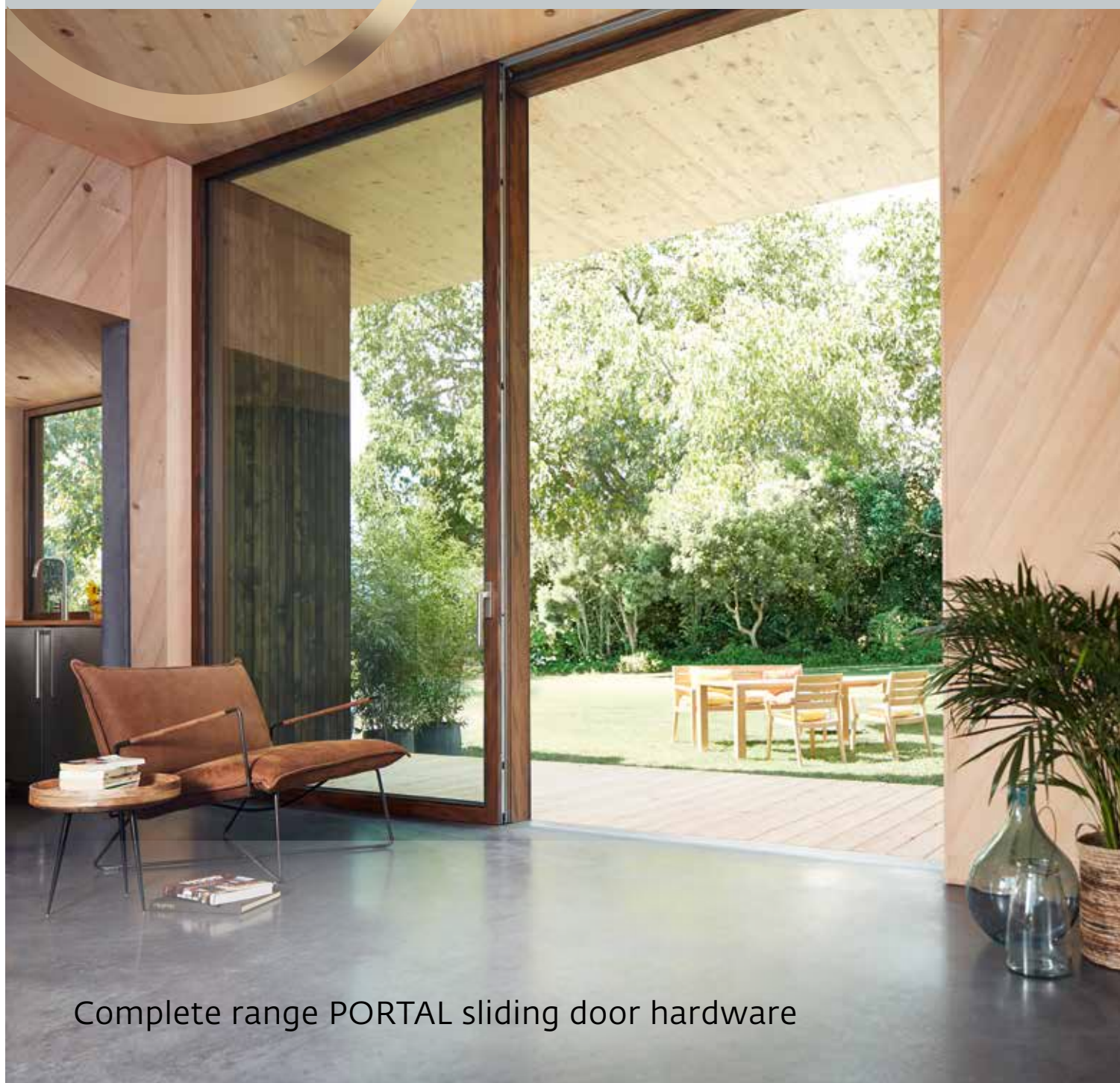


Open spaces
for the living of tomorrow.

360°
room comfort



Complete range PORTAL sliding door hardware

Experience
room comfort.
We bring spaces
to life.





More than 100 years of experience.

As a German family enterprise, for four generations now we have been developing future-oriented product solutions, which make your life easier in your everyday fabricating processes, and providing your customers with the security that comes with creating a home or a modern working environment out of four walls. Our products and solutions bring spaces to life and give people a sense of well-being.

Our instinct for the requirements of the market, the developments of the future and for the demands of our customers has made us one of the leading international innovation providers today. We owe this to a staff of more than 2,800 in around 80 countries and to the intensive exchange of ideas with our partners and customers.

Even if we didn't call it "room comfort" before: we have been working on this for over 100 years.

Room comfort with an all-round view.

In all our product developments, we consistently keep an eye on the trends and requirements of the future. Moreover, we combine this with tailored services which integrate each of our partners. But holistic, future-oriented room comfort comprises even more: namely, taking responsibility for our environment with resource-saving processes.

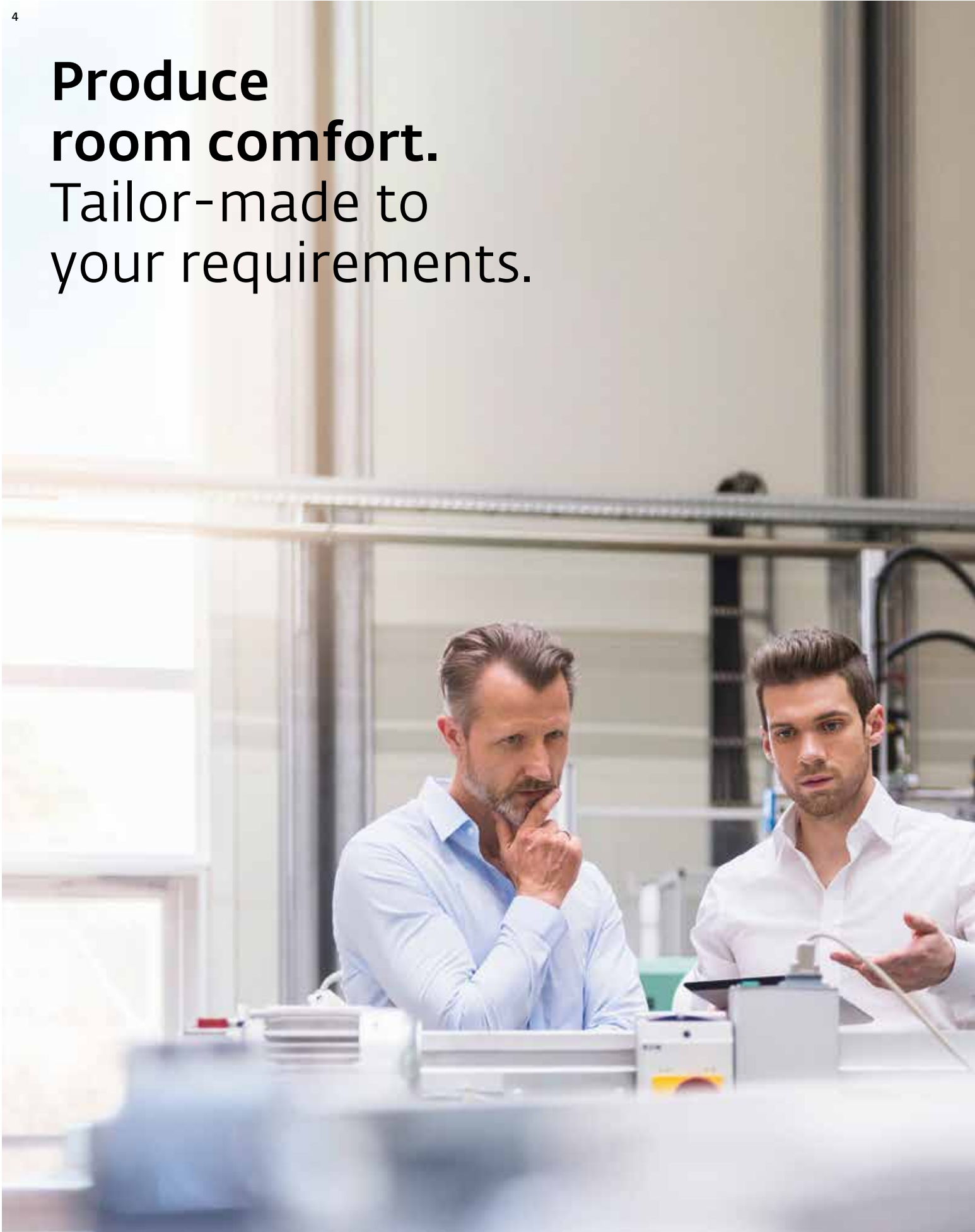
These are targets that we persistently pursue and by which we measure ourselves with conviction and an all-round-view:



360° room comfort

- > Future-oriented product solutions
- > Customised services
- > Low-resource processes

**Produce
room comfort.**
Tailor-made to
your requirements.



More solutions from one single source.

With a very diversified product portfolio for modern window systems, door systems and comfort systems, you can obtain everything from one single source with SIEGENIA, to stringently tested quality and with a wide range of innovations. Our PORTAL sliding door hardware offers you a wide range of opening types as well as solutions with up to 12 m opening width at 0 mm threshold height.

More flexibility and cost-effectiveness.

With PORTAL hardware for sliding elements, you have all the options for individual scalability in order to precisely adjust your systems to every project requirement. The high degree of pre-assembly, the optimum adjustment options and the small number of components ensure more efficient processes and streamlined logistics. We provide our lift-slide systems as a zero-hassle COMFORT UNIT package ready for assembly.

Customised services.

It is often minor details that make such a decisive difference in practice. With SIEGENIA, you have a partner who pays attention to every detail and who is aware of your everyday requirements better than anyone else. For this reason, we have pooled our product systems together perfectly with our complete know-how for you: in service packages that provide precise advice, information or on-site support. Whether this is for your production, training your staff, your marketing or your assembly line: we are there for you!



The PORTAL solution diversity.

PORTAL dissolves barriers – not only for your customers, but also in planning and assembly. Because PORTAL can be used very flexibly delivering optimum solutions from gear to sill installation.

Plan room comfort. You can build on this.



More planning quality with room comfort.

Our high-quality hardware, ventilation and building technology not only provides the building blocks for modern living and room concepts, but also well-coordinated systems. Because only when all room functions work together as one system can a room truly become a living space.

With SIEGENIA you have the freedom to create the comfort that brings spaces to life: room comfort.

Extensive support.

We want to support you with qualified consultation and services. Our team of project consultants and application technicians as well as the corresponding data technology and software are at your disposal for this purpose.



architekten.siegenia.com

PORTAL hardware for sliding elements

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PORTAL opening types

More width and a wide variety of designs.

Lift-slide

PORTAL HS



ECO SLIDE slide

PORTAL ES



Parallel slide & tilt

PORTAL PSK comfort



The true size of a room is measured not in square meters, but in apparent spaciousness and natural daylight. Here large sliding elements play out their strengths with our PORTAL hardware. Because thanks to maximum product quality and innovative comfort details, they are operated as lightly as a feather and securely in every size, weight class and material type. Thus, you can practically "dissolve walls into thin air", ensure barrier-freedom and have more freedom of design thanks to the great selection of opening types.



Parallel slide
PORTAL PS comfort



Fold and slide
PORTAL FS^{PLUS}



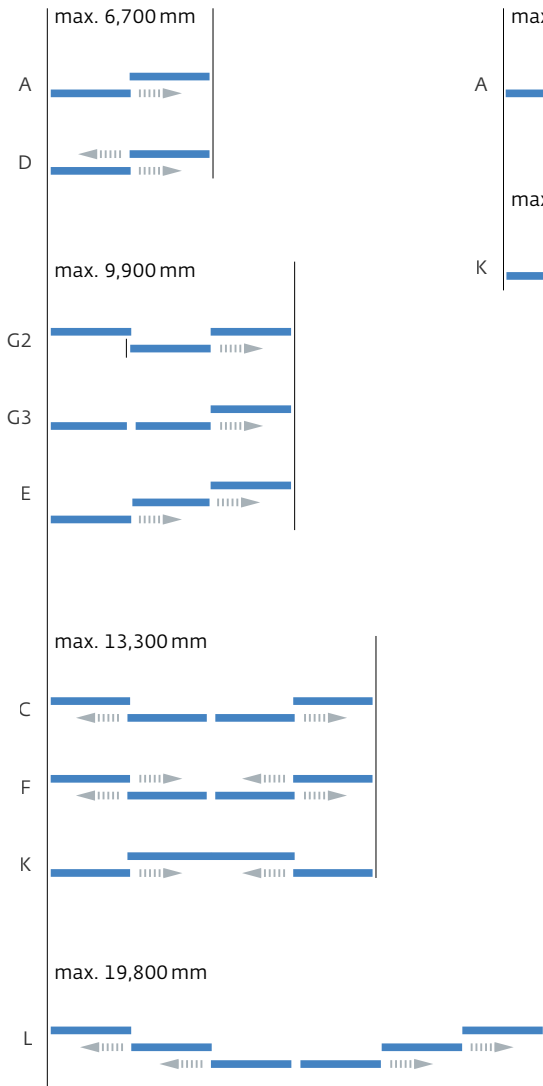
Slide
PORTAL CS



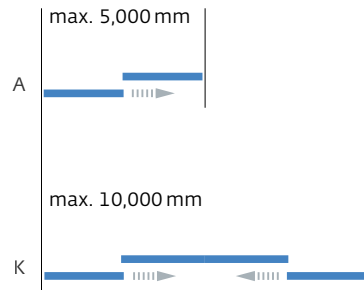
PORTAL opening schemes

More than only scheme F.

