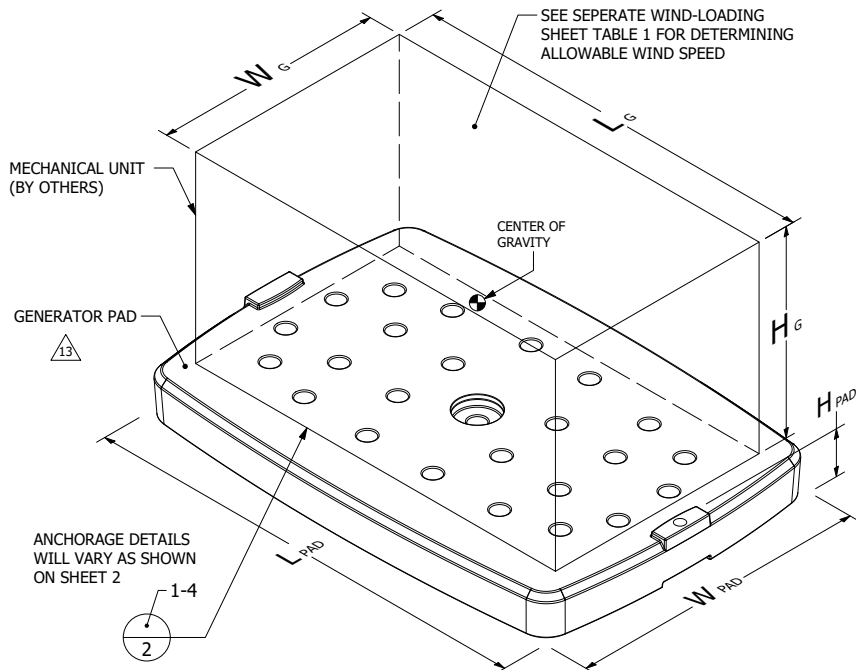
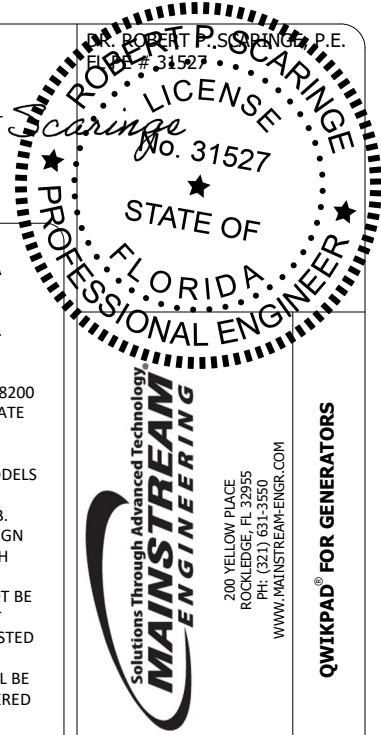


MAINSTREAM ENGINEERING CORP.

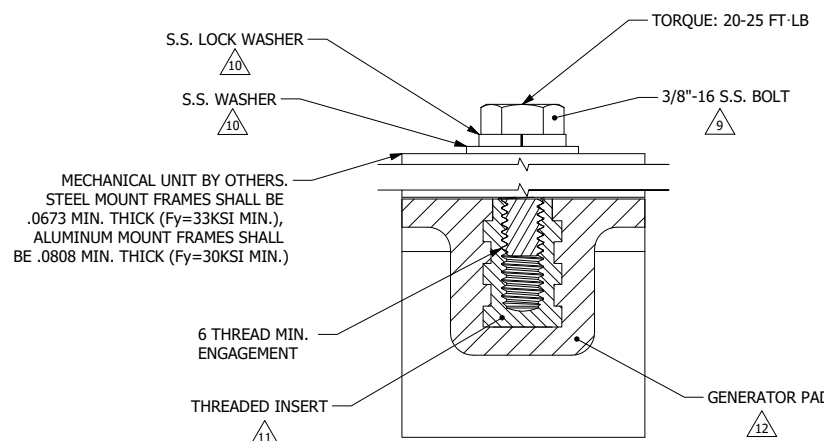
QWIKPAD® FOR GENERATORS

GENERATOR TIE-DOWN SYSTEM FOR HIGH-VELOCITY HURRICANE-ZONE (HVHZ)

Robert S. Carriage



1 GENERATOR TIE-DOWN SYSTEM
1:18 SCALE ISOMETRIC



2 ANCHOR DETAIL
1:2:3 SCALE SECTION VIEW

DESIGN NOTES:

1. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH ASCE 7-22 AND THE FLORIDA BUILDING CODE - EIGHTH EDITION (2023) FOR USE WITHIN AND OUTSIDE THE HIGH-VELOCITY HURRICANE ZONE (HVHZ).
2. DESIGN CONSIDERS ASCE 7-22 SECTION 29.4 DESIGN WIND LOADS - OTHER STRUCTURES. ALL OTHER DESIGN VARIABLES AND LOADING FACTORS ARE IN ACCORDANCE WITH ASCE 7-22 CHAPTERS 26 & 29 FOR EXPOSURE CATEGORY C.
3. PRODUCTS DETAILED HEREIN ARE INCLUDED WITH THE QWIKPAD FOR GENERATORS (QT8200 SERIES) HVHZ GENERATOR MOUNTING PADS, UNLESS OTHERWISE SPECIFIED. APPROPRIATE PAD MODEL ASSUMED TO BE DETERMINED BY CONTRACTOR/INSTALLER BASED ON GENERATOR MAKE/MODEL.
4. THIS INSTALLATION SPECIFICATION IS FOR INSTALLATION OF THE GIVEN GENERATOR MODELS ATOP ANY QWIKPAD FOR GENERATORS (QT8200 SERIES), WITH THE PAD LEVELED AND LOCATED AT GRADE LEVEL ON COMPACTED GROUND OR ATOP EXISTING CONCRETE SLAB.
5. INSTALLATIONS ATOP EXISTING CONCRETE SLAB WHERE VULT WIND SPEEDS EXCEED DESIGN CHECK IN TABLE 2 REQUIRE (1) ANCHOR INSTALLED WITH S.S. FENDER WASHER THROUGH CENTER HOLE TO PREVENT SLIDING.
6. MODEL NUMBER LISTS IN GENERATOR PAD SCHEDULE AND WIND LOAD TABLES MAY NOT BE ALL INCLUSIVE. MODEL NUMBER VARIANTS MAY EXIST, OR MAY BE ADDED TO PRODUCT LINES, WHICH MEET WIND LOAD RATINGS. GENERATOR MODELS OTHER THAN THOSE LISTED HAVING EQUIVALENT, OR SMALLER, EXTERIOR DIMENSIONS (Lg, Wg, Hg), MATCHING ANCHORAGE PATTERNS, AND WEIGHT GREATER THAN OR EQUAL TO THOSE LISTED SHALL BE CONSIDERED TO MEET GIVEN VULT WIND SPEEDS. OTHERWISE, UNITS MUST BE CONSIDERED ON A CASE-BY-CASE BASIS.
7. GENERATOR MOUNT BOLTS TO BE INSTALLED INTO MAKE/MODEL SPECIFIC ANCHORAGE POINTS PER THE DEPICTED CONFIGURATION VIEWS. PROPER BOLT LENGTH ASSUMED TO BE DETERMINED BY CONTRACTOR/INSTALLER BASED ON GENERATOR MAKE/MODEL AND MINIMUM THREAD ENGAGEMENT SPECIFIED HEREIN.
8. DESIGN IS BASED ON INSPECTED PRODUCTS AND MANUFACTURING DRAWINGS PRODUCED BY MAINSTREAM ENGINEERING CORP. NO SUBSTITUTIONS WITHOUT WRITTEN APPROVAL BY THIS ENGINEER SHALL BE PERMITTED.
9. BOLTS SHALL BE 18-8 STAINLESS STEEL PER ASTM F593 IN ACCORDANCE WITH ANSI B18.2.1 WITH UNC CLASS 2A THREADS (PER ASME B1.1).
10. WASHERS SHALL BE 18-8 STAINLESS STEEL.
11. THREADED INSERTS SHALL BE BRASS PER ASTM B16 WITH UNC CLASS 2B THREADS (PER ASME B1.1) AND SHALL HAVE A PULL-OUT STRENGTH GREATER THAN 250 LB.
12. GENERATOR PAD SHALL BE LOW-DENSITY POLYETHYLENE (LDPE) WITH YIELD STRENGTH = 1.675 KSI OR BETTER PER ASTM D638 AND NOMINAL WALL THICKNESS = .220 (.1875 MIN.).
13. GENERATOR PAD SHALL BE FILLED WITH WATER AT INSTALLATION SITE TO ACHIEVE INSTALLED WEIGHTS GIVEN IN THE GENERATOR PAD SCHEDULE. WEIGHT OF FILLED PAD IS 330 LB.

