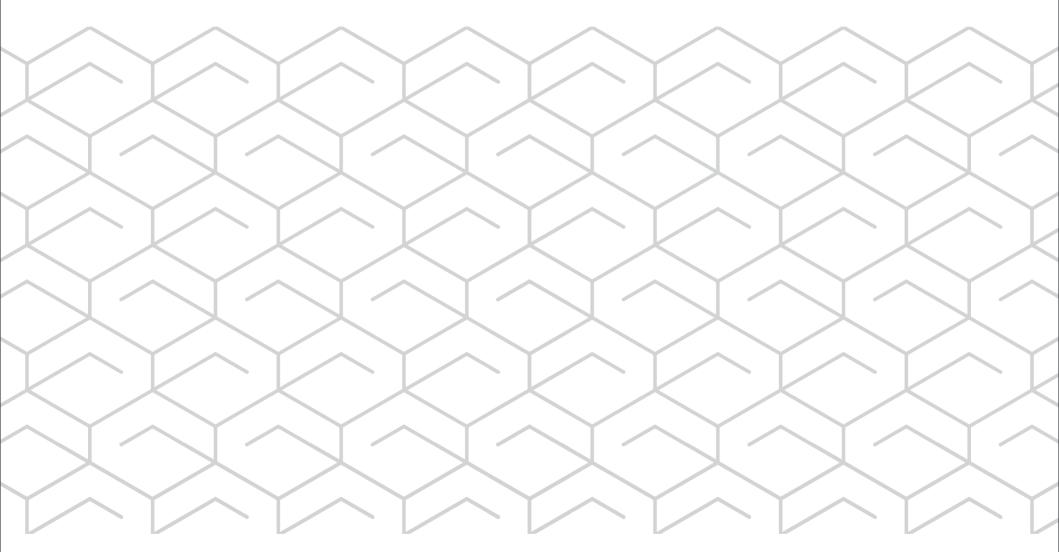
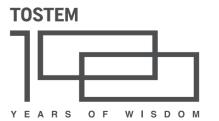
# TOSTEM

#### PRODUCT BROCHURE

ENJOY THE WIND & LIGHT AND FEEL THE SKY

PRODUCT COLLECTION 2023





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# \$13.8 BILLION

AMERICAS \$1.24 BILLION

# MAKING BETTER HOMES A REALITY FOR EVERYWHERE

\$1.1 BILLION PACIFIC \$1.16 BILLION

JAPAN \$10.1 BILLION

OTHER \$0.2 BILLION

#### **LIXIL GROUP**

Every person on the planet dreams of a better home. LIXIL makes that possible with pioneering water and housing products. Born in 2011 through the merger of five of Japan's most successful building materials and housing companies, we draw on our Japanese heritage to create world-leading technology and high-quality products that transform homes. We make things that matter to all sorts of different people, to the many communities we are part of, and to sustainably support the world we live in. Today, our approach comes to life through some of the most trusted global brands in our industry, including TOSTEM, GROHE, American Standard, and INAX. We are proud that our products touch the lives of more than a billion people every day, but believe we have the potential to still do so much more.

12,000+

PATENTS/DESIGN RIGHTS OWNED

FACTORIES

88<sub>IN</sub> 12

COUNTRIES

EMPLOYEES APPROX.

60,000

\$260 MILLION

**R&D INVESTMENT** 

SHOWROOMS

**130** <sub>IN</sub> **18** 

COUNTRIES

PEOPLE USING OUR PRODUCTS:

1 BILLION

**TOSTEM** 





**INAX** 





## TOSTEM BRAND

As the leading Japanese brand for global housing and building materials, TOSTEM stands apart as a one that deeply understands the needs of people. TOSTEM's comprehensive range of solutions ensures comfortable home living driven by a simple and seamless user experience. We develop our people-centric home solutions by drawing on a half-century of experience and expertise in balancing design and technology to anticipate the needs of people today and their families for generations to come.





## FRAMING THE BEAUTY OF LIVING

With the harmony of functional performance and aesthetic design, TOSTEM designs to let your own nature, experience the harmonious connection of outside and inside.

TOSTEM TOTAL HOUSING SOLUTION 010





# 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.

#### 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**

Stepping into your home should make you relieved, comfortable, and happy. 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.

#### **EXTERIOR**

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.

NATURAL WHITE

NATURAL SILVER

SHINE GRAY

AUTUMN BROWN



## **COLOR PROCESSING**

#### Maximizing the strength and beauty of Aluminum

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.

#### CERTIFICATION

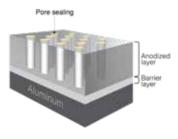
JIS H 8602: 2010, JIS H 4100: 2015, TIS 218-2520 (1977), TIS 284-2560 (2017), AAMA 612, ISO 9001: 2015, ISO 14001: 2015 ISO 17025: 2018

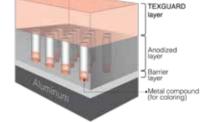












CONVENTIONAL ANODIZE

TOSTEM TEXGUARD ANODIZE









# PRE-ENGINEERED SYSTEM

All products of TOSTEM are developed and designed, manufactured and assembled under an integrated production process with strict TOSTEM quality control. Extrusion dies, aluminum billet, extrusion profiles, coating, pre-engineered and hardware assembly processes are all done in TOSTEM's factory. The greatest benefit of TOSTEM's pre-engineered system is the ability to build windows with consistent quality. With a single screwdriver, anyone can again and again consistently build the same high-quality window system.









## 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.

QUALITY ASSURANCE 018













# **QUALITY ASSURANCE**

Quality and standard are the core of TOSTEM product.

Japan is well-known for their rigorous standard control by Quality

Assurance and Quality Control systems to ensure that the product
meets international industrial standard: Japanese Industrial

Standard (JIS) and ASTM International.

WATER PENETRATION TESTING

SOUND INSULATION TESTING

AIR LEAKAGE TESTING

STRUCTURAL PERFORMANCE TESTING

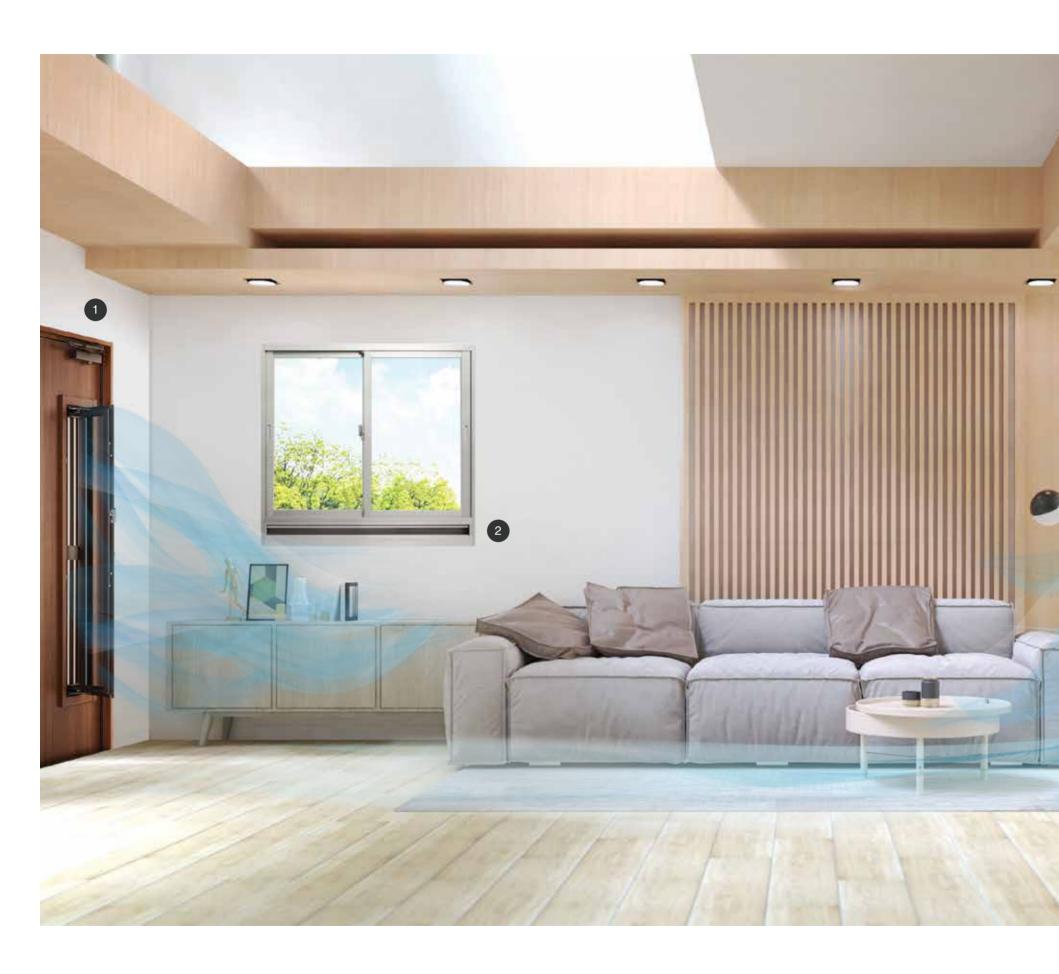
DURABILITY TESTING

ENVIRONMENTAL TESTING

LIGHT IRRADIATION TESTING

SUNSHINE WEATHER TESTING

TOSTEM AIRFLOW SYSTEM 020





# TOSTEM AIRFLOW SYSTEM

TOSTEM AIRFLOW System includes GIESTA AIRFLOW: steel wooden pattern door with integrated ventilation, AIRFLOW Door: ventilation door with sliding window for multiple ventilation levels and AIRFLOW SLOT: slot for ventilation with flap in top-notch design compatible with various TOSTEM window designs seamlessly.



GIESTA AIRFLOW



CLOSE



OPEN



AIRFLOW SLOT (available for WE 70)



CLOSE



OPEN



AIRFLOW DOOR



CLOSE



OPEN

## GIESTA AIRFLOW

### A PERFECT SOLUTION FOR YOUR OWN COMFORT WITH MINIMAL DESIGN

High performance wooden pattern steel door GIESTA AIRFLOW series with integrated AIRFLOW window and insect screen is perfect that combination keeps design and housing comfort at heart. GIESTA AIRFLOW allows air inside your house to circulate in and out all day to cool the living space, reduce humidity, remove unpleasant odor for serene ambience.

Invented to truly create soothing ambience and adding comfort to your home. Let the wind flow into the living space by opening ventilation panel without worrying as the AIRFLOW panel is wide enough to let the air flow in easily and too small to be entered from. Raising security to another level with multi-lock function to lock and unlock by single lock at handle but securely lock 2 positions. GIESTA AIRFLOW is Japanese Industrial Standards (JIS) certified and quaranteed with 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



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)







FRAME DEPTH.

