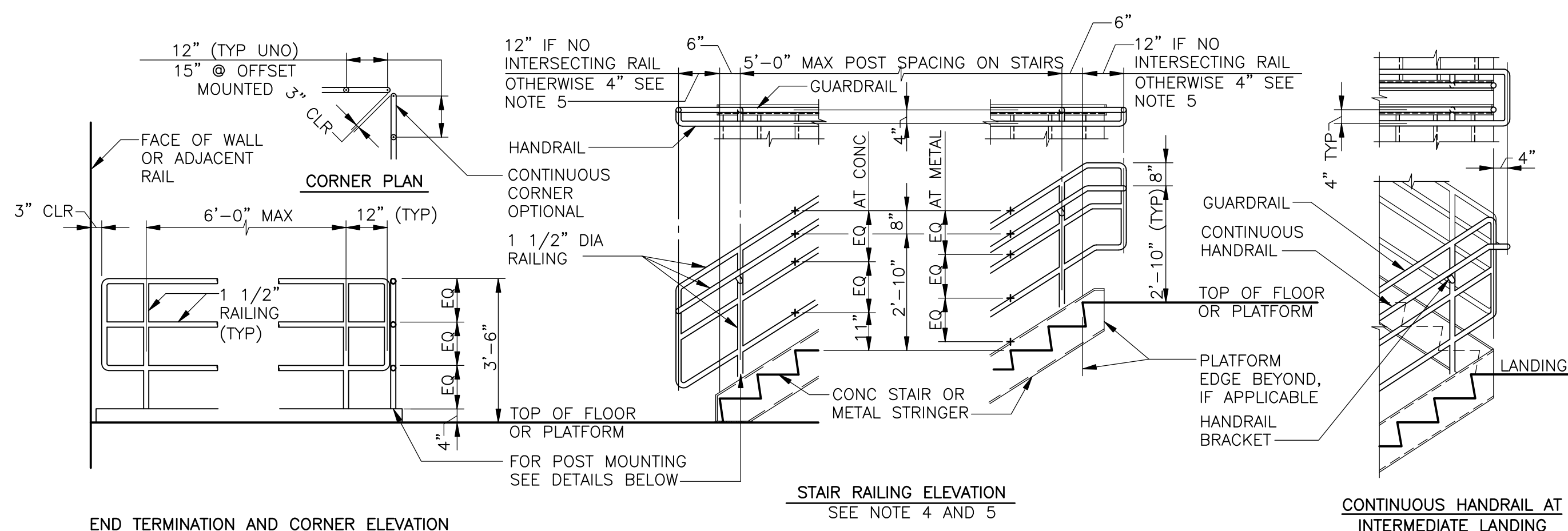
