

CALCULATIONS				
Wind load		Fence Material Properties		
Category:	I	Steel		
Exposure:	C	Fy=	46 ksi	
V (mph)	175	Fb=	27.6 ksi	
LF-load factor ASD	0.6	Material used		
kd:	0.85	dim	Sx	Sy
h(ft):	8	Post=	HSS 3"x3"x10ga	1.34
Spacing (ft)	4	Horizontal=	2"x1"15ga	0.5502
Kh	0.575	Paintgrid=	26ga	0.072
Pd(psf)	22.991			
Post Design		Paintgrid		
Mmax= WL^2/2	2942.8224 ft-lb	P=	367.8528	
	35313.869 in-lb	Mmax=PI/8	160.9356 ft-lb	
Sreq=	1.279488 in^3		1931.2272 in-lb	
		Sreq=	0.069972 in^3	
Top & Bot horizontal beam				
P=	551.7792			
Mmax=PI/8	241.4034 ft-lb			
	2896.8408 in-lb			
Sreq=	0.104958 in^3			
Unrestrained Pole in Fill				
Allowable passive pressure p	=	400 psf	FBC1806.2	
depth in soil d	=	4.5 ft		
width in soil b	=	2.0 ft		
applied load (wind=22.99psf P	=	1103.558 LB		
load height above soil h	=	4 ft		
Calcs				
S1= dp/3		600.00 psf		
A=2.34P/(S1*b)		2.15 sf		
d=0.5A[1+(1+(4.36h/A))^1/2]		4.3 ft		

00200 BUILDING CODES

FLORIDA BUILDING CODE - 2023 8th EDITION

00500 STRUCTURAL LOADING:

THE STRUCTURE HAS BEEN DESIGNED IN ACCORD WITH THE 2023 FLORIDA BUILDING CODE AND / OR MORE RESTRICTIVE REQUIREMENTS FOR LOADS AS GIVEN BELOW UNLESS SPECIFICALLY CALL FOR DIFFERENT LOADING CRITERIA. REFER TO DRAWINGS FOR LOAD SCHEDULE.

WIND LOAD PER ASCE 7-22:
V=175 MPH FOR FENCES UP TO 8'-0"

FOUNDATIONS:

* PERFORMED: WE OBSERVED A SANDY SOIL WITH LIMESTONE FRAGMENTS. AS PER FBC 2023; TABLE 1806.2; SECTION 1806.3.4 WE ASSUME A MAXIMUM OF 200 PSF LATERAL SOIL BEARING PRESSURE CAPACITY (WILL BE INCREASED BY 2)

03300 CAST-IN-PLACE CONCRETE: ACI 318-11

ALL CONCRETE TO HAVE 28 DAY COMPRESSIVE STRENGTHS AS
F'C = 3,000 PSI

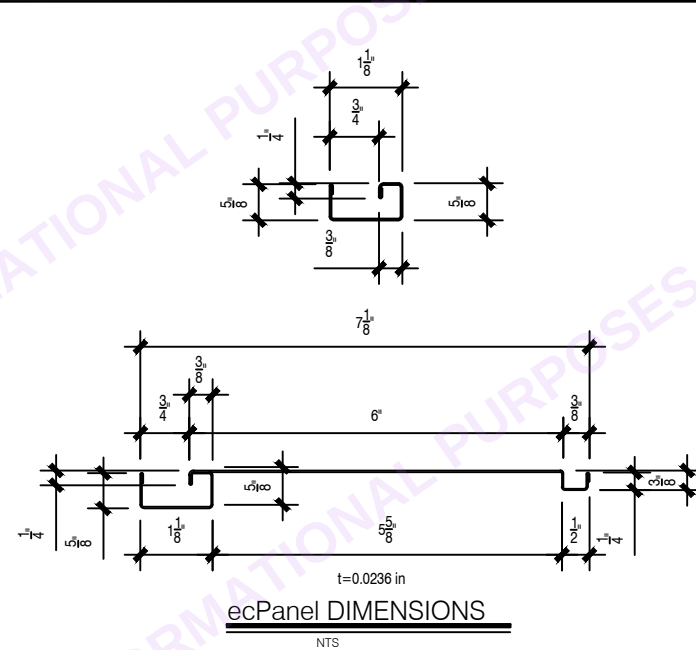
05120 STRUCTURAL STEEL: AISC 13TH EDITION

PER LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "SPECIFICATIONS FOR THE DESIGN, TO CONFORM TO:

