

Energy savings

Energy savings when installing new windows		Explanation	
U _w -value (old)	3.50 W/(m ² K)	Heating degree days	4,050
U _w -value (new)	0.68 W/(m ² K)	Conversion factor from kilograms in litres of heating oil	1.19
Window surface area	30 m ²	Conversion heating value Wh/kg	11,800
Annual savings on heating oil	1,109 L	Heating efficiency	0.75
Annual carbon dioxide reduction	2,996 kg		

Security features

- Adhesive technology
- BASIC: Winkhaus activPilot with 2 security strike plates
- Optional: BASIC plus, IDEAL secure (RH2), RC2

Sound insulation

Window R_{wp} up to 41 dB

Glass thickness

Up to 48 mm

Colour of fittings

- White and F9, powder coated (without caps)
- Brown and F4 over caps

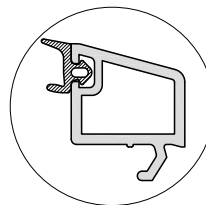
Colours

- White
- Decor based on current price list according to plastic colour range



Available glazing strips:

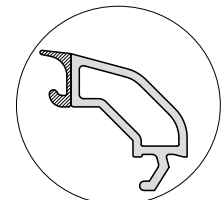
- Standard: classicline



- Optional: roundline



softline



Seals

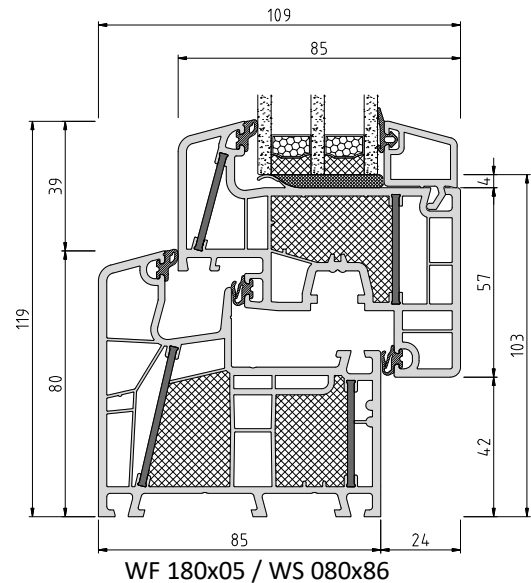
- Centre sealing system
- 3 sealing levels
- Available colours: papyrus white, or black with decor

System values

- Air permeability: Class 3 (according to EN 12207)
- Water tightness: Class 4A (according to EN 12208)
- Resistance to wind load: Class B3 (according to EN 12210)

Please note:

The classifications given here are minimum requirements.
 Please contact us if higher requirements are necessary.



Fittings

BASIC:

- Winkhaus activPilot (3-dimensional adjustment)
- Integral fail-safe device
- Window casement lift
- Coated tapes (white or F9)
- 2 security strike plates
- Max. weight of casement 130 kg

Optional:

- activPilot Comfort PAD (parallel-locking fitting)
- Safety levels: BASIS plus, IDEAL secure (RH2), RC2
- IDEAL SELECT (concealed corner and stay bearings)
- "Tilt first" (tilt then turn)
- High Control (magnetic contact for electronic lock monitoring)

Thermal insulation

- Reference dimensions 1,230 x 1,480 mm
- $U_f = 0.79 \text{ W}/(\text{m}^2\text{K})$
- Minimum requirements acc. to the German Energy Saving Ordinance (EnEV) 2014 $U_w = 1.3 \text{ W}/(\text{m}^2\text{K})$
- SPH = suitable for passive houses
- CPC = certified passive house component (Passive House Institute Dr. Feist)
 - * $U_g \leq 0.7 \text{ W}/\text{m}^2\text{K}$
 - * Swisspacer Ultimate edge compound
 - * WCP 184247G_2K (or equivalent)

U _g -glass (W/m ² K) EN 673	U _w -window (W/m ² K)		
	Insulated glazing edge compound		
	Aluminium	KSH/KSD	Swisspacer Ultimate
Double glazing	Psi = 0.066 (W/m ² K)	Psi = 0.041 (W/m ² K)	Psi = 0.032 (W/m ² K)
1.1	1.16	1.10	1.08
1.0	1.09	1.03	1.01
Triple glazing	Psi = 0.064 (W/m ² K)	Psi = 0.039 (W/m ² K)	Psi = 0.030 (W/m ² K)
0.8	0.95	0.90	0.87
0.7	0.89	0.82	0.80 (CPC)
0.6	0.82	0.76 (SPH)	0.73 (CPC)
0.5	0.75 (SPH)	0.69 (SPH)	0.67 (CPC)

- U_w-values < 1.0 W/(m²K) are shown with two decimal places in accordance with EN ISO 10077
- U_w-values > 1.0 W/(m²K) are shown with one decimal place in accordance with EN ISO 10077 and here – for information only – with two decimal places
- The specified PSI values are taken from the data sheets of the working group "Warm Edge"

Sound insulation

Reference dimensions 1,230 x 1,480 mm
 (components with test certificate)

R _w □ R _{wP} = Test value window	R _{wR} = Calculated value window	R _{wP} = Test value glass	Test certificate No.
33 dB	31 dB	29 dB	175 42480/2
38 dB	36 dB	35 dB	175 42480/2
41 dB	39 dB	42 dB	175 42480/2

In Germany the following applies acc. to DIN 4109:1989-11 (German standard for sound insulation in buildings; requirements and testing): R_w equals R_{wP}; R_{wR} = R_{wP} - 2dB