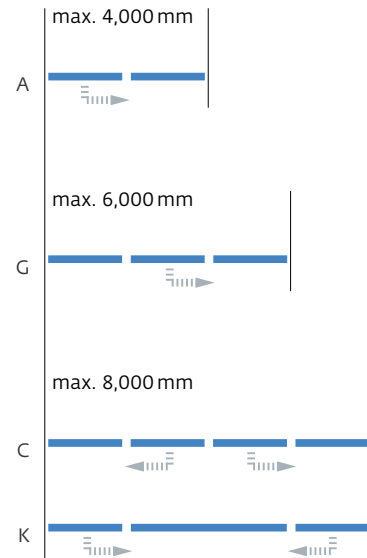
Lift-slide PORTAL HS



ECO SLIDE slide PORTAL ES

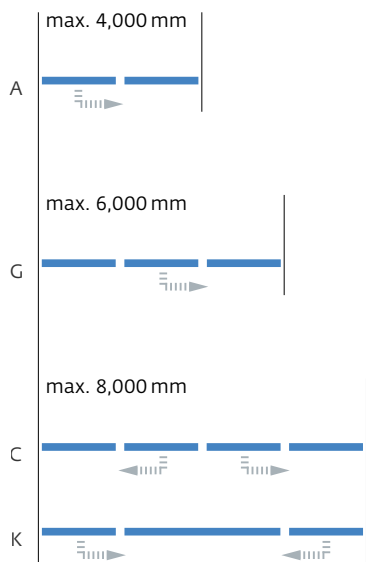


Parallel slide & tilt PORTAL PSK comfort



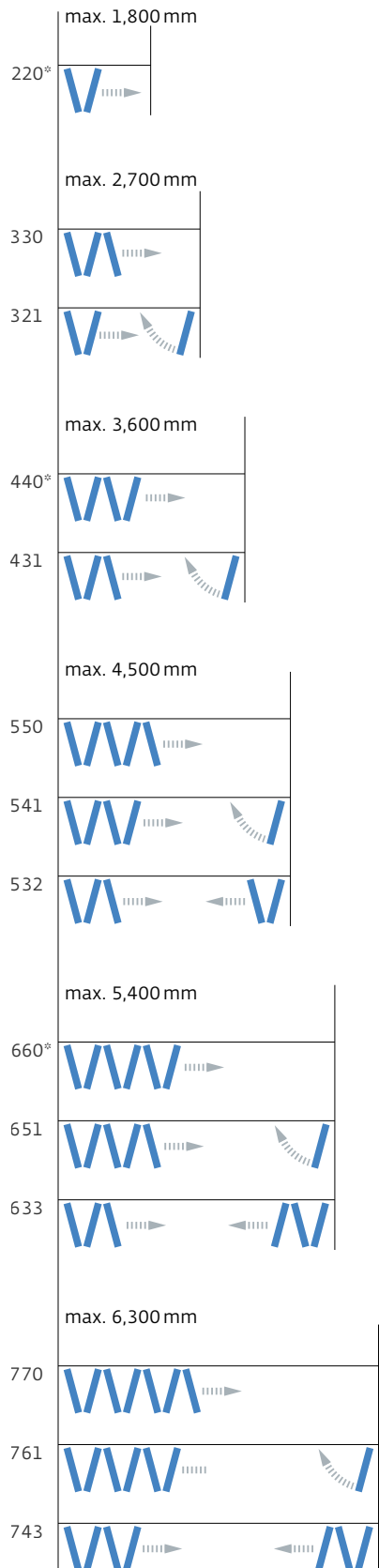
Parallel slide

PORTAL PS comfort



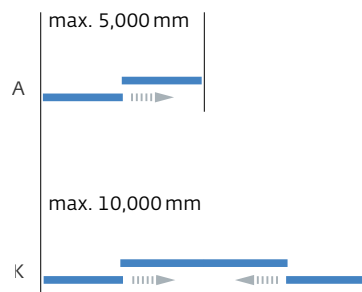
Fold and slide

PORTAL FS^{PLUS}



Slide

PORTAL CS



* Profile-specific clarification is required



PORTAL HS

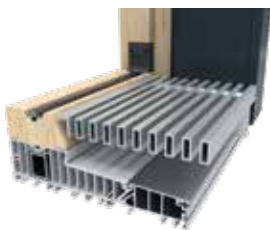
The pioneering lift-slide system
for greater comfort and opening widths.

More room comfort and scalability options.

With an opening width up to 12 m and a total width of approx. 20 m, PORTAL HS brings movement into modern design concepts with ease. After several decades of development, even lift and slide elements with a sash weight of 400 kg can be operated conveniently and safely. The innovative design and upgradeability options, ranging from a SOFT CLOSE function and burglar resistance up to RC3 to concealed motor function or opening and locking monitoring, offer you all possibilities for individual choice. In this way, you can flexibly design more room comfort or adjust your systems precisely to the actual project requirements.

High efficiency and lean logistics.

The PORTAL lift-slide technology for timber, PVC and aluminium is so versatile and sophisticated that it combines diverse room comfort options with endless possibilities for saving time and reducing costs. The high degree of pre-assembly, the optimum adjustment options and the small number of components ensure more efficient processes and streamlined logistics. Moreover, we provide our lift-slide systems as a zero-hassle COMFORT UNIT package ready for assembly.



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Revolutionary production. Outstanding design.

Our lift-slide systems with the ECO PASS threshold are perfectly tailored to your requirements. Because of the zero-hassle service of the COMFORT UNIT, you can obtain complete packages ready for assembly in which everything is already cropped, pre-drilled and preassembled..

With our ECO PASS SKY axcent level threshold, you can offer your customers a solution that combines accessibility, energy-efficiency and design in a pioneering way. This was worthy of the renowned Red Dot Award, the highest distinction.

PORTAL HS

Product overview.

Planning and production	PORTAL HS 150	PORTAL HS 250	PORTAL HS 350
Opening type	Lift-slide	Lift-slide	Lift-slide
Profile	Timber	Timber, PVC, aluminium	Timber, PVC, aluminium
Sash width in mm	650–2,485	590–2,485	720–3,335
Sash height in mm	1,175–2,690	1,175–2,690	1,175–3,325
Sash weight in kg maximum	150	250	350
Quality assurance	QM-346 certified (H3), corrosion class 5	QM-346 certified (H3), corrosion class 5	QM-346 certified (H3), corrosion class 5
Handle position	variable in steps (510, 810, 910, 1010, 1,110 mm)	410 mm for size 170 1,010 mm for sizes 220, 260	410 mm for size 170 1,010 mm for sizes 220, 260
Schemes	A, C, D, G2, G3, K, F, E, L	A, C, D, G2, G3, K, F, E, L	A, C, D, G2, G3, K, F, E, L
Thermally isolated threshold (optionally barrier-free)	⊙	⊙	⊙
Self-cleaning roller	–	–	⊙
Height-adjustable bogie wheels with rollers on ball bearings	–	–	⊙

Options for greater room comfort			
Achievable resistance class in accordance with EN 1627–1630			RC2, RC3
Handle lockable from the inside and outside	⊙	⊙	⊙
Barrier-free in accordance with DIN 18040	⊙	⊙	⊙
Glazing down to the threshold level	–	⊙	–
SOFT CLOSE function	⊙	⊙	⊙
Night vent	⊙	⊙	⊙
AEROMAT flex	⊙	⊙	⊙
Motorised drives		DRIVE axxent HSA smart	DRIVE axxent HSA smart
Opening and locking monitoring system AEROCNTROL	⊙	⊙	⊙
Special features		Optional comfort gear with energy storing mechanism	Optional comfort gear with energy storing mechanism

Benefits

- Flexibly scalable load capacity up to max 400 kg sash weight
- Quick and easy assembly: low number of components, higher degree of pre-assembly and optimum adjustment opportunities
- Also available as a ready-to-install zero-hassle COMFORT UNIT package
- Smooth, safe operation and night vent as standard
- High level of basic security as standard, upgradeable up to RC3, depending on profile
- Profile-specific with SOFT CLOSE: cushions the sash and closes it gently
- Comfort gear for heavy sashes
- AEROCONTROL opening and locking monitoring system possible
- More energy efficiency and barrier-free accessibility thanks to the ECO PASS threshold
- More light incidence thanks to the ECO PASS SKY solutions

PORTAL HS 400
 PORTAL HS 400 compact

Lift-slide
Timber, PVC, aluminium
1,370–3,335
1,175–3,325
400
QM-346 certified (H3), corrosion class 5
410 mm for size 170 1,010 mm for sizes 220, 260
A, C, D, G2, G3, K, F, E, L
⊙
⊙
⊙
RC2, RC3
⊙
⊙
⊙
⊙
⊙
⊙
DRIVE axxent HSA smart
⊙
Optional comfort gear with energy storing mechanism



ECO PASS thresholds

Energy efficiency and barrier-free systems as if from a single mould.

The unique ECO PASS threshold for our PORTAL lift and slide elements perfectly brings barrier-freedom and high energy efficiency flexibly and in an easy-to-assemble way down to one single common denominator. In addition, the ECO PASS threshold is available in different versions: as the standard variant, with 5-mm running rail and inclined step plate, with 5-mm running rail and level threshold, or in the level variants with 0-mm running rail.

The benefits of the ECO PASS threshold include its outstanding insulation characteristics and first-class thermal insulation. The thermal separation of the well-conceived 10-chamber profile prevents the formation of condensate and provides a pleasant indoor environment.

Extremely high stability is provided thanks to aluminium or steel reinforcement integrated in the threshold. This is achieved in the corner area of the threshold by special frame corner connections. The precisely fitting base profiles bear the threshold load to the floor evenly and entirely.

Profile selection

The unique ECO PASS threshold is available for all larger profile systems:

PVC

- Deceuninck HS476
- Gealan S9000
- Profine PremiDoor 76
- Profine PremiDoor 88
- Rehau Geneo
- Rehau Synego
- Salamander evolutionDrive: HST
- Schüco LivingSlide
- Vekamotion 82
- Vekaslide 82

Timber

IV 68, IV 78, IV 80, IV 88, IV 92

Timber/aluminium

- Aluron
- Bug
- Gutmann
- Stemeseder



ECO PASS thresholds

Designs for the passageway:
the threshold height.

ECO PASS Standard

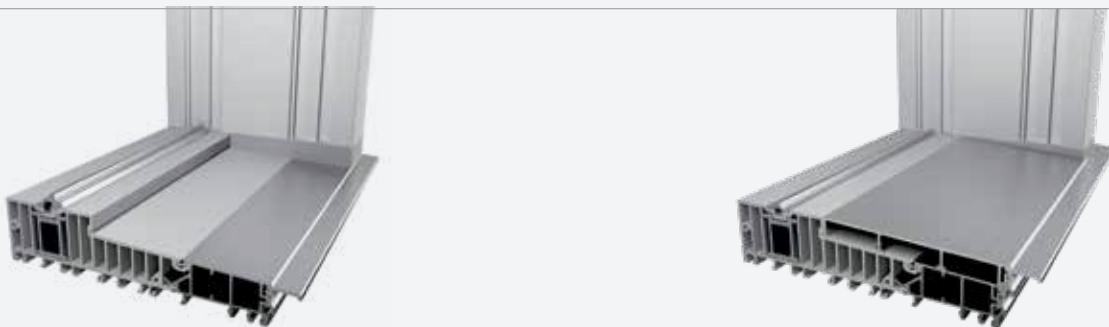
Ideal for renovations with floor offset.

The standard ECO PASS version is the classical lift-slide threshold with a small step and a replaceable running rail with a running rail height of 5 mm or 15 mm. This means that it is ideally suited to renovations in which there is a floor offset between the inside and outside areas.

ECO PASS running rail

With convenient passage height due to retrofittable step plates.

In this threshold version, the passage height is reduced to a convenient 10-12 mm, according to the profile system, due to additional step plates and the special running rail. This makes the threshold barrier-free according to DIN 18040-2 and offers an elegant threshold design at the same time.



Production benefits

- For HS systems made of timber, aluminium or PVC
- Professional sill installation made possible by the perfect standard and accessory programme
- Single piece solution with flush adaptation of the threshold to the installation depth of the frame
- Versatile connection profile programme of sealing rails in adequate sizes up to weather bars for homogeneous sealing without edges
- Also available as a zero-hassle COMFORT UNIT package ready for assembly

ECO PASS thresholds

Designs for the passageway:
the threshold height.

ECO PASS level 0-mm or 5-mm threshold

With level step plate and choice of 0-mm or 5-mm running rail

These threshold versions with their pleasing appearance and flat design underline the elegance and value of PORTAL HS. Moreover, the new thresholds score highly with their excellent watertightness: thanks to the two-level drainage, the same standard of watertightness is achieved as with the conventional thresholds with inclined water drainage channels.

0 mm running rail

5 mm running rail



Production benefits

- For lift-slide systems made of timber-aluminium, timber and also, for 5-mm running rail, PVC
- Professional sill installation made possible by the perfect standard and accessory programme
- Single piece solution with flush adaptation of the threshold to the installation depth of the frame
- Versatile connection profile programme of sealing rails in adequate sizes up to weather bars for homogeneous sealing without edges
- Also available as a zero-hassle COMFORT UNIT package ready for assembly

ECO PASS axxent

The level threshold for flowing transitions without inclines.

The level threshold for timber-aluminium systems lowers the height of the threshold, including the running rail, to 0 mm without any incline. Cooperation with a leading drainage system manufacturer allows a high-quality overall solution and professional sill installation. Maximum compression is provided by the efficient design with sealing plates, sealing wedges and base profiles, while the grille system prevents the accumulation of water and dirt.



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Production benefits

- For lift-slide systems made of timber-aluminium
- Professional sill installation made possible by the perfect standard and accessory programme
- Design out of a single mould with flexible threshold colour and same design of threshold and drainage grid
- Also available as a zero-hassle COMFORT UNIT package ready for assembly

ECO PASS thresholds

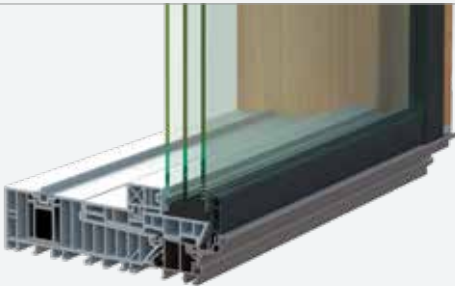
Designs for the fixed glazed area:
the SKY effect.

