



### ENGINEERING STAMP AVAILABLE IN 13 STATES.

(FLORIDA, GEORGIA, NORTH CAROLINA, SOUTH CAROLINA, VIRGINIA, WEST VIRGINIA, INDIANA, TENNESSEE, ALABAMA, LOUISIANA, MISSISSIPPI, TEXAS AND COROLADO).

### APPLICABLE CODES, REGULATIONS & STANDARDS

- 1. 2023 FLORIDA BUILDING CODE, BUILDING (8TH EDITION)
- 2. 2023 FLORIDA BUILDING CODE, RESIDENTIAL (8TH EDITION)
- 3. ASCE 7-22: MINIMUM DESIGN LOADS ON BUILDINGS AND OTHER STRUCTURES
- 4. ACI 318-19: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- 6. 2020 ALUMINUM DESIGN MANUAL

### WIND LOADS (SEC 1609)

- 1. RISK CATEGORY=II
- 2. BASIC WIND SPEED=160MPH
- 3. EXPOSURE CATEGORY = D

### LIVE LOADS FOR NON-RESIDENTIAL STRUCTURES (SEC 1607.8)

- 1. GUARDRAILS AND HANDRAILS
- A. LINEAR LOAD OF 50 PLF
- B. CONCENTRATED LOAD OF 200 LBF
- 2. INTERMEDIATE RAILS
- CONCENTRATED LOAD OF 50 LBF

LIVE LOADS FOR RESIDENTIAL STRUCTURES (TABLE R301.5)

