

**LIMITS & REQUIREMENTS OF USE:**

- HMD-CLASS HURRICANE PAD - FOR ALL COUNTIES WITH A MAXIMUM WIND SPEED UP TO 180 M.P.H.
- THE PAD AND THE SUPPORTED EQUIPMENT MUST BE LOCATED AT GROUND LEVEL. THIS TABLE DOES NOT APPLY TO ROOFTOP EQUIPMENT, EQUIPMENT LOCATED ON BALCONIES, OR ANY OTHER EQUIPMENT TO BE ELEVATED ABOVE GROUND LEVEL.
- THE AREA UNDER CONCRETE SLAB ON GROUND SHALL HAVE ALL MATERIALS REMOVED PRIOR TO INSTALLATION ON COMPACTED SOIL AS VERIFIED BY OTHERS. MINIMUM SOIL COEFFICIENT OF FRICTION = 0.25
- MAXIMUM DIMENSIONS AND WEIGHT OF UNIT / EQUIPMENT SHALL CONFORM TO SPECIFICATIONS STATED HEREIN. PAD WEIGHT TO BE VERIFIED BY OTHERS.
- O.E.M. INSTALLATION INSTRUCTIONS (INCL. O.E.M. CLIPS) SUPERSEDE HURRICANE PAD INSTALLATION INSTRUCTIONS & USE OF HC-1 CLIPS, IF MORE STRINGENT.
- 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.
- THE ROLE OF THIS ENGINEER FOR THIS PROJECT IS THAT 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 CONTRACTOR.
- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN. USE OF THIS SPEC. 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.
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- THIS DOCUMENT IS GENERIC AND DOES NOT PERTAIN TO ANY SPECIFIC PROJECT SITE.
- PADS / UNITS INSTALLED DIRECTLY ON ANY COASTLINE REQUIRE A HEAVIER AND LARGER PAD TO ACCOUNT FOR EXPOSURE D ; Table 28.3-1; Kz = 1.03
- ALL OTHER UNITS NOT SHOWN SHALL BE DESIGNED ON A CASE BY CASE BASIS.
- ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- PADS ARE CONSTRUCTED WITH PRECAST CONCRETE, MINIMUM COMPRESSIVE STRENGTH, f'c=7,000 PSI AT 28 DAYS.
- THIS ENGINEER SHALL BE GIVEN AN OPPORTUNITY TO RE-EVALUATE THIS WORK UPON DISCOVERY OF INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.

**ENGINEERING DATA:**

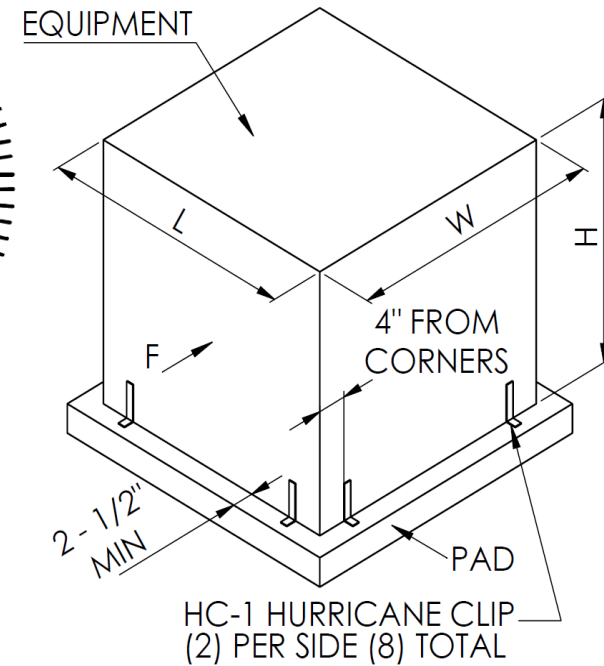
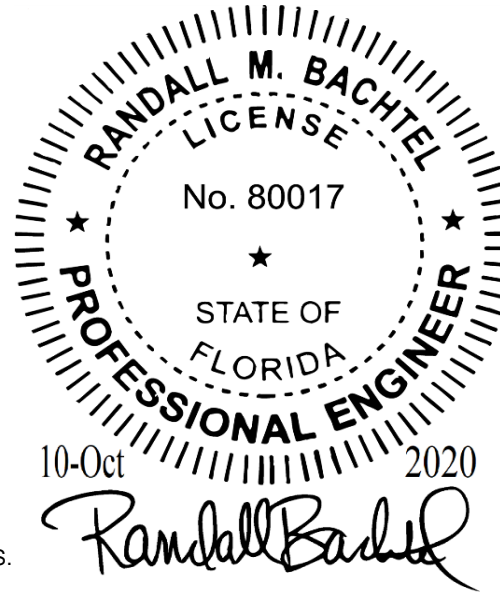
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- ALL EQUIPMENT REQUIRING TWO PADS ARE TO USE (12) TOTAL HC-1 CLIPS, FOUR (4) PER LENGTH AND TWO (2) PER WIDTH.
- RISK CATEGORY = II TABLE 1604.5 - RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES, SECTION 301.15 OF THE MECHANICAL CODE, WIND RESISTANCE, AND 553.844 OF THE FLORIDA STATUTES STORM LOSS MITIGATION.

