

DIVERSITECH CORP

PRECAST, FOAM-CORE CONCRETE PADS FOR MECHANICAL UNIT INSTALLATION
IN CONDITIONS UP TO 175 MPH / EXPOSURE C

GENERAL PERFORMANCE EVALUATION REPORT (FOR AT-GRADE APPLICATIONS ONLY) - FL# 41704.2

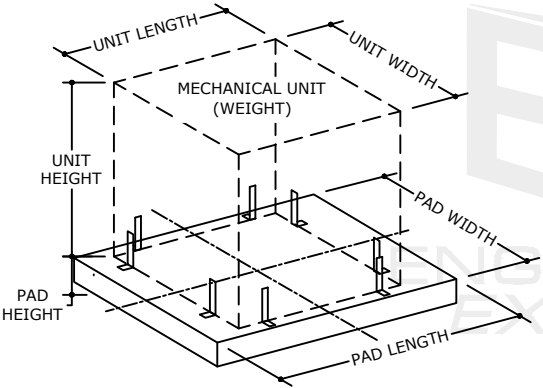
TABLE 1: DIVERSITECH PAD SELECTION TABLE - BY MINIMUM ALLOWABLE MECHANICAL UNIT WEIGHT - FOR WIND CONDITIONS: 175 MPH V_{ULT}/ EXPOSURE C

UNIT MAX DIMENSIONS			PAD MODEL NUMBER / MINIMUM ALLOWABLE UNIT WEIGHT													LOADING APPLIED	
SHORT LENGTH	LONG WIDTH	UNIT HEIGHT	HT1840-4	HT2424-4	HT2436-4	HT2448-4	HT3030-4	HT3232-4	HT3345-4	HT3636-4	HT3648-4	HT3852-4	HT4040-4	HT4242-4	HT4558-4	LATERAL FORCE	OVERTURNING MOMENT
13 IN	35 IN	20 IN	305 LB	N/A	N/A	145 LB	N/A	N/A	40 LB	N/A	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	210 LB	210 LB-FT
		24 IN	490 LB	N/A	N/A	285 LB	N/A	N/A	140 LB	N/A	75 LB	45 LB	35 LB	NO MIN	NO MIN	255 LB	295 LB-FT
		30 IN	825 LB	N/A	N/A	535 LB	N/A	N/A	325 LB	N/A	245 LB	205 LB	185 LB	160 LB	45 LB	315 LB	445 LB-FT
		36 IN	1230 LB	N/A	N/A	840 LB	N/A	N/A	545 LB	N/A	445 LB	395 LB	365 LB	330 LB	210 LB	380 LB	630 LB-FT
19 IN	24 IN	20 IN	N/A	N/A	120 LB	35 LB	65 LB	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	145 LB	145 LB-FT
		24 IN	N/A	N/A	215 LB	135 LB	140 LB	85 LB	30 LB	45 LB	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	175 LB	205 LB-FT
		30 IN	N/A	N/A	390 LB	305 LB	280 LB	215 LB	155 LB	160 LB	90 LB	55 LB	45 LB	25 LB	NO MIN	215 LB	305 LB-FT
		36 IN	N/A	N/A	595 LB	515 LB	445 LB	375 LB	305 LB	300 LB	230 LB	190 LB	170 LB	145 LB	35 LB	260 LB	430 LB-FT
	31 IN	20 IN	N/A	N/A	190 LB	105 LB	N/A	N/A	NO MIN	25 LB	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	185 LB	185 LB-FT
		24 IN	N/A	N/A	315 LB	230 LB	N/A	N/A	100 LB	110 LB	40 LB	NO MIN	NO MIN	NO MIN	NO MIN	225 LB	260 LB-FT
		30 IN	N/A	N/A	535 LB	450 LB	N/A	N/A	260 LB	260 LB	190 LB	150 LB	135 LB	110 LB	NO MIN	280 LB	395 LB-FT
		36 IN	N/A	N/A	805 LB	720 LB	N/A	N/A	460 LB	435 LB	365 LB	320 LB	295 LB	265 LB	145 LB	335 LB	555 LB-FT
25 IN	25 IN	20 IN	N/A	N/A	N/A	N/A	75 LB	25 LB	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	155 LB	155 LB-FT
		24 IN	N/A	N/A	N/A	N/A	155 LB	100 LB	40 LB	55 LB	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	180 LB	210 LB-FT
		30 IN	N/A	N/A	N/A	N/A	295 LB	230 LB	170 LB	175 LB	105 LB	70 LB	60 LB	40 LB	NO MIN	225 LB	320 LB-FT
		36 IN	N/A	N/A	N/A	N/A	470 LB	395 LB	330 LB	320 LB	250 LB	205 LB	190 LB	160 LB	50 LB	270 LB	450 LB-FT
	31 IN	20 IN	N/A	N/A	N/A	N/A	N/A	N/A	NO MIN	25 LB	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	185 LB	185 LB-FT
		24 IN	N/A	N/A	N/A	N/A	N/A	N/A	100 LB	110 LB	40 LB	NO MIN	NO MIN	NO MIN	NO MIN	225 LB	260 LB-FT
		30 IN	N/A	N/A	N/A	N/A	N/A	N/A	260 LB	260 LB	190 LB	150 LB	135 LB	110 LB	NO MIN	280 LB	395 LB-FT
		36 IN	N/A	N/A	N/A	N/A	N/A	N/A	460 LB	435 LB	365 LB	320 LB	295 LB	265 LB	145 LB	335 LB	555 LB-FT
31 IN	31 IN	30 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	260 LB	190 LB	150 LB	135 LB	110 LB	NO MIN	280 LB	395 LB-FT
		36 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	435 LB	365 LB	320 LB	295 LB	265 LB	145 LB	335 LB	555 LB-FT
		20 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25 LB	NO MIN	NO MIN	NO MIN	NO MIN	NO MIN	185 LB	185 LB-FT
		24 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	110 LB	40 LB	NO MIN	NO MIN	NO MIN	NO MIN	225 LB	260 LB-FT
	44 IN	42 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	645 LB	575 LB	520 LB	485 LB	445 LB	310 LB	390 LB	745 LB-FT
		20 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	45 LB	NO MIN	N/A	N/A	NO MIN	265 LB	265 LB-FT
		24 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	160 LB	125 LB	N/A	N/A	NO MIN	315 LB	370 LB-FT
		30 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	370 LB	325 LB	N/A	N/A	145 LB	395 LB	560 LB-FT
35 IN	35 IN	36 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	625 LB	565 LB	N/A	N/A	350 LB	475 LB	790 LB-FT
		42 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	925 LB	845 LB	N/A	N/A	590 LB	555 LB	1060 LB-FT
		32 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	240 LB	215 LB	95 LB	335 LB	505 LB-FT
		36 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	365 LB	330 LB	210 LB	380 LB	630 LB-FT
	44 IN	42 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	580 LB	535 LB	395 LB	440 LB	840 LB-FT
		48 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	825 LB	770 LB	615 LB	505 LB	1085 LB-FT
		54 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1100 LB	1030 LB	860 LB	565 LB	1360 LB-FT
		32 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	210 LB	420 LB	630 LB-FT
38 IN	40 IN	36 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	350 LB	475 LB	790 LB-FT
		42 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	590 LB	555 LB	1060 LB-FT
		48 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	860 LB	630 LB	1365 LB-FT
		54 IN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1170 LB	710 LB	1710 LB-FT

