



Aluminium solutions for façades, windows, doors and sliding elements

>>> System data sheets

ALUMINIUM PROFILE SYSTEMS

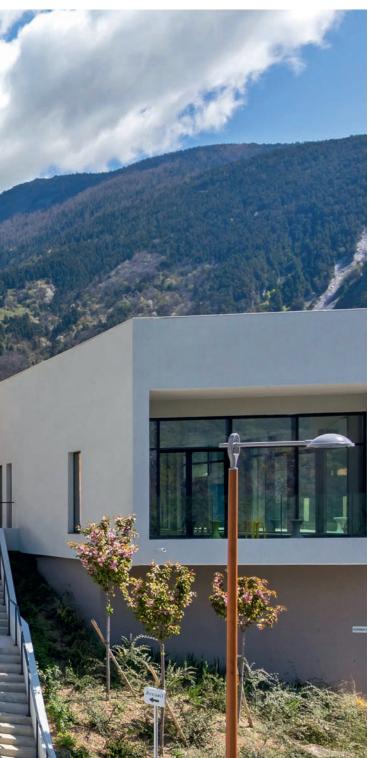
>> WICONA System data sheets

All key product features for each application at a glance: the WICONA system data sheets offer you all critical information about all WICONA series in a complete, clear and structured overview. These product data sheets are updated regularly, with the most recent version always available as PDF for download on our website.





Why WICONA? Because as a successful aluminium systems company based in Germany, WICONA has more than 60 years' experience – experience from which you can benefit on a daily basis.We not only provide you with a reliable and co-operative supplier, but you can also enjoy the advantages of a strong, technologically advanced brand that has enjoyed long-term success in the market. At WICONA, every detail counts: from detailed planning to the perfect processing material and rapid supply right through to active sales support. That's why you should choose WICONA!



Curtain walling WICTEC	4
Windows WICLINE	15
Doors WICSTYLE	37
Sliding systems WICSLIDE	51
Solar shading systems WICSOLAIRE	55
Cradle-to-Cradle (C2C)	57

You can find more comprehensive support tools for your project planning and tendering on our website.

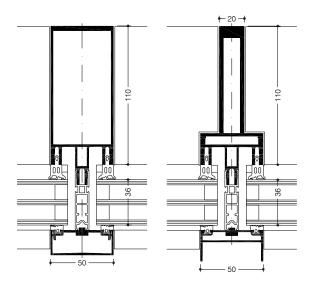
- Tender texts as word templates
- System sections in .dwg and .dxf format
- System data sheets in PDF format
- Reference projects worldwide in WICONA FINDER or on our iPad App

Please note: the application possibilities and the availability of the product series may be different depending on the country. Please ask your local WICONA sales office for details.

> WICTEC 50 Stick system curtain wall



WICTEC 50 is the basic version of the stick system curtain wall, with an extra-narrow face width of 50 mm, inside and outside. The unique flexibility is demonstrated by the various system variants and enhancement options, all of which are feasible with minor additions to the system and without compromising on appearance.



System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200 Pa, security 3000 / –4800 Pa
Sound insulation:	$R_{w}(C;C_{tr}) = 47 (-1; -4) dB$
Impact resistance:	Class E5 / I5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Bullet resistance:	FB4
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



Technical performance:

System width: Profile depth: Thermal insulation: Infill thickness: Glass weight: Polygon façade: Roof pitch: 50 mm 50 mm to 260 mm U_{f} value up to 0.7 W/(m²K) 3 mm to 63 mm up to 5.6 kN up to $\pm 45^{\circ}$ (per side = 90° angle) up to 10°

System technology:

- Ideal for vertical and polygon façades, sloped glazing and spatial structures
- Individual design thanks to a wide range of profile geometries for the structural and glazing profiles
- Alternative: Industrial design for technical look of steel profiles
- Reliable glass load transmission (up to 5.6 kN), with adapted transom-joint technology
- Overlapping and secure drainage at the cross point, without mechanical mullion processing, ensures tried-and-tested impermeability
- Filigree look without any change in appearance to the inner mullion and transom gaskets
- Broad selection of profiles enables economic adaptation to structural requirements, with the additional option of internal reinforcement
- Glazing from outside with visible or concealed screws
- Extensive solutions for structure junctions and conservatories

Additional options in identical design and technical set-up:

- Passive house curtain wall
- SG-design (integrated pressure profile)
- Structural glazing curtain wall
- Add-on curtain wall for steel and wood
- Integrated sun protection
- · Fire protection curtain wall

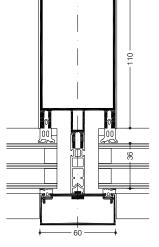
> WICTEC 60 Stick system curtain wall

Technical performance:

System width: Profile depth: Thermal insulation: Infill thickness: Glass weight: Roof pitch: 60 mm 70 mm to 170 mm U_f value up to 1.2 W/(m²K) 3 mm to 51 mm up to 4.0 kN up to 10°

System technology:

- Ideal for vertical façades and sloped-glazing and spatial-structure transitions
- Individual design thanks to a wide range of profile geometries for the structural and glazing profiles
- Reliable glass load transfer (up to 4.0 kN), with adapted transom-joint technology
- Overlapping and secure drainage at the cross point, without mechanical mullion processing, ensures tried-and-tested impermeability
- Filigree look without any change in appearance to the inner mullion and transom gaskets
- High static value of profiles, with the additional option of interior reinforcement
- Glazing from outside with concealed or visible screws
- Extensive solutions for structure junctions and conservatories



Featuring a 60-mm face width (inside and outside), WICTEC 60 is a stick system façade that meets the highest demands. With minor

additions, WICTEC 60 fulfils the most demanding requirements with regard to burglar and bullet resistance and fire protection.

System test results / CE product pass in accordance with DIN EN 13830

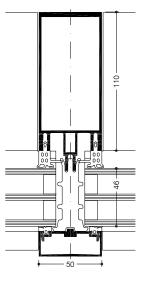
Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200 Pa, security 3000 / –4800 Pa
Sound insulation:	$R_{w}(C;C_{tr}) = 47 (-1; -4) dB$
Impact resistance:	Class E5 / I5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Bullet resistance:	FB4
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



WICTEC 50HI Passive house curtain wall Certified passive house component (ift)



A passive house does not require an active heating system and therefore relies heavily on the thermal insulation and air-tightness of the façade. Based on the standard series, WICTEC 50 is certified for aluminium/glass façades suitable for passive houses at minimal additional cost. The thermal insulation is improved to passive-house quality with a U_r value of 0.74 W/(m²K) when using triple glazing and an easy-to-install thermal break profile.



System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200 Pa, security 3000 / –4800 Pa
Sound insulation:	$R_{w}(C;C_{tr}) = 47 (-1; -4) dB$
Impact resistance:	Class E5 / I5
Burglar resistance:	RC1
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Technical performance:

System width: Basic system: Thermal insulation: Infill thickness: Glass weight: Polygon façade:

50 mm WICTEC 50 $U_f = 0.74$ W/(m²K) up to 51 mm up to 5.6 kN up to 5°

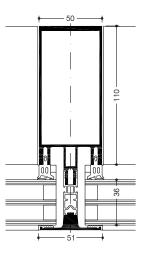
- Extension to WICTEC 50 with optimised thermal insulation
- Certified by the ift Rosenheim as a passive house component according to the ift guidance paper RI WA 15/1, with a U_{cw} value of 0.7 W/(m²K)
- Triplex glass construction suitable for passive houses, infill thickness up to 51 mm
- Thermal break profile made of elastomer foam for posterior installation
- System construction identical to standard WICTEC 50
- Individual design thanks to a wide range of profile geometries for the structural and glazing profiles
- Reliable glass load transmission (up to 5.6 kN), with adapted transom-joint technology
- Overlapping and secure drainage at the cross point, without mechanical mullion processing, ensures tried-and-tested impermeability
- Filigree look without any change in appearance to the inner mullion and transom gaskets
- Broad selection of profiles enables economic adaptation to structural requirements, with the additional option of internal reinforcement



WICTEC 50 SG design with integrated pressure profile



Reduced profile elevations leading to maximum transparency: With its integrated pressure profile WICTEC 50 offers an inexpensive solution with a design similar to structural glazing. The glazing technology with a flush or low pressure profile the assembly is as fast and easy as for a classic stick system curtain wall.



Technical performance:

System width: External profile width: Thermal insulation: 50 mm 43 mm / 51 mm 22 mm to 38 mm 26 mm to 42 mm for stepped glass edge WICTEC 50

System technology:

Basic system:

- Minimised visibility due to profile dimensions of only 43 mm or 51 mm pressure profile width
- Two options: with only 4 mm overlap over the glass or completely flush with processed glass edge
- Simplified standard construction with design similar to structural glazing SG curtain walling
- Replaces the silicone joint of a classic SG system, thus no maintenance of bonding and sealing, no technical approval and no supervision of production necessary
- Production and assembly like for the standard WICTEC 50 curtain wall
- Overlapping and secure drainage at the cross point, without mechanical mullion processing, ensures tried-and-tested impermeability
- Filigree look without any change in appearance to the inner mullion and transom gaskets
- Broad selection of profiles enables economic adaptation to structural requirements, with the additional option of internal reinforcement

System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200 Pa, security 3000 / –4800 Pa
Impact resistance:	Class E5 / I5
Burglar resistance:	RC1N
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

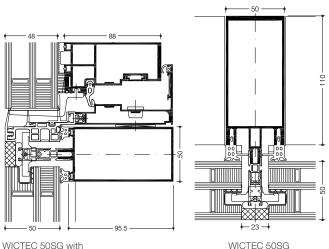


> WICTEC 50SG Structural glazing curtain wall



A characteristic feature of WICTEC 50SG structural glazing curtain wall is the flush design with slim silicone joints between the glass panes. The system offers all-glass technology both for vertical curtain walls and sloped roof glazing. Based on the standard WICTEC 50 stick system these options can be realised with simplified and economic processing and assembly, while assuring a high quality level.

The WICLINE 90SG all-glass integrated opening sash pursues the homogeneous full glass design with Italian style or parallel outward opening function.



WICTEC 50SG with integration sash WICLINE 90SG

System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 750
Resistance to wind load:	2000 Pa, security ± 3000 Pa
Impact resistance:	Class E5 / I5
Approval:	ETA: 12/0551 (European Technical Approval)
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Technical performance:

System width:

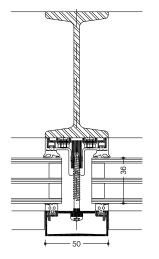
Thermal insulation: Infill thickness: Internal aluminium profiles 50 mm External silicone joint 23 mm U_r up to 1.6 W/(m²K) up to 64 mm

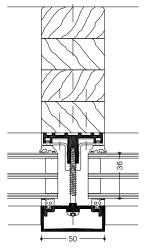
- ETA (European Technical Approval) granted
- Outstanding appearance
- Basic structure is the WICTEC 50 curtain wall, with identical profile and gasket technology
- Easy assembly of the glazing on site, without supplementary tools
- Simple and straightforward installation thanks to a special patented fastener
- Execution also possible in combination with cover profiles in various contours
- The ideal complement: integration sash WICLINE 90SG in all-glass technology with Italian style or parallel outward opening function



WICTEC 50A Add-on curtain wall for steel and wood

In certain cases, it is aesthetically or structurally beneficial to design curtain walls with supporting structures made from wood or steel. WICTEC 50A is a mounting option which makes it possible to fix the glazing on such supporting structures directly. WICTEC offers a free choice of supporting material – aluminium, steel or wood – for an identical outer appearance and glazing technology for the curtain wall.





System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200 Pa, security 3000 / –4800 Pa
Impact resistance:	Class E5 / I5
Burglar resistance:	RC1N, RC2N, RC2
Bullet resistance	FB4
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001





Technical performance:

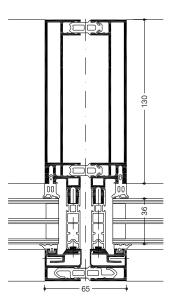
System width: Supporting frames: Structural profiles: 50 mm from 50 mm width Wood profiles Steel tubes Open steel profiles

- Free choice of material (steel or wood), for profile widths from 50 mm
- Same interface profile for mullions and transoms
- Overlapping via vertical and horizontal single-piece overarching sealing profiles with different drainage levels
- Simple and efficient fixing of the aluminium profile by means of screws
- Alternative simple fixing technique using steel studs for steel tubes with a wall thickness from 4 mm
- Ideal for vertical and polygon façades, sloped glazing and spatial structures
- Glazing from outside with visible or concealed screws

>> WICTEC 50EL Unitised curtain wall

WICTEC 50EL is a unitised version of the WICTEC 50 stick system. This range combines the advantages of the stick system structure with the assembly benefits of unitised curtain walling, with an extremely narrow sight line of only 50 or 65 mm.

