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High-performance Windows & Doors System Solution Provider



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Window System



















NS40.N



likezhou

Casement

2015-11-04 10:45:32







NOW Outward Opening Window

| | NOW 50. N Outward Opening Window | 07/08 |
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| | NOW65 Outward Opening Window | 11/12 |
| | NOW Outward Opening Window Hardware \$ | ystem |
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NOWS Outward Opening Window

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| NOWS55 Outward Opening Window | 23/24 |
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| | 25/26 |

| EOW Outward Opening Window | |
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| EOW50.N Outward Opening Window | 27/28 |
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NW Tilt & Turn Window

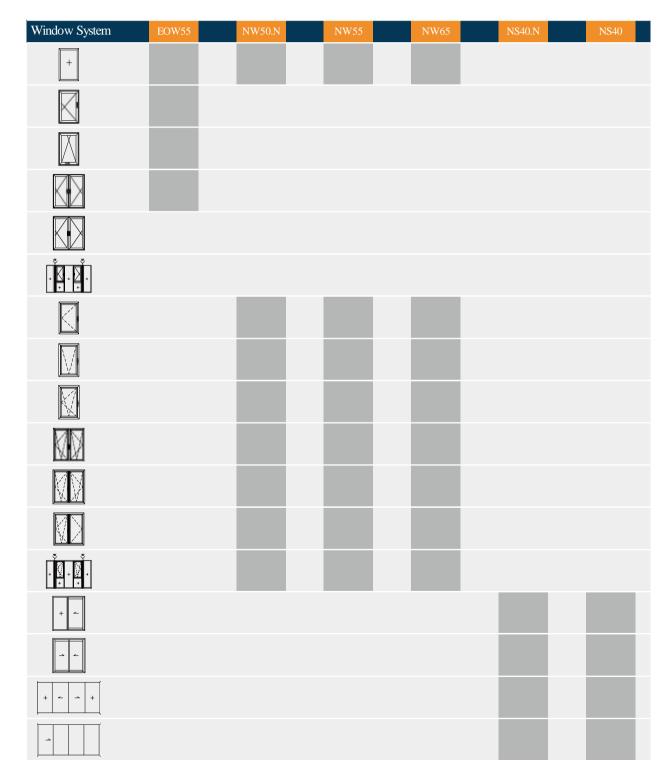
| NW50.N Tilt & Turn Window | 33/34 |
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| | |

Option of Opening

| likezhou 2015-11-04 | 0:43:52 | |
|------------------------|---------|--|
| Configurat | ion | |

| Window System | NOW50.N | NOW55 | NOW65 | NOWS50.N | NOWS55 | EOW50.N |
|---------------|---------|-------|-------|----------|--------|---------|
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NOW50.N Outward Opening Window System

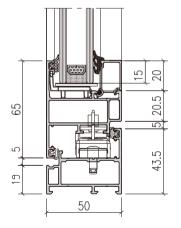


Product Profile

NOW50.N outward opening window system provides a comprehensive solution to the building. ftis product has high quality performance. Its parallel and level design of the inner and outer frames and sashs gives the building a pretty simple and pleasing look. Its simple, convenient and fast manufacturing and installation technology makes a further advantage. In addition, the unique anti-prizing design guarantees the powerful anti-theft performance and well solves the safety problems of outward opening windows. All these make the product suitable to be used in high-end projects.

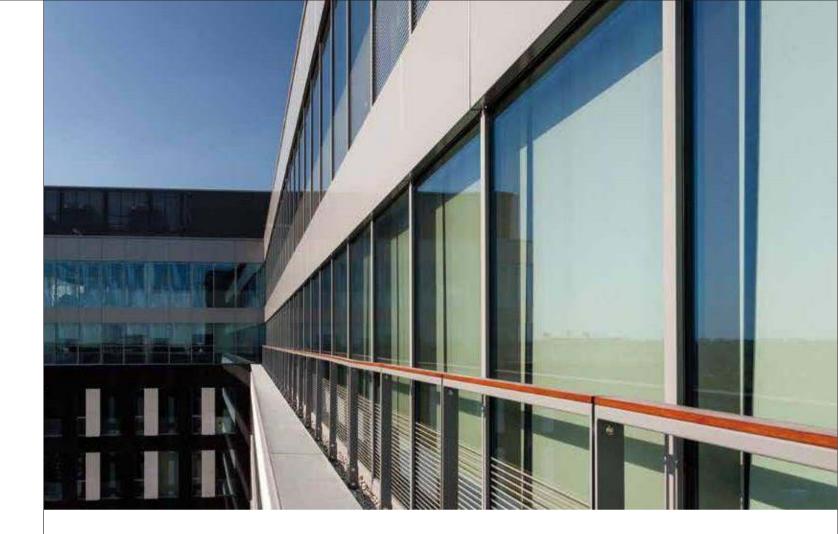
Technical Parameters

| Frame depth/mm | 50mm |
|--|-----------|
| Sash depth/mm | 50mm |
| Visible width of inner/outer frame/mm | 43.5/19mm |
| Visible width of inner/outer sash/mm | 20.5/65mm |
| Sash's clamping glass thickness range/mm | 5~29mm |



Performance

| ftermal insulation | The K value for thermal insulation can reach 3.5 W/m².k (Grade 3) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 34 dB(Grade 3) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4000 Pa (Grade 7) |



Product Features

Wider application

• Abundant configuration options to satisfy application requirements of different window patterns.

More secure for use

- Leading outward opening window hardware patented technology and the anti-falling security design;
- Unique anti-prizing design technique, in accordance with EU WK2 security level.

More convenient processing

- \bullet Mature and standard processing technique effectively improves the processing efficiency by 50%,
- Quick positioning and adjustable fast assembly of friction hinges, lock points and lock seats.

Longer service life

- \bullet Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years. Technical standard
- Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | Option of opening Height-width ratio | Hardware load bearing | Dimension range(mm) | | | | |
|------------------------------------|--------------------------------------|-----------------------|-----------------------------|-----------|------------------------|----------|-----------------------|
| Option of opening | | | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Single leaf outward opening | FH/FB≥1 | 28kg/34kg | 415~650 | 415~1700 | 460~780 | 460~1830 | 650x1200 |
| Single leaf outward hanging | FH/FB≤1 | 50kg/80kg | 415~1400 | 415~1100 | 460~1530 | 460~1230 | 1000x750 |
| Double leafs outward folio opening | FH/FB≥1 | 28kg/34kg | 415~650 | 415~1300 | 460~700 | 460~1350 | 600x1200 |

NOW55 Outward Opening Window System

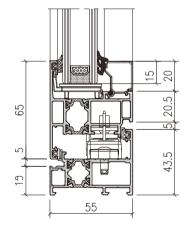


Product Profile

NOW55 outward opening window system provides a comprehensive solution to the building. ftis product has high quality performance. Its parallel and level design of the inner and outer frames and sashs gives the building a pretty simple and pleasing look. Its simple, convenient and fast manufacturing and installation technology makes a further advantage. In addition, the unique anti-prizing design guarantees the powerful anti-theft performance and well solves the safety problems of outward opening windows. All these make the product quite suitable to be used in high-end projects where the basic thermal insulation requirements are to be met.

Technical Parameters

| Frame depth/mm | 55mm |
|--|-----------|
| Sash depth/mm | 55mm |
| Visible width of inner/outer frame/mm | 43.5/19mm |
| Visible width of inner/outer sash/mm | 20.5/65mm |
| Sash's clamping glass thickness range/mm | 10~34mm |



Performance

| ftermal insulation | The K value for thermal insulation can reach $2.1~\mathrm{W/m^3.k}$ (Grade 6) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 40 dB(Grade 5) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4500 Pa (Grade 8) |



Product Features

Wider application

• Abundant configuration options to satisfy application requirements of different window patterns.

More secure for use

- Leading outward opening window hardware patented technology and the anti-falling security design;
- Unique anti-prizing design technique, in accordance with EU WK2 security level.

More convenient processing

- \bullet Mature and standard processing technique effectively improves the processing efficiency by 50%,
- \bullet Quick positioning and adjustable fast loading friction hinge and lock point and lock seat.

Longer service life

- \bullet Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years. Technical standard
- Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening | | | Dimension range(mm) | | | | | |
|------------------------------------|--------------------|--------------------------|---------------------|-----------------------|----------|------------------------|-----------------------------|--|
| | Height-width ratio | Hardware load bearing | Net dimension | mensions of sash (mm) | | Module dimensions (mm) | | |
| | | 8 | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Single leaf outward opening | FH/FB≥1 | 28kg/34kg | 415~650 | 415~1700 | 460~780 | 460~1830 | 650x1200 | |
| Single leaf outward hanging | FH/FB≤1 | 50kg/80kg | 415~1400 | 415~1100 | 460~1530 | 460~1230 | 1000x750 | |
| Double leafs outward folio opening | FH/FB≥1 | 28kg/34kg | 415~650 | 415~1300 | 460~700 | 460~1350 | 600x1200 | |

NOW65 Outward Opening Window System

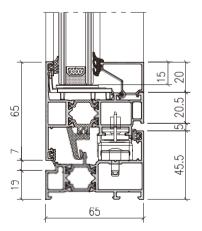


Product Profile

NOW65 outward opening window system provides a comprehensive solution to the building. This product has high quality performance. Its parallel and level design of the inner and outer frames and sashs gives the building a pretty simple and pleasing look. Its simple, convenient and fast manufacturing and installation technologies further demonstrate its advantages. In addition, the unique anti-prizing design guarantees the powerful anti-theft performance and well solves the safety problems of outward opening windows. A triple sealing is done, making the product a very suitable choice in projects where the requirements on the thermal insulation, air tightness and water tightness are relatively strict.

Technical Parameters

| Sash depth/mm | 65mm |
|--------------------------------------|-----------|
| | |
| Visible width of inner/outer sash/mm | 20.5/65mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach 1.9 W/m³.k (Grade 7) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing windows can reach 45 dB(Grade 6) (depending on the glass configuration) |
| Airtightness | The value exceeds 600 Pa (Grade 8) |
| Watertightness | The value exceeds 700 Pa (Grade 6) |
| Wind load resistance | The value can reach 5000 Pa (Grade 9) |



Product Features

Wider application

· Abundant configuration options to satisfy application requirements of different window patterns.

More secure for use

- Leading outward opening window hardware patented technology and the anti-falling security design;
- Unique anti-prizing design technique, in accordance with EU WK2 security level.

More convenient processing

- \bullet Mature and standard processing technique eRectively improves the processing efficiency by 50%,
- Quick positioning and adjustable fast assembly of the friction hinges and lock points and lock seats.
 Longer service life
- \bullet Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years. Technical standard
- Compliance with the EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening | | | Dimension range(mm) | | | | | |
|------------------------------------|--------------------|--------------------------|----------------------------------|-----------|-------------------|------------------|-----------------------------|--|
| | Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) Modu | | | Iodule dimension | dimensions (mm) | |
| | | 8 | Width FB | Height FH | Height FH Width W | Height H | Suggested dimension s | |
| Single leaf outward opening | FH/FB≥1 | 28kg/34kg | 415~650 | 415~1700 | 460~780 | 460~1830 | 650x1200 | |
| Single leaf outward hanging | FH/FB≤1 | 50kg/80kg | 415~1400 | 415~1100 | 460~1530 | 460~1230 | 1000x750 | |
| Double leafs outward folio opening | FH/FB≥1 | 28kg/34kg | 415~650 | 415~1300 | 460~700 | 460~1350 | 600x1200 | |



Hardware fast assembly design

•Mature and standard processing technique is adopted to realize the fast assembly of the C-shape hardware slots, eRectively improving the processing efficiency by 70%.

ERective anti-drop design

- •Leading outward opening window hardware patented technology and clamp-on anti-falling of steel plate security design; Ultra-high sealing performance design
- •Hinges with point-locking function are used to wrap the angles and lock the points, which enhances the locking eRects of the turning side;
- •fte strong back point-locking structure ensures 7 lock points on single window, which eRectively guarantees the sealing performance of the opening windows under the circumstances of typhoon.