ASCE 7-22 ULT WIND VELOCITY TO ASD DESIGN PRESSURE AT GRADE CONVERSION CHART - HVHZ OR NON HVHZ									
EXAMPLE COUNTY	RISK I			RISK II			RISK III, IV		
	C	D		C	D		C	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) (Table 26.10-1) =			0.85	1.03	Kd (Table 26.6-1) =			0.9	G (Section 26.11) =
Kzt (Section 26.8.2) =			1.0		Ke (Section 26.9) =			1	Cf (Table 29.4-1) =
									1.4

ULT WIND VELOCITY TABLE INCLUDES A QUICK REFERENCE OF COMMON FLORIDA CONDITIONS (AT ULTIMATE DESIGN WIND VELOCITIES) & CORRESPONDING DESIGN PRESSURES. 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.

PAD & UNIT ISOMETRIC VIEW



INSTRUCTIONS FOR HOW TO USE MINIMUM UNIT WEIGHT TABLE:

STEP 1: CONFIRM YOUR SITE'S REQUIRED, MAXIMUM WIND CONDITIONS FOR USE WITH THIS PERFORMANCE EVALUATION (VALID FOR UP TO 175 MPH / EXPOSURE C)

STEP 2: DETERMINE MECHANICAL UNIT'S MAX SIZE. UNIT MAY NOT BE LARGER IN ANY DIMENSION THAN LISTED ON TABLE

STEP 3: FIND WEIGHT OF (EMPTY) MECHANICAL UNIT AS REPORTED BY THE MANUFACTURER

STEP 4: SELECT PAD BASED ON MINIMUM ALLOWABLE WEIGHTS SHOWN BELOW (MECHANICAL UNIT INSTALLED ON PAD MUST BE **HEAVIER** THAN WEIGHT VALUE LISTED)

STEP 5: IF UNIT IS NOT HEAVY ENOUGH, EITHER SELECT A LARGER PAD OR REFER ADDITIONAL SUPPORT DIRECTIVE ON SHEET 1

CELLS MARKED WITH "N/A" REPRESENT UNITS WHICH ARE TOO BIG FOR INSTALLATION ON THE DESIGNATED PAD.

CELLS MARKED WITH "NO MIN" REPRESENT PADS WHICH ARE HEAVY ENOUGH TO SUPPORT A UNIT OF ANY WEIGHT (OF THE DESIGNATED SIZE)

FOR CONDITIONS WHERE UNIT WEIGHT IS NOT SUFFICIENT, ADDITIONAL SUPPORT MAY BE ADDED TO THE SYSTEM BY EITHER INCREASING THE SYSTEM'S PERMANENT WEIGHT OR INCLUDING ADDITIONAL GROUND ANCHORAGE. REFER DIRECTIVES ON SHEET 1 FOR ADDITIONAL INFORMATION.

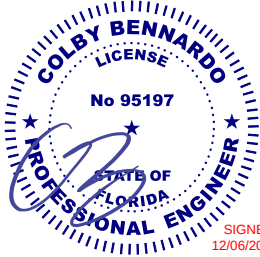
COLBY BENNARDO, PE
PE# 95197 CA# 9885

SPACE RESERVED FOR DIGITAL SEAL INFORMATION

WHEN DIGITALLY SEALED, THIS NOTE SHALL BE FULLY COVERED ON SHEET 1

WHEN PRINTED OR PHYSICALLY SEALED, SEAL OF CERTIFYING ENGINEER, AND DATE OF CERTIFICATION SHALL BE SHOWN TO THE RIGHT.

IN ALL CASES, CERTIFYING ENGINEER AND CERT OF AUTH AS LISTED ON STAMP



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FOAM CORE PRECAST CONCRETE PAD AT GRADE
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#41704.2)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE (22.55489)	CCB	RWN	10/4/22
FBC 2023	MJD	CCB	8/21/23
R2: CONCRETE & REINFORCEMENT	CCB	CCB	12/06/24

23-61198

SCALE: NTS UNLESS NOTED