ALTITUDE ALUMINIUM
world leading aluminium windows and doors

PERFORMANCES							
	Energy						
	Thermal insulation [1] EN 13947	Uf value down to 0,8 W/m+K, depending on the profile combination					
	Comfort						
	Acoustic performance [2] EN ISO 10140-2; EN ISO 717-1	RW (C;Ctr) = 33 (-1; -3) dB / 60 (-2; -6) dB, depending on glazing or panel type					
	Air tightness [3] EN 12153, EN 12152	A1 (150 Pa)	A2 (300 Pa)	A3 (450 Pa)	A4 (600 Pa)	AE 1200 (1200 Pa)	
	Water tightness [4] EN 12155, EN 12154	R4 (150 Pa)	R5 (300 Pa)	R6 (450 Pa)	R7 (600 Pa)	RE 1200 (1200 Pa)	
	Wind load resistance, max. test pressure [5] EN 12179, EN 13116	2000 Pa					
	Resistance against impact EN 12600, EN 14019	I3/E5			I5/E5		
	Safety						
	Fire Resistance [6] EN 1364-3, EN 13501-2	EI 15	EW 30	EI 30	E 60	EW 60	EI 60
	Burglar Resistance [7] EN 1627 - EN 1630	WK1 / RC1		WK2 / RC2		WK3 / RC3	

This table shows classes and values of performances, which can be achieved for specific configurations and opening types.
(1) The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the curtain wall.
(2) The sound reduction index (Rw) measures the capacity of the sound reduction performance of the curtain wall.
(3) The air tightness test measures the volume of air that would pass through a curtain wall at a certain air pressure.
(4) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the curtain wall.
(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.
(6) The fire resistance is defined by exposing the curtain wall to direct fire in order to determine the stability, thermal insulation and radiation insulation over a certain amount of time.
(7) The burglar resistance is tested by static and dynamic loads, as well as by stimulated attempts to break in using specific tools. This variant requires specific burglar resistance accessories and processing techniques.

Altitude Aluminium offer a wide range of Aluminium products for todays Grand Design Projects including:

Aluminium Windows • Sliding Doors • Folding/Bifolding Doors • Curtain Walling
Balconies • Balustrades • Structural Glazing • Rooflights

Altitude Aluminium • Access House • Aviation Park • Flint Road • Chester • CH4 0GZ
T 0800 2888 066 **E** quote@altitudealuminium.co.uk
www.altitudealuminium.co.uk

ALTITUDE ALUMINIUM
world leading aluminium windows and doors

CW 50

Curtain Wall 50 is a façade system that offers unlimited design freedom and allows maximum transparency. Innovative solutions contribute towards the tendency of big, heavy and high insulated glass panes. CW 50 supports up to 150, 310 and even 450 kg in various glass support configurations.

The system is available in several design and glazing variants, but also includes different technical variants to comply with specified levels of thermal insulation. The design variants offer solutions for both the exterior and the interior of the building. This system is perfect for bigger openings within a building and can incorporate, opening windows, single doors, sliding or folding doors or expansive areas of fixed glazing.

CW 50

Maximum natural light

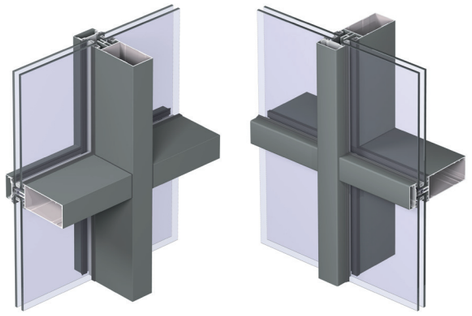
The extensive range of CW 50 profiles meets all requirements of contemporary architecture. With regard to the thermal performance, the system offers solutions in different levels, allowing the use of triple glazing and making the system even applicable for passive house or low energy buildings.

