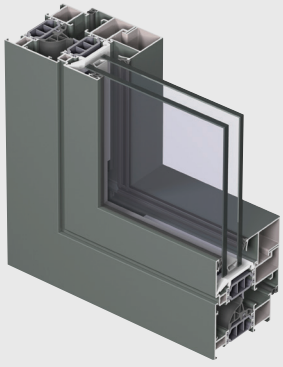
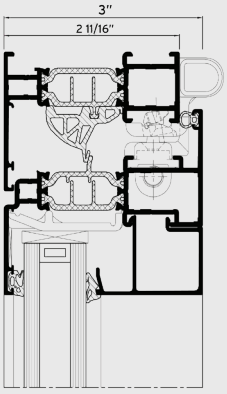
Architect: Speech
Photo: Ivanov

CONCEPT SYSTEM 77

Optimized safety and comfort

Reynaers Aluminium



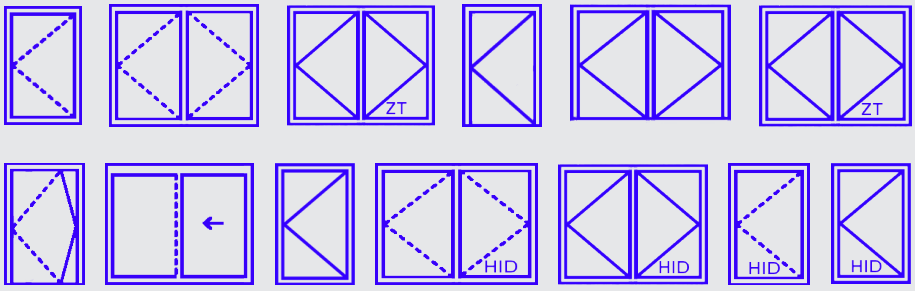


Concept System® 77 is a high-insulation window and door system that meets elevated requirements regarding thermal insulation, stability, and security. CS 77 is available in a variety of aesthetic styles to match the current trends while offering all types of inward and outward opening windows and doors. An additional asset is the possibility to combine this system with Ventalis®. The system's performance regarding acoustics, water-, and air-tightness meets the highest of standards.

MIAMI-DADE COUNTY

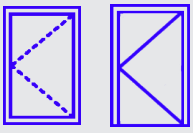
CS 77 FUNCTIONAL DOORS

The standard flush door range is available in all inward and outward opening types with a wide range of door locks to meet every kind of locking demand. Specially designed insulation strips are used to ensure the tightness of the door. Moreover, CS 77 flush doors are offered with different threshold solutions to perfectly match all comfort and aesthetic requirements.



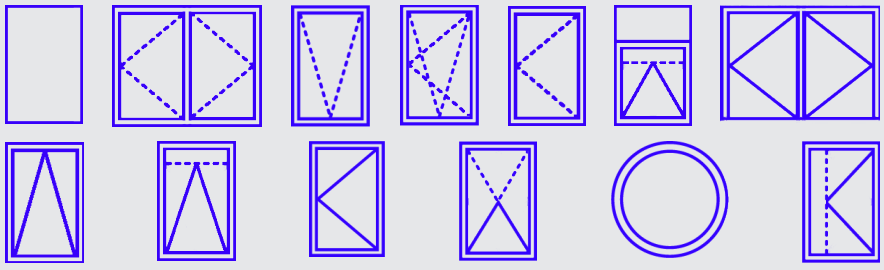
CS 77 PANEL DOORS

The CS 77 panel doors offer panels that are flush with the frame on the interior as well as the exterior side of the door. There is the possibility to include spy windows and a range of ergonomic solutions such as finger scanners, e-keys, and motorized locks. With the excellent thermal and weather performances, these specifications make the panel doors the ideal solution for entrance doors.



