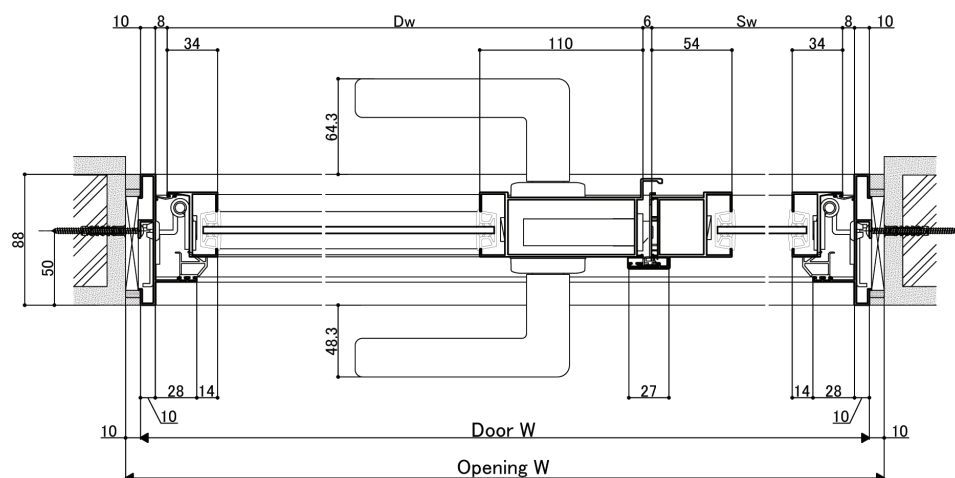


【】 In case $H \leq 2000$

< Vertical section: Single and double leaf Out-swing door >

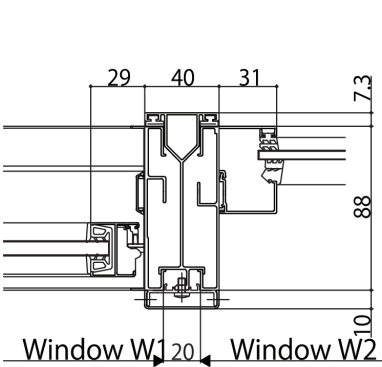


< Horizontal section: Single Out-swing door >

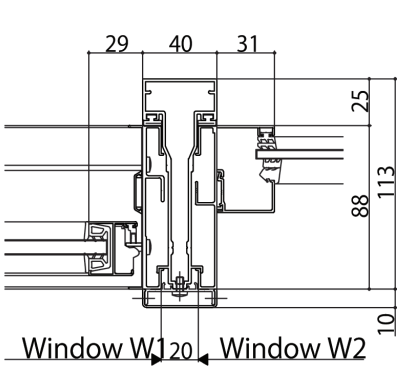


< Horizontal section: Double Out-swing door >

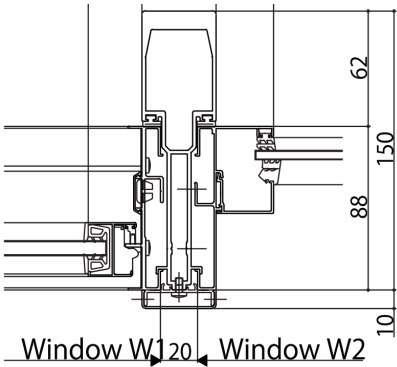
ATIS COMBINATION



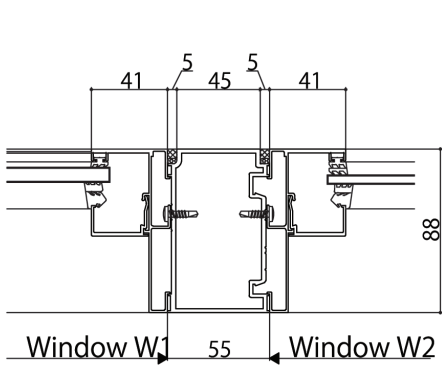
Mullion 180 A Type



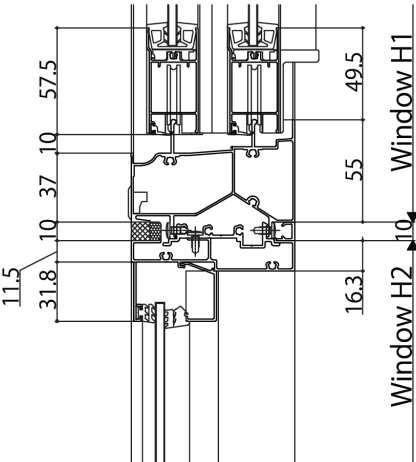
Mullion 180 B Type



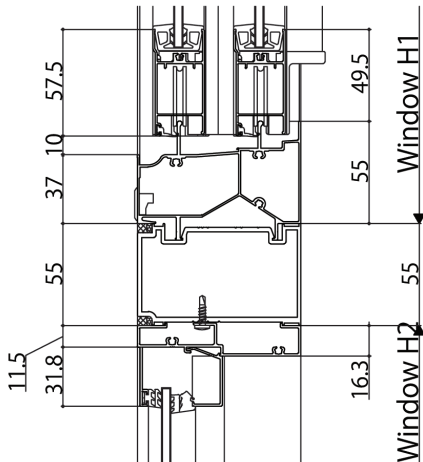
Mullion 180 C Type



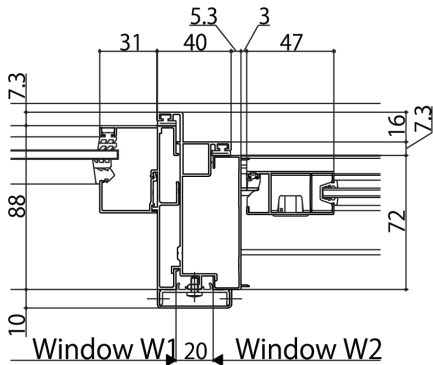
Reinforcement Mullion 180



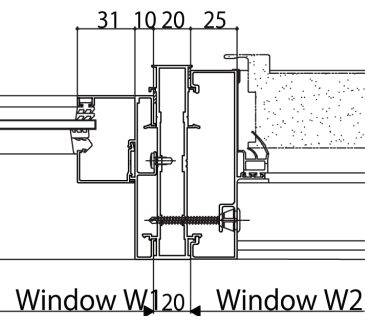
Transom A (88 mm)



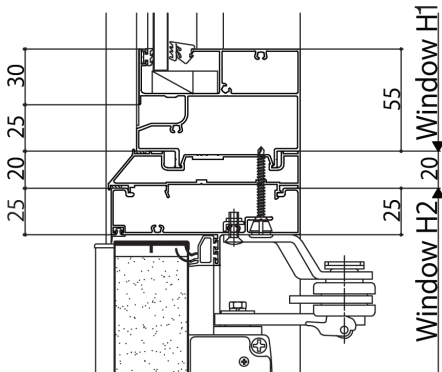
Reinforcement Transom



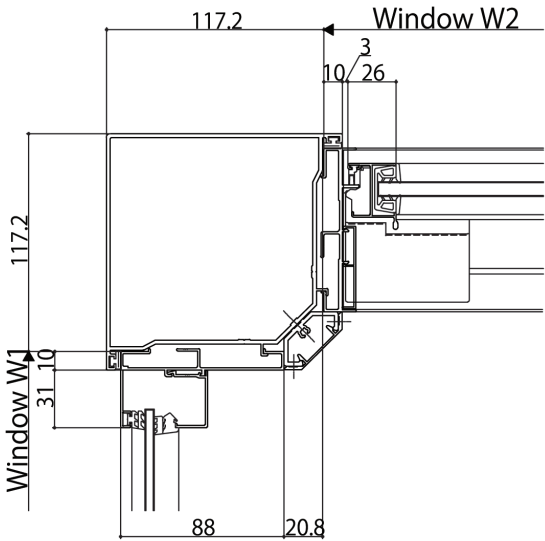
< Horizontal section: Mullion 180 for WE combination >



Mullion 180 (101 mm)



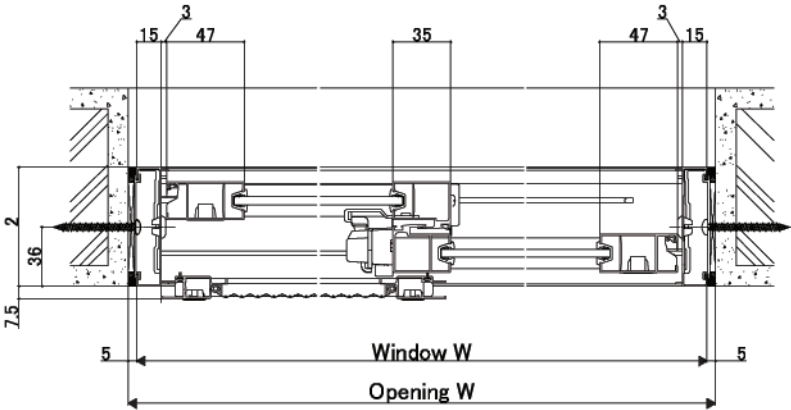
Transom (101 mm)



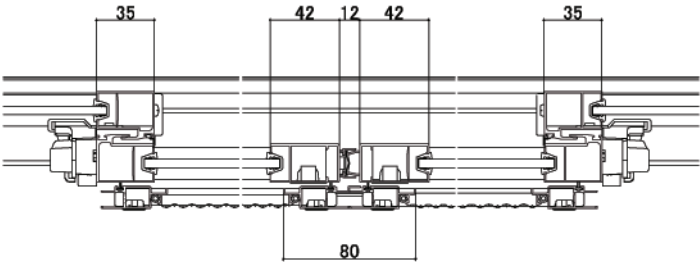
< Horizontal section: Mullion 90 combination >

< Horizontal section: Mullion 180 & Vertical section Transom for GUESTA combination >

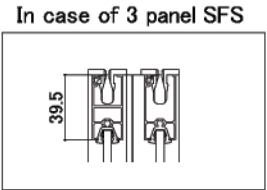
WE 70 WINDOW SERIES



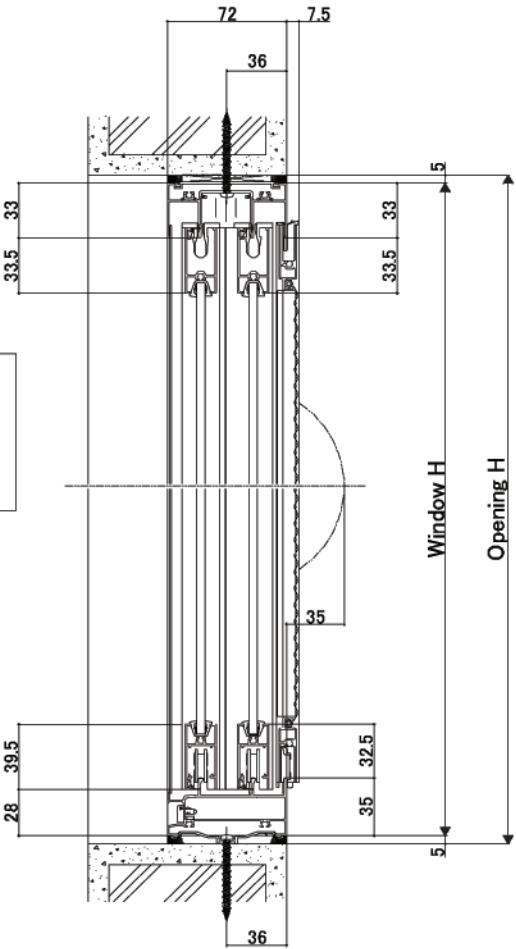
< Horizontal section: 2 panels sliding window >



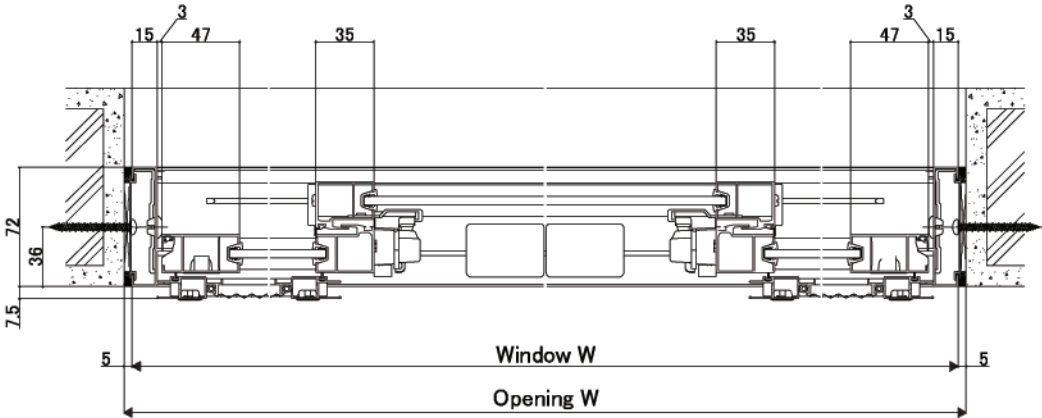
< Horizontal section: 4 panels sliding window >



In case of 3 panel SFS

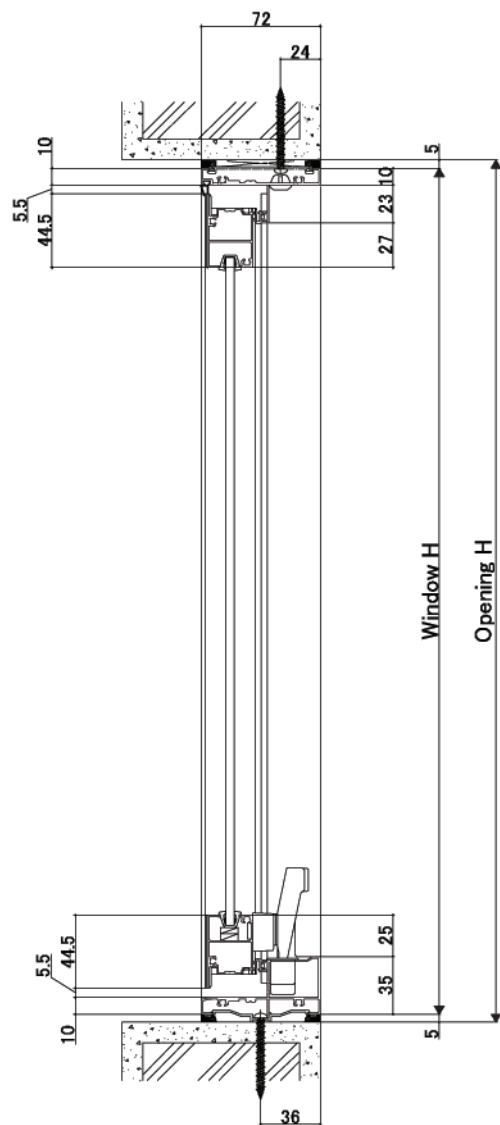


< Vertical section: 2, 4 and SFS 3 panels sliding window >

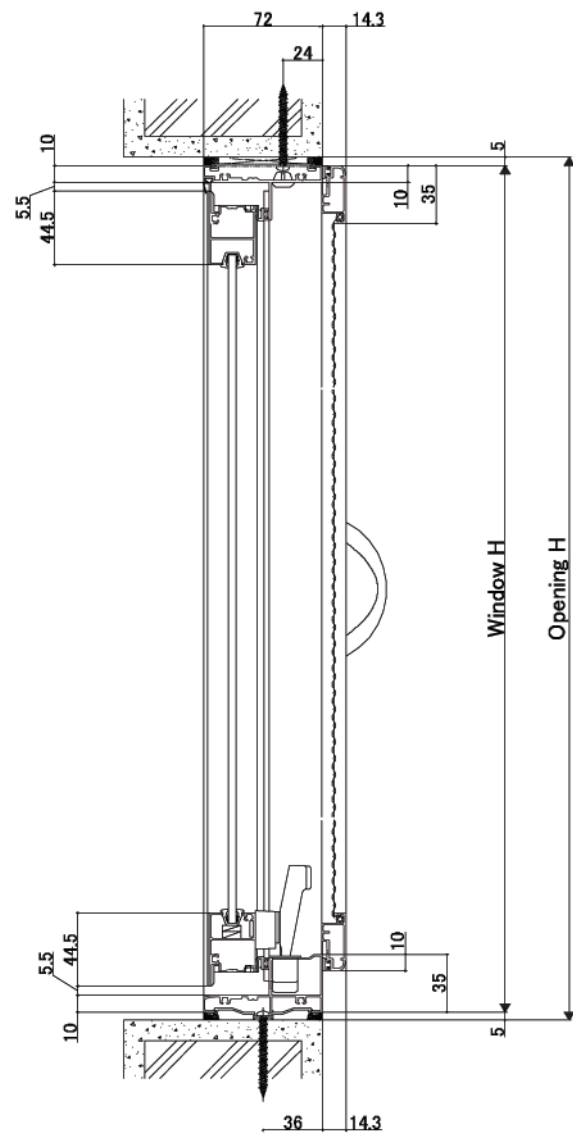


< Horizontal section: SFS 3 panels sliding window >

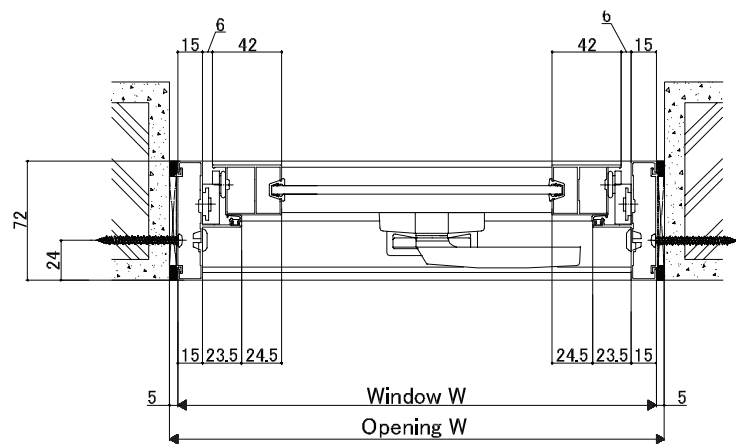
REFERENCE DRAWINGS



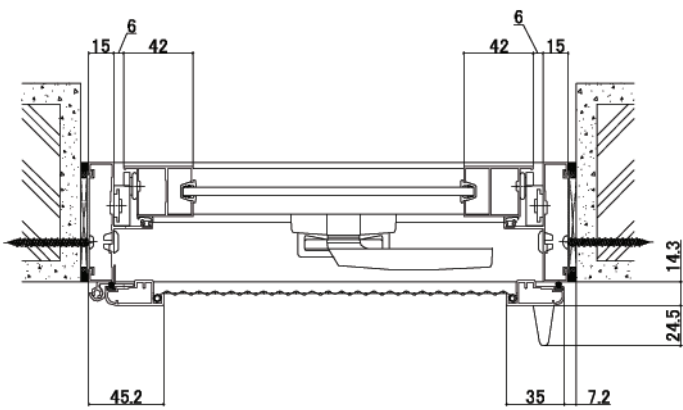
< Vertical section: Awning window >



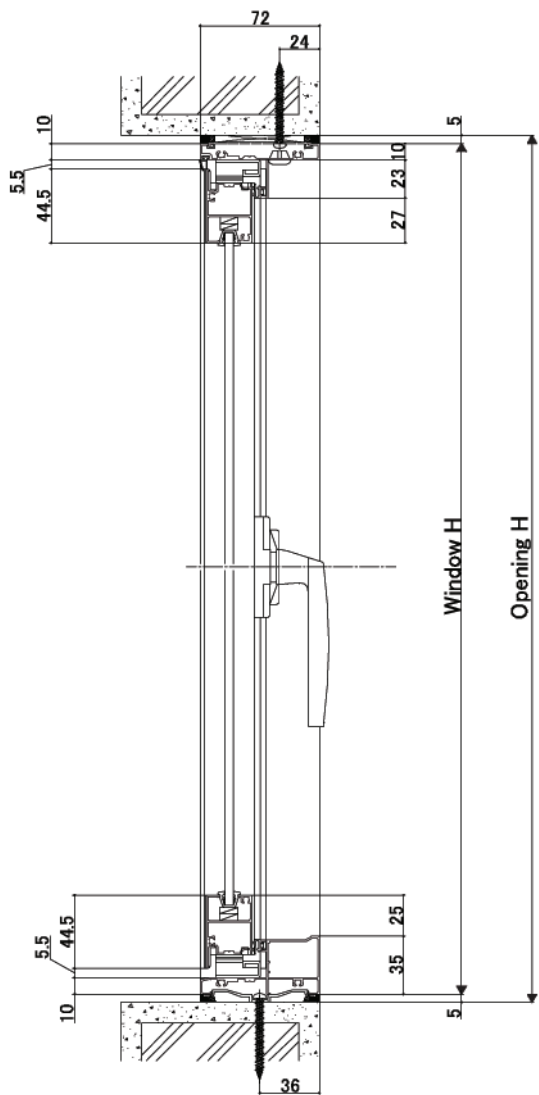
< Vertical section: Awning with screen >



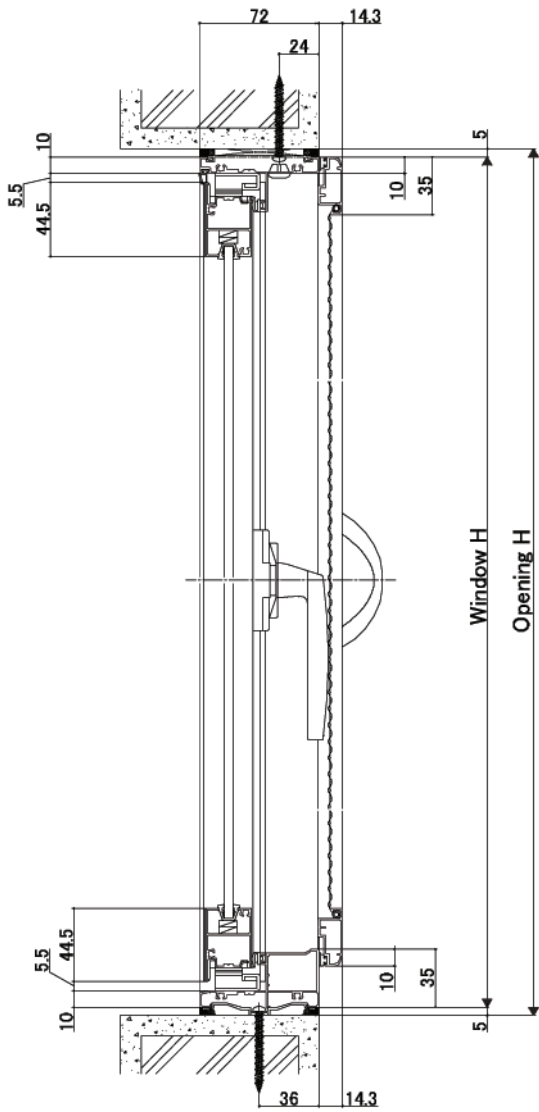
< Horizontal section: Awning window >



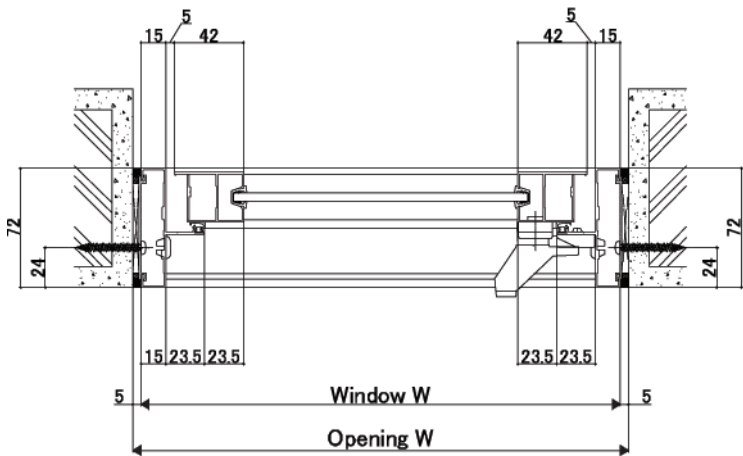
< Horizontal section: Awning with screen >