# TOSTEM WINDOW AND DOOR SERIES

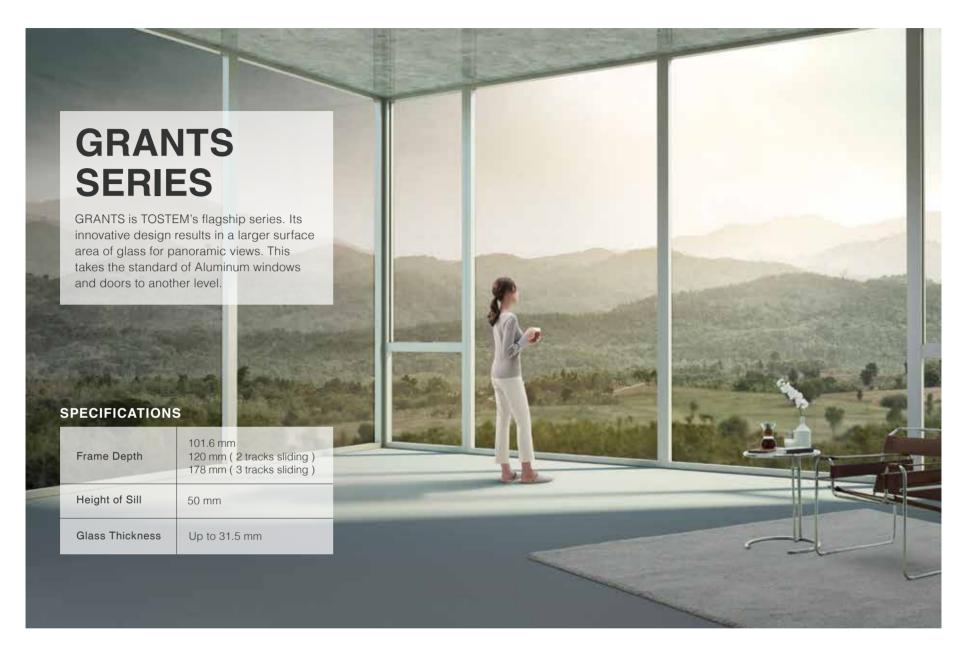
			HEIGHT OF SILL	
	GRANTS SERIES		GRANTS	Frame depth : 101.6 / 120 / 178 mm Height of sill : 50 mm
	ATIS SERIES		ATIS PLUS	Frame depth: 88 / 131.5 mm  Height of sill: 55 mm
			ATIS	Frame depth: 88 / 131.5 mm  Height of sill: 55 mm
	WE SERIES		WE PLUS	Frame depth: 72 / 104 mm  Height of sill: 35 mm / 50 mm
			WE 70	Frame depth: 72 / 104 mm  Height of sill: 35 mm
			WE 40	Frame depth: 41 mm  Height of sill: 35 mm

DESIGN	PERFORMA	PERFORMANCE		GLASS APPLICATION	
TRADITIONAL MINIMAL	LOW-RISE	HIGH-RISE	5 MM ~15MM (SG) (LG)	~32MM (IGU)	
TRADITIONAL MINIMAL	LOW-RISE	HIGH-RISE	5 MM ~15MM (SG) (LG)	~32MM (IGU)	
TRADITIONAL MINIMAL	LOW-RISE	HIGH-RISE	5 MM ~15MM (SG) (LG)	~32MM (IGU)	
TRADITIONAL MINIMAL	LOW-RISE	HIGH-RISE	5 MM ~15MN (SG) (LG)	~32MM (IGU)	
TRADITIONAL MINIMAL	LOW-RISE	HIGH-RISE	5 MM ~15MN (SG) (LG)	~32MM (IGU)	
TRADITIONAL MINIMAL	LOW-RISE	HIGH-RISE	5 MM ~15MN (SG) (LG)	~32MM (IGU)	





# GRANTS SERIES



#### **COLOR**



NATURAL WHITE



NATURAL SILVER



SHINE GRAY



AUTUMN BROWN



NATURAL BLACK

#### **PERFORMANCES**

WIND PRESSURE



2000 PA (ASTM E330) WATER TIGHTNESS



300 PA (ASTM E331) AIR TIGHTNESS



10.7m<sup>3</sup> / h·m<sup>2</sup> (ASTM E283)

NOISE INSULATION\*

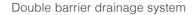


T-1 (25) (JIS A 1416)

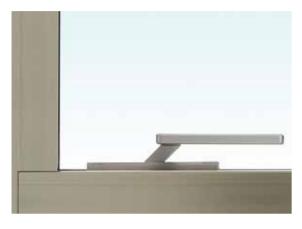
\* Sound performance test has been done in JIS standard controlled environment. Performance will vary by room condition. Please consult with sound insulation specialist.

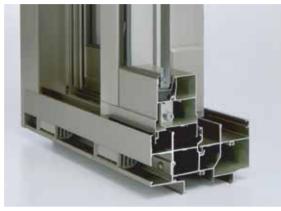
### **UNIQUE FEATURES**

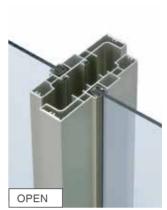
Streamline design (Concealed panel)

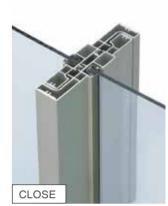


Overlapping meeting stile (4 Panels sliding)









L-FIT DESIGN HANDLES



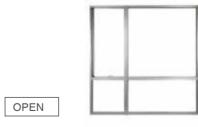






#### **GRANTS SCREEN SYSTEM**

FOR AWNING AND CASEMENT WINDOWS







- Fully embedded in the frame.
- Easy to remove for maintenance.

### **GRANTS**

WINDOW

DOOR

**OPTION** 

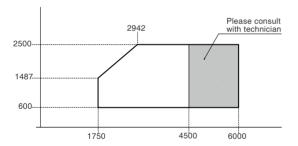
MIX

Available in SG and IG unit

#### SLIDING WINDOW (4 PANELS ON 2 TRACKS)



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



#### **AWNING WINDOW**



1800-

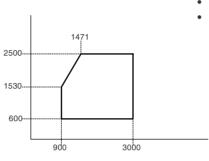
700

- 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

#### SLIDING WINDOW (2 PANELS ON 2 TRACKS)



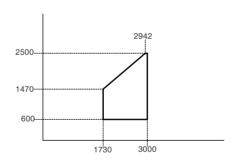
- Handle option
- Select panel position from L/R
- Single slide (L/R) available
- Glazing finish
  - 8 13.52mm : Glazing channel
  - Other glass : Sealant



#### SLIDING WINDOW (3 PANELS ON 2 TRACKS) SFS



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



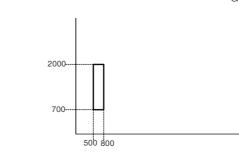
#### **CASEMENT WINDOW (WITH FRICTION STAY)**



- 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



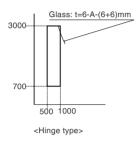
• Other glass : Sealant

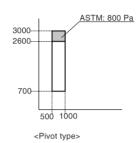


#### **CASEMENT WINDOW (WITH HINGE OR PIVOT)**



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

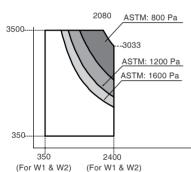


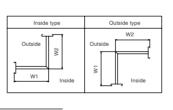


#### **CORNER FIXED WINDOW**



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

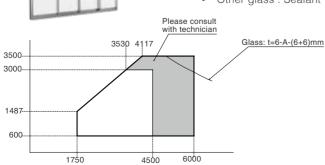




#### **SLIDING DOOR (4 PANELS ON 2 TRACKS)**



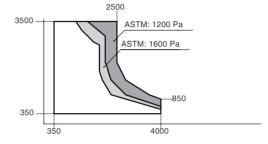
- Handle option
- Select from (SSSS, FSSF)
- Glazing finish
  - 8 13.52mm : Glazing channel
  - Other glass : Sealant



#### **FIXED WINDOW**



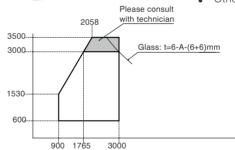
- For oversize fixed windows, please consult with our technician
- Glazing finish
  - 8 13.52mm : Glazing bead
  - 25 31.52mm: Glazing bead
  - Other glass : Sealant



#### SLIDING DOOR (2 PANELS ON 2 TRACKS)



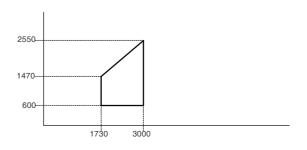
- Handle option
- Select panel position from L/R
- Single slide (L/R) available
- Glazing finish
  - 8 13.52mm : Glazing channel
  - Other glass : Sealant



#### SLIDING DOOR (3 PANELS ON 2 TRACKS) SFS



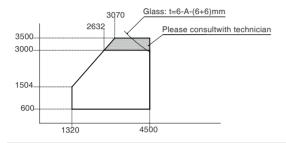
- Handle option
- Glazing finish
  - 8 13.52mm : Glazing channel
  - Other glass : Sealant



#### **SLIDING DOOR (3 PANELS ON 3 TRACKS)**



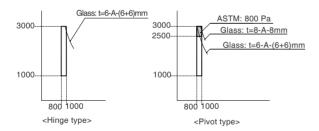
- Handle option
- Select panel position from L/R
- Select from (SSS, FSS, SSF)
- Glazing finish
  - 8 13.52mm : Glazing channel
  - Other glass : Sealant



#### **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



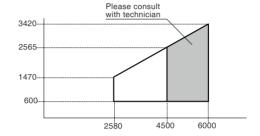
#### **MIXED & COMBINATION WINDOW**

- 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 (6 PANELS ON 3 TRACKS)**



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



#### **INSECT SCREEN**



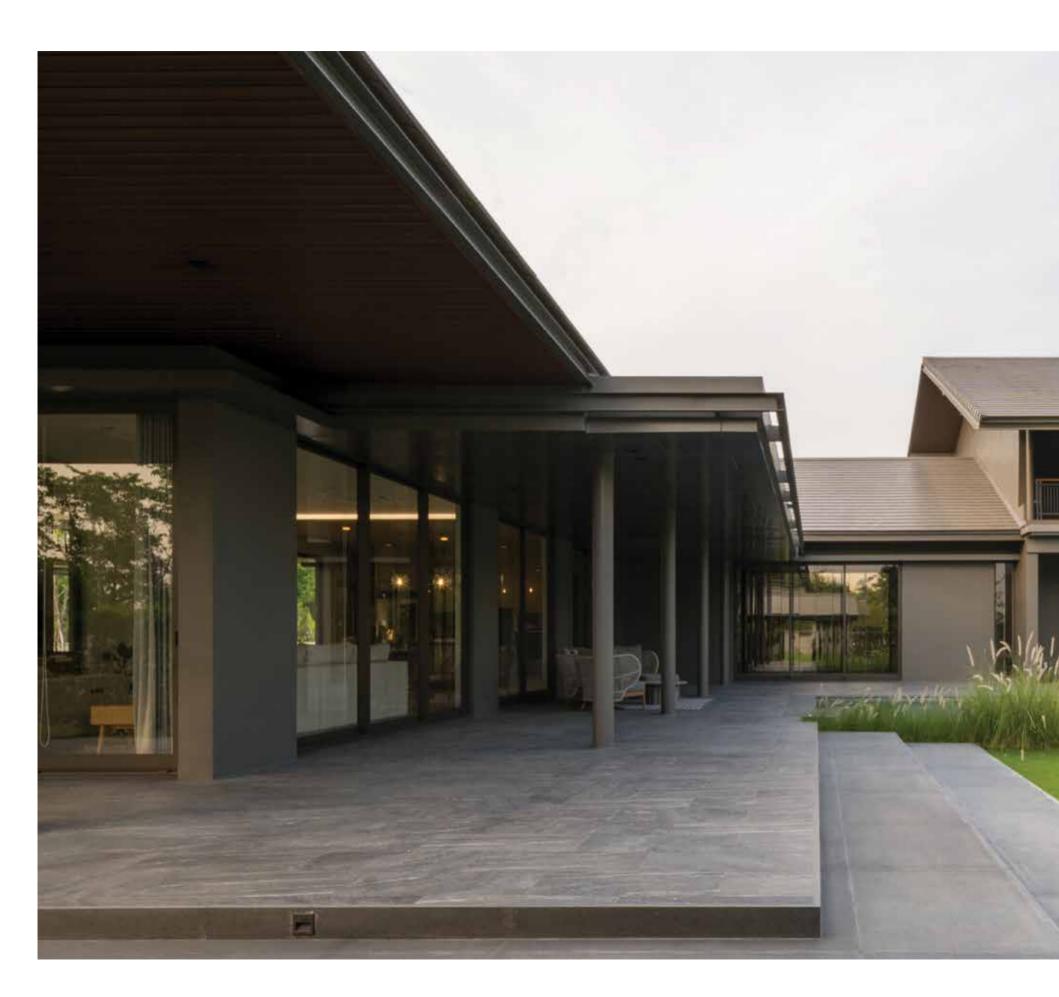
This insect screen is for awning and casement window



#### **UNIT WINDOWS**

Bottom Windows	Top Windows			
	Single Awning	Single Casement	Single Fix	Sliding
Single Awning			•	
Single Casement			•	
Swing Door			•	
Single Fix	•	•	•	•
Double Fix				•

