

GEMINI INTEGRAL II

wood-aluminium windows

Gemini Integral II is another type of wood-aluminium construction in the Gemini family, and this one comes with a concealed aluminium sash as its main feature. The sash, seemingly invisible from the outside, have a visual effect of a fixed window. Gemini Integral II variant comes with a wider sash profile, which increases stiffness, and allows for a thinner gasket to be used in the glazing section. Visually, this creates a narrow, black joint in the glazing area directly next to the aluminium profile. The shape of the system profiles remain the same, without a visible slant, and forming on the outside a 90° angle. System can be order as both welded and mechanically connected frames.



SYSTEM FEATURES

Welded corner connections



Crimped corner connections



Wood section thickness 68–92 mm



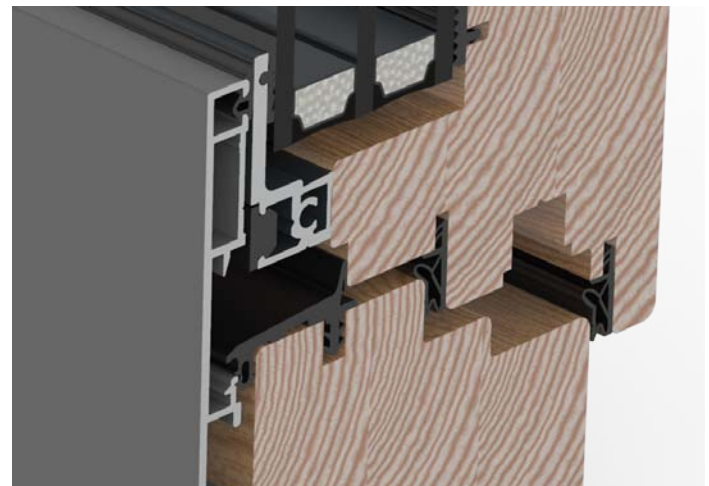
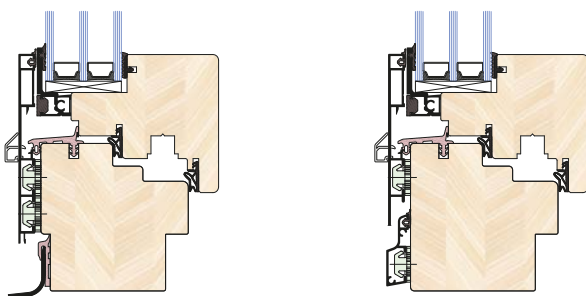
Glazing thickness 24–64 mm



Sash and frame profile bending



AN ALTERNATIVE TO A POPULAR GEMINI SYSTEM WITH CONCEALED SASH



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

U_w [W/(m ² K)]		Pine ($\lambda=0,13$ [W/(mK)]; $\rho=500$ [kg/m ³])				Meranti ($\lambda=0,12$ [W/(mK)]; $\rho=450$ [kg/m ³])				Spruce ($\lambda=0,11$ [W/(mK)]; $\rho=450$ [kg/m ³])			
		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	$U_g=1,1$ [W/(m ² K)]	1,274	1,254	1,238	1,233	1,254	1,234	1,219	1,214	1,232	1,213	1,199	1,193
	$U_g=1,0$ [W/(m ² K)]	1,207	1,186	1,171	1,165	1,186	1,166	1,151	1,146	1,165	1,145	1,131	1,126
Glazing 4/16/4/16/4	$U_g=0,7$ [W/(m ² K)]	0,941	0,919	0,902	0,896	0,922	0,901	0,884	0,879	0,903	0,882	0,866	0,861
	$U_g=0,5$ [W/(m ² K)]	0,804	0,781	0,764	0,761	0,785	0,763	0,749	0,744	0,766	0,745	0,729	0,726