

# GEMINI INTEGRAL

wood-aluminium windows



**Integral** is a unique line of products that belongs to the GEMINI family. It possesses a concealed aluminium sash profile. This creates a visual effect of a single frame, just like in fixed windows. These system profiles were developed without a visible slant and, as a result, create an external right angle. The use of an additional welded gasket in the frame profile increased the overall tightness of the construction which resulted in obtaining the E1200 classification, approved by IFT Rosenheim tests.

## SIMPLE FORM, NARROW FRAMES, FIXED GLAZING IMPRESSION

A modern, single-frame visual form, which fits perfectly well with the newest trends in architectural design by utilising glass, concrete, aluminium and steel.

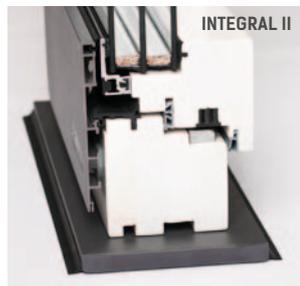
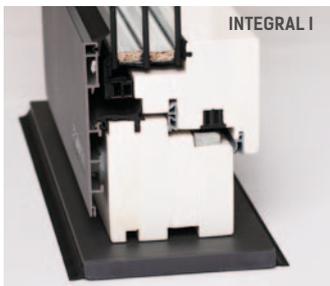
Its system profiles can be ordered in the form of welded or punched frames.

### AVAILABLE CONSTRUCTIONS:

- Tilt & turn windows
- Fixed windows
- Tilt & slide windows (PSK)
- Arc windows
- Mullions and transoms
- Removable mullions
- Glued crosspieces
- Construction crosspieces
- Balcony doors
- Facade connection profiles

### → System features

Welded corner connection	
Mechanical corner connection	
Wood section thickness 68–92 mm	
Glazing thickness 24–64 mm	
Sash and frame profile bending	



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

$U_w$ [W/(m <sup>2</sup> K)]		Pine ( $\lambda=0.13$ [W/(mK)]; $\rho=500$ [kg/m <sup>3</sup> ])				Meranti ( $\lambda=0.12$ [W/(mK)]; $\rho=450$ [kg/m <sup>3</sup> ])				Spruce ( $\lambda=0.11$ [W/(mK)]; $\rho=450$ [kg/m <sup>3</sup> ])			
		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 <sup>2</sup> K)]	1.257	1.232	1.217	1.213	1.237	1.213	1.199	1.194	1.217	1.199	1.180	1.175
	$U_g=1.0$ [W/(m <sup>2</sup> K)]	1.189	1.164	1.150	1.145	1.169	1.145	1.131	1.126	1.149	1.126	1.112	1.108
Glazing 4/16/4/16/4	$U_g=0.7$ [W/(m <sup>2</sup> K)]	0.927	0.906	0.889	0.886	0.909	0.888	0.875	0.870	0.890	0.871	0.857	0.852
	$U_g=0.5$ [W/(m <sup>2</sup> K)]	0.791	0.770	0.756	0.750	0.773	0.752	0.739	0.734	0.755	0.735	0.722	0.717