



WELDED ALUMINUM RAILING

MASTER PLAN

HVHZ/NON-HVHZ FOR USE UP TO 60' TOP OF RAIL IN 175MPH EXPOSURE 'C'
ADDITIONAL ENGINEERING REQUIRED THEREAFTER.

VALID AS A GENERIC SEALED
MASTER PLAN ONLY FOR UP TO
**250 FT OF RESIDENTIAL OR
COMMERCIAL** RAILING AT (1)
LOCATION. SITE
SPECIFIC/ADDITIONAL
ENGINEERING REQUIRED
THEREAFTER.

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REQUIRED
02/22/2021
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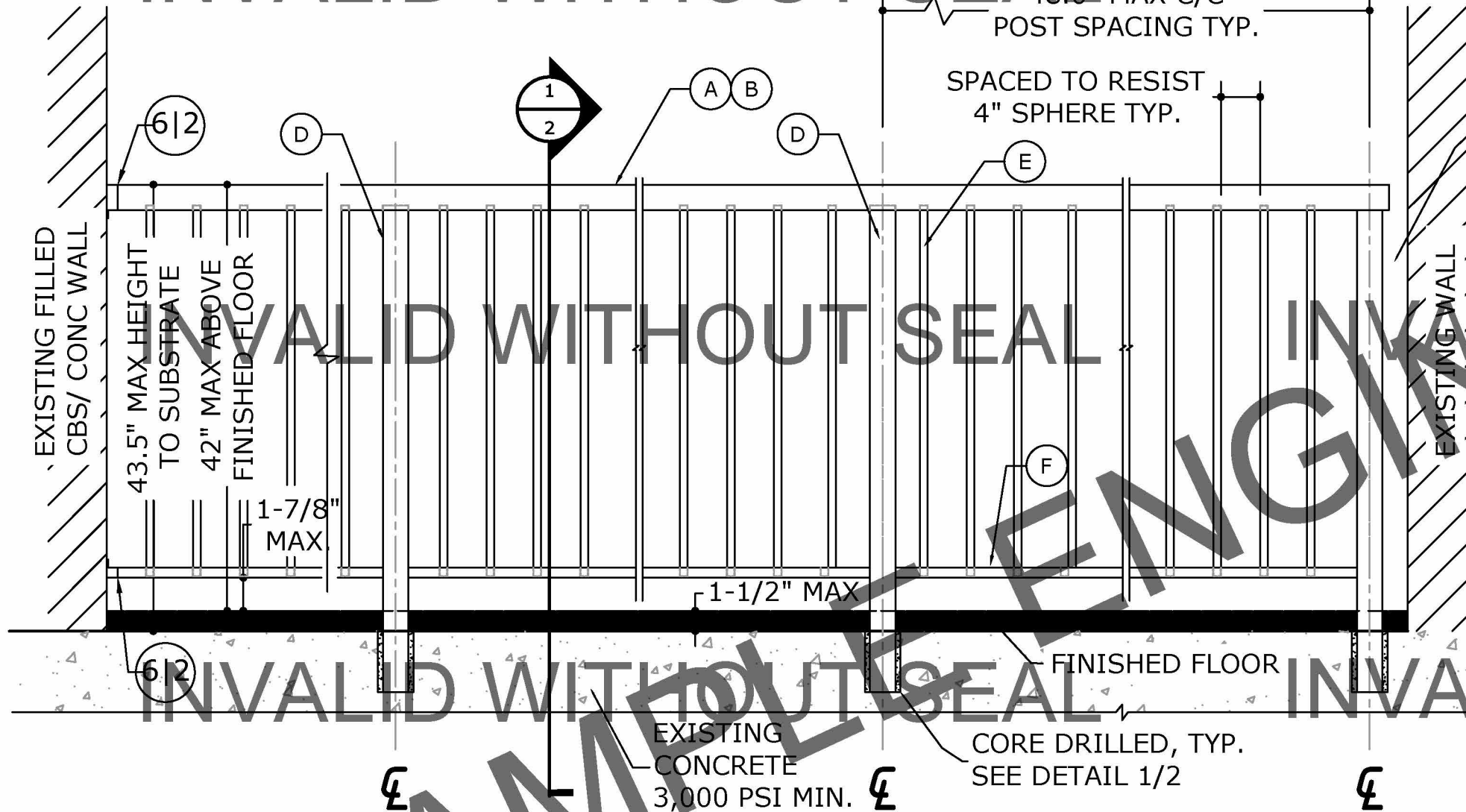
EASTERN METAL SUPPLY
4268 WESTROADS DR
WEST PALM BEACH, FL
(800) 423-2204
ALUMINUM SCREW TOGETHER
PICKET RAILING
FBC 7TH EDITION (2020) & IBC CODES