ECO PASS SKY

Glazing right down to the threshold level for more light incidence and optical space.

For living in light and without boundaries, the ECO PASS SKY threshold permits fixed sash glazing right down to the threshold. In conjunction with lean sash profiles, you will achieve a sliding door design that eliminates the boundary between inside and outside and will optically enlarge your living space. Because of the barrier-free threshold, this of course also applies to the passage area. The ECO PASS SKY threshold is suitable for PORTAL HS elements made of timber or timber-aluminium.

Fixed glazing down to the threshold



ECO PASS SKY axxent

Seamless transition of the fixed glazing in the threshold for maximum design requirements.

The ECO PASS SKY axxent threshold for timber-aluminium systems does not just lower the threshold and running rail to zero millimetres, it also allows a seamless transition of the fixed glazing into the threshold, combining barrier-freedom with maximum light incidence. The colour design of the threshold can be adapted to the floor or frame material and the cube design of the sash cover caps meets special demands: the merely two millimetre-deep metal covers are barely noticeable and can be adapted to all handle colours.

Fixed glazing in the threshold



Production benefits

- Diversification of the product programme for tailor-made solutions for customers
- Also available as a zero-hassle COMFORT UNIT package ready for assembly
- Available timber profile systems: IV 78, IV 88, IV 92
- Available timber-aluminium profile systems: Aluron, Bug, Gutmann, Stemeseder



ECO PASS SKY axxent: seamless transitions in the passageway area and the fixed glazing create a barrier-free and clean design, which is rounded off by especially flat and elegant metal sash cover caps (cube design). The colour design of the threshold can be flexibly adapted to the floor or frame material.



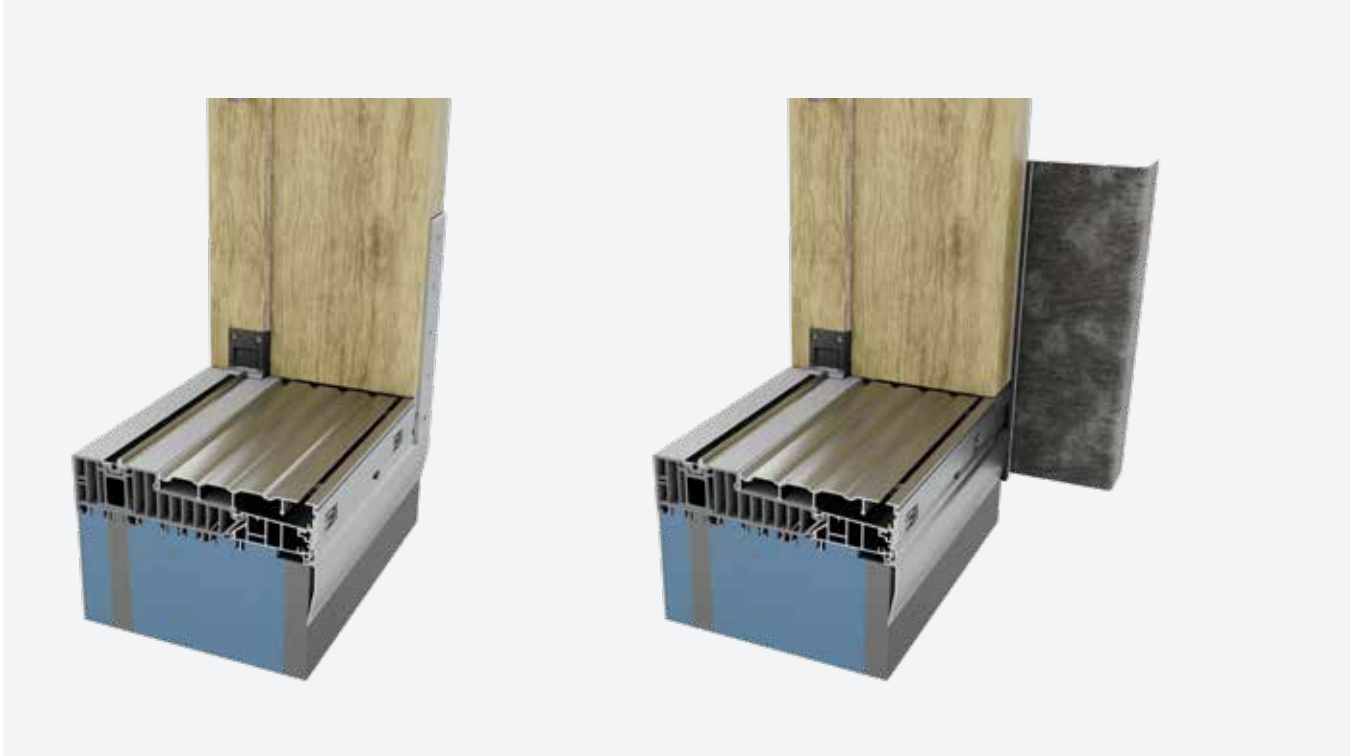
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ECO PASS sill installation

Certified complete solutions for ECO PASS thresholds.

Architects and planners benefit from the complete solutions for professional sill installation, thanks to the security that comes with standard-compliant, consistently high-quality solutions. A further solution with SIEGENIA connection flange is available in addition to the tried-and-tested design with vertical and horizontal sealing plates, sealing wedges and base profiles. It makes the professional sealing of the building element simple and durably reliable, especially for applications with, for example, roller shutter guide profiles or timber-aluminium elements.

Each of the two solutions has been certified as a complete solution with carefully coordinated threshold, connection joint tape and sealing with liquid plastic in accordance with the demanding MO-01/1 test procedure from the ift Rosenheim. Moreover, the tried-and-tested horizontal sealing plate is available in a new, process-optimised version for both solutions: in future it will be clamped into place with the rolled seal in one step and will reliably prevent water from running diagonally into the wall.



Production benefits

- Complete solutions for professional sill installation
- Certified in accordance with ift directive MO-01/1
- Reliable compression
- Flexible and time-saving fabrication



Solution 1**Vertical sealing plate**

Perfectly coordinated: the great strength is the uniform base throughout the complete sealing surface. This makes the combination of vertical and horizontal sealing plates extremely efficient and low cost.

**Solution 2****SIEGENIA connection flange**

Maximum flexibility: the seal ends at the connection flange, meaning that the narrow frame remains free from the seal e. g. for roller shutter guide profiles. Their well-conceived, practical design makes the sealing extremely simple and facilitates the collaboration between the different trades.

**Horizontal sealing plate:**

The optimised horizontal sealing plate is combined with one of the two vertical connection solutions. Its design, thought out to the last detail, ensures a time-saving and absolutely production-optimised finish: it is clamped into place with the rolled seal in one step and reliably prevents water from running diagonally into the wall.



COMFORT UNIT

The production-optimised lift & slide complete package with ECO PASS threshold.

Ready for assembly at once: everything is trimmed, pre-drilled and pre-assembled.

With the COMFORT UNIT, you will obtain a zero-hassle service that will revolutionise your production processes. Because not only is the ECO PASS threshold already completely pre-drilled and assembled, this also applies to all of the other hardware components. From the bogie wheels to the guiding rail and extending to the handle and gear: everything is cut to size and preassembled as much as possible. The new SIEGENIA online shop makes ordering and configuration even safer, faster and easier.

Tailor-made for fast production processes: the new online shop with configurator.

With the new SIEGENIA online shop, the entire ordering process is tailored to the production. Thanks to the configurator, with just a click you have a solution on hand that automatically displays all possibilities and eliminates all ordering errors. You have an overview of the process at all times thanks to the order history and the delivery tracking. SIEGENIA does the rest.



Production benefits

- Considerable saving of time, production costs and storage space
- No expensive warehousing, no searching for components and no inventory risks
- No waste, no scrap cuttings, no production risks
- Higher flexibility in case of production peaks
- Fast and easy configuration in the SIEGENIA online shop with plausibility testing
- 48-hour express delivery within Germany when ordered before 12 noon
- Standard delivery time within Germany 5 – 8 working days, delivery time for other countries on request

shop.siegenia.com



Secure configuration with immediate plausibility testing



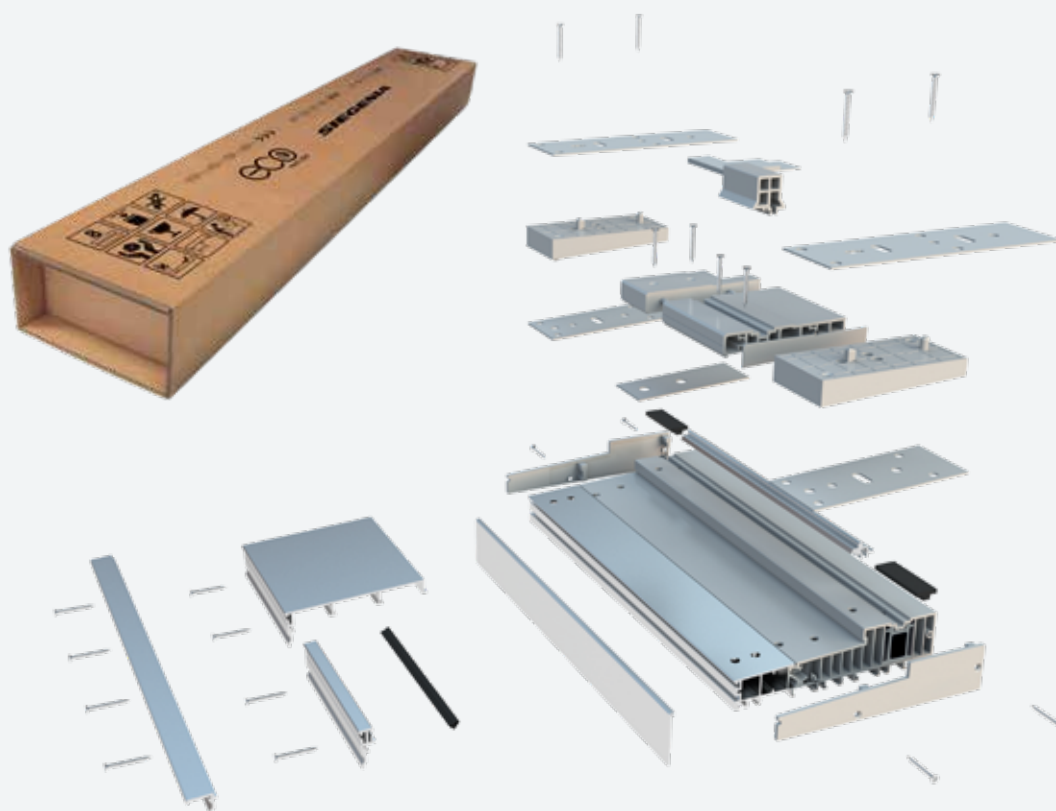
Quick processing of the individual order



Quick delivery, within 48 hours on request

The COMFORT UNIT includes all hardware components such as bogie wheels, gear and handle: precisely assembled and cut to size

ECO PASS threshold with frame corner connector, mid-section, support rail, adapter rail, all seals and the running rail: cut to size, pre-drilled and completely assembled.



PORTAL HS slim: solution with especially slim profile widths.

PORTAL HS slim is a high-quality option in the lift and slide range for timber or timber-aluminium elements with their consistently narrow frame weights – even in the mid-section, this is only 60 mm. Just like the HS system for wider profiles, the new solution is convincing due to the superior compression values and optional burglar resistance up to RC2. HS PORTAL slim is mainly based on the use of the same components as the SIEGENIA HS timber 4.0 versions and thus ensures efficient processes and lean warehousing.

60 mm – not only a measure, but a standard

The frame profiles are completely made of timber and do not need foreign material to stabilise them. This makes production of the elements exceptionally easy and efficient. Additional stability is also provided by the adhesion of the glass edge seal to the sash.

No compromises in terms of appearance

The well-conceived design of the hardware allows the complete and discreet integration of the components into the profiles. For example, the concealed stop buffer is virtually invisibly inserted into the flush guiding rail.



Production benefits

- Timber frame profiles, therefore no foreign material stabilisers are required
- No additional components for fabrication of HS timber 4.0 versions
- Also available as a ready-to-install zero-hassle COMFORT UNIT package

Benefits

- Maximum light incidence, a lot of natural daylight
- No loss of ease of use in comparison with wider profile systems
- Best compression values and watertightness according to class 9A
- Optional burglar resistance up to RC2 even with a running rail height of only 5 mm
- Optional motorised solutions for Smart Home



PORTAL HS slim meets the contemporary architectural trend for rooms that extend into nature and let in a lot of natural daylight

Gears

High-quality solutions so that security and ease of use interlock perfectly.

Gear with locking bolt

Burglar resistance up to RC3.

Depending on the profile system, burglar resistance up to RC2 can be easily achieved with two or four locking bolts and accessory equipment. Moreover, certified RC3 burglar resistance can be achieved for some profile systems with four locking bolts and accessory equipment.



Hook bolt gear

Flush, tight and secure.

Up to three hook bolts with integrated blocking function ensure effective, first-class sealing and high burglar resistance up to RC2 in combination with accessory components. The flush-mounted frame strikers mean that there are no protruding hardware components in the passage area. When the door sash is closed, the hook bolts slide over the locking rollers into the frame strikers gently and wear-free from bottom to top, thus reducing the gear load. The night vent function is integrated as standard and the concealed pressure adjustment is +/- 2 mm.



Production benefits

- Backsets 27.5 mm and 37.5 mm
- The new generation of locking parts and gears are coordinated so that a greater dimensional tolerance is achieved

Production benefits

- Backsets 27.5 mm and 37.5 mm
- Concealed pressure adjustment +/- 2 mm
- No wear to the frame part due to roller-guided hook bolts

Comfort gear

So that the handle does not spring back and lifting is easier.

The comfort gear is available for the locking bolt and the hook bolt gear. This includes a preassembled accumulator. A spiral spring uses the weight of the sash to reduce the torque and lift the sash more easily. The handle is prevented from snapping back in an uncontrolled manner when the sash is lowered into the locking position. Depending on the comfort level required, a damper can be used additionally for the comfort gear for sash weights from approx. 300 kg. This will further prevent the handle from snapping back.



