



ELITE 2000 GLASS & PICKET RAILING

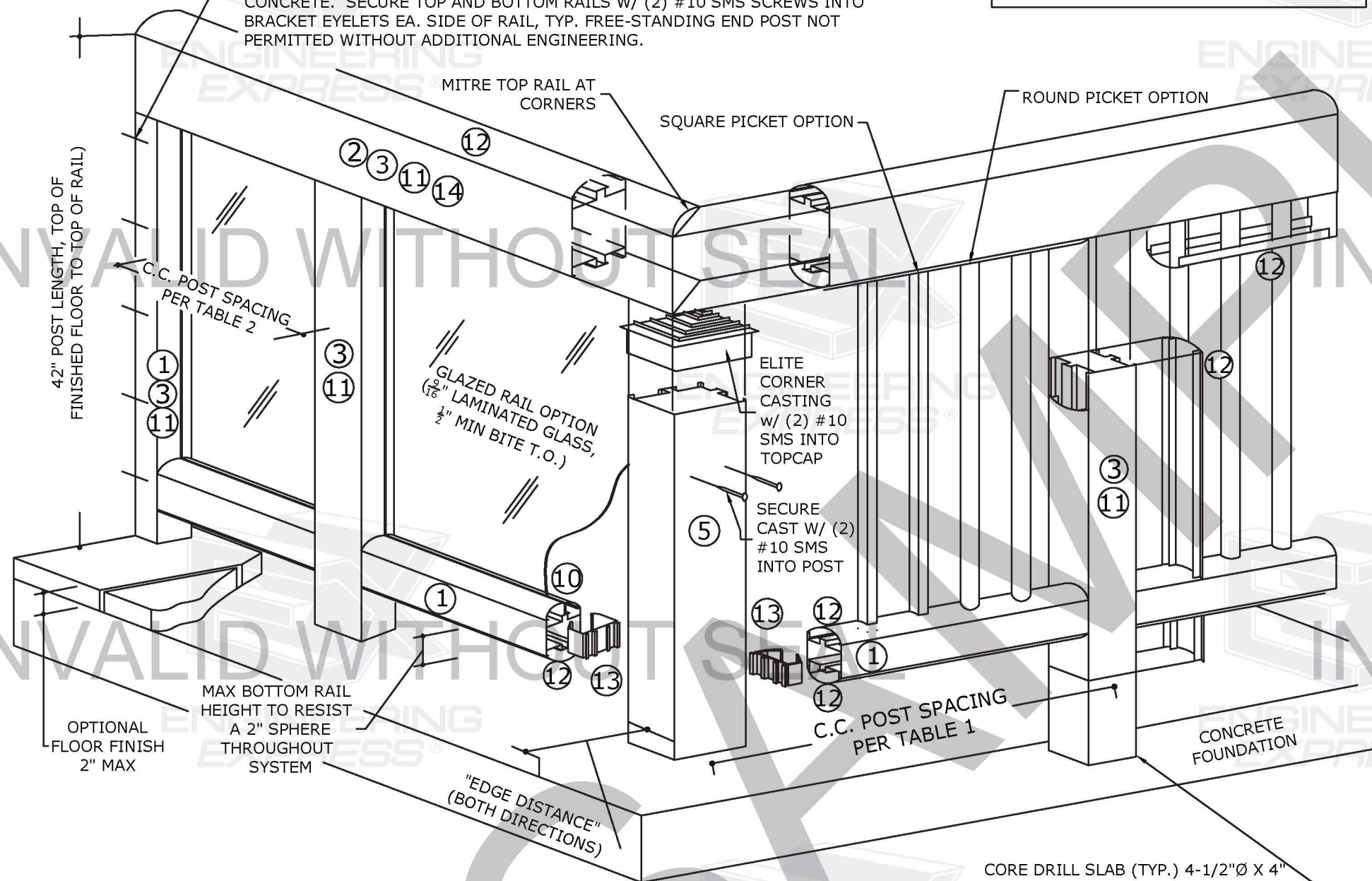
MASTER PLAN SHEET

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CONNECT ENDPOST TO HOST STRUCTURE WITH (4) 1/4"Ø STAINLESS STEEL ITW /DEWALT TAPCONS SPACED 4" FROM ENDS AND MAX 10" O.C. WITH 1-1/2" EDGE DISTANCE AND 1-1/4" MIN EMBEDMENT INTO GROUT FILLED BLOCK OR 3KSI CONCRETE. SECURE TOP AND BOTTOM RAILS W/ (2) #10 SMS SCREWS INTO BRACKET EYELETS EA. SIDE OF RAIL, TYP. FREE-STANDING END POST NOT PERMITTED WITHOUT ADDITIONAL ENGINEERING.

NOTE: ALL OPENINGS THROUGHOUT RAILING SYSTEM SHALL BE LIMITED TO REJECT A 4" SPHERE (2" SPHERE AT BOTTOM RAIL)



GENERAL NOTES

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DESIGN:

1. POSITIVE & NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS USING ASD METHOD OF ASCE 7-16 OR ASCE 7-10 AS APPLICABLE. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE 7TH EDITION FLORIDA BUILDING CODE (2020), 6TH EDITION FLORIDA BUILDING CODE (2017), 2012/2015/2018 INTERNATIONAL BUILDING CODES, 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 LISTED THEN MOST STRINGENT APPLIES.
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3. 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.
4. THIS RAILING IS DESIGNED TO MEET SECTIONS OF THE CODE GOVERNING ELEVATED BALCONIES AND STRUCTURAL RAILINGS (FL 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 (FL HVHZ CRITERIA FBC 1618.4.6). WIND LOADING PRESSURE IS BASED ON 57% POROSITY FOR OPEN PICKET SYSTEM.
