

# Schüco AWS 90

Aluminium window system



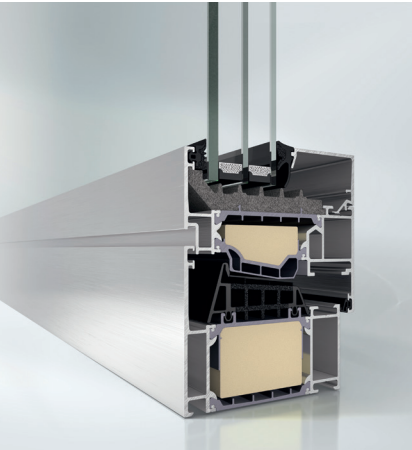
# Schüco AWS 90

## The aluminium window system with thermal insulation to passive house standard

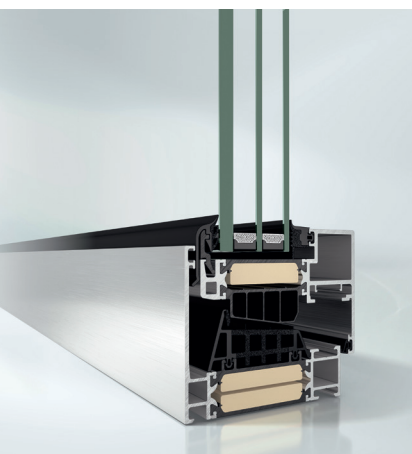
To complement the increasingly popular 90 mm basic depth, Schüco is adding these new window series with AWS 90.SI+ Green and 90 BS.SI+ versions.

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  $1.2 \text{ W}/(\text{m}^2\text{K})$  and a face width of 95mm, it achieves passive house standard. Narrow face widths also allow flush sightlines to be created with no visible window vents.

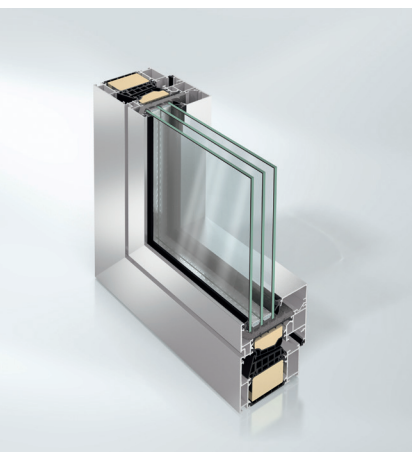
Furthermore, with the new AWS 90.SI+ Green generation of windows, Schüco is responding to the stricter guidelines and higher potential CO<sub>2</sub> savings for the building sector. Ground-breaking ecological materials are being used for this, such as castor oil in the polyamide insulating bars. This 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.



Schüco window AWS 90.SI+ Green



Schüco window AWS 90 BS.SI+



Schüco window AWS 90.SI+

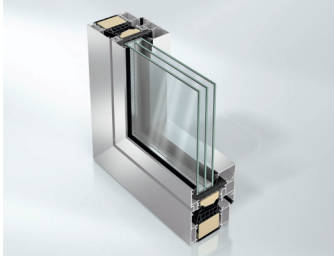
# Schüco AWS 90

Product benefits		
Schüco AWS 90.SI <sup>+</sup>	Schüco AWS 90 BS.SI <sup>+</sup>	AWS 90.SI <sup>+</sup> Green
<ul style="list-style-type: none"> <li>▪ Highest levels of thermal insulation with a 90mm basic depth and <math>U_f</math> values from 0.71 W/(m<sup>2</sup>K)</li> <li>▪ Average <math>U_f</math> value of 1.0 W/(m<sup>2</sup>K) with a face width of 117 mm and a <math>U_w</math> value of 0.8 W/(m<sup>2</sup>K) with a <math>U_g</math> value of 0.6 W/(m<sup>2</sup>K) and plastic spacers</li> <li>▪ Co-extruded centre gasket with fins</li> <li>▪ Optimised insulation zone with foam-filled insulating bars</li> </ul>	<ul style="list-style-type: none"> <li>▪ The perfect combination of design and energy efficiency with <math>U_f</math> values from 0.8 W/(m<sup>2</sup>K)</li> <li>▪ Average <math>U_f</math> value of 1.2 W/(m<sup>2</sup>K) with a face width of 95mm and a <math>U_w</math> value of 0.84 W/(m<sup>2</sup>K) with plastic spacers and a <math>U_g</math> value of 0.6 W/(m<sup>2</sup>K)</li> <li>▪ Face widths from 77mm can be constructed</li> <li>▪ Glass thicknesses of up to 58mm can be used</li> </ul>	<ul style="list-style-type: none"> <li>▪ Highly thermally insulated aluminium window to passive house standard with a <math>U_w</math> value of 0.8 W/(m<sup>2</sup>K) with triple glazing and a face width of 117mm</li> <li>▪ Insulating bars, foams and glazing gaskets with</li> <li>▪ proportions of renewable raw materials</li> <li>▪ Tested profile and insulating bar system as a series product</li> <li>▪ Certification for bio-based products through TÜV quality seal DIN CERTCO</li> <li>▪ Colour of bar material: slate grey</li> </ul>
Fabrication benefits		
<ul style="list-style-type: none"> <li>▪ Compatible with the Schüco ADS 90.SI door series.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Use of identical parts from Schüco AWS 90.SI<sup>+</sup> windows and Schüco AWS 112 IC windows</li> <li>▪ <math>U_f</math> values achievable without bonding the panes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Comprehensive profile range identical to AWS 90.SI<sup>+</sup> Standard</li> </ul>

