

nexgen 70m HighMast - BS5950/BS8100 - March 2006

1. Anchors @ 38m and 45m radius - BS5950/BS8100 analysis. Glaze ice

Maximum allowed

Radial Ice thickness mm	Wind speed @ 10m m/s	Wind speed @ 70m m/s	Inner Anchor * load kgf	Inner anchor load angle to horizontal degrees	Outer Anchor * load kgf	Outer anchor load angle to horizontal degrees	Upwind Guy #1 * Load kgf	Upwind Guy #2 * Load kgf	Upwind Guy #3 * Load kgf	Upwind Guy #4 * Load kgf	Upwind Guy #5 * Load kgf	Upwind Guy #6 * Load kgf	Upwind Guy #7 * Load kgf	Base plate * vertical load kgf
0	48.00	63.38	1766	30	3833	48	522	576	690	736	849	1072	1188	9726
5	30.50	40.27	1308	29	3441	48	394	404	526	609	746	971	1126	9971
6.35	28.00	36.97	1183	28	3241	47	372	356	470	561	700	917	1074	9841
10	24.00	31.69	1102	26	2974	47	391	344	380	464	630	864	1027	10125
12.70	20.50	27.07	1089	25	2426	46	386	378	337	370	488	704	875	9842
15	18.50	24.43	1161	26	2177	45	387	399	390	397	432	579	779	10108
20	12.00	15.85	1192	24	1872	43	418	393	398	453	465	475	485	11270
22	0.01	0.01	1109	23	1536	43	390	373	361	400	390	380	371	12088

* Note - all these loads have a 25% added safety factor applied

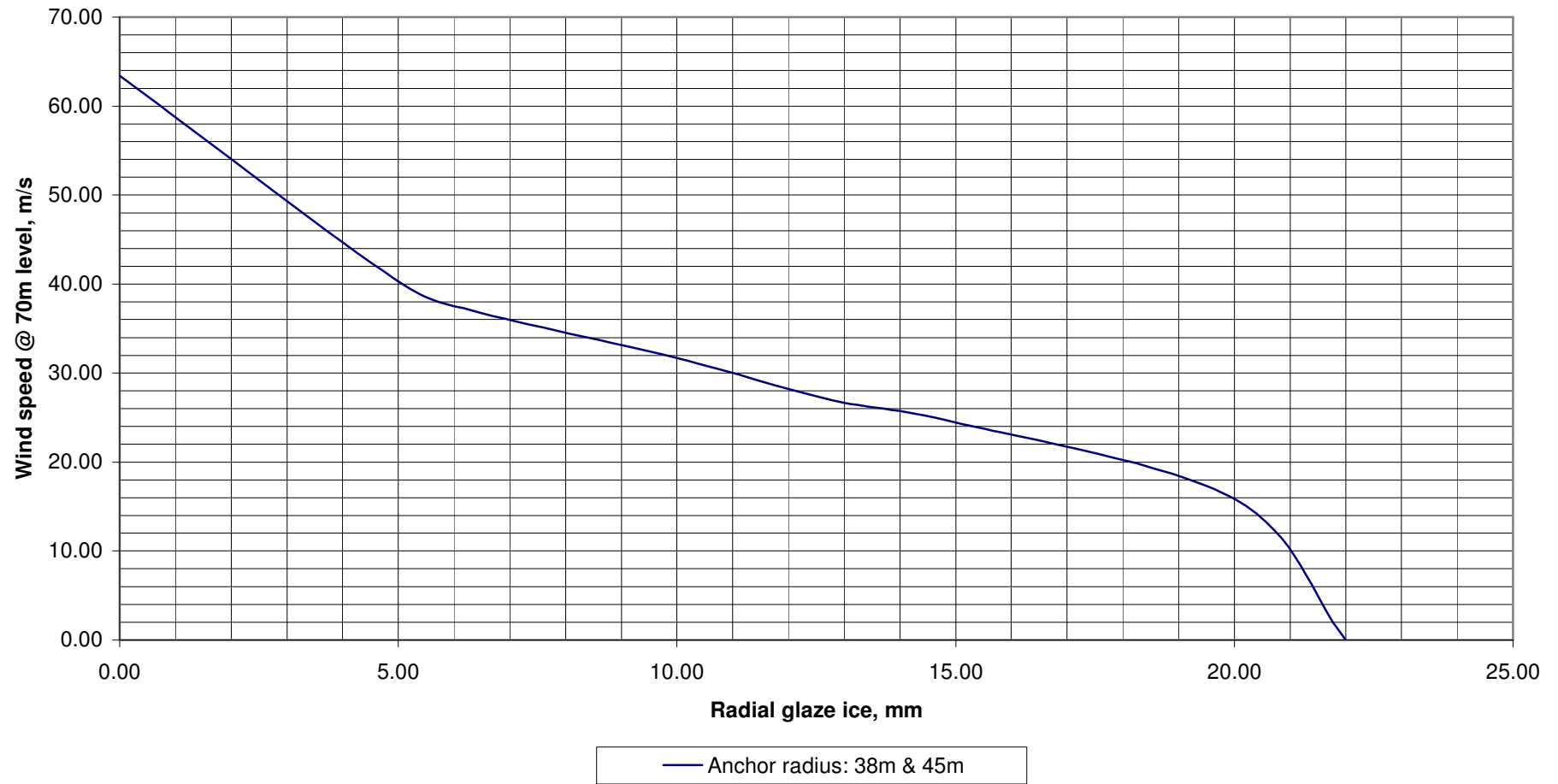
2. Anchors @ 42m radius - BS5950/BS8100 analysis. Glaze ice

Maximum allowed

Radial Ice thickness mm	Wind speed @ 10m m/s	Wind speed @ 70m m/s	Anchor * load kgf	Anchor load angle to horizontal degrees	Upwind Guy #1 * Load kgf	Upwind Guy #2 * Load kgf	Upwind Guy #3 * Load kgf	Upwind Guy #4 * Load kgf	Upwind Guy #5 * Load kgf	Upwind Guy #6 * Load kgf	Upwind Guy #7 * Load kgf	Base plate * vertical load kgf
0	47.50	62.72	5484	43	530	546	647	728	856	1089	1212	9698
5	30.00	39.61	4612	43	408	372	481	596	746	975	1135	9879
6.35	27.50	36.31	4294	43	389	333	426	546	700	919	1079	9746
10	23.50	31.03	3963	42	422	344	333	435	636	871	1023	10030
12.70	20.00	26.41	3449	40	396	395	350	357	473	697	874	9788
15	18.00	23.77	3270	38	401	420	400	374	415	572	777	10030
20	12.00	15.85	3019	35	446	422	423	434	446	458	470	11184
22	0.01	0.01	2594	34	419	402	390	379	369	360	351	11987

* Note - all these loads have a 25% added safety factor applied

nexgen 70m HighMast
Anchor radius: 38m & 45m
Maximum allowable wind speed @ 70m level versus Radial glaze ice
March 2006



nexgen 70m HighMast
Single anchor installation
Maximum allowable wind speed @ 70m level versus Radial glaze ice
March 2006