GUARDS AND HANDRAILS = 200 PSF

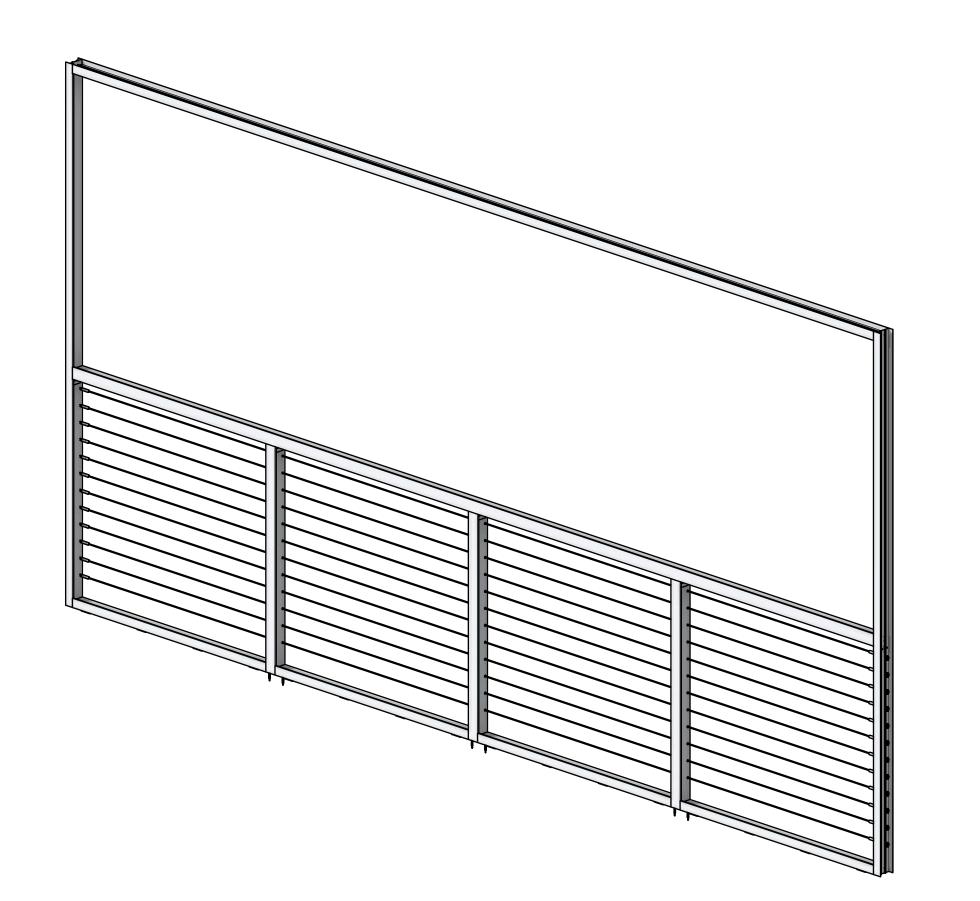
GUARD IN-FILL COMPONENTS = 50 PSF

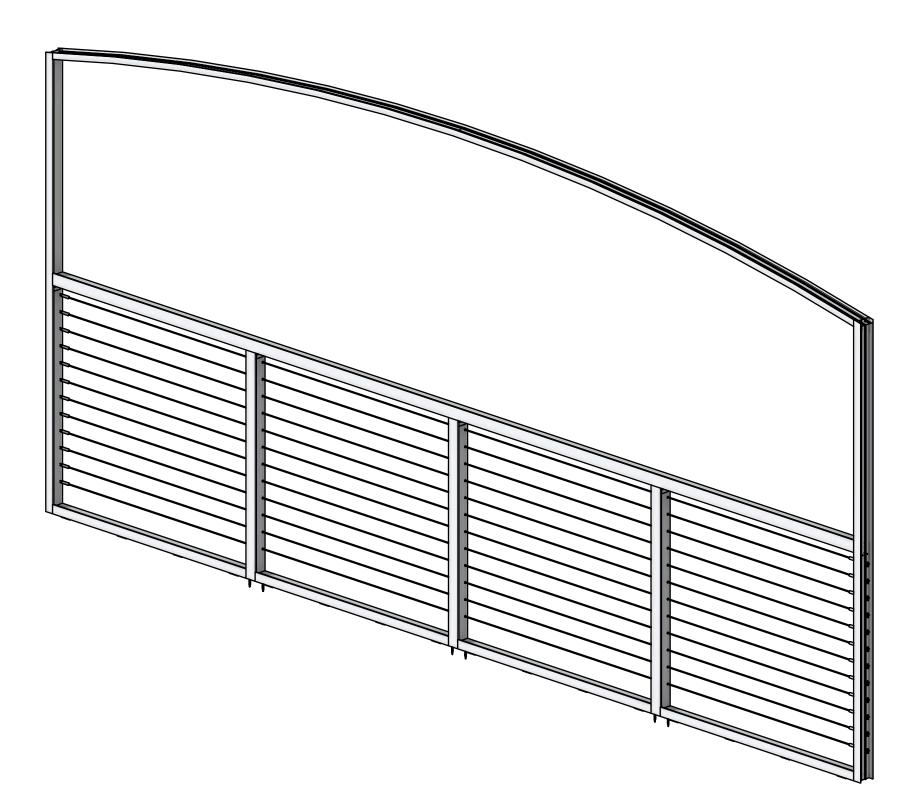
### GENERAL NOTES AND SPECIFICATIONS

- 1. THE STRUCTURES INDICATED HEREIN ARE DESIGNED TO BE INSTALLED WITH IN MASONRY OR WOOD FRAME HOST STRUCTURES OF ADEQUATE STRUCTURAL CAPACITY. THE CONTRACTOR SHALL VERIFY THAT THE HOST STRUCTURE IS IN GOOD CONDITION AND OF SUFFICIENT STRENGTH TO SUPPORT THE PROPOSED ADDITION.
- 2. ALUMINUM EXTRUSIONS SHALL MEET THE STRENGTH REQUIREMENTS OF ASTM B221 AFTER POWDER COATING.
- 3. ALL ALUMINUM EXTRUSIONS ARE TO BE A MINIMUM 6063-T6.
- 4. SITE SPECIFIC ENGINEERING REQUIRED FOR ALL INSTALLATIONS ABOVE AN ELEVATION OF 60 FT FROM GRADE.
- 5. THE SCHEMATIC SHOWN ON PAGE 3 AND 4 AS WELL AS THE DETAILS ON THE FOLLOWING PAGES ARE DESIGNED BASED ON THE PROVISIONS OF THE BUILDING CODE.
- 6. CABLES TO BE ATTACHED TO FRAME MEMBERS USING PUSH-LOCK TOGGLE TENSIONER ON ONE SIDE AND PUSH-LOCK TOGGLER NON-TENSIONER ON THE OTHER SIDE, WITH A WORKING LOAD RATING OF 750 LBF. SEE MANUFACTURER'S SPECIFICATIONS FOR DETAILS.

