

# GOLDEN ELEVATOR LIFT

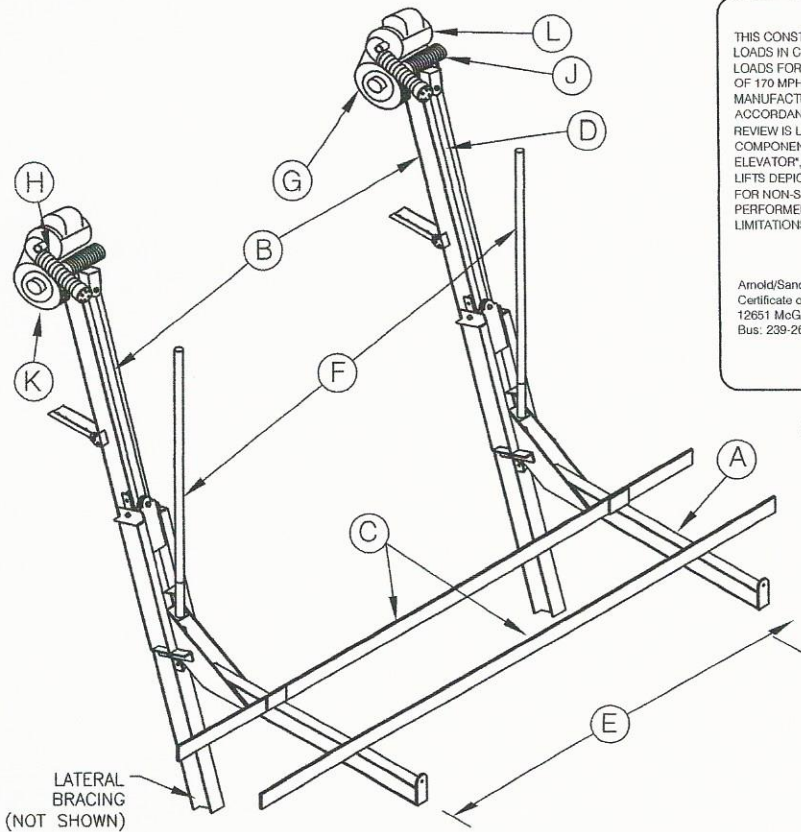
## STRUCTURAL ENGINEERING REVIEW

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

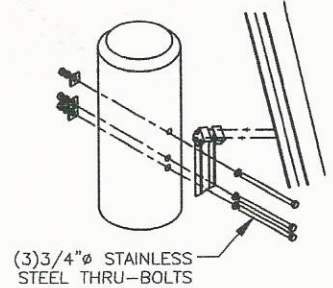


## INCLINE MOUNT OR VERTICAL MOUNT

(2) 3/4" x 3-1/4" 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

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				(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								
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 1.65" WALL GALVANIZED HSS				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									(2) 1 HP 120V/20A 240V/10A	
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								9"
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. CARPETED W/ WOOD & CARPET	(2) 1/2" Ø x 68' S.S. 4 PART	10' THRU 16'		(6) 2" EXTRUDED 6061-T6 ALUM				(2) 1.5 HP 120V/20A 240V/10A	6.75"
40,000#										500:1		6.5"