Security angle and anti-falling design

- Opening windows are designed with multi-angle positioning, meeting the safety requirements of special window patterns; Security and anti-falling design
- Unique anti-prizing design technique, in accordance with EU WK2 security level.

Short torque and noise reduction design

- Transmission structure is moved inward, making the transmission fork short and the force upon the handle smaller.
- High-intensive noise reduction and transmission design.

Superior anti-corrosion design for parts

•Capable of withstanding the neutral salt spray test 240 hours longer than that of the EU standard, more suitable for coastal and harsh environments.

PRODUCTS

NOW Outward Opening Window Hardware System

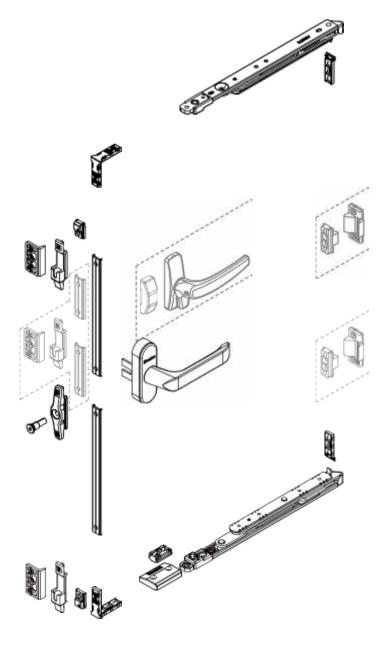
Hardware Configuration







More type of handles are available



NOW55 Outward Casement Window System

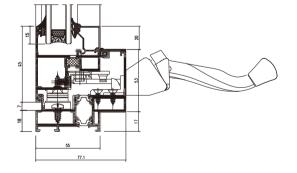


Product Profile

NOW55 Outward Casement Window System has innovative structure which gives parallel and level visual eRect of the inner and outer frames and sashes. It integrates convenient assembly hardware and is fully symbolized in modern high quality life. It product not only has all functions of ordinary casement window, but also has leisured opening mode. It can realize locking at every opening angle and free selection for lighting and ventilation.

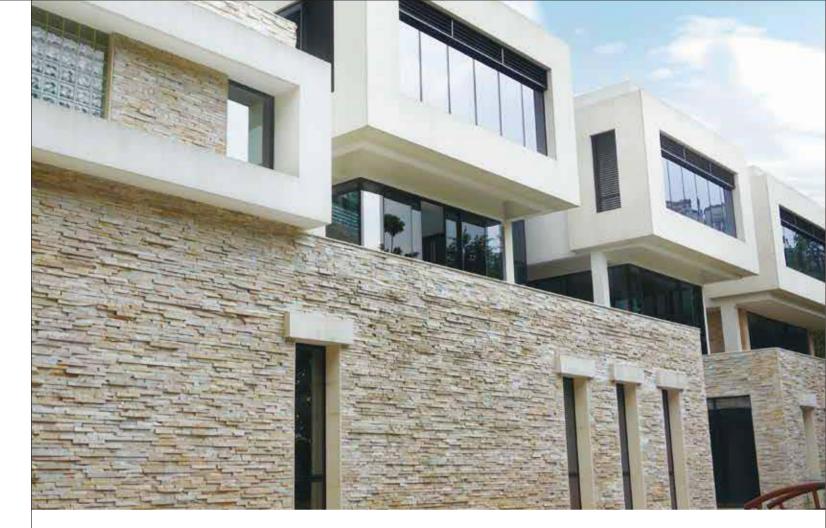
Technical Parameters

| Frame depth/mm | 55/77mm |
|------------------------------------|---------|
| Sash depth/mm | 55mm |
| Visible Width of Inner/Outer Frame | 70/18mm |
| Visible Width of Inner/Outer Sash | 20/65mm |



Performance

| ftermal insulation | The K value for thermal insulation can be up to $1.8W/m^3$.K (Grade 6) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 40dB (Grade 5) (Depending on glass configuration) |
| Air Permeability | fte value exceeds 600Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4500Pa (Grade 8) |



Product Features

More Application

- Abundant configuration options to satisfy application requirements of different window patterns
- No matter that cupboard is by the window or withstanding large sash, it can be opened smoothly.

Convenient for Collocation

 \bullet Collocated with window screen. And the visible area is simple & pleasing with excellent anti-mosquito effect. More Security

• Handle is installed on the frame. With low handle height, it can be opened by swinging the operator. Easy Assembling

• Standard assembling technique, effectively improving the assembling efficiency by 50%

Technical Standard

• Meet EU CE standard, USA ASTM standard and China GB standard.

Openable Dimension Range

| Option of opening | | | Dimension range(mm) | | | | |
|--------------------------------------|--------------------|--------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|
| | Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Single leaf outward casement opening | FH/FB≥1 | 30kg/38kg | 420~750 | 415~1700 | 470~800 | 460~1830 | 650x1200 |



Fast Assembly Design

• Standardized design of friction stay & rail, effectively improving installation efficiency

Ultra-high Sealing Performance Design

• Vertical lock structure independently guarantees the sealing performance of the windows

Security Design

• Friction stay with multi-angle positioning and excellent anti-falling function

Convenient Operation

• Force-saved swing operator design, to be operated casually.

Durability Design

- Hardware fittings are made through several layers of coating processing, with high quality coating effect and anti-corrosion function
- Compliance with AAMA904.1 standard

PRODUCTS

NOW55 Awning System

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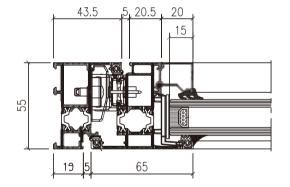
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Casement Product Profile

NOW55 awning system has leisured opening mode. It can realize locking at every opening angle and free selection for lighting and ventilation. ftis product has innovative structure which gives parallel and level visual eRect of the inner and outer frames and sashes. It's fully symbolized in modern high quality life.

Technical Parameters

| Frame depth/mm | 55/105mm |
|------------------------------------|----------|
| Sash depth/mm | 55mm |
| Visible Width of Inner/Outer Frame | 43/19mm |
| Visible Width of Inner/Outer Sash | 40/65mm |



Performance

| ftermal insulation | The K value for thermal insulation can be up to 2.1W/m².K (Grade |
|----------------------|--|
| 6 Sound proof | fte attenuation value of sound after passing windows can reach 40dB (Grade 5) (Depending on glass configuration) |
| Air tightness | fte value exceeds 600Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4500Pa (Grade 8) |



Product Features

More Application

- Applicable for window in high position, no matter the window is by the cupboard or withstanding large sash, it can be opened easily.
- Maximum opening distance is up to 300mm

More Security

• Handle is installed on the frame. With low handle height, it can be opened by swinging the operator.

Easy Assembling

- Standard assembling technique, effectively improving assembling efficiency
- Simple & practical hardware fittings, easy for installation.

Technical Standard

• Meet EU CE standard, USA ASTM standard and China GB standard.

Openable Dimension Range

| Option of opening | | | Dimension range(mm) | | | | |
|-------------------|--------------------|--------------------------|-----------------------------|-----------|----------|------------------------|-----------------------------|
| | Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) | | N | Module dimensions (mm) | |
| | | 5 5 5 5 5 5 5 | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Top hung | FH/FB≥1 | 36kg~80kg | 415~1400 | 415~1100 | 460~1500 | 460~1200 | 1000x700 |

Hardware Features

Convenient for Operation

- Force-saved swing operator design, to be operated casually.
- Adjustable opening angle with mechanism locking system
- Simple & fast installation method, force is divided effectively.

Durability Design

• The material is mostly high strength structural steel, engineering plastic and zinc alloy. Superior anti-corrosion and longer service life.

NOWS50.N Outward Opening Window System

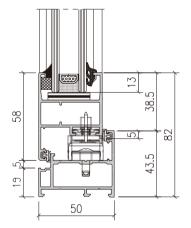


Product Profile

NOWS50.N outward opening window system provides a comprehensive solution to the building. This product has high quality performance. Its parallel and level design of the outer frame and sash gives the building a pretty simple and pleasing look. It is suitable to be used in medium- and high-end projects.

Technical Parameters

| Frame depth/mm | 50mm |
|--|---|
| Sash depth/mm | 42mm |
| Visible width of inner/outer frame/mm | 43.5/19mm |
| Visible width of inner/outer sash/mm | 43.5/58mm |
| Sash's clamping glass thickness range/mm | 22~24mm (open casement) /5-29mm (fixed casement) |



Performance

| Thermal insulation | The K value for thermal insulation can reach 3.5 W/m*,k (Grade 3) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing windows can reach 34 dB(Grade 3) (depending on the glass configuration) |
| Airtightness | The value exceeds 600 Pa (Grade 8) |
| Watertightness | The value exceeds 700 Pa (Grade 6) |
| Wind load resistance | The value can reach 4000 Pa (Grade 7) |



Product Features

Wider application

· Abundant configuration options to satisfy application requirements of different window patterns.

More secure for use

· Adopting anti-falling security safety design

More convenient processing

- \bullet Mature and standard processing technique eRectively improves the processing efficiency by 50%,
- Quick positioning and adjustable fast assembly of friction hinges, lock points and lock seats.

Longer service life

 \bullet Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | Dimension range(mm) | | | | | |
|------------------------------------|--------------------|--------------------------|-----------------------------|-----------|----------|------------------------|-----------------------------|--|
| | Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) | | M | Module dimensions (mm) | | |
| | | Ü | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Single leaf outward opening | FH/FB≥1 | 28kg/34kg | 378~600 | 378~1500 | 426~706 | 426~1606 | 600x1200 | |
| Single leaf outward hanging | FH/FB≤1 | 50kg/80kg | 378~1400 | 378~1000 | 426~1506 | 426~1106 | 1000x750 | |
| Double leafs outward folio opening | FH/FB≥1 | 28kg/34kg | 378~600 | 378~1300 | 426~648 | 426~1348 | 600x1200 | |

NOWS55 Outward Opening Window System

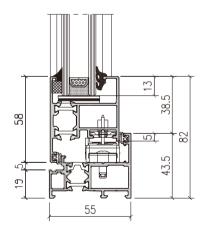


Product Profile

NOWS55 outward opening window system provides a comprehensive solution to the building. ftis product has high quality performance. Its parallel and level design of the outer frame and sash gives the building a pretty simple and pleasing look. It is suitable to be used in medium- and high-end projects where the basic thermal insulation requirements are to be met.

Technical Parameters

| Frame depth/mm | 55mm |
|--|--|
| Sash depth/mm | 46.4mm |
| Visible width of inner/outer frame/mm | 43.5/19mm |
| Visible width of inner/outer sash/mm | 43.5/58mm |
| Sash's clamping glass thickness range/mm | 22~24mm (open casement) /10~34mm (fixed casement) |



Performance

| ftermal insulation | The K value for thermal insulation can reach $2.1~\mathrm{W/m^3.k}$ (Grade 6) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 40 dB(Grade 5) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4500 Pa (Grade |
| 8) | |



Product Features

Wider application

• Abundant configuration options to satisfy application requirements of different window patterns.

More secure for use

• Adopting anti-falling security design;

More convenient processing

- Mature and standard processing technique effectively improves the processing efficiency by 50%,
- Quick positioning and adjustable fast assembly of friction hinges, lock points and lock seats.