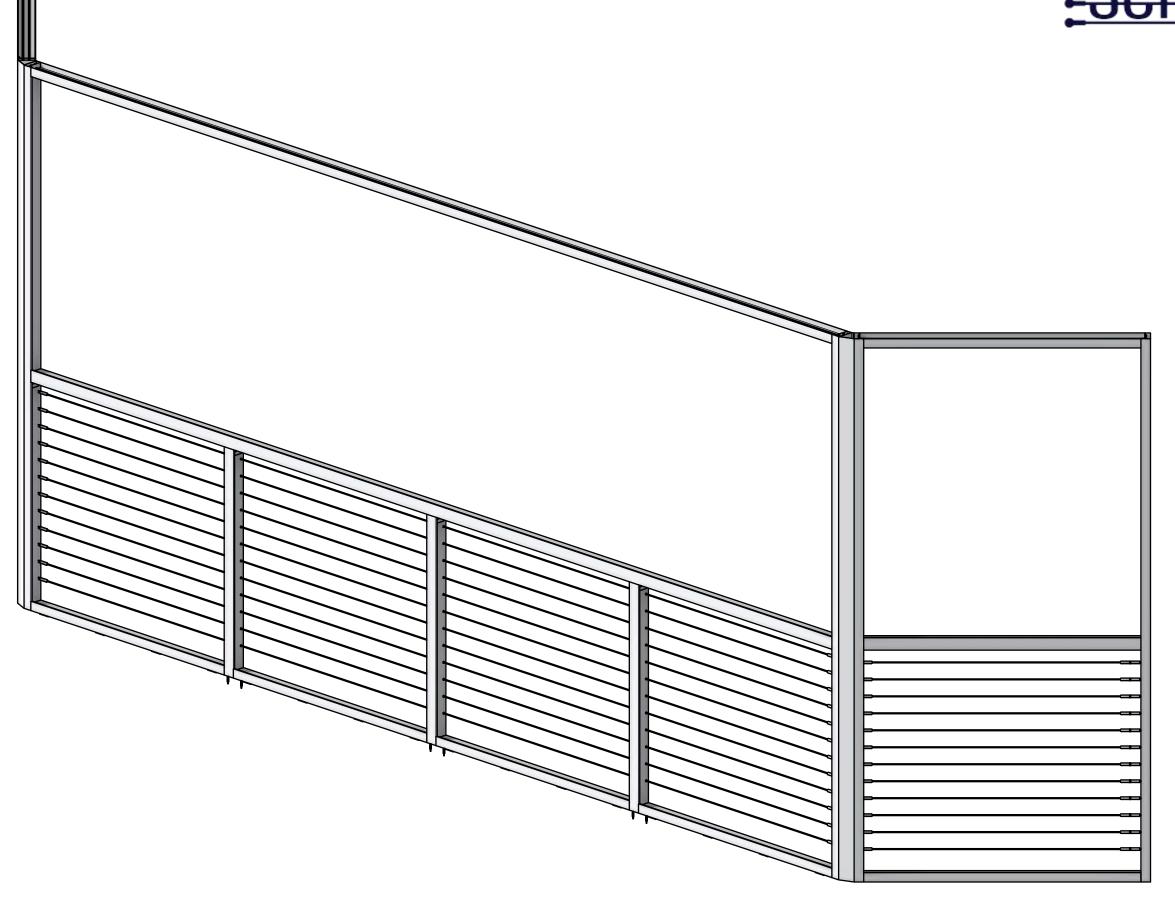
THE APPLICABILITY OF THIS DESIGN FOR ANY SITE-SPECIFIC PROJECT REQUIRES THE SIGN & SEAL OF A PROFESSIONAL ENGINEER.

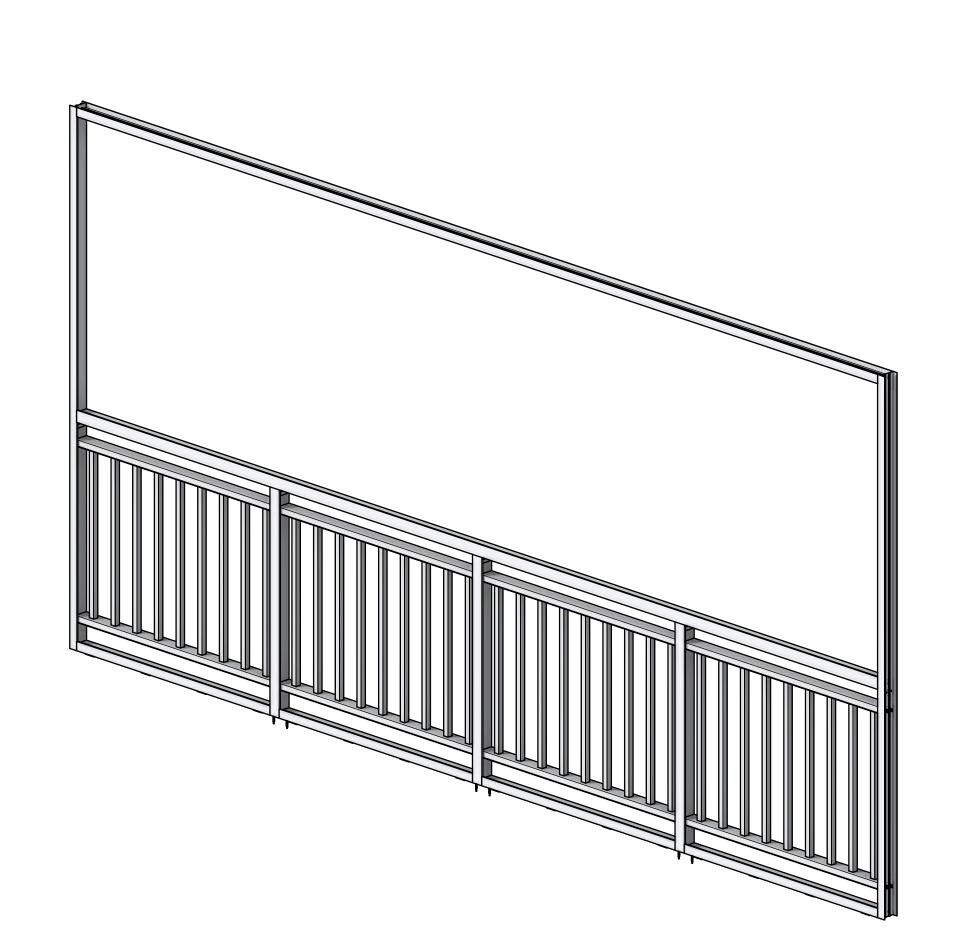
RAILING SYSTEM MAST









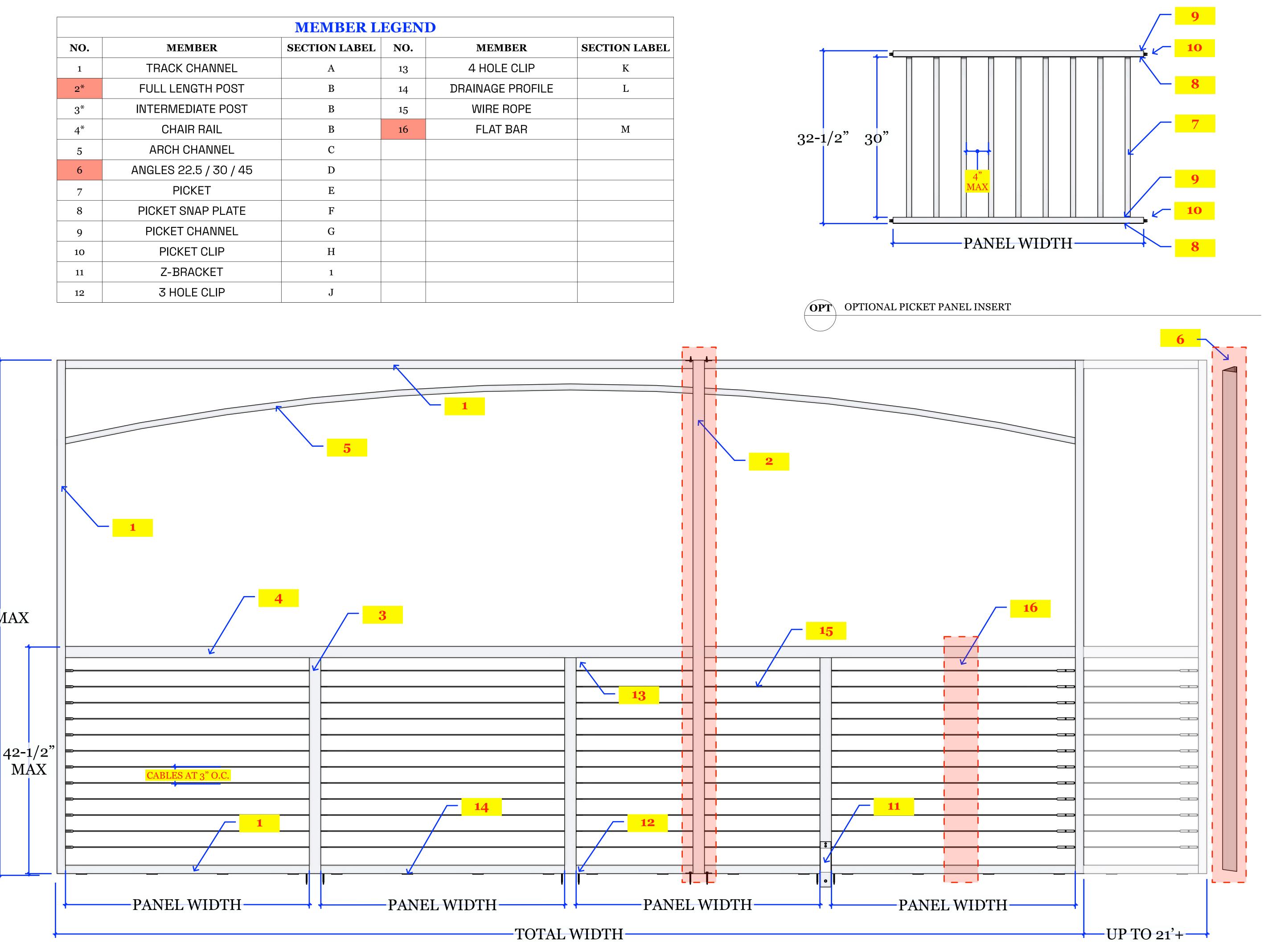




## AILING SYSTEM MASTER PLAN

US Patent NOs: US 11,125,013 B1

US 11,125,013 B1 US 11,603,705 B2



10' MAX

TYPICAL PANEL LAYOUT (CABLE VERSION)



