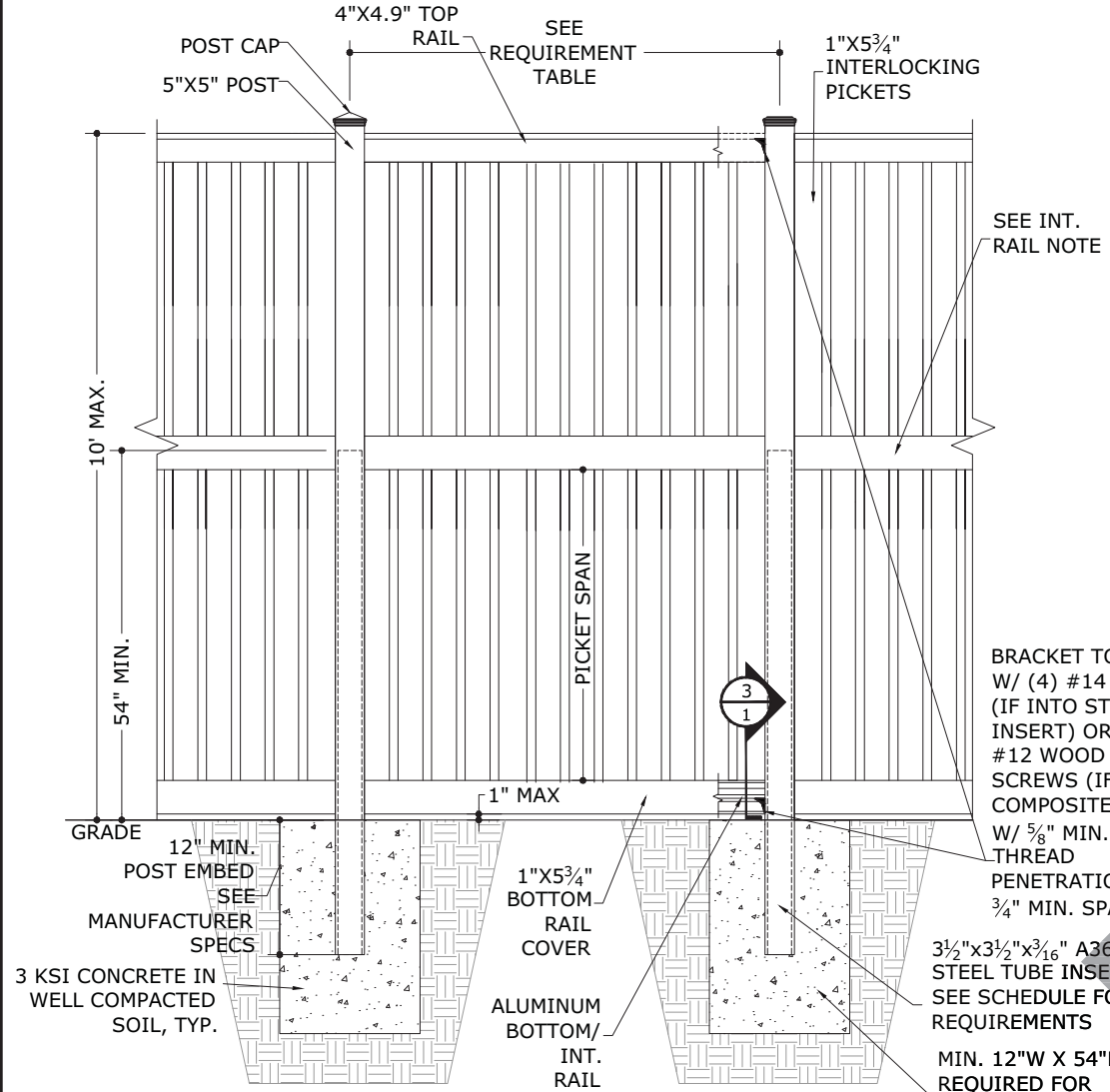
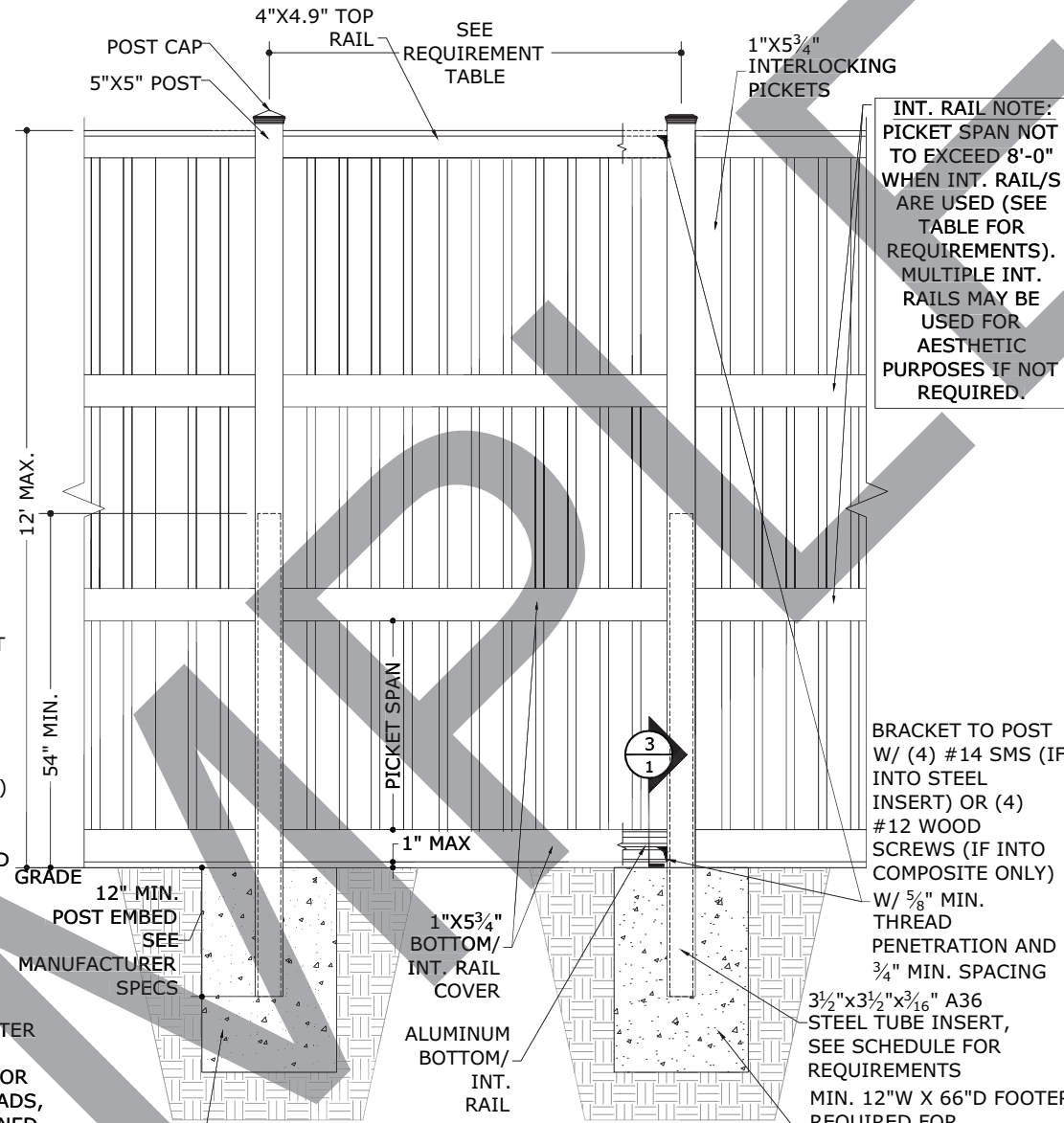