Special spring: if the element is closed, the spring serves as an energy storage mechanism.



When the element is opened, the spring discharges the force again.

Gear damper

Perfect, noiseless power transmission without loss of stroke.



The gear damper ensures a backlash-free connection between handle and gear. This means that no cracking noises are generated or loss of stroke is incurred when operating heavy sashes. The damper is integrated in all PORTAL HS gears with a backset of 27.5 and 37.5 mm as standard.

Production benefits

- Preassembled accumulator, ready for installation
- Additional damper for even more operating safety, can be retrofitted on site

Production benefits

- No additional part or expenditure: already integrated in all HS gears with 27.5 mm or 37.5 mm backset

Gears

High-quality solutions so that security and ease of use interlock perfectly.

Gear 170 / 220 / 260 / 280

Variety for more efficiency in production.

The HS gear is available in different versions: in the sizes 170, 220, 260 and 280. This reduces the work involved in the production of lift and slide elements and ensures optimised workflows. So, for example, there is no need to use an extension for high elements with the 280 version. To this end, the dimension has been designed so that the gear is compatible with the conventional maximum sizes of PVC elements and the locking point is located near the top corner of the element.



	170	220	260	280
Locking bolt	⊙	⊙	⊙	⊙
Hook bolt	-	⊙	⊙	-
Gear extension	⊙	⊙	⊙	⊙

Production benefits

- Efficient production
- Flexible configuration of the product range

Sealing rails

Let neither cold and heat nor burglars through.

Sealing rail C

Good insulation values.

The sealing rail C for timber elements facilitates the creation of a reliable seal of the space between the sliding and fixed sash. To achieve burglar resistance up to RC2, three aluminium rear security interlocks can be attached to the rail as necessary to effectively prevent the sash from being pried open.



Production benefits

- Easy installation of the PVC sealing rail
- Large seal compensates for production tolerances
- Easy adjustment due to centre lock with compression adjustment

Sealing rail C28/48

Optimum insulation for narrow profile views.

The new sealing rail C28/48 allows effective compression in the vertical and in the critical top horizontal sash area. Moreover, burglar resistance up to RC2 can be achieved with only a few additional components. Hence, this solution offers all prerequisites for a high level of room comfort.



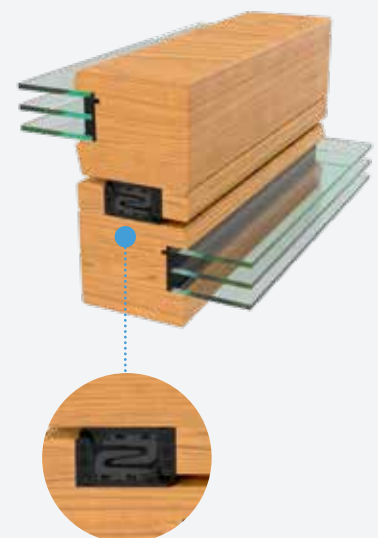
Production benefits

- Easy installation of the PVC sealing rail
- Can also be mounted horizontally to seal the top sash area
- Sash tolerance range +/- 3mm in both directions
- Optionally available with additional sealing brush
- Easy, invisible fixing due to pre-drilled screw holes

Sealing rail DS28/48/28

Optimum insulation and optionally high security with narrow profile views.

The consistent further development of the sealing rail C28/48 ensures even more room comfort and more speed in fabrication. In combination with the HS 4.0 sealing system, the DS28/48/28 guarantees optimum compression horizontally at the top and vertically and enables certified burglar resistance up to RC3 with only a few additional components.



Production benefits

- Easy installation of the PVC sealing rail
- Increased sash tolerance range
- Fastest fabrication and easy fixing due to pre-drilled screw holes and a corner part between the horizontal and vertical sealing rail

Bogie wheels

Make heavyweights practically weightless.

HS 400 compact bogie wheels

Sets sash weights up to 400 kg effortlessly into motion on eight self-aligning rollers.

Due to their self-aligning load distribution on eight rollers, these bogie wheels effortlessly slide even heavyweight sashes back and forth. Their exceptionally low height allows especially narrow sash profiles and with the enhanced glass proportion, provides both more daylight and better U-values. The omission of a tandem solution for 350–400 kg sash weights shortens the assembly time.

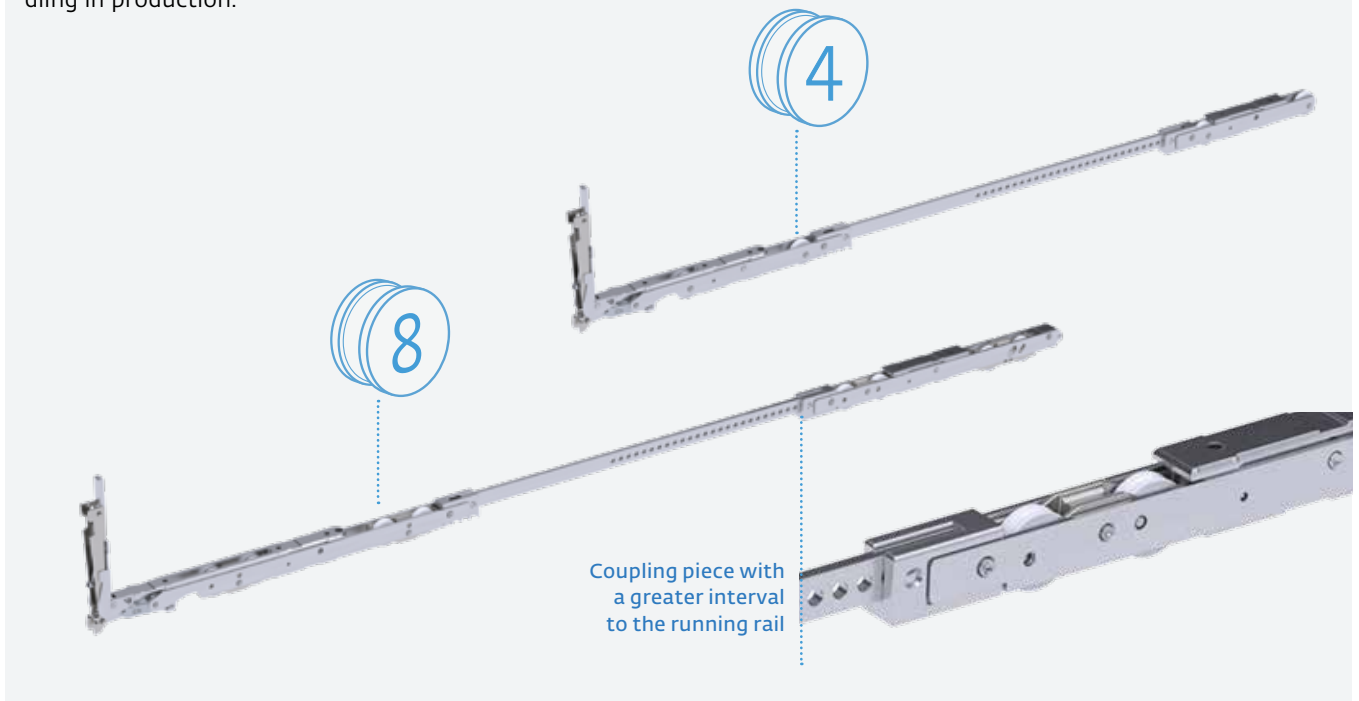
The new coupling piece for the connection of the bogie wheels optimises the hardware assembly. Its sophisticated design enables the use of a square connecting rod and ensures easy handling in production.

HS 250 compact bogie wheels

The cost-effective option for sash weights up to 250 kg.

The little brother HS 250 compact is the cost-effective option for light lift-slide sashes up to 250 kg.

Both bogie wheels have the same width and height dimensions, making it possible to work with a uniform bogie wheel groove during the production process.



Production benefits

- Shortened assembly time by dispensing with a tandem solution for 350–400 kg sash weight
- Up to 12 mm narrower and more efficient frame design while retaining the bottom sash stability

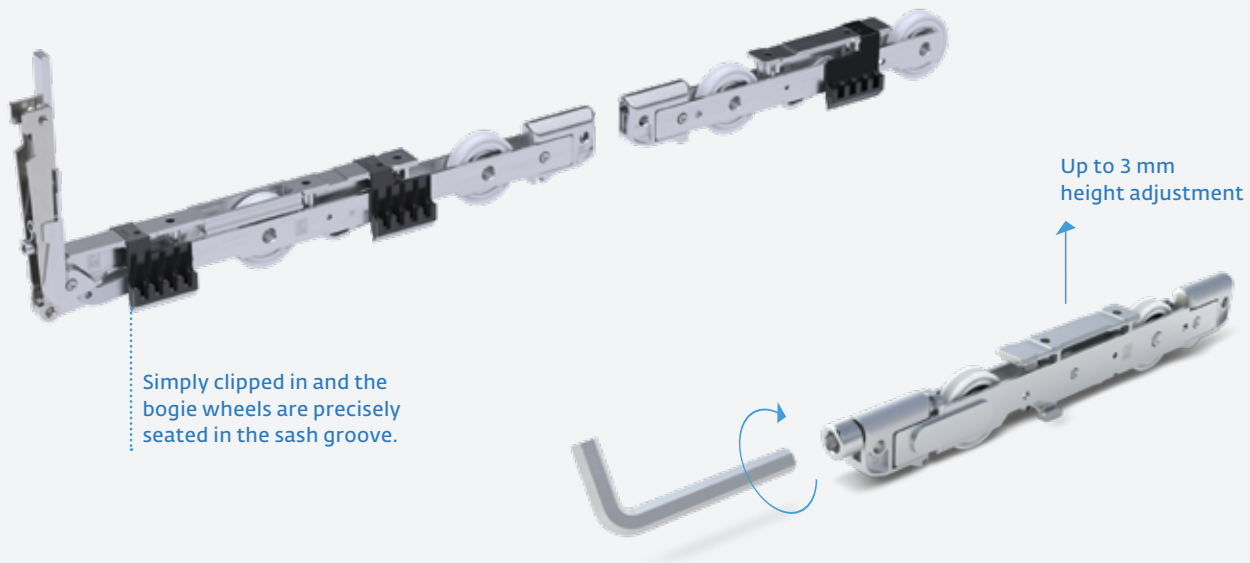
Production benefits

- For light lift &-slide sashes up to 250 kg
- Can be used for narrow sash widths

Centering piece for the HS 350 bogie wheels

Optional accessories precisely coordinated with several PVC profile systems.

Simply clipped into place, the distance pieces guarantee the precise seating of the bogie wheels in the sash groove. In this way, they provide reliable protection against shear forces and prevent the frequently associated slightly inclined position of the bogie wheels. The precise seating of the bogie wheels means a high degree of smooth-running and ease of use.



Simply clipped in and the bogie wheels are precisely seated in the sash groove.

Up to 3 mm height adjustment

Height-adjustable HS bogie wheels

Perfect precision adjustment.

The height-adjustable bogie wheels not only make the sliding motion smooth and effortless, they also significantly aid onsite assembly. Available for the HS 350, HS 250 compact and HS 400 compact bogie wheels.

Production benefits

- Easy operation
- Precise seating of the bogie wheels in the sash groove
- Secured vertically even in case of severe wind load

Production benefits

- Integrated precision adjustment with readjustment reserves of 3 mm for easy lifting of the sash in the rear area
- Saving time and cost due to faster and more flexible adjustment of the sash when assembling on site
- Tolerance compensation of a potential V-joint on the locking side is possible

Accessories

More comfort and fresh air.

Stop buffer

Elegant, discreet, easy to clean.

The new stop buffer stands for clear design benefits: directly integrated into the guiding rail, it is virtually invisible and gives lift and slide elements an elegant and discreet appearance. This also makes cleaning elements in the bottom profile area considerably easier. The new stop buffer is suitable for all SC guiding rails of the PORTAL HS system.

Suitable for the following profile systems:

PVC

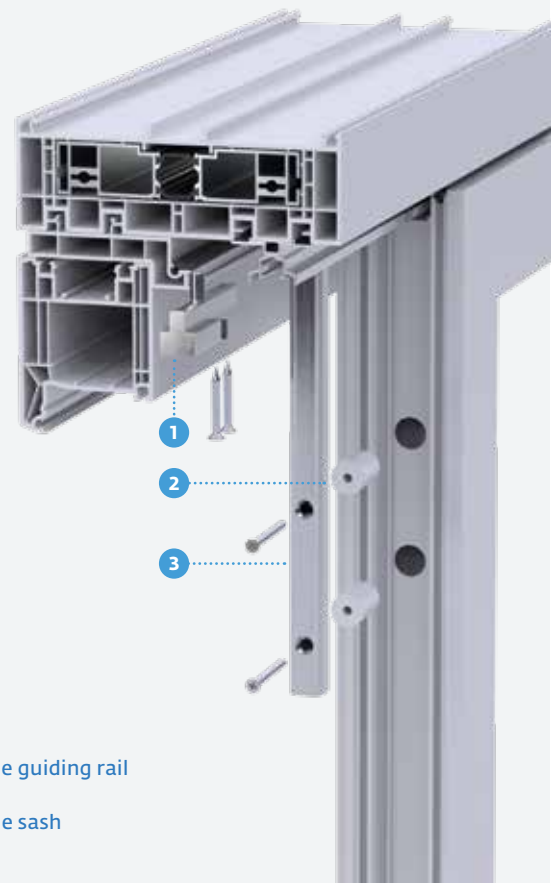
- Aluplast HST85
- Deceuninck HS476
- Gealan S9000
- Profine PremiDoor 76
- Profine PremiDoor 88
- Rehau Geneo
- Rehau Synego
- Salamander evolutionDrive: HST
- Vekaslide 82
- Schüco LivIngSlide

Timber

IV 68, IV 78, IV 80, IV 88, IV 92

Timber/aluminium

- Aluron
- Bug
- Gutmann
- Stemeseder



Production benefits

- Virtually invisible because it is directly integrated in the guiding rail
- Elegant, discreet appearance
- Easy cleaning of the elements in the bottom profile area
- Suitable for all SC guiding rails of the PORTAL HS system

Night vent

Fresh air as standard.

