

WINDDOWS



EVERYTHING AT A GLANCE

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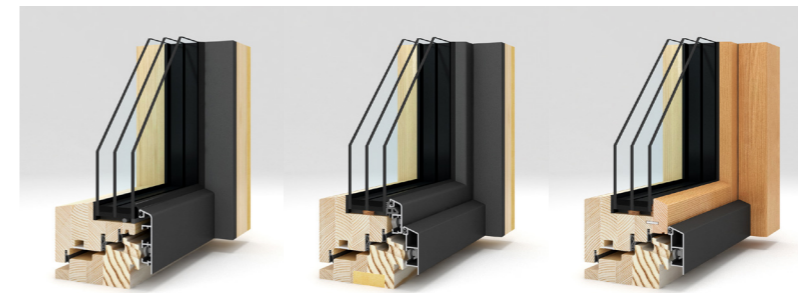




ALLROUND ALU	ALLROUND ALU - FLUSH	ALLROUND TIMBER
05-06	07-08	09-10
105	105	100
48/50/52/54	48/50/52/54	48/50/52/54
0,75	0,75	0,72
0,5	0,5	0,5
0,026	0,026	0,025
x	x	x
GROOVE & GUDGEON	GROOVE & GUDGEON	GROOVE & GUDGEON
x	x	x

THE FREISINGER-BENEFIT

		x
4	4	3
x	x	x



PURISTA	RESISTA	LIGNUMA	
11-12	13-14	15-16	PAGE
150	150	150	(mm) MEASUREMENT
48/50/52/54	48/50/52/54	48/50/52/54	(mm) GLASSMEASURE
0,64	0,65	0,65	U _w (W/m ² K) -WINDOW
0,5	0,5	0,5	U _g (W/m ² K) -GLASS
0,023	0,024	0,023	Ψ - (W/mK)- GLASSSPACER
x	x	x	LOW-ENERGY-STANDARD
GROOVE & GUDGEON	GROOVE & GUDGEON	GROOVE & GUDGEON	FRAMECONNECTION
x	x	x	COMFORTGROUNDSILL

x	x	x	PASSIVCERTIFIED
x	x	x	FULL-FRAME-INSULATION
4	4	4	SEALS
x			FRAMELESS-EXTERIOR VIEW
x	x	x	ACCOYAWOODCOMPONENT
x	x	x	INTEGRABLE SLIDING DOOR

WINDOWS FOR EVERY SITUATION



ALLROUND ALU

INFORMATION AND FACTS

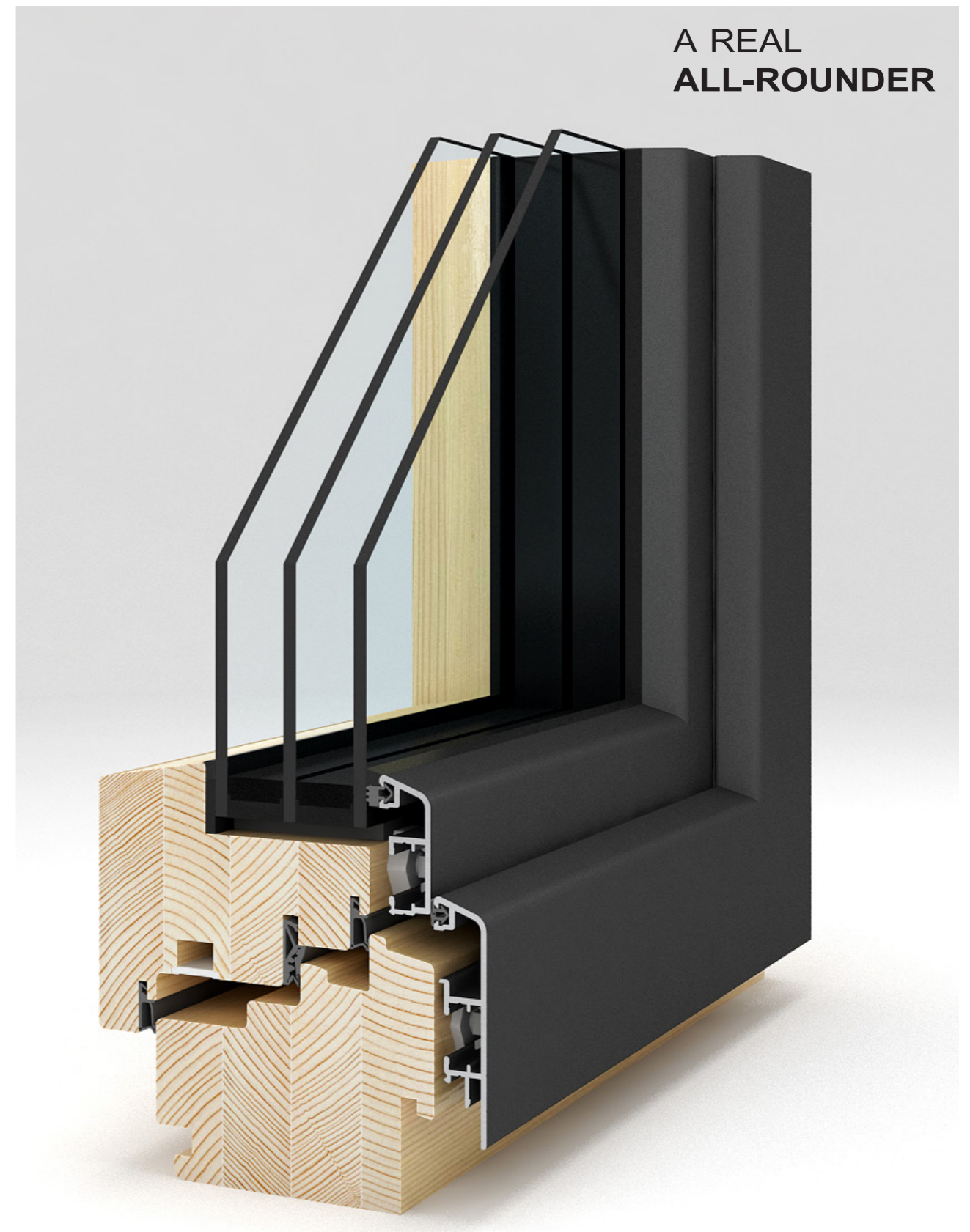
An advantage of ALLROUND ALU window system is the variety and outstanding durability. The frame's outer layer is made of aluminium and protects the wood window from the elements. It can be removed and replaced when needed. In interior spaces, wood windows provide a natural and warm atmosphere.

