



Project no: 25-278-M154LG

Prepared by: S Price

Checked by:

Site reference: Egerton Street Manchester, Greater Manchester, M15 4LG, UK

Calculation no:

Date: 17-03-2025

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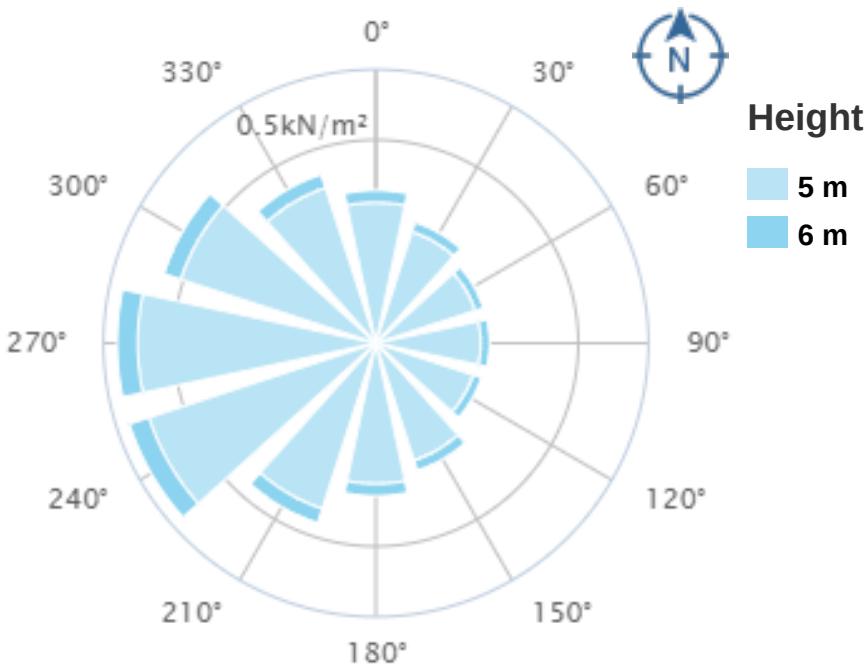
Notes

Peak velocity pressure calculation to BS EN 1991-1-4:2005+A1:2010 and UK national annex
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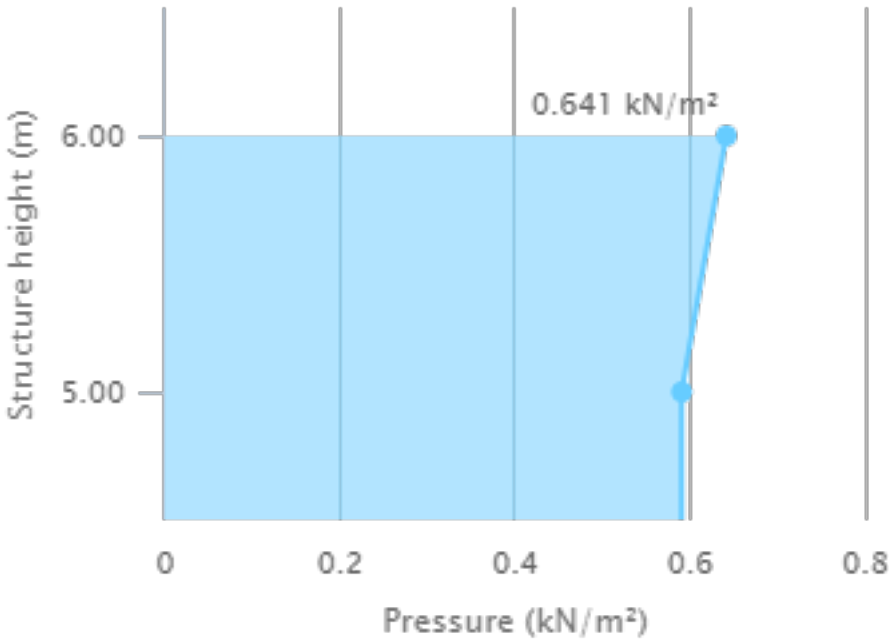
Description	Value
Site location	53.473518°N -2.259574°E
Fundamental basic wind velocity, $V_{b,map}$ (m/s)	22.7 (Figure NA.1)
Site altitude, A (m)	31
Seasonal factor is based on all year.	
Probability factor, C_{prob}	1.00 (NA.2.8)
Altitude factor, C_{alt}	1.031 (NA.2.5)
Orography	Not significant
The site is in town terrain	
Distance inside town terrain (km)	0.43
Effective height, z_e (m)	6.0 (A.5)
Exposure correction factor, $C_{e,T}$	0.92 (Figure NA.8)
Peak velocity, V_p (m/s)	32.3