CS 77 FUNCTIONAL AND HIDDEN VENT WINDOWS

The CS 77 window system includes the most generous range of solutions for all types of inward and outward opening windows. Combination possibilities with CS 77 doors, CP 130 sliding systems, and Ventalis® ventilation units, makes CS 77 extremely suitable for all types of building concepts, even with the highest safety requirements. The Functional design offers a clean and minimalistic look that is suitable for all architectural styles. The Hidden Vent style is achieved by the vents being covered by the outer frames and transoms, which allows for a concealed install of the window elements behind the window reveal.




Architect: Stramien
Photo: Brauwer


Architect: Design Partnership
Photo: Beneze

Hurricane Impact Windows

To help protect your building from debris and strong winds in hurricane-prone regions, CS 77 windows meet Miami Dade NOA and Florida Building Code with a DP65, HVHZ, and Missile Type D Zone 4 rating. The fixed (18-1226.01), outswing casement (18-1226.02), and tilt-and-turn inswing casement (20-0410.06) windows all meet the Miami Dade NOA. Both the fixed (FL28671-R1) and casement (FL28672-R1) windows meet the Florida Building Code.

MIAMI-DADE COUNTY

TECHNICAL CHARACTERISTICS

			
Style variants		FUNCTIONAL	HIDDEN VENT
Min. visible width inward opening window	Frame	2 3/16"	3"
	Vent	1 5/16"	not visible
Min. visible width outward opening window	Frame	11/16"	-
	Vent	3"	-
Min. visible width inward opening flush door	Frame	2 11/16"	-
	Vent	3"	-
Min. visible width outward opening flush door	Frame	1 5/8"	-
	Vent	4"	-
Min. visible width T-profile		3"	4 15/16
Overall system depth window	Frame	2 11/16"	2 11/16"
	Vent	3 1/16"	2 7/8"
Rebate height		1"	3/4"
Glass thickness		up to 2 1/16"	up to 1 7/8"
Glazing method		dry glazing with EPDM or neutral silicones	
Thermal insulation		1 1/4" omega and/or hollow chamber -shaped fibreglass reinforced polyamide strips	
High Insulation variant (HI)		Available	Not Available
High Insulation Plus variant (HI+)		Available	Not Available

PERFORMANCE SPECIFICATIONS (1)			FIXED		OPERABLE		SWING DOOR		TERRACE DOOR	
	ENERGY									
	Thermal Insulation (2) (Btu/hr·ft²·°F) per NFRC 102		Double	Triple	Double	Triple	Double	Triple	Double	Triple
		Fixed – Uw	0.24	0.17						
		Fixed – SHGC	0.20	0.15						
		Open in – Uw			0.26	0.20	0.3	0.25	0.3	0.24
		Open in – SHGC			0.16	0.12	0.16	0.12	0.16	0.12
		Open out – Uw			0.34	0.27	0.35	0.29	0.31	0.25
		Open out – SHGC			0.17	0.13	0.16	0.12	0.16	0.12
	COMFORT									
	Acoustic performance(3) ASTM E90-09/1332	STC	43		42		39		40	
		OITC	34		35		36		36	
	Air tightness, max. test pressure(4) (cfm/ft²)		0.04		0.04		0.02		0.27	
	Water tightness(5) (psf)		12.11		15		2.92		9.4	
	AAMA Rating AAMA/WDMA/CSA 101/I.S.2/A440, NAFS		AW PG120		CW PG 100 DAW AW PG 100 C		R PG15		CW PG50	
	TAS 202/203-94 TAS 201		DP +/-65 psf Large Missile Impact				-			

This table shows classes and values of performances, which can be achieved for specific configurations and opening types.

(1) All results based on gateway sizes; vary depending on glass/profile combinations | Above Uw & SHGC values do not necessarily work in combination.
(2) Uw is the measure of heat transfer through the fenestration product with glass. The lower the Uw, the better the thermal insulation of the element.
(3) The sound reduction index measures the capacity of the sound reduction performance of the frame and glass.
(4) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
(5) Water tightness testing applies a specified air pressure differential while simultaneously spraying water on to the ext. face of the assembly at the rate of 5 gal/hr/ft².

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