10'-12' TREX SECLUSIONS COMPOSITE FENCE AT GRADE MPS

(NON-STRUCTURAL DECORATIVE AT-GRADE BARRIER)



1 10' COMPOSITE FENCE
SCALE: NTS ELEVATION VIEW



2 12' COMPOSITE FENCE
SCALE: NTS ELEVATION VIEW

INT. RAIL NOTE:
PICKET SPAN NOT TO EXCEED 8'-0" WHEN INT. RAIL/S ARE USED (SEE TABLE FOR REQUIREMENTS). MULTIPLE INT. RAILS MAY BE USED FOR AESTHETIC PURPOSES IF NOT REQUIRED.

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.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- SURROUNDING SOIL TO 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.
- ELECTRICAL 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 BASED 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.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

BRACKET TO POST W/ (4) #14 SMS (IF INTO STEEL INSERT) OR (4) #12 WOOD SCREWS (IF INTO COMPOSITE ONLY) W/ 5/8" MIN. THREAD PENETRATION AND 3/4" MIN. SPACING

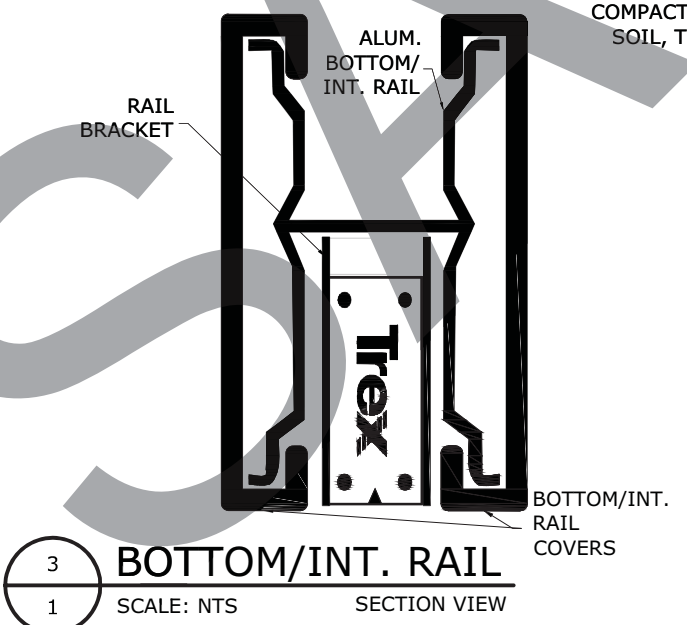
MIN. 12"W X 54"D FOOTER REQUIRED FOR INSTALLATION ONLY. FOR STRUCTURAL WIND LOADS, FOOTING TO BE DESIGNED BY OTHERS PER LOCAL CONDITIONS

