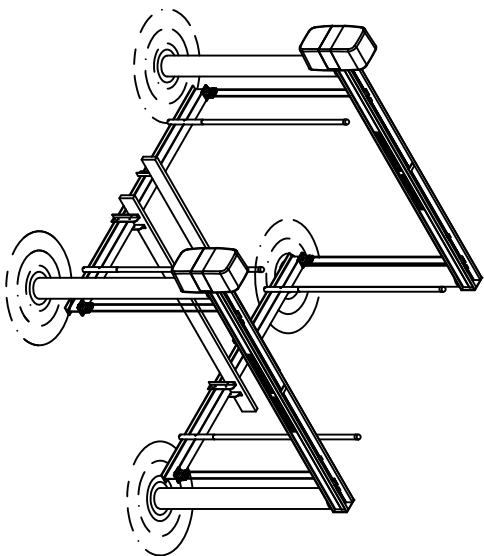


IMM Quality Boat Lifts

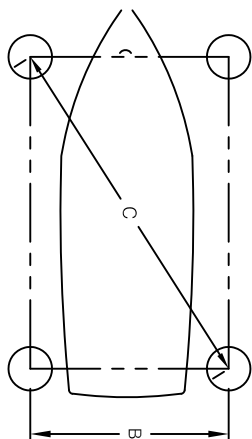
VATOR BOAT LIFT SPECIFICATIONS

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

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.

NOTE: BOATS SHALL NOT BE STORED ON LIFTS DURING HIGH WIND EVENTS.

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, 8th EDITION, 2023, CHAPTERS 16 & 20, ASCE 7-22, AND ASCE 7-22 "MINIMUM DESIGN LOADS AND OTHER CRITERIA FOR BUILDINGS AND OTHER STRUCTURES" TO WITHSTAND THE WIND LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 160 MPH, EXPOSURE "D", RISK CATEGORY 1, J.L. SANDERS, P.E. HAS NO CONTROL OF THE MANUFACTURING, PERFORMANCE, OR INSTALLATION OF THIS PRODUCT. THESE GENERIC SPECIFICATIONS WERE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES BASED ON DATA PROVIDED BY THE MANUFACTURER. THIS STRUCTURAL REVIEW IS LIMITED TO THE PRIMARY FRAMING AND CONNECTIONS AND IS NOT INTENDED TO COVER ALL DETAILS OF THE PRODUCT. THE MANUFACTURER SHALL BE RESPONSIBLE FOR PROVIDING ALL CALCULATIONS, TITLED "4-POST BOAT LIFT", WHICH CONTROL ALL ADDITIONAL DESIGN REQUIREMENTS AND CRITERIA AND ARE AVAILABLE UPON REQUEST. THE BOAT LIFTS DEPICTED IN THESE SPECIFICATIONS AND RELATED CALCULATIONS WERE ENGINEERED AS MANUFACTURED PRODUCT FOR NON-SITE SPECIFIC USE AND NOT INTENDED TO COVER SITE SPECIFIC CONDITIONS, REQUIREMENTS AND LIMITATIONS LISTED IN THE STRUCTURAL CALCULATIONS.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY J.L. SANDERS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

J.L. Sanders, P.E.
2515 Grans Road NW
Marietta, GA 30066
Phone: 229-671-1576

J.L. SANDERS, P.E.
Reg. Florida No. 66361

Date:

