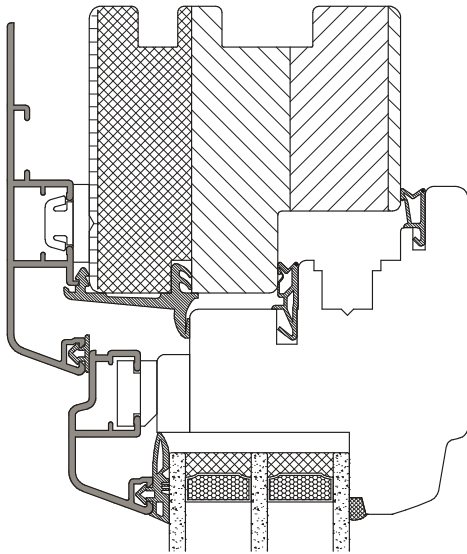
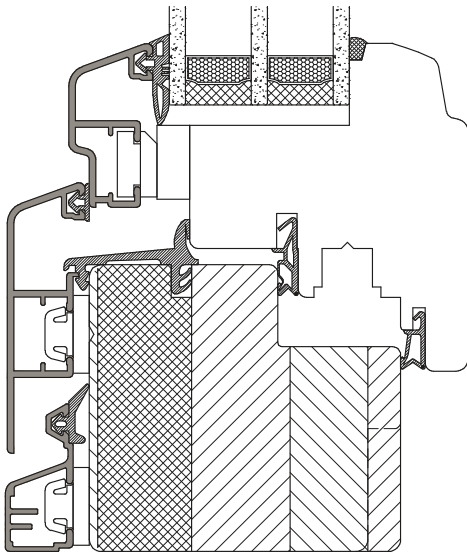




Aluminium clad timber windows, with high thermal insulation  
Mortise/tenon joint  
Installation depth 96 mm  
Semi-recessed, optionally recessed  
Inner profile: profiled, smart, edged



OBJ



### Energy savings

Energy savings when installing new windows		Explanation	
U <sub>w</sub> -value (old)	3.50 W/(m <sup>2</sup> K)	Heating degree days	4,050
U <sub>w</sub> -value (new)	0.72 W/(m <sup>2</sup> K)	Conversion factor from kilogrammes in litres of heating oil	1.19
Window surface	30 m <sup>2</sup>	Conversion heating value Wh/kg	11,800
Annual savings on heating oil	1,090 L	Heating efficiency	0.75
Annual carbon dioxide reduction	2,943 kg		

### Safety features

- Basic
- Basic plus
- RH 2

### Sound insulation

- Window currently not tested

### Glass thickness

- from 32 mm to 50 mm

### Colour of fittings

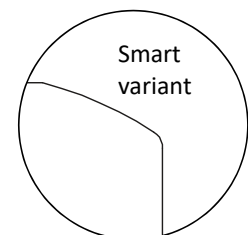
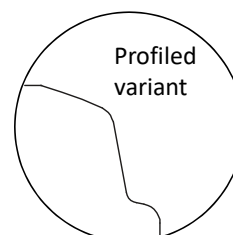
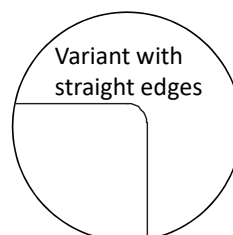
- white
- F9
- brown, only with caps

### Colours

- Inside: all colours of the IDEAL timber range (timber windows)
- Outside: all colours of the IDEAL aluminium clad timber colour range

### Available glazing strips

- Standard: profiled
- Optional: smart or straight edge



**Seals**

- Centre sealing system
- 3 sealing levels, optionally 4 (seal inside the window frame aluminium facing)
- Available colours: black, graphite grey, brown, beige, white

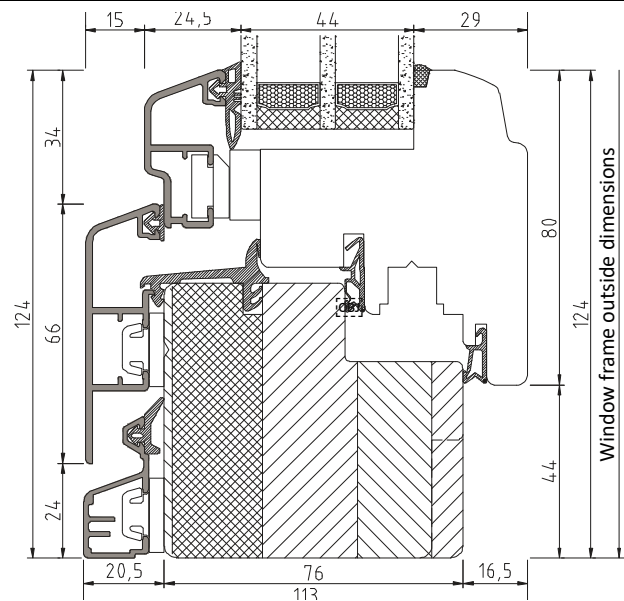
**System values**

- Air permeability: Class 3 (according to EN 12207)
- Water tightness: Class 4A (according to EN 12208)
- Resistance to wind load: Class C3/B3 (according to DIN EN 12210)

Please note:

The classifications given here are minimum requirements.

Please contact us if higher requirements are necessary.