REMARKS	DATE	DRWN	CHKD	FLB	COB
2020 FBC	2/18/21				

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1 OF 2

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1 TYPICAL PICKET RAILING
1 SCALE: N.T.S. ELEVATION VIEW

FOR ALTERNATE CORE DRILL

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DESIGN NOTES

- THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 7TH EDITION (2020). ALSO APPLICABLE FOR THE FBC 6TH EDITION (2017), IBC/IRC (2015 & 2018), AS WELL AS CURRENT VERSIONS OF THE MN, NC, NJ, NY, OH, SC, & VA BUILDING CODES AS APPLICABLE. CODE ENFORCED COMPLIES WITH STATE OF SEAL AND IF MULTIPLE VERSIONS ARE LISTED THEN MOST STRINGENT APPLIES. DESIGN SHALL UTILIZE ASD DESIGN METHOD USING ASCE 7-16 OR ASCE 7-10 CODES FOR SITE SPECIFIC APPLICATIONS AS APPLICABLE.
- THIS RAILING IS DESIGNED TO MEET SECTIONS OF THE CODE GOVERNING ELEVATED BALCONIES AND STRUCTURAL RAILINGS (200LB POINT LOAD, 50PLF TOPCAP LOAD, 50LB POINT LOAD UPON 15F OF INFILL). RAILING DESIGNED FOR WIND LOADING PER CHAP 16 HVHZ, NON-HVHZ & THE PROVISIONS OF ASCE 7, Vult = 175 MPH, Vasd = 135.5 MPH, EXPOSURE 'C', AS 70% OPEN SIGN USING "ASD" METHODOLOGY.
- INSTALLATION HEIGHT <= 60 FEET GROUND TO TOP OF RAIL.
- ALL ALUMINUM EXTRUSIONS TO BE 6063-T6 ALLOY (UNLESS OTHERWISE NOTED) THE THICKNESS OF ALL EXTRUSIONS SHALL BE AS SHOWN ON THE DRAWING.
- ALUMINUM WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE BUILDING CODE WITH WELD FILLER ALLOYS MEETING ANSI/AWS A5.10 STANDARDS TO ACHIEVE ULTIMATE DESIGN STRENGTH IN ACCORDANCE WITH THE 2015 ALUMINUM DESIGN MANUAL TABLE A.3.6. ALL ALUMINUM CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE TOLERANCES, QUALITY AND METHODS OF CONSTRUCTION AS SET FORTH IN IBC/FBC SECTION 2003.2. MINIMUM WELD IS 1/2" THROAT FULL PERIMETER FILLET WELD UNLESS OTHERWISE NOTED.
- ALL FLOOR FINISHES SHALL BE BY OTHERS AND SHALL NOT EXCEED 1 1/2" MAXIMUM, OTHERWISE THEY SHALL BE SEPARATELY CERTIFIED TO TRANSFER ALL LOADING TO THE PROJECT SUPERSTRUCTURE. DIMENSIONS ARE POST-FLOOR FINISHES.
- ALL SCREWS TO BE ANSI 300 SERIES STAINLESS STEEL WITH 50 KSI MINIMUM YIELD AND 90 KSI TENSILE STRENGTH.
- POST EMBEDMENT INTO EXISTING CONCRETE SLAB SHALL BE PERFORMED WITH HOLE SIZE AS SHOWN ON THIS DRAWING. INSTALLATION INTO EXISTING REINFORCED CONCRETE, PRESTRESSED OR POST TENSIONED SLABS SHALL BE CAREFULLY PERFORMED SO THAT THE EXISTING REBARS OR CABLES ARE NOT DAMAGED. PRESET HOLES ON CONCRETE ARE ALSO ALLOWED AS LONG AS ARE PERFORMED WITH SIZES AS REQUIRED ON THIS DRAWING.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS. ALUMINUM MEMBERS IN CONTACT WITH CONCRETE SHALL BE PROTECTED WITH ALKALI-RESISTANT COATING, SUCH AS HEAVY BODIED BITUMINOUS PAINT OR WATER-WHITE METHACRYLATE LACQUER.
- CONTRACTOR IS RESPONSIBLE FOR MEETING OR EXCEEDING ALL APPLICABLE RAILING REQUIREMENTS AS PER F.B.C., N.F.P.A. AND ADA MANUALS IN APPLYING THESE GENERIC DRAWINGS TO ACTUAL CONDITIONS PARTICULAR TO A PROJECT.
- IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THAT THE EXISTING SLAB CAN SUSTAIN THE SUPERIMPOSED LOADS.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS.

GENERAL NOTES

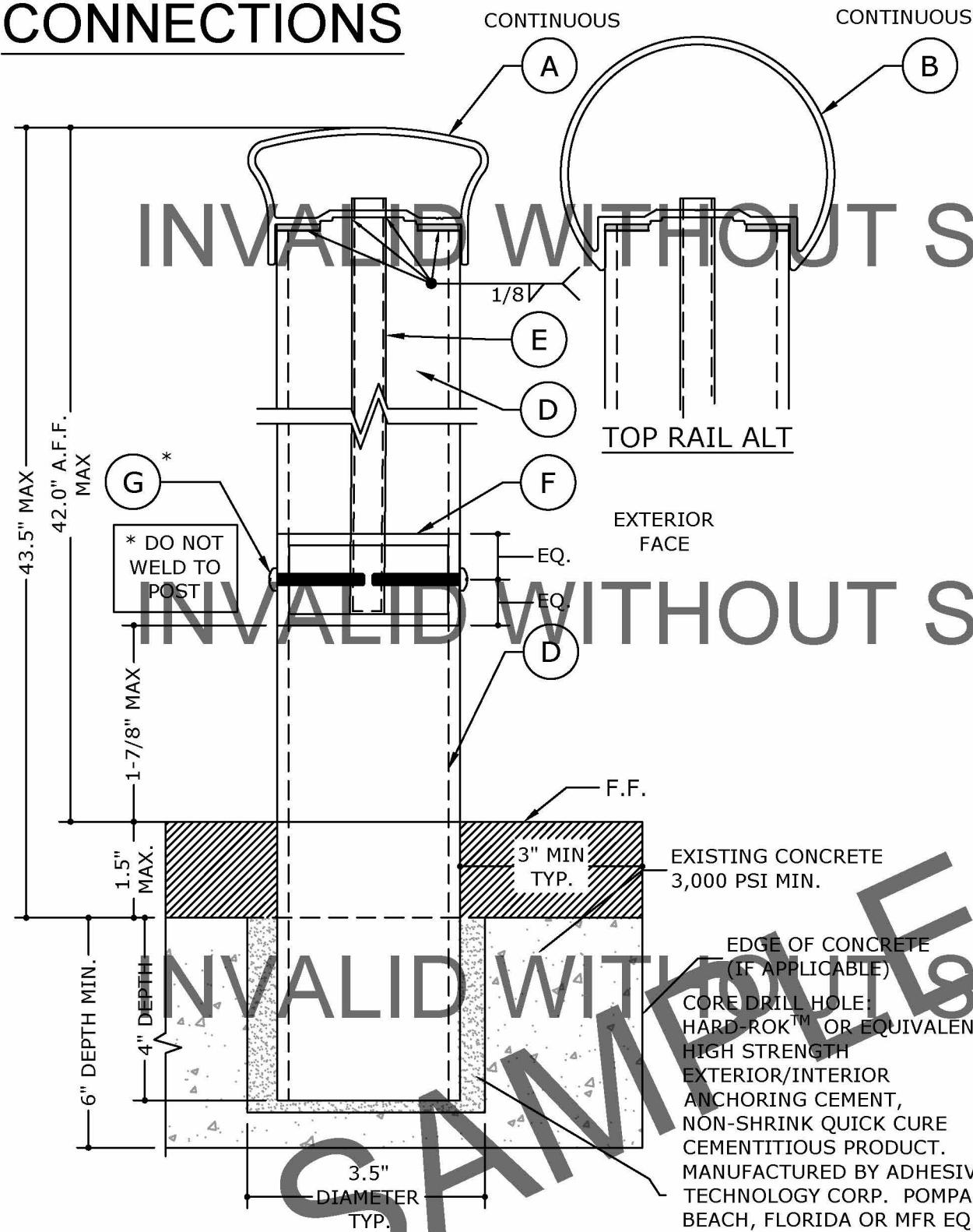
- COMPONENTS OF THIS RAILING SHALL BE DISTRIBUTED BY EASTERN METAL SUPPLY. PART NUMBERS USED IN CONSTRUCTION SHALL MATCH THOSE LISTED HEREIN OR CORRESPOND TO EASTERN PART EQUIVALENTS.
- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. 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. 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.
- 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.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

