STEP 1: DETERMINE WIND VELOCITY PER LOCATION, RISK, AND EXPOSURE

									*	
ASCE 7-10 & 7-16 ULT WIND VELOCITY TO ASD DESIGN PRESSURE AT GRADE CONVERSION CHART - HVHZ OR NON HVHZ										
EXAMPLE	RISK	EXPOSURE		RISK	EXPOSURE		RISK	EXPC	SURE	
COUNTY	Ì	С	D	11	С	D	III, IV	С	D	
FORT MYERS	145 MPH	29.4 PSF	35.6 PSF	160 MPH	35.8 PSF	43.4 PSF	175 MPH	42.8 PSF	51.9 PSF	
PALM BEACH	150 MPH	31.5 PSF	38.1 PSF	170 MPH	40.4 PSF	49.0 PSF	180 MPH	45.3 PSF	54.9 PSF	
BROWARD	156 MPH	34.0 PSF	41.2 PSF	170 MPH	40.4 PSF	49.0 PSF	180 MPH	45.3 PSF	54.9 PSF	
MIAMI-DADE	165 MPH	38.1 PSF	46.1 PSF	175 MPH	42.8 PSF	51.9 PSF	186 MPH	48.4 PSF	58.6 PSF	
MONROE	175 MPH	42.8 PSF	51.9 PSF	180 MPH	45.3 PSF	54.9 PSF	200 MPH	55.9 PSF	67.8 PSF	
Kz (Exp C/D) (Tal	ble 26.10-1) =	0.85	1.03	Kd (Tabl	e 26.6-1) =	0.9	G (Section	on 26.11) =	0.85	
	Kzt (Section 26.8.2) =		1.0	Ke (Sect	ion 26.9) =	1	Cf (Table 29.4-1) =		1.4	

NOTE: TABLE ABOVE INCLUDES A QUICK REFERENCE OF COMMON FLORIDA CONDITIONS (AT ULTIMATE DESIGN WIND VELOCITIES) FOR SITE-SPECIFIC CONDITIONS, CONSULT LOCAL BUILDING MUNICIPALITY. MAXIMUM DESIGN WIND PRESSURES AT GRADE PER SPECIFIED EXPOSURE REMAIN CONSTANT FOR ANY MAX WIND VELOCITY. FOR SITE-SPECIFIC WIND VELOCITY AND PRESSURE CONVERSIONS, SEE QR LINK PROVIDED BELOW.