The exterior profiles with mitre joints on the outside achieve a particularly elegant appearance with a "picture frame effect". Particularly where there are stringent requirements pertaining to thermal insulation, WICTEC 50 EL offers the appropriate solution.



System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200 Pa, security 3000 / –4800 Pa
Impact resistance:	Class E5 / I5
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



Technical performance:

System width:	50 mm for undivided frames
	65 mm for divided frames
Profile depth:	195 mm to 213 mm,
	depending on the infill
	130 mm inner profile elevation
Thermal insulation:	U, up to 1.4 W/(m²K) at horizontal bar
	U_{f} up to 1.5 W/(m ² K) at vertical bar
Infill thickness:	up to 44 mm
Unit sizes:	(w x h) up to 3000 mm x 3500 mm,
	up to 1500 mm width without
	mid posts

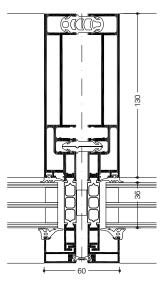
- WICTEC 50EL is a basic unitised system and can be adapted individually to meet specific project requirements
- Production of the complete units in the workshops, avoiding any weather influence and thus assuring a constantly high product quality
- Fast, efficient and projectable assembly on site
- Aluminium profiles using mullion-transom technology, with insulating profile that provides a high level of thermal insulation
- Narrow sight lines for maximum transparency
- Mullions and transoms have the same profile depth
- Efficient thermal protection up to $U_f = 1.4 \text{ W/(m^2K)}$
- Reliable corner connection with system brackets
- Easy installation on the construction site, with special system anchors



>> WICTEC EL60 Unitised curtain wall



WICTEC EL60 is a slim alternative within the unitised curtain wall systems, with reduced sight lines of just 60 mm both inside and outside. The exterior glazing profiles with mitre joints achieve a particularly elegant appearance with a "picture frame effect". As a result of optimised thermal insulation, the system leads the way with outstanding U_{cw} values of up to 0.9 W/(m²K).



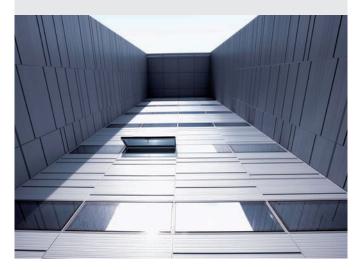
System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200 Pa, security 3000 / –4800 Pa
Impact resistance:	Class E5 / I5
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Technical performance:

System width: Profile depth: Thermal insulation:	60 mm 198 mm U_f for support and bar profiles up to 1.6 W/(m ² K) U_f for frame combinations up to 1.8 W/(m ² K)
Infill thickness:	U _{cw} up to 0.9 W/(m²K) Up to 36 mm as standard system,
Unit sizes:	above on request (w x h) up to 2800 mm x 3500 mm, up to 1500 mm width without mid posts

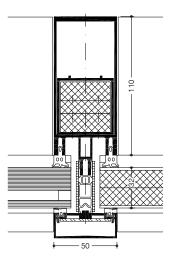
- WICTEC EL60 is a basic unitised system and can be adapted individually to meet specific project requirement
- Production of the complete units in the workshops, avoiding any weather influence and thus assuring a constantly high product quality
- Fast, efficient and projectable assembly on site
- Aluminium composite profiles with excellent thermal insulation, from quality-assured and monitored production
- Slim sight lines of only 60 mm, with divided and undivided profiles
- Mullions and transoms have the same profile depth
- Reliable corner connection with corner brackets
- On the construction site, the units are easily installed in the façade anchors from the system range



>> WICTEC 50FP / WICTEC 60FP Fire protection curtain wall

WICTEC 50FP and WICTEC 60FP for fire protection façades in the G30 and F30 classes: no matter whether used in stairwells, extensions, hallways or glazed roofs – with WICTEC FP all types of façade and architectural concepts can be adapted to the necessary protection requirements.

The FP design is based on the WICTEC 50 and 60 standard façades, meaning that fire protection solutions can be integrated into standard solutions in a homogeneous and functional manner.



System test results / CE product pass in accordance with DIN EN 13830

Air permeability:	Class AE
Watertightness:	RE 1200
Resistance to wind load:	2000 / –3200, safety 3000 / –4800 Pa
Impact resistance:	Class E5 / I5
German approval:	For vertical curtain wall and overhead glazing in F30 and G30
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

 \triangle Approval in accordance with national regulations



Technical performance:

System width: Basic system: Fire protection classes: Infill dimensions:

Heigth of façade: Polygon façade: Infill thickness: 50 mm / 60 mm WICTEC 50 / WICTEC 60 G30 / F30 Portrait format up to 1800 mm x 3000 mm Landscape format up to 2400 mm x 1400 mm up to 5000 mm up to \pm 5° F30: 15 mm to 38 mm G30: 7 mm to 38 mm

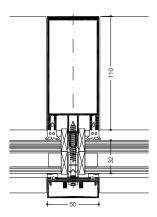
- For vertical and overhead glazing (fire protection up to 0° inclination)
- Slim sight lines: 50 mm or 60 mm
- Compatible and structurally identical with WICTEC 50 and WICTEC 60 standard systems
- Infills: glass or panel
- Extended freedom in design with big possible infill dimensions
- Suitable for interior and exterior application
- The WICONA fire protection parapet, in resistance class W90, offers the appropriate solution to prevent fire flashover with standard façades.
- Can also be combined with WICSTYLE 77FP fire protection doors and WICLINE 75FP fire protection windows



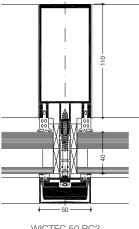
WICONA

>> WICTEC Curtain wall systems Burglar resistance

Personal security and building protection - for your building you need a solution approach which can be accomplished with aluminium systems in a wholistic and compatible way. This is achieved by the WICONA series for curtain walls, windows and doors. Each of them can offer burglar resistance, in combination with other additional functions. The various levels of resistance classes can be achieved with WICTEC stick curtain wall series without visual alterations of the constructions, with only a minimum of additional measures on the basis of the standard design.



WICTEC 50 RC2



WICTEC 50 RC3

System test results/CE product pass in accordance with DIN EN 13830

See classification of the respective WICTEC curtain wall series.



Technical performance:

Burglar resistance according to EN 1627:

• The currently valid standard for burglar resistance, EN 1627, has come into effect in European countries in 2011 and 2012. It replaced former national standards. The classifications have been modified to classes RC1N to RC3, which are not identical with the former classes WK1 to WK3.

Test results of the WICONA window series:

• The test results of the WICTEC curtain wall series have been assigned according to the new standard EN 1627. They can easily be specified and implemented without any additional measurement according to this new standard.

Burglar resistance according to EN 1627 resp. DIN 1627/classifications:

WICTEC 50	RC1N, RC2N, RC2, RC3
WICTEC 60	RC1N, RC2N, RC2, RC3
WICTEC 50 Passive house curtain wall	RC1N
WICTEC 50 Integrated pressure profile	RC1N
WICTEC 50A Add-on curtain wall	RC1N, RC2N, RC2

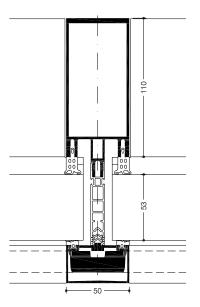
▲ Approval in accordance with national regulations



>> WICTEC Curtain wall systems Bullet resistance

Personal security and building protection – for your building you need a solution approach which can be accomplished with aluminium systems in a wholistic and compatible way. This is achieved by the WICONA series for curtain walls, windows and doors. Each of them can offer bullet resistance, in combination with other additional functions.

The requirements for bullet resistance are achieved with WICTEC curtain wall series, simply by addition of the standard construction with a special aluminium planking.



System test results/CE product pass in accordance with DIN EN 13830

See classification of the respective WICTEC curtain wall series.





Technical performance:

Bullet resistance according to DIN EN 1522:

• The WICTEC curtain wall series have been tested according to this standard in various profile combinations, and successfully been certified in class FB4.

Possible combinations with other WICONA product series in bullet resistance in class FB4:

- Doors WICSTYLE 65 evo/WICSTYLE 75 evo
- Windows WICLINE 65 evo/WICLINE 75 evo

Bullet resistance according to DIN EN 1522/classifications:

WICTEC 50	FB4
WICTEC 60	FB4

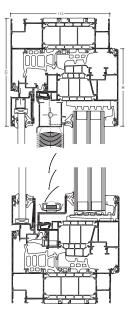
▲ Approval in accordance with national regulations

WICLINE 115 AFS Composite window system



With its new composite window system WICLINE 115 AFS, WICONA provides architects, planners and fabricators the solution for sophisticated projects with particularly high demands on thermal performance, sound insulation and sun protection – suited for both new build and renovations.

The WICLINE 115 AFS composite window system combines an internal and external frame and sash, creating a cavity between the two which improves the system's thermal and sound performance without additional measures.



System test results / CE product pass in accordance with DIN EN 14351-1:2010-08

Description	Standard	Class
Thermal insulation U_{f}	EN ISO 10077-2	1.1 – 1.3 W/(m ² K)
Thermal insulation ${\rm U}_{\rm w}$	EN ISO 10077-1	below 0.80 W/(m ² K)*
Sound insulation $R_w^{}(C;C_{tr}^{})$	EN ISO 717-1	up to 50 (-1;-4) dB
Air tightness	EN 12207	4
Water tightness	EN 12208	up to E1200
Wind tightness	EN 12210	up to C5/B5
Mechanical durability	EN 13115	up to 4
Durability repeat opening	EN 12400	up to 3

 * at a window size of 1230 mm x 1480 mm and U $_{\rm g}$ = 0.6 W/(m²K), psi = 0.031 W/(mK)



Technical performance

Profile technology:

- Profile depth: 115 mm
- Construction depth: 125 or 135 mm
- Infill thickness up to 48 mm (58 mm) and up to 100 mm with fixed glazing
- Pressure compensation of the cavity
- Optimised condensation performance within the cavity, officially confirmed by CSTB Institute in France (Centre Scientifique et Technique du Bâtiment)
- Concealed blind system which is protected against weather conditions and dirt, no daylight penetration on the sides
- Highest operating comfort
- Easy installation, maintenance and cleaning due to independently operable outer sash
- Optional sash with universal zone for sun protection

Profile sightlines:

- Frame profiles from 84 mm up to 94 mm
- Transom profile from 128 mm up to 158 mm
- Sash profile 35 mm

Thermal performance:

 U_w values below 0.80 W/(m²K) with a 115-mm frame depth and a sleek sight line of only 125 mm, a unit size of 1230 mm x 1480 mm and U_g value of 0.60 W/(m²K) at 0.031 W/(mK) psi

Sound insulation:

- Up tp 50 dB
- (Sound insulation glazing inside, single glazing outside) • Up to 43 dB
- (Insulated glazing inside, single glazing outside)

Hardware:

- High quality concealed hardware with DPS (Direct Positioning System). Components can be installed in any order. Sash weights for:
 - concealed hinges up to 160 kg
 - surface-mounted hinges up to 200 kg
- Sash weight up to 200 kg
- Sash sizes (w x h): up to 1200 mm x 2500 mm

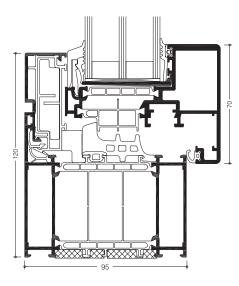
Opening types:

• Turn, turn-tilt, tilt, tilt-first, fixed field

>> WICLINE 95 Turn /Turn-tilt/ Tilt/ Tilt-first windows, passive house certified

WICLINE 95 meets the high requirements of the Dr. Feist Passive House Institute in Darmstadt, Germany, and due to its intelligent modular design offers maximum flexibility in planning projects.

In the WICLINE 95 the thermoframe insulator sits inside the window and can be finished as a sash-frame and conveniently installed by the installer using the intelligent Clips Technology. This allows a variable setting of the Uf value of the window.



System tests / CE-marked product passport according to DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Waterproofing against driving rain :	E900
Resistance to wind load:	Class C5/B5
Soundproofing:	$R_{w}(C;C_{tr}) = 47 (-1;-4) dB$
Operating forces:	Class 1
Load capacity of safety precautions:	Fulfilled
Mechanical strength:	Class 4
Continuous operation:	Class 3 (20000 cycles)
Corrosion resistance of fittings:	Class 5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Quality management:	Certified to DIN EN ISO 9001:2008



Technical capabilities:

Profile technology:

- Highly thermally insulated multi-chamber system with ETC Intelligence[®] thermal break 'zone', passive house certified to efficiency class phB.
- Patented corner and butt joint technology for high rigidity of components
- Infill thicknesses up to 55 mm

Thermal insulation:

- U_f values 0.68 to 0.91 W/(m²K) for fixed glazed units with external sight lines from 65 to 180 mm
- U_f values 0.75 to 0.88 W/(m²K) for sash-frame combinations with external sight lines from 105 to 260 mm
- Passive house efficiency class phB, U_w and $U_f = 0.80$ W/(m²K) with sight lines of only 125 mm and 95 mm sash-frame installation depth

Sealing concept:

- Large volume central seal in three variants:
 - Circumference installation without corner butts
 - With formed corners, no adhesive processing of butts
 - Corner vulcanised frames

Hardware:

- Concealed single handed operated fittings,
- optionally with:
- overlaid hinges, coated or anodized in all colours
- concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weights:
 - concealed hinges: up to 160 kg
- Visible hinges: up to 160 kg
- Sash sizes (w x h): up to 1300 mm x 2250 mm,
- Optionally with opening limiter

System combinations:

• Fully integratable into WICTEC façades using integration sash frames.

