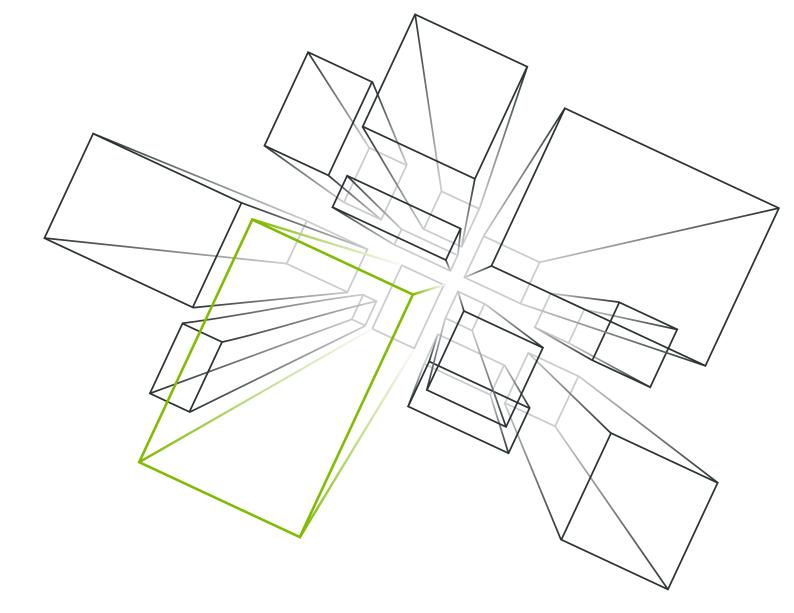
Experience Progress.







Experience Progress.

PRODUCT HIGHLIGHTS FOR BAU 2019





Dear Partners,

What shapes the future of building? What shapes the future of our industry? Of course developments like urbanisation, globalisation and digitalisation – combined with the desire for comfort, design and sustainability, but also security and health.

Every day at Schüco we are already working on meeting these complex demands from the markets of tomorrow in the best possible way. In doing so, we are contributing towards actively shaping the future of construction. Be it ease of access, intelligent networking or vertical building, our holistic solutions and services for residential and commercial projects, as well as digitalisation and fabrication, are innovative and groundbreaking.

Be part of it – let us see the challenges of the markets as opportunities. With our varied range of products, individual digital services and tailored fabrication solutions, we are by your side as a strong partner. Today and in the future.

Experience Progress!

Andreas Engelhardt Managing Partner

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360°

Download the Schüco 360° Viewer app from the app store and take a tour of the Schüco exhibition stand for BAU 2019!



Experience Progress.

For Schüco, social and technological change means working together to design secure, healthy and sustainable living and working environments for a globally networked society. Schüco is forging ahead. We are actively shaping the future of construction with pioneering solutions. With excellent products and digital services, we can achieve sustainable, modern architecture together with our partners: architects and fabricators. Experience progress with Schüco.





+ Ease of access



Home

Future design will be seamless.

We design living spaces with panoramic views.

Providing more comfort and design excellence.

Find out more about Home at: www.schueco.com/bau-home

Integration of functions

+ Design freedom

Vertical

Future cities will be vertical and individually designed.

We develop dynamic façade solutions for different climates.

Offering functional flexibility and aesthetic design.

+ Energy efficiency

Find out more about Vertical at: www.schueco.com/bau-vertical

+ Healthy, pleasant indoor clim<u>ate</u>

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4

Smart Building

Future cities will be intelligent. Die Stadt der Zukunft ist intelligent.

Experience Progress

Convenient and secure access

Secure windows and doors

Smart Building

Future cities will be intelligent.

We create façades made for connectivity.

Protecting the health of buildings and their inhabitants.

 The intelligent façade

Home

Find out more about Smart Building at: www.schueco.com/bau-smartbuilding



+ CE marking

 High security systems

+ Fire and smoke protection systems



Future building systems will become ever more secure Die Gebäude der Zukunft werden immer sicherer.



Security

Future building systems will become ever more secure.

We provide innovative and proven security systems.

Enhancing functionality, flexibility and design.

Find out more about Security at: www.schueco.com/bau-security



+ SoundCal acoustic software

Digital acoustic lab

Acoustics

Future cities will be silent. For better urban acoustics. Reducing noise. Increasing comfort.

Find out more about Acoustics at: www.schueco.com/bau-acoustics



+ Planning & Configuration



+ Operation & Maintenance

Digitalisation

Future architecture will be connected.

We manage building processes digitally.

For more freedom, efficiency and planning security.

Find out more about Digitalisation at: www.schueco.com/bau-digitalisation







Sustainability

Cradle to Cradle-certified real estate is future-proof and retains its value.

Schüco leads the way here with 43 systems already certified with silver status.

C2C stands for material cycles that do not harm humans or the environment. Recyclability without any loss of quality becomes a key factor here – and the building as the raw material stockpile of the future. This principle is the basis for all product developments at Schüco.

This provides developers, architects and clients with independently tested security when selecting materials. All C2C-certified systems from Schüco are available as standard at no additional charge.

Find out more about Cradle to Cradle at: www.schueco.com/c2c

Cradle to Cradle Certified[™] is a certification mark licensed by the Cradle to Cradle Products Institute.

+ Architect

A fluid design with aesthetic freedom. Slimline profiles and seamless transitions between the Schüco systems create a transparent, light and airy atmosphere with maximum functionality. Planning certainty. Design freedom.

+ Fabricator

Individual client requirements can be fabricated and installed quickly and easily thanks to the Schüco modular system. Delivering reliable quality. Meeting the highest requirements.

RECTANDED

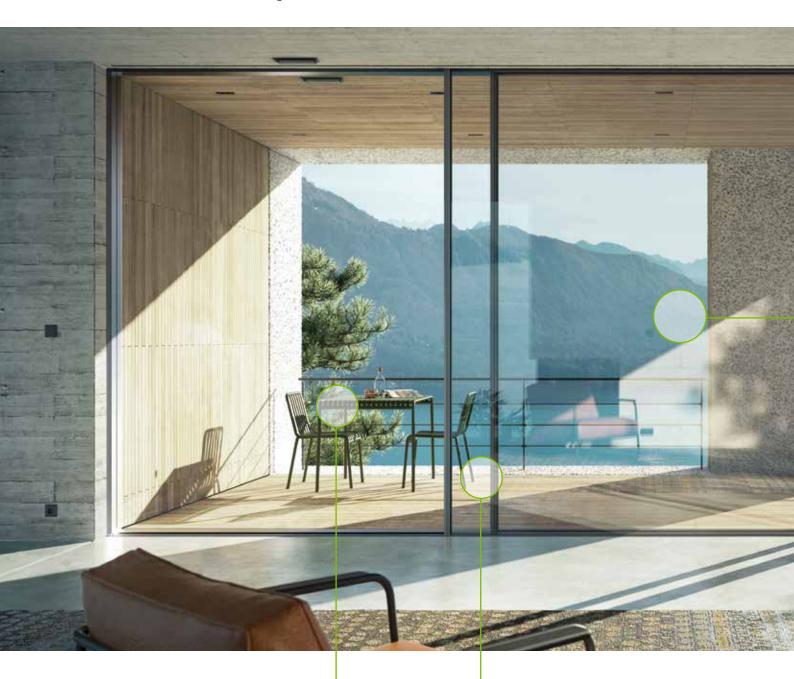


Residential Buildings

Withdrawing, feeling safe and secure. Design-oriented systems from Schüco provide maximum comfort and energy efficiency.

Residential Buildings

Modern building concepts require a timeless design, a high degree of transparency and a clear architectural language. Schuco systems give living spaces their own individual character. Large glass combined with narrow profiles create an ambient environment that is flooded with light.



Comfort

The ultra-simple, intuitive operation via an app or home automation system provides a high level of convenience, including transitions without thresholds.

Security

Safe and secure. Innovative solutions provide reliable protection against wind, weather and unwanted guests.

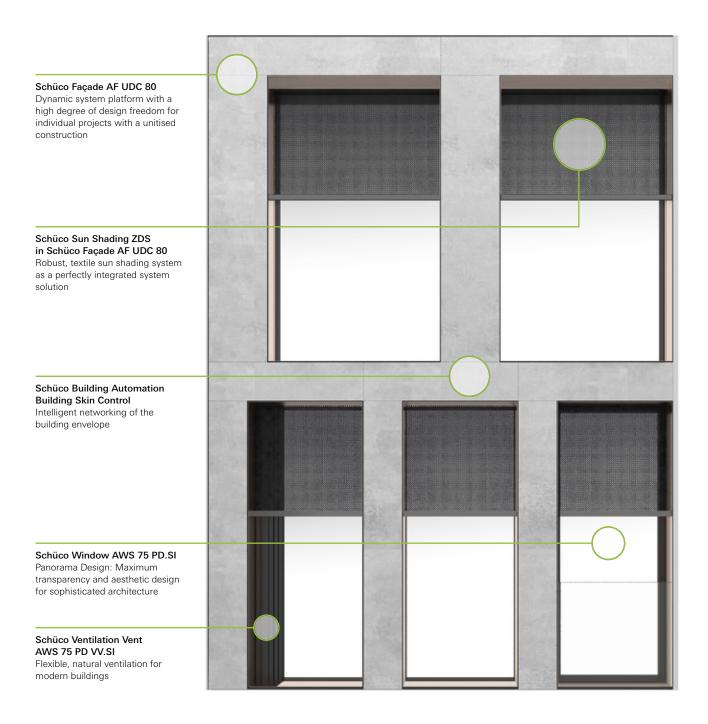


Panoramic design Large-scale window and sliding systems with minimal profiles enable high-quality living flooded with light.

Seamless

Thanks to fluid transitions and slimline profiles, Schüco Seamless offers an attractive design that sets new standards.

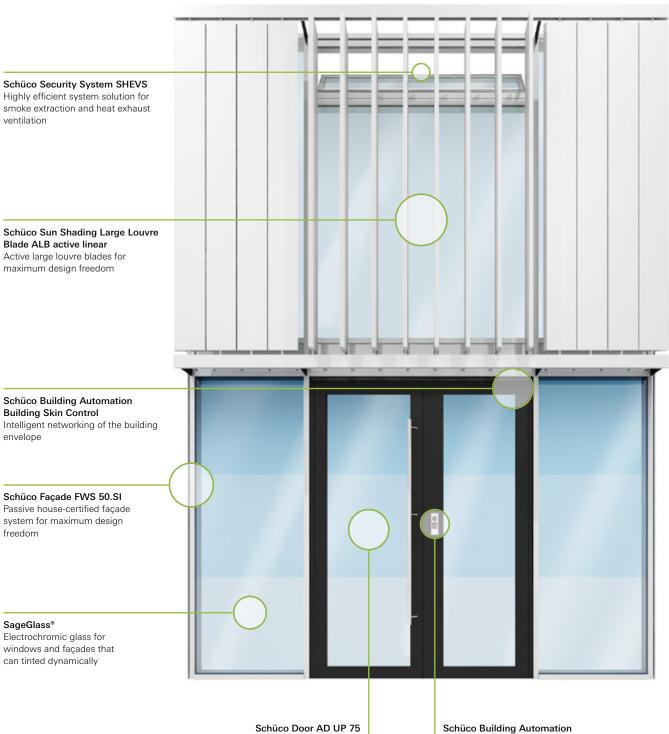
Schüco unitised façade with opaque areas, Panorama Design window insert unit, Panorama Design ventilation vent and concealed textile sun shading



Schüco unitised façade with integrated sliding door, ventilation system with ventilation function and sound-absorbing façade units (concept)



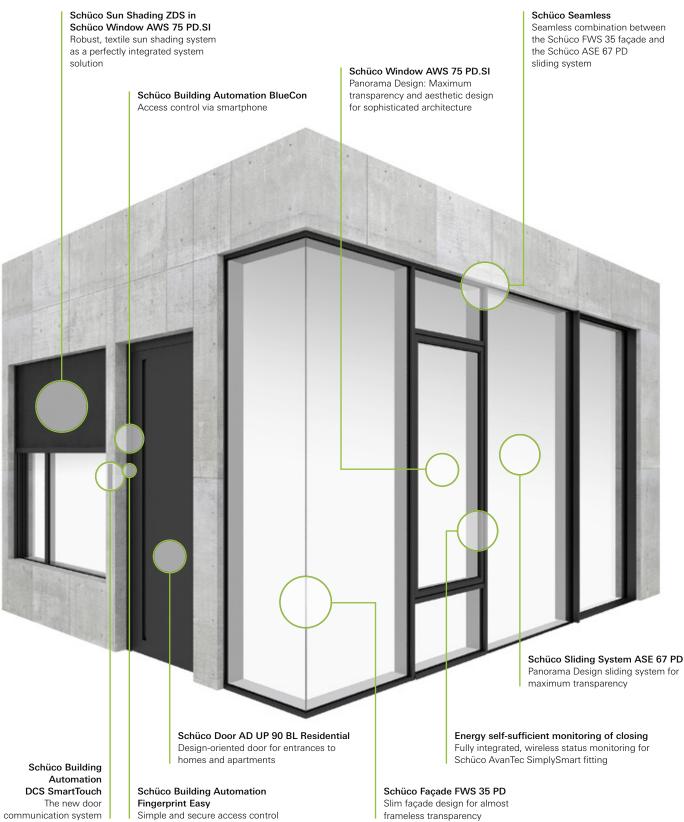
Schüco mullion/transom façade with project door and Touch Display, window insert unit with SHEVS, sun shading large louvre blades and switchable glass



One system platform for all applications

DCS SmartTouch The new door communication system

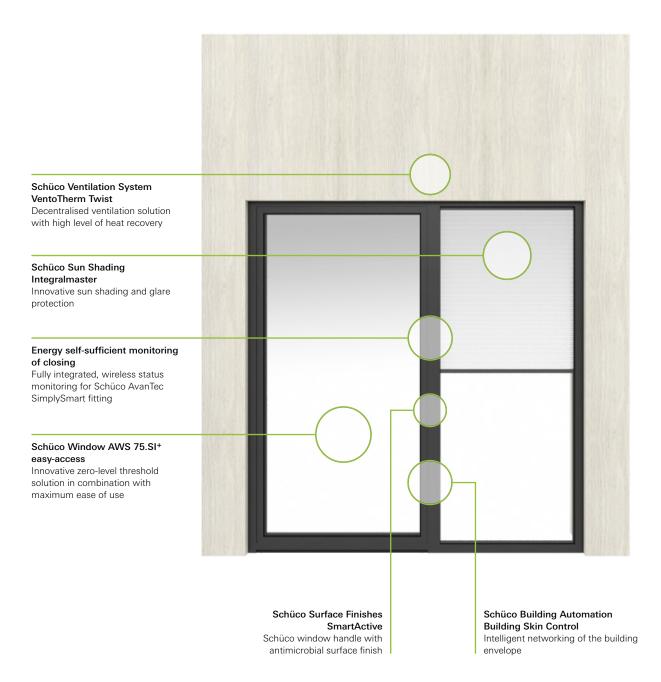
Schüco Seamless - Panorama Design façade unit with integrated opening units, sun shading and networked control units



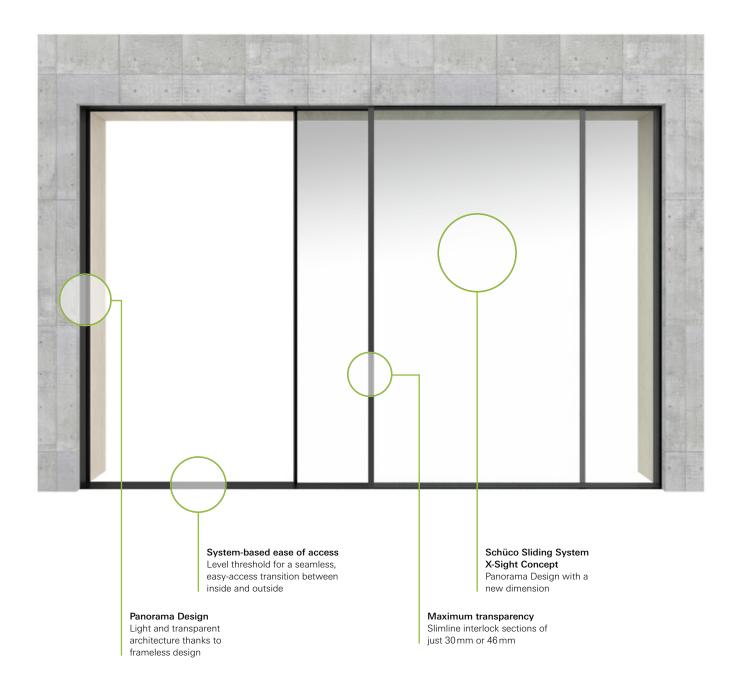
Simple and secure access control

frameless transparency

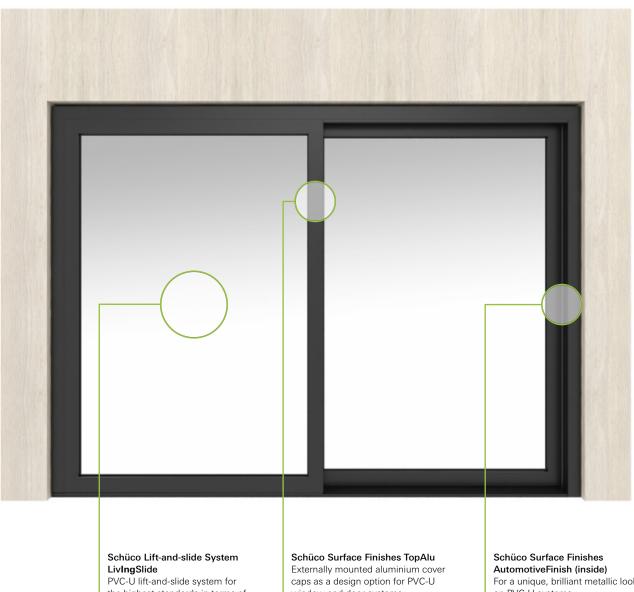
Schüco window system with easy-access threshold, automatic ventilation and integrated sun shading