STEP 2: DETERMINE ALLOWABLE WIND PRESSURE PER CONCRETE PAD & UNIT

TABLE 2: ALLOWABLE LATERAL ASD PRESSURE FOR PAD / GENERATOR COMBINATION											
PAD & BASE				GENERATOR UNIT			DESIGN ALLOWANCES				
PAD + BASE REQ'D		PAD + BASE	L, IN	NAZ INI	11 181	WT, LB	ALLOWABLE	EQUIVALENT WIND			
HEIGHT, IN	WIDTH, IN	WEIGHT, LB	L, IIV	VV, IIV	п, ня	WI, LD	ASD PRESSURE	EXP C	EXP D		
12 in			25	48	29	350	59.9 PSF	200 MPH	186 MPH		
			_ 25	48	29	400	61.4 PSF	200 MPH	190 MPH		
	36 in	1677 lbs	25	48	29	450	62.8 PSF	200 MPH	190 MPH		
			25	48	29	500	64.3 PSF	200 MPH	190 MPH		
			25	48	29	550	65.8 PSF	200 MPH	195 MPH		
			25	48	29	600	67.3 PSF	200 MPH	195 MPH		
18 in		1957 lbs	25	48	29	350	47.6 PSF	180 MPH	165 MPH		
	36 in		25	48	29	400	48.7 PSF	186 MPH	165 MPH		
			25	48	29	450	49.7 PSF	186 MPH	170 MPH		
			25	48	29	500	50.7 PSF	190 MPH			
			25	48	29	550	51.8 PSF	190 MPH	170 MPH		
			25	48	29	600	52.8 PSF	190 MPH	175 MPH		
			25	48	29	350	49.3 PSF	186 MPH			
		2418 lbs	25	48	29	400	50.2 PSF	186 MPH			
24 in	42 in		25	48	29	450	51.1 PSF	190 MPH			
			25	48	29	500	52.0 PSF	190 MPH			
			■25	48	29	550	52.8 PSF	190 MPH			
			25	48	29	600	53.7 PSF	195 MPH			
		$\forall A$	25	48	29	350	50.6 PSF	190 MPH			
		2880 lbs	25	48	29	400	51.4 PSF	190 MPH			
	48 in		25	48	29	450	52.2 PSF	190 MPH			
30 in			25	48	29	500	52.9 PSF	190 MPH	principal and an accomp		
			25	48	29	550	53.7 PSF	195 MPH			
			25	48	29	600	54.5 PSF	195 MPH			
			25	48	29	350	51.6 PSF	190 MPH	m-na we memma moon		
	54 in	3341 lbs	25	48	29	400	52.3 PSF	190 MPH			
			25	48	29	450	53.0 PSF	190 MPH			
36 in			25	48	29	500	53.7 PSF	195 MPH			
			25	48	29	550	54.4 PSF	195 MPH			
			25	48	29	600	55.1 PSF	195 MPH			
			25	48	29	350	45.4 PSF	180 MPH			
	54 in	3621 lbs	25	48	29	400	45.4 PSF	180 MPH			
42 in			25	48	29	450	45.8 PSF	180 MPH			
			25	48	4	500		180 MPH			
					29		46.9 PSF	180 MPH			
			25	48	29	550	47.5 PSF				
48 in	60 in	4083 lbs	25	48	29	600	48.0 PSF	180 MPH			
			25	48	29	350	46.5 PSF	180 MPH			
			25	48	29	400	47.0 PSF	180 MPH			
			25	48	29	450	47.5 PSF	180 MPH			
			25	48	29	500	48.1 PSF	180 MPH			
			25	48	29	550	48.6 PSF	186 MPH	21.3000.002 500 500 300.00		
			25	48	29	600	49.1 PSF	186 MPH	1/0 MIPH		

AMERICAST GENERATOR

HEAVY DUTY, FOAM CORE, 12" TO 48" **ELEVATED CONCRETE PAD**

(ON-GRADE APPLICATIONS ONLY)

GENERATOR

FOAM CORE ELEVATED PAD

-PAD LENGTH

UNIT LENGTH

UNIT

ISOMETRIC VIEW

BASE LENGTH: 58

- PAD LENGTH: 54"

GENERATOR UNIT BY

SEPARATE SUBMITTAL

(SEE SCHEDULE FOR SIZE & WEIGHT)

PAD DIMENSIONS: PLAN VIEW

GENERATOR UNIT

1- PAD + BASE WEIGHT CALCULATED BASED ON 150 PCF MIN CONCRETE

(EX: 450 LB UNIT RATING APPLICABLE FOR UNITS 450 TO 499 LBS).

2- CONCRETE MIN COMPRESSIVE STRENGTH TO BE f'c=2,500 PSI AT 28 DAYS.

FOR 18 IN PAD ARE ALSO APPLICABLE FOR 13 IN TO 17 IN PADS GIVEN IDENTICAL

4- GENERATOR UNIT SIZE TO MATCH INFO SHOWN IN TABLE 2 (+/- 1 IN TOLERANCE).

3- CONCRETE PAD + BASE HEIGHT ARE MAXIMUMS FOR RATINGS PROVIDED. (EX: RATINGS

5- GENERATOR UNIT WEIGHT TO BE EQUAL OR GREATER THAN SHOWN FOR EACH RATING.

6- GENERATOR'S MANUFACTURER SPECS TO BE PROVIDED WITH THIS MASTER PLAN SHEET

7- FOR UNITS OR CONDITIONS REQUIRING GREATER ALLOWABLE PRESSURE, ADDITIONAL

HEIGHT

TABLE 2 NOTES:

& 1.25 PCF EPS FOAM CORE.

CONSTRUCTION & MATERIALS).

FOR SUBMISSION & CERTIFICATION.

ENGINEERING MAY BE REQUIRED.

COPIES NOT VALID FOR PERMIT

NOT VALID FOR PERMIT

AMERICAST

BASE TO BE SOLID

CONCRETE

EPS FOAM CORE

3"X4" CONCRETE

NOTCHES AS SHOWN

PAD SECTION &

REINFORCEMENT PLAN VIEW

ALLOWABLE DESIGN PRESSURE

BE DETERMINED UNDER SEPARATE

REQUIRED WIND LOAD DESIGN PRESSURES

CERTIFICATION ON A JOB-SPECIFIC BASIS IN

ACCORDANCE WITH THE GOVERNING CODE.