**THE HURRICANE Pad MD**  
SOLID CONCRETE  
Engineered for Miami-Dade  
UP TO 175 MPH

**FLORIDA BUILDING CODE NOTICE**  
This product meets the following building code requirements as calculated by Master Consulting Engineers:  
1. Mechanical Volume, Section 504.19 - clearance from grade.  
2. This product is made from a minimum 7000PSI 4" solid concrete.  
3. The weight and wind load requirements have been calculated per the Florida Building Code, Chapter 16.  
Follow prescribed attachment methods as indicated on the engineering tables. For up to date calculations and documentation, visit our website www.diversitech.com or call 1-800-995-2222.

**INSTALLATION INSTRUCTIONS**  
1. Choose acceptable equipment pad size and fastening method that meets wind load requirements in your area. Go to www.diversitech.com for equipment pad engineering tables.  
2. Level the pad on the ground and place equipment on the pad.  
3. Secure the equipment to the pad using the fastening methods set forth in the equipment pad tables.

**DiversiTECH**  
www.diversitech.com  
3039 Premiere Parkway  
Duluth, GA 30097



HMD-CLASS TO PAD MODEL#	PAD THICKNESS (in) = 4		
	WEIGHT	WIDTH	LENGTH
HMD1840-4	196	18	40
HMD2436-4	147	24	36
HMD3030-4	155	30	30
HMD3636-4	220	36	36
HMD3648-4	306	36	48
HMD3842-4	277	38	42
HMD4040-4	318	40	40
ZHMD3672*	440	36	72
ZHMD4080**	636	40	80
ZHMD4276***	554	42	76
ZHMD4872****	612	48	72

**WIND LOAD CALCS:**

Wind Speed V = 180 MPH  
 $F = qz * G * Cf * Af$  (Eq. 29.5-2) = 70.65 \* Af (lbs)  
 $qz = 0.00256 * Kz * Kzt * Kd * V^2 = 63.45$  PSF  
 Exposure C ; Table 28.3-1 Kz = 0.85  
 Figure 26.8-1 Kzt = 1.00  
 Table 26.6-1 Kd = 0.90  
 Figure 29.5-1 Cf = 1.31  
 G = 0.85

DiversiTech Corporation  
3039 Premiere Pkwy - Suite 600  
Duluth, GA 30097 (800) 397-4823