SHAPES & PLATES

ASTM A 500 GRADE C
FY=36 KSI; FB=23.76 KSI
ASTM A 500 GRADE B

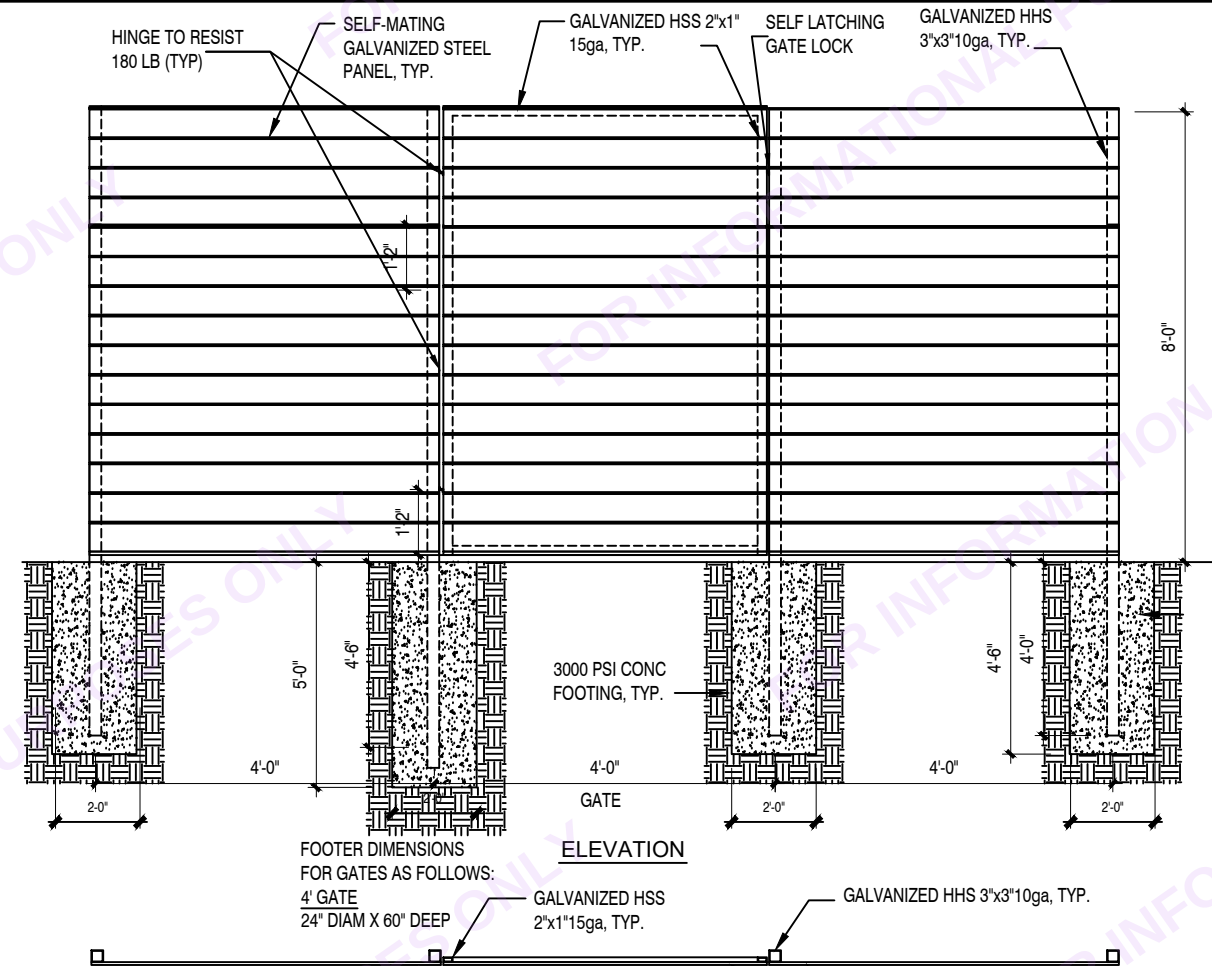
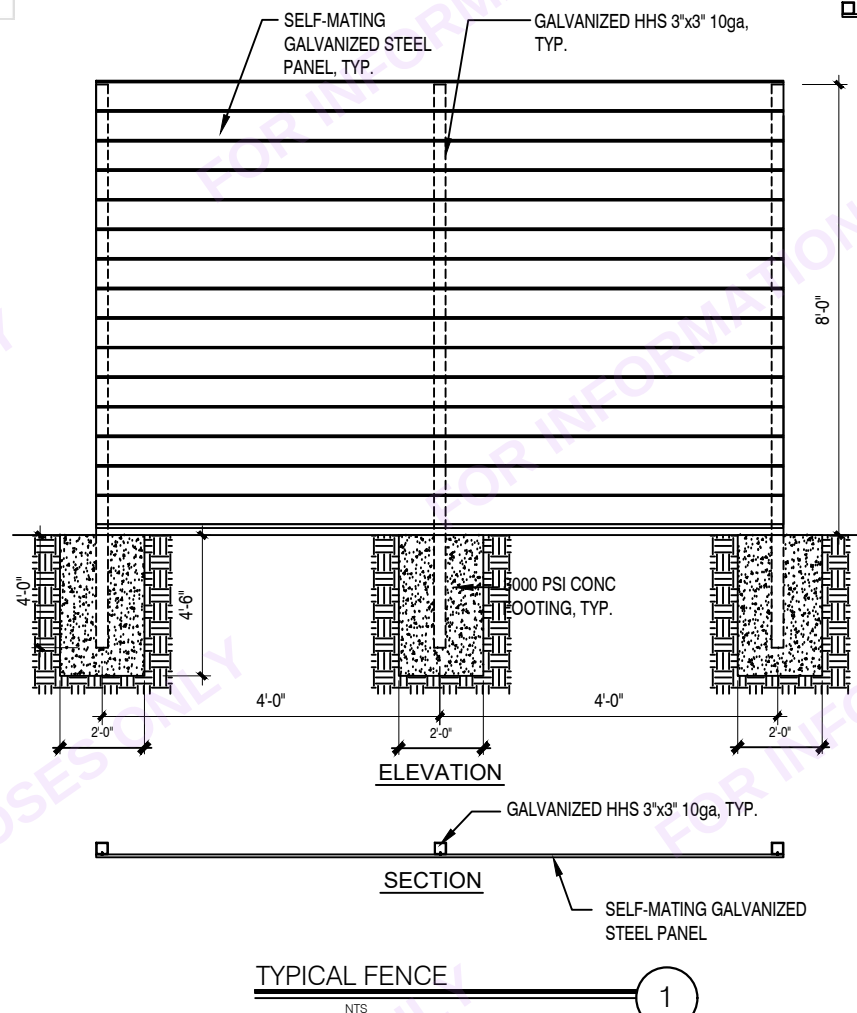
TUBES



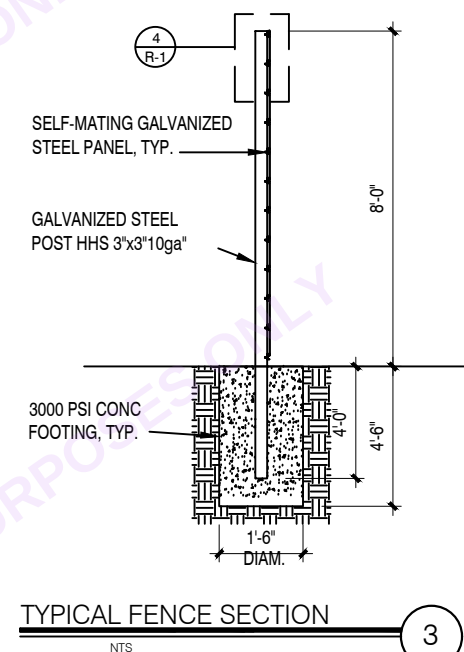
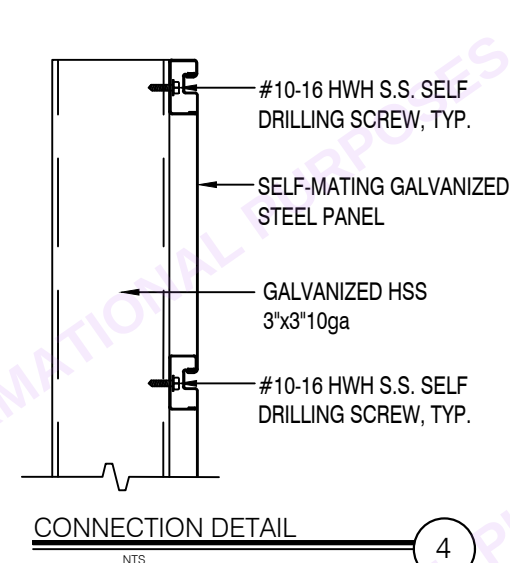
MINIMUM FENCE FRAME FOR V=175 MPH				
WIND EXPOSURE	POST SIZE HSS	SLAT THICKNESS (INCH)	FOUNDATION SIZE	HORIZ STRUT HSS
"C"	3"x3"x10ga	0.0236	24"Øx4'-6" DEPTH	2"x1" 15ga

STRESS CAP: Fb=30.36 ksi

FENCE HEIGHT UP TO 8'-0"



SECTION TYPICAL FENCE W/ GATE



REVISIONS		BY	DATE		
No					
METAL FENCE - NOT FOR PERMITTING					
MANUFACTURER: ecFENCE SYSTEMS					
ADDRESS: 3105 NW 107 AVE, SUITE 400-J6, DORAL FL 33172					
Date	JUNE 2025				
Scale	NOTED				
Drawn					
Job	EC FENCE				
Sheet	S-1				
1 OF 1					