Technical data	AWS 90.SI <sup>+</sup>	AWS 90 BS.SI <sup>+</sup>	AWS 90.SI <sup>+</sup> Green
$U_f$ values in W/(m <sup>2</sup> K) from	0.71	0.8	0.79
Basic depths in mm	90	90	90
Compatible with Schüco TipTronic	■	■	■
Sound insulation/standard DIN EN 20140 up to $R_w$ value in dB	47	47	47
Burglar resistance/standard DIN EN 1627 (Class)	RC3 (WK3)	RC3 (WK3)	RC3 (WK3)
Watertightness/standard DIN EN 12208 (Class)	9a	9a	9a
Air permeability, DIN 12207 (Class)	4	4	4
Wind load resistance, DIN 12210 (Class)	C5/B5	C5/B5	C5/B5



## Schüco AWS 90



With the Schüco AWS 90.SI+ Green window, Schüco is the first provider to successfully manufacture an approved aluminium window system which is suitable for series production and which contains significant proportions of renewable raw materials in the plastics. This means that raw fossil materials are partially replaced with tested, bio-based materials.

### Schüco International KG

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# Overview

	Schüco AWS 90 BS.SI+	Schüco AWS 90.SI+	Schüco AWS 75.SI	Schüco AWS 75 BS.SI	Schüco AWS 75 BS.HI	Schüco AWS 75 WF.SI	Schüco AWS 65	Schüco AWS 65 BS	Schüco AWS 65 WF	Schüco AWS 60	Schüco AWS 60.HI	Schüco AWS 60 BS
<b>Energy</b>												
Thermally insulated							■	■	■	■		■
High Thermally insulated			■	■	■	■					■	
Suitable for passive houses	■	■										
U <sub>f</sub> -values in W/(m <sup>2</sup> K) from	0.71	0.8	0.92	1.3	1.3	1.4	1.9	2.0	2.6	1.9	1.7	2.1
Weighted sound insulation index R <sub>w</sub> in dB	47	49	48	49	45	49	47	44	44	45	45	43
<b>Design</b>												
Basic depth in mm	90	90	75	75	75	75	65	65	65	60	60	60
<b>Fittings</b>												
Schüco AvanTec, concealed	■	■	■	■	■	■	■	■	■	■	■	■
Schüco TipTronic, concealed	■	■	■	■	■	■	■	■	■	■	■	
<b>Design Options</b>												
RL (Residential Line)			■				■			■		
SL (Soft Line)			■				■			■		
MC (Multi Contour)							■			■	■	
BS (Block system)		■		■		■		■				■
WF (Window Facade)					■			■				
<b>Areas of Use</b>												
Facade insert unit	■	■	■	■		■	■	■		■	■	■
Window facade					■			■				
Floating window				■		■		■				■
Compatible Schüco ADS door system	■		■				■			■		

# Overview

	Schüco AWS 90 BS.SI+	Schüco AWS 90.SI+	Schüco AWS 75.SI	Schüco AWS 75 BS.SI	Schüco AWS 75 BS.HI	Schüco AWS 75 WF.SI	Schüco AWS 65	Schüco AWS 65 BS	Schüco AWS 65 WF	Schüco AWS 60	Schüco AWS 60.HI	Schüco AWS 60 BS
<b>Schüco Avan Tec</b>												
Side -hung (SH), turn/tilt (TT), bottom-hung (BH), tilt-before-turn (TbT)	■	■	■	■	■	■	■	■	■	■	■	■
Double-vent	■	■	■	■		■	■	■		■	■	■
Crank-operated turn/tilt vent												
Tilt/slide vent	■	■	■	■		■	■		■	■	■	■
Bottom-hung toplight	■	■	■	■	■	■	■	■	■	■	■	■
Outward-opening			■			■			■	■	■	
Side-hung, top-hung vent			■			■				■	■	
Horizontal and vertical pivot vent												
<b>Security</b>												
Burglar resistance in accordance with DIN EN 1627												
Schüco AvanTec WK1	■	■	■	■	■	■	■	■	■	■	■	■
Schüco AvanTec RC2 (WK2)	■	■	■	■	■	■	■	■		■	■	■
Schüco AvanTec RC3 (WK3)	■	■	■			■	■	■				
Schüco TipTronic WK1	■	■	■	■	■	■	■	■	■			
Schüco TipTronic RC2 WK2	■	■	■	■	■	■	■					
Monitoring of opening and closing, display	■	■	■	■	■	■	■	■	■	■	■	■
<b>Automation</b>												
Schüco TipTronic												
Turn / tilt fitting	■	■	■	■	■	■	■	■	■	■	■	■
Toplight	■	■	■	■	■	■	■	■	■	■	■	■
Outward opening			■				■					
Group control, bus automation	■	■	■	■	■	■	■	■	■			
Automatic night-time cooling, automatic ventilation	■	■	■	■	■	■	■	■	■			



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