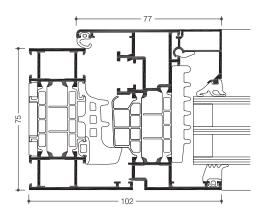




WICLINE 75 TOP Turn / Turn-tilt / Tilt / Tilt-first / Casement windows / Skylights



WICLINE 75 TOP is a highly thermally insulating window system with optimal performance, reliable fabrication and performance figures at passive house levels – combined with the familiar slim-line appearance of a 75 mm window system.



System tests / CE-marked product passport according to DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E900
Resistance to wind load:	Class C5/B5
Acoustic performance:	$R_{w}(C;C_{tr}) = 47 (-1;-4) dB$
Operating forces:	Class 1
Load capacity of safety precautions:	Fulfilled
Mechanical strength	Class 4
Continuous operation:	Class 3 (20000 cycles)
Corrosion resistance of fittings:	Class 5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Bullet resistance:	FB4 S, FB4 NS (depending on profile combinations)
Quality management:	Certified to DIN EN ISO 9001:2008

/OL

Technical capabilities:

Profile technology:

- Highly thermally insulated multi-chamber system with ETC Intelligence[®] thermal break zone, which implements window designs with only 75 mm frame depth to passive house standards.
- Patented corner and butt joint technology for high rigidity of components
- Infill thicknesses up to 65 mm

Thermal insulation:

- U_f values 0.79 to 1.3 W/(m²K) for fixed glazed units with external sight lines from 48 to 155 mm
- U_f values 1.0 to 1.2 W/(m²K) for sash-frame combinations with external sight lines from 74 to 142 mm
- U_w values less than 0.80 W/(m²K)

Sealing concept:

- Large-volume central seal in three variants:
 - Linear gasket insertion without corner butts
 - With formed corners, no sealing of joints
 - Corner vulcanised frames

Hardware:

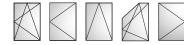
- Concealed single-handed operated fittings, optionally with:
 - face-fixed, coated or anodised in all colours
 - concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weights:
 - concealed hinges: up to 160 kg
 - Visible hinges: up to 200 kg
 - On request: up to 300 kg
- Sash sizes (w x h): up to 1700 mm x 2500 mm, Skylights up to 2500 mm x 1700 mm
- Optionally with opening limiter

Additional designs:

- Concealed sash, infill thicknesses up to 50 mm
- Integration frame for mullion/transom curtain walling
- Skylight with manual lever, crank handle or motor

System combinations:

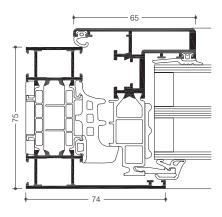
 WICLINE 75 TOP windows can be combined with WICLINE 75 evo windows, WICSTYLE 75 evo doors and using integration sash-frames, with current WICTEC curtain walling





>> WICLINE 75 TOP Concealed sash

In the concealed sash variant of the WICLINE 75 TOP aluminium window system the glass is held directly in the thermal break zone by a special glazing bead. This gives extremely slim frame profiles which also have excellent insulation values and joint-free external frame sight lines. The improved ratio of frame to glazing proportions enable U_w values to passive house standard, and increased light transmission with panoramic views.



System tests / CE-marked product passport according to DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E900
Resistance to wind load:	Class C5/B5
Acoustic performance:	$R_{w}(C;C_{tr}) = 46 (-1;-4) dB$
Operating forces:	Class 1
Load capacity of safety precautions:	Fulfilled
Mechanical strength:	Class 4
Continuous operation:	Class 3 (20000 cycles)
Corrosion resistance of fittings:	Class 5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Quality management:	Certified to DIN EN ISO 9001:2008







Technical capabilities:

Profile technology:

- Highly thermally insulated multi-chamber system with ETC Intelligence[®] thermal break zone, which implements window designs with only 75 mm frame depth to passive house standard.
- Patented corner and butt joint technology for high rigidity of components
- Infill thicknesses up to 50 mm

Thermal insulation:

- U_f values 0.97 to 1.3 W/(m²K) for fixed glazed units with external sight lines from 48 to 155 mm
- U_f values up to 1.2 W/(m²K) for sash-frame combinations with external sight lines from 74 to 142 mm
- U_w values less than 0.80 W/(m²K)

Sealing concept:

- Large-volume central seal in three variants:
 - Linear seal without corner joints
- With formed corners,
- no adhesive processing of butts
- Corner vulcanised frames

Hardware:

- Concealed single-handed operated fittings,
 - optionally with:
 - surface mounted hinges, coated or anodised in all colours
 - concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weights:
 - concealed hinges: up to 130 kg
 - Visible hinges: up to 130 kg
- Sash sizes (w x h): up to 1300 mm x 2250 mm
- Optionally with opening limiter

System combinations:

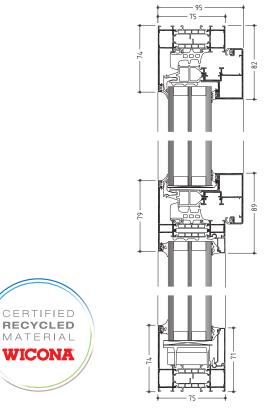
 WICLINE 75 TOP windows can be combined with WICLINE 75 evo windows, and using integration sash-frames, with current WICTEC curtain walling

WICLINE 75 MAX Concealed sash Concealed handle



The new concealed sash of the WICLINE 75 MAX makes the difference between an opening field and a fixed field disappear from the outside. Concealed hinges and fittings, as well as the new concealed handle, on WICLINE 75 MAX ensure clear, uninterrupted lines, also from the inside.

"MAX" stands for top innovation and the triple performance spectrum of a harmonious appearance, greater light and comfort, and a system containing a high recycled content.



Air permeability:	Class 4
Watertightness:	E750
Resistance to wind load:	Class C5/B5
Acoustic performance:	R _w up to 48 dB
Operating forces:	Class 1
Mechanical strength:	Class 4
Repeated opening/closing:	Class 2 (10000 cycles)
Impact resistance:	Class 2

Technical performance:

Profile technology:

- Frame depth: 75 mm
- Frame rebate height: 44 mm
- Overall construction depth of profile system: 95 mm
- Max. sash width: up to 1400 mm
- Max. sash height: up to 2250 mm

Profile sightlines:

- Frame profiles: 74 mm
- Transom profiles: 79 mm
- Sash profiles, concealed: 57 mm (internal sightline)

Thermal insulation:

• U_w value up to 0.81 W/(m²K) for a standard window size of 1230 mm x 1480 mm, $U_a = 0.5$ W/(m²K)

Types of opening:

 Side-hung window, turn-tilt window, bottom-hung window, tilt-first window

The window handle is hidden in the sash, adding to the harmonious appearance of the window.

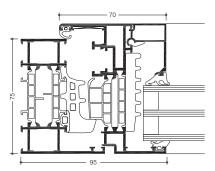
This innovative design idea was awarded a prize from the international expert juries at both the **iF DESIGN AWARD** 2018 and the **Red Dot Design Award 2018**.



WICLINE 75 evo Turn, Turn-tilt, Tilt, Tilt-first, Double casement windows / Fanlights / Minergie-P module



With 75 mm profile depth, WICLINE 75 evo features the highest thermal insulation properties and structural characteristics. With its superior technical performance this aluminium window is attuned to all architectural requirements of the future. In Switzerland WICLINE 75 evo has been the first metal window to be certified as Minergie-P module window.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E900
Resistance to wind load:	Class C5 / B5
Acoustic performance:	$R_{w}(C; C_{tr}) = 47 (-1; -4) dB$
Operating forces:	Class 1
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 4
Repeated opening / closing:	Class 3 (20000 cycles)
Corrosion resistance of the fittings:	Class 5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Bullet resistance:	FB4 S, FB4 NS (depending on the profile combination)
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001





Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 69 mm

Thermal insulation:

- U, values: until 1.2 W/(m²K)
- U_w values: until 0.87 W/(m²K) for sashes, until 0.72 W/(m²K) for fixed glazing, with triple glazing
- Certified as Minergie-P module U, 0.8 W/(m²K)

Sealing concept:

- Voluminous centre gasket with three installation methods:
 - Circumferential centre gasket, no joints in the corner areas
 - Formed corners, avoiding adhesive in the joints
 - Corner vulcanised frames

Hardware:

- Heavy duty system fittings with:
- Visible hinges, powder coating or anodisation in all colours
- Concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weight:
 - Concealed hinges: up to 160 kg
 - Visible hinges: up to 200 kg
 - On demand: up to 300 kg
- Sash sizes (w x h): 1700 mm x 2500 mm, fanlight 2500 mm x 1700 mm
- Optionally with opening limiter

Additional designs:

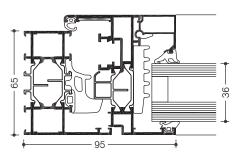
- Concealed sash
- Classic design
- Integration frame for stick façades
- Fanlight with hand lever, cranked rod or motor
- Pivot window, horizontal or vertical
- Parallel sliding window, with or without force operation
- Italian style window
- Top-hung window
- Window doors with barrier free threshold, single or double casement door, inward and outward opening

Compatible with the door series WICSTYLE 65 evo and WICSTYLE 75 evo

WICLINE 65 evo Turn, Turn-Tilt, Tilt, Tilt-first, Double casement windows / Fanlights



State of the art technology and a comprehensive profile range make the aluminium window WICLINE 65 evo a perfect all-rounder with a versatile spectrum of applications. By using a design depth of only 65 mm, this system meets high standards required for thermal and sound insulation. WICLINE 65 evo offers a very attractive price / performance ratio.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E900
Resistance to wind load:	Class C5 / B5
Acoustic performance:	$R_{w}(C; C_{tr}) = 47 (-1; -4) dB$
Operating forces:	Class 1
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 4
Repeated opening / closing:	Class 3 (20000 cycles)
Corrosion resistance of the fittings:	Class 5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Bullet resistance:	FB4 S, FB4 NS (depending on the profile combination)
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



/OL

Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 59 mm

Thermal insulation:

- U, values: until 1.4 W/(m²K)
- U values: until 0.93 W/(m²K) with triple glazing

Sealing concept:

- Voluminous centre gasket with three installation methods:
 - Circumferential centre gasket, no joints in the corner areas
 - Formed corners, avoiding adhesive in the joints
 - Corner vulcanised frames

Hardware:

- Heavy duty system fittings with:
- Visible hinges, powder coating or anodisation in all colours
- Concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weight:
 - Concealed hinges: up to 160 kg
 - Visible hinges: up to 200 kg
 - On demand: up to 300 kg
- Sash sizes (w x h): 1700 mm x 2500 mm, fanlight 2500 mm x 1700 mm
- Optionally with opening limiter in various executions

Additional designs:

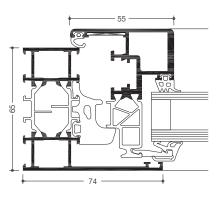
- Concealed sash
- Classic design
- Integration frame for stick façades
- Fanlight with hand lever, cranked rod or motor
- Pivot window, horizontal or vertical
- Parallel sliding window, with or without force operation
- Italian style window
- Top-hung window
- Window doors with barrier free threshold, single or double casement door, inward and outward opening

Compatible with the door series WICSTYLE 65 evo and WICSTYLE 75 evo

>> WICLINE 65 evo / 75 evo Concealed sash



The option "Concealed Sash" in the aluminium window system WICLINE evo features a special glazing bead fixed directly in the thermal break zone. As a result the system achieves an extremely slim frame elevation, superior thermal insulation values and a groove-free profile design from outside. The improved ratio between frame and glazing surfaces leads to very good U_w values, increased light transmissions and panoramic views.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E1200
Resistance to wind load:	Class C5 / B5
Operating forces:	Class 1
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 4
Repeated opening / closing:	Class 2 (10000 cycles)
Impact resistance:	Class 3
Corrosion resistance of the fittings:	Class 5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 42 mm
- Optionally with integration frame for stick curtain walls

Thermal insulation:

- U, values: until 1.5 W/(m²K)
- U_w values: until 0.94 W/(m²K) with triple glazing

Sealing concept:

- Voluminous centre gasket with three installation methods:
 - Circumferential centre gasket, no joints in the corner areas
 - Formed corners, avoiding adhesive in the joints
 - Corner vulcanised frames

