ELECTRIC GENERATOR PRE-CAST CONCRETE PAD

DESIGN CALCULATIONS:

WIND EXPOSURE = Condition C

IMPORTANCE FACTOR = 1

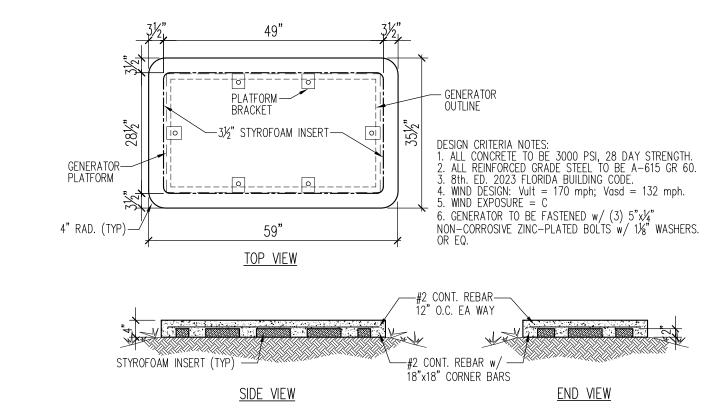
Vult = 170 mph

SHAPE FACTOR = 0.90

EXPOSURE ADJUSTMENT FACTOR (Uplift) = 0.67 (Ht. Above Ground< 8') Po(wind) = 26.5xl.21=32.06psf

PAD FOR: GENERAC AIR-COOLED 16KW; 18KW; 20KW; 22KW; 24KW; 26KW GENERATORS

L=4.5' W = 2.4' H = 2.4' Unit Wt. = 455lbs. Alum Stand Wt. = 60lbs, Pad Wt = 240lbs V(vertical reaction) = 240lbs + 455lbs + 60lbs = 755lbs Overturn Uplift (U) = (L)(H)(Po)(Shape Factor) = 4.5x2.4x32.06x0.9 = 312lbs Wind Uplift, Ph = 60psf Wind U = (W)(L)(Ph)(Exp. Adj. Factor)= 4.5x2.4x60x0.67 = 434lbs Total Uplift = U + Wind U = 312 + 434 = 746lbs Total V (Vertical Download= Pad Wt. + Unit Wt. + Stand Wt. = 240 + 455 + 60 = 755lbs > 746lbs







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THESE CONSTRUCTION DOCUMENTS HAVE BEEN PREPARED UNDER THE DIRECT SUPERVISION OF LAN—ANH NGUYEN, P.E. (FL.# 68226). LAH—ANH NGUYEN, HEREBY CERTIFIES THAT THESE DOCUMENTS COMPLY WITH ALL APPLICABLE SECTIONS OF THE FLORIDA BUILDING CODE 2023, 8th. EDITION.

THESE PLANS SHALL REFERENCE COMPLIANCE WITH THE 2023, 8th. EDITION FLORIDA BUILDING CODE, SECTION 1601, DESIGN CRITERIA & ASCE 7-16.

THIS DRAWING AND DESIGN IS VALID FOR 12 MONTHS AFTER THE DATE IT IS SIGNED & SEALED.

DATE:

CLIENT:

MASTER SET for PRE-CAST GENERATOR PAD

PROJECT#
GENERX
DATE:
1/2/

DRAWN BY:

1/2/20243 Y: G.S.

SCALE: AS NOTED

OF 1

SHEET