T-POST FENCE ENGINEERING SUMMARY

PalmSHIELD recognizes that free standing louvered screening requires a great deal of structural engineering to assure this large surface area structure can withstand the latest wind load codes. This level of investment should be met with professional analysis. Responsible designers should be provided with this information in a usable format demonstrating full compliance. PalmSHIELD has provided this analysis herein.

PART 1 – PREPARATION

Structural calculations were prepared by the following structural engineering firm:

A. Rise Structural Associates

B. 1405 Prairie Parkway

C. West Fargo, North Dakota

D. Professional Engineer

E South Dakota License #15041

F. October 8, 2024

G. T-Post design chart

PART 2. – DESIGN CRITERIA

A. Risk category: III

B. Wind speed: 150 mph

C. Exposure: C

D. Importance factor: Open Sign Structure, Case A

E. Kzt =1

F. G= .85

G. Kz = .85

H. Kd = .85

I. Longest span: 40’

J. Pw: 26.3 psf

PART 3 – MATERIALS. The above performance criteria is based on the following material types.

A. T-Posts: 5/16” 6063-T52 Aluminum.

B. Flat Bar: 5/16” 6061-T6 Aluminum.

C. Baseplate: ¾” 6061-T6 Aluminum

PART 4. – DESIGN CRITERIA

The above performance criteria is based on the following critical design characteristics.

A. Panel intermediate supports not to exceed 26” o.c.

B. Louvers to be solid and allow no penetration

C. Each post to receive 2 ea. panels placed perpendicular to post runs.

PART 5. – ENGINEERING

Below is the span data stating the specific post required relative to panel height and standard panel width.

Height= 10’ Span Width = 26” O.C.

Height= 8’ Span Width =52” O.C.

T-Post: See Figure 1.

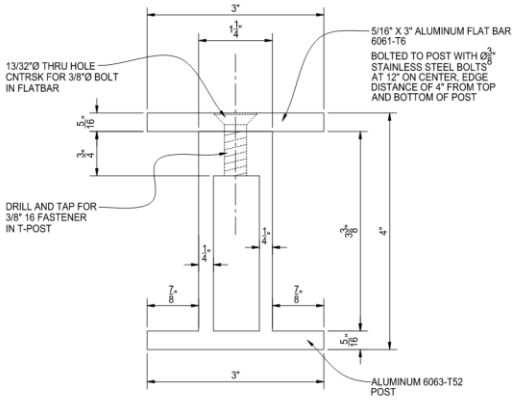

Figure 1

Flat Bar: 3” wide x 10’ long x 5/16” thick.

Base Plate: 8” wide x 8” long x ¾” thick

PART 6. – ENGINEERING DISCLAIMER

PalmSHIELD recognizes that every site has unique site conditions. The above engineering summary is not intended to represent form or fitness for any particular installation. The above engineering is for reference purposes only to demonstrate basic design criteria and performance characteristics. PalmSHIELD strongly recommends that every customer employ engineering within their jurisdiction specific to the installation and site conditions.

PART 7. – ENGINEER STAMP