**Fittings**

Standard:

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

Optional:

- IDEAL SELECT (concealed fittings)
- "Tilt first" (tilt then turn fitting)
- High Control (magnetic contact for electronic lock monitoring)
- PAD / PADM (parallel-locking fitting)

**Thermal insulation**

Thermal conductivity	0.11 W/(m <sup>2</sup> K)	0.13 W/(m <sup>2</sup> K)	0.16 W/(m <sup>2</sup> K)	0.18 W/(m <sup>2</sup> K)	Thermal conductivity	0.11 W/(m <sup>2</sup> K)	0.13 W/(m <sup>2</sup> K)	0.16 W/(m <sup>2</sup> K)	0.18 W/(m <sup>2</sup> K)
U <sub>f</sub> -value	0.92 W/(m <sup>2</sup> K)	0.99 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	U <sub>f</sub> value	0.92 W/(m <sup>2</sup> K)	0.99 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)
U <sub>g</sub> -value	U <sub>w</sub> -values if using aluminium spacers				U <sub>g</sub> value	U <sub>w</sub> -values if using KSH/KSD spacers			
1.1 W/(m <sup>2</sup> K) ***	Not available for this window system				1.1 W/(m <sup>2</sup> K) ***	Not available for this window system			
1.0 W/(m <sup>2</sup> K) ***	Not available for this window system				1.0 W/(m <sup>2</sup> K) ***	Not available for this window system			
0.9 W/(m <sup>2</sup> K) ***	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.2 W/(m <sup>2</sup> K)	0.9 W/(m <sup>2</sup> K) ***	1.0 W/(m <sup>2</sup> K)	1.0 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)
0.8 W/(m <sup>2</sup> K) ***	1.0 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	0.8 W/(m <sup>2</sup> K) ***	0.94 W/(m <sup>2</sup> K)	0.96 W/(m <sup>2</sup> K)	0.99 W/(m <sup>2</sup> K)	1.0 W/(m <sup>2</sup> K)
0.7 W/(m <sup>2</sup> K) ***	0.96 W/(m <sup>2</sup> K)	0.98 W/(m <sup>2</sup> K)	1.0 W/(m <sup>2</sup> K)	1.0 W/(m <sup>2</sup> K)	0.7 W/(m <sup>2</sup> K) ***	0.87 W/(m <sup>2</sup> K)	0.90 W/(m <sup>2</sup> K)	0.93 W/(m <sup>2</sup> K)	0.95 W/(m <sup>2</sup> K)
0.6 W/(m <sup>2</sup> K) ***	0.89 W/(m <sup>2</sup> K)	0.91 W/(m <sup>2</sup> K)	0.95 W/(m <sup>2</sup> K)	0.96 W/(m <sup>2</sup> K)	0.6 W/(m <sup>2</sup> K) ***	0.81 W/(m <sup>2</sup> K)	0.83 W/(m <sup>2</sup> K)	0.86 W/(m <sup>2</sup> K)	0.88 W/(m <sup>2</sup> K)
0.5 W/(m <sup>2</sup> K) ***	0.82 W/(m <sup>2</sup> K)	0.85 W/(m <sup>2</sup> K)	0.88 W/(m <sup>2</sup> K)	0.90 W/(m <sup>2</sup> K)	0.5 W/(m <sup>2</sup> K) ***	0.74 W/(m <sup>2</sup> K)	0.76 W/(m <sup>2</sup> K)	0.79 W/(m <sup>2</sup> K)	0.81 W/(m <sup>2</sup> K)
<b>Thermal conductivity</b>	<b>0.11 W/(m<sup>2</sup>K)</b>	<b>0.13 W/(m<sup>2</sup>K)</b>	<b>0.16 W/(m<sup>2</sup>K)</b>	<b>0.18 W/(m<sup>2</sup>K)</b>	Reference dimensions 1,230 x 1,480 mm				
U <sub>f</sub> -value	0.92 W/(m <sup>2</sup> K)	0.99 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	U <sub>w</sub> -value calculated according to EN ISO 10077-1:2006 + AC:2009				
U <sub>g</sub> -value	U <sub>w</sub> -values if using Swissspacer V				Thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 1: General				
1.1 W/(m <sup>2</sup> K) ***	Not available for this window system				***	Calculated according to EN 673			
1.0 W/(m <sup>2</sup> K) ***	Not available for this window system				0.11 W/(m <sup>2</sup> K)	Spruce			
0.9 W/(m <sup>2</sup> K) ***	0.98 W/(m <sup>2</sup> K)	1.0 W/(m <sup>2</sup> K)	1.0 W/(m <sup>2</sup> K)	1.1 W/(m <sup>2</sup> K)	0.13 W/(m <sup>2</sup> K)	Pine, European larch, Meranti Light Red Southeast Asia, Eucalyptus RED Grandis, European alder (black alder)			
0.8 W/(m <sup>2</sup> K) ***	0.92 W/(m <sup>2</sup> K)	0.94 W/(m <sup>2</sup> K)	0.97 W/(m <sup>2</sup> K)	0.99 W/(m <sup>2</sup> K)	0.16 W/(m <sup>2</sup> K)	American cherry tree			
0.7 W/(m <sup>2</sup> K) ***	0.85 W/(m <sup>2</sup> K)	0.87 W/(m <sup>2</sup> K)	0.90 W/(m <sup>2</sup> K)	0.92 W/(m <sup>2</sup> K)	0.18 W/(m <sup>2</sup> K)	European oak, steamed beech, European beech, European birch			
0.6 W/(m <sup>2</sup> K) ***	0.78 W/(m <sup>2</sup> K)	0.81 W/(m <sup>2</sup> K)	0.84 W/(m <sup>2</sup> K)	0.86 W/(m <sup>2</sup> K)	European maple; Sycamore maple, American walnut				
0.5 W/(m <sup>2</sup> K) ***	0.72 W/(m <sup>2</sup> K)	0.74 W/(m <sup>2</sup> K)	0.77 W/(m <sup>2</sup> K)	0.79 W/(m <sup>2</sup> K)					