5. LAMINATED GLASS SHALL COMPLY WITH FBC/IBC SECTION 2406.1.1, ANSI Z97.1 CLASS "A" AND CATEGORY II OF CONSUMER PRODUCT SAFETY COMMISSION STANDARD CPSC 16 CFR 1201 & ALL REQUIREMENTS OF THE APPLICABLE BUILDING CODE AS VERIFIED BY OTHERS FOR USE.
6. FABRICATION AND / OR DISTRIBUTION OF ALL MATERIALS TO BE BY ELITE ALUMINUM ONLY IN ACCORDANCE WITH APPROVED FABRICATION METHODS.
7. ALL MATERIALS USED & FABRICATION METHODS SHALL CONFORM TO THE MANUFACTURER'S PUBLISHED AND APPROVED REQUIREMENTS.
8. EMBEDMENT DEPTHS SPECIFIED HEREIN ARE DEPTHS INTO SOLID SUBSTRATE AND DO NOT INCLUDE THICKNESS OF STUCCO OR OTHER FINISHES.
9. 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 2015 ALUMINUM DESIGN MANUAL BY THE ALUMINUM ASSOCIATION, INC., & APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
10. ALL EXTRUDED MEMBERS SHALL BE ALUMINUM ALLOY TYPE 6063-T6.
11. 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.
12. THE CONTRACTOR IS RESPONSIBLE TO INSULATE DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
13. ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS.
14. 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.
15. 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.
16. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

CORE DRILL SLAB (TYP.) 4-1/2"Ø X 4" DEEP WITH EDGE DISTANCE SPACED PER TABLES (1) OR (2), EMBED POST, AND FILL WITH NON-SHRINK IRON-FREE EPOXY OR GROUT (8,000 PSI MIN), SITE SPECIFIC ENGINEERING NEEDED FOR SLABS LESS THAN 7" THICK OR LESS THAN 4KSI IN STRENGTH. AVOID ALL POST TENSION REINFORCING.