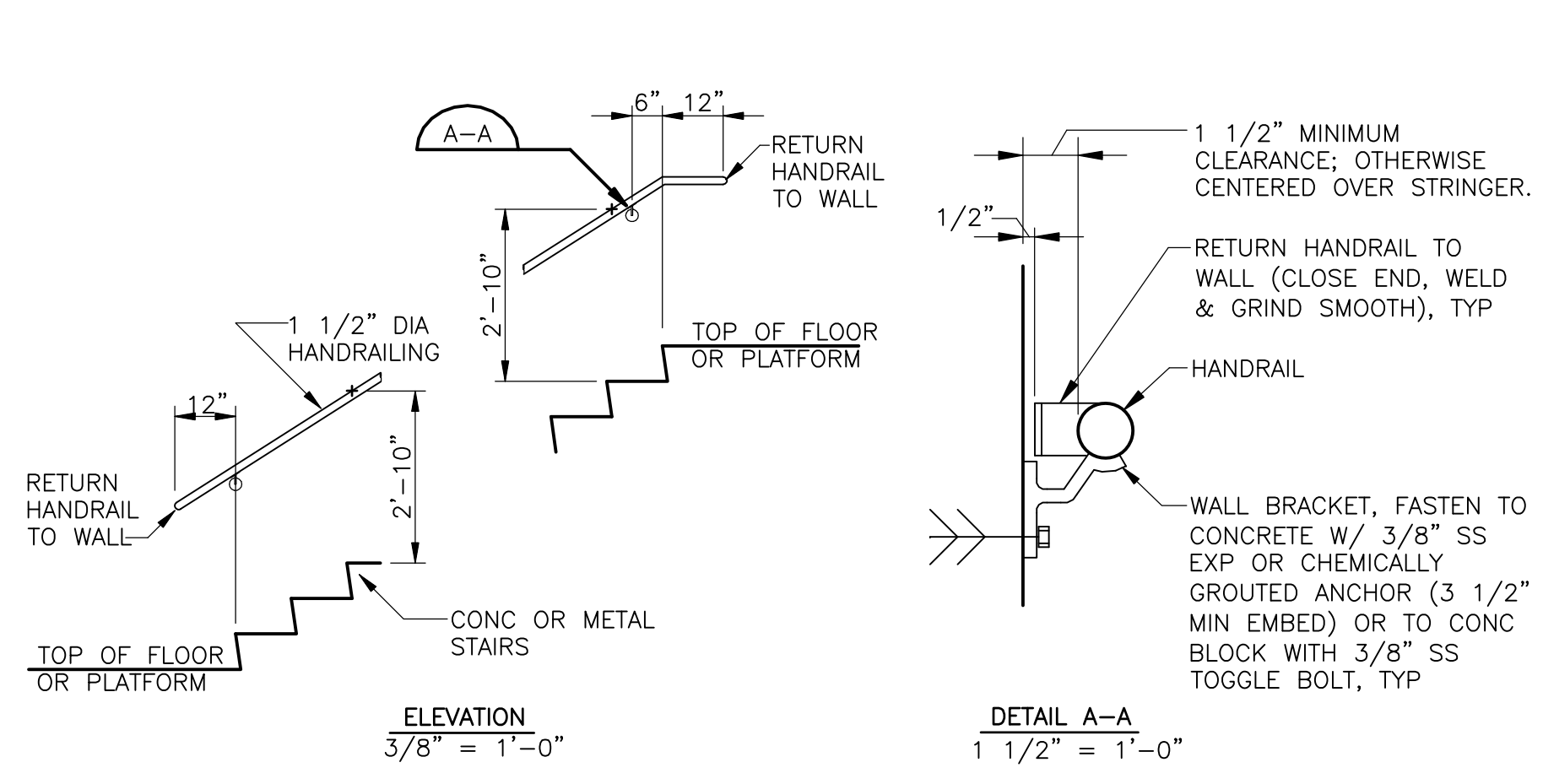