SITE-SPECIFIC LOAD REQUIREMENTS AS

DETERMINED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE SHALL BE LESS

CALCULATED FOR USE WITH THIS SYSTEM SHALL

THAN OR EQUAL TO THE POSITIVE OR NEGATIVE

LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.

DESIGN PRESSURE "ASD" CAPACITY VALUES.

-FQ - o -

PAD WIDTH

- THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE EDITION (2017 & 2020).

 2. POSITIVE AND NEGATIVE DESIGN PRESSURES
- CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE. MAXIMUM DIMENSIONS AND WEIGHT OF GENERATORS
- UNIT SHALL CONFORM TO SPECIFICATIONS STATED
 - THE AREA UNDER CONCRETE SLAB ON GROUND SHALL HAVE ALL VEGETATION, STUMPS, ROOTS, AND FOREIGN MATERIALS REMOVED PRIOR TO INSTALLATION ON COMPACTED SOIL AS VERTEIED BY OTHERS. THESE CONCRETE PADS HAVE BEEN DESIGNED FOR A MINIMUI BEARING CAPACITY OF 2,000 PSF AND MINIMUM SUBGRADE MODULUS = 100 PCI. SHOULD OTHER CONDITIONS OR MATERIALS BE ENCOUNTERED. THE ENGINEER OF RECORD SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE WORK.
 - SLIDING IS ASSUMED RESISTED BY 2" EMBEDMENT OF PAD IN GROUND ALONG WITH RESISTANCE FROM CONNECTED CABLING. NOMIAL SLIDING IS NOT ASSUMED A FAILURE CASE IN THIS DESIGN

GENERAL NOTES

- 6. 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
- 7. 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. 15.
- USE OF PADS MAY BE SUBJECT TO BUILDING DEPT
- WATER-TIGHTNESS OF EXISTING FINISHES SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL ENSURE THAT ANY REMOVED OR ALTERED WATER/ROOFING MEMBRANE IS RESTORED AFTER FABRICATION AND INSTALLATION OF STRUCTURE PROPOSED HEREIN. THIS ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY WATERPROOFING OR LEAKAGE ISSUES WHICH MAY OCCUR AS WATER-TIGHTNESS SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR.
- OF SPECIALTY ENGINEER AND NOT THE ENGINEER OF RECORD. CONSEQUENTLY, THE ARCHITECT/ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING.
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FOR ADDITIONAL PLANS REPORTS & RESOURCES



DESIGN NOTES

- FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE SIXTH & SEVENTH

- THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
- NO FLOOD OR WATERPROOFING RATINGS OR CERTIFICATIONS ARE INTENDED
- HOLLOW PADS FOR USE WHERE APPLICABLE BY CODE.
- THE ROLE OF THIS ENGINEER FOR THIS PROJECT IS THAT
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 2. POSITIVE AND NEGATIVE DESIGN PRESSURES
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DESCRIPTION

(3)-3/8"Ø TITEN HD

OR EQUIVALENT,

TO CONCRETE, 3"

MIN. FDGE

DISTANCE, 6" MIN

SPACING TO ANY

ADJACENT

ENSURE MINIMUM EDGE DISTANCE

AS NOTED IN ANCHOR SCHEDULE.

INSTALLATION INSTRUCTIONS TO

ENSURE MINIMUM SPACING TO ANY ADJACENT ANCHORS.

FOLLOW MANUFACTURER'S

INSTALL ANCHORS

APPLICABLE.



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HEIGH TABLE ((NTS) CONCRETE PAD PAD PER GFRC CONCRETE MIX MASTERFIBER MAC 100 W6 X W6 / 6ga X 6ga MESH MIN Y DISTANCE DEPEND ON GENERATOR BASE LENGTH, NO LESS THAN 2". EPS FOAM CORE -3"---X DISTANCE 3" FROM UNIT EDGE TO CLIP. #3 BARS @ 12" Z DISTANCE DEPEND ON GENERATOR BASE WIDTH, NO LESS THAN **FACH WAY** ANCHOR REQUIREMENTS **VARIES PER** TABLE 2