

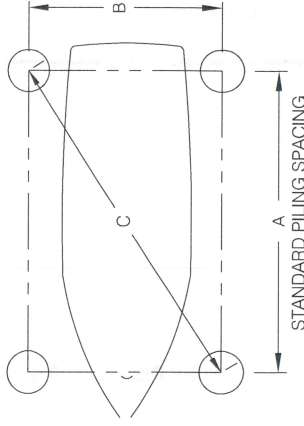
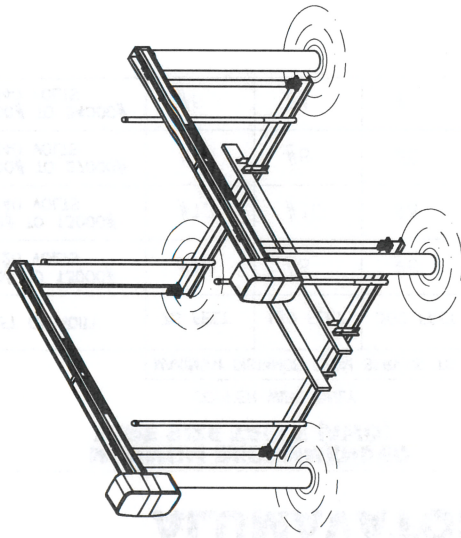
IMM Quality Boat Lifts

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.



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.

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, 6th EDITION, 2017, CHAPTERS 16 & 20, ADM. 2015, AND ASCE/SEI 7-10. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES TO WITHSTAND THE WIND LOADS ASSOCIATED WITH AN EXISTING DOCK, POSTING CATEGORY 1, ASK CATEGORY 1. J.L. SANDERS, P.E. HAS NO CONTROL OF THE MANUFACTURING PROCESS OR THE QUALITY OF THE PRODUCT. THESE 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 MECHANICAL AND ELECTRICAL COMPONENTS. THESE SPECIFICATIONS ARE BASED ON STRUCTURAL CALCULATIONS TITLED "4 POST BOAT LIFT", WHICH CONTAIN ADDITIONAL DESIGN REQUIREMENTS FOR CRADLE BEAMS, CABLES, AND PILING. THESE SPECIFICATIONS ARE NOT INTENDED TO COVER SITE SPECIFIC CONDITIONS, REQUIREMENTS AND LIMITATIONS LISTED IN THE STRUCTURAL CALCULATIONS.

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Date:

J.L. Sanders
2-5-20

SIGNATURE NOT VALID WITHOUT RAISED SEAL

LIFT CAPACITY lbs.	CABLE BEAM SIZE CUSTOM CHANNEL 6061-T6, 6005A-15	CRADLE BEAM SIZE 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 in/min	GUIDE POST HEIGHT	BOAT BUNK WOOD OPTION	BOAT BUNK 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-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. 17" Length LIFTS 14 FT.	1.9 Ø TUBE 9 ga	#50A60	#50B9	60:1	(2)3/4H 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 .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-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 .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-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 .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)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 .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)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 .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)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 .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