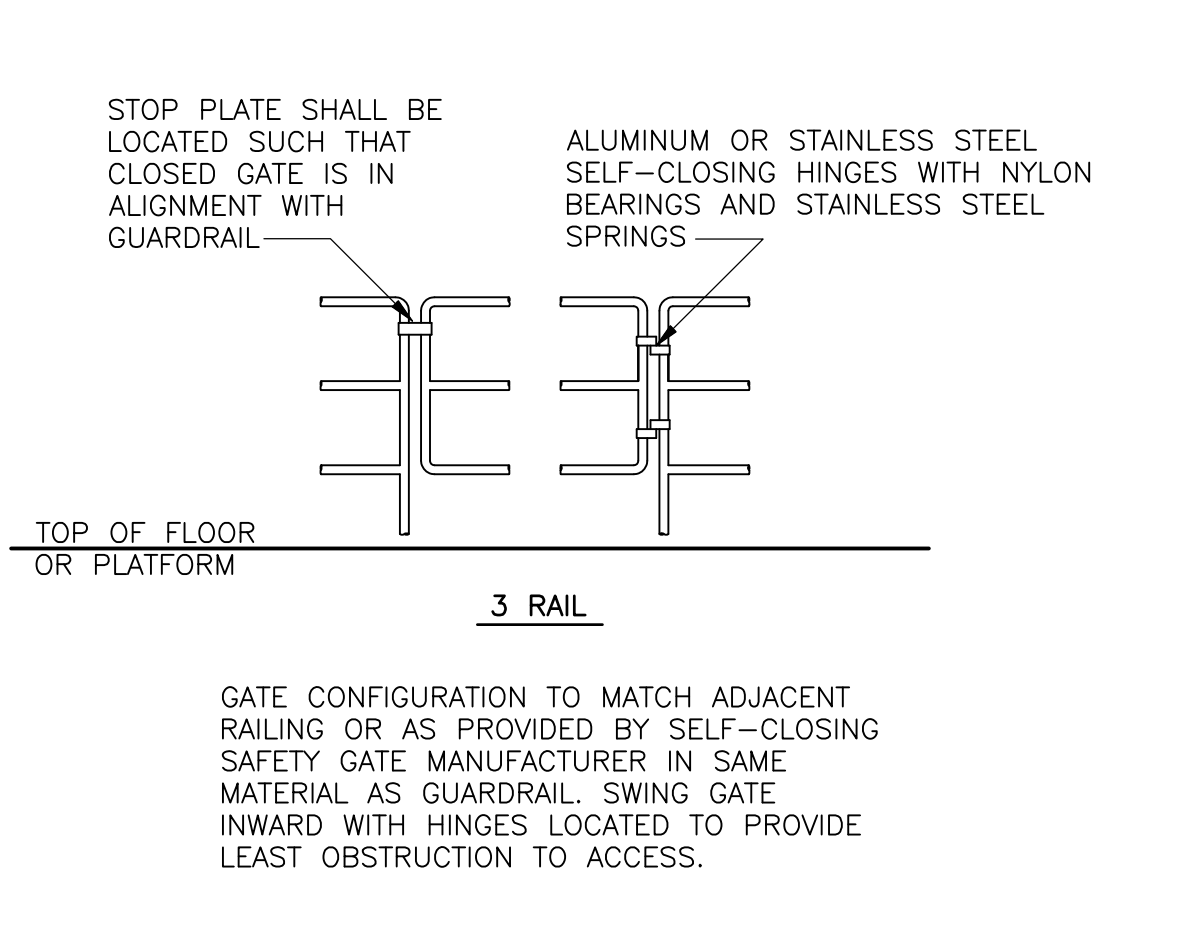
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**THREE RAIL GUARDRAIL**  
3/8" = 1'-0"



