



WIND PRESSURE TEST RESULTS



Sample tested: 0.35 × 0.5m

Wind pressure calculation using Bernoulli equation

$$\frac{p_1}{\rho g} + \frac{v^2}{2g} = \frac{p_2}{\rho g} + \frac{v_1^2}{2g} + h$$

- V—— Wind speed (m/s)
- P—— Fluid density (kg/m³) = 1.144kg/m³
- P—— Static pressure (Pa)
- Hw—— loss

Wind Speed	Wind Pressure The Screen Bear
V1=2m/s	P1=2.288Pa
V2=5m/s	p2=14.3Pa
V3=10m/s	p3=57.2Pa
V4=15m/s	p4=128.7Pa
V5=20m/s	p5=228.8Pa
V6=25m/s	p6=357.5Pa
V7=30m/s	P7=514.8Pa
Wind Speed	Wind Speed After The Screen Bear
V1=3m/s	V1=(0.35m/s—0.39m/s)
V2=5m/s	V1=(0.41m/s—0.45m/s)
V3=7m/s	V1=(0.42m/s—0.47m/s)
V4=10m/s	V1=(0.41m/s—0.46m/s)
V5=15m/s	V1=(0.42m/s—0.48m/s)
V6=20m/s	V1=(0.42m/s—0.46m/s)
V7=26m/s	V1=(0.43m/s—0.47m/s)