In addition to that, dedicated opening types can also be seamlessly integrated:

Description opening types*:

1. Top Hung Window – THW:

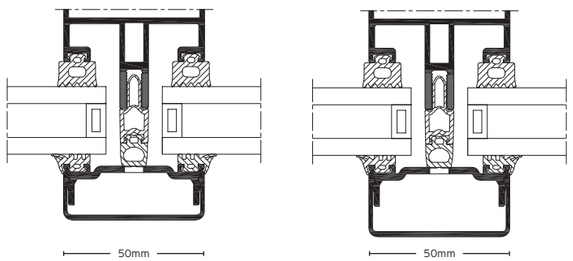
The Top Hung Window allows integrating opening elements with large opening spans, which can be operated manually or automatically. The design choice between the solution with glazing bead or structural silicone glazing (SSG) characterises the total appearance of the façade. This THW can be integrated in the overall strategy of the building's Smoke & Heat Exhaust Ventilation Systems (SHEVS).



2. Parallel Opening Window – POW:

The opening concept, Parallel Opening Window, allows an ultimate airflow for small or tall windows. This results in a better natural ventilation, improving the indoor air quality, thermal comfort and healthy indoor climate for building users. Aesthetically, this parallel way of opening gives a uniform impression: the reflection of the building remains the same for opened or closed vents. An additional advantage of this opening type is that it realises ventilation without creating unwanted access to the building (e.g. night ventilation). Furthermore, the POW can be used for big opening elements, operated both manually or automatically, and is suited to be integrated in Smoke & Heat Exhaust Ventilation Systems. The glazing of the window can be done with glazing beads or with structural silicone glazing (SSG).

Various back sections to suit all applications

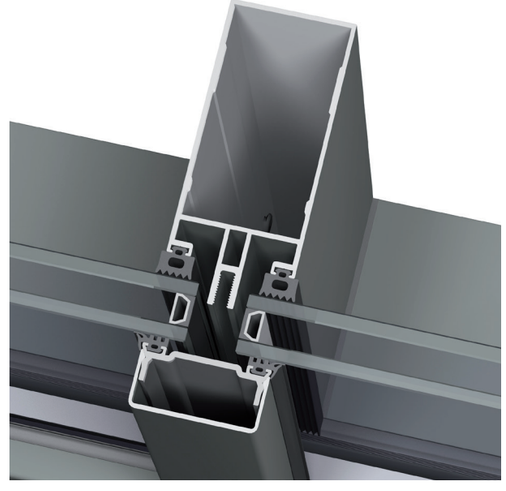


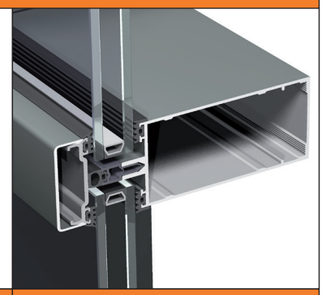
3. Hidden vent turn and tilt window - HV-TUTI:

A special type of Inward Opening Window, also known as the hidden vent, is a structural silicone glazing solution which can be applied in a standard curtain wall façade or in a structurally clamped façade. It's main advantage is that the exterior doesn't differ from a fixed glazing panel in the façade. Therefore it doesn't affect the façade geometry. From the inside, this system uses a half mullion, resulting in a minimal visible width. Water tightness is assured by the use of a central gasket.

4. Integration of Reynaers window and door systems

Several aesthetical connection profiles allow a concealed integration of other Reynaers window and door systems.



TECHNICAL CHARACTERISTICS	
Style variants	**CW 50**
	functional
Interior visible width	50 mm
Exterior visible width	50 mm
Depth mullions	from 42 mm to 300 mm
Depth transoms	from 5 mm to 193 mm
Inertia mullions (Ix: wind load)	min 14 cm^4 to max 2690 cm^4
Inertia transoms (Ix: wind load)	min 4 cm^4 to max 552 cm^4
Inertia transoms (Iy: glass load)	min 8 cm^4 to max 57 cm^4
Exterior face caps	different shapes available
Glazing	fixing by pressure plates
Rebate height	20 mm
Glass thickness	from 6 mm to 62 mm
Opening types (see: description)*	1 - 2 - 3 - 4 - 5
Roof application	yes