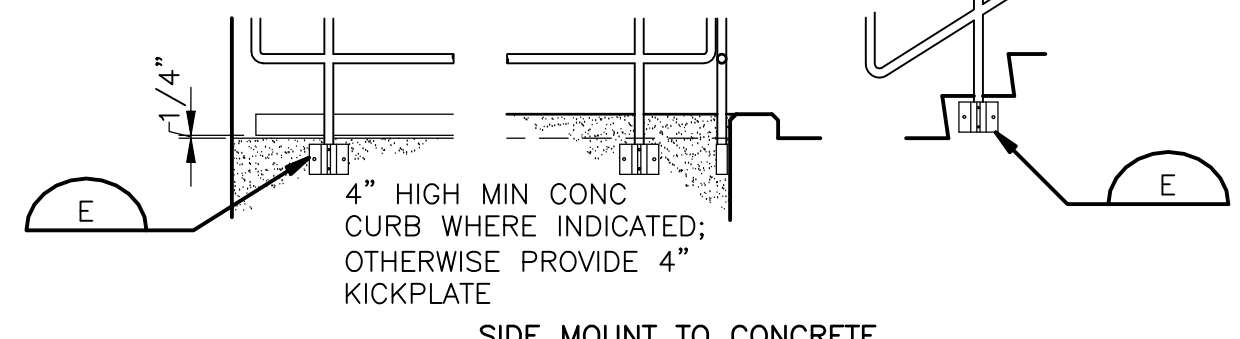
**WALL MOUNTED HANDRAIL**  
AS NOTED



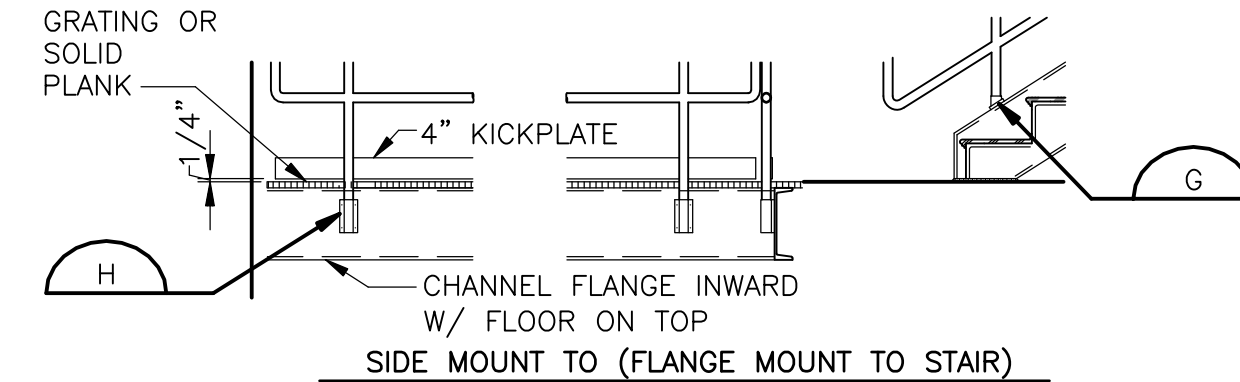
**SELF-CLOSING SWING GATE**  
NO SCALE

**NOTES:**

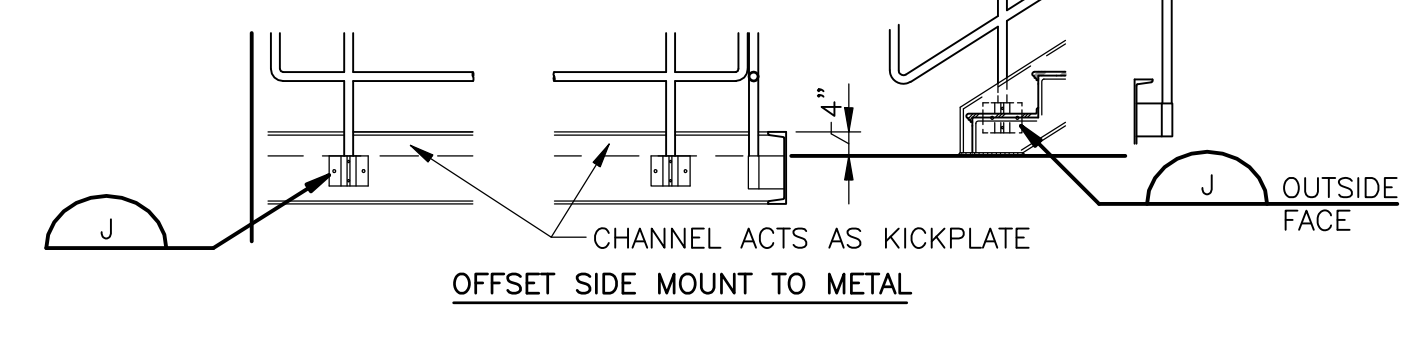
1. RAILING MATERIAL AND FABRICATION SHALL BE AS INDICATED ON THE DESIGN DRAWINGS AND IN THE PROJECT SPECIFICATIONS FOR HANDRAILING AND GUARDRAILING.
2. ALL RAILING AND MOUNTINGS SHALL BE DESIGNED AND FABRICATED IN COMPLIANCE WITH THE MOST STRINGENT REQUIREMENTS OF THE RAILING SPECIFICATIONS, THE APPLICABLE LOCAL BUILDING CODE AND ALL PERTINENT OSHA AND LOCAL SAFETY REGULATIONS.
3. GUARDRAIL AND HANDRAIL SHALL BE DESIGNED AND FABRICATED IN CONFIGURATIONS REQUIRED TO FIT THE LOCATIONS INDICATED ON THE DESIGN DRAWINGS. CONTRACTOR SHALL VERIFY FINAL DIMENSIONS BEFORE FABRICATION.
4. GUARDRAIL MAY BE REPLACED WITH WALL MOUNTED HANDRAIL AT STAIR EDGES AND STRINGERS LOCATED ADJACENT TO WALLS. IF THE OUTSIDE EDGE OF THE STAIR STRINGER IS MORE THAN 3" FROM THE WALL FACE, GUARDRAIL SHALL BE USED.
5. THE INBOARD GUARDRAILING AT SWITCHBACK STAIR LANDINGS MUST BE CONTINUOUS FROM ONE STAIR RUN TO THE NEXT. ADJUST INDICATED DIMENSION AS REQUIRED TO ALIGN AND CONNECT RAILINGS OVER THE LANDING EDGE.
6. THE GUARDRAIL AND HANDRAIL CONFIGURATIONS ON THIS SHEET WILL NOT SATISFY ADA REQUIREMENTS FOR HANDICAPPED ACCESSIBILITY. AT LOCATIONS ON THE DESIGN DRAWINGS WHERE CONFORMANCE WITH ADA REQUIREMENTS IS SPECIFICALLY NOTED, THE RAILING SUPPLIER SHALL MODIFY THE CONFIGURATIONS TO COMPLY WITH THE MOST STRINGENT REQUIREMENTS OF ANSI 117.1 UNIFORM FEDERAL ACCESSIBILITY STANDARDS AND THE ACCESSIBILITY STANDARDS OF THE AMERICANS WITH DISABILITIES ACT (ADA).



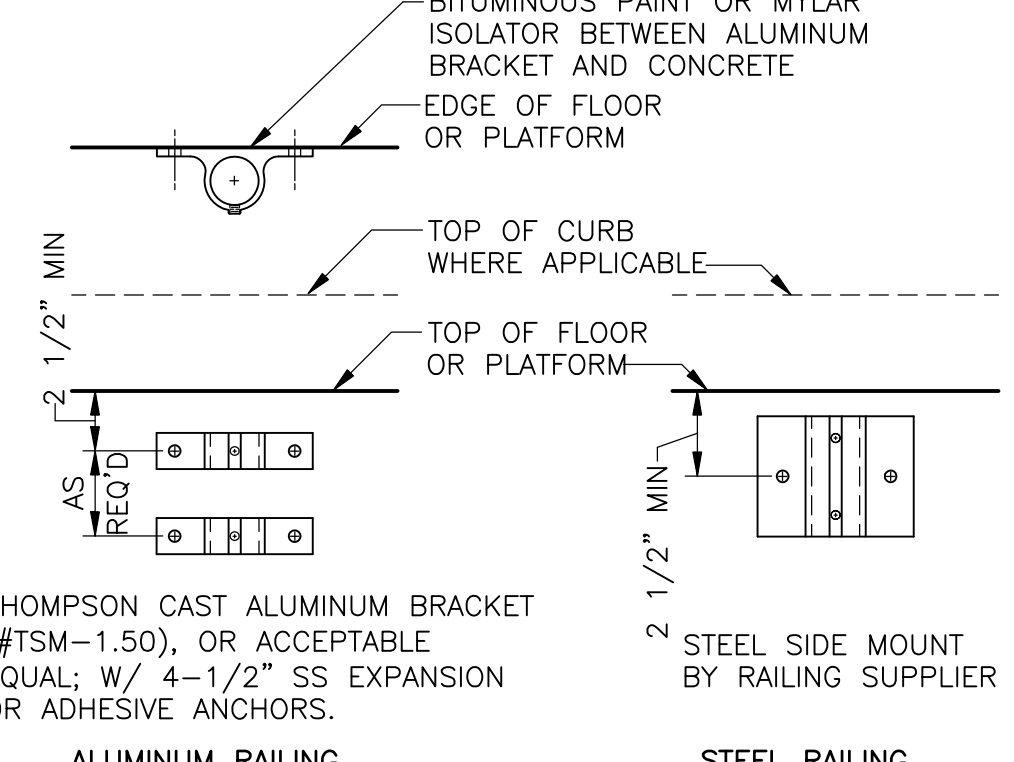
**SIDE MOUNT TO CONCRETE**



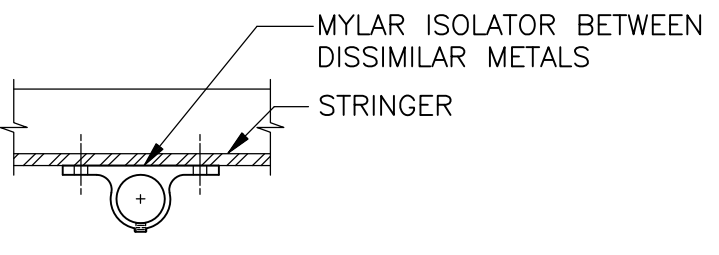
**SIDE MOUNT TO (FLANGE MOUNT TO STAIR)**



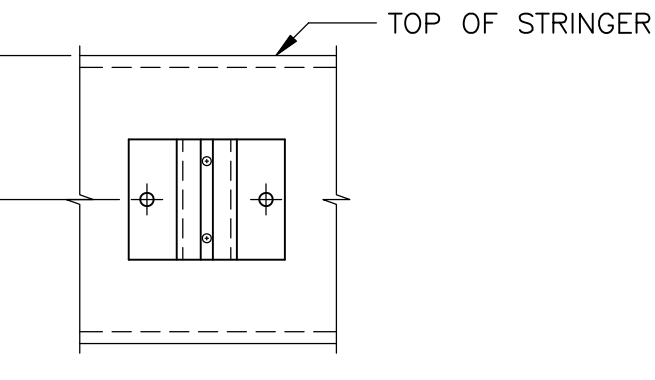
**OFFSET SIDE MOUNT TO METAL**



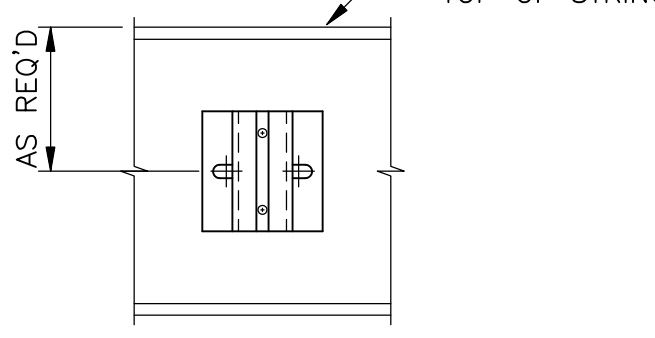
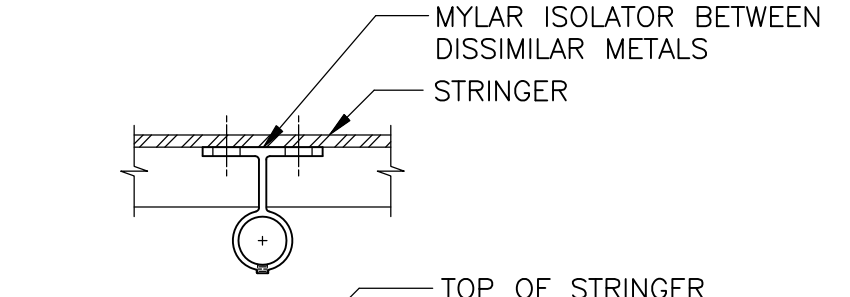
**SIDE MOUNT**  
1 1/2" = 1'-0"