Its slender design, excellent heat insulation performance, and outstanding value make this window system very attractive. ALLROUND ALU is also ideal for renovations.

ALLROUND ALU uses four seals and one drainage level for the best possible protection against cold, driving rain, and noise. With a U_w value of up to $0.75 \text{ W/m}^2\text{K}$ is ALLROUND ALU a high-end low-energy-window.

HARDFACTS	
MEASUREMENT (mm)	105
GLASSMEASURE (mm)	48/50/52/54
U_w (W/m ² K) -WINDOW	0,75
U_g (W/m ² K) -GLASS	0,5
Ψ - (W/mK)- GLASSPACER	0,026
LOW-ENERGY-STANDARD	yes
FULL-FRAME-INSULATION	no
SEALS	4
DRAINAGE LEVELS	1
ACCOYAWOOD	no

A REAL ALL-ROUNDER



ALLROUND ALU-FLUSH

INFORMATION AND FACTS

An advantage of ALLROUND ALU-FLUSH window system is the variety and outstanding durability. The frame's outer layer is made of aluminium and protects from all types of environmental influences. In interior spaces, wood windows provide a natural and warm atmosphere.

Its slender design, excellent heat insulation performance, and outstanding value make this window system very attractive. ALLROUND ALU-FLUSH is also ideal for renovations.

ALLROUND ALU-FLUSH uses four seals and one drainage level for the best possible protection against cold, driving rain, and noise. With a U_w value of up to $0.75 \text{ W/m}^2\text{K}$ is ALLROUND ALU-FLUSH a high-end low-energy-window.

HARDFACTS

MEASUREMENT (mm)	105
GLASSMEASURE (mm)	48/50/52/54
U_w (W/m ² K) -WINDOW	0,75
U_g (W/m ² K) -GLASS	0,5
Ψ - (W/mK) - GLASSPACER	0,026
LOW-ENERGY-STANDARD	yes
FULL-FRAME-INSULATION	no
SEALS	4
DRAINAGE LEVELS	1
ACCOYAWOOD	no

A REAL
EYE-CATCHER



FREISINGER
Fensterbau



ALLROUND TIMBER

ALLROUND TIMBER

INFORMATION AND FACTS

An advantage of ALLROUND TIMBER window system is the variety and outstanding durability. The frame's outer layer is made of aluminium and protects the wood window from all types of environmental influences. It can be removed and replaced when needed. In interior spaces, wood windows provide a natural and warm atmosphere.

Its slender design, excellent heat insulation performance, and outstanding value make this window system very attractive. ALLROUND TIMBER is also ideal for renovations.