Longer service life

- Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.
- Technical standard
- Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | Dimension range(mm) | | | | |
|-------------------------------------|--------------|--------------------------|---------------------|--|----------|----------|-----------------------------|
| Option of opening Height-widt ratio | Height-width | Hardware load bearing | Net dimension | Net dimensions of sash (mm) Module dimensi | | | s (mm) |
| | | 2 3 3 3 3 3 | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Single leaf outward opening | FH/FB≥1 | 28kg/34kg | 378~600 | 378~1500 | 426~706 | 426~1606 | 600x1200 |
| Single leaf outward hanging | FH/FB≤1 | 50kg/80kg | 378~1400 | 378~1000 | 426~1506 | 426~1106 | 1000x750 |
| Double leafs outward folio opening | FH/FB≥1 | 28kg/34kg | 378~600 | 378~1300 | 426~648 | 426~1348 | 600x1200 |



Hardware fast assembly design

•Mature and standard processing technique is adopted to realize the fast assembly of the C-shaped hardware slots, effectively improving the processing efficiency by 70%.

ERective anti-drop design

• Clamp-on anti-falling of steel plate security design;

Ultra-high sealing performance design

- •Hinges with point-locking function are used to wrap the angles and lock the points, which enhances the locking effects of the turning side:
- The strong back point-locking structure ensures 7 locking points on single window, which effectively guarantees the sealing performance of the opening windows under the circumstances of typhoon.

Security angle and anti-falling design

- Opening windows are designed with multi-angle positioning, meeting the safety requirements of special window patterns; Short torque and noise reduction design
- Transmission structure is moved inward, making the transmission fork short and the force upon the handle smaller.
- High-intensive noise reduction and transmission design.

Superior anti-corrosion design for parts

• Capable of withstanding the neutral salt spray test 240 hours longer than that of the EU standard, more suitable for coastal and harsh environments

PRODUCTS

NOWS Outward Opening Window Hardware System

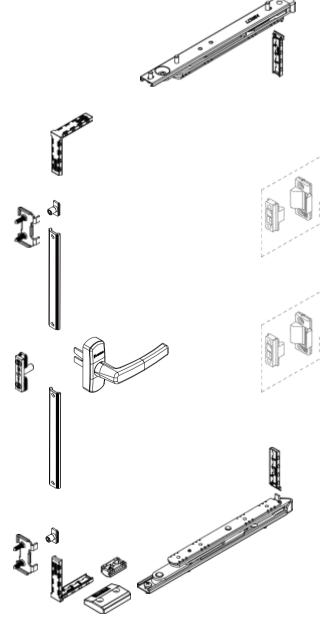
Hardware Configuration







More type of handles are available



EOW50.N Outward Opening Window System

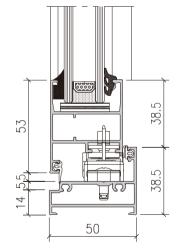


Product Profile

EOW50.N is a non-thermal insulating outward opening window system. ftrough the optimization of the structure and the processing technique, the product is highly cost-eRective and suitable to be used in medium-end projects.

Technical Parameters

| Frame depth/mm | 50mm |
|--|---|
| Sash depth/mm | 41.4mm |
| Visible width of inner/outer frame/mm | 38.5/14mm |
| Visible width of inner/outer sash/mm | 43.5/53mm |
| Sash's clamping glass thickness range/mm | 22~24mm (open casement) /5~29mm (fixed casement) |



Performance

| ftermal insulation | The K value for thermal insulation can reach 3.5 W/m^3 .k (Grade 3) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 34 dB(Grade 3) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 3600 Pa (Grade 6) |



Product Features

Wider application

• Abundant configuration options to satisfy different windows application requirements.

More secure for use

• Adopting anti-falling security design

More convenient processing

- Mature and standard processing technique effectively improves the processing efficiency by 50%,
- Quick positioning and adjustable fast loading friction hinge and lock point and lock seat.

Longer service life

• Design can be repeatedly opened up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | Dimension range(mm) | | | | |
|---|--------------------|--------------------------|-----------------------------|----------|------------------------|-----------------------------|----------|
| Option of opening Height-width ratio | Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | C | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Single leaf outward vertical hinged opening | FH/FB≥1 | 28kg/34kg | 378~600 | 378~1500 | 418~640 | 422~1544 | 650x1200 |
| Single leaf outward hanging | FH/FB≤1 | 50kg/80kg | 378~1400 | 378~1000 | 418~1440 | 422~1044 | 1000x750 |

EOW55 Outward Opening Window System

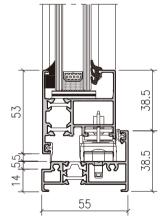


Product Profile

EOW55 is a thermal insulating outward opening window system. ftrough the optimization of the structure and the processing technique, the product is highly cost-eRective and suitable to be used in medium-end projects where the basic thermal insulation is required.

Technical Parameters

| Frame depth/mm | 55mm |
|--|--|
| Sash depth/mm | 46.4mm |
| Visible width of inner/outer frame/mm | 38.5/14mm |
| Visible width of inner/outer sash/mm | 43.5/53mm |
| Sash's clamping glass thickness range/mm | 22~24mm (open casement) /10~34mm (fixed casement) |



Performance

| ftermal insulation | The K value for thermal insulation can reach $2.1W/\text{m}^2.\text{k}$ (Grade 6) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 40 dB(Grade 5) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4300 Pa (Grade 7) |



Product Features

Wider application

• Abundant configuration options to satisfy different windows application requirements.

More secure for use

• Adopting anti-falling security design

More convenient processing

- Mature and standard processing technique effectively improves the processing efficiency by 50%,
- Quick positioning and adjustable fast assembly of friction hinges, lock points and lock seats.

Longer service life

• Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening Height-widtl ratio | | | Dimension range(mm) | | | | |
|---|--------------|--------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|
| | Height-width | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | ns (mm) |
| | rado | 8 | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Single leaf outward vertical hinged opening | FH/FB≥1 | 28kg/34kg | 378~600 | 378~1500 | 418~640 | 422~1544 | 650x1200 |
| Single leaf outwardhanging | FH/FB≤1 | 50kg/80kg | 378~1400 | 378~1000 | 418~1440 | 422~1044 | 1000x750 |



Hardware fast assembly design

•Mature and standard process is adopted to realize the fast assembly of the C-shape hardware slots, effectively improving the processing efficiency by 70%.

ERective anti-drop design

• Clamp-on anti-falling of steel plate security design;

Ultra-high sealing performance design

- •Hinges with point-locking function are used to wrap the angles and lock the points, which enhances the locking effects of the turning side;
- The strong back point-locking structure ensures 7 locking points on single window, which effectively guarantees the sealing performance of the opening windows under the circumstances of typhoon.

Security angle and anti-falling design

- Opening windows are designed with multi-angle positioning, meeting the safety requirements of special window patterns; Short torque and noise reduction design
- Transmission structure is moved inward, making the transmission fork short and the force upon the handle smaller.
- High-intensive noise reduction and transmission design.

Superior anti-corrosion design for parts

• Capable of withstanding the neutral salt spray test 240 hours longer than that of the EU standard, more suitable for coastal and harsh environments

PRODUCTS

EOW Outward Opening Window Hardware System

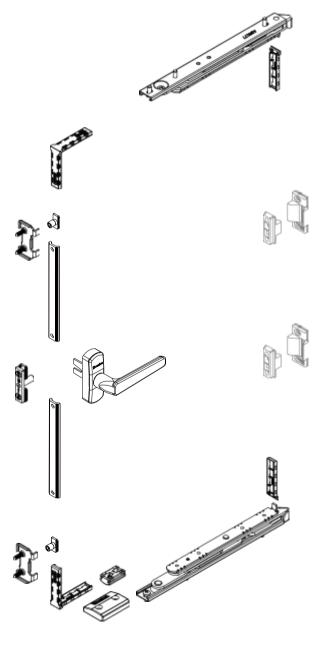
Hardware Configuration







More type of handles are available



NW50.N Tilt & Turn Window System

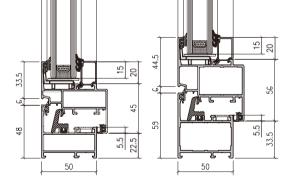


Product Profile

NW50.N tilt & turn window system provides a comprehensive solution to the building. Triple sealing is done to the product with the adhesive tape. It e middle adhesive tape gives full play to the rain screen principle, ensuring the good air tightness and water tightness of the product. It e higher hardware load bearing can ensure the opening of big modules, which will meet the partition requirements of the building more readily. Its parallel and level design of the outer frame and sash gives the building a pretty simple and pleasing look. All these make it suitable to be used in medium- and high-end projects.

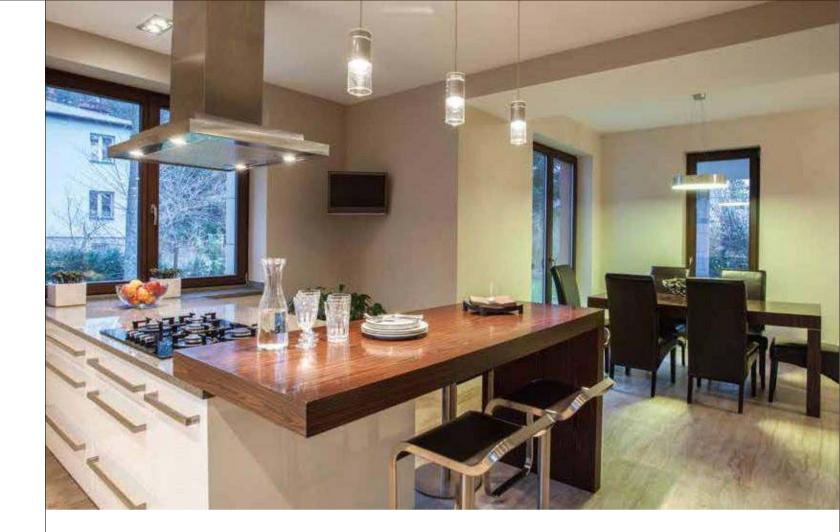
Technical Parameters

| Frame depth/mm | 50mm |
|--|-----------------------|
| Sash depth/mm | 60mm |
| Visible width of inner/outer frame/mm | 28/48mm&39/59mm |
| Visible width of inner/outer sash/mm | 45/33.5mm & 56/44.5mm |
| Sash's clamping glass thickness range/mm | 5~29mm |



Performance

| ftermal insulation | The K value for thermal insulation can reach 3.5 W/m^3 .k (Grade 3) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 35 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4000 Pa (Grade 7) |



Product Features

Excellent performance

- Water tightness level 6, air tightness level 8, the sound insulation up to 35 dB;
- Thermal insulation K-value can reach 2.1 at most.

Super anti-theft performance

• Special design for anti-prizing, in accordance with EU WK2 security level.

More convenient processing

• Mature and standard processing technique, improving the processing efficiency.

Longer service life

- Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.
- Technical standard
- Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | Dimension range(mm) | | | | |
|-----------------------------------|--------------------|--------------------------|----------------------------------|-----------|------------------|----------------------|-----------------------------|
| Option of opening | Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) Mode | | Iodule dimension | dule dimensions (mm) | |
| | 1440 | Sums | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Single leaf tilt and turn | FH/FB≥1.25 | 100kg/150kg | 350~1200 | 700~2800 | 395~1267 | 745~2867 | 750x1200 |
| Single leaf inward opening | FH/FB≥1.25 | 70kg/100kg | 350~1200 | 700~2800 | 395~1267 | 745~2867 | 750x1200 |
| Single leaf inward turning | FH/FB≤0.8 | 90kg/100kg | 700~2800 | 350~1400 | 745~2867 | 395~1467 | 1200x800 |
| Double leafs inward folio opening | FH/FB≥1.25 | 70kg/100kg | 350~1200 | 700~2100 | 375~1236 | 745~2167 | 650x1200 |

NW55 Tilt & Turn Window System

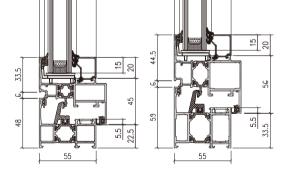


Product Profile

NW55 tilt & turn window system provides a comprehensive solution to the building. Triple sealing is done to the product with the adhesive tape. fte middle adhesive tape gives full play to the rain screen principle, ensuring the good air tightness and water tightness of the product. fte higher hardware load bearing can ensure the opening of big modules, which will meet the partition requirements of the building more readily. Its parallel and level design of the outer frame and sash gives the building a pretty simple and pleasing look. All these make it quite suitable to be used in high-end projects where basic thermal insulation requirements are to be met.

