

Conforms to the requirements of the 7th Edition (2020) of the Florida Building Code sections 1609 and 3107, V(ult) = 120 mph, Exposure category = C, Risk category = II
John J. Orlando P.E. LLC - 165 Old Ridge Road - Macon, GA 31211 - 478 731 5394 - jlorlando@cox.net - Florida registration # 0044089 sheet 1 of 2

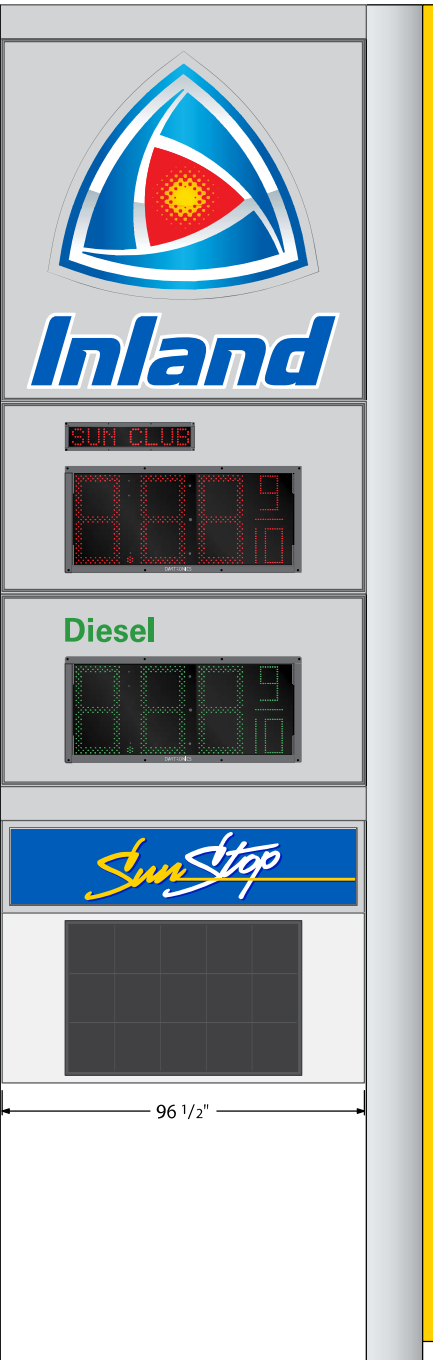
This item has been electronically signed and sealed by John J. Orlando, P.E. using a Digital Signature and date.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



30' 0"

45"

75"



NEW EMC
CABINET

96 1/2"



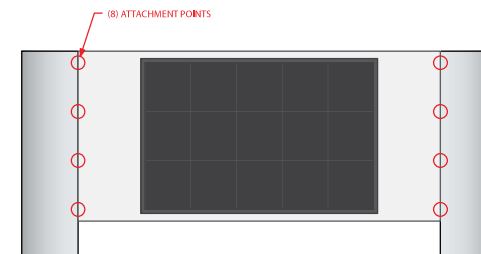
CURRENT SIGN



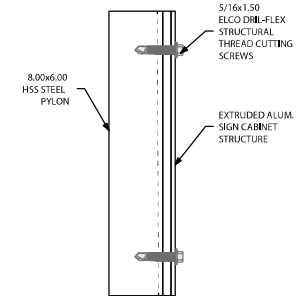
PROPOSED CHANGES

ADD EMC TO EXISTING STRUCTURE

1. Fabricate new 45"x96.50"x24" sign cabinet to attach to existing poles.
2. Re-purpose existing 41"x63" EMC from Shell #303.



ATTACHMENT DETAIL



SECTION DETAIL



251 FORTUNE BLVD
MIDWAY, FL 32343
PH: 850.224.7446
FX: 850.224.8936
ApogeeSigns.com
STATE CERTIFIED
SIGN CONTRACTOR
LIC# ES12000314

DRAWN BY:
ERIC LARSON
EMAIL:
Eric.Larson@ApogeeSigns.com
DRCT LINE:
850.999.6042



Inland #341
4047 SW SR 47
Lake City, FL.

JOB NUMBER:
31710
DATE:
01/26/2022

SHEET NUMBER
A.1

Job name Inland #341
Job# 0322APG
Sign company: Apogee Signs
Installation location: 4047 SW SR 47, Lake City, FL 32055

Section 3107 and 1609 of Florida Building Code 2020 and Chapter 30 ASCE 7-16 applies.
Application of wind pressures using the alternative all heights method for components and cladding

Type of structure: new EMC sign cabinet fastened to existing sign poles

Occupancy Category: II

Wind velocity (3 sec gust), FBC 2020, section 1609.3: 120 mph

Wind pressure (qz) 36.9 psf

Net Pressure Coefficient (Cnet) from Figure 30.7-2
Components and cladding not in areas of discontinuity - walls and parapets -1.09
Wind Pressure -40.2 psf

Wind load applied between wall and structure, pulling structure away from wall
Load carried by tension in fasteners connecting structure to wall

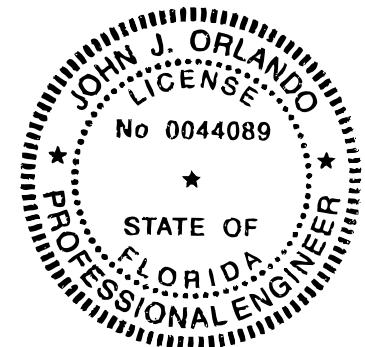
- maximum height of structure to be attached	3.75 ft
- maximum width of structure to be attached	8.04 ft
- fill factor	1.00
- projected area of each component to be attached	30.2 ft ²
- wind load	-1213 lbs
- design limit tension load per fastener to	200 lbs
- even number of fasteners minimum of 2 =	-8
- number of fasteners practically required due to structure shape	8
- weight of structure is approximately	181 lbs
- design limit shear load per fastener to	100 lbs
- average shear load per fastener =	22.6 lbs

Mounting surface construction is: 8.00 x 6.00 HSS steel pylon

Method - 5/16" Drill-Flex screws
http://anchors.dewalt.com/anchors/documents/uploads/elco_drilflex_a_manual.pdf?1589229775

References:
ASCE 7-16
The 7th Edition (2020) of the Florida Building Code

John J. Orlando PE LLC 0044089
165 Old Ridge Road
Macon, GA 31211
(478) 731-5394
jjorlando@cox.net



sheet: 2 of 2

John Orlando Digitally signed by John Orlando
Date: 2022.02.03 16:18:57 -05'00'

This item has been electronically signed and sealed by John J. Orlando, PE using a Digital Signature and date.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.