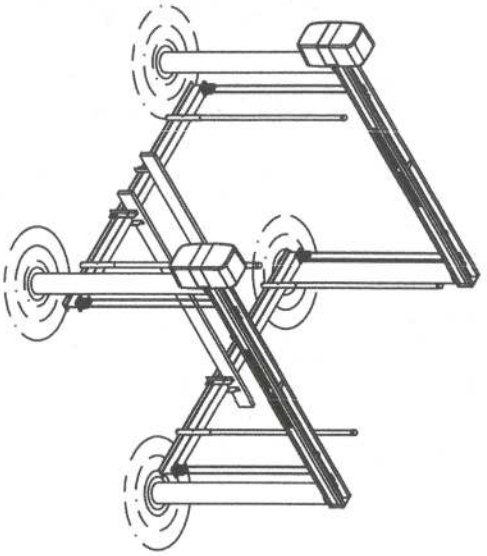


IMM Quality Boat Lifts

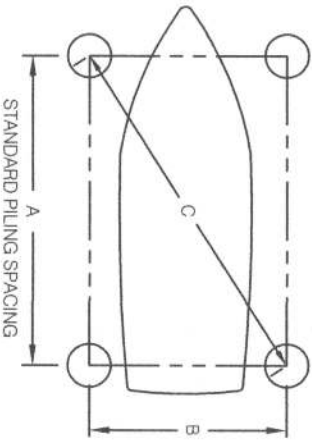
VATOR BOAT LIFT SPECIFICATIONS

4 POST BOAT LIFTS WITH 2 CRADLE BEAMS AND 4 CABLES

ALL SPACING TO CENTER OF PILING



LIFT CAPACITY	A	B	C	RECOMMENDED MIN. PILE SIZE
4,500 lbs.	132"	120"	178"	8" DIA.
7,000 lbs.	144"	144"	204"	8" DIA.
10,000 lbs.	144"	150"	208"	8" DIA.
13,000 lbs.	144"	150"	208"	8" DIA.
16,000 lbs.	144"	168"	218"	10" DIA.
16,000 XL lbs.	168"	168"	238"	10" DIA.
20,000 lbs.	168"	192"	255"	10" DIA.
27,000 lbs.	192"	192"	272"	10" DIA.



STANDARD PILING SPACING

LIFT CAPACITY lbs.	CABLE BEAM SIZE CUSTOM CHANNEL 6061-16, 6005A-15	CRADLE BEAM SIZE 6061-16, 6005A-15	GROUND CABLE WINNER SIZE inches	DRIVE SHAFT SIZE inches	DRIVE SHAFT SPOCKET	GEAR DRIVE SPOCKET	GEAR RATIO	NO. OF MOTORS #HP.	CABLES	CABLE STRENGTH INCHES	LIFT SPEED ft/min	GUIDE POST HEIGHT	BOAT BUNKING WOOD OPTION	BOAT BUNKING ALUM. OPTION
4,500	5 x .230 H 2 x .160 W	6 x .190 H 4 x .290 W 120 L	2.375 DIA. 1.7" Length LIFTS 14 FT.	1.9" Ø TUBE 9 ga	#50A60	#50B11	60:1	(2)3/4HP P-115V/22A 230V/11A	5/16 SSAC 7x19 304, 1P 20'	101	41	7	2 x 8 x 144	144
7,000	6 x .230 H 2 x .160 W	6 x .190 H 4 x .290 W 144 L	2.375 DIA. 1.7" Length LIFTS 14 FT.	1.9" Ø TUBE 9 ga	#50A60	#50B9	60:1	(2)3/4HP P-115V/22A 230V/11A	5/16 SSAC 7x19 304, 1P 20'	113	33	7	2 x 8 x 144	144
10,000	7 x .230 H 2 x .160 W	8 x .230 H 5 x .360 W 150 L	2.375 DIA. 2.0" Length LIFTS 12 FT.	1.9" Ø TUBE 9 ga	#50A60	#50B11	60:1	(2)3/4HP P-115V/22A 230V/11A	5/16 SSAC 7x19 304, 2P 38'	110	20	7	2 x 8 x 144	144
13,000	8 x .230 H 2 x .160 W	8 x .230 H 5 x .360 W 150 L	2.375 DIA. 2.0" Length LIFTS 12 FT.	1.9" Ø TUBE 9 ga	#50A60	#50B9	60:1	(2)3/4HP P-115V/22A 230V/11A	5/16 SSAC 7x19 304, 2P 38'	110	16	7	2 x 8 x 144	144
16,000	11 x .230 H 2 x .160 W	10 x .230 H 6 x .410 W 168 L	2.375 DIA. 2.0" Length LIFTS 12 FT.	1.9" Ø TUBE 8 ga	#60A60	#60B10	60:1	(2)1HP 230V/13A	5/16 SSAC 7x19 304, 2P 38'	110	18	10	3 x 10 x 168	192
16,000 XL	11 x .230 H 2 x .160 W	10 x .230 H 6 x .410 W 168 L	2.375 DIA. 2.0" Length LIFTS 12 FT.	1.9" Ø TUBE 8 ga	#60A60	#60B10	60:1	(2)1HP 230V/13A	5/16 SSAC 7x19 304, 2P 38'	134	18	10	3 x 10 x 192	192
20,000	12 x .266 H 2 x .172 W	12 x .230 H 7 x .470 W 192 L	2.375 DIA. 2.5" Length LIFTS 12 FT.	1.9" Ø TUBE 8 ga	#60A60	#60B10	60:1	(2)1HP 230V/13A	5/16 SSAC 7x19 304, 3P 60'	123	13	10	3 x 10 x 192	192
27,000	14 x .313 H 2 x .313 W	12 x .230 H 7 x .470 W 192 L	3.5 DIA. 2.1" Length LIFTS 12 FT.	2.875" Ø TUBE 8 ga	#60A60 #60A50 HS	#60B10	60:1	(2)1-1/2HP 230V/19A	5/16 SSAC 7x19 304, 4P 74'	147	13	10	3 x 10 x 192	192

