

Report Number	RE16083 rev 1
Client	Glass Outlet
Client Contact	Mr. Richard Van Lieshout & Mr. Luke Keong
Job Description	Wind Load Assessment of EliteFence Aluminium Slat Fence Infill Screen System
Test Standard(s)	AS/NZS 1170.2-2011, AS/NZS 1170.0-2022
Engineers Certification	Noel F Straker <i>BEng, MEngSc, CPEng, RPEQ 10652</i>
Report Date	11/09/2016

Items	Quantity	Specifications
65mm x 16.5mm Slat	22 or 24	6063 T6 Profile per drawing G06516 - Blade rev 00 9 or 20mm gap between slats
Vertical Mid Rail Assembly 40mm x 13mm	1 off (2 part assembly)	6063 T5 Profiles per drawings "midrail" rev 00 and "midrail snap cover" rev 00. Fastened with 1 off screw per slat. (10-16 x 15mm self drilling wafer head screws per AS3566.1 (2002))
Side Frame Assembly 27mm x 25mm	2 off (2 part assembly)	6063 T5 Profiles per drawings "sideframe (outer)" and "side frame (inner)" Clip fit to slats Fastened top middle and bottom to U-Channel. (10-16 x 22mm self drilling wafer head screws per AS3566.1 (2002))
U-Channel 300mm x 32mm	2 off	6063 T5 Profile per drawing "U channel" rev 00. Fastened bottom middle top with minimum 3.5kN shear capacity fixtures.

Wind Load Tables		Span (mm)									
		2400	2300	2200	2100	2000	1900	1800	1700	1600	1500
S 1/50	kPa	1.22	1.38	1.57	1.79	2.06	2.39	2.80	3.31	3.95	4.78
	m/s	40.45	42.93	45.70	48.81	52.32	56.31	60.87	66.12	72.20	79.32
S 1/100	kPa	0.65	0.73	0.82	0.93	1.07	1.23	1.44	1.69	2.01	2.43
	m/s	29.45	31.16	33.07	35.22	37.66	40.43	43.61	47.27	51.53	56.52
S 1/150	kPa	0.46	0.51	0.57	0.65	0.74	0.85	0.98	1.15	1.37	1.64
	m/s	24.72	26.08	27.60	29.32	31.27	33.50	36.06	39.02	42.46	46.50
S 1/200	kPa	0.36	0.40	0.45	0.50	0.57	0.65	0.75	0.88	1.04	1.25
	m/s	21.98	23.12	24.41	25.87	27.53	29.43	31.62	34.15	37.10	40.57
S 1/250	kPa	0.30	0.33	0.37	0.42	0.47	0.54	0.62	0.72	0.85	1.01
	m/s	20.16	21.16	22.28	23.56	25.02	26.70	28.63	30.86	33.48	36.56
ULS	kPa	3.22	3.50	3.82	4.18	4.60	5.09	5.66	6.34	7.15	8.12
	m/s	65.62	68.36	71.35	74.62	78.22	82.20	86.62	91.56	97.12	103.42

Notes:

- The performance data above does not take into account the performance of supporting structures. Seek professional engineering advice for assessment of these structures.
- Pressure values expressed above in kPa are to be used the maximum design pressure for wind load only.
- Gust speeds are calculated using AS1170.2 (2011). Quoted values may be used as an acceptable ?
- m/s = metres per second.
- S 1/XXX denotes a serviceability assessment criteria of 1/XXX deflection.
- ULS denotes an Ultimate Limit State assessment criteria.

PLEASE NOTE:

This report has been commissioned as a general guide only pertaining to the wind load suitability of a Glass Outlet screening system and should be used for this limited purpose and general guidance only. It is based on a simplified analysis and an engineer's assistance should be sought for the specific project applications, certification or where any doubt exists.

The wind load suitability information presented above was generated from calculations based on test data produced in a controlled environment and pertains to the slat screen system alone. Due to consideration must be given to the substrate, fixings and other site specific factors.

As far as the law permits, Glass Outlet and the certifying engineer specifically exclude any liability and/or consequential liability as a result of reliance on this report.