PORTAL lift-slide systems in all gear versions are equipped with a night vent function as standard that is simply selectable via the handle. Hence, a healthy indoor environment is provided with an air exchange of up to 265 m³/h conveniently and without annoying draughts.



Production benefits

- Achievable for all gear versions including hook bolt gears

AEROMAT flex

The optionally integrated passive vent for user-independent ventilation.

User-independent ventilation can be achieved with the AEROMAT flex passive ventilation unit in addition to the manual night vent. The ventilation unit makes optimal use of the existing installation space and can be integrated in the element without milling grooves and virtually concealed. Fresh air supply is possible even with closed roller shutters or blinds and provides a high level of sound absorption up to 55 dB due to optional sound insulation modules. Depending on the ventilation unit version, the supply air opening is independently regulated by the humidity in the room.



Production benefits

- Can be used singly or in pairs, horizontally or vertically on the element in the existing installation space – without routing out
- Quick and easy assembly on site: flexible telescopic duct for 70 to 125 mm profile depth, optional duct extension for up to 235 mm profile depth

Accessories

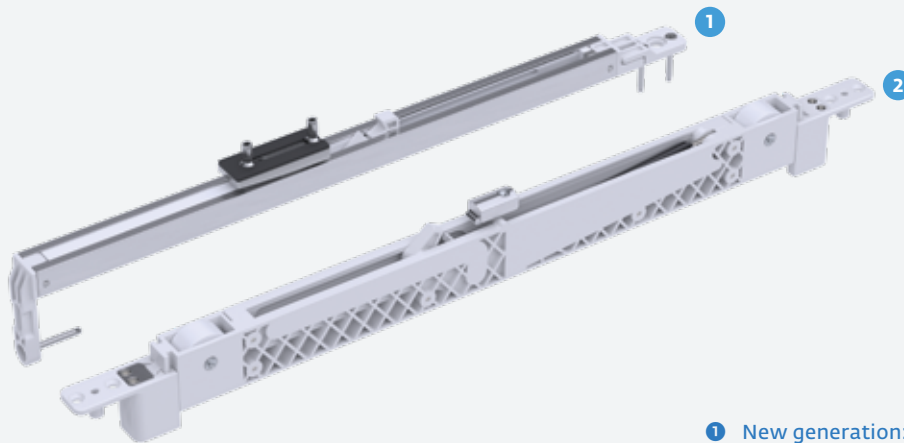
More comfort and freedom of design.

SOFT CLOSE function

Automatically slows down the sash before the end position, like a kitchen drawer.

The innovative SOFT CLOSE function that can be invisibly integrated into the sash consists of a trigger in the SC guiding rail and a damper. This brakes the sash gently just before the end position and then pulls it shut automatically. This minimises any risk of injury in the case of improper operation and precludes any material damage.

A further SOFT CLOSE generation is available alongside the tried-and-tested version. A distinction is made between a SOFT CLOSE compact and a SOFT STOP compact, which can be used separated from or in combination with each other. SOFT STOP compact balances the functional mode of SOFT CLOSE compact and offers an attractive alternative, depending on the specific behaviour of the user. Both solutions with their low space requirement have been specially developed for lean profile systems and can be integrated into the sash without the need for milling. The triggers for the SOFT CLOSE or SOFT STOP function no longer need a special contour in the frame, meaning that this version is especially interesting for aluminium profile systems.



- 1 New generation: SOFT CLOSE compact and SOFT STOP compact for lean profile systems
- 2 Tried-and-tested SOFT CLOSE generation


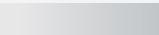

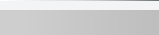








Production benefits

- Spring-mounted, it automatically adjusts to each sash position and tolerances
- Fully concealed and maintenance-free solutions
- Protects the lift and slide elements thus preventing material damage
- Possible for lean profile systems without milling

Handles

Quality that you grasp immediately.

PORTAL HS handles provide noiseless locking and release free of play with lasting high functional security. They are perfectly coordinated with the lift-slide gear and the sash weight and are available in a large range of colours. There is also an option of subsequent painting in event of special requests. A wide range of sliding door configurations is possible due to the variant diversity.

	Wide range of white tones
	Silver
	Stainless-steel finish
	Titan matt light
	F9
	EV1 anodized
	EV2 anodized
	Old gold
	Medium bronze
	RAL 8019
	RAL 8022
	RAL 9005



Production benefits

- Large choice of variants ranging to version with cylinder
- Perfectly coordinated with the hardware and the sash weight
- Available in a versatile colour range
- There is also an option of subsequent painting in the event of special colour requests

Motor function and monitoring

The new ease of living.

DRIVE axxent HSA smart

Fully automatic, partially concealed drive system for maximum ease of use and a clean design.

Sash weights of up to 400 kg can be opened, closed and securely locked fully automatically with this partially concealed drive system, which can be scaled to optimise costs and benefits. And the fully concealed lift drive provides clear benefits in design. Thanks to the WIFI module integrated as standard, which provides its own WIFI network, but which can also very easily be connected to the home network, operation works not only by button, but also via the SIEGENIA Comfort app. This opens up additional comfort functions and includes a smart installation assistant, like all SIEGENIA smart devices.



Production benefits

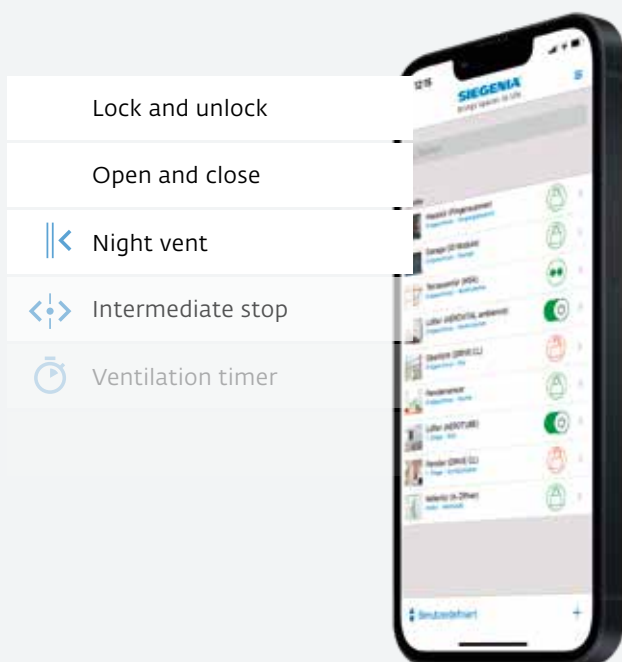
- Suitable for opening schemes A and C with sash weights up to 400 kg
- Quick and easy installation and commissioning: preassembled drive and automatic programming
- Scalable for lighter lift & slide sashes: additional product variants up to 200 kg sash weight



SIEGENIA Comfort app

All designs and functions of the smart SIEGENIA world in one single app.

The SIEGENIA Comfort app allows you to operate, network and monitor all SIEGENIA "smart" products intuitively and also via remote access. Alongside smart ventilation units, monitoring and access control systems, this naturally also applies to the smart drives. Hence, large lift and slide elements can be conveniently operated and automated. The SIEGENIA Comfort app opens up numerous additional functions such as motorised starting of the night vent and the free timer adjustment of 1 to 59 minutes as alternative to the 10-minute automatic ventilation system.



AEROCONTROL magnetic switch

Opening and locking monitoring up to VdS class C.

With these integrated magnetic switches, concealed in the profile, lift and slide elements can be optimally integrated in the central monitoring and alarm system. This means that the opening status as well as the correct locking status can be controlled.



Production benefits

- For universal use
- There is also a concealed variant for timber, timber-aluminium and some PVC systems
- BUS-compatible for integration in building control technology
- VdS tested and certified to the maximum monitoring class C, depending on switch type



PORTAL ECO SLIDE, ECO SLIDE CO

More options and cost-effectiveness
for sliding windows and doors.

Ease of use and compression perfectly combined.

The explicitly cost-effective and assembly-friendly sliding hardware of the PORTAL ECO SLIDE consistently brings the ease of use of lift-slide systems and the compression of parallel slide & tilt systems consistently under one umbrella. The combination of special bogie wheels and innovative guiding and locking elements ensures intuitive operation with night vent function as standard. The assembly is very easy and cost-effective for both ECO SLIDE systems

Versatile opportunities, for perfect utilisation of the space.

PORTAL ECO SLIDE and ECO SLIDE CO provide more freedom of design; especially when used in window systems where the hardware saves considerable space in interior rooms. Because when sashes do not pivot inwards, but easily and smoothly slide alongside each other, every centimetre on the window can be used. In this way, the system presents an interesting comfort option to turn and tilt systems. ECO SLIDE is also a good alternative to other systems in the door market with its attractive appearance, its intuitive operation and its night vent function.

PORTAL ECO SLIDE, ECO SLIDE CO

Product overview.



Planning and production

	PORTAL ECO SLIDE	PORTAL ECO SLIDE CO
Opening type	Slide	Slide
Profile	PVC (Profine and Deceuninck), aluminium; for profiles with 16 mm fittings groove	PVC profile systems: Gealan, Rehau, Salamander, Aluplast, more in preparation
Sash rebate width in mm	680–2,500	640–2,130 (depending on profile system)
Sash rebate height in mm	1,200–2,500	460–2,442 (depending on profile system)
Sash weight in kg maximum	150/250	150/200
Handle position	constant 300, 400, 500 or 1,000 mm	constant 300, 400, 500 or 1,000 mm
Quality assurance	QM -346 certified (H2) corrosion class 5	QM 346 certified (H2) corrosion class 5
Schemes	A, K	A, K, C

Options for greater room comfort

Handle lockable from the inside and outside	⊙	⊙
SOFT CLOSE / SOFT STOP function	⊙	SOFT STOP in preparation
Night vent	⊙	–
Positive control	⊙	⊙
Special features	Possible as sliding window or sliding door, concealed bogie wheels and innovative guiding and locking elements	Possible as sliding window or sliding door, elegant, continuous locking rails without visible screwing

Benefits

- Cost-effective solution for sliding windows or sliding doors with sash weights of up to 200 kg (ECO SLIDE CO) or 250 kg (ECO SLIDE) (dependent on profile system)
- Small number of components for quick and easy assembly
- High energy efficiency due to continuous seal for high compression
- Innovative guide and locking elements on each sash side for enhanced compression
- Intuitive operation: also suitable for frequently changing user groups
- Night vent as standard for ECO SLIDE
- Profile-dependent with SOFT CLOSE for ECO SLIDE and SOFT STOP for ECO SLIDE CO: slows down the sash and prevents the sash from slamming onto the frame
- Can be combined with narrow profiles for maximum light incidence



PORTAL ECO SLIDE

Innovative guide and locking elements:
convenient, sealed and secure.



The extremely cost-effective hardware solution PORTAL ECO SLIDE brings the ease of use of lift-slide systems and the compression of parallel slide & tilt down to one single common denominator, even for sliding windows. This is provided by the assembly-friendly, perfect combination of a unique seal, special bogie wheels and innovative guiding and locking elements at all four sash corners.

Production benefits

- Integrated height adjustment with optimised adjustment options
- The 16 mm eurogroove is identical to that used in turn-and-tilt windows: no modifications required



Moving practically by themselves: sliding elements with ECO SLIDE are distinguished by the optimum gliding motion and high ease as far as the locking position, which is additionally safeguarded by horizontal centre locks.

Bogie wheels

Ensure easy and smooth gliding.

The ECO SLIDE bogie wheels gently absorb the put-down movement of the sash by a side movement and ensure smooth gliding. The necessary transfer of load up to 150 kg sash weight is achieved with two bogie wheels; from 150 to 250 kg with four bogie wheels. Moreover, ECO SLIDE bogie wheels are especially low-maintenance and function without greasing. Consequently, they do not attract dirt that could impair operation.



- 1 Guiding elements
- 2 Locking elements
- 3 Centre locks

Robust guiding and locking elements draw the sash to the frame and seal perfectly. Horizontal centre locks supplement the four strikers for the guiding elements.



Production benefits

- Three screwing variants are possible: in the eurogroove, in the groove base or laterally (picture)
- Load-bearing capacity up to 150 kg with two bogie wheels; 150 – 250 kg with four bogie wheels
- Fixing of the axial movement of the rollers for easy insertion of the sash
- Grooves for sealing brushes available

PORTAL ECO SLIDE CO

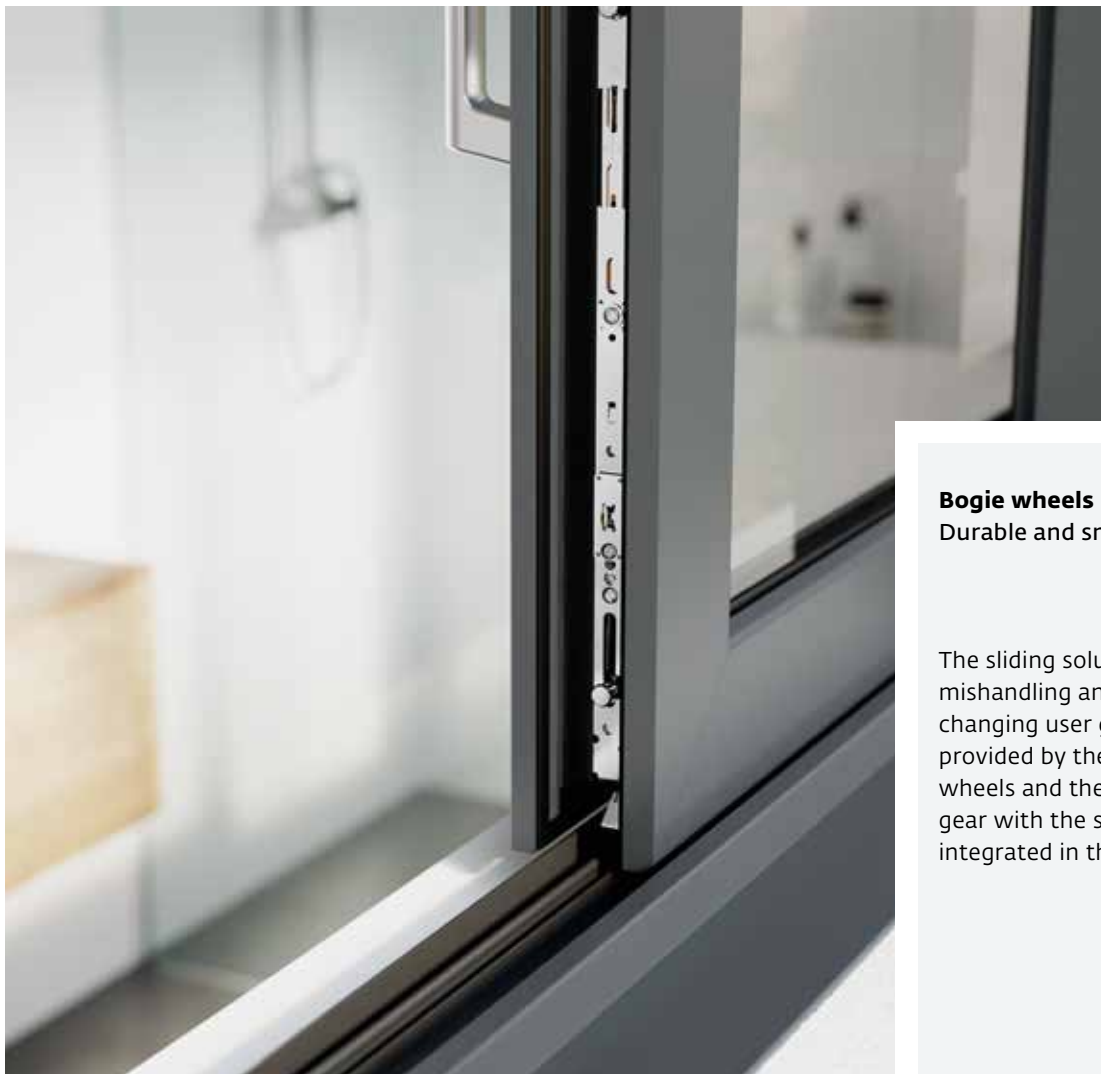
With TITAN central locking gear:
versatile, sturdy, time-saving.



PORTAL ECO SLIDE CO combines the smooth-running and intuitive operation of a sliding solution with the benefits of turn-and-tilt hardware. The wraparound sash hardware is based on the TITAN central locking gear and only needs a few additional components. This means it ensures efficient processes from lean warehousing to easy assembly.

Production benefits

- Versatile offerings: available for a wide range of profile systems
- Lean warehousing thanks to few additional components and only one multifunctional rail for the striker packer of the frame hardware
- Easy assembly: quick installation and simple hardware adjustments
- Individual logoclip is possible



Bogie wheels

Durable and smooth operation.

The sliding solution is resistant to mishandling and very suitable for changing user groups. This is also provided by the pivot-mounted bogie wheels and the TITAN central locking gear with the sliding components, integrated in the linkages.



Design-oriented version:

The strikers without visible screwing and the continuous locking rails on the locking side and in the centre part combine safe functioning with a contemporary appearance.

Production benefits

- No canting: resistant against asynchronous starting and stopping
- Protection of the hardware
- Outside grease and maintenance-free bearing positions
- No contamination and blocking

Accessories

For ease of use and a healthy indoor environment.

SOFT CLOSE function for ECO SLIDE

Gently slows down the sash and automatically guides it reliably into its end position.

The innovative SOFT CLOSE function that can be invisibly integrated into the sash consists of a trigger in the top guide rail and a damper. It reduces the speed of the sash when closing or opening just before the frame and guides it safely into its end position. This minimises any risk of injury in the case of improper operation and precludes any material damage.

SOFT STOP function for ECO SLIDE CO

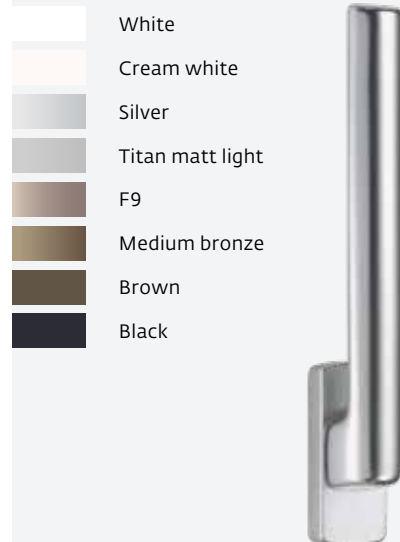
Gently slows down the sash.

The innovative SOFT STOP function slows down the sash according to the sash weight and the operating speed. This minimises any risk of injury in the case of improper operation and precludes any material damage.

Handles

Perfectly coordinated with the hardware and the sash weight.

PORTAL handles combine a noiseless ease of use free of play with high functional safety. They are available in a wide range of colours and there is also an option of painting in the event of special colour requests.



Production benefits

- Fully concealed, but easy to access and therefore easy to adjust
- Maintenance-free thanks to oil-lubricated gas pressure spring
- Protects the ECO SLIDE elements thus preventing material damage

Production benefits

- Large choice of variants ranging to version with cylinder
- Perfectly coordinated with the hardware and the sash weight
- Available in a versatile colour range
- There is also an option of subsequent painting in the event of special colour requests

Night vent

Fresh air as standard.

PORTAL ECO SLIDE sliding systems are equipped with a night vent function as standard that is simply selectable via the handle. Hence, a healthy indoor environment is simply provided at any time via the handle without annoying draughts.



Production benefits

- Integrated as standard
- Operating function easily explained

AEROMAT flex

The optionally integrated passive vent for user-independent ventilation.

User-independent ventilation can be achieved with the AEROMAT flex passive ventilation unit in addition to the manual night vent. The ventilation unit makes optimal use of the existing installation space and can be integrated in the element without milling grooves and virtually concealed. Fresh air supply is possible even with closed roller shutters or blinds and provides a high level of sound absorption up to 55 dB due to optional sound insulation modules. Depending on the ventilation unit version, the supply air opening is independently regulated by the humidity in the room.



Production benefits

- Can be used singly or in pairs, horizontally or vertically on the element in the existing installation space – without routing out
- Quick and easy assembly on site: flexible telescopic duct for 70 to 125 mm profile depth, optional duct extension for up to 235 mm profile depth



PORTAL PS/PSK comfort

Parallel-slide and parallel slide & tilt systems

For intuitive operation and fabrication.

The PORTAL PSK comfort: from its modular system to operation, it's simply in a class of its own.

The new PSK comfort generation offers you a hardware concept, which is unique from the modular structure to the gentle and protective operation. The innovative comfort components make the opening and closing process especially safe and easy as well as offering you a wide range of scalability options. Because you can elevate your basic equipment, according to customer requirement, with just a few additional parts very quickly and flexibly to the maximum level of comfort.

PORTAL PS 200 comfort: intuitive operation even for changing user groups.

Less is often more. With the parallel sliding hardware PORTAL PS 200 comfort, this means: the reduction to the basic function of sliding. Because, with this hardware, even large sliding elements can be operated with ease and intuitively solely via the 90° rotation of the handle. Misuse is practically impossible even in the case of frequently changing user groups.

Moreover, with PORTAL PS 200 comfort, you will benefit from a very efficient and flexible hardware concept that converts the basic equipment into a comfort variant, which meets even the highest demands at any time with only a few quickly mounted additional parts.

Clever comfort components.

Thereby, you enable even higher sash weights to swing in or out gently and evenly with deceleration. The entire running motion is stabilised and sash overshoot is prevented at the same time. This minimises wear and elevates the room comfort to a high standard.



PORTAL PS/PSK comfort

Product overview.



Planning and production	PORTAL PSK 100/130 comfort	PORTAL PSK 160 comfort	PORTAL PSK 200-Z comfort
Opening type	Parallel slide & tilt	Parallel slide & tilt	Parallel slide & tilt
Profile	Timber, PVC	for turn and tilt profiles with 16 mm fittings groove	for turn and tilt profiles with 16 mm fittings groove
Sash rebate width in mm	670–1,200	670–2,000	770–2,000
Sash rebate height in mm	840–2,360	840–2,800	1,000–2,360
Sash width in mm	–	–	–
Sash height in mm	–	–	–
Sash weight in kg maximum	100/130	160	200
Quality assurance	QM-347 certified (H3) Corrosion class 5	QM-347 certified (H3) Corrosion class 5	QM-347 certified (H3) Corrosion class 5
Schemes	A, C, G, K	A, C, G, K	A, C, G, K
Frame to sash clearance in mm	125	125	125 118 (ALU)
35 mm space requirement for running rail	⊙	⊙	⊙
Self-cleaning roller	⊙	⊙	⊙
Special features	–	–	with force-controlled stays

Options for greater room comfort

Achievable resistance class in accordance with EN 1627–1630	–	RC2	RC2
Handle lockable from the inside and outside	⊙	⊙	⊙
SOFT CLOSE function	–	⊙	–
Night vent	–	⊙	–
Opening and locking monitoring system AEROCONTROL	⊙	⊙	⊙
Positive control	–	–	⊙
Intuitive operation	–	⊙	⊙

Benefits

- Intuitive ease of use due to additional comfort components
- Very quiet running motion and swings open and closed smoothly
- Customised solutions for different sash weights
- Easy scalability due to innovative comfort components
- High level of basic security as standard, upgradeable up to RC2 without problems
- Simplified installation: bogie wheels with height and tilt adjustment and a self-supporting running rail without support profile up to 160 kg (dependent on profile)
- Standard turn-and-tilt hardware can be used for the central locking gear
- Maximum flexibility: with 125 mm frame to sash clearance and small dimensions also suitable for extremely narrow or deep-set sash profiles

PORTAL PS 200 comfort

Parallel slide

for turn and tilt profiles with 16 mm fittings groove

-

-

670–2,000 (up to 160 kg)

770–2,000 (> 160 kg)

840–2,800

200

QM-347 certified (H3)
Corrosion class 5

A, C, G, K

125

118 (ALU)

⊙

⊙

-

RC2

⊙

⊙

⊙

⊙

-

⊙

Frame clearance of just 35 mm.

These 35 mm do not only reduce the threshold height and allow larger glass surfaces to be inserted. The use of narrow and more economical frame profiles is also possible.



Comfort components

Also provide more ease in production.

Connecting rod sliders

Quiet, smooth sliding.

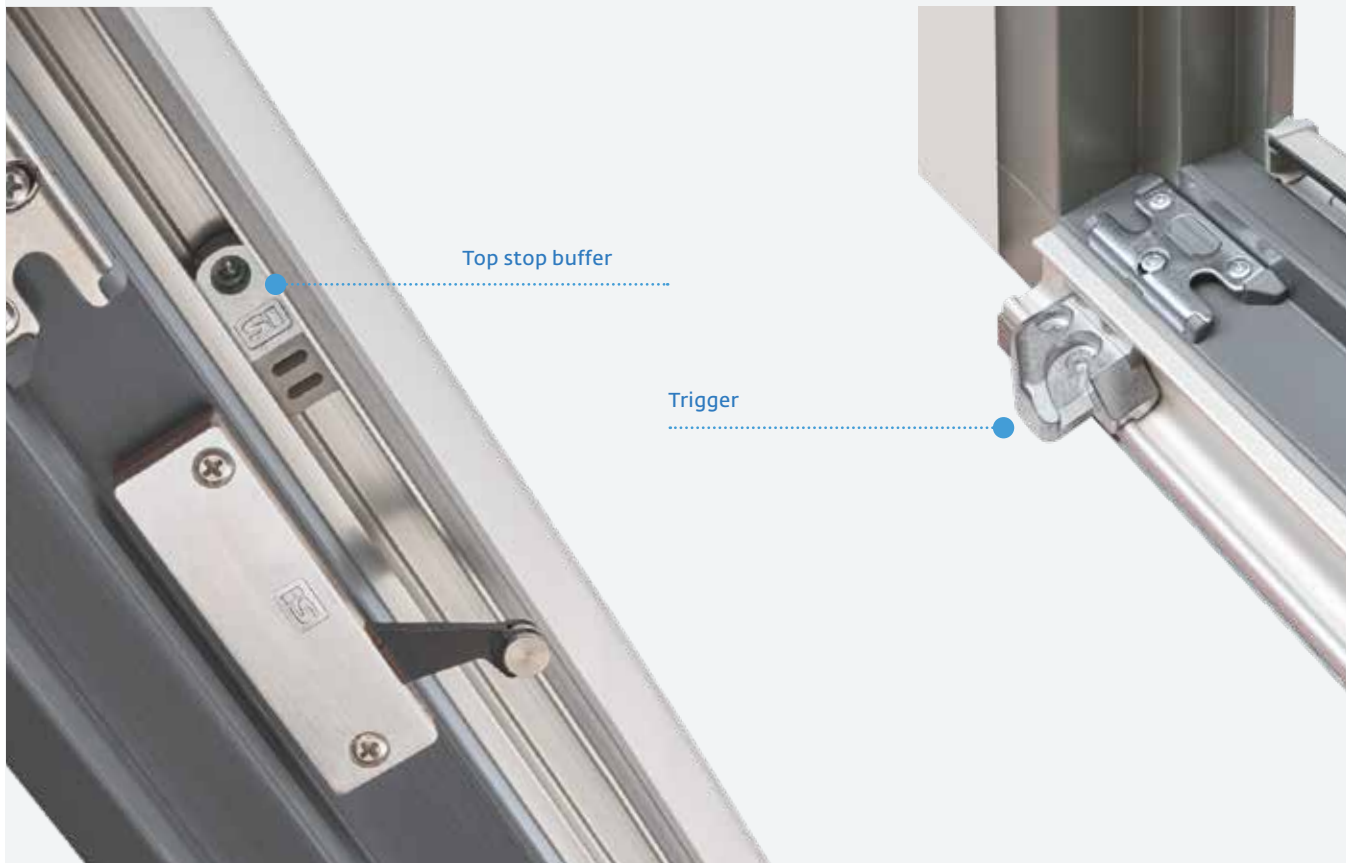
To ensure that operation is child's play even for unfamiliar and frequently changing users upon the first touch, it is essential that it functions intuitively as well as safely. With the PORTAL PS/PSK comfort, the ease begins in production. Because the smart comfort components are so easy to assemble, thus making maximum comfort supremely efficient.