Hardware:

- Heavy duty system fittings with:
 - Visible hinges, powder coating or anodisation in all colours
 - Concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weight:
 - up to 130 kg
- Sash sizes (w x h): 1400 mm x 2250 mm
- Optionally with opening limiter in various executions

Additional designs in concealed sash design:

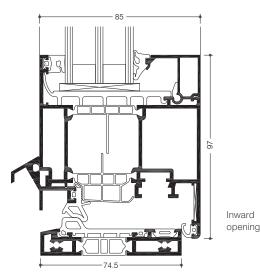
- Integration frame for stick façades
- Fanlight
- Burglar resistance (see system tests)



>> WICLINE 65 evo / 75 evo French door, barrier free



With extended sash formats, single or double casement option and barrier free threshold this aluminium window door with inward or outward opening offers new freedom in architectural design. Superior technical performance and exemplary thermal insulation set new standards.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

	Inward opening	Outward opening
Air permeability:	Class 4	Class 4
Watertightness:	Single sash: 9A Double sash: 7A	7A
Resistance to wind load:	Until Class C5/B5	Class C3 /B3
Operating forces:	Class 1	Class 1
Mechanical strength:	Class 4	Class 4
Corrosion resistance of the fittings:	Class 5	
Repeated opening / closing:	Class 2 (10000 cycles)	Class 2 (10000 cycles)
Quality assurance:	Certified according to ISO 9001:2008	
Environmental management:	Certified according to ISO 14001	



Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 69 mm
- Barrier free threshold, thermally insulated

Thermal insulation:

U, values: until 1.3 W/(m²K)

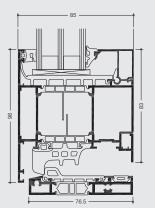
Sealing concept:

- Voluminous centre gasket with three installation methods:
 - Circumferential centre gasket, avoiding joints in the corner areas
 - Formed corners, avoiding adhesive in the joints
 - Corner vulcanised frames on 3 sides

Hardware:

- Alternatively inward or outward opening
- Single or double sash option
- Inward opening option with heavy duty system fittings, with visible hinges, powder coating or anodisation in various colours.
- Sash weight:
 - Up to 130 kg
- Sash sizes (w x h):
 - Inward opening: up to 1400 mm x 2500 mm
 - Outward opening: up to 1300 mm x 2250 mm
- Optionally with opening limiter in various executions

Compatible with the door series WICSTYLE 65 evo and WICSTYLE 75 evo

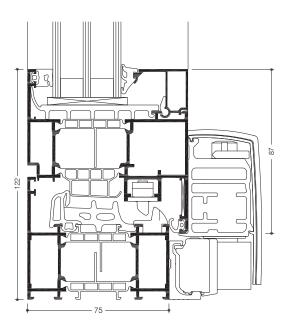


Outward opening

>> WICLINE 65 evo / 75 evo Tilt slide window



In this space saving opening version the sash can be tilted or slid away to the side with ease. High operation comfort, versatile ventilation positioning without disturbing the sash and the elevated technical performance values are characteristic for this opening type of the WICLINE evo aluminium window system.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E750
Resistance to wind load:	Class C5 / B5
Operating forces:	Class 1
Mechanical strength:	Class 4
Repeated opening / closing:	Class 2 (10000 cycles)
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 69 mm

Thermal insulation:

U_f values: until 1.2 W/(m²K)

Sealing concept:

Voluminous centre gasket in corner vulcanised frames

Hardware:

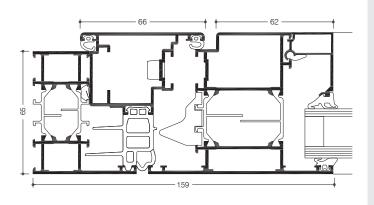
- Tilt slide fittings, optionally
- without force operation
- with force operation (wfo)
- Sash weight:
- Up to 160 kg
- Up to 200 kg (wfo)
- Sash sizes (w x h):
 - Up to 1685 mm x 2500 mm
 - Up to 2000 mm x 2700 mm (wfo)

Compatible with the door series WICSTYLE 65 evo and WICSTYLE 75 evo



WICLINE 65 evo / 75 evo Integration pivot sash, horizontal or vertical

A classic opening type becomes again a state-of-the-art product with WICONA technology: The horizontal and the vertical pivot windows based on the aluminium window system WICLINE evo offer improved thermal insulation, have achieved high classifications in CE-testing each, and with their option of visible or concealed fittings they are a real visual highlight for any façade integration.



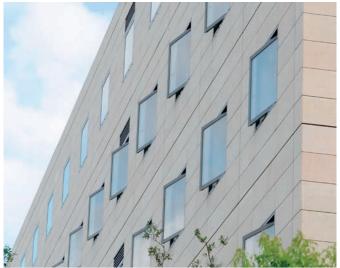
System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

	Horizontal	Vertical
Air permeability:	Class 4	Class 4
Watertightness:	E750	4A
Resistance to wind load:	Class C5 / B5	Class C5 / B5
Operating forces:	Class 1	Class 1
Mechanical strength:	Class 4	Class 4
Repeated opening / closing:	Class 2 (10000 cycles)	Class 2 (10000 cycles)
Quality assurance:	Certified according to ISO 9001:2008	
Environmental management:	Certified accord ISO 14001	ling to









Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 69 mm
- Optionally with frame for punched hole application

Thermal insulation:

- U, values: until 1.5 W/(m²K)
- U_w values: until 1.0 W/(m²K) with triple glazing

Sealing concept:

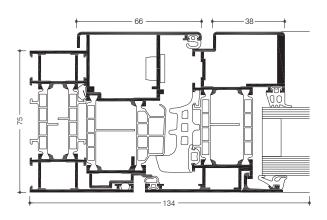
 Special multi-chamber centre gasket with fins for superior tightness and improved thermal insulation

- Horizontal or vertical pivot fittings, optionally with
- visible bearings orconcealed bearings
- Sash weight:
 - Horizontal: up to 150 kg
 - Vertical: up to 120 kg
- Sash sizes (w x h):
 - Horizontal: up to 2400 mm x 1400 mm
 - Vertical: up to 2000 mm x 2000 mm



WICLINE 65 evo / 75 evo Integration sash, outward opening, Italian sash

An elegant appearance combined with efficient ventilation are the characteristics of the aluminium system WICLINE evo in its Italian opening version. Concealed friction stays ensure an outward opening also for large size sashes, with a secure opening fixation in any position. Special frame profiles for curtain wall integration as well as a large selection of friction stay sizes guarantee maximum versatility of the system.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E1200
Resistance to wind load:	Class C5 / B5
Operating forces:	Class 1
Mechanical strength:	Class 4
Repeated opening / closing:	Class 2 (10000 cycles)
Impact resistance:	Class 3
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 69 mm
- Optionally with frame for punched hole application

Thermal insulation:

- U, values: until 1.5 W/(m²K)
- U_w values: until 1.0 W/(m²K) with triple glazing

Sealing concept:

Voluminous centre gasket with formed corners

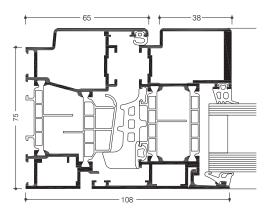
- Concealed integrated friction stay fittings, with vertical adjustment
- Operation either manual or motorised
- Sash weight: until 150 kg
- Sash sizes (w x h): until 2000 mm x 2200 mm



WICONA

WICLINE 65 evo / 75 evo Integration sash, outward opening, Top-hung sash / Side-hung sash

A sash opening towards the outside offers many substantial advantages like effective ventilation, the choice between manual and motorised operation, and avoids a disturbing sash towards the inside. With large sash dimensions available and optimised functionality WICLINE evo offers an interesting alternative opening type for architecture.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E1200
Resistance to wind load:	Class C5 / B5
Operating forces:	Class 1
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 4
Repeated opening / closing:	Class 2 (10000 cycles)
Impact resistance:	Class 3
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 69 mm
- Optionally with frame for punched hole application

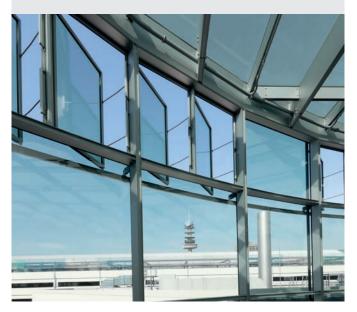
Thermal insulation:

- U_r values until 1.5 W/(m²K)
- U values until 0.94 W/(m²K)

Sealing concept:

• Special multi-chamber centre gasket with fins for superior tightness and improved thermal insulation

- Externally applied turn hinges, optionally with
- top fixation for top-hung openinglateral fixation for side-hung opening
- Operation either manual or motorised
- Sash weight until 150 kg
- Sash sizes (w x h): until 2000 mm x 2000 mm

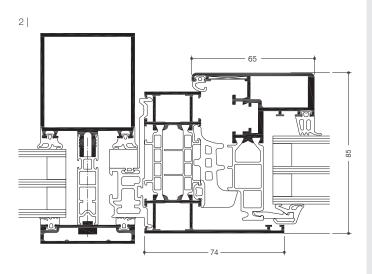




WICLINE 65 evo / 75 evo Integration sash Turn / Tilt-turn / Turn sash



The ideal combination: WICTEC stick system curtain walls with integrated opening sashes from the WICLINE window series. These versatile systems, which provide enhanced performance benefits, also offer individual solutions on highest technical and design level, adaptable with a large selection of additional functions.



1 | Example standard sash

2 | Example concealed sash

System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010 and DIN EN 13830

See classification of the WICLINE window series and the WICTEC curtain wall series.

Technical performance:

Profile technology:

1|

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 69 mm

Thermal insulation:

See values of the respective window and door series

Inward opening options:

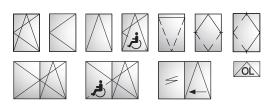
- Turn / turn-tilt / tilt window
- Concealed sash
- Horizontal pivot window
- Vertical pivot window
- Burglar resistance

Hardware:

- Heavy duty system fittings with:
 - visible hinges, powder coating or anodisation in all colours
 - concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weight:
 - Concealed turn-tilt hinges: up to 160 kg
 - Visible turn-tilt hinges: up to 200 kg
 - Turn hinges (on demand): up to 300 kg
- Sash sizes (w x h): 1700 mm x 2500 mm
- Optionally with opening limiter in various executions

- **Outward opening options:**
- Top-hung window
- Side-hung window
- Italian window

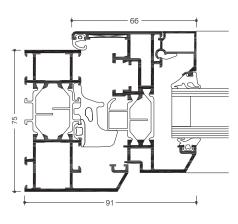
- Visible hinges top-hung or side-hung
- Concealed hinges Italian style window
- Sash weight: up to 150 kg
- Sash sizes (w x h): up to 2000 mm x 2000 mm



>> WICLINE 65 evo / 75 evo Classic design



Bevelled profile contours and overlapping sashes are characteristic for the aluminium door series WICSTYLE evo in a classic design. This design underlines a style which is often requested for residential architecture. Ideal for new building and for energetic renovations alike.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E900
Resistance to wind load:	Class C5/B5
Acoustic performance:	$R_{w}(C; C_{tr}) = 47 (-1; -4) dB$
Operating forces:	Class 1
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 4
Repeated opening/closing:	Class 3 (20000 cycles)
Corrosion resistance of the fittings:	Class 5
Burglar resistance:	RC1N, RC2N, RC2, RC3
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection, with 30° bevelled glazing rebates
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 59 mm

Thermal insulation:

- U_f values: until 1.5 W/(m²K)
- U_w values: until 0.84 W/(m²K) with triple glazing

Sealing concept:

- Voluminous centre gasket with three
 - installation methods:
 - Circumferential centre gasket, avoiding joints in the corner areas
 - Formed corners, avoiding adhesive in the joints
 - Corner vulcanised frames

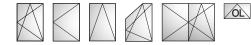
Hardware:

- Heavy duty system fittings with:
 - visible hinges, powder coating or anodisation in all colours
 - concealed hinges with integrated end position damping, opening angle max. 105°
- Sash weight:
 - Visible hinges: up to 100 kg
 - Concealed hinges: up to 100 kg
- Sash sizes (w x h): 1300 mm x 1700 mm
- Optionally with opening limiter in various executions

Additional options in classic design:

- Flush sash in classic design
- Overlapping sash and frame in classic design
- Fixed glazing
- Double casement window
- Crossbar profiles and glazing bars
- Integration frame for stick façades
- Fanlight
- Burglar resistance (see system tests)

Compatible with the door series WICSTYLE 65 evo and WICSTYLE 75 evo in Classic Design



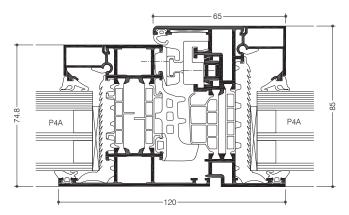


WICONA

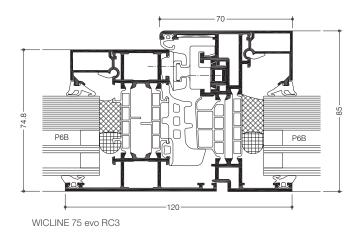
WICLINE Window systems Burglar resistance

Personal security and building protection – for your building you need a solution approach which can be accomplished with aluminium systems in a wholistic and compatible way. This is achieved by the WICONA series for windows, curtain walls and doors. Each of them can provide burglar resistance, in combination with other additional functions.

