

# PRECISION ALUMINUM PRODUCTS, INC.

## ALUMINUM A/C STAND

VALID FOR USE INSIDE AND OUTSIDE THE HVHZ (SEE LIMITATIONS HEREIN)

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.

### DESIGN NOTES:

DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED SEPARATELY ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE USING ASD METHODOLOGY. SITE-SPECIFIC PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7 AND CHAPTER 16 OF THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) SHALL BE LESS THAN OR EQUAL TO THE LATERAL AND UPLIFT DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.

### GENERAL NOTES

- THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE STRUCTURAL PROVISIONS OF THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) FOR USE WITHIN AND OUTSIDE OF THE HIGH VELOCITY HURRICANE ZONE.
- PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.**
- CONTRACTOR SHALL ENSURE THAT EACH INSTALLATION ASSEMBLY MEET THE MINIMUM CLEARANCE HEIGHT PER FBC SECTION 1510.10 FOR NON-HVHZ APPLICATIONS AND SECTION 1522.2 FOR HVHZ APPLICATIONS.
- SEISMIC DESIGN DOES NOT GOVERN. SEISMIC PARAMETERS CHECKED: RISK CATEGORY II, IMPORTANCE FACTOR 1.0,  $S_s=0.057$ ,  $S_1=0.022$ , SITE CLASS D,  $S_{ds}=0.061$ ,  $S_{d1}=0.0355$ , SEISMIC DESIGN CATEGORY D, SEISMIC DEMANDS ON NON-STRUCTURAL COMPONENTS (MECHANICAL COMPONENTS, AC UNITS),  $F_{pMAX} = 46$  LBS,  $A_p=2.5$ ,  $R_p=6.0$ , UP TO 200' MRH.
- MAXIMUM DIMENSIONS AND WEIGHT OF A/C UNIT SHALL CONFORM TO SPECIFICATIONS STATED HEREIN, MINIMUM 75LB OR MAXIMUM AS LISTED HEREIN.
- THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO EXISTING STRUCTURE.
- REACTION FORCES LISTED FOR USE WITH HOST STRUCTURE VERIFICATION ARE CALCULATED USING ASD METHODOLOGY. DESIGN PROFESSIONAL OF RECORD TO VERIFY APPLICABILITY AND/OR ADDITIONAL FACTORS FOR USE WITH HOST STRUCTURE VERIFICATION.
- ALL FASTENERS TO BE #14 OR GREATER SAE GRADE 5, UNLESS NOTED OTHERWISE, CADMIUM PLATED OR OTHERWISE CORROSION RESISTANT MATERIAL AND SHALL COMPLY WITH ANY APPLICABLE FEDERAL, STATE, AND LOCAL CODES. PROVIDE (5) PITCHES MIN PAST THREAD PLANE, 3X THE FASTENER DIAMETER MIN. SPACING & 2X THE FASTENER DIAMETER MIN. EDGE DISTANCE TO ANY ALUMINUM EDGE, U.N.O.. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.7.2 BY THE ALUMINUM ASSOCIATION INC., AND ANY APPLICABLE FEDERAL, STATE AND OR LOCAL CODES.
- REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.

### MAXIMUM ALLOWABLE DESIGN PRESSURES (ASD):

AS NOTED IN DESIGN SCHEDULES

### GENERAL NOTES (CONTINUED):

- ALL EXTRUDED MEMBERS SHALL BE ALUMINUM ALLOY TYPE 6061-T6 OR 6005-T5.
- ALL EXISTING CONCRETE SUBSTRATE SHALL HAVE MINIMUM  $f'_c$  COMPRESSIVE STRENGTH OF 3000 PSI AS VERIFIED BY OTHERS.
- ALUMINUM WELDING SHALL BE PERFORMED IN ACCORDANCE WITH FBC SECTION 2003.8.1.4 WITH WELD FILLER ALLOYS MEETING ANSI/AWS A5.10 STANDARDS TO ACHIEVE ULTIMATE DESIGN STRENGTH IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL, TABLE A.3.6 WELD FILLER: 5383 ELECTRODES. ALL ALUMINUM CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE TOLERANCES, QUALITY AND METHODS OF CONSTRUCTION AS SET FORTH IN FBC SECTION 2003.2 AND THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE-ALUMINUM. MINIMUM WELD IS 1/8" THROAT FULL PERIMETER FILLET WELD UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS. ALL MECHANICAL SPECIFICATIONS (CLEAR SPACE, TONNAGE, ETC.) SHALL BE AS PER MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- ALTERATIONS ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- AC STANDS SHALL BE LABELED CONTAINING:

PRECISION ALUMINUM PRODUCTS, INC.  
DEERFIELD BEACH, FL  
FLORIDA PRODUCT APPROVAL NUMBER

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024

#### NOTE REGARDING USE OF THIS DOCUMENT & USE OUTSIDE FLORIDA:

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. THIS PRODUCT EVALUATION IS VALID FOR USE IN **FLORIDA ONLY**. USE OF THIS EVALUATION REQUIRES A REVIEW & CERTIFICATION BY A LOCAL DESIGN PROFESSIONAL WHO SHALL BE RESPONSIBLE FOR THE PROPER ADAPTATION OF THIS GENERAL PERFORMANCE EVALUATION TO ANY SITE-SPECIFIC PROJECT. CONTACT THIS OFFICE AT **ENGINEERINGEXPRESS.COM/QUOTE** FOR ASSISTANCE WITH YOUR PROJECT-SPECIFIC NEEDS & FOR ADAPTATION & CERTIFICATION OF THIS DOCUMENT OUTSIDE OF FLORIDA.

FL 16921.1

**ENGINEERING EXPRESS**  
POSTAL ADDRESS:  
2234 NORTH FEDERAL HWY #7664  
BOCA RATON, FL 33431  
ENGINEERINGEXPRESS.COM

#### PAGE INDEX:

SHEET INDEX	
# SHEET	DESCRIPTION
1	COVER SHEET
2	ASSEMBLY ELEVATIONS & PARTS
3	STAND COMPONENTS & CALCULATION DIRECTIVE
4-7	"STD" STAND DESIGN SCHEDULE
8-11	"HD" STAND DESIGN SCHEDULE
11-14	"XHD" STAND DESIGN SCHEDULE
14-16	"FIXED HD" STAND DESIG SCHEDULE
16	"XHD" CUSTOM BRACE STAND DESIGN SCHEDULE
17-18	FRAME ASSEMBLY & UNIT TIE-DOWN DETAILS

#### TERMINOLOGY:

THE FOLLOWING ABBREVIATIONS APPEAR IN THIS APPROVAL: "ER" FOR "END RETENTION", "NER" FOR "NON-END RETENTION", "INC." FOR "INCORPORATION", "CORP." FOR "CORPORATION", "ALUM" FOR "ALUMINUM", "ASD" FOR "ALLOWABLE STRESS DESIGN", "ASTM" FOR "AMERICAN SOCIETY FOR TESTING AND MATERIALS", "CS" FOR "CARBON STEEL", "CONN" FOR "CONNECTION", "EMBED" FOR "EMBEDMENT", "DIST." FOR "DISTANCE", "GA" FOR "GAUGE", "HVHZ" FOR "HIGH-VELOCITY HURRICANE ZONE", "LB" FOR "POUND", "MAX" FOR "MAXIMUM", "N.T.S." FOR "NOT TO SCALE", "PSF" FOR "POUNDS PER SQUARE FOOT (lb/ft<sup>2</sup>)", "SPECS" FOR "SPECIFICATIONS", "&" FOR "AND", "MAX" FOR "MAXIMUM", "W/" FOR "WITH", "EXIST" FOR "EXISTING", "STRUCT" FOR "STRUCTURE", "CONC." FOR "CONCRETE". CONTACT ENGINEERING EXPRESS FOR ADDITIONAL ABBREVIATION/TERMINOLOGY CLARIFICATIONS.

VISIT [ECALC.IO/69401](http://ECALC.IO/69401)

FOR SITE-SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE

VISIT [ENGINEERINGEXPRESS.COM/STORE](http://ENGINEERINGEXPRESS.COM/STORE) FOR ADDITIONAL PLANS, REPORTS & RESOURCES



PRECISION ALUMINUM PRODUCTS, INC.

1339 SW 1ST WAY  
DEERFIELD BEACH, FL 33441  
(954) 480-6919

ALUMINUM A/C STANDS  
FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
FLORIDA STATEWIDE APPROVAL (FSA #16921.1)

REMARKS	DATE	DRWN	CHKD
PREV. SUBMITTAL (20-32768)	12/15/20	CSL	RWN
2023 FBC UPDATE & TECH. CHANGES	12/08/23	MRT	RWN

23-69401

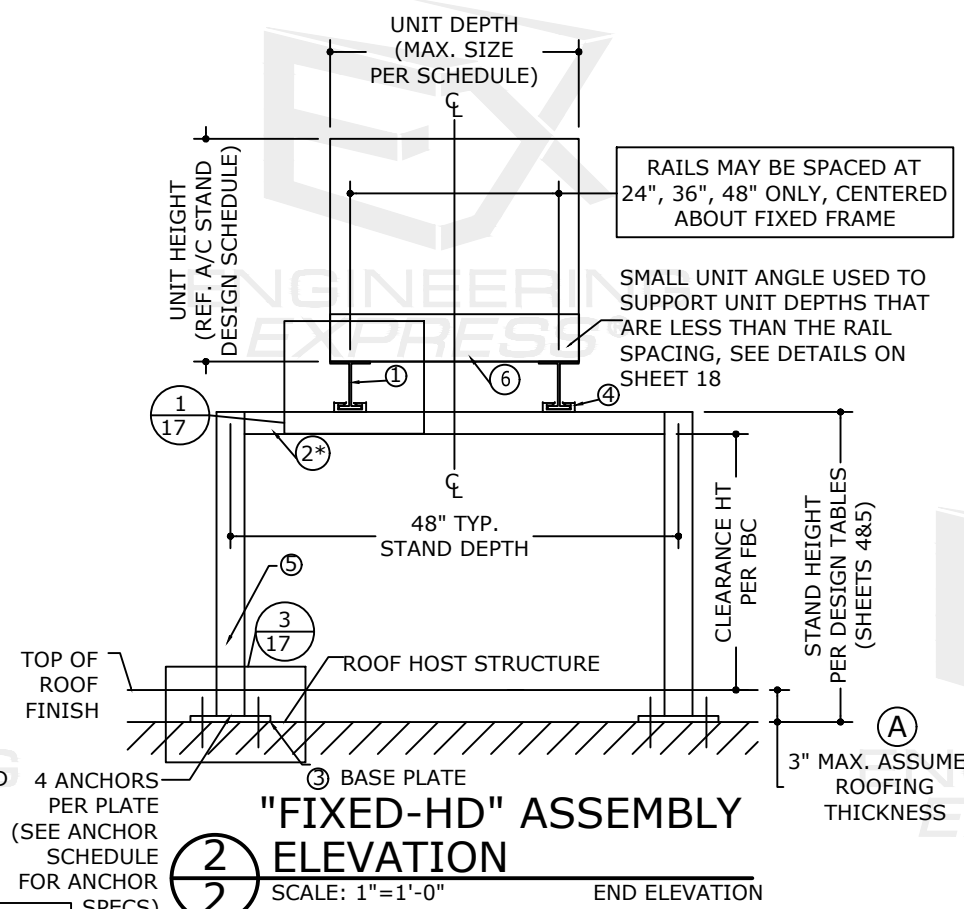
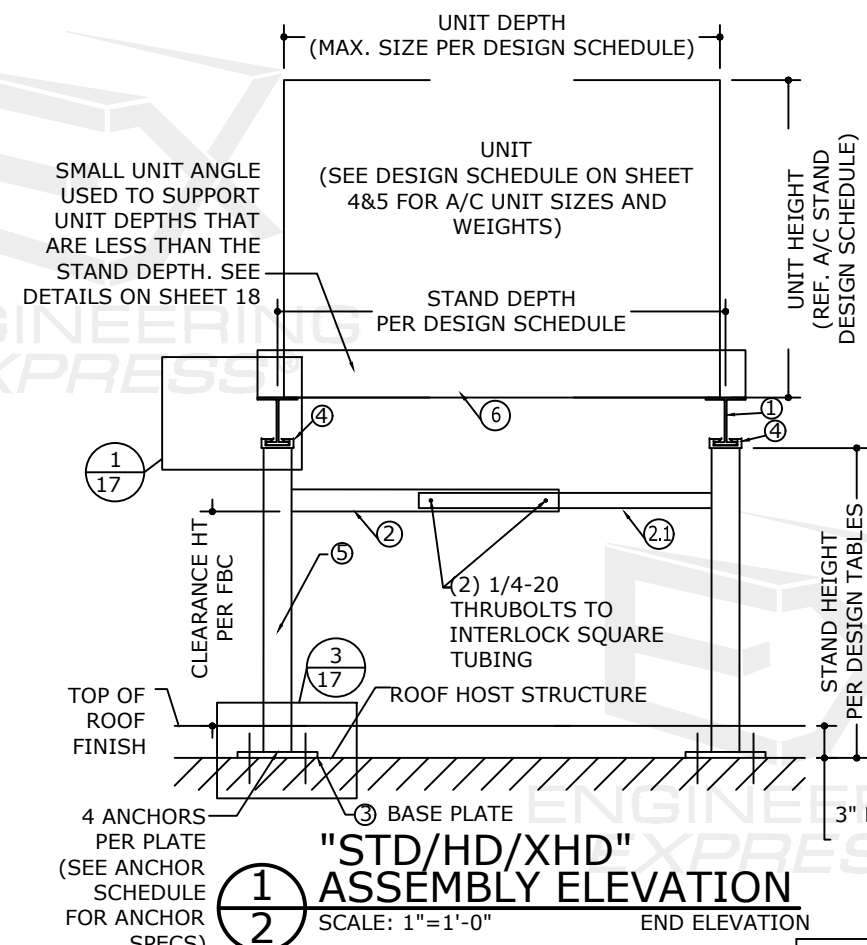
SCALE: NTS UNLESS NOTED

1 OF 18



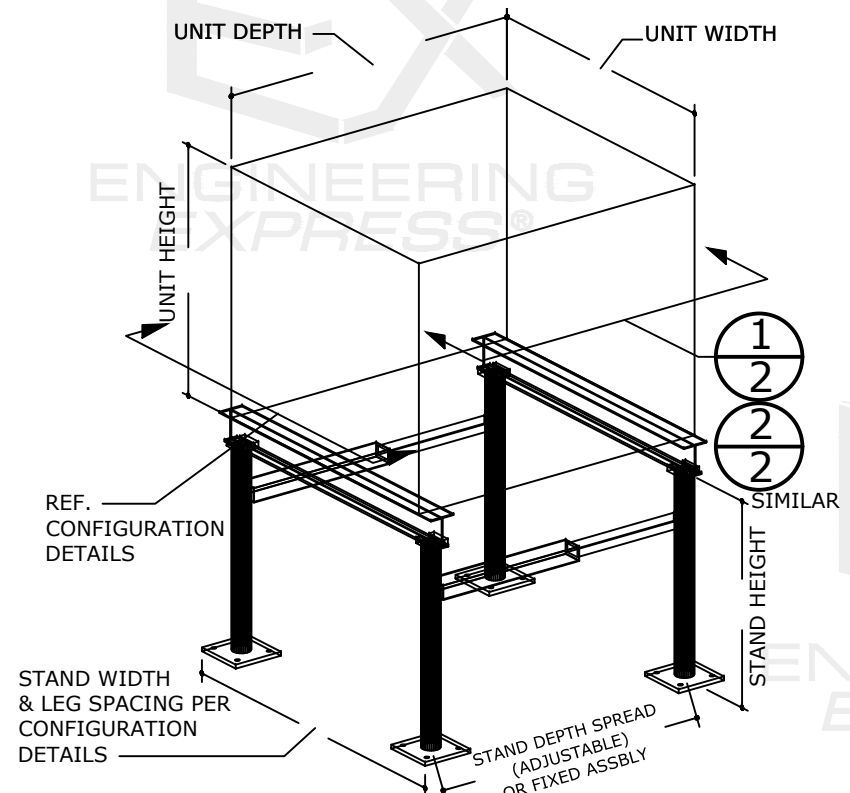
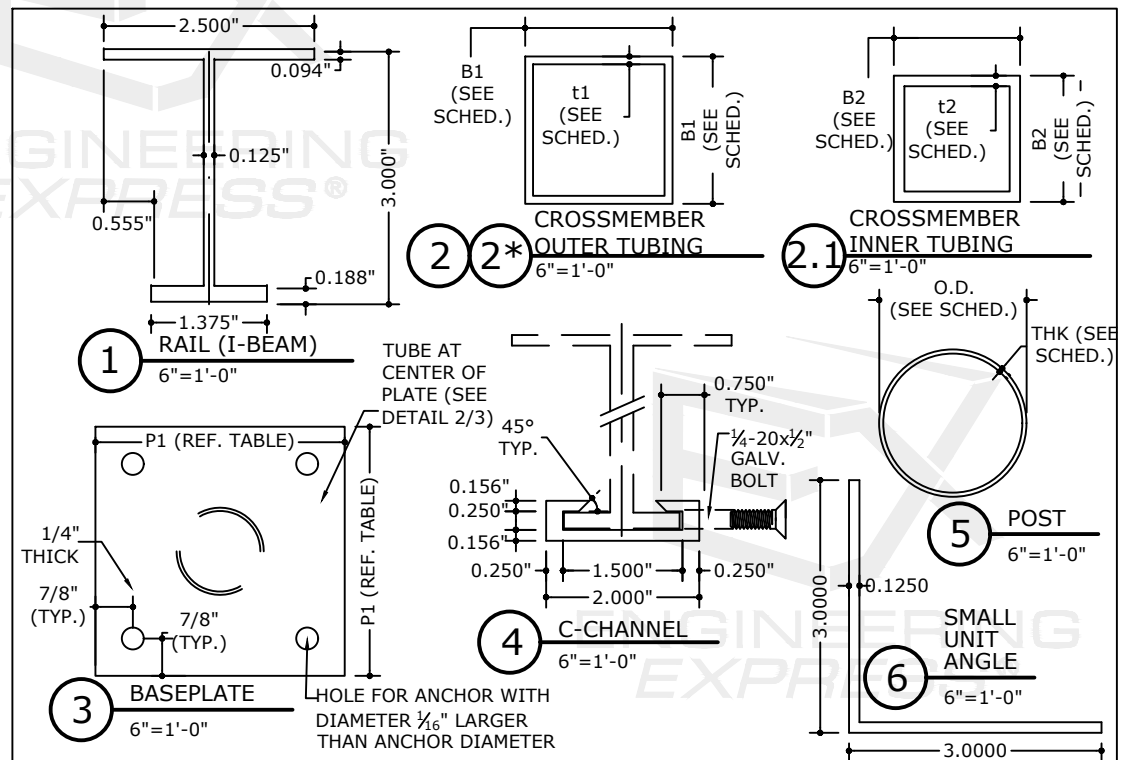
FL

# ALUMINUM A/C STAND



**A** UTILIZE NEXT-HIGHEST STAND HEIGHT FOR LARGER ROOF THICKNESS. FOR ROOFING WITHOUT INSULATION OMIT 3" THICKNESS AND UTILIZE CLEAR HEIGHT FROM FINISHED FLOOR. SPECIAL CONDITIONS REQUIRE SITE-SPECIFIC ENGINEERING.

UTILIZE NEXT-SMALLEST STAND DEPTH FOR VALUES IN BETWEEN EXISTING TABLES  
75# MIN./450 # MAX (800# MAX w/XHD STANDS) UNIT WEIGHT AS VERIFIED BY OTHERS, TYP.



FL 16921.1

**ENGINEERING EXPRESS**  
POSTAL ADDRESS:  
2234 NORTH FEDERAL HWY #7664  
BOCA RATON, FL 33431  
ENGINEERINGEXPRESS.COM

**PRECISION ALUMINUM PRODUCTS, INC.**  
1339 SW 1ST WAY  
DEERFIELD BEACH, FL 33441  
(954) 480-6919  
ALUMINUM A/C STANDS  
FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
FLORIDA STATEWIDE APPROVAL (FSA FL#16921.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-32768)	CSL	RWN	12/15/20
2023 FBC UPDATE & TECH. CHANGES	IMRT	RWN	12/08/23

23-69401

SCALE: NTS UNLESS NOTED



# STAND COMPONENTS



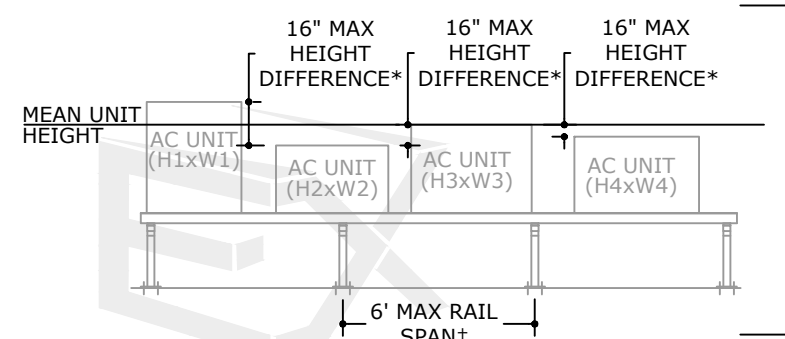
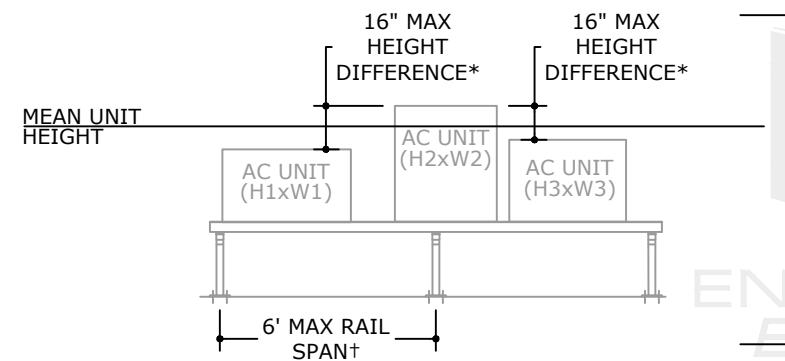
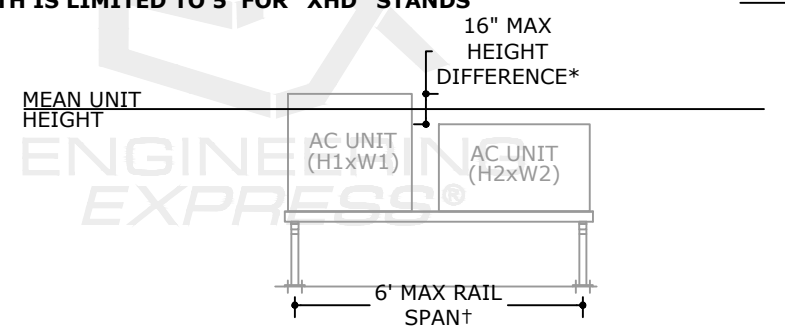
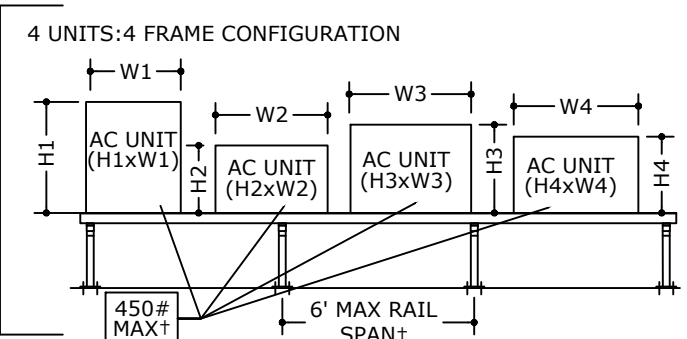
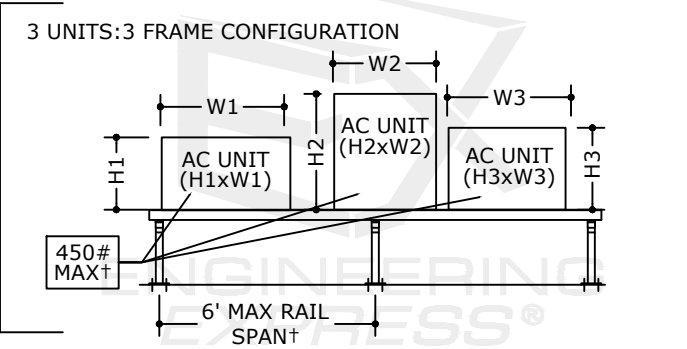
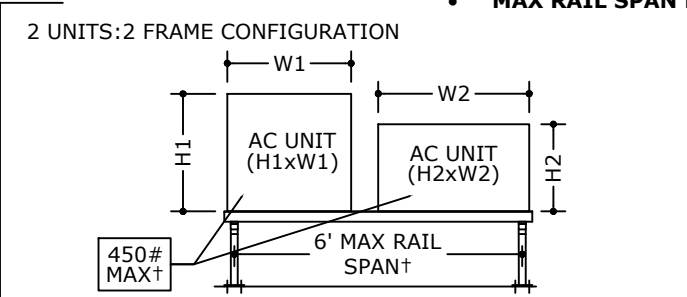
PART	DESCR.	STAND TYPE			
		STD	HD	XHD	FIXED-HD
②	OUTER TUBE SIZE (B1 x B1 x t1)	1.25" x 1.25" x 0.093"	1.50" x 1.50" x 0.093"	2.00" x 2.00" x 0.093"	N/A
②*	OUTER TUBE SIZE (B1 x B1 x t1)	N/A	N/A	N/A	2.00" x 2.00" x 0.093"
②.1	INNER TUBE SIZE (B2 x B2 x t2)	1.00" x 1.00" x 0.125"	1.25" x 1.25" x 0.125"	1.75" x 1.75" x 0.125"	N/A
④	POST SIZE (OD X THK)	1.5" x 0.090"	1.9" x 0.145"	1.9" x 0.200"	1.9" x 0.145"
⑤	BASEPLATE SIZE (P1 X P1)	4" x 4"	•4" X 4" UP TO 24" STAND HT •5" X 5" FOR 30" STAND HT	6" X 6"	5" X 5"

- LEGEND:
- "HD" = HEAVY DUTY
  - "STD" = STANDARD
  - "XHD" = EXTRA HEAVY DUTY
- ②\* SHALL BE UTILIZED FOR HD FIXED ASSEMBLY ONLY

## MEAN UNIT HEIGHT & MAX FACE AREA CALCULATION DIRECTIVE: THIS DIRECTIVE SHALL BE USED TO CALCULATE THE MEAN UNIT HEIGHT & MAXIMUM FACE AREA OF ANY MULTIPLE UNIT CONFIGURATION.

### EXAMPLE CONFIGURATIONS:

- †NOTE
- UNIT WEIGHT MAY BE INCREASED TO 800# MAX FOR "XHD" STANDS
  - MAX RAIL SPAN LENGTH IS LIMITED TO 5' FOR "XHD" STANDS



### FORMULAS USED FOR DETERMINING MEAN UNIT HEIGHT & MAXIMUM UNIT FACE AREA:

1. CALCULATE THE MEAN UNIT HEIGHT BY THE FOLLOWING EQUATION:

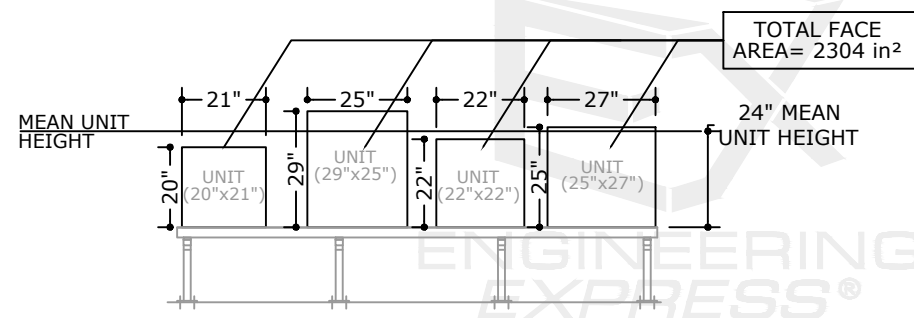
- TWO UNITS:  $\frac{H1+H2}{2}$
- THREE UNITS:  $\frac{H1+H2+H3}{3}$
- FOUR UNITS:  $\frac{H1+H2+H3+H4}{4}$
- "n" UNITS:  $\frac{H1+H2+H3+...+Hn}{n}$

2. CALCULATE THE MAXIMUM UNIT FACE AREA BY THE FOLLOWING EQUATION:

- TWO UNITS:  $(H1 \times W1) + (H2 \times W2)$
- THREE UNITS:  $(H1 \times W1) + (H2 \times W2) + (H3 \times W3)$
- FOUR UNITS:  $(H1 \times W1) + (H2 \times W2) + (H3 \times W3) + (H4 \times W4)$
- "n" UNITS:  $(H1 \times W1) + ... + (Hn \times Wn)$

### EXAMPLE SCENARIO:

- CONSIDER A FOUR UNIT CONFIGURATION WITH THE DIMENSIONS AS SHOWN BELOW.
- CALCULATE THE MEAN UNIT HEIGHT.
  - FOUR UNITS:  $\frac{H1+H2+H3+H4}{4} = \frac{20''+29''+22''+25''}{4} = 24''$  MEAN UNIT HEIGHT
- CALCULATE THE MAXIMUM FACE AREA.
  - FOUR UNITS:  $(H1 \times W1) + (H2 \times W2) + (H3 \times W3) + (H4 \times W4) = (20'' \times 21'') + (29'' \times 25'') + (22'' \times 22'') + (25'' \times 27'')$
  - = 2304 in<sup>2</sup>



NOTE: THE NUMBER OF UNITS PER STAND CONFIGURATION MAY BE UNLIMITED PROVIDED THAT MULTIPLE UNITS CONFORM TO THE MEAN UNIT HEIGHT & MAXIMUM UNIT FACE AREA RESTRICTIONS UTILIZED IN THE DESIGN SCHEDULES.

