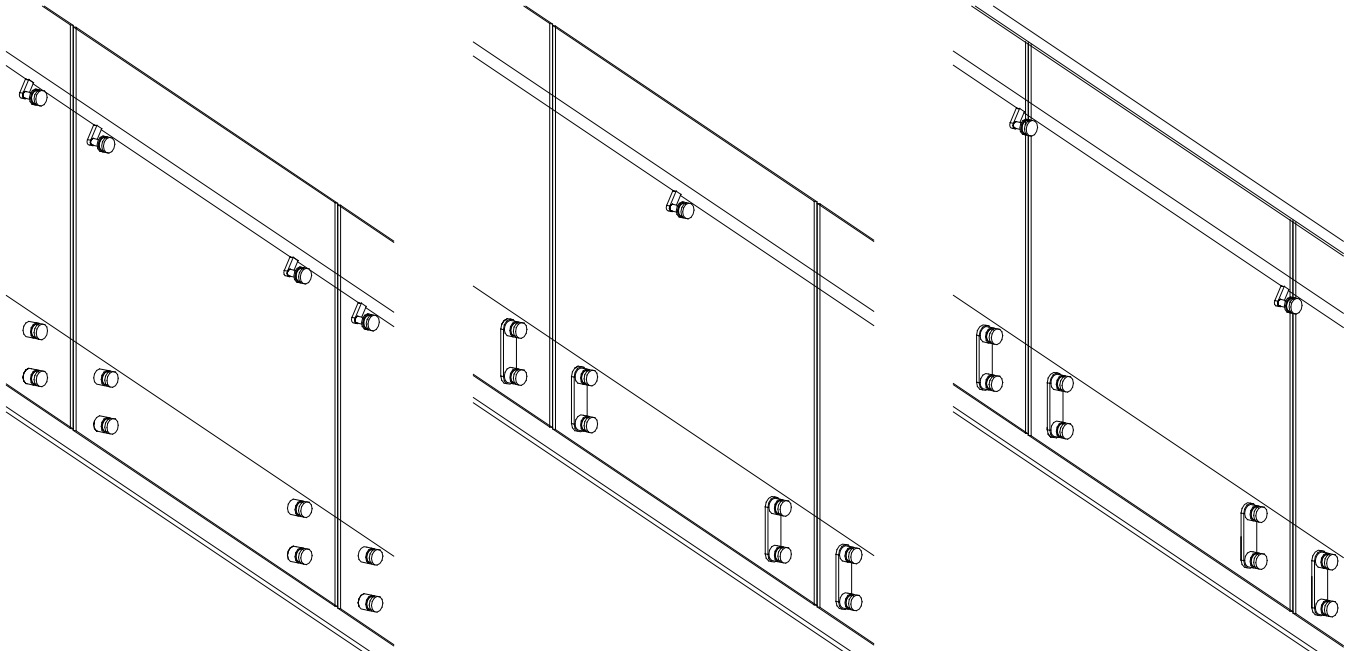




700 Creel Drive  
 Wood Dale, IL 60191  
 Office: 630.860.2990  
 Fax: 630.860.5913  
 artec-rail.com

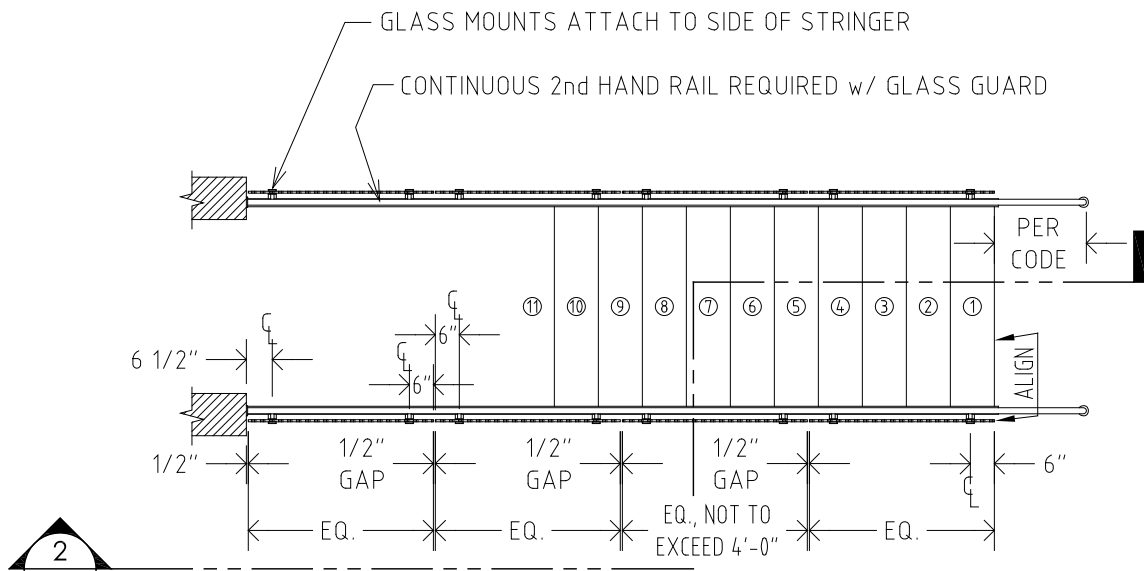
# FOCUS SYSTEM

## TECHNICAL DETAILS



SYSTEM: FOCUS	COVER SHEET	NO SCALE
	FOCUS SYSTEM	
REVISION 2016-05		SHEET F-01 of 25

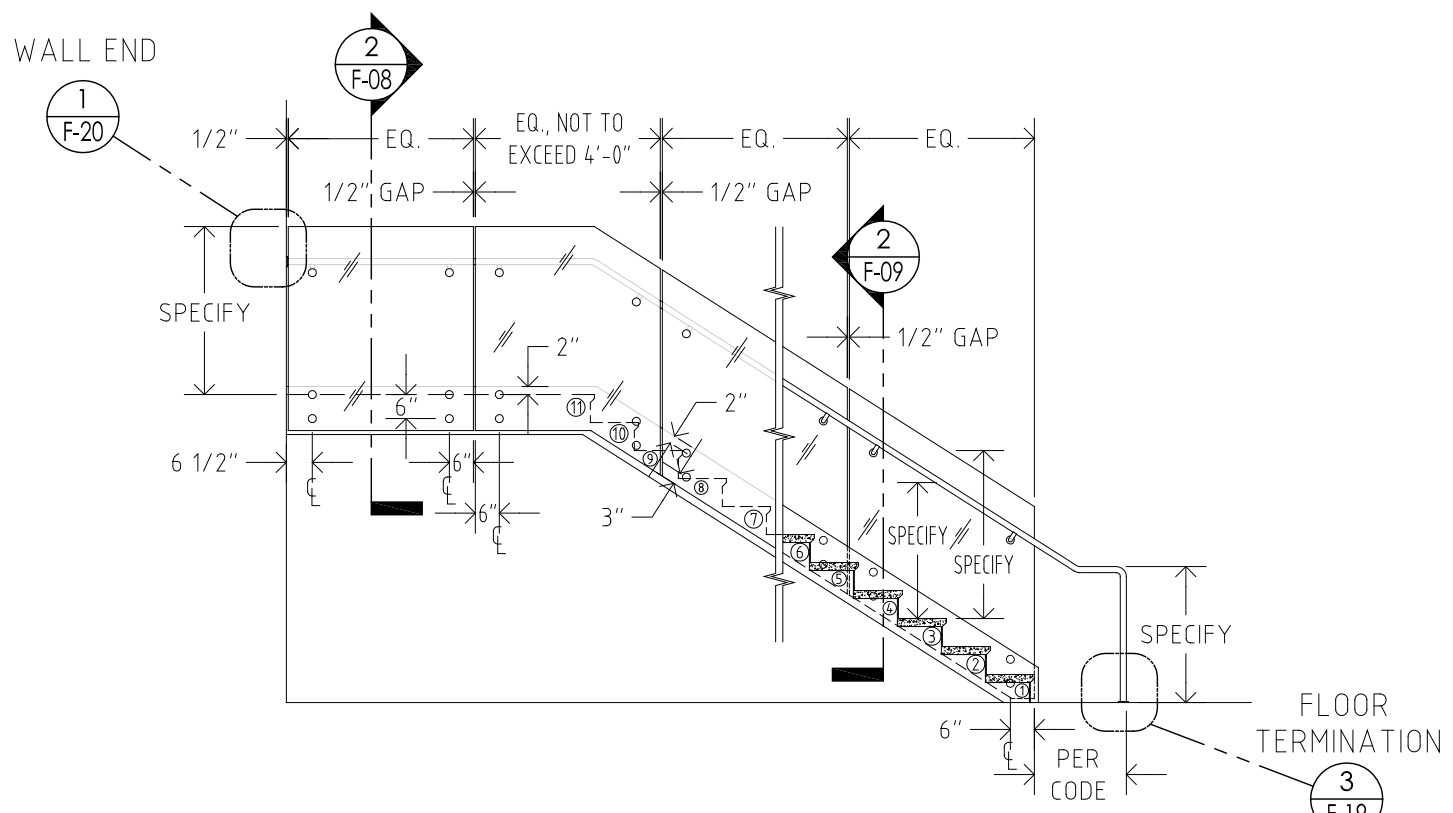
PAGE NUMBER	CONTENTS
F-01	COVER SHEET
F-02	TABLE OF CONTENTS
F-03	SINGLE MOUNTS: PLAN AND ELEVATION
F-04	BACKER PLATE MOUNTS: PLAN AND ELEVATION
F-05	HAND RAIL FITTINGS AT GAP: PLAN AND ELEVATION
F-06	CURVED RAILINGS: PLAN
F-07	WALL MOUNT AND NO-INFILL RAILINGS: PLAN AND ELEVATION
F-08	DETAIL ELEVATION: SINGLE MOUNTS ON LEVEL RUN
F-09	DETAIL ELEVATION: SINGLE MOUNTS ON STAIR RUN
F-10	DETAIL ELEVATION: BACKER PLATE MOUNTS ON LEVEL RUN
F-11	DETAIL ELEVATION: BACKER PLATE MOUNTS ON STAIR RUN
F-12	DETAIL ELEVATION: HAND RAIL FITTINGS AT GAP ON LEVEL RUN
F-13	DETAIL ELEVATION: HAND RAIL FITTINGS AT GAP ON STAIR RUN
F-14	BALUSTER ANCHORAGE DETAILS: SINGLE MOUNTS, STEEL
F-15	BALUSTER ANCHORAGE DETAILS: BACKER PLATE MOUNTS, STEEL
F-16	BALUSTER ANCHORAGE DETAILS: SINGLE MOUNTS, CONCRETE & WOOD
F-17	BALUSTER ANCHORAGE DETAILS: BACKER PLATE MOUNTS, CONCRETE & WOOD
F-18	FITTING DETAILS: 2nd HAND RAIL AND OPTIONAL TOP CAP
F-19	FITTING DETAILS: END CAP & RAILING STARTERS
F-20	FITTING DETAILS: HAND RAIL WALL TERMINATION
F-21	FITTING DETAILS: WALL MOUNT BRACKETS
F-22	DETAIL PLANS: SIDE MOUNT CONDITIONS
F-23	TUBE BENDING / ELBOWS
F-24	DETAILS: WOOD RAILS
F-25	DETAILS: L.E.D. LIGHTS IN RAILINGS



1  
F-03

2  
F-03

TYPICAL PLAN: SINGLE MOUNT CONFIGURATION  
SCALE: 1/4" = 1'-0"