Technical Parameters

| Frame depth/mm | 55mm |
|--|-----------------------|
| Sash depth/mm | 65mm |
| Visible width of inner/outer frame/mm | 28/48mm & 39/59mm |
| Visible width of inner/outer sash/mm | 45/33.5mm & 56/44.5mm |
| Sash's clamping glass thickness range/mm | 10~34mm |



Performance

| ftermal insulation | The K value for thermal insulation can reach $2.1~\mathrm{W/m^2.k}$ (Grade 6) (depending on the glass configuration) |
|----------------------|---|
| Sound proof | fte attenuation value of sound after passing windows can reach 40 dB (Grade 5) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 4500 Pa (Grade 8) |



Product Features

Excellent performance

- Water tightness level 6, air tightness level 8, the sound insulation up to 40 dB;
- Thermal insulation K-value can reach 2.1 at most.

Super anti-theft performance

• Special design for anti-prizing, in accordance with EU WK2 security level.

More convenient processing

• Mature and standard processing technique improves the processing efficiency.

Longer service life

- Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.
- Technical standard
- Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | | Dimen | asion range(mm) | | |
|-----------------------------------|--------------------|-------------------------|---------------|----------------|-----------------|------------------------|-----------------------------|
| Option of opening Height-wiratio | Height-width ratio | Hardwareload bearing | Net dimension | s of sash (mm) | | Iodule dimensions (mm) | |
| | | ., | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Single leaf tilt and turn | FH/FB≥1.25 | 100kg/150kg | 350~1200 | 700~2800 | 395~1267 | 745~2867 | 750x1200 |
| Single leaf inward opening | FH/FB≥1.25 | 70kg/100kg | 350~1200 | 700~2800 | 395~1267 | 745~2867 | 750x1200 |
| Single leaf inward turning | FH/FB≤0.8 | 90kg/100kg | 700~2800 | 350~1400 | 745~2867 | 395~1467 | 1200x800 |
| Double leafs inward folio opening | FH/FB≥1.25 | 70kg/100kg | 350~1200 | 700~2100 | 375~1236 | 745~2167 | 650x1200 |

NW65 Tilt & Turn Window System

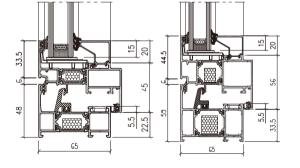


Product Profile

NW65 tilt & turn window system provides a comprehensive solution to the building. Triple sealing is done to the product with the adhesive tape. fte middle adhesive tape gives full play to the rain screen principle, ensuring the good air tightness and water tightness of the product. fte higher hardware load bearing can ensure the opening of big modules, which will meet the partition requirements of the building more readily. Its parallel and level design of the outer frame and sash gives the building a pretty simple and pleasing look. With the wide heat insulation bar containing the heat insulation cotton, the product has obvious thermal insulation eRects. All these make it quite suitable to be used in projects that require higher thermal insulation performance.

Technical Parameters

| Frame depth/mm | 65mm |
|--|-----------------------|
| Sash depth/mm | 75mm |
| Visible width of inner/outer frame/mm | 28/48mm & 39/59mm |
| Visible width of inner/outer sash/mm | 45/33.5mm & 56/44.5mm |
| Sash's clamping glass thickness range/mm | 20~44mm |



Performance

| ftermal insulation | The K value for thermal insulation can reach 1.9 W/m^2 .k. (Grade 7) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 45 dB(Grade 6) (depending on the glass configuration) |
| Air tightness | fte value exceeds 600 Pa (Grade 8) |
| Water tightness | fte value exceeds 700 Pa (Grade 6) |
| Wind load resistance | fte value can reach 5000 Pa (Grade 9) |



Product Features

Excellent performance

- Water tightness level 6, air tightness level 8 and the sound insulation up to 45 dB;
- Thermal insulation K-value can reach 1.9 at most.

Super anti-theft performance

• Special design for anti-prizing, in accordance with EU WK2 security level.

More convenient processing

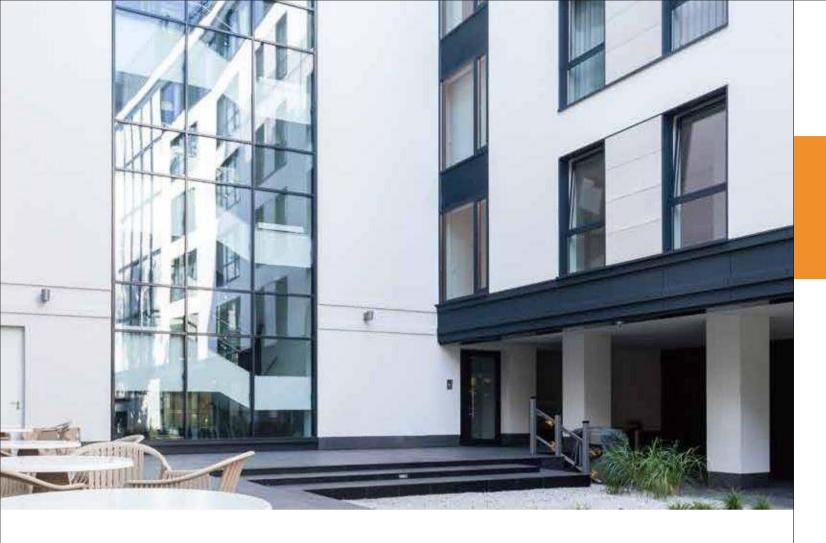
• Mature and standard processing technique improves the processing efficiency.

Longer service life

- Repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.
- Technical standard
- Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | | Dime | ension range(mm) | | | |
|-----------------------------------|--------------------|-------------------------|-----------------------------|-------------------|------------------------|-----------------------------|----------|--|
| Option of opening | Height-width ratio | Hardwareload bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | | |
| | Italio | Coming | Width FB | Height FH Width W | Height H | Suggested dimension s | | |
| Single leaf tilt and turn | FH/FB≥1.25 | 100kg/150kg | 350~1200 | 700~2800 | 395~1267 | 745~2867 | 750x1200 | |
| Single leaf inward opening | FH/FB≥1.25 | 70kg/100kg | 350~1200 | 700~2800 | 395~1267 | 745~2867 | 750x1200 | |
| Single leaf inward turning | FH/FB≤0.8 | 90kg/100kg | 700~2800 | 350~1400 | 745~2867 | 395~1467 | 1200x800 | |
| Double leafs inward folio opening | FH/FB≥1.25 | 70kg/100kg | 350~1200 | 700~2100 | 375~1236 | 745~2167 | 650x1200 | |



Hardware fast assembly design

•Mature and standard processing technique is adopted to realize the fast installation of the C-shape hardware slots, effectively improving the processing efficiency by 70%.

Universal standard slots

• The hardware slots follow the European standard V.01. basic sizes, fully taking advantage of the standard resources efficiently at a low cost to get manufactured. ftey have high universality.

Convenient installation design

- Mature and standard installation technique effectively improves the installation efficiency by 50%.
- $\bullet \ \text{Accessory tools and installation tools are equipped, quickening the positioning of lock points and lock seats. } \\$

Ultra-high sealing performance design

 $\bullet \ \, \text{The strong point-locking structure is used to } \ \, \text{make all the four sides of the sash locked uniformly}. \\$

Safety and anti-prizing design

•Leading inward opening hardware patented technology and unique anti-prizing design technique are used, which is in accordance with EU WK2 security level.

Superior anti-corrosion design for parts

• Capable of withstanding the neutral salt spray test 240 hours longer than that of the EU standard, more suitable for coastal and harsh environments.

PRODUCTS

NW Tilt & Turn Window Hardware System

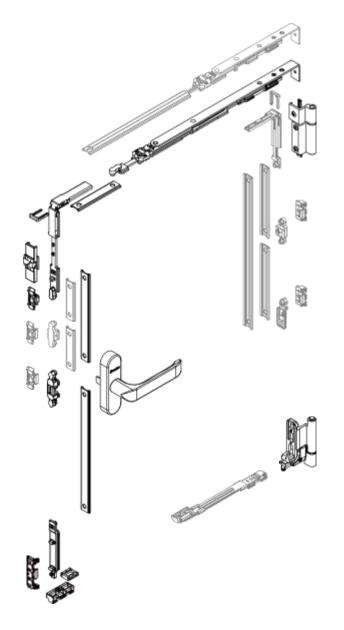
Hardware Configuration







More type of handles are available



NS40.N Sliding Window System

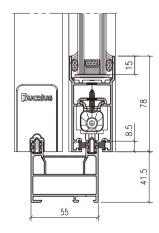


Product Profile

NS40.N sliding window system is an ideal solution for indoor or areas with no additional requirements for thermal insulation. Its compact look makes the sliding window save the indoor and outdoor room to the limit. It is compatible with the side hinged door and window system to meet diverse demands. ftis system is moderate in price and combines advanced technology with beauty and simplicity.

Technical Parameters

| Frame depth/mm | 55/100mm |
|--|---|
| Sash depth/mm | 38mm |
| Visible width of inner/outer frame/mm | 28/50mm&50/50mm |
| Visible width of inner/outer sash/mm | 45/45mm(vertical frame)&78/78mm(horizontal frame) |
| Sash's clamping glass thickness range/mm | 16~24mm |



Performance

| ftermal insulation | The K value for thermal insulation can reach $4.0~\mathrm{W/m}^3.\mathrm{k}$ (Grade 2) (depending on the glass configuration) |
|----------------------|---|
| Sound proof | fte attenuation value of sound after passing windows can reach 32 dB(Grade 3) (depending on the glassconfiguration) |
| Air tightness | fte value can reach 400 Pa (Grade 4) |
| Water tightness | fte value can reach 300 Pa (Grade 3) |
| Wind load resistance | fte value can reach 4000 Pa (Grade 7) |



Product Features

Superior security design

• Hidden anti-prizing lock point and lock seat design, more secure for use.

More convenient assembly

• Standard slot design, quick installation of hardware and accessories effectively improve the processing efficiency by 30%.

Larger window leaf bearing

• Equipped with large bearing pulley block and achieving up to 160 kg window application.

Longer service life

 \bullet Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance and repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening Height-width ratio | | | | | | | |
|--------------------------------------|--------------------------|-----------------------------|----------|-----------|------------------------|----------|-----------------------------|
| | Hardware load bearing | Net dimensions of sash (mm) | | M | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Sliding | FH/FB<2.5 | 80kg/160kg | <1180 | <1700 | <1200 | <1800 | 650x1200 |

NS40 Sliding Window System

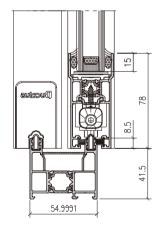


Product Profile

NS40 sliding window system is an ideal solution for indoor or areas with no additional requirements for thermal shelter. Its compact look makes the sliding window save the indoor and outdoor room to the limit. It is compatible with the side hinged door and window system to meet diverse demands. ftis system is moderate in price and combines advanced technology with beauty and simplicity.

Technical Parameters

| Frame depth/mm | 55/100mm |
|--|---|
| Sash depth/mm | 38mm |
| Visible width of inner/outer frame/mm | 28/50mm&50/50mm |
| Visible width of inner/outer sash/mm | 45/45mm(vertical frame) &78/78mm(horizontal frame) |
| Sash's clamping glass thickness range/mm | 16~24mm |



Performance

| ftermal insulation | The K value for thermal insulation can reach $3.0W/\ \mathrm{m}^2$.k (Grade 4) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | fte attenuation value of sound after passing windows can reach 35 dB(Grade 3) (depending on the glass configuration) |
| Air tightness | fte value can reach 400 Pa (Grade 4) |
| Water tightness | fte value can reach 300 Pa (Grade 3) |
| Wind load resistance | fte value can reach 4000 Pa (Grade 7) |



Product Features

Superior security design

• Hidden anti-prizing lock point and lock seat design, more secure for use.

