



MasterLine 8  
Windows  
and Doors

**MASTER**LINE

**R**

Reynaers  
Aluminium

**Together for better**

[www.reynaers.co.uk](http://www.reynaers.co.uk)

## Endless possibilities, incredible performance

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

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 system depth of 77mm.

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

MasterLine 8 windows feature 3 different levels of insulation, offering solutions for high insulated, low energy and even passive house.

These different levels of insulation are achieved by the integration of new and clever materials.

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

### STANDARD



Uf = 1.9 W/m<sup>2</sup>K (\*)

### HI



Uf = 1.5 W/m<sup>2</sup>K (\*)

### HI+



Uf = 1.2 W/m<sup>2</sup>K (\*)

## Built for comfort

### Air, Wind & Water Tightness

MasterLine 8 windows and doors allow for a water tightness of 450Pa, 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.

### Ventilation Vent

MasterLine 8 ventilation vents are available on 2 different levels of insulation for high insulated, low energy and even passive houses. These ventilation vents exist in 2 widths for optimal fresh air access: 185mm and 250mm. The vents are optimised for easy installation and aesthetics as the end pieces are adjustable for perfect fit and paintable to match the colour of the profiles.

## Safety

MasterLine 8 windows and doors ensure your safety as they comply to burglar resistance Pas 24 2016.

Reynaers Aluminium offers a wide range of compatible handles, locks and hinges to ensure your safety and comfort. To further enhance safety, MasterLine 8 is compatible

with RB Glass: the add-on glass balustrade for larger window areas in high rise buildings. Even without balconies, RB Glass ensures you can safely open your windows and enjoy an unobstructed view.

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	20 mm		n.a.	20 mm	42.5 mm
	Vent	118 mm		n.a.	118 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
	Vent	87 mm		77 mm	87 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 57/65* mm	up to 72 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

(\*) inside beaded version

## Energy efficiency

MasterLine 8 doors are available in 2 levels of insulation for balcony and flush doors. For projects where extreme insulation is required, our MasterLine 8 range offers a panel

door with excellent insulation values, that was awarded passive house certification by the renowned Passive House Institute.



### HI



Uf = 2.2 W/m<sup>2</sup>K

### HI+



Uf = 1.4 W/m<sup>2</sup>K

### Passive Door



Uf = 1.2 W/m<sup>2</sup>K (\*)

## Design

MasterLine 8 doors offer a wide range of highly insulated and robust flush doors, which meet the modern requirements with regard to safety, thermal insulation and stability (class 8). This allows for the creation of entrance doors with large dimensions and weights up

to 250kg. MasterLine 8 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, and new balustrade arrangements are available.



Panel Door



Balcony Door

## Design

The unique MasterLine 8 windows concept offers up to 4 design variants, each with their own distinct look and feel, which make MasterLine 8 suitable for any architectural style.

Needless to say, MasterLine 8 can easily be integrated with other Reynaers Aluminium systems, such as CP 130 and CP 155

sliding systems, our new glass balustrade arrangements, the Mosquito system, and curtain wall system CW 50.

The unique concept makes it possible to combine an extensive range of window opening types, design variants, and different levels of thermal insulation.

### Functional



The straightforward design of the MasterLine 8 Functional variant is beautiful in its simplicity, and is suitable for both modern and contemporary buildings.

### Renaissance



The MasterLine 8 Renaissance windows have been redesigned, more true to the traditional ogee detailing in heritage windows. The sash is recessed to the frame on the exterior side and the detailing is more refined.

### Deco



MasterLine 8 Deco windows offer a modern, unique design that stands out and gives a contemporary feel. The sash is recessed to the frame on the exterior side and the sloped detailing brings a fine palette of reflections and shading.

### Hidden Vent



For a modern minimalistic appearance MasterLine 8 offers the Hidden Vent system. With Hidden Vent profiles the vents are covered by the outer frames and transoms, which allows for a concealed install of the opening elements behind the window reveal.

# Design

## Energy



Thermal Insulation windows<sup>(1)</sup>  
EN ISO 10077-2

Uf-value down to 1.0 W/m<sup>2</sup>K depending on the frame/vent combination and the glass thickness.

Thermal Insulation doors<sup>(1)</sup>  
EN ISO 10077-2

Uf-value down to 1.4 W/m<sup>2</sup>K depending on the frame/vent combination and the glass thickness.

## Comfort



Acoustic performance windows<sup>(2)</sup>  
EN ISO 140-3; EN ISO 717-1

Rw(C;Ctr) = 46 (-1;-3) dB, Hidden Vent: Rw(C;Ctr) = 49 (-1;-5) dB, depending on glazing and opening type

Acoustic performance doors<sup>(2)</sup>  
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<sup>(3)</sup>  
EN 1026; EN 12207

1  
(150 Pa)

2  
(300 Pa)

3  
(600 Pa)

4  
(600 Pa)



Water tightness windows<sup>(4)</sup>  
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<sup>(4)</sup>  
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<sup>(5)</sup>  
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 windows  
to frame deflection<sup>(5)</sup>  
EN 12211; EN 12210

A  
(≤ 1/150)

B  
(≤ 1/200)

C  
(≤ 1/300)



Wind load resistance doors,  
max. test pressure<sup>(5)</sup>  
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 doors  
to frame deflection<sup>(5)</sup>  
EN 12211; EN 12210

A  
(≤ 1/150)

B  
(≤ 1/200)

C  
(≤ 1/300)

## Safety



Burglar Resistance<sup>(6)</sup>  
Pas 24 2016

PAS 24 2016

This table shows possible classes and values of performances. The values indicated in blue 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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