6' TREX HORIZONS **COMPOSITE SINGLE** AND DOUBLE GATE **MPS**

Trex Fencing Standard Gate Opening	Gate Opening	Gate Hardware Tolorance
Standard Single Gate	46-1/4"	1-7/8"
Large Single Gate	65-3/4"	1-7/8"
Standard Double Gate	90-1/2"	2-3/4"
Large Double Gate	130-1/2"	2-3/4"

Post Height (ft) Vult (mph) DP (psf) Req. Moment for 46-1/4" Gate Leaf (lb-ft) Feature 6 110 16.3 1760	OWEIT
6 115* 19 2052 6 130 22.8 2462 6 145 28.4 3067 6 165 36.8 3974	Req. Moment for 65-3/4" Gate Leaf (lb-ft)
6 130 22.8 2462 6 145 28.4 3067 6 165 36.8 3974	2054
6 145 28.4 3067 6 165 36.8 3974	2394
6 165 36.8 3974	2873
- 100 - 100	3578
6 180 43.8 4730	4637
	5519
6 180 43.9 4741	5531

REQUIRED WINDSPEED IF WITHIN HVHZ

IDEAL 1" **IDEAL 7/8"** IDEAL 7/8' MIN. 1/2" MIN. 3/4" MIN. 1/2" IDEAL 7/8" SFF MAX 1 1/2" MAX 1 1/2" MAX 1 1/4" MIN. 1/2" **STANDARD** MAX 1 1/2" OPENING TABLE 8'W x 8'H 8'W x 8'H MAX FENCE MAX FENCE SECTION SECTION -1 7/8" MAX HINGES ATTACHED (1) DROP ROD PER ∠W/ (4) #14 SMS PER LEAF SIDE MIN. 12"W X 36"D FOOTER REQUIRED FOR INSTALLATION ONLY. FOR STRUCTURAL WIND LOADS, FOOTING TO BE DESIGNED BY OTHERS PER GATE POST STIFFENER, SEE LOCAL CONDITIONS HORIZONS BELOW

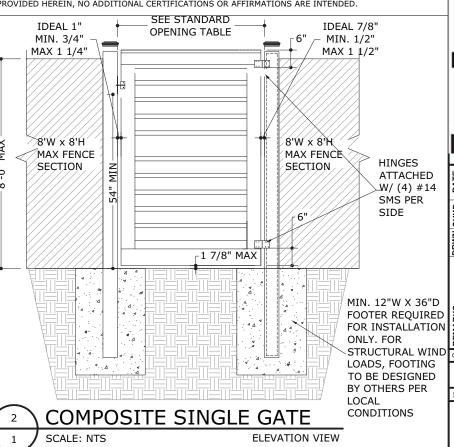


GENERAL NOTES

- THIS STRUCTURE HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE STRUCTURAL PROVISIONS OF THE FLORIDA BUILDING CODE SIXTH EDITION (2017). STRUCTURE SHALL BE FABRICATED IN ACCORDANCE WITH ALL GOVERNING CODES. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY AND GOVERN. DESIGN CRITERIA OR SPANS BEYOND STATED HEREIN MAY REQUIRE ADDITIONAL SITE SPECIFIC SEALED ENGINEERING.
- DESIGN BASED ON ASCE 7-10 USING V_{ult} = SEE DESIGN PRESSURE TABLES (3 SEC GUST), EXPOSURE 'C', RISK CATEGORY I, USING THE SOLID SIGN METHOD, 0% OPEN USED IN CALCULATIONS. THIS FENCE DESIGN TO BE USED AT GROUND SURFACE ONLY, WITH USE LIMITED TO DECORATIVE BARRIER PURPOSES ONLY. THIS
- FENCE IS NOT INTENDED TO MEET CODES GOVERNING ELEVATED BALCONIES OR STRUCTURAL RAILINGS. COMPOSITE WOOD MATERIAL INFORMATION: ALL COMPOSITE WOOD MATERIAL TO HAVE A FLEX STR. OF 4000PSI MIN. ALL CONCRETE AND EPOXY TO REACH A MIN. COMPRESSIVE STRENGTH OF 3000 PSI IN 7 DAYS. CONCRETE FOOTERS SHALL CONTAIN MINIMUM 0.1% FIBERMESH CONTENT PER CUBIC YARD.
- HE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS. SURRO<mark>UNDING SOIL TO</mark> BE COMPACTED TO 98% OPTIMUM DENSITY, 2500 PSF MIN AND SHALL BE CLASSIFIED OR VERIFIED BY
- OTHERS PRIOR TO CONSTRUCTION PER FBC 1806.2 AND SHALL BE SANDY GRAVEL CLASS ONLY
- PER FBC 454.2.17.1.8: POOL ACCESS GATES WHEN PROVIDED SHALL COMPLY WITH FBC 454.2 AND MUST BE AT LEAST 48" ABOVE GRADE & EQUIPPED WITH A SELF CLOSING, SELF LATCHING LOCKING DEVICE NOT LESS THAN 54" FROM BOT OF GATE. GATE MUST OPEN OUTWARD AWAY FROM POOL & MUST HAVE NO OPENING >1/2" WITHIN 18" OF RELEASE MECHANISM.
- ELÉCTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS. ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- THIS DOCUMENT IS GENERIC AND DOES NOT PERTAIN TO ANY SPECIFIC PROJECT SITE. INFORMATION CONTAINED HEREIN IS BASEL ON CONTRACTOR-SUPPLIED DATA AND MEASUREMENTS. ENGINEERING EXPRESS SHALL NOT BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. DIMENSIONS ARE SHOWN TO ILLUSTRATE DESIGN FORCES AND OTHER DESIGN CRITERIA. THEY MAY VARY SLIGHTLY, BUT MUST REMAIN WITHIN THE LIMITATIONS SPECIFIED HEREIN. WORK SHALL BE FIELD VERIFIED BY OTHERS PRIOR TO CONSTRUCTION. ENGINEERING EXPRESS SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO REEVALUATE OUR WORK UPON DISCOVERY OF ANY INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS. ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
- ANYTHING LESS THAN THE HEIGHT AND POST SPACING SHOWN HEREIN MAY BE AS PER MANUFACTURER PLANS FOR DIMENSIONAL CONFORMITY, PROVIDED COMPONENTS AND EXTRUSIONS ARE PER THIS DESIGN AND THERE ARE NO INCREASED TRIBUTARIES.

TREX HORIZONS® GATE PROFILES 13. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED. IDEAL 1" Gate Hinge Post Stiffener 2 1/2" Drop Rod Ontional MIN. 3/4" Assembly A36 Steel 12 ga min. Anti-Sag MAX 1 1/4" A. Black vinyl wrapped steel cable B Cable clamp (2) C 'S' hook D 'D' rings (2) E 1" Self-drilling screws (2) F Tumbuckle 8'W x 8'H Side View MAX FENCE 2 1/2" → 1€4# SECTION 70.25 **Double Gate** 108" → 1 3/4" Striker NOTE: ALL TREX GATE HARDWARE IS MADE OF STAINLESS STEEL (Fy = 36KSI $\frac{1}{8}$ " THICK MIN.) AND IS POWDER ©2013 TFSC COATED BLACK. SELF DRILLING 1/4" CLIPS WITH SCREWS ARE INCLUDED

(3) #14 SMS



FRANK L. BENNARDQ, P.E.

ORDON DIBATTISTO, P.E. NOTICE: IF THIS SHEET DOES

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