More convenient assembly

• Standard slot design, quick installation of hardware and accessories effectively improve the processing efficiency by 30%.

Larger window leaf bearing

• Equipped with large bearing pulley block and achieving up to 160 kg window application.

Longer service life

 \bullet Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance and repeated opening design up to 50,000 times (GB 10,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | Dimension range(mm) | | | | | |
|-------------------|--------------------|---------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|
| Option of opening | Height-width ratio | | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Sliding | FH/FB<2.5 | 80kg/160kg | <1180 | <1700 | <1200 | <1800 | 650x1200 |

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Hardware fast installation design

•Mature and standard processing technique is adopted to realize the fast installation of the C-shape hardware slots, effectively improving the processing efficiency by 70%.

Convenient installation design

- $\bullet \ \ \text{Mature and standard installing technique effectively improves the installing efficiency by 50\%. } \\$
- It is equipped with auxiliary tools and installation tools, quickly positioning lock points and lock seats.

Security design

• The leaf frame blocks, the frame seal kit and the security blocks ensure the sealing and increase the safety as well.

Hidden lock seat

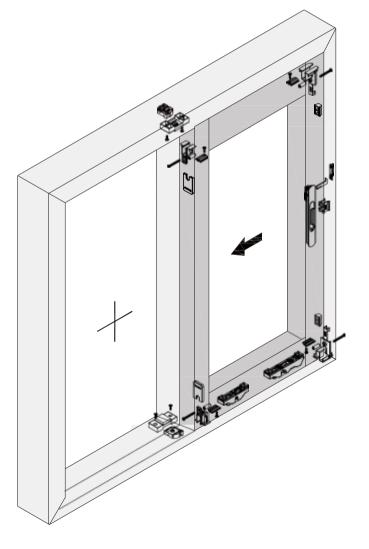
- The notch of the frame is positioned to install. The positioning is of high precision and the lock seat is hidden to avoid knocking. Anti-corrosion design for parts
- Capable of withstanding the neutral salt spray test 72 hours longer than that of the GB standard, suitable for coastal and harsh environments.

PRODUCTS

NS40/NS40.N Sliding Window Hardware System

Hardware Configuration

1A + •



Door System









NS40.N.D









NS40.D









NFD70



| 51/52 |
|-------|
| 53/54 |
| 55/56 |
| 57/58 |
| |

| NS Sliding Door | |
|-------------------------------------|-------------|
| NS55.N Sliding Door | 59/60 |
| NS55 Sliding Door | 61/62 |
| NS55/NS55.N Sliding Door Hardware S | System |
| | 63/64 |
| NS40.N.D sliding door | 65/66 |
| NS40.D Sliding Door | 67/68 |
| NS40.D/NS40.N.D Sliding Door Hardw | vare System |
| | 69/70 |
| NS46 Slim Sliding Door System | 71/72 |

NS Lift & Slide Door

| NS65.N Lift & Slide Door | 73/74 |
|-----------------------------------|-------|
| NS65 Lift & Slide Door | 75/76 |
| NS55.N-300 Lift & Slide Door | 77/78 |
| NS55-300 Lift & Slide Door | 79/80 |
| NS Lift & Slide Door Hardware Sys | tem |
| | 81/82 |

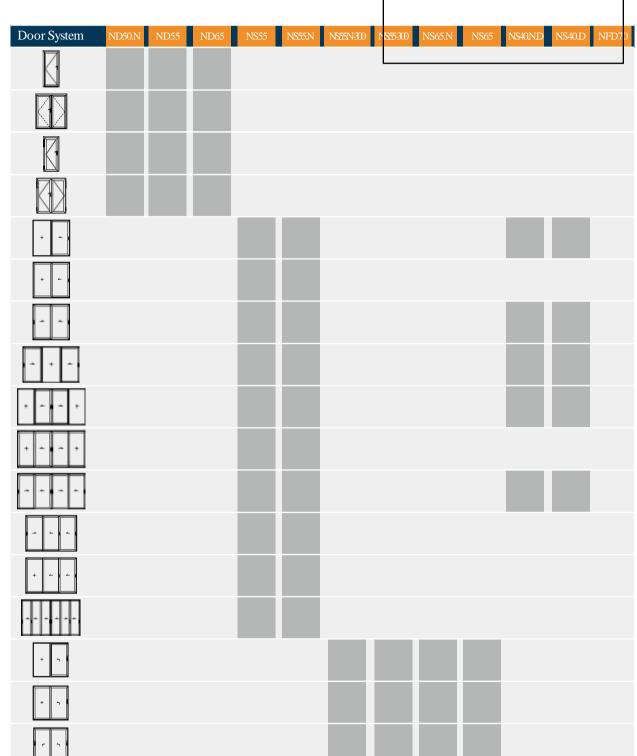
NFD Folding Door

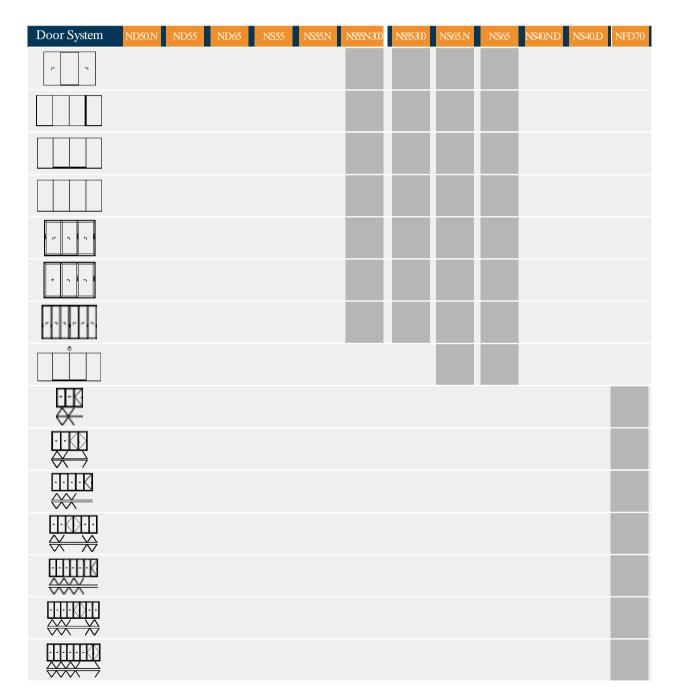
NFD70 Folding Door 83/84 NFD70 Folding Door Hardware System

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|---------------------|-------|--|
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Bi-Folding







ND50.N Side Hinged Door System

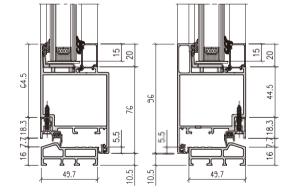


Product Profile

ND50.N Side hinged door system is suitable to be used in areas where no thermal insulation is required. The system is mature and stable. It has superior anti-theft performance, flexible compatibility with door systems and simple processing technique. Its hinge is three-dimensionally adjustable and easy to install. After the installation, fine tuning can be made on the hinge directly to ensure the installation precision.

Technical Parameters

| Frame depth/mm | 50mm |
|--|-----------------------|
| Sash depth/mm | 60mm |
| Visible width of inner/outer frame/mm | 49/69mm & 69/49mm |
| Visible width of inner/outer sash/mm | 76/64.5mm & 44.5/96mm |
| Sash's clamping glass thickness range/mm | 5~29mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach 3.5 W/m^2 .k (Grade 3) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 35 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | The value can reach 600 Pa (Grade 6) |
| Water tightness | The value can reach 300 Pa (Grade 3)/ High doorsill 700 Pa (Grade 6) |
| Wind load resistance | The value can reach 5000 Pa (Grade 9) |



Product Features

Full system compatibility

• Realizing the perfect integration with other Bucalus products.

Excellent performance

• Barrier-free doorsill design. With high doorsill structure adopted, the water tightness value of the door can be up to 700 Pa, solving the water tightness problem of the outer door.

Superior security design

• Unique lock point and lock seat design, in accordance with EU WK2 security level.

Longer service life

• Integrated design, hardware and profile perfect matching with high precision, repeated opening up to 120, 000 times (GB 100,000 times), in accordance with lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening | Height-width ratio | Hardware load bearing | Dimension range(mm) | | | | | |
|---------------------------------|-----------------------|--------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|--|
| | | | Net dimensions of sash (mm) | | Module dimensions (mm) | | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Single leaf side-hinged opening | FH/FB≥2.0 | 100kg/120kg | <1000 | <2500 | <1050 | <2550 | 850x2300 | |
| Double leafs folio opening | FH/FB≥2.0 single leaf | 100kg/120kg | <1000 | <2500 | <1050 | <2550 | 850x2300 | |

ND55 Side Hinged Door System

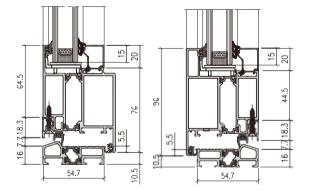


Product Profile

ND55 Side hinged door system is mature and stable. It has superior anti-theft performance, flexible compatibility with door systems and simple processing technique. Its hinge is three-dimensional adjustable and easy to install. After the installation, fine tuning can be made on the hinge directly to ensure the installation precision. All these make the product quite suitable for project applications that have basic requirements on thermal insulation.

Technical Parameters

| Frame depth/mm | 55mm |
|--|-----------------------|
| Sash depth/mm | 65mm |
| Visible width of inner/outer frame/mm | 49/69mm & 69/49mm |
| Visible width of inner/outer sash/mm | 76/64.5mm & 44.5/96mm |
| Sash's clamping glass thickness range/mm | 10~34mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach 2.1 W/m^3 .k. (Grade 6) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 38 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | The value exceeds 600 Pa (Grade 6) |
| Water tightness | The value can reach 300 Pa (Grade 3)/ High doorsill 700 Pa (Grade 6) |
| Wind load resistance | The value can reach 5000 Pa (Grade 9) |



Product Features

Full system compatibility

• Realizing the perfect integration with other Bucalus products.

Excellent performance

• Barrier-free doorsill design. With high doorsill structure adopted, the water tightness value of the door can be up to 700 Pa, solving the water tightness problem of the outer door.

Superior security design

• Unique lock point and lock seat design, in accordance with EU WK2 security level.

Longer service life

• Integrated design, hardware and profile perfect matching with high precision, repeated opening up to 120, 000 times (GB 100,000 times), in accordance with lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening | Height-width ratio | Hardwareload bearing | Dimension range(mm) | | | | |
|---------------------------------|-----------------------|-------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|
| | | | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Single leaf side-hinged opening | FH/FB≥2.0 | 100kg/120kg | <1000 | <2500 | <1050 | <2550 | 850x2300 |
| Double leafs folio opening | FH/FB≥2.0 single leaf | 100kg/120kg | <1000 | <2500 | <1050 | <2550 | 850x2300 |

ND65 Side Hinged Door System

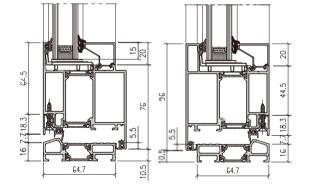


Product Profile

ND65 Side hinged door system is mature and stable. It has superior anti-theft performance, flexible compatibility with door systems and simple processing technique. Its hinge is three-dimensional adjustable and easy to install. After the installation, fine tuning can be made on the hinge directly to ensure the installation precision. All these make the product quite suitable for project applications that have higher requirements on thermal insulation.