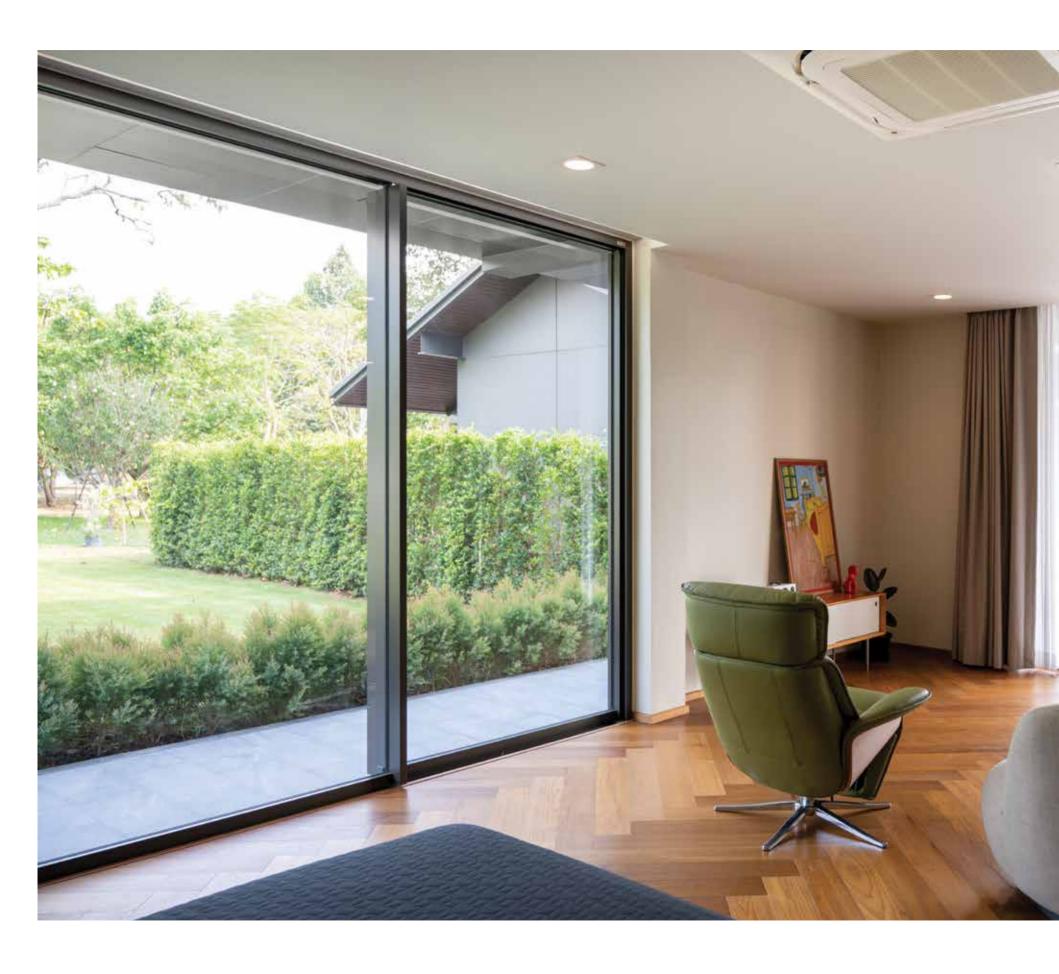






## GRANTS PROJECT REFERENCE

PRIVATE HOUSE, KHON KAEN













## ATIS SERIES



### **COLOR**



NATURAL WHITE



NATURAL SILVER



SHINE GRAY



AUTUMN BROWN



NATURAL BLACK

### **PERFORMANCES**

WIND PRESSURE



2000 PA (ASTM E330)

WATER TIGHTNESS



300 PA (ASTM E331)

AIR TIGHTNESS



10.7m<sup>3</sup>/h·m<sup>2</sup> (ASTM E283)

NOISE INSULATION\*1



T-1 (25), T-2 (30)<sup>\*2</sup> (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



### **COLOR**



NATURAL WHITE



NATURAL SILVER



SHINE GRAY



AUTUMN BROWN



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\*1



T-1 (25), T-2 (30)\*2 (JIS A 1416)

<sup>\*1:</sup> Sound performance test has been done in JIS standard controlled environment.

Performance will vary by room condition. Please consult with sound insulation specialist.

<sup>\*2:</sup> Some specific window types and glasses

### ATIS 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.



20% more airflow

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

### **AWNING/CASEMENT WINDOW**



#### **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**



### SLIDING WINDOW / DOOR



ALUMINUM PROFILE HANDLE



LIMIT ARM (OPTION)

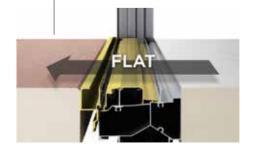
### **FLAT ATTACHMENT (OPTION)**



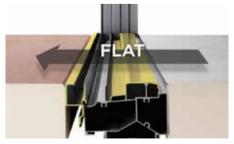
SAFE FOR EVERYONE



DETACHABLE



FOR OUTER RAIL (OUTER PANEL FIXED)



FOR INNER RAIL (INNER PANEL FIXED)

# **SWING DOOR** CONCEALED FRICTION ARM L-FIT DESIGN HANDLE AND LOCK SET <CONVENTIONAL> <ATIS> CONCEALED HINGES DOUBLE SWING DOOR WITH MAXIMIZED (RECOMMENDED FOR LOW-RISE PROJECTS)

### **ATIS PLUS**

WINDOW

**DOOR** 

**OPTION** 

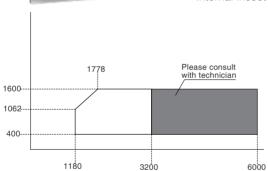
MIX

Available in SG and IG unit

### **SLIDING WINDOW (4 PANELS ON 2 TRACKS)**



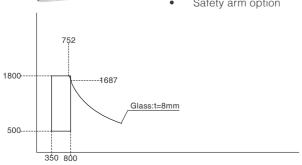
- In case of over 8mm glass thickness, please consult with our technician
- External insect screen available
- Internal insect screen (optional)



### CASEMENT WINDOW (WITH SUBLOCK)



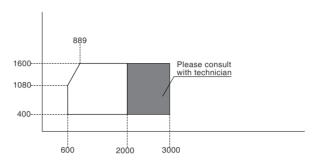
- In case of over 8mm glass thickness, please consult with our technician
- Select from L/R
- Swing screen available
- Safety arm option



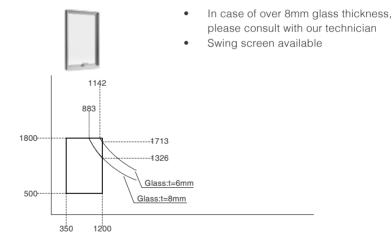
### **SLIDING WINDOW (2 PANELS ON 2 TRACKS)**



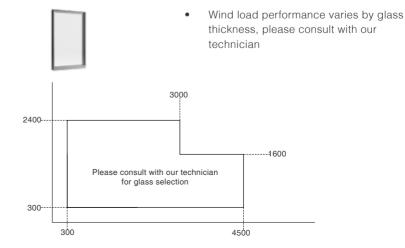
- In case of over 8mm glass thickness, please consult with our technician
- External insect screen available
- Internal insect screen (optional)
- Safety arm option



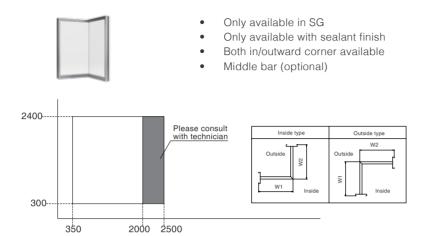
### **AWNING WINDOW (WITH SUBLOCK)**



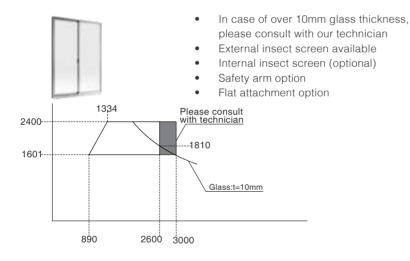
### **FIXED WINDOW**



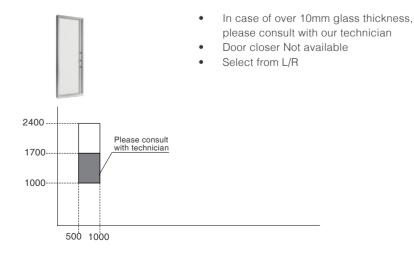
### **CORNER FIXED WINDOW**



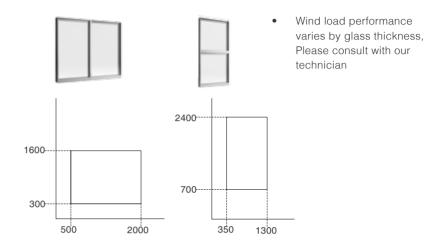
### **SLIDING DOOR (2 PANELS ON 2 TRACKS)**



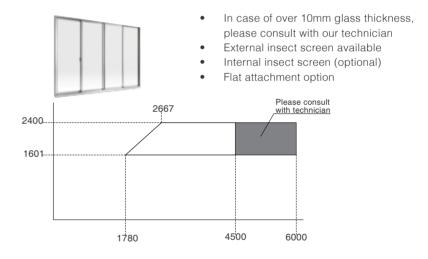
### **OUT-SWING DOOR (SINGLE)**



#### **FIX UNIT VARIATION**



### **SLIDING DOOR (4 PANELS ON 2 TRACKS)**



### **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** 

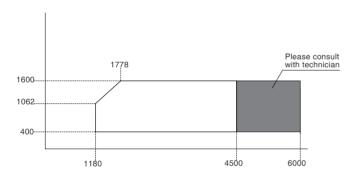
MIX

Available in SG and IG unit

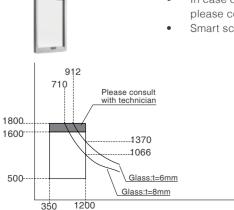
### SLIDING WINDOW (4 PANELS ON 2 TRACKS)



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



### **AWNING OPERATOR WINDOW**

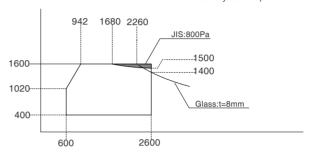


- In case of over 8mm glass thickness, please consult with our technician
- Smart screen available

### SLIDING WINDOW (2 PANELS ON 2 TRACKS)



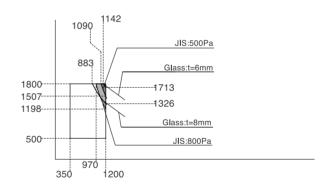
- In case of over 8mm glass thickness, please consult with our technician
- External insect screen available
- Internal insect screen (optional)
- Safety arm option



### **AWNING WINDOW (SINGLE LOCK)**



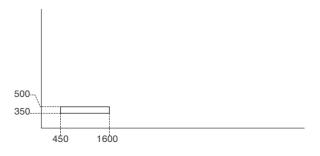
- In case of over 8mm glass thickness, please consult with our technician
- Swing screen available



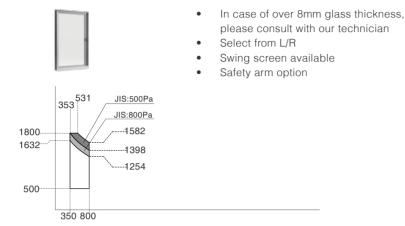
### **AWNING SLIT WINDOW**



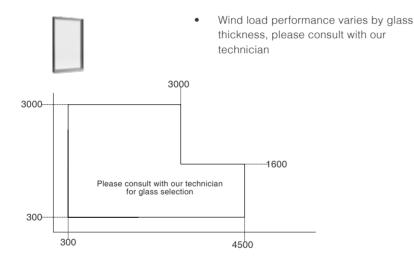
- In case of over 8mm glass thickness, please consult with our technician
- Smart screen available
- Select from Pully chain or orbit handle



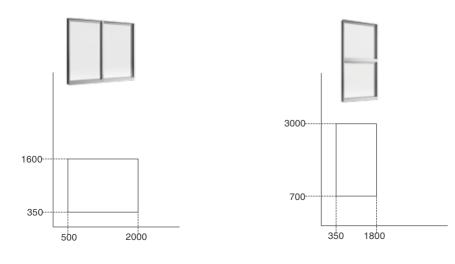
### CASEMENT WINDOW (SINGLE LOCK)