The two sliders are synchronised in the guide rail via a connecting rod. This provides additional smooth and stable sash guidance.

Trigger

Swings open and closed smoothly.

On the locking side, there is a special trigger in the running rail and a stop buffer integrated in the guiding rail at the same time, which mutually ensure smooth swinging.



Stop buffer

Dampened and safe stopping.

A stop buffer, integrated in the guide rail on the hinge side, stops the slider and therefore the sash particularly gently at the top and bottom. A further stop buffer on the locking side is another possibility in order to enable the sash, as an additional trigger, to swing open and closed more gently.

Additional brakes

Soft pivoting for minimum overshoot.

Slam-shut brakes, positioned diagonally to each other at the top of the locking side and at the bottom of the opposite side brake the sash, enabling gentle swinging and minimising overshoot.

Running and guiding rail

More quietness and stability.

In interaction with the stable running rail, the specially coated guide rail supports smooth sash motion and steers sash weights of up to 200 kg safely on the right tracks without problems.

Additional brake



Handle and gear

So that every user gets the hang of it.

Handles

Intuitive ease of use.

PORTAL PS/PSK comfort handles combine a noiseless ease of use free of play with lasting high functional safety and modern design. They are available in a wide range of variants extending to the version with cylinder as well as in a large range of colours. They therefore ideally adapt to the living space and the hardware covers.

PSK 100/130/160 comfort:


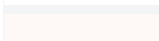
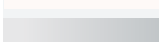




- Opening and sliding of the sash after 90° rotation of the handle
- A further 90° rotation allows the sash to be tilted
- SIEGENIA central locking gear from standard turn and tilt components

PS 200 comfort:

- Opening and sliding of the sash after 90° rotation of the handle
- SIEGENIA central locking gear from standard turn and tilt components

PSK 200-Z comfort:

- A 90° rotation of the handle brings the sash automatically into the tilt position
- A further 45° rotation allows the sliding of the sash

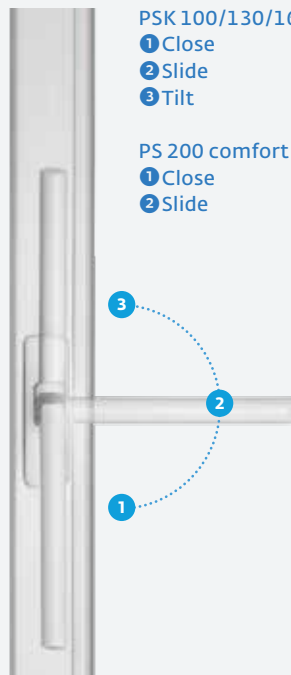
	Signal white
	Cream white
	Silver
	F9
	Old gold
	Medium bronze
	Brown

PSK 100/130/160 comfort

- 1 Close
- 2 Slide
- 3 Tilt

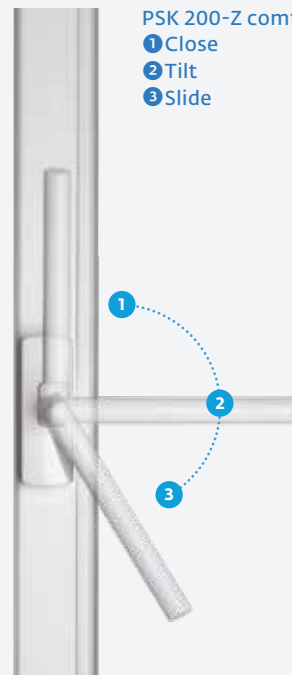
PS 200 comfort

- 1 Close
- 2 Slide



PSK 200-Z comfort

- 1 Close
- 2 Tilt
- 3 Slide



PZ gear set PSK 200-Z comfort

Minimum operating force when tilting and locking.

In the PSK 200-Z version the stays are force-controlled via the hardware, meaning that the sash is automatically moved into the tilt position by a 90° handle rotation. After a further 45°, the sash can be moved. This allows convenient single-handed operation of sash weights up to 200 kg.

**Production benefits**

- 30, 35, 40, 45 and 50 mm backsets for optimal adaptation to profile requirements
- Also lockable in tilt position
- For adaptation to standard linkages
- Low logistics costs

Comfort mushroom cam

The only locking part that compensates the tolerances itself and makes robust burglar resistance durably smooth-running.

The unique comfort mushroom cam from the TITAN family offers great benefits in the smallest space: with a sturdy mushroom head, its roller function and continuous height adjustment, which automatically balances the airgap tolerances or changed conditions. This minimises the installation work and ensures an optimally adjusted and smooth-running locking system. In this way, the comfort mushroom cam combines lasting high ease of use with consistent burglar resistance and maximum efficiency in production like no other.

**Production benefits**

- Ensures straightforward and absolutely precise installation with its continuous height adjustment
- Compensates air-gap tolerances independently, therefore simplifying installation
- Prevents costly and time-consuming complaints

Stays and bogie wheels

More comfort and frame to sash clearance.

Stays

High-performance solutions up to 160 kg or 200 kg.

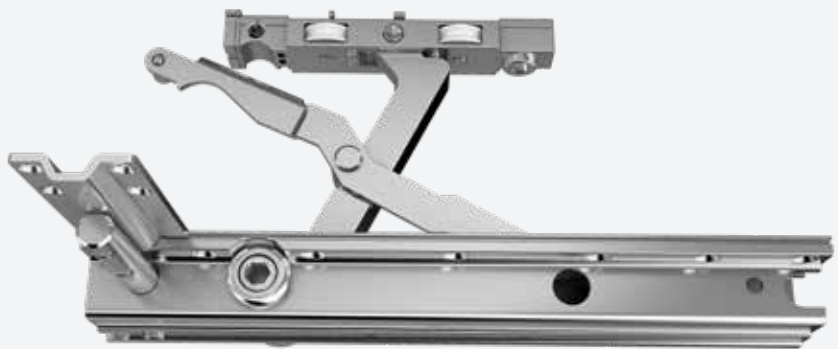
The laser-welded stays are extremely secure components due to the combination of high-quality materials like brass and high-tensile steel. They are available in two versions: the PS-/PSK stay allows sliding up to 200 kg and tilting up to 160 kg. Tilting up to a sash weight of 200 kg is possible in the PSK 200-Z version.



Bogie wheels

High ease of use and frame to sash clearance with small dimensions.

With their diameter increased by up to 25 %, the new PORTAL PS/PSK comfort rollers make the sliding even smoother and easier. Positive-locking metal bogie wheel safeguards securely and durably hold the bogie wheels in the running rail and allow the sash to be tilted without tension with PSK comfort hardware. For sash weights up to 160 kg, the running rail does not need a support profile as a rule and the large frame to sash clearance of 125 mm permits use in deeper, highly insulated profiles.



Production benefits

- Rational assembly: optimum screw positions and an assembly fixing
- 125 mm frame to sash clearance: also suitable for elements with very deep sash profiles

Production benefits

- Simplified assembly: height and tilt adjustment for optimum adaptation to the weight and size of the sash
- Maximum flexibility: with 125 mm frame to sash clearance and small dimensions also suitable for extremely narrow or deep-set sash profiles
- Self-supporting running rail up to 160 kg; no support profile required (depending on profile)

Accessories

For a healthy indoor environment.

AEROMAT flex

The optionally integrated passive vent for user-independent ventilation.

User-independent ventilation can be achieved with the AEROMAT flex passive vent. The ventilation unit makes optimal use of the existing installation space and can be integrated in the element without milling grooves and virtually concealed. Fresh air supply is possible even with closed roller shutters or blinds and provides a high level of sound absorption up to 55 dB due to optional sound insulation modules. Depending on the ventilation unit version, the supply air opening is independently regulated by the humidity in the room.



Production benefits

- Can be used singly or in pairs, horizontally or vertically on the element in the existing installation space – without routing out
- Quick and easy assembly on site: flexible telescopic duct for 70 to 125 mm profile depth, optional duct extension for up to 235 mm profile depth

Secured night vent - TITAN vent secure

Supplying fresh air whilst providing burglar-resistance.

High burglar resistance and healthy ventilation are no longer a contradiction in terms. Because with the secured night vent, TITAN vent secure, you can leave your tilt sash cracked open and still be well protected against burglary, vandalism, rain and draughts. Through TITAN vent secure, tested, scalable burglar resistance from basic security to up to RC2 is achieved, not only in the locked position but also in the 10 mm tilt gap position. The intuitive operation corresponds to the familiar turn and tilt operation and the appearance of the sliding door remains unchanged.



Production benefits

- Implemented using special frame parts, no additional parts required
- Simply upgradeable solution



PORTAL FS^{PLUS}

The fold and slide hardware for large opening widths and full flexibility.

Larger opening width, more freedom of design.

With the PORTAL FS^{PLUS}, fold and slide elements with up to seven elements can be folded together easily up to a sash weight of 80 kg and can also be used with a low threshold if desired. This results in opening widths of up to 6.3 m and just as much freedom of design. The efficient assembly technology makes fabrication very flexible, quick and cost-effective. The hardware covers can be painted in different colours and the high-quality surfaces are also suitable for long-term use in outside areas due to the use of new materials and coating techniques. This opens up all options for outward opening fold and slide elements and consequently additional business opportunities.



Up to 6.3 m free thoroughfare.

All elements can be easily folded inward or outward. Every centimetre of the width of the space is useable as there is no post standing in the way.

PORTAL FS^{PLUS}

Product overview.

Benefits

- Up to 6.3 m opening width
- Up to 80 kg sash weight
- Especially smooth sash running: top or bottom, same profile set
- Maintenance-free sash hinges due to plastic bearing
- The efficient assembly technology provides more flexibility and cost-effectiveness
- Available in a highly corrosion-resistant stainless-steel finish
- Turn-and-tilt sash can be integrated
- Low threshold version is possible



Planning and production

	PORTAL FS ^{PLUS}
Opening type	Fold and slide
Profile	for turn and tilt profiles with 16 mm fittings groove
Sash rebate width in mm	up to 900
Sash rebate height in mm	840–2,360 (sash rebate height) ALU: 850–2,400 (sash rebate height)
Maximum sash weight	80 kg per sash
Quality assurance	QM 345 certified (H3) corrosion class 5
Schemes	220*, 321, 330, 431, 440*, 532, 541, 550, 633, 651, 660*, 743, 761, 770
Top and bottom running	⊙

Options for greater room comfort

Handle lockable from the inside and outside	⊙
Opening and locking monitoring system AEROCONTROL	⊙
Special features	Turn-and-tilt sash can be integrated, inward and outward opening achievable

* Profile-specific clarification is required

Folding hinges

Maintenance-free, weather-resistant and can also be outward opening.

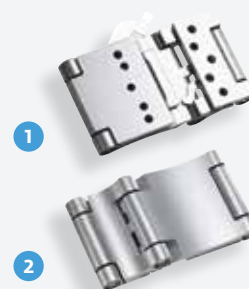
With their special friction bearings, PORTAL FS^{PLUS} rebate hinges guarantee a high standard of noiseless and long-lasting use. The rebate hinges are maintenance-free thanks to their innovative plastic bearing. The hardware components are weather-resistant due to their high-quality surface technology and are also available in a highly corrosion-resistant stainless-steel finish. A turn-and-tilt sash can also be integrated in PORTAL FS^{PLUS} elements, without any problems, for even more freedom of design.

Also outward opening.

The fold and slide elements can also be designed to be outward opening thanks to the high-quality surface technology. Burglar resistance is further prioritised in these elements through the use of bolt security and special screws. Because the hinges can only be removed when the sash is open.

Also as cleaning hinges.

The special FS-RS sash hinge makes it possible to conveniently clean the outsides from the inside. This can be a huge help on narrow balconies.



- ① Open hinge: secured cleaning position
- ② Closed hinge: normal function as rebate hinge

Threshold and bogie wheels

More ease of use and freedom of movement.

Threshold

Low passageway height and high thermal insulation.

The thermally separated threshold for fold and slide elements with its low passageway height enables a barrier-free version and prevents the formation of condensation.

Bogie wheels

Running comfort on ball bearings.

The large bogie wheels made of special plastic on ball bearings ensure especially smooth running of the sashes and also minimise installation time. The brush elements keep the running rail free from dirt and dust and contribute to a continual ease of use.



Production benefits

- Low threshold version is possible

Production benefits

- Minimum installation time thanks to large, ball-bearing bogie wheels
- Integrated brush elements to clean the running rail

Handle and locking system

Attractive, secure and smooth-running.

Handles

Quality that you grasp immediately.

PORTAL FS^{PLUS} handles combine a noiseless ease of use free of play with lasting high functional safety and are perfectly coordinated to the hardware and the sash weight. The handles are available in a large range of colours and perfectly match the handles of the turn and tilt programme in design.



Production benefits

- Large choice of variants ranging to version with cylinder
- Perfectly coordinated with the hardware and the sash weight
- Available in a versatile colour range
- Match the handles from the turn and tilt range in terms of colour and design

Comfort mushroom cam

The only locking part that compensates the tolerances itself.

The unique comfort mushroom cam from the TITAN range combines high ease of use with consistent burglar resistance: with a sturdy mushroom head, its roller function and continuous height adjustment, which automatically balances the airgap tolerances. This minimises the installation work and ensures a permanent smooth-running locking system.