3 KSI CONCRETE IN WELL COMPACTED SOIL, TYP.

BRACKET TO POST W/ (4) #14 SMS (IF INTO STEEL INSERT) OR (4) #12 WOOD SCREWS (IF INTO COMPOSITE ONLY) W/ 5/8" MIN. THREAD PENETRATION AND 3/4" MIN. SPACING

MIN. 12"W X 66"D FOOTER REQUIRED FOR INSTALLATION ONLY. FOR STRUCTURAL WIND LOADS, FOOTING TO BE DESIGNED BY OTHERS PER LOCAL CONDITIONS

3 KSI CONCRETE IN WELL COMPACTED SOIL, TYP.



3 BOTTOM/INT. RAIL
SCALE: NTS SECTION VIEW

| POST INSERT, FOOTER MOMENT & INTERMEDIATE RAIL REQUIREMENTS | | | | | | |
|---|-------------------|------------|----------|----------------------------|------------------|-------------------------|
| POST HEIGHT (FT) | POST SPACING (FT) | VULT (MPH) | DP (PSF) | NO. OF INT. RAILS REQUIRED | INSERT REQUIRED? | POST REQ MOMENT (LB-FT) |
| 10 | 8 | 110 | 17 | 1 | INSERT | 6800 |
| 10 | 8 | 115 | 18.6 | 1 | INSERT | 7440 |
| 10 | 8 | 130 | 23.7 | 1 | INSERT | 9480 |
| 10 | 6.9 | 145 | 29.5 | 1 | INSERT | 10178 |
| 10 | 5.3 | 165 | 38.2 | 1 | INSERT | 10123 |
| 10 | 4.5 | 180 | 45.5 | 1 | INSERT | 10238 |
| 12 | 8 | 110 | 17.3 | 2 | INSERT | 9965 |
| 12 | 7.5 | 115 | 18.9 | 2 | INSERT | 10206 |
| 12 | 5.9 | 130 | 24.2 | 2 | INSERT | 10280 |
| 12 | 4.7 | 145 | 30 | 2 | INSERT | 10152 |
| 12 | 3.6 | 165 | 38.9 | 2 | INSERT | 10083 |
| 12 | 3 | 180 | 46.3 | 2 | INSERT | 10001 |

| 6' TREX SECLUSIONS | MATERIAL NEEDED FOR 8' SECTION |
|--------------------|---|
| | 5 x 5 Post Cap Pyramid or Flat |
| | 5 x 5 x 5/8" Post |
| | Top Rail 4 x 4.9 x 1/2" |
| | Bottom/Intermediate Rail Cover 1 x 5.75 |
| | Interlocking Picket 1 x 5.75 |
| | Aluminum Bottom/Intermediate Rail (6063-T6) |
| | 1 1/4" x 3 1/8" x 1/8" Rail Bracket |

FRANK L. BENNARDO, P.E.
PE# 0046549

SEAL REQUIRED
03/13/2018

IF CHECKED, CERTIFYING P.E. APPEARS BELOW
GORDON DIBATTISTO, P.E.
82328

NOTICE: IF THIS SHEET DOES NOT CONTAIN AN ORIGINAL SIGNATURE & ENGINEER SEAL:
IF THERE IS A DIGITAL SIGNATURE ON SHEET 1, THIS SHEET IS PART OF A DIGITALLY SIGNED FILE, SHALL REMAIN IN DIGITAL FORMAT, & PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. IF THERE IS NO DIGITAL SIGNATURE ON SHEET 1 OR THIS SHEET DOES NOT CONTAIN AN ENGINEER'S ORIGINAL SIGNATURE & SEAL, THIS SHEET IS A COPY/DRAFT.

ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
P: (954) 354-0660 F: (954) 354-0443
E: HELLO@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM
CERT OF AUTH #9885

Trex Fencing
www.TrexFencing.com
1.877.700.8739
TREX FENCING 10'-12' FENCE MPS
FLORIDA BUILDING CODE
ASCE 7-10 'SOLID SIGN METHOD' 0% OPEN

| REMARKS | INIT ISSUE | DATE |
|---------|---------------------|----------|
| | DRWN | 02/28/18 |
| | CHKD | 02/28/18 |
| | RWN | FLB |
| | JAC | FLB |
| | UPDATE FOR 2017 FBC | |

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

15-2692c
SCALE: NTS UNLESS NOTED
1 of 1

V:\Projects\15-2692 Multiple Fence and Gate Design - Existing Master Sheet - Update 13-FENCE\WP\2018 Updates\15-2692c_g - MPS 10'-12' HT FENCE (FL).dwg 03/13/2018 - 10:41am intern1