2  
F-03

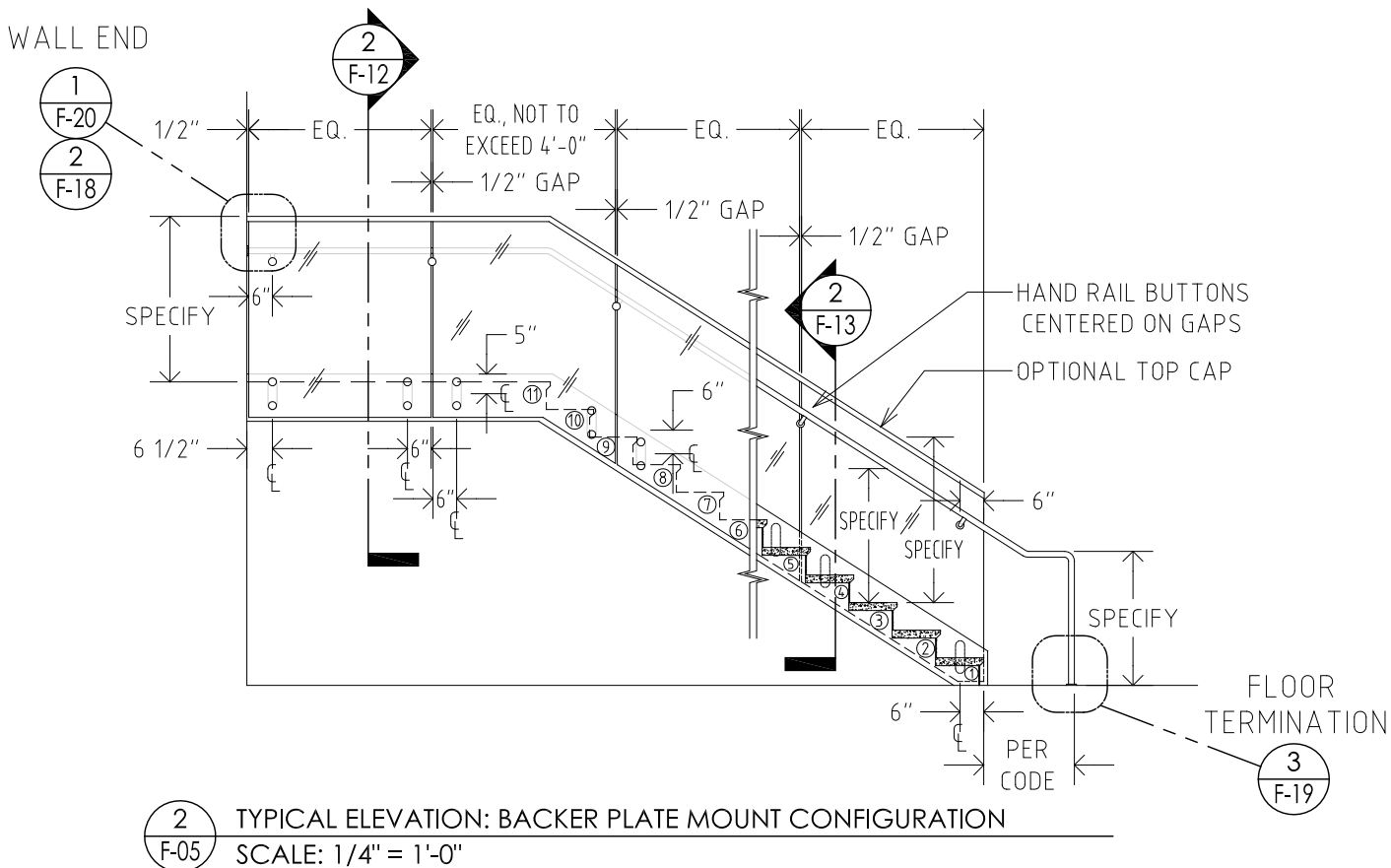
2  
F-03

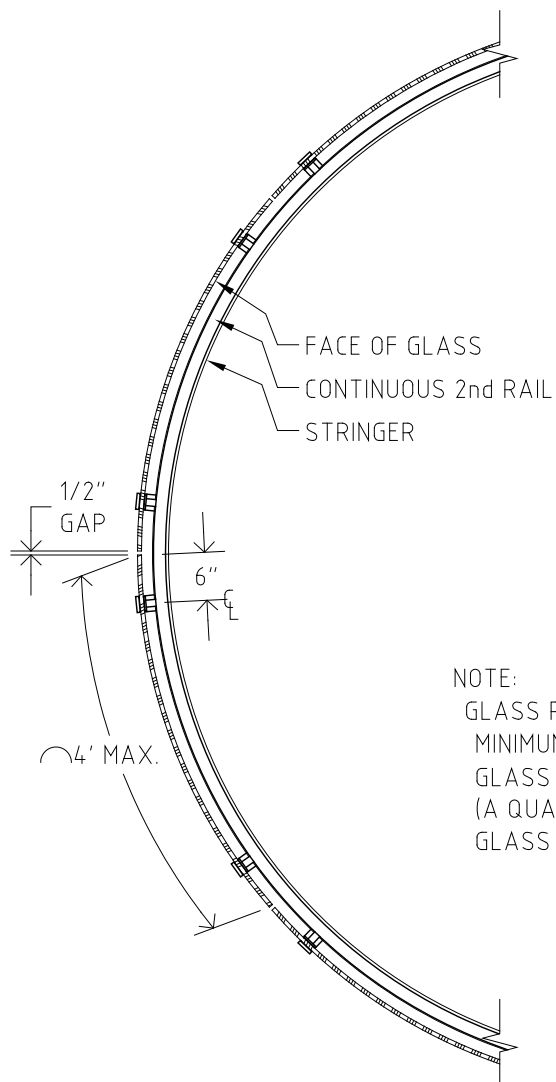
TYPICAL ELEVATION: TOP MOUNT SYSTEM  
SCALE: 1/4" = 1'-0"

3  
F-19

	SYSTEM: FOCUS	PLAN & ELEVATION	1/4" = 1'-0" (8.5 x 11)
		SINGLE MOUNTS	
	REVISION 2016-05		SHEET F-03 of 25



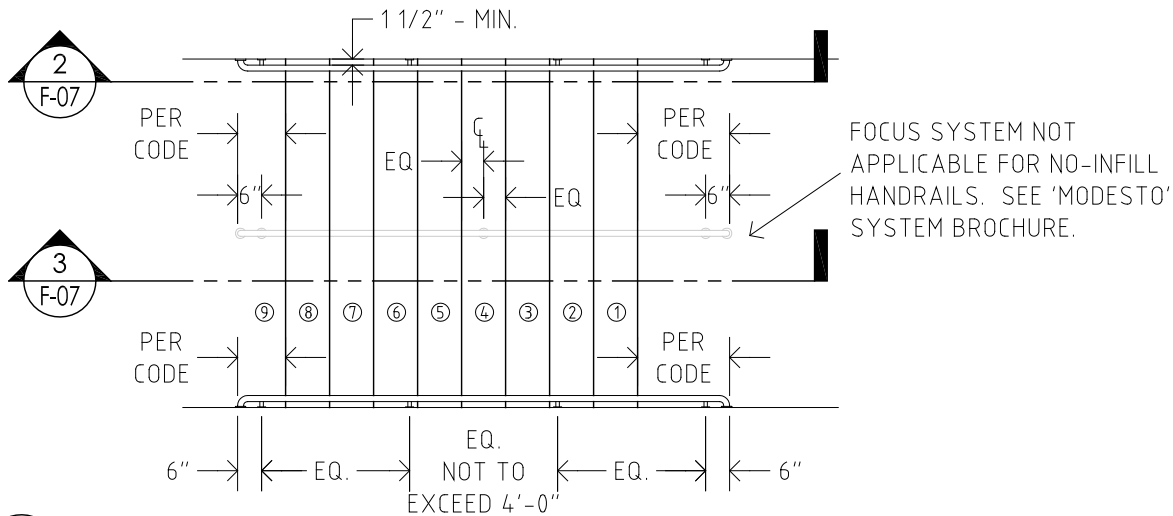




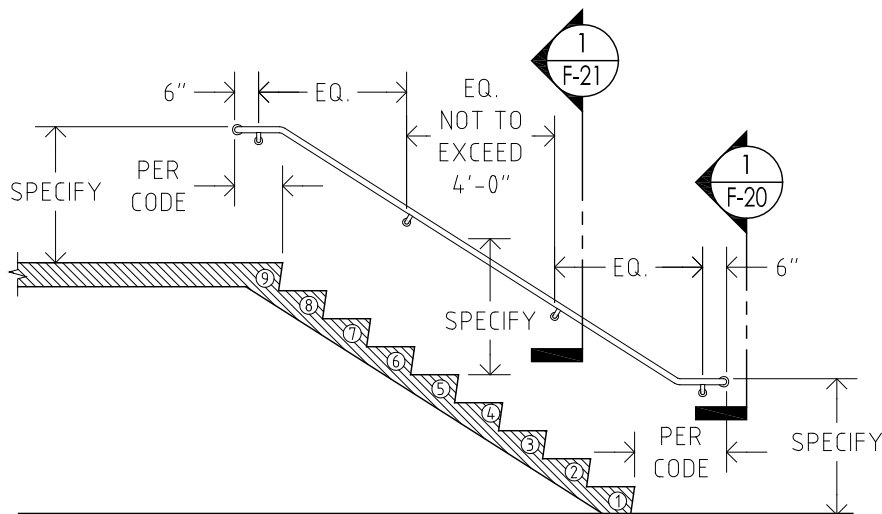
NOTE:

GLASS PANELS MAY BE CURVED, BUT THE  
MINIMUM RADIUS IS 30", AND THE  
GLASS MAY NOT EXCEED 90° OF BENDING  
(A QUARTER OF A CIRCLE MAX.)  
GLASS MAY NOT EXCEED 48" WIDE

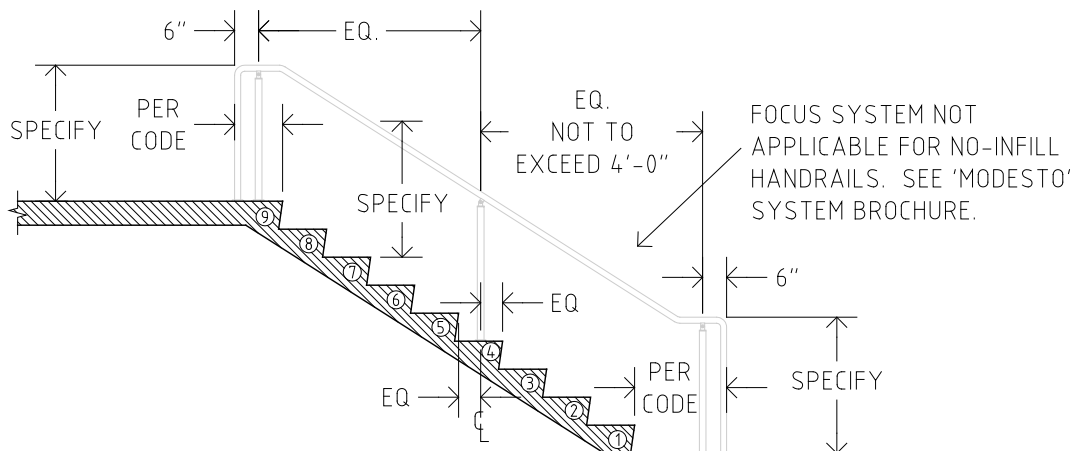
1 SCHEMATIC PLAN: CURVED RAILINGS  
F-06 SCALE: 1/2" = 1'-0"



1 PLAN: WALL MOUNT HANDRAIL & NO-INFILL RAILING  
SCALE: 1/4" = 1'-0"



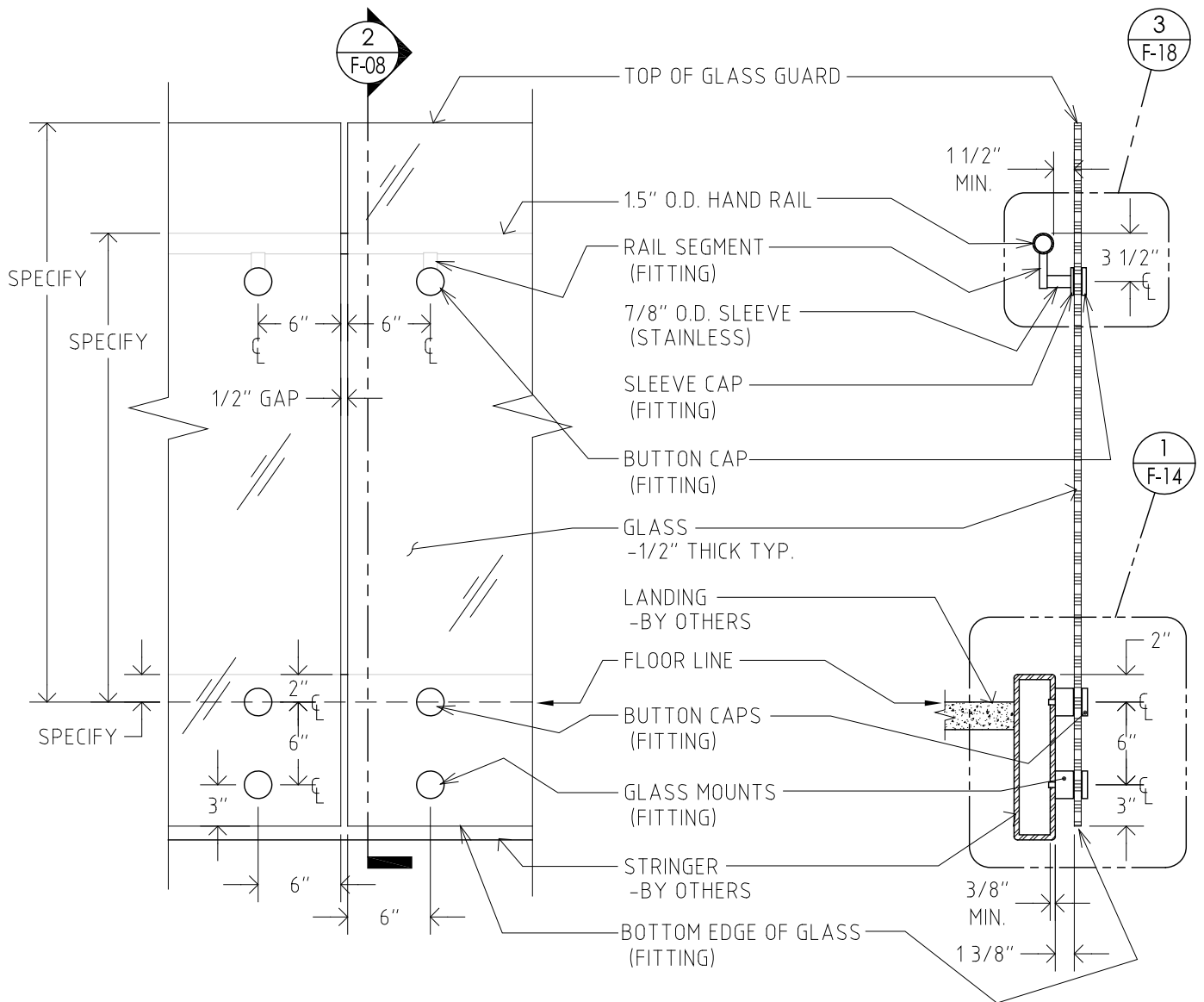
2 ELEVATION: WALL MOUNT HANDRAIL  
SCALE: 1/4" = 1'-0"