Schüco Panorama Design prototype with innovative functions



Schüco lift-and-slide system with aluminium cover caps



the highest standards in terms of comfort, design and thermal insulation

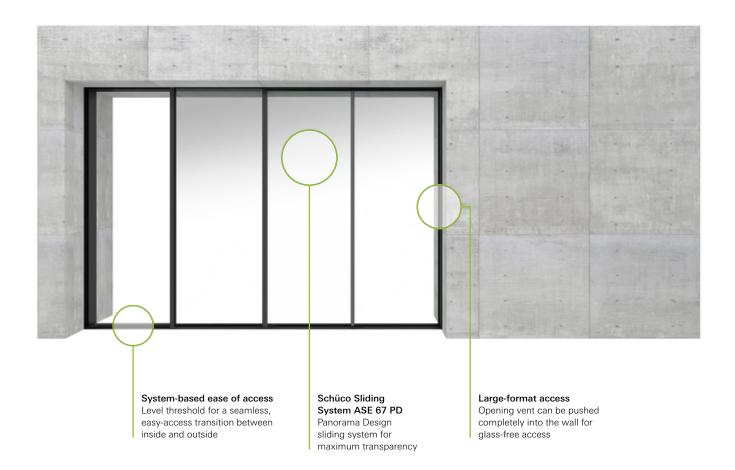
window and door systems

For a unique, brilliant metallic look on PVC-U systems

Schüco window with aluminium cover caps, ventilation fitting and safety barrier



Schüco Panorama Design sliding system with easy-access threshold and opening vent integrated in the wall



Schüco Panorama Design sliding system



Schüco Sliding System ASE 67 PD Panorama Design sliding system for maximum transparency

Modular range of options

Two outer frame profiles can be combined in a modular way and guarantee design freedom in every situation

Maximum transparency Narrow interlock section increases

the percentage of glass and ensures maximum transparency

+ Fabricator

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Vertical building with Schüco. This means a high level of efficiency and process reliability from planning through to installation. The innovative building components allow reliable solutions to be achieved even in challenging circumstances.

+ Architect

The density of a town or city calls for careful planning and maximum creativity from architects. Outstanding design: flexible, architecturally modular and with selected sustainable materials.



Commercial Buildings

Vertical architecture shapes urban living. Flexible Schüco systems offer design freedom for new ideas.

Commercial Buildings

Urban building is the key to modern societies. Schüco systems offer design freedom and planning reliability. The interplay of opaque and transparent façade units, versatile materials and slimline joints offers aesthetic clarity and geometric flexibility.



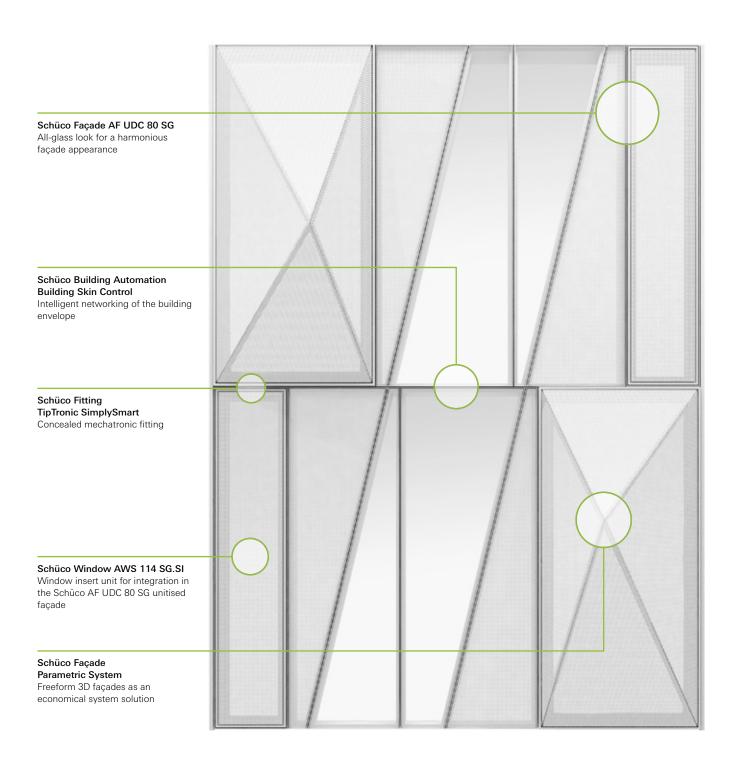
Efficiency

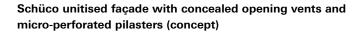
Modules that can be freely combined ensure maximum efficiency along the entire process chain – from planning through to installation. **Design freedom** Enjoy design freedom thanks to flexible, compatible façade units and materials from Schüco.

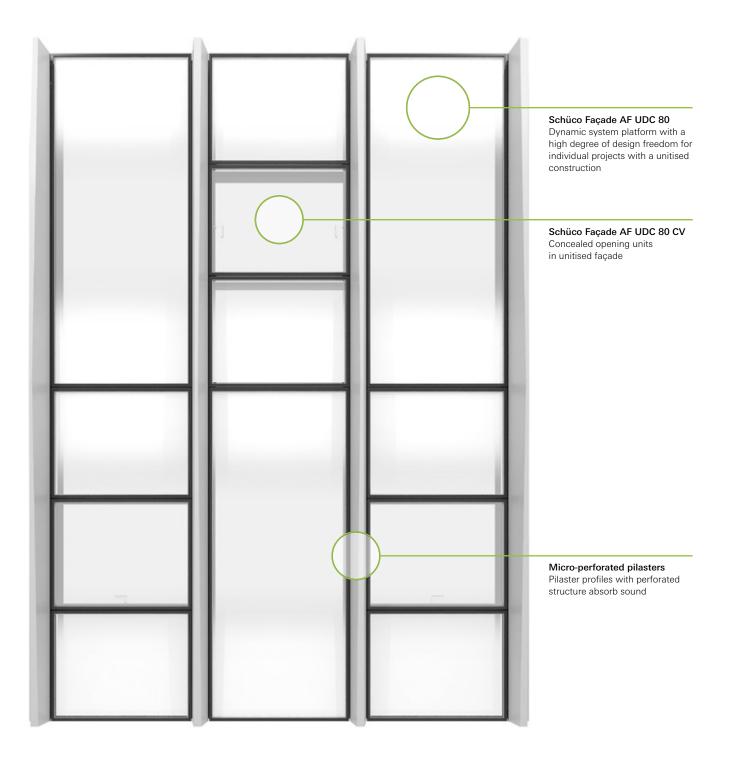


Integration of functions Integrated functions enable maximum individual comfort for modern, urban spaces.

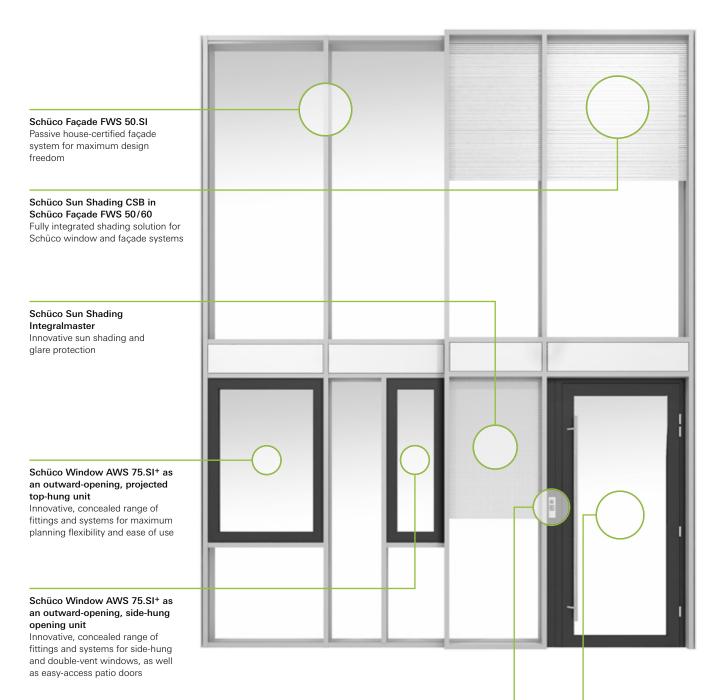
Schüco all-glass unitised façades with mechatronically controlled opening units







Schüco mullion/transom façade with easy-access project door and Touch Display, outward-opening window insert units and integrated sun shading