**RMB ENGINEERING LLC**  
Solving Problems to Minimize the Stress of Doing Business

**SPECIAL PAD CONFIG.**  
 \* INDICATES TWO HMD3636-4 PADS USED IN A 36" x 72" SHAPE  
 \*\* INDICATES TWO HMD4040-4 PADS USED IN A 40" x 80" SHAPE  
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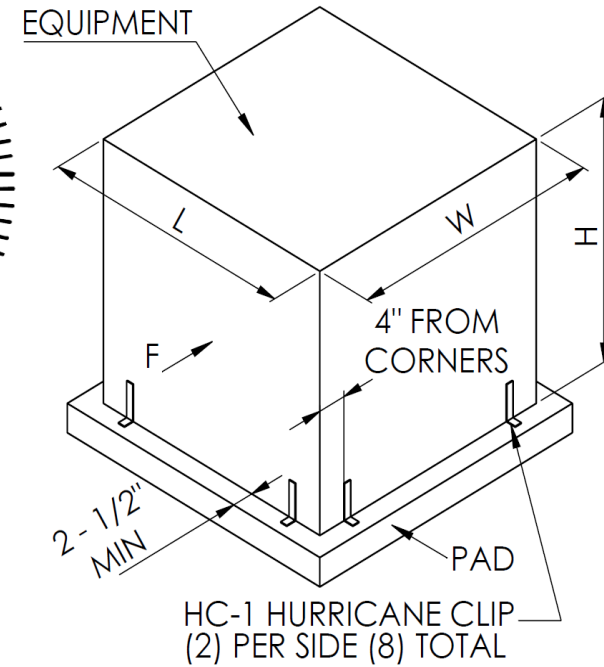
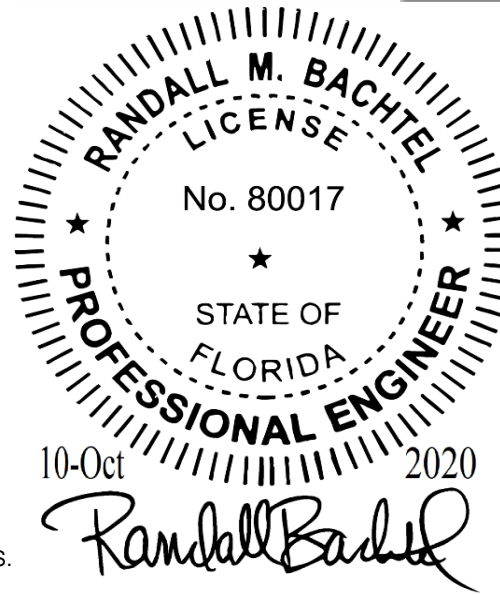
ROW #	UNIT / EQUIPMENT MAXIMUM DIMENSIONS INCHES			EQUIPMENT MINIMUM WEIGHT LBS.	HURRICANE HMD-CLASS PAD USED					180 MPH		RESISTING MOMENT FT-LBS.	DESIGN CHECK		
	WIDTH	LENGTH	HEIGHT		MODEL NUMBER	WEIGHT LBS.	PAD WIDTH IN.	PAD LENGTH IN.	PAD THICK IN.	WIND LOAD LBS.	0.6(WIND MOMENT) FT-LBS.		0.6(UNIT+ PAD) WEIGHT LBS.		
1	13.0	35.0	20.0	10	HMD3648-4	306	36	48	4.0	345	242	190	284	OK FOR	180 MPH
2	13.0	35.0	20.0	342	HMD1840-4	196	18	40	4.0	345	242	323	242	OK FOR	180 MPH
3	13.0	35.0	23.0	36	HMD3648-4	306	36	48	4.0	396	308	205	308	OK FOR	180 MPH
4	13.0	35.0	23.0	488	HMD1840-4	196	18	40	4.0	396	308	411	308	OK FOR	180 MPH
5	13.0	35.0	24.0	63	HMD3648-4	306	36	48	4.0	414	331	221	332	OK FOR	180 MPH
6	13.0	35.0	24.0	541	HMD1840-4	196	18	40	4.0	414	331	442	332	OK FOR	180 MPH
7	13.0	35.0	25.0	90	HMD3648-4	306	36	48	4.0	431	356	238	356	OK FOR	180 MPH
8	13.0	35.0	25.0	595	HMD1840-4	196	18	40	4.0	431	356	475	356	OK FOR	180 MPH
9	13.0	35.0	26.0	118	HMD3648-4	306	36	48	4.0	448	381	255	382	OK FOR	180 MPH
10	13.0	35.0	26.0	652	HMD1840-4	196	18	40	4.0	448	381	509	382	OK FOR	180 MPH
11	19.0	31.0	20.0	18	HMD3636-4	220	36	36	4.0	305	214	143	215	OK FOR	180 MPH
12	19.0	31.0	20.0	210	HMD2436-4	147	24	36	4.0	305	214	214	214	OK FOR	180 MPH
13	19.0	31.0	21.0	39	HMD3636-4	220	36	36	4.0	321	233	156	233	OK FOR	180 MPH
14	19.0	31.0	21.0	242	HMD2436-4	147	24	36	4.0	321	233	233	233	OK FOR	180 MPH
15	19.0	31.0	22.0	61	HMD3636-4	220	36	36	4.0	336	252	169	253	OK FOR	180 MPH
16	19.0	31.0	22.0	274	HMD2436-4	147	24	36	4.0	336	252	253	253	OK FOR	180 MPH
17	19.0	31.0	23.0	83	HMD3636-4	220	36	36	4.0	351	273	182	273	OK FOR	180 MPH
18	19.0	31.0	23.0	308	HMD2436-4	147	24	36	4.0	351	273	273	273	OK FOR	180 MPH
19	19.0	31.0	24.0	107	HMD3636-4	220	36	36	4.0	366	294	196	294	OK FOR	180 MPH
20	19.0	31.0	24.0	343	HMD2436-4	147	24	36	4.0	366	294	294	294	OK FOR	180 MPH
21	25.0	25.0	30.0	171	HMD3636-4	220	36	36	4.0	369	351	235	352	OK FOR	180 MPH
22	25.0	25.0	30.0	314	HMD3030-4	155	30	30	4.0	369	351	281	352	OK FOR	180 MPH
23	25.0	25.0	32.0	219	HMD3636-4	220	36	36	4.0	394	394	263	395	OK FOR	180 MPH
24	25.0	25.0	32.0	371	HMD3030-4	155	30	30	4.0	394	394	316	395	OK FOR	180 MPH
25	25.0	25.0	34.0	183	HMD3648-4	306	36	48	4.0	419	440	294	440	OK FOR	180 MPH
26	25.0	25.0	34.0	432	HMD3030-4	155	30	30	4.0	419	440	352	440	OK FOR	180 MPH
27	25.0	25.0	36.0	237	HMD3648-4	306	36	48	4.0	443	488	326	488	OK FOR	180 MPH