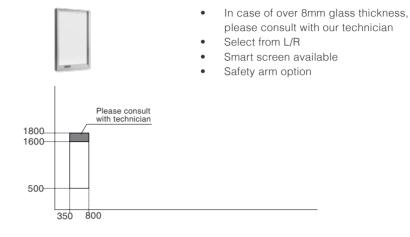
### **FIXED WINDOW**



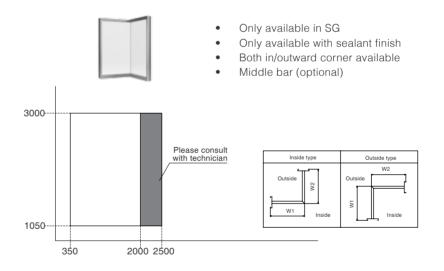
### **FIX UNIT VARIATION**

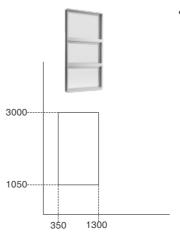


#### **CASEMENT OPERATOR WINDOW**



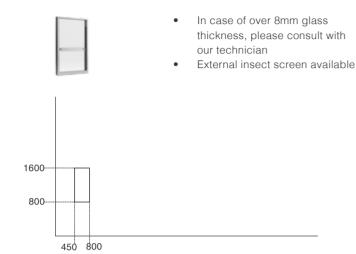
### **CORNER FIXED WINDOW**





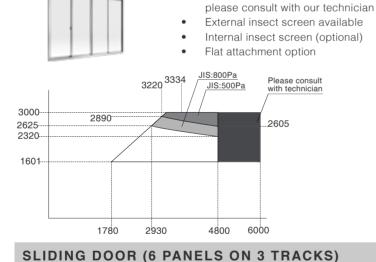
 Wind load performance varies by glass thickness, please consult with our technician

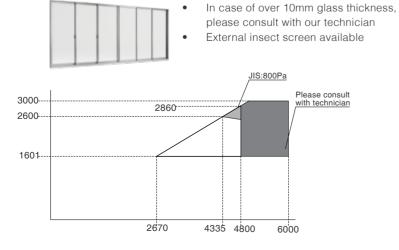
#### **TILT & SLIDE**



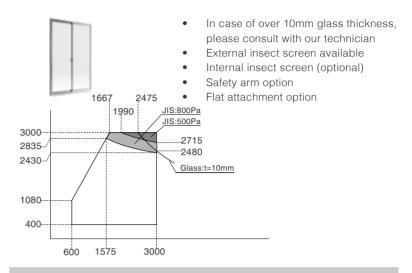
### SLIDING DOOR (4 PANELS ON 2 TRACKS)

In case of over 10mm glass thickness,

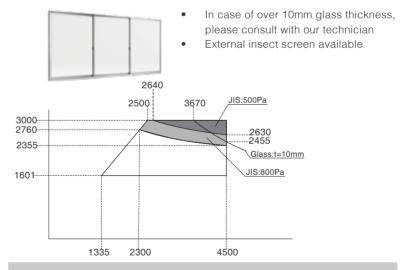




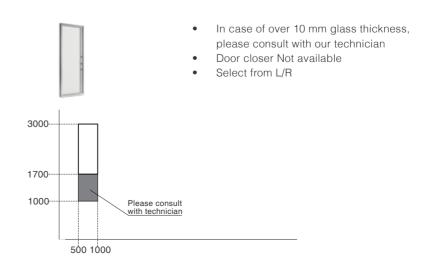
### **SLIDING DOOR (2 PANELS ON 2 TRACKS)**



### **SLIDING DOOR (3 PANELS ON 3 TRACKS)**



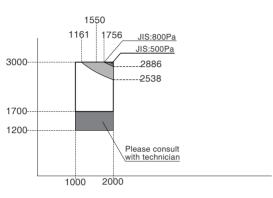
### **OUT-SWING DOOR (SINGLE)**



### **OUT-SWING DOOR (DOUBLE)**

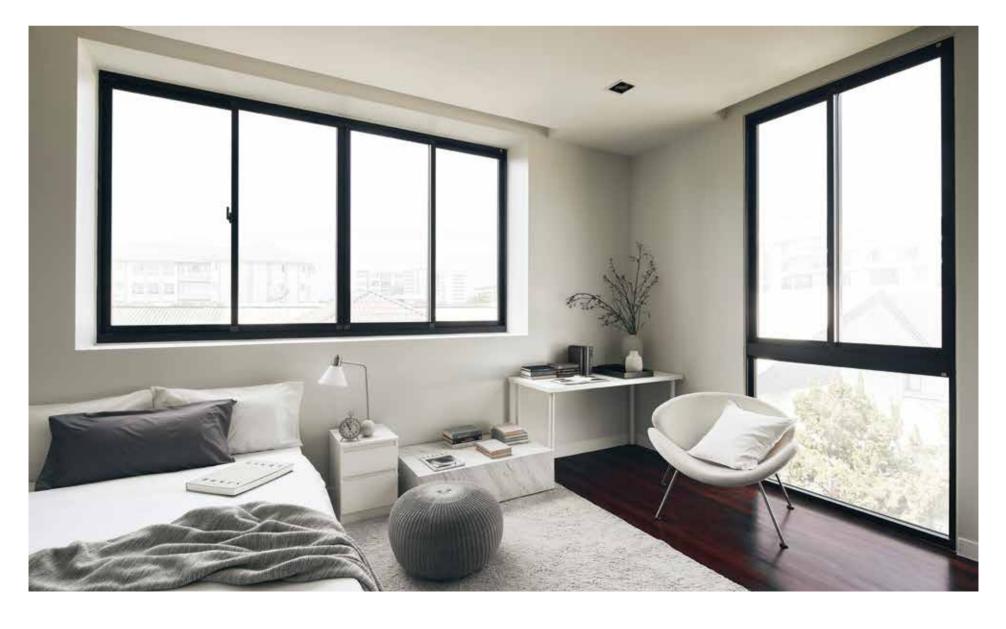


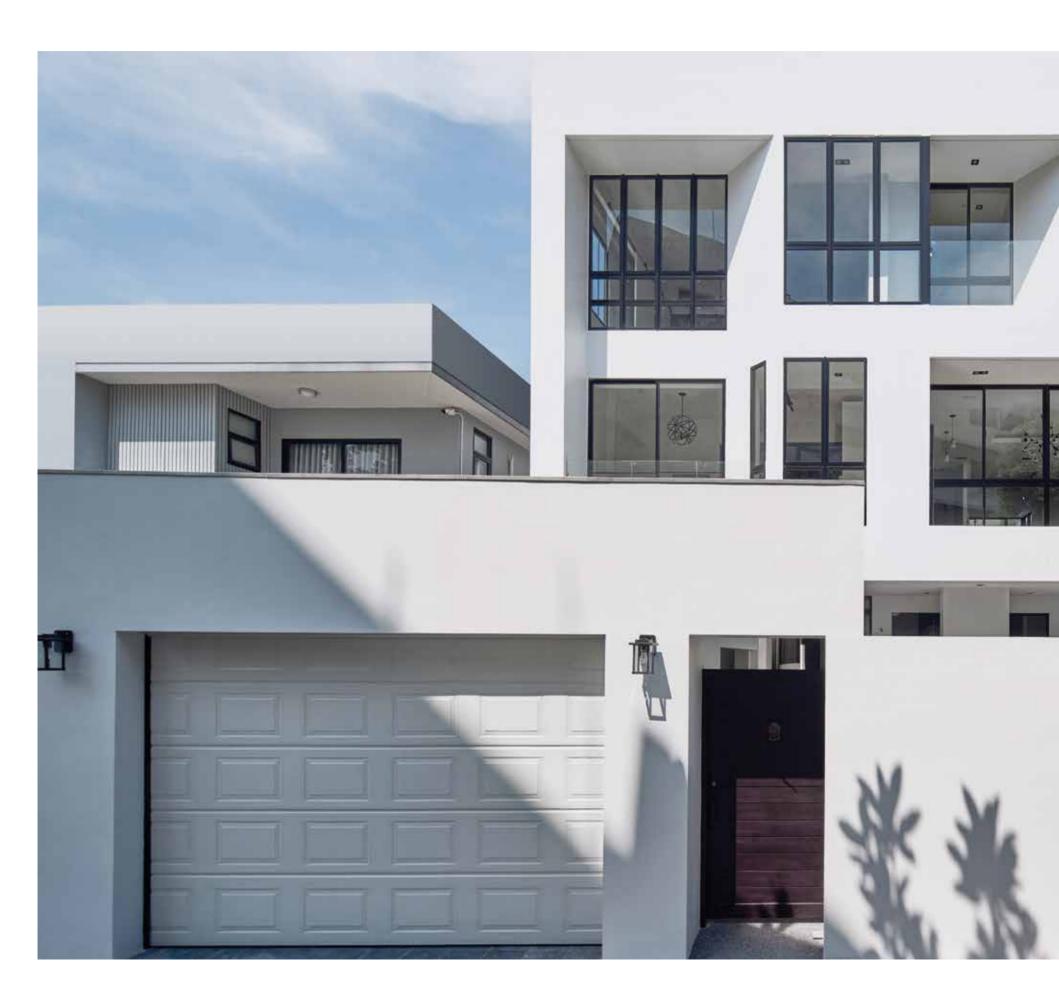
- In case of over 10 mm glass thickness, please consult with our technician
- Door closer Not available
- Select from L/R

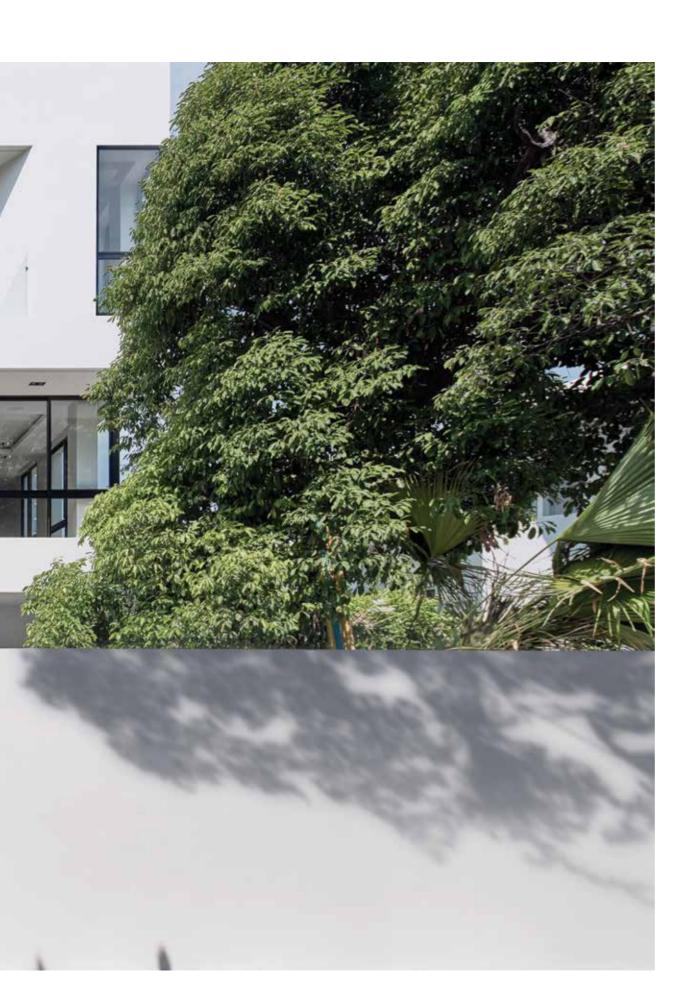


### **MIXED & COMBINATION WINDOW**

- 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

A&B HOUSE, BANGKOK

PROJECT REFERENCE 056

















## WE SERIES

## WE SERIES

### COLOR







SHINE GRAY



AUTUMN BROWN



NATURAL BLACK

### **WE PLUS**

WE PLUS has passed rigorous tests based on ASTM, and TOSTEM inhouse'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 (Panel: Single glass groove 11mm) 8-13.52 mm (Panel: Laminated glass groove 17mm)						