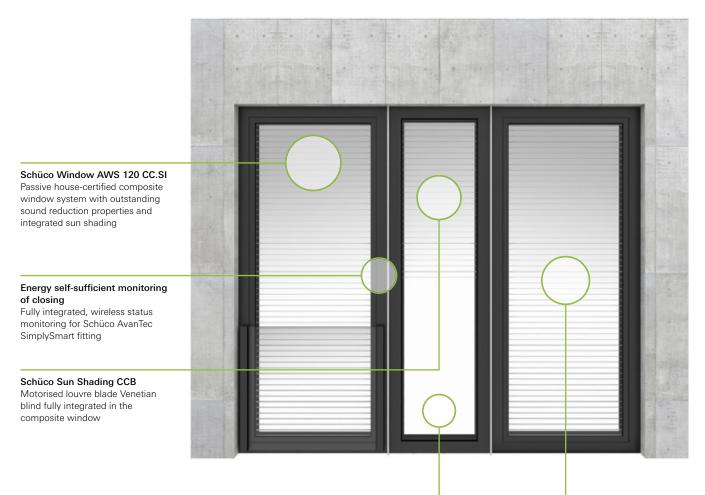


Schüco Door Control System Door communication and access control integrated in the profile Schüco Door AD UP 75 One system platform for all applications

Schüco FACID textile façade



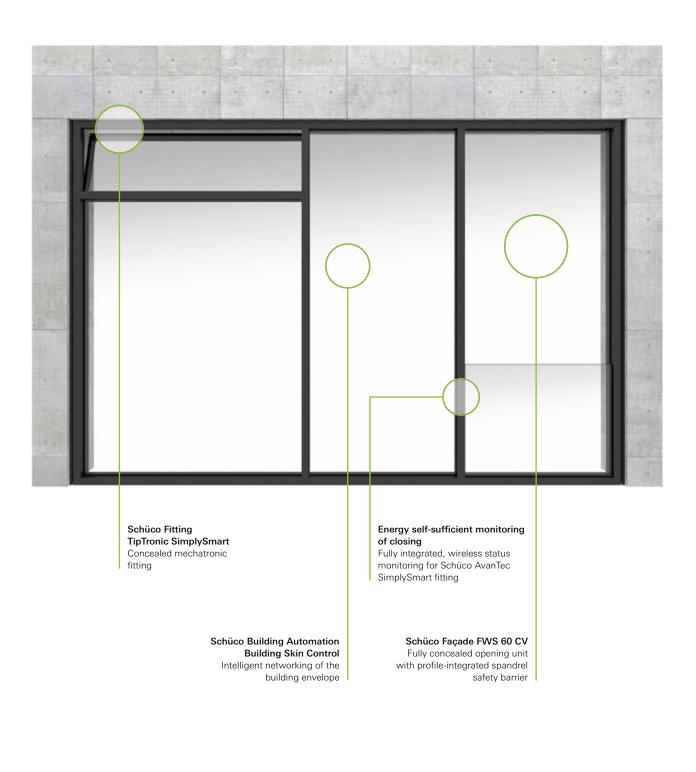
Mechatronically and manually-operated Schüco composite window with integrated sun shading



Slimline look Fixed light with narrow sightline including inspection vent High-quality design

Design option of window vent with structural glazing look

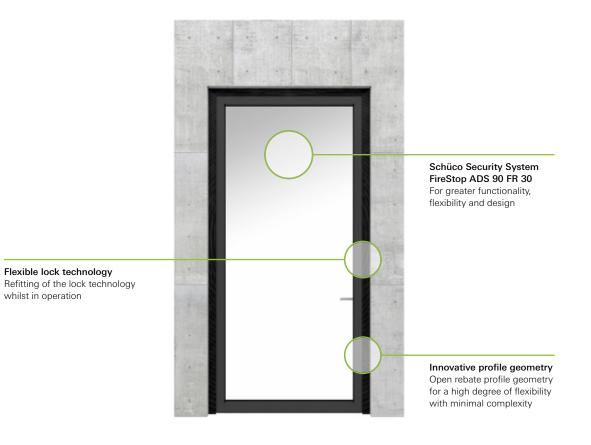
Façade unit with concealed opening vents in mechanical and mechatronic designs



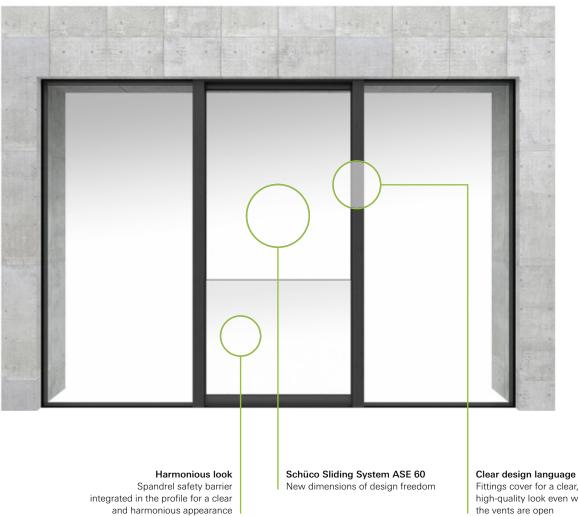
Schüco sliding system as a fully automated solution



Schüco fire and smoke protection system for 30 minutes of fire resistance

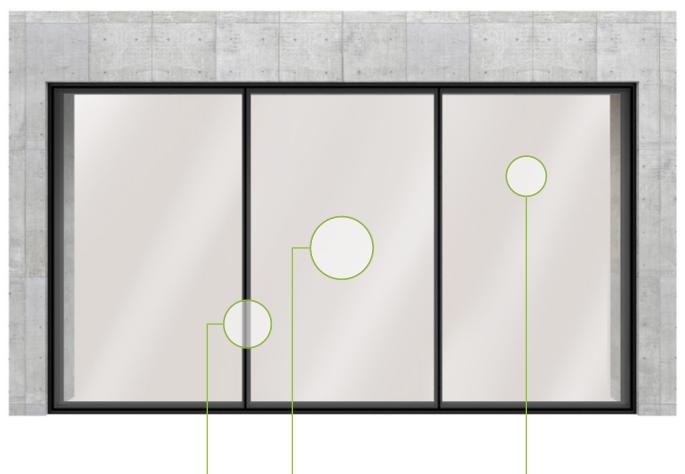


Schüco sliding system with integrated spandrel safety barrier



Fittings cover for a clear, high-quality look even when

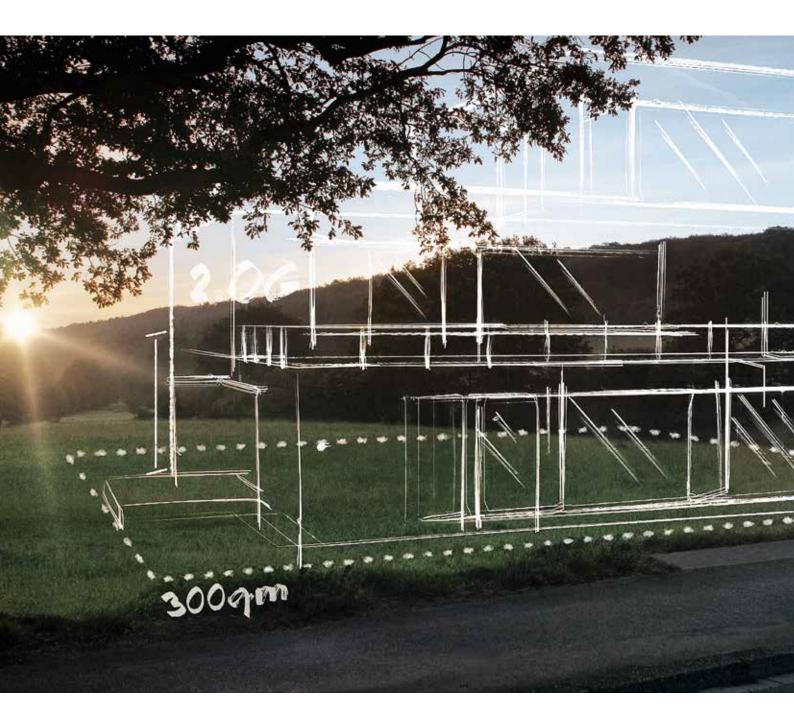
Schüco mullion/transom all-glass façade



Slimline look Flush-fitted all-glass look on the external façade with slimline joints Schüco Façade FWS 50 SG.SI Harmonious all-glass façade look with flush-fitted glazing without visible mechanical fixings

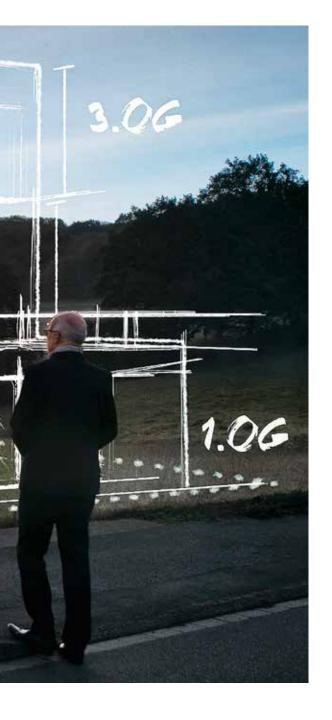
Award-winning sustainability Cradle to Cradle-certified system for sustainable planning

PLANNING & CONFIGURATION



FABRICATION & INSTALLATION

OPERATION & MAINTENANCE



Digitalisation & Fabrication

The future of construction is networked: Digital Schüco solutions offer efficiency and reliability in all stages of the construction.