3 ELEVATION: NO-INFILL RAILING  
SCALE: 1/4" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. (1 7/8" O.D.) OR 1.5" O.D. (1 1/2") WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).  
'MODESTO' SYSTEM BALUSTER TUBES IN 304 STAINLESS STEEL - 1.66" O.D. (1-11/16" O.D.) WITH STANDARD MILL BRUSHED FINISH (LONGITUDINAL).



1  
F-08

DETAIL ELEVATION: SINGLE MOUNTS AT LEVEL FLOOR  
SCALE: 1" = 1'-0"

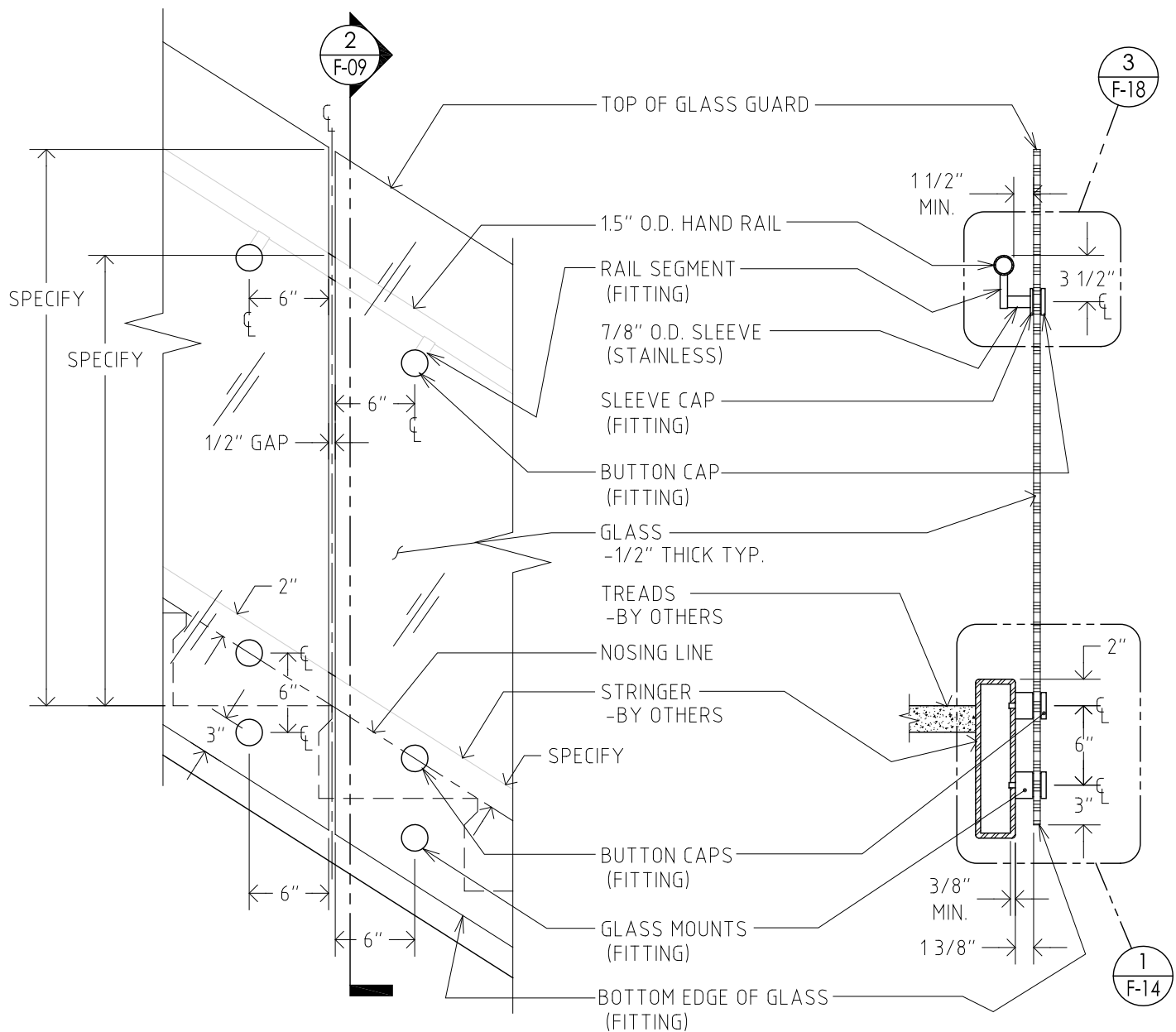
2  
F-08

DETAIL SECTION  
SCALE: 1" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. (1 <sup>7</sup>/<sub>8</sub>" O.D.) OR 1.5" O.D. ( 1 <sup>1</sup>/<sub>2</sub>" )  
WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).





1  
F-09

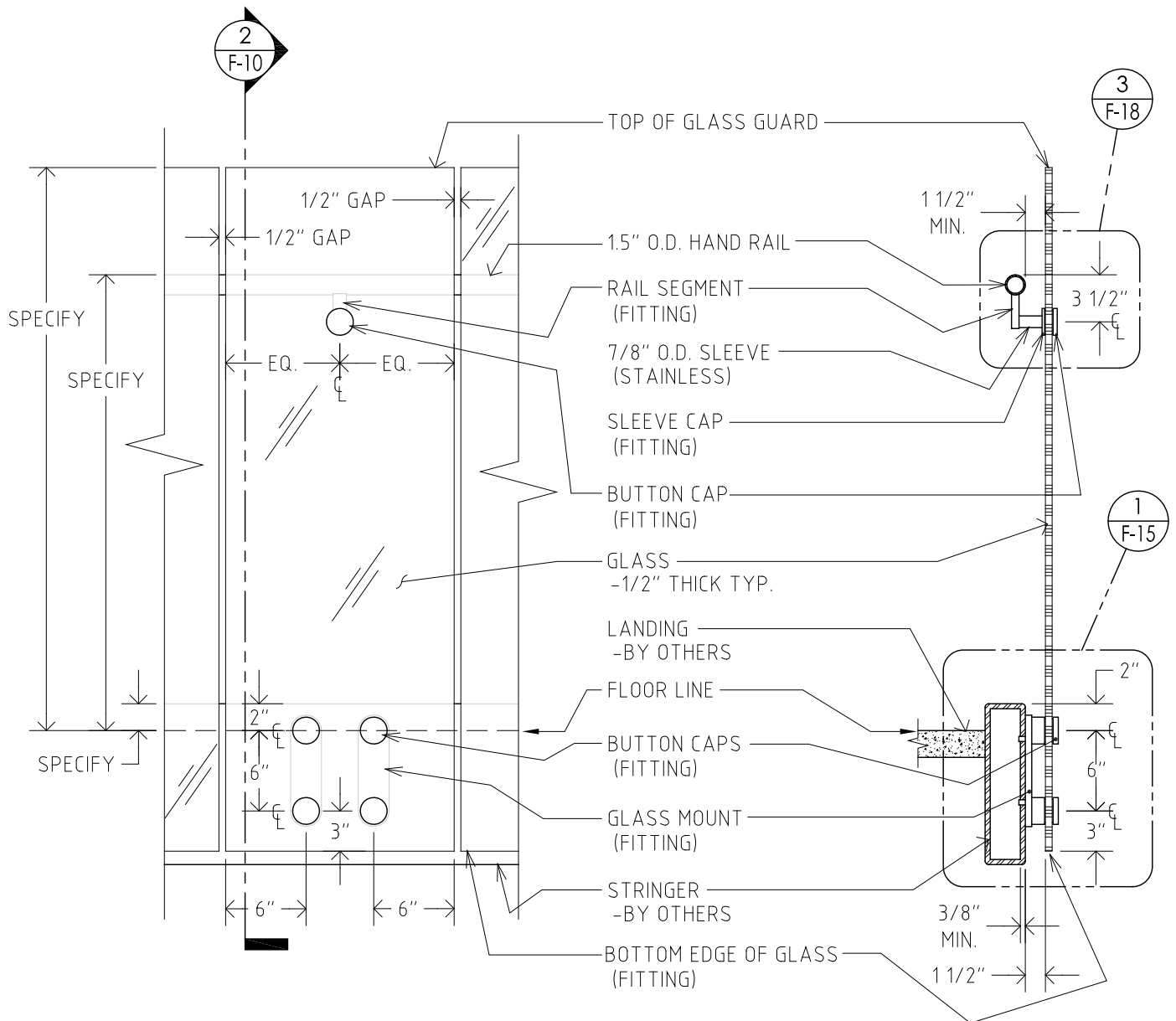
DETAIL ELEVATION: TOP MOUNT ON STAIR RUN  
SCALE: 1" = 1'-0"

2  
F-09

DETAIL SECTION  
SCALE: 1" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. ( $1\frac{7}{8}$ " O.D.) OR 1.5" O.D. ( $1\frac{1}{2}$ ") WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).



1  
F-10

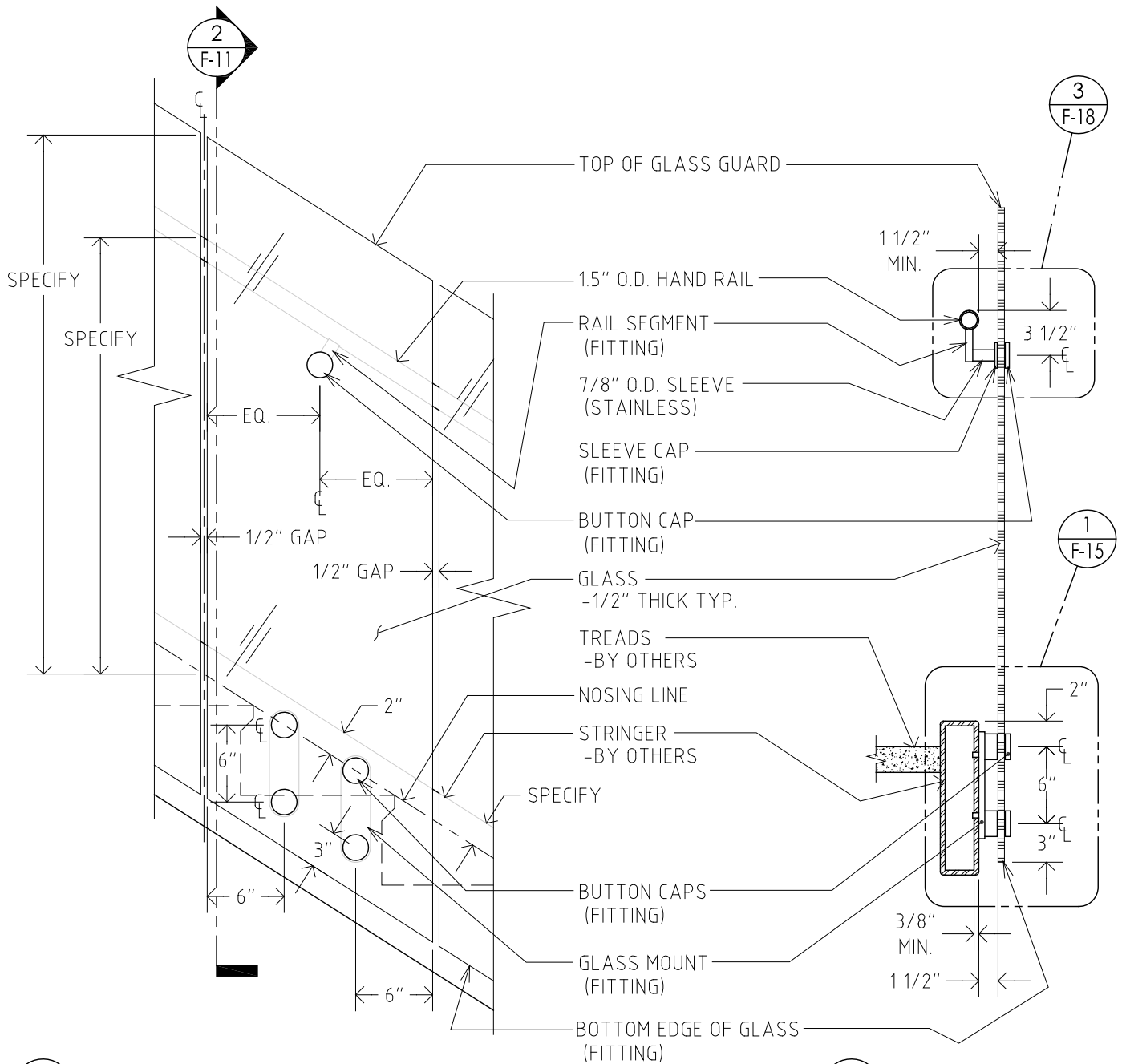
DETAIL ELEVATION: SIDE MOUNT AT LEVEL FLOOR  
SCALE: 1" = 1'-0"

2  
F-10

DETAIL SECTION  
SCALE: 1" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. (1 <sup>7</sup>/<sub>8</sub>" O.D.) OR 1.5" O.D. ( 1 <sup>1</sup>/<sub>2</sub>" )  
WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).

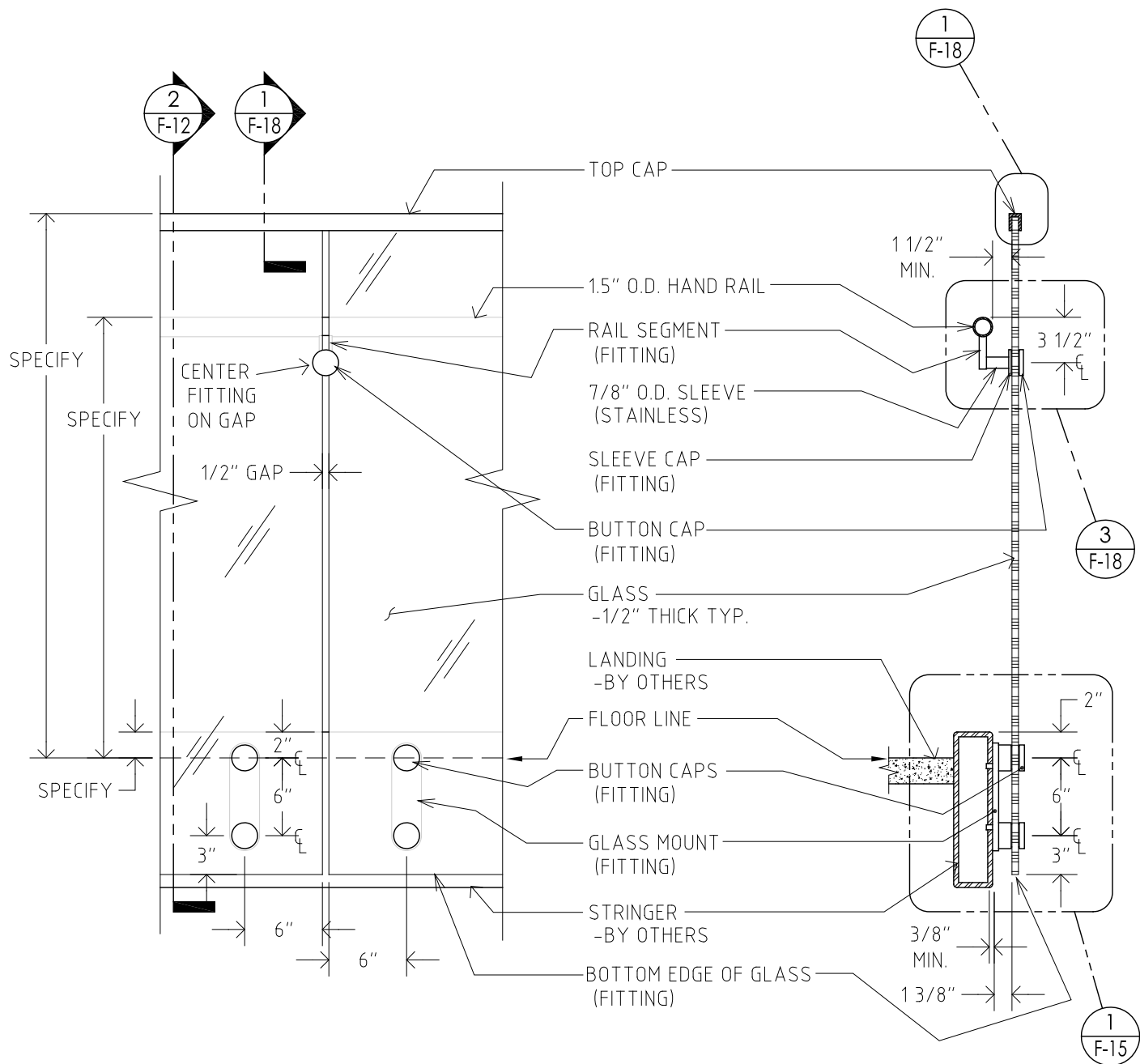


1  
F-11  
DETAIL ELEVATION: SIDE MOUNT ON STAIR RUN  
SCALE: 1" = 1'-0"

2  
F-11  
DETAIL SECTION  
SCALE: 1" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. (1  $\frac{7}{8}$ " O.D.) OR 1.5" O.D. (1  $\frac{1}{2}$ ")  
WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).



1  
F-12

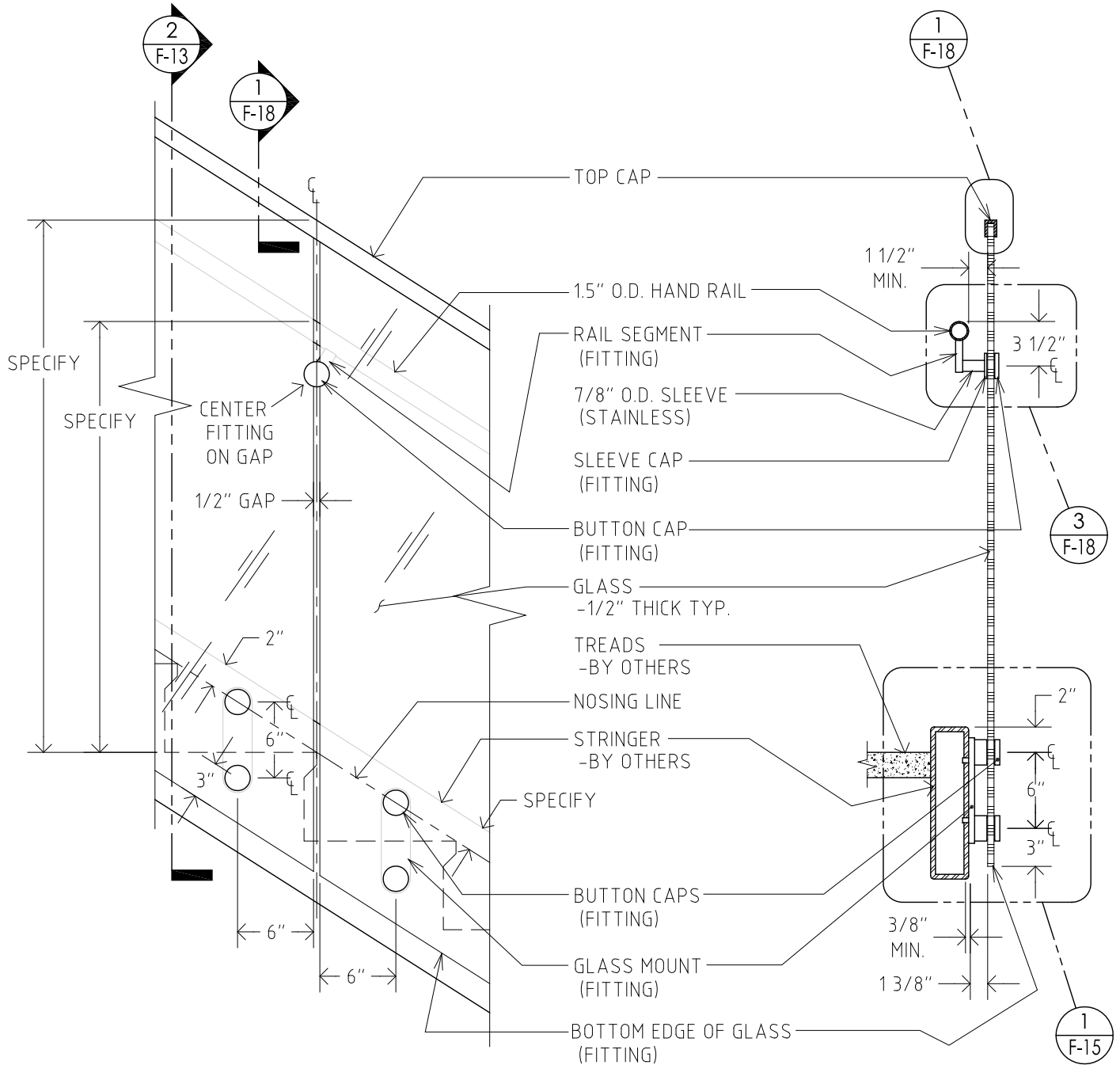
DETAIL ELEVATION: TOP MOUNT AT LEVEL FLOOR  
SCALE: 1" = 1'-0"

2  
F-12

DETAIL SECTION  
SCALE: 1" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. ( $1\frac{7}{8}$ " O.D.) OR 1.5" O.D. ( $1\frac{1}{2}$ ") WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).

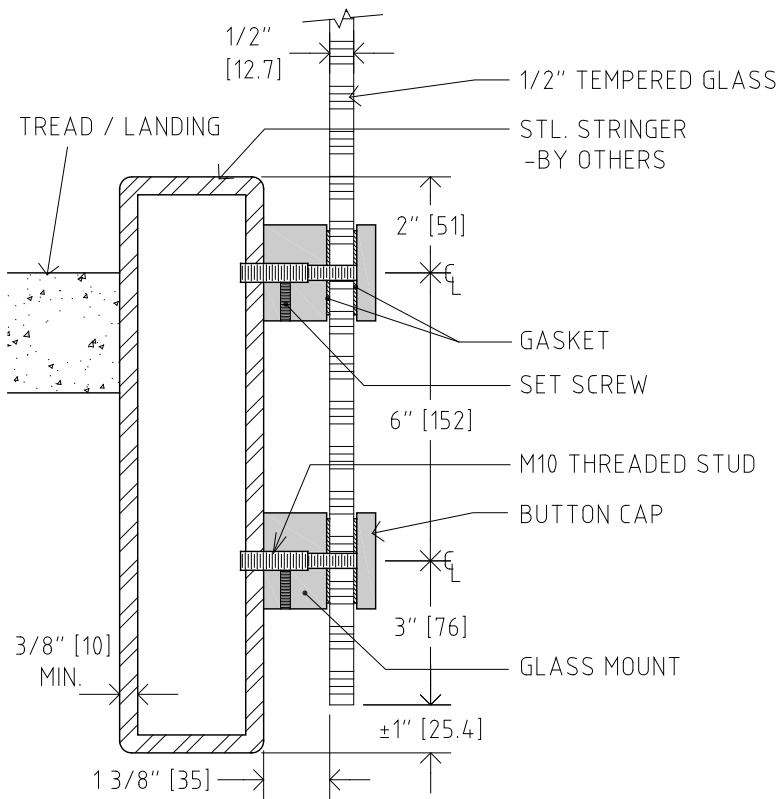


1 F-13 DETAIL ELEVATION: TOP MOUNT ON STAIR RUN  
SCALE: 1" = 1'-0"

2 F-13 DETAIL SECTION  
SCALE: 1" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. ( $1\frac{7}{8}$ " O.D.) OR 1.5" O.D. ( $1\frac{1}{2}$ ") WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).

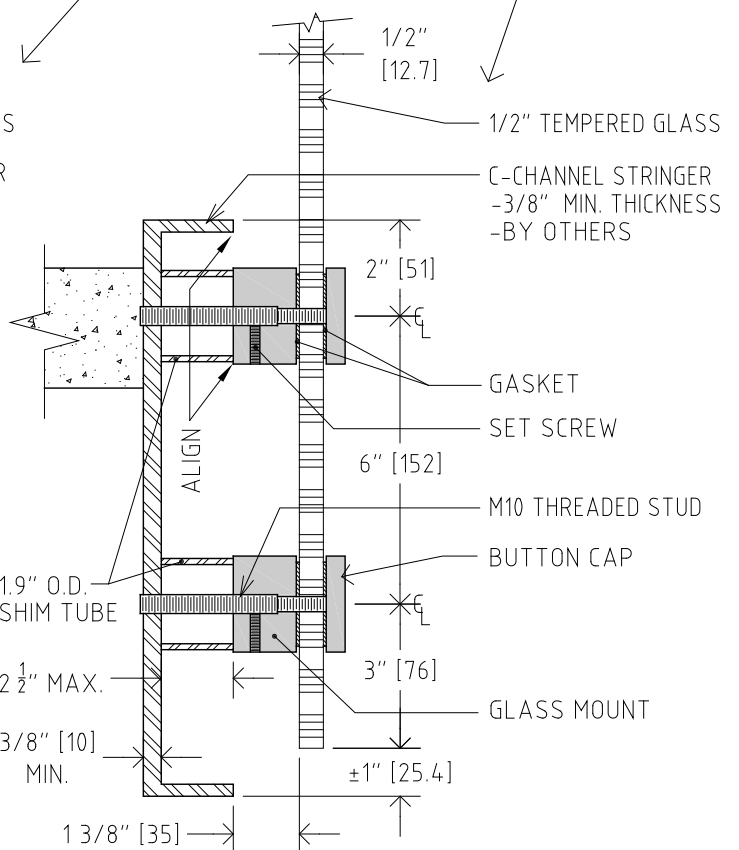
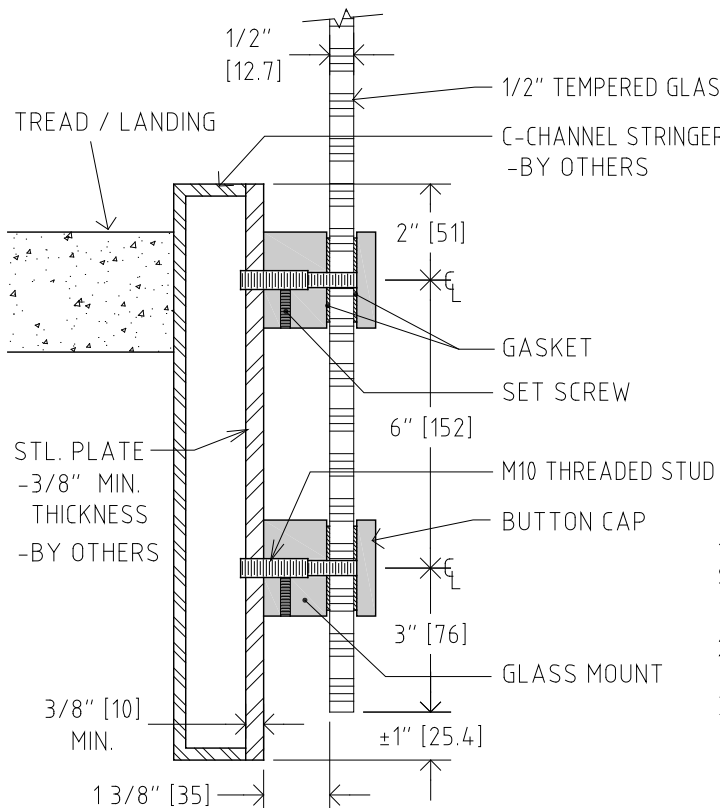


#### NOTES:

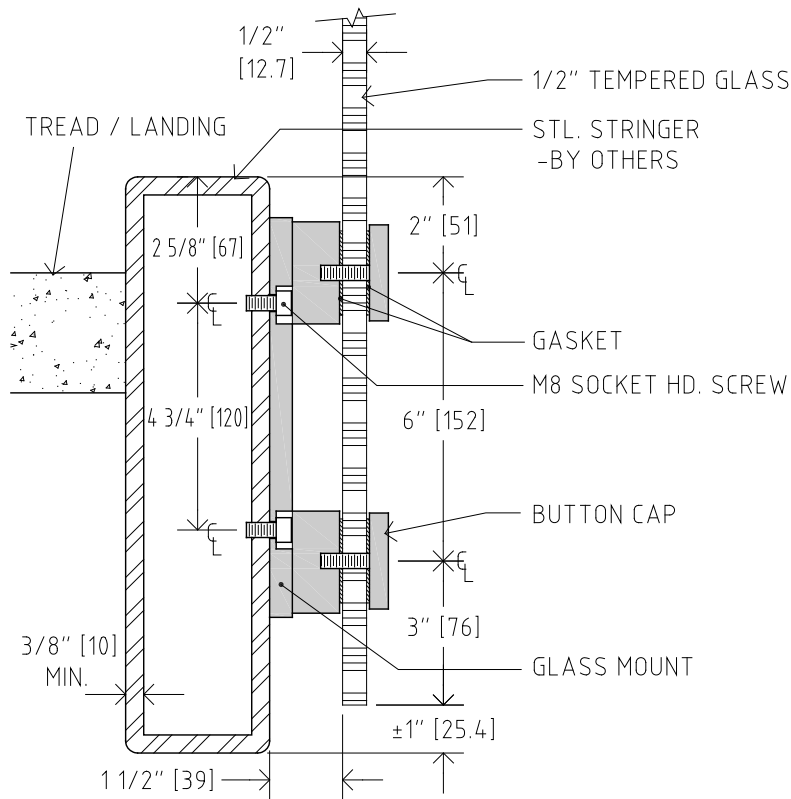
FITTINGS IN 304 STAINLESS STEEL.  
ARCHITECT SPECIFY FINISH: POLISHED  
OR BRUSHED.

NOTE:  
WHEN AN OPEN CHANNEL IS THE  
STRINGER, A PLATE (BY OTHERS)  
CAN BE USED FOR SIDE MOUNTING  
(MINIMUM THICKNESS OF PLATE IS  $\frac{3}{8}$ "),  
OR IN LIEU OF PLATE, SHIM TUBES  
CAN BE USED.

1  
F-14  
DETAIL SECTION: SIDE MOUNT AT STEEL TUBE STRINGER  
SCALE: 3" = 1'-0"



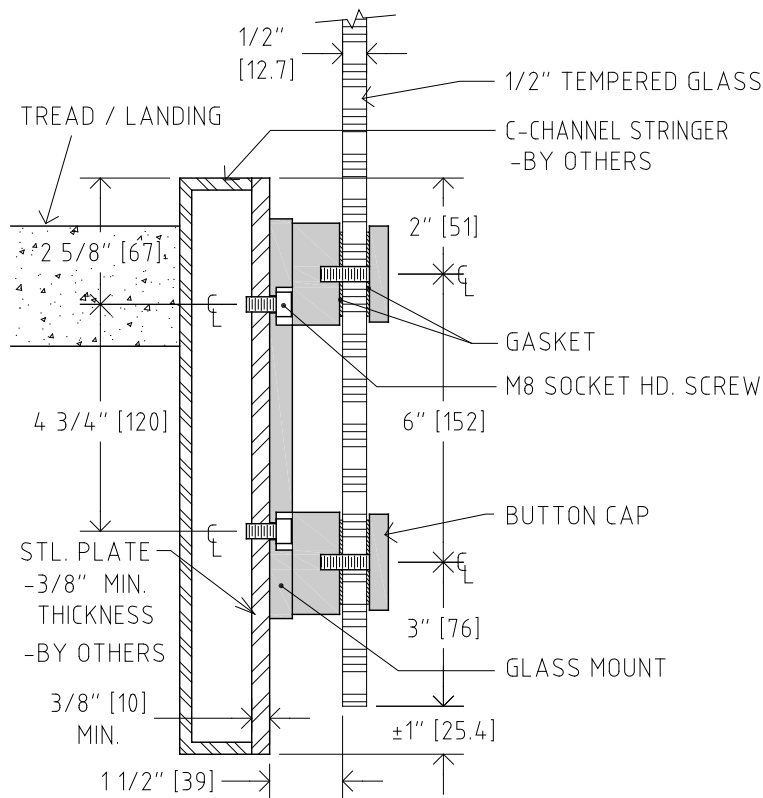
2  
F-14  
DETAIL SECTION: SIDE MOUNT AT STEEL CHANNEL STRINGER  
SCALE: 3" = 1'-0"



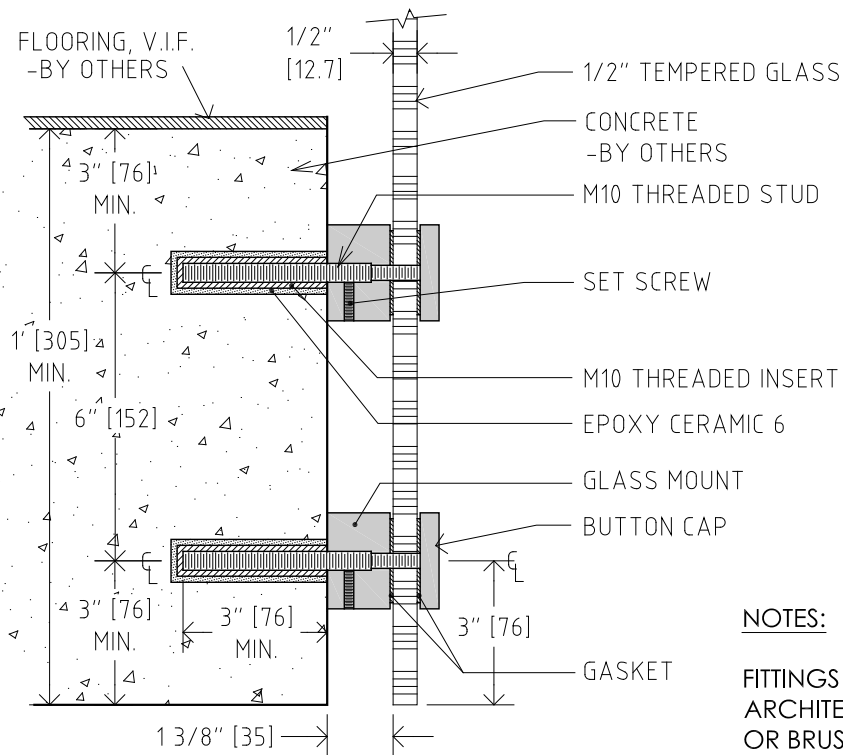
**NOTES:**

FITTINGS IN 304 STAINLESS STEEL.  
ARCHITECT SPECIFY FINISH: POLISHED  
OR BRUSHED.