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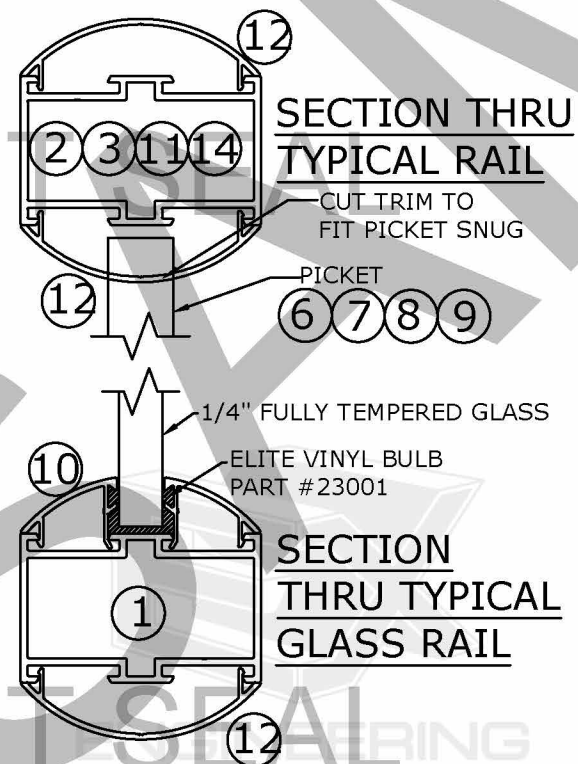
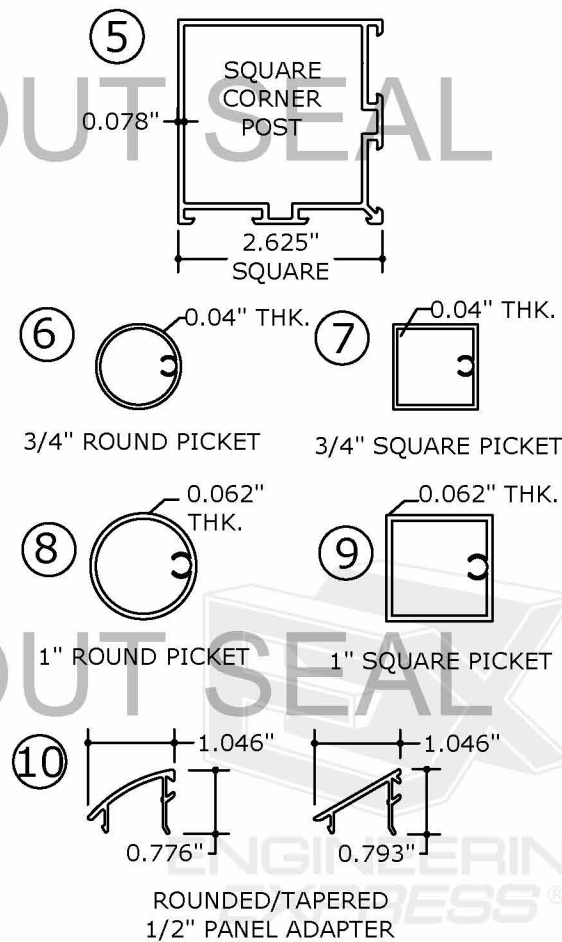
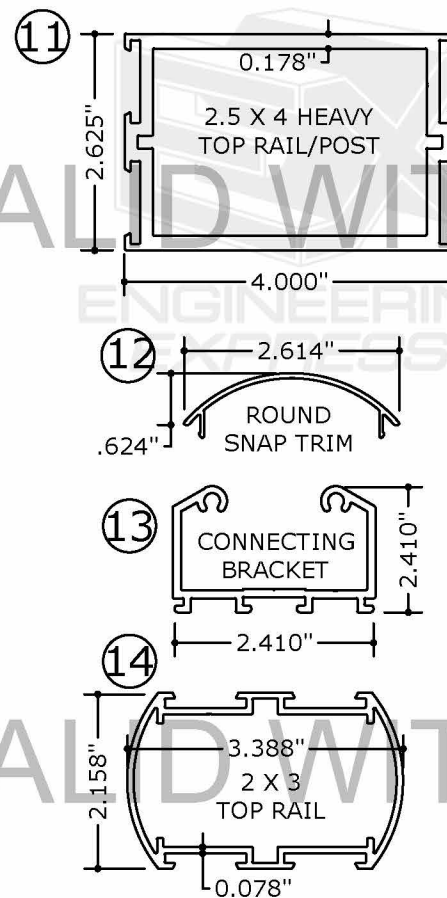
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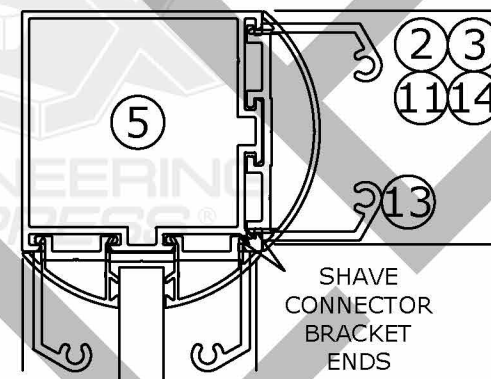
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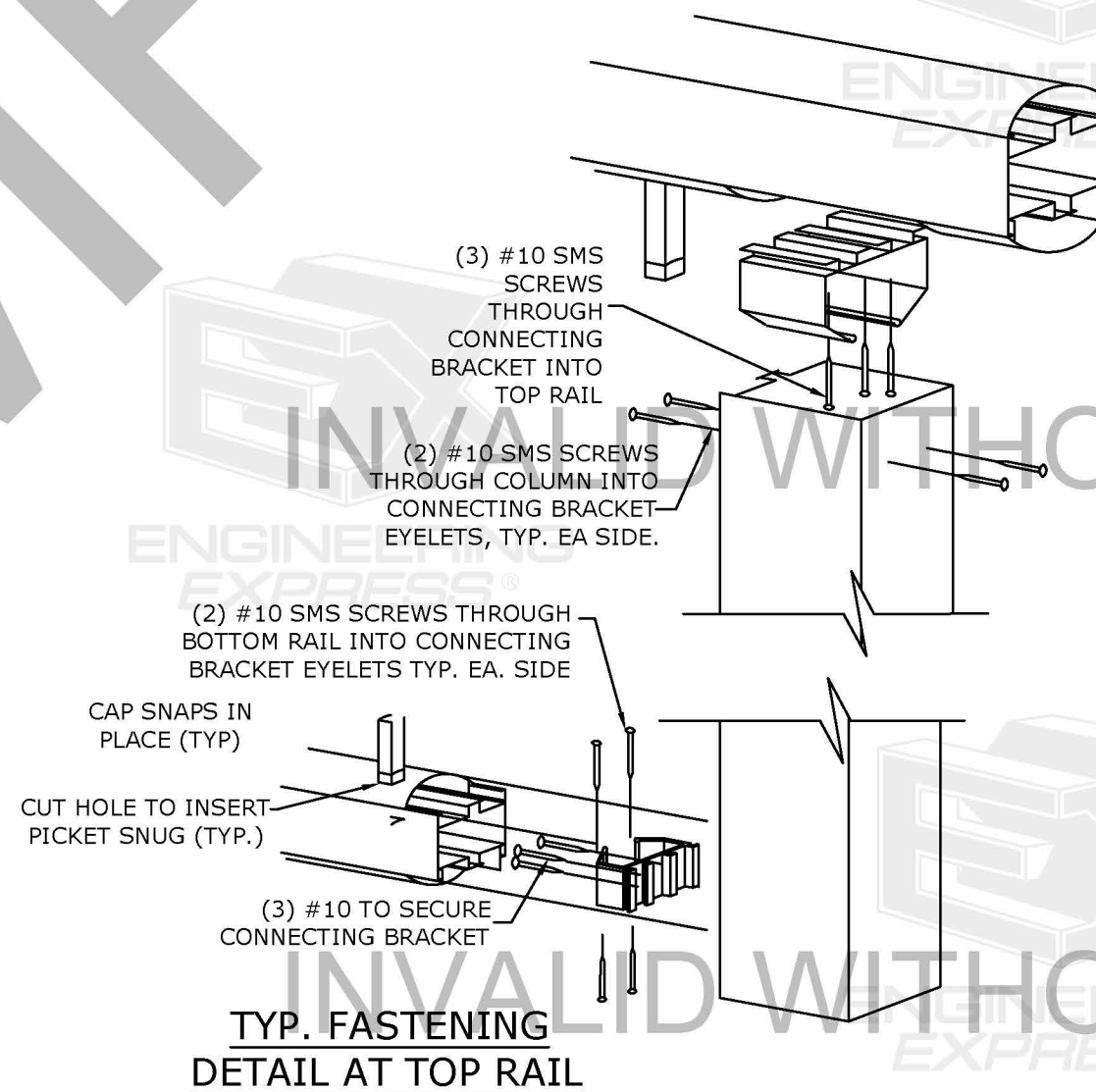
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SECTION THRU CORNER
POST & CONNECTORS