The various levels of resistance classes can be achieved with all WICLINE window series without visual alterations of the constructions, with only a minimum of additional measures on the basis of the standard design.



WICLINE 75 evo RC2



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

See classification of the respective WICLINE window series.



Technical performance:

Burglar resistance according to EN 1627:

 The currently valid standard for burglar resistance, EN 1627, has come into effect in European countries in 2011 and 2012. It replaced former national standards. The classifi cations have been modifi ed to classes RC1N to RC3, which are not identical with the former classes WK1 to WK3.

Test results of the WICONA window series:

• The new WICLINE 65 evo and WICLINE 75 evo series with several variations have been tested according to the new standard EN 1627. They can easily be specifi ed and implemented without any additional measurement according to this new standard.

Burglar resistance according to EN 1627 resp. DIN 1627 / classifications:

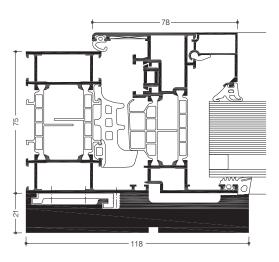
WICLINE 65 evo / 75 evo Turn / turn-tilt / tilt / tilt- first / double casement	RC1N, RC2N, RC2, RC3
WICLINE 65 evo / 75 evo Fanlight	RC1N, RC2N, RC2, RC3
WICLINE 65 evo / 75 evo Concealed sash	RC1N, RC2N, RC2, RC3
WICLINE 65 evo / 75 evo Classic design	RC1N, RC2N, RC2, RC3
WICLINE 95 Turn/ Turn-tilt/ Tilt/ Tilt-first/ Fanlight	RC1N, RC2N, RC2, RC3
WICLINE 115 AFS Turn/ Turn-tilt/ Tilt/ Tilt-first/ fixed field	RC1N, RC2N, RC2, RC3



WICONA

>> WICLINE Window systems Bullet resistance

Personal security and building protection – for your building you need a solution approach which can be accomplished with aluminium systems in a wholistic and compatible way. This is achieved by the WICONA series for windows, curtain walls and doors. Each of them can provide bullet resistance, in combination with other additional functions. The requirements for bullet resistance are achieved with various WICLINE window profile combinations, simply by addition of the standard construction with a special aluminium planking.



System test results/CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

See classification of the respective WICLINE window series.





Technical performance:

Bullet resistance according to EN 1522

- The bullet resistance requirements for windows are regulated Europe wide in the standard EN 1522. The new window series WICLINE 65 evo and WICLINE 75 evo have been tested according to this standard in various profile combinations, and successfully been certified in class FB4 S and FB4 NS.
- Bullet resistance in classes FB4 S and FB4 NS can be achieved for various opening types, in punched hole applications or in ribbon windows.
- Bullet resistance can be combined with burglar resistance in the classes RC1N, RC2N, RC2, RC3 according to EN 1627.

Possible combinations with other WICONA product series in bullet resistance in class FB4:

- Doors WICSTYLE 65 evo/WICSTYLE 75 evo
- Stick curtain walls WICTEC 50

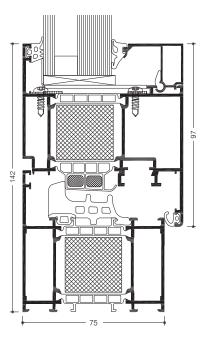
Bullet resistance according to EN 1522/classifications:

WICLINE 65 evo/75 evo Turn/turn-tilt/tilt/tilt-first/ double casement	FB4 S/FB4 NS
WICLINE 65 evo/75 evo Fanlight	FB4 S/FB4 NS

>> WICLINE 75FP Fire protection window



With the new WICLINE 75FP fire protection window series, the WICONA fire protection programme is completed. The construction is 100 % based on a WICLINE 75 standard design and cannot be visually differentiated from this design. The self-closing openable fire protection glazing can be implemented as punch windows, windows with surrounds or integrated in a WICTEC 50FP fire protection stick curtain wall.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E750
Resistance to wind load:	Class C4 / B4
Operating forces:	Class 2
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 4
Repeated opening / closing:	Class 2 (10000 cycles)
Impact resistance:	Class 3
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Thermal insulation:

WICTEC 50FP

U_f values: until 1.3 W/(m²K)

Infill thickness up to 49 mm

Technical performance:

Profile technology:

Sealing concept:

- Voluminous centre gasket with three
 - installation methods:
 - Circumferential centre gasket, avoiding joints in the corner areas

CE marking according to DIN EN 16034 El, 30-C,S,

Patented corner and butt joint connection technology

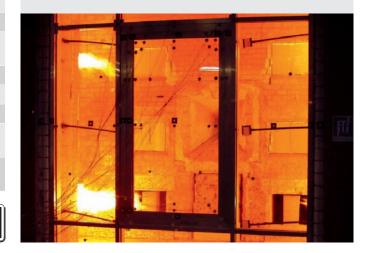
• Optionally with integration frame for stick curtain walls

Execution in fire protection classes EI30 or EW30

for high rigidity of frames and sashes

- Formed corners, avoiding adhesive in the joints
- Corner vulcanised frames

- Heavy duty system fittings, with concealed hinges, integrated end position damping, opening angle max. 105°
- Sash weight:
- up to 160 kg
- Sash sizes (w x h): 1300 mm x 2300 mm



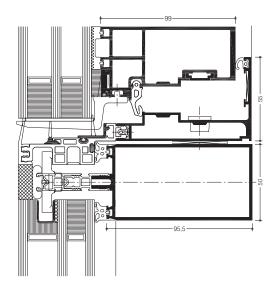


>> WICLINE 90SG Structural glazing integration sash, Italian sash / Parallel outward opening sash



As an attractive complement for curtain walls the integration sash WICLINE 90SG provides efficient ventilation, if requested also fully automated.

This all-glass window gives full options as a projecting top-hung sash or as a parallel outward opening sash and can be integrated flush with the glass panel level in WICTEC 50SG structural glazing curtain walling or in stick systems with exterior pressure profiles. For an optimum thermal insulation WICLINE 90SG can be equipped with double or triple glazing. Using standard glass without glass step leads to an economy of cost and improved safety.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	E750
Resistance to wind load:	Class C4 / B4
Repeated opening / closing:	Class 2 (10000 cycles)
Impact resistance:	up to Class 3
Load bearing capacity of safety devices:	Fulfilled
Approval	ETA: -12/0551 (European Technical Approval)
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Technical performance:

Profile technology:

- All-glass sash with slim profile design for maximum transparency and finelined window structures.
 Construction depth 90 mm, interior width 55 mm
- ETA granted (European Technical Approval)
- Infill thickness up to 62 mm
- For double or triplex glass
- Technology without step glazing, leading to economy and simpler assembly
- Complete fittings from WICONA for manual or motor operation

Thermal insulation:

U_f value until 1.1 W/(m²K)

Italian sash application:

- Sash weight until 180 kg
- Sash sizes (w x h): until 1500 mm x 2500 mm or until 2000 mm x 1700 mm

Parallel outward sash application:

- Sash weight until 200 kg
- Sash sizes (w x h): until 1500 mm x 3000 mm or until 2000 mm x 1500 mm

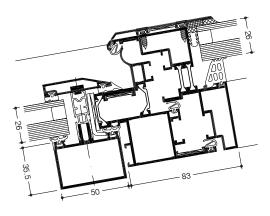


WICONA

>> WICTEC 50 Integration sash Skylight window



The quality requirements for ventilation sashes are particularly high for those installed in the roof. WICTEC 50 meets these requirements and delivers a delicate appearance with minimal offset of the glass level. Minimised profile widths, concealed hinges with 90° opening angle and the option of large sash formats offer extensive freedom of design. Thanks to the large ventilation cross sections, the WICTEC 50 skylight is also ideal for use as natural smoke and heat exhaust ventilators.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	9A
Resistance to wind load:	Class C5 / B5
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Technical performance:

Profile technology:

- High insulation triple-chamber system, quality assured thermal insulator connection
- Slim design with only 81 mm visible sight line
 Offset against the glass only 36 mm
 - Application in sloped glazing until 10°

Hardware:

- Concealed turn hinges
- Opening angle 90°
- Manual or motorised operation

Sash weight:

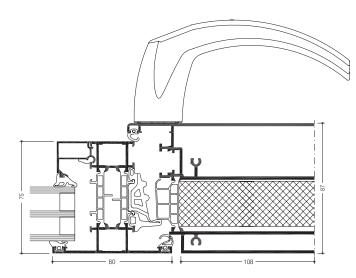
- Until 130 kg
- Sash sizes (w x h): until 1800 mm x 1400 mm or until 1400 mm x 1800 mm

Additional options:

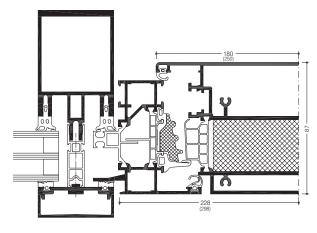
• NSHEV: tested and approved as natural smoke and heat extraction ventilation unit.



>> WICLINE 75 evo Ventilation flap



WICLINE 75 evo Ventilation flap 180 with window frame



WICLINE 75 evo Ventilation flap 250 with tensioning frame for facades

System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	Class 9A
Resistance to wind load:	Class C5 / B5
Sound insulation:	Until 42 dB
Burglar resistance:	RC1N, RC2N, RC2



Technical performance:

Highlights:

- Sash widths from 170 to 330 mm, Standard dimensions 180 and 250 mm
- Max. sash sizes (w x h): 180 mm x 3000 mm or 250 mm x 3000 mm
- Fast and economical adjustment of the sash width in the object
- Narrowest possible shadow gap between sash and frame - only 6 mm as in standard WICONA windows
- 3 m sash height including burglar resistance up to RC2
- Simple and efficient processing exclusively with 90° cutting saw or notch cuts
- Comprehensive system testing according to DIN 14351-1 verifies the high quality of the system technology

Thermal insulation:

U_f value up to 1.2 W/(m²K)

Hardware:

- High quality system fittings with Direct Positioning System (DPS). Components can be assembled in any order, optionally:
 - Surface-mounted hinges, colour coated or anodised
 - Concealed hinges with integrated end-position stops
- Sash weights: 80 kg
- Optionally with opening limiter
- Burglar resistance RC1N, RC2N and RC2

Concealed motor integration:

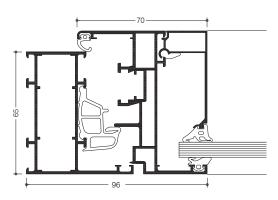
- 90° opening allowing for maximum ventilation
- Low-maintenance and tamper-proof
- Adjustable opening angle
- Control via ventilation switches, remote control or building management system
- Concealed emergency release
- No motor chains protruding into the opening area

Compatible with the window series WICLINE 75 and façade series WICTEC

>> WICLINE 65N Non-insulated windows

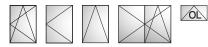


The WICLINE 65N aluminium window is ideally suited for buildings in which specific heat protection measures are unnecessary. Ideal as well for the use as NSHEV (Natural Smoke and Heat Exhaust Ventilator).



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	9A
Resistance to wind load:	Class C5 / B5
Operating forces:	Class 1
Repeated opening / closing:	Class 2 (10000 cycles)
Burglar resistance:	WK1, WK2
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001





Technical peformance:

Profile technology:

- High quality aluminium profiles, without thermal break
- Patented corner and butt joint connection technology for high rigidity of frames and sashes
- Infill thickness up to 58 mm

Hardware:

- Concealed single-handed operated fittings,
 - alternatively with:
 - Visible hinges
 - Concealed hinges
- Sash weight:
- Up to 100 kg
- Sash sizes (w x h): 1300 mm x 1700 mm

Additional designs non-insulated:

- Window-doors / French doors
- NSHEV applications
- Burglar resistance

Compatible with the door series WICSTYLE 65N non-insulated

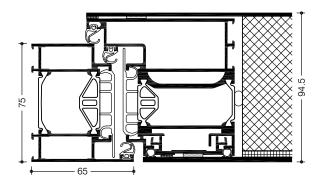
36

>> WICSTYLE 75 evo Panel doors



Complete system for single- and double-leaf doors, which can be both inward or outward opening. With its smooth rebated cover profile, it doesn't just deliver on looks, but its seamless design offers an easy cleaning solution.

Characteristic design using profile covering infills. With this patented solution, WICONA introduces an innovative front door to meet the highest demands of design and energy efficiency. Besides giving the leaf covering the desired visually harmonious effect, this construction also reduces deformation of the doors leaves to a minimum using the bi-metal effect.





Technical performance:

Section technology:

- Leaf profile 75 mm
- Frame profile 95 mm Classic Design or 75 mm flush-mounted
- Single-sided profile covering (or leaf covering)
- Double-sided profile covering
- Single-leaf, inward or outward opening
- Double-leaf, inward or outward opening

Thermal insulation:

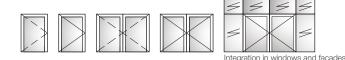
U_d-Values up to 0.78 W/(m²K)

Hardware:

- Concealed hinges, WICONA invisio system
- Max. leaf weight 160 kg
- Max. leaf sizes (w x h): 1400 mm x 2520 mm
- Automatically locking WICONA autotronic 834P motorised lock
- Finger scan and remote control (further options available)
- Integrated concealed door drive system

Test results for product standard DIN EN 14351-1

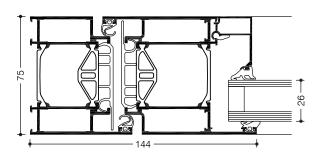
Air permeability:	Class 3
Driving rain resistance:	Class 6A
Ability to withstand wind load:	Class C2
Operating forces:	Class 5
Climate effects:	Class 3(e)



>> WICSTYLE 75 evo Hinged door



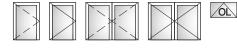
With a 75 mm profile depth, WICSTYLE 75 evo puts itself ahead in terms of thermal insulation and physical features. Its outstanding technical performance and application range make it the ideal door solution for all current and future requirements in architecture, both in new buildings and in renovations.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Until class 2
Watertightness:	Until 7A
Resistance to wind load:	Class C2
Acoustic performance:	R _w (C; C _t) until 43 (–2; –5) dB
Operating forces:	Class 2
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 3
Repeated opening / closing:	Until class 7 (500 000 cycles)
Impact resistance:	Class 1
Behaviour between different climates:	Until class 2(e) 2(d)
Burglar resistance:	RC1N, RC2N, RC2, RC3
Bullet resistance:	Until class FB4 NS
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Specific application data see ift product pass





Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- For single and double leaf hinged doors
- For inward and outward opening
- For glass or panels with infill thickness from 6 mm to 60 mm
- Various threshold profiles with or without thermal break, also barrier free
- Fanlights, lateral glazings fixed or opening in combination with WICLINE evo window series

Thermal insulation:

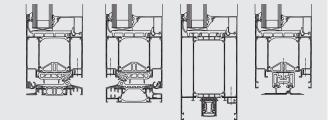
 U_f values: from 1.6 to 1.8 W/(m²K), without foam inserts

Hardware:

- Butt hinge
- Screwed hinge
- Concealed hinge
- Leaf sizes (w x h): 1400 mm x 2520 mm
- Max. leaf weight: until 200 kg, for bullet resistance with additional hinges until 400 kg

Additional designs:

- Double action doors
- Integration frame for stick façades
- Burglar resistance in classes RC1 to RC3
- Bullet resistance in class FB4
- Leaf overlapping infill on one side or on both sides

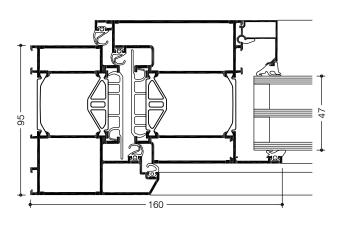


WICSTYLE threshold options

>> WICSTYLE 75 evo Classic design



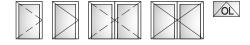
Bevelled profile contours and overlapping sashes are characteristic for the classic design of the WICSTYLE evo aluminium door series. This design underlines a style which is often requested for residential architecture. Ideal for new building and for energetic renovations alike.



System test results / CE product pass in accordance with DIN EN 14351-1:

Air permeability:	Until class 4
Watertightness:	Until 7A
Resistance to wind load:	Class C2
Acoustic performance:	R _w (C; C _{tr}) until 43 (–2; –5) dB
Operating forces:	Class 2
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 3
Repeated opening / closing:	Until class 7 (500 000 cycles)
Impact resistance:	Class 1
Behaviour between different climates:	Until class 2(e) 2(d)
Burglar resistance:	RC1N, RC2N, RC2, RC3
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Specific application data see ift product pass



Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- For single and double leaf hinged doors
- For inward and outward opening
- For glass or panels with infill thickness from 3 mm to 60 mm
- Various threshold profiles with or without thermal break, also barrier free
- Fanlights, lateral glazings fixed or opening in combination with WICLINE evo window series

Thermal insulation:

 U_f values: from 1.6 to 1.8 W/(m²K), without foam inserts

Hardware:

- Butt hinge
- Screwed hinge
- Concealed hinge
- Leaf sizes (w x h): 1400 mm x 2520 mm
- Max. leaf weight: until 200 kg

Additional designs:

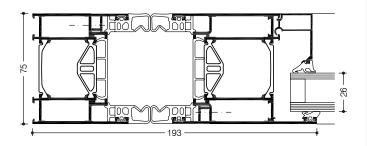
- Double action doors
- Integration frame for stick façades
- Burglar resistance in classes RC1 to RC3

>> WICSTYLE 65 evo / 75 evo Finger protection door



The finger protection variation is based on the technical concept of the WICSTYLE evo aluminium door, with a 65 mm and 75 mm profile and is fully compatible with other solutions for ease of fabrication. The equipment and tools for manufacture remain the same, so that inventory does not increase unnecessarily and no time whatsoever is lost during production.

Finger protection is achieved using special seals and requires no additional elements for installation. Tools and manufacturing processes remain the same. As with all the versions in the WICSTYLE range, the door with an installation profile can be incorporated into the WICTEC façade and is also compatible with the WICLINE window system.



System test results / CE product pass in accordance with DIN EN 14351-1

Air permeability:	Class 2
Watertightness:	Until 6A
Resistance to wind load:	Class C2
Operating forces:	Class 2
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 3
Repeated opening / closing:	Until class 7 (500 000 cycles)
Impact resistance:	Class 1
Behaviour between different climates:	Until class 2(e) 2(d)
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Specific application data see ift product pass



Technical performance:

Profile technology:

- Finger protection on the hinge side is effected only by special gaskets. No other additional parts are needed.
- The requirements of the standard DIN 18650 (safety distance > 25 mm) are met
- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- For single and double leaf hinged doors
- For inward and outward opening
- For glass or panels with infill thickness from 3 mm to 60 mm
- Various threshold profiles with or without thermal break, also barrier free
- Fanlights, lateral glazings fixed or opening in combination with WICLINE evo window series

Thermal insulation:

 U_f values: from 1.6 to 1.8 W/(m²K), without foam inserts

Hardware:

- Butt hinge
- Screwed hinge
- Leaf sizes (w x h): 1400 mm x 2520 mm
- Max. leaf weight: until 200 kg

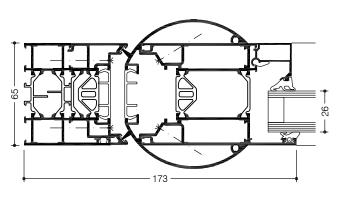
Additional designs:

- Double action doors
- Integration frame for stick façades

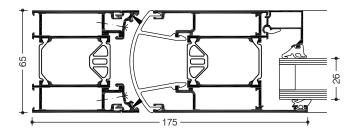
>> WICSTYLE 65 evo Double action door



The WICSTYLE 65 evo series offers two profile options for single and double sash doors with double action fitting. Both versions are based on the standard door series and can perfectly be combined with it.



With round profile, fulfils also the finger protection requirements



Flush surface door

Technical performance:

Profile technology:

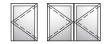
- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- For single and double leaf double action doors
- For glass or panels with infill thickness from 3 mm to 50 mm
- Various threshold profiles, also barrier free
- Fanlights, lateral glazings fixed or opening in combination with WICLINE evo window series

Hardware:

- With overhead door closer
- With floor spring
- Leaf sizes (w x h): 1300 mm x 2300 mm
- Max. leaf weight: until 160 kg

Additional designs:

Integration frame for stick façades

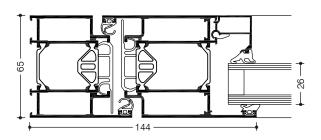




>> WICSTYLE 65 evo Hinged doors



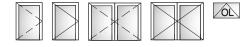
WICSTYLE 65 evo with its flush leaf design in 65 mm system depth and a comprehensive application range is perfectly qualified for the highest demands in design, technological quality and performance. Due to its favourable price/performance ratio it constitutes an economical aluminium door solution for almost any requirement.



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Until Class 4
Watertightness:	Until 7A
Resistance to wind load:	Class C2
Acoustic performance:	$\rm R_{_{\rm W}}$ (C; $\rm C_{_{\rm tr}}$) until 42 (–2; –5) dB
Operating forces:	Class 2
Load bearing capacity of safety devices:	Fulfilled
Mechanical strength:	Class 3
Repeated opening / closing:	Until class 8 (1 000 000 cycles)
Impact resistance:	Class 1
Behaviour between different climates:	Until class 2(e) 2(d)
Burglar resistance:	RC1N, RC2N, RC2, RC3
Bullet resistance:	Until FB4 NS
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

Specific application data see ift product pass





Technical performance:

Profile technology:

- High insulation multi-chamber system in symmetric design, quality assured thermal insulator connection
- For single and double leaf hinged doors
- For inward and outward opening
- For glass or panels with infill thickness from 3 mm to 50 mm
- Various threshold profiles with or without thermal break, also barrier free
- Fanlights, lateral glazings fixed or openable in combination with WICLINE evo window series

Thermal insulation:

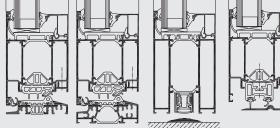
- U_r values: from 1.8 to 2.1 W/(m²K)
- U_d values: until 1.3 W/(m²K)

Hardware:

- Butt hinge
- Screwed hinge
- Concealed hinge
- Leaf sizes (w x h): 1400 mm x 2520 mm
- Max. leaf weight: until 200 kg, for bullet resistance with additional hinges until 400 kg

Additional designs:

- Double action doors
- Integration frame for stick façades
- Burglar resistance in classes RC1 to RC3
- Bullet resistance in class FB4
- Leaf overlapping infill on one side or on both sides



WICSTYLE threshold options

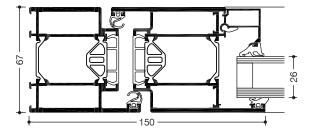


>> WICSTYLE 65 Hinged doors



The solution for high-traffic areas is based on the successful concept of the WICSTYLE evo doors and, with a 65 mm profile, is fully compatible with other solutions for ease of fabrication. The equipment and tools for manufacture remain the same.

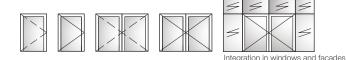
The WICTYLE 65 door for high-traffic areas is also fully compatible with WICTEC façade systems and WICLINE window systems.



WICSTYLE 65 - version for high-traffic areas

Test results for product standard NF EN 14351-1

Air permeability:	Class 4
Driving rain resistance:	Class 7A
Ability to withstand wind load:	Class C2
Soundproofing:	$R_{w}(C; C_{tr}) = 43 (-2; -5) dB$
Impact resistance:	Class 3
Mechanical strength:	Class 3
Continuous operation:	Class 8 1 000 000 cycles
Load capacity of safety devices:	Fullfilled
Operating forces:	Class 2



Technical performance:

Profile technology:

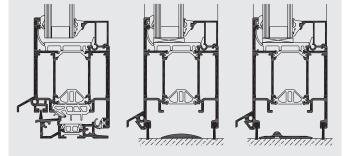
- Reinforced, thermally insulated multi-chamber system
- Inwards or outwards opening
- Single- or double-leaf
- Infill thicknesses: 3 mm to 50 mm
- Tight, accessible threshold
- Locks on PVC supports

Thermal insulation:

• $U_d = 1.7 \text{ W/(m^2K)}$ with $U_g = 1.1 \text{ W/(m^2K)}$

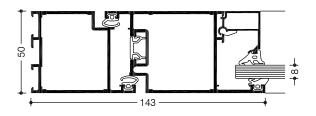
Hardware:

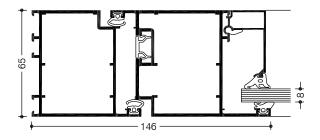
- Rolled strip:
 - Maximum weight 2 strips: 130 kg
 - Maximum weight 3 strips: 150 kg
- Max. leaf sizes (w x h): 1500 mm x 2600 mm



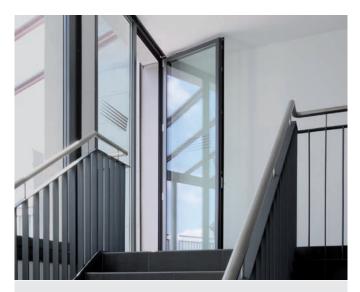
>> WICSTYLE 50N/65N Hinged doors, non-insulated

These aluminium systems are designed specially for use inside buildings or where thermal insulation is not a determining factor. The range also meets high standards with regard to functionality, durability and comfort, whilst providing good economy.