**1** DETAIL SECTION: SIDE MOUNT AT STEEL TUBE STRINGER  
F-15 SCALE: 3" = 1'-0"



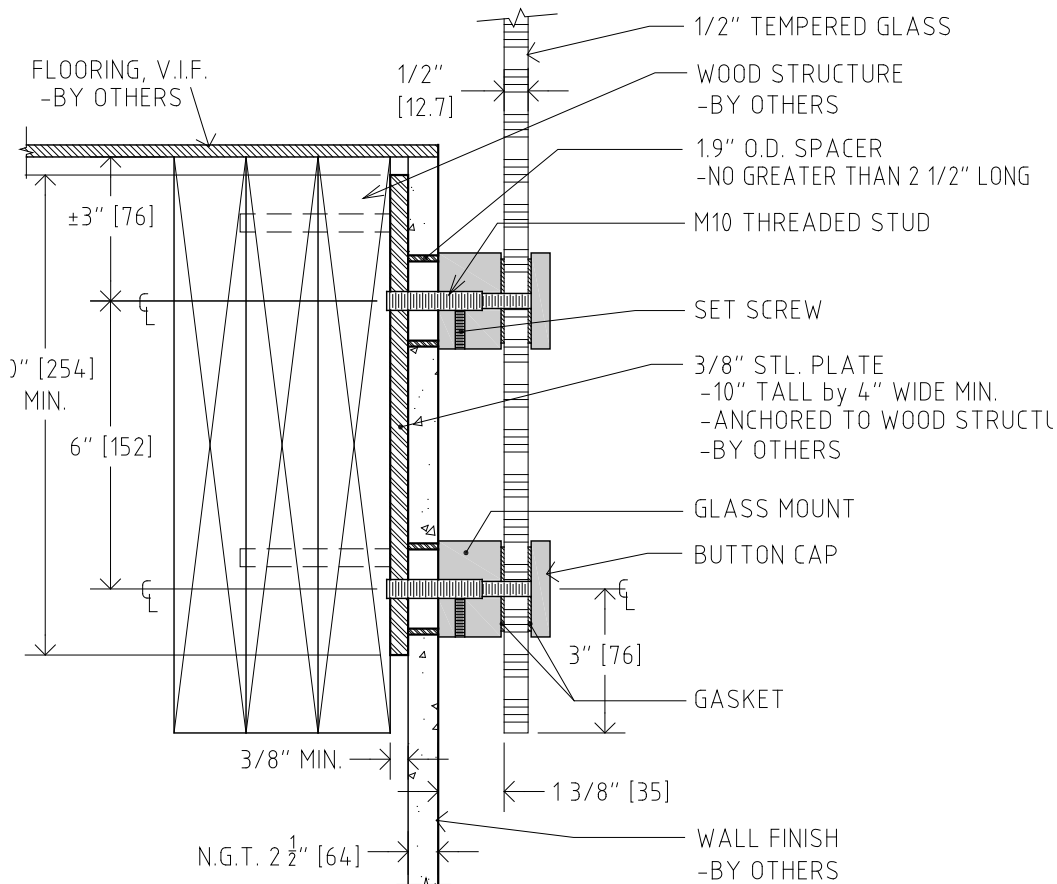
**2** DETAIL SECTION: SIDE MOUNT AT STEEL CHANNEL STRINGER  
F-15 SCALE: 3" = 1'-0"



**NOTES:**

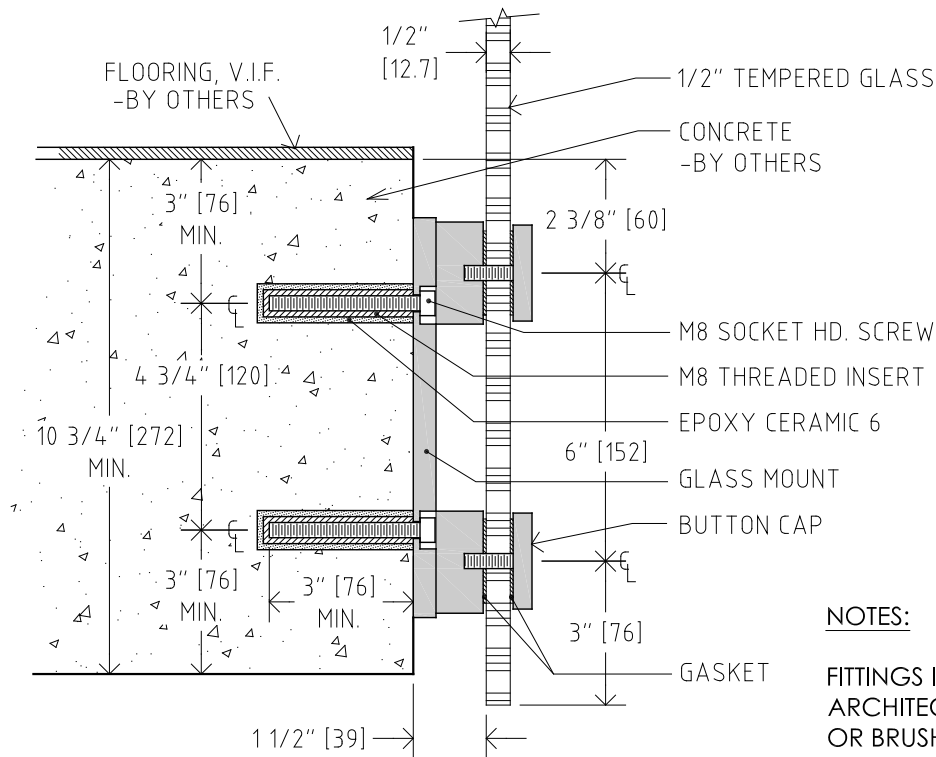
FITTINGS IN 304 STAINLESS STEEL.  
ARCHITECT SPECIFY FINISH: POLISHED OR BRUSHED.

**1** DETAIL SECTION: SIDE MOUNT INTO CONCRETE  
F-16 SCALE: 3" = 1'-0"



**2** DETAIL SECTION: SIDE MOUNT INTO WOOD STRUCTURE  
F-16 SCALE: 3" = 1'-0"

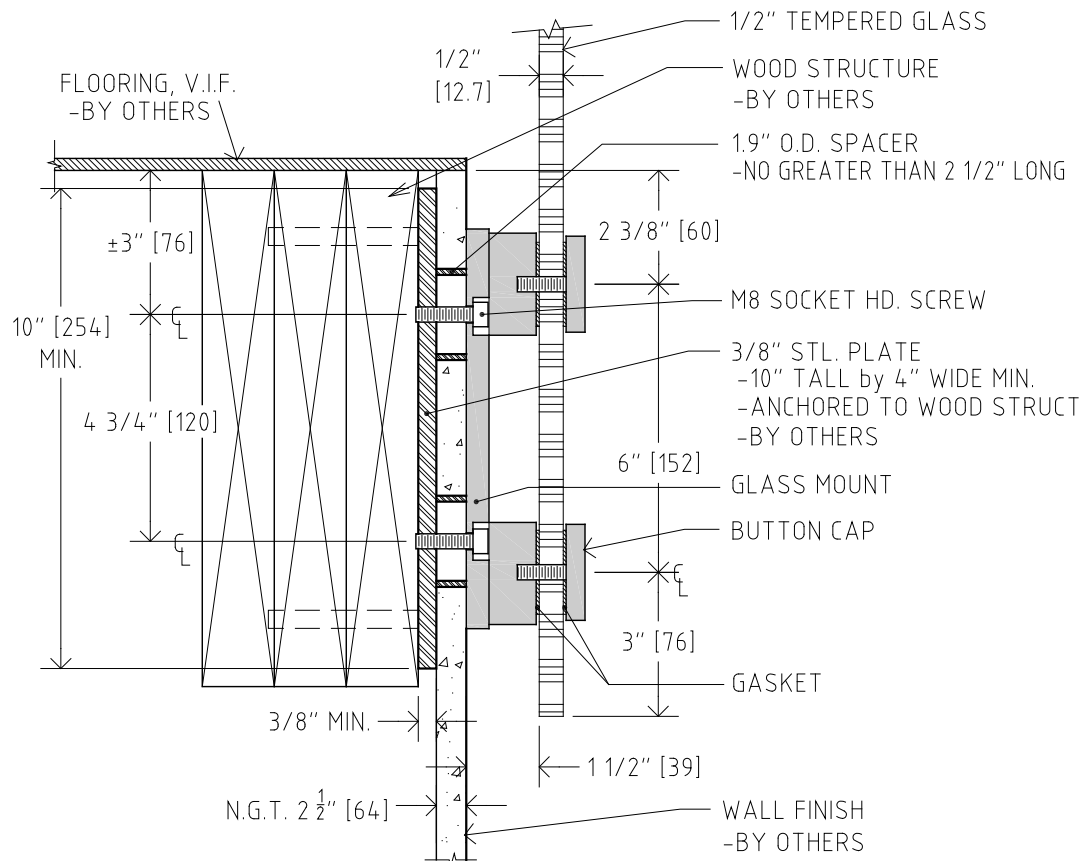




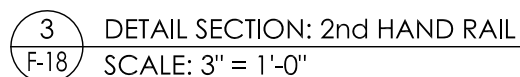
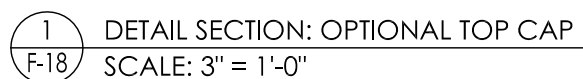
**NOTES:**

FITTINGS IN 304 STAINLESS STEEL.  
ARCHITECT SPECIFY FINISH: POLISHED  
OR BRUSHED.

1  
F-17  
DETAIL SECTION: SIDE MOUNT INTO CONCRETE  
SCALE: 3" = 1'-0"



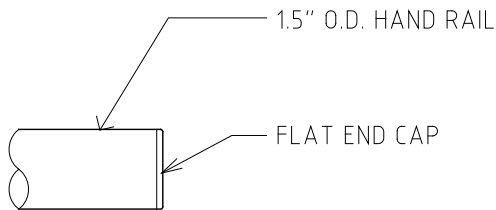
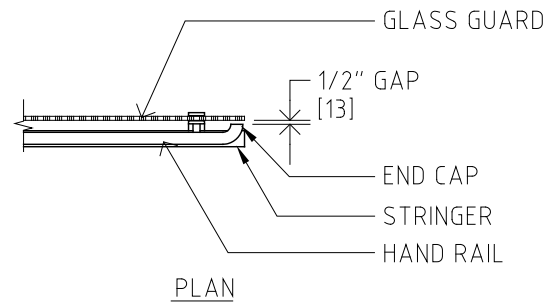
2  
F-17  
DETAIL SECTION: SIDE MOUNT INTO WOOD STRUCTURE  
SCALE: 3" = 1'-0"



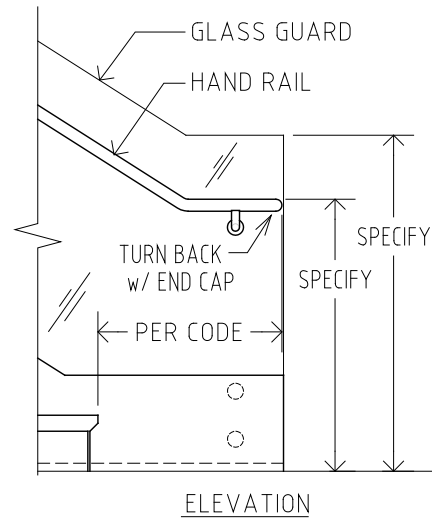
FITTINGS IN 304 STAINLESS STEEL. ARCHITECT SPECIFY FINISH: POLISHED OR BRUSHED.  
INFILL PANELS TO BE  $\frac{1}{2}$ " THK. CLEAR TEMPERED GLASS, ALL EDGES POLISHED. TEMPERED GLASS  
LOGO WILL APPEAR. CUSTOM DESIGNED GLASS MAY BE SPECIFIED.

NOTES:

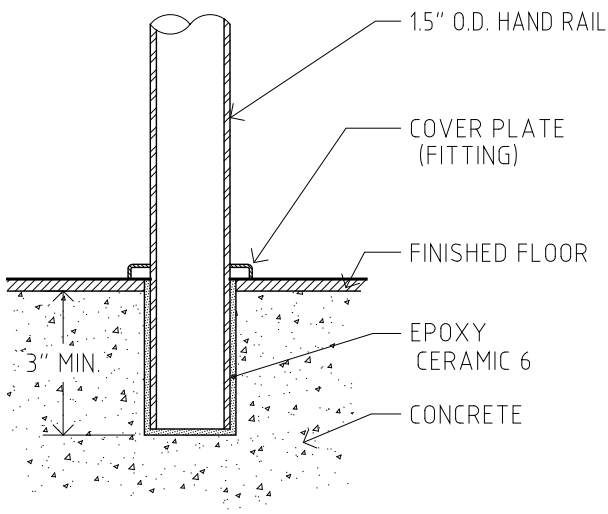
FITTINGS IN 304 STAINLESS STEEL.  
ARCHITECT SPECIFY FINISH: POLISHED  
OR BRUSHED.