#### **PERFORMANCES**

WIND PRESSURE WATER TIGHTNESS AIR TIGHTNESS NOISE INSULATION\*



1600 PA (ASTM E330)



240 PA (ASTM E331)



10.7m<sup>3</sup> / h·m<sup>2</sup> (ASTM E283)



T-1 (25) (JIS A 1416)

<sup>\*</sup> 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

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S-1 (800PA) (JIS A 1515) WATER TIGHTNESS

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



A-3 (10) (JIS A 1516) NOISE INSULATION\*



T-1 (25) (JIS A 1416)

### **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



(500PA) (JIS A 1515) WATER TIGHTNESS



W-1 (100PA) (JIS A 1517) AIR TIGHTNESS



A-3 (10) (JIS A 1516) NOISE INSULATION\*



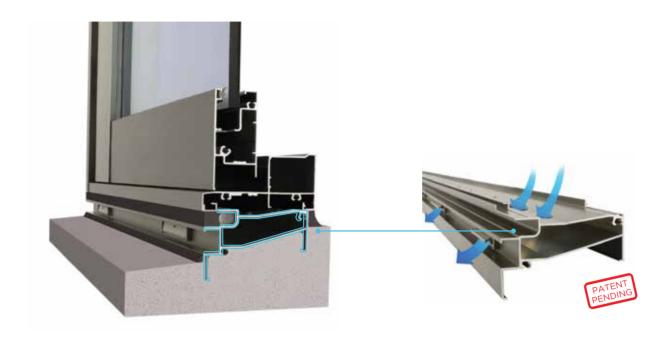
N/A (JIS A 1416)

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

<sup>\*</sup> 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**





V

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 DRIANAGE DEVICES

### **AIRFLOW SLOT**



Smooth operation with bearing rollers

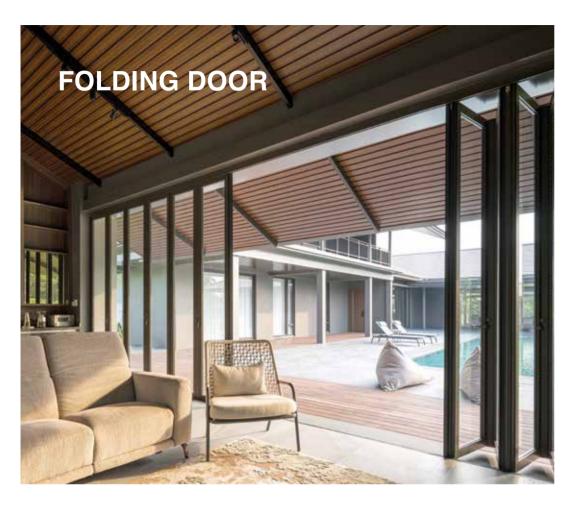


Air tightness: JIS A-3 when closed



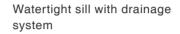
Detachable insect screen for cleaning

Available with all windows



### **UNIQUE FEATURES**







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	4 (R) (L)	4	2 2
6 Panels	6 (c) (d)	6	
8 Panels	8 60	8	4 4
12 Panels			6 6
16 Panels			8 🖚 🔊 8

### **WE PLUS**

WINDOW

**DOOR** 

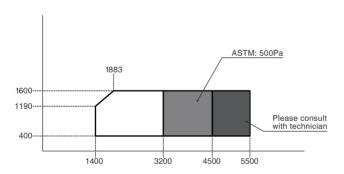
**OPTION** 

MIX

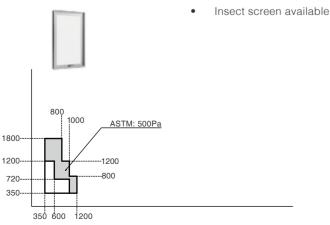
### **SLIDING WINDOW (4 PANELS ON 2 TRACKS)**



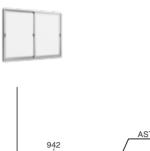
Inside insect screen available



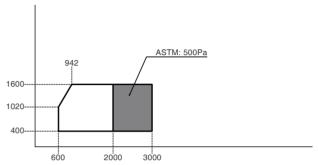
### AWNING WINDOW (SINGLE LOCK)



### **SLIDING WINDOW (2 PANELS ON 2 TRACKS)**



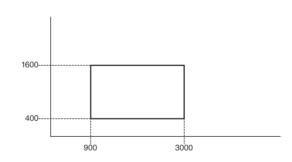
Inside insect screen available



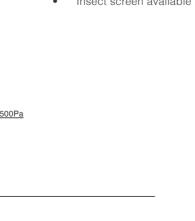
### SLIDING WINDOW (3 PANELS ON 3 TRACKS)



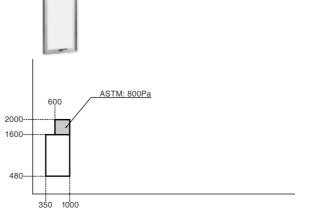
Inside insect screen NOT available



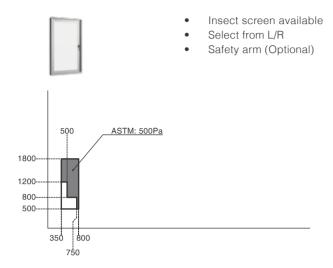
### **AWNING WINDOW (MULTI LOCK)**



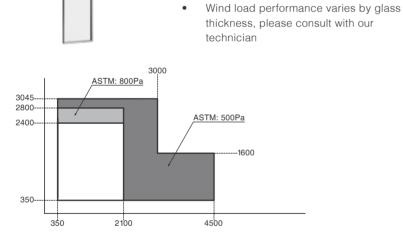
Insect screen NOT available



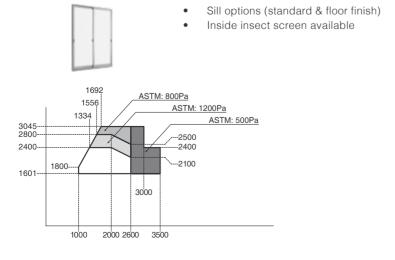
### **CASEMENT WINDOW (SINGLE LOCK)**



### **FIXED WINDOW**

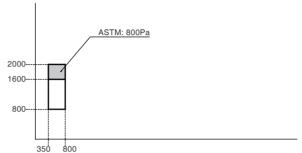


### **SLIDING DOOR (2 PANELS ON 2 TRACKS)**

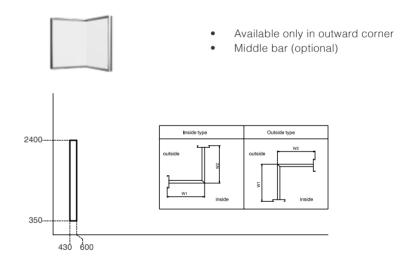


### CASEMENT WINDOW (MULTI LOCK)

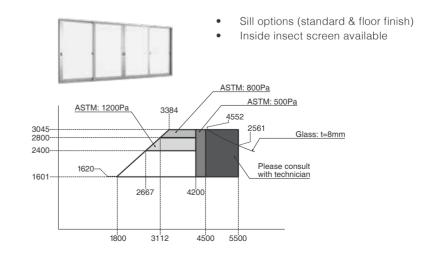




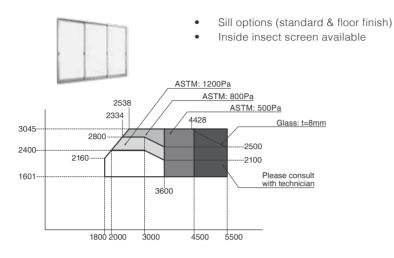
### **CORNER FIXED WINDOW**



### **SLIDING DOOR (4 PANELS ON 2 TRACKS)**



### **SLIDING DOOR (3 PANELS ON 3 TRACKS)**

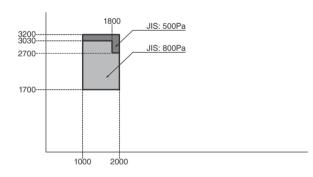


### **OUT-SWING DOOR (DOUBLE)**



- Select from L/R
- Sill option (with/without sill)
- Door closer (optional)

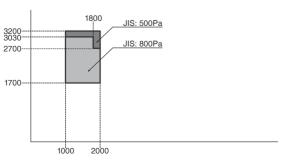
\*in case of non-sill, no air and water performance determined



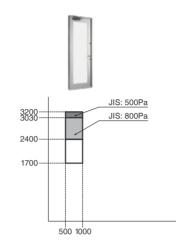
### **IN-SWING DOOR (DOUBLE)**



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



### **OUT - SWING DOOR (SINGLE)**



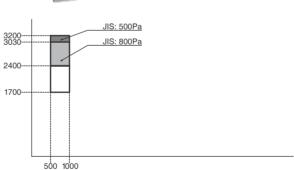
- Select from L/R
- Sill option (with/without sill)
- Door closer (optional)

\*in case of non-sill, no air and water performance determined

### **IN-SWING DOOR (SINGLE)**



- 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** 

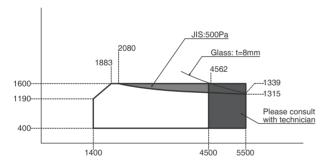
MIX

- 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)**



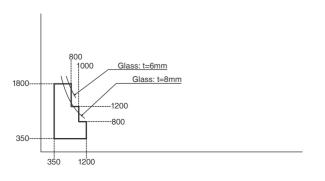
- Internal insect screen available
- External insect screen available with a special order



### **AWNING WINDOW**



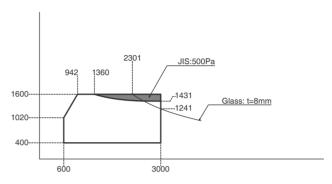
Insect Screen available



### SLIDING WINDOW (2 PANELS ON 2 TRACKS)



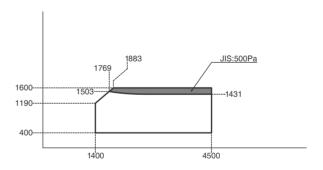
- Internal insect screen available
- External insect screen available with a special order
- Single sliding available (L/R)



### SLIDING WINDOW (3 PANELS ON 2 TRACKS) SFS



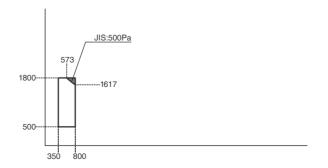
- Internal insect screen available
- External insect screen available with a special order



### **CASEMENT WINDOW**



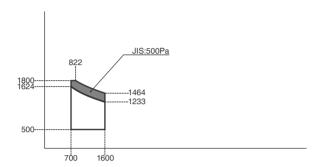
- Select from L/R
- Insect screen available



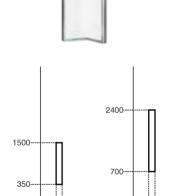
#### **DOUBLE CASEMENT WINDOW**



Insect Screen available



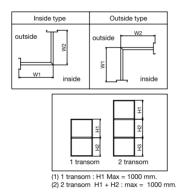
### **CORNER FIXED WINDOW**



430 500

(for W1 & W2) <Single>

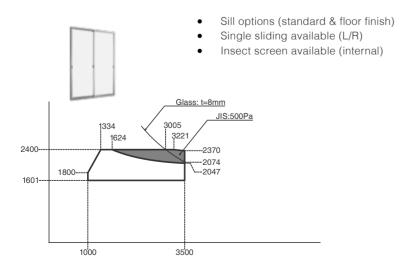
- Both In/outward corner available
- Middle bar (optional)



### **SLIDING DOOR (2 PANELS ON 2 TRACKS)**

430 500

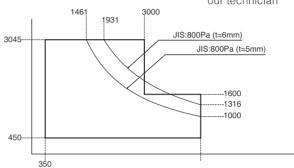
(for W1 & W2) <with transom>



#### **FIXED WINDOW**



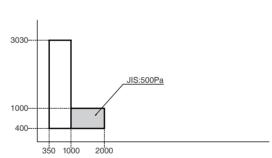
- Up to 4 fixed windows with unitized mullion
- Wind load performance varies by glass thickness Please consult with our technician