Digitalisation & Fabrication

INSPIRATION & DESIGN



PLAN.ONE

As a search machine and comparison portal, Plan.One is the digital source for information relevant to building planning. Designed as an intelligent assistance system by architects and for architects, Plan.One allows you to quickly search for and compare products tailored perfectly to your building project. It's manufacturer-independent, intuitive and takes just a few clicks. Plan. One creates market transparency, saves time on lengthy searches, and simplifies and speeds up the workflow. Search results can be saved, product details and planning information can be copied over directly into standard planning software. As an interactive business intelligence tool, Plan. One enables the digitalisation of work processes and revolutionises the interaction between architects, developers, manufacturers and contracted companies in the construction industry.

- Central platform for manufacturer information that is relevant to the product
- Clear comparison of selected product properties
- Use in your browswer or from your planning software

PLANNING & CONFIGURATION



SCHÜCO PRODUCT CONFIGURATOR

The digital sales tool for sales staff in the metal showroom. Product solutions that are built with Schüco systems can be configured correctly using the tool, so that the customer can visualise and experience the product in high quality. Directly at the point of sale, where the likelihood of making a sale is at its highest. The Schüco Product Configurator uses the innovative features of virtual reality (VR) technology to display the units and also has the potential to showcase the range of Schuco systems in a way that saves space and reduces costs. Further benefits include automatic technical checking, parallel price calculation in real time as well as rapid quotation creation with considerable time savings thanks to integrated SchüCal software.

- Attractive sales tool: digital product configuration and presentation in the showroom
- Integrated SchüCal software for calculation, quotation creation, order processing and technical checks

FABRICATION & INSTALLATION

OPERATION & MAINTENANCE



ARCHIPINION

Innovative transfer of knowledge for architects and interior designers. The digital video streaming service archipinion offers concise technical information about current topics related to the job, expert interviews, the latest background information on materials and products as well as digital training that is available on demand at any time and from anywhere. To produce its content, archipinion works with external architects, specialists and selected manufacturers.

- Series formats prepared by experts for fast transfer of knowledge
- Inspiring films and documentation
- Available on computers, tablets and smartphones





BIM

Schüco supports BIM (Building Information Modelling) users with digital planning and construction using BIM planning modules, which ensure fast, efficient work. The BIM data with its modular structure contains 3D geometries as well as series properties. All data is available at any time and can be integrated in a project with just a few clicks. The system interfaces and the underlying data management are continuously developed and adapted. Fast and simple digital handling is possible thanks to real-time synchronisation via the Schüco Cloud.

- Schuco metal fabrication range can be fully integrated
- Additional digital features such as Schüco Revit plug-in, parameter sets in accordance with COBie or ISO
- Attachment of project-specific parameters that can be freely defined

VIRTUAL SHOWROOM

In the Schüco Virtual Showroom, Schüco products and system solutions can be experienced digitally in a unique way. Instead of conventional spaces where the size and number of exhibits to be shown is usually limited, the Schüco Virtual Showroom opens up a new dimension of presentation. Visualisation of any number of products in interactive, virtual installation scenarios impressively demonstrates the advantages and benefits of Schüco systems - for architects and metal fabricators as well as investors.

- 3D product display in different buildings and installation locations
- Visualisation of the product functions
- Import your own 3D building models

Digitalisation & Fabrication

INSPIRATION & DESIGN

PLANNING & CONFIGURATION





SCHÜCAD NEXT

With SchüCad next, Schüco is presenting the next generation of CAD software for metal fabricators. The new software makes construction even more convenient, faster and more reliable for metal fabricators. SchüCad next offers a comprehensive range of functions which are necessary for creating workshop drawings, attachments to building structure and documentation plans in daily practice. To this end, the pioneering generation of Schüco software was completely reconfigured technically and equipped with new interfaces. Thanks to the best SchüCal integration on the market, fully compatible with ATHENA |SE and ATHENA, SchüCad next guarantees flexible data exchange.

A further benefit for secure construction is that all article data is always kept up to date thanks to the self-installing online update function.

- Article library already contains key standard parts
- Get results quickly: make intuitive changes by means of double clicking
- One contact person for all products
- Training and support included

PLAN TO BUILD

Reliable, web-based project management platform for fabricators of doors, windows and façades. With its wide range of modules, it supports project teams with efficient planning, control and implementation of building projects, e.g. schedule and task management, document collaboration, incident management, daily construction reports and defect management. A further highlight is a 2D or 3D digital building model, which provides a quick and simple overview of the items in the specification, their properties and location. The PlanToBuild platform can be accessed easily via a web browser and allows for digital networking and communication with all internal staff and third parties involved on the project anytime, anywhere. A clear competitive advantage for fabricators.

- Unit-oriented construction management
- Graphic schedule for a transparent overview of individual processes and milestones
- Interfaces for perfect integration in existing work processes

FABRICATION & INSTALLATION

OPERATION & MAINTENANCE



CONNECT

The high-performance online service portal for Schüco partners. Businessrelated information about and functions of Schüco articles as well as ongoing orders or open complaints can be called up and used easily in real time at any hour of the day with just a web browser and internet connection. With the Schüco Connect Mobile app, data will always be to hand when you're on the move. The app for Android and iOS devices is available to download free of charge from the Google Play Store and Apple App Store.

- Delivery status display with track & trace data, order updates, monitoring of deadlines
- Check for article availability including delivery dates and ordering
- Search function and download of original documents as PDF



SCHÜCAL

The finished Schüco unit is created easily, quickly and effectively – SchüCal is the time and cost-saving calculation software for processing quotations and orders as well as for job planning for Schüco window, door, façade and conservatory systems. Tailored to the different requirements of Schüco partners, the software solution is available in three configuration levels: basic, advanced and enterprise. With SchüCal, all calculation and fabrication steps can be completed to the customary high Schüco standard.

- Reliability for calculation and fabrication with the latest article data and Schüco system information
- Automatic calculation of the preparations in 3D and transfer to the CNC machine
- Software, hardware, training, advice and service from a single source



DOCU CENTER WITH INSTRUCTION VIDEOS

The platform for working efficiently with Schüco documentation – with three tailored software solutions for work preparation, construction meetings and the workshop: Schüco Docu Center – Web, Schüco Docu Center – Mobile and Schüco Docu Center – Local. This means that all information can be called up digitally from Docu Center quickly and easily: from order and fabrication manuals, architect information through to instructions and brochures. New: Instruction videos for fabrication and installation.

- Schüco Docu Center Web: Universal browser application for secure internet connections
- Schüco Docu Center Mobile: The app for smartphones and tablets
- Schüco Docu Center Local: The solution for when there is no internet connection or one that is unstable

Digitalisation & Fabrication

INSPIRATION & DESIGN

PLANNING & CONFIGURATION



WORKSHOP PLANNING

The Schüco "workshop planning" consultancy service aims to provide more added value for every metal customer through individual solutions. In order to utilise the available resources in the best possible way and increase quality and performance, the current fabrication processes are initially considered as part of an as-is analysis. The focus is on use of space, operator ergonomics, machine capacity as well as material flow and digital solutions. These factors are assessed on the basis of the current workshop layout and production range.

Based on this, Schüco designs a new, individual fabrication concept which is adapted to suit the actual conditions and the needs of the Schüco partner. The result is long-term cost reduction and quality assurance through process optimisation and increase in efficiency in all areas of fabrication.

- Tailored, individual fabrication concepts
- Long-term process optimisation, cost reduction and quality assurance
- Ergonomic fabrication

AS 100 CONTINUOUS FEED MACHINING CENTRE

The new fabrication system with numerous profile cutting and notching options is as flexible as a modern 5-axis CNC machine. With its high speed and continuous fabrication process, the Schüco AS 100 also offers the benefits of a continuous feed system. In addition to its pioneering high performance in terms of fabrication optimisation, the system impresses with its minimal space requirements. This is ensured by a combined loading and unloading magazine, which can hold profiles up to 7,500 mm and thereby enables the longest unmanned operation of the machines available on the market. The heart of the machine is the processing station: a 9 m machine bed accommodates not only the two 5-axis towers, which process the profiles on four sides - including cutting and end-of-profile processing, but also five self-positioning clamps.

- Innovative feed process provides a wide variety of options
- Pioneering clamp: reliable profile clamping right through to the vent profiles
- Parallel-operating towers ensure short fabrication times

FABRICATION & INSTALLATION

OPERATION & MAINTENANCE



AF 500 MACHINE

The 5-axis Schüco AF 500 CNC machine is a highly flexible, costsaving solution for fabricating windows, doors and façades from aluminium profiles. With processing lengths of up to 7,300 mm and excess lengths in two stages, 3sided processing and end-of-profile machining, the system is the basis for virtually any metal fabrication task. Two highlights include processing and cutting of aluminium profiles in one work step as well as the CNC-controlled, self-positioning clamps, which shorten fabrication time significantly.