\*MAXIMUM ALLOWABLE HEIGHT DIFFERENCE BETWEEN ANY UNITS IN A MULTIPLE UNIT CONFIGURATION IS RESTRICTED TO 16" MAX.

FL 16921.1

**ENGINEERING EXPRESS**  
 POSTAL ADDRESS:  
 2234 NORTH FEDERAL HWY #7664  
 BOCA RATON, FL 33431  
 ENGINEERINGEXPRESS.COM

**PRECISION ALUMINUM PRODUCTS, INC.**  
 1339 SW 1ST WAY  
 DEERFIELD BEACH, FL 33441  
 (954) 480-6919  
 ALUMINUM A/C STANDS  
 FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
 FLORIDA STATEWIDE APPROVAL (FSA #16921.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-37768)	CSL	RWN	12/15/20
2023 FCC UPDATE & TECH. CHANGES	MRT	RWN	12/08/23

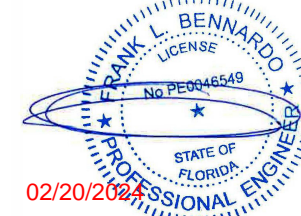
23-69401

SCALE: NTS UNLESS NOTED

# "STD" STAND DESIGN SCHEDULES & STAND DIRECTIVE EXAMPLE

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



## DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

## 24" STAND DEPTH: MAX FACE AREA (2760in<sup>2</sup> - 11520in<sup>2</sup>), FRAME QUANTITY (5-8 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 8 FRAMES				MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	2760 in <sup>2</sup>	87.3 PSF	68.9 PSF	87.3 PSF	68.9 PSF	76.4 PSF	60.3 PSF	76.4 PSF	60.3 PSF	65.5 PSF	51.7 PSF	65.5 PSF	51.7 PSF	54.6 PSF	43.1 PSF	54.6 PSF	43.1 PSF	100.40 LB-FT	104.6 LB	356.4 LB	373.2 LB
24"			68.4 PSF	54.0 PSF	68.4 PSF	54.0 PSF	59.8 PSF	47.2 PSF	59.8 PSF	47.2 PSF	51.3 PSF	40.5 PSF	51.3 PSF	40.5 PSF	42.7 PSF	33.7 PSF	42.7 PSF	33.7 PSF	100.40 LB-FT	81.9 LB	317.0 LB	362.5 LB
30"			56.4 PSF	44.5 PSF	56.4 PSF	44.5 PSF	49.3 PSF	38.9 PSF	49.3 PSF	38.9 PSF	42.3 PSF	33.4 PSF	42.3 PSF	33.4 PSF	35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	100.40 LB-FT	67.5 LB	292.7 LB	356.4 LB
36"	30"	4650 in <sup>2</sup>	48.0 PSF	37.9 PSF	48.0 PSF	37.9 PSF	42.0 PSF	33.2 PSF	42.0 PSF	33.2 PSF	36.0 PSF	28.4 PSF	36.0 PSF	28.4 PSF	30.0 PSF	23.7 PSF	30.0 PSF	23.7 PSF	100.40 LB-FT	57.6 LB	276.2 LB	352.5 LB
18"			51.8 PSF	40.9 PSF	51.8 PSF	40.9 PSF	45.3 PSF	35.8 PSF	45.3 PSF	35.8 PSF	38.8 PSF	30.7 PSF	38.8 PSF	30.7 PSF	32.4 PSF	25.5 PSF	32.4 PSF	25.5 PSF	100.40 LB-FT	104.6 LB	382.5 LB	399.4 LB
24"			40.6 PSF	32.0 PSF	40.6 PSF	32.0 PSF	35.5 PSF	28.0 PSF	35.5 PSF	28.0 PSF	30.4 PSF	24.0 PSF	30.4 PSF	24.0 PSF	25.3 PSF	20.0 PSF	25.3 PSF	20.0 PSF	100.40 LB-FT	81.9 LB	337.5 LB	383.0 LB
30"	36"	6300 in <sup>2</sup>	33.4 PSF	26.4 PSF	33.4 PSF	26.4 PSF	29.3 PSF	23.1 PSF	29.3 PSF	23.1 PSF	25.1 PSF	19.8 PSF	25.1 PSF	19.8 PSF	20.9 PSF	16.5 PSF	20.9 PSF	16.5 PSF	100.40 LB-FT	67.5 LB	309.6 LB	373.3 LB
36"			28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	24.9 PSF	19.7 PSF	24.9 PSF	19.7 PSF	21.4 PSF	16.9 PSF	21.4 PSF	16.9 PSF					100.40 LB-FT	57.6 LB	290.6 LB	344.4 LB
18"			38.2 PSF	30.2 PSF	38.2 PSF	30.2 PSF	33.4 PSF	26.4 PSF	33.4 PSF	26.4 PSF	28.7 PSF	22.6 PSF	28.7 PSF	22.6 PSF	23.9 PSF	18.8 PSF	23.9 PSF	18.8 PSF	100.40 LB-FT	104.6 LB	408.7 LB	425.5 LB
24"	42"	8400 in <sup>2</sup>	29.9 PSF	23.6 PSF	29.9 PSF	23.6 PSF	26.2 PSF	20.7 PSF	26.2 PSF	20.7 PSF	22.4 PSF	17.7 PSF	22.4 PSF	17.7 PSF					100.40 LB-FT	81.9 LB	358.0 LB	381.0 LB
30"			24.7 PSF	19.5 PSF	24.7 PSF	19.5 PSF	21.6 PSF	17.0 PSF	21.6 PSF	17.0 PSF									100.40 LB-FT	67.5 LB	326.5 LB	351.6 LB
36"			21.0 PSF	16.6 PSF	21.0 PSF	16.6 PSF														100.40 LB-FT	57.6 LB	305.0 LB
18"	48"	11520 in <sup>2</sup>	28.7 PSF	22.6 PSF	28.7 PSF	22.6 PSF	25.1 PSF	19.8 PSF	25.1 PSF	19.8 PSF	21.5 PSF	16.9 PSF	21.5 PSF	16.9 PSF					100.40 LB-FT	104.6 LB	434.9 LB	429.2 LB
24"			22.4 PSF	17.7 PSF	22.4 PSF	17.7 PSF													100.40 LB-FT	81.9 LB	378.5 LB	373.4 LB
30"																						
36"																						

FL 16921.1

**ENGINEERING EXPRESS**  
 POSTAL ADDRESS:  
 2234 NORTH FEDERAL HWY #7664  
 BOCA RATON, FL 33431  
 ENGINEERINGEXPRESS.COM

PRECISION ALUMINUM PRODUCTS, INC.  
 1339 SW 1ST WAY  
 DEERFIELD BEACH, FL 33441  
 (954) 480-6919  
 ALUMINUM A/C STANDS  
 FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
 FLORIDA STATEWIDE APPROVAL (FSA #16921.1)

## DESIGN SCHEDULE NOTES:

- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

## DESIGN SCHEDULE NOTES:

- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

## TABLE LEGEND:

○ - DENOTES EXAMPLE VALUE FOR USE WITH COVER PAGE DIRECTIVE

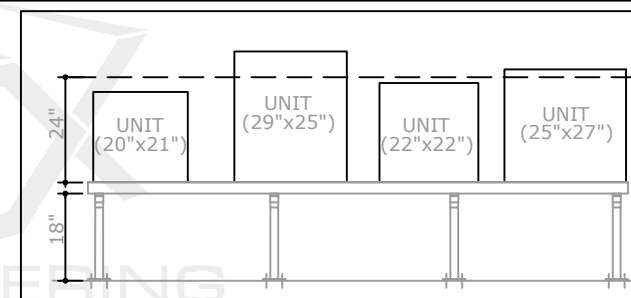
## STAND EXAMPLE

(THE FOLLOWING EXAMPLE ILLUSTRATES THE PROCEDURE USED TO DETERMINE THE MAXIMUM ALLOWABLE WIND PRESSURE & UPLIFT FOR ANY GIVEN MECHANICAL UNIT CONFIGURATION THAT CONFORMS TO THE DIMENSION RESTRICTIONS LISTED HEREIN. SEE SHEET 3 FOR MEAN UNIT HEIGHT & MAXIMUM FACE AREA CALCULATION DIRECTIVE. SEE SHEET 3 FOR COMPONENT SCHEDULE. SEE SHEET 17 FOR ANCHOR SCHEDULES.)

### MECHANICAL UNIT/STAND CRITERIA:

CONSIDER THE INSTALLATION OF (4) MECHANICAL UNITS, (1)-20" TALL x 24" DEEP x 21" WIDE, (1)-29" TALL x 24" DEEP x 25" WIDE, (1)-22" TALL x 24" DEEP x 22" WIDE, (1)-25" TALL x 27" DEEP x 27" WIDE, [350 LB MAX WEIGHT] INSTALLED WITH THE FOLLOWING CRITERIA:

- NUMBER OF LEG FRAMES= (5) FRAMES
- STAND HEIGHT= 18" HEIGHT
- STAND DEPTH= 24" STAND DEPTH SPREAD
- HOST STRUCTURE TYPE= 3,000 PSI CONCRETE (AS VERIFIED BY OTHERS).



### PROCEDURE:

### RESULT:

1	DETERMINE THE MEAN UNIT HEIGHT FOR THE GIVEN CONFIGURATION	SEE SHEET 3, CALCULATION DIRECTIVE STEP #1 FOR METHOD OF CALCULATING THE MEAN UNIT HEIGHT. FOR CLARIFICATION, THIS CONFIGURATION HAS BEEN WORKED OUT IN THE EXAMPLE SCENARIO. <b>(MEAN UNIT HEIGHT = 24 in)</b>
2	DETERMINE THE MAXIMUM FACE AREA FOR THE GIVEN CONFIGURATION	SEE SHEET 3, CALCULATION DIRECTIVE STEP #2 FOR METHOD OF CALCULATING THE MAXIMUM TOTAL UNIT FACE AREA. FOR CLARIFICATION, THIS CONFIGURATION HAS BEEN WORKED OUT IN THE EXAMPLE SCENARIO. <b>(MAXIMUM UNIT FACE AREA = 2304 in<sup>2</sup>)</b>
3	LOCATE DESIGN SCHEDULE THAT APPLIES TO THE GIVEN CONFIGURATION	SEE SHEET 4 FOR THE 24" STAND DEPTH WITH A MAXIMUM FACE AREA OF 2304 in <sup>2</sup> .
4	DETERMINE THE MAXIMUM ALLOWABLE LATERAL & UPLIFT WIND LOADS	FOR A 2304 in <sup>2</sup> MAX TOTAL UNIT FACE AREA ON A 18" STAND HEIGHT WITH (5) SUPPORTING FRAMES, THE ALLOWABLE WIND LOADS ARE AS FOLLOWS: <ul style="list-style-type: none"> <li>ALLOWABLE LATERAL WIND LOAD: <b>54.6 PSF</b> (FROM TABLE ABOVE)</li> <li>ALLOWABLE UPLIFT WIND LOAD: <b>43.1 PSF</b></li> </ul>
5	INSTALL STAND PER PERMISSIBLE ANCHOR TYPES AND VERIFY HOST STRUCTURE TYPE	UTILIZE ANCHOR TYPES FROM DESIGN SCHEDULE ASSOCIATED WITH THE ALLOWABLE WIND VALUES DETERMINED IN STEP 4. FOR THE TABLE LISTING, <b>ANCHOR TYPES 2 &amp; 3 MAY BE APPLIED</b> . FOR THIS EXAMPLE UTILIZE ANCHOR TYPE 2 FOR CONCRETE HOST STRUCTURE TYPE. INSTALL STANDS PER ANCHOR SCHEDULE AND DETAILS AS ILLUSTRATED ON SHEETS 17 & 18.

### CONCLUSION:

6	MAXIMUM ALLOWABLE LATERAL DESIGN PRESSURE= MAXIMUM ALLOWABLE UPLIFT DESIGN PRESSURE=	= 54.6 PSF = 43.1 PSF (FROM TABLE ABOVE)
7	COMPARE TO SITE SPECIFIC DESIGN CONDITIONS	COMPARE VALUES FROM STEP #6 TO THE SEPARATE SITE SPECIFIC REQUIRED DESIGN WIND PRESSURE PROVIDED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT; NOT INCLUDED IN THIS CERTIFICATION. SITE-SPECIFIC PRESSURE REQUIREMENTS SHALL BE LESS THAN OR EQUAL TO THE LATERAL AND UPLIFT DESIGN PRESSURE ALLOWABLE CAPACITY VALUES LISTED.

REMARKS	DATE	DRWN	CHKD
PREV. SUBMITTAL (20-32768)	12/15/20	CSL	RWN
2023 FBC UPDATE & TECH. CHANGES	12/08/23	MRT	RWN

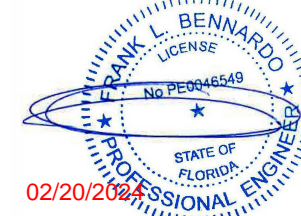
23-69401

SCALE: NTS UNLESS NOTED

# "STD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

**36" STAND DEPTH: MAX FACE AREA (2760in<sup>2</sup> - 11520in<sup>2</sup>), FRAME QUANTITY (5-8 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY				
			MAX FACE AREA : 8 FRAMES				MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)	
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3						
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT						
18"	24"	2760 in <sup>2</sup>	81.7 PSF	64.5 PSF	81.7 PSF	64.5 PSF	71.5 PSF	56.4 PSF	71.5 PSF	56.4 PSF	61.3 PSF	48.3 PSF	61.3 PSF	48.3 PSF	51.0 PSF	40.3 PSF	51.0 PSF	40.3 PSF	100.40 LB-FT	97.9 LB	242.7 LB	268.1 LB	
24"			64.3 PSF	50.7 PSF	64.3 PSF	50.7 PSF	56.2 PSF	44.4 PSF	56.2 PSF	44.4 PSF	48.2 PSF	38.0 PSF	48.2 PSF	38.0 PSF	40.1 PSF	31.7 PSF	40.1 PSF	31.7 PSF	100.40 LB-FT	77.0 LB	213.6 LB	265.4 LB	
30"			53.2 PSF	42.0 PSF	53.2 PSF	42.0 PSF	46.6 PSF	36.8 PSF	46.6 PSF	36.8 PSF	39.9 PSF	31.5 PSF	39.9 PSF	31.5 PSF	33.3 PSF	26.2 PSF	33.3 PSF	26.2 PSF	100.40 LB-FT	63.8 LB	195.9 LB	264.3 LB	
36"			45.6 PSF	36.0 PSF	45.6 PSF	36.0 PSF	39.9 PSF	31.5 PSF	39.9 PSF	31.5 PSF	34.2 PSF	27.0 PSF	34.2 PSF	27.0 PSF	28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	100.40 LB-FT	54.6 LB	183.9 LB	263.9 LB	
18"	30"	4650 in <sup>2</sup>	48.5 PSF	38.2 PSF	48.5 PSF	38.2 PSF	42.4 PSF	33.5 PSF	42.4 PSF	33.5 PSF	36.3 PSF	28.7 PSF	36.3 PSF	28.7 PSF	30.3 PSF	23.9 PSF	30.3 PSF	23.9 PSF	100.40 LB-FT	97.9 LB	259.0 LB	284.4 LB	
24"			38.1 PSF	30.1 PSF	38.1 PSF	30.1 PSF	33.4 PSF	26.3 PSF	33.4 PSF	26.3 PSF	28.6 PSF	22.6 PSF	28.6 PSF	22.6 PSF	23.8 PSF	18.8 PSF	23.8 PSF	18.8 PSF	100.40 LB-FT	77.0 LB	226.5 LB	278.2 LB	
30"			31.6 PSF	24.9 PSF	31.6 PSF	24.9 PSF	27.6 PSF	21.8 PSF	27.6 PSF	21.8 PSF	23.7 PSF	18.7 PSF	23.7 PSF	18.7 PSF	20.3 PSF	16.0 PSF	20.3 PSF	16.0 PSF	100.40 LB-FT	63.8 LB	206.5 LB	252.4 LB	
36"			27.0 PSF	21.3 PSF	27.0 PSF	21.3 PSF	23.6 PSF	18.7 PSF	23.6 PSF	18.7 PSF	20.3 PSF	16.0 PSF	20.3 PSF	16.0 PSF	17.6 PSF	13.9 PSF	17.6 PSF	13.9 PSF	100.40 LB-FT	54.6 LB	193.0 LB	250.5 LB	
18"	36"	6300 in <sup>2</sup>	35.8 PSF	28.2 PSF	35.8 PSF	28.2 PSF	31.3 PSF	24.7 PSF	31.3 PSF	24.7 PSF	26.8 PSF	21.2 PSF	26.8 PSF	21.2 PSF	22.3 PSF	17.6 PSF	22.3 PSF	17.6 PSF	100.40 LB-FT	97.9 LB	275.3 LB	300.7 LB	
24"			28.1 PSF	22.2 PSF	28.1 PSF	22.2 PSF	24.6 PSF	19.4 PSF	24.6 PSF	19.4 PSF	21.1 PSF	16.6 PSF	21.1 PSF	16.6 PSF	18.8 PSF	14.6 PSF	18.8 PSF	14.6 PSF	100.40 LB-FT	77.0 LB	239.3 LB	268.6 LB	
30"			23.3 PSF	18.4 PSF	23.3 PSF	18.4 PSF	20.4 PSF	16.1 PSF	20.4 PSF	16.1 PSF	18.7 PSF	14.4 PSF	18.7 PSF	14.4 PSF	16.6 PSF	12.4 PSF	16.6 PSF	12.4 PSF	100.40 LB-FT	63.8 LB	217.2 LB	247.0 LB	
36"			20.4 PSF	15.6 PSF	20.4 PSF	15.6 PSF	18.1 PSF	13.8 PSF	18.1 PSF	13.8 PSF	16.6 PSF	12.4 PSF	16.6 PSF	12.4 PSF	14.4 PSF	10.2 PSF	14.4 PSF	10.2 PSF	100.40 LB-FT	54.6 LB	191.6 LB	249.5 LB	
18"	42"	8400 in <sup>2</sup>	26.8 PSF	21.2 PSF	26.8 PSF	21.2 PSF	23.4 PSF	18.5 PSF	23.4 PSF	18.5 PSF	20.1 PSF	15.9 PSF	20.1 PSF	15.9 PSF					100.40 LB-FT	97.9 LB	291.6 LB	294.5 LB	
24"			21.1 PSF	16.6 PSF	21.1 PSF	16.6 PSF													100.40 LB-FT	77.0 LB	252.1 LB	253.3 LB	
30"																							
36"																							
18"	48"	11520 in <sup>2</sup>																					
24"																							
30"																							
36"																							

**24" STAND DEPTH: MAX FACE AREA (2208in<sup>2</sup> - 9216in<sup>2</sup>), FRAME QUANTITY (4-7 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY				
			MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)	
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3						
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT						
18"	24"	2208 in <sup>2</sup>	95.5 PSF	75.4 PSF	95.5 PSF	75.4 PSF	81.9 PSF	64.6 PSF	81.9 PSF	64.6 PSF	68.2 PSF	53.8 PSF	68.2 PSF	53.8 PSF	54.6 PSF	43.1 PSF	54.6 PSF	43.1 PSF	100.40 LB-FT	104.6 LB	357.6 LB	373.2 LB	
24"			74.8 PSF	59.0 PSF	74.8 PSF	59.0 PSF	64.1 PSF	50.6 PSF	64.1 PSF	50.6 PSF	53.4 PSF	42.2 PSF	53.4 PSF	42.2 PSF	42.7 PSF	33.7 PSF	42.7 PSF	33.7 PSF	100.40 LB-FT	81.9 LB	318.2 LB	362.5 LB	
30"			61.7 PSF	48.7 PSF	61.7 PSF	48.7 PSF	52.8 PSF	41.7 PSF	52.8 PSF	41.7 PSF	44.0 PSF	34.8 PSF	44.0 PSF	34.8 PSF	35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	100.40 LB-FT	67.5 LB	293.9 LB	356.4 LB	
36"			52.5 PSF	41.5 PSF	52.5 PSF	41.5 PSF	45.0 PSF	35.5 PSF	45.0 PSF	35.5 PSF	37.5 PSF	29.6 PSF	37.5 PSF	29.6 PSF	30.0 PSF	23.7 PSF	30.0 PSF	23.7 PSF	100.40 LB-FT	57.6 LB	277.4 LB	352.5 LB	
18"	30"	3720 in <sup>2</sup>	56.7 PSF	44.7 PSF	56.7 PSF	44.7 PSF	48.6 PSF	38.3 PSF	48.6 PSF	38.3 PSF	40.5 PSF	31.9 PSF	40.5 PSF	31.9 PSF	32.4 PSF	25.5 PSF	32.4 PSF	25.5 PSF	100.40 LB-FT	104.6 LB	383.7 LB	399.4 LB	
24"			44.4 PSF	35.0 PSF	44.4 PSF	35.0 PSF	38.0 PSF	30.0 PSF	38.0 PSF	30.0 PSF	31.7 PSF	25.0 PSF	31.7 PSF	25.0 PSF	25.3 PSF	20.0 PSF	25.3 PSF	20.0 PSF	100.40 LB-FT	81.9 LB	338.7 LB	383.0 LB	
30"			36.6 PSF	28.9 PSF	36.6 PSF	28.9 PSF	31.3 PSF	24.7 PSF	31.3 PSF	24.7 PSF	26.1 PSF	20.6 PSF	26.1 PSF	20.6 PSF	20.9 PSF	16.5 PSF	20.9 PSF	16.5 PSF	100.40 LB-FT	67.5 LB	310.8 LB	373.3 LB	
36"			31.2 PSF	24.6 PSF	31.2 PSF	24.6 PSF	26.7 PSF	21.1 PSF	26.7 PSF	21.1 PSF	22.2 PSF	17.6 PSF	22.2 PSF	17.6 PSF	20.9 PSF	16.5 PSF	20.9 PSF	16.5 PSF	100.40 LB-FT	57.6 LB	291.8 LB	339.5 LB	
18"	36"	5040 in <sup>2</sup>	41.8 PSF	33.0 PSF	41.8 PSF	33.0 PSF	35.8 PSF	28.3 PSF	35.8 PSF	28.3 PSF	29.9 PSF	23.6 PSF	29.9 PSF	23.6 PSF	23.9 PSF	18.8 PSF	23.9 PSF	18.8 PSF	100.40 LB-FT	104.6 LB	409.9 LB	425.5 LB	
24"			32.7 PSF	25.8 PSF	32.7 PSF	25.8 PSF	28.1 PSF	22.1 PSF	28.1 PSF	22.1 PSF	23.4 PSF	18.4 PSF	23.4 PSF	18.4 PSF	20.9 PSF	16.5 PSF	20.9 PSF	16.5 PSF	100.40 LB-FT	81.9 LB	359.2 LB	376.5 LB	
30"			27.0 PSF	21.3 PSF	27.0 PSF	21.3 PSF	23.1 PSF	18.2 PSF	23.1 PSF	18.2 PSF	18.4 PSF	14.4 PSF	18.4 PSF	14.4 PSF					100.40 LB-FT	67.5 LB	327.7 LB	345.2 LB	
36"			23.0 PSF	18.1 PSF	23.0 PSF	18.1 PSF	18.1 PSF	14.1 PSF	18.1 PSF	14.1 PSF										100.40 LB-FT	57.6 LB	306.2 LB	323.4 LB
18"	42"	6720 in <sup>2</sup>	31.4 PSF	24.7 PSF	31.4 PSF	24.7 PSF	26.9 PSF	21.2 PSF	26.9 PSF	21.2 PSF	22.4 PSF	17.7 PSF	22.4 PSF	17.7 PSF					100.40 LB-FT	104.6 LB	436.1 LB	424.7 LB	
24"			24.5 PSF	19.4 PSF	24.5 PSF	19.4 PSF	21.0 PSF	16.6 PSF	21.0 PSF	16.6 PSF									100.40 LB-FT	81.9 LB	379.7 LB	379.0 LB	
30"			20.2 PSF	16.0 PSF	20.2 PSF	16.0 PSF														100.40 LB-FT	67.5 LB	344.6 LB	349.2 LB
36"																							
18"	48"	9216 in <sup>2</sup>	22.8 PSF	18.0 PSF	22.8 PSF	18.0 PSF													100.40 LB-FT	104.6 LB	462.2 LB	420.0 LB	
24"																							
30"																							
36"																							

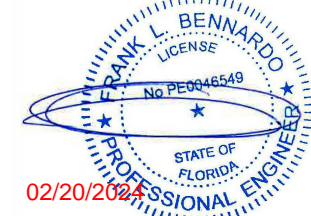
**36" STAND DEPTH: MAX FACE AREA (2208in<sup>2</sup> - 9216in<sup>2</sup>), FRAME QUANTITY (4-7 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	2208 in <sup>2</sup>	89.3 PSF	70.5 PSF	89.3 PSF	70.5 PSF	76.6 PSF	60.4 PSF	76.6 PSF	60.4 PSF	63.8 PSF	50.4 PSF	63.8 PSF	50.4 PSF	51.0 PSF	40.3 PSF	51.0 PSF	40.3 PSF	100.40 LB-FT	97.9 LB	243.9 LB	268.1 LB
24"			70.3 PSF	55.5 PSF	70.3 PSF	55.5 PSF	60.2 PSF	47.5 PSF	60.2 PSF	47.5 PSF	50.2 PSF	39.6 PSF	50.2 PSF	39.6 PSF	40.1 PSF	31.7 PSF	40.1 PSF	31.7 PSF	100.40 LB-FT	77.0 LB	214.8 LB	265.4 LB
30"			58.2 PSF	46.0 PSF	58.2 PSF	46.0 PSF	49.9 PSF	39.4 PSF	49.9 PSF	39.4 PSF	41.6 PSF	32.8 PSF	41.6 PSF	32.8 PSF	33.3 PSF	26.2 PSF	33.3 PSF	26.2 PSF	100.40 LB-FT	63.8 LB	197.1 LB	264.3 LB
36"			49.8 PSF	39.3 PSF	49.8 PSF	39.3 PSF	42.7 PSF	33.7 PSF	42.7 PSF	33.7 PSF	35.6 PSF	28.1 PSF	35.6 PSF	28.1 PSF	28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	100.40 LB-FT	54.6 LB	185.1 LB	263.9 LB
18"	30"	3720 in <sup>2</sup>	53.0 PSF	41.8 PSF	53.0 PSF	41.8 PSF	45.4 PSF	35.9 PSF	45.4 PSF	35.9 PSF	37.9 PSF	29.9 PSF	37.9 PSF	29.9 PSF	30.3 PSF	23.9 PSF	30.3 PSF	23.9 PSF	100.40 LB-FT	97.9 LB	260.2 LB	284.4 LB
24"			41.7 PSF	32.9 PSF	41.7 PSF	32.9 PSF	35.7 PSF	28.2 PSF	35.7 PSF	28.2 PSF	29.8 PSF	23.5 PSF	29.8 PSF	23.5 PSF	23.8 PSF	18.8 PSF	23.8 PSF	18.8 PSF	100.40 LB-FT	77.0 LB	227.7 LB	278.2 LB
30"			34.5 PSF	27.3 PSF	34.5 PSF	27.3 PSF	29.6 PSF	23.4 PSF	29.6 PSF	23.4 PSF	24.7 PSF	19.5 PSF	24.7 PSF	19.5 PSF	20.9 PSF	16.5 PSF	20.9 PSF	16.5 PSF	100.40 LB-FT	63.8 LB</		

# "STD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



## DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

### 24" STAND DEPTH: MAX FACE AREA (1656in<sup>2</sup> - 6912in<sup>2</sup>), FRAME QUANTITY (3-6 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY				
			MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)	
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3						
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT						
18"	24"	1656 in <sup>2</sup>	109.2 PSF	86.2 PSF	109.2 PSF	86.2 PSF	91.0 PSF	71.8 PSF	91.0 PSF	71.8 PSF	72.8 PSF	57.4 PSF	72.8 PSF	57.4 PSF	54.6 PSF	43.1 PSF	54.6 PSF	43.1 PSF	100.40 LB-FT	104.6 LB	359.2 LB	373.2 LB	
24"			85.5 PSF	67.5 PSF	85.5 PSF	67.5 PSF	71.2 PSF	56.2 PSF	71.2 PSF	56.2 PSF	57.0 PSF	45.0 PSF	57.0 PSF	45.0 PSF	42.7 PSF	33.7 PSF	42.7 PSF	33.7 PSF	100.40 LB-FT	81.9 LB	319.8 LB	362.5 LB	
30"			70.5 PSF	55.6 PSF	70.5 PSF	55.6 PSF	58.7 PSF	46.4 PSF	58.7 PSF	46.4 PSF	47.0 PSF	37.1 PSF	47.0 PSF	37.1 PSF	35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	100.40 LB-FT	67.5 LB	295.5 LB	356.4 LB	
36"			60.1 PSF	47.4 PSF	60.1 PSF	47.4 PSF	50.0 PSF	39.5 PSF	50.0 PSF	39.5 PSF	40.0 PSF	31.6 PSF	40.0 PSF	31.6 PSF	30.0 PSF	23.7 PSF	30.0 PSF	23.7 PSF	100.40 LB-FT	57.6 LB	279.0 LB	352.5 LB	
18"	30"	2790 in <sup>2</sup>	64.8 PSF	51.1 PSF	64.8 PSF	51.1 PSF	54.0 PSF	42.6 PSF	54.0 PSF	42.6 PSF	43.2 PSF	34.1 PSF	43.2 PSF	34.1 PSF	32.4 PSF	25.5 PSF	32.4 PSF	25.5 PSF	100.40 LB-FT	104.6 LB	385.3 LB	399.4 LB	
24"			50.7 PSF	40.0 PSF	50.7 PSF	40.0 PSF	42.3 PSF	33.4 PSF	42.3 PSF	33.4 PSF	33.8 PSF	26.7 PSF	33.8 PSF	26.7 PSF	25.3 PSF	20.0 PSF	25.3 PSF	20.0 PSF	100.40 LB-FT	81.9 LB	340.3 LB	383.0 LB	
30"			41.8 PSF	33.0 PSF	41.8 PSF	33.0 PSF	34.8 PSF	27.5 PSF	34.8 PSF	27.5 PSF	27.9 PSF	22.0 PSF	27.9 PSF	22.0 PSF	20.9 PSF	16.5 PSF	20.9 PSF	16.5 PSF	100.40 LB-FT	67.5 LB	312.4 LB	373.3 LB	
36"			35.6 PSF	28.1 PSF	35.6 PSF	28.1 PSF	29.7 PSF	23.4 PSF	29.7 PSF	23.4 PSF	23.7 PSF	18.7 PSF	23.7 PSF	18.7 PSF	23.9 PSF	18.8 PSF	23.9 PSF	18.8 PSF	100.40 LB-FT	57.6 LB	293.4 LB	333.1 LB	
18"	36"	3780 in <sup>2</sup>	47.8 PSF	37.7 PSF	47.8 PSF	37.7 PSF	39.8 PSF	31.4 PSF	39.8 PSF	31.4 PSF	31.8 PSF	25.1 PSF	31.8 PSF	25.1 PSF	31.8 PSF	25.1 PSF	31.8 PSF	25.1 PSF	100.40 LB-FT	104.6 LB	411.5 LB	425.5 LB	
24"			37.4 PSF	29.5 PSF	37.4 PSF	29.5 PSF	31.2 PSF	24.6 PSF	31.2 PSF	24.6 PSF	24.9 PSF	19.7 PSF	24.9 PSF	19.7 PSF	23.9 PSF	18.8 PSF	23.9 PSF	18.8 PSF	100.40 LB-FT	81.9 LB	360.8 LB	369.8 LB	
30"			30.8 PSF	24.3 PSF	30.8 PSF	24.3 PSF	25.7 PSF	20.3 PSF	25.7 PSF	20.3 PSF	20.5 PSF	16.2 PSF	20.5 PSF	16.2 PSF					100.40 LB-FT	67.5 LB	329.3 LB	356.5 LB	
36"			26.3 PSF	20.7 PSF	26.3 PSF	20.7 PSF	21.9 PSF	17.3 PSF	21.9 PSF	17.3 PSF									100.40 LB-FT	57.6 LB	307.8 LB	327.3 LB	
18"	42"	5040 in <sup>2</sup>	35.8 PSF	28.3 PSF	35.8 PSF	28.3 PSF	29.9 PSF	23.6 PSF	29.9 PSF	23.6 PSF	23.9 PSF	18.8 PSF	23.9 PSF	18.8 PSF					100.40 LB-FT	104.6 LB	437.7 LB	418.0 LB	
24"			28.1 PSF	22.1 PSF	28.1 PSF	22.1 PSF	23.4 PSF	18.4 PSF	23.4 PSF	18.4 PSF									100.40 LB-FT	81.9 LB	381.3 LB	370.0 LB	
30"			23.1 PSF	18.2 PSF	23.1 PSF	18.2 PSF													100.40 LB-FT	67.5 LB	346.2 LB	339.6 LB	
36"																							
18"	48"	6912 in <sup>2</sup>	26.1 PSF	20.6 PSF	26.1 PSF	20.6 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF									100.40 LB-FT	104.6 LB	463.9 LB	423.9 LB	
24"			20.4 PSF	16.1 PSF	20.4 PSF	16.1 PSF													100.40 LB-FT	81.9 LB	401.8 LB	377.0 LB	
30"																							
36"																							

### 36" STAND DEPTH: MAX FACE AREA (1656in<sup>2</sup> - 6912in<sup>2</sup>), FRAME QUANTITY (3-6 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	1656 in <sup>2</sup>	102.1 PSF	80.6 PSF	102.1 PSF	80.6 PSF	85.1 PSF	67.2 PSF	85.1 PSF	67.2 PSF	68.1 PSF	53.7 PSF	68.1 PSF	53.7 PSF	51.0 PSF	40.3 PSF	51.0 PSF	40.3 PSF	100.40 LB-FT	97.9 LB	245.5 LB	268.1 LB
24"			80.3 PSF	63.4 PSF	80.3 PSF	63.4 PSF	66.9 PSF	52.8 PSF	66.9 PSF	52.8 PSF	53.5 PSF	42.3 PSF	53.5 PSF	42.3 PSF	40.1 PSF	31.7 PSF	40.1 PSF	31.7 PSF	100.40 LB-FT	77.0 LB	216.4 LB	265.4 LB
30"			66.6 PSF	52.5 PSF	66.6 PSF	52.5 PSF	55.5 PSF	43.8 PSF	55.5 PSF	43.8 PSF	44.4 PSF	35.0 PSF	44.4 PSF	35.0 PSF	33.3 PSF	26.2 PSF	33.3 PSF	26.2 PSF	100.40 LB-FT	63.8 LB	198.7 LB	264.3 LB
36"			57.0 PSF	45.0 PSF	57.0 PSF	45.0 PSF	47.5 PSF	37.5 PSF	47.5 PSF	37.5 PSF	38.0 PSF	30.0 PSF	38.0 PSF	30.0 PSF	28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	100.40 LB-FT	54.6 LB	186.7 LB	263.9 LB
18"	30"	2790 in <sup>2</sup>	60.6 PSF	47.8 PSF	60.6 PSF	47.8 PSF	50.5 PSF	39.8 PSF	50.5 PSF	39.8 PSF	40.4 PSF	31.9 PSF	40.4 PSF	31.9 PSF	30.3 PSF	23.9 PSF	30.3 PSF	23.9 PSF	100.40 LB-FT	97.9 LB	261.8 LB	284.4 LB
24"			47.7 PSF	37.6 PSF	47.7 PSF	37.6 PSF	39.7 PSF	31.3 PSF	39.7 PSF	31.3 PSF	31.8 PSF	25.1 PSF	31.8 PSF	25.1 PSF	23.8 PSF	18.8 PSF	23.8 PSF	18.8 PSF	100.40 LB-FT	77.0 LB	229.3 LB	278.2 LB
30"			39.5 PSF	31.2 PSF	39.5 PSF	31.2 PSF	32.9 PSF	26.0 PSF	32.9 PSF	26.0 PSF	26.3 PSF	20.8 PSF	26.3 PSF	20.8 PSF					100.40 LB-FT	63.8 LB	209.3 LB	241.2 LB
36"			33.8 PSF	26.7 PSF	33.8 PSF	26.7 PSF	28.2 PSF	22.2 PSF	28.2 PSF	22.2 PSF	22.5 PSF	17.8 PSF	22.5 PSF	17.8 PSF					100.40 LB-FT	54.6 LB	195.8 LB	239.3 LB
18"	36"	3780 in <sup>2</sup>	44.7 PSF	35.3 PSF	44.7 PSF	35.3 PSF	37.2 PSF	29.4 PSF	37.2 PSF	29.4 PSF	29.8 PSF	23.5 PSF	29.8 PSF	23.5 PSF	22.3 PSF	17.6 PSF	22.3 PSF	17.6 PSF	100.40 LB-FT	97.9 LB	278.1 LB	300.7 LB
24"			35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	29.3 PSF	23.1 PSF	29.3 PSF	23.1 PSF	23.4 PSF	18.5 PSF	23.4 PSF	18.5 PSF					100.40 LB-FT	77.0 LB	242.1 LB	257.3 LB
30"			29.1 PSF	23.0 PSF	29.1 PSF	23.0 PSF	24.3 PSF	19.1 PSF	24.3 PSF	19.1 PSF									100.40 LB-FT	63.8 LB	220.0 LB	231.6 LB
36"			24.9 PSF	19.7 PSF	24.9 PSF	19.7 PSF	20.8 PSF	16.4 PSF	20.8 PSF	16.4 PSF									100.40 LB-FT	54.6 LB	204.9 LB	228.1 LB
18"	42"	5040 in <sup>2</sup>	33.5 PSF	26.5 PSF	33.5 PSF	26.5 PSF	27.9 PSF	22.0 PSF	27.9 PSF	22.0 PSF	22.3 PSF	17.6 PSF	22.3 PSF	17.6 PSF					100.40 LB-FT	97.9 LB	294.5 LB	283.3 LB
24"			26.4 PSF	20.8 PSF	26.4 PSF	20.8 PSF	22.0 PSF	17.3 PSF	22.0 PSF	17.3 PSF									100.40 LB-FT	77.0 LB	255.0 LB	249.9 LB
30"			21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF													100.40 LB-FT	63.8 LB	230.6 LB	228.7 LB
36"																						
18"	48"	6912 in <sup>2</sup>	24.4 PSF	19.3 PSF	24.4 PSF	19.3 PSF	20.3 PSF	16.1 PSF	20.3 PSF	16.1 PSF									100.40 LB-FT	97.9 LB	310.0 LB	279.3 LB
24"																						
30"																						
36"																						

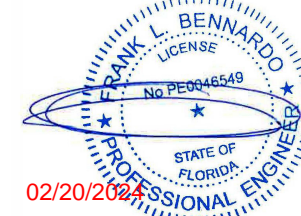
### 24" STAND DEPTH: MAX FACE AREA (1104in<sup>2</sup> - 4608in<sup>2</sup>), FRAME QUANTITY (2-5 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY							
			MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	1104 in <sup>2</sup>	136.5 PSF	107.7 PSF	136.5 PSF	107.7 PSF	109.2 PSF	86.2 PSF	109.2 PSF	86.2 PSF	81.9 PSF	64.6 PSF	81.9 PSF	64.6 PSF	54.6 PSF	43.1 PSF	54.6 PSF	43.1 PSF	100.40 LB-FT	104.6 LB	361.4 LB	373.2 LB
24"			106.9 PSF	84.4 PSF	106.9 PSF	84.4 PSF	85.5 PSF	67.5 PSF	85.5 PSF	67.5 PSF	64.1 PSF	50.6 PSF	64.1 PSF	50.6 PSF	42.7 PSF	33.7 PSF	42.7 PSF	33.7 PSF	100.40 LB-FT	81.9 LB	322.1 LB	362.5 LB
30"			88.1 PSF	69.6 PSF	88.1 PSF	69.6 PSF	70.5 PSF	55.6 PSF	70.5 PSF	55.6 PSF	52.8 PSF	41.7 PSF	52.8 PSF	41.7 PSF	35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	100.40 LB-FT	67.5 LB	297.8 LB	356.4 LB
36"			75.1 PSF	59.3 PSF	75.1 PSF	59.3 PSF	60.1 PSF	47.4 PSF	60.1 PSF	47.4 PSF	45.0 PSF	35.5 PSF	45.0 PSF	35.5 PSF	30.0 PSF	23.7 PSF	30.0 PSF	23.7 PSF	100.40 LB-FT	57.6 LB	281.2 LB	352.5 LB
18"	30"	1860 in <sup>2</sup>	81.0 PSF	63.9 PSF	81.0 PSF	63.9 PSF	64.8 PSF	51.1 PSF	64.8 PSF	51.1 PSF	48.6 PSF	38.3 PSF	48.6 PSF	38.3 PSF	32.4 PSF	25.5 PSF	32.4 PSF	25.5 PSF	100.40 LB-FT	104.6 LB	387.6 LB	399.4 LB
24"			63.4 PSF	50.1 PSF	63.4 PSF	50.1 PSF	50.7 PSF	40.0 PSF	50.7 PSF	40.0 PSF	38.0 PSF	30.0 PSF	38.0 PSF	30.0 PSF	25.3 PSF	20.0 PSF	25.3 PSF	20.0 PSF	100.40 LB-FT	81.9 LB	342.6 LB	383.0 LB
30"			52.3 PSF	41.3 PSF	52.3 PSF	41.3 PSF	41.8 PSF	33.0 PSF	41.8 PSF	33.0 PSF	31.3 PSF	24.7 PSF	31.3 PSF	24.7 PSF								

# "STD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

### 36" STAND DEPTH: MAX FACE AREA (1104in<sup>2</sup> - 4608in<sup>2</sup>), FRAME QUANTITY (2-5 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY				
			MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)	
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3						
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT						
18"	24"	1104 in <sup>2</sup>	127.7 PSF	100.8 PSF	127.7 PSF	100.8 PSF	102.1 PSF	80.6 PSF	102.1 PSF	80.6 PSF	76.6 PSF	60.4 PSF	76.6 PSF	60.4 PSF	51.0 PSF	40.3 PSF	51.0 PSF	40.3 PSF	100.40 LB-FT	97.9 LB	247.8 LB	268.1 LB	
24"			100.4 PSF	79.3 PSF	100.4 PSF	79.3 PSF	80.3 PSF	63.4 PSF	80.3 PSF	63.4 PSF	60.2 PSF	47.5 PSF	60.2 PSF	47.5 PSF	40.1 PSF	31.7 PSF	40.1 PSF	31.7 PSF	100.40 LB-FT	77.0 LB	218.7 LB	265.4 LB	
30"			83.2 PSF	65.7 PSF	83.2 PSF	65.7 PSF	66.6 PSF	52.5 PSF	66.6 PSF	52.5 PSF	49.9 PSF	39.4 PSF	49.9 PSF	39.4 PSF	33.3 PSF	26.2 PSF	33.3 PSF	26.2 PSF	100.40 LB-FT	63.8 LB	200.9 LB	264.3 LB	
36"			71.2 PSF	56.2 PSF	71.2 PSF	56.2 PSF	57.0 PSF	45.0 PSF	57.0 PSF	45.0 PSF	42.7 PSF	33.7 PSF	42.7 PSF	33.7 PSF	28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	100.40 LB-FT	54.6 LB	188.9 LB	263.9 LB	
18"	30"	1860 in <sup>2</sup>	75.8 PSF	59.8 PSF	75.8 PSF	59.8 PSF	60.6 PSF	47.8 PSF	60.6 PSF	47.8 PSF	45.4 PSF	35.9 PSF	45.4 PSF	35.9 PSF	30.3 PSF	23.9 PSF	30.3 PSF	23.9 PSF	100.40 LB-FT	97.9 LB	264.1 LB	284.4 LB	
24"			59.6 PSF	47.0 PSF	59.6 PSF	47.0 PSF	47.7 PSF	37.6 PSF	47.7 PSF	37.6 PSF	35.7 PSF	28.2 PSF	35.7 PSF	28.2 PSF	23.4 PSF	18.8 PSF	23.4 PSF	18.8 PSF	100.40 LB-FT	77.0 LB	231.5 LB	278.2 LB	
30"			49.4 PSF	39.0 PSF	49.4 PSF	39.0 PSF	39.5 PSF	31.2 PSF	39.5 PSF	31.2 PSF	29.6 PSF	23.4 PSF	29.6 PSF	23.4 PSF	23.8 PSF	18.8 PSF	23.8 PSF	18.8 PSF	100.40 LB-FT	63.8 LB	211.6 LB	229.9 LB	
36"			42.3 PSF	33.4 PSF	42.3 PSF	33.4 PSF	33.8 PSF	26.7 PSF	33.8 PSF	26.7 PSF	25.3 PSF	20.0 PSF	25.3 PSF	20.0 PSF					100.40 LB-FT	54.6 LB	198.0 LB	228.0 LB	
18"	36"	2520 in <sup>2</sup>	55.9 PSF	44.1 PSF	55.9 PSF	44.1 PSF	44.7 PSF	35.3 PSF	44.7 PSF	35.3 PSF	33.5 PSF	26.5 PSF	33.5 PSF	26.5 PSF	22.3 PSF	17.6 PSF	22.3 PSF	17.6 PSF	100.40 LB-FT	97.9 LB	280.4 LB	300.7 LB	
24"			44.0 PSF	34.7 PSF	44.0 PSF	34.7 PSF	35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	26.4 PSF	20.8 PSF	26.4 PSF	20.8 PSF					100.40 LB-FT	77.0 LB	244.4 LB	246.1 LB	
30"			36.4 PSF	28.7 PSF	36.4 PSF	28.7 PSF	29.1 PSF	23.0 PSF	29.1 PSF	23.0 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF					100.40 LB-FT	63.8 LB	222.2 LB	240.6 LB	
36"			31.2 PSF	24.6 PSF	31.2 PSF	24.6 PSF	24.9 PSF	19.7 PSF	24.9 PSF	19.7 PSF										100.40 LB-FT	54.6 LB	207.1 LB	214.6 LB
18"	42"	3360 in <sup>2</sup>	41.9 PSF	33.1 PSF	41.9 PSF	33.1 PSF	33.5 PSF	26.5 PSF	33.5 PSF	26.5 PSF	25.1 PSF	19.8 PSF	25.1 PSF	19.8 PSF					100.40 LB-FT	97.9 LB	296.7 LB	272.0 LB	
24"			33.0 PSF	26.0 PSF	33.0 PSF	26.0 PSF	26.4 PSF	20.8 PSF	26.4 PSF	20.8 PSF									100.40 LB-FT	77.0 LB	257.2 LB	236.4 LB	
30"			27.3 PSF	21.5 PSF	27.3 PSF	21.5 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF									100.40 LB-FT	63.8 LB	232.9 LB	228.7 LB	
36"			23.4 PSF	18.4 PSF	23.4 PSF	18.4 PSF														100.40 LB-FT	54.6 LB	216.2 LB	210.2 LB
18"	48"	4608 in <sup>2</sup>	30.5 PSF	24.1 PSF	30.5 PSF	24.1 PSF	24.4 PSF	19.3 PSF	24.4 PSF	19.3 PSF									100.40 LB-FT	97.9 LB	313.0 LB	265.8 LB	
24"			24.0 PSF	19.0 PSF	24.0 PSF	19.0 PSF													100.40 LB-FT	77.0 LB	270.0 LB	235.7 LB	
30"																							
36"																							

### 24" STAND DEPTH: MAX FACE AREA (552in<sup>2</sup> - 2304in<sup>2</sup>), FRAME QUANTITY (2-3 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO								LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	552 in <sup>2</sup>	163.8 PSF	129.3 PSF	163.8 PSF	129.3 PSF	109.2 PSF	86.2 PSF	109.2 PSF	86.2 PSF	100.40 LB-FT	104.6 LB	362.9 LB	305.7 LB
24"			128.3 PSF	101.2 PSF	128.3 PSF	101.2 PSF	85.5 PSF	67.5 PSF	85.5 PSF	67.5 PSF	100.40 LB-FT	81.9 LB	323.6 LB	295.0 LB
30"			105.7 PSF	83.5 PSF	105.7 PSF	83.5 PSF	70.5 PSF	55.6 PSF	70.5 PSF	55.6 PSF	100.40 LB-FT	67.5 LB	299.3 LB	288.9 LB
36"			90.1 PSF	71.1 PSF	90.1 PSF	71.1 PSF	60.1 PSF	47.4 PSF	60.1 PSF	47.4 PSF	100.40 LB-FT	57.6 LB	282.7 LB	285.0 LB
18"	30"	930 in <sup>2</sup>	97.2 PSF	76.7 PSF	97.2 PSF	76.7 PSF	64.8 PSF	51.1 PSF	64.8 PSF	51.1 PSF	100.40 LB-FT	104.6 LB	389.1 LB	331.9 LB
24"			76.1 PSF	60.1 PSF	76.1 PSF	60.1 PSF	50.7 PSF	40.0 PSF	50.7 PSF	40.0 PSF	100.40 LB-FT	81.9 LB	344.1 LB	315.5 LB
30"			62.7 PSF	49.5 PSF	62.7 PSF	49.5 PSF	41.8 PSF	33.0 PSF	41.8 PSF	33.0 PSF	100.40 LB-FT	67.5 LB	316.2 LB	305.8 LB
36"			53.5 PSF	42.2 PSF	53.5 PSF	42.2 PSF	35.6 PSF	28.1 PSF	35.6 PSF	28.1 PSF	100.40 LB-FT	57.6 LB	297.2 LB	299.4 LB
18"	36"	1260 in <sup>2</sup>	71.7 PSF	56.6 PSF	71.7 PSF	56.6 PSF	47.8 PSF	37.7 PSF	47.8 PSF	37.7 PSF	100.40 LB-FT	104.6 LB	415.3 LB	358.0 LB
24"			56.2 PSF	44.3 PSF	56.2 PSF	44.3 PSF	37.4 PSF	29.5 PSF	37.4 PSF	29.5 PSF	100.40 LB-FT	81.9 LB	364.6 LB	336.0 LB
30"			46.3 PSF	36.5 PSF	46.3 PSF	36.5 PSF	30.8 PSF	24.3 PSF	30.8 PSF	24.3 PSF	100.40 LB-FT	67.5 LB	333.1 LB	322.7 LB
36"			39.5 PSF	31.1 PSF	39.5 PSF	31.1 PSF	26.3 PSF	20.7 PSF	26.3 PSF	20.7 PSF	100.40 LB-FT	57.6 LB	311.6 LB	313.8 LB
18"	42"	1680 in <sup>2</sup>	53.8 PSF	42.4 PSF	53.8 PSF	42.4 PSF	35.8 PSF	28.3 PSF	35.8 PSF	28.3 PSF	100.40 LB-FT	104.6 LB	441.4 LB	384.2 LB
24"			42.1 PSF	33.2 PSF	42.1 PSF	33.2 PSF	28.1 PSF	22.1 PSF	28.1 PSF	22.1 PSF	100.40 LB-FT	81.9 LB	385.0 LB	356.5 LB
30"			34.7 PSF	27.4 PSF	34.7 PSF	27.4 PSF	23.1 PSF	18.2 PSF	23.1 PSF	18.2 PSF	100.40 LB-FT	67.5 LB	350.0 LB	339.6 LB
36"			29.6 PSF	23.3 PSF	29.6 PSF	23.3 PSF					100.40 LB-FT	57.6 LB	326.0 LB	305.7 LB
18"	48"	2304 in <sup>2</sup>	39.2 PSF	30.9 PSF	39.2 PSF	30.9 PSF	26.1 PSF	20.6 PSF	26.1 PSF	20.6 PSF	100.40 LB-FT	104.6 LB	467.6 LB	410.4 LB
24"			30.7 PSF	24.2 PSF	30.7 PSF	24.2 PSF	20.4 PSF	16.1 PSF	20.4 PSF	16.1 PSF	100.40 LB-FT	81.9 LB	405.5 LB	377.0 LB
30"			25.3 PSF	20.0 PSF	25.3 PSF	20.0 PSF					100.40 LB-FT	67.5 LB	366.9 LB	334.0 LB
36"			21.6 PSF	17.0 PSF	21.6 PSF	17.0 PSF					100.40 LB-FT	57.6 LB	340.4 LB	320.1 LB

### 36" STAND DEPTH: MAX FACE AREA (552in<sup>2</sup> - 2304in<sup>2</sup>), FRAME QUANTITY (2-3 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO								LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	552 in <sup>2</sup>	153.2 PSF	120.9 PSF	153.2 PSF	120.9 PSF	102.1 PSF	80.6 PSF	102.1 PSF	80.6 PSF	100.40 LB-FT	97.9 LB	249.3 LB	200.6 LB
24"			120.5 PSF	95.1 PSF	120.5 PSF	95.1 PSF	80.3 PSF	63.4 PSF	80.3 PSF	63.4 PSF	100.40 LB-FT	77.0 LB	220.2 LB	197.9 LB
30"			99.9 PSF	78.8 PSF	99.9 PSF	78.8 PSF	66.6 PSF	52.5 PSF	66.6 PSF	52.5 PSF	100.40 LB-FT	63.8 LB	202.4 LB	196.8 LB
36"			85.5 PSF	67.5 PSF	85.5 PSF	67.5 PSF	57.0 PSF	45.0 PSF	57.0 PSF	45.0 PSF	100.40 LB-FT	54.6 LB	190.4 LB	196.4 LB
18"	30"	930 in <sup>2</sup>	90.9 PSF	71.8 PSF	90.9 PSF	71.8 PSF	60.6 PSF	47.8 PSF	60.6 PSF	47.8 PSF	100.40 LB-FT	97.9 LB	265.6 LB	216.9 LB
24"			71.5 PSF	56.5 PSF	71.5 PSF	56.5 PSF	47.7 PSF	37.6 PSF	47.7 PSF	37.6 PSF	100.40 LB-FT	77.0 LB	233.0 LB	210.7 LB
30"			59.3 PSF	46.8 PSF	59.3 PSF	46.8 PSF	39.5 PSF	31.2 PSF	39.5 PSF	31.2 PSF	100.40 LB-FT	63.8 LB	213.1 LB	207.4 LB
36"			50.7 PSF	40.0 PSF	50.7 PSF	40.0 PSF	33.8 PSF	26.7 PSF	33.8 PSF	26.7 PSF	100.40 LB-FT	54.6 LB	199.5 LB	205.5 LB
18"	36"	1260 in <sup>2</sup>	67.1 PSF	53.0 PSF	67.1 PSF	53.0 PSF	44.7 PSF	35.3 PSF	44.7 PSF	35.3 PSF	100.40 LB-FT	97.9 LB	281.9 LB	233.2 LB
24"			52.8 PSF	41.7 PSF	52.8 PSF	41.7 PSF	35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	100.40 LB-FT	77.0 LB	245.9 LB	223.6 LB
30"			43.7 PSF	34.5 PSF	43.7 PSF	34.5 PSF	29.1 PSF	23.0 PSF	29.1 PSF	23.0 PSF	100.40 LB-FT	63.8 LB	223.7 LB	218.1 LB
36"			37.4 PSF	29.5 PSF	37.4 PSF	29.5 PSF	24.9 PSF	19.7 PSF	24.9 PSF	19.7 PSF	100.40 LB-FT	54.6 LB	208.6 LB	214.6 LB
18"	42"	1680 in <sup>2</sup>	50.3 PSF	39.7 PSF	50.3 PSF	39.7 PSF	33.5 PSF	26.5 PSF	33.5 PSF	26.5 PSF	100.40 LB-FT	97.9 LB	298.2 LB	249.5 LB
24"			39.6 PSF	31.2 PSF	39.6 PSF	31.2 PSF	26.4 PSF	20.8 PSF	26.4 PSF	20.8 PSF	100.40 LB-FT	77.0 LB	258.7 LB	236.4 LB
30"			32.8 PSF	25.9 PSF	32.8 PSF	25.9 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF	100.40 LB-FT	63.8 LB	234.4 LB	228.7 LB
36"			28.1 PSF	22.1 PSF	28.1 PSF	22.1 PSF					100.40 LB-FT	54.6 LB	217.7 LB	201.2 LB
18"	48"	2304 in <sup>2</sup>	36.7 PSF	28.9 PSF	36.7 PSF	28.9 PSF	24.4 PSF	19.3 PSF	24.4 PSF	19.3 PSF	100.40 LB-FT	97.9 LB	314.5 LB	265.8 LB
24"			28.8 PSF	22.8 PSF	28.8 PSF	22.8 PSF					100.40 LB-FT	77.0 LB	271.5 LB	226.7 LB
30"			23.9 PSF	18.8 PSF	23.9 PSF	18.8 PSF					100.40 LB-FT	63.8 LB	245.0 LB	

# "HD" STAND DESIGN SCHEDULE

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

**24" STAND DEPTH: MAX FACE AREA (2760in<sup>2</sup> - 11520in<sup>2</sup>), FRAME QUANTITY (5-8 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 8 FRAMES				MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	2760 in <sup>2</sup>	200.0 PSF	157.8 PSF	171.4 PSF	135.3 PSF	176.3 PSF	139.2 PSF	150.0 PSF	118.4 PSF	151.1 PSF	119.3 PSF	128.7 PSF	101.6 PSF	125.9 PSF	99.4 PSF	107.4 PSF	84.7 PSF	247.00 LB-FT	241.4 LB	838.5 LB	684.6 LB
24"			158.5 PSF	125.1 PSF	141.3 PSF	111.5 PSF	123.7 PSF	109.5 PSF	123.7 PSF	97.6 PSF	118.9 PSF	93.8 PSF	106.1 PSF	83.8 PSF	99.1 PSF	78.2 PSF	88.5 PSF	69.9 PSF	247.00 LB-FT	189.9 LB	753.3 LB	662.4 LB
30"			130.6 PSF	103.1 PSF	130.6 PSF	103.1 PSF	114.3 PSF	90.2 PSF	114.3 PSF	90.2 PSF	98.0 PSF	77.3 PSF	98.0 PSF	77.3 PSF	81.6 PSF	64.4 PSF	81.6 PSF	64.4 PSF	245.70 LB-FT	156.5 LB	696.5 LB	647.8 LB
36"			104.2 PSF	82.3 PSF	104.2 PSF	82.3 PSF	91.2 PSF	72.0 PSF	91.2 PSF	72.0 PSF	78.1 PSF	61.7 PSF	78.1 PSF	61.7 PSF	65.1 PSF	51.4 PSF	65.1 PSF	51.4 PSF	229.00 LB-FT	124.8 LB	615.3 LB	606.6 LB
18"	30"	4650 in <sup>2</sup>	119.6 PSF	94.4 PSF	100.1 PSF	79.1 PSF	104.6 PSF	82.6 PSF	87.7 PSF	69.2 PSF	89.7 PSF	70.8 PSF	75.2 PSF	59.4 PSF	74.7 PSF	59.0 PSF	62.7 PSF	49.5 PSF	247.00 LB-FT	241.4 LB	900.9 LB	745.0 LB
24"			94.1 PSF	74.3 PSF	82.8 PSF	65.3 PSF	82.3 PSF	65.0 PSF	72.5 PSF	57.2 PSF	70.5 PSF	55.7 PSF	62.2 PSF	49.1 PSF	58.8 PSF	46.4 PSF	51.9 PSF	40.9 PSF	247.00 LB-FT	189.9 LB	800.7 LB	709.9 LB
30"			77.5 PSF	61.2 PSF	77.5 PSF	61.2 PSF	67.8 PSF	53.5 PSF	67.8 PSF	53.5 PSF	58.1 PSF	45.9 PSF	58.1 PSF	45.9 PSF	48.4 PSF	38.2 PSF	48.4 PSF	38.2 PSF	245.70 LB-FT	156.5 LB	735.7 LB	687.0 LB
36"			61.8 PSF	48.8 PSF	61.8 PSF	48.8 PSF	54.1 PSF	42.7 PSF	54.1 PSF	42.7 PSF	46.4 PSF	36.6 PSF	46.4 PSF	36.6 PSF	38.6 PSF	30.5 PSF	38.6 PSF	30.5 PSF	229.00 LB-FT	124.8 LB	646.5 LB	637.8 LB
18"	36"	6300 in <sup>2</sup>	88.3 PSF	69.7 PSF	72.8 PSF	57.5 PSF	77.2 PSF	61.0 PSF	63.7 PSF	50.3 PSF	66.2 PSF	52.2 PSF	54.7 PSF	43.1 PSF	55.1 PSF	43.5 PSF	45.6 PSF	36.0 PSF	247.00 LB-FT	241.4 LB	961.3 LB	805.3 LB
24"			69.4 PSF	54.8 PSF	60.3 PSF	47.6 PSF	60.7 PSF	47.9 PSF	52.8 PSF	41.7 PSF	52.1 PSF	41.1 PSF	45.3 PSF	35.8 PSF	43.4 PSF	34.2 PSF	37.8 PSF	29.8 PSF	247.00 LB-FT	189.9 LB	848.2 LB	757.3 LB
30"			57.2 PSF	45.1 PSF	57.2 PSF	45.1 PSF	50.0 PSF	39.5 PSF	50.0 PSF	39.5 PSF	42.9 PSF	33.8 PSF	42.9 PSF	33.8 PSF	35.7 PSF	28.2 PSF	35.7 PSF	28.2 PSF	245.70 LB-FT	156.5 LB	774.8 LB	726.1 LB
36"			45.6 PSF	36.0 PSF	45.6 PSF	36.0 PSF	39.9 PSF	31.5 PSF	39.9 PSF	31.5 PSF	34.2 PSF	27.0 PSF	34.2 PSF	27.0 PSF	28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	229.00 LB-FT	124.8 LB	677.7 LB	669.0 LB
18"	42"	8400 in <sup>2</sup>	65.8 PSF	52.0 PSF	53.8 PSF	42.5 PSF	57.6 PSF	45.5 PSF	47.1 PSF	37.2 PSF	49.4 PSF	45.5 PSF	47.1 PSF	37.2 PSF	32.5 PSF	26.6 PSF	33.7 PSF	26.6 PSF	246.30 LB-FT	240.7 LB	1016.2 LB	863.4 LB
24"			52.1 PSF	41.1 PSF	44.7 PSF	35.3 PSF	45.5 PSF	35.9 PSF	39.1 PSF	30.9 PSF	39.0 PSF	30.8 PSF	33.5 PSF	26.5 PSF	32.5 PSF	25.7 PSF	28.0 PSF	22.1 PSF	247.00 LB-FT	189.9 LB	895.7 LB	804.8 LB
30"			42.9 PSF	33.8 PSF	42.9 PSF	33.8 PSF	37.5 PSF	29.6 PSF	37.5 PSF	29.6 PSF	32.2 PSF	25.4 PSF	32.2 PSF	25.4 PSF	26.8 PSF	21.1 PSF	26.8 PSF	21.1 PSF	245.70 LB-FT	156.5 LB	813.9 LB	765.2 LB
36"			34.2 PSF	27.0 PSF	34.2 PSF	27.0 PSF	29.9 PSF	23.6 PSF	29.9 PSF	23.6 PSF	25.6 PSF	20.2 PSF	25.6 PSF	20.2 PSF	21.4 PSF	16.9 PSF	21.4 PSF	16.9 PSF	229.00 LB-FT	124.8 LB	708.9 LB	700.2 LB
18"	48"	11520 in <sup>2</sup>	47.3 PSF	37.3 PSF	38.6 PSF	30.5 PSF	41.4 PSF	32.6 PSF	33.8 PSF	26.7 PSF	35.5 PSF	28.0 PSF	35.5 PSF	28.0 PSF	29.6 PSF	23.3 PSF	24.2 PSF	19.1 PSF	242.50 LB-FT	237.0 LB	1059.5 LB	911.5 LB
24"			37.9 PSF	29.9 PSF	32.2 PSF	25.4 PSF	32.2 PSF	26.2 PSF	28.2 PSF	22.2 PSF	28.4 PSF	24.2 PSF	28.4 PSF	24.2 PSF	22.9 PSF	19.1 PSF	22.9 PSF	19.1 PSF	247.00 LB-FT	189.9 LB	943.2 LB	852.3 LB
30"			31.3 PSF	24.7 PSF	31.3 PSF	24.7 PSF	27.3 PSF	21.6 PSF	27.3 PSF	21.6 PSF	23.4 PSF	18.5 PSF	23.4 PSF	18.5 PSF	23.7 PSF	18.7 PSF	23.7 PSF	18.7 PSF	245.70 LB-FT	156.5 LB	853.1 LB	781.9 LB
36"			24.9 PSF	19.7 PSF	24.9 PSF	19.7 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF	21.8 PSF	17.2 PSF	229.00 LB-FT	124.8 LB	740.2 LB	692.9 LB

**36" STAND DEPTH: MAX FACE AREA (2760in<sup>2</sup> - 11520in<sup>2</sup>), FRAME QUANTITY (5-8 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 8 FRAMES				MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	2760 in <sup>2</sup>	188.0 PSF	148.4 PSF	172.8 PSF	136.4 PSF	164.5 PSF	129.9 PSF	151.3 PSF	119.4 PSF	141.0 PSF	111.3 PSF	129.7 PSF	102.4 PSF	117.5 PSF	92.7 PSF	108.2 PSF	85.4 PSF	247.00 LB-FT	225.2 LB	576.8 LB	441.3 LB
24"			148.1 PSF	116.9 PSF	142.1 PSF	112.1 PSF	129.6 PSF	102.3 PSF	124.4 PSF	98.2 PSF	111.1 PSF	87.7 PSF	106.7 PSF	84.2 PSF	92.6 PSF	70.2 PSF	89.0 PSF	70.2 PSF	247.00 LB-FT	177.4 LB	510.6 LB	435.4 LB
30"			123.1 PSF	97.1 PSF	123.1 PSF	97.1 PSF	107.7 PSF	85.0 PSF	107.7 PSF	85.0 PSF	92.3 PSF	72.8 PSF	92.3 PSF	72.8 PSF	76.9 PSF	60.7 PSF	76.9 PSF	60.7 PSF	247.00 LB-FT	147.4 LB	471.0 LB	433.8 LB
36"			105.7 PSF	83.4 PSF	105.7 PSF	83.4 PSF	92.5 PSF	73.0 PSF	92.5 PSF	73.0 PSF	79.2 PSF	62.5 PSF	79.2 PSF	62.5 PSF	66.0 PSF	52.1 PSF	66.0 PSF	52.1 PSF	247.00 LB-FT	126.6 LB	444.7 LB	433.8 LB
18"	30"	4650 in <sup>2</sup>	111.6 PSF	88.1 PSF	101.5 PSF	80.1 PSF	97.6 PSF	77.1 PSF	88.8 PSF	70.1 PSF	83.7 PSF	66.0 PSF	76.2 PSF	60.2 PSF	69.7 PSF	55.0 PSF	63.6 PSF	50.2 PSF	247.00 LB-FT	225.2 LB	614.3 LB	478.8 LB
24"			87.9 PSF	69.4 PSF	83.6 PSF	66.0 PSF	76.9 PSF	60.7 PSF	73.2 PSF	57.8 PSF	65.9 PSF	52.8 PSF	62.8 PSF	49.5 PSF	54.9 PSF	43.3 PSF	54.9 PSF	43.3 PSF	247.00 LB-FT	177.4 LB	540.2 LB	465.0 LB
30"			73.0 PSF	57.6 PSF	73.0 PSF	57.6 PSF	63.9 PSF	50.4 PSF	63.9 PSF	50.4 PSF	54.8 PSF	43.2 PSF	54.8 PSF	43.2 PSF	45.6 PSF	36.0 PSF	45.6 PSF	36.0 PSF	247.00 LB-FT	147.4 LB	495.6 LB	458.4 LB
36"			62.7 PSF	49.5 PSF	62.7 PSF	49.5 PSF	54.9 PSF	43.3 PSF	54.9 PSF	43.3 PSF	47.0 PSF	37.1 PSF	47.0 PSF	37.1 PSF	39.2 PSF	30.9 PSF	39.2 PSF	30.9 PSF	247.00 LB-FT	126.6 LB	465.8 LB	454.9 LB
18"	36"	6300 in <sup>2</sup>	82.3 PSF	65.0 PSF	74.1 PSF	58.5 PSF	72.0 PSF	56.9 PSF	64.9 PSF	51.2 PSF	61.7 PSF	55.7 PSF	64.9 PSF	51.2 PSF	51.4 PSF	40.6 PSF	46.4 PSF	36.6 PSF	247.00 LB-FT	225.2 LB	651.9 LB	516.4 LB
24"			64.9 PSF	51.2 PSF	61.2 PSF	48.3 PSF	56.7 PSF	44.8 PSF	53.5 PSF	42.3 PSF	48.6 PSF	38.4 PSF	45.9 PSF	36.2 PSF	40.5 PSF	32.0 PSF	38.3 PSF	30.2 PSF	247.00 LB-FT	177.4 LB	569.8 LB	494.6 LB
30"			53.9 PSF	42.5 PSF	53.9 PSF	42.5 PSF	47.1 PSF	37.2 PSF	47.1 PSF	37.2 PSF	40.4 PSF	31.9 PSF	40.4 PSF	31.9 PSF	33.7 PSF	26.6 PSF	33.7 PSF	26.6 PSF	247.00 LB-FT	147.4 LB	520.2 LB	482.9 LB
36"			46.3 PSF	36.5 PSF	46.3 PSF	36.5 PSF	40.5 PSF	31.9 PSF	40.5 PSF	31.9 PSF	34.7 PSF	27.4 PSF	34.7 PSF	27.4 PSF	28.9 PSF	22.8 PSF	28.9 PSF	22.8 PSF	247.00 LB-FT	126.6 LB	486.9 LB	476.0 LB
18"	42"	8400 in <sup>2</sup>	61.7 PSF	48.7 PSF	55.0 PSF	43.4 PSF	54.0 PSF	48.2 PSF	38.0 PSF	46.3 PSF	37.5 PSF	41.3 PSF	32.6 PSF	38.6 PSF	30.4 PSF	34.5 PSF	27.2 PSF	247.00 LB-FT	225.2 LB	689.4 LB	553.9 LB	
24"			48.6 PSF	38.4 PSF	45.5 PSF	35.9 PSF	42.5 PSF	33.6 PSF	39.8 PSF	31.4 PSF	36.5 PSF	28.8 PSF	34.1 PSF	26.9 PSF	30.4 PSF	24.0 PSF	28.5 PSF	22.5 PSF	247.00 LB-FT	177.4 LB	599.3 LB	524.2 LB
30"			40.4 PSF	31.9 PSF	40.4 PSF	31.9 PSF	35.3 PSF	27.9 PSF	35.3 PSF	27.9 PSF	30.3 PSF	23.9 PSF	30.3 PSF	23.9 PSF	25.2 PSF	19.9 PSF	25.2 PSF	19.9 PSF	247.00 LB-FT	147.4 LB	544.7 LB	507.5 LB
36"			34.7 PSF	27.4 PSF	34.7 PSF	27.4 PSF	30.3 PSF	23.9 PSF	30.3 PSF	23.9 PSF	26.0 PSF	20.5 PSF	26.0 PSF	20.5 PSF	21.7 PSF	17.1 PSF	21.7 PSF	17.1 PSF	247.00 LB-FT	126.6 LB	508.0 LB	497.1 LB
18"	48"	11520 in <sup>2</sup>	45.0 PSF	35.5 PSF	39.7 PSF	31.3 PSF	39.4 PSF	31.1 PSF	34.8 PSF	27.4 PSF	33.7 PSF	26.6 PSF	29.8 PSF	23.5 PSF	28.1 PSF	22.2 PSF	24.9 PSF	19.6 PSF	247.00 LB-FT	225.2 LB	727.0 LB	591.5 LB
24"			35.4 PSF	28.0 PSF	32.9 PSF	25.9 PSF	31.0 PSF	24.5 PSF	28.8 PSF	22.7 PSF	26.6 PSF	21.0 PSF	24.7 PSF	19.5 PSF	22.1 PSF	17.5 PSF	20.6 PSF	16.2 PSF	247.00 LB-FT	177.4 LB	628.9 LB	553.8 LB
30"			29.4 PSF	23.2 PSF	29.4 PSF	23.2 PSF	25.8 PSF	20.3 PSF	25.8 PSF	20.3 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	247.00 LB-FT	147.4 LB	569.3 LB	509.6 LB
36"			25.3 PSF	19.9 PSF	25.3 PSF	19.9 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	22.1 PSF	17.4 PSF	22.1 PSF	247.00 LB-FT	126.6 LB	529.1 LB

**24" STAND DEPTH: MAX FACE AREA (2208in<sup>2</sup> - 9216in<sup>2</sup>), FRAME QUANTITY (4-7 FRAMES)**

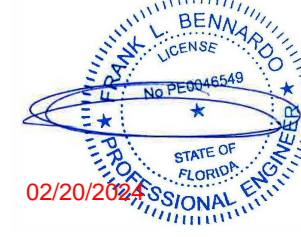
STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL																



# "HD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

**36" STAND DEPTH: MAX FACE AREA (2208in<sup>2</sup> - 9216in<sup>2</sup>), FRAME QUANTITY (4-7 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	2208 in <sup>2</sup>	200.0 PSF	157.8 PSF	188.9 PSF	149.1 PSF	176.3 PSF	139.1 PSF	133.2 PSF	105.2 PSF	115.7 PSF	91.3 PSF	111.1 PSF	87.7 PSF	92.6 PSF	73.1 PSF	89.0 PSF	70.2 PSF	247.00 LB-FT	225.2 LB	575.8 LB	441.3 LB
24"			162.0 PSF	127.9 PSF	155.3 PSF	122.6 PSF	138.9 PSF	109.6 PSF	105.2 PSF	81.1 PSF	111.1 PSF	87.7 PSF	92.6 PSF	73.1 PSF	89.0 PSF	70.2 PSF	247.00 LB-FT	177.4 LB	511.8 LB	435.4 LB		
30"			134.6 PSF	106.3 PSF	134.6 PSF	106.3 PSF	115.4 PSF	91.1 PSF	115.4 PSF	91.1 PSF	66.0 PSF	96.1 PSF	75.9 PSF	96.1 PSF	75.9 PSF	66.0 PSF	60.7 PSF	76.9 PSF	60.7 PSF	247.00 LB-FT	147.4 LB	472.2 LB
18"	30"	3720 in <sup>2</sup>	115.6 PSF	91.2 PSF	115.6 PSF	91.2 PSF	99.1 PSF	78.2 PSF	91.2 PSF	69.5 PSF	82.5 PSF	65.2 PSF	99.1 PSF	78.2 PSF	66.0 PSF	52.1 PSF	66.0 PSF	52.1 PSF	247.00 LB-FT	126.6 LB	445.9 LB	433.8 LB
24"			122.0 PSF	96.3 PSF	111.0 PSF	87.6 PSF	104.6 PSF	82.6 PSF	95.2 PSF	75.1 PSF	87.2 PSF	68.8 PSF	79.4 PSF	62.6 PSF	69.7 PSF	55.0 PSF	63.6 PSF	50.2 PSF	247.00 LB-FT	225.2 LB	615.5 LB	478.8 LB
30"			96.1 PSF	75.9 PSF	91.4 PSF	72.1 PSF	82.4 PSF	65.0 PSF	78.4 PSF	61.9 PSF	68.7 PSF	54.2 PSF	65.4 PSF	51.6 PSF	54.9 PSF	43.3 PSF	52.4 PSF	41.3 PSF	247.00 LB-FT	177.4 LB	541.4 LB	465.0 LB
18"	36"	5040 in <sup>2</sup>	79.9 PSF	63.0 PSF	79.9 PSF	63.0 PSF	68.5 PSF	54.0 PSF	68.5 PSF	54.0 PSF	57.0 PSF	45.0 PSF	57.0 PSF	45.0 PSF	45.6 PSF	36.0 PSF	45.6 PSF	36.0 PSF	247.00 LB-FT	147.4 LB	496.8 LB	458.4 LB
24"			68.6 PSF	54.1 PSF	68.6 PSF	54.1 PSF	58.8 PSF	46.4 PSF	58.8 PSF	46.4 PSF	49.0 PSF	38.7 PSF	49.0 PSF	38.7 PSF	39.2 PSF	30.9 PSF	39.2 PSF	30.9 PSF	247.00 LB-FT	126.6 LB	467.0 LB	454.9 LB
30"			90.1 PSF	71.1 PSF	81.1 PSF	64.0 PSF	77.2 PSF	60.9 PSF	69.5 PSF	54.9 PSF	64.3 PSF	50.8 PSF	58.0 PSF	45.8 PSF	58.0 PSF	45.8 PSF	46.4 PSF	36.6 PSF	46.4 PSF	247.00 LB-FT	225.2 LB	653.1 LB
18"	42"	6720 in <sup>2</sup>	58.9 PSF	46.5 PSF	66.9 PSF	52.8 PSF	60.8 PSF	48.0 PSF	57.4 PSF	45.3 PSF	50.7 PSF	40.0 PSF	47.8 PSF	37.8 PSF	40.5 PSF	32.0 PSF	38.3 PSF	30.2 PSF	247.00 LB-FT	177.4 LB	571.0 LB	494.6 LB
24"			50.6 PSF	39.9 PSF	50.6 PSF	39.9 PSF	43.4 PSF	34.2 PSF	43.4 PSF	34.2 PSF	36.1 PSF	28.5 PSF	36.1 PSF	28.5 PSF	28.9 PSF	22.8 PSF	28.9 PSF	22.8 PSF	247.00 LB-FT	126.6 LB	488.1 LB	476.0 LB
30"			67.5 PSF	53.3 PSF	60.2 PSF	47.5 PSF	57.9 PSF	45.7 PSF	51.6 PSF	40.0 PSF	48.2 PSF	38.1 PSF	45.7 PSF	34.0 PSF	38.6 PSF	30.4 PSF	34.5 PSF	27.2 PSF	247.00 LB-FT	225.2 LB	690.6 LB	553.9 LB
18"	48"	9216 in <sup>2</sup>	44.2 PSF	34.9 PSF	44.2 PSF	34.9 PSF	37.9 PSF	29.9 PSF	37.9 PSF	29.9 PSF	31.6 PSF	24.9 PSF	31.6 PSF	24.9 PSF	25.2 PSF	19.9 PSF	25.2 PSF	19.9 PSF	247.00 LB-FT	147.4 LB	545.9 LB	507.5 LB
24"			37.9 PSF	29.9 PSF	37.9 PSF	29.9 PSF	32.5 PSF	25.7 PSF	32.5 PSF	25.7 PSF	27.1 PSF	21.4 PSF	27.1 PSF	21.4 PSF	21.7 PSF	17.1 PSF	21.7 PSF	17.1 PSF	247.00 LB-FT	126.6 LB	509.2 LB	497.1 LB
30"			49.2 PSF	38.9 PSF	43.4 PSF	34.3 PSF	42.2 PSF	33.3 PSF	37.2 PSF	29.4 PSF	35.2 PSF	27.7 PSF	31.1 PSF	24.5 PSF	28.1 PSF	22.2 PSF	24.9 PSF	19.6 PSF	247.00 LB-FT	225.2 LB	728.2 LB	591.5 LB
18"	36"	5040 in <sup>2</sup>	38.8 PSF	30.6 PSF	36.0 PSF	28.4 PSF	33.2 PSF	30.8 PSF	24.3 PSF	24.3 PSF	21.8 PSF	18.1 PSF	21.8 PSF	18.1 PSF	17.5 PSF	16.2 PSF	20.6 PSF	16.2 PSF	247.00 LB-FT	147.4 LB	630.1 LB	553.8 LB
24"			32.2 PSF	25.4 PSF	32.2 PSF	25.4 PSF	27.6 PSF	21.8 PSF	27.6 PSF	21.8 PSF	23.0 PSF	18.1 PSF	23.0 PSF	18.1 PSF					247.00 LB-FT	147.4 LB	570.5 LB	505.1 LB
30"			27.7 PSF	21.8 PSF	27.7 PSF	21.8 PSF	23.7 PSF	18.7 PSF	23.7 PSF	18.7 PSF									247.00 LB-FT	126.6 LB	530.3 LB	473.2 LB

**24" STAND DEPTH: MAX FACE AREA (1656in<sup>2</sup> - 6912in<sup>2</sup>), FRAME QUANTITY (3-6 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY							
			MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	1656 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	178.5 PSF	140.9 PSF	167.9 PSF	132.6 PSF	142.9 PSF	112.8 PSF	125.9 PSF	99.4 PSF	107.4 PSF	84.7 PSF	247.00 LB-FT	241.4 LB	837.7 LB	684.6 LB
24"			198.2 PSF	156.4 PSF	176.5 PSF	139.3 PSF	165.1 PSF	130.4 PSF	147.1 PSF	116.2 PSF	132.1 PSF	104.3 PSF	117.8 PSF	93.0 PSF	99.1 PSF	78.2 PSF	88.5 PSF	69.9 PSF	247.00 LB-FT	189.9 LB	756.1 LB	662.4 LB
30"			163.3 PSF	128.9 PSF	163.3 PSF	128.9 PSF	136.1 PSF	107.4 PSF	136.1 PSF	107.4 PSF	108.9 PSF	85.9 PSF	108.9 PSF	85.9 PSF	81.6 PSF	64.4 PSF	81.6 PSF	64.4 PSF	247.00 LB-FT	156.5 LB	699.3 LB	647.8 LB
18"	30"	2790 in <sup>2</sup>	130.3 PSF	102.8 PSF	130.3 PSF	102.8 PSF	108.5 PSF	85.7 PSF	108.5 PSF	85.7 PSF	86.8 PSF	68.5 PSF	86.8 PSF	68.5 PSF	65.1 PSF	51.4 PSF	65.1 PSF	51.4 PSF	229.00 LB-FT	124.8 LB	618.1 LB	606.6 LB
24"			149.5 PSF	118.0 PSF	125.1 PSF	98.7 PSF	124.6 PSF	98.3 PSF	104.3 PSF	82.3 PSF	99.7 PSF	78.7 PSF	83.5 PSF	65.9 PSF	74.7 PSF	59.0 PSF	49.5 PSF	49.5 PSF	247.00 LB-FT	241.4 LB	903.7 LB	745.0 LB
30"			117.6 PSF	92.8 PSF	103.4 PSF	81.6 PSF	98.0 PSF	77.4 PSF	86.2 PSF	68.1 PSF	78.4 PSF	61.9 PSF	69.0 PSF	54.5 PSF	58.8 PSF	46.4 PSF	51.9 PSF	40.9 PSF	247.00 LB-FT	189.9 LB	803.6 LB	709.9 LB
18"	36"	3780 in <sup>2</sup>	96.9 PSF	76.5 PSF	96.9 PSF	76.5 PSF	80.7 PSF	63.7 PSF	80.7 PSF	63.7 PSF	64.6 PSF	51.0 PSF	64.6 PSF	51.0 PSF	48.4 PSF	38.2 PSF	48.4 PSF	38.2 PSF	245.70 LB-FT	156.5 LB	738.5 LB	687.0 LB
24"			77.3 PSF	61.0 PSF	77.3 PSF	61.0 PSF	64.4 PSF	50.8 PSF	64.4 PSF	50.8 PSF	51.5 PSF	40.7 PSF	51.5 PSF	40.7 PSF	38.6 PSF	30.5 PSF	38.6 PSF	30.5 PSF	229.00 LB-FT	124.8 LB	649.3 LB	637.8 LB
30"			110.3 PSF	87.1 PSF	90.9 PSF	71.8 PSF	91.9 PSF	72.6 PSF	75.8 PSF	59.9 PSF	73.5 PSF	58.0 PSF	60.7 PSF	47.9 PSF	55.1 PSF	43.5 PSF	45.6 PSF	36.0 PSF	247.00 LB-FT	241.4 LB	964.1 LB	805.3 LB
18"	42"	5040 in <sup>2</sup>	86.8 PSF	68.5 PSF	75.4 PSF	59.5 PSF	72.3 PSF	57.1 PSF	62.8 PSF	49.6 PSF	57.8 PSF	45.7 PSF	50.3 PSF	39.7 PSF	43.4 PSF	34.2 PSF	37.8 PSF	29.8 PSF	247.00 LB-FT	189.9 LB	851.1 LB	757.3 LB
24"			71.5 PSF	56.4 PSF	71.5 PSF	56.4 PSF	59.6 PSF	47.0 PSF	59.6 PSF	47.0 PSF	47.7 PSF	37.6 PSF	47.7 PSF	37.6 PSF	35.7 PSF	28.2 PSF	35.7 PSF	28.2 PSF	245.70 LB-FT	156.5 LB	777.6 LB	726.1 LB
30"			57.0 PSF	45.0 PSF	57.0 PSF	45.0 PSF	47.5 PSF	37.5 PSF	47.5 PSF	37.5 PSF	38.0 PSF	30.0 PSF	38.0 PSF	30.0 PSF	32.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	229.00 LB-FT	124.8 LB	680.5 LB	669.0 LB
18"	48"	6912 in <sup>2</sup>	82.2 PSF	64.9 PSF	67.2 PSF	53.0 PSF	68.6 PSF	54.1 PSF	56.0 PSF	44.2 PSF	54.9 PSF	43.3 PSF	44.9 PSF	35.4 PSF	41.2 PSF	32.5 PSF	33.7 PSF	26.6 PSF	246.30 LB-FT	240.7 LB	1018.2 LB	863.4 LB
24"			65.1 PSF	51.4 PSF	55.8 PSF	44.1 PSF	54.2 PSF	42.8 PSF	46.5 PSF	36.7 PSF	43.4 PSF	34.2 PSF	37.3 PSF	29.4 PSF	32.5 PSF	25.7 PSF	28.0 PSF	22.1 PSF	247.00 LB-FT	189.9 LB	898.5 LB	804.8 LB
30"			53.6 PSF	42.3 PSF	53.6 PSF	42.3 PSF	44.7 PSF	35.3 PSF	44.7 PSF	35.3 PSF	35.7 PSF	28.2 PSF	35.7 PSF	28.2 PSF	26.8 PSF	21.1 PSF	26.8 PSF	21.1 PSF	245.70 LB-FT	156.5 LB	816.7 LB	765.2 LB
18"	36"	3780 in <sup>2</sup>	42.8 PSF	33.8 PSF	42.8 PSF	33.8 PSF	35.6 PSF	28.1 PSF	35.6 PSF	28.1 PSF	28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	21.4 PSF	16.9 PSF	21.4 PSF	16.9 PSF	229.00 LB-FT	124.8 LB	711.7 LB	700.2 LB
24"			59.0 PSF	46.6 PSF	48.3 PSF	38.1 PSF	49.2 PSF	38.8 PSF	40.2 PSF	31.2 PSF	31.6 PSF	24.9 PSF	26.8 PSF	21.2 PSF	23.7 PSF	18.7 PSF	20.1 PSF	15.9 PSF	242.50 LB-FT	237.0 LB	1061.6 LB	911.5 LB
30"			47.4 PSF	37.4 PSF	40.2 PSF	31.7 PSF	39.5 PSF	31.2 PSF	33.5 PSF	26.4 PSF	31.6 PSF	24.9 PSF	26.8 PSF	21.2 PSF	23.7 PSF	18.7 PSF	20.1 PSF	15.9 PSF	247.00 LB-FT	189.9 LB	946.0 LB	852.3 LB
18"	42"	5040 in <sup>2</sup>	39.1 PSF	30.8 PSF	39.1 PSF	30.8 PSF	32.6 PSF	25.7 PSF	32.6 PSF	25.7 PSF	26.0 PSF	20.5 PSF	26.0 PSF	20.5 PSF					245.70 LB-FT	156.5 LB	855.9 LB	770.6 LB
24"			31.2 PSF	24.6 PSF	31.2 PSF	24.6 PSF	26.0 PSF	20.5 PSF	26.0 PSF	20.5 PSF	20.8 PSF	16.4 PSF	20.8 PSF	16.4 PSF					229.00 LB-FT	124.8 LB	743.0 LB	697.7 LB
30"																						

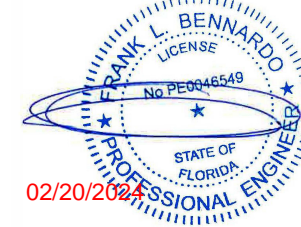
**36" STAND DEPTH: MAX FACE AREA (1656in<sup>2</sup> - 6912in<sup>2</sup>), FRAME QUANTITY (3-6 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY							
			MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	1656 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	195.9 PSF	154.6 PSF	179.9 PSF	142.1 PSF	156.7 PSF	123.7 PSF										

# "HD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

FL 16921.1

**ENGINEERING EXPRESS**  
 POSTAL ADDRESS:  
 2234 NORTH FEDERAL HWY #7664  
 BOCA RATON, FL 33431  
 ENGINEERINGEXPRESS.COM

**PRECISION ALUMINUM PRODUCTS, INC.**  
 1339 SW 1ST WAY  
 DEERFIELD BEACH, FL 33441  
 (954) 480-6919  
 ALUMINUM A/C STANDS  
 FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
 FLORIDA STATEWIDE APPROVAL (FSA FL#16921.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-2768)	CSL	RWN	12/15/20
2023 FBC UPDATE & TECH. CHANGES	MRT	RWN	12/08/23
COPYRIGHT ENGINEERING EXPRESS®			

23-69401

SCALE: NTS UNLESS NOTED

10 OF 18

**24" STAND DEPTH: MAX FACE AREA (1104in<sup>2</sup> - 4608in<sup>2</sup>), FRAME QUANTITY (2-5 FRAMES)**

LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES							
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT							
18"	24"	1104 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	188.9 PSF	149.1 PSF	160.7 PSF	126.9 PSF	125.9 PSF	99.4 PSF	84.7 PSF	247.00 LB-FT	241.4 LB	839.6 LB	684.6 LB	
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	198.2 PSF	156.4 PSF	176.5 PSF	139.3 PSF	148.6 PSF	117.3 PSF	132.5 PSF	104.6 PSF	99.1 PSF	78.2 PSF	88.5 PSF	69.9 PSF	247.00 LB-FT	189.9 LB	756.1 LB	662.4 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	163.3 PSF	128.9 PSF	163.3 PSF	128.9 PSF	122.5 PSF	96.7 PSF	122.5 PSF	96.7 PSF	81.6 PSF	64.4 PSF	81.6 PSF	64.4 PSF	245.70 LB-FT	156.5 LB	699.3 LB	647.8 LB
36"			162.8 PSF	128.6 PSF	162.8 PSF	128.6 PSF	130.3 PSF	102.8 PSF	130.3 PSF	102.8 PSF	97.7 PSF	77.1 PSF	97.7 PSF	77.1 PSF	65.1 PSF	51.4 PSF	65.1 PSF	51.4 PSF	229.00 LB-FT	124.8 LB	620.3 LB	606.6 LB
18"	30"	1860 in <sup>2</sup>	186.9 PSF	147.5 PSF	156.3 PSF	123.4 PSF	149.5 PSF	118.0 PSF	125.1 PSF	98.7 PSF	112.1 PSF	88.5 PSF	93.9 PSF	74.1 PSF	74.7 PSF	59.0 PSF	62.7 PSF	247.00 LB-FT	241.4 LB	906.0 LB	745.0 LB	
24"			147.0 PSF	116.1 PSF	129.2 PSF	102.0 PSF	117.6 PSF	92.8 PSF	103.4 PSF	81.6 PSF	88.2 PSF	69.6 PSF	77.6 PSF	61.3 PSF	58.8 PSF	46.4 PSF	51.9 PSF	40.9 PSF	247.00 LB-FT	189.9 LB	805.8 LB	709.9 LB
30"			121.1 PSF	95.6 PSF	121.1 PSF	95.6 PSF	96.9 PSF	76.5 PSF	96.9 PSF	76.5 PSF	72.7 PSF	57.4 PSF	72.7 PSF	57.4 PSF	48.4 PSF	38.2 PSF	48.4 PSF	38.2 PSF	245.70 LB-FT	156.5 LB	740.7 LB	687.0 LB
36"			96.6 PSF	76.3 PSF	96.6 PSF	76.3 PSF	77.3 PSF	61.0 PSF	77.3 PSF	61.0 PSF	58.0 PSF	45.7 PSF	58.0 PSF	45.7 PSF	38.6 PSF	30.5 PSF	38.6 PSF	30.5 PSF	229.00 LB-FT	124.8 LB	651.5 LB	637.8 LB
18"	36"	2520 in <sup>2</sup>	137.9 PSF	108.9 PSF	113.6 PSF	89.7 PSF	110.3 PSF	87.1 PSF	90.9 PSF	71.8 PSF	82.7 PSF	65.3 PSF	68.3 PSF	53.9 PSF	55.1 PSF	43.5 PSF	45.6 PSF	36.0 PSF	247.00 LB-FT	241.4 LB	966.3 LB	805.3 LB
24"			108.5 PSF	85.6 PSF	94.2 PSF	74.3 PSF	86.6 PSF	68.5 PSF	75.4 PSF	59.5 PSF	65.1 PSF	51.4 PSF	56.6 PSF	44.7 PSF	43.4 PSF	34.2 PSF	37.8 PSF	29.8 PSF	247.00 LB-FT	189.9 LB	853.3 LB	757.3 LB
30"			89.4 PSF	70.6 PSF	89.4 PSF	70.6 PSF	71.5 PSF	56.4 PSF	71.5 PSF	56.4 PSF	53.6 PSF	42.3 PSF	53.6 PSF	42.3 PSF	35.7 PSF	28.2 PSF	35.7 PSF	28.2 PSF	245.70 LB-FT	156.5 LB	779.9 LB	726.1 LB
36"			71.3 PSF	56.3 PSF	71.3 PSF	56.3 PSF	57.0 PSF	45.0 PSF	57.0 PSF	45.0 PSF	42.8 PSF	33.8 PSF	42.8 PSF	33.8 PSF	28.5 PSF	22.5 PSF	28.5 PSF	22.5 PSF	229.00 LB-FT	124.8 LB	682.8 LB	669.0 LB
18"	42"	3360 in <sup>2</sup>	102.8 PSF	81.1 PSF	83.9 PSF	66.3 PSF	82.2 PSF	64.9 PSF	67.2 PSF	53.0 PSF	61.7 PSF	48.7 PSF	50.4 PSF	39.8 PSF	41.2 PSF	32.5 PSF	33.7 PSF	26.6 PSF	246.30 LB-FT	240.7 LB	1019.9 LB	863.4 LB
24"			81.4 PSF	64.2 PSF	69.7 PSF	55.0 PSF	65.1 PSF	51.4 PSF	55.8 PSF	44.1 PSF	48.8 PSF	38.5 PSF	41.9 PSF	33.1 PSF	32.5 PSF	25.7 PSF	28.0 PSF	22.1 PSF	247.00 LB-FT	189.9 LB	900.8 LB	804.8 LB
30"			67.0 PSF	52.9 PSF	67.0 PSF	52.9 PSF	53.6 PSF	42.3 PSF	53.6 PSF	42.3 PSF	40.2 PSF	31.7 PSF	40.2 PSF	31.7 PSF	26.8 PSF	21.1 PSF	26.8 PSF	21.1 PSF	245.70 LB-FT	156.5 LB	819.0 LB	765.2 LB
36"			53.5 PSF	42.2 PSF	53.5 PSF	42.2 PSF	42.8 PSF	33.8 PSF	42.8 PSF	33.8 PSF	32.1 PSF	25.3 PSF	32.1 PSF	25.3 PSF	21.4 PSF	16.9 PSF	21.4 PSF	16.9 PSF	229.00 LB-FT	124.8 LB	714.0 LB	700.2 LB
18"	48"	4608 in <sup>2</sup>	73.8 PSF	58.2 PSF	60.3 PSF	47.6 PSF	59.0 PSF	46.6 PSF	48.3 PSF	38.1 PSF	44.3 PSF	35.0 PSF	36.2 PSF	28.6 PSF	29.6 PSF	23.6 PSF	24.2 PSF	19.1 PSF	242.50 LB-FT	237.0 LB	1063.2 LB	911.5 LB
24"			59.3 PSF	46.8 PSF	50.2 PSF	39.6 PSF	47.4 PSF	37.4 PSF	40.2 PSF	31.7 PSF	35.6 PSF	28.1 PSF	30.2 PSF	23.8 PSF	23.7 PSF	18.7 PSF	20.1 PSF	15.9 PSF	247.00 LB-FT	189.9 LB	948.3 LB	852.3 LB
30"			48.9 PSF	38.6 PSF	48.9 PSF	38.6 PSF	39.1 PSF	30.8 PSF	39.1 PSF	30.8 PSF	29.3 PSF	23.1 PSF	29.3 PSF	23.1 PSF	24.5.70 LB-FT	156.5 LB	858.1 LB	759.4 LB				
36"			39.0 PSF	30.8 PSF	39.0 PSF	30.8 PSF	31.2 PSF	24.6 PSF	31.2 PSF	24.6 PSF	23.4 PSF	18.4 PSF	23.4 PSF	18.4 PSF	22.9.00 LB-FT	124.8 LB	745.2 LB	686.5 LB				

**36" STAND DEPTH: MAX FACE AREA (1104in<sup>2</sup> - 4608in<sup>2</sup>), FRAME QUANTITY (2-5 FRAMES)**

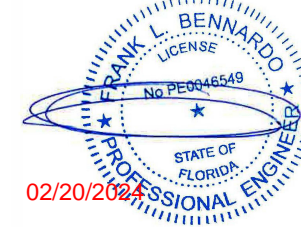
LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES							
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT							
18"	24"	1104 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	176.3 PSF	139.1 PSF	162.0 PSF	127.9 PSF	117.5 PSF	92.7 PSF	108.2 PSF	85.4 PSF	247.00 LB-FT	225.2 LB	575.8 LB	441.3 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	185.2 PSF	146.2 PSF	177.4 PSF	140.1 PSF	138.9 PSF	109.6 PSF	133.2 PSF	105.2 PSF	92.6 PSF	70.2 PSF	89.0 PSF	70.2 PSF	247.00 LB-FT	177.4 LB	513.4 LB	435.4 LB
30"			192.3 PSF	151.8 PSF	192.3 PSF	151.8 PSF	153.8 PSF	121.4 PSF	153.8 PSF	121.4 PSF	115.4 PSF	91.1 PSF	115.4 PSF	91.1 PSF	76.9 PSF	60.7 PSF	76.9 PSF	60.7 PSF	247.00 LB-FT	147.4 LB	476.1 LB	433.8 LB
36"			165.1 PSF	130.4 PSF	165.1 PSF	130.4 PSF	132.1 PSF	104.3 PSF	132.1 PSF	104.3 PSF	99.1 PSF	78.2 PSF	99.1 PSF	78.2 PSF	66.0 PSF	52.1 PSF	66.0 PSF	52.1 PSF	247.00 LB-FT	126.6 LB	449.8 LB	433.8 LB
18"	30"	1860 in <sup>2</sup>	174.4 PSF	137.6 PSF	158.3 PSF	125.0 PSF	139.5 PSF	110.1 PSF	126.8 PSF	100.1 PSF	104.6 PSF	82.6 PSF	95.2 PSF	75.1 PSF	69.7 PSF	55.0 PSF	63.6 PSF	50.2 PSF	247.00 LB-FT	225.2 LB	619.4 LB	478.8 LB
24"			137.4 PSF	108.4 PSF	130.4 PSF	103.0 PSF	109.9 PSF	86.7 PSF	104.4 PSF	82.4 PSF	82.4 PSF	65.0 PSF	78.4 PSF	61.9 PSF	54.9 PSF	43.3 PSF	52.4 PSF	41.3 PSF	247.00 LB-FT	177.4 LB	545.2 LB	465.0 LB
30"			114.1 PSF	90.1 PSF	114.1 PSF	90.1 PSF	91.3 PSF	72.1 PSF	91.3 PSF	72.1 PSF	68.5 PSF	54.0 PSF	68.5 PSF	54.0 PSF	45.6 PSF	36.0 PSF	45.6 PSF	36.0 PSF	247.00 LB-FT	147.4 LB	500.6 LB	458.4 LB
36"			98.0 PSF	77.4 PSF	98.0 PSF	77.4 PSF	78.4 PSF	61.9 PSF	78.4 PSF	61.9 PSF	58.8 PSF	46.4 PSF	58.8 PSF	46.4 PSF	39.2 PSF	30.9 PSF	39.2 PSF	30.9 PSF	247.00 LB-FT	126.6 LB	470.9 LB	454.9 LB
18"	36"	2520 in <sup>2</sup>	128.7 PSF	101.6 PSF	115.7 PSF	91.3 PSF	102.9 PSF	81.3 PSF	92.6 PSF	73.1 PSF	77.2 PSF	60.9 PSF	69.5 PSF	54.9 PSF	51.4 PSF	40.6 PSF	46.4 PSF	36.6 PSF	247.00 LB-FT	225.2 LB	656.9 LB	516.4 LB
24"			101.4 PSF	80.0 PSF	95.5 PSF	75.4 PSF	81.1 PSF	64.0 PSF	76.4 PSF	60.3 PSF	60.8 PSF	48.0 PSF	57.4 PSF	45.3 PSF	40.5 PSF	32.0 PSF	38.3 PSF	30.2 PSF	247.00 LB-FT	177.4 LB	574.8 LB	494.6 LB
30"			84.2 PSF	66.5 PSF	84.2 PSF	66.5 PSF	67.4 PSF	53.2 PSF	67.4 PSF	53.2 PSF	50.5 PSF	39.9 PSF	50.5 PSF	39.9 PSF	33.7 PSF	26.6 PSF	33.7 PSF	26.6 PSF	247.00 LB-FT	147.4 LB	525.2 LB	482.9 LB
36"			72.3 PSF	57.1 PSF	72.3 PSF	57.1 PSF	57.8 PSF	45.7 PSF	57.8 PSF	45.7 PSF	43.4 PSF	34.2 PSF	43.4 PSF	34.2 PSF	28.9 PSF	22.8 PSF	28.9 PSF	22.8 PSF	247.00 LB-FT	126.6 LB	492.0 LB	476.0 LB
18"	42"	3360 in <sup>2</sup>	96.5 PSF	76.2 PSF	85.9 PSF	67.8 PSF	77.2 PSF	60.9 PSF	68.7 PSF	54.3 PSF	57.9 PSF	45.7 PSF	51.6 PSF	40.7 PSF	38.6 PSF	30.4 PSF	34.5 PSF	27.2 PSF	247.00 LB-FT	225.2 LB	694.5 LB	553.9 LB
24"			76.0 PSF	60.0 PSF	71.0 PSF	56.0 PSF	60.8 PSF	48.0 PSF	56.8 PSF	44.8 PSF	45.6 PSF	36.0 PSF	42.6 PSF	33.7 PSF	30.4 PSF	24.0 PSF	28.5 PSF	22.5 PSF	247.00 LB-FT	177.4 LB	604.4 LB	524.2 LB
30"			63.2 PSF	49.8 PSF	63.2 PSF	49.8 PSF	50.5 PSF	39.9 PSF	50.5 PSF	39.9 PSF	37.9 PSF	29.9 PSF	37.9 PSF	29.9 PSF	25.2 PSF	19.9 PSF	25.2 PSF	19.9 PSF	247.00 LB-FT	147.4 LB	549.8 LB	507.5 LB
36"			54.2 PSF	42.8 PSF	54.2 PSF	42.8 PSF	43.4 PSF	34.2 PSF	43.4 PSF	34.2 PSF	32.5 PSF	25.7 PSF	32.5 PSF	25.7 PSF	21.7 PSF	17.1 PSF	21.7 PSF	17.1 PSF	247.00 LB-FT	126.6 LB	513.1 LB	497.1 LB
18"	48"	4608 in <sup>2</sup>	70.4 PSF	55.5 PSF	62.0 PSF	48.9 PSF	56.3 PSF	44.4 PSF	49.6 PSF	39.2 PSF	42.2 PSF	33.3 PSF	37.2 PSF	29.4 PSF	28.1 PSF	22.2 PSF	24.9 PSF	19.6 PSF	247.00 LB-FT	225.2 LB	732.0 LB	591.5 LB
24"			55.4 PSF	43.7 PSF	51.3 PSF	40.5 PSF	44.3 PSF	35.0 PSF	41.1 PSF	32.4 PSF	33.2 PSF	26.2 PSF	30.8 PSF	24.3 PSF	22.1 PSF	17.5 PSF	20.6 PSF	16.2 PSF	247.00 LB-FT	177.4 LB	634.0 LB	553.8 LB
30"			46.0 PSF	36.3 PSF	46.0 PSF	36.3 PSF	36.8 PSF	29.1 PSF	36.8 PSF	29.1 PSF	27.6 PSF	21.8 PSF	27.6 PSF	21.8 PSF	22.1 PSF	17.5 PSF	20.6 PSF	16.2 PSF	247.00 LB-FT	147.4 LB	574.4 LB	487.1 LB
36"			39.5 PSF	31.2 PSF	39.5 PSF	31.2 PSF	31.6 PSF	24.9 PSF	31.6 PSF	24.9 PSF	23.7 PSF	18.7 PSF	23.7 PSF	18.7 PSF	24.7.00 LB-FT	126.6 LB	534.2 LB	473.2 LB				

# "HD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



FL

## 36" STAND DEPTH: MAX FACE AREA (552in<sup>2</sup> - 2304in<sup>2</sup>), FRAME QUANTITY (2-3 FRAMES)

LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO								MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES							
			ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	552 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	210.20 LB-FT	191.6 LB	491.4 LB	328.0 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	185.2 PSF	146.2 PSF	177.4 PSF	140.1 PSF	247.00 LB-FT	177.4 LB	513.4 LB	367.9 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	153.8 PSF	121.4 PSF	153.8 PSF	121.4 PSF	247.00 LB-FT	147.4 LB	473.8 LB	366.3 LB
36"			198.2 PSF	156.4 PSF	198.2 PSF	156.4 PSF	132.1 PSF	104.3 PSF	132.1 PSF	104.3 PSF	247.00 LB-FT	126.6 LB	451.3 LB	366.3 LB
18"	30"	930 in <sup>2</sup>	200.0 PSF	157.8 PSF	189.9 PSF	149.9 PSF	139.5 PSF	110.1 PSF	126.8 PSF	100.1 PSF	247.00 LB-FT	225.2 LB	617.1 LB	411.3 LB
24"			164.8 PSF	130.1 PSF	156.5 PSF	123.5 PSF	109.9 PSF	86.7 PSF	104.4 PSF	82.4 PSF	247.00 LB-FT	177.4 LB	546.7 LB	397.5 LB
30"			137.0 PSF	108.1 PSF	137.0 PSF	108.1 PSF	91.3 PSF	72.1 PSF	91.3 PSF	72.1 PSF	247.00 LB-FT	147.4 LB	502.1 LB	390.9 LB
36"			117.6 PSF	92.8 PSF	117.6 PSF	92.8 PSF	78.4 PSF	61.9 PSF	78.4 PSF	61.9 PSF	247.00 LB-FT	126.6 LB	472.4 LB	387.4 LB
18"	36"	1260 in <sup>2</sup>	154.4 PSF	121.9 PSF	138.8 PSF	109.5 PSF	102.9 PSF	81.3 PSF	92.6 PSF	73.1 PSF	247.00 LB-FT	225.2 LB	658.4 LB	448.9 LB
24"			121.7 PSF	96.0 PSF	114.5 PSF	90.4 PSF	81.1 PSF	64.0 PSF	76.4 PSF	60.3 PSF	247.00 LB-FT	177.4 LB	576.3 LB	427.1 LB
30"			101.1 PSF	79.8 PSF	101.1 PSF	79.8 PSF	67.4 PSF	53.2 PSF	67.4 PSF	53.2 PSF	247.00 LB-FT	147.4 LB	526.7 LB	415.4 LB
36"			86.8 PSF	68.5 PSF	86.8 PSF	68.5 PSF	57.8 PSF	45.7 PSF	57.8 PSF	45.7 PSF	247.00 LB-FT	126.6 LB	493.5 LB	408.5 LB
18"	42"	1680 in <sup>2</sup>	115.8 PSF	91.4 PSF	103.0 PSF	81.3 PSF	77.2 PSF	60.9 PSF	68.7 PSF	54.3 PSF	247.00 LB-FT	225.2 LB	696.0 LB	486.4 LB
24"			91.2 PSF	72.0 PSF	85.2 PSF	67.2 PSF	60.8 PSF	48.0 PSF	56.8 PSF	44.8 PSF	247.00 LB-FT	177.4 LB	605.9 LB	456.7 LB
30"			75.8 PSF	59.8 PSF	75.8 PSF	59.8 PSF	50.5 PSF	39.9 PSF	50.5 PSF	39.9 PSF	247.00 LB-FT	147.4 LB	551.3 LB	440.0 LB
36"			65.1 PSF	51.4 PSF	65.1 PSF	51.4 PSF	43.4 PSF	34.2 PSF	43.4 PSF	34.2 PSF	247.00 LB-FT	126.6 LB	514.6 LB	429.6 LB
18"	48"	2304 in <sup>2</sup>	84.4 PSF	66.6 PSF	74.4 PSF	58.7 PSF	56.3 PSF	44.4 PSF	49.6 PSF	39.2 PSF	247.00 LB-FT	225.2 LB	733.5 LB	524.0 LB
24"			66.5 PSF	52.5 PSF	61.6 PSF	48.6 PSF	44.3 PSF	35.0 PSF	41.1 PSF	32.4 PSF	247.00 LB-FT	177.4 LB	635.5 LB	486.3 LB
30"			55.3 PSF	43.6 PSF	55.3 PSF	43.6 PSF	36.8 PSF	29.1 PSF	36.8 PSF	29.1 PSF	247.00 LB-FT	147.4 LB	575.9 LB	464.6 LB
36"			47.4 PSF	37.4 PSF	47.4 PSF	37.4 PSF	31.6 PSF	24.9 PSF	31.6 PSF	24.9 PSF	247.00 LB-FT	126.6 LB	535.7 LB	450.7 LB

### DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

# "XHD" STAND DESIGN SCHEDULE

## 24" STAND DEPTH: MAX FACE AREA (2760in<sup>2</sup> - 11520in<sup>2</sup>), FRAME QUANTITY (5-8 FRAMES)

LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)				
			MAX FACE AREA : 8 FRAMES				MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES								MAX FACE AREA : 5 FRAMES			
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3						ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3	
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT							
18"	24"	2760 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	181.6 PSF	143.4 PSF	167.8 PSF	132.5 PSF	311.90 LB-FT	348.1 LB	1209.7 LB	1032.5 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	197.5 PSF	155.9 PSF	197.4 PSF	155.9 PSF	169.3 PSF	133.6 PSF	169.3 PSF	133.6 PSF	141.0 PSF	111.3 PSF	141.0 PSF	111.3 PSF	311.90 LB-FT	270.4 LB	1076.3 LB	990.8 LB
30"			184.9 PSF	145.9 PSF	184.9 PSF	145.9 PSF	161.7 PSF	127.7 PSF	161.7 PSF	127.7 PSF	138.6 PSF	109.4 PSF	138.6 PSF	109.4 PSF	115.5 PSF	91.2 PSF	115.5 PSF	91.2 PSF	311.90 LB-FT	221.4 LB	991.4 LB	965.7 LB
36"			156.7 PSF	123.7 PSF	156.7 PSF	123.7 PSF	137.1 PSF	108.2 PSF	137.1 PSF	108.2 PSF	117.5 PSF	92.7 PSF	117.5 PSF	92.7 PSF	97.9 PSF	77.3 PSF	97.9 PSF	77.3 PSF	311.90 LB-FT	187.7 LB	931.9 LB	948.8 LB
18"	30"	4650 in <sup>2</sup>	172.5 PSF	136.1 PSF	155.3 PSF	122.6 PSF	150.9 PSF	119.1 PSF	135.9 PSF	107.3 PSF	129.3 PSF	102.1 PSF	116.6 PSF	92.0 PSF	107.8 PSF	85.1 PSF	97.3 PSF	76.8 PSF	311.90 LB-FT	348.1 LB	1305.2 LB	1119.5 LB
24"			133.9 PSF	105.7 PSF	131.2 PSF	103.5 PSF	117.2 PSF	92.5 PSF	114.8 PSF	90.7 PSF	100.4 PSF	79.3 PSF	98.5 PSF	77.8 PSF	83.7 PSF	66.1 PSF	82.2 PSF	64.9 PSF	311.90 LB-FT	270.4 LB	1145.9 LB	1058.4 LB
30"			109.7 PSF	86.6 PSF	109.7 PSF	86.6 PSF	96.0 PSF	75.8 PSF	96.0 PSF	75.8 PSF	82.3 PSF	64.9 PSF	82.3 PSF	64.9 PSF	68.5 PSF	54.1 PSF	68.5 PSF	54.1 PSF	311.90 LB-FT	221.4 LB	1046.8 LB	1021.0 LB
36"			93.0 PSF	73.4 PSF	93.0 PSF	73.4 PSF	81.3 PSF	64.2 PSF	81.3 PSF	64.2 PSF	69.7 PSF	55.0 PSF	69.7 PSF	55.0 PSF	58.1 PSF	45.8 PSF	58.1 PSF	45.8 PSF	311.90 LB-FT	187.7 LB	978.8 LB	995.8 LB
18"	36"	6300 in <sup>2</sup>	127.3 PSF	100.5 PSF	112.0 PSF	88.4 PSF	111.4 PSF	87.9 PSF	98.0 PSF	77.4 PSF	95.4 PSF	75.3 PSF	84.1 PSF	66.4 PSF	79.5 PSF	62.8 PSF	70.1 PSF	55.4 PSF	311.90 LB-FT	348.1 LB	1392.2 LB	1206.5 LB
24"			98.9 PSF	78.0 PSF	94.9 PSF	74.9 PSF	86.5 PSF	68.3 PSF	83.1 PSF	65.6 PSF	74.1 PSF	58.5 PSF	71.3 PSF	56.3 PSF	61.8 PSF	48.8 PSF	59.5 PSF	46.9 PSF	311.90 LB-FT	270.4 LB	1213.5 LB	1126.0 LB
30"			81.0 PSF	63.9 PSF	81.0 PSF	63.9 PSF	70.8 PSF	55.9 PSF	70.8 PSF	55.9 PSF	60.7 PSF	47.9 PSF	60.7 PSF	47.9 PSF	50.6 PSF	39.9 PSF	50.6 PSF	39.9 PSF	311.90 LB-FT	221.4 LB	1102.1 LB	1076.4 LB
36"			68.6 PSF	54.1 PSF	68.6 PSF	54.1 PSF	60.0 PSF	47.4 PSF	60.0 PSF	47.4 PSF	51.4 PSF	40.6 PSF	51.4 PSF	40.6 PSF	42.9 PSF	33.8 PSF	42.9 PSF	33.8 PSF	311.90 LB-FT	187.7 LB	1025.8 LB	1042.7 LB
18"	42"	8400 in <sup>2</sup>	95.4 PSF	75.3 PSF	82.1 PSF	64.8 PSF	83.5 PSF	65.9 PSF	71.8 PSF	56.7 PSF	71.6 PSF	56.5 PSF	61.6 PSF	48.6 PSF	59.6 PSF	47.1 PSF	51.4 PSF	40.6 PSF	311.90 LB-FT	348.1 LB	1479.3 LB	1293.6 LB
24"			74.1 PSF	58.5 PSF	69.8 PSF	55.1 PSF	64.9 PSF	51.2 PSF	61.1 PSF	48.2 PSF	55.6 PSF	43.9 PSF	52.4 PSF	41.4 PSF	46.3 PSF	36.6 PSF	43.7 PSF	34.5 PSF	311.90 LB-FT	270.4 LB	1281.2 LB	1193.6 LB
30"			60.7 PSF	47.9 PSF	60.7 PSF	47.9 PSF	53.1 PSF	41.9 PSF	53.1 PSF	41.9 PSF	45.5 PSF	35.9 PSF	45.5 PSF	35.9 PSF	37.9 PSF	29.9 PSF	37.9 PSF	29.9 PSF	311.90 LB-FT	221.4 LB	1157.5 LB	1131.8 LB
36"			51.4 PSF	40.6 PSF	51.4 PSF	40.6 PSF	45.0 PSF	35.5 PSF	45.0 PSF	35.5 PSF	38.6 PSF	30.4 PSF	38.6 PSF	30.4 PSF	32.1 PSF	25.4 PSF	32.1 PSF	25.4 PSF	311.90 LB-FT	187.7 LB	1072.7 LB	1089.6 LB
18"	48"	11520 in <sup>2</sup>	69.6 PSF	54.9 PSF	58.5 PSF	46.2 PSF	60.9 PSF	48.1 PSF	51.2 PSF	40.4 PSF	52.2 PSF	41.2 PSF	43.9 PSF	34.7 PSF	43.5 PSF	34.3 PSF	36.6 PSF	28.9 PSF	311.90 LB-FT	348.1 LB	1566.3 LB	1380.6 LB
24"			54.0 PSF	42.7 PSF	49.9 PSF	39.4 PSF	47.3 PSF	37.3 PSF	43.7 PSF	34.5 PSF	40.5 PSF	32.0 PSF	37.5 PSF	29.6 PSF	33.8 PSF	26.6 PSF	31.3 PSF	24.7 PSF	311.90 LB-FT	270.4 LB	1348.8 LB	1261.2 LB
30"			44.2 PSF	34.9 PSF	43.6 PSF	34.4 PSF	38.7 PSF	30.6 PSF	38.2 PSF	30.1 PSF	33.2 PSF	26.2 PSF	32.7 PSF	25.8 PSF	27.6 PSF	21.8 PSF	27.3 PSF	21.5 PSF	311.90 LB-FT	221.4 LB	1212.9 LB	1187.1 LB
36"			37.5 PSF	29.6 PSF	37.5 PSF	29.6 PSF	32.8 PSF	25.9 PSF	32.8 PSF	25.9 PSF	28.1 PSF	22.2 PSF	28.1 PSF	22.2 PSF	23.4 PSF	18.5 PSF	23.4 PSF	18.5 PSF	311.90 LB-FT	187.7 LB	1119.6 LB	1136.6 LB

## 36" STAND DEPTH: MAX FACE AREA (2760in<sup>2</sup> - 11520in<sup>2</sup>), FRAME QUANTITY (5-8 FRAMES)

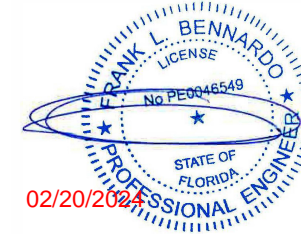
LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)				
			MAX FACE AREA : 8 FRAMES				MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES								MAX FACE AREA : 5 FRAMES			
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3						ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3	
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT							
18"	24"	2760 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	171.3 PSF	135.3 PSF	171.3 PSF	135.3 PSF	311.90 LB-FT	328.5 LB	839.1 LB	686.6 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	187.7 PSF	148.2 PSF	187.7 PSF	148.2 PSF	160.9 PSF	127.0 PSF	160.9 PSF	127.0 PSF	134.0 PSF	105.8 PSF	134.0 PSF	105.8 PSF	311.90 LB-FT	256.9 LB	743.6 LB	675.0 LB
30"			176.7 PSF	139.5 PSF	176.7 PSF	139.5 PSF	154.6 PSF	122.0 PSF	154.6 PSF	122.0 PSF	132.5 PSF	104.6 PSF	132.5 PSF	104.6 PSF	110.4 PSF	87.2 PSF	110.4 PSF	87.2 PSF	311.90 LB-FT	211.7 LB	682.4 LB	669.0 LB
36"			150.5 PSF	118.8 PSF	150.5 PSF	118.8 PSF	131.6 PSF	103.9 PSF	131.6 PSF	103.9 PSF	112.8 PSF	89.1 PSF	112.8 PSF	89.1 PSF	94.0 PSF	74.2 PSF	94.0 PSF	74.2 PSF	311.90 LB-FT	180.2 LB	639.1 LB	665.4 LB
18"	30"	4650 in <sup>2</sup>	162.7 PSF	128.5 PSF	162.7 PSF	128.5 PSF	142.4 PSF	112.4 PSF	142.4 PSF	112.4 PSF	122.0 PSF	96.3 PSF	122.0 PSF	96.3 PSF	101.7 PSF	80.3 PSF	101.7 PSF	80.3 PSF	311.90 LB-FT	328.5 LB	902.3 LB	741.4 LB
24"			127.3 PSF	100.5 PSF	127.3 PSF	100.5 PSF	111.4 PSF	87.9 PSF	111.4 PSF	87.9 PSF	95.5 PSF	75.3 PSF	95.5 PSF	75.3 PSF	79.5 PSF	62.8 PSF	79.5 PSF	62.8 PSF	311.90 LB-FT			

# "XHD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

**24" STAND DEPTH: MAX FACE AREA (2208in<sup>2</sup> - 9216in<sup>2</sup>), FRAME QUANTITY (4-7 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY					
			MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)		
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3							
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT							
18"	24"	2208 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	181.6 PSF	143.4 PSF	167.8 PSF	132.5 PSF	311.90 LB-FT	348.1 LB	1209.7 LB	1032.5 LB
24"	24"	2208 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	176.3 PSF	139.2 PSF	176.3 PSF	139.2 PSF	141.0 PSF	111.3 PSF	141.0 PSF	111.3 PSF	311.90 LB-FT	270.4 LB	1074.4 LB	990.8 LB
30"	24"	2208 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	173.3 PSF	136.8 PSF	173.3 PSF	136.8 PSF	173.3 PSF	136.8 PSF	144.4 PSF	114.0 PSF	144.4 PSF	114.0 PSF	115.5 PSF	91.2 PSF	115.5 PSF	91.2 PSF	311.90 LB-FT	221.4 LB	990.4 LB	965.7 LB
36"	24"	2208 in <sup>2</sup>	171.3 PSF	135.3 PSF	171.3 PSF	135.3 PSF	146.9 PSF	115.9 PSF	146.9 PSF	115.9 PSF	146.9 PSF	115.9 PSF	122.4 PSF	96.6 PSF	122.4 PSF	96.6 PSF	97.9 PSF	77.3 PSF	97.9 PSF	77.3 PSF	311.90 LB-FT	187.7 LB	933.1 LB	948.8 LB
18"	30"	3720 in <sup>2</sup>	188.6 PSF	148.9 PSF	169.8 PSF	134.0 PSF	161.7 PSF	127.6 PSF	161.7 PSF	127.6 PSF	145.6 PSF	114.9 PSF	134.7 PSF	106.3 PSF	121.4 PSF	95.9 PSF	107.8 PSF	85.1 PSF	97.3 PSF	76.8 PSF	311.90 LB-FT	348.1 LB	1306.4 LB	1119.5 LB
24"	30"	3720 in <sup>2</sup>	146.5 PSF	115.7 PSF	143.4 PSF	113.2 PSF	125.6 PSF	99.1 PSF	123.0 PSF	97.1 PSF	104.6 PSF	82.6 PSF	102.6 PSF	81.0 PSF	81.0 PSF	66.1 PSF	82.2 PSF	64.9 PSF	64.9 PSF	64.9 PSF	311.90 LB-FT	270.4 LB	1147.1 LB	1058.4 LB
30"	30"	3720 in <sup>2</sup>	120.0 PSF	94.7 PSF	120.0 PSF	94.7 PSF	102.8 PSF	81.2 PSF	102.8 PSF	81.2 PSF	85.7 PSF	67.6 PSF	85.7 PSF	67.6 PSF	67.6 PSF	54.1 PSF	68.5 PSF	54.1 PSF	68.5 PSF	54.1 PSF	311.90 LB-FT	221.4 LB	1048.0 LB	1021.0 LB
36"	30"	3720 in <sup>2</sup>	101.7 PSF	80.3 PSF	101.7 PSF	80.3 PSF	87.1 PSF	68.8 PSF	87.1 PSF	68.8 PSF	72.6 PSF	57.3 PSF	72.6 PSF	57.3 PSF	58.1 PSF	45.8 PSF	58.1 PSF	45.8 PSF	58.1 PSF	45.8 PSF	311.90 LB-FT	187.7 LB	980.0 LB	995.8 LB
18"	36"	5040 in <sup>2</sup>	139.2 PSF	109.9 PSF	122.4 PSF	96.6 PSF	119.3 PSF	94.2 PSF	105.0 PSF	82.9 PSF	99.4 PSF	78.5 PSF	87.6 PSF	69.1 PSF	79.5 PSF	62.8 PSF	70.1 PSF	55.4 PSF	70.1 PSF	55.4 PSF	311.90 LB-FT	348.1 LB	1393.4 LB	1206.5 LB
24"	36"	5040 in <sup>2</sup>	108.1 PSF	85.4 PSF	103.8 PSF	81.9 PSF	92.7 PSF	73.2 PSF	89.0 PSF	70.3 PSF	77.2 PSF	61.0 PSF	74.2 PSF	58.6 PSF	61.8 PSF	48.8 PSF	59.5 PSF	46.9 PSF	59.5 PSF	46.9 PSF	311.90 LB-FT	270.4 LB	1214.7 LB	1126.0 LB
30"	36"	5040 in <sup>2</sup>	88.5 PSF	69.9 PSF	88.5 PSF	69.9 PSF	75.9 PSF	59.9 PSF	75.9 PSF	59.9 PSF	63.2 PSF	49.9 PSF	63.2 PSF	49.9 PSF	50.6 PSF	39.9 PSF	50.6 PSF	39.9 PSF	50.6 PSF	39.9 PSF	311.90 LB-FT	221.4 LB	1103.3 LB	1076.4 LB
36"	36"	5040 in <sup>2</sup>	75.0 PSF	59.2 PSF	75.0 PSF	59.2 PSF	64.3 PSF	50.8 PSF	64.3 PSF	50.8 PSF	53.6 PSF	42.3 PSF	53.6 PSF	42.3 PSF	42.9 PSF	33.8 PSF	42.9 PSF	33.8 PSF	42.9 PSF	33.8 PSF	311.90 LB-FT	187.7 LB	1027.0 LB	1042.7 LB
18"	42"	6720 in <sup>2</sup>	104.4 PSF	82.4 PSF	89.7 PSF	70.8 PSF	89.5 PSF	70.6 PSF	77.0 PSF	60.7 PSF	74.6 PSF	58.8 PSF	64.2 PSF	50.7 PSF	59.6 PSF	47.1 PSF	51.4 PSF	40.6 PSF	40.6 PSF	40.6 PSF	311.90 LB-FT	348.1 LB	1480.5 LB	1293.6 LB
24"	42"	6720 in <sup>2</sup>	81.1 PSF	64.0 PSF	76.3 PSF	60.3 PSF	69.5 PSF	54.9 PSF	65.5 PSF	51.7 PSF	57.9 PSF	45.7 PSF	54.6 PSF	43.1 PSF	46.3 PSF	36.6 PSF	43.7 PSF	34.5 PSF	43.7 PSF	34.5 PSF	311.90 LB-FT	270.4 LB	1282.4 LB	1193.6 LB
30"	42"	6720 in <sup>2</sup>	66.4 PSF	52.4 PSF	66.4 PSF	52.4 PSF	56.9 PSF	44.9 PSF	56.9 PSF	44.9 PSF	47.4 PSF	37.4 PSF	47.4 PSF	37.4 PSF	37.9 PSF	29.9 PSF	37.9 PSF	29.9 PSF	37.9 PSF	29.9 PSF	311.90 LB-FT	221.4 LB	1158.7 LB	1131.8 LB
36"	42"	6720 in <sup>2</sup>	56.3 PSF	44.4 PSF	56.3 PSF	44.4 PSF	48.2 PSF	38.1 PSF	48.2 PSF	38.1 PSF	40.2 PSF	31.7 PSF	40.2 PSF	31.7 PSF	32.1 PSF	25.4 PSF	32.1 PSF	25.4 PSF	32.1 PSF	25.4 PSF	311.90 LB-FT	187.7 LB	1073.9 LB	1089.6 LB
18"	48"	9216 in <sup>2</sup>	76.1 PSF	60.1 PSF	64.0 PSF	50.5 PSF	65.2 PSF	51.5 PSF	54.9 PSF	43.3 PSF	54.3 PSF	42.9 PSF	45.8 PSF	36.1 PSF	43.5 PSF	36.6 PSF	36.6 PSF	28.9 PSF	36.6 PSF	28.9 PSF	311.90 LB-FT	348.1 LB	1567.5 LB	1380.6 LB
24"	48"	9216 in <sup>2</sup>	59.1 PSF	46.7 PSF	54.6 PSF	43.1 PSF	50.7 PSF	40.0 PSF	46.8 PSF	37.0 PSF	42.2 PSF	33.3 PSF	39.1 PSF	30.8 PSF	33.8 PSF	26.6 PSF	31.3 PSF	24.7 PSF	31.3 PSF	24.7 PSF	311.90 LB-FT	270.4 LB	1350.0 LB	1261.2 LB
30"	48"	9216 in <sup>2</sup>	48.4 PSF	38.2 PSF	47.7 PSF	37.6 PSF	41.5 PSF	32.7 PSF	40.9 PSF	32.3 PSF	34.6 PSF	27.3 PSF	34.1 PSF	26.9 PSF	27.6 PSF	21.8 PSF	27.3 PSF	21.5 PSF	27.3 PSF	21.5 PSF	311.90 LB-FT	221.4 LB	1214.1 LB	1187.1 LB
36"	48"	9216 in <sup>2</sup>	41.0 PSF	32.4 PSF	41.0 PSF	32.4 PSF	35.1 PSF	27.7 PSF	35.1 PSF	27.7 PSF	29.3 PSF	23.1 PSF	29.3 PSF	23.1 PSF	18.5 PSF	18.5 PSF	18.5 PSF	18.5 PSF	18.5 PSF	311.90 LB-FT	187.7 LB	1120.8 LB	1136.6 LB	

**36" STAND DEPTH: MAX FACE AREA (2208in<sup>2</sup> - 9216in<sup>2</sup>), FRAME QUANTITY (4-7 FRAMES)**

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY					
			MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)		
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3							
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT							
18"	24"	2208 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	171.3 PSF	135.3 PSF	171.3 PSF	135.3 PSF	311.90 LB-FT	328.5 LB	839.1 LB	686.6 LB		
24"	24"	2208 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	167.6 PSF	132.3 PSF	167.6 PSF	132.3 PSF	134.0 PSF	105.8 PSF	134.0 PSF	105.8 PSF	311.90 LB-FT	256.9 LB	741.7 LB	675.0 LB		
30"	24"	2208 in <sup>2</sup>	193.3 PSF	152.6 PSF	193.3 PSF	152.6 PSF	165.6 PSF	130.8 PSF	165.6 PSF	130.8 PSF	138.0 PSF	109.0 PSF	138.0 PSF	109.0 PSF	110.4 PSF	87.2 PSF	110.4 PSF	87.2 PSF	311.90 LB-FT	211.7 LB	683.6 LB	669.0 LB		
36"	24"	2208 in <sup>2</sup>	164.6 PSF	129.9 PSF	164.6 PSF	129.9 PSF	141.0 PSF	111.3 PSF	141.0 PSF	111.3 PSF	117.5 PSF	92.8 PSF	117.5 PSF	92.8 PSF	94.0 PSF	74.2 PSF	94.0 PSF	74.2 PSF	311.90 LB-FT	180.2 LB	640.3 LB	665.4 LB		
18"	30"	3720 in <sup>2</sup>	178.0 PSF	140.5 PSF	178.0 PSF	140.5 PSF	152.5 PSF	120.4 PSF	152.5 PSF	120.4 PSF	127.1 PSF	100.3 PSF	127.1 PSF	100.3 PSF	101.7 PSF	80.3 PSF	101.7 PSF	80.3 PSF	311.90 LB-FT	328.5 LB	903.5 LB	741.4 LB		
24"	30"	3720 in <sup>2</sup>	139.2 PSF	109.9 PSF	139.2 PSF	109.9 PSF	119.3 PSF	94.2 PSF	119.3 PSF	94.2 PSF	99.4 PSF	78.5 PSF	99.4 PSF	78.5 PSF	79.5 PSF	62.8 PSF	79.5 PSF	62.8 PSF	311.90 LB-FT	256.9 LB	789.7 LB	717.9 LB		
30"	30"	3720 in <sup>2</sup>	114.7 PSF	90.5 PSF	114.7 PSF	90.5 PSF	98.3 PSF	77.6 PSF	98.3 PSF	77.6 PSF	81.9 PSF	64.7 PSF	81.9 PSF	64.7 PSF	65.5 PSF	51.7 PSF	65.5 PSF	51.7 PSF	311.90 LB-FT	211.7 LB	718.8 LB	704.3 LB		
36"	30"	3720 in <sup>2</sup>	97.7 PSF	77.1 PSF	97.7 PSF	77.1 PSF	83.7 PSF	66.1 PSF	83.7 PSF	66.1 PSF	69.7 PSF	55.0 PSF	69.7 PSF	55.0 PSF	55.8 PSF	44.0 PSF	55.8 PSF	44.0 PSF	311.90 LB-FT	180.2 LB	670.3 LB	695.4 LB		
18"	36"	5040 in <sup>2</sup>	131.4 PSF	103.7 PSF	131.4 PSF	103.7 PSF	112.6 PSF	88.9 PSF	112.6 PSF	88.9 PSF	93.8 PSF	74.1 PSF	93.8 PSF	74.1 PSF	75.0 PSF	59.2 PSF	75.0 PSF	59.2 PSF	311.90 LB-FT	328.5 LB	958.2 LB	796.1 LB		
24"	36"	5040 in <sup>2</sup>	102.7 PSF	81.1 PSF	102.7 PSF	81.1 PSF	88.1 PSF	69.5 PSF	88.1 PSF	69.5 PSF	73.4 PSF	57.9 PSF	73.4 PSF	57.9 PSF	58.7 PSF	46.3 PSF	58.7 PSF	46.3 PSF	311.90 LB-FT	256.9 LB	832.5 LB	760.7 LB		
30"	36"	5040 in <sup>2</sup>	84.6 PSF	66.8 PSF	84.6 PSF	66.8 PSF	72.5 PSF	57.3 PSF	72.5 PSF	57.3 PSF	60.4 PSF	47.7 PSF	60.4 PSF	47.7 PSF	48.3 PSF	38.2 PSF	48.3 PSF	38.2 PSF	311.90 LB-FT	211.7 LB	754.1 LB	739.5 LB		
36"	36"	5040 in <sup>2</sup>	72.1 PSF	56.9 PSF	72.1 PSF	56.9 PSF	61.8 PSF	48.8 PSF	61.8 PSF	48.8 PSF	51.5 PSF	40.6 PSF	51.5 PSF	40.6 PSF	41.2 PSF	32.5 PSF	41.2 PSF	32.5 PSF	311.90 LB-FT	180.2 LB	700.4 LB	725.5 LB		
18"	42"	6720 in <sup>2</sup>	98.5 PSF	77.8 PSF	97.3 PSF	76.8 PSF	84.4 PSF	66.6 PSF	83.4 PSF	65.9 PSF	70.3 PSF	55.5 PSF	69.6 PSF	54.9 PSF	56.3 PSF	44.4 PSF	55.7 PSF	44.0 PSF	44.0 PSF	44.0 PSF	311.90 LB-FT	328.5 LB	1013.0 LB	850.9 LB
24"	42"	6720 in <sup>2</sup>	77.0 PSF	60.8 PSF	77.0 PSF	60.8 PSF	66.0 PSF	52.1 PSF	66.0 PSF	52.1 PSF	55.0 PSF	43.4 PSF	55.0 PSF	43.4 PSF	44.0 PSF	34.7 PSF	44.0 PSF	34.7 PSF	311.90 LB-FT	256.9 LB	875.3 LB	803.5 LB		
30"	42"	6720 in <sup>2</sup>	63.5 PSF	50.1 PSF	63.5 PSF	50.1 PSF	54.4 PSF	42.9 PS																

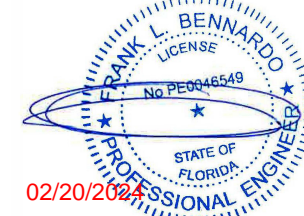
# "XHD" STAND DESIGN SCHEDULE CONTINUED

## DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



### 36" STAND DEPTH: MAX FACE AREA (1656in<sup>2</sup> - 6912in<sup>2</sup>), FRAME QUANTITY (3-6 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO																LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 6 FRAMES				MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	1656 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	171.3 PSF	135.3 PSF	171.3 PSF	135.3 PSF	311.90 LB-FT	328.5 LB	839.1 LB	686.6 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	134.0 PSF	105.8 PSF	134.0 PSF	105.8 PSF	311.90 LB-FT	256.9 LB	742.8 LB	675.0 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	184.1 PSF	145.3 PSF	184.1 PSF	145.3 PSF	184.1 PSF	145.3 PSF	184.1 PSF	145.3 PSF	110.4 PSF	87.2 PSF	110.4 PSF	87.2 PSF	311.90 LB-FT	211.7 LB	682.9 LB	669.0 LB
36"			188.1 PSF	148.5 PSF	188.1 PSF	148.5 PSF	156.7 PSF	123.7 PSF	156.7 PSF	123.7 PSF	156.7 PSF	123.7 PSF	156.7 PSF	123.7 PSF	99.0 PSF	74.2 PSF	99.0 PSF	74.2 PSF	311.90 LB-FT	180.2 LB	641.9 LB	665.4 LB
18"	30"	2790 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	169.5 PSF	133.8 PSF	169.5 PSF	133.8 PSF	169.5 PSF	133.8 PSF	169.5 PSF	133.8 PSF	101.7 PSF	80.3 PSF	101.7 PSF	80.3 PSF	311.90 LB-FT	328.5 LB	902.8 LB	741.4 LB
24"			159.1 PSF	125.6 PSF	159.1 PSF	125.6 PSF	132.6 PSF	104.7 PSF	132.6 PSF	104.7 PSF	132.6 PSF	104.7 PSF	132.6 PSF	104.7 PSF	79.5 PSF	62.8 PSF	79.5 PSF	62.8 PSF	311.90 LB-FT	256.9 LB	791.3 LB	717.9 LB
30"			131.1 PSF	103.5 PSF	131.1 PSF	103.5 PSF	109.2 PSF	86.2 PSF	109.2 PSF	86.2 PSF	109.2 PSF	86.2 PSF	109.2 PSF	86.2 PSF	69.0 PSF	51.7 PSF	69.0 PSF	51.7 PSF	311.90 LB-FT	211.7 LB	720.5 LB	704.3 LB
36"			111.6 PSF	88.1 PSF	111.6 PSF	88.1 PSF	93.0 PSF	73.4 PSF	93.0 PSF	73.4 PSF	93.0 PSF	73.4 PSF	93.0 PSF	73.4 PSF	58.7 PSF	44.0 PSF	58.7 PSF	44.0 PSF	311.90 LB-FT	180.2 LB	671.9 LB	695.4 LB
18"	36"	3780 in <sup>2</sup>	150.1 PSF	118.5 PSF	150.1 PSF	118.5 PSF	125.1 PSF	98.8 PSF	125.1 PSF	98.8 PSF	125.1 PSF	98.8 PSF	125.1 PSF	98.8 PSF	100.1 PSF	79.0 PSF	100.1 PSF	79.0 PSF	311.90 LB-FT	328.5 LB	959.8 LB	796.1 LB
24"			117.4 PSF	92.7 PSF	117.4 PSF	92.7 PSF	97.9 PSF	77.2 PSF	97.9 PSF	77.2 PSF	97.9 PSF	77.2 PSF	97.9 PSF	77.2 PSF	78.3 PSF	61.8 PSF	78.3 PSF	61.8 PSF	311.90 LB-FT	256.9 LB	834.1 LB	760.7 LB
30"			96.7 PSF	76.4 PSF	96.7 PSF	76.4 PSF	80.6 PSF	63.6 PSF	80.6 PSF	63.6 PSF	80.6 PSF	63.6 PSF	80.6 PSF	63.6 PSF	64.5 PSF	50.9 PSF	64.5 PSF	50.9 PSF	311.90 LB-FT	211.7 LB	755.7 LB	739.5 LB
36"			82.4 PSF	65.0 PSF	82.4 PSF	65.0 PSF	68.6 PSF	54.2 PSF	68.6 PSF	54.2 PSF	68.6 PSF	54.2 PSF	68.6 PSF	54.2 PSF	54.9 PSF	43.3 PSF	54.9 PSF	43.3 PSF	311.90 LB-FT	180.2 LB	702.0 LB	725.5 LB
18"	42"	5040 in <sup>2</sup>	112.6 PSF	88.9 PSF	112.6 PSF	88.9 PSF	87.7 PSF	74.1 PSF	87.7 PSF	74.1 PSF	87.7 PSF	74.1 PSF	87.7 PSF	74.1 PSF	75.0 PSF	59.2 PSF	75.0 PSF	59.2 PSF	311.90 LB-FT	328.5 LB	1014.6 LB	850.9 LB
24"			88.1 PSF	69.5 PSF	88.1 PSF	69.5 PSF	73.4 PSF	57.9 PSF	73.4 PSF	57.9 PSF	73.4 PSF	57.9 PSF	73.4 PSF	57.9 PSF	46.3 PSF	34.7 PSF	46.3 PSF	34.7 PSF	311.90 LB-FT	256.9 LB	876.9 LB	803.5 LB
30"			72.5 PSF	57.3 PSF	72.5 PSF	57.3 PSF	60.4 PSF	47.7 PSF	60.4 PSF	47.7 PSF	60.4 PSF	47.7 PSF	60.4 PSF	47.7 PSF	48.3 PSF	38.2 PSF	48.3 PSF	38.2 PSF	311.90 LB-FT	211.7 LB	791.0 LB	774.8 LB
36"			61.8 PSF	48.8 PSF	61.8 PSF	48.8 PSF	51.5 PSF	40.6 PSF	51.5 PSF	40.6 PSF	51.5 PSF	40.6 PSF	51.5 PSF	40.6 PSF	41.2 PSF	32.5 PSF	41.2 PSF	32.5 PSF	311.90 LB-FT	180.2 LB	732.0 LB	755.5 LB
18"	48"	6912 in <sup>2</sup>	82.1 PSF	64.8 PSF	79.7 PSF	62.9 PSF	68.4 PSF	54.0 PSF	68.4 PSF	54.0 PSF	66.5 PSF	52.5 PSF	66.5 PSF	52.5 PSF	54.7 PSF	43.2 PSF	54.7 PSF	43.2 PSF	311.90 LB-FT	328.5 LB	1069.3 LB	905.6 LB
24"			64.2 PSF	50.7 PSF	64.2 PSF	50.7 PSF	53.5 PSF	42.2 PSF	53.5 PSF	42.2 PSF	53.5 PSF	42.2 PSF	53.5 PSF	42.2 PSF	33.8 PSF	25.3 PSF	33.8 PSF	25.3 PSF	311.90 LB-FT	256.9 LB	919.8 LB	846.4 LB
30"			52.9 PSF	41.7 PSF	52.9 PSF	41.7 PSF	44.1 PSF	34.8 PSF	44.1 PSF	34.8 PSF	44.1 PSF	34.8 PSF	44.1 PSF	34.8 PSF	35.2 PSF	27.8 PSF	35.2 PSF	27.8 PSF	311.90 LB-FT	211.7 LB	826.3 LB	810.1 LB
36"			45.0 PSF	35.5 PSF	45.0 PSF	35.5 PSF	37.5 PSF	29.6 PSF	37.5 PSF	29.6 PSF	37.5 PSF	29.6 PSF	37.5 PSF	29.6 PSF	30.0 PSF	23.7 PSF	30.0 PSF	23.7 PSF	311.90 LB-FT	180.2 LB	762.1 LB	785.6 LB

### 24" STAND DEPTH: MAX FACE AREA (1104in<sup>2</sup> - 4608in<sup>2</sup>), FRAME QUANTITY (2-5 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY							
			MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES		MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)		
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4						ANCHORS TYPE: 2 OR 3	
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	1104 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	181.6 PSF	143.4 PSF	167.8 PSF	132.5 PSF	311.90 LB-FT	348.1 LB	1209.7 LB	1032.5 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	141.0 PSF	111.3 PSF	141.0 PSF	111.3 PSF	311.90 LB-FT	270.4 LB	1069.9 LB	990.8 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	173.3 PSF	136.8 PSF	173.3 PSF	136.8 PSF	311.90 LB-FT	221.4 LB	990.4 LB	965.7 LB
36"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	195.8 PSF	154.6 PSF	195.8 PSF	154.6 PSF	195.8 PSF	154.6 PSF	195.8 PSF	154.6 PSF	146.9 PSF	115.9 PSF	146.9 PSF	115.9 PSF	311.90 LB-FT	187.7 LB	934.7 LB	948.8 LB
18"	30"	1860 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	161.7 PSF	127.6 PSF	161.7 PSF	127.6 PSF	311.90 LB-FT	348.1 LB	1304.3 LB	1119.5 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	167.4 PSF	132.2 PSF	167.4 PSF	132.2 PSF	167.4 PSF	132.2 PSF	167.4 PSF	132.2 PSF	99.1 PSF	77.3 PSF	99.1 PSF	77.3 PSF	311.90 LB-FT	270.4 LB	1148.7 LB	1058.4 LB
30"			171.4 PSF	135.3 PSF	171.4 PSF	135.3 PSF	137.1 PSF	108.3 PSF	137.1 PSF	108.3 PSF	137.1 PSF	108.3 PSF	137.1 PSF	108.3 PSF	81.2 PSF	68.5 PSF	81.2 PSF	68.5 PSF	311.90 LB-FT	221.4 LB	1051.8 LB	1021.0 LB
36"			145.3 PSF	114.7 PSF	145.3 PSF	114.7 PSF	116.2 PSF	91.7 PSF	116.2 PSF	91.7 PSF	116.2 PSF	91.7 PSF	116.2 PSF	91.7 PSF	87.1 PSF	68.8 PSF	87.1 PSF	68.8 PSF	311.90 LB-FT	187.7 LB	983.9 LB	995.8 LB
18"	36"	2520 in <sup>2</sup>	198.9 PSF	157.0 PSF	174.7 PSF	137.9 PSF	159.1 PSF	125.6 PSF	139.8 PSF	110.4 PSF	119.3 PSF	94.2 PSF	119.3 PSF	94.2 PSF	105.0 PSF	82.9 PSF	79.5 PSF	62.8 PSF	311.90 LB-FT	348.1 LB	1397.3 LB	1206.5 LB
24"			154.5 PSF	122.0 PSF	148.1 PSF	116.9 PSF	123.6 PSF	97.6 PSF	118.6 PSF	93.6 PSF	92.7 PSF	73.2 PSF	92.7 PSF	73.2 PSF	89.0 PSF	70.3 PSF	61.8 PSF	48.8 PSF	311.90 LB-FT	270.4 LB	1218.6 LB	1126.0 LB
30"			126.5 PSF	99.9 PSF	126.5 PSF	99.9 PSF	101.2 PSF	79.9 PSF	101.2 PSF	79.9 PSF	79.9 PSF	59.9 PSF	59.9 PSF	59.9 PSF	50.6 PSF	39.9 PSF	50.6 PSF	39.9 PSF	311.90 LB-FT	221.4 LB	1107.2 LB	1076.4 LB
36"			107.2 PSF	84.6 PSF	107.2 PSF	84.6 PSF	85.8 PSF	67.7 PSF	85.8 PSF	67.7 PSF	85.8 PSF	67.7 PSF	85.8 PSF	67.7 PSF	64.3 PSF	50.8 PSF	64.3 PSF	50.8 PSF	311.90 LB-FT	187.7 LB	1030.8 LB	1042.7 LB
18"	42"	3360 in <sup>2</sup>	149.2 PSF	117.7 PSF	128.1 PSF	101.1 PSF	119.3 PSF	94.2 PSF	102.5 PSF	80.9 PSF	89.5 PSF	70.6 PSF	89.5 PSF	70.6 PSF	77.0 PSF	59.6 PSF	47.1 PSF	51.4 PSF	311.90 LB-FT	348.1 LB	1484.3 LB	1293.6 LB
24"			115.9 PSF	91.5 PSF	109.0 PSF	86.0 PSF	92.7 PSF	73.2 PSF	92.7 PSF	73.2 PSF	92.7 PSF	73.2 PSF	92.7 PSF	73.2 PSF	51.7 PSF	36.6 PSF	51.7 PSF	36.6 PSF	311.90 LB-FT	270.4 LB	1286.2 LB	1193.6 LB
30"			94.9 PSF	74.9 PSF	94.9 PSF	74.9 PSF	75.9 PSF	59.9 PSF	75.9 PSF	59.9 PSF	75.9 PSF	59.9 PSF	75.9 PSF	59.9 PSF	44.9 PSF	37.9 PSF	44.9 PSF	37.9 PSF	311.90 LB-FT	221.4 LB	1162.6 LB	1131.8 LB
36"			80.4 PSF	63.5 PSF	80.4 PSF	63.5 PSF	64.3 PSF	50.8 PSF	64.3 PSF	50.8 PSF	64.3 PSF	50.8 PSF	64.3 PSF	50.8 PSF	48.2 PSF	38.1 PSF	48.2 PSF	38.1 PSF	311.90 LB-FT	187.7 LB	1077.8 LB	1089.6 LB
18"	48"	4608 in <sup>2</sup>	108.7 PSF	85.8 PSF	91.3 PSF	72.1 PSF	87.0 PSF	68.7 PSF	73.1 PSF	57.7 PSF	65.2 PSF	51.5 PSF	65.2 PSF	51.5 PSF	54.9 PSF	43.3 PSF	43.5 PSF	36.6 PSF	311.90 LB-FT	348.1 LB	1571.4 LB	1380.6 LB
24"			84.5 PSF	66.7 PSF	77.9 PSF	61.5 PSF	67.6 PSF	53.3 PSF	62.4 PSF	49.2 PSF	50.7 PSF	40.0 PSF	46.8 PSF	37.0 PSF	33.8 PSF	26.6 PSF	31.3 PSF	24.7 PSF	311.90 LB-FT	270.4 LB	1353.8 LB	1261.2 LB
30"			69.2 PSF	54.6 PSF	68.1 PSF	53.7 PSF	55.3 PSF	43.7 PSF	54.5 PSF	43.7 PSF	54.5 PSF	43.7 PSF	54.5 PSF	43.7 PSF	41.5 PSF	32.3 PSF	40.9 PSF	32.3 PSF	311.90 LB-FT	221.4 LB	1217.9 LB	1187.1 LB
36"			58.6 PSF	46.3 PSF	58.6 PSF	46.3 PSF	46.9 PSF	37.0 PSF	46.9 PSF	37.0 PSF	46.9 PSF	37.0 PSF	46.9 PSF	37.0 PSF	35.1 PSF	27.7 PSF	35.1 PSF	27.7 PSF	311.90 LB-FT	187.7 LB	1124.7 LB	1136.6 LB

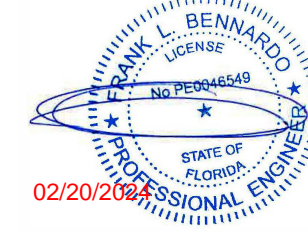
### 36" STAND DEPTH: MAX FACE AREA (1104in<sup>2</sup> - 4608in<sup>2</sup>), FRAME QUANTITY (2-5 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 5 FRAMES				MAX FACE AREA : 4 FRAMES				MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2			

# "XHD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



## 24" STAND DEPTH: MAX FACE AREA (552in<sup>2</sup> - 2304in<sup>2</sup>), FRAME QUANTITY (2-3 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO								LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	552 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	171.70 LB-FT	191.6 LB	667.1 LB	556.2 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	221.00 LB-FT	191.6 LB	762.9 LB	652.1 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	269.90 LB-FT	191.6 LB	858.8 LB	747.9 LB
36"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	195.8 PSF	154.6 PSF	195.8 PSF	154.6 PSF	311.90 LB-FT	187.7 LB	934.7 LB	828.8 LB
18"	30"	930 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	193.9 PSF	153.1 PSF	289.30 LB-FT	322.9 LB	1212.4 LB	935.7 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	167.4 PSF	132.2 PSF	163.8 PSF	129.3 PSF	311.90 LB-FT	270.4 LB	1148.7 LB	938.4 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	137.1 PSF	108.3 PSF	137.1 PSF	108.3 PSF	311.90 LB-FT	221.4 LB	1049.6 LB	901.0 LB
36"			174.3 PSF	137.6 PSF	174.3 PSF	137.6 PSF	116.2 PSF	91.7 PSF	116.2 PSF	91.7 PSF	311.90 LB-FT	187.7 LB	985.4 LB	875.8 LB
18"	36"	1260 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	159.1 PSF	125.6 PSF	139.8 PSF	110.4 PSF	311.90 LB-FT	348.1 LB	1395.1 LB	1086.5 LB
24"			185.4 PSF	146.4 PSF	177.7 PSF	140.3 PSF	123.6 PSF	97.6 PSF	118.6 PSF	93.6 PSF	311.90 LB-FT	270.4 LB	1220.1 LB	1006.0 LB
30"			151.8 PSF	119.9 PSF	151.8 PSF	119.9 PSF	101.2 PSF	79.9 PSF	101.2 PSF	79.9 PSF	311.90 LB-FT	221.4 LB	1108.7 LB	956.4 LB
36"			128.7 PSF	101.6 PSF	128.7 PSF	101.6 PSF	85.8 PSF	67.7 PSF	85.8 PSF	67.7 PSF	311.90 LB-FT	187.7 LB	1032.3 LB	922.7 LB
18"	42"	1680 in <sup>2</sup>	179.0 PSF	141.3 PSF	153.6 PSF	121.3 PSF	119.3 PSF	94.2 PSF	102.5 PSF	80.9 PSF	311.90 LB-FT	348.1 LB	1485.8 LB	1173.6 LB
24"			139.0 PSF	109.8 PSF	130.7 PSF	103.2 PSF	92.7 PSF	73.2 PSF	87.2 PSF	68.8 PSF	311.90 LB-FT	270.4 LB	1287.7 LB	1073.6 LB
30"			113.9 PSF	89.9 PSF	113.8 PSF	89.9 PSF	75.9 PSF	59.9 PSF	75.9 PSF	59.9 PSF	311.90 LB-FT	221.4 LB	1164.1 LB	1011.8 LB
36"			96.5 PSF	76.2 PSF	96.5 PSF	76.2 PSF	64.3 PSF	50.8 PSF	64.3 PSF	50.8 PSF	311.90 LB-FT	187.7 LB	1079.3 LB	969.6 LB
18"	48"	2304 in <sup>2</sup>	130.5 PSF	103.0 PSF	109.5 PSF	86.5 PSF	87.0 PSF	68.7 PSF	73.1 PSF	57.7 PSF	311.90 LB-FT	348.1 LB	1572.9 LB	1260.6 LB
24"			101.4 PSF	80.0 PSF	93.5 PSF	73.8 PSF	67.6 PSF	53.3 PSF	62.4 PSF	49.2 PSF	311.90 LB-FT	270.4 LB	1355.3 LB	1141.2 LB
30"			83.0 PSF	65.5 PSF	81.6 PSF	64.4 PSF	55.3 PSF	43.7 PSF	54.5 PSF	43.0 PSF	311.90 LB-FT	221.4 LB	1219.4 LB	1067.1 LB
36"			70.3 PSF	55.5 PSF	70.3 PSF	55.5 PSF	46.9 PSF	37.0 PSF	46.9 PSF	37.0 PSF	311.90 LB-FT	187.7 LB	1126.2 LB	1016.6 LB

DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

## 36" STAND DEPTH: MAX FACE AREA (552in<sup>2</sup> - 2304in<sup>2</sup>), FRAME QUANTITY (2-3 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO								LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	552 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	181.90 LB-FT	191.6 LB	491.4 LB	380.5 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	232.60 LB-FT	191.6 LB	555.3 LB	444.4 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	282.30 LB-FT	191.6 LB	619.2 LB	508.3 LB
36"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	188.1 PSF	148.5 PSF	188.1 PSF	148.5 PSF	311.90 LB-FT	180.2 LB	641.9 LB	545.4 LB
18"	30"	930 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	306.60 LB-FT	322.9 LB	889.5 LB	612.8 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	159.1 PSF	125.6 PSF	159.1 PSF	125.6 PSF	311.90 LB-FT	256.9 LB	791.3 LB	597.9 LB
30"			196.6 PSF	155.2 PSF	196.6 PSF	155.2 PSF	131.1 PSF	103.5 PSF	131.1 PSF	103.5 PSF	311.90 LB-FT	211.7 LB	724.2 LB	584.3 LB
36"			167.4 PSF	132.2 PSF	167.4 PSF	132.2 PSF	111.6 PSF	88.1 PSF	111.6 PSF	88.1 PSF	311.90 LB-FT	180.2 LB	675.7 LB	575.4 LB
18"	36"	1260 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	150.1 PSF	118.5 PSF	150.1 PSF	118.5 PSF	311.90 LB-FT	328.5 LB	959.8 LB	676.1 LB
24"			176.2 PSF	139.1 PSF	176.2 PSF	139.1 PSF	117.4 PSF	92.7 PSF	117.4 PSF	92.7 PSF	311.90 LB-FT	256.9 LB	837.8 LB	640.7 LB
30"			145.1 PSF	114.6 PSF	145.1 PSF	114.6 PSF	96.7 PSF	76.4 PSF	96.7 PSF	76.4 PSF	311.90 LB-FT	211.7 LB	759.5 LB	619.5 LB
36"			123.6 PSF	97.6 PSF	123.6 PSF	97.6 PSF	82.4 PSF	65.0 PSF	82.4 PSF	65.0 PSF	311.90 LB-FT	180.2 LB	705.7 LB	605.5 LB
18"	42"	1680 in <sup>2</sup>	168.9 PSF	133.3 PSF	166.5 PSF	131.5 PSF	112.6 PSF	88.9 PSF	111.1 PSF	87.7 PSF	311.90 LB-FT	328.5 LB	1018.3 LB	730.9 LB
24"			132.1 PSF	104.3 PSF	132.1 PSF	104.3 PSF	88.1 PSF	69.5 PSF	88.1 PSF	69.5 PSF	311.90 LB-FT	256.9 LB	880.7 LB	683.5 LB
30"			108.8 PSF	85.9 PSF	108.8 PSF	85.9 PSF	72.5 PSF	57.3 PSF	72.5 PSF	57.3 PSF	311.90 LB-FT	211.7 LB	794.8 LB	654.8 LB
36"			92.7 PSF	73.2 PSF	92.7 PSF	73.2 PSF	61.8 PSF	48.8 PSF	61.8 PSF	48.8 PSF	311.90 LB-FT	180.2 LB	735.8 LB	635.5 LB
18"	48"	2304 in <sup>2</sup>	123.1 PSF	97.2 PSF	119.5 PSF	94.3 PSF	82.1 PSF	64.8 PSF	79.7 PSF	62.9 PSF	311.90 LB-FT	328.5 LB	1073.1 LB	785.6 LB
24"			96.3 PSF	76.0 PSF	96.3 PSF	76.0 PSF	64.2 PSF	50.7 PSF	64.2 PSF	50.7 PSF	311.90 LB-FT	256.9 LB	923.5 LB	726.4 LB
30"			79.3 PSF	62.6 PSF	79.3 PSF	62.6 PSF	52.9 PSF	41.7 PSF	52.9 PSF	41.7 PSF	311.90 LB-FT	211.7 LB	830.1 LB	690.1 LB
36"			67.6 PSF	53.3 PSF	67.6 PSF	53.3 PSF	45.0 PSF	35.5 PSF	45.0 PSF	35.5 PSF	311.90 LB-FT	180.2 LB	765.8 LB	665.6 LB

# "FIXED HD" STAND DESIGN SCHEDULE

## 48" STAND DEPTH: MAX FACE AREA (2760in<sup>2</sup> - 11520in<sup>2</sup>), FRAME QUANTITY (5-8 FRAMES)

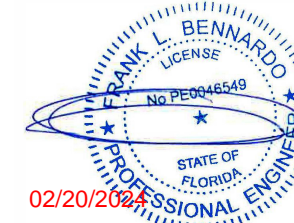
STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY							
			MAX FACE AREA : 8 FRAMES				MAX FACE AREA : 7 FRAMES				MAX FACE AREA : 6 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)				
			ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3									
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT									
18"	24"	2760 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	193.7 PSF	152.9 PSF	193.7 PSF	152.9 PSF	166.0 PSF	131.0 PSF	166.0 PSF	131.0 PSF	138.3 PSF	109.2 PSF	138.3 PSF	109.2 PSF	247.00 LB-FT	265.2 LB	558.0 LB	374.0 LB
24"			172.8 PSF	136.4 PSF	172.8 PSF	136.4 PSF	151.2 PSF	119.4 PSF	151.2 PSF	119.4 PSF	129.6 PSF	102.3 PSF	129.6 PSF	102.3 PSF	108.0 PSF	85.2 PSF	108.0 PSF	85.2 PSF	247.00 LB-FT	207.0 LB	485.8 LB	373.3 LB
30"			142.1 PSF	112.2 PSF	142.1 PSF	112.2 PSF	124.3 PSF	98.1 PSF	124.3 PSF	98.1 PSF	106.6 PSF	84.1 PSF	106.6 PSF	84.1 PSF	88.8 PSF	70.1 PSF	88.8 PSF	70.1 PSF	247.00 LB-FT	170.2 LB	439.6 LB	373.6 LB
36"			120.8 PSF	95.4 PSF	120.8 PSF	95.4 PSF	105.7 PSF	83.4 PSF	105.7 PSF	83.4 PSF	90.6 PSF	71.5 PSF	90.6 PSF	71.5 PSF	75.5 PSF	59.6 PSF	75.5 PSF	59.6 PSF	247.00 LB-FT	144.7 LB	407.9 LB	374.0 LB
18"	30"	4650 in <sup>2</sup>	131.4 PSF	103.7 PSF	131.4 PSF	103.7 PSF	114.9 PSF	90.7 PSF	114.9 PSF	90.7 PSF	98.5 PSF	77.8 PSF	98.5 PSF	77.8 PSF	82.1 PSF	64.8 PSF	82.1 PSF	64.8 PSF	247.00 LB-FT	265.2 LB	593.1 LB	407.2 LB
24"			102.5 PSF	80.9 PSF	102.5 PSF	80.9 PSF	89.7 PSF	70.8 PSF	89.7 PSF	70.8 PSF	76.9 PSF	60.7 PSF	76.9 PSF	60.7 PSF	64.1 PSF	50.6 PSF	64.1 PSF	50.6 PSF	247.00 LB-FT	207.0 LB	511.7 LB	399.2 LB
30"			84.3 PSF	66.6 PSF	84.3 PSF	66.6 PSF	73.8 PSF	58.2 PSF	73.8 PSF	58.2 PSF	63.2 PSF	49.9 PSF	63.2 PSF	49.9 PSF	52.7 PSF	41.6 PSF	52.7 PSF	41.6 PSF	247.00 LB-FT	170.2 LB	460.9 LB	394.9 LB
36"			71.7 PSF	56.6 PSF	71.7 PSF	56.6 PSF	62.7 PSF	49.5 PSF	62.7 PSF	49.5 PSF	53.8 PSF	42.4 PSF	53.8 PSF	42.4 PSF	44.8 PSF	35.3 PSF	44.8 PSF	35.3 PSF	247.00 LB-FT	144.7 LB	426.0 LB	392.1 LB
18"	36"	6300 in <sup>2</sup>	96.9 PSF	76.5 PSF	96.9 PSF	76.5 PSF	84.8 PSF	67.0 PSF	84.8 PSF	67.0 PSF	72.7 PSF	57.4 PSF	72.7 PSF	57.4 PSF	60.6 PSF	47.8 PSF	60.6 PSF	47.8 PSF	247.00 LB-FT	265.2 LB	626.3 LB	440.3 LB
24"			75.7 PSF	59.7 PSF	75.7 PSF	59.7 PSF	66.2 PSF	52.3 PSF	66.2 PSF	52.3 PSF	56.7 PSF	44.8 PSF	56.7 PSF	44.8 PSF	47.3 PSF	37.3 PSF	47.3 PSF	37.3 PSF	247.00 LB-FT	207.0 LB	537.6 LB	425.1 LB
30"			62.2 PSF	49.1 PSF	62.2 PSF	49.1 PSF	54.4 PSF	43.0 PSF	54.4 PSF	43.0 PSF	46.7 PSF	36.8 PSF	46.7 PSF	36.8 PSF	38.9 PSF	30.7 PSF	38.9 PSF	30.7 PSF	247.00 LB-FT	170.2 LB	482.2 LB	416.1 LB
36"			52.9 PSF	41.8 PSF	52.9 PSF	41.8 PSF	46.3 PSF	36.5 PSF	46.3 PSF	36.5 PSF	39.7 PSF	31.3 PSF	39.7 PSF	31.3 PSF	33.0 PSF	26.1 PSF	33.0 PSF	26.1 PSF	247.00 LB-FT	144.7 LB	444.1 LB	410.2 LB
18"	42"	8400 in <sup>2</sup>	72.7 PSF	57.4 PSF	72.7 PSF	57.4 PSF	63.6 PSF	50.2 PSF	63.6 PSF	50.2 PSF	54.5 PSF	43.0 PSF	54.5 PSF	43.0 PSF	45.4 PSF	35.8 PSF	45.4 PSF	35.8 PSF	247.00 LB-FT	265.2 LB	659.4 LB	473.5 LB
24"			56.7 PSF	44.8 PSF	56.7 PSF	44.8 PSF	49.6 PSF	39.2 PSF	49.6 PSF	39.2 PSF	42.5 PSF	33.6 PSF	42.5 PSF	33.6 PSF	35.4 PSF	28.0 PSF	35.4 PSF	28.0 PSF	247.00 LB-FT	207.0 LB	563.5 LB	451.0 LB
30"			46.7 PSF	36.8 PSF	46.7 PSF	36.8 PSF	40.8 PSF	32														



# "FIXED HD" STAND DESIGN SCHEDULE CONTINUED

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

FEBRUARY 20, 2024



FL

## 48" STAND DEPTH: MAX FACE AREA (552in<sup>2</sup> - 2304in<sup>2</sup>), FRAME QUANTITY (2-3 FRAMES)

STAND CLEAR HEIGHT	MAX MEAN UNIT HEIGHT	MAX FACE AREA	UNIT TO FRAME RATIO								LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
			MAX FACE AREA : 3 FRAMES				MAX FACE AREA : 2 FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
			ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHOR TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT					
18"	24"	552 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	178.50 LB-FT	191.6 LB	403.6 LB	240.2 LB
24"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	228.70 LB-FT	191.6 LB	451.5 LB	288.1 LB
30"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	177.6 PSF	140.2 PSF	177.6 PSF	140.2 PSF	247.00 LB-FT	170.2 LB	442.4 LB	306.1 LB
18"	30"	690 in <sup>2</sup>	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	223.20 LB-FT	239.5 LB	537.2 LB	313.3 LB
24"			192.3 PSF	151.8 PSF	192.3 PSF	151.8 PSF	128.2 PSF	101.2 PSF	128.2 PSF	101.2 PSF	247.00 LB-FT	207.0 LB	518.3 LB	331.7 LB
30"			158.1 PSF	124.8 PSF	158.1 PSF	124.8 PSF	105.4 PSF	83.2 PSF	105.4 PSF	83.2 PSF	247.00 LB-FT	170.2 LB	467.4 LB	327.4 LB
36"	36"	1116 in <sup>2</sup>	134.5 PSF	106.1 PSF	134.5 PSF	106.1 PSF	89.6 PSF	70.7 PSF	89.6 PSF	70.7 PSF	247.00 LB-FT	144.7 LB	432.5 LB	324.6 LB
18"			200.0 PSF	157.8 PSF	200.0 PSF	157.8 PSF	136.8 PSF	108.0 PSF	136.8 PSF	108.0 PSF	247.00 LB-FT	265.2 LB	629.1 LB	372.8 LB
24"			141.9 PSF	112.0 PSF	141.9 PSF	112.0 PSF	94.6 PSF	74.7 PSF	94.6 PSF	74.7 PSF	247.00 LB-FT	207.0 LB	544.2 LB	357.6 LB
30"	42"	1470 in <sup>2</sup>	116.7 PSF	92.1 PSF	116.7 PSF	92.1 PSF	77.8 PSF	61.4 PSF	77.8 PSF	61.4 PSF	247.00 LB-FT	170.2 LB	488.7 LB	348.6 LB
36"			99.2 PSF	78.3 PSF	99.2 PSF	78.3 PSF	66.1 PSF	52.2 PSF	66.1 PSF	52.2 PSF	247.00 LB-FT	144.7 LB	450.6 LB	342.7 LB
18"			155.8 PSF	123.0 PSF	155.8 PSF	123.0 PSF	103.9 PSF	82.0 PSF	103.9 PSF	82.0 PSF	247.00 LB-FT	265.2 LB	666.0 LB	406.0 LB
24"	48"	1920 in <sup>2</sup>	106.4 PSF	84.0 PSF	106.4 PSF	84.0 PSF	70.9 PSF	56.0 PSF	70.9 PSF	56.0 PSF	247.00 LB-FT	207.0 LB	570.0 LB	383.5 LB
30"			87.5 PSF	69.1 PSF	87.5 PSF	69.1 PSF	58.3 PSF	46.0 PSF	58.3 PSF	46.0 PSF	247.00 LB-FT	170.2 LB	510.0 LB	369.9 LB
36"			74.4 PSF	58.7 PSF	74.4 PSF	58.7 PSF	49.6 PSF	39.1 PSF	49.6 PSF	39.1 PSF	247.00 LB-FT	144.7 LB	468.7 LB	360.8 LB
18"	48"	1920 in <sup>2</sup>	119.3 PSF	94.2 PSF	119.3 PSF	94.2 PSF	79.5 PSF	62.8 PSF	79.5 PSF	62.8 PSF	247.00 LB-FT	265.2 LB	699.1 LB	439.1 LB
24"			77.6 PSF	61.3 PSF	77.6 PSF	61.3 PSF	51.7 PSF	40.8 PSF	51.7 PSF	40.8 PSF	247.00 LB-FT	207.0 LB	595.9 LB	409.4 LB
30"			63.8 PSF	50.4 PSF	63.8 PSF	50.4 PSF	42.5 PSF	33.6 PSF	42.5 PSF	33.6 PSF	247.00 LB-FT	170.2 LB	531.3 LB	391.2 LB
36"			54.2 PSF	42.8 PSF	54.2 PSF	42.8 PSF	36.1 PSF	28.5 PSF	36.1 PSF	28.5 PSF	247.00 LB-FT	144.7 LB	486.8 LB	378.9 LB

### DESIGN SCHEDULES NOTES:

- DESIGN SCHEDULES SHOWN HEREIN ARE REFERENCED TO ALLOWABLE STRENGTH DESIGN (ASD) METHODOLOGY.
- EMPTY CELLS DENOTES CONDITIONS NOT ALLOWED TO USE.
- MAXIMUM CALCULATED FACE AREA SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM ALLOWABLE FACE AREA FOR EACH CONFIGURATION.
- REFERENCE ANCHOR SCHEDULE FOR ANCHOR TYPES LISTED HEREIN.

## "HD CUSTOM CROSS-BRACE" STAND DESIGN SCHEDULE

### 24" STAND DEPTH:

MAX UNIT DIMENSIONS (W x D x H)	STAND CLEAR HEIGHT	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
		(1) UNIT: (3) FRAMES				(2) UNITS: (5) FRAMES				(3) UNITS: (6) FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT				
52" WIDTH 49" DEPTH 72" HEIGHT	18"	71.7 PSF	56.6 PSF	57.6 PSF	45.5 PSF	59.7 PSF	47.2 PSF	48.0 PSF	37.0 PSF	47.8 PSF	37.7 PSF	38.4 PSF	30.3 PSF	181.80 LB-FT	310.70 LB	1642.3 LB	1606.9 LB
	24"	60.9 PSF	48.1 PSF	49.5 PSF	39.1 PSF	50.8 PSF	40.1 PSF	41.2 PSF	32.6 PSF	40.6 PSF	32.1 PSF	33.0 PSF	26.1 PSF	196.50 LB-FT	264.3 LB	1526.8 LB	1534.7 LB
	30"	63.5 PSF	50.1 PSF	52.2 PSF	41.2 PSF	52.9 PSF	41.8 PSF	43.5 PSF	34.3 PSF	42.3 PSF	34.8 PSF	34.8 PSF	27.5 PSF	247.00 LB-FT	275.3 LB	1733.2 LB	1726.3 LB
	36"	54.3 PSF	42.9 PSF	47.0 PSF	37.1 PSF	45.3 PSF	35.7 PSF	39.2 PSF	30.9 PSF	36.2 PSF	28.6 PSF	31.4 PSF	24.8 PSF	247.00 LB-FT	235.6 LB	1599.7 LB	1570.0 LB

### 36" STAND DEPTH:

MAX UNIT DIMENSIONS (W x D x H)	STAND CLEAR HEIGHT	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
		(1) UNIT: (3) FRAMES				(2) UNITS: (5) FRAMES				(3) UNITS: (6) FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT				
52" WIDTH 49" DEPTH 72" HEIGHT	18"	78.9 PSF	62.3 PSF	63.0 PSF	49.7 PSF	65.8 PSF	51.9 PSF	52.5 PSF	41.5 PSF	52.6 PSF	41.5 PSF	42.0 PSF	33.2 PSF	215.30 LB-FT	343.4 LB	1257.0 LB	1216.7 LB
	24"	66.3 PSF	52.4 PSF	53.6 PSF	42.3 PSF	55.3 PSF	43.6 PSF	44.7 PSF	35.3 PSF	44.2 PSF	34.9 PSF	35.8 PSF	28.2 PSF	229.80 LB-FT	288.7 LB	1151.2 LB	1157.6 LB
	30"	59.5 PSF	47.0 PSF	58.0 PSF	45.8 PSF	49.6 PSF	39.1 PSF	48.3 PSF	38.2 PSF	39.6 PSF	31.3 PSF	38.7 PSF	30.5 PSF	247.00 LB-FT	257.9 LB	1116.3 LB	1085.7 LB
	36"	51.1 PSF	40.3 PSF	51.1 PSF	40.3 PSF	42.6 PSF	33.6 PSF	41.6 PSF	33.6 PSF	34.0 PSF	26.9 PSF	34.0 PSF	26.9 PSF	247.00 LB-FT	221.5 LB	1030.9 LB	1031.6 LB

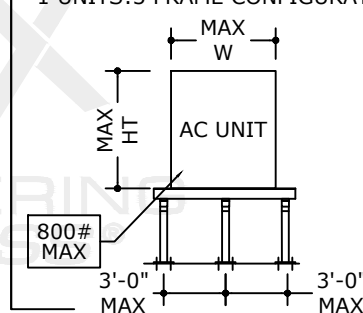
### 24"-36" STAND DEPTH (SPECIAL MINI-SPLIT OPTION):

UNIT DIMENSIONS (W x D x H)	STAND CLEAR HEIGHT	UNIT TO FRAME RATIO												LOAD TRANSFER INFORMATION FOR USE WITH HOST STRUCTURE VERIFICATION ONLY			
		(1) UNIT: (3) FRAMES				(2) UNITS: (4) FRAMES				(3) UNITS: (5) FRAMES				MAX. BASE MOMENT (M)	MAX. BASE SHEAR (V)	MAX. BASE UPLIFT (T)	MAX. BASE GRAVITY (C)
		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3		ANCHOR TYPE: 1 OR 4		ANCHORS TYPE: 2 OR 3					
MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT	MAX ALLOWABLE LATERAL LOAD	MAX ALLOWABLE UPLIFT				
30" MAX. WIDTH 12" MIN. DEPTH 55" MAX. HEIGHT	18"	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	79.2 PSF	62.5 PSF	199.70 LB-FT	341.5 LB	1420.2 LB	1585.0 LB
	24"	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	80.5 PSF	63.6 PSF	82.5 PSF	65.1 PSF	67.2 PSF	53.0 PSF	212.80 LB-FT	286.2 LB	1330.4 LB	1510.4 LB
	30"	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	80.0 PSF	63.2 PSF	71.1 PSF	56.1 PSF	247.00 LB-FT	275.3 LB	1422.0 LB	1599.6 LB
	36"	82.5 PSF	65.1 PSF	82.5 PSF	65.1 PSF	82.2 PSF	64.9 PSF	76.3 PSF	60.2 PSF	68.5 PSF	54.1 PSF	63.6 PSF	50.2 PSF	247.00 LB-FT	235.6 LB	1335.3 LB	1521.6 LB

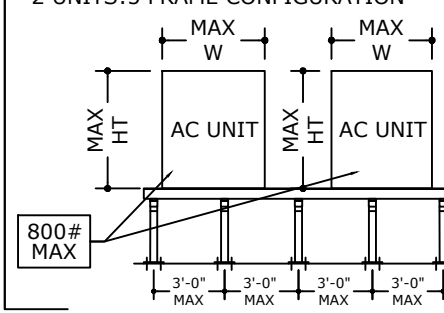
24"-36" STAND DEPTH (SPECIAL MINI-SPLIT OPTION) SCHEDULE NOTE: SEE DETAIL 1/16 FOR MINI-SPLIT UNIT TO STAND ATTACHMENT