/OL



Technical performance:

Profile technology:

- High quality profiles with profile depth 50 mm for WICSTYLE 50N or 65 mm for WICSTYLE 65N
- For single and double leaf hinged doors with flush leaf profiles
- For inward and outward opening
- Option of glass-separating or adhesive sash bars
- Fanlights, lateral glazings fixed or opening in combination with WICLINE evo window series
- With mechanical floor gasket or stop gasket
- With butt-hinge or screwed hinge

Special for WICSTYLE 50N:

- Infill thickness 4 mm to 31 mm
- Leaf weight until 150 kg
- Max. leaf size (w x h): until 1300 mm x 2350 mm

Special for WICSTYLE 65N:

- Infill thickness 4 mm to 46 mm (flush leaf) or 8 mm to 57 mm (overlapping leaf)
- Leaf weight until 200 kg
- Max. leaf sizes (w x h): until 1450 mm x 2700 mm

Additional designs:

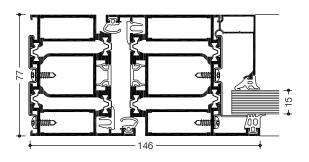
 WICSTYLE 65N also possible as smoke control door and with burglar resistance in resistance classes WK1 and WK2



WICSTYLE 77FP Fire protection door El30/T30 and El60/T60



This aluminium door in modular set-up fulfils the requirements of class El30 and/or class T30/F30 for single and double-leaf doors without the need for fire protection inserts. Simply by add-ing these, class El60 and/or T60/F60 are achieved. A full range of fanlight or fixed top or lateral glazings assure a comprehensive application range.



Technical performance:

Profile technology:

- Approved by building authorities
- CE marking according to DIN EN 16034 El₂ 30-C₅S₂₀₀
- Execution in fire protection classes El30/T30/F30 without fire protection inserts
- Execution in fire protection classes EI60/T60/F60 simply by adding fire protection inserts
- For single and double leaf hinged doors, inward and outward opening
- Fixed glazings, lateral lights and fanlights possible in many options
- Identical profile elevation as in the door series WICSTYLE 65 evo and WICSTYLE 75 evo, allowing for a unique design in a building project

Hardware:

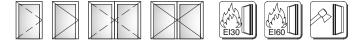
- Butt hinge or screwed hinges in the same design as for WICSTYLE standard series, leading to a harmonised building design
- Extensive fittings for requirements such as panic functions, emergency exit seals, electric safety locks, electronic openers, revolving door drive with magnet and bolt contact
- Max. leaf sizes (w x h): up to 1462 mm x 2990 mm (single leaf), or 2943 mm x 2990 mm (double leaf)
- Max. leaf weight: up to 260 kg



System test results / CE product pass in accordance with DIN EN 14351-1:2006+A1:2010

Air permeability:	Class 4
Watertightness:	Class 6A
Resistance to wind load:	Class C3 / B3
Burglar resistance:	RC1N, RC2N, RC2

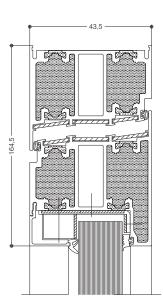
 \triangle Approval in accordance with national regulations

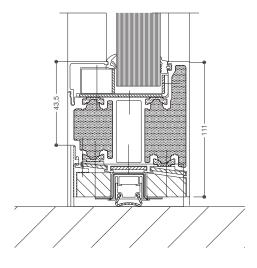


WICSTYLE 90FP Fire protection door T90/F90

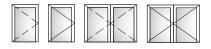


WICSTYLE 90FP is delivered as a pre-assembled component and offers very high fire resistance of 90 minutes as a single or double-leaf hinged door. This is also available in combination with fixed glazing. The door is designed for internal use, opening inwards and outwards. In individual cases, outdoor usage is possible after consultation.





Hinged door, outward opening. Special frame with surrounding leaf profile and lowering gasket.





Technical performance:

Profile technology:

- WICSTYLE 90FP is approved for the German market. For other countries the national regulations must be respected.
- Pre-assembled fire protection system, doors are ready to install and include glass
- Execution in fire protection classes T90/F90
- For indoor application, inward and outward opening, and fixed glazing
- Fixed glazings, lateral lights and fanlights possible in many options
- Slim profile dimensions for filigree design
- Flush leaf with profile depth 100 mm
- Free choice for surface treatment
- Additional functions possible with large fitting portfolio

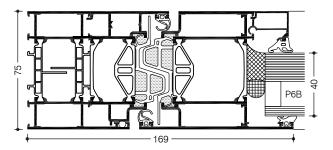


WICONA

>> WICSTYLE Door systems Burglar resistance

Personal security and building protection – for your building you need a solution approach which can be accomplished with aluminium systems in a wholistic and compatible way. This is achieved by the WICONA series for windows, curtain walls and doors. Each of them can provide in burglar resistance, in combination with other additional functions.

The various levels of resistance classes can be achieved with all WICSTYLE door series without visual alterations of the constructions, with only a minimum of additional measures on the basis of the standard design.



WICSTYLE 65 evo in class RC3

System test results / CE product pass in accordance with DIN EN 14351-1

See classification of the respective WICSTYLE door series





Technical performance:

Burglar resistance according to DIN EN 1627:

 The currently valid standard for burglar resistance, DIN EN 1627, has come into effect in European countries in 2011 and 2012. It replaced former national standards. The classifications have been modified to classes RC1N to RC3, which are not identical with the former classes WK1 to WK3, as the test sequences have been changed.

Test results of the WICONA door series:

 The new WICSTYLE 65 evo and WICSTYLE 75 evo door series with several variations have been tested according to the new standard DIN EN 1627. They can easily be specified and implemented without any additional measurement according to this new standard.

Burglar resistance according to DIN EN 1627 resp. DIN 1627 / classifications:

WICSTYLE 65 evo / 75 evo Hinged doors	RC1N, RC2N, RC2, RC3
WICSTYLE 65 evo / 75 evo Classic design	RC1N, RC2N, RC2, RC3
WICSTYLE 65N, non-insulated	WK1, WK2

WICONA

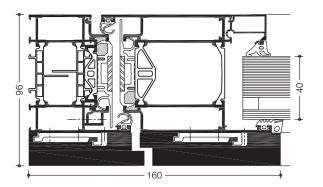
>> WICSTYLE Door systems Bullet resistance



Following the WICONA Unisys principle, the bullet-resistant version of the WICSTYLE aluminium doors was developed from the the WICSTYLE evo range.

The design construction of the WICSTYLE evo standard door is expanded using surface-mounted aluminium profiles to offer protection against firearms. The appearance of the doors fronts which are protected in this way remain visually unchanged compared with standard version. There is no change to the manufacturing process either, so no additional time is required.

Naturally, the door must be supplemented with multipoint locks and suitable bullet-resistant glazing.



WICSTYLE 75 evo in class FB4

System test results / CE product pass in accordance with DIN EN 14351-1

See classification of the respective WICSTYLE door series



Technical performance:

Bullet resistance according to EN 1522

- The new door series WICSTYLE 65 evo and WICSTYLE 75 evo have been tested according to this standard in various profile combinations, and successfully been certified in class FB4 S and FB4 NS.
- Bullet resistance can be combined with burglar resistance in the classes RC1N, RC2N, RC2, RC3 according to EN 1627.

Possible combinations with other WICONA product series in bullet resistance in class FB4:

- Windows WICLINE 65 evo / WICLINE 75 evo
- Stick curtain walls WICTEC 50

Bullet resistance according to EN 1522 / classifications:

WICSTYLE 65 evo / WICSTYLE 75 evo Hinged doors, single or double leaf, inward or outward opening

FB4 S / FB4 NS

WICONA

>> WICSTYLE Door systems Emergency exit



Technical performance:

Profile technology:

- Doors in accordance with EN 179 (emergency exit devices) or with EN 1125 (panic exit devices)
- Many system options for the emergency application, allowing for a unified door design within the building, irrespective of additional functions
- Single or double leaf possible
- Combination with burglar resistance in classes RC1 and RC2 possible
- Execution in combination with fire protection in classes T30 and T60 and in combination with smoke control possible (national regulations must be respected)



WICSTYLE systems for exit doors according to EN 179 (emergency exit device) and according to EN 1125 (panic exit device)

WICSTYLE 65 evo hinged door WICSTYLE 75 evo hinged door WICSTYLE evo finger protection door WICSTYLE 65 non-insulated WICSTYLE 77FP fire protection door

In panic situations the safety and evacuation of people in the building are the main concern. In Europe uniform standards for emergency exit door fittings are applicable. Within the meaning of these standards, emergency exit door systems are subdivided in emergency exit devices according to EN 179, and panic door exit devices according to EN 1125. Emergency exits acc. to EN 179 are designated to buildings to which the general public does not have access and whose visitors understand the function of the emergency doors.

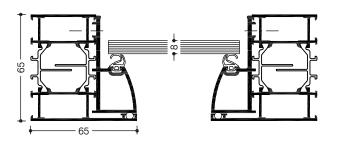
Panic door exit devices acc. to EN 1125 are used in public buildings where the visitors are not familiar with the function of emergency doors, like schools, hospitals, shopping malls. WICSTYLE door systems offer a comprehensive range of applications, which can also be combined with other functions and design options.



>> WICSTYLE 65 evo All-glass doors



All-glass doors create maximum transparency in a building. WICSTYLE all-glass doors are based on the standard WICSTYLE 65 evo serie, with many identical parts, and thus offer optimal compatibility with other door solutions within the building.



Technical performance:

Profile technology:

- High quality profile system in symmetric design
- For single and double leaf hinged doors
- For inward and outward opening
- For glass doors with 8 mm or 10 mm glass
- Fanlights, lateral glazings fixed or opening

Hardware:

• Fittings for standard glass doors with 45 kg or 55 kg leaf weight

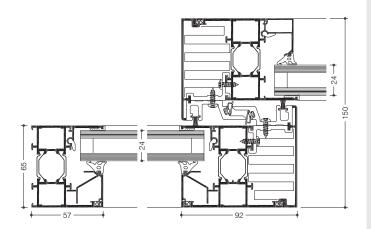


>> WICSTYLE 65ED Energy-saving automatic sliding door



WICSTYLE 65ED, the energy-saving automatic sliding door for commercial buildings, was developed in collaboration with the Swiss global market leader Gilgen Door Systems AG, on the basis of the WICSTYLE 65 profile. Automatic sliding doors have short open and close cycles that have been optimised for throughput. Therefore, when in operation they retain the largest amount of warmth within the building. A major role in energy efficiency, however, is the time in which the door remains permanently shut – such as overnight.

During such periods, WICSTYLE 65ED protects the building reliably against excessive energy loss, thereby making a significant contribution to improving the overall energy balance of the building.



System test results / CE product pass in accordance with DIN EN 14351-1

Air permeability:	Class 2
Watertightness:	5A
Resistance to wind load:	Class B1
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001



Technical performance:

Profile technology:

- Safety tested in accordance with the personal safety regulations in standard DIN 18650
- Approved complete door device (both thermally insulated profile system and drive unit), according to DIN EN 14351-1
- Leading thermal insulation values with $\rm U_{d}$ values below 1.5 W/(m²K)
- Up to 70 % less energy loss in closed situation
- Improved tightness compared to surrounding double gaskets in labyrinth application, with values comparable to residential entrance doors
- Reliable automation by Gilgen Door Systems
- Ideal for both new builds and renovations
- Attractive appearance due to narrow sight lines and coordinated integration of the door drive
- Infill thickness from 24 mm to 27 mm
- Option of single or double-leaf sliding versions, with or without lateral glazing
- Easy integration of additional functions and fittings, such as multipoint locks for increased burglar resistance

Thermal insulation:

U_d values: below 1.5 W/(m²K)

Drive system / fittings:

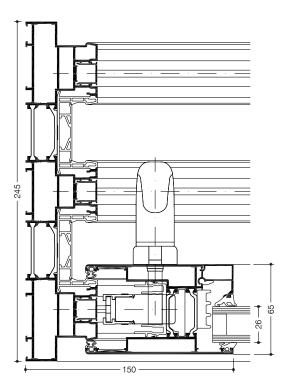
- Single or double leaf door devices
- Drive systems SLA, SLX and SLX redundant
- Possible for emergency exits
- Infill weights: until 150 kg
- Leaf sizes (w x h): until 2000 mm x 3000 mm



>> WICSLIDE 160 Lifting sliding doors



The WICSLIDE 160 lifting sliding system combines excellent thermal insulation with the highest functionality and design. Impressive leaf dimensions and enduring operation comfort are your guarantors for maximum customer satisfaction. With stateof-the-art technology and innovative advantages in fabrication, WICSLIDE 160 is a high-tech product that sets new standards.