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CONNECTIONS

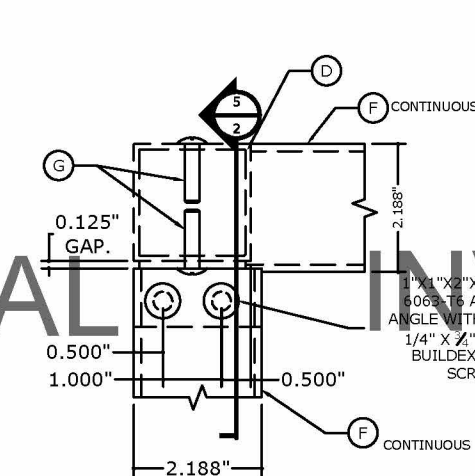


SECTION A-A

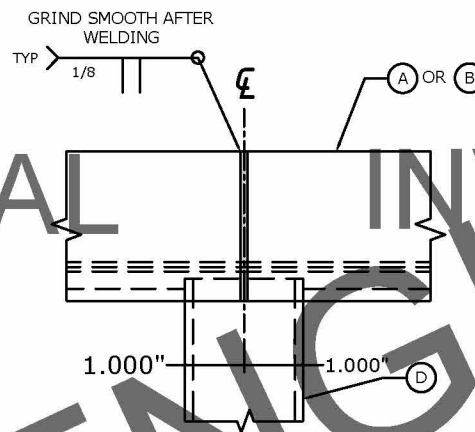
SECTION VIEW

1 TYPICAL PICKET RAILING

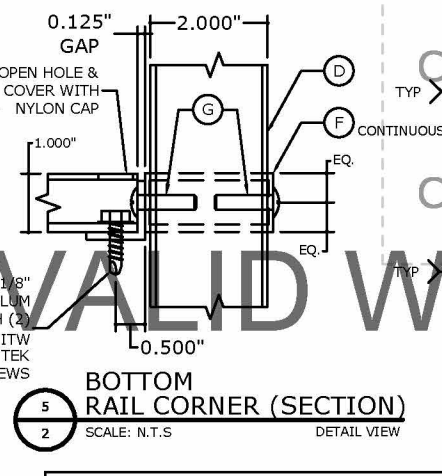
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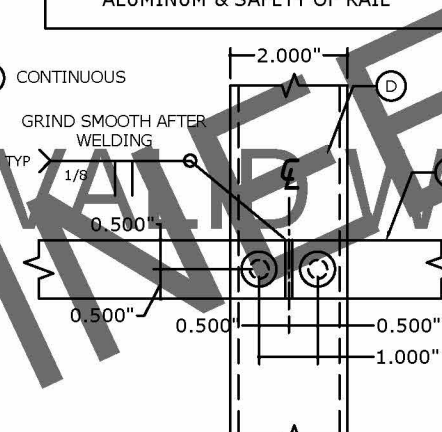
1 BOTTOM RAIL CORNER (PLAN) SCALE: N.T.S.



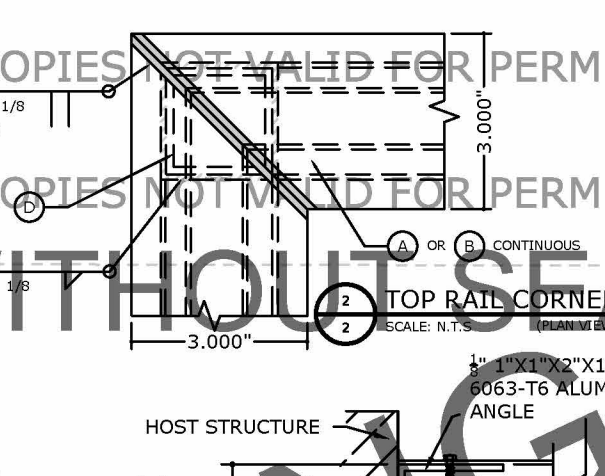
3 TOP RAIL SPLICE SCALE: N.T.S.