Technical Parameters

| Frame depth/mm | 65mm |
|--|-----------------------|
| Sash depth/mm | 75mm |
| Visible width of inner/outer frame/mm | 49/69mm & 69/49mm |
| Visible width of inner/outer sash/mm | 76/64.5mm & 44.5/96mm |
| Sash's clamping glass thickness range/mm | 20~44mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach 1.9 W/m^3 .k. (Grade 7) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 42 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | The value can reach 600 Pa (Grade 6) |
| Water tightness | The value can reach 300 Pa (Grade 3)/ High doorsill 700Pa (Grade 6) |
| Wind load resistance | The value can reach 5000 Pa (Grade 9) |



Product Features

Full system compatibility

• Realizing the perfect integration with other Bucalus products.

Excellent performance

• Barrier-free doorsill design. With high doorsill structure adopted, the water tightness value of the door can be up to 700 Pa, solving the water tightness problem of the outer door.

Superior security design

• Unique lock point and lock seat design, in accordance with EU WK2 security level.

Longer service life

• Integrated design, hardware and profile perfect matching with high precision, repeated opening up to 120, 000 times (GB 100,000 times), in accordance with lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening | | Hardware load bearing | Dimension range(mm) | | | | | |
|---------------------------------|-----------------------|--------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|--|
| | | | Net dimensions of sash (mm) | | Module dimensions (mm) | | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Single leaf side-hinged opening | FH/FB≥2.0 | 100kg/120kg | <1000 | <2500 | <1050 | <2550 | 850x2300 | |
| Double leafs folio opening | FH/FB≥2.0 single leaf | 100kg/120kg | <1000 | <2500 | <1050 | <2550 | 850x2300 | |

 \sim 55



Hardware fast assembly design

•Mature and standard processing technique is adopted to realize the fast installation of the C-shape hardware slots, effectively improving the processing efficiency by 70%.

Universal standard slots

•The hardware slots follow the European standard V.01. basic sizes, fully taking advantage of the standard resources efficiently at a low cost to get manufactured. They have high universality.

Convenient installation design

- With mature and standard installation technology, effectively improving the installation efficiency by 50%.
- •Three-dimensional adjustable columnar hinge with double clamping C-shape slots facilitates the quick positioning of lock points and lock seats.

Folio locking design

• Both leafs being able to be locked independently, side leaf middle driver, and hidden transmission structure.

Security and anti-prizing design

•Leading side hinged door hardware patented technology and unique anti-prizing design technique are used, which is in accordance with EU WK2 security level.

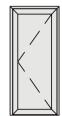
Superior anti-corrosion design for parts

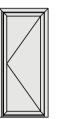
•Capable of withstanding the neutral salt spray test 240 hours longer than that of the EU standard, more suitable for coastal and

PRODUCTS

ND Side Hinged Door Hardware System

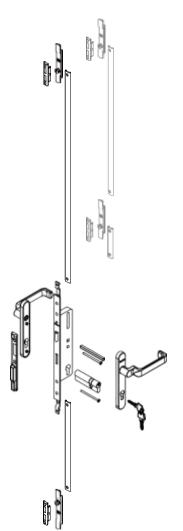
Hardware Configuration

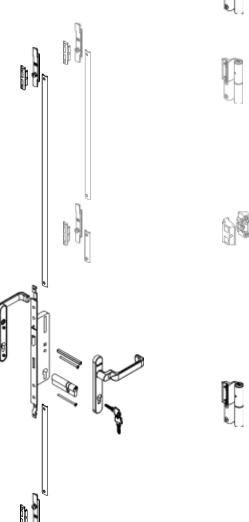






More type of handles are available





NS55.N Sliding Door System

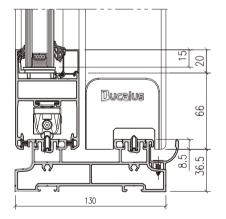


Product Profile

NS55.N sliding door system has single rail, double rail and triple rail frames for choosing. The design provides various sliding opening modes. The small bottom sill plan of the system makes it convenient for going in and out of the building. Various beautiful and reliable sliding reinforcement designs make the wind load resistance value reach Class 7.

Technical Parameters

| Frame depth/mm | 130/205mm |
|--|-----------|
| Sash depth/mm | 55mm |
| Visible width of inner/outer frame/mm | 28/47.5mm |
| Visible width of inner/outer sash/mm | 66/86mm |
| Sash's clamping glass thickness range/mm | 10~34mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach 3.5 W/\dot{m} .k (Grade 3) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 31 dB(Grade 3) (depending on the glass configuration) |
| Air tightness | The value can reach 400 Pa (Grade 4) |
| Water tightness | The value can reach 300 Pa (Grade 3) |
| Wind load resistance | The value can reach 4000Pa (Grade 7) |



Product Features

Superior security design

•Hidden anti-prizing lock point and lock seat design, more secure for use.

More convenient assembly

 $\bullet \mbox{Quick design, hardware and accessories quick installation effectively improve the processing efficiency by 50\%. \\$

Longer service life

•Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance and repeated opening design up

to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

•Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening Height-width ratio | | Dimension range(mm) | | | | | |
|--------------------------------------|--------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|----------|
| | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | | |
| | | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Sliding | FH/FB<2.5 | 80kg/160kg | <1180 | <2900 | <1200 | <3000 | 900x2300 |

NS55 Sliding Door System

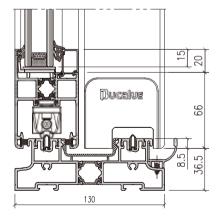


Product Profile

NS55 sliding door system has single rail, double rails and triple rails frames available for selection The design provides various sliding opening modes. The small bottom sill plan of the system makes it convenient for going in and out of the building. Various beautiful and reliable sliding reinforcement designs make the wind load resistance value reach Class 7. It is suitable for the high-end projects that basic thermal insulation requirements are to be met.

Technical Parameters

| Frame depth/mm | 130/205mm |
|--|-----------|
| Sash depth/mm | 55mm |
| Visible width of inner/outer frame/mm | 28/47.5mm |
| Visible width of inner/outer sash/mm | 66/86mm |
| Sash's clamping glass thickness range/mm | 10~34mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach 2.5 $W/m^3.k$ (Grade 5) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 35 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | The value can reach 400 Pa (Grade 4) |
| Water tightness | The value can reach 300 Pa (Grade 3) |
| Wind load resistance | The value can reach 4000Pa (Grade 7) |



Product Features

Superior security design

•Hidden anti-prizing lock point and lock seat design, more secure for use.

More convenient assembly

 $\bullet \mbox{Quick design, hardware and accessories quick installation effectively improve the processing efficiency by 50\%. \\$

Longer service life

•Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance and repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | Dimension range(mm) | | | | |
|-------------------|---|-----------------------|-----------------------------|-----------|------------------------|----------|----------------------|
| Option of opening | Option of opening Height-width Harratio | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimensions |
| Sliding | FH/FB<2.5 | 80kg/160kg | <1180 | <2900 | <1200 | <3000 | 900x2300 |



Hardware fast assembly design

•Mature and standard processing technique is adopted to realize the fast assembly of the C-shape hardware slots, effectively improving the processing efficiency by 70%.

Convenient installation design

- $\bullet \ \ \text{Mature and standard installing technique effectively improves the installing efficiency by 50\%. } \\$
- $\bullet \ \, \text{It is equipped with auxiliary tools and installation tools, quickly positioning lock points and lock seats. } \\$

Security design

- \bullet The leaf frame blocks, the frame seal kit and the security blocks ensure the sealing and increase the safety as well.
- Patented locking technology can set multiple lock points according to the door height. Easy operation makes the locking more reliable and secure.

Hidden lock bracket

• Hidden lock point design makes it safer in use. It is beautiful in appearance and reliable in locking.

Superior anti-corrosion design for parts

•Capable of withstanding the neutral salt spray test 240 hours longer than that of the EU standard, more suitable for coastal and harsh environments.

PRODUCTS

NS55/NS55.N Sliding Door Hardware System

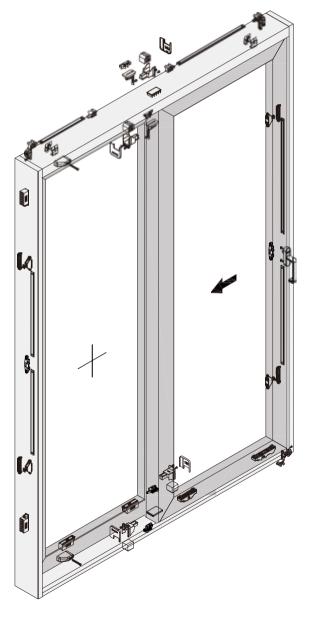
Hardware Configuration

2A/1 + **←**

(2A/1, 2A)



More type of handles are available



NS40.N.D Sliding Door System

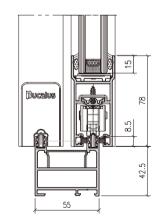


Product Profile

NS40.N.D sliding door system is an ideal solution for indoor or areas with no additional requirements for thermal Insulation. The frame is compatible with the side hinged door and window system to meet diverse demands. This system is moderate in price and combines advanced technology with beauty and simplicity.

Technical Parameters

| Frame depth/mm | 55mm&100mm |
|--|--|
| Sash depth/mm | 38mm |
| Visible width of inner/outer frame/mm | 51/29mm&51/51mm |
| Visible width of inner/outer sash/mm | 55/55mm (vertical frame) &78/78mm (horizontal frame) |
| Sash's clamping glass thickness range/mm | 16-24mm (open casement)/ 16-34 (fixed casement) |



Performance

| Thermal insulation | The K value for thermal insulation can reach 4.0W/m,k (Class 2) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 32 dB(Class 3) (depending on the glass configuration) |
| Air tightness | The value can reach 400 Pa (Class 4) |
| Watertightness | The value can reach 300 Pa (Class 3) |
| Wind load resistance | The value can reach 4000 Pa (Class 7) |



Product Features

Superior security design

• Multi-point lock design and anti-misoperation design, more secure for use.

More convenient assembly

• Standard C-shape slot transmission, quick installation of hardware and accessories effectively improve the processing efficiency by 30%.

Larger window load bearing

• Equipped with large bearing pulley block and achieving up to 160 kg door application.

Longer service life

•Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance and repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening Height-width ratio | | Dimension range(mm) | | | | | |
|--------------------------------------|-----------|-----------------------|-----------------------------|---------|------------------------|-----------------------------|----------|
| | | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Sliding | FH/FB<2.5 | 80kg/160kg | <1180 | <2400 | <1200 | <2500 | 900x2300 |

NS40.D Sliding Door System

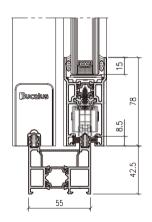


Product Profile

NS40.D sliding door system is an ideal solution for indoor or areas with no additional requirements for thermal insulation. Its compact look makes the sliding door save the inside and outside room to the limit. It is compatible with the side hinged door and window system to meet diverse demands. This system is moderate in price and combines advanced technology with beauty and simplicity.

Technical Parameters

| Frame depth/mm | 55mm&100mm |
|--------------------------------------|--|
| Sash depth/mm | 38mm |
| | |
| Visible width of inner/outer sash/mm | 55/55mm (vertical frame) &78/78mm (horizontal frame) |
| | 16-24mm (open casement)/ 16-34 (fixed casement |



Performance

| Thermal insulation | The K value for thermal insulation can reach 3.0W/m³,k (Class 4) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 35 dB(Class 3) (depending on the glass configuration) |
| Air tightness | The value can reach 400 Pa (Class 4) |
| Watertightness | The value can reach 300 Pa (Class 3) |
| Wind load resistance | The value can reach 4000 Pa (Class 7) |



Product Features

Superior security design

• Multi-points lock design and anti-misoperation design, more secure for use.

More convenient assembly

• Standard C-shape slot transmission, quick operation of hardware and accessories effectively improve the processing efficiency by 30%.

Larger window load bearing

• Equipped with large bearing pulley block and achieving up to 160 kg door application.

Longer service life

- $\bullet \ Replaceable \ high-quality \ stainless \ steel \ rails, higher \ strength, \ longer \ life, \ smaller \ motion \ resistance$
- Repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 year.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard

Openable Dimension Range

| | | Hardware load bearing | Dimension range(mm) | | | | |
|-------------------|--------------------------------------|--------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|
| Option of opening | Option of opening Height-width ratio | | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Sliding | FH/FB<2.5 | 80kg/160kg | <1180 | <2400 | <1200 | <2500 | 900x2300 |



Hardware fast assembly design

•Mature and standard processing technique is adopted to realize the fast assembly of the C-shaped hardware slots, effectively improving the processing efficiency by 70%.

Convenient installation design

• Mature and standard installing technique effectively improves the installing efficiency by 50%.

Security design

- The leaf frame blocks, the frame seal kit and the security blocks ensure the sealing and increase the safety performance as well.
- Patented locking technology can set multiple lock points, making it more reliable. With an anti-misoperation design, making it

Hidden lock bracket

• Hidden lock point design makes it safer in use. It is beautiful in appearance and reliable in locking.

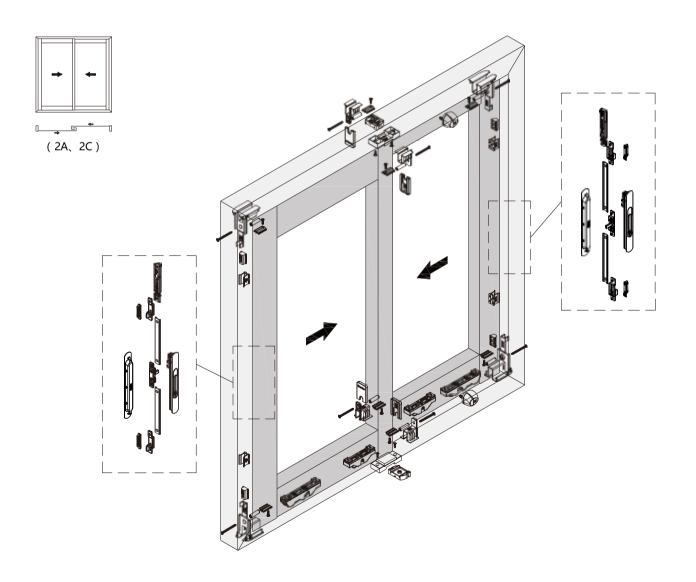
Anti-corrosion design for parts

•Capable of withstanding the neutral salt spray test 72 hours longer than that of the GB standard, suitable for coastal and harsh environments.

PRODUCTS

NS40.N.D/NS40.D Sliding Door Hardware System

Hardware Configuration



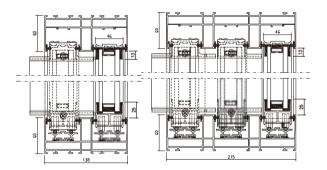
NS46 Slim Sliding Door System

Product Profile

NS46 slim sliding door system has excellent thermal insulation and more transparent and comfortable. It brings adequate sunlight in the room and attractive external view. Slender profile face width, frameless and super large sash width makes impressive panoramic sight view. It's the best solution to enjoy the external view.

Technical Parameters

| Frame depth/mm | 138mm |
|------------------------------------|---------|
| Sash depth/mm | 46mm |
| Visible Width of Inner/Outer Frame | 60mm |
| Visible Width of Inner/Outer Sash | 13/25mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach $1.6W/m^2$.K (Grade 7) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing windows can reach 35dB (Grade 4) (Depending on glass configuration) |
| Air tightness | The value exceeds 400Pa (Grade 4) |
| Water tightness | The value exceeds 400 Pa (Grade 4) |
| Wind load resistance | The value can reach 3000Pa (Grade 5) |

Openable Dimension Range

| | Option of opening Height-width ratio | Hardware load bearing | Dimension range(mm) | | | | | |
|--------------------------------------|--------------------------------------|--------------------------|-----------------------------|-----------|------------------------|----------|-----------------------------|--|
| Option of opening | | | Net dimensions of sash (mm) | | Module dimensions (mm) | | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Single leaf outward casement opening | FH/FB≥1 | 30kg/38kg | 420~750 | 415~1700 | 470~800 | 460~1830 | 650x1200 | |



Product Features

Innovative Design

•New frameless profile-integrated driver and locking system

•Innovative rail design with roller fitted into the track, withstanding large loading and easier for people to go in and out.

High Thermal Insulation

•Visible frame-sash ratio is small, making maximum thermal insulation

Fabulous sight view

•Large cave opening, large load bearing and three-sided concealed door leaf, it guarantees fabulous sight view of curtain wall in great extent

Technical Standard

•Meet EU CE standard, USA ASTM standard and China GB standard.

Hardware Features

Fast Assembly Design

• Standardized design of friction stay & rail, effectively improving installation efficiency

Ultra-high Sealing Performance Design

• Vertical lock structure independently guarantees the sealing performance of the windows Security Design

- Friction stay with multi-angle positioning and excellent anti-falling function Convenient Operation
- Force-saved swing operator design, to be operated casually.

Durability Design

- \bullet Hardware fittings are made through several layers of coating processing, with high quality coating effect and anti-corrosion function
- Certificated and compliance with AAMA904.1 standard

NS65.N Lift & Slide Door System

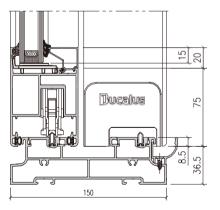


Product Profile

S65.N lift and slide door system has diverse opening modes, with single rail frame, double rail frame and triple rail frame available. The barrier-free design of the low doorsill makes it easier for people to go in and out. Due to the joint efforts of the good air tightness, water tightness and sound insulation performance and the beautiful and stable reinforcement design, this product is applicable to extreme weather conditions where typhoons occur frequently. Its unique corner design with no stand columns gives the product a super-wide viewing angle, which makes the product the best choice for viewing platforms in high-end projects.

Technical Parameters

| Frame depth/mm | 150/235mm |
|--|-----------|
| Sash depth/mm | 65mm |
| Visible width of inner/outer frame/mm | 28/47.5mm |
| Visible width of inner/outer sash/mm | 75/95mm |
| Sash's clamping glass thickness range/mm | 20~44mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach $3.5~\mathrm{W/m}^3.\mathrm{k}$ (Grade 3) (depending on the glass configuration) |
|----------------------|---|
| Sound proof | The attenuation value of sound after passing doors can reach 35 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | The value exceeds 600Pa (Grade 8) |
| Water tightness | The value can reach 600 Pa (Grade 5) |
| Wind load resistance | The value can reach 5000 Pa (Grade 9) |



Product Features

Multifunctional door leaf application

- Meeting the large application demand of up to 400 kg on single leaf
- Providing electric and manual opening modes
- $\bullet \ Providing \ diverse \ application \ choices: single \ rail, \ double \ rail, \ triple \ rail \ and \ 90^{\circ}corner \ with \ no \ stand \ column.$

Excellent whole door performance

• Unique special sealing design; water tightness level 5; air tightness level 8.

Human-centered design

 $\bullet \ With \ the \ Bucalus \ proprietary \ lifting \ and \ assisting \ hardware \ mechanism, \ the \ operating \ force \ upon \ the \ handle \ can be \ reduced \ by \ 40\%.$

Longer service life

- Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance
- \bullet Repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | Dimension range(mm) | | | | |
|-------------------|--------------------------------------|-----------------------|-----------------------------|-----------|------------------------|-----------|----------------------|
| Option of opening | Option of opening Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimensions |
| Lift and slide | FH/FB<2.5 | 300kg/400kg | 720~2500 | 1800~3300 | 750~2530 | 1900~3400 | 1800x2300 |

NS65 Lift & Slide Door System

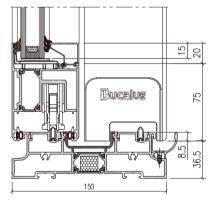


Product Profile

NS65 lift and slide door system has diverse opening modes, with single rail frame, double rail frame and triple rail frame available. The barrier-free design of the low doorsill makes it easier for people to go in and out. Due to the joint efforts of the good air tightness, water tightness and sound insulation performance and the beautiful and stable reinforcement design, this product is applicable to extreme weather conditions where typhoons occur frequently. With the wide heat insulation bar containing the heat insulation cotton, the product has obvious thermal insulation effects. All these together make the product very suitable to be used in projects where higher thermal insulation performance is required.

Technical Parameters

| Frame depth/mm | 150/235mm |
|--|-----------|
| Sash depth/mm | 65mm |
| Visible width of inner/outer frame/mm | 28/47.5mm |
| Visible width of inner/outer sash/mm | 75/95mm |
| Sash's clamping glass thickness range/mm | 20~44mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach $2.3~\mathrm{W/m^3.k}$ (Grade 6) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 40 dB(Grade 5) (depending on the glass configuration) |
| Air tightness | The value exceeds 600Pa (Grade 8) |
| Water tightness | The value can reach 600 Pa (Grade 5) |
| Wind load resistance | The value can reach 5000 Pa (Grade 9) |



Product Features

Multifunctional door leaf application

- Meeting the large application demand of up to 400 kg on single leaf
- Providing electric and manual opening modes,
- Providing diverse application choices: single rail, double rail, triple rail and 90° corner with no stand column.

Excellent whole door performance

• Unique special sealing design; water tightness level 5; air tightness level 8.

Human centered design

 $\bullet \ \ With \ the \ Bucalus \ proprietary \ lifting \ and \ assisting \ hardware \ mechanism, \ the \ operating \ force \ upon \ the \ handle \ can be \ reduced \ by \ 40\%.$

Longer service life

- Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance
- Repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | | Dimension range(mm) | | | | |
|-------------------|------------------------------------|-------------|-----------------------------|-----------|------------------------|-----------------------|-----------|
| Option of opening | Height-width Hardware load bearing | | Net dimensions of sash (mm) | | Module dimensions (mm) | | s (mm) |
| | | Width FB | Height FH | Width W | Height H | Suggested dimension s | |
| Lift and slide | FH/FB<2.5 | 300kg/400kg | 720~2500 | 1800~3300 | 750~2500 | 1900~3400 | 1800x2300 |

NS55.N 300 Lift & Slide Door System

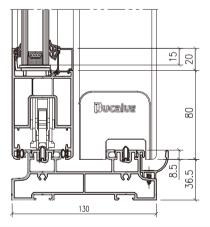


Product Profile

NS55.N-300 lift and slide door system has diverse opening modes, with single rail frame, double rail frame and triple rail frame available. The barrier-free design of the low doorsill makes it easier for people to go in and out. Due to the good air tightness, water tightness and sound insulation performance and the beautiful and stable reinforcement design, this product is applicable to extreme weather conditions where typhoons occur frequently.