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qz = 0.00256*Kz*Kzt*Kd*V^2 = 63.45	PSF
Exposure C ; Table 28.3-1	Kz = 0.85
Figure 26.8-1	Kzt = 1.00
Table 26.6-1	Kd = 0.90
Figure 29.5-1	Cf = 1.31
	G = 0.85

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3039 Premiere Pkwy - Suite 600  
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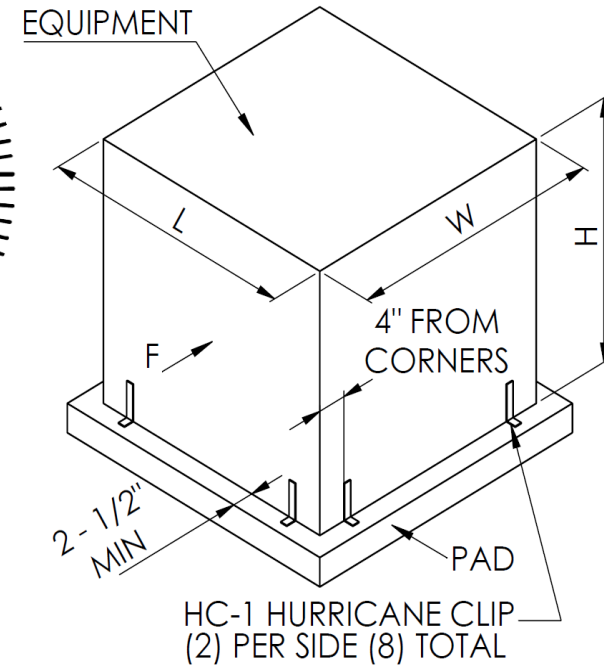
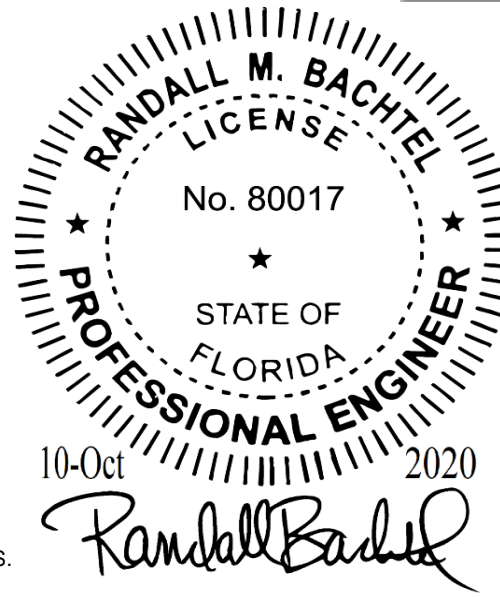
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28	25.0	25.0	36.0	496	HMD3030-4	155	30	30	4.0	443	488	391	488	OK FOR 180 MPH	
29	25.0	25.0	38.0	293	HMD3648-4	306	36	48	4.0	468	538	359	539	OK FOR 180 MPH	
30	25.0	25.0	38.0	563	HMD3030-4	155	30	30	4.0	468	538	431	539	OK FOR 180 MPH	
31	25.0	25.0	40.0	352	HMD3648-4	306	36	48	4.0	492	591	395	592	OK FOR 180 MPH	
32	25.0	25.0	40.0	634	HMD3030-4	155	30	30	4.0	492	591	473	592	OK FOR 180 MPH	
33	31.0	31.0	30.0	118	HMD4040-4	318	40	40	4.0	458	435	262	436	OK FOR 180 MPH	
34	31.0	31.0	30.0	264	HMD3636-4	220	36	36	4.0	458	435	291	436	OK FOR 180 MPH	
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36	31.0	31.0	32.0	324	HMD3636-4	220	36	36	4.0	488	489	326	489	OK FOR 180 MPH	
37	31.0	31.0	34.0	166	ZHMD3672*	440	36	72	4.0	519	545	364	546	OK FOR 180 MPH	
38	31.0	31.0	34.0	386	HMD3636-4	220	36	36	4.0	519	545	364	546	OK FOR 180 MPH	
39	31.0	31.0	36.0	287	HMD4040-4	318	40	40	4.0	549	605	363	605	OK FOR 180 MPH	
40	31.0	31.0	36.0	453	HMD3636-4	220	36	36	4.0	549	605	404	605	OK FOR 180 MPH	
41	31.0	31.0	38.0	302	ZHMD3672*	440	36	72	4.0	580	667	445	668	OK FOR 180 MPH	
42	31.0	31.0	38.0	522	HMD3636-4	220	36	36	4.0	580	667	445	668	OK FOR 180 MPH	
43	31.0	31.0	40.0	375	ZHMD3672*	440	36	72	4.0	610	733	489	733	OK FOR 180 MPH	
