

METALBILT DOORS 0.8mm STEEL ROLLER SHUTTER WINDLOADING CHART WINDLOCKED SHUTTERS

MB-WL

1-Oct-13

Door mounted internally, subjected to external wind pressure (assuming atmospheric pressure inside building).

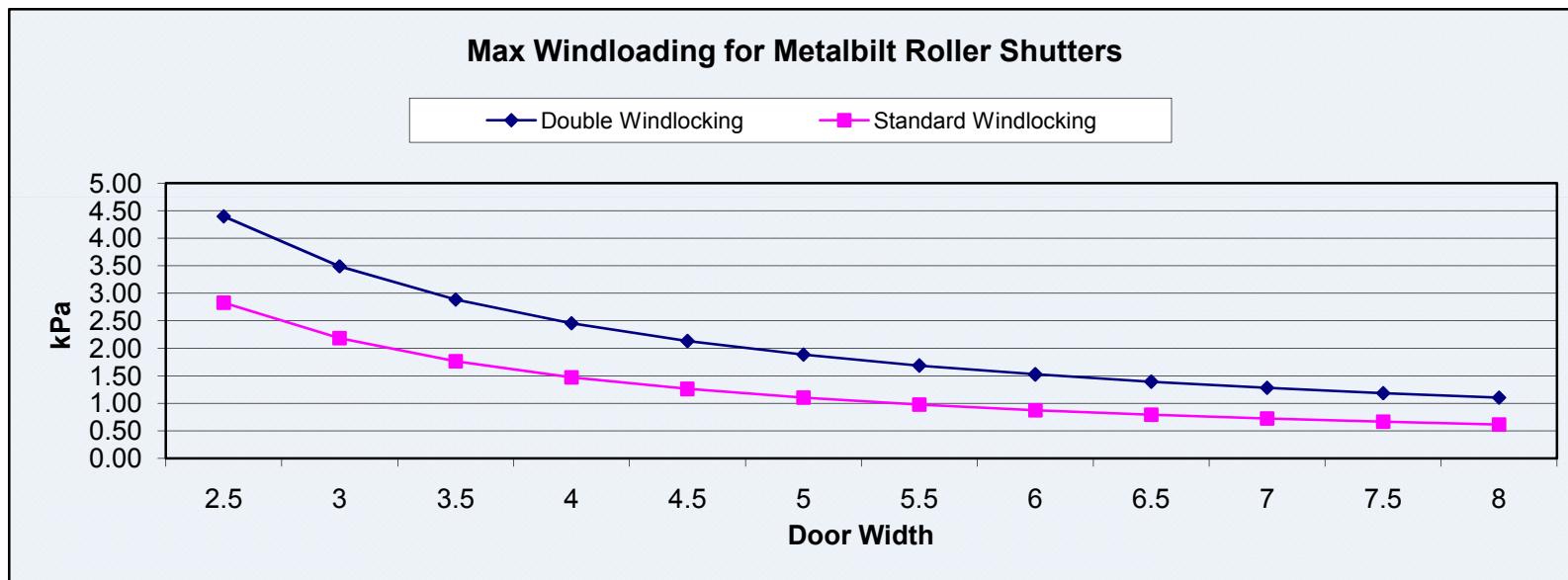
STANDARD WINDLOCKED SHUTTER

Door Width (m)	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
Ultimate Load (kPa)	2.83	2.18	1.76	1.47	1.26	1.10	0.97	0.87	0.79	0.72	0.66	0.61

DOUBLE WINDLOCKED SHUTTER - FOR INCREASED WINDLOADS

Door Width (m)	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
Ultimate Load (kPa)	4.39	3.49	2.88	2.45	2.13	1.88	1.69	1.53	1.39	1.28	1.19	1.10

NZS 3604, Table 5.4 Design Wind Pressures		
Low	0.65 kPa	32m/s
Medium	0.85 kPa	37m/s
High	1.2 kPa	44 m/s
Very High	1.55 kPa	50 m/s
Extra High	1.85 kPa	55 m/s



Wind Pressure	kPa	0.6	0.8	1	1.2	1.4	1.6	1.8	2	2.2	2.4
Equivalent Wind Speed	m/sec	32.6	36.5	40.8	44.7	48.3	51.6	54.8	57.7	60.6	63.3
Equivalent Wind Speed	km/hr	114	131	147	161	174	186	197	204	218	228

Metalbilt Doors recommends windlocking on all shutters over 5m in width. Doors under 5m in width, without windlocking, are only suitable for Low Wind Pressures.

Windloading figures derived from static load testing on windlocked slats and guides. This chart should be used as a guideline only.

Door orientation, building design, surrounding buildings and landscape can influence wind pressures on the door.

