

214ASY

EQUIPTO

BOCA 'U' – SERIES STAIRWAY ASSEMBLY INSTRUCTIONS

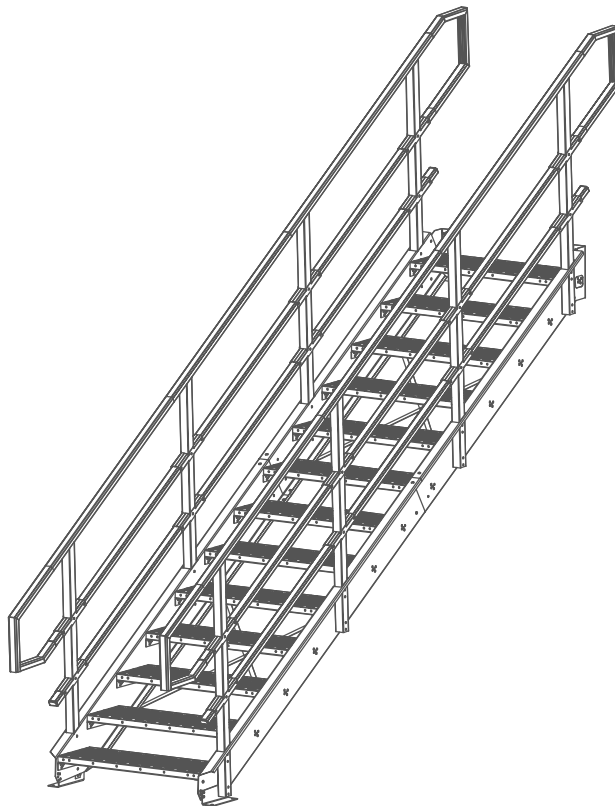


TABLE OF CONTENTS

STAIRWAY ASSEMBLY

1. TOP ANGLE ASSEMBLY	PAGE 3
1a. MOUNTING TOP ANGLE TO BUILDING STRUCTURE	PAGE 3
1b. MOUNTING TOP ANGLE TO V-GRIP UPRIGHT	PAGE 3
1c. MOUNTING TOP ANGLE TO IRON GRIP UPRIGHT	PAGE 3
1d. MOUNTING TOP ANGLE TO SLOTTED ANGLE.	PAGE 4
1e. MOUNTING TOP ANGLE TO GRATING.	PAGE 4
2. RISER PANEL ASSEMBLY.	PAGE 5
2a. ASSEMBLE RISER PANEL TO TOP ANGLE.	PAGE 5
2b. ASSEMBLE RISER PANEL TO FLOOR ANGLE.	PAGE 5
3. STAIR TREAD ASSEMBLY.	PAGE 6
3a. STAIR TREAD AND SUPPORT ANGLE ASSEMBLY.	PAGE 6
3b. FASTENING STAIR TREAD ASSEMBLY TO RISER	PAGE 6
4. SWAY BRACE ASSEMBLY.	PAGE 7

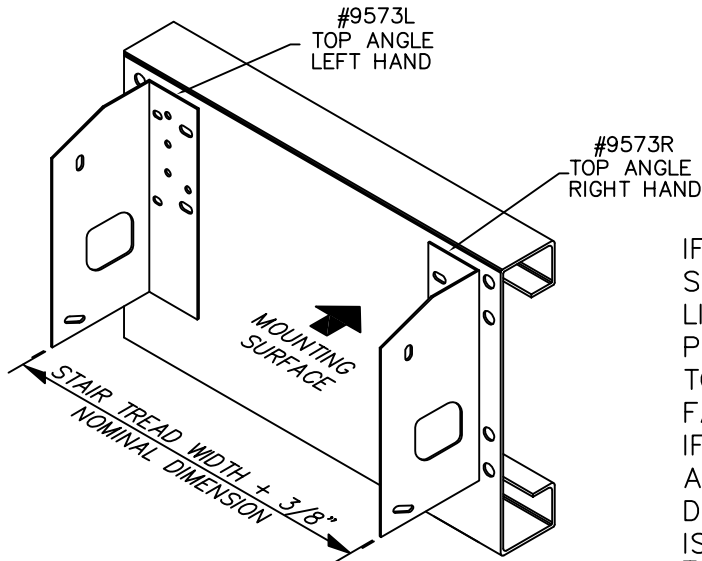
STAIR RAILING ASSEMBLY

1. RAILING POST ASSEMBLY	PAGE 8
2. TOP RAIL ASSEMBLY.	PAGE 8
2a. FOR U5 THROUGH U7 STAIRWAYS	PAGE 8
2b. FOR U8 THROUGH U11 STAIRWAYS.	PAGE 10
2c. FOR U13 THROUGH U20 STAIRWAYS	PAGE 12
3. INTERMEDIATE AND END RAILS ASSEMBLY	PAGE 14
4. END EXTENSION ASSEMBLY.	PAGE 15
5. RAIL PLUG, POST PLUG & SLOT COVER ASSEMBY	PAGE 16
6. STAIRWAY RAILING CHART.	PAGE 18
FOR U5 THROUGH U7 STAIRWAYS	PAGE 18
FOR U8 THROUGH U11 STAIRWAYS.	PAGE 18
FOR U13 AND U15 STAIRWAYS	PAGE 19
FOR U17 AND U20 STAIRWAYS	PAGE 20

STAIRWAY ASSEMBLY

1 TOP ANGLE ASSEMBLY

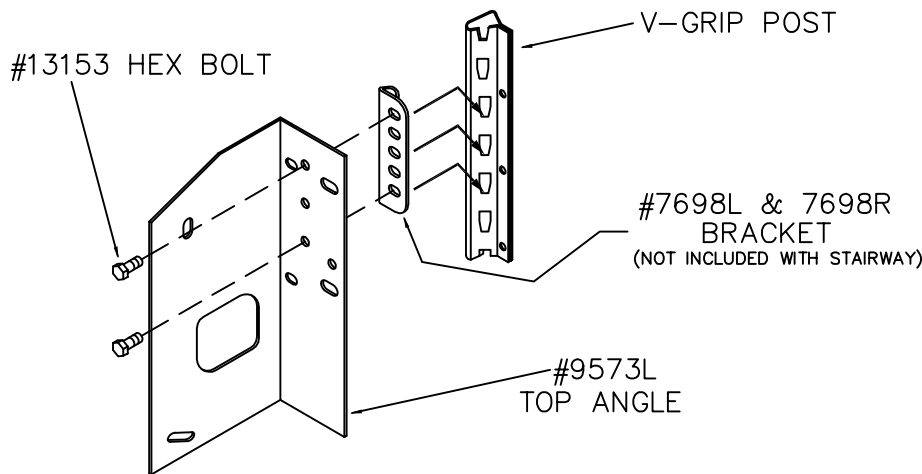
1a) MOUNTING TOP ANGLE TO BUILDING STRUCTURE



NOTE

IF MOUNTING TO BUILDING STRUCTURE, REAR SURFACE OF ANGLE MUST BE IN A PERPENDICULAR LINE, FLUSH WITH THE OUTER EDGE OF MEZZANINE PLATFORM TO GAIN FULL ADVANTAGE OF THE TOP STAIR TREAD DEPTH. A MINIMUM OF TWO (2) FASTENERS MUST BE INSTALLED IN EACH ANGLE. IF ANGLE IS TO BE FASTENED TO THE WALL, ANCHORS MUST BE FURNISHED BY OTHERS. DO NOT TIGHTEN FASTENERS UNTIL STAIRWAY IS COMPLETELY ASSEMBLED. TO MOUNT STAIRWAY TO EQUIPTO MEZZANINE SEE MEZZANINE INSTRUCTIONS.

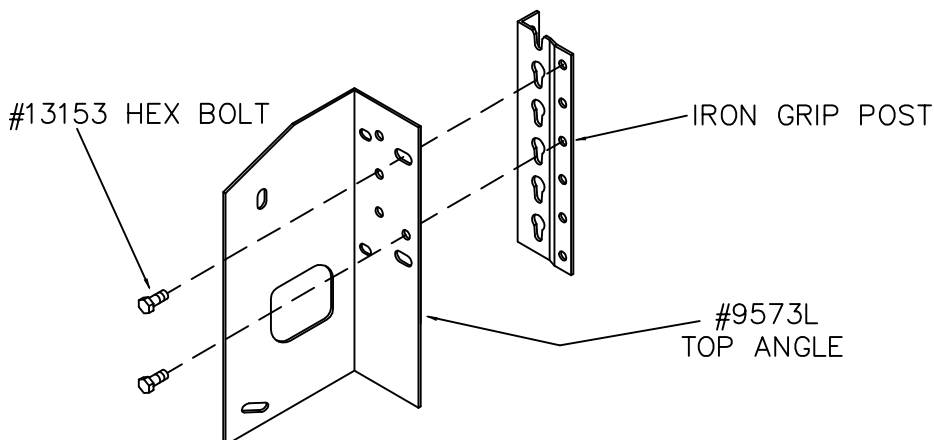
1b) MOUNTING TOP ANGLE TO V-GRIP UPRIGHT



#13153 HEX BOLT 5/16-18 x 3/4"
 #13051 LOCK NUT 5/16-18
 #13182 SPRING LOCKWASHER 3/8"
 (2 PER ANGLE)

FULL SCALE

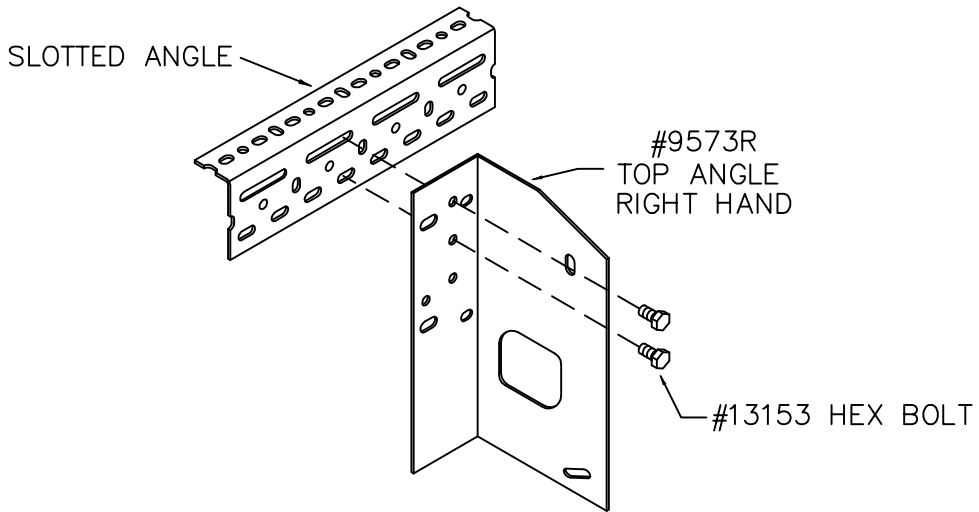
1c) MOUNTING TOP ANGLE TO IRON GRIP UPRIGHT



#13153 HEX BOLT 5/16-18 x 3/4"
 #13051 LOCK NUT 5/16-18
 #13182 SPRING LOCKWASHER 3/8"
 (2 PER ANGLE)

FULL SCALE

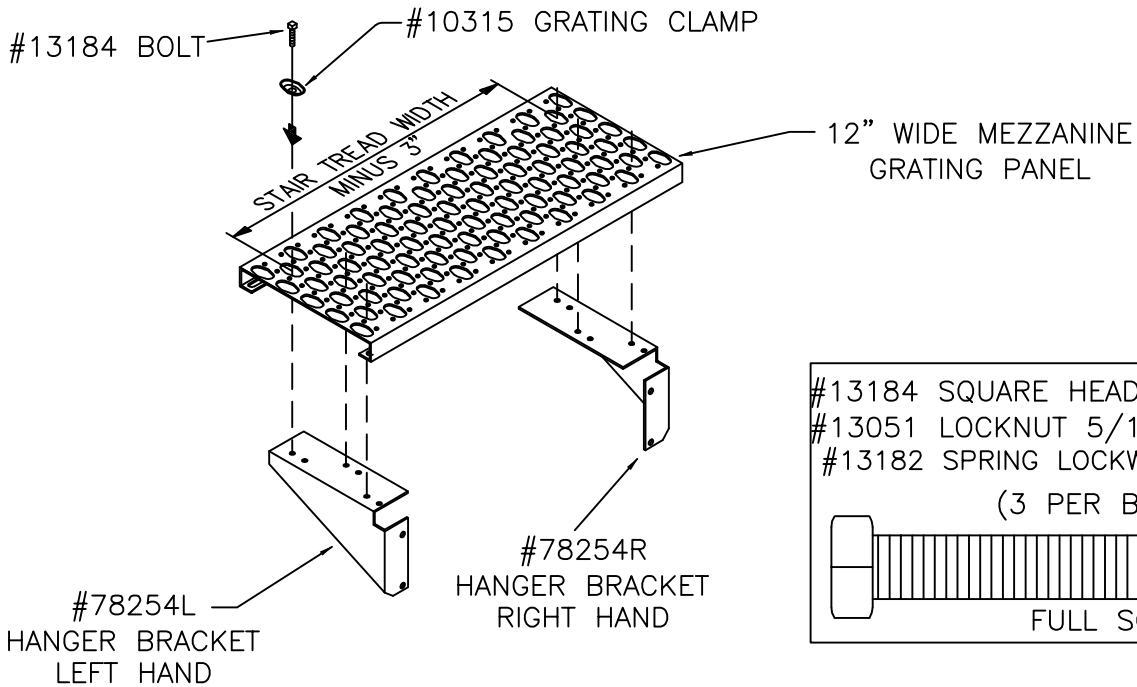
1d) MOUNTING TOP ANGLE TO SLOTTED ANGLE



#13153 HEX BOLT 5/16-18 x 3/4"
 #13051 LOCK NUT 5/16-18
 #13182 SPRING LOCKWASHER 3/8"
 (2 PER ANGLE)

FULL SCALE

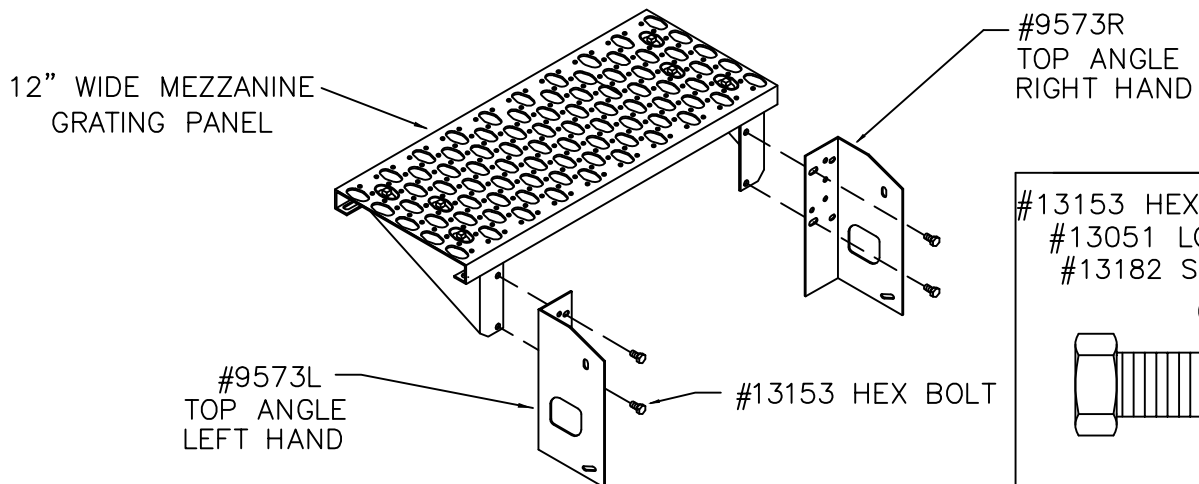
1e) MOUNTING TOP ANGLE TO GRATING
ASSEMBLE HANGER BRACKET TO GRATING PANEL
 (HARDWARE AND HANGER BRACKETS NOT INCLUDED WITH STAIRWAY)



#13184 SQUARE HEAD BOLT 5/16"-18 x 2"
 #13051 LOCKNUT 5/16"-18
 #13182 SPRING LOCKWASHER 3/8"
 (3 PER BRACKET)

FULL SCALE

ASSEMBLE TOP ANGLE TO HANGER BRACKET

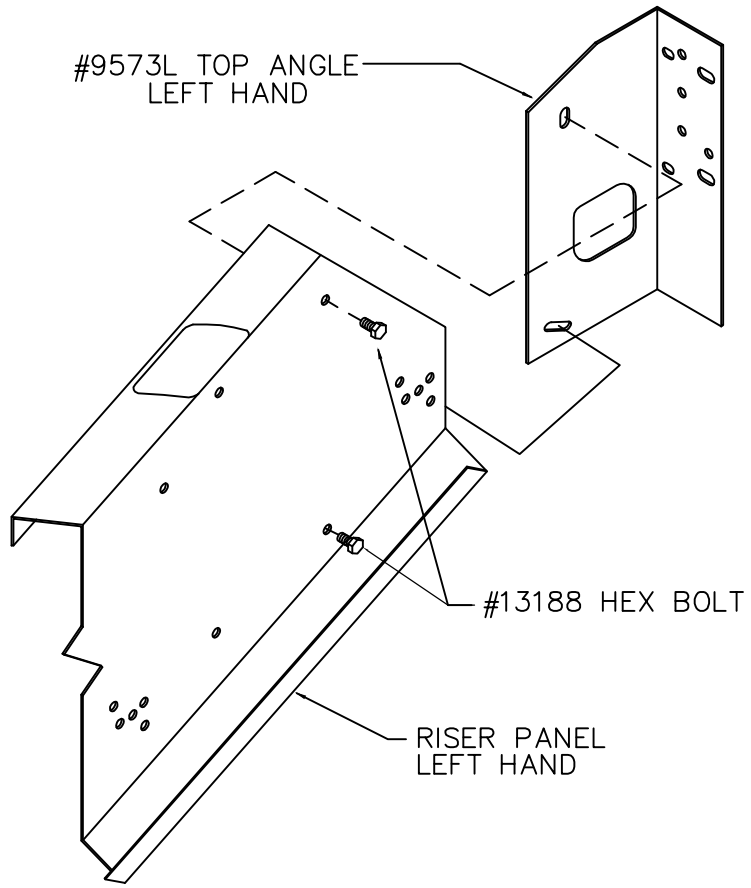


#13153 HEX BOLT 5/16-18 x 3/4"
 #13051 LOCK NUT 5/16-18
 #13182 SPRING LOCKWASHER 3/8"
 (2 PER ANGLE)

FULL SCALE

2 RISER PANEL ASSEMBLY

2a) ASSEMBLE RISER PANEL TO TOP ANGLE



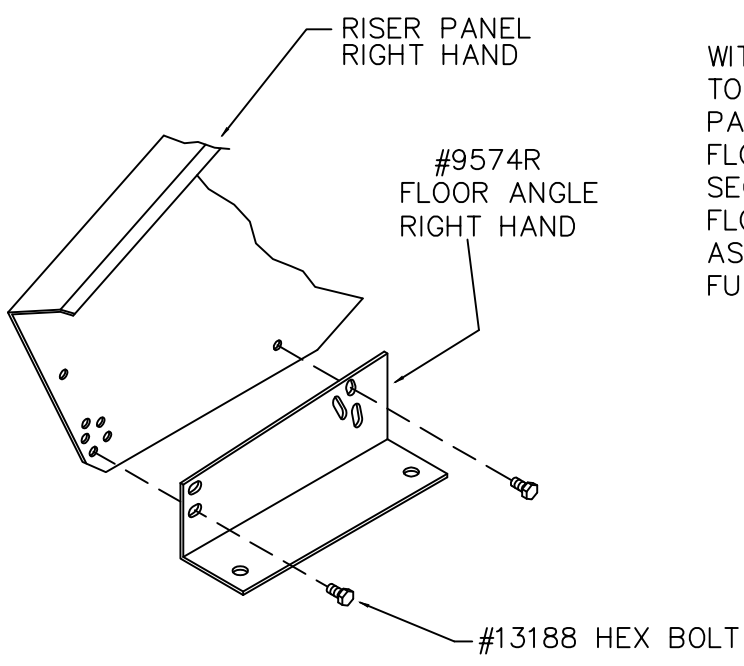
NOTE

AFTER THE TOP ANGLES ARE IN PLACE, LIFT TOP END OF THE RISER PANEL INTO POSITION WITH THE VERTICAL SURFACE OF THE RISER PANEL TO THE INSIDE OF THE TOP ANGLE AND THE SLOTTED TOP FLANGE TO THE OUTSIDE. REPEAT THIS PROCEDURE WITH THE OPPOSITE RISER PANEL. DURING THIS ASSEMBLY THE BOTTOM ENDS OF THE RISERS ARE TO REST ON THE FLOOR. DO NOT TIGHTEN BOLTS AT THIS POINT.

#13188 HEX HEAD BOLT 3/8"-16 x 3/4"
 #13191 HEX NUT 3/8"-16
 #13182 SPRING LOCKWASHER 3/8"

(2 PER TOP ANGLE)

2b) MOUNTING RISER PANEL TO FLOOR ANGLE



NOTE

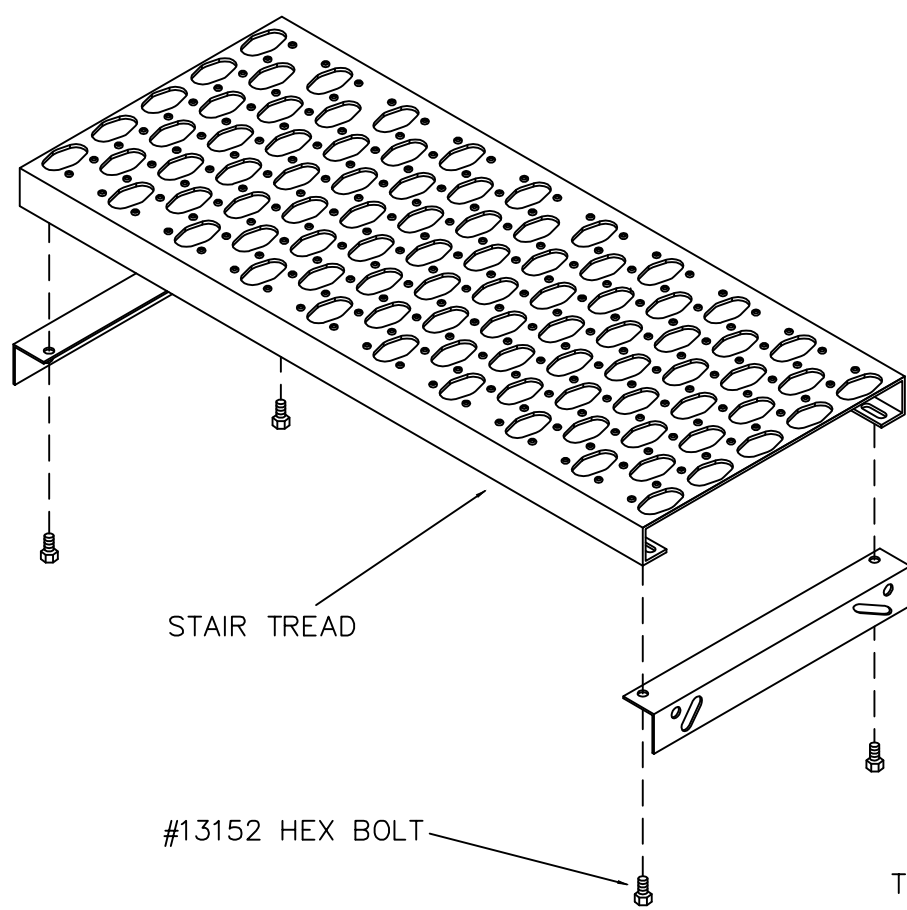
WITH THE RISER PANEL FASTENED TO THE TOP ANGLE, RAISE LOWER END OF THE RISER PANEL FROM THE FLOOR AND FASTEN THE FLOOR ANGLE IN PLACE. TIGHTEN BOLTS SECURELY. STAIRWAY IS TO BE ANCHORED TO THE FLOOR BUT NOT UNTIL STAIRWAY IS COMPLETELY ASSEMBLED. FLOOR ANCHORS ARE TO BE FURNISHED BY OTHERS.

#13188 HEX HEAD BOLT 3/8"-16 x 3/4"
 #13191 HEX NUT 3/8"-16
 #13182 SPRING LOCKWASHER 3/8"

(2 PER FLOOR ANGLE)

3 STAIR TREAD ASSEMBLY

3a) STAIR TREAD AND SUPPORT ANGLE ASSEMBLY



#13152 HEX HEAD BOLT
5/16" -18 X 5/8"

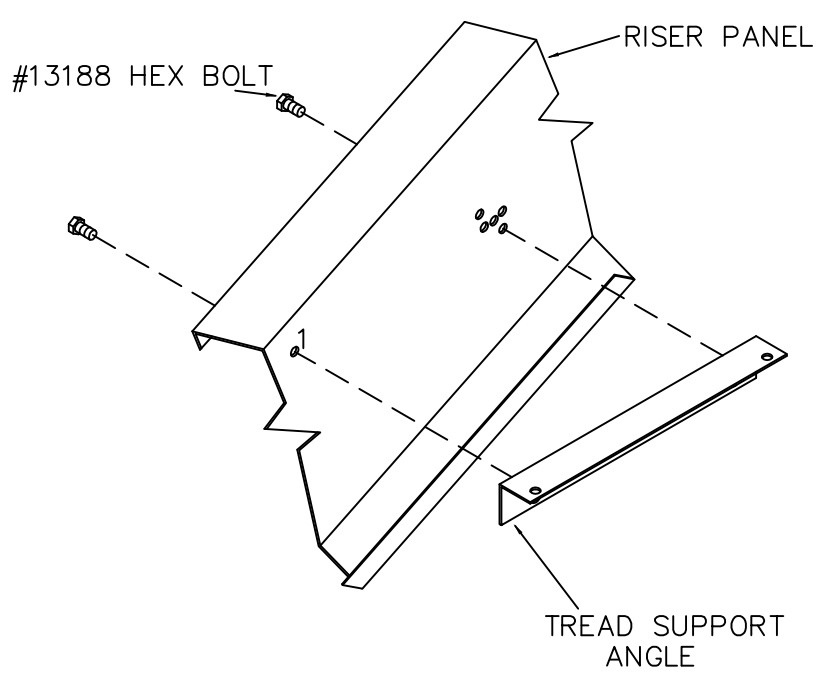
#13051 LOCKNUT 5/16
(2 PER ANGLE)

FULL SCALE

TREAD SUPPORT ANGLE
#9575 - 12" TREAD

NOTE
TIGHTEN BOLTS SECURELY.

3b) FASTENING STAIR TREAD ASSEMBLY TO RISER



NOTE
STAIR TREAD NOT SHOWN FOR CLARITY. BOLT TREAD SUPPORT ANGLE TO HOLE 1 IN THE RISER PANEL. LEVEL TREAD SUPPORT ANGLE AND BOLT THE OTHER END OF ANGLE IN THIS POSITION. DO NOT TIGHTEN TREADS UNTIL ALL STAIR TREADS ARE IN PLACE.

#13188 HEX HEAD BOLT 3/8"-16 x 3/4"

#13191 HEX NUT 3/8" -16

#13182 SPRING LOCKWASHER 3/8"

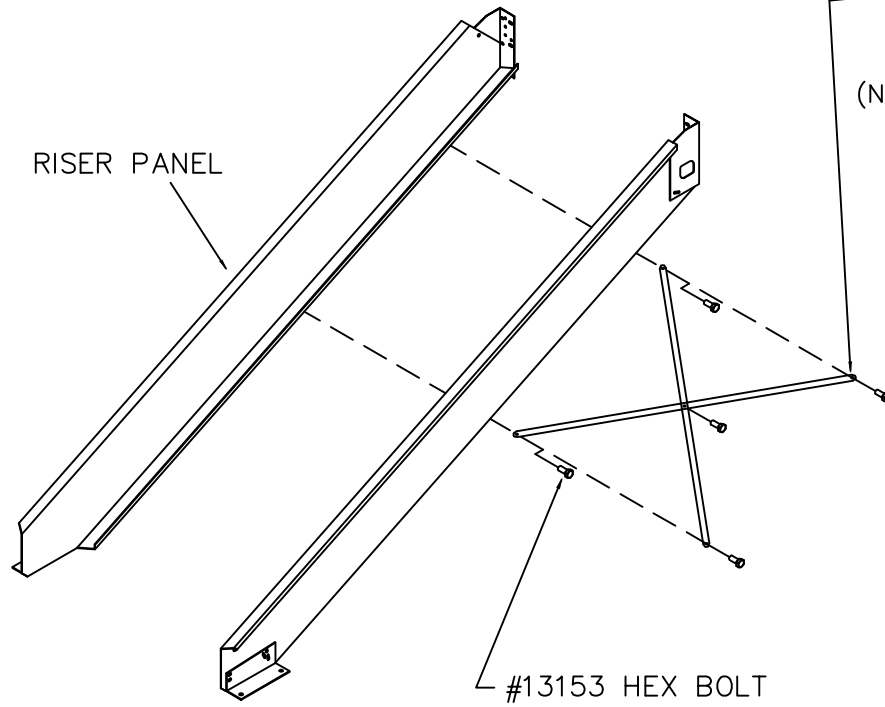
(2 PER SUPPORT ANGLE)

FULL SCALE

4

SWAY BRACE ASSEMBLY

FOR U9 THROUGH U11 STAIRWAYS



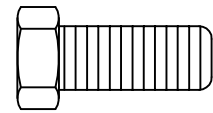
BRACE

#6444 - 36" WIDE STAIRWAY
 #6479 - 48" WIDE STAIRWAY
 (NOT REQUIRED FOR U5-8 STAIRWAYS)

NOTE

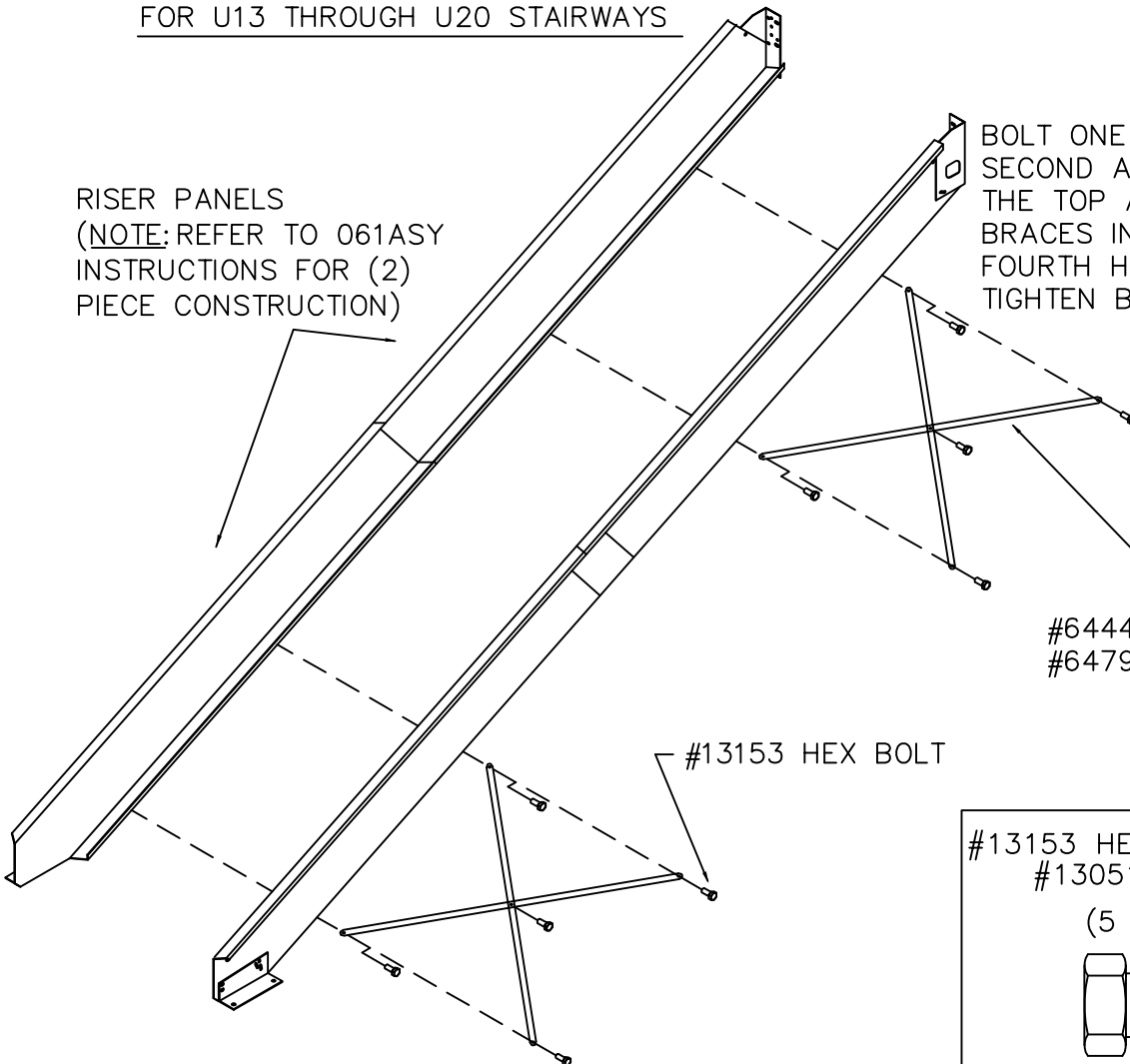
BOLT ONE PAIR OF BRACES IN THE SECOND AND FOURTH HOLE FROM THE TOP.
 TIGHTEN BOLTS SECURELY.

#13153 HEX BOLT 5/16"-18 x 3/4"
 #13051 LOCK NUT 5/16-18
 (5 PER PAIR OF BRACES)



FULL SCALE

FOR U13 THROUGH U20 STAIRWAYS



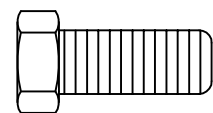
NOTE

BOLT ONE PAIR OF BRACES IN THE SECOND AND FOURTH HOLE FROM THE TOP AND A SECOND PAIR OF BRACES IN THE SECOND AND FOURTH HOLES FROM THE BOTTOM.
 TIGHTEN BOLTS SECURELY.

BRACE

#6444 - 36" WIDE STAIRWAY
 #6479 - 48" WIDE STAIRWAY

#13153 HEX BOLT 5/16"-18 x 3/4"
 #13051 LOCK NUT 5/16-18
 (5 PER PAIR OF BRACES)



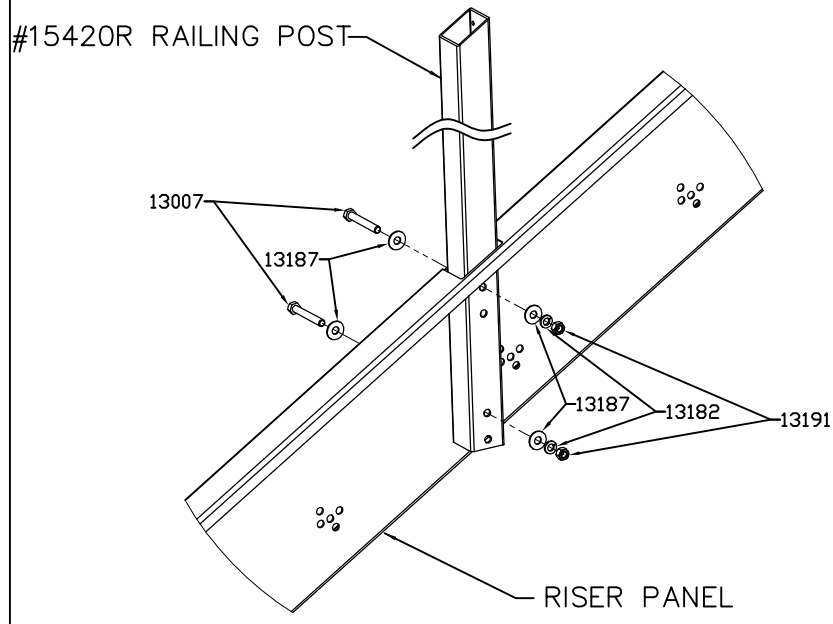
FULL SCALE

STAIR RAILING ASSEMBLY

1 RAILING POST ASSEMBLY

NOTE

INSERT POST THRU SLOT IN RISER PANEL SO THAT THE HOLES IN THE TOP OF THE POST ARE FACING TOWARD TOP OF THE STAIRWAY. BOLT POSTS TO RISER PANEL AS SHOWN DO NOT TIGHTEN THESE BOLTS UNTIL COMPLETE RAIL IS ASSEMBLED.

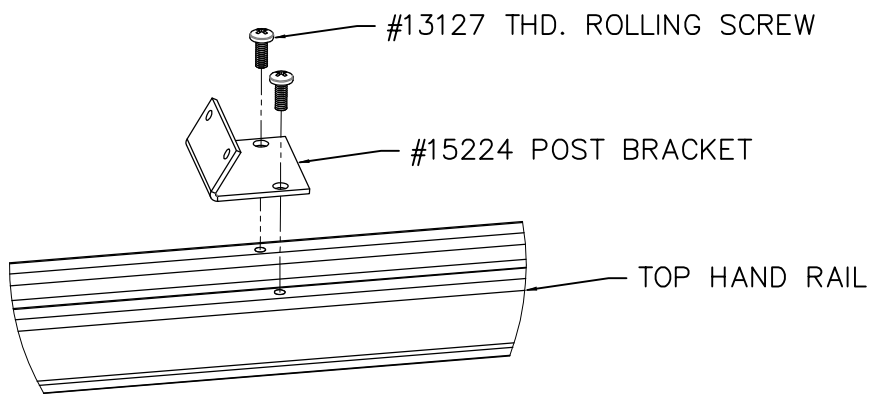


#13007 HEX HEAD BOLT 3/8"-16 x 2 3/4"
 #13191 HEX NUT 3/8"-16
 #13182 SPRING LOCKWASHER 3/8"
 #13187 FLAT WASHER 3/8" (2 PER BOLT)

FULL SCALE

2 TOP HAND RAIL ASSEMBLY

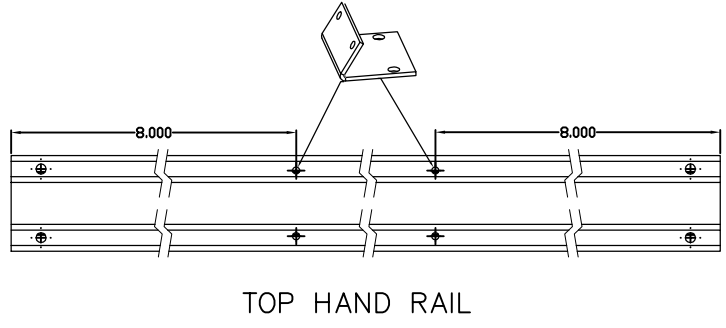
ASSEMBLE POST BRACKET TO TOP HAND RAILS



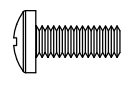
NOTE

INSTALL BRACKET SO IT POINTS TOWARD TOP END OF RAIL. TIGHTEN BOLTS SECURELY.

2a) FOR U5 THRU U7 STAIRWAYS



#13127 #8-32 X 7/16 PH. PAN HEAD THRD ROLLING SCREW (2 PER ASSEMBLY)

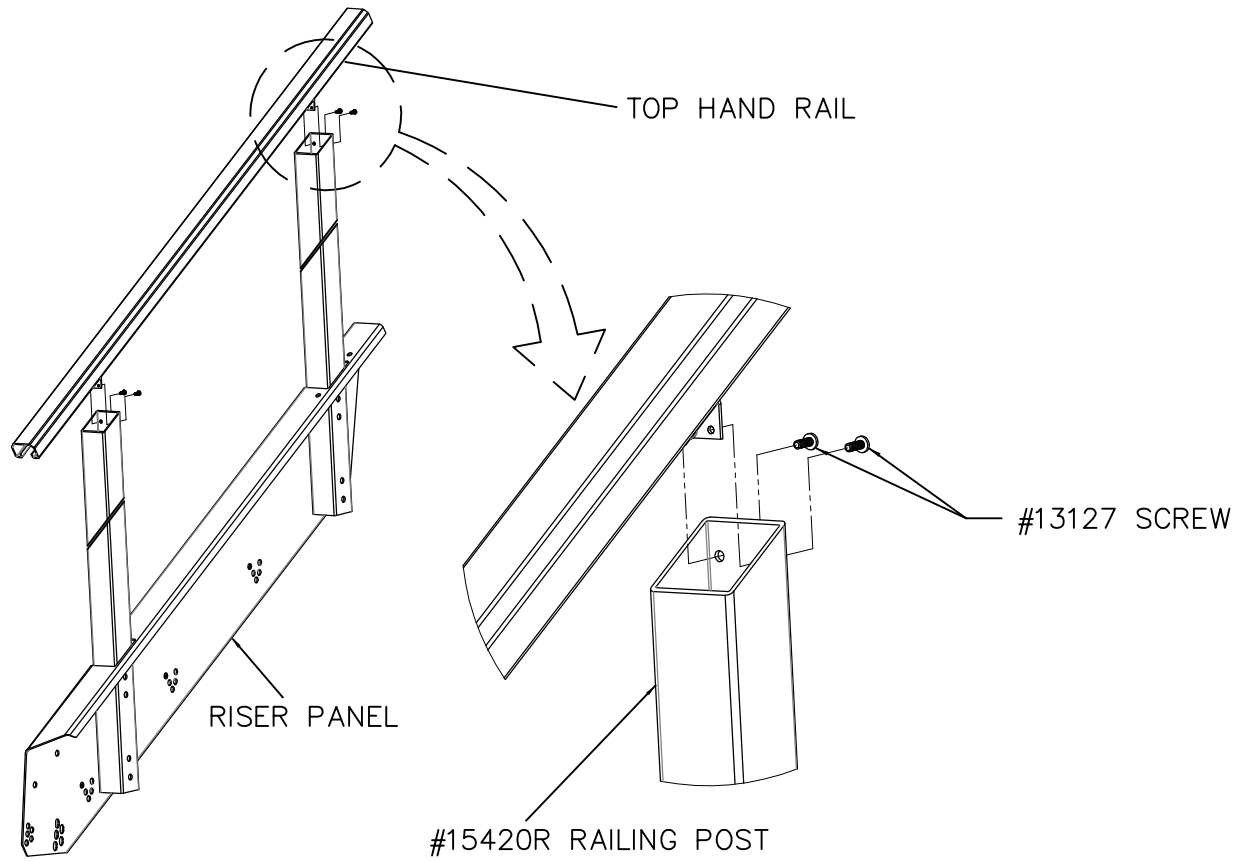


FULL SCALE

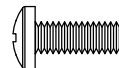
TOP HAND RAIL ASSEMBLY TO VERTICAL POSTS

NOTE

BE SURE ALL POST BRACKETS ARE FASTENED SECURELY TO TOP RAIL. LOWER TOP RAIL OVER TOPS OF POSTS WITH BRACKETS INSIDE. FASTEN IN PLACE SECURELY.



#13127 #8-32 X 7/16 PH. PAN
HEAD THRD ROLLING SCREW
(2 PER ASSEMBLY)