44	31.0	31.0	40.0	595	HMD3636-4	220	36	36	4.0	610	733	489	733	OK FOR 180 MPH	
45	31.0	43.0	25.0	46	ZHMD3672*	440	36	72	4.0	529	437	292	438	OK FOR 180 MPH	
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49	31.0	43.0	29.0	10	ZHMD4080**	636	40	80	4.0	614	568	388	646	OK FOR 180 MPH	
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52	31.0	43.0	31.0	406	HMD3648-4	306	36	48	4.0	656	640	427	641	OK FOR 180 MPH	
53	31.0	43.0	33.0	81	ZHMD4080**	636	40	80	4.0	698	716	430	717	OK FOR 180 MPH	
54	31.0	43.0	33.0	491	HMD3648-4	306	36	48	4.0	698	716	478	717	OK FOR 180 MPH	
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- 8) ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN. USE OF THIS SPEC. 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.
- 9) THIS ENGINEER SHALL NOT BE HELD RESPONSIBLE/LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. DIMENSIONS ARE SHOWN TO ILLUSTRATE DESIGN FORCES AND OTHER DESIGN CRITERIA. THEY MAY VARY SLIGHTLY, BUT MUST REMAIN WITHIN THE LIMITATIONS SPECIFIED HEREIN.
- 10) THIS DOCUMENT IS GENERIC AND DOES NOT PERTAIN TO ANY SPECIFIC PROJECT SITE.
- 11) PADS / UNITS INSTALLED DIRECTLY ON ANY COASTLINE REQUIRE A HEAVIER AND LARGER PAD TO ACCOUNT FOR EXPOSURE D ; Table 28.3-1; Kz = 1.03
- 12) ALL OTHER UNITS NOT SHOWN SHALL BE DESIGNED ON A CASE BY CASE BASIS.
- 13) ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- 14) EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- 15) PADS ARE CONSTRUCTED WITH PRECAST CONCRETE, MINIMUM COMPRESSIVE STRENGTH, f'c=7,000 PSI AT 28 DAYS.
- 16) THIS ENGINEER SHALL BE GIVEN AN OPPORTUNITY TO RE-EVALUATE THIS WORK UPON DISCOVERY OF INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.