ALLROUND TIMBER uses four seals and one drainage level for the best possible protection against cold, driving rain, and noise. With a U_w value of up to $0.72 \text{ W/m}^2\text{K}$ is ALLROUND TIMBER a high-end low-energy-window.

HARDFACTS	
MEASUREMENT (mm)	100
GLASSMEASURE (mm)	48/50/52/54
U_w (W/m ² K) -WINDOW	0,72
U_g (W/m ² K) -GLASS	0,5
Ψ - (W/mK)- GLASSPACER	0,025
LOW-ENERGY-STANDARD	yes
FULL-FRAME-INSULATION	yes
SEALS	3
DRAINAGE LEVELS	1
ACCOYAWOOD	no



THE WOOD-MADE ALL-ROUNDER

FREISINGER
Fensterbau

PURISTA

INFORMATION AND FACTS

The PURISTA window system is a clear and timeless design with the highest technical quality. The special design enables an exterior appearance of pure glass. This is true both for window sashes as well as for stationary elements.

The glass surface not only provides an attractive, puristic appearance, but also protects the frame from the elements. The regular maintenance that is normally required for wood-framed windows is unnecessary.

PURISTA has an extremely slender profile. The overall internal view width of the frame and sash is just 90 mm. The frame can be insulated right up to the sash, further enhancing its minimalist appearance.

The PURISTA window system is ideally suited for passive homes. Like all OPTIWIN window systems, PURISTA can accept glazing that is up to 60 mm thick, for extreme heat transfer of up to 0.64 W/m²K. The refined design of the window system also results in an installation-optimised thermal bridge.

Because of these benefits, the window system is certified by the Passive House Institute of Darmstadt as A-components for the highest energy-efficiency requirements.

HARDFACTS	
MEASUREMENT (mm)	150
GLASSMEASURE (mm)	48/50/52/54
U _w (W/m ² K) -WINDOW	0,64
U _g (W/m ² K) -GLASS	0,5
Ψ - (W/mK)- GLASSPACER	0,023
PASSIVCERTIFIED	yes
FULL-FRAME-INSULATION	yes
SEALS	4
DRAINAGE LEVELS	2
ACCOYAWOOD	yes

THE WINDOW WITHOUT A FRAME





RESISTA

INFORMATION AND FACTS

The RESISTA window system has impressively clear optics and outstanding durability. The frame's outer layer is made of aluminium and protects the wood window from the elements. It can be removed and replaced when needed. In interior spaces, wood windows provide a natural and warm atmosphere.

Its slender design, excellent heat insulation performance, and outstanding value make this window system very attractive. The RESISTA is also ideal for renovations.

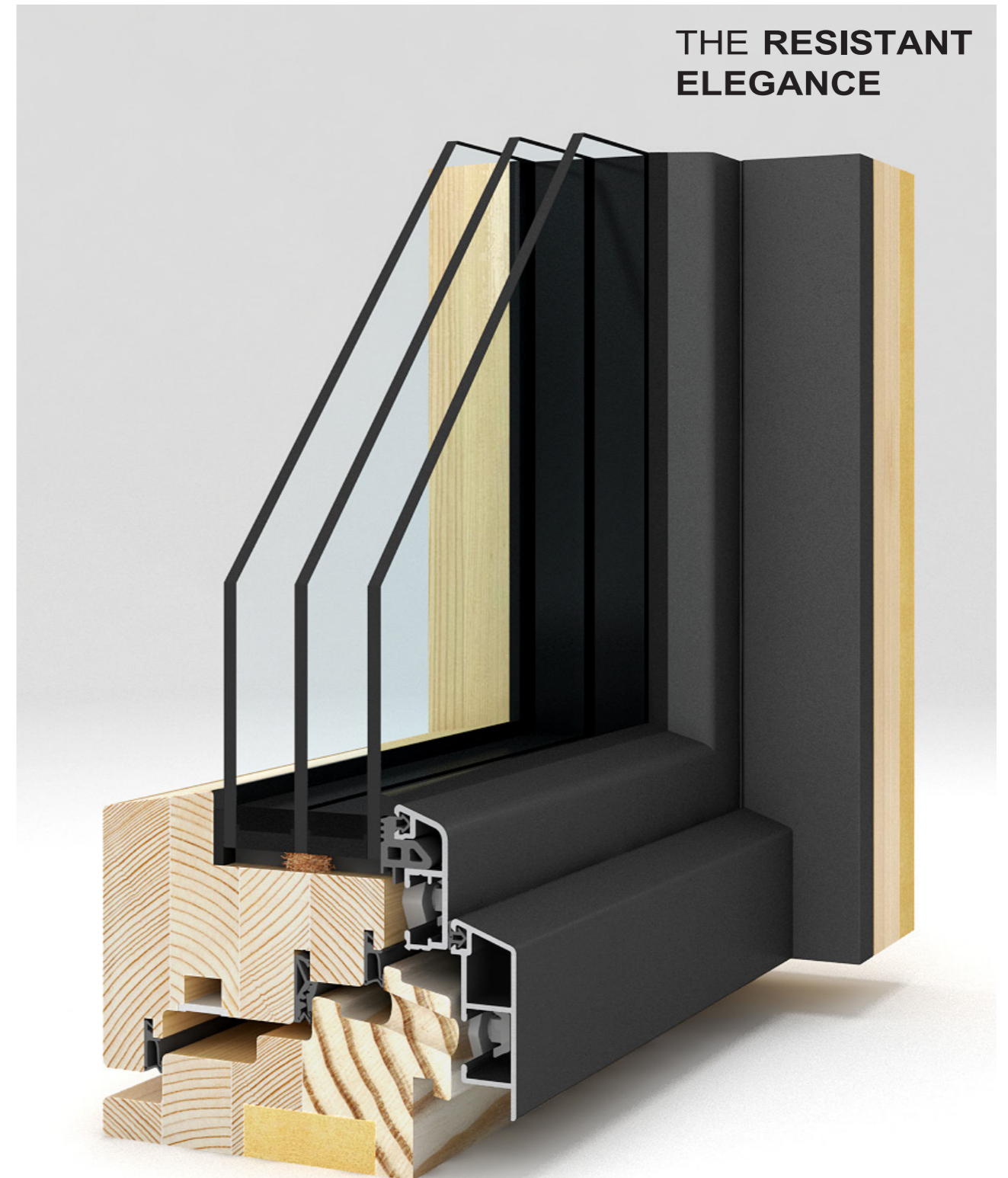
Another special benefit of the RESISTA window system: The frame can be insulated up to the sash. But only the narrow sash wood is visible from the outside, contributing to the minimalist appearance. But this also optimizes heat insulation at the important connection to the building.