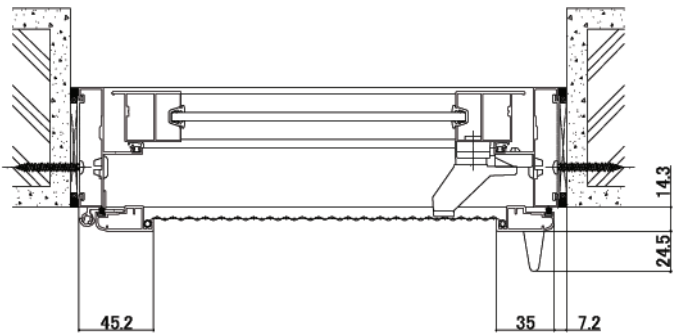
< Vertical section: Casement window >



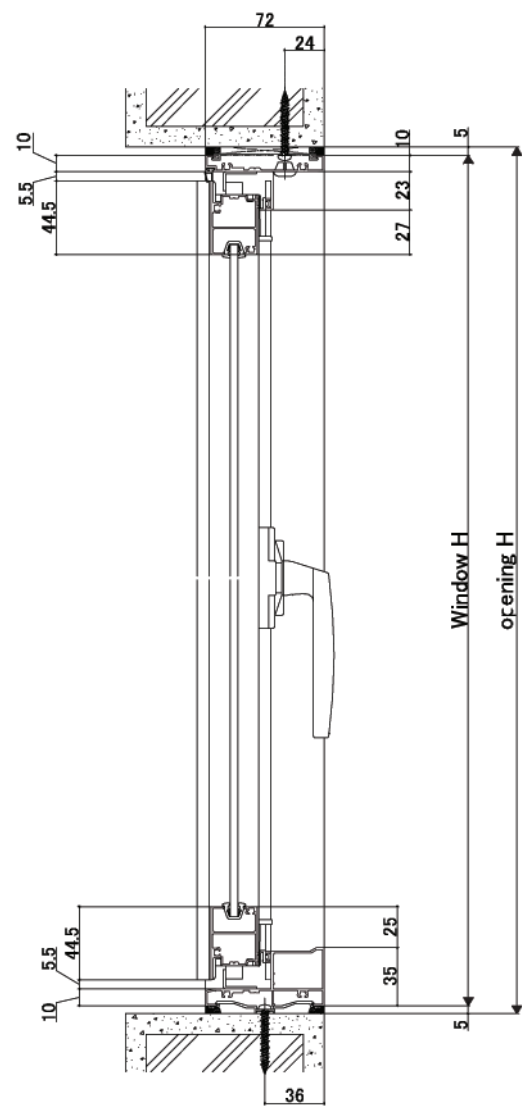
< Vertical section: Casement with screen >



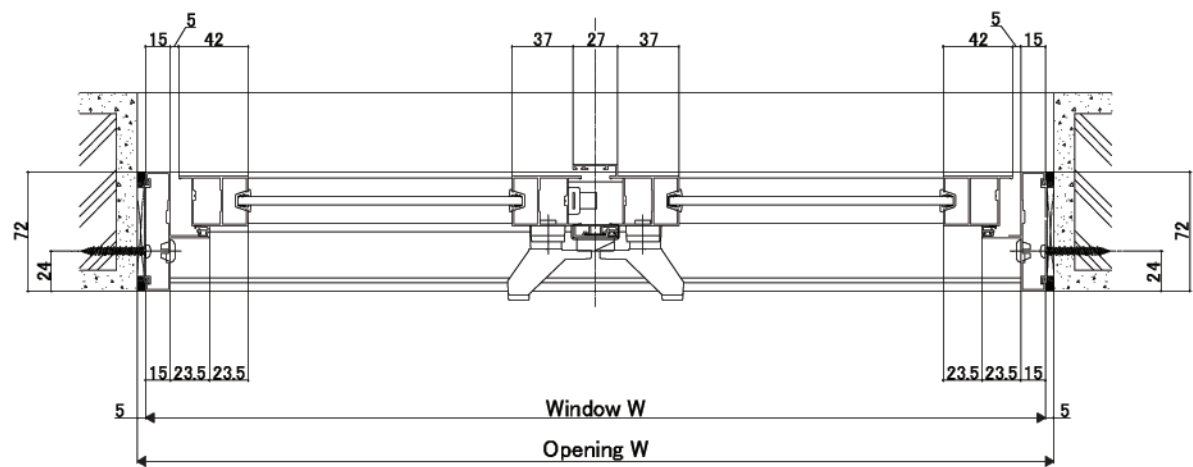
< Horizontal section: Casement window >



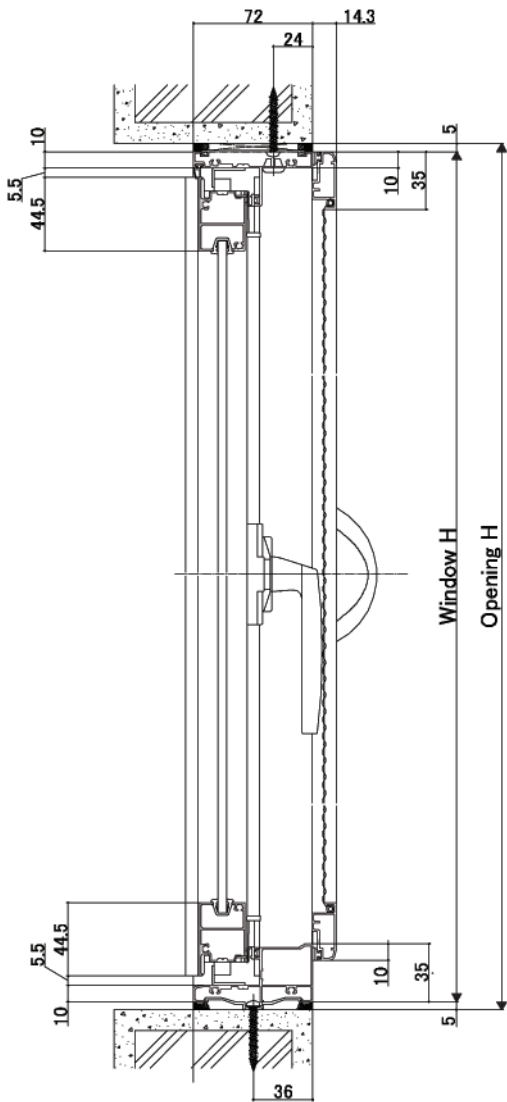
< Horizontal section: Casement with screen >



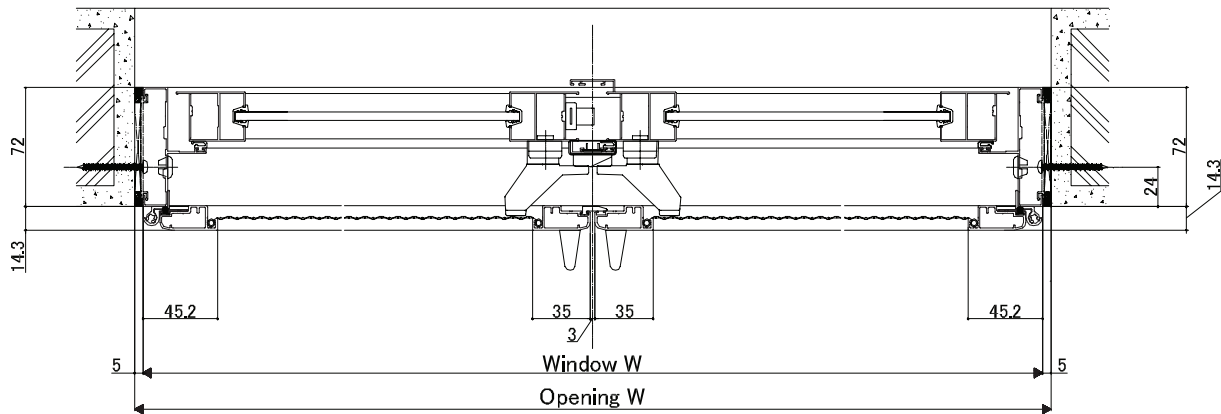
< Vertical section: Double casement window >



< Horizontal section: Double casement window >

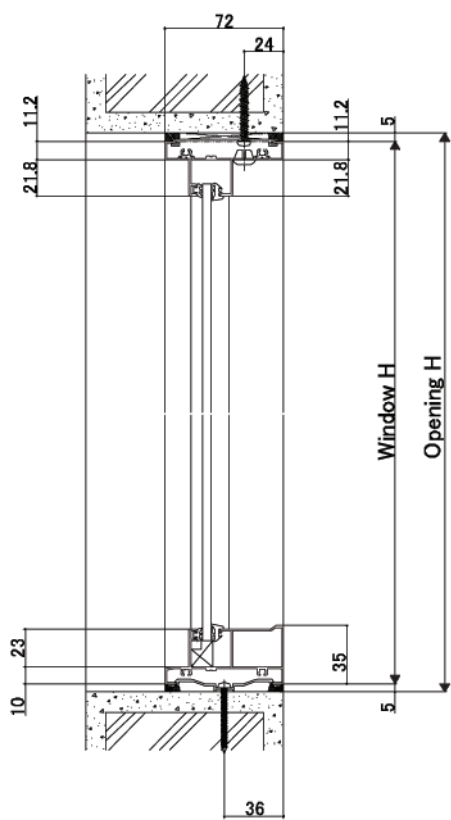


< Vertical section: Double Casement with screen >

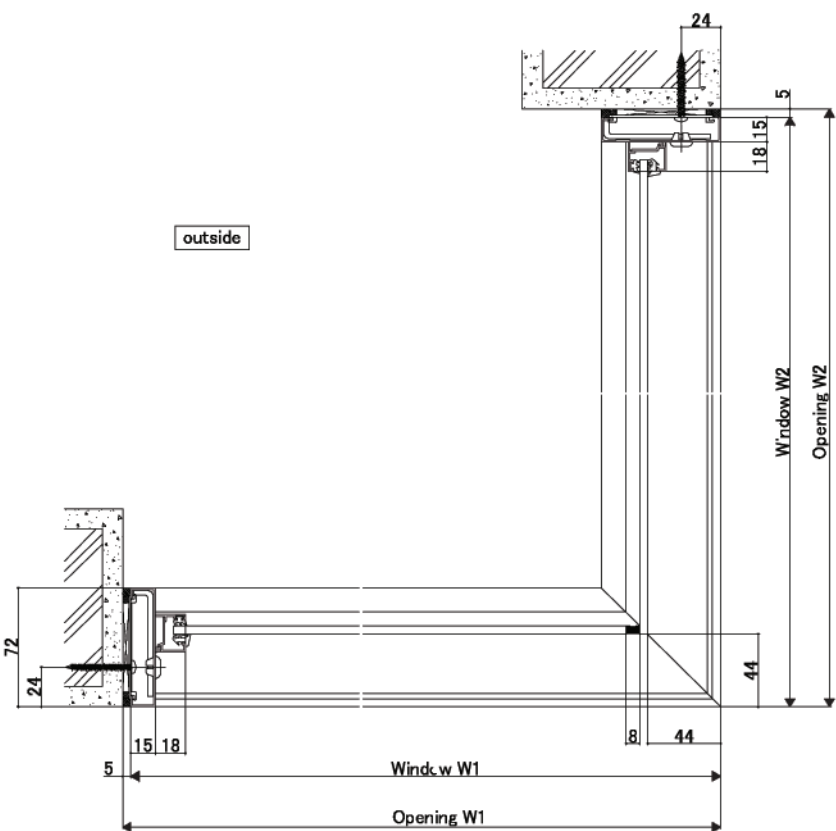


< Horizontal section: Double Casement with screen >

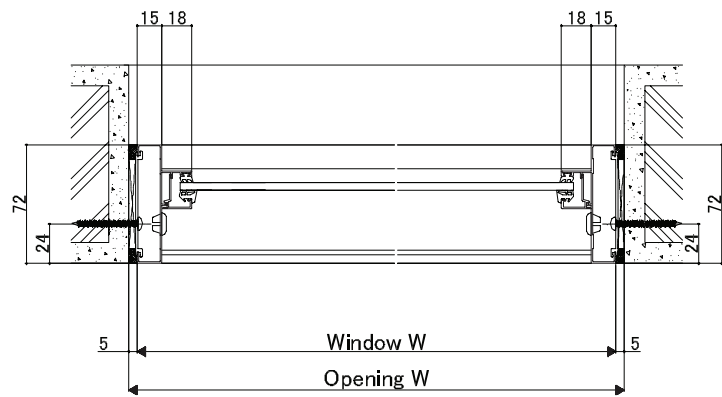
REFERENCE DRAWINGS



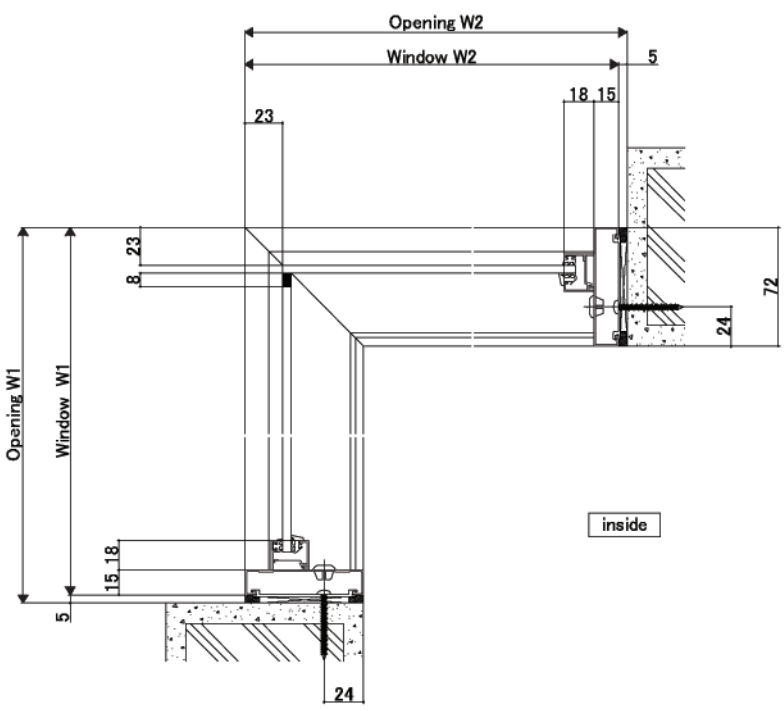
< Vertical section: Single and corner fixed window >



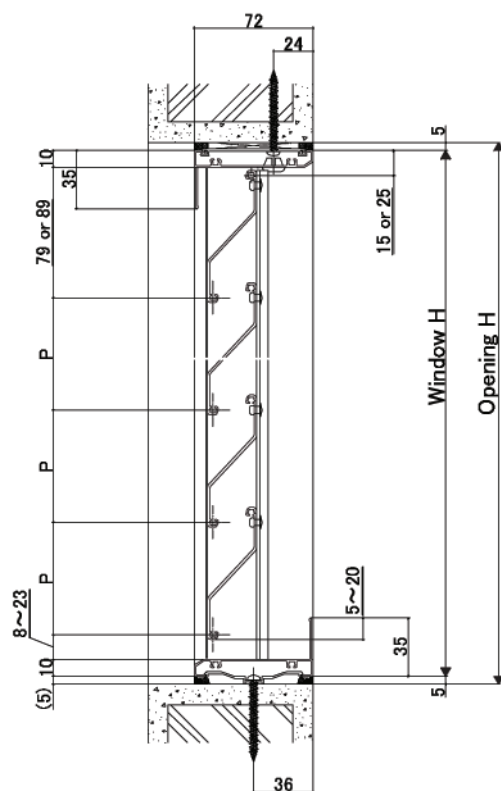
< Horizontal section: Inward fixed window >



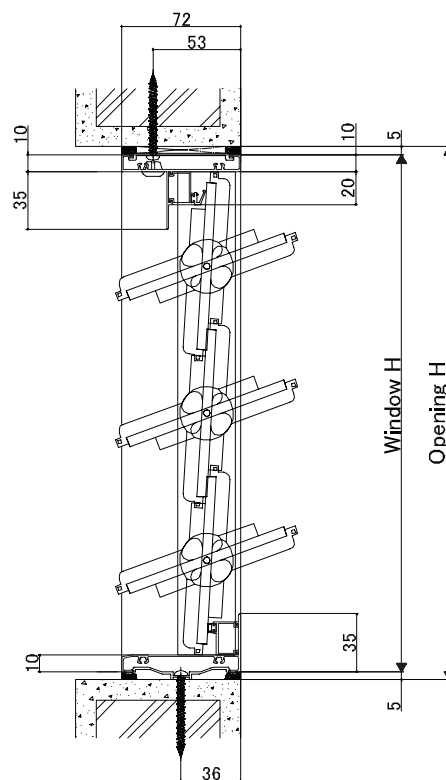
< Horizontal section: Single fixed window >



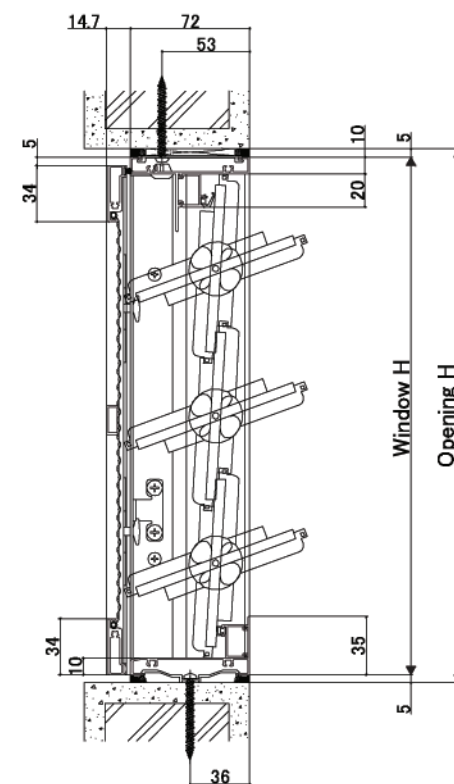
< Horizontal section: Outward fixed window >



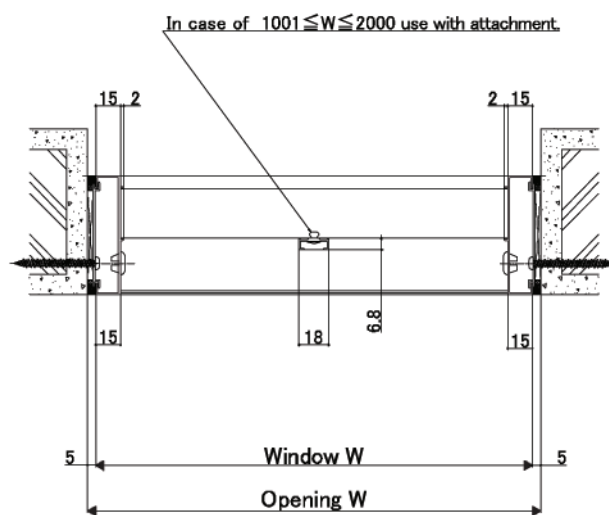
< Vertical section: Aluminum louver >



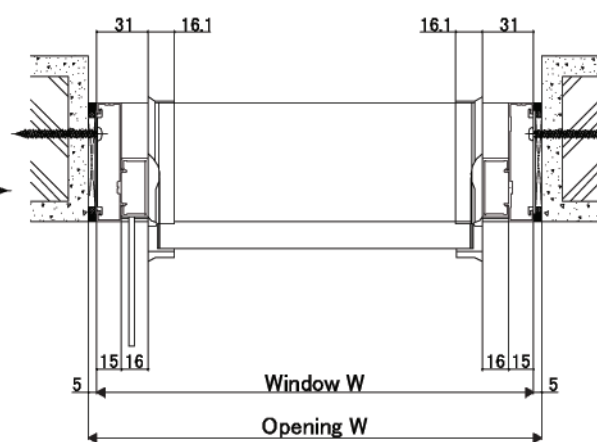
< Vertical section: Glass louver >



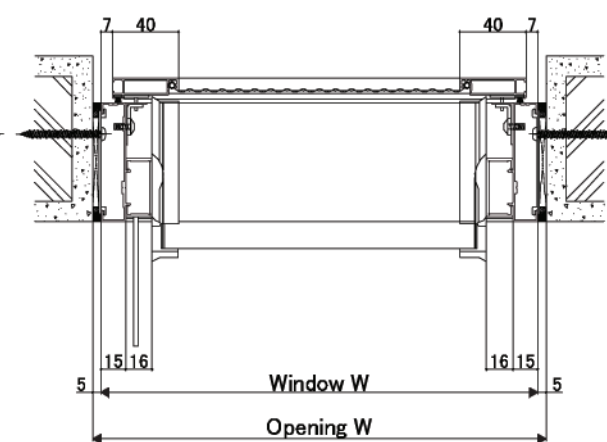
< Vertical section: Glass louver >
(with screen)



< Horizontal section: Aluminum louver >

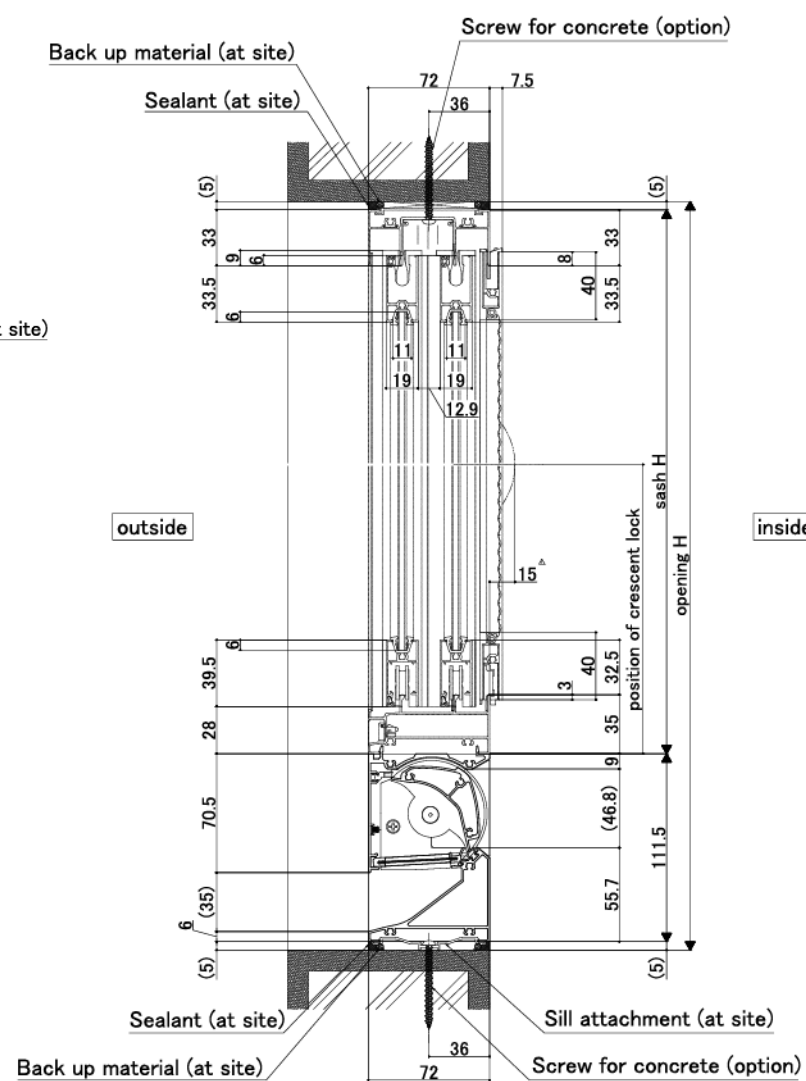
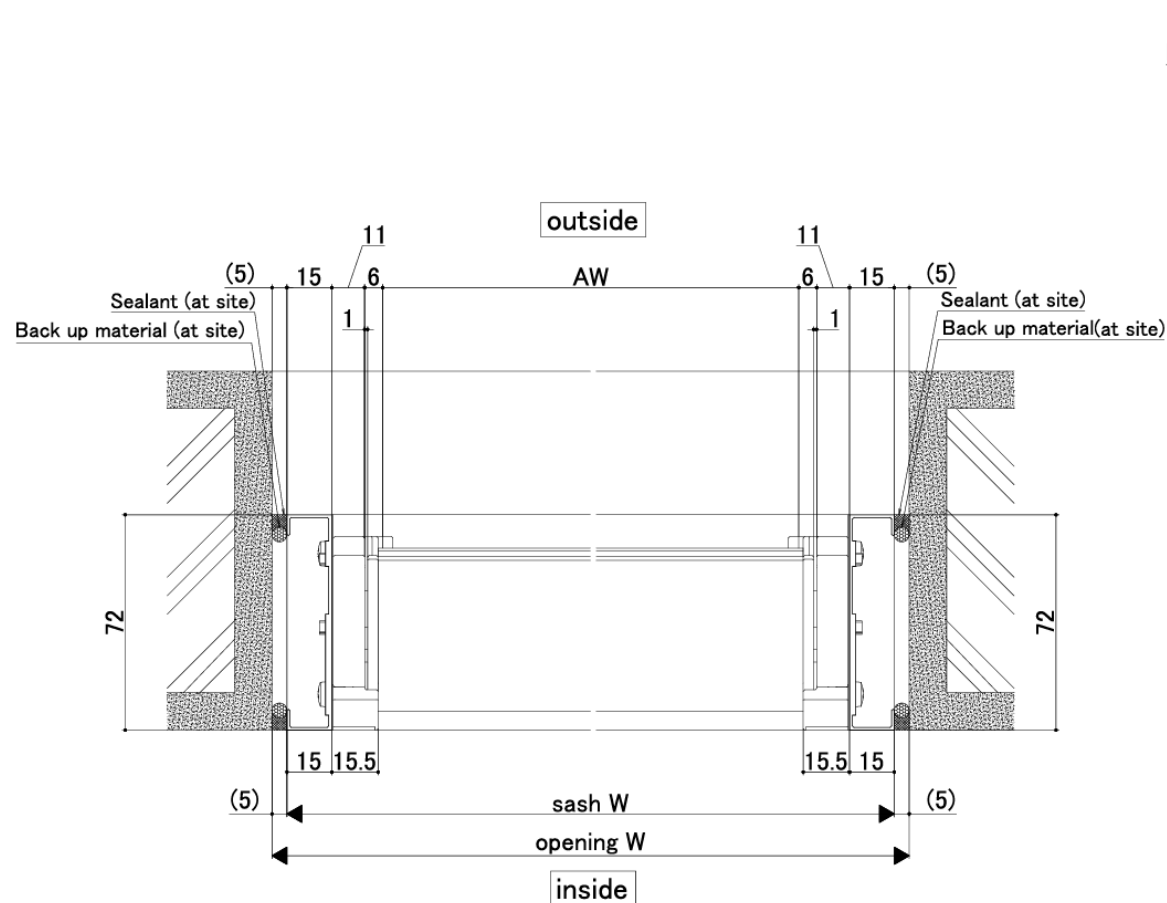