**ENGINEERING DATA:**

- 1) ANALYSES PER 7th EDITION (2020) FLORIDA BUILDING CODE - SECTION 1620 HIGH VELOCITY HURRICANE ZONES.
- 2) WIND LOADS & LOAD COMBINATIONS PER ASCE 7-10 SECTION 2.4.1 (LOAD COMBINATIONS), SECTION 29.5 & FIGURE 29.5.1 FOR: WIND LOADS ON OTHER STRUCTURES.
- 3) EQUIP. TO BE ANCHORED TO PAD USING (8) DIVERSITECH HC-1 (OR O.E.M. CLIPS) CENTER ALL EQUIPMENT ON PADS. ATTACH CLIPS TO EQUIP (22 GAGE METAL MIN) WITH 1/4" BLUE / WHITE OR STAINLESS TAPCON CONCRETE ANCHORS WITH MINIMUM OF 1" EMBEDMENT. MINIMUM TAPCON SPECIFICATION: 700 LB PULLOUT / 900 LB SHEAR.
- 4) ALL EQUIPMENT REQUIRING TWO PADS ARE TO USE (12) TOTAL HC-1 CLIPS, FOUR (4) PER LENGTH AND TWO (2) PER WIDTH.
- 5) RISK CATEGORY = II TABLE 1604.5 - RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES, SECTION 301.15 OF THE MECHANICAL CODE, WIND RESISTANCE, AND 553.844 OF THE FLORIDA STATUTES STORM LOSS MITIGATION.



HMD-CLASS TO PAD MODEL#	PAD THICKNESS (in) = 4		
	WEIGHT	WIDTH	LENGTH
HMD1840-4	196	18	40
HMD2436-4	147	24	36
HMD3030-4	155	30	30
HMD3636-4	220	36	36
HMD3648-4	306	36	48
HMD3842-4	277	38	42
HMD4040-4	318	40	40
ZHMD3672**	440	36	72
ZHMD4080**	636	40	80
ZHMD4276***	554	42	76
ZHMD4872****	612	48	72

**WIND LOAD CALCS:**

Wind Speed V = 180	MPH
F = qz*G*Cf*Af (Eq. 29.5-2) = 70.65	*Af (lbs)
qz = 0.00256*Kz*Kzt*Kd*V^2 = 63.45	PSF
Exposure C ; Table 28.3-1 Kz = 0.85	
Figure 26.8-1 Kzt = 1.00	
Table 26.6-1 Kd = 0.90	
Figure 29.5-1 Cf = 1.31	
G = 0.85	

DiversiTech Corporation  
3039 Premiere Pkwy - Suite 600  
Duluth, GA 30097 (800) 397-4823



SPECIAL PAD CONFIG.  
\* INDICATES TWO HMD3636-4 PADS USED IN A 36" x 72" SHAPE \*\* INDICATES TWO HMD4040-4 PADS USED IN A 40" x 80" SHAPE \*\*\*INDICATES TWO HMD3842-4 PADS USED IN A 42" x 76" SHAPE \*\*\*\* INDICATES TWO HMD3648-4 PADS USED IN A 48" x 72" SHAPE

