



Static Ground Mount 2.0 Ballast Table

Required Ballast Weight Per Block (kg) One Block Per A-Frame



		Base Wind Pressure (q50)								
	0.2 kPa 0.3 kPa 0.4 kPa 0.5 kPa 0.6 kPa 0.7 kPa 0.8 kPa 0.9 kPa 1.0 kPa								1.0 kPa	
KBFGMXXX-GA	604	899	1195	1516	1811	2132	2427	2735	3043	

Suggested Ballast Sizes to suit required weights

655 kg - 300mm x 300mm x 3048mm long, reinforced with 4-10M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 1170 kg - 400mm x 400mm x 3048mm long, reinforced with 4-10M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 1825 kg - 500mm x 500mm x 3048mm long, reinforced with 4-10M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 2630 kg - 600mm x 600mm x 3048mm long, reinforced with 4-10M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 650mm x 3048mm long, reinforced with 4-15M longitudinal rebar and 10M rebar stirrups @ 600mm c/c 3090 kg - 650mm x 650mm x 650mm x 8048mm long x 800mm x 8048mm long x 800mm x 8048mm long x 8048mm x 8048mm long x 8048mm long x 8048mm long x 8048mm x 8048mm long x 8048mm x 8048mm x 8048mm long x 8048mm x 80

Min. required Concrete Compressive Strength @ 28 days = 20 MPa Min. required Soil Bearing Capacity = 100 kPa Ground Preparation = 4" Compacted Gravel Subbase, compacted to 98% standard proctor density.

General Notes:

- 1. Concrete ballast design in accordance with CAN/CSA A23, Design of Concrete Structures.
- 2. Contractor is responsible for proper construction of concrete ballasts and gravel subbase.
- 3. All rebar to be grade 400W conforming to CSA G30.18.
- 4. All specifications are to be used as a guide only. It is recommended to consult a professional engineer before construction
- 5. The feet will be centred on the ballast.

Design Parameters: Density of Concrete = 2,400 kg/m^3





Static Ground Mount 2.0 Ballast Table

Required Ballast Weight Per Block (kg) Two Blocks Per A-Frame with Toe Berm Each block to match weight listed in chart



	Base Wind Pressure (q50)								
	0.2 kPa 0.3 kPa 0.4 kPa 0.5 kPa 0.6 kPa 0.7 kPa 0.8 kPa 0.9 kPa 1.0 kP								
KBFGMXXX-GA	1000	1000	1000	1000	1000	1000	1000	1000	1022

Single leg ballast blocks (2 per A-frame) should be standard precast concrete lock blocks, when combined with min. 6" deep/high compacted toe berm. A compacted toe berm (either built up 6", or cut 6" into native soil) shall be installed at the outside ends of each set of blocks, to resist sliding. <u>Typical precast lock block dimensions are 600mm x 600mm x 1200mm long or 750mm x 750mm x 1500mm</u>, with a minimum weight of 1000 kg. Ground Preparation = 4" Compacted Gravel subbase, and 6" deep/high compacted toe berm each end (compacted granular, or cut into native soil). All fill material shall be placed in horizontal layers not exceeding 6" (150mm) and shall be compacted to 98% standard Procter density. Min. required Soil Bearing Capacity = 100 kPa





		Factored Reactions (kN)								
		Base Wind Pressure (q50)								
KBFGMXXX-GA	0.2 kPa	0.3 kPa	0.4 kPa	0.5 kPa	0.6 kPa	0.7 kPa	0.8 kPa	0.9 kPa	1.0 kPa	
Lateral (x, y)	± 12.01	± 13.42	± 14.83	± 16.36	± 17.77	± 19.30	± 20.71	± 22.17	± 23.64	
Downforce (-z)	20.98	21.95	22.92	23.98	24.95	26.00	26.97	27.99	29.00	
Uplift (+z)	.97	1.94	2.91	3.97	4.94	6.00	6.97	7.98	8.99	





Static Ground Mount 2.0 Sonotube Table All piles are 12" diameter x min. length noted (feet)



	Base Wind Pressure (q50)									
	0.2 kPa 0.3 kPa 0.4 kPa 0.5 kPa 0.6 kPa 0.7 kPa 0.8 kPa 0.9 kPa 1.0 kPa									
KBFGMXXX-GA	6	6	6	6	6	6.5	6.5	7	7	

General Notes:

1. Concrete pile design in accordance with CAN/CSA A23, Design of Concrete Structures.



	Base Wind Pressure (q50)								
	0.2 kPa 0.3 kPa 0.4 kPa 0.5 kPa 0.6 kPa 0.7 kPa 0.8 kPa 0.9 kPa 1.0 kPa								
KBFGMXXX-GA	24	24	24	24	24	28	28	28	28

General Notes: