

ELITE 2000 RAILING SYSTEM

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PE# 0046549

07/17/2015

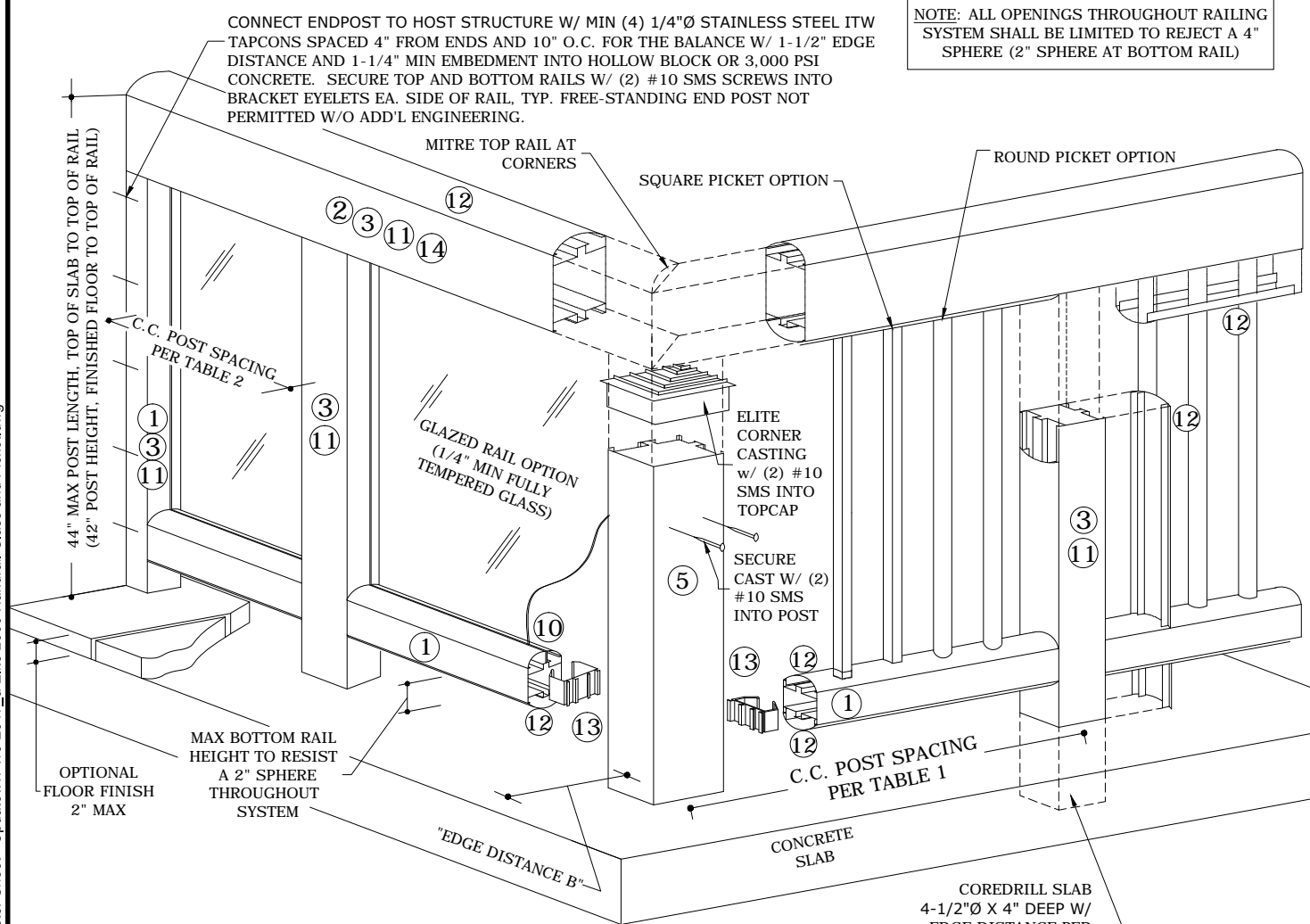


TABLE 1: POST SPECIFICATIONS FOR 42" HIGH OPEN / PICKET RAILING:

MAX WIND PRESS	POST SPAN C.C.	EDGE DIST. A	EDGE DIST. B	BASE MOMENT	BASE SHEAR	2.5 x 2.5 HD POST	2.5 x 4.0 HD POST
30.00 PSF	8.75 FT	7.50 IN	6.125 IN	1.56 K-FT	0.44 K	✓	✓
40.00 PSF	8.75 FT	7.50 IN	6.125 IN	1.56 K-FT	0.55 K	✓	✓
50.00 PSF	8.75 FT	7.50 IN	6.125 IN	1.56 K-FT	0.69 K	✓	✓
60.00 PSF	8.75 FT	7.75 IN	6.375 IN	1.56 K-FT	0.83 K	✓	✓
70.00 PSF	8.17 FT	7.75 IN	6.375 IN	1.58 K-FT	0.90 K	✓	✓
80.00 PSF	7.17 FT	7.75 IN	6.375 IN	1.58 K-FT	0.90 K	✓	✓
90.00 PSF	6.25 FT	7.75 IN	6.375 IN	1.55 K-FT	0.89 K	✓	✓
100.00 PSF	5.67 FT	7.75 IN	6.375 IN	1.56 K-FT	0.89 K	✓	✓
110.00 PSF	5.00 FT	7.75 IN	6.375 IN	1.52 K-FT	0.87 K	✓	✓
115.00 PSF	4.75 FT	7.75 IN	6.375 IN	1.51 K-FT	0.86 K	✓	✓
70.00 PSF	8.75 FT	8.00 IN	6.625 IN	1.69 K-FT	0.97 K	N/A	✓
80.00 PSF	8.00 FT	8.25 IN	6.875 IN	1.77 K-FT	1.01 K	N/A	✓
90.00 PSF	7.50 FT	8.50 IN	7.125 IN	1.86 K-FT	1.06 K	N/A	✓
100.00 PSF	7.25 FT	9.00 IN	7.625 IN	2.00 K-FT	1.14 K	N/A	✓
110.00 PSF	7.00 FT	9.25 IN	7.875 IN	2.12 K-FT	1.21 K	N/A	✓

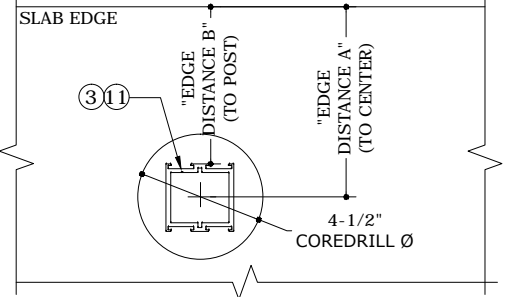
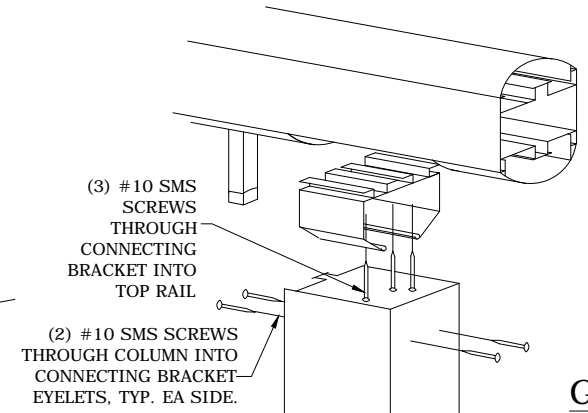
TABLE 2: POST SPECIFICATIONS FOR 42" HIGH SOLID / GLASS RAILING:

MAX WIND PRESS	POST SPAN C.C.	EDGE DIST. A	EDGE DIST. B	BASE MOMENT	BASE SHEAR	2.5 x 2.5 HD POST	2.5 x 4.0 HD POST
30.00 PSF	6.25 FT	7.50 IN	6.125 IN	1.14 K-FT	0.65 K	✓	✓
40.00 PSF	6.25 FT	7.50 IN	6.125 IN	1.52 K-FT	0.87 K	✓	✓
50.00 PSF	5.08 FT	7.50 IN	6.125 IN	1.55 K-FT	0.88 K	✓	✓
60.00 PSF	4.25 FT	7.75 IN	6.375 IN	1.55 K-FT	0.89 K	✓	✓
65.00 PSF	3.92 FT	7.75 IN	6.375 IN	1.55 K-FT	0.89 K	✓	✓
80.00 PSF	4.00 FT	8.75 IN	7.375 IN	1.95 K-FT	1.11 K	N/A	✓
90.00 PSF	4.00 FT	9.50 IN	8.125 IN	2.19 K-FT	1.25 K	N/A	✓
100.00 PSF	3.67 FT	9.75 IN	8.375 IN	2.24 K-FT	1.28 K	N/A	✓
110.00 PSF	3.33 FT	9.75 IN	8.375 IN	2.23 K-FT	1.28 K	N/A	✓

TABLE NOTES 1-2:

- MAX REQUIRED WIND PRESSURE FOR RAILING SYSTEM TO BE DETERMINED BY OTHERS ON A SITE-SPECIFIC BASIS AND SHALL NOT EXCEED THE ALLOWABLE VALUES LISTED HEREIN (WIND PRESSURES LISTED ABOVE MAY NOT BE REDUCED FOR RAIL POROSITY).
- LINEAR INTERPOLATION BETWEEN VALUES IN THE ABOVE TABLES BY A PROFESSIONAL ENGINEER IS PERMITTED.
- "EDGE DISTANCE A" IS MEASURED FROM CENTER OF COREDRILL TO NEAREST CONCRETE EDGE. "EDGE DISTANCE B" IS MEASURED FROM FACE OF POST; SEE DETAIL BELOW.
- SLAB DEPTH SHALL BE = 1.5 x EDGE DISTANCE "A".
- MOMENT AND SHEAR TO BE CONSIDERED SIMULTANEOUS.
- ALL RAILS SHALL BE 42" ABOVE FINISHED FLOOR (A.F.F.), NO EXCEPTIONS.
- TABLES INCLUDE 2" POST HEIGHT ALLOWANCE FOR TILE/FLOOR FINISH. SITE-SPECIFIC ENGINEERING IS REQUIRED FOR RAIL HEIGHTS GREATER THAN 42" A.F.F.

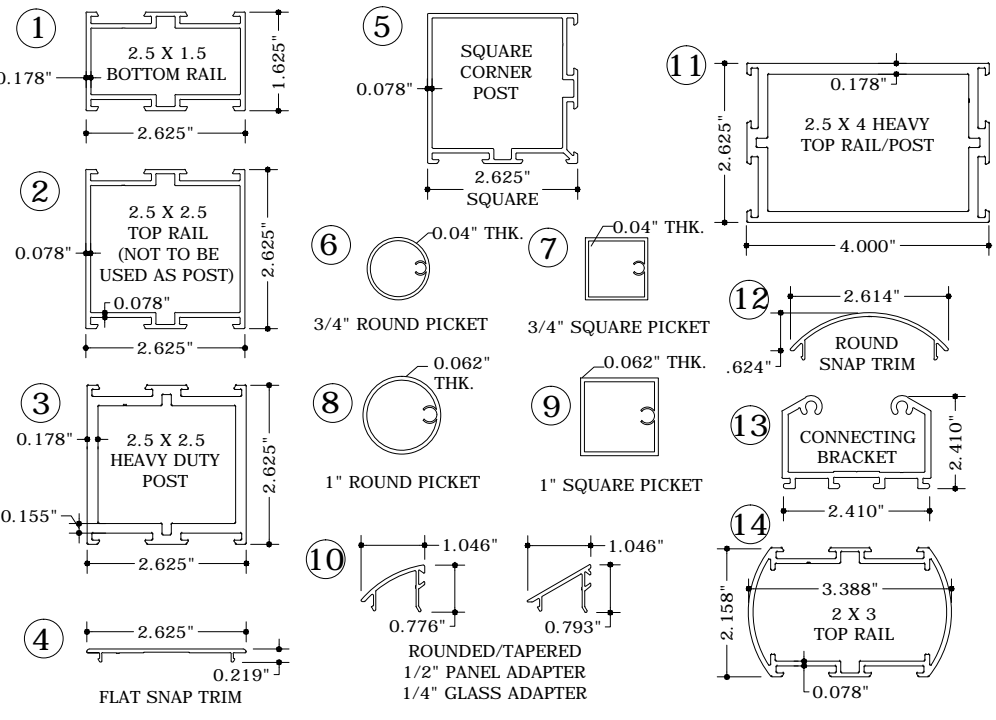
TYP. FASTENING DETAIL AT TOP RAIL



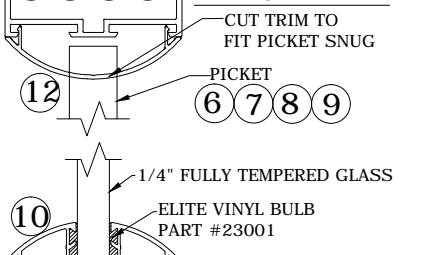
GENERAL NOTES COREDRILL EDGE DISTANCE

- THIS DETAIL ONLY VALID WITH RED 'ELITE' STAMP ACROSS THE PAGE. PHOTOCOPIES AND UNSEALED DOCUMENTS SHALL NOT BE ACCEPTED. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
- THIS SYSTEM HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FIFTH EDITION (2014). WIND LOAD DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE.
- THE EXISTING STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED RAILING SYSTEM AS DETERMINED BY OTHERS OR BY SPECIAL ENGINEERING BY UNDERSIGNED ENGINEER ATTACHED HERETO. NO WARRANTY IS CONTAINED HEREIN.
- THIS RAILING IS DESIGNED TO MEET SECTIONS OF THE CODE GOVERNING ELEVATED BALCONIES AND STRUCTURAL RAILINGS (200LB POINT LOAD, 50PLF TOP CAP LOAD, 50LB POINT LOAD UPON 1SF OF INFILL (NON-HVHZ CRITERIA FBC 1607.8.1) AND 25 PSF UPON GROSS AREA OF GUARD (HVHZ CRITERIA FBC 1618.4.6). WIND LOADING PRESSURE IS BASED ON 57% POROSITY FOR OPEN PICKET SYSTEM OR 5% OPEN FOR GLASS RAIL SYSTEM.
- FULLY TEMPERED GLASS AND RAILING SYSTEMS SHALL COMPLY WITH FBC SECTION 2406.1.1, ANSI Z97.1 CLASS "A" AND CATEGORY II OF CONSUMER PRODUCT SAFETY COMMISSION STANDARD CPSC 16 CFR 1201.
- THE EXISTING HOST STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED RAILING AS VERIFIED BY THE ONSITE DESIGN PROFESSIONAL. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS CONTAINED HEREIN. DESIGN FORCES SHALL BE AS NOTED ON TABLES 1 AND 2.
- FABRICATION AND / OR DISTRIBUTION OF ALL MATERIALS TO BE BY ELITE ALUMINUM ONLY IN ACCORDANCE WITH APPROVED FABRICATION METHODS.
- ALL MATERIALS USED & FABRICATION METHODS SHALL CONFORM TO THE MANUFACTURER'S PUBLISHED AND APPROVED REQUIREMENTS.
- EMBEDMENT DEPTHS SPECIFIED HEREIN ARE DEPTHS INTO SOLID SUBSTRATE AND DO NOT INCLUDE THICKNESS OF STUCCO OR OTHER FINISHES.
- ALL FASTENERS TO BE #12 OR GREATER ASTM F593 CW 316 STAINLESS STEEL, SAE GRADE 5 CADMIUM PLATED OR OTHERWISE CORROSION RESISTANT MATERIAL AND SHALL COMPLY WITH THE 2010 ALUMINUM DESIGN MANUAL BY THE ALUMINUM ASSOCIATION, INC., & APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
- ALL EXTRUDED MEMBERS SHALL BE ALUMINUM ALLOY TYPE 6063-T6.
- ALL CONCRETE TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 7 DAYS. EPOXY/GROUT SHALL REACH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI IN 7 DAYS. ALL CONCRETE, EPOXY/GROUT SHALL BE NON-REACTIVE.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et al. INDEMNIFIES AND SAVES HARMLESS THIS ENGINEER FOR ALL COSTS AND DAMAGES INCLUDING LEGAL FEES AND APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, AND CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, AND FEDERAL CODES AND FROM DEVIATIONS OF THIS PLAN.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

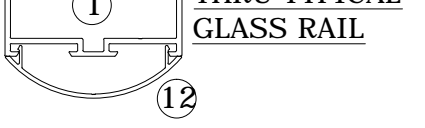
MEMBER EXTRUSIONS



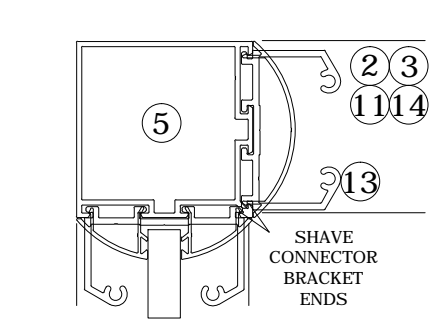
SECTION THRU TYPICAL RAIL



SECTION THRU TYPICAL GLASS RAIL



TYP. FASTENING DETAIL AT BOTTOM RAIL



SECTION THRU CORNER POST AND CONNECTORS

VALID FOR 1 PERMIT ONLY U.N.O. VALID ONLY WITH ORIGINAL ENGINEER SEAL

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ELITE Building Innovation Panel Products

ELITE 2000 RAILING SYSTEM MASTER PLAN SHEET
GLASS OR OPEN PICKET DESIGN
FLORIDA BUILDING CODE FIFTH EDITION (2014)

REMARKS	DRWN	CHKD	DATE
UPDATE FOR 2010 FBC 5TH EDITION	CSL	TSB	11/23/12
	CSL	TSB	07/17/15

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SCALE: N.T.S.