< Horizontal section: Glass louver >

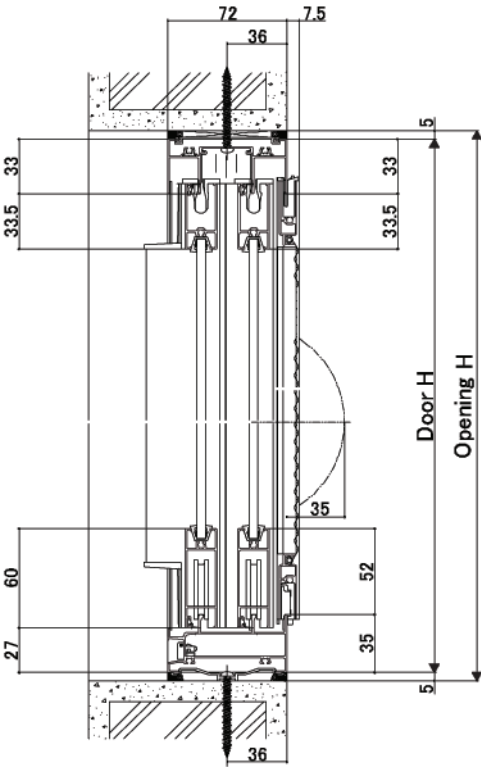
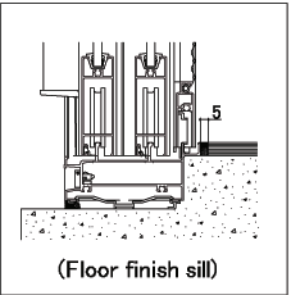
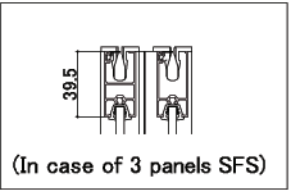


< Horizontal section: Glass louver >
(with screen)

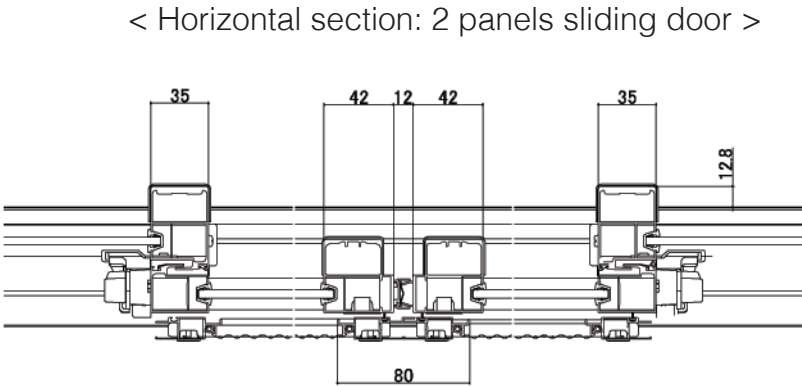
WE 70 AIRFLOW SLOT



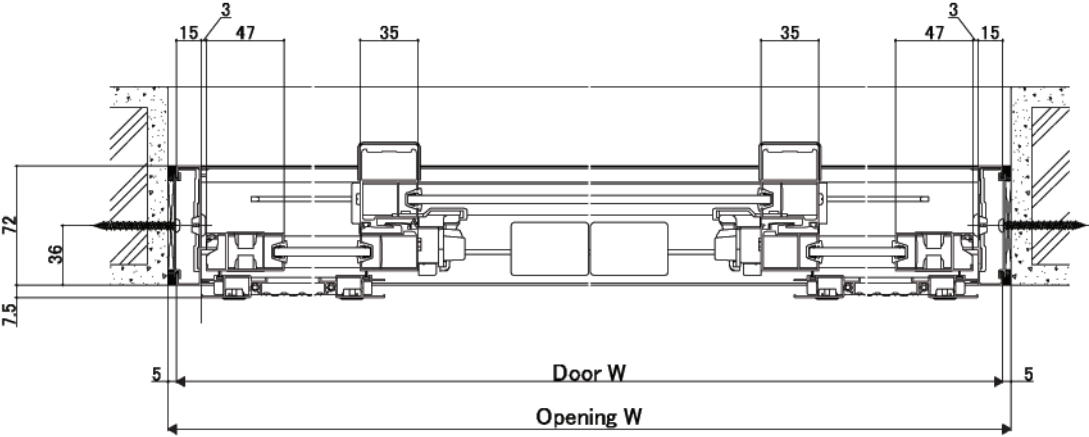
WE 70 DOOR SERIES



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

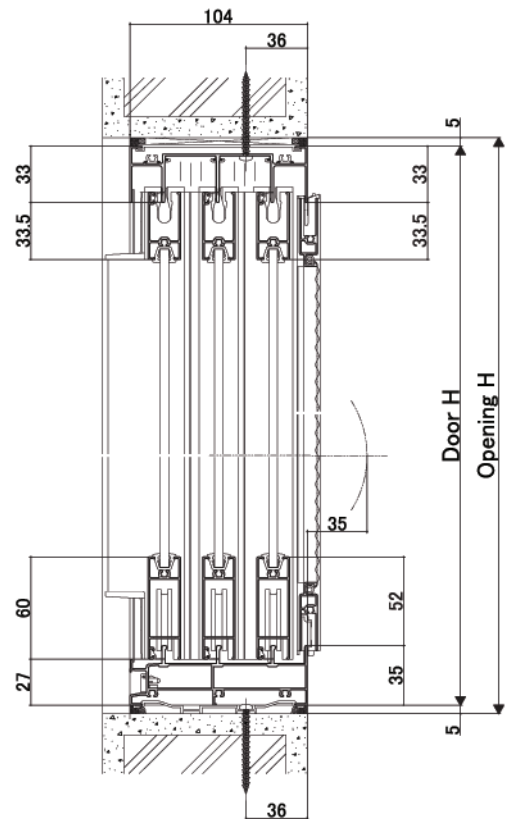


< Horizontal section: 4 panels sliding door >

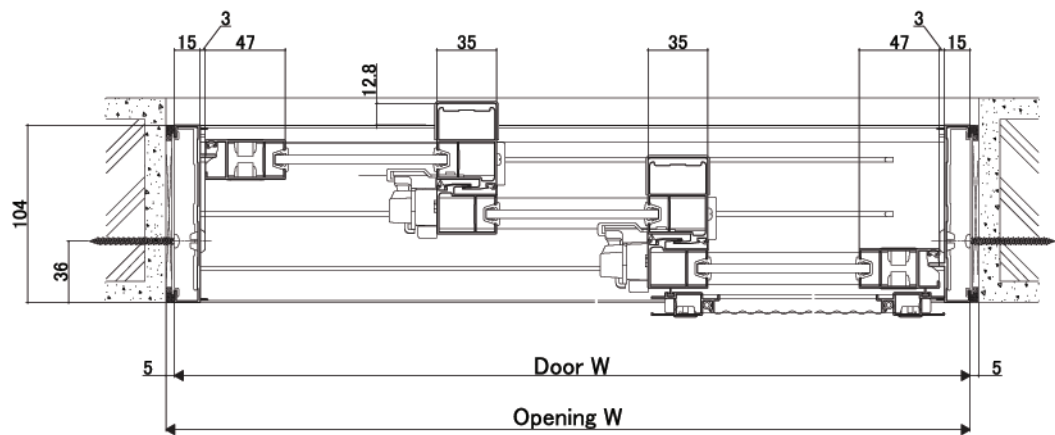


< Horizontal section: SFS 3 panels sliding door >

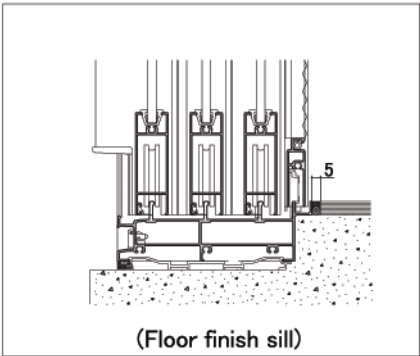
REFERENCE DRAWINGS



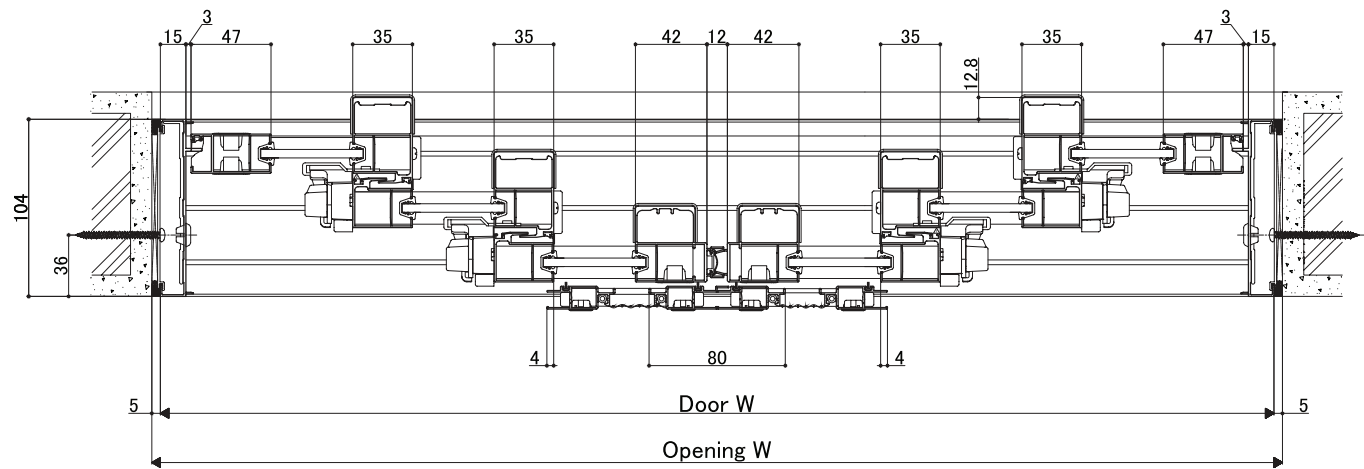
< Vertical section: 3, 6 panels sliding door >



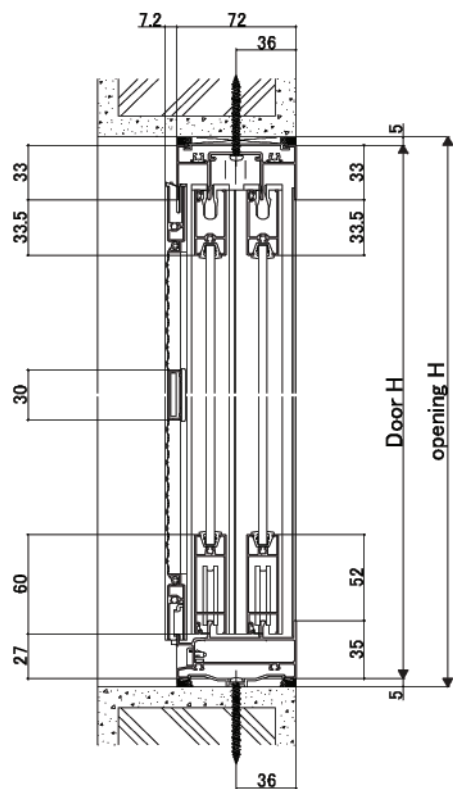
< Horizontal section: 3 panels sliding door >



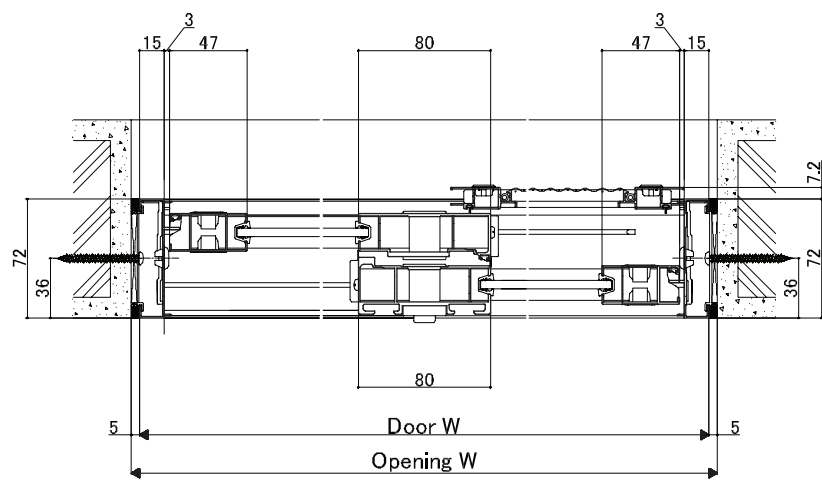
(Floor finish sill)



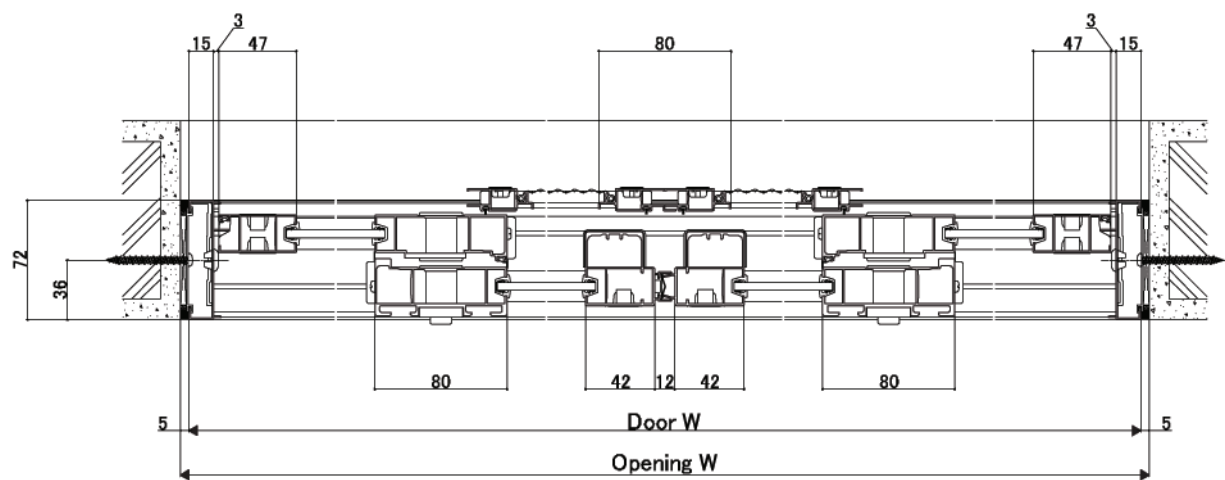
< Horizontal section: 6 panels sliding door >



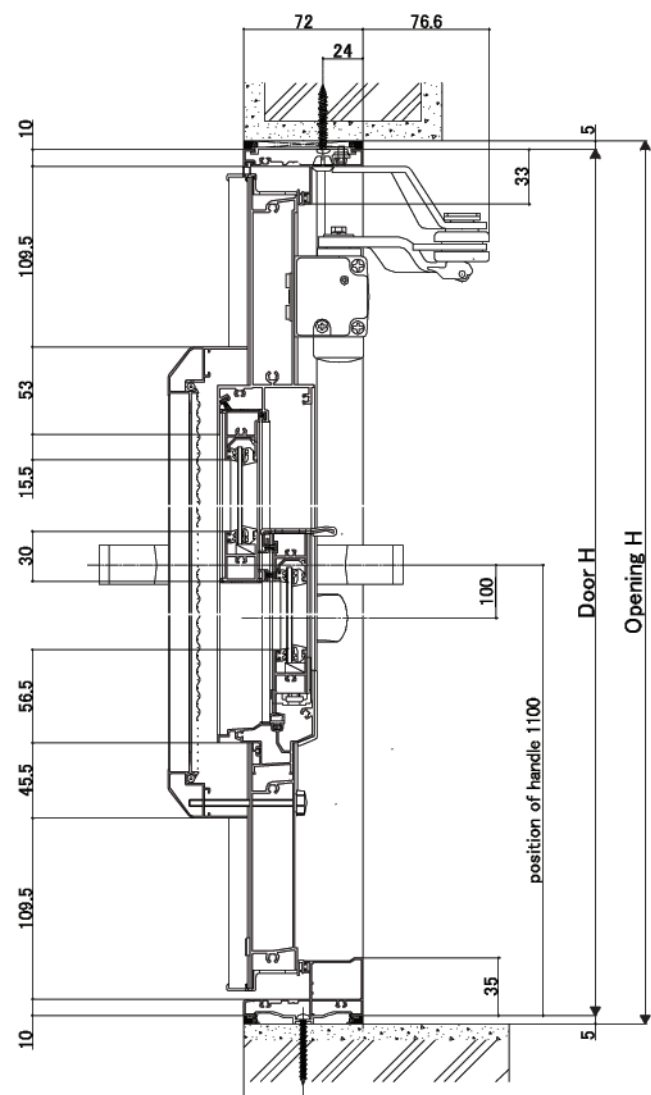
< Vertical section: 2 and 4 panels sliding door >



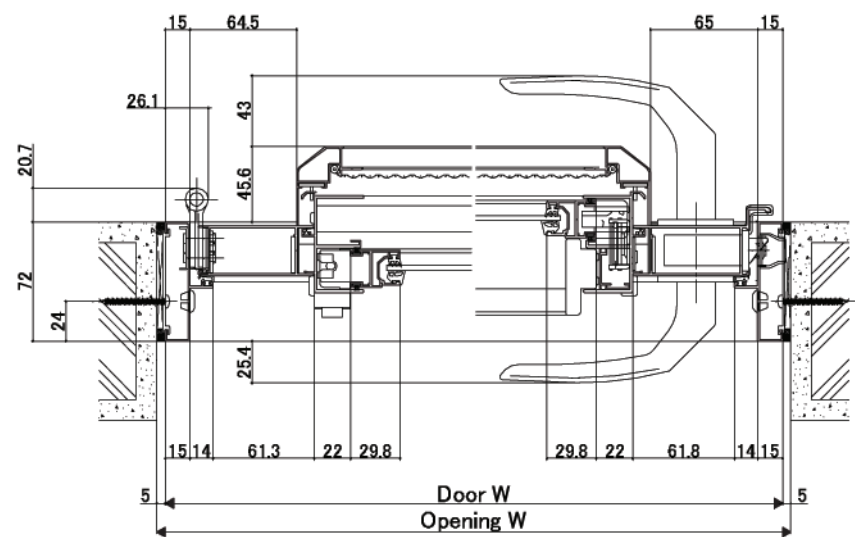
< Horizontal section: 2 panels panel sliding door >



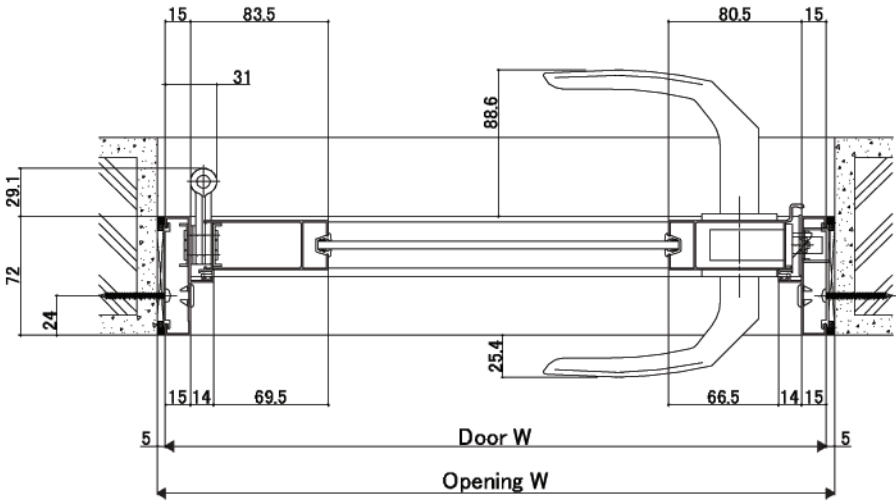
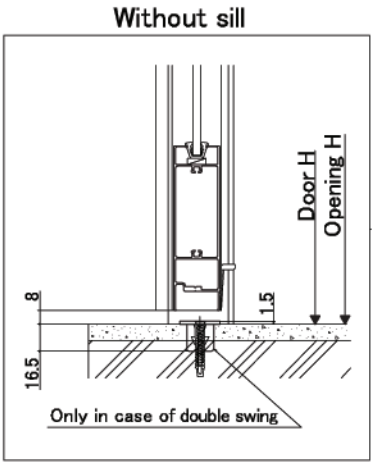
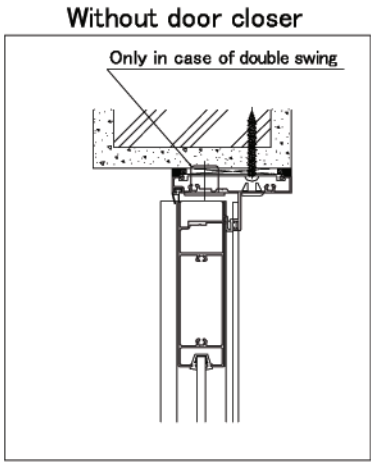
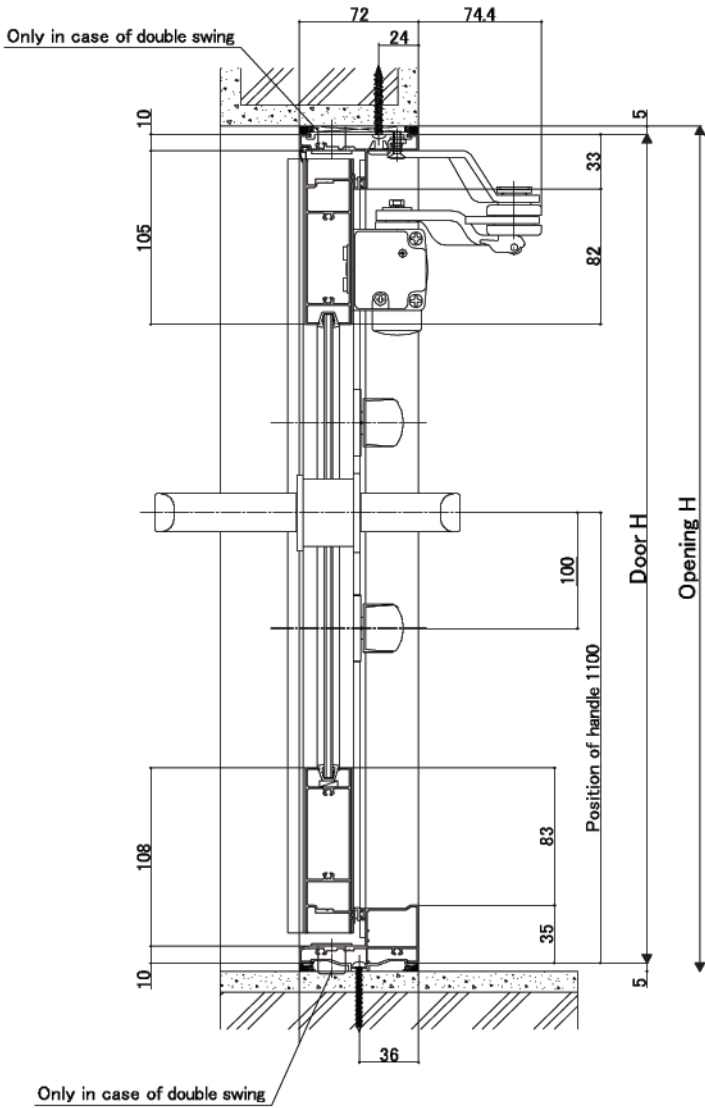
< Horizontal section: 4 panels sliding door >