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

		③			⑪	
MAX WIND PRESSURE	MAX POST SPAN	EDGE DISTANCE	2.5 x 2.5 HD POST	2.5 x 4.0 HD POST		
30.00 PSF	8.0 FT	6.125 IN	✓	✓		
40.00 PSF	8.0 FT	6.125 IN	✓	✓		
50.00 PSF	8.0 FT	6.125 IN	✓	✓		
60.00 PSF	8.0 FT	6.375 IN	✓	✓		
70.00 PSF	8.0 FT	6.375 IN	✓	✓		
80.00 PSF	7.0 FT	6.375 IN	✓	✓		
90.00 PSF	6.0 FT	6.375 IN	✓	✓		
100.00 PSF	5.5 FT	6.375 IN	✓	✓		
110.00 PSF	5.0 FT	6.375 IN	✓	✓		
115.00 PSF	4.0 FT	6.375 IN	✓	✓		
70.00 PSF	8.0 FT	6.625 IN	N/A	✓		
80.00 PSF	8.0 FT	6.875 IN	N/A	✓		
90.00 PSF	7.5 FT	7.125 IN	N/A	✓		
100.00 PSF	7.0 FT	7.625 IN	N/A	✓		
110.00 PSF	6.0 FT	7.875 IN	N/A	✓		

TABLE NOTES

1. WORK DESIGNED IN ACCORDANCE WITH THE 2015 ALUMINUM DESIGN MANUAL.
 2. MAX REQUIRED WIND PRESSURE 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).
 3. LINEAR INTERPOLATION BETWEEN VALUES IN THE ABOVE TABLES BY A DESIGN PROFESSIONAL IS PERMITTED.
 4. "EDGE DISTANCE A" IS MEASURED FROM CENTER OF CORE DRILL TO NEAREST CONCRETE EDGE. "EDGE DISTANCE B" IS MEASURED FROM FACE OF POST.
 5. SLAB DEPTH SHALL BE = 1.5 x ANCHOR EMBEDMENT.
 6. TOP RAIL SHALL BE 42" ABOVE FINISHED FLOOR (A.F.F.)
 7. TABLES INCLUDE 2" POST HEIGHT ALLOWANCE FOR TILE/FLOOR FINISH.
- SITE-SPECIFIC ENGINEERING IS REQUIRED FOR RAIL HEIGHTS GREATER THAN 42" A.F.F.

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

		③			⑪	
MAX WIND PRESSURE	POST SPAN C.C.	EDGE DISTANCE	2.5 x 2.5 HD POST	2.5 x 4.0 HD POST		
30.00 PSF	6.0 FT	7.50 IN	✓	✓		
40.00 PSF	6.0 FT	7.50 IN	✓	✓		
50.00 PSF	5.0 FT	7.50 IN	✓	✓		
60.00 PSF	4.0 FT	7.75 IN	✓	✓		
70.00 PSF	4.0 FT	7.75 IN	✓	✓		
80.00 PSF	4.0 FT	8.75 IN	N/A	✓		
90.00 PSF	3.5 FT	9.50 IN	N/A	✓		
100.00 PSF	3.5 FT	9.75 IN	N/A	✓		
110.00 PSF	3.0 FT	9.75 IN	N/A	✓		

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