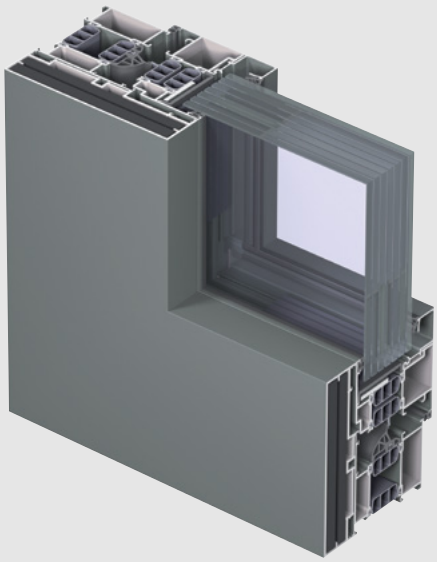
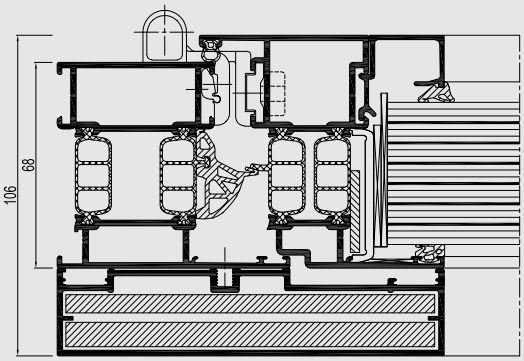
CS 77-BP

Bulletproof

REYNAERS aluminium





CS 77-BP is an extension of CS 77 which enables the realization of bullet-proof windows and doors according to the most severe European standards.

CS 77-BP

TECHNICAL CHARACTERISTICS

Min. visible width inward opening window	Frame	128 mm
	Vent	not visible
Min. visible width inward opening flush door	Frame	77 mm
	Vent	77 mm
Min. visible width outward opening flush door	Frame	77 mm
	Vent	102 mm
Min. visible width T-profile		102 mm
Overall system depth window	Frame	97 mm
	Vent	77 mm
Overall system depth flush door	Frame	97 mm
	Vent	97 mm
Rebate height		25 mm
Glass thickness		up to 63 mm
Glazing method		dry glazing with EPDM or neutral silicones
Thermal insulation		32 mm fibreglass reinforced hollow chamber polyamide strips

PERFORMANCES

	ENERGY										
	Thermal insulation (1) EN ISO 10077-2	Uf-value between 1.6 W/m²K and 2.6 W/m²K, depending on the frame/vent combination									
	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)				B (≤ 1/200)			C (≤ 1/300)		
	SAFETY										
	Burglar resistance (6) ENV 1627 – ENV 1630	WK 1				WK 2			WK 3		

This table shows possible classes and values of performances. The values indicated in red 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 static and dynamic loads, as well as by simulated attempts to break in using specified tools.