< Vertical section: AIRFLOW Door >

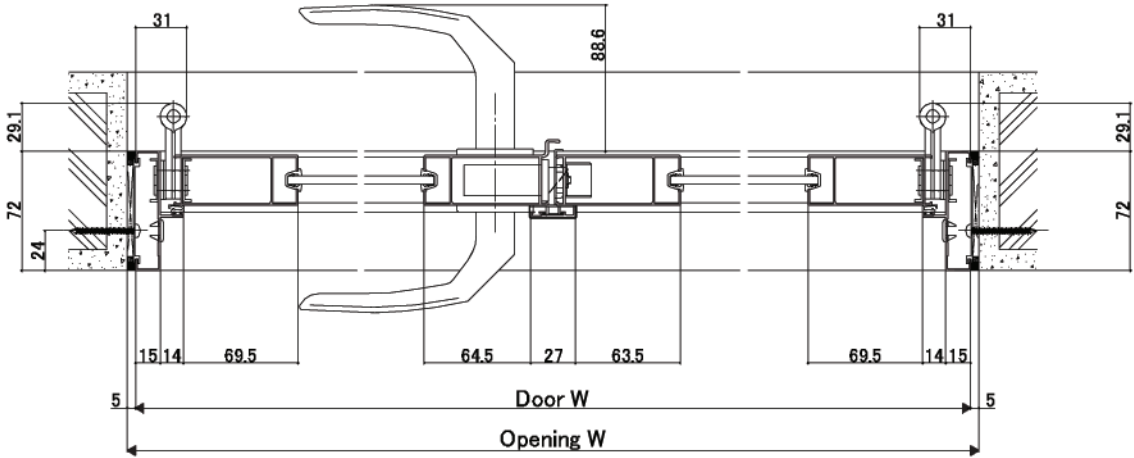


< Horizontal section: AIRFLOW Door >



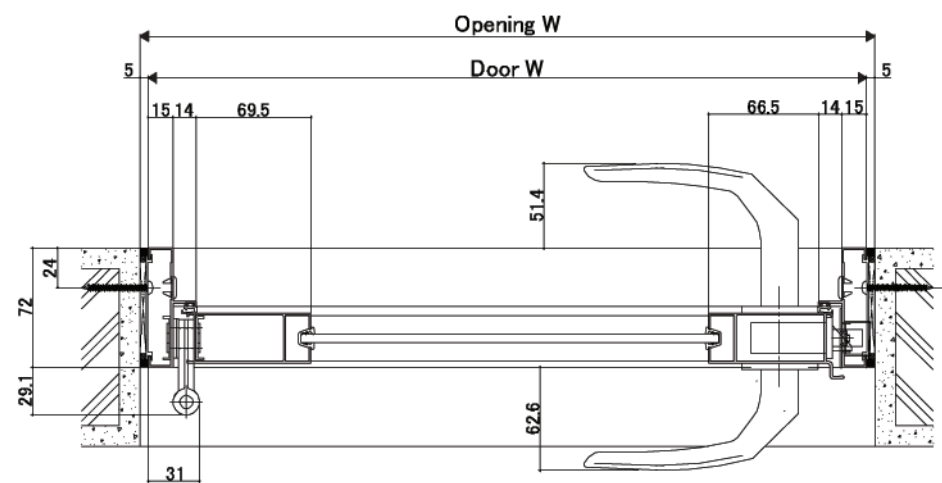
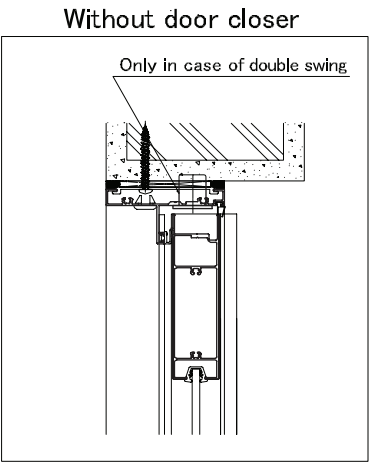
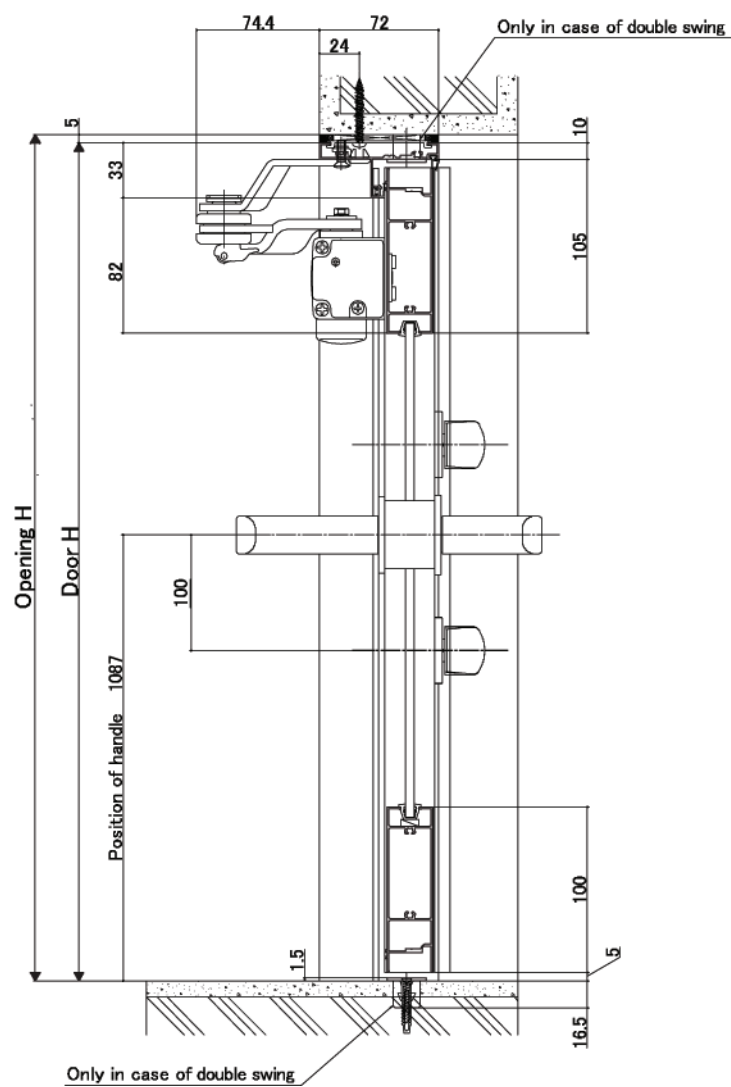
< Vertical section: Single & double out-swing door with sill >

< Horizontal section: Single out-swing door >



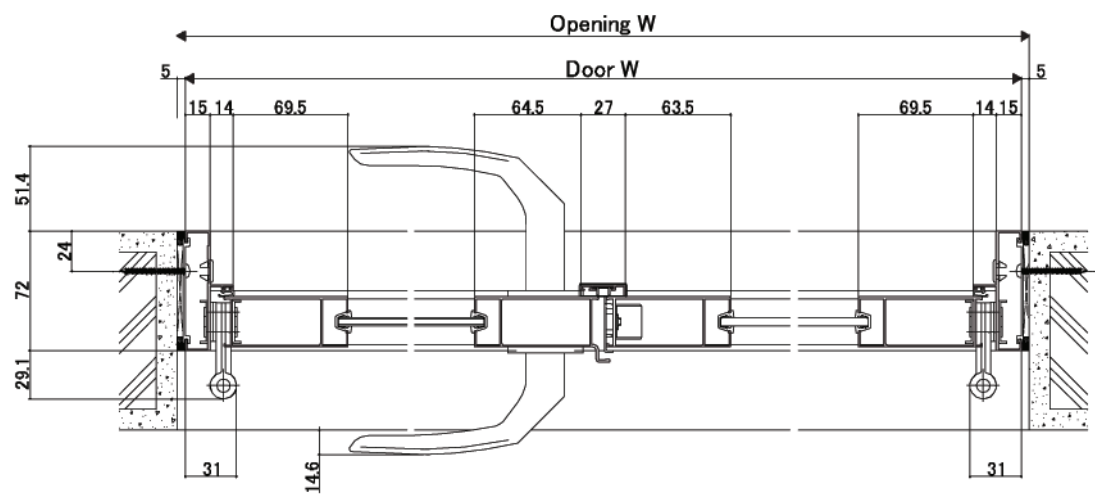
< Horizontal section: Double out-swing door >

REFERENCE DRAWINGS

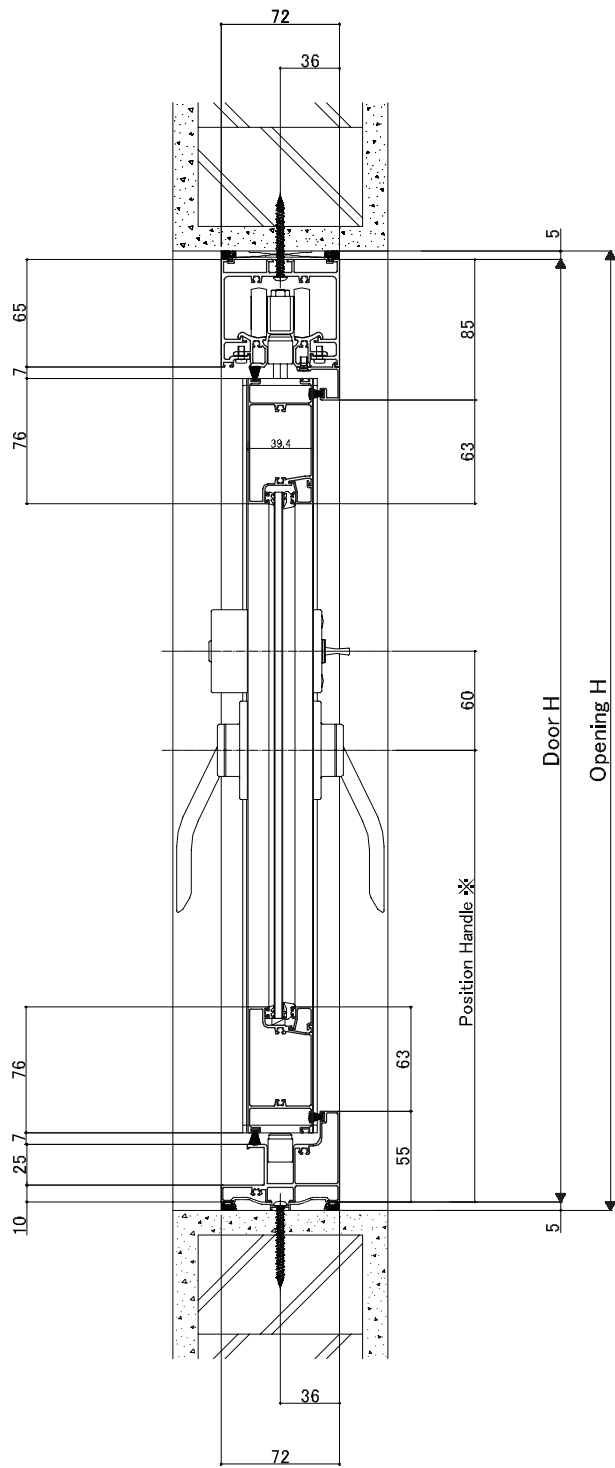


< Vertical section: Single & double in-swing door >

< Horizontal section: Single in-swing door >

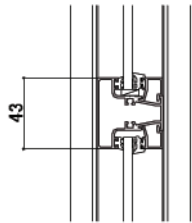


< Horizontal section: Double in-swing door >

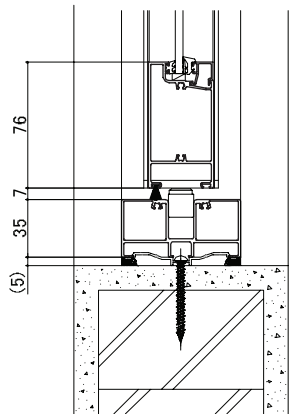


< Vertical section: Folding Door

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

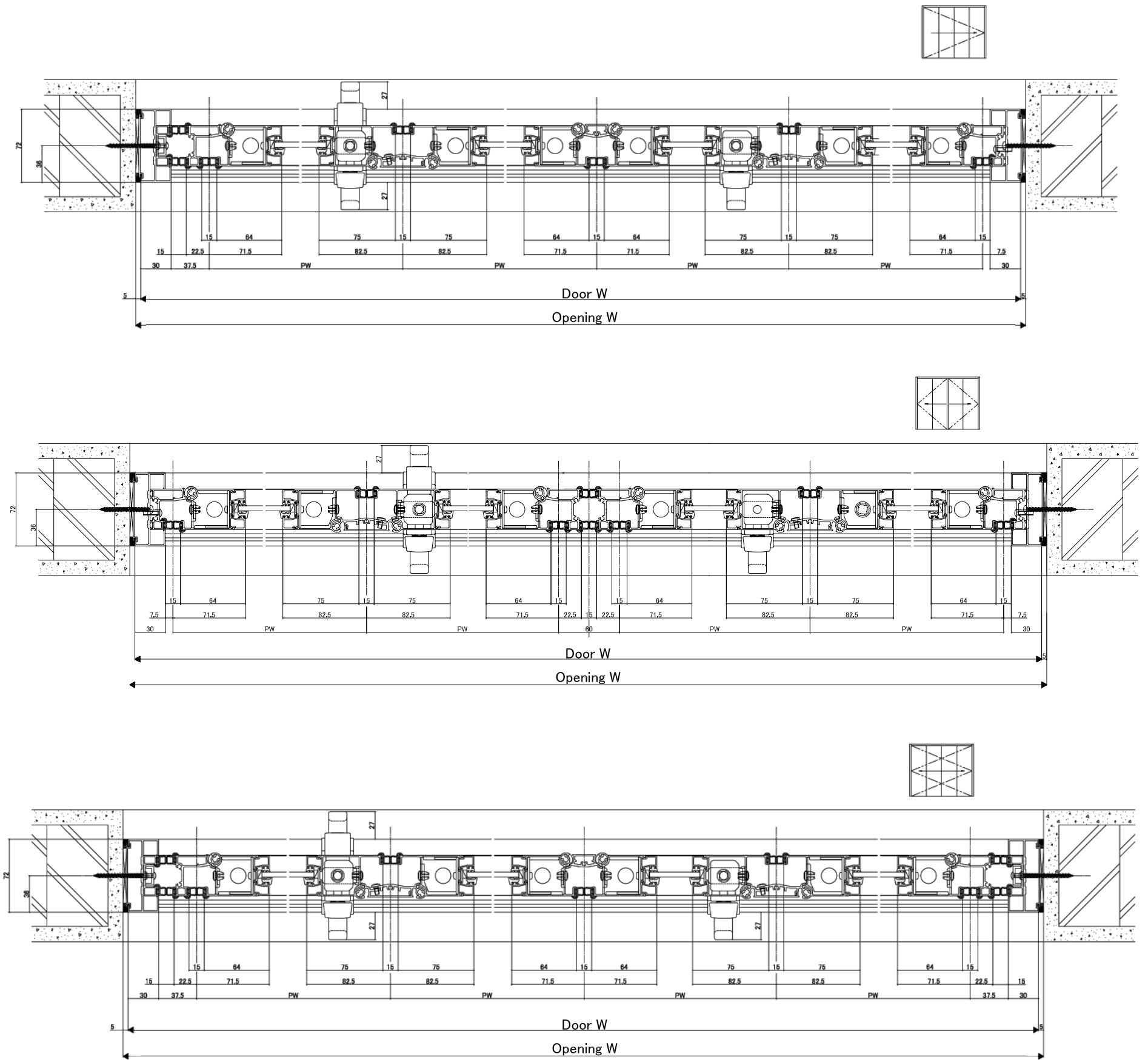


< Vertical section: With middle bar >



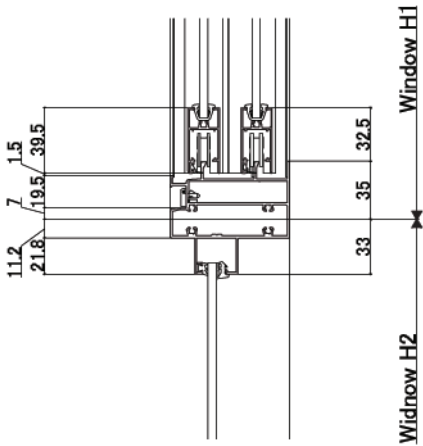
< Vertical section: Flat sill >

REFERENCE DRAWINGS

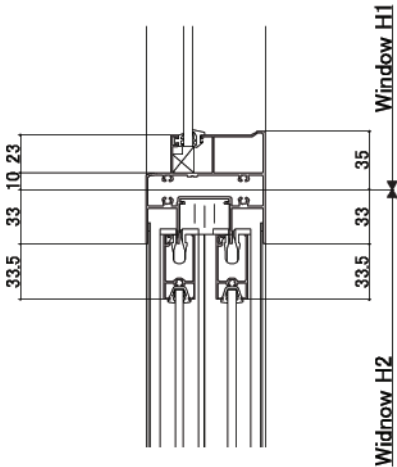


<Horizontal section : Folding Door>

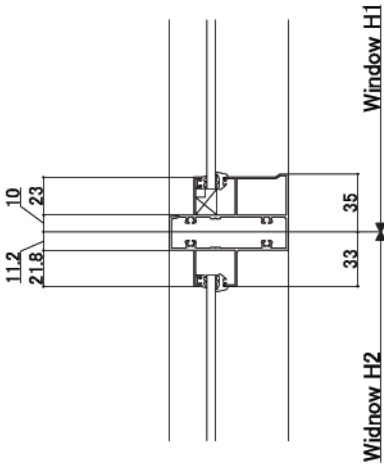
WE 70 COMBINATION



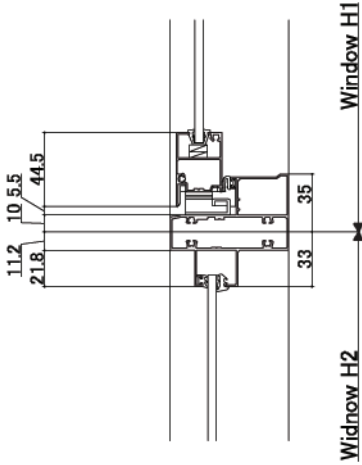
< Vertical section: Sliding/Fixed transom >



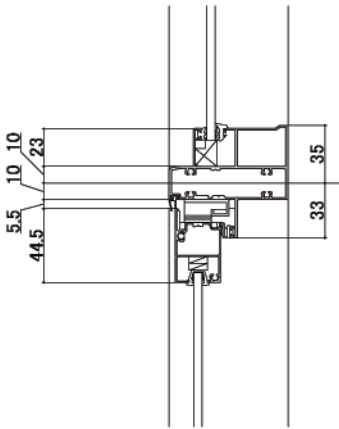
< Vertical section: Fixed/Sliding transom >



