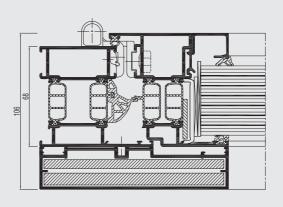


**CS 77-BP** 

Windows & Doors







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.

# **TECHNICAL CHARACTERISTICS**



	The state of the s					
Min. visible width inward opening window						
Frame	128 mm					
Vent	0 mm					
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**

Uf-value between 1.94 W/m<sup>2</sup>K and 2.6 W/m<sup>2</sup>K, Thermal Insulation (1) EN 10077-2 depending on the frame/vent combination

### COMFORT

Acoustic performance <sup>(2)</sup> 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 F	2 (300 Pa)		3 (600 Pa)		4 (600 Pa)			
Water tightness <sup>(4)</sup> EN 1027; EN 12208	1A (0 Pa)	2A (50 Pa)	3 A (100 Pa)	4A (150 Pa)	5A (200 Pa)	6A (250 Pa)	7 A (300 Pa)	8 <i>A</i> (450		9A (600 Pa)	E (900 Pa)
Wind load resistance, max. test pressure (5) EN 12211; EN 12210	1 (400	Pa)	2 (800 Pa)	(1	3 200 Pa)	4 (1600	Pa)	(200		_	Exxx 000 Pa)
Wind load resistance to frame deflection <sup>(5)</sup> EN 12211; EN 12210	A (£1/150)			B (\$1/200)			C (\$1/300)				

#### SAFETY

ENV 1627 - ENV 1630	Burglar resistance <sup>(6)</sup> ENV 1627 - ENV 1630	WK 1	WK 2	WK 3
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 $This \ table \ shows \ possible \ classes \ and \ values \ of \ performances. \ The \ values \ indicated \ in \ red \ are \ the \ ones \ relevant \ to \ this \ system.$ 

- (1) The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the frame.

- The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame.
  The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame.
  The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
  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.
  The burglar resistance is tested by statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.