**FRP BRACKET BY RAILING SUPPLIER W/ MIN 2-1/2" SS BOLTS**



**ALUMINUM RAILING**



**FRP RAILING**

**OFFSET SIDE MOUNT**  
1 1/2" = 1'-0"

**POST MOUNTED**

**DIVISION 6: PLASTIC FABRICATIONS**

**GENERAL PROVISIONS**

1. SCOPE: FURNISH AND INSTALL PIPE GUARDS AND METAL GATES FOR TRASH DUMPSTER'S AREA, STEEL ROOF ACCESS LADDER, EXTERIOR HANDRAILS.
2. ROOF ACCESS LADDER, DUMPSTER GATES AND POSTS, AND EXTERIOR HANDRAILS METAL SHALL CONFORM TO ASTM A-36 OF SIZES SHOWN.

**MATERIAL**

1. PIPE GUARDS: 4" STANDARD STEEL PIPE.
2. ROOF ACCESS LADDER, DUMPSTER GATES AND POSTS, AND EXTERIOR HANDRAILS METAL SHALL CONFORM TO ASTM A-36 OF SIZES SHOWN.
  - A. SHOP PAINTING: APPLY ONE (1) SHOP COAT OF RUST INHIBITIVE PAINT TO ALL STEEL SURFACES, EXCEPT SURFACE AREAS TO BE IMBEDDED IN CONCRETE OR FIELD WELDED.
  - B. WELDS SHALL BE CLEANED AND PAINTED WITH RUST INHIBITIVE PRIMER PAINT. WHERE RUSTING OF STEEL MEMBERS OCCURS PRIOR TO ACCEPTANCE OF THE BUILDING, THE RUST SPOTS SHALL BE REMOVED BY SANDBLASTING OR GRINDING TO BARE METAL AND REPAINTED WITH RUST INHIBITIVE PRIMER.
3. EXTERIOR HANDRAILS: AS SHOWN ON SITE PLAN.

**PERFORMANCE**

1. INSTALLATION:
  - A. PIPE GUARDS: SET PIPE IN CONCRETE. FILL PIPES WITH CONCRETE AND INSTALL PVC TOP CAP.
  - B. STEEL ROOF ACCESS LADDER: INSTALL AS SHOWN.
  - C. METAL GATES: INSTALL AS SHOWN.
  - D. EXTERIOR HANDRAILS: HANDRAILS SHALL BE SET IN CONCRETE WITH POR-ROK EPOXY GROUT. INSTALL AS SHOWN.
2. NONCOMBUSTIBLE LUMBER AND PLYWOOD AS NOTED SHALL BE FIRE RETARDANT TREATED WITH PRESSURE-IMPREGNATED FIRE RETARDANT MONOMERIC RESIN SOLUTION AND THEN KILN DRIED TO CURE CHEMICALS IN WOOD. TREATMENT SHALL HAVE U.L. DESIGNATION OF FR-1 OR FLAME SPREAD RATING NOT GREATER THAN 25. DRICON BY KOPPERS COMPANY, INC., PITTSBURGH, PA, OR OSMOSE FLAME PROOF LHC BY OSMOSE WOOD PRESERVING CO. OF AMERICA, INC., BUFFALO, NY.
3. WOOD SLEEPERS TO BE KILN DRIED REDWOOD OR CYPRESS, GRADE B OR BETTER.
4. BLOCKING SUPPLIED AND INSTALLED BY INDIVIDUAL TRADES AS REQUIRED SHALL BE COORDINATED BY GENERAL CONTRACTOR FOR PROPER LOCATION AND INSTALLATION.
5. FASTENERS:
  - A. NAILS SHALL BE COMMON STEEL WIRE FEDERAL SPECIFICATIONS FF-N-101 EXCEPT AS OTHERWISE NOTED. LENGTH SHALL BE 2 1/2 TIME THICKNESS OF PIECE NAILED MINIMUM. ALL NAILS FOR EXPOSED WORK SHALL BE FINISHING OR CASING NAILS WITH HEADS SET. USE ALUMINUM ALLOY OR STAINLESS STEEL NAILS FOR EXTERIOR WORK.
  - B. SELF-TAPPING SHEET METAL SCREWS SHALL BE USED WHEN ATTACHING WOOD TO METAL FRAMING.
  - C. HARDENED STEEL NAILS SHALL BE USED WHEN ATTACHING WOOD TO CONCRETE OR MASONRY.
6. NAIL STOPPERS SHALL BE NS-16, 16 GAUGE GALVANIZED STEEL TO CONFORM TO NATIONAL ELECTRIC CODE, BY SIMPSON COMPANY OR EQUAL BY TECO OR SILVER.