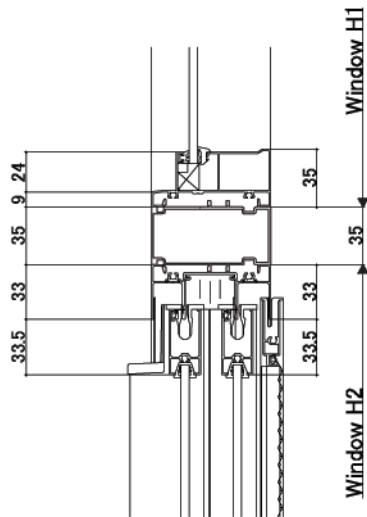
< Vertical: Fixed/Fixed transom >



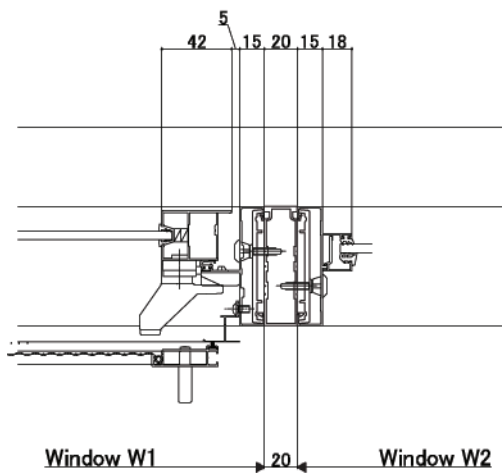
< Vertical: Projection/Fixed transom >



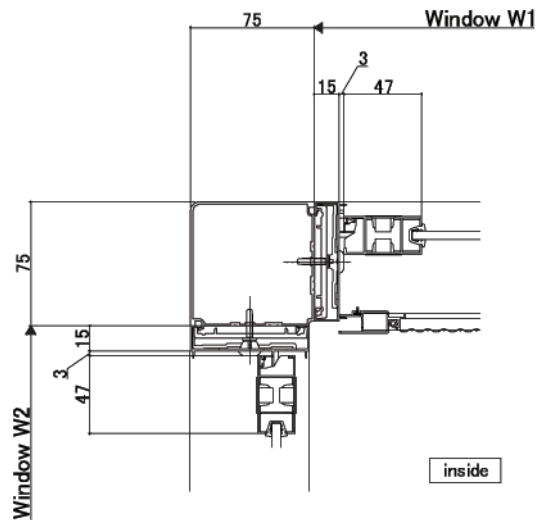
< Vertical: Fixed/Projection transom >



< Transom >

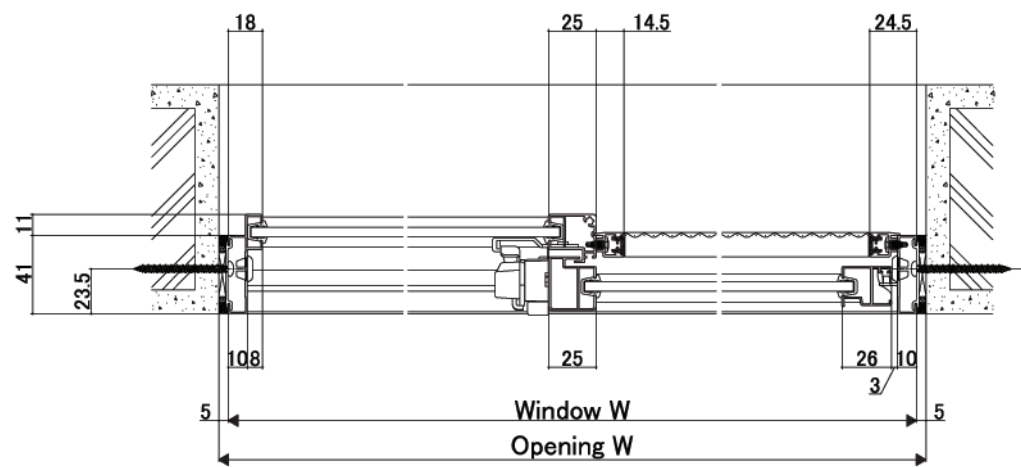


< Mullion >

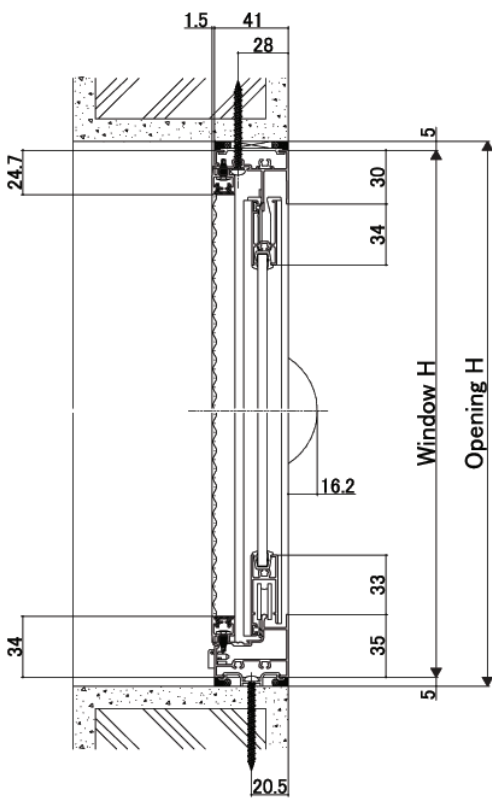


< Corner mullion >

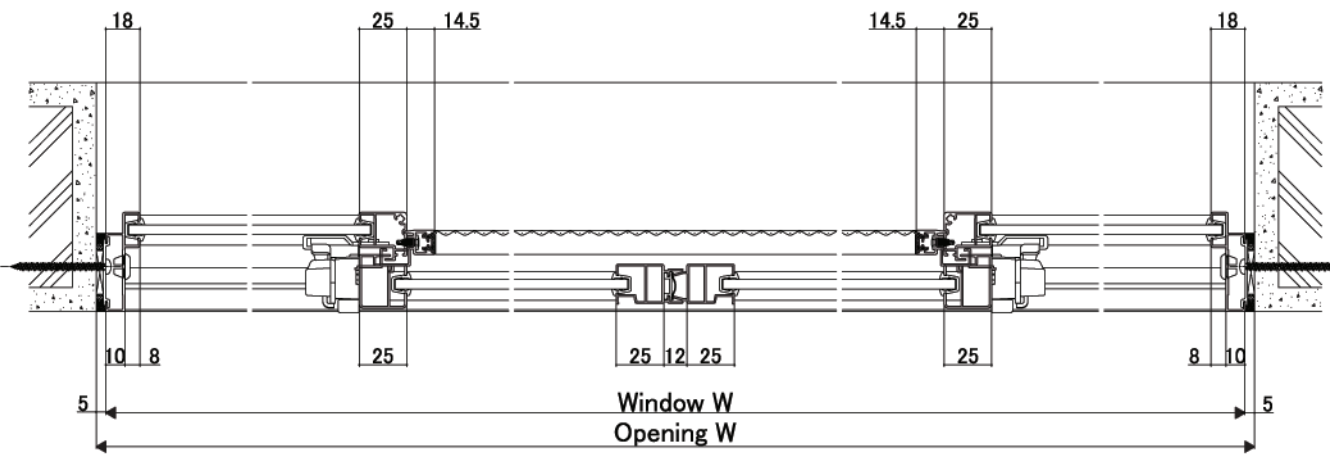
WE 40 SERIES



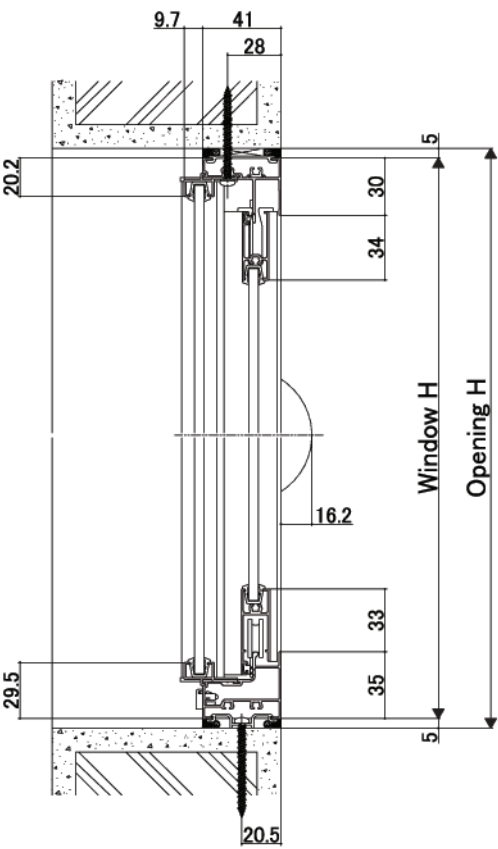
< Horizontal section: Single sliding window >



< Vertical section: Single sliding (screen side) >

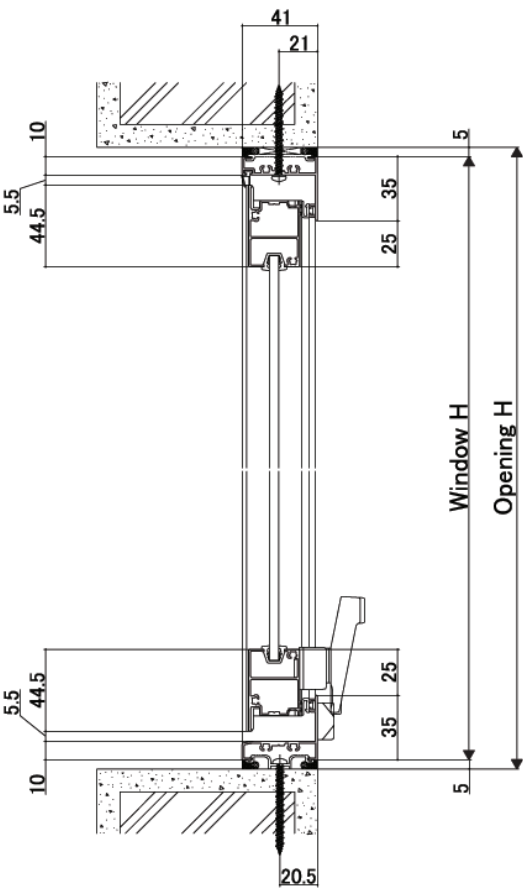


< Horizontal section: Center sliding window >

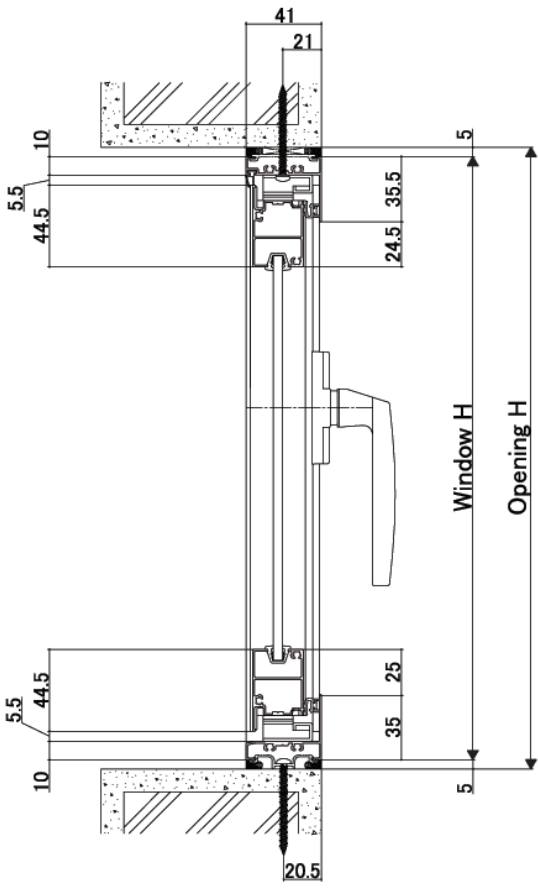


< Vertical section: Single sliding window (panel side) >

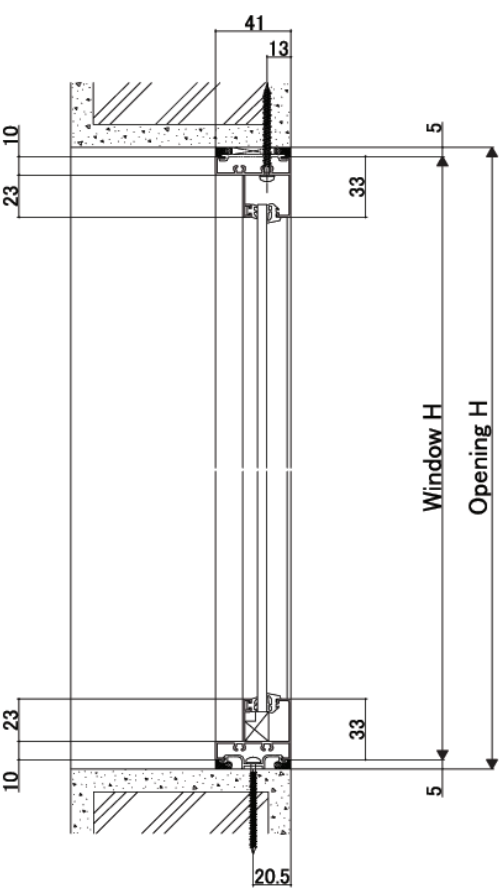
REFERENCE DRAWINGS



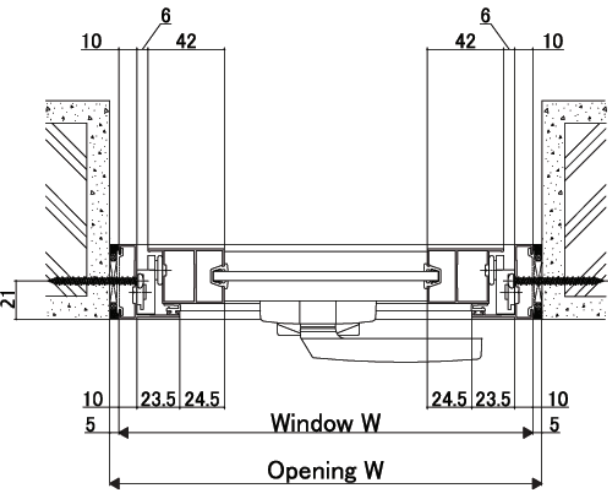
< Vertical section: Awning window >



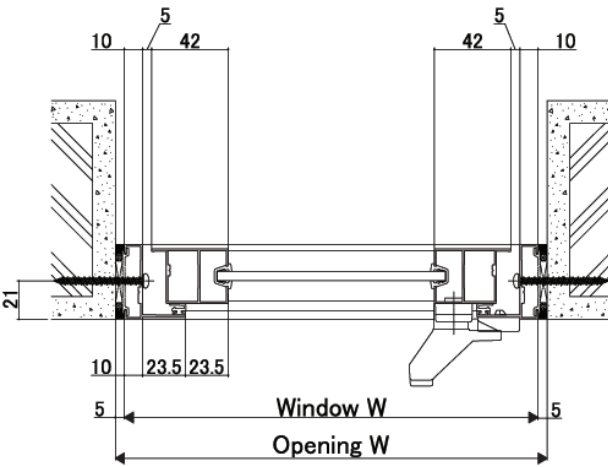
< Vertical section: Casement window >



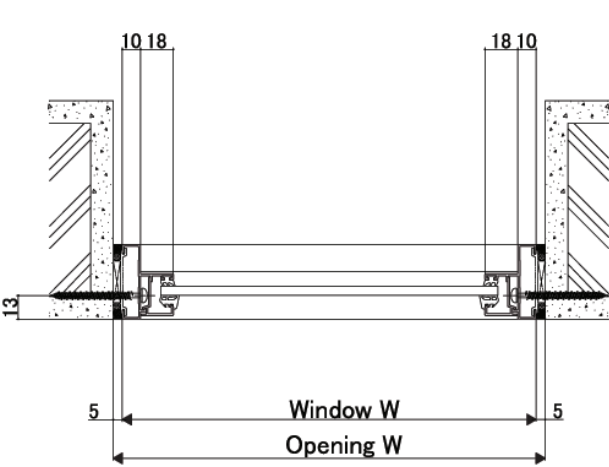
< Vertical section: Fixed window >



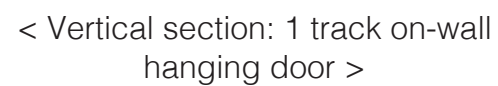
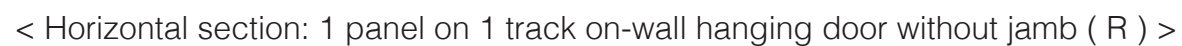
< Horizontal section: Awning window >



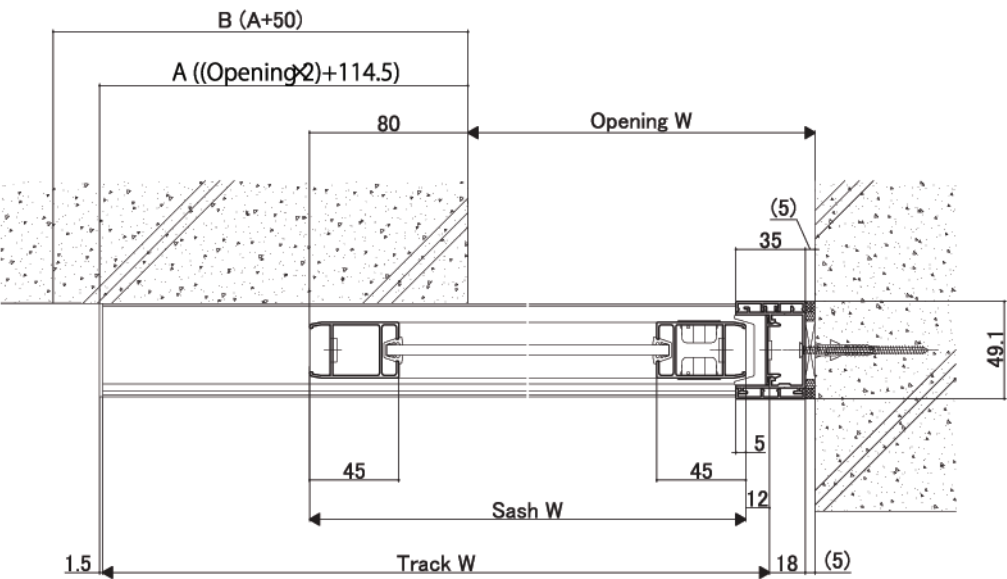
< Horizontal section: Casement window >



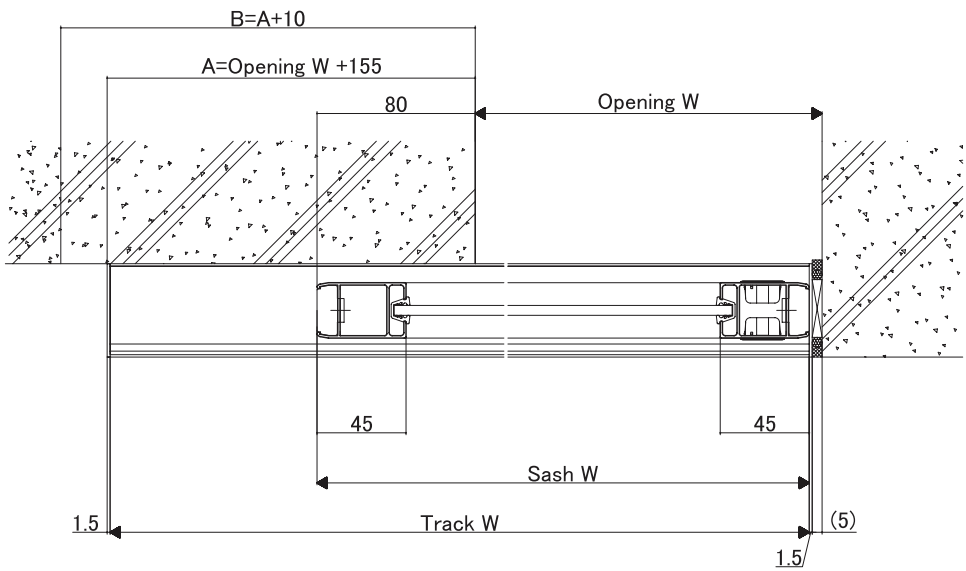
< Horizontal section: Fixed window >



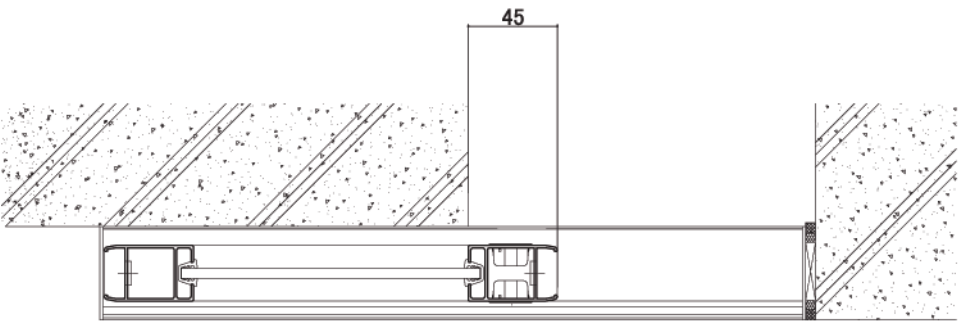
REFERENCE DRAWINGS



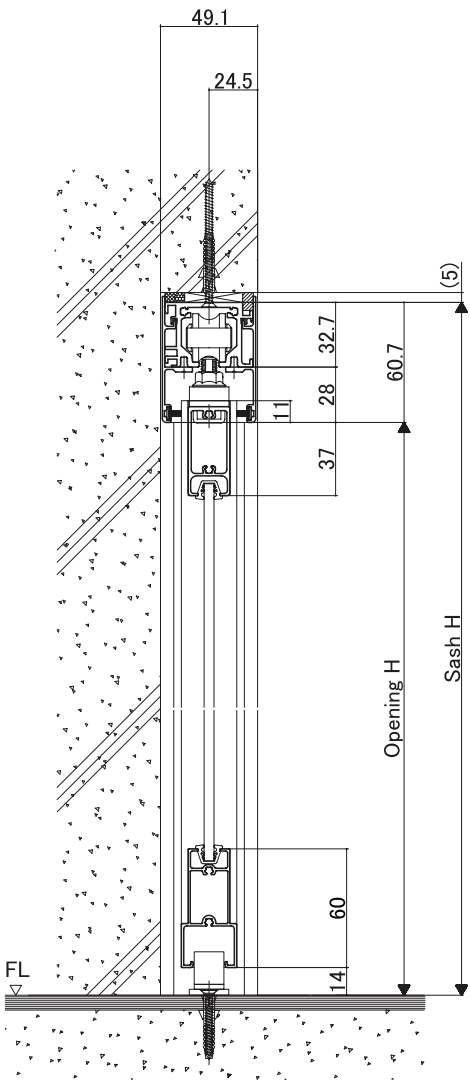
< Horizontal section: 1 panel on 1 track in-wall hanging door with jamb (R) >



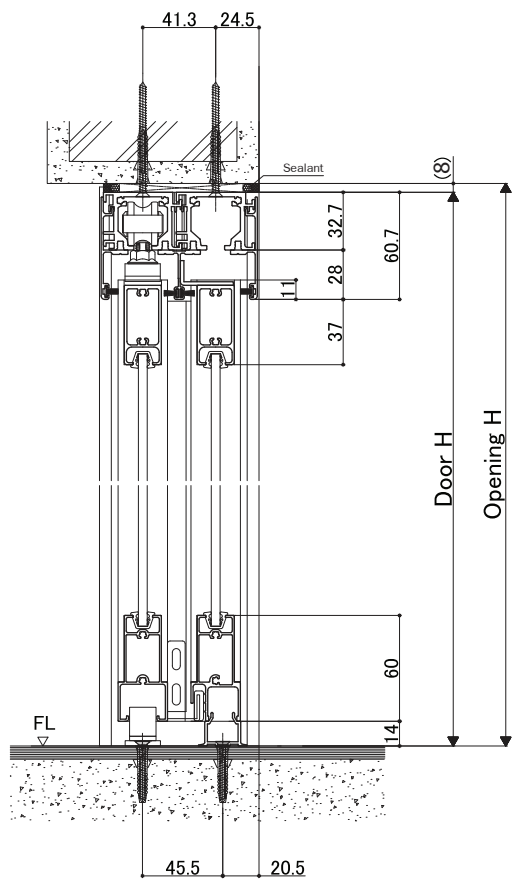
< Horizontal section: 1 panel on 1 track in-wall hanging door> *opened



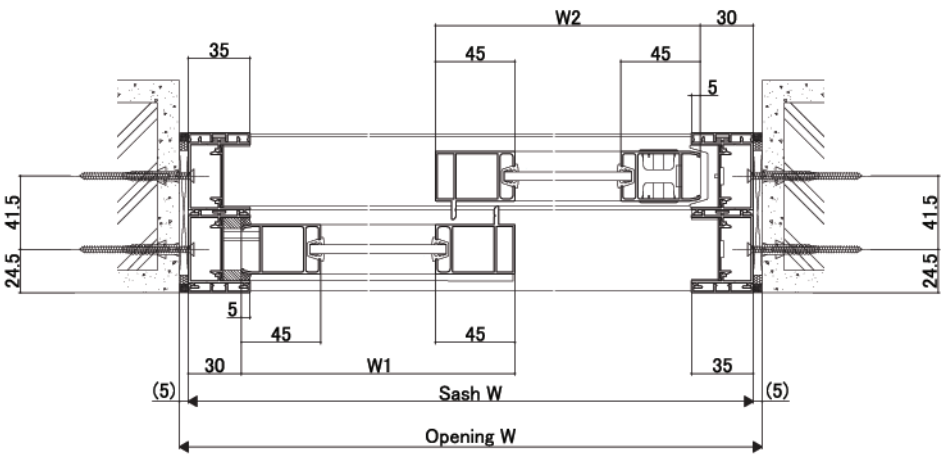
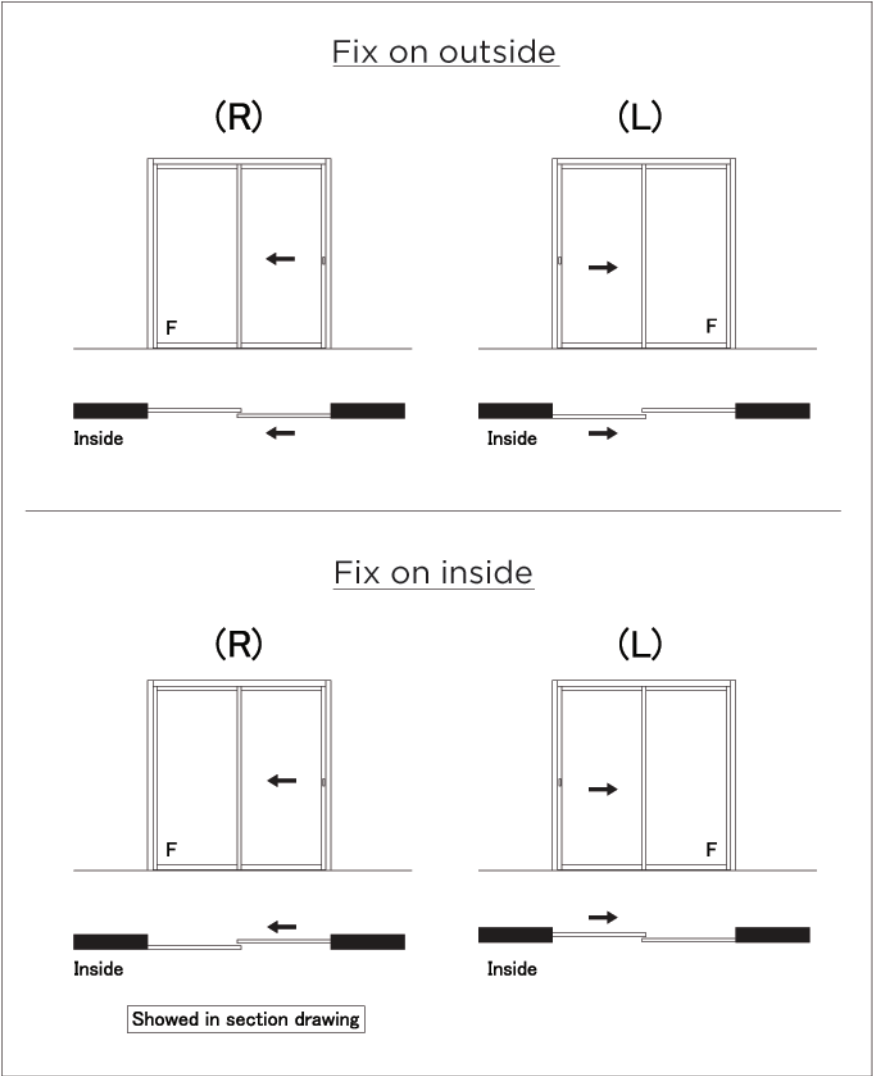
< Horizontal section: 2 panels on 1 track on-wall hanging door >