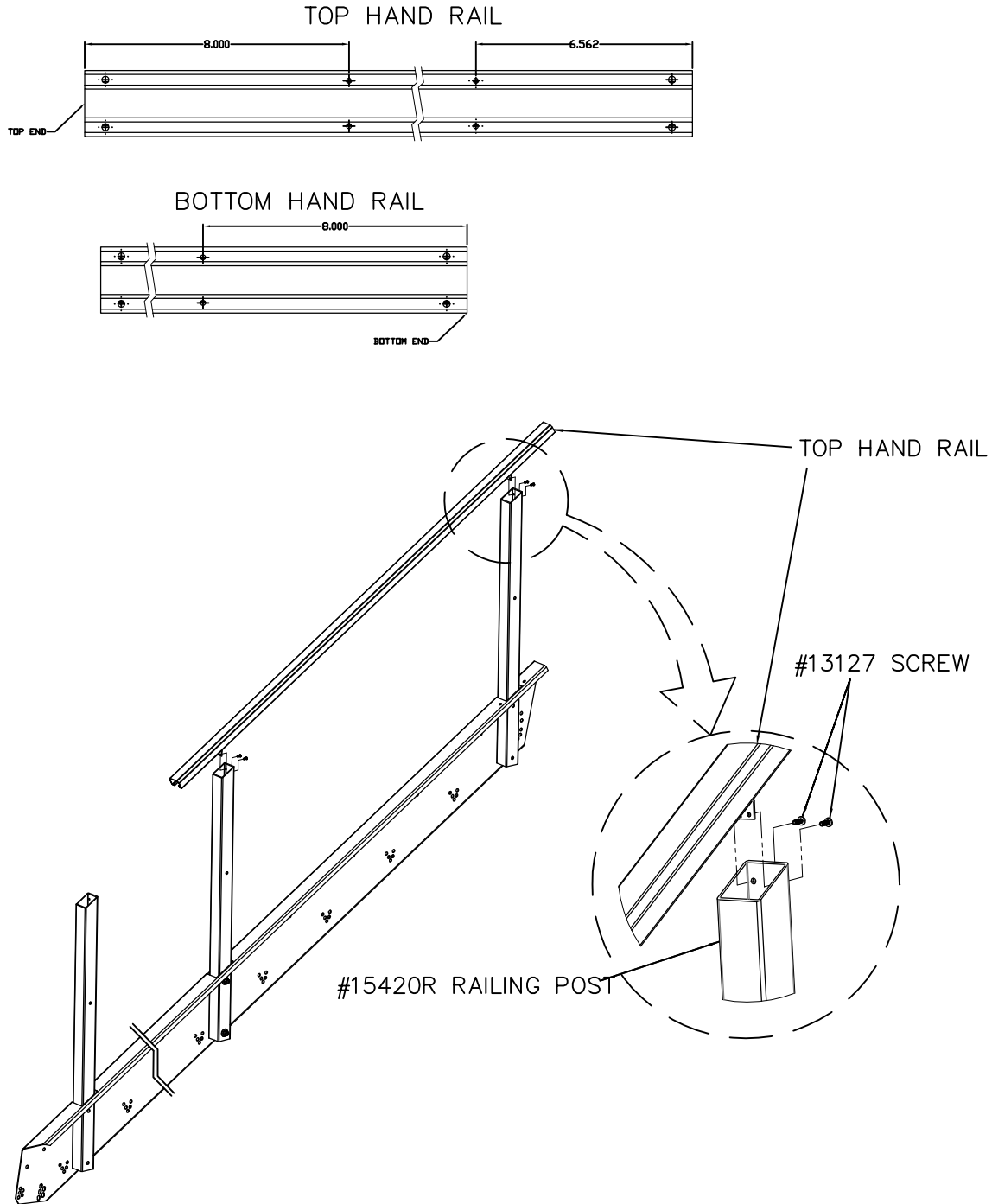


FULL SCALE

TOP HAND RAIL ASSEMBLY TO VERTICAL POSTS

2b) FOR U8 THROUGH U11 STAIRWAYS

TOP HAND RAIL ASSEMBLY TO VERTICAL POST



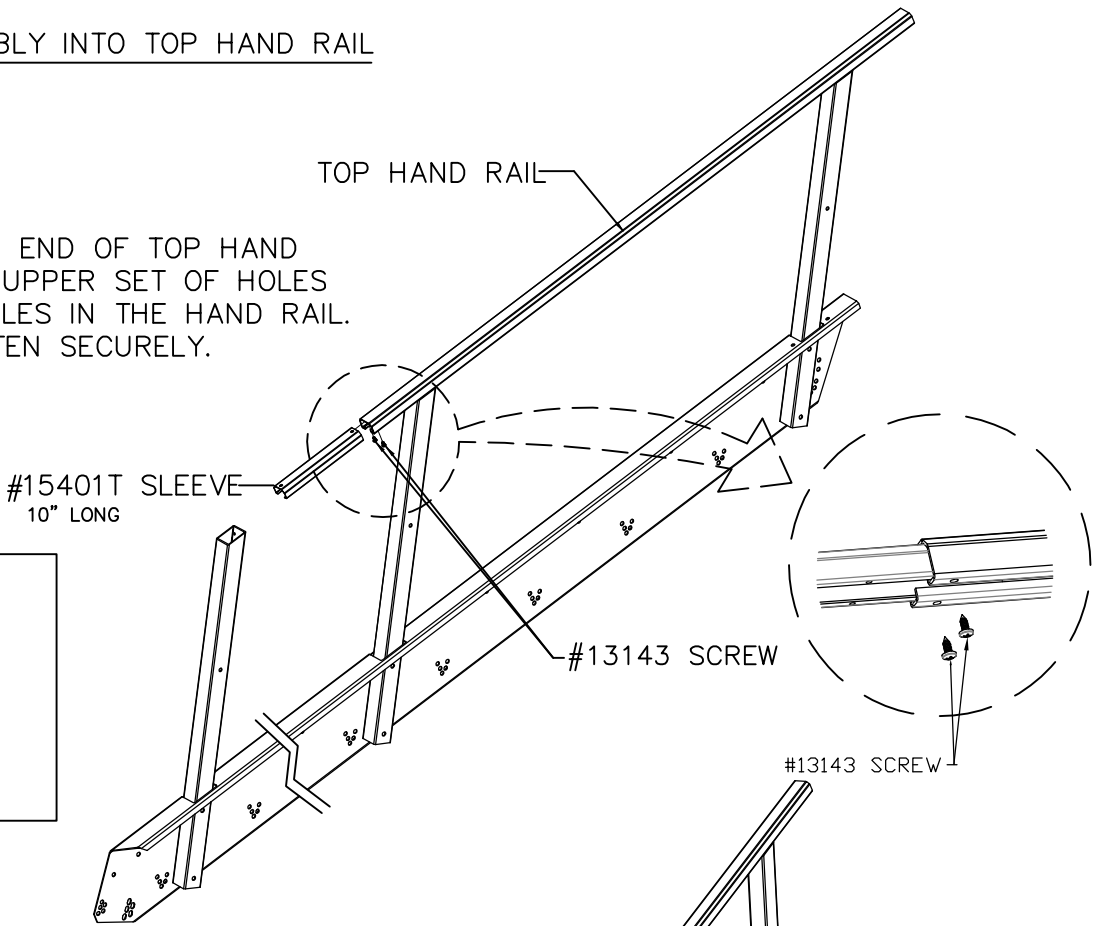
NOTE

ASSEMBLE POST BRACKET TO TOP HAND RAIL IN THE SAME WAY AS SHOWN AT STEP 2a. MAKE SURE ALL BRACKETS ARE TIGHTENED SECURELY TO TOP HAND RAIL AND FASTEN THE RAIL TO POSTS AS SHOWN.

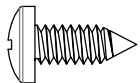
SLEEVE ASSEMBLY INTO TOP HAND RAIL

NOTE

INSERT SLEEVE INTO BOTTOM END OF TOP HAND RAIL AS SHOWN. ALIGN THE UPPER SET OF HOLES IN THE SLEEVE WITH THE HOLES IN THE HAND RAIL. FASTEN IN PLACE AND TIGHTEN SECURELY.



#13143 PH. PAN HD SHEET METAL SCREW #10-24 X 1/2" (4 PER SLEEVE)

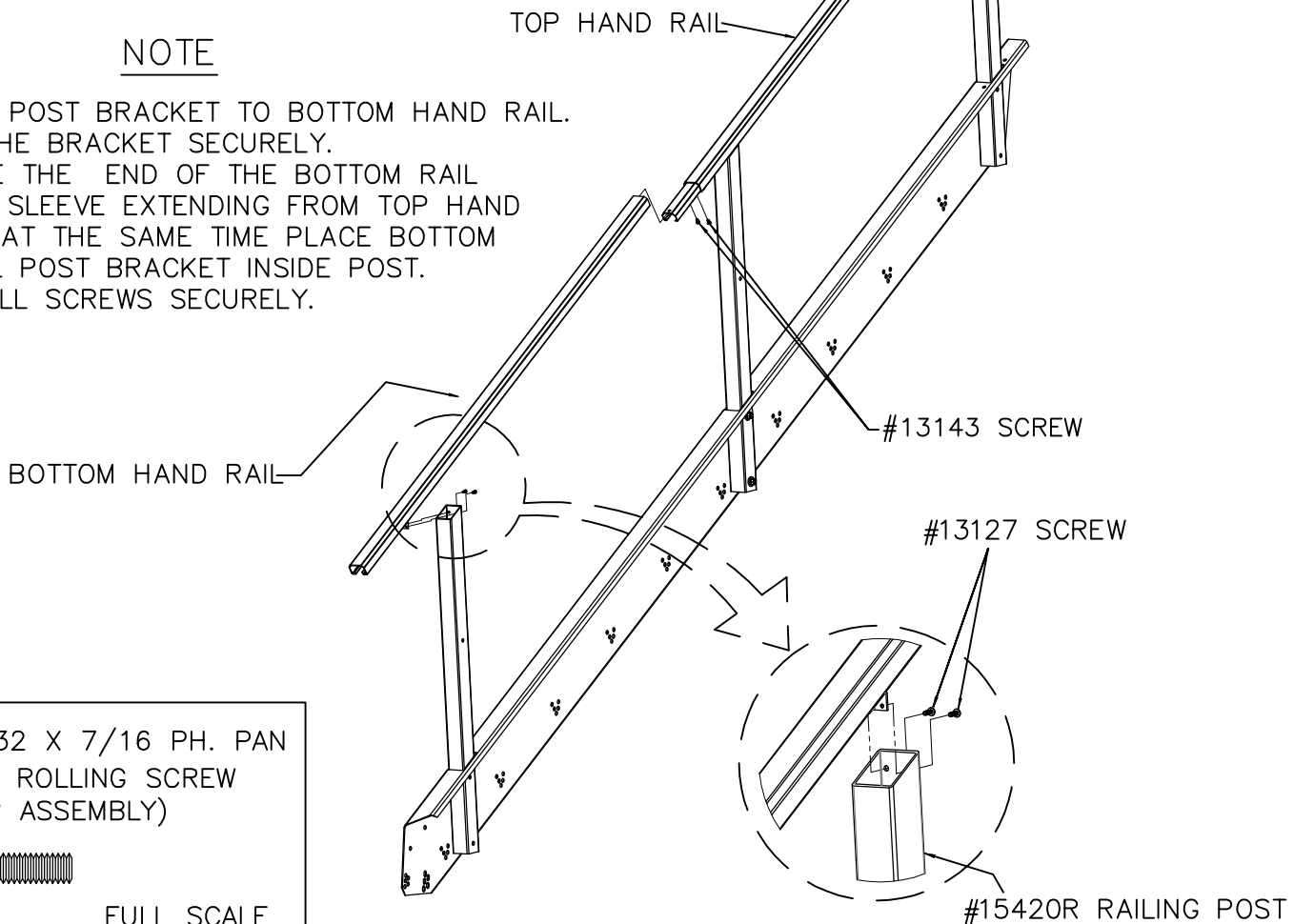


FULL SCALE

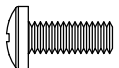
BOTTOM HAND RAIL ASSEMBLY TO VERTICAL POST

NOTE

ASSEMBLE POST BRACKET TO BOTTOM HAND RAIL. TIGHTEN THE BRACKET SECURELY. TELESCOPE THE END OF THE BOTTOM RAIL OVER THE SLEEVE EXTENDING FROM TOP HAND RAIL AND AT THE SAME TIME PLACE BOTTOM HAND RAIL POST BRACKET INSIDE POST. TIGHTEN ALL SCREWS SECURELY.



#13127 #8-32 X 7/16 PH. PAN HEAD THRD ROLLING SCREW (2 PER ASSEMBLY)



FULL SCALE

#15420R RAILING POST

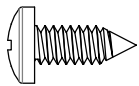
2c) FOR U13 THROUGH U20 STAIRWAYS

HAND RAIL ASSEMBLY TO VERTICAL POST

NOTE

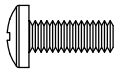
ASSEMBLE POST BRACKETS TO TOP HAND RAIL AND ASSEMBLE TOP HAND RAIL TO POSTS AS SHOWN AT STEP 2b. ASSEMBLE SLEEVE INTO BOTTOM END OF TOP HAND RAIL AS SHOWN AT STEP 2b. ASSEMBLE POST BRACKET TO MIDDLE RAIL AS SHOWN AT STEP 2b. TELESCOPE THE END OF THE MIDDLE RAIL OVER THE SLEEVE EXTENDING FROM TOP END RAIL AND AT THE SAME TIME PLACE MIDDLE RAIL POST BRACKET INSIDE THE POST. TIGHTEN ALL SCREWS SECURELY.

#13143 PH. PAN HD SHEET METAL SCREW
#10-24 X 1/2"
(4 PER SLEEVE)



FULL SCALE

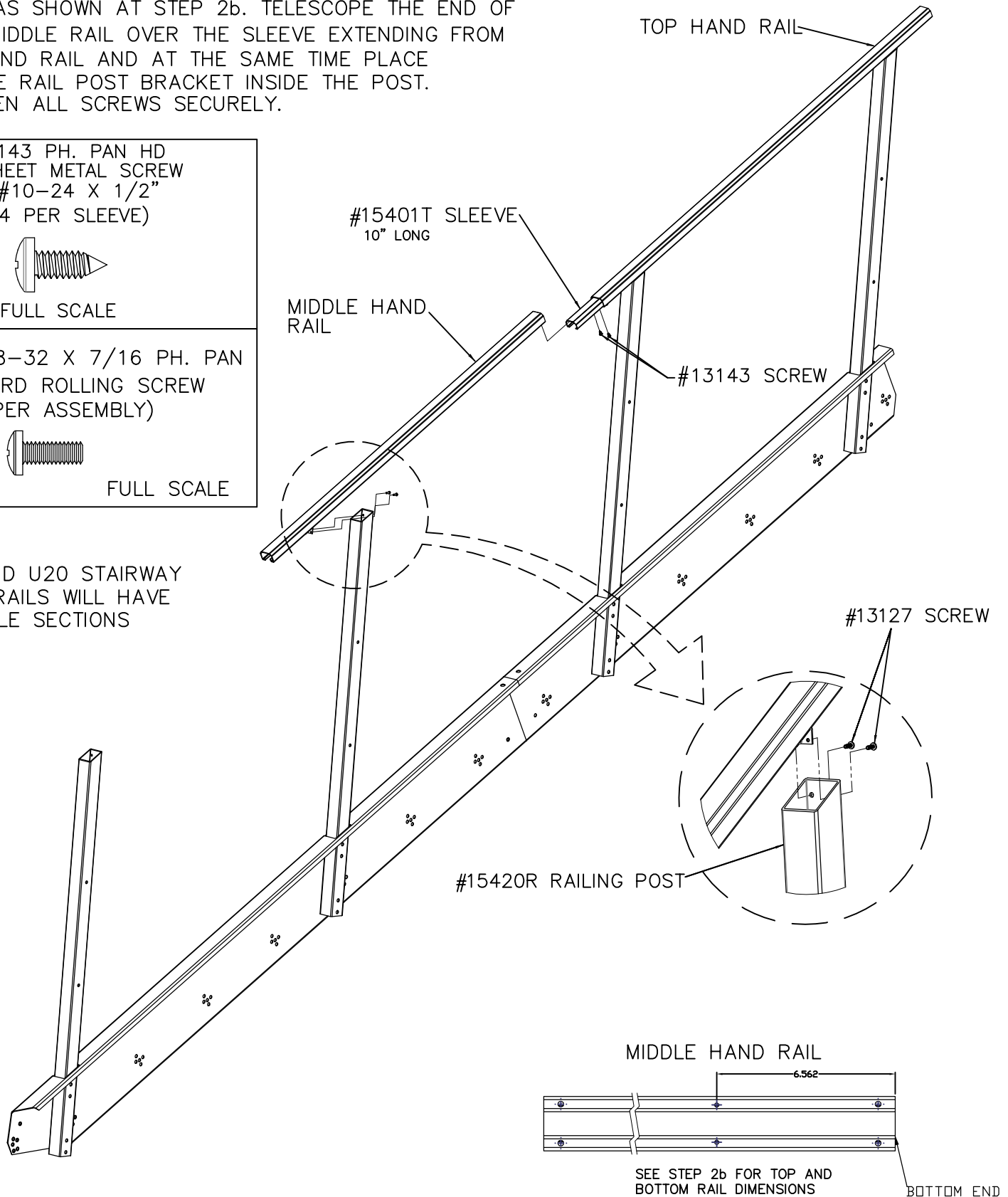
#13127 #8-32 X 7/16 PH. PAN HEAD THRD ROLLING SCREW
(2 PER ASSEMBLY)



FULL SCALE

NOTE

U17 AND U20 STAIRWAY HAND RAILS WILL HAVE 2 MIDDLE SECTIONS



MIDDLE HAND RAIL

6.562

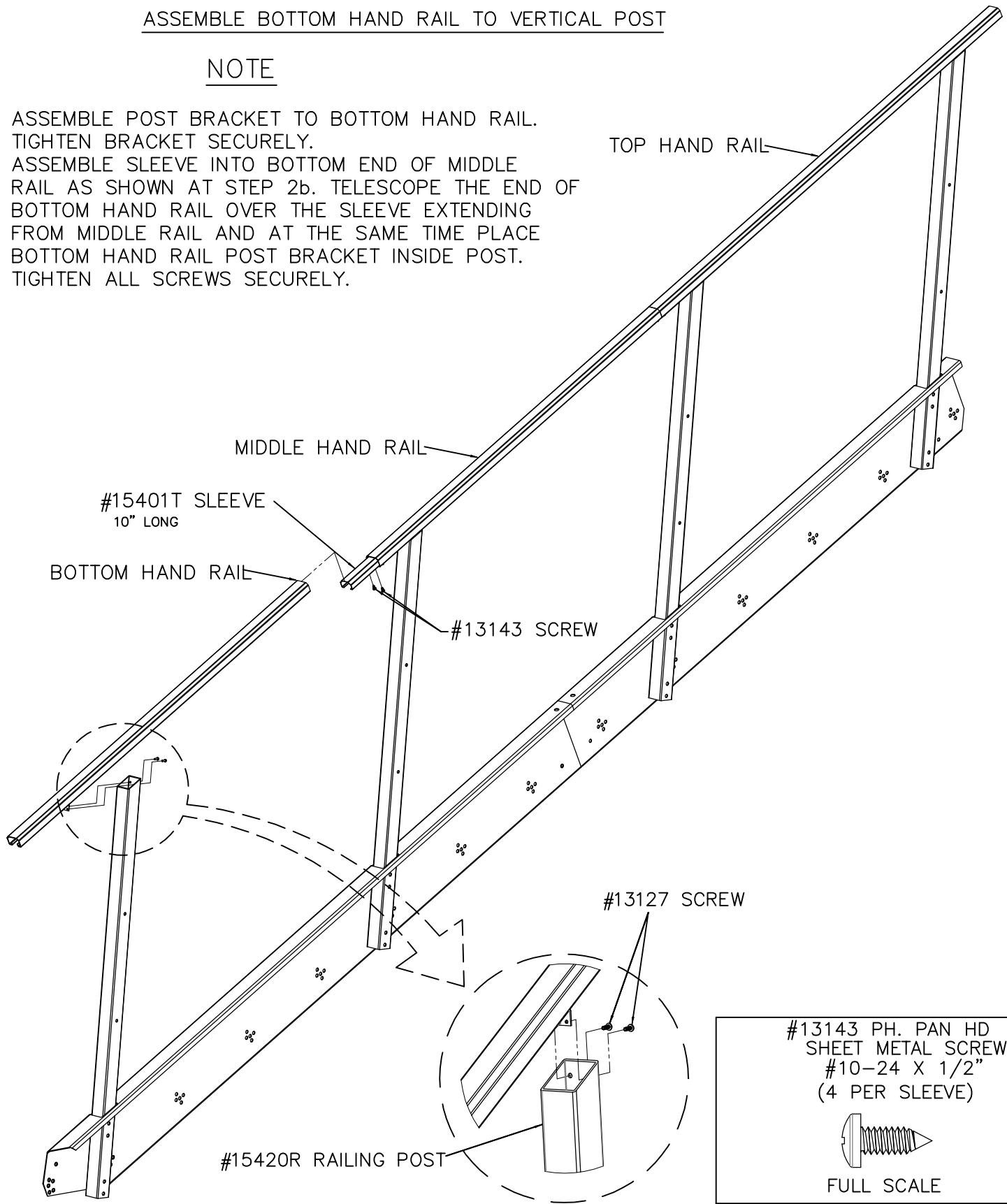
SEE STEP 2b FOR TOP AND BOTTOM RAIL DIMENSIONS

BOTTOM END

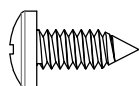
ASSEMBLE BOTTOM HAND RAIL TO VERTICAL POST

NOTE

ASSEMBLE POST BRACKET TO BOTTOM HAND RAIL.
TIGHTEN BRACKET SECURELY.
ASSEMBLE SLEEVE INTO BOTTOM END OF MIDDLE
RAIL AS SHOWN AT STEP 2b. TELESCOPE THE END OF
BOTTOM HAND RAIL OVER THE SLEEVE EXTENDING
FROM MIDDLE RAIL AND AT THE SAME TIME PLACE
BOTTOM HAND RAIL POST BRACKET INSIDE POST.
TIGHTEN ALL SCREWS SECURELY.

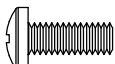


#13143 PH. PAN HD
SHEET METAL SCREW
#10-24 X 1/2"
(4 PER SLEEVE)



FULL SCALE

#13127 #8-32 X 7/16 PH. PAN
HEAD THRD ROLLING SCREW
(2 PER ASSEMBLY)



FULL SCALE

3

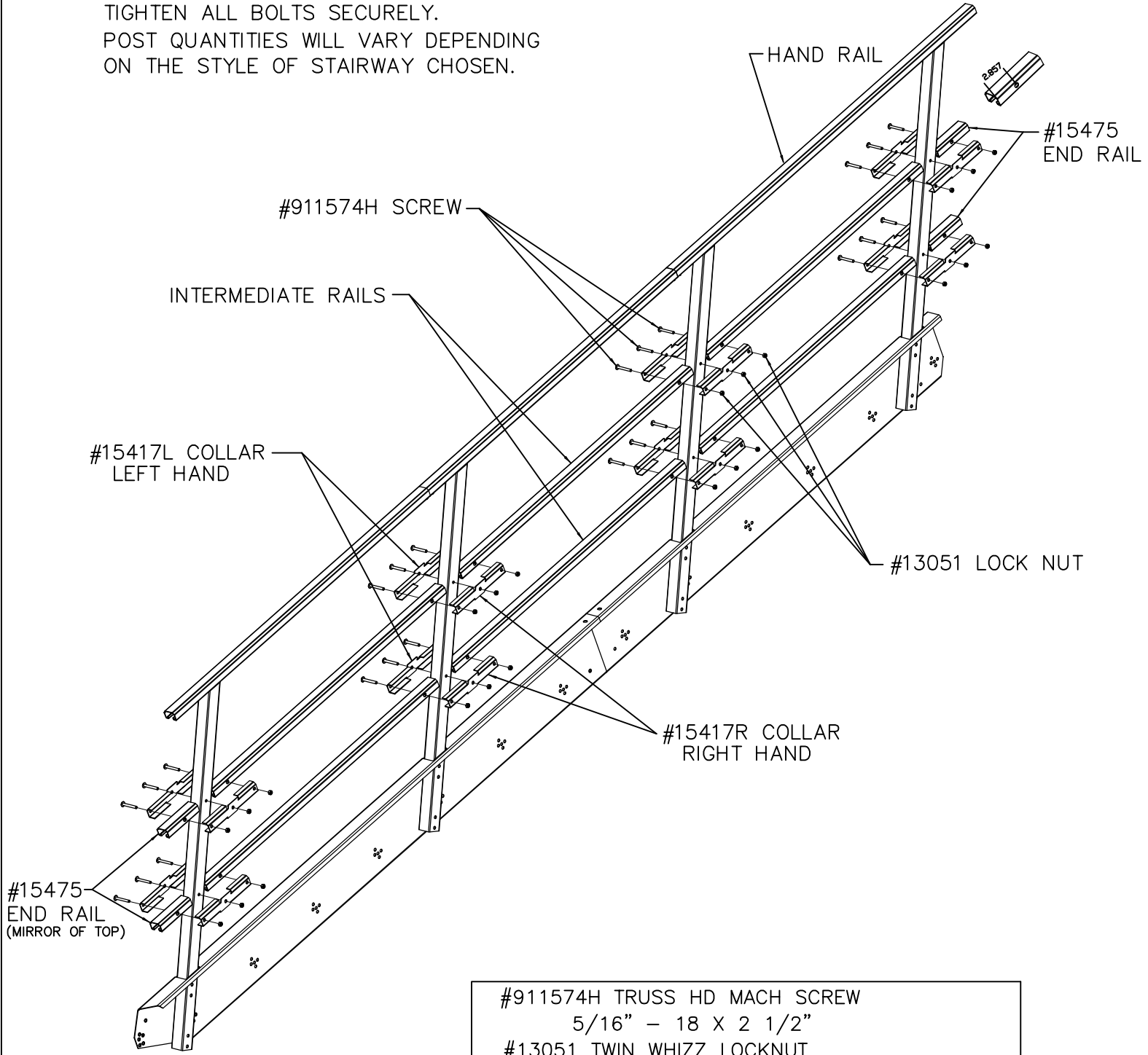
INTERMDIATE AND END RAIL ASSEMBLY

NOTE



INSERT ALL BOLTS WITH THE HEAD TOWARD INSIDE STAIRWAY. TIGHTEN ALL BOLTS SECURELY. POST QUANTITIES WILL VARY DEPENDING ON THE STYLE OF STAIRWAY CHOSEN.

NOTE

SEE CHARTS ON PAGE 18-20 FOR TOP AND BOTTOM RAILING LENGTHS AND SEQUENCE OF ASSEMBLY

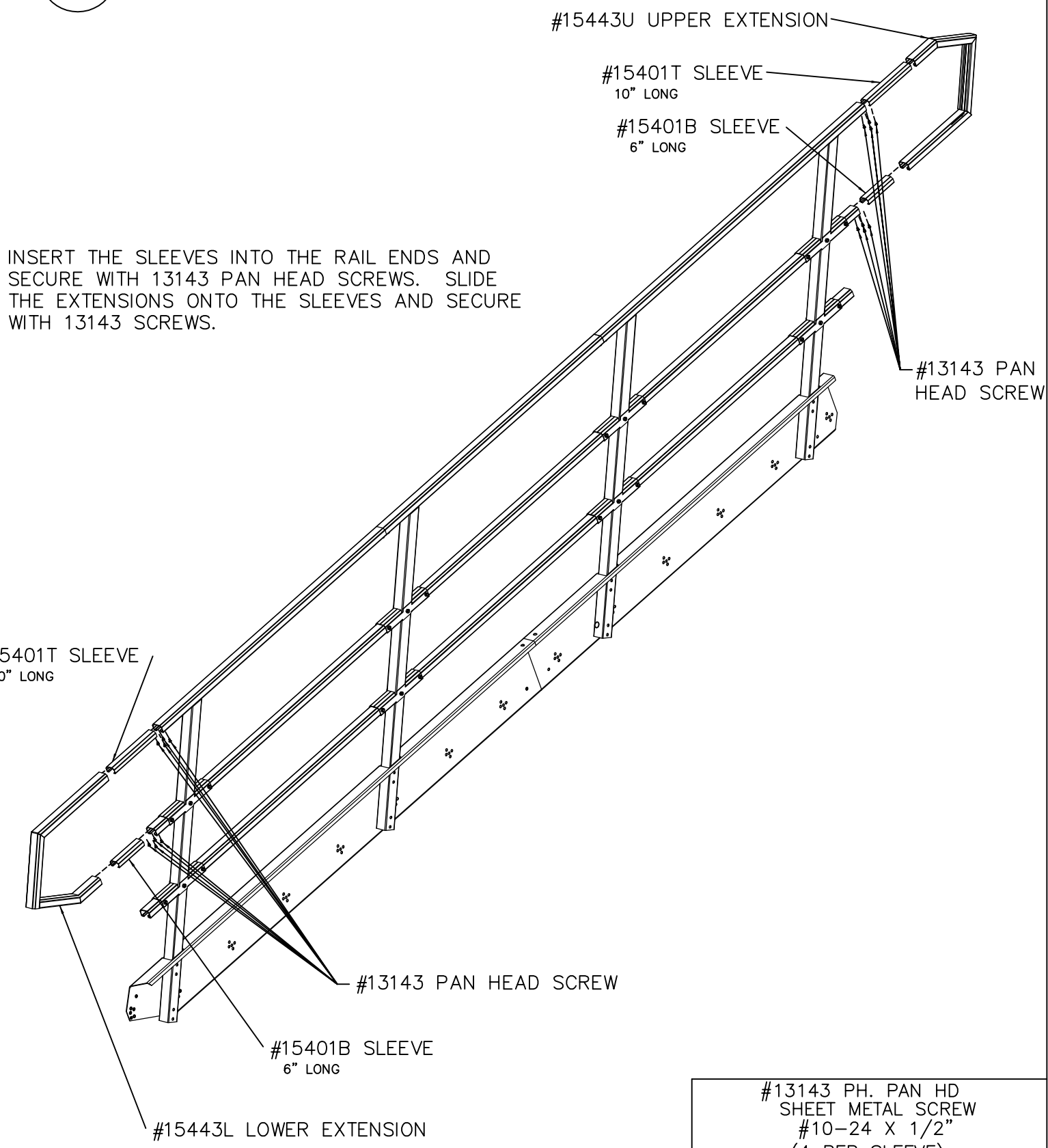


#911574H TRUSS HD MACH SCREW
5/16" - 18 X 2 1/2"
#13051 TWIN WHIZZ LOCKNUT
5/16" - 18
(3 PER PAIR OF COLLARS)

FULL SCALE

4 END EXTENSION ASSEMBLY

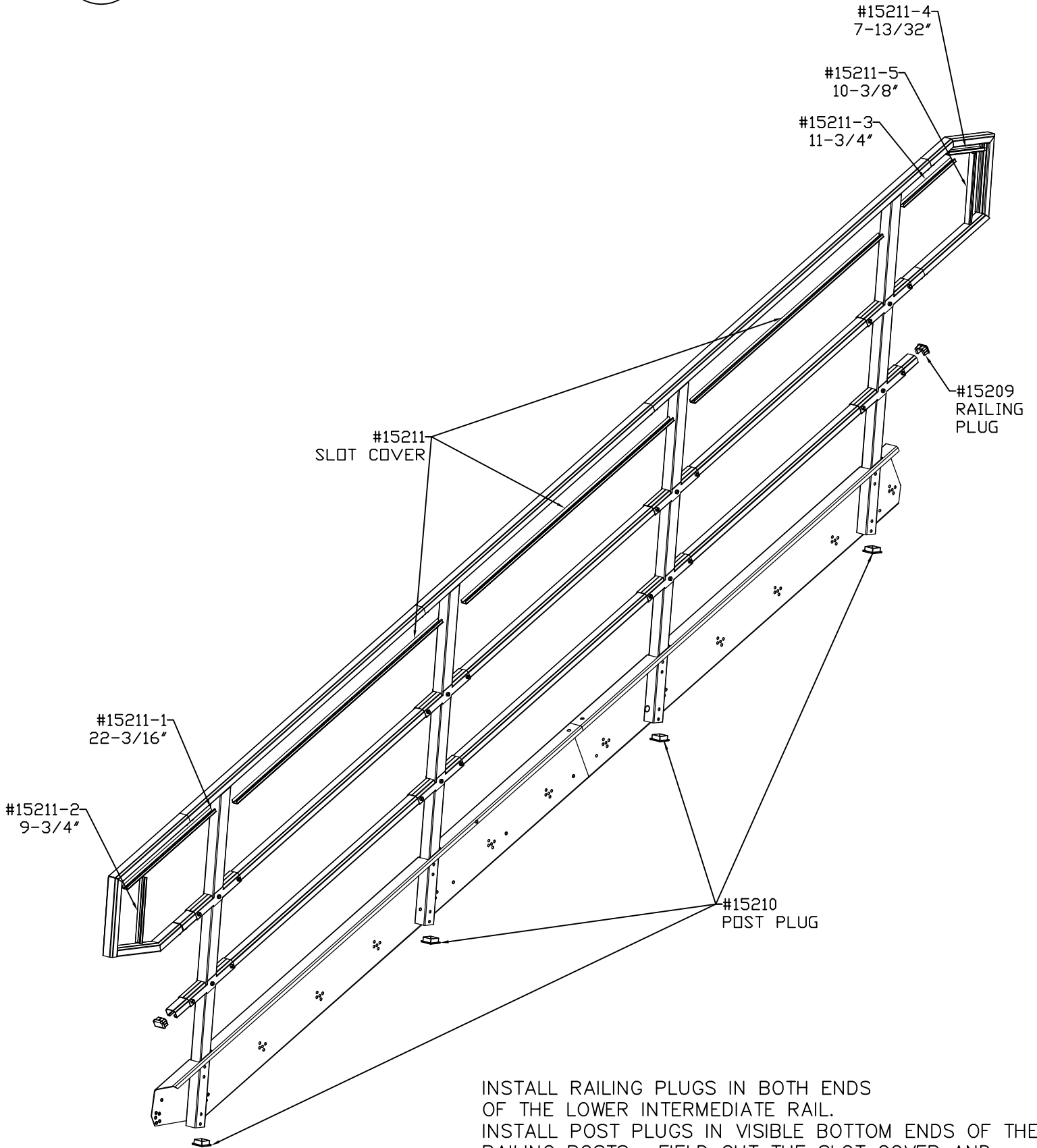


#13143 PH. PAN HD SHEET METAL SCREW
#10-24 X 1/2"
(4 PER SLEEVE)