Production benefits

- Ensures straightforward and absolutely precise installation with its continuous height adjustment
- Compensates air-gap tolerances independently, therefore simplifying installation
- Prevents costly and time-consuming complaints



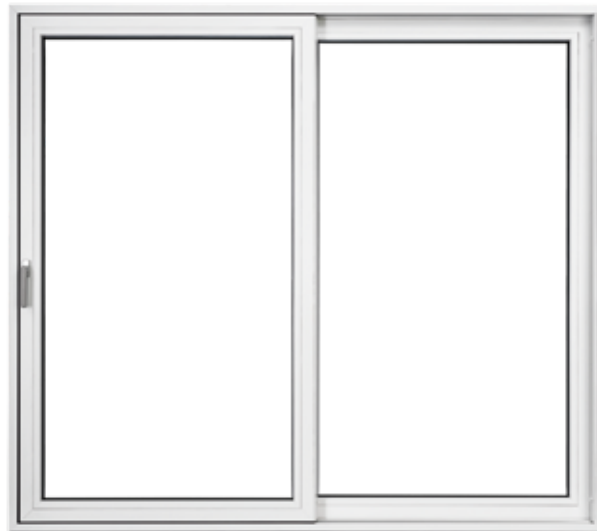
PORTAL CS

The economical solution for upgrading conventional sliding elements.

Conveniently ensuring more comfort.

The PORTAL CS sliding hardware allows you to convert basic sliding windows and doors into high-quality sliding elements using an economical system. Height-adjustable bogie wheels on ball bearings mean that timber or PVC elements with sash weights up to 150 kg can be moved with ease. Up to four special-steel locking hooks and an integrated anti-lift device provide the necessary security and can be operated very conveniently via the different handle versions.

We also offer matching solutions for aluminium elements with sash weights of up to 100 kg: the PORTAL CS ALU hardware range and its special locking sides. The locking hooks and locking parts are made out of stainless steel and the millable, clampable recessed handle has a locking indicator.



The sliding system for more ease of use and long service life for timber, PVC and aluminium profiles up to 150 kg sash weight.

PORTAL CS

Product overview.

Bogie wheels

With very smooth-running rollers on ball bearings for lasting comfort.

With the PORTAL CS 150 version, weights up to 150 kg can be moved easily and safely using the height-adjustable bogie wheels on ball bearings. With the PORTAL CS 80, there is also a variant available for smaller elements to flexibly adapt the sliding system to individual requirements.



Planning and production

	PORTAL CS 80	PORTAL CS 150	PORTAL CS ALU
Opening type	Slide	Slide	Slide
Profile	Timber, PVC, aluminium; for profiles with 16 mm fittings groove	Timber, PVC, aluminium; for profiles with 16 mm fittings groove	Aluminium with ALU eurogroove
Sash weight in kg maximum	80	150	100
Handle position	variable, centre	variable, centre	variable, centre
Schemes	A, C, D, K	A, C, D, K	A, C, D, K
Gear with locking hook	⊙	⊙	—
Special features	Stainless steel bogie wheels	—	Recessed handle that can be milled and clamped
Height-adjustable bogie wheels with rollers on ball bearings	⊙	⊙	⊙

Gears

Reliable, sturdy and convenient.

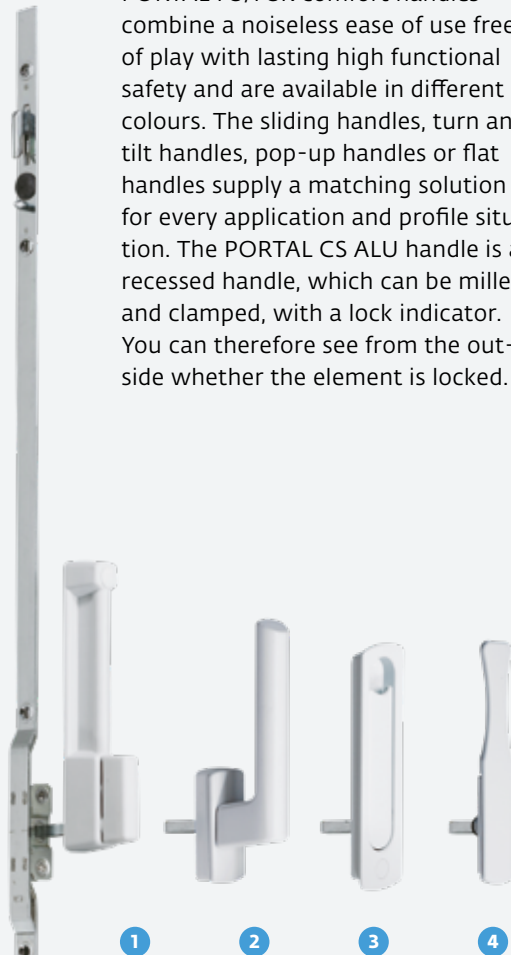
The PORTAL CS 80 and CS 150 gear is suitable for profiles with 16 mm fittings groove in all frame materials. It is equipped with up to four locking hooks made of special steel, an integrated security lock and is also available as a lockable version. Integrated stop buffers increase the ease of use. The locking hooks and locking parts of the PORTAL CS ALU are made out of stainless steel.



Handles

Solutions for every requirement.

PORTAL PS/PSK comfort handles combine a noiseless ease of use free of play with lasting high functional safety and are available in different colours. The sliding handles, turn and tilt handles, pop-up handles or flat handles supply a matching solution for every application and profile situation. The PORTAL CS ALU handle is a recessed handle, which can be milled and clamped, with a lock indicator. You can therefore see from the outside whether the element is locked.



1 2 3 4

- 1 Tilt and slide handle
- 2 Turn and tilt handle
- 3 Pop-up handle
- 4 Flat handle



PORTAL for aluminium.

The basis for big ideas for all opening types.

Everything from one source: PORTAL and the complete ALU range.

PORTAL also opens up a particularly wide performance spectrum for aluminium sliding elements, which offers you more options for a high standard of room comfort in all opening types, sizes and weight classes with low expenditure. Because PORTAL is also an important building block in our ALU complete range. This covers all applications from high-quality sliding door and window hardware to intelligent locking systems for entrance doors. With a versatility that delivers the right solution for every safety, comfort and design requirement with ease and consequently will also be the ideal basis for great ideas in the future.

Complete freedom and innovations: for more than 50 years.

Aluminium is the material that lends pioneering concepts to sashes. For this purpose, visions of the future and practical suitability must be perfectly coordinated. The know-how of over 50 years of consistent development work is contained not just in every component, but also in the modular system, in order to fulfil these requirements. Thanks to targeted innovations and individual special solutions, ALU opens all possibilities to distinguish yourself in the market.



Large lift and slide elements with smart motor function.

PORTAL brings more light and ease of movement into clear design concepts. Even sash weights of up to 400 kg can be moved and locked via app with our drive system.



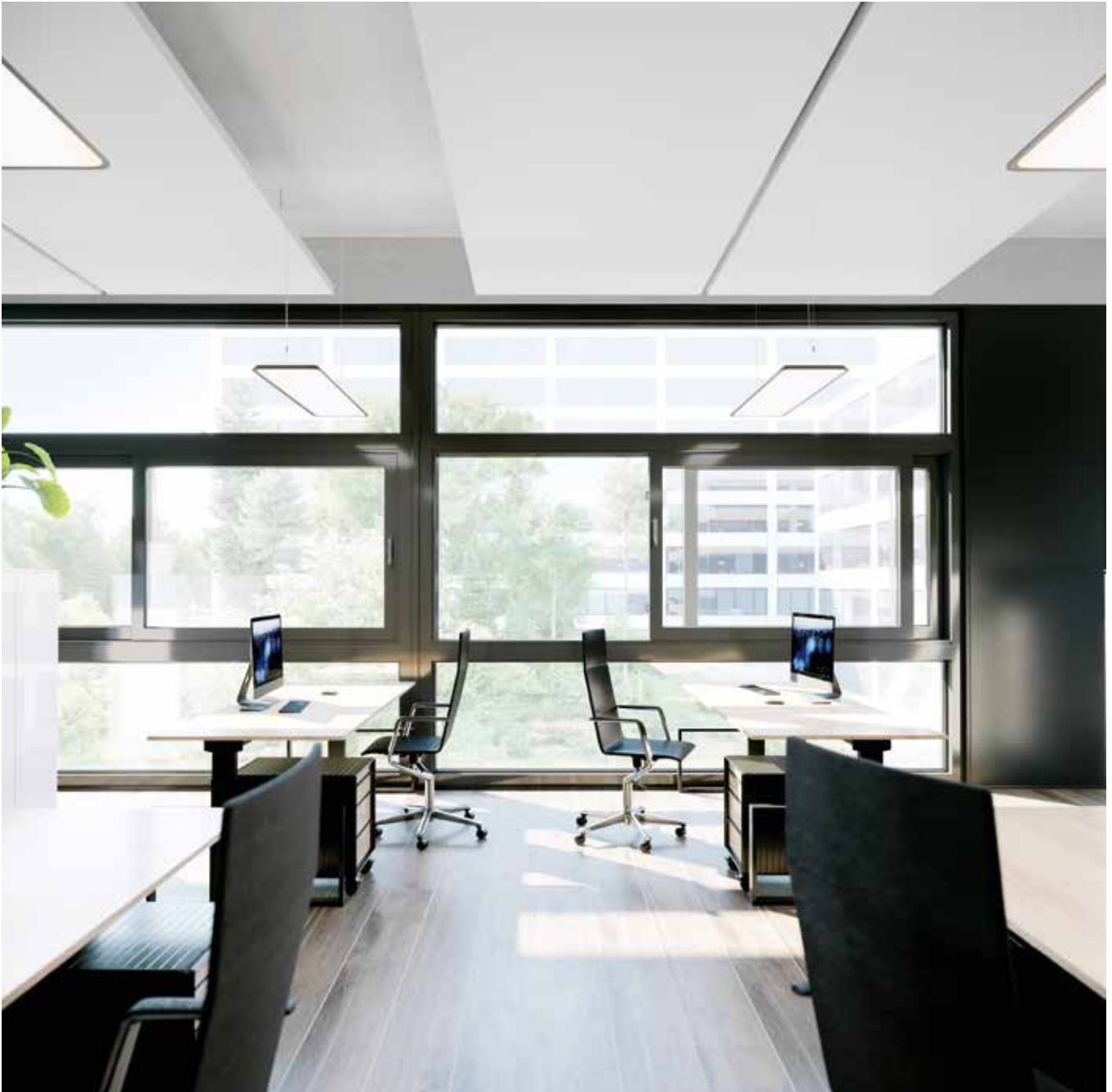
Portal HS ALU

Lift-slide system for aluminium.

Opening type	Lift-slide
Max. overall width	19800 mm (for scheme L)
Sash width	590–3,335 mm
Sash height	1,175–3,325 mm
Max. sash weight	400 kg
Quality assurance	QM346 certified (H3) Corrosion class 5

Benefits

- Scalable load capacity up to 200 kg, 300 kg or 400 kg
- Possible in schemes A, C, D, G and E
- Small number of components and high level of pre-assembly
- Smooth, safe operation
- Night vent as standard
- High level of basic security as standard, upgradeable up to RC3 depending on profile
- With SOFT CLOSE function depending on profile



PORTAL ECO SLIDE ALU

Sliding system for aluminium.

Opening type	Slide
Max. overall width	10,000 mm (for scheme K)
Sash width	680–2,500 mm
Sash height	1,200–2,500 mm
Max. sash weight	250 kg
Quality assurance	QM-346 certified (H2) Corrosion class 5

Benefits

- Cost-effective solution for sliding windows or sliding doors
- Possible in scheme A
- Small number of components and high level of pre-assembly
- High energy efficiency due to continuous seal
- Innovative guiding and locking elements
- Intuitive operation: ideal for changing users
- Night vent as standard
- With SOFT CLOSE function depending on profile



PORTAL PS/PSK comfort ALU

Parallel-slide and parallel slide & tilt systems for aluminium.

Opening type	Parallel slide Parallel slide & tilt
Max. overall width	8,000 mm (for scheme C/K)
Sash width	670–2,000 mm
Sash height	840–2,800 mm
Max. sash weight	PORTAL PS: 200 kg PORTAL PSK: 200 kg, profile-dependent
Quality assurance	QM-347 certified (H3) Corrosion class 5

Benefits

- Possible in schemes A, C, G and K
- Scalability due to innovative comfort components
- Bogie wheels with height and tilt adjustment
- 125 mm frame to sash clearance and small dimensions: also suitable for extremely narrow or deep-set sash profiles
- Running rail height of only 29 mm
- Intuitive operation: very quiet running motion and swings open and closed gently
- High energy efficiency due to continuous seal
- High level of basic security as standard, upgradeable up to RC2



PORTAL FS^{PLUS} ALU

Fold and slide hardware for aluminium.

Opening type	Fold and slide
Max. overall width	6,300 mm
Sash width	330–900 mm
Sash height	840–2,400 mm
Max. sash weight	80 kg
Quality assurance	QM-345 certified (H3) Corrosion class 5

Benefits

- Possible in different schemes
- Up to 6.3 m opening width and 80 kg sash weight
- Especially smooth sash running: top or bottom, same profile set
- Only 26 mm threshold height
- Maintenance-free sash hinges due to plastic bearing
- Available in a highly corrosion-resistant stainless-steel finish
- Turn-and-tilt sash can be integrated
- Barrier-free threshold version is possible

SIEGENIA®
brings spaces to life

Head Office:
Industriestraße 1–3
57234 Wilnsdorf
GERMANY

Phone: +49 271 3931-0
Telefax: +49 271 3931-1333
info@siegenia.com
www.siegenia.com



You can find address details for our
international sites at: www.siegenia.com

SIEGENIA worldwide:

Austria Phone: +43 6225 8301
Benelux Phone: +31 613 143773
China Phone: +86 316 5998198
France Phone: +33 3 89618131
Germany Phone: +49 271 39310
Great Britain Phone: +44 2476 622000
Hungary Phone: +36 76 500810

India Phone: +91 124 4121647
Italy Phone: +39 02 9353601
Poland Phone: +48 77 4477700
Russia Phone: +7 495 7211762
South Korea Phone: +82 15445369
Switzerland Phone: +41 33 3461010
Turkey Phone: +90 216 5934151
Ukraine Phone: +38 044 4065793

Contact your distributor: