

GOLDEN ELEVATOR LIFT

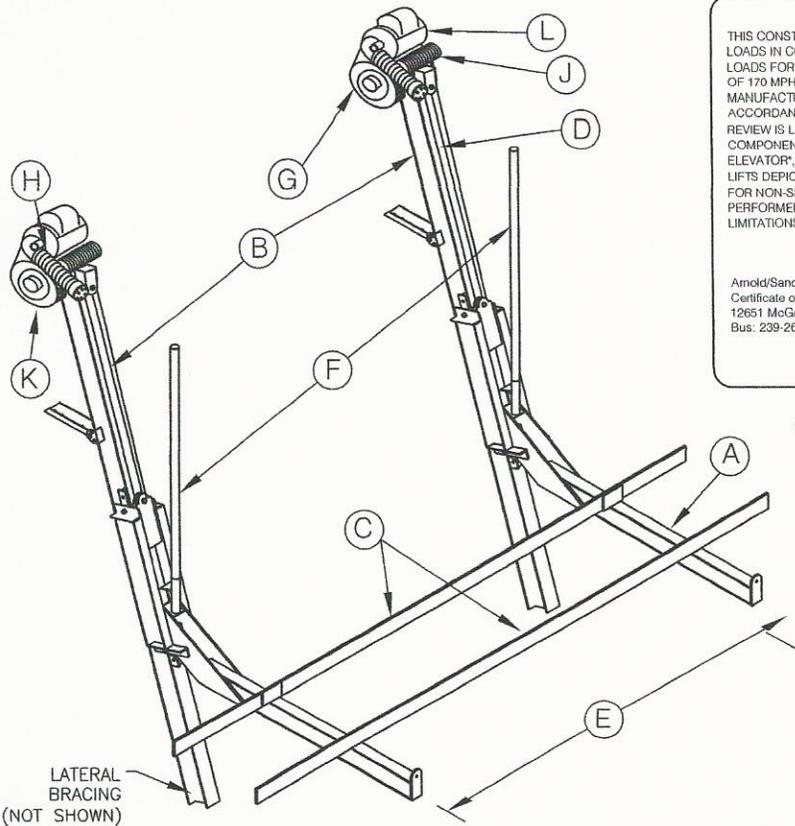
STRUCTURAL ENGINEERING REVIEW

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 2010, SECTION 1609, ADM 2005, AND ASCE/SEI 7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" TO WITHSTAND THE WIND LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 170 MPH, EXPOSURE "D", RISK CATEGORY I. ARNOLD/SANDERS CONSULTING ENGINEERS 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 DESIGN FEATURES AND RELATED CALCULATIONS WERE ENGINEERED AS MANUFACTURED PRODUCT FOR NON-SITE SPECIFIC USE AND NOT INTENDED TO COVER SITE SPECIFIC CONDITIONS. SITE SPECIFIC DESIGN SHALL BE PERFORMED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER AS REQUIRED TO VERIFY THE DESIGN REQUIREMENTS AND LIMITATIONS LISTED IN THE STRUCTURAL CALCULATIONS ARE MET.

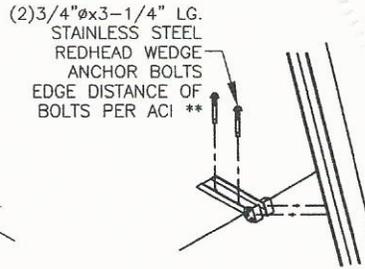
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SIGNATURE NOT VALID WITHOUT RAISED SEAL

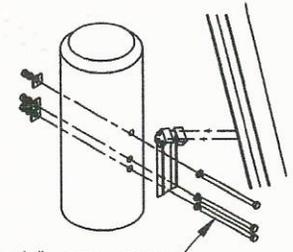


INCLINE MOUNT OR VERTICAL MOUNT



** ON 40K LIFT USE
 (2) 1" DIA. x 4-1/2" EMBED

TYPICAL HORIZONTAL CONNECTION TO REINFORCED CONCRETE DOCK OR SEAWALL



TYPICAL VERTICAL CONNECTION TO WOOD PILE OR HORIZONTAL WOOD DECK FRAMING

NOTE: THIS STRUCTURE HAS BEEN DESIGNED FOR LOADS ASSOCIATED WITH AN ULTIMATE WIND SPEED OF 170 MPH, EXPOSURE "D", RISK CATEGORY I, CALCULATED PER FLORIDA BUILDING CODE 2010, ASCE/SEI 7-10 AND ADM-2005. 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

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)	(K)	(L)	
LIFT CAPACITY	CRADLE I-BEAM	TRACK I-BEAM	BUNK BOARDS FEET	CABLE SIZE	TRACK SPREAD	GUIDE POST HEIGHT	BRGS	DRIVE SHAFT	WINDER DIA	GEAR RATIO	MOTOR HP/VOLTAGE	INCHES OF LIFT PER MIN.
3,000#	(2) 6 H x .19 4 W x .29 x 7 LG @ 4.03#/FT	(2) 8 H x .23 5 W x .35 x 25' LG. @ 6.18#/FT		(2) 5/16" Ø x 30' S.S. 2 PART	7 THRU 10'						(2) 3/4 HP 120V/20A 240V/10A	
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) 2 x 8 x 144 ROUGH SAWN CARPETED	(2) 5/16" Ø x 30' S.S. 2 PART	10'			(2) 1.900" O.D. x 1.48" WALL GALVANIZED HSS			5,000# (2) 3/4 HP 7,000# (2) 1 HP	13-1/2"
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) 3/8" Ø x 30' S.S. 2 PART	8' THRU 11'	80'					(2) 3/4 HP 120V/20A 240V/10A	
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					(4) 2" EXTRUDED 6061-T6 ALUM					9"
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 38' S.S. 3 PART						480:1		
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) 3 x 10 x 192 ROUGH SAWN CARPETED	(2) 3/8" Ø x 56' S.S. 4 PART	8' THRU 14'	120'		(2) 1.900" O.D. x 1.165" WALL GALVANIZED HSS			(2) 1 HP 120V/20A 240V/10A	6.75"
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										9"
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. CARPETED W/ WOOD & CARPET	(2) 7/16" Ø x 60' S.S. 4 PART			(6) 2" EXTRUDED 6061-T6 ALUM	(2) 1.900" O.D. x 1.165" WALL GALVANIZED HSS	FLAT PLATE DRIVE: 3" Ø O.D. x 1.99" I.D. SEA DRIVE: 3.5" Ø O.D. x 1.99" I.D.		(2) 1.5 HP 120V/20A 240V/10A	6.75"
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) 1/2" Ø x 68' S.S. 4 PART	10' THRU 16'							6.5"
40,000#										500:1		6.5"