- New processing head: high quality and flexibility, even when cutting
- Axis-controlled clamps: flexible processing of short profiles
- New security concept: reduced space requirements





AF 310 MACHINE

The Schüco AF 310, successor to the Schüco AF 300, is a new, highperformance 4-axis CNC machine for flexible tasks in metal fabrication. With intelligent control, the latest milling spindle technology with 8.5 kW and a maximum torque of 13.5 Nm, as well as simple, ergonomic operation, the machine offers maximum dynamism and precision during fabrication. The redesigned two-stage clamping area of the five motorised clamps allows a triple-track sliding unit from the Schüco ASS 70.HI or Schüco ASE 80 series to be clamped, for example.

- More powerful motor, especially for steel machining
- Higher speed increases productivity in the main axis
- Tool measurement ensures high process reliability

FABRICATION DATA CENTER

With its unique package of hardware and software, including the SchüCal workshop version and Schüco Docu Center, the Schüco Fabrication Data Center speeds up fabrication processes considerably for the fabricator by means of digital access to the latest Schüco project and manual information as well as installation videos directly from the workshop. Another successful module is the workshop-compatible hardware, which is immediately ready for use without the need for training. A barcode reader ensures error-free assignment of the profile bars too.

- The latest planning status is available digitally in the workshop at any time
- Reliable visual check in 3D operating mode
- Digital, time-saving online search through the manuals
- Easy access to learning videos

Digitalisation & Fabrication

INSPIRATION & DESIGN

PLANNING & CONFIGURATION



BUILDING SKIN CONTROL

One system for all units: Schüco Building Skin Control (BSC) is the comprehensive platform for the integration, control and monitoring of Schüco units in the building envelope. An open interface enables the connection of building management systems such as KNX or BACnet, as well as smart home systems such as Amazon Alexa.

The cloud-based Schüco Operation Dashboard is new. It offers an individual graphical overview, localisation and checks of all active Schüco BSC systems. On the dashboard, the user can see at a glance the live status of each mechatronic unit and a news feed. They can also plan and manage services for systems (e.g. maintenance cycles). The user-specific access management also allows the app authorisation to be managed by unit or group.

- Intelligent control and monitoring of ventilation and ambient air quality, for example, no matter where you are
- Simple connection to smart home systems via the Schüco cloud
- Plan and manage service work
- Everything at a glance on the Schüco Dashboard

www.schueco.com/bsc

FABRICATION & INSTALLATION

OPERATION & MAINTENANCE



Experience the digital Schüco solutions for all stages of construction at: **www.schueco.com/digital**

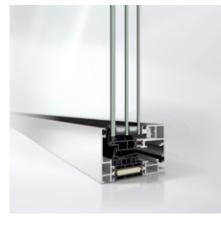
Technical Information

61



Window Systems







Energy self-sufficient monitoring of closing

Fully integrated, wireless status monitoring for Schüco AWS window systems

- Concealed system solution is completely integrated in the profile
- Energy self-sufficient thanks to integrated energy generation
- Wireless: Perfect for renovations or retrofitting

Schüco Window AWS 75 PD.SI

The narrowest of face widths for aluminium opening units – as a traditional punched opening, ribbon window and in Schüco façade systems

- Panorama Design: maximum transparency due to minimum profile face width
- Stylish profile geometry: inner flush finish thanks to all-round shadow gap
- Extensive range of tools and machinery to support bonding processes

Schüco easy-access window systems

Innovative zero-level threshold solution in combination with maximum ease of use

- System enhancement in basic depths of 70 mm, 75 mm and 90 mm
- Zero-level threshold with intelligent sealing system: high watertightness up to class 9A with maximum vent sizes of 2500 mm x 1300 mm (w x h)
- Operating forces in accordance with DIN 18040-2 can be adjusted and verified

Technical data	Schüco AWS 75 PD.SI	Schüco AWS 75.SI ⁺ easy-access
Dimensions		
System basic depth	75 mm	75 mm
Face width	55 mm	91 mm
Glass thicknesses	26 mm to 50 mm	18 mm to 61 mm
Tests and standards		
Thermal insulation in accordance with DIN EN ISO 10077-2	U _f values to 1.7 W/(m ² K)	U _f values to 0.92 W/(m ² K)
Sound reduction in accordance with DIN EN ISO 140-3	R_w values to 46 dB	R_w values to 49 dB
Burglar resistance in accordance with DIN EN 1627 (DIN V ENV 1627)	Class RC 2 (WK2)	Class RC 3 (WK3)
Air permeability in accordance with DIN EN 12207	Class 4	Class 4
Watertightness in accordance with DIN EN 12208	Class 9A	Class 9A
Wind load resistance in accordance with DIN EN 12210*	Class C5/B5	Class C5/B5
Mechanical loading in accordance with DIN EN 13115	Class 4	Class 4
Durability in accordance with DIN EN 12400	Class 3	Class 3

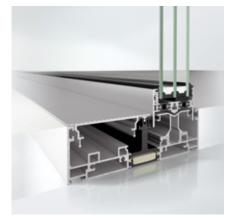
* The amount of deflection will depend on the profile



Sliding Systems







Schüco Sliding System ASE 60

With excellent thermal insulation values and slim face widths, these sliding and lift-and-slide systems offer added design and comfort

- Modularity and a variety of possible opening types guarantee flexibility and design freedom
- DesignLine options with a level threshold and slimline interlock section provide highlights in terms of comfort and design
- Concealed fittings groove without visible technical components gives a clear and elegant look

Schüco Sliding System ASE 80.HI

The Schüco ASE 80.HI sliding and liftand-slide system combines the benefits of aluminium with pioneering thermal insulation to passive house standard

- Wide variety of opening types offers a solution for virtually any application
- Narrow face widths of the vent frames ensure an even more slender appearance
- Multifunctional components and prefabricated construction parts reduce fabrication time and increase process reliability

Schüco Sliding System ASE 67 PD The Panorama Design sliding system with maximum flexibility

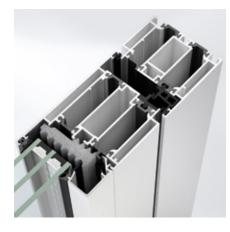
- Two types of outer frame guarantee design freedom
- The new locking point in the interlock section also allows open vents to be locked
- Minimalist design of the handles and coupling profiles

Technical data	Schüco ASE 60	Schüco ASE 80.HI	Schüco ASE 67 PD
Dimensions			
System basic depth	60 mm	80 mm	67 mm
Face width	40 mm	40 mm	31 mm
Glass thicknesses	24 mm to 40 mm	36 mm to 60 mm	36 mm to 49 mm
Tests and standards			
Thermal insulation in accordance with DIN EN ISO 10077-2	U _w value from 1.1 W/(m²K)	U _w value from 0.99 W/(m ² K)	U _w value from 1.0 W/(m ² K)
Sound reduction in accordance with DIN EN ISO 140-3	R_w values to 41 dB	R_w values to 45 dB	R _w values to 46 dB
Burglar resistance in accordance with DIN EN 1627 (DIN V ENV 1627)	Class RC 2 (WK2)	Class RC 2 (WK2)	Class RC 2 (WK2)
Air permeability in accordance with DIN EN 12207	Class 4	Class 4	Class 4
Watertightness in accordance with DIN EN 12208	Class RE 900	Class RE 900	Class 9A
Wind load resistance in accordance with DIN EN 12210*	Class C5/B5	Class C5/B5	Class C3

* The amount of deflection will depend on the profile



Door Systems







Schüco Door AD UP 75

Door system with 75 mm basic depth for universal use as heavily used commercial door and stylish entrance door

- Triple-skin profile composition ensures maximum stability and functional reliability
- Range of vent types, concealed hinges in combination with door communication and access control for high degree of planning freedom
- Identical work and fabrication steps thanks to universal construction principle across basic depths with high use of identical parts

Schüco Door AD UP 75 – add-on infill on one side, mechanical Patented system solution for efficient, adhesive-free fabrication of front

doors and entrance doors based on the Schüco AD UP (Universal Platform) system

- Reversible, replaceable infill fixing: maximum flexibility with amended design requirements
- KfW-eligible system solution in terms of energy efficiency, burglar resistance and ease of access

Schüco Door AD UP 90 BL – add-on infill on both sides, mechanical System solutions for maximum energy efficiency and design requirements in the premium segment