RESISTA uses four seals and two drainage levels for the best possible protection against cold, driving rain, and noise. With a U_w value of up to $0.65 \text{ W/m}^2\text{K}$, RESISTA is also certified as an A-component by the Passive House Institute of Darmstadt for fulfilment of the highest requirements.

The CLASSIC variant of RESISTA has visible hinges, while the MODERN has hidden ones.

HARDFACTS	
MEASUREMENT (mm)	150
GLASSMEASURE (mm)	48/50/52/54
U_w (W/m ² K) -WINDOW	0,65
U_g (W/m ² K) -GLASS	0,5
Ψ - (W/mK)- GLASSPACER	0,024
PASSIVCERTIFIED	yes
FULL-FRAME-INSULATION	yes
SEALS	4
DRAINAGE LEVELS	2
ACCOYAWOOD	yes

THE RESISTANT ELEGANCE





LIGNUMA

INFORMATION AND FACTS

The LIGNUMA offers a narrow frame, elegant design, and individual colour patterns for interior and exterior. Weather-resistant wood types are ready to withstand the elements and give the window a removable external protection layer. The external layer can be replaced if needed, virtually eliminating the need for surface treatment. The interior layer is made of wood types with favourable density and outstanding static characteristics.

The LIGNUMA fully exploits the atmospheric traits of wood. If desired, special wood types such as walnut, zebrawood, or apple can be provided for interior use. Natural oils and thin or thick glazes provide plenty of freedom for individualized colour arrangements. LIGNUMA is synonymous with cosiness and natural radiance. LIGNUMA is also ideal for renovations.

LIGNUMA has an impressive heat transfer coefficient of up to 0.65 W/m²K. This outstanding performance has earned the window system certification as an A-component by the Passive House Institute of Darmstadt.

Four seals and two drainage levels give them exceptional security against wind and weather in addition to outstanding noise protection and thermal comfort.

The frame and glass panes are adhered together for optimal insulation and static properties. With LIGNUMA CLASSIC and LIGNUMA MODERN the hinges may be visible or hidden in the window design, as desired.

HARDFACTS	
MEASUREMENT (mm)	150
GLASSMEASURE (mm)	48/50/52/54
U _w (W/m ² K) -WINDOW	0,65
U _g (W/m ² K) -GLASS	0,5
Ψ - (W/mK)- GLASSPACER	0,023
PASSIVCERTIFIED	yes
FULL-FRAME-INSULATION	yes
SEALS	4
DRAINAGE LEVELS	2
ACCOYAWOOD	yes

THE BEST OF NATURE & ENGINEERING



