

# Metalbilt Doors Aluminium Shutter Series 3

## WINDLOADING CHART - WINDLOCKED SHUTTERS MB-AL-WL

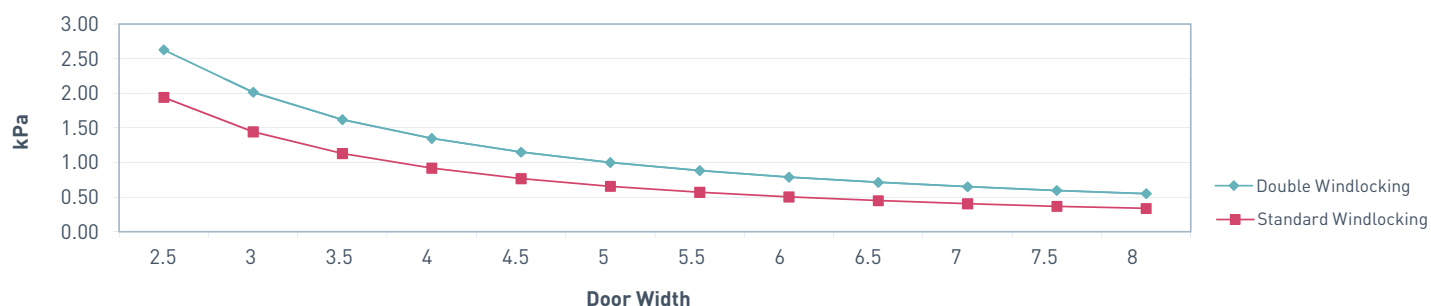
Door mounted internally, subjected to external wind pressure (assuming atmospheric pressure inside building).

STANDARD SERIES 3 SHUTTER - NO WINDLOCKS												
Door Width (m)	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
Ultimate Load (kPa)	1.18	0.82	0.60	0.46	0.36	0.29	0.24	0.20	0.17	0.15	0.13	0.11

STANDARD WINDLOCKED SHUTTER - WL EVERY 4 <sup>TH</sup> SLAT												
Door Width (m)	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
Ultimate Load (kPa)	2.32	1.77	1.42	1.18	1.00	0.87	0.76	0.68	0.61	0.56	0.51	0.47

DOUBLE WINDLOCKED SHUTTER - FOR INCREASED WINDLOADS - WL EVERY 2 <sup>ND</sup> SLAT												
Door Width (m)	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
Ultimate Load (kPa)	3.47	2.73	2.24	1.89	1.64	1.44	1.28	1.16	1.05	0.97	0.89	0.83

Max Windloading for Metalbilt Roller Shutters



WIND PRESSURE	kPa	0.2	0.4	0.6	0.8	1	1.2	1.4	1.6	1.8	2	2.2	2.4
Equivalent Wind Speed	m/sec	18.1	25.5	31.3	36.1	40.3	44.2	47.8	51.1	54.2	57.1	59.9	62.6
Equivalent Wind Speed	km/hr	65	91.9	113	130	145	159.2	172	184	195	206	216	225

### NZS 3604, TABLE 5.4 DESIGN WIND PRESSURES

Low	0.65 kPa	32m/s
Medium	0.85 kPa	37m/s
High	1.2 kPa	44m/s
Very High	1.55 kPa	50m/s
Extra High	1.85 kPa	55m/s

Metalbilt Doors recommends windlocking on all shutters over 4m in width. Doors under 4m 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.