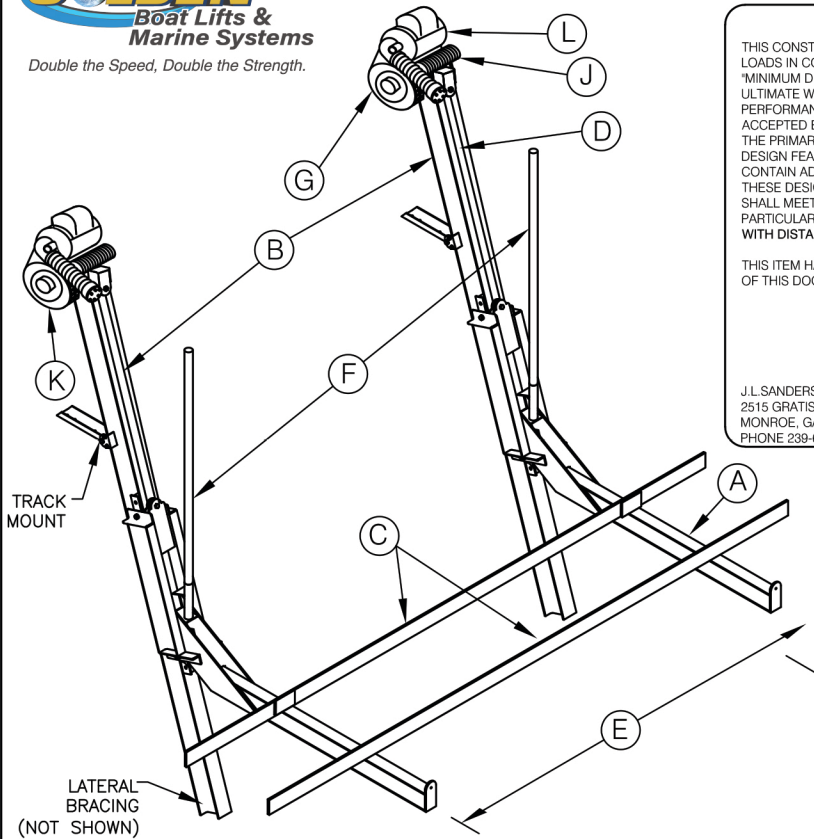


# GOLDEN 2-TRACK ELEVATOR LIFT



**INCLINE MOUNT OR VERTICAL MOUNT**

**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, ADM 2020, AND ASCE/SEI 7-22 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" TO WITHSTAND THE WIND LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 180 MPH, EXPOSURE "D", RISK CATEGORY I. J.L. SANDERS, PE HAS NO CONTROL OF THE MANUFACTURING, PERFORMANCE, OR INSTALLATION OF THIS PRODUCT. THESE GENERIC DESIGN FEATURES 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 MECHANICAL AND ELECTRICAL COMPONENTS. THESE DESIGN FEATURES ARE BASED ON STRUCTURAL CALCULATIONS, TITLED "STRUCTURAL CALCULATIONS FOR ELEVATOR", WHICH CONTAIN ADDITIONAL DESIGN REQUIREMENTS AND CRITERIA AND ARE AVAILABLE UPON REQUEST. THE BOAT LIFTS DEPICTED BY THESE DESIGNS AND RELATED CALCULATIONS WERE ENGINEERED AS MANUFACTURED PRODUCT FOR NON-SITE SPECIFIC USE AND SHALL MEET THE DESIGN REQUIREMENTS AND INSTALLATION LIMITATIONS LISTED IN THE STRUCTURAL CALCULATIONS. IN PARTICULAR THE TRACK BEAMS SHALL BE ADEQUATELY BRACED LATERALLY NO MORE THAN 8 FT. O.C. FOR ELEVATOR LIFTS WITH DISTANCE FROM TRACK MOUNT TO SEA FLOOR LESS THAN 9 FEET, LATERAL BRACING IS NOT REQUIRED

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

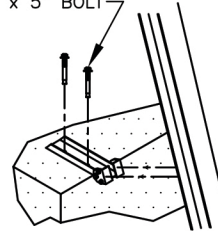


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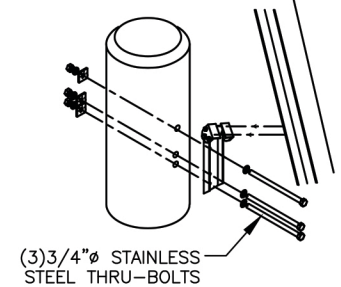
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J. L. SANDERS, P.E. Date:  
Reg. Florida No. 66361

(2) 3/4"Øx3-1/4" LG.  
STAINLESS STEEL  
REDHEAD WEDGE  
ANCHOR BOLTS  
EDGE DISTANCE OF  
BOLTS PER ACI  
NOTE: 26K LIFT USE  
(2) 7/8" x 5" BOLT