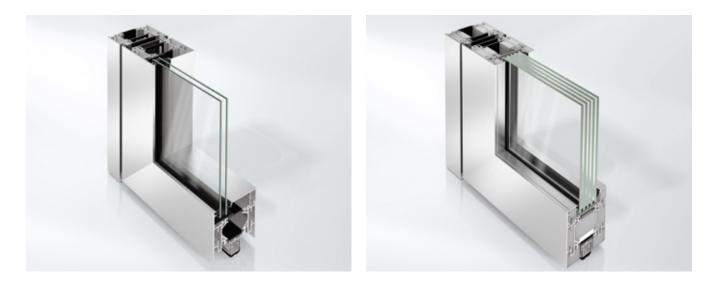
- Harmonious, smooth door rebate look
- Concealed fixing to building structure
- Innovative, patented, mechanical infill fixing without adhesive
- Without bonding and pretreatment of panel infills for secure, time-saving and efficient fabrication

Technical data	Schüco AD UP 75	Schüco AD UP 90 BL
Dimensions		
System basic depth	75 mm	90 mm
Face width	170 mm	-
Glass thicknesses	13 mm to 53 mm	-
Panel thickness	48 mm or 56 mm	82 mm
Tests and standards		
Thermal insulation in accordance with DIN EN ISO 10077-2	U _f values to 1.6 W/(m ² K)	U _f values to 1.8 W/(m ² K)
Burglar resistance in accordance with DIN EN 1627 (DIN V ENV 1627)	Class RC 2 (WK2)	Class RC 2 (WK2)
Air permeability in accordance with DIN EN 12207	Class 4	Class 2
Watertightness in accordance with DIN EN 12208	Class E 750	Class 3A
Wind load resistance in accordance with DIN EN 12210*	Class C3/B3	Class C2/B2
Durability in accordance with DIN EN 12400	Class 8	Class 6

* The amount of deflection will depend on the profile



Security Systems



Schüco Security System FireStop ADS 90 FR 30

Open rebate profile geometry: High degree of flexibility with minimal complexity

- New dimensions in terms of size and transparency: Door types with clear opening dimensions of up to 1500 mm x 3100 mm, tested fixed glazing with glass sizes of up to 1500 mm x 3000 mm
- Concealed fittings: attractive combination of fire protection and design can be achieved
- All door types can be constructed without the use of glazing clips: Reduced complexity, increased effectiveness

Schüco Security System FireStop ADS 90 FR 90

Aluminium fire-resistant construction with 90-minute fire resistance for maximum flexibility

- New dimensions in terms of size and transparency: Door types with clear opening dimensions of up to 1400 mm x 2700 mm, tested fixed glazing with glass sizes of up to 1500 mm x 3000 mm
- Simple and flexible changes in application while the building is still in use
- New fixing system for installing fittings virtually without any tools

Technical data	Schüco FireStop ADS 90 FR 30	Schüco FireStop ADS 90 FR 90
Dimensions		
System basic depth	90 mm	90 mm
Face width	127 mm	127 mm
Maximum glass dimensions (W x H)	1500 mm x 3000 mm	1500 mm x 3000 mm
Maximum glass weights	280 kg	350 kg
Tests and standards		
Fire resistance in accordance with EN 13501-2	EI30	E190
Sound reduction in accordance with DIN EN ISO 140-3	R_w values to 45 dB	-
Durability in accordance with DIN EN 12400	200,000 cycles	200,000 cycles
Panic function in accordance with EN 179 and EN 1125		
Smoke protection in accordance with EN 1634		



Through its work with Sälzer Security GmbH, a global specialist for high-security technology based in Marburg, Schüco is expanding its portfolio in the areas of burglar resistance, bullet resistance, blast resistance, as well as fire and smoke protection. For more information, visit www.saelzer-security.com



Façade Systems







Schüco Façade AF UDC 80

Dynamic Schüco AF UDC 80 façade system platform – high level of design freedom for creating individual buildings with unitised constructions

- Individual design option with opaque units from sheet metal to natural stone in flush-fitted or cantilevered configuration
- Reduction of cooling loads in the building thanks to concealed textile sun shading that is stable in windy conditions
- Scalable and tested system components for adapted project-specific unitised façade constructions too

Schüco Façade AF UDC 80 SG

All-glass look for a harmonious façade appearance, combined with the benefits of efficient fabrication and installation

- Arrangement of units that are flexibly offset horizontally as well as angled sash bar profiles in the unit
- Maximum transparency with unit dimensions of up to 3000 mm x 4000 mm
- Extensive system testing in accordance with European test standards (other international system tests are being carried out)

Schüco Façade AF UDC 80 CV

New standard for functional unitised façades – concealed opening units for an overall face width of just 80 mm

- Fixed lights and opening units look identical from the outside
- Projected top-hung insert units with maximum dimensions of up to 2200 mm x 1400 mm or 1500 mm x 2000 mm with a maximum vent weight of up to 160 kg
- Parallel-opening window with maximum dimensions of up to 1200 mm x 2000 mm with a maximum vent weight of up to 100 kg

Technical data	Schüco UDC 80	Schüco UDC 80 SG	Schüco UDC 80 CV
Dimensions			
Face width	80 mm	80 mm	80 mm
Glass thicknesses	22 mm to 70 mm	22 mm to 50 mm	22 mm to 70 mm
Maximum unit weights	1000 kg	500 kg	1000 kg
Horizontal joint flexibility	± 15 mm	± 15 mm	± 10 mm
Vertical joint flexibility	± 10 mm	± 10 mm	±5mm
Tests and standards			
Thermal insulation in accordance with DIN EN ISO 10077-2	U _f values to 0.86 W/(m ² K)	U _f values to 1.5 W/(m ² K)	U _f values to 1.1 W/(m ² K)
Air permeability in accordance with DIN EN 12153	Class AE 1200	Class AE 1200	Class AE 1200
Watertightness in accordance with DIN EN 12155	Class RE 1650	Class RE 1650	Class RE 1650
Wind load resistance in accordance with DIN EN 12179	Up to 2.5/3.75 kN/m ²	Up to 2.5/3.75 kN/m ²	Up to 2.5/3.75 kN/m ²



FACID textile façades combine functionality with future-proofing. Coloured or printed fabric and parametric constructions offer design freedom. The fabric can be easily replaced when converting buildings. For more information, visit www.schueco.com/facid



Sun Shading Systems







Schüco Sun Shading ZDS in Schüco Window AWS 75 PD.SI Schüco ZDS sun shading – textile s

Schüco ZDS sun shading – textile sun shading perfectly integrated in the Schüco AWS 75 PD.SI window system, with very high wind stability

- Excellent views to the outside with a high level of transparency of 0% to 14% (depending on the chosen textile and the fabric openness coefficient)
- High wind stability up to 25 m/s (force 9 to 10 on the Beaufort scale)
- Weather-resistant, low-flammability textiles (class B1)
- The sun shading is supplied preassembled, ready for installation and already rolled up in a closed blind box

Schüco Sun Shading Integralmaster

Fully concealed sun shading, glare protection and screening integrated in the glazing beads or façade transom

- The interior design of the building is not compromised by retrofitted blinds or other systems
- Reduction of glare by up to 97%
- Concealed lateral guide in the vertical glazing bead prevents light entering from the sides
- Various materials can be used (films, textiles)

SageGlass[®]

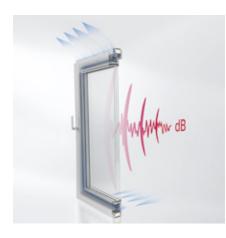
SageGlass[®] – the glazing that can be tinted dynamically for use in window, façade and door systems

- Consistently good views to the outside are guaranteed
- Lower lighting and air conditioning costs
- Three different tinting zones (LightZones[®]) possible within the glass
- SageGlass[®] can help when obtaining green quality seals such as BREEAM or LEED certification
- Simple construction similar to conventional insulating glass units

Technical data	Schüco ZDS in Schüco AWS 75 PD.SI	Schüco Integralmaster	SageGlass®
Technical values			
Width	662 mm to 4000 mm	400 mm to 2400 mm	350 mm to 1524 mm
Height	600 mm to 6000 mm	Up to 3500 mm	350 mm to 3048 mm
Maximum area	18 m ²	-	-
Wind stability	25 m/s	unaffected by wind	unaffected by wind
Installation option	surface-mounted	integrated	-
Operation	electrical	manual or electric	electrical



Ventilation Systems







Schüco Sound Reduction Window AWS 90 AC.SI (study) Double the comfort: high sound reduction and natural ventilation

- Natural room ventilation with simultaneous sound reduction without increased noise
- Adherence to sound-related construction regulations and increase in attractiveness of the property
- Sound reduction certificates for the entire system in the open and closed position
- Unrestricted views to the outside and full design freedom

Schüco Ventilation System VentoLife

Window-integrated, automatic air purification and oxygen supply – the perfect solution for a healthy indoor climate by efficiently removing harmful substances from the air

- Design-oriented, attractive display and LED gap light for displaying the current operating status and ambient air conditions
- Variable length and flexible installation position (horizontal or vertical) enable individual adaptation of the project and architecture
- Air entry and exit without visible ventilation grilles by means of discreet shadow gaps: Building's appearance remains unchanged