HI-SPEED OPTION

GEAR DRIVE RATIO	NO. OF MOTORS #HP.	MOTOR BRAKE TORQUE	INCHES OF LIFT PER MINUTE
30:1	(2)1-1/2HP 230V/22A	6 FT-LBS	82
30:1	(2)1-1/2HP 230V/22A	6 FT-LBS	66
30:1	(2)1-1/2HP 230V/22A	6 FT-LBS	40
30:1	(2)1-1/2HP 230V/22A	6 FT-LBS	32
30:1	(2)2HP 230V/25A	6 FT-LBS	44
30:1	(2)2HP 230V/25A	6 FT-LBS	44
30:1	(2)2HP 230V/25A	6 FT-LBS	30
30:1	(2)2HP 230V/25A	6 FT-LBS	28

STRUCTURAL ENGINEERING REVIEW

THIS CONSTRUCTION HAS BEEN DESIGNED AS A MAIN WIND FORCE RESISTING SYSTEM, WITH CALCULATED GRAVITY AND WIND LOADS IN COMPLIANCE WITH THE FLORIDA BUILDING CODE 2014, CHAPTER 16 & 20, ASCE 5-10, ASCE 58-10, AND MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES TO WITHSTAND THE WIND LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 160 MPH, EXPOSURE "B", RISK CATEGORY "1", ARCHITECTS/ENGINEERS CONSULTING ENGINEERS HAS NO CONTROL OF THE MANUFACTURING PERFORMANCE, OR INSTALLATION OF THIS PRODUCT. THESE GENERIC PLANS WERE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES AND DATA PROVIDED BY THE MANUFACTURER.

Signature: *[Handwritten Signature]*
 Date: 4-25-16

11 SANDERS
 Reg. Florida No. 65361
 Date: 4-25-16

Architect/Engineer Consulting Engineers, Inc.
 Certificate of Authorization 9451
 12851 MacGregor Blvd, Suite 105
 Ft. Myers, FL 33919
 239-287-5866

SIGNATURE NOT VALID WITHOUT RAISED SEAL

IMM BOAT LIFTS, INC. IS NOT RESPONSIBLE FOR THE DOCK STRUCTURE OR ITS ABILITY RESIST THE APPLIED LOADS OF THE BOAT LIFT. THE SITE SHOULD BE VERIFIED BY A LICENSED MARINE CONTRACTOR. APPLIED LOADS WILL BE PROVIDED UPON REQUEST.

