GOLDEN 4 TRACK ELEVATOR LIFT

GOLDEN Boat Lifts & Marine Systems

Double the Speed, Double the Strength.

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, CHAPTER 16 AND 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 THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

J. L. SANDERS LICENSE No. 66361 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by J.L. Sanders
Date: 2024.01.03 15:17:22 -05'00'

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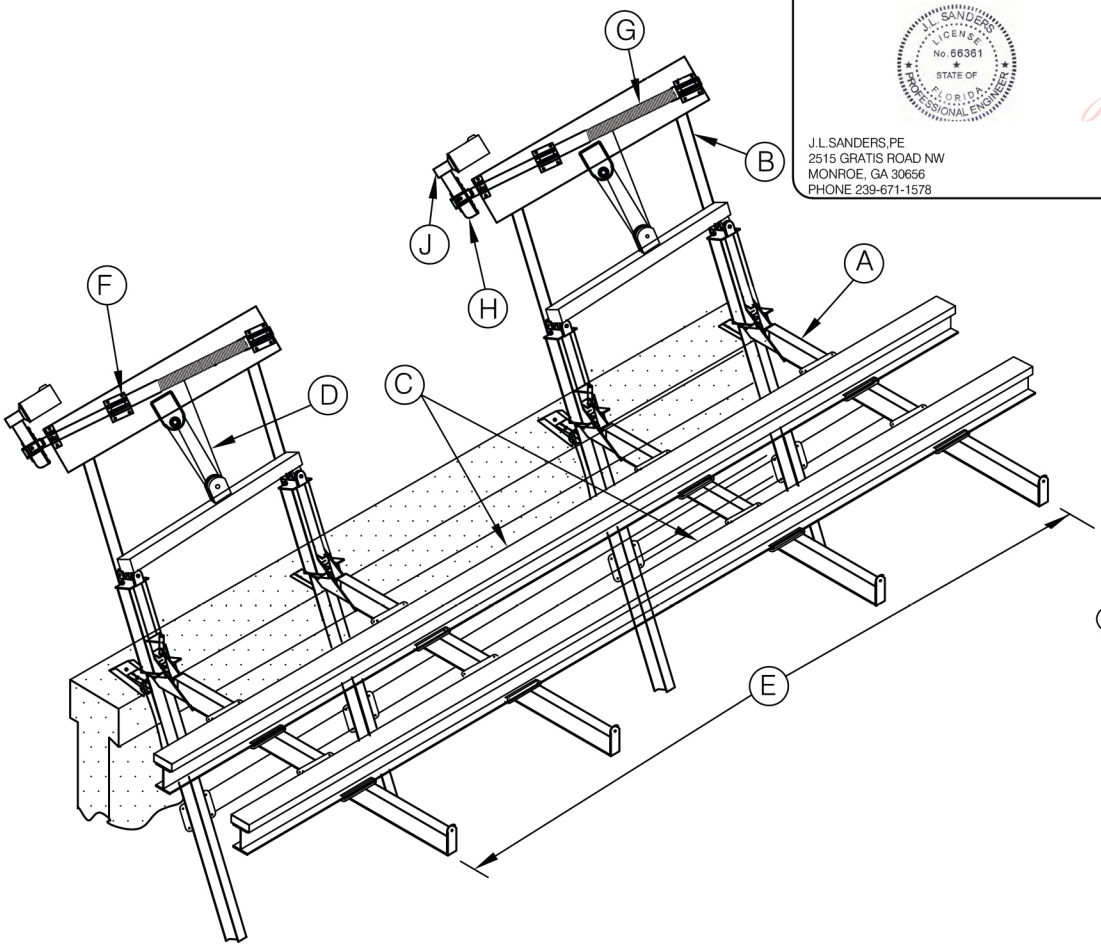
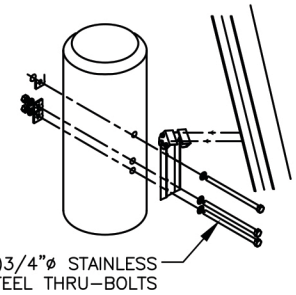
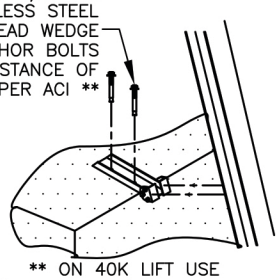


INCLINE MOUNT OR VERTICAL MOUNT



(3)3/4"ø STAINLESS STEEL THRU–BOLTS

TYPICAL VERTICAL CONNECTION TO WOOD PILE OR HORIZONTAL WOOD DECK FRAMING



(2)3/4"øx3–1/4" LG. STAINLESS STEEL REDHEAD WEDGE ANCHOR BOLTS EDGE DISTANCE OF BOLTS PER ACI **

** ON 40K LIFT USE (2) 1" DIA. x 4–1/2" EMBED INTO MIN 4500 PSI CONCRETE

TYPICAL HORIZONTAL CONNECTION TO REINFORCED CONCRETE DOCK OR SEAWALL

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. ALL PRIMARY STRUCTURAL MEMBERS ARE TO BE 6061-T6 ALUMINUM. TRACKS ARE TO BE DRIVEN TO FIRM BEARING MATERIAL.

SUMMARY OF DESIGN FEATURES

LIFT CAPACITY	(A) CRADLE I-BEAM	(B) TRACK I-BEAM	(C) BUNK FEET	(D) CABLE SIZE	(E) TRACK SPREAD	(F) BRGS	(G) WINDER DIA	(H) DRIVE	(J) MOTOR HP/VOLTAGE	INCHES OF LIFT PER MIN.	GUIDE POST HEIGHT
24,000#	(4) 10 H x.29 6 W x .50 x 10' LG. @ 10.3#/FT	(4) 10 H x.29 6 W x .50 x 25' LG @ 10.3#/FT	(2) 10 H x .25 6 W x .41 x 20' LG.	(2) 7/16"Ø x 60' S.S. 4 PART	10' THRU 16'	(6) 2" EXTRUDED 6061-T6 ALUM	SEA DRIVE: 3.5" Ø SOLID WINDER	350:1 480:1	(2) 1.5 HP 120V/20A 240V/10A	11" to 40"	120"
30,000#	(4) 12 H x.31 7 W x .62 x 11' LG. @ 14.3#/FT	(4) 12 H x.31 7 W x .62 x 25' LG. @ 14.3#/FT	(2) 10 H x .25 6 W x .41 x 20' LG.	(2) 1/2"Ø x 68' S.S. 4 PART							
40,000#								2 - 500:1 4 - 350:1		10" to 30"	