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# MASTERWALL

The window wall that reaches for the sky





MasterWall builds on the robust MasterLine 8 windows and doors platform providing exceptional weather sealing performances, fabrication efficiency, and - last but not least - design freedom. With all the profile options that the MasterWall product offers, any different expression of the façade is possible with the standard product: punched openings, horizontal or vertical accentuation, or hybrid walls.

Reynaers Aluminium

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# WINDOW WALLS ARE ALREADY KNOWN FOR THEIR VERSATILITY AND EFFICIENCY, BUT MASTERWALL OFFERS MORE...

The scarcity of skilled labor and lack of space in dense urban environments calls for a renewed approach to fabricating and installing building envelop components. With the Reynaers Aluminium MasterWall system, you are ensured of a solution for high-rise projects with performances ready for today and tomorrow that can be both produced and installed effectively and efficiently.

## **PROVEN HIGH PERFORMANCE AND DESIGN FREEDOM**

Fabrication and installation efficiency are probably the most important advantages of a window wall; however, MasterWall goes beyond that because we based it on our high performing windows & doors system MasterLine 8. They are designed to fit together perfectly. A wide variety of opening types can be chosen from the portfolio, including in- and outside opening elements, balcony doors, and hidden vents. Next to the window and door opening types, the system is also able to incorporate sliding doors.

Our MasterWall is also a chameleon when it comes to aesthetics. By default, it already enables 4 distinct architectural styles:

- punched windows
- vertical lining
- horizontal lining
- hybrid walls

The 3 small sections to the right show that even the floor slab designs are fully customizable with:

- beaded infill panels
- 1/16" sheet metal
- face-capped mullions







#### FORGIVING AND FLEXIBLE WHERE POSSIBLE

Construction sites can be rough - both figuratively and literally. Often they are like beehives with many different parties on-site, each fighting for their space to finish their job in time and according to plan. It can be challenging to add the joinery to the building. MasterWall enables you to manage all of this with a 2-step approach: the first steps are the pre-frames that can handle the larger tolerances of the structural work, the second steps are the infill elements that are made to fit the pre-frames.

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The pre-frame profile design gives an additional margin to address the building's live load up. The infills can be made to fit the pre-frames with more narrow tolerances. This precise work can be completed in the comfort of the workshop: meaning all the tools and manpower are readily available, and fabrication, transport, and installation can all be organized to suit your schedule.





### **TECHNICAL CHARACTERISTICS**

Visible width interior	2 15/16"	
Visible width exterior	2 15/16"	
Max. intertia mullions (Ix: wind load)	514 cm <sup>4</sup>	
Min. intertia transoms (lx: wind load)	225 cm <sup>4</sup>	
Max. height vent	145 11/16"	
Max. width vent	106 5/16"	
Min. glass thickness	1/2"	
Max. glass thickness	2 1/2"	
Glazing method	Dry glazing with EPDM or neutral silicones	

PERFORMANCE SPECIFICATIONS			MASTERWALL	
	ENERGY			
	Thermal Insulation <sup>(2)</sup> (Btu/hr-ft <sup>2,o</sup> F) per NFRC 102	Glazing	Double	Triple
		Uw	0.23	0.16
		SHGC		-
	COMFORT			
	Acoustic performance <sup>(3)</sup> ASTM E90-09/1332	STC	50	
		ОІТС	44	
	Air tightness, max. test pressure <sup>(4)</sup> (cfm/ft <sup>2</sup> )		0.04	
	Water tightness <sup>(5)</sup> (psf)		15	
	AAMA Rating AAMA/WDMA/CSA 101/I.S.2/A440, NAFS		AW PG60	

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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/ft<sup>2</sup>.

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