Schüco Ventilation System VentoTherm Twist

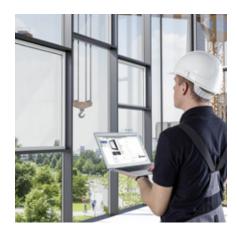
Decentralised, window-integrated ventilation system with incoming air, outgoing air and heat recovery – controlled exchange of air in specific rooms without opening the window

- Easy implementation of sophisticated ventilation concepts
- Decentralised, cost-saving integration in the building envelope without suspended ceilings or wall openings; fire compartments also do not need to be accounted for in the planning
- Horizontal and vertical integration in tested Schüco window systems
- Schüco VentoTherm Twist in collaboration with Renson[®]

Technical data	Schüco VentoLife	Schüco VentoTherm Twist
Technical values		
Ventilation type	ventilation supported	ventilation supported
Maximum air exchange rate	60 m³/h	variable
Filter class of incoming air	Class 12 particulates	Class G3, optionally class F7 particulates
Standardised sound level difference	$D_{n.e.w}$ values up to 50 dB	$D_{n,e,w}$ values up to 50 dB
Heat recovery	-	81%
Can be used in window series	Schüco AWS 50 to AWS 75	Schüco AWS 70 to AWS 120



Building Automation







Schüco Building Automation Building Skin Control

One system for all units: comprehensive platform for the integration, control and monitoring of the mechatronic Schüco units

- Open interface for maximum variety: Schüco BSC can be connected to open building management systems such as KNX or BACnet as well as external smart home systems such as Amazon Alexa
- Maximum convenience: with the Schüco app, you can activate automatic functions such as night-time cooling, air quality sensors, motion sensors, silent mode time
- Schüco dashboard: An individual overview of all Schüco BSC systems installed in projects in one web interface

Schüco Building Automation DCS SmartTouch

The world of door communication and access control in one high-quality module

- Integrated HD camera and access control ensure that the entrance area is always visible and secure
- 24/7 reception as the transmission is automatically adjusted to the regional network conditions
- Reduced commissioning: no previous training or knowledge of the system required, therefore suitable for any building infrastructure. Only an internet connection is required.
- Flexibility: the Schüco Cloud enables connectivity with various Smart Home systems

Schüco Sliding System ASE 80.HI TipTronic

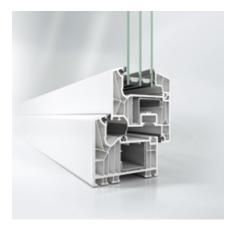
Mechatronic sliding system with newly developed drive and control technology

- Vent weights up to 600 kg
- Twelve different opening types offer considerable design freedom in the system
- Movement of vents up to 18m (dependent on opening type)
- Enables direct integration of sliding units in Schüco Building Skin Control
- New wizard function: easy and secure guidance through the individual commissioning steps

Technical data	Schüco Building Skin Control	Schüco DCS SmartTouch	Schüco ASE 80.HI TipTronic
Technical values			
Can be integrated in	KNX, BACnet, IP	IP	KNX, BACnet, IP
App operation	iOS	iOS and Android	iOS
Protection rating	IP20 (installed in the distributor)	IP54 (when installed)	-
System basic depth	-	-	80 mm
Glass thicknesses	-	-	36 mm to 60 mm
Tests and standards			
Burglar resistance in accordance with DIN EN 1627 (DIN V ENV 1627)	-	-	Class RC 2 (WK2)



PVC-U Systems





Schüco Window LivIng 82 MD

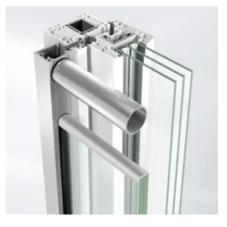
System generation suitable for passive houses for pioneering PVC-U windows

- Suitable for ift passive houses
- Innovative, durable EPDM rubber gaskets: optimum functional performance and weathertightness
- Impresses with simple, efficient and flexible fabrication and installation properties
- Special vent frame profile for the use of adhesive technology

Schüco Lift-and-slide System Liv**Ing**Slide

Innovative lift-and-slide system – highest requirements combined with economical fabrication

- Thermally broken threshold and thermally broken frame trim reinforcing profiles made from aluminium: outstanding thermal insulation and isothermal flows
- Low frame trim depth of 194mm facilitates use in newbuilds and renovations
- Delivery includes Schüco lift-and-slide fittings all from a single supplier



Schüco Security System Safety Barrier Security and design perfectly combined

- Meets statutory security specifications with test certificates and general building approval test certificates, including in accordance with DIN 18008-4 and the ETB guideline
- Spandrel height: 300 mm to maximum 1100 mm
- Spandrel width: 400 mm to maximum 2000 mm

Technical data	Schüco LivIng 82 MD	Schüco LivIngSlide
Dimensions		
System basic depth	82 mm	194 mm
Face width	120 mm	180 mm
Glass thicknesses	24 mm to 52 mm	20 mm to 52 mm
Tests and standards		
Thermal insulation in accordance with DIN EN ISO 10077-2	U _f values to 0.96 W/(m ² K)	U _f values to 1.3 W/(m ² K)
Sound reduction in accordance with DIN EN ISO 140-3	$R_{_{\rm wp}}$ value to 47 dB	R_{wp} value to 42 dB
Burglar resistance in accordance with DIN EN 1627 (DIN V ENV 1627)	Class RC 2 (WK2)	Class RC 2 (WK2)

The Company 81

Overview of the company

Head office in Bielefeld Founded: 1951 in East-Westphalia

Expertise

Window systems, door systems, façade systems and more



PRODUCTS AND SERVICES IN MORE THAN

sites in 43 countries

NETWORK 12,000 FABRICATORS, ARCHITECTS, DEVELOPERS AND INVESTORS

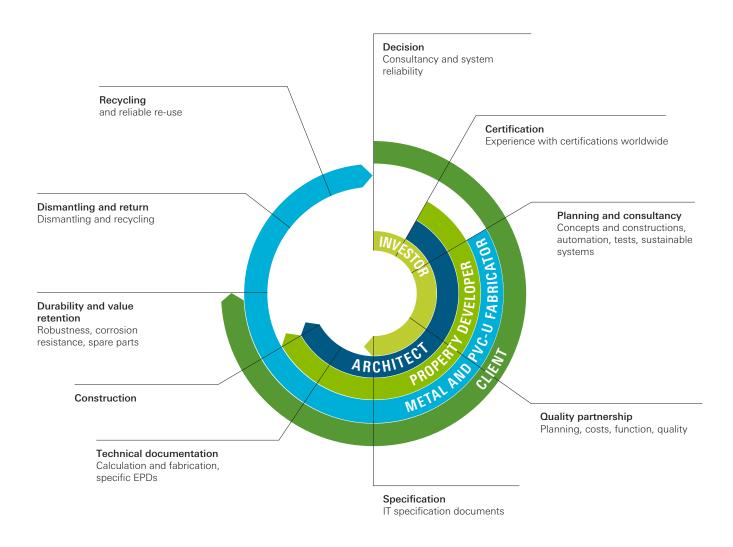
"Sustainability is not a trend it's an attitude."

Andreas Engelhardt Managing Partner Sustainability in the construction sector means designing, constructing and operating a property in such a way that it is ecologically, economically and socially future-proof.

The 360° sustainability approach of Schüco therefore comprises the whole lifecycle of a product from the design and manufacture, installation and use, through to the possibility of dismantling the products and feeding them back into the closed recycling process.

Saving energy, reducing CO_2 emissions and using material resources carefully are likewise essential and self-evident aspects of our work. For example, aluminium systems from Schüco are almost 100% recyclable. With our products, we are a trailblazer in the industry, and are contributing towards achieving the 2° climate target set by the United Nations.

With us, clients can rest assured that their construction projects are economical, resource-friendly and future-proof – that is, they retain their value in the long term.



You can find more information and our sustainability report at **www.schueco.com/sustainability**

Schüco Showrooms

Innovative and interactive - our showrooms

Are you looking for a high degree of design freedom as well as planning reliability for your project? Visit our showrooms and take a look at our design-oriented window, door and façade systems which offer plenty of room for your ideas while also meeting the highest requirements in terms of sustainability, comfort and security. **www.schueco.com/showrooms**

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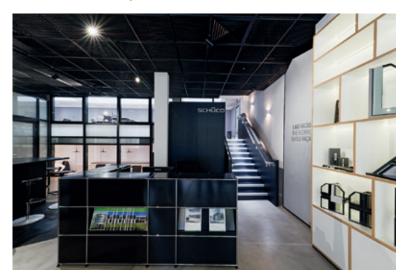
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Schüco – System solutions for windows, doors and façades

Based in Bielefeld, the Schüco Group develops and sells system solutions for windows, doors and façades. With more than 4900 employees worldwide, the company strives to be the industry leader in terms of technology and service today and in the future. In addition to innovative products for residential and commercial buildings, the building envelope specialist offers consultation and digital solutions for all phases of a building project – from the initial idea through to design, fabrication and installation. 12,000 fabricators, developers, architects and investors around the world work together with Schüco. The company is active in more than 80 countries and achieved a turnover of 1.575 billion euros in 2017.

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