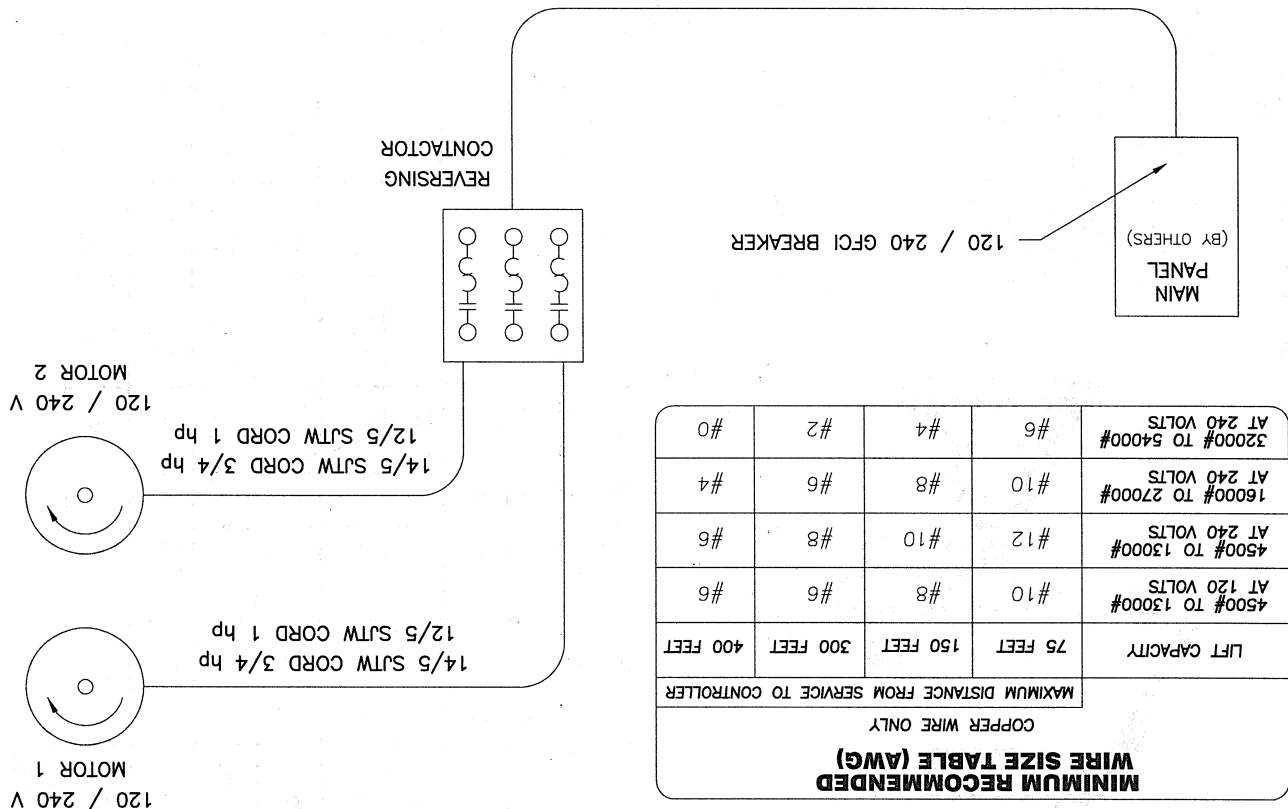
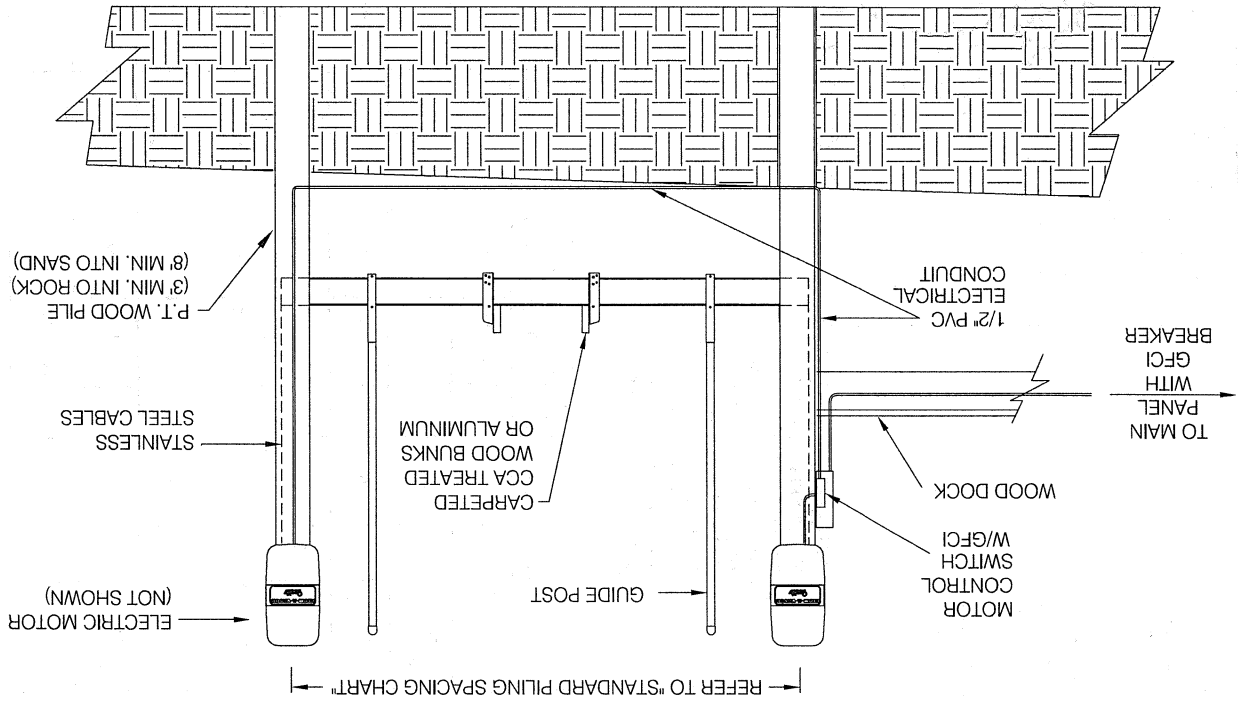
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