



Architect: Crahay & Jamaigne

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 and door solutions mirrors the current architectural trend towards maximising daylight while offering ultimate insulation levels. MasterLine 8 panel doors even come with passive house certification.

ENERGY EFFICIENCY MADE TO MEASURE

MasterLine 8 windows feature 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.



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



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



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

The new MasterLine 8 panel door boasts excellent insulation values, and was awarded passive house certification by the renowned Passive House Institute.



$U_f = 2.2 \text{ W/m}^2\text{K}^{(*)}$



$U_f = 1.4 \text{ W/m}^2\text{K}^{(*)}$



$U_f = 0.87 \text{ W/m}^2\text{K}^{(*)}$

(*) 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 boasts 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. MasterLine 8 contains a wide range of highly insulated and robust flush panel doors, which meet the modern requirements for comfort and allow the creation of large entrance doors.

Needless to say, MasterLine 8 can easily be integrated with other Reynaers systems, such as CP 130 and CP 155 sliding systems, the RB glass balustrade, the Mosquito system, and curtain wall system CW 50.

FUNCTIONAL



RENAISSANCE



BALCONY DOOR



DECO



HIDDEN VENT



PANEL DOOR



COMFORT MADE TO MEASURE

AIR- WIND- WATER TIGHTNESS

MasterLine 8 windows and doors allow 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 in the windows, 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 and door system allows for plenty of daylight, thereby meeting the needs of architects.

SAFETY MADE TO MEASURE


MasterLine 8 windows ensure your safety as they comply to burglar resistance class RC2 or RC3. Reynaers offers a wide range of compatible handles, locks and hinges to further ensure your safety and comfort.

Masterline 8 offers a wide range of highly insulated and robust flush doors, which meet the modern requirements with regard to safety, thermal insulation and stability, allowing the creation of large entrance doors. MasterLine doors are available as inward and outward opening glass- or panel doors. All the doors can be fitted with a wide range of locks and hinges. The MasterLine doors are designed with the modern criteria for air tightness and thermal performances in mind and meet with burglar resistance class RC2 and RC3. MasterLine 8 also offers single or double panic doors and Anti-Fingertrap doors.





TECHNICAL CHARACTERISTICS		WINDOWS				DOORS	
		FUNCTIONAL	RENAISSANCE	DECO	HIDDEN VENT	WINDOW DOORS	FLUSH DOORS
Min. visible width inward opening window or door	Frame	53 mm			80 mm	60 mm	68.5 mm
	Vent	37 mm			-	67 mm	78.5 mm
Min. visible width outward opening window or door	Frame	21 mm			n.a.	21 mm	42.5 mm
	Vent	113 mm			n.a.	113 mm	104.5 mm
Min. visible width T-profile		80 mm			107 mm	80 mm	80 mm
Overall system depth window or door	Frame	77 mm	87 mm	87 mm	77 mm	77 mm	77 mm
	Vent	87 mm			77 mm	80 mm	77 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	up to 72 mm	up to 62 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.					32 mm

PERFORMANCES


ENERGY

	Thermal Insulation windows ⁽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.
	Thermal Insulation doors ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.4 W/m ² K depending on the frame/vent combination and the glass thickness.

COMFORT

	Acoustic performance windows ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw(C;Ctr) = 45 (-1;-4) dB, Hidden Vent: Rw(C;Ctr) = 49 (-1;-5) dB, depending on glazing and opening type									
	Acoustic performance doors ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw(C;Ctr) = 43 (-1;-4) dB, depending on glazing and opening type									
	Air tightness windows & doors, max. test pressure ⁽³⁾ EN 1026; EN 12207	1 (150 Pa)	2 (300 Pa)	3 (600 Pa)	4 (600 Pa)						
	Water tightness windows ⁽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)	E1200 (1200 Pa)
	Water tightness doors ⁽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)	E1200 (1200 Pa)
	Wind load resistance windows, max. test pressure ⁽⁵⁾ EN 12211; EN 12210	1 (400 Pa)	2 (800 Pa)	3 (1200 Pa)	4 (1600 Pa)	5 (2000 Pa)	E _{xxx} (> 2000 Pa)				
	Wind load resistance windows to frame deflection ⁽⁵⁾ EN 12211; EN 12210	A (≤ 1/150)			B (≤ 1/200)			C (≤ 1/300)			
	Wind load resistance doors, max. test pressure ⁽⁵⁾ EN 12211; EN 12210	1 (400 Pa)	2 (800 Pa)	3 (1200 Pa)	4 (1600 Pa)	5 (2000 Pa)	E _{xxx} (> 2000 Pa)				
	Wind load resistance doors to frame deflection ⁽⁵⁾ EN 12211; EN 12210	A (≤ 1/150)			B (≤ 1/200)			C (≤ 1/300)			

SAFETY

	Burglar Resistance ⁽⁶⁾ EN 1627 - 1630	RC 1	RC 2	RC 3
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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) The water tightness test 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 statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.



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TOGETHER FOR BETTER

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