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MASTERLINE 8

R
REYNAERS
aluminium



MasterLine 8 is a unique windows and doors system that combines countless design possibilities with first in class performance and production speed.

This system gives you a wide design range, to perfectly fit any architectural style, while at the same time offering the ultimate performance regarding thermal insulation and air- and water tightness, with a limited building-in depth of 87 mm.

This new generation of innovative window solutions mirrors the current architectural trend towards maximising daylight while offering ultimate insulation levels.

ENERGY EFFICIENCY MADE TO MEASURE

MasterLine 8 features 3 different levels of insulation, offering solutions for high insulated, low energy and even passive houses. These different levels of insulation are achieved by the integration of new and clever materials.

For the High Insulation+ variant, innovative insulation bars are incorporated, which use a low-emission foil and thus improve the insulation value by reflecting and retaining heat.



$U_f = 1.9 \text{ W/m}^2\text{K}^{(*)}$



$U_f = 1.5 \text{ W/m}^2\text{K}^{(*)}$



$U_f = 1.2 \text{ W/m}^2\text{K}^{(*)}$

(*) for frame vent section of 119mm

DESIGN MADE TO MEASURE

The unique MasterLine 8 concept offers 4 design variants, each with their own distinct look and feel, which make MasterLine 8 suitable for any architectural style. Moreover, MasterLine 8 offers new opening options for vents of different sizes, such as single and double balcony doors with minimal thresholds for both inward and outward opening elements. Needless to say, MasterLine 8 can easily be integrated with other Reynaers systems, such as CP 130 and CP 155 sliding systems, the new glass balustrade, the Mosquito system, and curtain wall system CW 50.

FUNCTIONAL



RENAISSANCE



BALCONY DOOR



DECO



HIDDEN VENT









COMFORT MADE TO MEASURE

AIR- WIND- WATER TIGHTNESS

MasterLine 8 allows for a water tightness of 900Pa, reduced air loss at 600Pa air pressure, and excellent sealing properties. These ultimate performances are achieved by the overall concept and the increased overlap of the central gasket, offering a guaranteed performance.

HIGH STABILITY

Next to these performances, MasterLine 8 is perfectly suited to create large vents, using narrow yet strong profiles. As a result, the window system allows for plenty of daylight, thereby meeting the needs of architects.

ENERGY											
	Thermal Insulation ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.0 W/m ² K 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) = 45 (-1;-4) dB, 50(-1;-2), depending on glazing and opening type									
	Air tightness, max. test pressure ⁽³⁾ EN 1026; EN 12207	1 (150 Pa)	2 (300 Pa)	3 (600 Pa)	4 (600 Pa)	4+ ⁽⁴⁾ (600 Pa)					
	Water tightness ⁽⁵⁾ 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)	E1200 (1200 Pa)
	Wind load resistance, max. test pressure ⁽⁶⁾ 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 ⁽⁶⁾ EN 12211; EN 12210	A (≤ 1/150)		B (≤ 1/200)		C (≤ 1/300)					
SAFETY											
	Burglar Resistance ⁽⁷⁾ EN 1627 - 1630	RC 1		RC 2			RC 3				

This table shows possible classes and values of performances. The values indicated in orange 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) Non official class, Reduced Air Permeability @ 600Pa, with reduced loss of 1.2 m³/(hm²) or 0.3 m³/(hm²)
- (5) The water tightness test involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (6) 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.
- (7) The burglar resistance is tested by statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.

MASTERLINE 8 VENTILATION VENT

Optimal flow of fresh air is possible through the use of the unique solution for ventilation vents. These vents are limited in width to offer a breath of fresh air while ensuring full safety. The solution delivers both excellent water tightness and high insulation (Uf-Uw value of 1,1 W/m²K). Simple millings and adjustable end pieces ensure easy production and installation.

The ventilation vents can be used with visible or invisible hinges.



TECHNICAL CHARACTERISTICS		FUNCTIONAL	RENAISSANCE	DECO	HIDDEN VENT
Min. visible width inward opening window	Frame	53 mm			80 mm
	Vent	37 mm			-
Min. visible width outward opening window	Frame	21 mm			n.a.
	Vent	113 mm			n.a.
Min. visible width inward opening window-door	Frame	60 mm			n.a.
	Vent	67 mm			n.a.
Min. visible width outward opening window-door	Frame	21 mm			n.a.
	Vent	113 mm			n.a.
Min. visible width T-profile		80 mm			107 mm
Overall system depth window	Frame	77 mm	87 mm	87 mm	77 mm
	Vent	87 mm			80 mm
Rebate height		27 mm			
Glass thickness	Frame	up to 62 mm			
	Vent	up to 72 mm	up to 62 mm	up to 62 mm	up to 57 mm
Glazing method		dry glazing with EPDM or neutral silicones			
Thermal break		omega-shaped glass fibre reinforced polyamide strips. HI+ version: glass fibre reinforced noryl strips. 40 or 37.8 mm depending on profile.			



Architect: CMC Architects



Architect: Bedaux de Brouwer Architecten BV



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TOGETHER FOR BETTER