### **ALUMINUM LOUVER**



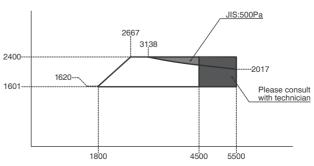
No performance determined



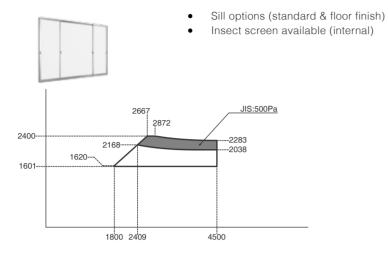
### **SLIDING DOOR (4 PANELS ON 2 TRACKS)**



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



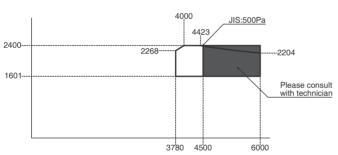
### SLIDING DOOR (3 PANELS ON 2 TRACKS) SFS



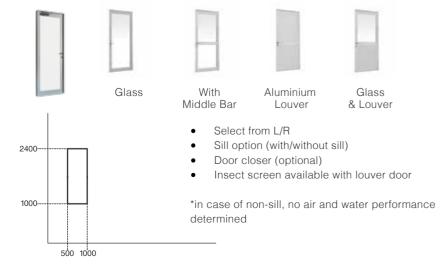
### SLIDING DOOR (6 PANELS ON 3 TRACKS)



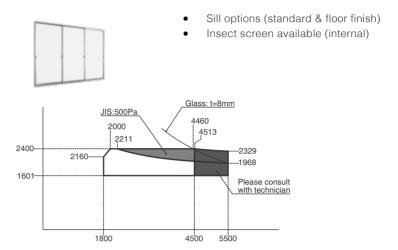
- Sill options (standard & floor finish)
- Insect screen available (internal)



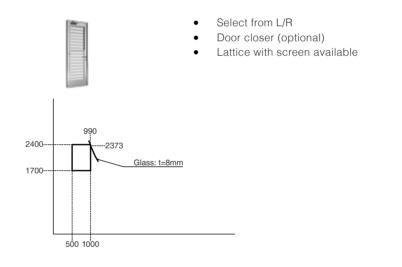
### **OUT-SWING DOOR (SINGLE)**



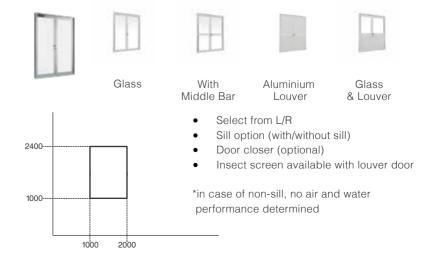
### SLIDING DOOR (3 PANELS ON 3 TRACKS)



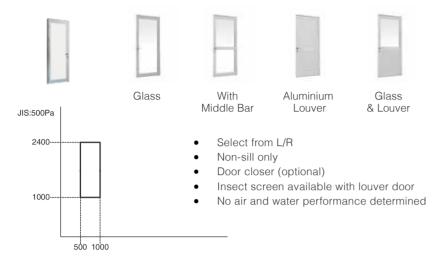
#### **AIRFLOW DOOR**



### **OUT-SWING DOOR (DOUBLE)**



### **IN-SWING DOOR (SINGLE)**



### **FOLDING DOOR (4 PANELS)**



- Sill option (standard & flat)
- 1 panel weight cannot exceed 40 kg.
- 1 panel width limit 350 850 mm
- Choose from
  - One way open (select L/R)
  - Both ways open
  - Center open

\*in case of flat-sill, no air and water performance determined

### **FOLDING DOOR (8 PANELS)**



- Sill option (standard & flat)
- 1 panel weight cannot exceed 40 kg.
- 1 panel width limit 350 850 mm
- Choose from
  - One way open (select L/R)
  - Both ways open
  - Center open
- Water performance is JIS: 120 pa

\*in case of flat-sill, no air and water performance determined

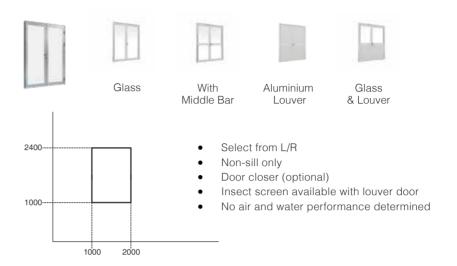
3030

650

2935

6000

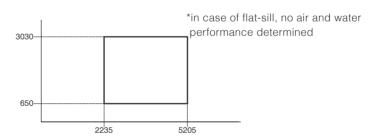
### **IN-SWING DOOR (DOUBLE)**



### **FOLDING DOOR (6 PANELS)**

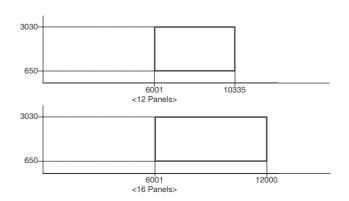


- Sill option (standard & flat)
- 1 panel weight cannot exceed 40 kg.
- 1 panel width limit 350 850 mm
  - Choose from
    - One way open (select L/R)
    - Both ways open
    - Center open



### **FOLDING DOOR (12,16 PANELS)**

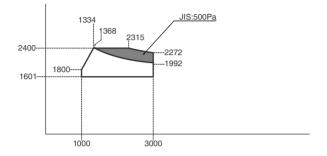
- Sill option (standard & flat)
- 1 panel weight cannot exceed
   40 kg.
- 1 panel width limit 350 850 mm
- Center open only
- No air and water performance determined



### **ENTRANCE SLIDING DOOR (2 PANELS ON 2 TRACKS)**

### Sill options (standard & floor finish)

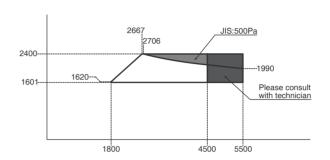
- Single sliding available (L/R)
- External Insect screen available

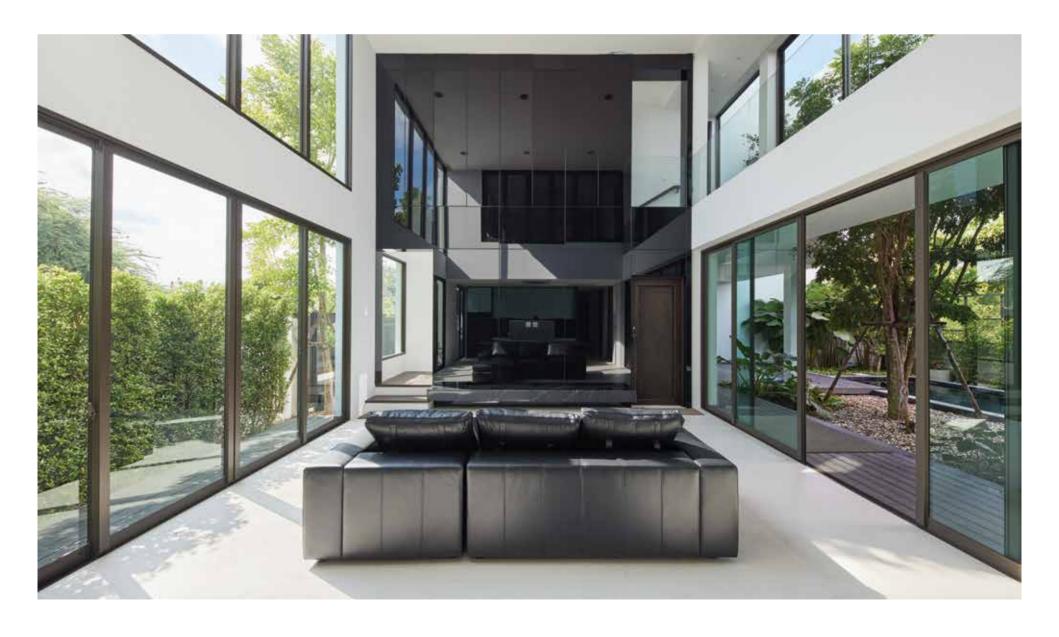


### **ENTRANCE SLIDING DOOR (4 PANELS ON 2 TRACKS)**



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





### MIXED & COMBINATION WINDOW

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

### **UNIT WINDOWS**

	Top Windows											
Bottom 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**

	Top Windows							
Bottom Doors	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** 

DOOR

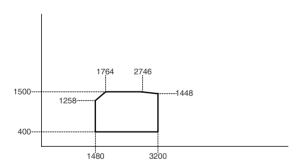
**OPTION** 

MIX

### **CENTER SLIDING WINDOW**



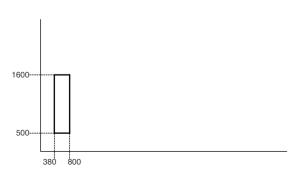
External fixed insect screen available



### **CASEMENT WINDOW**



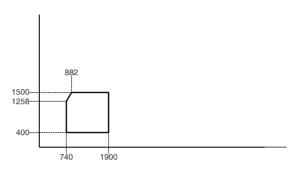
Insect screen NOT available



### SINGLE SLIDING WINDOW



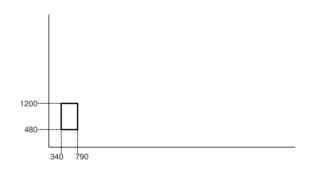
- Select from L/R
- External fixed insect screen available