**PERFORMANCE**

1. INSTALLATION:
  - PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE WOOD FRAME IN ALIGNMENT UNTIL ALL ROOF TRUSSES, WALL TRUSSES, GIRDERS, ROOF DECKS, FLOOR DECKS, AND WALLS ARE IN PLACE. BRACING RECOMMENDATIONS BY THE WOOD TRUSS COUNCIL OF AMERICA REFER TO MINIMUM BRACING GUIDELINES.
  - INSTALL ALL FRAMING PLUMB, LEVEL AND TRUE.
  - INSTALL FRAMING ANCHORS AS RECOMMENDED BY MANUFACTURER.
  - TRUSSES SHALL BE INSTALLED LEVEL, PLUMB, TRUE, AND SLOPE AS INDICATED AND SPACED IN ACCORDANCE WITH TRUSS LAYOUT PLAN. TRUSSES SHALL BE ANCHORED WITH METAL CLIPS TO WITHSTAND UPLIFT FORCES. ALL PERMANENT BRACING ELEMENTS SHALL BE INSTALLED ACCORDING TO THE TRUSS FABRICATORS DETAILS.
  - PROVIDE STUDS OR BLOCKING FOR ALL ACCESSORIES ATTACHED TO WALLS SUCH AS LADDER, TOILET ACCESSORIES, TOILET PARTITIONS, SHELVING, AND COUNTERS.
2. NAILING SCHEDULE FOR PLYWOOD:
  - A. WALL, AND ROOF SHEATHING - NAILING SHALL BE ACCORDING TO SHEATHING NAILING SCHEDULE. REFER TO STRUCTURAL DRAWINGS.
  - B. PANEL END JOINTS TO OCCUR OVER FRAMING. ALLOW 1/16" SPACING AT PANEL ENDS AND 1/8" AT PANEL EDGES.
  - C. POWER NAILING SHALL USE THE SAME NAIL SIZE AS SPECIFIED. THE NAIL HEAD SHALL NOT BE DRIVEN BELOW THE SURFACE OF THE PLYWOOD.
3. NAILING SCHEDULE FOR FRAMING:
  - ALL FRAMING SHALL BE NAILED WITH MINIMUM CONNECTIONS MEETING THE REQUIREMENTS OF LOCAL AND/OR NATIONAL BUILDING CODES AND/OR AS INDICATED ON THE STRUCTURAL FRAMING DRAWINGS AND NOTES.
4. INSTALL NAIL STOPPER TO PROTECT WATER, GAS, AND ELECTRIC LINES THAT PENETRATE THE FRAMING MEMBERS.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 SHEET CHK'D BY: \_\_\_\_\_  
 CROSS CHK'D BY: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_  
 DATE: APRIL 2015

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CITY OF WICHITA, KANSAS  
 WATER AND SEWER DEPARTMENT  
**SEWAGE TREATMENT PLANT NO.2  
 IMPROVMENTS UV DISINFECTION**

**EFFLUENT UV DISINFECTION FACILITY  
 HANDRAIL AND GUARDRAIL DETAILS**

PROJECT NO. 2395-104609  
 FILE NAME:  
 SHEET NO.  
**S-4**