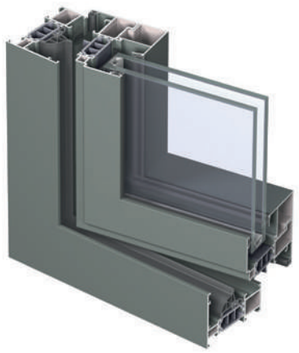
REYNAERS®
at home

CS 77 Windows & Doors

CS 77 is a thermally-broken, multi-chambered system for windows and doors that offers excellent levels of security, weather resistance and thermal insulation.

The CS 77 system offers a comprehensive range of inward- and outward-opening window and door designs that are available in a range of three different styles, making it ideal for both traditional and contemporary building designs. Combined with a huge choice of colours and finishes, and the ability to specify a different colour inside and out, the CS 77 is a truly versatile system that can be specified to complement almost any home.

The fibreglass-reinforced polyamide strips and weather gaskets are designed with ribs and hollow chambers to achieve superior thermal insulation levels. A variant of the CS 77 has been awarded the coveted Swiss Minergie accreditation.



Window

Door

Style options

The CS 77 window and door system is available in three different style options. Whether you prefer the more traditional Renaissance style or the very clean and contemporary lines of the hidden vent style, the CS 77 has the aesthetics to complement almost any home.

Functional

Renaissance

Hidden vent

Performance

The CS 77 not only looks stylish but is also a great all-round performer in terms of thermal insulation, weather resistance and security:

- Whole window U-values as low as 0.94 W/m²K
- Up to 600 Pa air-tightness
- Up to 900 Pa water-tightness
- Up to 2000 Pa wind load resistance
- WK2 and even WK3 security with UK Secured By Design security, PAS 24:2012 or BS7950 depending on window type

Window

Door

Technical characteristics

Style variants		Functional	Renaissance	Hidden vent
Min. visible width inward-opening window	Frame	51 mm	51 mm	76 mm
	Vent	33 mm	33 mm	not visible
Min. visible width outward-opening window	Frame	17.5 mm	–	–
	Vent	76 mm	–	–
Min. visible width inward-opening flush door	Frame	68 mm	–	–
	Vent	76 mm	–	–
Min. visible width outward-opening flush door	Frame	42 mm	–	–
	Vent	102 mm	–	–
Min. visible width T-profile		76 mm	76 mm	126 mm
Overall system depth window	Frame	68 mm	77 mm	68 mm
	Vent	77 mm	86 mm	72.5 mm
Rebate height		25 mm	25 mm	18.5 mm
Glass thickness		up to 53 mm	up to 53 mm	up to 48 mm
Glazing method		dry glazing with EPDM or neutral silicones		
Thermal insulation		32 mm omega and/or hollow chamber-shaped fibreglass reinforced polyamide strips		
High Insulation variant (HI)		Available	Available	Not available
High Insulation Plus variant (HI+)		Available	Not available	Not available

Performances

Energy												
	Thermal insulation[1] EN 10077-2	Uf-value down to 1.2 W/m²K depending on the frame/vent combination and the glass thickness										
Comfort												
	Acoustic performance[2] EN ISO 140-3; EN ISO 717-1	Rw (C; Ctr) = 36 (-1; -4) dB / 42 (-2; -4) dB, depending on glazing type										
	Air-tightness, max. test pressure[3] EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)			3 (600 Pa)			4 (600 Pa)		
	Water-tightness[4] EN 1027; EN 12208	1A (0 Pa)	2A (50 Pa)	3A (100 Pa)	4A (150 Pa)	5A (200 Pa)	6A (250 Pa)	7A (300 Pa)	8A (450 Pa)	9A (600 Pa)	E900 (900 Pa)	
	Wind load resistance, max. test pressure[5] EN 12211; EN 12210	1 (400 Pa)		2 (800 Pa)		3 (1200 Pa)		4 (1600 Pa)		5 (2000 Pa)	Exxx (>2000 Pa)	
	Wind load resistance to frame deflection[5] EN 12211; EN 12210	A (≤ 1/150 Pa)				B (≤ 1/200 Pa)				C (≤ 1/300 Pa)		
Safety												
	Burglar resistance[6] ENV 1627 - ENV 1630, UK SBD PASS	RC 1				RC 2				RC 3		

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

(1) The Uf-value measures the heat flow. The lower the Uf-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 wind force. 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.
(7) The performance is defined by directly exposing the construction to fire in order to determine the stability, thermal insulation and radiation insulation over a certain amount of time.
(8) The bullet resistance of the window or door is evaluated for different classes of weapons and ammunition: hand guns, (automatic) rifles and shot guns.

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REYNAERS aluminium

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