### AWNING WINDOW



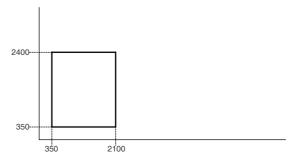
Insect screen NOT available



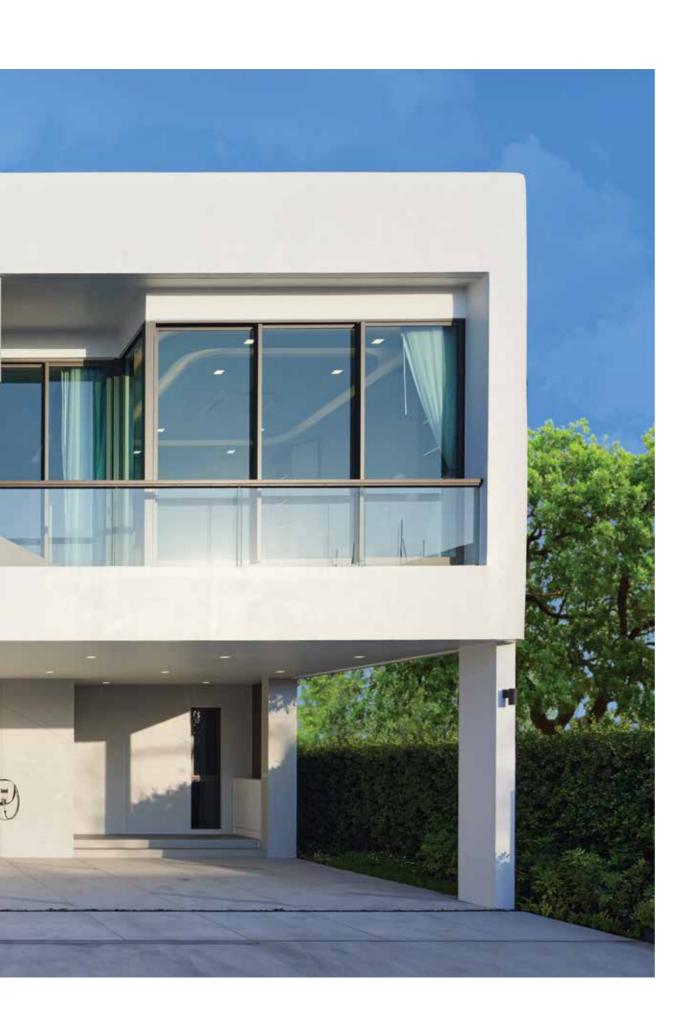
### **FIXED WINDOW**



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



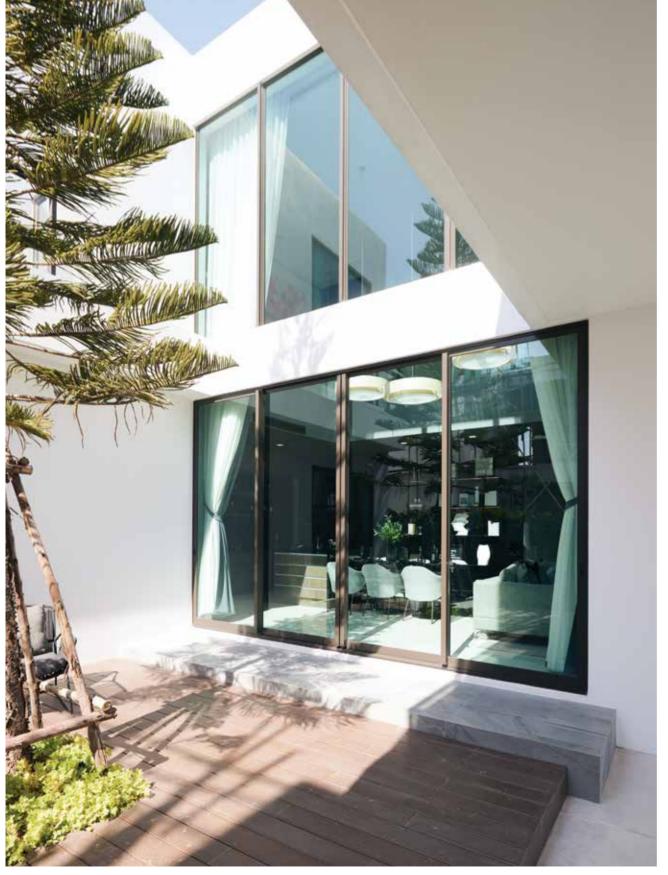




# WE SERIES PROJECT REFERENCE

THE ARTIQUE, BANGKOK

PROJECT REFERENCE 076















# 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	Sliding Door	
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)	
Sill	No sill	20 mm	
kness	5, 6, 8 mm	5, 6, 8 mm	
	2 tracks	Top 47.2 mm Jamb 49.1 mm  Top 88.5 mm Jamb 90.4 mm  No sill	

### **FEATURES**



NATURAL

WHITE

**COLOR** 



NATURAL

SILVER



SHINE

GRAY



**AUTUMN** 

BROWN



NATURAL BLACK

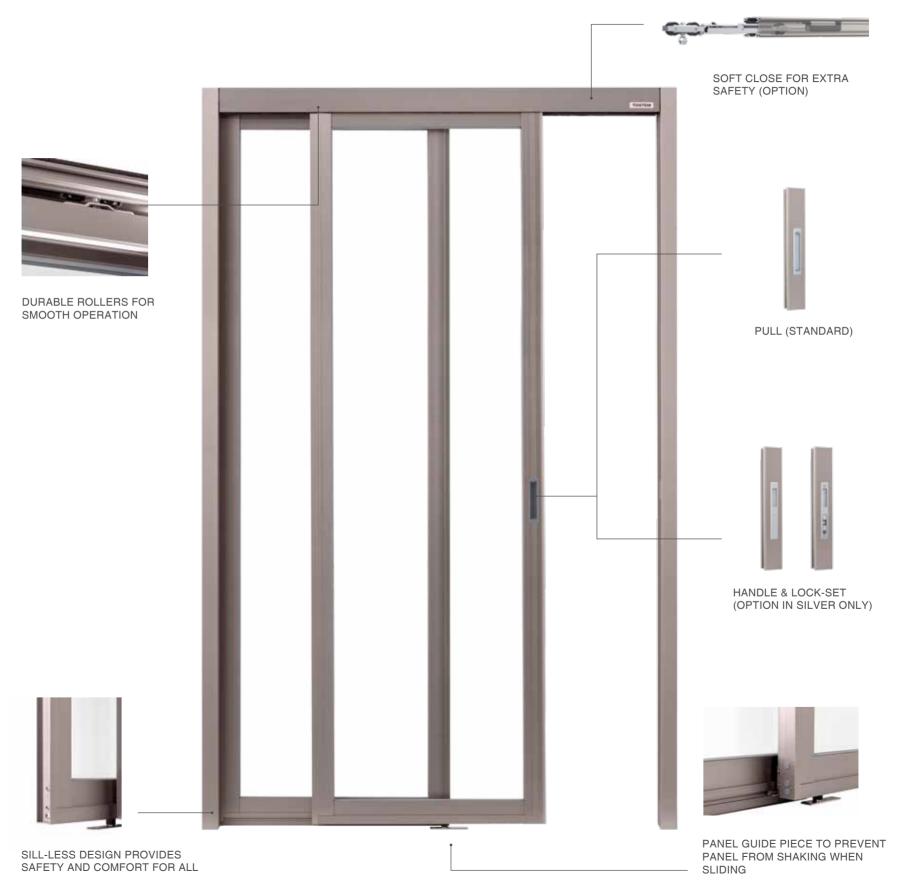






SAFETY

# **UNIQUE FEATURES**



# **INTERIOR SERIES**

WINDOW

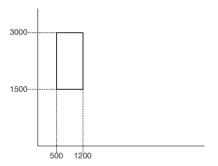
DOOR

OPTION

MIX

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

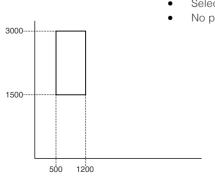
- Select from L/R
- Lock (optional)
- Soft close (optional)
- Select from with or without ending jamb
- No performance determined



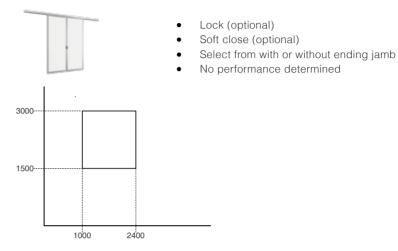
### IN-WALL HANGING DOOR (1 PANEL ON 1 TRACK)



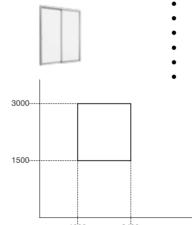
- Select from L/R
- Lock (optional)
- Soft close (optional)
- Can be a pocket door
- Select from with or without ending jamb
- No performance determined



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



### HANGING DOOR (2 PANELS ON 2 TRACKS)

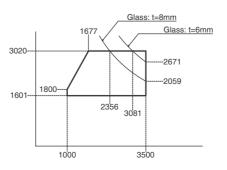


- Select from L/R
- Lock (optional)
- Soft close (optional)
- Only single slide L/R available
- Select from Fix-Slide or Slide-Fix
- No performance determined

### **PARTITION DOOR (2 PANELS ON 2 TRACKS)**



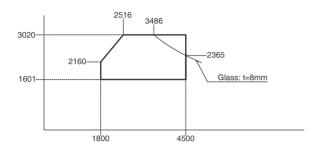
No performance determined



### PARTITION DOOR (3 PANELS ON 3 TRACKS)



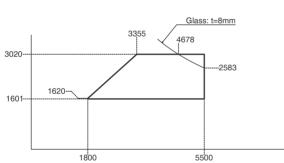
No performance determined



### PARTITION DOOR (4 PANELS ON 2 TRACKS)



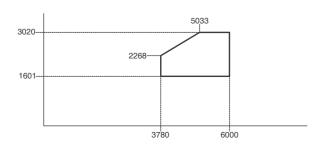
No performance determined



### PARTITION DOOR (6 PANELS ON 3 TRACKS)



No performance determined

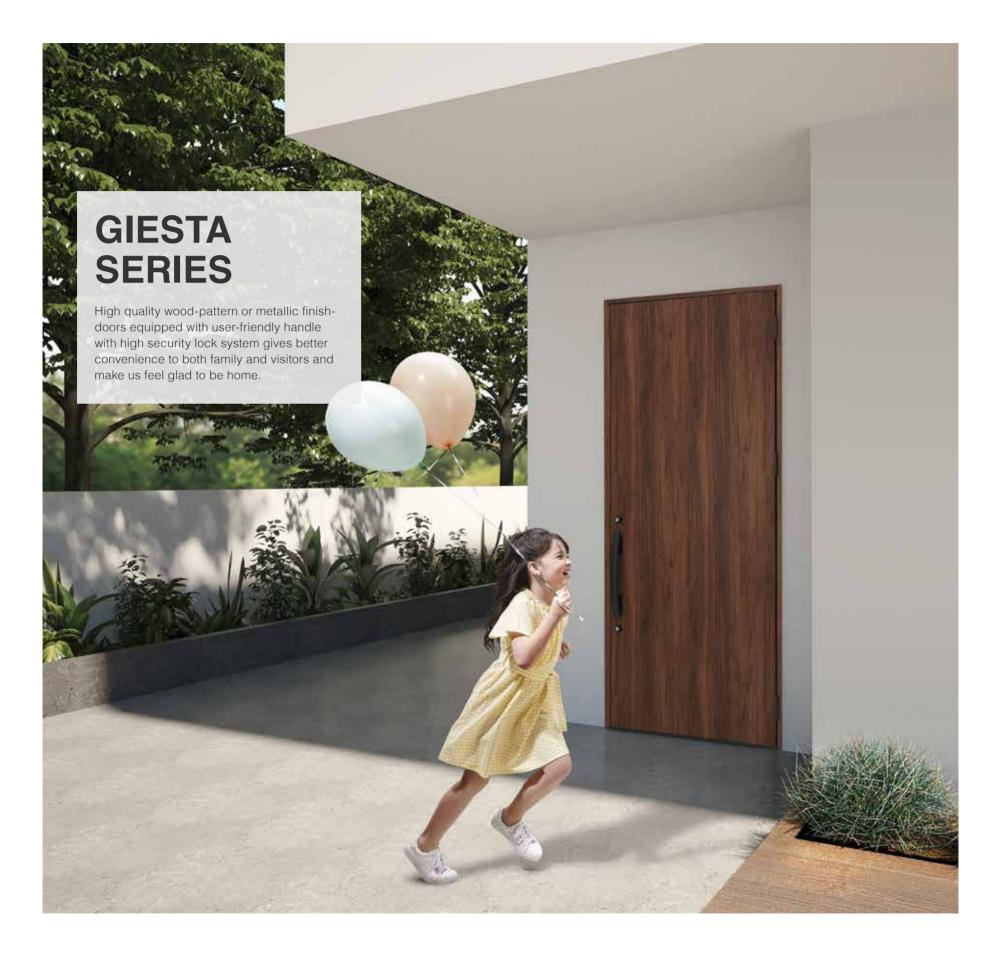








# ENTRANCE DOOR



# **UNIQUE FEATURES**

### **SPECIFICATIONS**

Frame Depth	101.6 mm		
Height Of Sill	Out-Swing 50 mm		
	In-Swing Outside 30 / Inside 14 mm		
Door Frame	<ul> <li>TOP AND SIDE FRAME</li> <li>Wood pattern type: Wood pattern resin sheet, wrapping on Aluminum profile with synthetic rubber</li> <li>Painted type Anodized Aluminum profile</li> <li>SILL Anodized Aluminum profile</li> </ul>		
Door Panel	<ul> <li>EXTERNAL SHEET</li> <li>Wood pattern type : (External) Resin laminated sheet/ (Internal) Anti-rust epoxy coating</li> <li>Polystyrene (EPS Foam)</li> </ul>		
	Insulating glass thickness 23 mm (Cleared 3+Air gap 16+Patterned glass 4)		

### **PERFORMANCES**

WIND PRESSURE WATER TIGHTNESS AIR TIGHTNESS NOISE INSULATION









S-2 (1200PA) (JIS A 1515) W-2 (150PA) (JIS A 1517) A-4 (2) (JIS A 1516) N/A (JIS A 1416)