LIFT CAPACITY lbs.	CABLE BEAM SIZE CUSTOM CHANNEL 6061-T6, 6005A-15	CRADLE SIZE I-BEAM 6061-T6, 6005A-15	GROOVED CABLE WINDER SIZE inches	DRIVE SHAFT SIZE inches	DRIVE SHAFT SPROCKET	GEAR DRIVE SPROCKET	GEAR RATIO	NO. OF MOTORS & H.P.	CABLES	CABLE SPREAD INCHES	LIFT SPEED ft/min	GUIDE POST HEIGHT	BOAT BUNKS WOOD OPTION	BOAT BUNKS 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. 17" Length LIFTS 14 FT.	1.9 Ø TUBE 9 ga	#50A60	#50B11	60:1	(2)3/4H-P-15V/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. 17" Length LIFTS 14 FT.	1.9 Ø TUBE 9 ga	#50A60	#50B9	60:1	(2)3/4H-P-15V/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 .350 W 150 L	2.375 DIA. 20" Length LIFTS 12 FT.	1.9 Ø TUBE 9 ga	#50A60	#50B11	60:1	(2)3/4H-P-15V/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 .350 W 150 L	2.375 DIA. 20" Length LIFTS 12 FT.	1.9 Ø TUBE 9 ga	#50A60	#50B9	60:1	(2)3/4H-P-15V/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 .250 H 6 x .410 W 168 L	2.375 DIA. 20" Length LIFTS 12 FT.	1.9 Ø TUBE 8 ga	#60A60 #60A50 HS	#60B10	60:1	(2)1H-P 230V/13A	5/16 SSAC 7x19 304, 2P 38"	134	18	10	3 x 10 x 168	192
16,000 XL	11 x .230 H 2 x .160 W	10 x .250 H 6 x .410 W 168 L	2.375 DIA. 20" Length LIFTS 12 FT.	1.9 Ø TUBE 8 ga	#60A60 #60A50 HS	#60B10	60:1	(2)1H-P 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 .290 H 7 x .470 W 192 L	2.375 DIA. 25" Length LIFTS 12 FT.	1.9 Ø TUBE 8 ga	#60A60 #60A50 HS	#60B10	60:1	(2)1H-P 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 .290 H 7 x .470 W 192 L	3.5 DIA. 21" Length LIFTS 12 FT.	2.875 Ø TUBE 8 ga	#60A60 #60A50 HS	#60B10	60:1	(2)1-1/2 H-P 230V/18A	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 & H.P.	MOTOR BRAKE TORQUE	INCHES OF LIFT PER MINUTE
30:1	(2)1-1/2 H-P 230V/22A	6 FT-LBS	82
30:1	(2)1-1/2 H-P 230V/22A	6 FT-LBS	66
30:1	(2)1-1/2 H-P 230V/22A	6 FT-LBS	40
30:1	(2)1-1/2 H-P 230V/22A	6 FT-LBS	32
30:1	(2)2 H-P 230V/25A	6 FT-LBS	44
30:1	(2)2 H-P 230V/25A	6 FT-LBS	44
30:1	(2)2 H-P 230V/25A	6 FT-LBS	30
30:1	(2)2 H-P 230V/25A	6 FT-LBS	28



BOAT LIFTS

17030 Allico Center Rd.

Ft. Myers, FL 33967

DWG: D5 - 600100 - VATOR PUB February 1, 2024 Page 1 of 2

Phone: (800) 663-3515

Fax: (239) 454-0641

ALUMAVATOR WIRING SCHEMATIC

**MINIMUM RECOMMENDED
WIRE SIZE TABLE (AWG)**

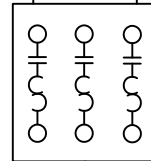
COPPER WIRE ONLY

MAXIMUM DISTANCE FROM SERVICE TO CONTROLLER

LIFT CAPACITY	75 FEET	150 FEET	300 FEET	400 FEET
4500# TO 13000# AT 120 VOLTS	#10	#8	#6	#6
4500# TO 13000# AT 240 VOLTS	#12	#10	#8	#6
16000# TO 27000# AT 240 VOLTS	#10	#8	#6	#4
32000# TO 54000# AT 240 VOLTS	#6	#4	#2	#0

MAIN
PANEL
(BY OTHERS)

120 / 240 GFCI BREAKER

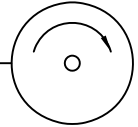


REVERSING
CONTACTOR

14/5 SJTW CORD 3/4 hp
12/5 SJTW CORD 1 hp

120 / 240 V

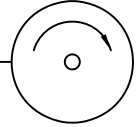
MOTOR 1



14/5 SJTW CORD 3/4 hp
12/5 SJTW CORD 1 hp

120 / 240 V

MOTOR 2



REFER TO "STANDARD PILING SPACING CHART"