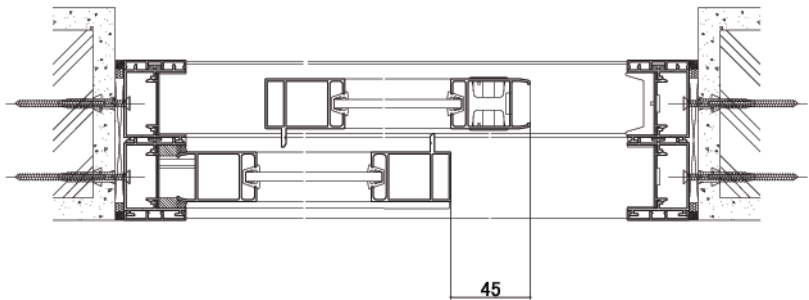
< Vertical section: 1 track in-wall hanging door >



< Vertical section: 2 panels on 2 tracks in-wall hanging door >

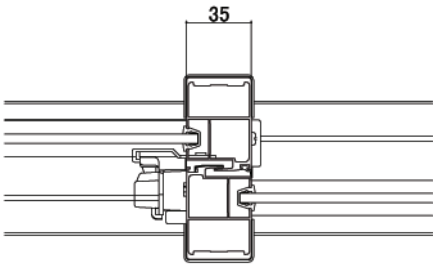


< Horizontal section: 2 panels on 2 tracks in-wall hanging door >

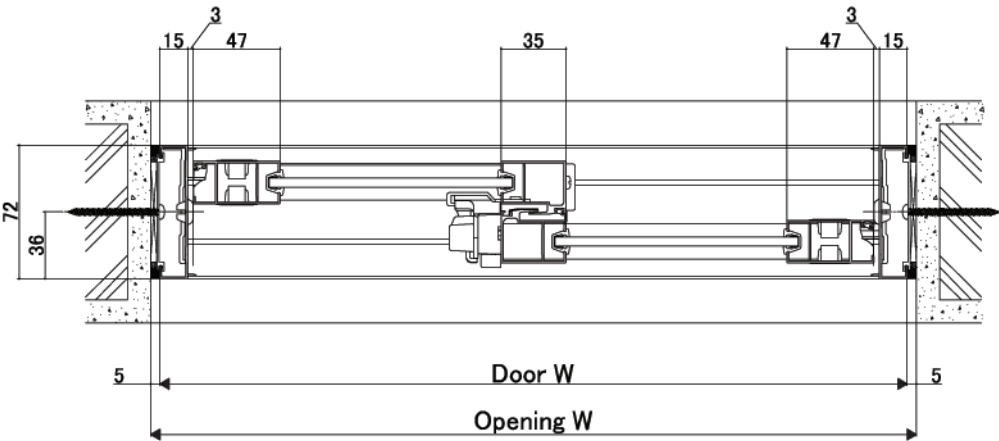


< Horizontal section: 2 panels on 2 tracks hanging door > *opened

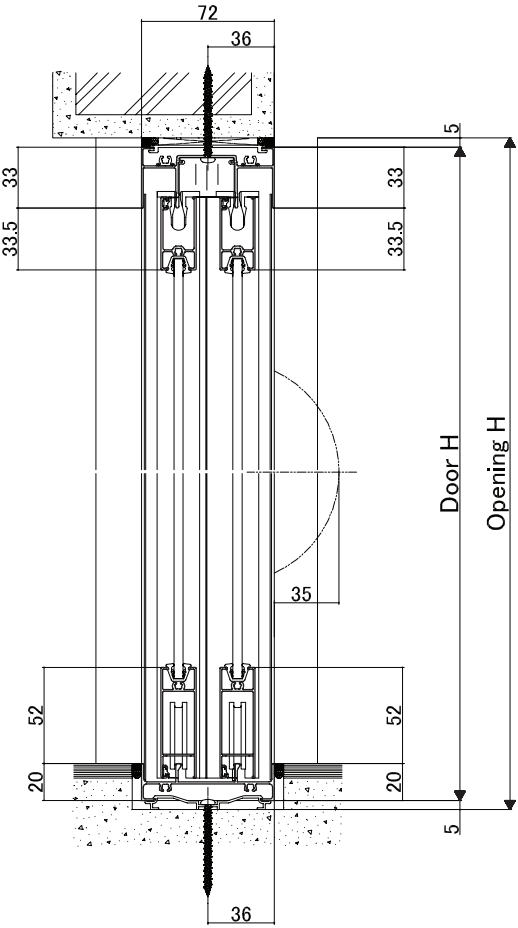
REFERENCE DRAWINGS



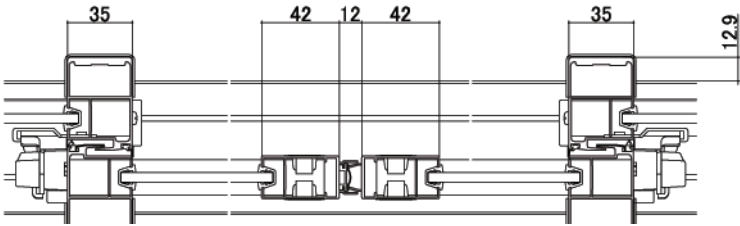
In case of Door H>2400mm



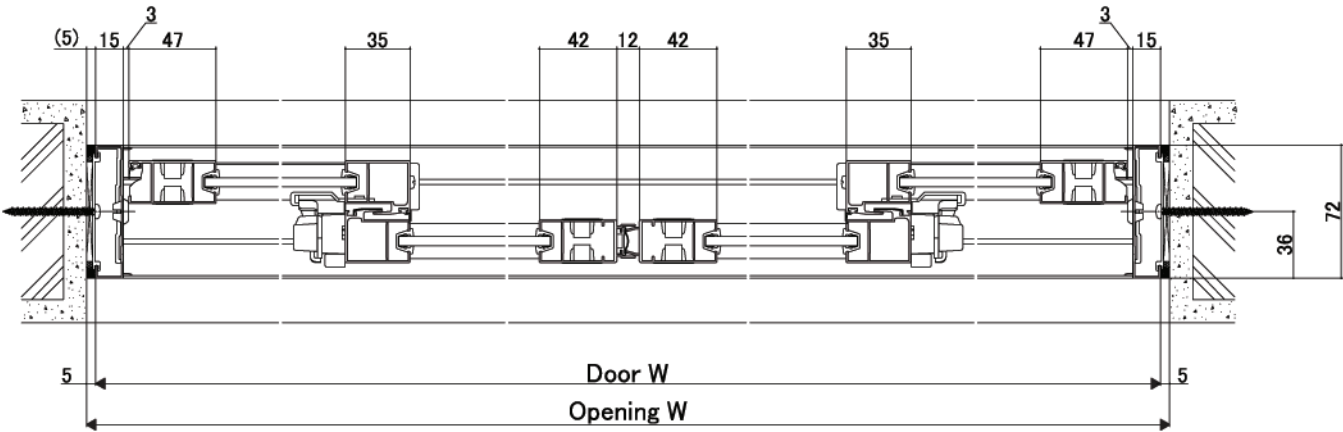
< Horizontal section: 2 panels partition door >



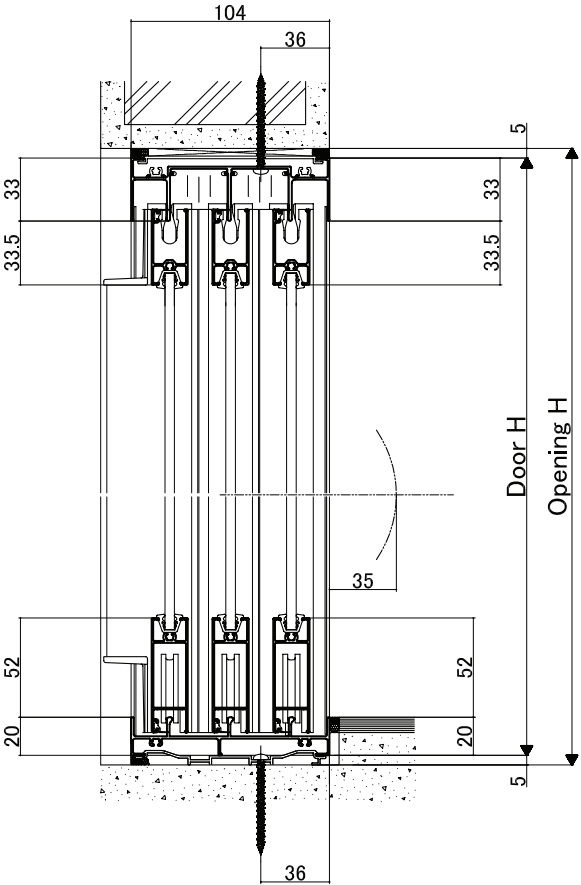
< Vertical section: 2 and 4 panels partition door >



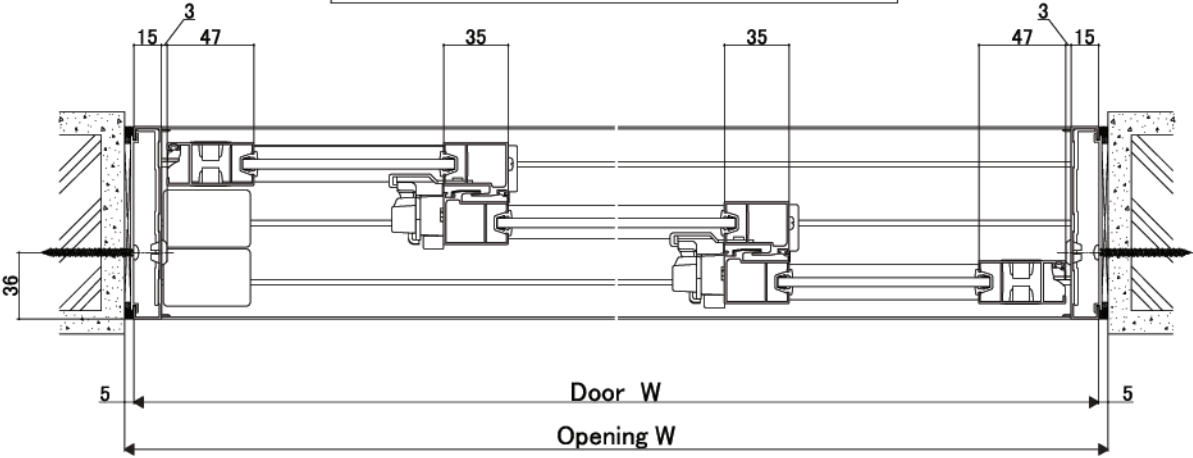
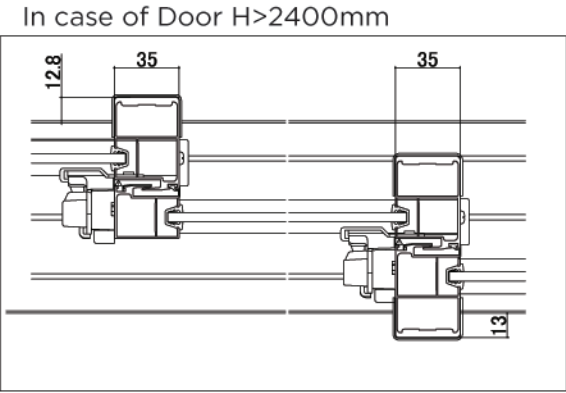
In case of Door H>2400mm



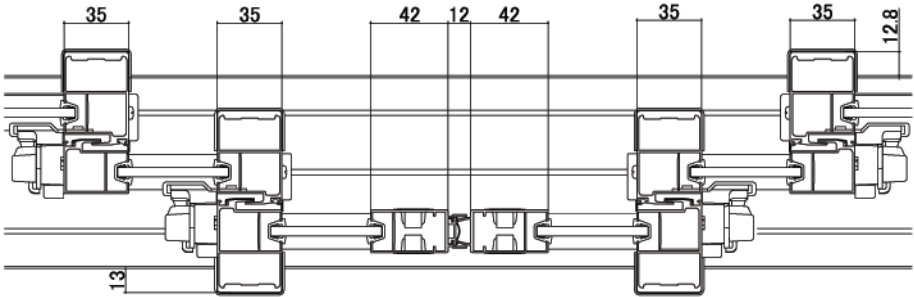
< Horizontal section: 4 panels partition door >



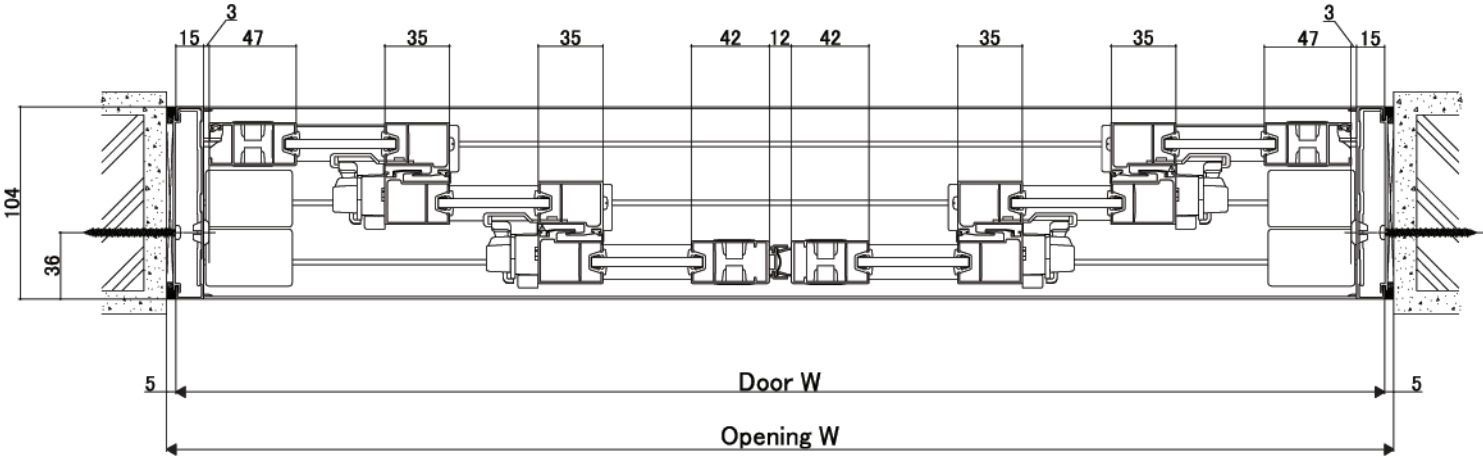
< Vertical section: 3 and 6 panels partition door >



< Horizontal section: 3 panels partition door >

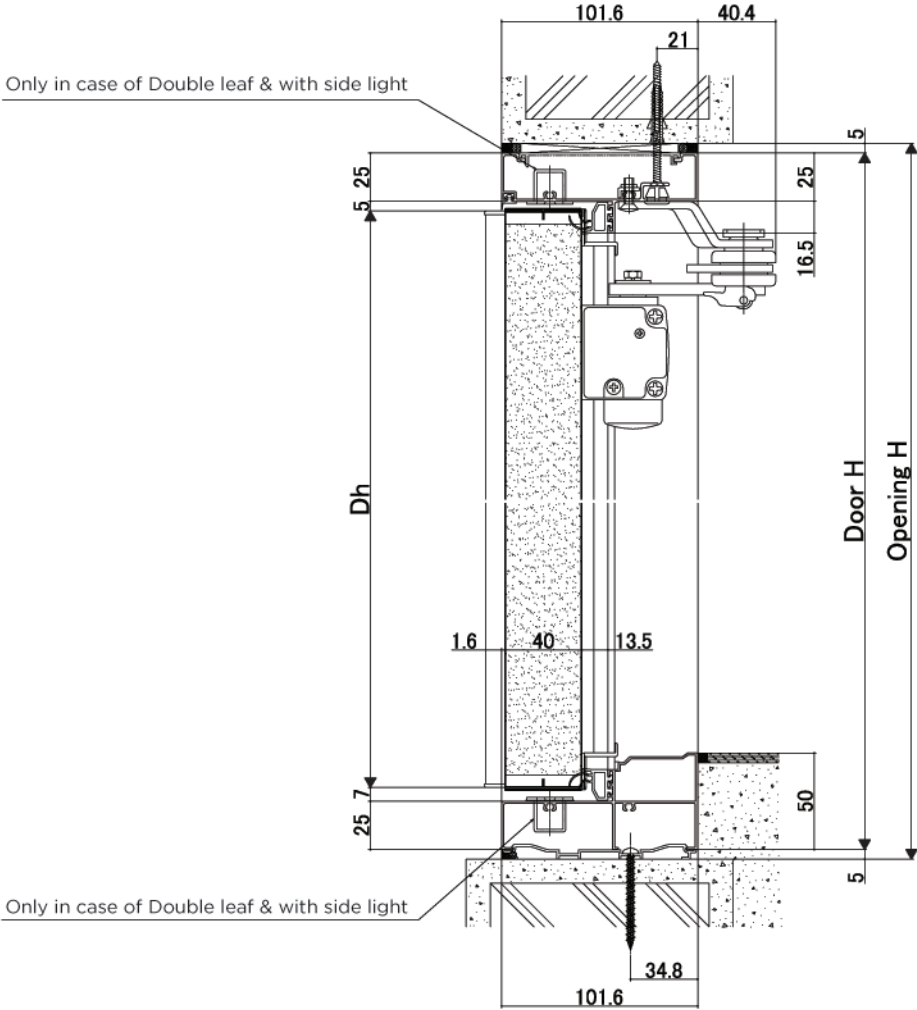


In case of Door H>2400mm

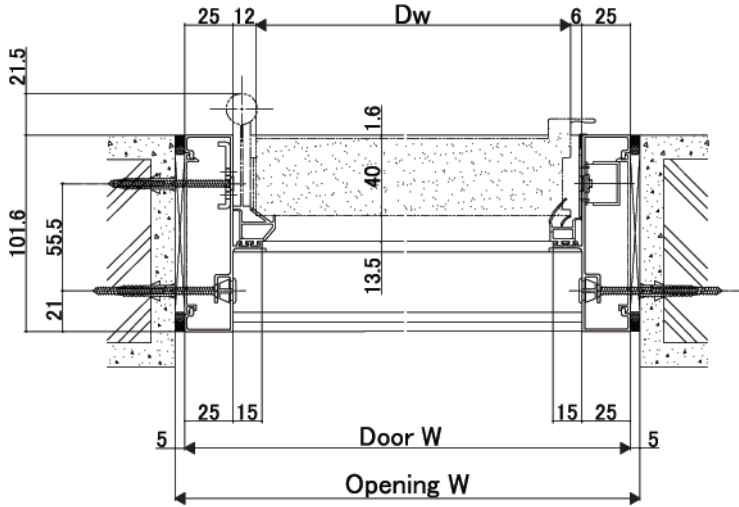


< Horizontal section: 6 panels partition door >

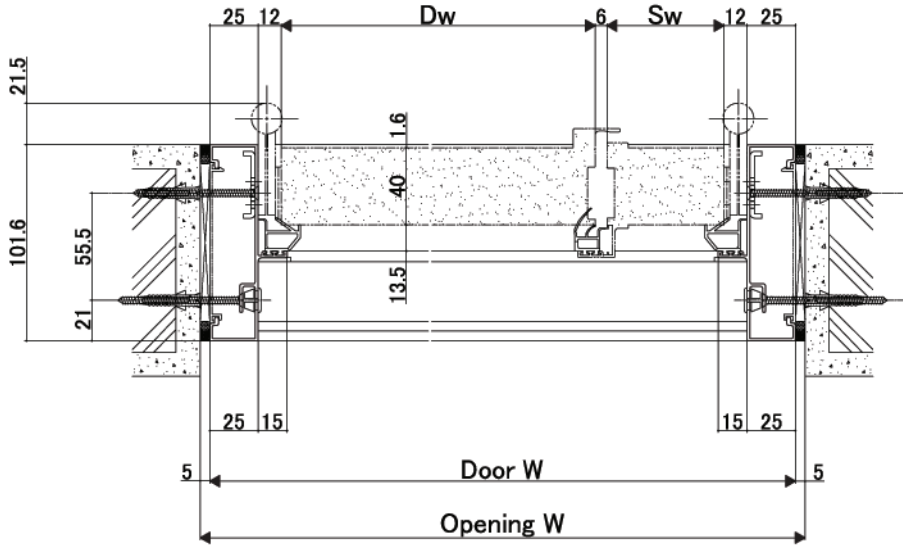
GIESTA OUT-SWING SERIES



< Vertical section: Single & Double leaf with sill >

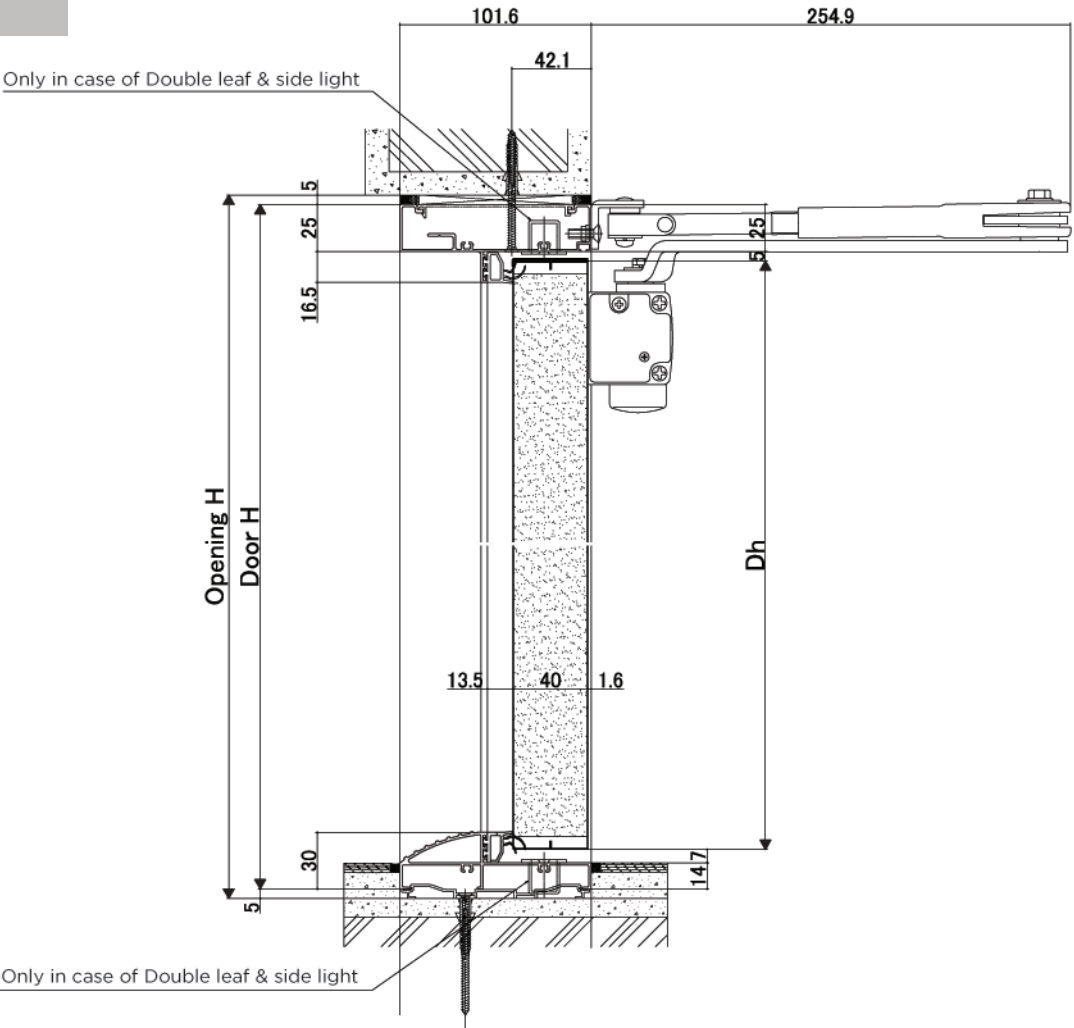
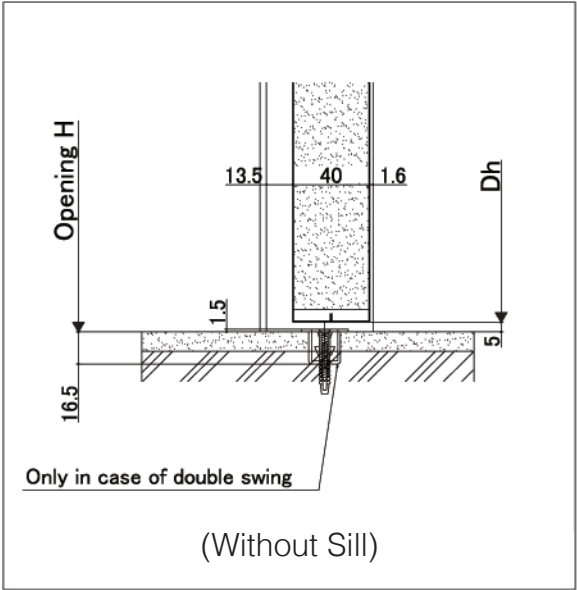