# SIMPLE AND MINIMALISTIC



### **COLORS**



TURIN PINE



CREA MOCHA



CREA RUSK



TEAK



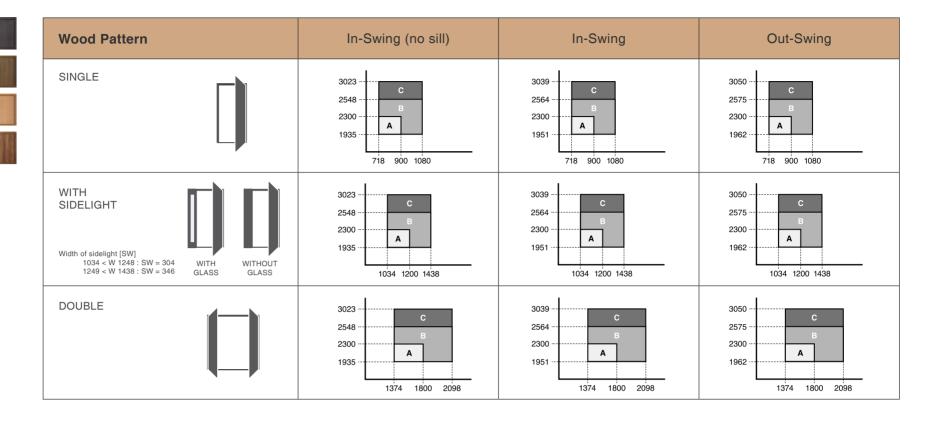
POLISH SIL-VER

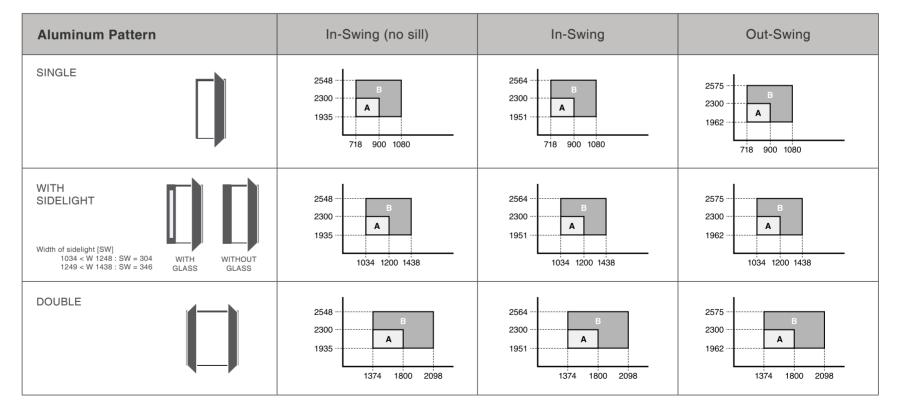


SILKY WHITE



AUTUMN BROWN





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



# MODERN BUT TRADITIONAL



### **COLORS**







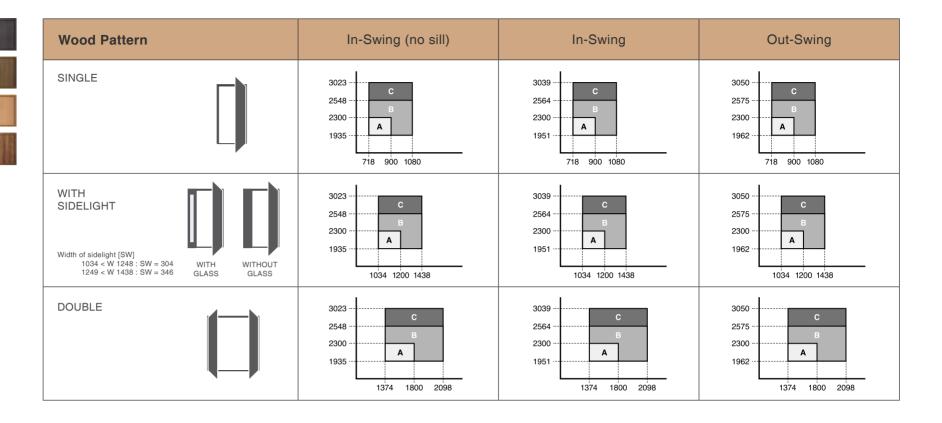
CREA MOCHA



CREA RUSK



TEAK



Aluminum Pattern	In-Swing (no sill)		Out-Swing	
SINGLE	N/A	N/A	N/A	
WITH SIDELIGHT  Width of sidelight [SW]	N/A	N/A	N/A	
DOUBLE	N/A	N/A	N/A	

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

# ENTRANCE

# GLASS WITH STYLE



### **COLORS**







CREA MOCHA



CREA RUSK



TEAK



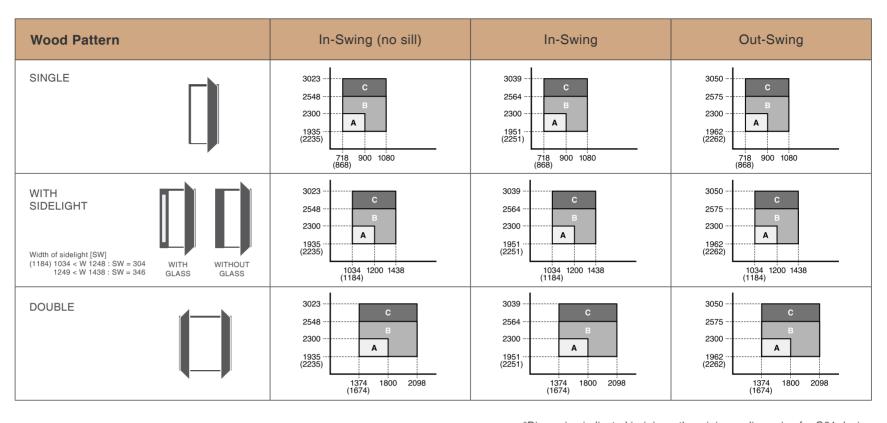
POLISH SIL-VER



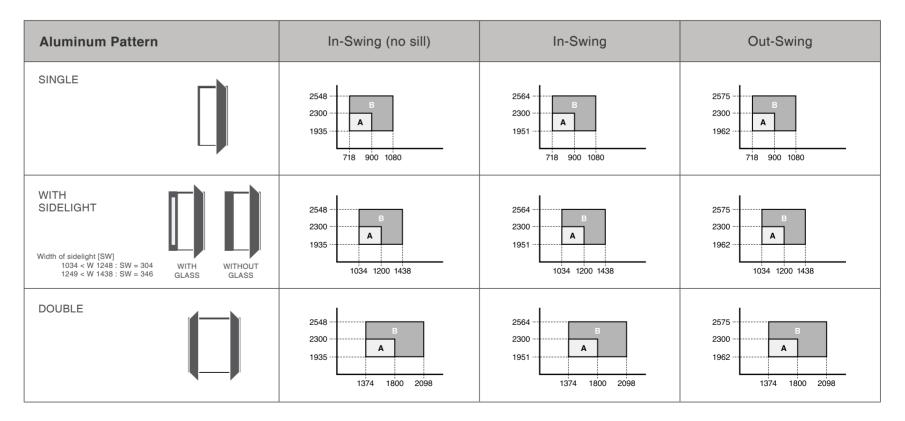
SILKY WHITE



AUTUMN BROWN



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



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



# COMFORT WITH MINIMAL DESIGN



A01

### **COLORS**



TURIN PINE



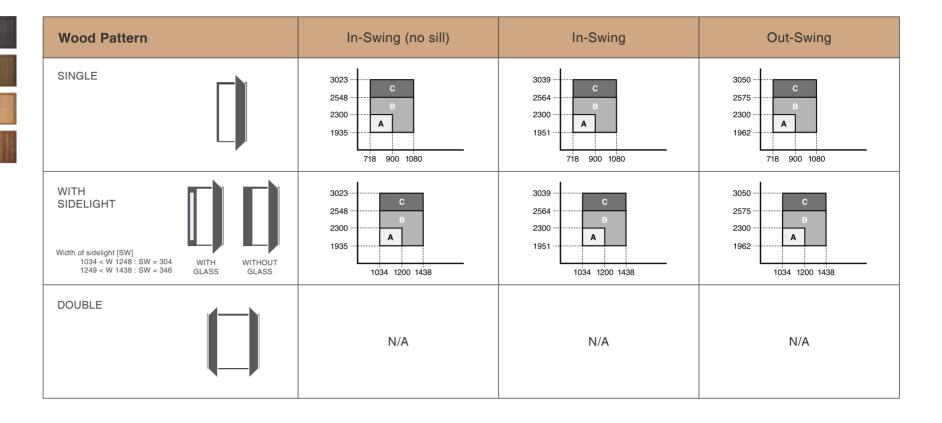
CREA MOCHA



CREA RUSK



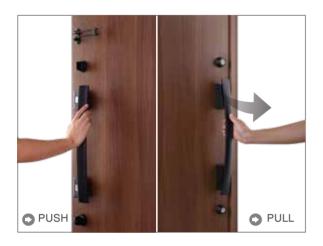
TEAK



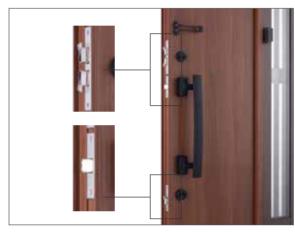
Aluminum Pattern	In-Swing (no sill)	In-Swing	Out-Swing	
SINGLE	N/A	N/A	N/A	
WITH SIDELIGHT  Width of sidelight [SW]	N/A	N/A	N/A	
DOUBLE	N/A	N/A	N/A	

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

# **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 foam for watertight and anti-pinch



Door filled with insulation material for heat prevention and noise insulation



# **HANDLES**

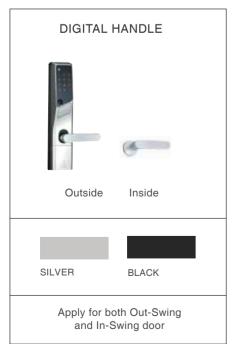




apply with In-Swing door











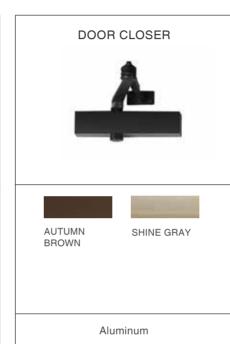
\*Handle A and F will be inside out when apply with In-Swing door only.

# **ACCESSORIES**

### **OUT-SWING DOOR**



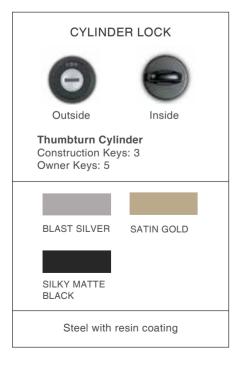




**IN-SWING DOOR** 



### **CYLINDER LOCK & KEY**





### LIXIL WINDOW SYSTEMS PRIVATE LIMITED

### **Factory & Company Showroom**

Corp. Office: Plot No. 75, Sector 8, IMT Manesar, Gurgaon, Haryana, India - 122050., Customer Care Number - 18001036855, E-mail: tostemsales.lws@lixil.com

### **Company Showroom**

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### **LIXIL Group Corporation**

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### TOSTEM Thai Co., Ltd.

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http://global.LIXIL.co.jp/e

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### **LIXIL Taiwan**

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### **Partners Network**

Ahmedabad	Bhatinda	Dehradun	Hisar	Jodhpur	Maysore	Raipur	Trivandrum
Allahabad	Bhavnagar	Delhi	Hubli	Kannur	Moradabad	Rajnandgaon	Udaipur
Amritsar	Bhubaneswar	Delhi-NCR	Hyderabad	Kanpur	Mumbai	Ranchi	Vijayawada
Bagalkot	Bilaspur	Dhule	Imphal	Kochi	Nagpur	Rudrapur	Vishkhapatnam
Banaras	Calicut	Gangtok	Jaipur	Kolhapur	Nasik	Saurashtra	Warangal
Bangalore	Chandigarh	Goa	Jalandhar	Kolkata	Nepal	Siliguri	
Baroda	Chennai	Gorakhpur	Jammu	Kota	Noida	Solan	
Belgaum	Chikamagalore	Guwahati	Jamshedpur	Lucknow	Palanpur	Surat	
Berhampur	Coimbatore	Haridwar	Jind	Ludhiana	Pune	Trichy	

