Schüco
passive house-certified aluminium window systems
The Schüco FWS 35 PD Panorama Design facade system is ideally suited to representative facade areas close to the ground of luxury residential and commercial projects.

In addition to the excellent architectural quality of the system, particular value has also been placed on simple, efficient fabrication and installation. New prepared system components ensure a considerably faster fabrication process in the workshop. An optimised system for attachment to the building structure and the innovative, patented fixing system for pressure plates reduce interfaces and enable efficient and reliable installation, which is forgiving of tolerances.
Product benefits

Energy
- Passive house-certified system with new isolator technology for reliable fabrication: U values up to 0.90 W/(m²K).
- Two thermal insulation standards: HI and SI isolators available.
- Triple glazing with a glass thickness of up to 52mm can be installed.

Design
- Aluminium façade system solution with extremely narrow face widths of just 35mm.
- Three drainage levels for maximum design flexibility.
- Schüco AWS window insert units can be integrated in different ways.
- Schüco AWS 114 SG SI façade window can be used as a slimline outward and parallel-opening or projected top-hung system.

Automation
- Insert outer frame profiles for integration of the Schüco Aluminium Window System window series with Schüco TipTronic fitting.

Security
- Burglar resistance to RC 2.
- System articles for transferring glass loads of up to 250kg per transom.

Enhanced function
- Compliance with applicable glazing regulations, e.g. glass edge cover of 12 mm.
The Schüco Façade FWS 50 / FWS 60 sets new standards of fabrication and energy efficiency. The focus of the development of the tried-and-tested systems was particularly the optimisation of fabrication in the workshop and on the construction site. New prepared system components ensure, for example in the workshop, much faster and therefore more efficient fabrication processes.

The Schüco FWS 50/FWS 60 façade provides a diverse range of design options – including the passive house-certified SI (Super Insulation) version – in the popular face widths.

Very heavy panes will be even easier to fabricate in future thanks to the new range of glazing supports, and will retain the same high level of load transfer.

A new cable guidance system now guarantees the metal fabricator the safe integration of electrical components in the mullion/transom façade.
Product benefits

Energy
- Passive house-certified SI Super Insulation system with new isolator technology: U values up to 0.70 W/(m²K).
- New HI High Insulation isolator to passive house standard: U values up to 0.91 W/(m²K).
- Complete solutions for the integration of Schüco BIPV systems.

Design
- Integration of diverse inserts:
  - Units from the Schüco systems AWS, ADS, ASS
  - Schüco AWS 114 SG.SI facade window as an outward and parallel-opening or projected top-hung window.
- Combination with Schüco FWS 60 CV ribbon window creates very narrow profiles for turn/tilt units.

Enhanced Functions
- New glazing supports for maximum weights and simple fabrication.

Automation
- New cable guidance system for simple, safe installation and commissioning of mechatronic components of up to 230V AC.
- Rear cable channel on mullion enables the flexible installation of cable guides during installation or thereafter
- Additional components for the safe penetration of connection areas and panels.
- Integration of Schüco Aluminium Window System 114 as projected top-hung window or parallel-opening window; possibility of large automated window solutions incorporated in the building management system for standard and SHEVS applications.
- Insert outer frame profiles for integration of the Schüco Aluminium Window System window series with Schüco TipTronic fitting.

Security
- Burglar resistance to RC 3.
- Bullet resistance up to FB4.
The aluminium window system with thermal insulation to passive house standard.

To complement the increasingly popular 90mm basic depth, Schüco is adding these new window series with AWS 90.SI+ Green and 90 BS.SI+ versions. The new Schüco AWS 90 BS.SI+ aluminium block window system features ground-breaking thermal insulation and allows diverse architectural designs of the highest quality to be created with a basic depth of just 90mm. With a $U_f$ value of 1.2 W/(m²K) and a face width of 95mm, it achieves passive house standard. Narrow face widths allow flush sightlines to be created with no visible window vents.

With the new AWS 90.SI+ Green generation of windows, Schüco is responding to the stricter guidelines and higher potential CO2 savings. Ground-breaking ecological materials are being used, such as castor oil in the polyamide insulating bars. This has allowed Schüco to become the first provider to offer an approved aluminium window suitable for series production, which contains significant proportions of renewable materials in the plastics, and to substitute raw fossil materials.
Product Benefits

Energy – AWS 90.SI+ Green

- Highly thermally insulated aluminium window to passive house standard with a Uw value of 0.8 W/(m²K) with triple glazing and a face width of 117mm.
- Insulating bars, foams and glazing gaskets with proportions of renewable raw materials.
- Tested profile and insulating bar system as a series product.
- Certification for bio-based products through TÜV quality seal DIN CERTCO.
- Colour of bar material: slate grey.

Automation

- Can be combined with Schüco TipTronic.

Security

- Schüco AvanTec SimplySmart concealed fittings system.
- Burglar resistance available to RC 1 N, RC 2 and RC 3.

Enhanced Function

- Series variants with maximum thermal insulation to passive house standard available:
  - Block windows without visible vents
  - Easy-access opening and double-vent units.

- Insulating bars, foams and glazing gaskets with proportions of renewable raw materials.
- Tested profile and insulating bar system as a series product.
- Certification for bio-based products through TÜV quality seal DIN CERTCO.
- Colour of bar material: slate grey.
With the advancements in building standards, plus the drive to improve thermal comfort and energy efficiency, today’s buildings have become more airtight with less air leakage. This contributes to poor indoor air quality where dust mites, moulds, viruses, bacterial and chemical substances can accumulate, impacting on the health of a home’s occupants.

Of course, we can open windows and doors to allow fresh air in, however this is often a temporary solution that can compromise energy efficiency, security and comfort. The need for regular ventilation thus becomes an important consideration in the maintenance of indoor air quality.

Trickle vents have been designed as an effective ventilation solution. Without the need of electric power, sensors or human interaction, they passively control ventilation.
Advantages of Capral’s Trickle vents

- Consistent supply of ventilation even when windows are closed, especially at night or when the home is unoccupied.
- More secure than an open window where you can be vulnerable to burglary, annoying insects and noise.
- Helps control air moisture that can lead to mould and mildew.
- Installed above window frames means views are unobstructed.
- Safer for children.

Invisivent Renson Trickle Vent

- The most discreet, self-regulating, acoustic overframe ventilator on the market.
- Can be discreetly installed above Capral Futureline 440TB and 419TB sub frames, providing an almost invisible installation.
- i-Flux® technology. This self-regulating flap ensures a supply of fresh and healthy air without draughts. Moreover, the interior profile deflects the incoming air upwards, causing an optimal spread of fresh air in the room.
- Thermally broken. Reduces direct heat/cold transfer to maintain internal temperatures and reduce energy costs.
- Screened to control insects.

Aerovent Renson Slot Vent

- The latest innovation in slot vent range.
- Can easily be installed on Capral Futureline 440TB and 419TB sub frames.
- Aluminium profile with PVC endcaps.
- Powdercoated in all RAL colours.

Inside profile

- Directs incoming air upwards, avoiding draughts.
- Available with manual control or cord control.
- Small and discreet, with sizes available to suit different ventilation requirements.

Outside profile

- Self-regulating. Independent from outside weather conditions, it brings a permanent airflow without draughts.