GENERAL NOTES:

1. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
2. CENTER OF GRAVITY ASSUMED TO ACT AT GEOMETRIC CENTER OF UNIT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR METALS TO PREVENT ELECTROLYSIS.
4. ELECTRICAL GROUND, WHEN REQUIRED, SHALL BE DESIGNED AND INSTALLED BY OTHERS.
5. 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 SHALL PREPARE SITE SPECIFIC DOCUMENTS IN CONJUNCTION WITH THIS DOCUMENT.
6. FOR AN EXPLANATION OF RISK AND EXPOSURE CATEGORIES THAT ACCOMPANY THE VULT WIND SPEEDS USED IN THIS APPROVAL, SEE SECTIONS 1.5.1 AND 26.7.3, RESPECTIVELY, OF ASCE 7-22. VULT WIND SPEEDS FOR RISK CATEGORY II DETERMINED BY FIGURE 26.5-1B OF ASCE 7-22.
7. GENERATOR WEIGHTS AND DIMENSIONS PER MANUFACTURER DOCUMENTATION, TO BE VERIFIED BY OTHERS.
8. ALL DIMENSIONS SHOWN ARE REFERENCE AND IN INCHES, UNLESS OTHERWISE SPECIFIED.

PRODUCT APPROVAL NOTICE

This product has received **Florida Product Approval #27646** in accordance with the Florida Building Code - Eighth Edition (2023). The full product approval document can be accessed on the Florida Building Codes Information System (BCIS) (www.floridabuilding.org).

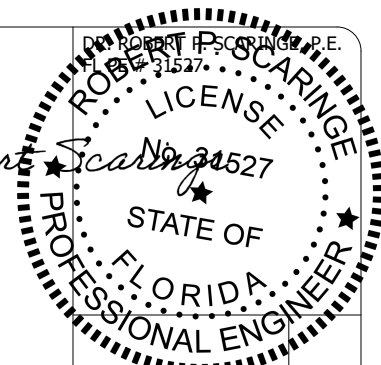
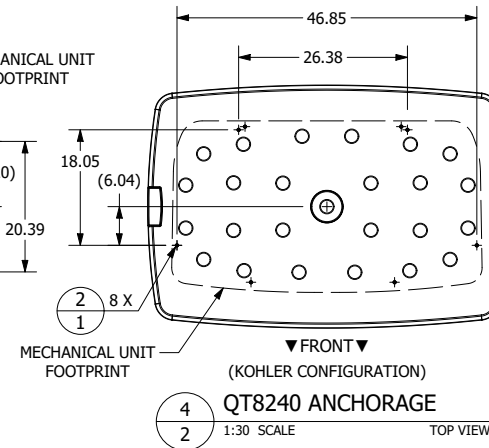
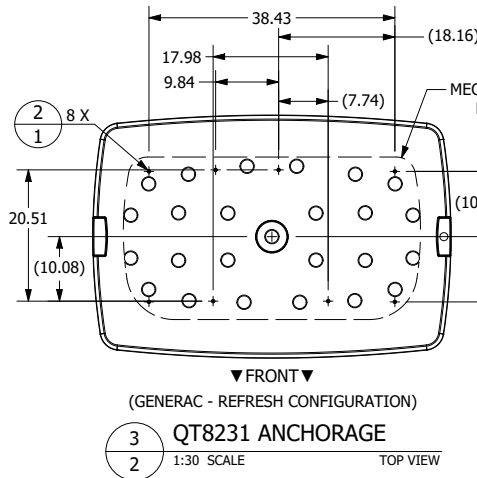
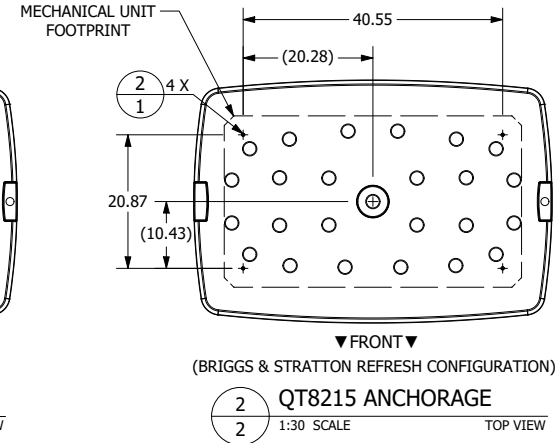
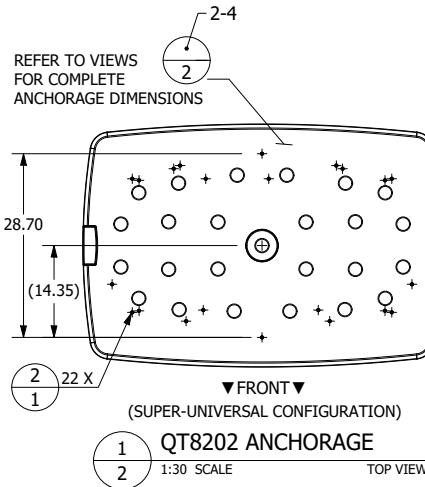
REV	REMARKS	DRWN	CHKD	DATE
G	REGISTERED TRADEMARK, CUMMINS MODELS, ADD QT8201, REMOVE QT8200	R. SIMMONS	A. CARPENTER	5/17/2022
H	ADD 26 KW KOHLER NUMBERS TO CHARTS, UPDATED FOR FBC 8TH EDITION AND ASCE 7-22	T. ABBOTT	A. CARPENTER	8/16/2023
J	ADD QT8202, QT8231, GENERAC 14 KW & 18 KW MODELS, REMOVE QT8201 & QT8220	B. FELDMAN	A. CARPENTER	10/08/2025
K	REMOVE QT8201 & QT8220, REMOVE QT8210 & QT8220	B. FELDMAN	A. CARPENTER	11/11/2025

