

→ GEMINI PASSIV

wood-aluminium system
for passive housing

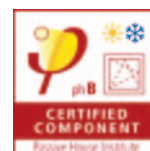


The **GEMINI Passiv** is a wood-alu system for window constructions designed for passive housing. Thanks to its high utility and durability in the form of excellent thermal insulation, above average tightness, air permeability and wind load resistance, this system is suitable for modern, energy-saving and high performance buildings.

GEMINI Passiv, as a certified component of Passivhaus Institut, meets its requirements for passive housing, that is: $U_w \leq 0,80 \text{ W/(m}^2\text{K)}$ in combination with triple-glazing $U_g = 0.7 \text{ W/m}^2\text{K}$.

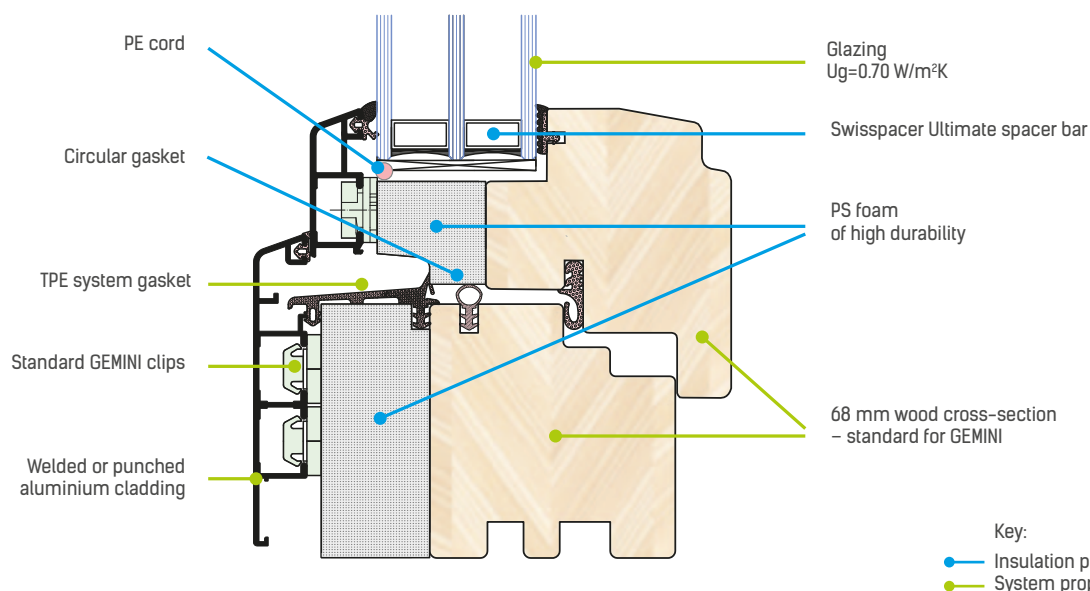
The system utilizes innovative insulation material of high durability utilises on foamed PS, which shares the properties of wood. Thanks to its high level of rigidity, GEMINI clips can be screwed directly into it. Additional components that distinguish this system from more traditional wood-alu designs include the broader main gasket, PE cord, additional central gasket, and the use of a Swisspacer Ultimate warm edge spacer bar.

A certified result of $U_w=0.79 \text{ W/(m}^2\text{K)}$ was achieved in GEMINI Passiv, using standard 68 mm wood cross-sections, known from other GEMINI systems.



AVAILABLE DESIGNS:

- Tilt & turn windows
- Fixed windows
- Mullions and transoms
- Removable mullions
- Tilt & slide windows (PSK)
- Facade connection profiles

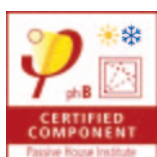




Designed for operation with intelligent buildings

→ System features

Welded corner connections	
Crimped corner connections	
Certified wood section thickness 68 mm	
Certified glazing thickness 44 mm	



Heat transfer U_w coefficient
for sample window 1.23x1.48 [m]

U_w [W/(m²K)]		Pine ($\lambda=0.13$ [W/(mK)]; $\rho=500$ [kg/m³])				Meranti ($\lambda=0.12$ [W/(mK)]; $\rho=450$ [kg/m³])				Spruce ($\lambda=0.11$ [W/(mK)]; $\rho=450$ [kg/m³])			
		68 [mm]	78 [mm]	88 [mm]	92 [mm]	68 [mm]	78 [mm]	88 [mm]	92 [mm]	68 [mm]	78 [mm]	88 [mm]	92 [mm]
Glazing 4/16/4/16/4	$U_g=0.7$ [W/(m²K)]	0.790	0.762	0.756	0.754	0.763	0.755	0.749	0.747	0.756	0.748	0.742	0.740