### HD CUSTOM CROSS-BRACE ASSEMBLY ALLOWABLE CONFIGURATIONS:

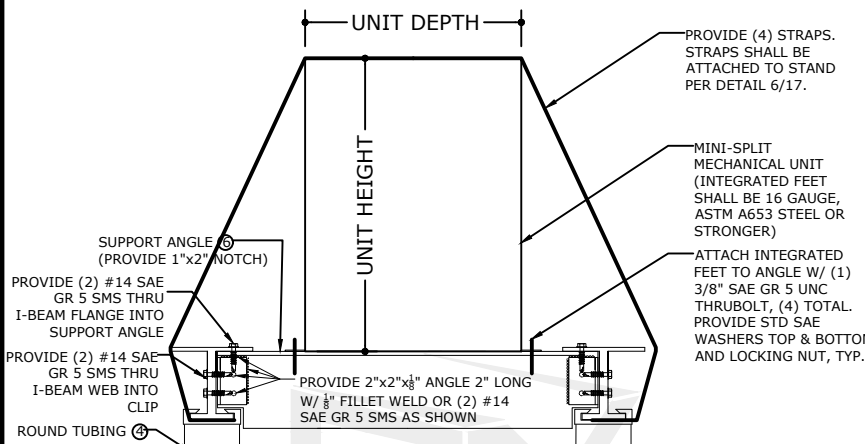
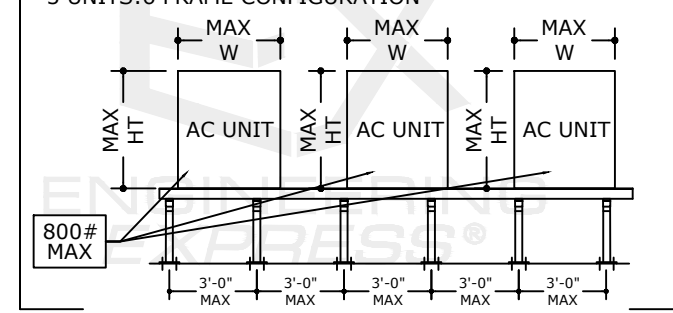
#### 1 UNITS:3 FRAME CONFIGURATION



#### 2 UNITS:5 FRAME CONFIGURATION



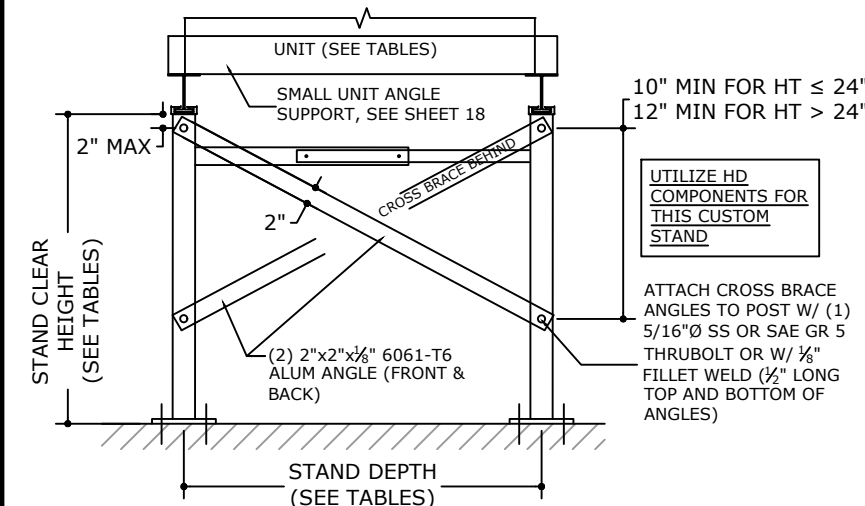
#### 3 UNITS:6 FRAME CONFIGURATION



### 1 MINI-SPLIT TO STAND ATTACHMENT DETAIL

#### DETAIL 1/16 NOTES:

- THE INSTALLER SHALL ENSURE INTEGRATED FEET OF MINI-SPLIT UNIT IS 16 GAUGE THICK MIN, ASTM 653 STEEL OR STRONGER.
- INTEGRATED FEET HOLES SHALL ENSURE 3/4" MINIMUM EDGE DISTANCE TO ANY INTEGRATED FEET EDGE FOR EACH 3/8" Ø ANCHOR.
- IF THE INSTALLER IS UNABLE TO VERIFY THESE REQUIREMENTS, THE BUILDING OFFICIAL SHALL REQUIRE A SITE-SPECIFIC EVALUATION TO ENSURE TIEDOWN STABILITY.



FL 16921.1

**PRECISION ALUMINUM PRODUCTS, INC.**  
1339 SW 1ST WAY  
DEERFIELD BEACH, FL 33441  
(954) 480-6919  
ALUMINUM A/C STANDS  
FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
FLORIDA STATEWIDE APPROVAL (FSA #16921.1)

POSTAL ADDRESS:  
2234 NORTH FEDERAL HWY #7664  
BOCA RATON, FL 33431  
ENGINEERINGEXPRESS.COM

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-2768)	CSL	RWN	12/15/20
2023 FCC UPDATE & TECH. CHANGES	MRT	RWN	12/08/23

23-69401

SCALE: NTS UNLESS NOTED

16 OF 18



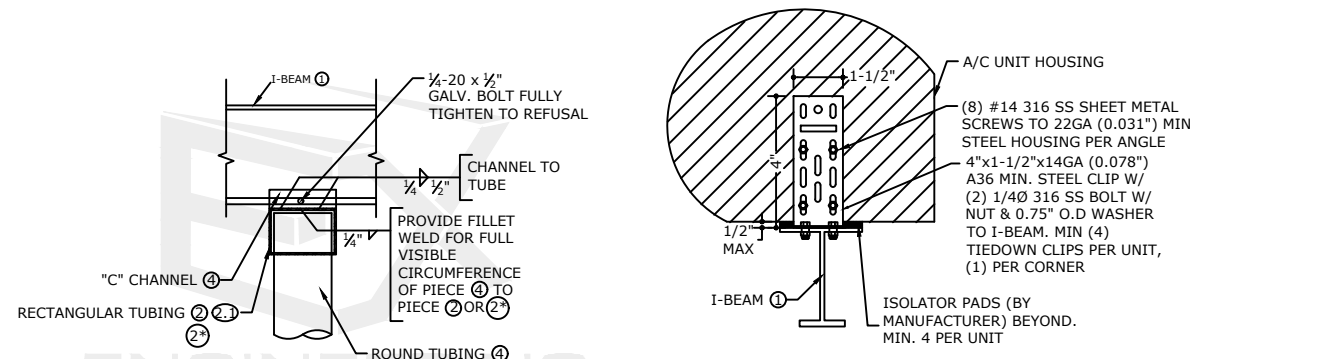
FRAME ASSEMBLY & UNIT TIE-DOWN DETAILS:

FRANK BENNARDO, P.E.  
PE# 0046549 CA# 9885

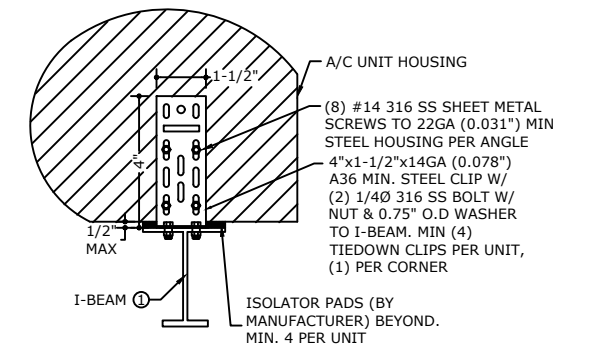
FEBRUARY 20, 2024

FL

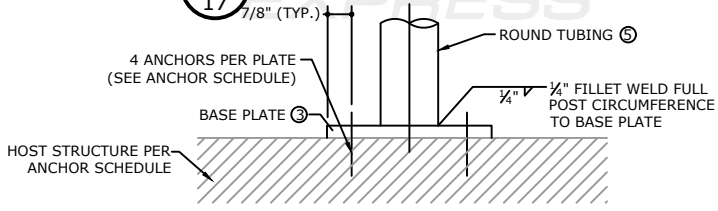
FRANK L. BENNARDO  
LICENSE  
No PE0046549  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
02/20/2024



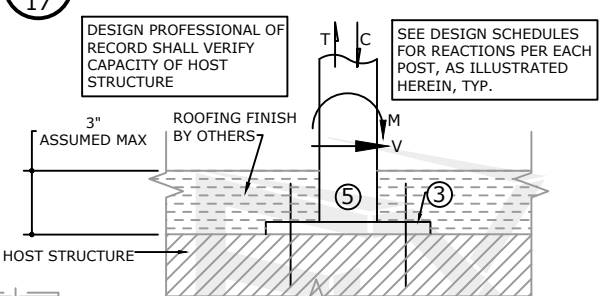
1 FRAME ASSEMBLY DETAIL



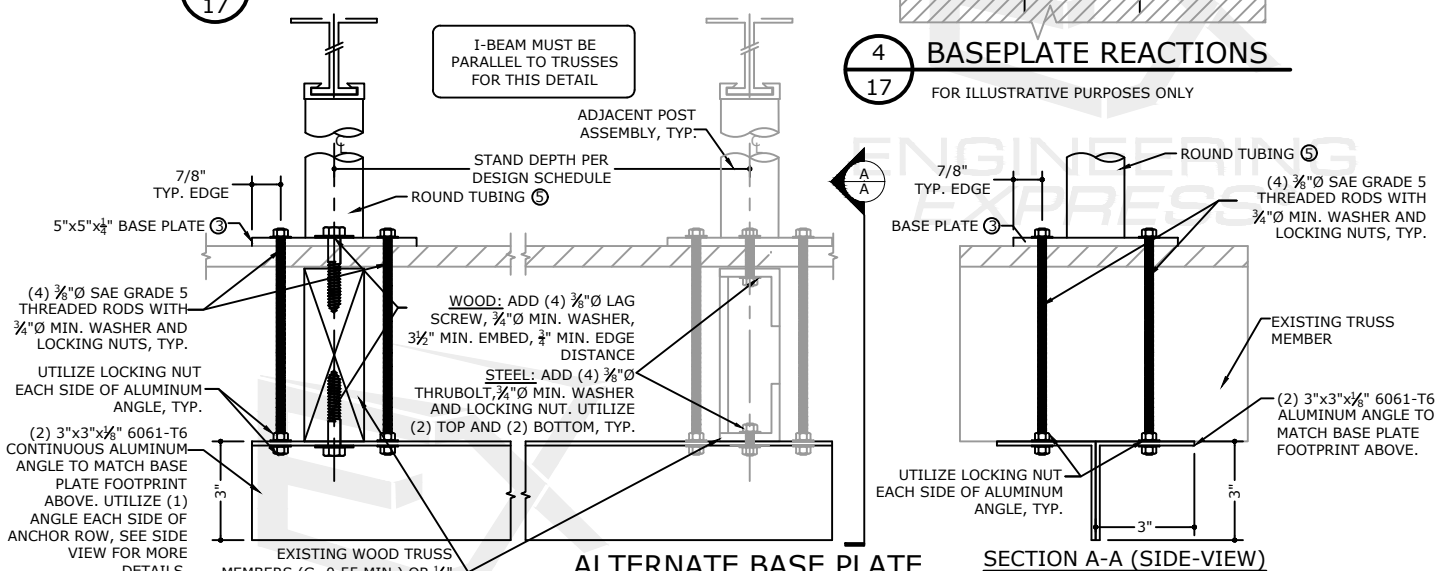
2 A/C UNIT TIE-DOWN DETAIL



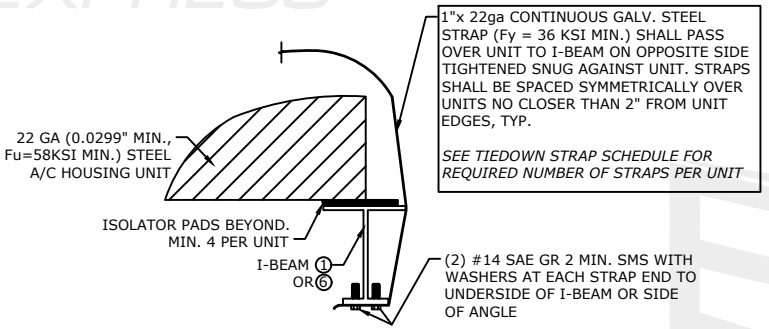
3 BASE PLATE DETAIL



4 BASEPLATE REACTIONS



5 ALTERNATE BASE PLATE ATTACHMENT AT WOOD/STEEL TRUSS MEMBERS



6 TIE-DOWN STRAP DETAIL\*\*

TIEDOWN STRAP SCHEDULE

MAX UNIT HEIGHT (in)	MIN UNIT DEPTH (in)	MAX LATERAL PRESSURE (psf)	NO. OF STRAPS REQUIRED (PER UNIT)
UP TO 24	12-19	UP TO 80	0
		UP TO 120	0
		UP TO 200	2
UP TO 30	20	UP TO 80	0
		UP TO 120	0
		UP TO 200	2
UP TO 36	12-19	UP TO 80	0
		UP TO 120	2
		UP TO 200	3
UP TO 40	20	UP TO 80	0
		UP TO 120	2
		UP TO 200	3
UP TO 48	14-23	UP TO 80	0
		UP TO 120	2
		UP TO 200	3
UP TO 54	24	UP TO 80	0
		UP TO 120	2
		UP TO 200	4
UP TO 60	16-23	UP TO 80	4
		UP TO 120	5
		UP TO 200	6
UP TO 60	24	UP TO 80	2
		UP TO 120	3
		UP TO 200	5
UP TO 60	SITE SPECIFIC DESIGN REQUIRED		

**TIEDOWN STRAP SCHEDULE NOTE:**  
SEE DETAIL 1/16 FOR SPECIAL TIEDOWN CONFIGURATION FOR MINI-SPLIT UNITS WITH 30" MAX. WIDTH, 12" MIN. DEPTH & 55" MAX. HEIGHT.

ANCHOR SCHEDULE

FOR USE WITH DETAIL 3 ON THIS SHEET ONLY

ANCHOR TYPE	HOST STRUCTURE	ANCHOR DESCRIPTION
1	STEEL	(4) 3/8" SAE GRADE 2 GALVANIZED BOLTS W/ NUT & 3/4" MIN. WASHER, TO STRUCTURAL A36 STEEL MEMBERS (3/16" MIN HOST THICKNESS)
2	CONCRETE (3KSI MIN.)	(4) 3/8" DEWALT SCREW-BOLT+ CONCRETE ANCHORS OR EQUIVALENT WITH 2-1/2" EMBEDMENT & 3" MIN EDGE DISTANCE, SPACING PER THE FOLLOWING = (BASE PLATE WIDTH - 1.75").
2A**	CONCRETE (5KSI MIN.)	(4) 1/2" DEWALT MINI DROPIN CONCRETE ANCHORS WITH 1" EMBEDMENT & 6" MIN EDGE DISTANCE, SPACING PER THE FOLLOWING = (BASE PLATE WIDTH - 1.75").
2B**	CONCRETE (5KSI MIN.)	(4) 3/8" DEWALT MINI DROPIN CONCRETE ANCHORS WITH 3/4" EMBEDMENT & 6" MIN EDGE DISTANCE, SPACING PER THE FOLLOWING = (BASE PLATE WIDTH - 1.75").
3	WOOD	SEE DETAIL 5/17: USE DETAIL 3/17 FOR GROUND MOUNT ONLY WHEN APPROVED BY EOR/BUILDING OFFICIAL (SEE NOTES BELOW). (4)-3/8" LAG SCREWS w/WASHER, 2-1/2" THREAD PENETRATION, 2" EDGE DISTANCE.
4	STEEL	(4) 5/16" SAE GRADE 5 SHEET METAL SCREWS WITH 5/8" MIN. WASHER TO STRUCTURAL A36 STEEL MEMBERS (3/16" MIN HOST THICKNESS)

**\*\*ANCHOR OPTION 2A NOTE\*\***  
FOR ANCHOR OPTION 2A, MAXIMUM ALLOWABLE PRESSURES LISTED IN DESIGN SCHEDULES (ANCHOR TYPE: 2 OR 3) SHALL BE MULTIPLIED BY THE FOLLOWING FACTORS:

- STD STAND = 0.50
- HD STAND & HD CUSTOM BRACE STAND = 0.50
- XHD STAND = 0.65
- FIXED-HD = 0.60

**\*\*ANCHOR OPTION 2B NOTE\*\***  
FOR ANCHOR OPTION 2B, MAXIMUM ALLOWABLE PRESSURES LISTED IN DESIGN SCHEDULES (ANCHOR TYPE: 2 OR 3) SHALL BE MULTIPLIED BY THE FOLLOWING FACTORS:

- STD STAND = 0.50
- HD STAND & HD CUSTOM BRACE STAND = 0.50
- XHD STAND = 0.50
- FIXED-HD = 0.50

ANCHOR NOTES:

- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- ENSURE MINIMUM EDGE DISTANCE AS NOTED IN ANCHOR SCHEDULE FOR EACH ANCHOR.
- ALL CONCRETE SUBSTRATE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI, U.N.O. CONCRETE SUBSTRATE THICKNESS SHALL BE GREATER THAN OR EQUAL TO 1.5x ANCHOR EMBEDMENT. INSTALL CONCRETE ANCHORS TO UN-CRACKED CONCRETE ONLY.
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES ROOFING FINISHES.
- WHERE EXISTING STRUCTURE IS WOOD TRUSSES, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD TRUSS MEMBERS, NOT INTO PLYWOOD.

**THE CONNECTION OF THE AC STAND TO THE SUPPORTING HOST STRUCTURE IS ASSUMED TO BE A RIGID CONNECTION. THE INSTALLER SHALL ENSURE THAT ANY ROTATION OF THE SUPPORTING HOST STRUCTURE IS STRICTLY PREVENTED. IN ADDITION, THE INSTALLER SHALL ENSURE THE HOST STRUCTURE CAN ADEQUATELY SUPPORT THE REACTIONS PROVIDED IN THIS APPROVAL.**

**IF THE INSTALLER IS UNABLE TO VERIFY THESE REQUIREMENTS, THE BUILDING OFFICIAL SHALL REQUIRE A SITE SPECIFIC EVALUATION TO ENSURE STAND STABILITY.**

FL 16921.1

**ENGINEERING EXPRESS**  
PRECISION ALUMINUM PRODUCTS, INC.  
1339 SW 1ST WAY  
DEERFIELD BEACH, FL 33441  
(954) 480-6919  
ALUMINUM A/C STANDS  
FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
FLORIDA STATEWIDE APPROVAL (FSA #16921.1)

POSTAL ADDRESS:  
2234 NORTH FEDERAL HWY #7664  
BOCA RATON, FL 33431  
ENGINEERINGEXPRESS.COM

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-22768)	CSL	RWN	12/15/20
2023 FCC UPDATE & TECH. CHANGES	MRT	RWN	12/08/23

23-69401

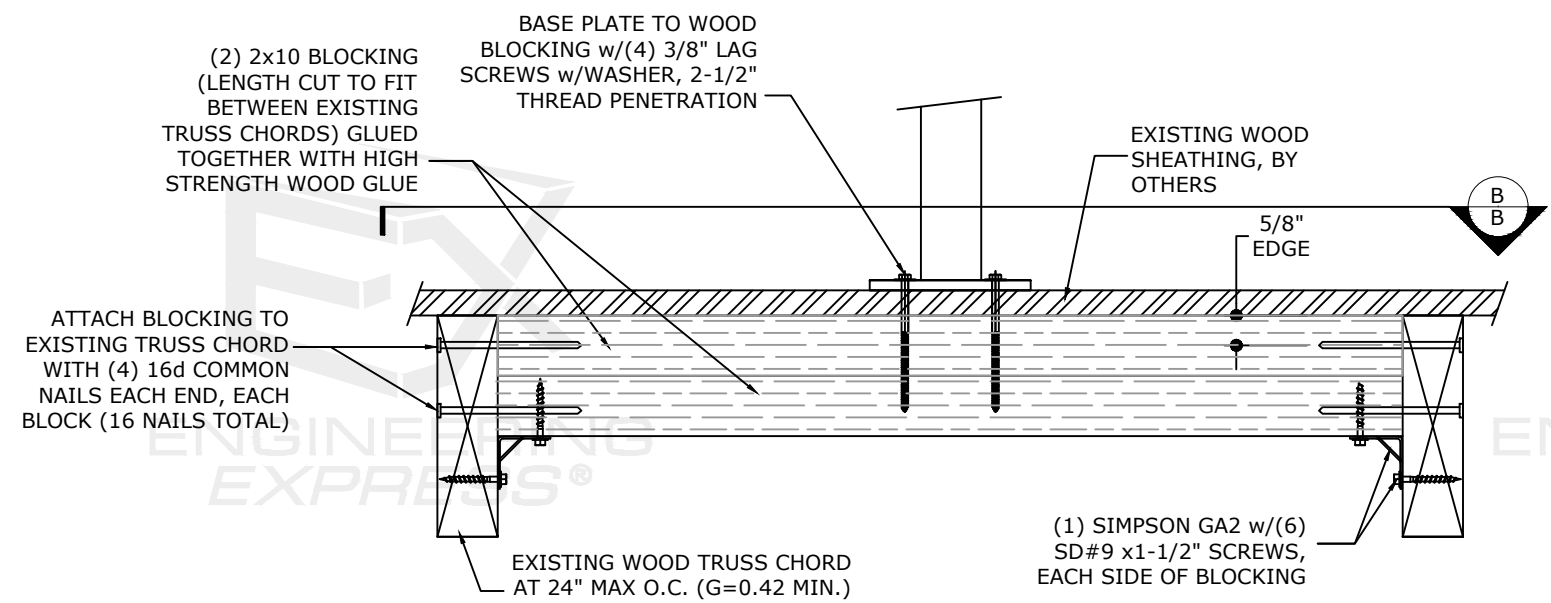
SCALE: NTS UNLESS NOTED

17 OF 18

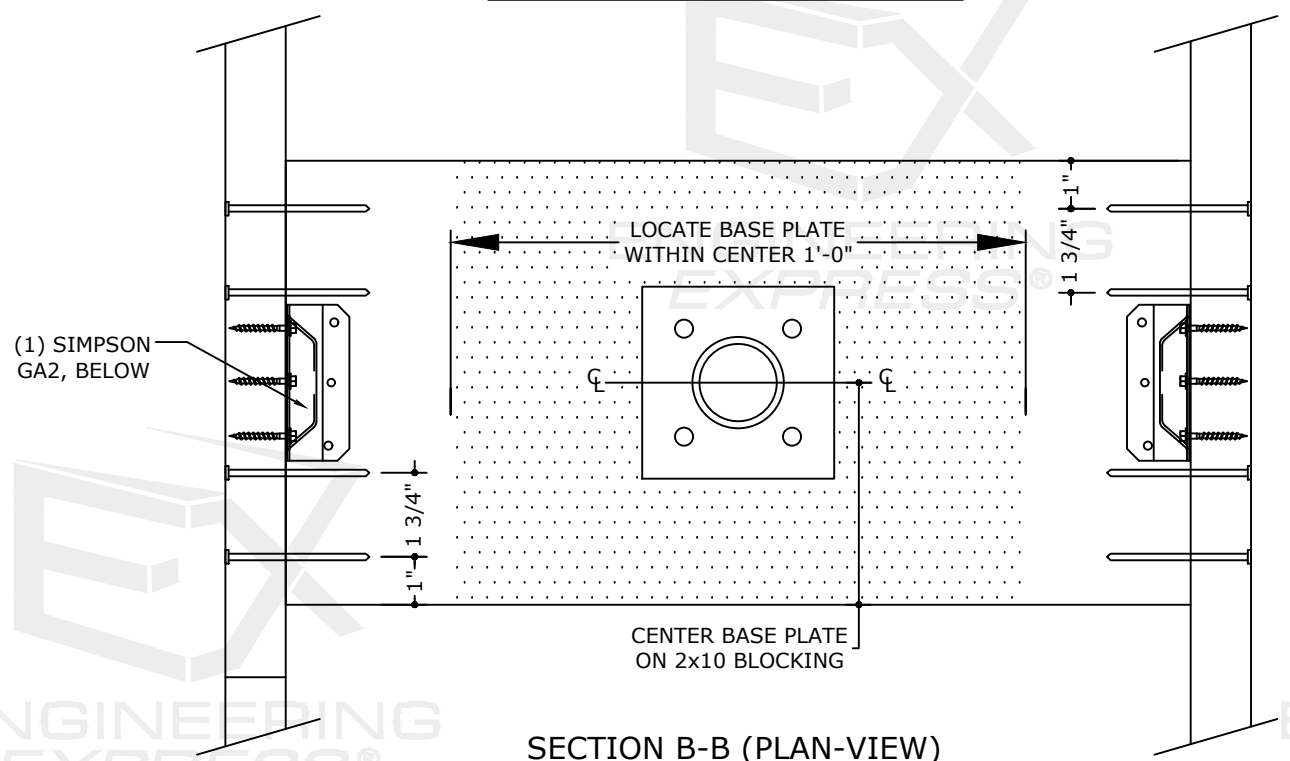
c:\users\rickn\engineering\express\production - documents\projects\23-123-69401\_2023 product fbc update fl16921\work\2023 fbc\drawings & cad\23-69401.d - fl16921.1 - cad.dwg



FL



SECTION A-A (SECTION-VIEW)



SECTION B-B (PLAN-VIEW)

**ALTERNATE BASE PLATE ATTACHMENT AT WOOD TRUSS MEMBERS**

1  
18

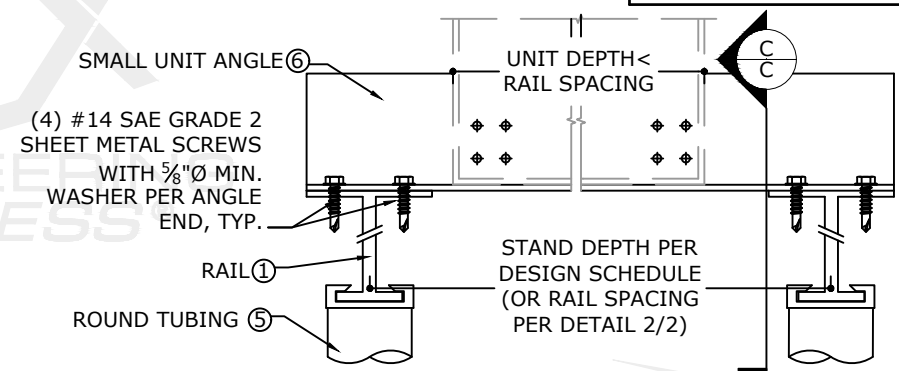
FOR USE AS AN ALTERNATE ATTACHMENT METHOD FOR TO WOOD

NOTE: USE OF THIS DETAIL (1/18) IS RESTRICTED TO FOLLOWING:

- ONLY APPLICABLE FOR THE FOLLOWING STAND TYPES: STD, HD, FIXED-HD
- LIMITED TO 60% OF THE ALLOWABLE DESIGN PRESSURE LISTED IN THE DESIGN TABLES.

EXAMPLE: MAX ALLOWABLE LATERAL LOAD PER DESIGN SCHEDULES = 95 PSF  
 MAX ALLOWABLE UPLIFT LOAD PER DESIGN SCHEDULE = 70 PSF

MAX ALLOWABLE LATERAL LOAD PER DETAIL (1/18) = 95 PSF x (0.60) = 57 PSF  
 MAX ALLOWABLE UPLIFT LOAD PER DETAIL (1/18) = 70 PSF x (0.60) = 42 PSF



SECTION C-C (SIDE-VIEW)

**SMALL UNIT ANGLE ATTACHMENT DETAIL**

2  
18 NTS

**THE CONNECTION OF THE AC STAND TO THE SUPPORTING HOST STRUCTURE IS ASSUMED TO BE A RIGID CONNECTION. THE INSTALLER SHALL ENSURE THAT ANY ROTATION OF THE SUPPORTING HOST STRUCTURE IS STRICTLY PREVENTED. IN ADDITION, THE INSTALLER SHALL ENSURE THE HOST STRUCTURE CAN ADEQUATELY SUPPORT THE REACTIONS PROVIDED IN THIS APPROVAL.**

**IF THE INSTALLER IS UNABLE TO VERIFY THESE REQUIREMENTS, THE BUILDING OFFICIAL SHALL REQUIRE A SITE SPECIFIC EVALUATION TO ENSURE STAND STABILITY.**

FL 16921.1

**ENGINEERING EXPRESS**  
 POSTAL ADDRESS:  
 2234 NORTH FEDERAL HWY #7664  
 BOCA RATON, FL 33431  
 ENGINEERINGEXPRESS.COM

PRECISION ALUMINUM PRODUCTS, INC.  
 1339 SW 1ST WAY  
 DEERFIELD BEACH, FL 33441  
 (954) 480-6919  
 ALUMINUM A/C STANDS  
 FLORIDA BUILDING CODE EIGHTH EDITION (2023)  
 FLORIDA STATEWIDE APPROVAL (FSA #16921.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-32768)	CSL	RWV	12/15/20
2023 FBC UPDATE & TECH. CHANGES	MRT	RWV	12/08/23

23-69401

SCALE: NTS UNLESS NOTED

18 OF 18

c:\users\rickn\engineering\express\production - documents\projects\23-123-69401\_2023 product fbc update fl16921\work\2023 fbc\drawings & cad\23-69401.d - fl16921.1 - cad.dwg