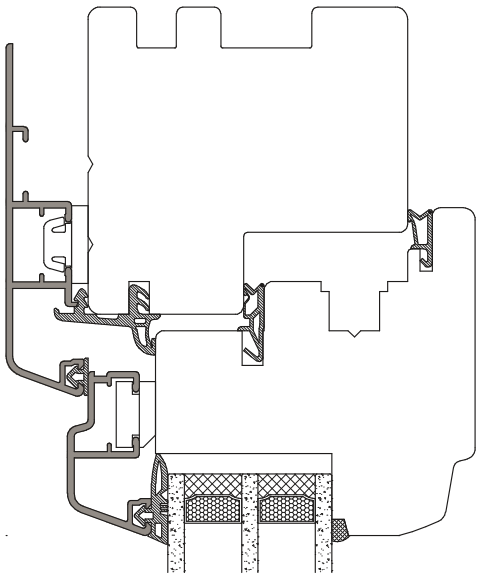
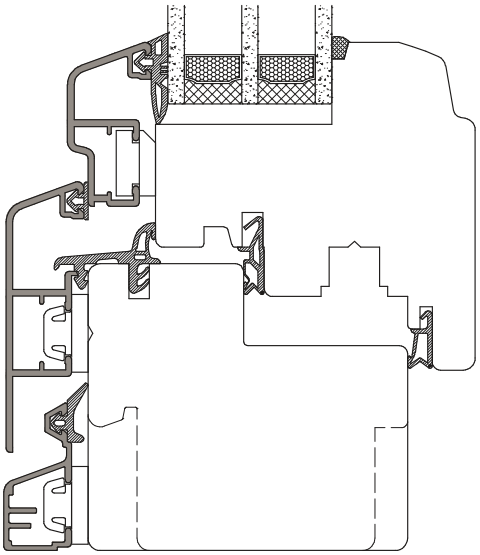
IDEALU78plus

Aluminium clad timber windows
Mortise/tenon joint
Installation depth 98 mm
Semi-recessed; optionally recessed
Inner profile: profiled, smart, straight edge

0.78 Best value Uw-value Basic value 1.3





Energy savings

Energy savings when installing new windows	
U_w-value (old)	3.50 W/(m²K)
U_w-value (new)	0.78 W/(m²K)
Window surface area	30 m²
Annual savings on heating oil	1,066 L
Annual carbon dioxide reduction	2,880 kg

Explanation	
Heating degree days	4,050
Conversion factor from kilograms in litres of heating oil	1.19
Conversion heating value Wh/kg	11,800
Heating efficiency	0.75

Security features

- Basic
- Basic plus
- RH 2
- RC 2

Sound insulation

- Tested up to $R_w(C; C_{tr})$ = 45 (-1, -4) dB

Glass thickness

- from 33 mm to 52 mm

Colour of fittings

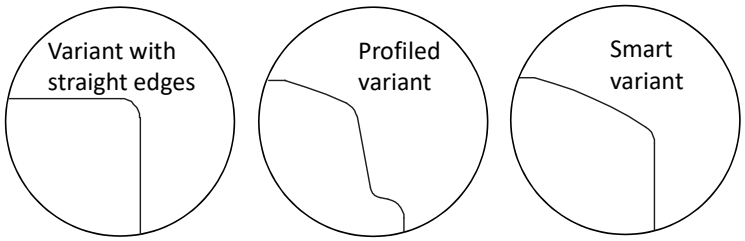
- White
- F9
- Brown, only with caps

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 edged



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Seals

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

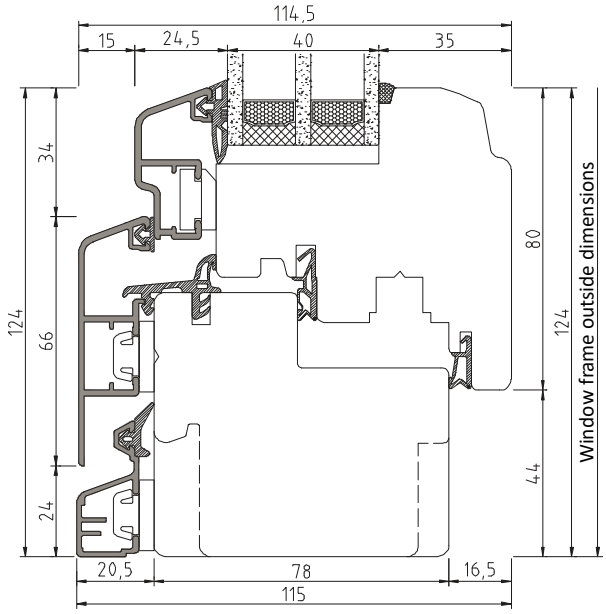
System values

- 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 hinges (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 action fitting)

