



CS104

solution for passive construction



With the **CS 104** window and door system, Reynaers achieves unparalleled insulation values for aluminium profiles in the building industry, introducing a solution for passive buildings.

The high insulation levels, down to an U_w -value of $0.77 \text{ W/m}^2\text{K}$, are achieved by the use of a patented insulation technology which contains a special foam, firmly fixed in the chamber of the insulation strip so that no extra manipulation is required when handling, processing and composing the window and door. A new set of specifically developed gaskets also assures the high level of the wind and water tightness of the system. After insulation, air tightness is the most important factor determining the energy efficiency of a window or door.

In addition to the high insulation values, **CS 104** offers extremely high performance when it comes to water tightness. With values up to 900 Pa for windows and 300 Pa for doors, the system is suitable for extreme conditions such as coastal areas, and can be applied at extreme heights.

The increased built-in depth of the profiles (the vent is 104mm deep) contributes furthermore to their strength and stability. This gives architects and builders the design benefits of large, expansive surfaces of triple glazing resulting in innovative, energy-efficient and yet sustainable solutions.



Your Tel Number Here

PERFORMANCES			
	ENERGY		
	Thermal insulation (1)	Uw-value down to 0.77 W/m ² depending on the frame/vent combination and the glass thickness	
	COMFORT	WINDOWS	DOORS
	Air tightness, max. test pressure (2) E N 1026; EN 12207	4 (600 Pa)	4 (600 Pa)
	Water tightness (3) EN 1027; EN 12208	E900 (900 Pa)	7A (300 Pa)
	Wind load resistance, max. test pressure (4) EN 12211; EN 12210	5	2
	Wind load resistance to frame deflection (5) EN 12211; EN 12210	C	C

This table shows possible classes and values of performances. The values indicated in orange are the ones relevant to this system.

- (1) The Uw-value measures the heat flow. The lower the Uw-value, the better the thermal insulation of the frame.
- (2) The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame.
- (3) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (4) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (5) The wind load resistance is a measure of the profile's structural strength and is tested by applying increasing levels of air pressure to simulate the windforce. There are up to five levels of wind resistance (1 to 5) and three deflection classes (A,B,C). The higher the number, the better the performance.
- (6) The burglar resistance is tested by statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.