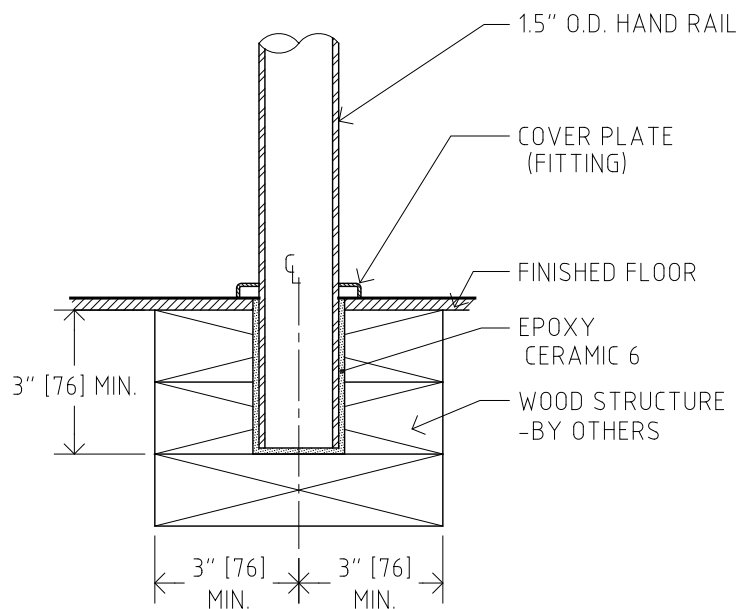
1  
F-19  
DETAIL: RAILING END CAP  
SCALE: 3" = 1'-0"



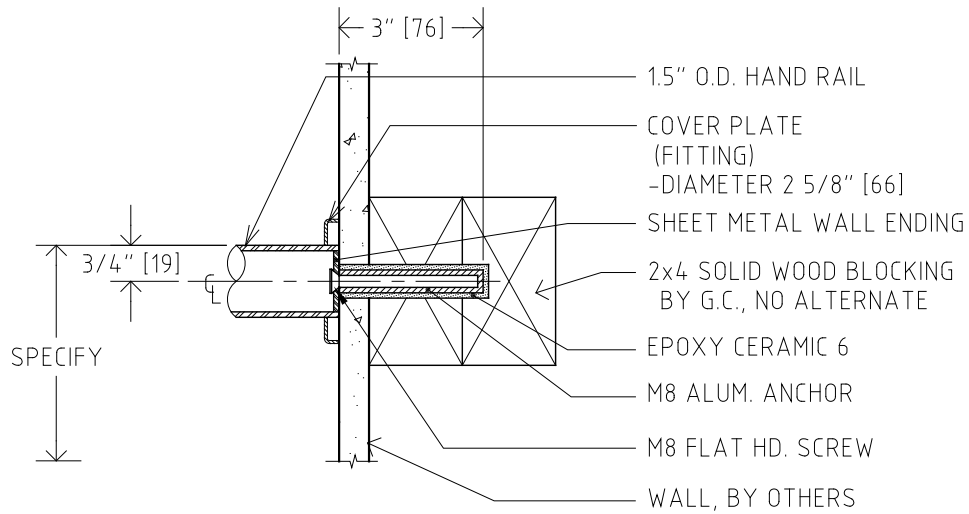
2  
F-19  
ALTERNATE HAND RAIL TERMINATION  
SCALE: 1/2" = 1'-0"



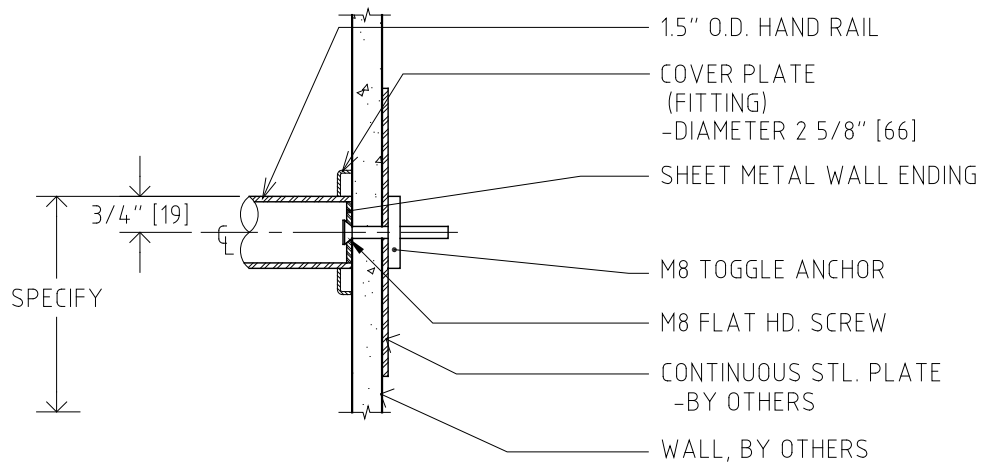
3  
F-19  
DETAIL: RAILING STARTER IN CONCRETE  
SCALE: 3" = 1'-0"



4  
F-19  
DETAIL: RAILING STARTER IN WOOD  
SCALE: 3" = 1'-0"



1 DETAIL SECTION: HAND RAIL TERMINATION, STANDARD  
F-20 SCALE: 3" = 1'-0"



2 DETAIL SECTION: HAND RAIL TERMINATION, ALTERNATE  
F-20 SCALE: 3" = 1'-0"

NOTES:

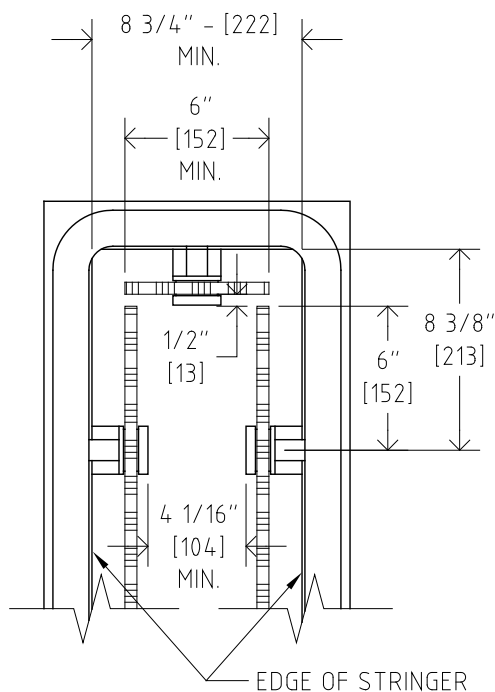
FITTINGS IN 304 STAINLESS STEEL. ARCHITECT SPECIFY FINISH: POLISHED OR BRUSHED.



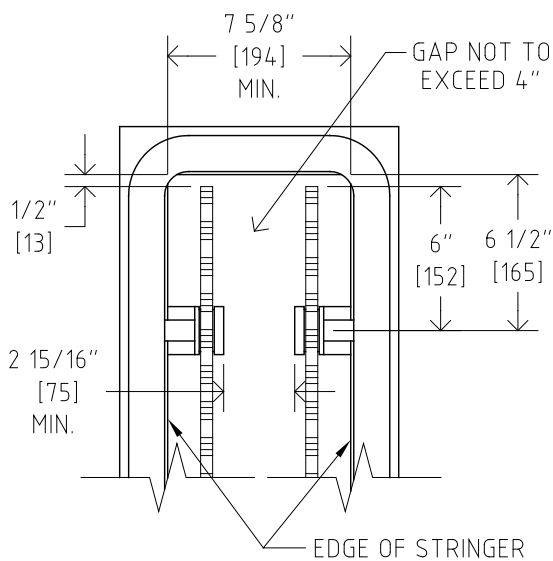
2  
F-21

DETAIL SECTION: WALL MOUNT BRACKETS, ALTERNATE  
SCALE: 3" = 1'-0"

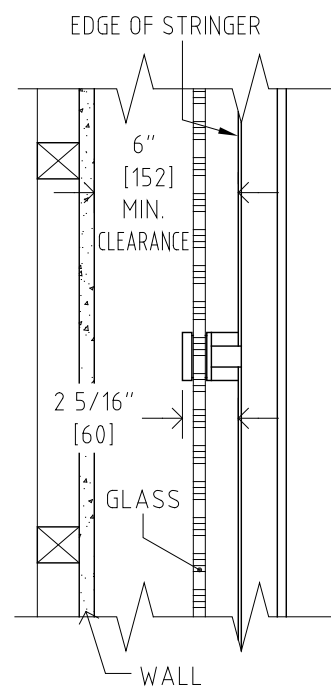
	SYSTEM: FOCUS	FITTING DETAILS	3" = 1'-0" (8.5 x 11)
		HAND RAIL WALL MOUNT BRACKETS	
	REVISION 2016-05		SHEET F-21 of 25



WITH END PANEL

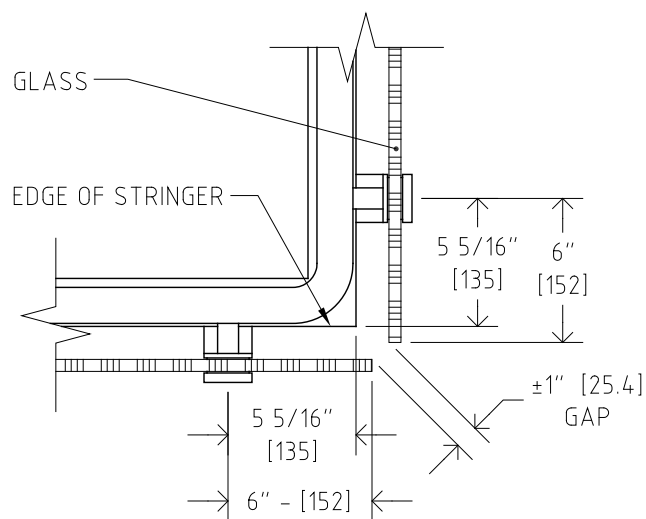


NO END PANEL

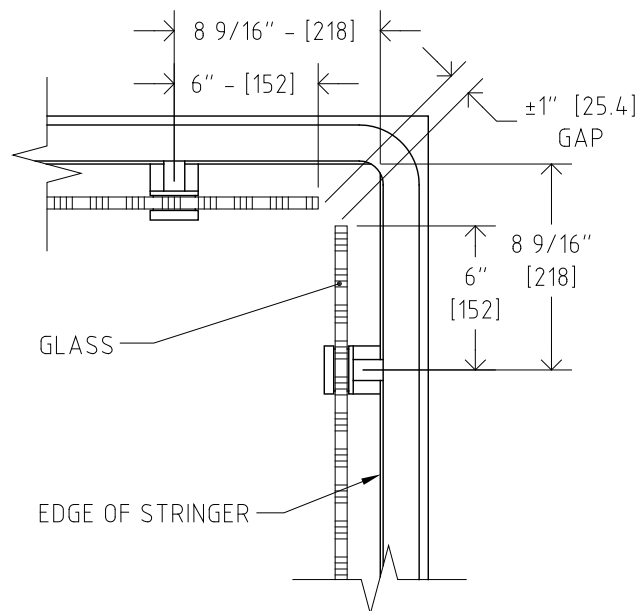


1 MINIMUM WIDTH, SIDE MOUNT AT EYE  
F-22 SCALE: 1 1/2" = 1'-0"

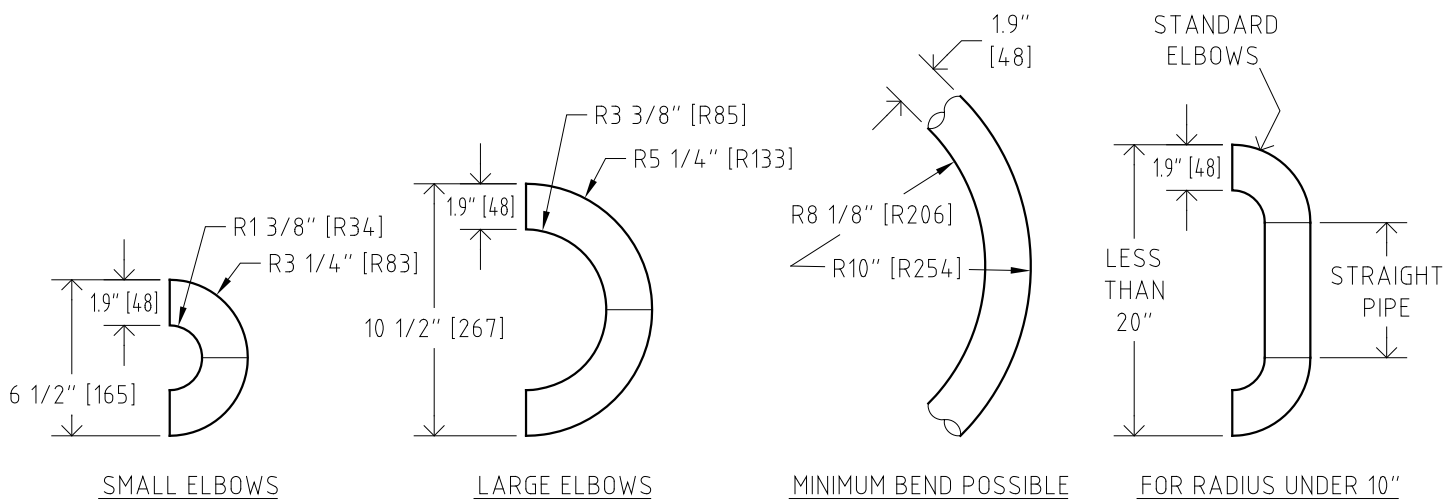
2 SIDE MOUNT ADJACENT TO WALL  
F-22 SCALE: 1 1/2" = 1'-0"