ROW #	UNIT / EQUIPMENT MAXIMUM DIMENSIONS INCHES			EQUIPMENT MINIMUM WEIGHT LBS.	HURRICANE HMD-CLASS PAD USED				180 MPH		RESISTING MOMENT FT-LBS.	DESIGN CHECK			
	WIDTH	LENGTH	HEIGHT		MODEL NUMBER	WEIGHT LBS.	PAD WIDTH IN.	PAD LENGTH IN.	PAD THICK IN.	WIND LOAD LBS.		0.6(WIND MOMENT) FT-LBS.	0.6(UNIT+ PAD) WEIGHT LBS.	OK FOR	180 MPH
56	31.0	43.0	35.0	580	HMD3648-4	306	36	48	4.0	740	797	531	797	OK FOR	180 MPH
57	31.0	55.0	27.0	269	ZHMD3672**	440	36	72	4.0	729	638	426	638	OK FOR	180 MPH
58	31.0	55.0	31.0	467	ZHMD3672**	440	36	72	4.0	837	816	544	817	OK FOR	180 MPH
59	33.0	37.0	32.0	10	ZHMD4080**	636	40	80	4.0	583	583	388	646	OK FOR	180 MPH
60	33.0	37.0	32.0	338	HMD3842-4	277	38	42	4.0	583	583	369	584	OK FOR	180 MPH
61	33.0	37.0	33.0	10	ZHMD4080**	636	40	80	4.0	601	617	388	646	OK FOR	180 MPH
62	33.0	37.0	33.0	373	HMD3842-4	277	38	42	4.0	601	617	390	617	OK FOR	180 MPH
63	33.0	37.0	34.0	15	ZHMD4080**	636	40	80	4.0	619	651	391	651	OK FOR	180 MPH
64	33.0	37.0	34.0	408	HMD3842-4	277	38	42	4.0	619	651	411	651	OK FOR	180 MPH
65	33.0	37.0	35.0	50	ZHMD4080**	636	40	80	4.0	637	686	412	686	OK FOR	180 MPH
66	33.0	37.0	35.0	445	HMD3842-4	277	38	42	4.0	637	686	433	686	OK FOR	180 MPH
67	33.0	37.0	36.0	86	ZHMD4080**	636	40	80	4.0	655	722	433	722	OK FOR	180 MPH
68	33.0	37.0	36.0	483	HMD3842-4	277	38	42	4.0	655	722	456	722	OK FOR	180 MPH
69	35.0	35.0	36.0	47	ZHMD4080**	636	40	80	4.0	620	683	410	683	OK FOR	180 MPH
70	35.0	35.0	36.0	365	HMD4040-4	318	40	40	4.0	620	683	410	683	OK FOR	180 MPH
71	35.0	35.0	38.0	118	ZHMD4080**	636	40	80	4.0	654	753	452	754	OK FOR	180 MPH
72	35.0	35.0	38.0	436	HMD4040-4	318	40	40	4.0	654	753	452	754	OK FOR	180 MPH
73	35.0	35.0	40.0	192	ZHMD4080**	636	40	80	4.0	689	827	497	828	OK FOR	180 MPH
74	35.0	35.0	40.0	510	HMD4040-4	318	40	40	4.0	689	827	497	828	OK FOR	180 MPH
75	35.0	35.0	44.0	350	ZHMD4080**	636	40	80	4.0	758	986	592	986	OK FOR	180 MPH
76	35.0	35.0	44.0	668	HMD4040-4	318	40	40	4.0	758	986	592	986	OK FOR	180 MPH
77	35.0	49.0	22.2	10	ZHMD4080**	636	40	80	4.0	535	405	388	646	OK FOR	180 MPH
78	35.0	49.0	30.2	61	ZHMD4080**	636	40	80	4.0	728	696	418	697	OK FOR	180 MPH
79	35.0	49.0	34.2	235	ZHMD4080**	636	40	80	4.0	824	871	523	871	OK FOR	180 MPH
80	35.0	70.0	31.0	403	ZHMD4080***	636	40	80	4.0	1065	1039	623	1039	OK FOR	180 MPH
81	35.0	70.0	35.0	657	ZHMD4080***	636	40	80	4.0	1203	1293	776	1293	OK FOR	180 MPH
82	35.0	63.0	38.2	330	POUR IN PLACE										
83	35.0	63.0	38.2	359	POUR IN PLACE										