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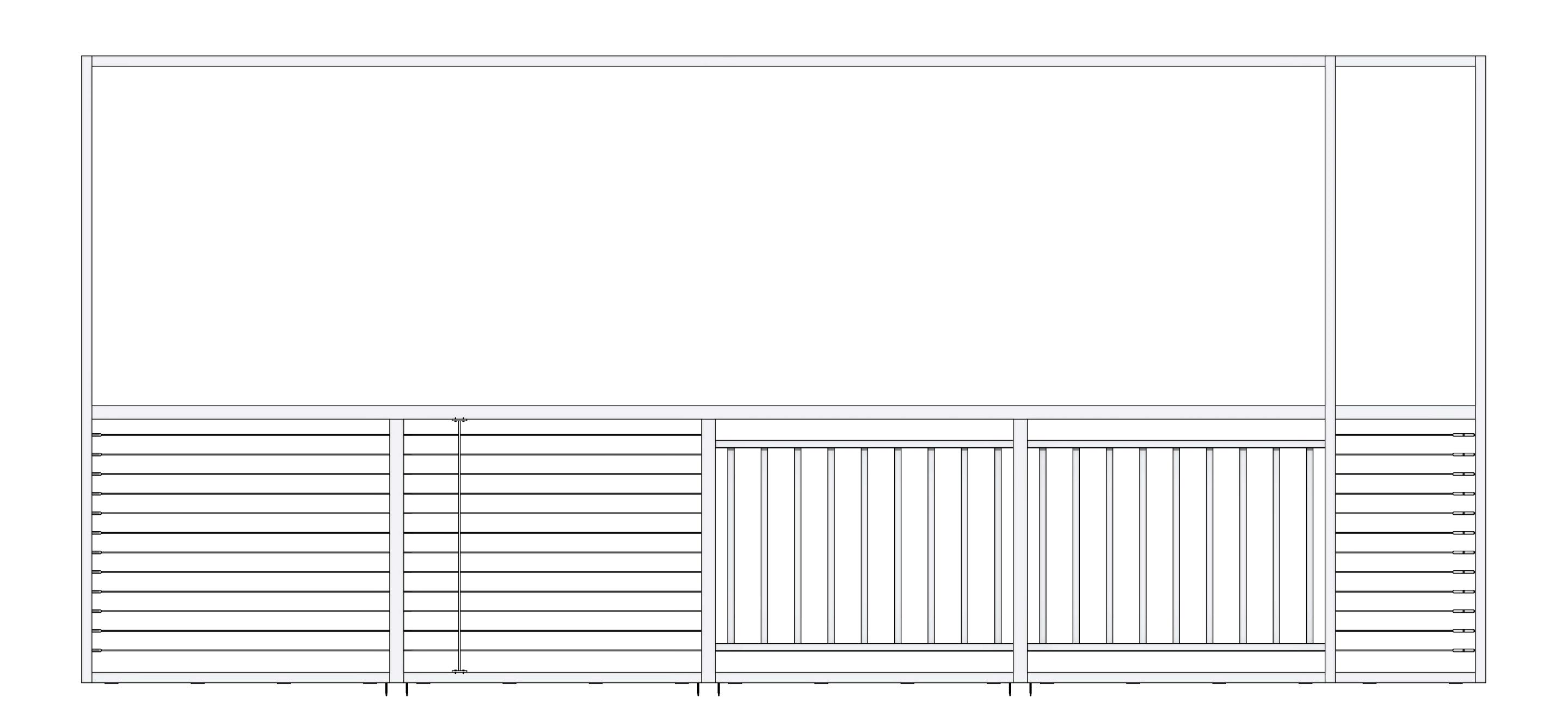
AILING SYSTEM MASTER PLAN

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## RAILING SYSTEM MASTER PLAN

US Patent NOs: US 11,125,013 B1 US 11,603,705 B2



NO.	MEMBER	DETAILED INSTRUCTIONS	DRAWING
1	TRACK CHANNEL  # EV-030 (BRONZE 24')  # EV-031 (WHITE 24')	PERIMETER CHANNEL FASTENED TO CONCRETE AT 24" O.C. STARTING AT 2-1/2" ON EITHER SIDE OF POST.  FASTEN PERIMETER CHANNEL TO MASONRY WITH 1/4" X 2-1/4" QUICKSET (FOR WOOD WITH 1/2" X 2-1/4" GALVANIZED LAG BOLTS) 24" O.C. AND WITHIN 6" OF INTERSECTING MEMBERS AND JOINTS.	SECTION LABEL: A
2*	FULL LENGTH POST  # EV-032 (BRONZE 24')  # EV-033 (WHITE 24')	DISTANCE BETWEEN FULL-LENGTH POST 16' (NON-EPOXY ANCHORS) UP TO 21' (WITH EPOXY ANCHORS).	SECTION LABEL: B
3*	INTERMEDIATE POST  FOR PICKET (42" W/ NOTCH): # EV-034 (BRONZE 42") # EV-035 (WHITE 42")  FOR CABLE (42" W/ NOTCH & PUNCH): # EV-036 (BRONZE 42") # EV-037 (WHITE 42")	ATTACH 2-3 HOLE CLIPS 2" X 0.8" X 0.125" ANGLE EACH SIDE OF POST.	
4*	CHAIR RAIL # EV-038 (BRONZE 24') # EV-039 (WHITE 24')	CHAIR RAIL TO INTERMEDIATE POST AND PERIMETER CHANNEL FASTENING. 4 HOLE CLIPS EACH SIDE OF POST PERIMETER CHANNEL.	RAILING APPLICATION  POSTS APPLICATION



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NO.	MEMBER	DETAILED INSTRUCTIONS	DRAWING	
5	ARCH CHANNEL  # EV-040 (BRONZE 20')  # EV-041 (WHITE 20')	ARCH IS ABLE TO FLEX TO MEET AN ARCHED TOP OF UPPER WALL PANEL.	3"	
6	POST ANGLE: 22.5  # EV-042 (BRONZE 24') # EV-043 (WHITE 24')	USED AS FULL LENGTH POST WHEN WALL ANGLES BACK AT A 22.5° ANGLE.	SECTION LABEL: C	
6	POST ANGLE: 30 # EV-044 (BRONZE 24') # EV-045 (WHITE 24')	USED AS FULL LENGTH POST WHEN WALL ANGLES BACK AT A 30° ANGLE.	2-1/16"	
6	POST ANGLE: 45 # EV-046 (BRONZE 24') # EV-047 (WHITE 24')	USED AS FULL LENGTH POST WHEN WALL ANGLES BACK AT A 45° ANGLE.	2-13/16"    1/2"     SECTION LABEL: D	



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NO.	MEMBER	DETAILED INSTRUCTIONS	DRAWING
7	PICKET  # EV-048 (BRONZE 19'10")  # EV-049 (WHITE 19'10")	CUT TO LENGTH AND FASTEN WITH 10 X 1/2" TO TOP AND BOTTOM PRE-PUNCHED PICKET TRACK.	
8	PICKET SNAP PLATE 24' W/ PUNCH  # EV-050 (BRONZE 24')  # EV-051 (WHITE 24')	OPTIONAL PICKET PANEL INSERT. PRE-PUNCHED FOR EASY INSTALLATION OF 1" X 1" PICKET.	2-5/8"  SECTION LABEL: F
9	PICKET CHANNEL W/ PUNCH  # EV-052 (BRONZE 24') # EV-053 (WHITE 24')  PICKET CHANNEL  # EV-054 (BRONZE 24') # EV-055 (WHITE 24')	OPTIONAL PICKET PANEL INSERT. PRE-PUNCHED FOR EASY INSTALLATION OF 1" X 1" PICKET.	SECTION LABEL: G
10	PICKET CLIP # EV-056 (BRONZE) # EV-057 (WHITE)	MOUNTED TO POSTS TO RECEIVE PICKET CHANNEL.	SECTION LABEL: H



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# EDGEVIEW RAILING SYSTEM MASTER PLAN

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NO.	MEMBER	DETAILED INSTRUCTIONS	DRAWING
11	Z-BRACKET  # EV-058 (BRONZE)  # EV-059 (WHITE)	INSTALLATION IS REQUIRED WHEN FULL LENGTH POST OR END WALLS ARE GREATER THAN 16' TO MAXIMUM OF 21'. IT IS POSSIBLE TO SUBSTITUTE Z BRACKET WITH 2" x 2" CLIP. SEE SITE SPECIFIC ENGINEERINGS FOR SPECS.	1-3/4"  1-1/2"  ECTION LABEL: I
12	3 HOLE CLIP # EV-060 (BRONZE) # EV-061 (WHITE)	ONE ON EACH SIDE OF INTERMEDIATE POST BOTTOM. ALSO INSTALLED ONE ON EACH SIDE OF FULL LENGTH POST BOTTOM AND TOP. THIS CLIP IS AWAYS COVERED BY PERIMETER CHANNEL. IT IS ALSO USED ON MULLIONS (ANGLED POST).	ECTION LABEL: J
13	4 HOLE CLIP # EV-062 (BRONZE) # EV-063 (WHITE)	INSTALLED WHEREVER CHAIR RAIL MEETS PERIMETER CHANNEL, AND ONE ON EACH SIDE OF INTERMEDIATE POST ATTACHED TO CHAIR.	ECTION LABEL: K
<b>14</b>	DRAINAGE PROFILE  # EV-064 (BRONZE 24')  # EV-065 (WHITE 24')	NOT A REQUIRED ENGINEERING USE. WAITING FOR NEW DESCRIPTION FROM FLORIDA ENGINEERING.	2-5/8"  ECTION LABEL: L



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NO.	MEMBER	DETAILED INSTRUCTIONS	DRAWING	
15	WIRE ROPE # EV-066 (TENSIONER TOGGLE) # EV-067 (FIXED TOGGLE)	1/8" CABLE ANCHORED TO PUSH-LOCK AT 3" O.C.	FIXED TENSIONER	
16	FLAT BAR  # EV-068 (BRONZE) # EV-069 (WHITE)  FLAT BAR PLATE  # EV-070 (BRONZE) # EV-071 (WHITE)	CAN BE USED IN CONJUNCTION WITH INTERMEDIATE POST, REQUIRES SITE SPECIFIC ENGINEERING FOR PLACEMENT.	PLATE  PLAT BAR  SECTION LABEL: M	
	CABLE HOLES TEMPLATE # EV-072	TYPICALLY USED ON END PERIMETER CHANNEL, AND FULL LENGTH POST.		
	NOTCH JIG # EV-073	TYPICALLY USED ON EACH SIDE OF ALL HORIZONTAL EXTRUSIONS.		



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ADDITIONAL PARTS AND TOOLS				
MEMBER	DRAWING / PHOTO	MEMBER	DRAWING / PHOTO	
CABLE GROMMETS # EV-074 (BAG OF 25)		REAMER # EV-080		
WIRE CABLE # EV-075 (1.000FT ROLL) # EV-076 (500FT ROLL)		CABLE GROMMET TOOL # EV-081		
3/8" X 2-1/2" 304SS # EV-077		TENSIONER WRENCH # EV-082		
TOTAL CABLE CARE KIT # EV-078 (2PK)	BOESHIELD  RUST & CORROSION PROTECTION WATERPROOF LUGRICATION NET WY 4 OZ (113) DANGER: Water of Rockers of Record o	5/16 DRILL BIT FOR TOGGLES # EV-083		
PUSH LOCK KEY # EV-079		TENSION GAUGE # EV-084		



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