Thermal insulation

Thermal conductivity	**0.11 W/(m²K)**	**0.13 W/(m²K)**	**0.16 W/(m²K)**	**0.18 W/(m²K)**
U_f-value	1.1 W/(m²K)	1.2 W/(m²K)	1.4 W/(m²K)	1.5 W/(m²K)
U_g-value	U_w-values if using aluminium spacers			
1.1 W/(m²K) ***	1.3 W/(m²K)	1.3 W/(m²K)	1.4 W/(m²K)	1.4 W/(m²K)
1.0 W/(m²K) ***	1.2 W/(m²K)	1.3 W/(m²K)	1.3 W/(m²K)	1.3 W/(m²K)
0.9 W/(m²K) ***	1.2 W/(m²K)	1.2 W/(m²K)	1.2 W/(m²K)	1.3 W/(m²K)
0.8 W/(m²K) ***	1.1 W/(m²K)	1.1 W/(m²K)	1.2 W/(m²K)	1.2 W/(m²K)
0.7 W/(m²K) ***	1.0 W/(m²K)	1.1 W/(m²K)	1.1 W/(m²K)	1.2 W/(m²K)
0.6 W/(m²K) ***	0.95 W/(m²K)	0.99 W/(m²K)	1.1 W/(m²K)	1.1 W/(m²K)
0.5 W/(m²K) ***	0.88 W/(m²K)	0.92 W/(m²K)	0.98 W/(m²K)	1.0 W/(m²K)

Thermal conductivity	**0.11 W/(m²K)**	**0.13 W/(m²K)**	**0.16 W/(m²K)**	**0.18 W/(m²K)**
U_f-value	1.1 W/(m²K)	1.2 W/(m²K)	1.4 W/(m²K)	1.5 W/(m²K)
U_g-value	U_w-values if using KSH/KSD spacers			
1.1 W/(m²K) ***	1.2 W/(m²K)	1.2 W/(m²K)	1.3 W/(m²K)	1.3 W/(m²K)
1.0 W/(m²K) ***	1.1 W/(m²K)	1.2 W/(m²K)	1.2 W/(m²K)	1.3 W/(m²K)
0.9 W/(m²K) ***	1.1 W/(m²K)	1.1 W/(m²K)	1.2 W/(m²K)	1.2 W/(m²K)
0.8 W/(m²K) ***	1.0 W/(m²K)	1.0 W/(m²K)	1.1 W/(m²K)	1.1 W/(m²K)
0.7 W/(m²K) ***	0.93 W/(m²K)	0.97 W/(m²K)	1.0 W/(m²K)	1.1 W/(m²K)
0.6 W/(m²K) ***	0.87 W/(m²K)	0.91 W/(m²K)	0.96 W/(m²K)	1.0 W/(m²K)
0.5 W/(m²K) ***	0.80 W/(m²K)	0.84 W/(m²K)	0.90 W/(m²K)	0.93 W/(m²K)

Thermal conductivity	**0.11 W/(m²K)**	**0.13 W/(m²K)**	**0.16 W/(m²K)**	**0.18 W/(m²K)**
U_f-value	1.1 W/(m²K)	1.2 W/(m²K)	1.4 W/(m²K)	1.5 W/(m²K)
U_g-value	U_w-values if using Swissspacer V			
1.1 W/(m²K) ***	1.2 W/(m²K)	1.2 W/(m²K)	1.3 W/(m²K)	1.3 W/(m²K)
1.0 W/(m²K) ***	1.1 W/(m²K)	1.2 W/(m²K)	1.2 W/(m²K)	1.2 W/(m²K)
0.9 W/(m²K) ***	1.0 W/(m²K)	1.1 W/(m²K)	1.1 W/(m²K)	1.2 W/(m²K)
0.8 W/(m²K) ***	0.97 W/(m²K)	1.0 W/(m²K)	1.1 W/(m²K)	1.1 W/(m²K)
0.7 W/(m²K) ***	0.91 W/(m²K)	0.95 W/(m²K)	1.0 W/(m²K)	1.0 W/(m²K)
0.6 W/(m²K) ***	0.84 W/(m²K)	0.88 W/(m²K)	0.94 W/(m²K)	0.97 W/(m²K)
0.5 W/(m²K) ***	0.78 W/(m²K)	0.82 W/(m²K)	0.87 W/(m²K)	0.91 W/(m²K)

Reference dimensions 1,230 x 1,480 mm

U_w-value calculated according to EN ISO 10077-1:2006 + AC:2009 thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 1: General

***	Calculated according to EN 673
0.11 W/(m²K)	Spruce
0.13 W/(m²K)	Pine, European larch, Meranti Light Red Southeast Asia, Eucalyptus RED Grandis, European alder (black alder)
0.16 W/(m²K)	American cherry tree
0.18 W/(m²K)	European oak, steamed beech, European beech, European birch European maple; Sycamore maple, American walnut