QT8200 SERIES

GENERATOR PAD SCHEDULE:

QWIKPAD® FOR GENERATORS							GENERATOR						
PART NO.	INSTALLED PAD WEIGHT	L _{pad}	W _{pad}	H _{pad}	WIND RATING MPH	ULTIMATE PRESSURE PSF	MAKE	NOMINAL RATING kW	SEE DESIGN NOTE 6 MODEL NO.	L _g	W _g	H _g	MIN. WEIGHT LB
QT8202	330	56	38	5	180	66.2	SUPER UNIVERSAL	-	ALL LISTED MAKES/MODELS	SEE DESIGN NOTE 6			
							CUMMINS	13	C13NGH	34.1	36	27.3	479
								17	C17NGH				540
								20	C20NGH C20N6HC				540
QT8215	330	56	38	5	180	66.2	BRIGGS & STRATTON	17	040661	46.5	26.8	28.4	520
								20	040662 040657				520
								26	040658 040664				540
QT8231	330	56	38	5	180	66.2	GENERAC	9	G007029 G007030	48	25.1	28.6	340
								11	G007031 G007032 G007033				348
								16	G007035 G007036 G007037				409
								20	G007038 G007039				448
								22	G007042 G007043				466
								24	G007209 G007210				455
								26	G007290 G007291				518
								14	G007258 G007323	46.4	26.3	30.7	391
								18	G007259 G007324				426
							HONEYWELL	16	G007059	48	25.1	28.6	409
								20	G007062				448
								22	G007065				466
QT8240	330	56	38	5	178†	64.8	KOHLER	14	14RCA	47	26	32.3	440
					175†	63		14	14RESA				420
								14	14RCAL-200SELS				490
								14	14RESAL				467
								20	20RCA				555
								20	20RCAL-200SELS	48	26.2	29	600
								20	20RESA 20RESC				535
								20	20RESAL 20 RESCL				580
					180	66.2		26	26RCA	47	26	32.3	625
								26	26RCAL				670

† 180 MPH WIND SPEED RATING ACHIEVED WITH USE OF QT8110 OR QT8111 ANCHOR KITS (FOR SOIL AND CONCRETE INSTALLATION SITES, RESPECTIVELY)



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REV	REMARKS	DRWN	CHKD	DATE
G	REGISTERED TRADEMARK CUMMINS MODELS, ADD QT8201, REMOVE QT8200	R. SIMMONS	A. CARPENTER	5/17/2022
H	ADD 26 KW KOHLER NUMBERS TO CHARTS, UPDATED FOR RBC 8TH EDITION AND ASCE 7-22	T. ABBOTT	A. CARPENTER	8/16/2023
J	ADD QT8202, QT8231, GENERAC 14 KW & 18 KW MODELS, REMOVE QT8201 & QT8220	B. FELDMAN	A. CARPENTER	10/08/2025
K	REMOVE QT8201 & QT8220 BOLT, REMOVE QT8202, REMOVE QT8210 & QT8220	B. FELDMAN	A. CARPENTER	11/11/2025

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QT8200

DWG NO. 5010950 REV K

SHEET 2 OF 2