TYPICAL HORIZONTAL  
CONNECTION TO REINFORCED  
CONCRETE DOCK OR SEAWALL



TYPICAL VERTICAL  
CONNECTION TO WOOD  
PILE OR HORIZONTAL  
WOOD DECK FRAMING

**PILE DIAMETER CHART**

Boat center of gravity @ center of cradles

Lift Capacity Lb.	MAX. "E" Dim.		Recommended Pile Diameters In.
	Ft.	In.	
3, 5, & 7000	10	10	12
10,000	11	14	
12,000			
15,000			
17,000	14	12	
20,000			
26,000			

NOTE: THIS STRUCTURE HAS BEEN DESIGNED FOR LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 180 MPH, EXPOSURE "D", RISK CATEGORY I, CALCULATED PER FLORIDA BUILDING CODE 8th EDITION, 2023, ASCE/SEI 7-22 AND ADM-2020. BOATS SHALL NOT BE STORED ON LIFTS DURING HIGH WIND EVENTS (GREATER THAN 75 MPH). ALL PRIMARY STRUCTURAL MEMBERS ARE TO BE 6061-T6 ALUMINUM. TRACKS ARE TO BE DRIVEN TO FIRM BEARING MATERIAL AND SHALL BE SPACED HORIZONTALLY WITHIN THE LIMITS OF TRACK SPREAD "E". TRACKS SHALL BE ADEQUATELY BRACED LATERALLY FROM TRACK TO TRACK WHEN DISTANCE BETWEEN THE TRACK MOUNT AND SEA FLOOR IS 9 FT. OR GREATER. LATERAL BRACES SHALL BE SPACED AT NO MORE THAN 8 FEET APART. FOR LIFTS WITH DISTANCE FROM TRACK MOUNT TO SEA FLOOR LESS THAN 9 FEET, LATERAL BRACING IS NOT REQUIRED.

**SUMMARY OF DESIGN FEATURES**

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(J)	(K)	(L)		
	LIFT CAPACITY	CRADLE I-BEAM	TRACK I-BEAM	BUNKS	CABLE SIZE	TRACK SPREAD	GUIDE POST HEIGHT	BRGS	WINDER DIA	GEAR RATIO	MOTOR HP/VOLTAGE	INCHES OF LIFT PER MIN.
	3,000#	(2) 8 H x .23 5 W x .35 x 8' LG. @ 6.18#/FT	(2) 8 H x .23 5 W x .35 x 25' LG. @ 6.18#/FT	(2) 2" x 8" x 144"	(2) 5/16" Ø x 30' S.S. 2 PART	7' THRU 10'	80"	(4) 2" EXTRUDED 6061-T6 ALUM	SOLID 3.5" WINDER	350:1	(2) 3/4 HP 120V/20A 240V/10A	42" to 108"
	5,000# & 7,000#	(2) 8 H x .25 5 W x .41 x 8' LG. @ 7.02#/FT	(2) 8 H x .25 5 W x .41 x 25' LG. @ 7.02#/FT		(2) 5/16" Ø x 30' S.S. 2 PART						(2) 3/8" Ø x 30' S.S. 2 PART	
	10,000#	(2) 9 H x .27 5.5 W x .44 x 8' LG. @ 8.36#/FT	(2) 9 H x .27 5.5 W x .44 x 25' LG. @ 8.36#/FT	(2) 3" x 10" x 192"	(2) 3/8" Ø x 45' S.S. 3 PART	8' THRU 11'	(2) 3/4 HP 120V/20A 240V/10A				21" to 54"	
	12,000#	(2) 10 H x .25 6 W x .41 x 8' LG. @ 8.65#/FT	(2) 10 H x .25 6 W x .41 x 25' LG. @ 8.65#/FT		(2) 3/8" Ø x 56' S.S. 4 PART	8' THRU 14'	120"				(2) 1 HP 120V/20A 240V/10A	14" to 40"
	15,000#	(2) 10 H x .29 6 W x .50 x 8' LG. @ 10.3#/FT	(2) 10 H x .29 6 W x .50 x 25' LG. @ 10.3#/FT	(2) 3/8" Ø x 56' S.S. 4 PART	10' THRU 14'							14"
	17,000#	(2) 12 H x .29 7 W x .47 x 10' LG. @ 11.7#/FT	(2) 12 H x .29 7 W x .47 x 25' LG. @ 11.7#/FT	(2) 10" x 192"								
	20,000#	(2) 12 H x .31 7 W x .62 x 11' LG. @ 14.3#/FT	(2) 12 H x .31 7 W x .62 x 25' LG. @ 14.3#/FT									
	26,000#	(2) 14 H x .30 8 W x .60 x 10' LG. @ 16.0#/FT	(2) 14 H x .30 8 W x .60 x 30' LG. @ 16.0#/FT									