Description	Value
OS grid reference	SJ 82868 97452
Structure height, h (m)	6.00
Structure orientation from North (°N)	0
Seasonal factor, C_{season}	1.00 (Table NA.2)
Directional factor, C_{dir}	1.00 (Table NA.1)
Local effects factor, K_f	1.00 (A.3(4))
Orography factor, C_o	1.000 (A.3)
Distance to shoreline (km)	30.91
Displacement height, h_{dis} (m)	0.0 (A.5)
Exposure factor, C_e	2.08 (Figure NA.7)
Zone for size factor, C_s	C (NA.8)
Peak velocity pressure, q_p (kN/m²)	0.641 (NA.2.17)

Pressure variation across compass directions



Pressure variation with height in dominant wind direction (240°)



Peak velocity pressure variation with height across all wind directions



GLOBAL CONSTRUCTION
SOFTWARE AND SERVICES

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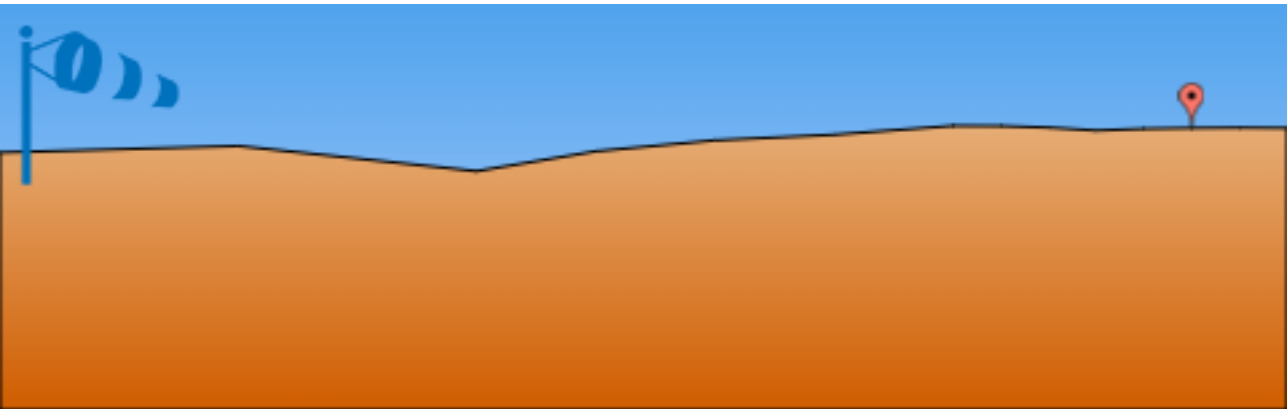
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Structure height/Direction	Peak velocity pressure (kN/m²)											
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°
5.0 m	0.346	0.288	0.258	0.259	0.253	0.304	0.346	0.428	0.590	0.589	0.507	0.402
6.0 m	0.376	0.313	0.280	0.281	0.275	0.330	0.376	0.465	0.641	0.640	0.551	0.437

Orography details in dominant wind direction (240°)



Nominally flat ground upwind of site. Orography Not significant

Orography category	Nominally Flat or Sheltered
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Site Location - Latitude: 53.473518, Longitude: -2.259574