< Horizontal section: Single leaf >

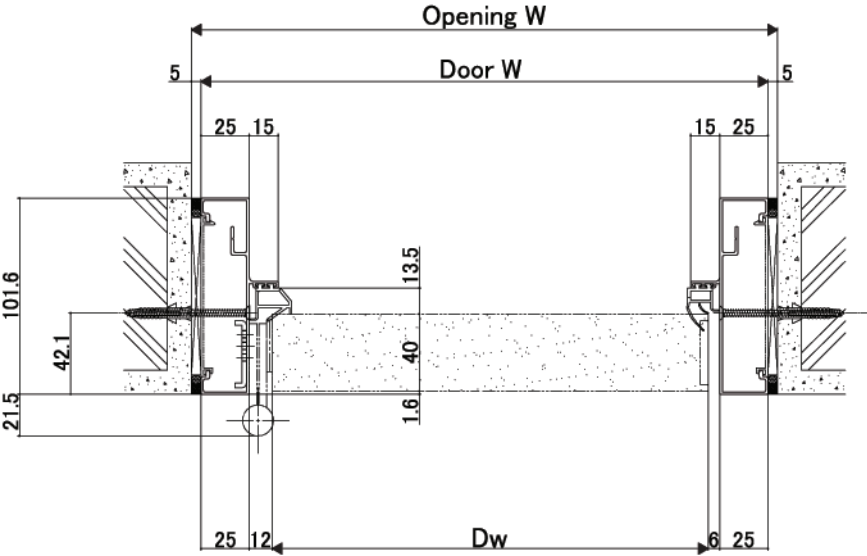


< Horizontal section: Double leaf or with side light >

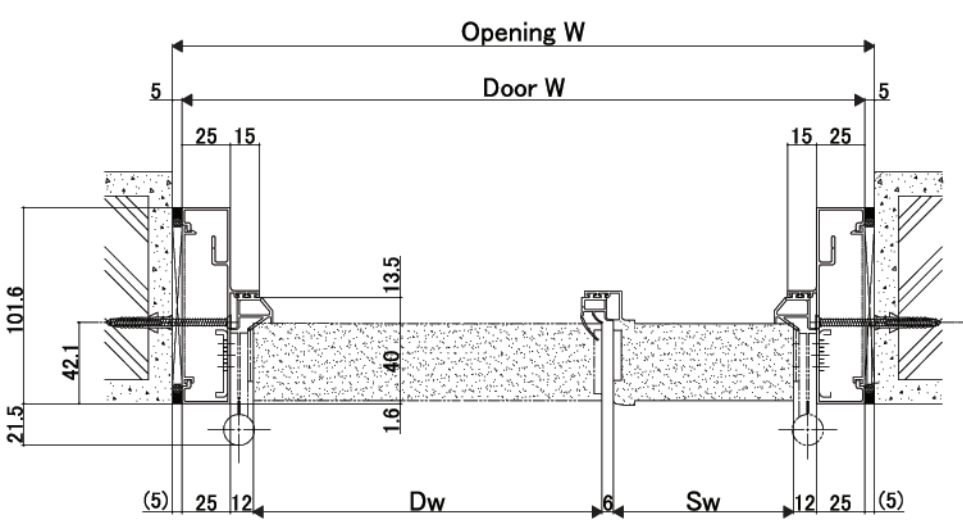
GIESTA IN-SWING SERIES



< Vertical section: Single & Double leaf >

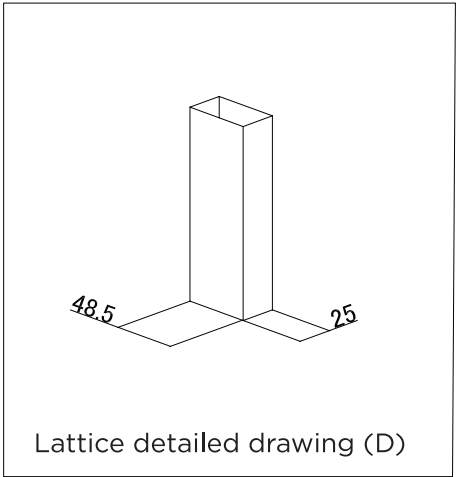
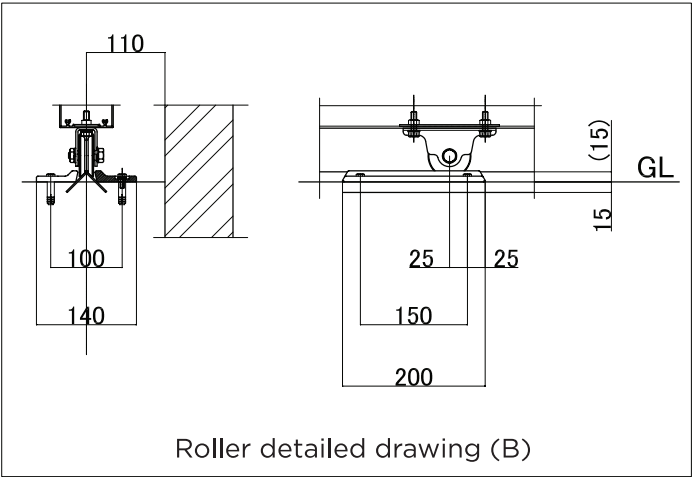
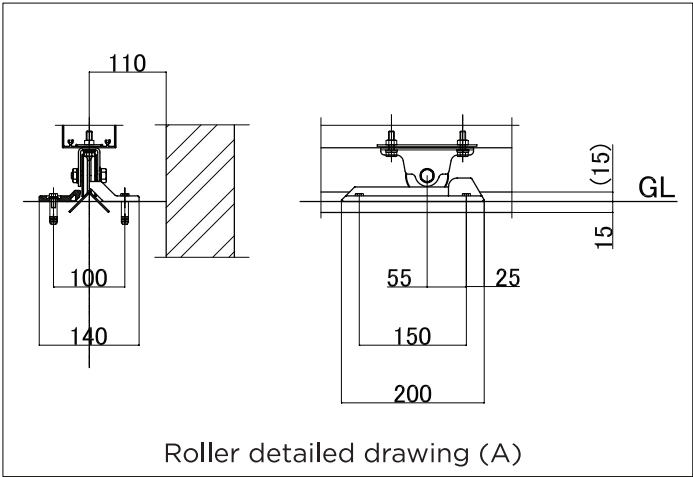
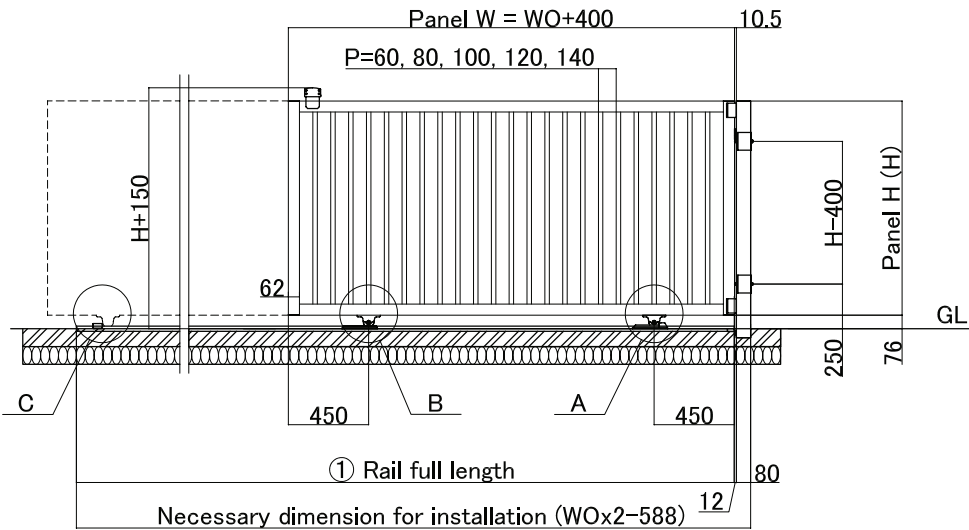
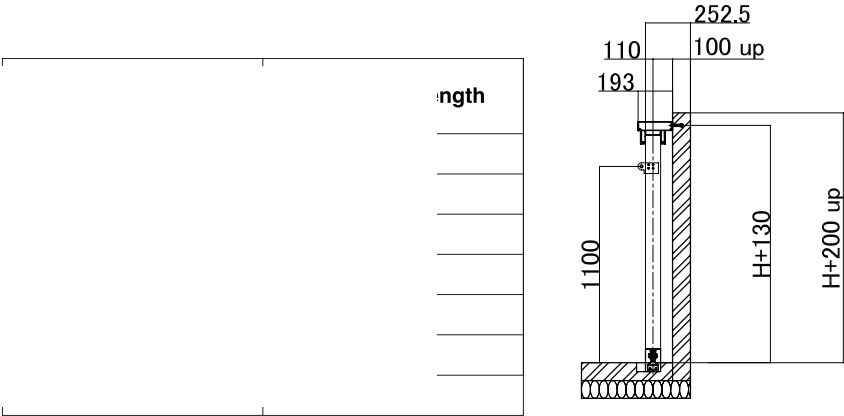
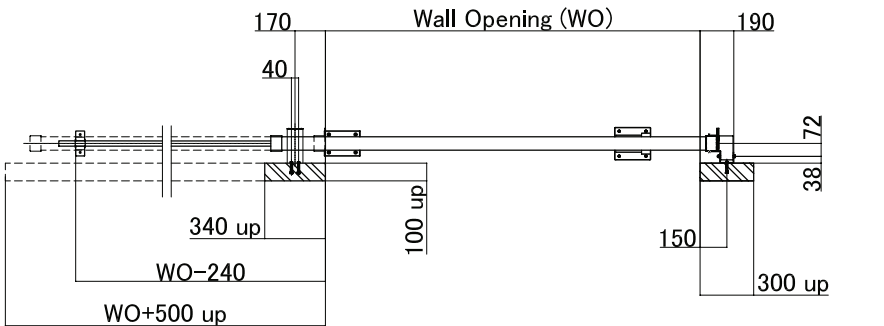
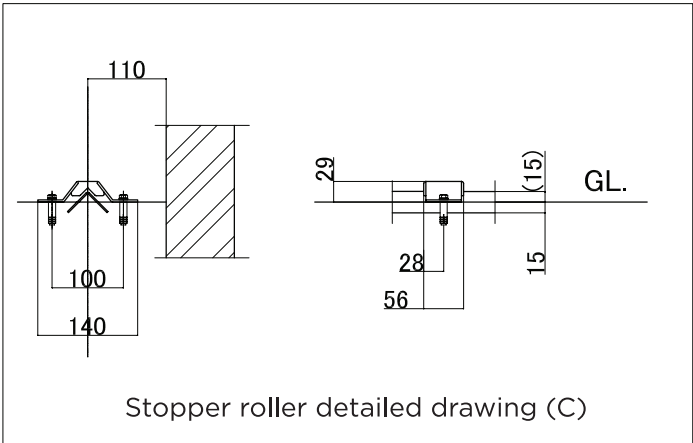


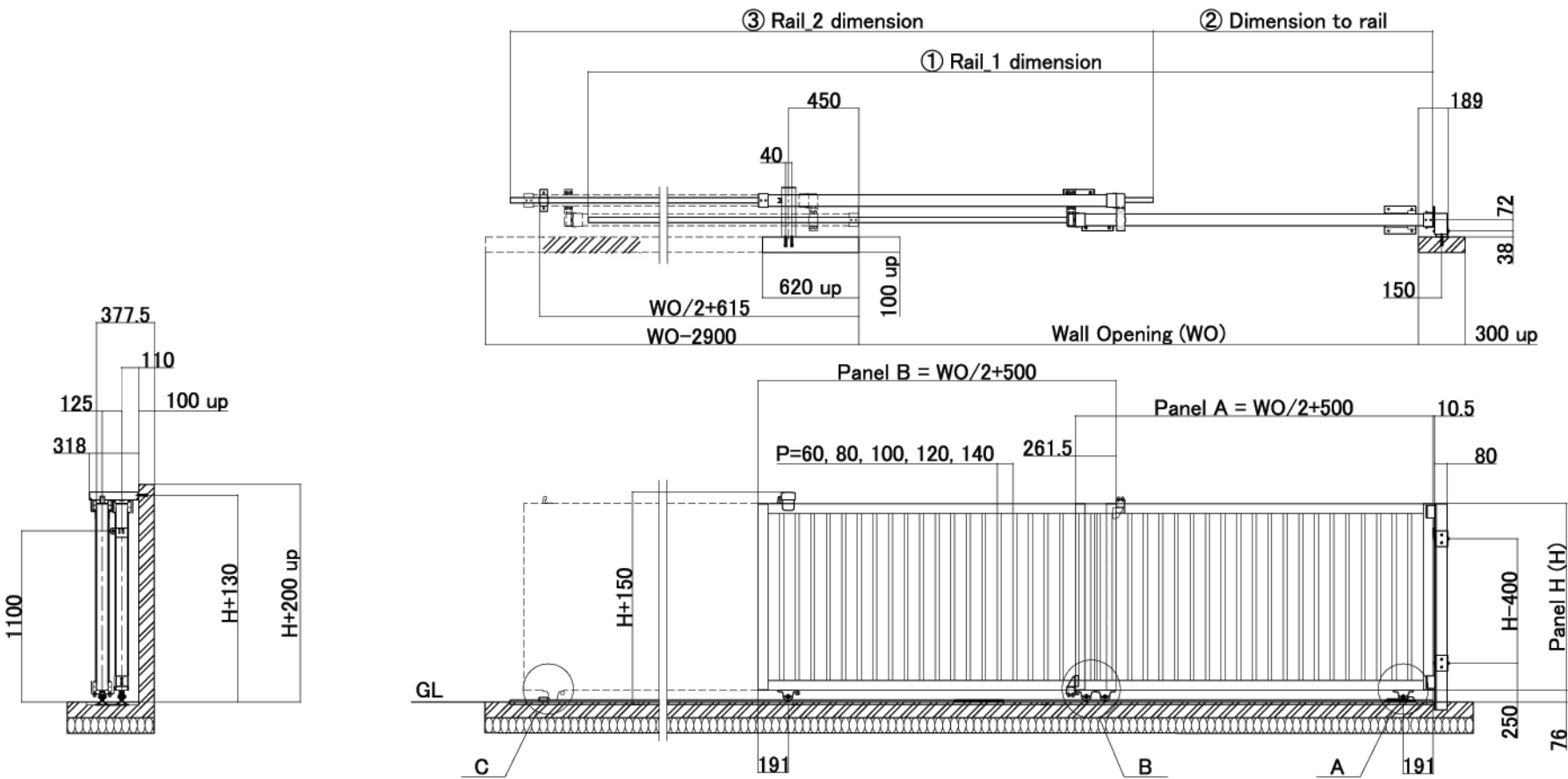
< Horizontal section: Single leaf>



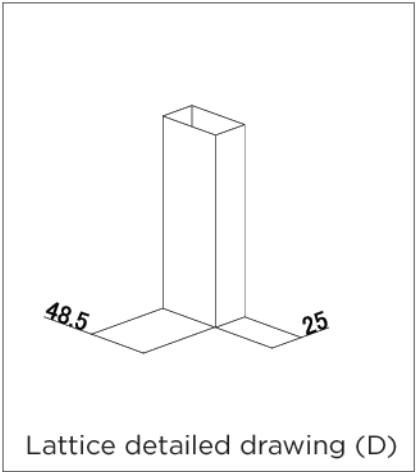
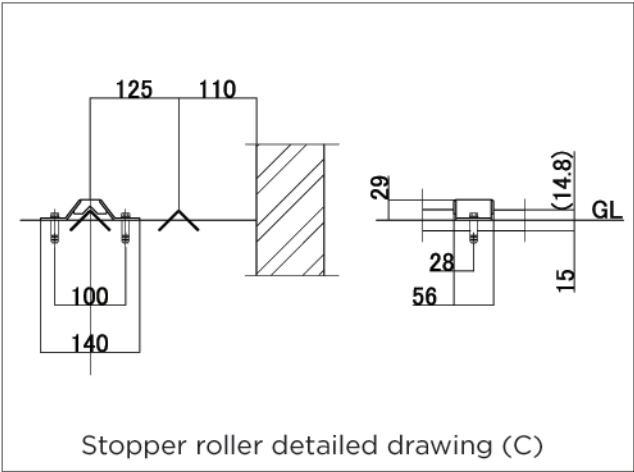
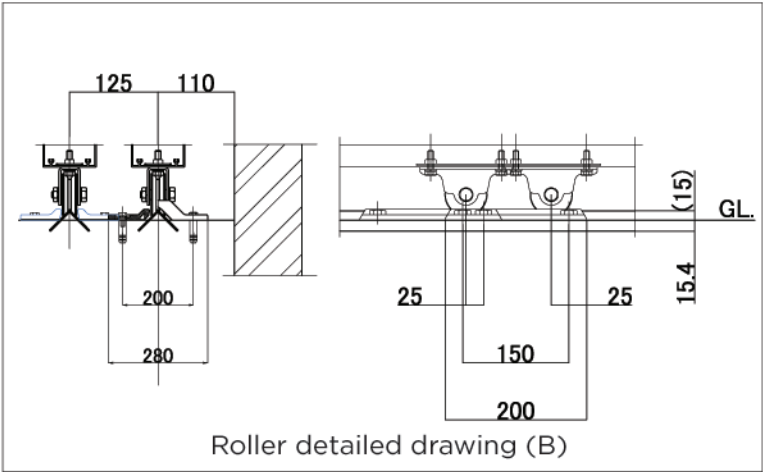
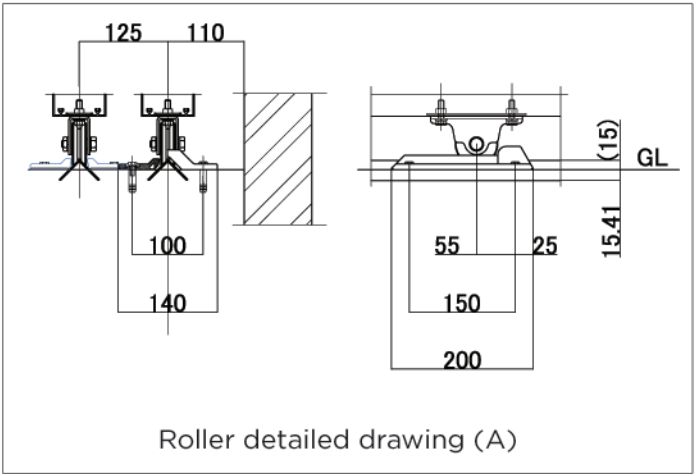
< Horizontal section: Double leaf or with side light >

ALUMINUM EXTERIOR SERIES

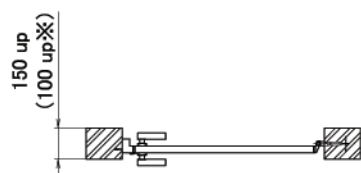




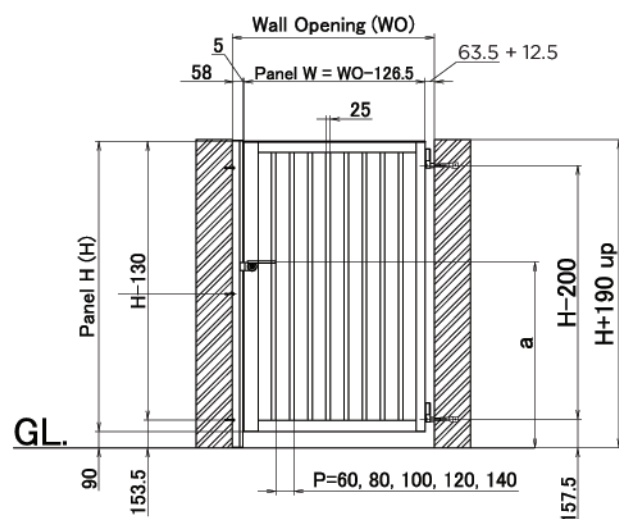
| Wall Opening (WO) | ① Rail Dimension (1) | ② Dimension to rail | ③ Rail Dimension (2) |
|-------------------|----------------------|---------------------|----------------------|
| 5000+5500 | 9000 | 3000 | 3000 |
| 5501+6000 | 9500 | 3000 | 3000 |
| 6001+6500 | 10500 | 3500 | 3500 |
| 6501+7000 | 11000 | 3500 | 3500 |
| 7001+7500 | 12000 | 4000 | 4000 |
| 7501+8000 | 12500 | 4000 | 4000 |



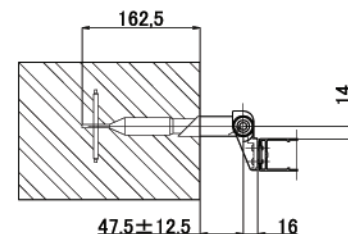
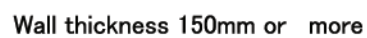
REFERENCE DRAWINGS



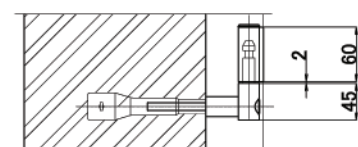
| H | a |
|-----------|------------|
| 1200-1299 | (H+90)-315 |
| 1300-1475 | (H+90)-465 |
| 1476-1600 | (H+90)-665 |



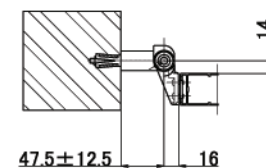
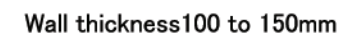
< Single swing >