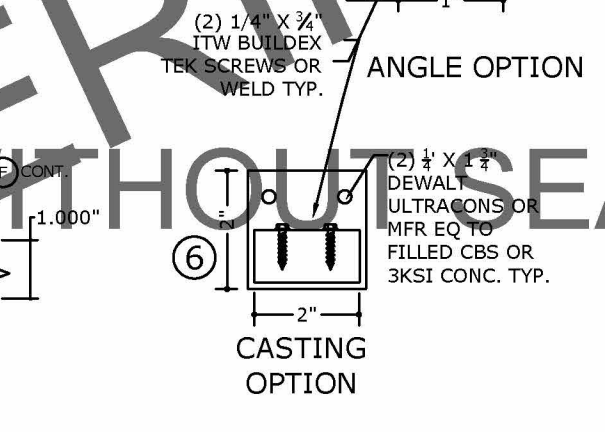
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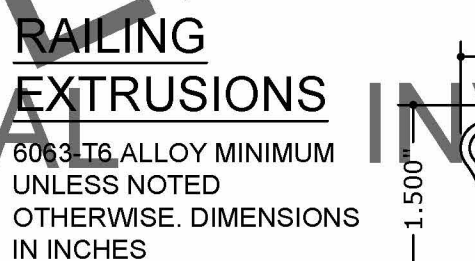
4 BOTTOM RAIL SPLICE SCALE: N.T.S.



5 TOP RAIL CORNER (PLAN) SCALE: N.T.S.



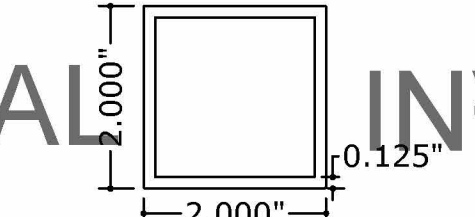
6 CONNECTION TO HOST OPTIONS SCALE: N.T.S.



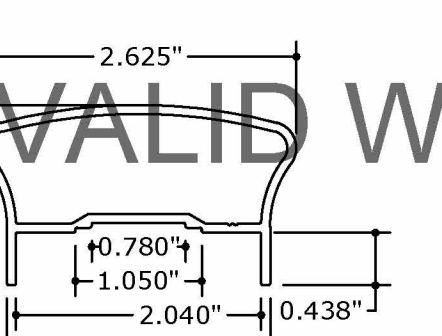
RAILING EXTRUSIONS

6063-T6 ALLOY MINIMUM UNLESS NOTED OTHERWISE. DIMENSIONS IN INCHES

6063-T6 ALLOY 28-63-215 SHPA ST-61381

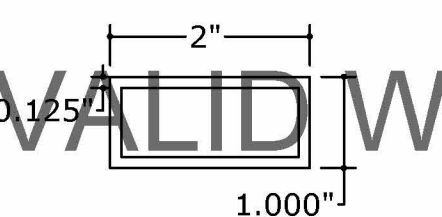


D TYPICAL POST 6061-T6 ALLOY 52-61-936 *SAPA 27662

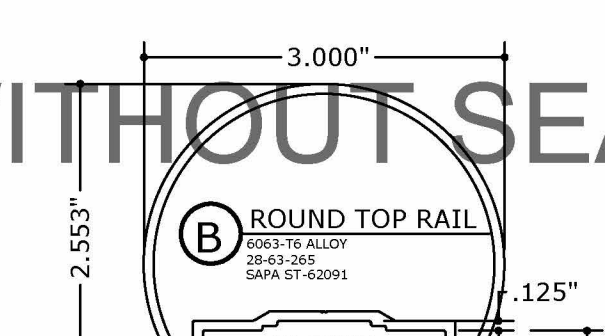


A REGULAR TOP RAIL 6063-T6 ALLOY 28-63-265 SHPA ST-62091

6063-T6 ALLOY 28-63-265 SHPA ST-62091

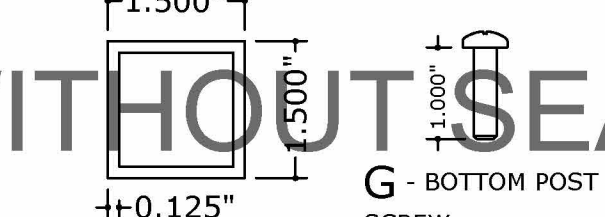


F BOTTOM RAIL 6063-T6 ALLOY 19-63-105 K-FH00488



B ROUND TOP RAIL 6063-T6 ALLOY 28-63-265 SHPA ST-62091

6063-T6 ALLOY 28-63-265 SHPA ST-62091



E PICKET 6063-T6 ALLOY 19-63-105 K-FH00488

G - BOTTOM POST SCREW 1/4"-20 SS. M.S. EASTERN PART 34966G

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