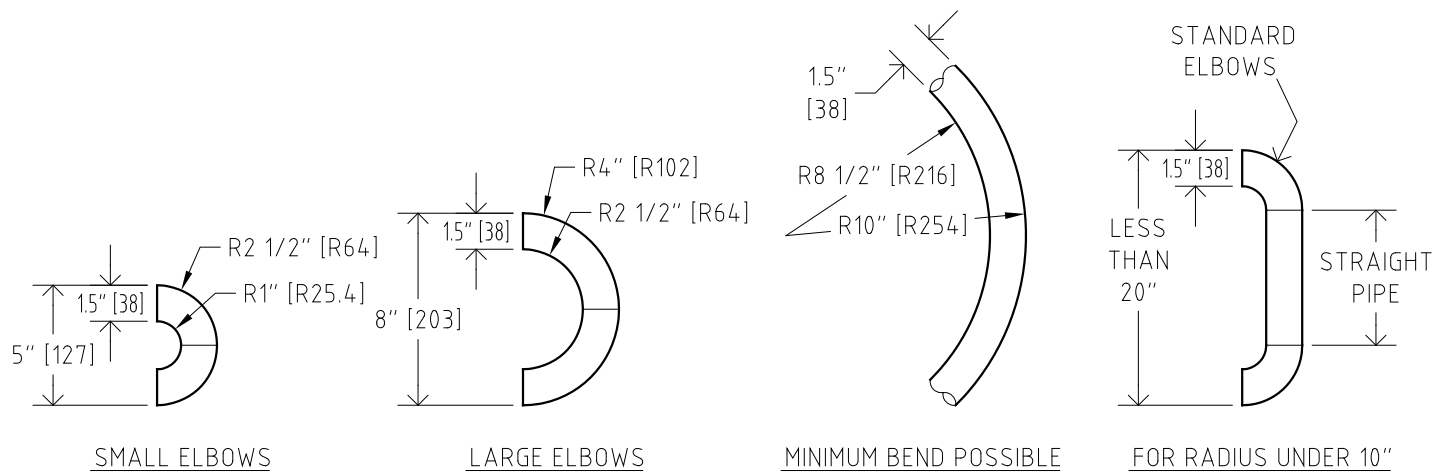
3 SIDE MOUNT OUTSIDE AT CORNER  
F-22 SCALE: 1 1/2" = 1'-0"



4 SIDE MOUNT INSIDE AT CORNER  
F-22 SCALE: 1 1/2" = 1'-0"



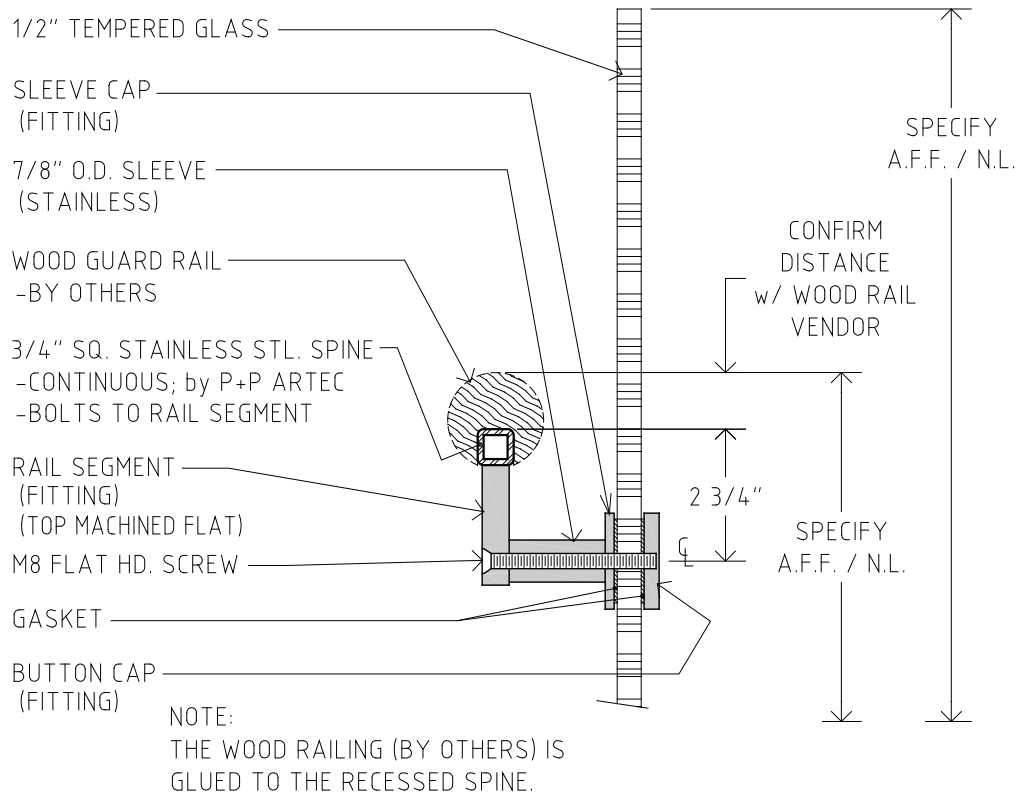
1 TOP VIEWS: ELBOWS AND BENDS FOR 1.9" O.D. PIPE  
F-23 SCALE: 1 1/2" = 1'-0"



2 TOP VIEWS: ELBOWS AND BENDS FOR 1.5" O.D. PIPE  
F-23 SCALE: 1 1/2" = 1'-0"

NOTES:

HANDRAIL TUBES IN 304 STAINLESS STEEL - 1.9" O.D. APPROVED BY A.D.A. (1 7/8" O.D.) OR 1.5" O.D. (1 1/2") WITH 360-400 GRIT FINISH (CIRCUMFERENCIAL).



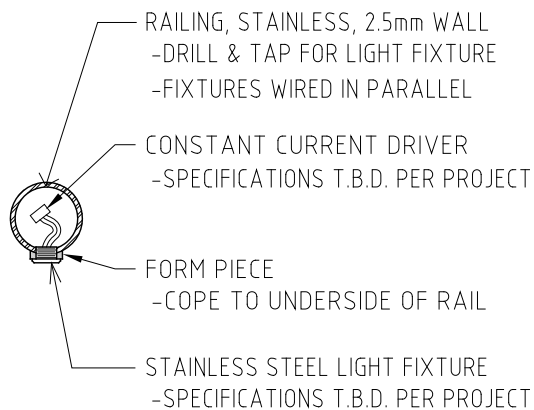
1  
F-24

DETAIL SECTION: WOOD HAND RAIL

SCALE: 3" = 1'-0"



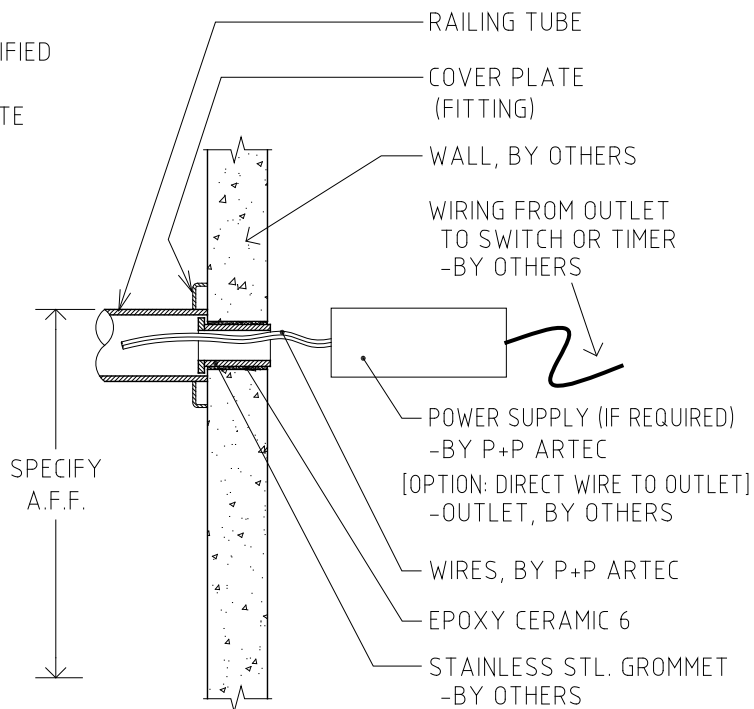
NOTE:  
 CONNECTION TO MAIN POWER SUPPLY PERFORMED BY CERTIFIED  
 ELECTRICIANS, PRIOR TO L.E.D. HAND RAIL INSTALLATION /  
 CONNECTION WITH THE RAILING SYSTEM. G.C. TO COORDINATE



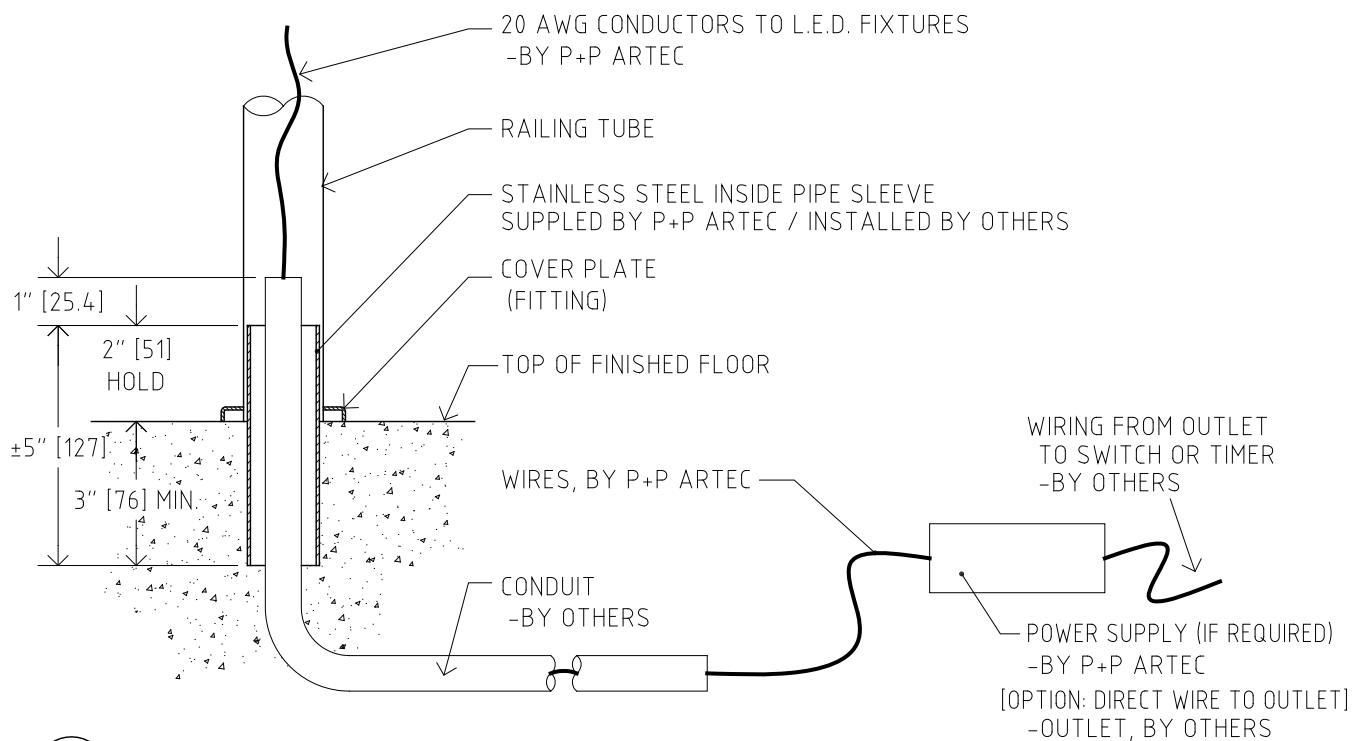
FEEDER CABLE: 20 AWG

FIXTURE WIRES: 22 AWG w/ POST TAP CONNECTORS

1  
 F-25  
 DETAIL SECTION: L.E.D. AT RAILING  
 SCALE: 3" = 1'-0"



2  
 F-25  
 DETAIL SECTION: POWER SOURCE FROM WALL  
 SCALE: 3" = 1'-0"



3  
 F-25  
 DETAIL SECTION: POWER SOURCE FROM FLOOR  
 SCALE: 3" = 1'-0"