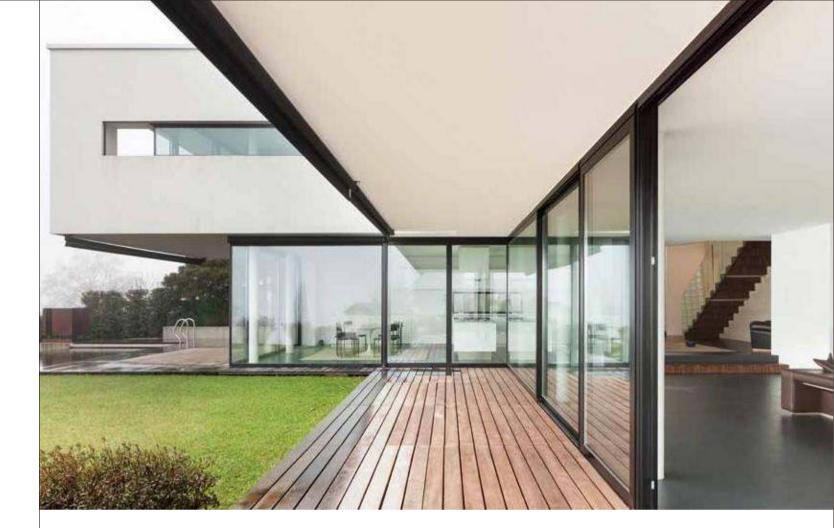
Technical Parameters

| Frame depth/mm | 130/205mm |
|--|-----------|
| Sash depth/mm | 55mm |
| Visible width of inner/outer frame/mm | 28/47.5mm |
| Visible width of inner/outer sash/mm | 80/100mm |
| Sash's clamping glass thickness range/mm | 10~34mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach $3.5~\mathrm{W/m^3.k}$ (Grade 3) (depending on the glass configuration) |
|----------------------|---|
| Sound proof | The attenuation value of sound after passing doors can reach 31 dB(Grade 3) (depending on the hardware configuration) |
| Air tightness | The value exceeds 600Pa (Grade 8) |
| Water tightness | The value can reach 600 Pa (Grade 5) |
| Wind load resistance | The value can reach 4000 Pa (Grade 7) |



Product Features

Multifunctional door leaf application

- Meeting the large application demand of up to 400 kg on single leaf
- Providing electric and manual opening modes,
- $\bullet \ Providing \ diverse \ application \ choices: single \ rail, \ double \ rail, \ triple \ rail \ and \ 90^{\circ}corner \ with \ no \ stand \ column.$

Excellent whole door performance

• Unique special sealing design; water tightness level 5; air tightness level 8.

Human centered design

 $\bullet \ \ With \ the \ Bucalus \ proprietary \ lifting \ and \ assisting \ hardware \ mechanism, \ the \ operating \ force \ upon \ the \ handle \ can be \ reduced \ by \ 40\%.$

Longer service life

- Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance
- Repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| | | Dimension range(mm) | | | | | |
|-------------------|--------------------------------------|--------------------------|-----------------------------|-----------|------------------------|-----------|-----------------------------|
| Option of opening | Option of opening Height-width ratio | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Lift and slide | FH/FB<2.5 | 300kg/400kg | 720~2500 | 1800~3300 | 750~2530 | 1900~3400 | 1800x2300 |

NS55-300 Lift & Slide Door System

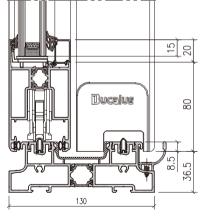


Product Profile

NS55-300 lift and slide door system has diverse opening modes, with single rail frame, double rail frame and triple rail frame available. The barrier-free design of the low doorsill makes it easier for people to go in and out. Due to the joint efforts of the good air tightness, water tightness and sound insulation performance and the beautiful and stable reinforcement design, this product is applicable to extreme weather conditions where typhoons occur frequently. All these together make the product suitable to be used in high-end projects where basic thermal insulation is required.

Technical Parameters

| Frame depth/mm | 130/205mm |
|--|-----------|
| Sash depth/mm | 55mm |
| Visible width of inner/outer frame/mm | 28/47.5mm |
| Visible width of inner/outer sash/mm | 80/100mm |
| Sash's clamping glass thickness range/mm | 10~34mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach $2.4~\mathrm{W/m^2.k}$ (Grade 6) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 36 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | The value exceeds 600Pa (Grade 8) |
| Water tightness | The value can reach 600 Pa (Grade 5) |
| Wind load resistance | The value can reach 4000 Pa (Grade 7) |



Product Features

Multifunctional door leaf application

- Meeting the large application demand of up to 400 kg on single leaf
- Providing electric and manual opening modes,
- $\bullet \ Providing \ diverse \ application \ choices: single \ rail, \ double \ rail, \ triple \ rail \ and \ 90° corner \ without \ stand \ column.$

Excellent whole door performance

• Unique special sealing design; water tightness level 5; air tightness level 8.

Human centered design

 $\bullet \ \ With \ the \ Bucalus \ proprietary \ lifting \ and \ assisting \ hardware \ mechanism, \ the \ operating \ force \ upon \ the \ handle \ can be \ reduced \ by \ 40\%.$

Longer service life

- Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance
- Repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening Height-width ratio | | | Dimension range(mm) | | | | |
|--------------------------------------|-----------------------|-----------------------------|---------------------|------------------------|----------|-----------|-----------------------------|
| | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | | |
| | | | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Lift and slide | FH/FB<2.5 | 300kg/400kg | 720~2500 | 1800~3300 | 750~2530 | 1900~3400 | 1800x2300 |



European standard slots

•Using the European standard commonly used U-shape slots with the hardware mature and stable.

Hardware load bearing

•One single leaf can bear 400 KG, the load bearing of an super-large door leaf with its dimension as below: about width x height=4.2mx2.5m.

Handle and transmission mechanism

•The lift-up door handle has the buffering function, which can effectively avoid the handle springback.

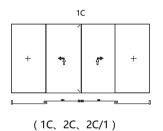
Superior anti-corrosion design for parts

•Capable of withstanding the neutral salt spray test 240 hours longer than that of the EU standard, more suitable for coastal and harsh environments.

PRODUCTS

NS Lift & Slide Door Hardware System

Hardware Configuration

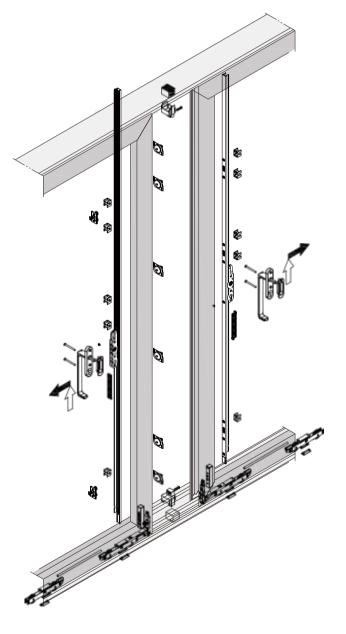












NFD70 Folding Door System

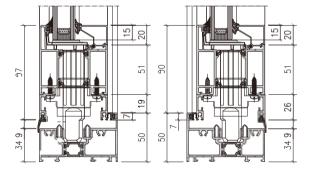


Product Profile

NFD70 folding door system can realize the folio opening of a total of 14 leafs with each single leaf's door height being 3 meters. It is the best solution for ultra-large cave opening. The width of the folding doors is the same. The simple appearance brings the building extremely concise and beautiful visual effects. It is suitable for the projects where basic thermal insulation requirements are to be met.

Technical Parameters

| Frame depth/mm | 84mm |
|--|---------|
| Sash depth/mm | 70mm |
| Visible width of inner/outer frame/mm | 55/55mm |
| Visible width of inner/outer sash/mm | 51/71mm |
| Sash's clamping glass thickness range/mm | 20~44mm |



Performance

| Thermal insulation | The K value for thermal insulation can reach 2.3 W/m^3 .k (Grade 6) (depending on the glass configuration) |
|----------------------|--|
| Sound proof | The attenuation value of sound after passing doors can reach 35 dB(Grade 4) (depending on the glass configuration) |
| Air tightness | The value can reach 600 Pa (Grade 6) |
| Water tightness | The value can reach 500 Pa (Grade 5) |
| Wind load resistance | The value can reach 5000 Pa (Grade 9) |



Product Features

Larger opening area

•Realizing 90% cave opening area and larger opening demand.

Full sealing design

 \bullet Separately sealing each door leaf, water tightness level 5, air tightness level 6.

Human centered design

•Bucalus proprietary hardware mechanism for folding doors, making the opening and closing smoother and more stable, thus effectively reducing the noise when opening and closing;

• Unique hand-pinching-proof design to ensure safety to the greatest extent.

Longer service life

- Replaceable high-quality stainless steel rails, higher strength, longer life, smaller motion resistance.
- Embedded adjustable frame design and bottom bearing design;
- Repeated opening design up to 120,000 times (GB 100,000 times), in accordance with the lifespan of 30 years.

Technical standard

• Compliance with EU CE standard, USA ASTM standard and Chinese GB standard.

Openable Dimension Range

| Option of opening Height-width ratio | | Dimension range(mm) | | | | | |
|--------------------------------------|--------------------------|-----------------------------|----------|------------------------|---------|----------|-----------------------------|
| | Hardware load bearing | Net dimensions of sash (mm) | | Module dimensions (mm) | | | |
| | | C | Width FB | Height FH | Width W | Height H | Suggested dimension s |
| Side-hinged opening | FH/FB<2.5 | 90kg | <1100 | <3300 | <1200 | <3400 | 850x2300 |



Transmission design advantages

•The locking actuator positions with the lumen of the section bars. The processing is simple and the processing efficiency will be improved effectively.

Superior bolt design

•Independent heaven and earth bolt mechanism locks firmly. The proper use of cavity configuration of the proximate matters reduces processing techniques and improves appearance and quality.

Powerful pulley mechanism

- Proprietary backboard and position bars designs: fast installation, precision guarantee.
- Stainless steel pulley: Smooth and stable sliding, of high intensity and durable.
- Nylon guide rollers: of high intensity and stable.

Excellent noise reduction design

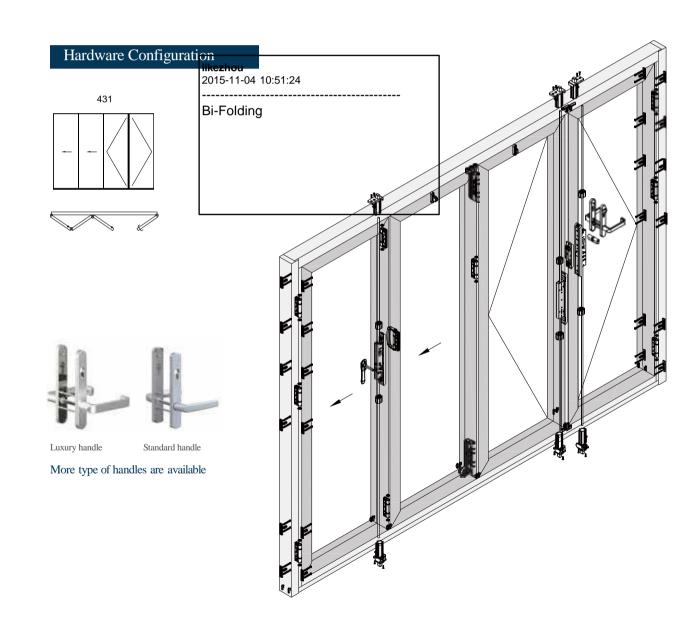
•Bolt, guide and top nylon guide roller are made of high quality materials respectively, which greatly reduce the noise in opening, closing and moving.

Anti-corrosion design for parts

•Capable of withstanding the neutral salt spray test 72 hours longer than that of the GB standard, suitable for coastal and harsh environments.

PRODUCTS

NFD70 Folding Door Hardware System



CASE REFERENCE



✓ The Hanking Hillside Villas, Shenzhen







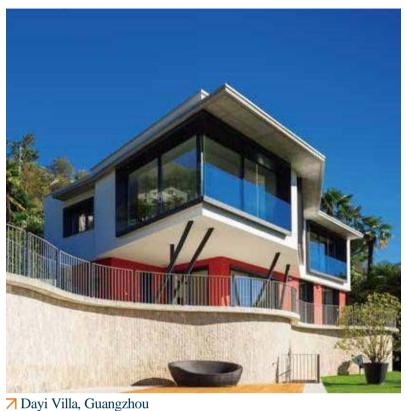
→ Vanke Jiulong Mountain Villa, Shenzhen

→ Grand Mansion of Poly, Guangzhou













→ One City of Vanke, Shenzhen



CASE REFERENCE





→ Qatar Samrya Building

▼ Waihonua at Kewalo, Honolulu, Hawaii



Abu Dhabi Nation Building



☐ The Collection, South street & ALA Moana Blvd., Honolulu, Hawaii