System test results / CE product pass in accordance with DIN EN 14351-1

Air permeability:	Class 4
Watertightness:	E750
Resistance to wind load:	Class C3
Acoustic performance:	$R_{w}(C; C_{tr}) = 43 (-1; -3) dB$
Quality assurance:	Certified according to ISO 9001:2008
Environmental management:	Certified according to ISO 14001

◀┐│┌◄



Technical performance:

Profile technology:

- Improved hooking zone between the leaves for enhanced thermal insulation and tightness
- Infill thickness from 4 mm to 50 mm
- Construction depth 160 mm (double track) and 245 mm (triple track)
- Special frame profiles with multi function zone
- Barrier free threshold possible
- Enduring comfort operation due to optimised running carriage technology
- Hooking zone without visible screws
- Optional with fixed glazing or fixed sash
- Easy integration in WICTEC 50 and WICTEC 60 stick system curtain walling

Thermal insulation:

U_w values: below 1.0 W/(m²K)

Hardware:

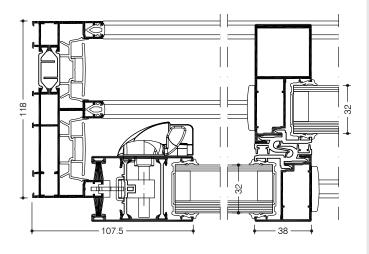
- Lifting sliding fittings, running carriage with integrated brush for permanent cleaning of the tracks
- Support device in the lowering of the leaf, resulting in reduced operation forces
- Leaf sizes (w x h): up to 3240 mm x 3400 mm
- Leaf weight up to 400 kg (lifting sliding)



>> WICSLIDE 65 Sliding windows/Sliding doors



The WICSLIDE 65 sliding unit elegantly combines large dimensions with excellent thermal properties. Many details enable each individual installation to be creatively customised. Numerous profile combinations offer you more planning freedom.



Technical performance:

Profile technology:

- Sliding units with 65 mm construction depth (double-track) or 118 mm (triple-track)
- Two-, three-, four- or six-leaved application
- Patented corner connection technology for high component strength and reduced use of adhesive.
- Infill thicknesses: 24 mm, 28 mm or 32 mm
- Concealed or visible drainage
- Perpendicular leaf profile in different designs, straight or rounded
- Individually customisable profile connection technology
- Optional: Accessible threshold

Thermal insulation:

• U_w up to 1.5 W/(m²K) with U_g = 1.0 W/(m²K)

Hardware:

- Max. leaf weight with single rollers: 80 kg
- Max. leaf weight with double rollers: 220 kg
- Leaf sizes (w x h): up to 2400 mm x 2500 mm
- Exclusive WICONA design handle

System test results / CE product pass in accordance with DIN EN 14351-1

Air permeability:	Class 4
Driving rain resistance:	Class 7A
Ability to withstand wind load:	Class A3
Soundproofing:	$R_{A,tr} = 36 \text{ dB}$
Operating forces:	Class 1
Corrosion resistance of fittings:	Class 4
Quality management:	Certified to ISO 9001:2008
Environmental management:	Certified to ISO 14001

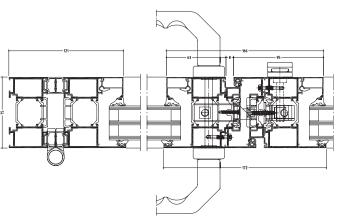


>> WICSLIDE 75FD Folding/sliding door



Finishes on the WICSLIDE 75FD folding doors are carefully designed for visual harmony in both open and closed positions. When open, all elements are black, the screw heads and the lower rollers are concealed by black caps. When closed, the profiles are flush and their presence is dignified and balanced.

The leaves of the WICSLIDE 75FD folding / sliding door system are available in two versions with sightlines of 63 mm (standard) or 73 mm (heavy-duty).



Horizontal cross-section

	Outward opening
Air permeability*:	Class 3
Watertightness*:	8A
Resistance to wind load*:	Up to Class 3
Operating forces*:	Class 1 (under 100 N)
Mechanical resistance*:	Class 3
Acoustic performance:	43 dB
Repeated opening / closing*:	Class 2: 25000 cycles (3 leaves of 150 kg)
Anticorrosion:	Grade 5

* under verification

Technical performance

- Infill thickness from 6 mm to 60 mm
- Folding / sliding elements with three to ten leaves
- Opening right or left
- Inward or outward opening
- Main leaf positioned centrally or to one side
- Standard and heavy-duty versions
- Threshold:
- Double brush seal
- Flush for persons with reduced mobility
- Frame profile for improved performance
- For higher requirements with gasket
- Hardware corrosion resistance: Grade 5 (420 h in neutral spray)
- Simple to adjust on site (vertical and lateral):
 - Vertical + 3 mm / 1 mm
 - Lateral +/- 5 mm
- Glazing with identical dimensions
- Max. leaf sizes (w): up to 1 200 mm
- Max. leaf sizes (h): up to 3000 mm
- Weight of leaves up to 150 kg
- Profile depth 75 mm
- Three-point locking, with keys

Thermal performance :

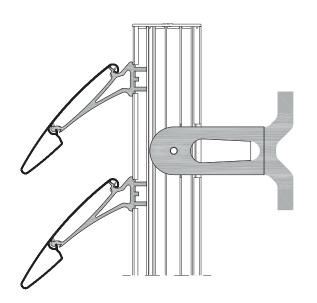
- 3-leaf door (w x h): 3773 mm x 3148 mm
 - $U_d = 1.5 \text{ W/(m^2K)}$ with $U_g = 1.1 \text{ W/(m^2K)}$ double-glazed
 - $\rm U_{d}$ = 1.0 W/(m²K) with $\rm U_{g}$ = 0.6 W/(m²K) triple-glazed

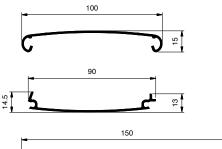


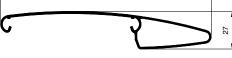
>> WICSOLAIRE Solar shading system Curtain walling integration

Modern architecture with extended glazed building skins offer increased energy gains from daylight, but require an external light control that aligns energy savings, user comfort and economy. WICSOLAIRE sunshading systems guide daylight into the building and thus reduce the need for artificial light. They control the energy and heat input by solar radiation and reduce the need for air conditioning.

The visual contact with the exterior remains and improves the sensation of comfort. As a passive technology WICSOLAIRE can be adapted in diverse options to the individual requirements and the architectural style of the building. In combination with the WI-CONA window and curtain wall systems a consistent solution is achieved. Integrated directly in the structure of a stick curtain wall, WICSOLAIRE offers a simplified construction and implementation.









Technical performance:

- Blade dimensions: Profile depth 100 mm or 150 mm
- Blade holders for fixture in 4 angles (15° / 30° / 45° / 60°)
- Horizontal blades for vertical or sloped application or canopies
- Easy assembly due to special WICTEC fixture parts for curtain wall integration or for other surfaces

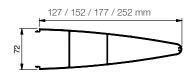
>> WICSOLAIRE Solar shading system Independent structure

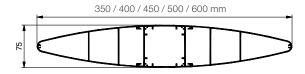


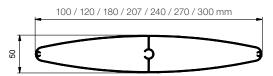
Modern architecture with extended glazed building skins offer increased energy gains from daylight, but require an external light control that aligns energy savings, user comfort and economy. WICSOLAIRE sunshading systems guide daylight into the building and thus reduce the need for artificial light. They control the energy and heat input by solar radiation and reduce the need for air conditioning.

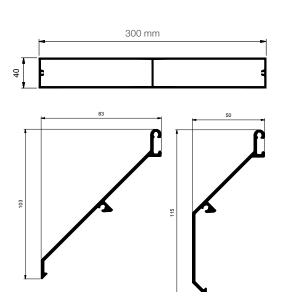
The visual contact with the exterior remains and improves the sensation of comfort. As a passive technology WICSOLAIRE can be adapted in diverse options to the individual requirements and the architectural style of the building.

Fixed directly on an independant support structure, WICSOLAIRE offers a maximum choice of applications with vertical or horizontal blade orientation, for canopies or with motorised adjustable orientation.









Technical performance:

- Easy adaptation in size, assembly, application and orientation individually to each project's requirements
- Blade holders for fixture in 4 angles (15° / 30° / 45° / 60°)
- Fixture at angles from 0° to 45° resp. from 0° to 60°, or adjustable orientation from 0° to 90°
- Blade dimensions:
- 120 mm to 270 mm for fixture in front of the support structure (0° to 45°)
- 100 mm to 300 mm (single profile) and 350 mm to 600 mm (composite profiles) for fixture between the support structure
- 175 mm to 300 mm (half-blades) for fixture in front of the support structure
- Easy assembly due to special fixture parts for every application
- Orientation of the blades horizontally or vertically or on sloped structures



Sustainable and ecological

At WICONA, sustainability and ecology have been a fundamental part of the company's philosophy for a long time. Recently, this was significant with them being awarded the Bronze Cradle-to-Cradle (C2C) Certificate for window, door, façade and sliding systems.

The process leading to certification takes the designer and manufacturer through a process of continuous product optimisation towards a combination of ambitious aesthetics, technical quality and the highest ecological standards.

The C2C Certificate complements and also offers an alternative to the well-known building certificates (DGNB, LEED, BREEAM, etc.) The criteria are directly related to the product, not to the entire building. The responsibility of the product manufacturer, including the entire prefabrication and supply chain, comes into focus.

In order to achieve one of the five levels of certification (from Basic up to Platinum), a product must satisfy the minimum requirements of the relevant level in the following five categories: Material health, Material reutilization, Renewable energy and carbon management, Water stewardship and Social fairness and biodiversity. The five C2C categories enable all aspects of the materials used, the manufacturing process – including the company's social responsibility and its impact for society – to be considered throughout the certification process.

For planners and architects, certification provides them with the advantage that, with WICONA aluminium systems, they are always able to automatically achieve at least C2C Bronze Standard. The differences in their ecological thinking and behaviour compared to the competition are clearly visible. However, for WICONA, the Bronze standard is just the start of their journey towards Platinum level.











Austria

5201 Seekirchen ♥ +43 6212 2000 ● info@wicona.at

Benelux

- 3400 Landen
- +32 11 690316
- info@wicona.be
- info@wicona.nl

Croatia

- 43000 Bjelovar
- +385 43 22 25 46
- info@wicona.de

Czech Republic

- 619 00 Brno
- +420 602 745 407
- wicona@wicona.cz

Denmark

- 8240 Risskov
- +45 7020 2048
- wicona@wicona.dk

España

08195 Sant Cugat del Vallès Barcelona

+34 93 573 77 76

Se wicona.es@wicona.com

Estonia / Latvia

- 75312 Rae vald Harjumaa
- +372 657 66 35
- Info@wicona.ee

France

02200 Courmelles +33 3 23598200 info@wicona.fr

Germany

- 89077 Ulm
- +49 731 3984-0
- Info@wicona.de

Hungary

1031 Budapest * +36 (1) 4533457 info@wicona.hu

Ireland

- Dublin 22
- +353 1 4105766
 info@wicona.ie
- Italia
- 20063 Cernusco sul Naviglio MI +39 02 924291
- info@wicona.it

Lithuania / Latvia

- 02244 Vilnius V +370 5 2102587
- S 10 5 2 10258
 S info@wicona.lt

Norway

- 2007 Kjeller
- +47 22 42 22 00
- wicona@wicona.no

Poland

- 93-428 Łódź
- +48 42 683 63 73
- info@wicona.pl

Romania

- 031041 Bucharest +40 21 3260045 info@wicona.de
- Serbia
- 11070 Beograd ♥ +381 11 312 18 35 ❷ info@wicona.de

Slovakia

82105 Bratislava +421 918 725 098 info@wicona.sk

Slovenia

- 2201 Zg. Kungota
- +386 26 20 99 70
- info@wicona.de

Sweden

- 574 81 Vetlanda
- +46 470 78 74 00
- wicona@wicona.se

Switzerland

- 5506 Mägenwil
- 🕸 +41 62 88741-41
- info@wicona.ch

United Kingdom

- Wakefield WF5 9TG
- +44 1924 232323
- info.wiconauk@wicona.com

China

- Beijing 100005, P.R.C
- 🕸 +86 10 6059 5686 ext. 805
- Scontact.wicona.international@wicona.com

Singapore

- 608831 Singapore
- 🌣 +65 6513 2126
- contact.wicona.international@wicona.com

United Arab Emirates

- **Dubai** ♥ +971 4 887 00 96
- × +9/14 00/ 00 90
- Scontact.wicona.international@wicona.com

Other countries

- 31037 Toulouse
- 🕸 +33 5 61312626
- scontact.wicona.international@wicona.com