<Top view>

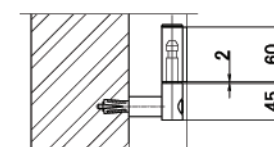


<Front view>

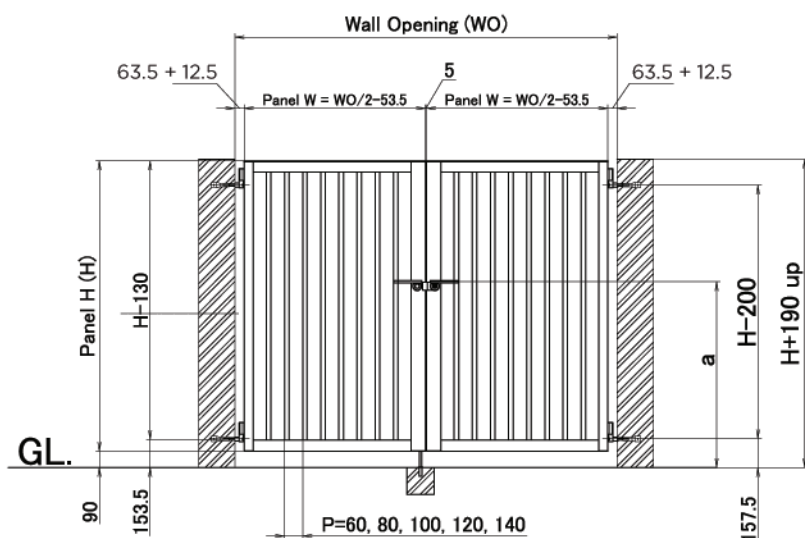
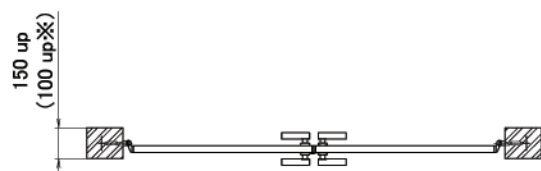


*Please prepare M8 Anchor bolt at site

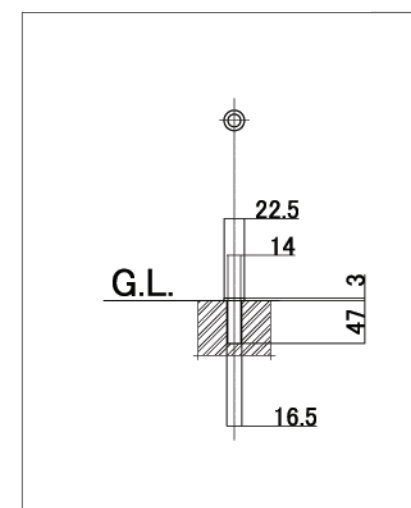
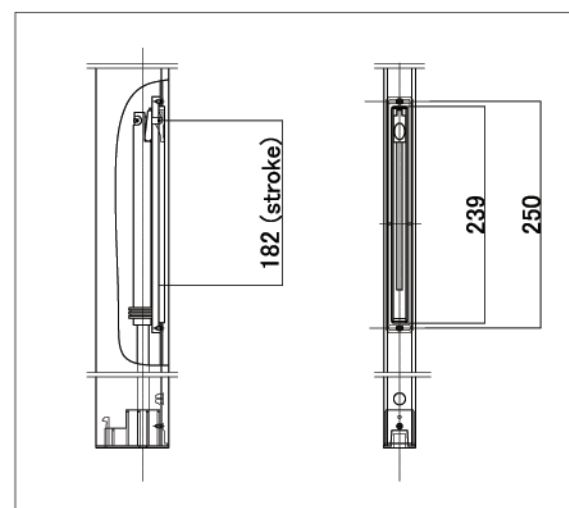
<Top view>

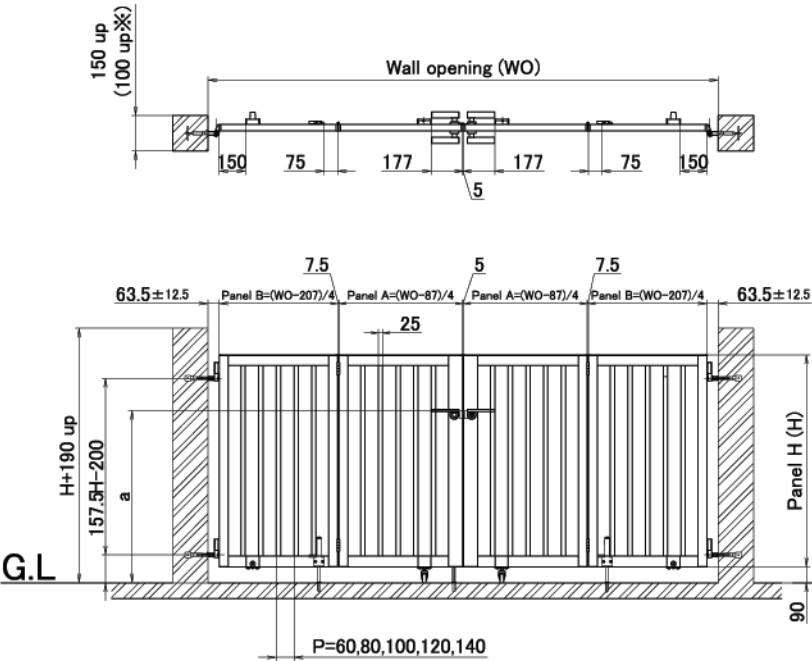


◁Front view▷

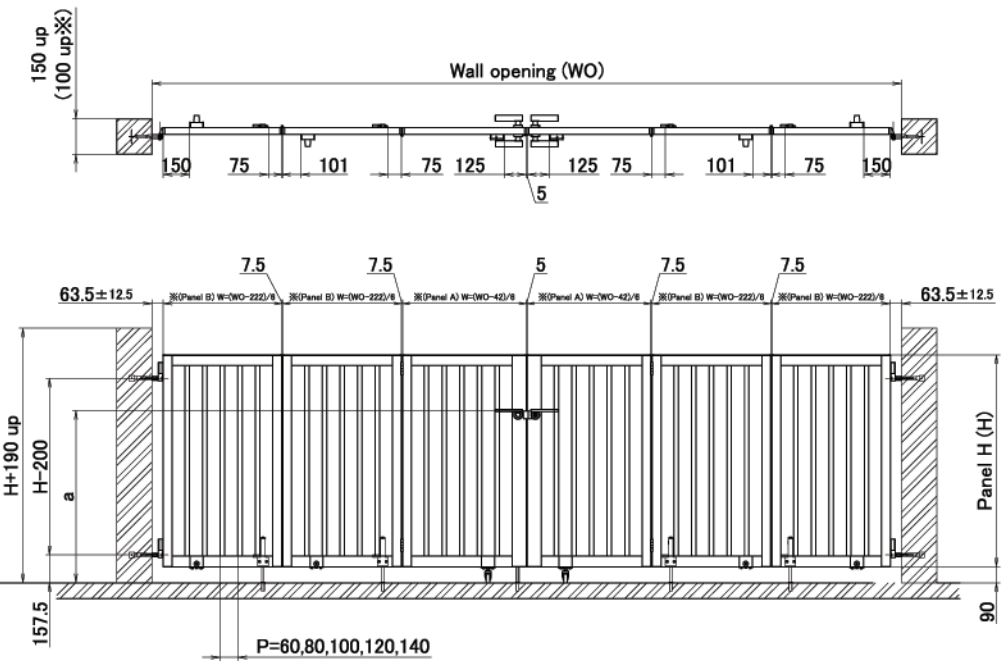


< Double swing >



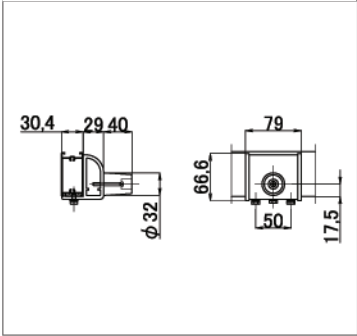


Folding gate (4 panels)

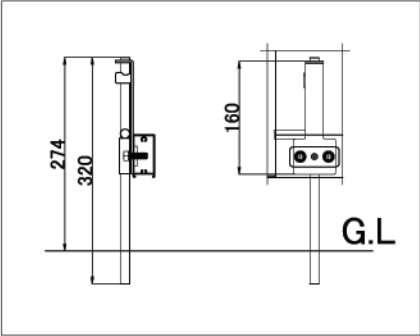


Folding gate (6 panels)

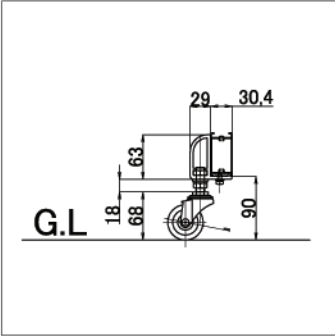
Stopper detail



Drop bar detail

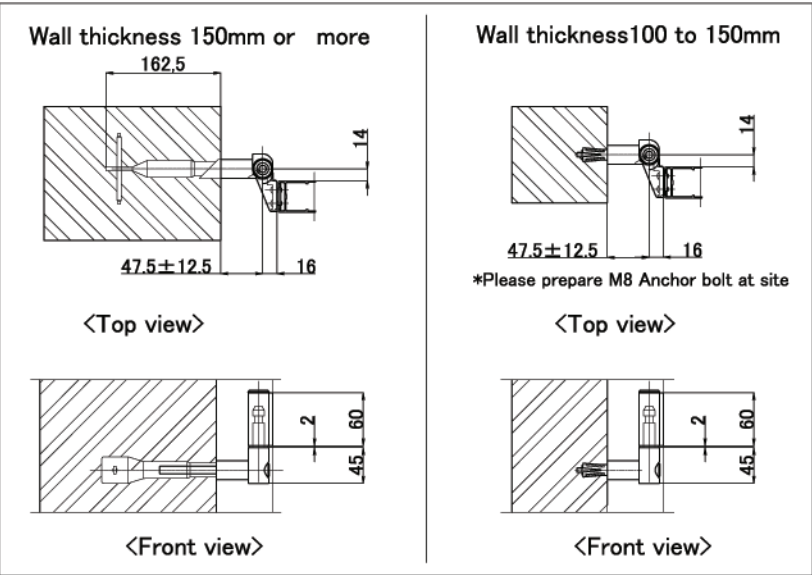


Roller detail

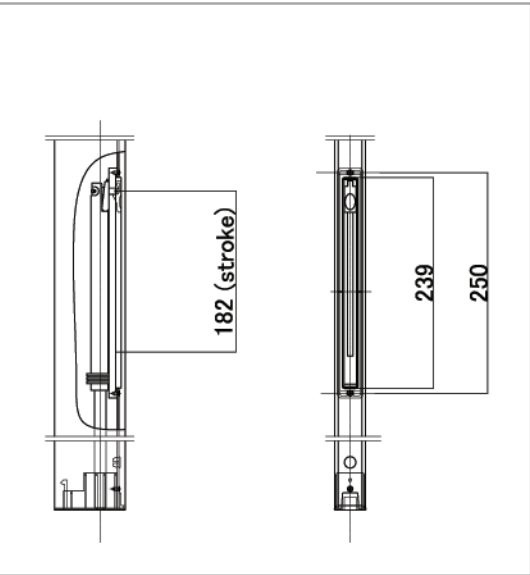


| H | a |
|-----------|------------|
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| 1300-1475 | (H+90)-465 |
| 1476-1600 | (H+90)-665 |

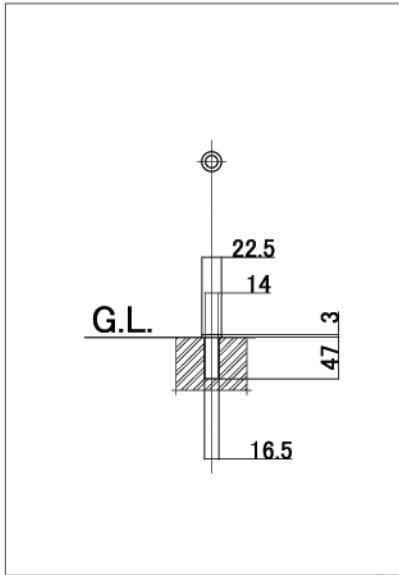
Hinge detail



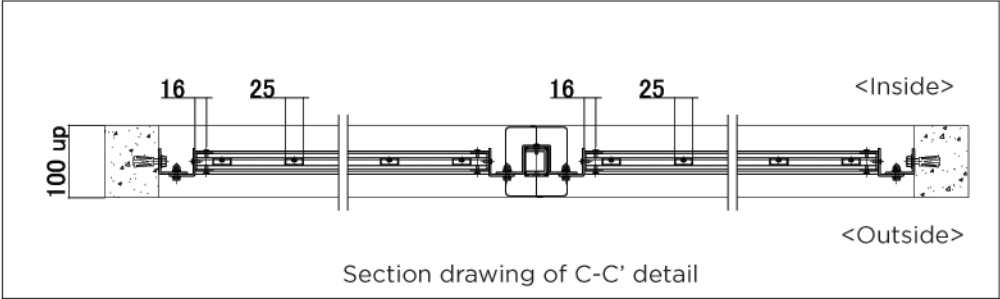
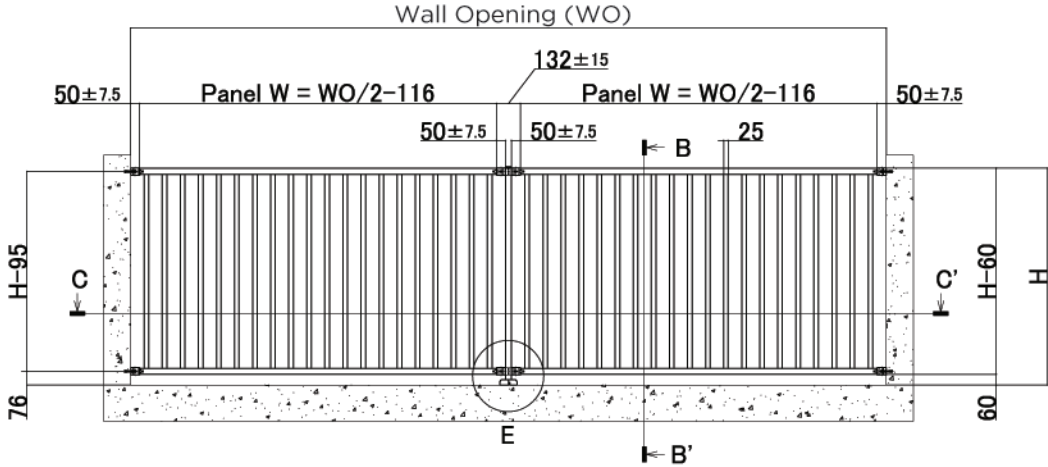
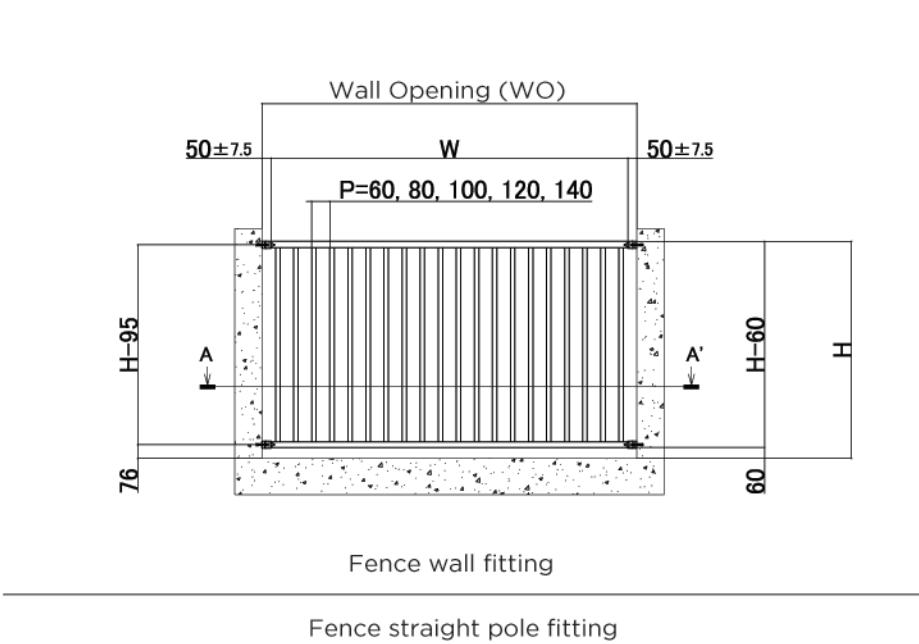
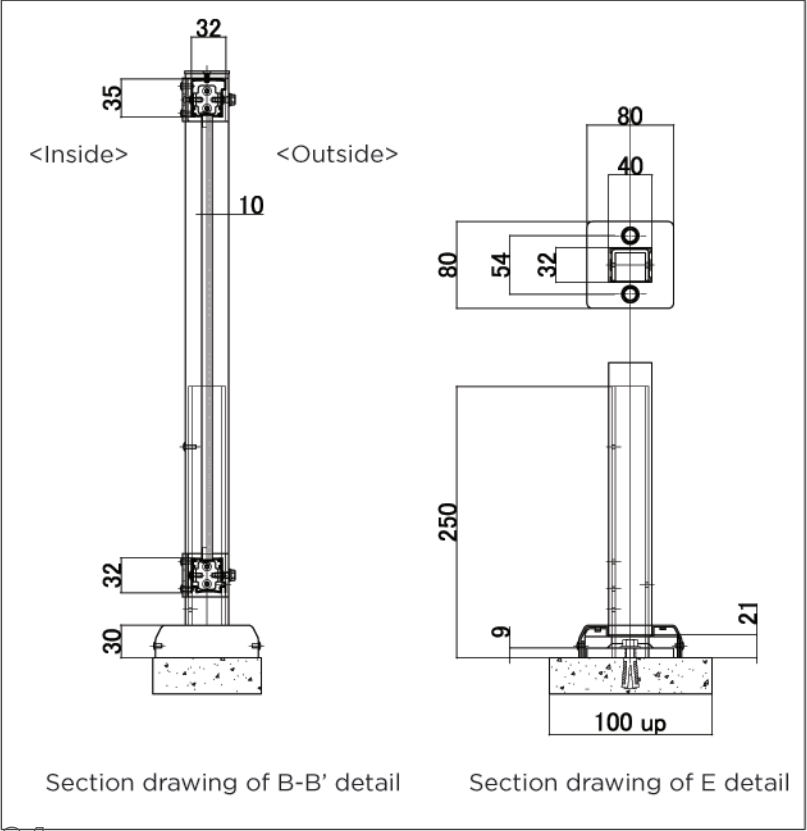
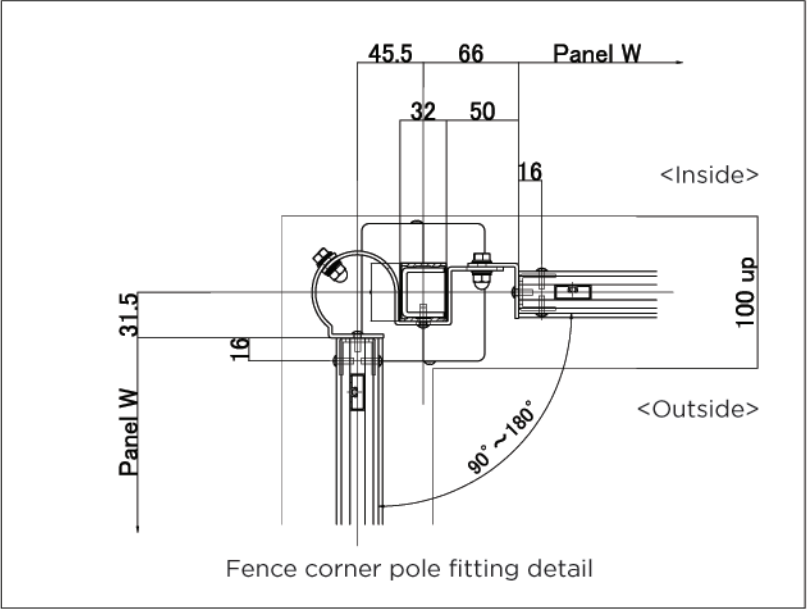
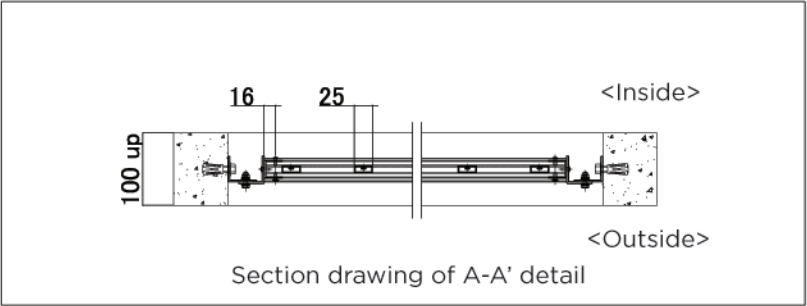
Dead bolt detail



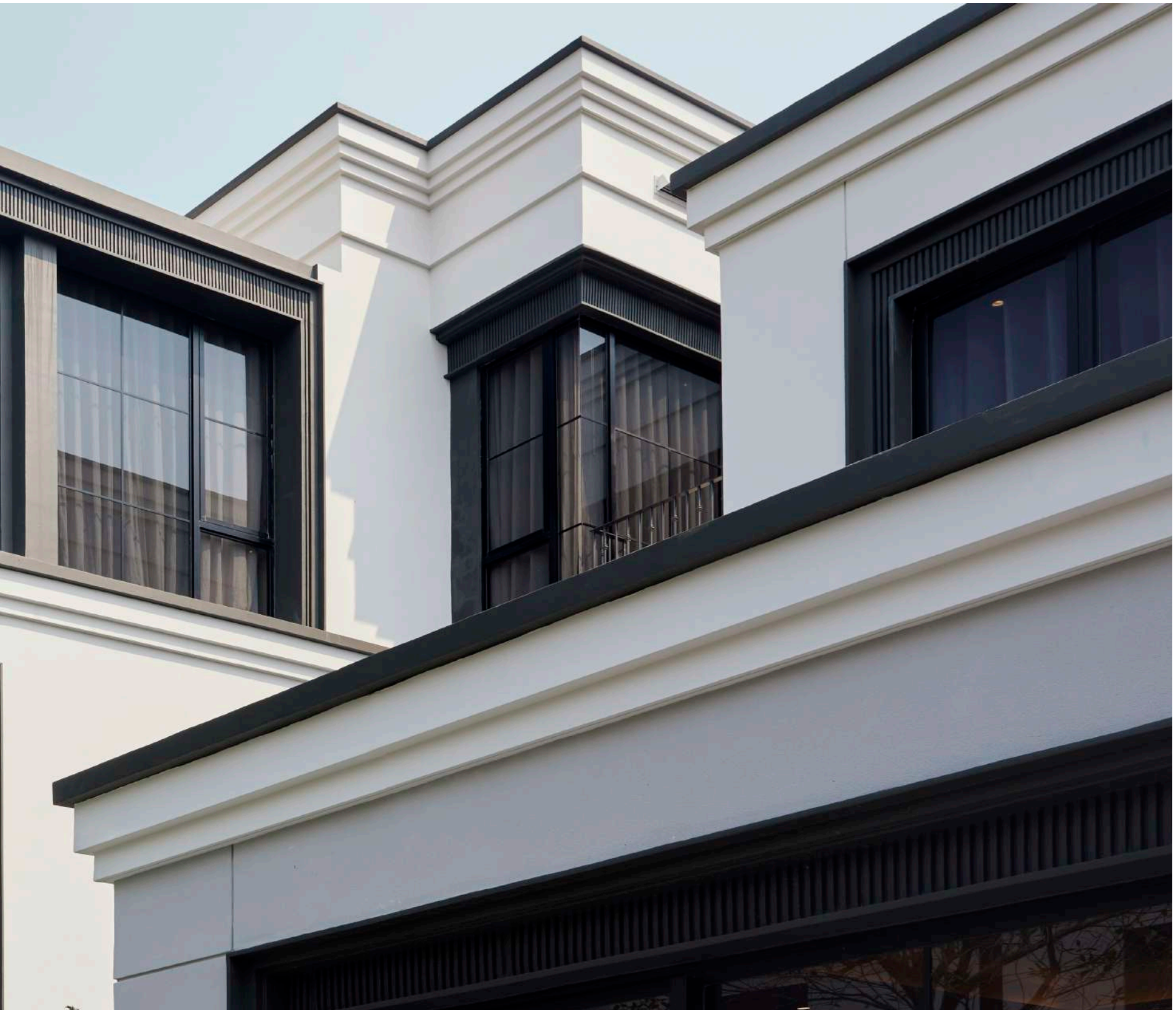
Dead bolt catch detail



REFERENCE DRAWINGS







PROJECT REFERENCE
MALTON GATES, THAILAND





PROJECT REFERENCE
PRIVATE HOUSE, INDONESIA

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