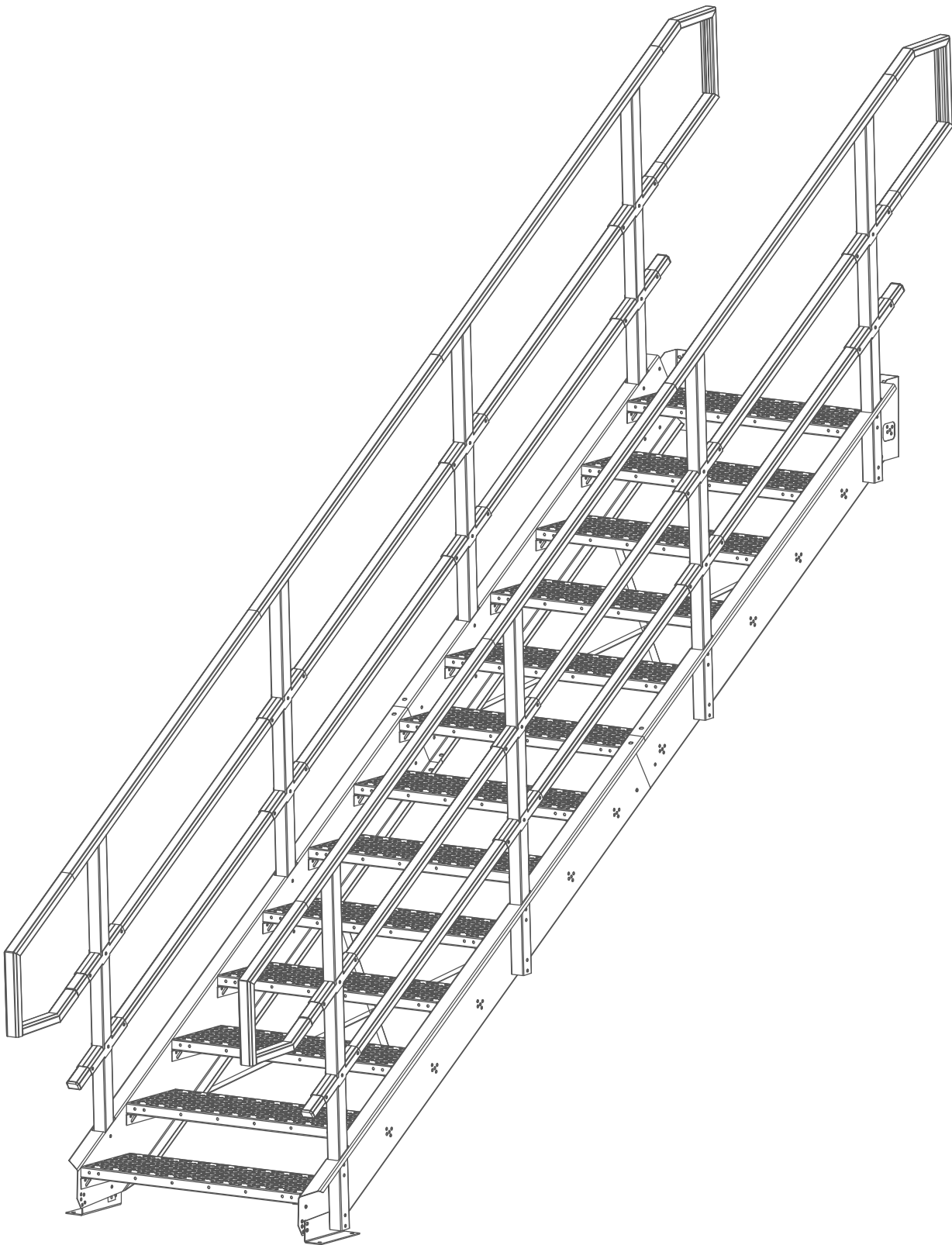
FULL SCALE

RAIL PLUG, POST PLUG AND SLOT COVER ASSEMBLY

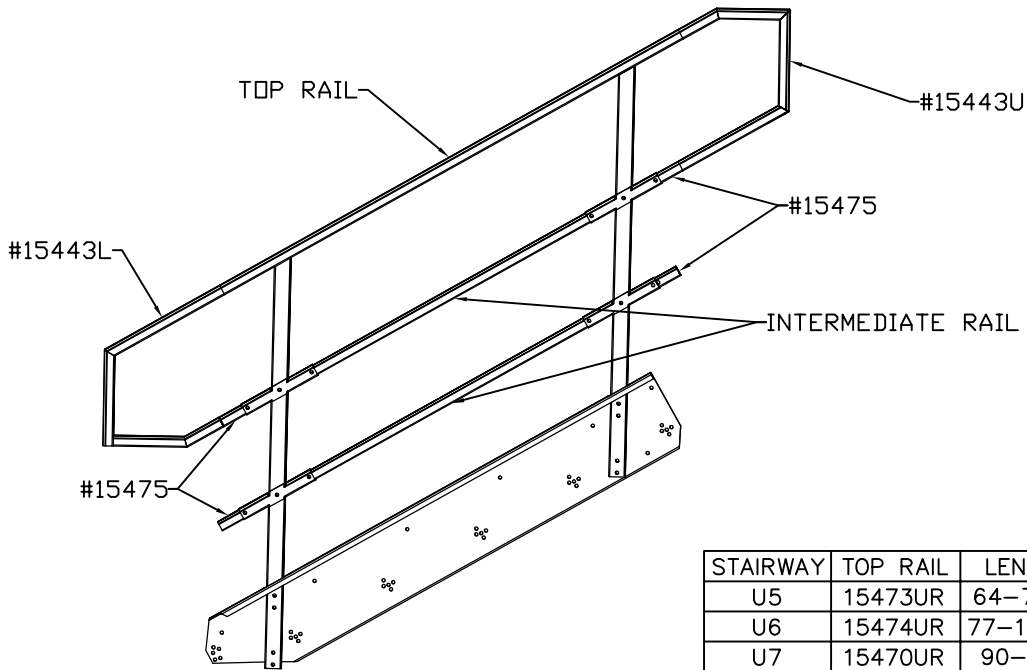
5



INSTALL RAILING PLUGS IN BOTH ENDS OF THE LOWER INTERMEDIATE RAIL. INSTALL POST PLUGS IN VISIBLE BOTTOM ENDS OF THE RAILING POSTS. FIELD CUT THE SLOT COVER AND INSTALL IN THE TOP HAND RAIL ONLY. SLOT COVERS FOR THE EXTENSIONS ARE FACTORY PRE-CUT.

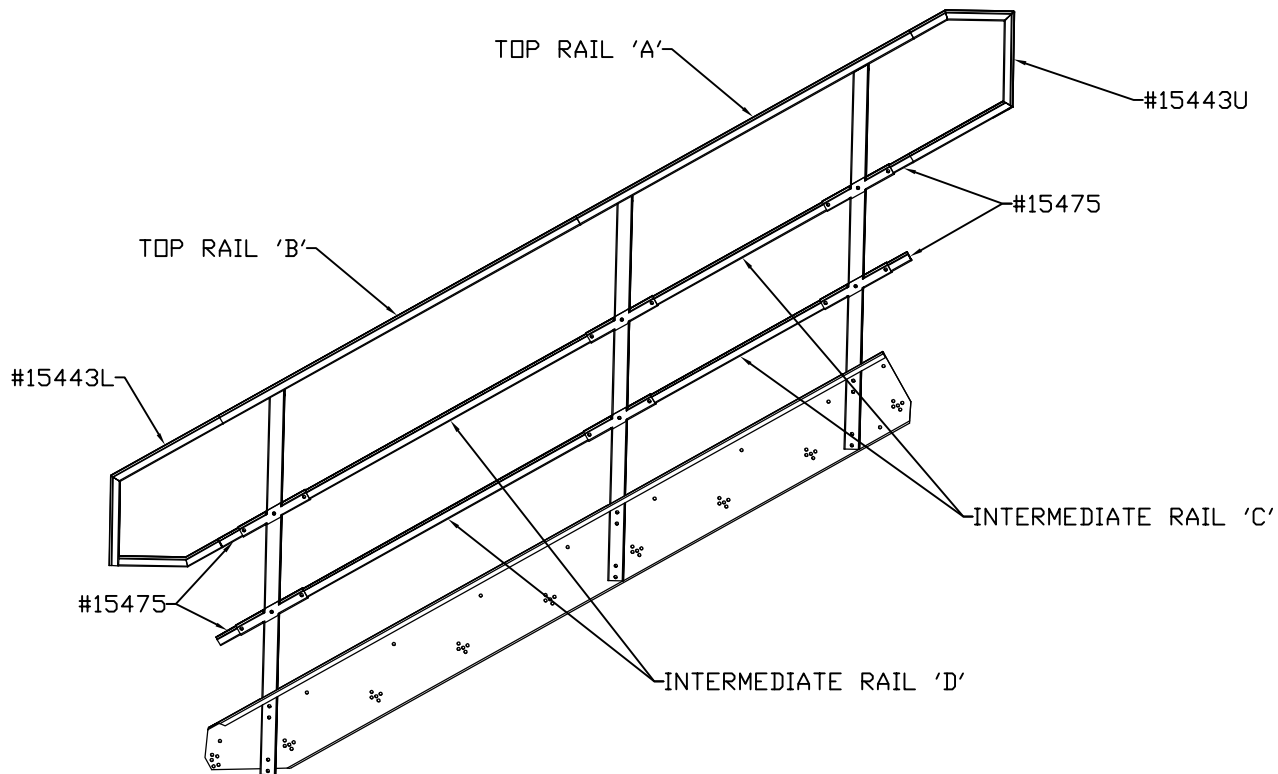


U5 - U7 RAILING CHART



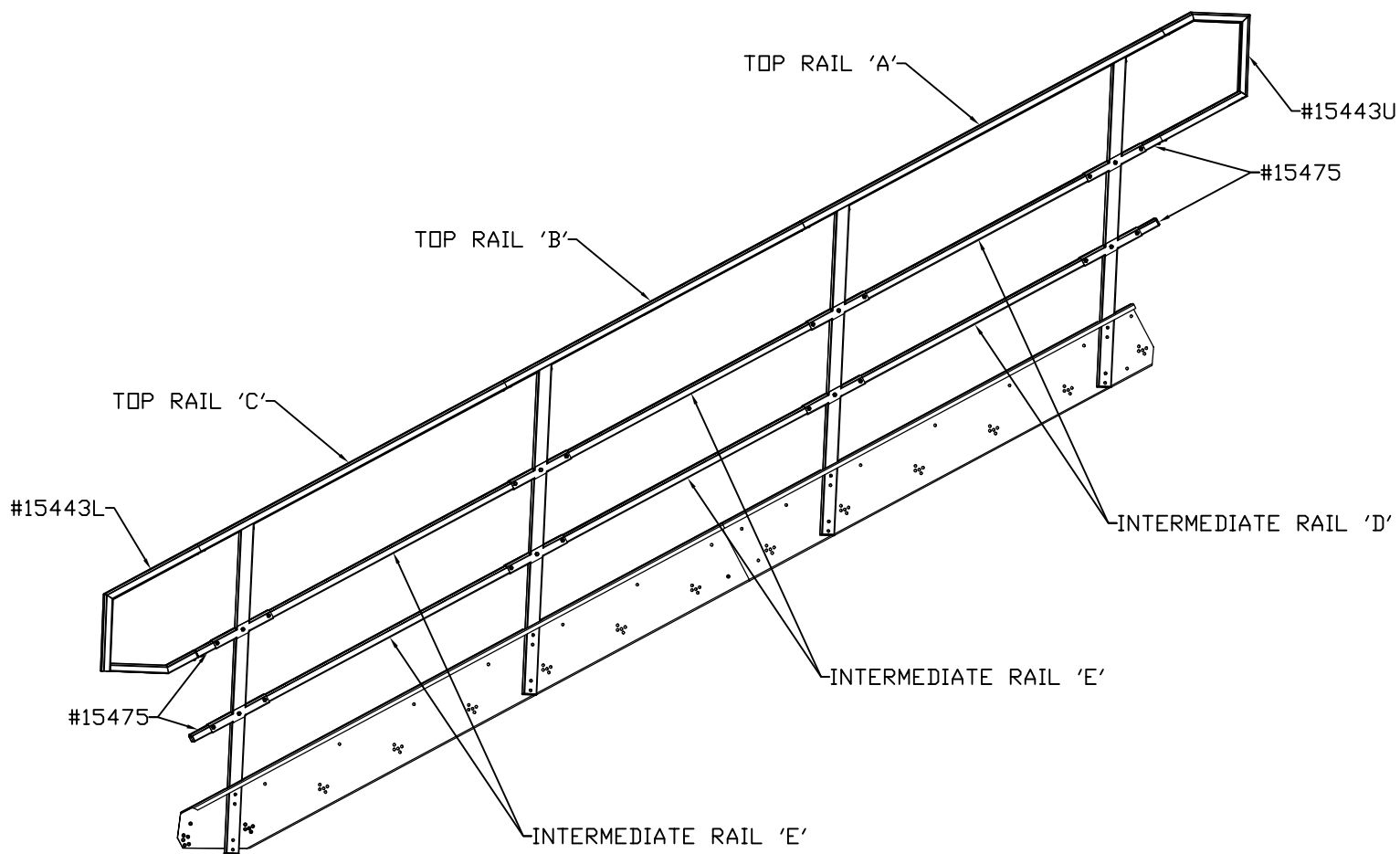
STAIRWAY	TOP RAIL	LENGTH	INTER. RAIL	LENGTH
U5	15473UR	64-7/16"	15460UR	45-1/32"
U6	15474UR	77-15/32"	15429UR	58-1/16"
U7	15470UR	90-1/2"	15459UR	71-3/32"

U8 - U11 RAILING CHART



STAIRWAY	'A'	LENGTH	'B'	LENGTH	'C'	LENGTH	'D'	LENGTH
U8	15471UR	49-31/32"	15471LR	53-9/16"	15471UL	32"	15472UL	48-23/32"
U9	15457UR	63"	15471LR	53-9/16"	15460UR	45-1/32"	15472UL	48-23/32"
U11	15468UR	76-1/32"	15457LR	66-19/32"	15429UR	58-1/16"	15460LR	61-3/4"

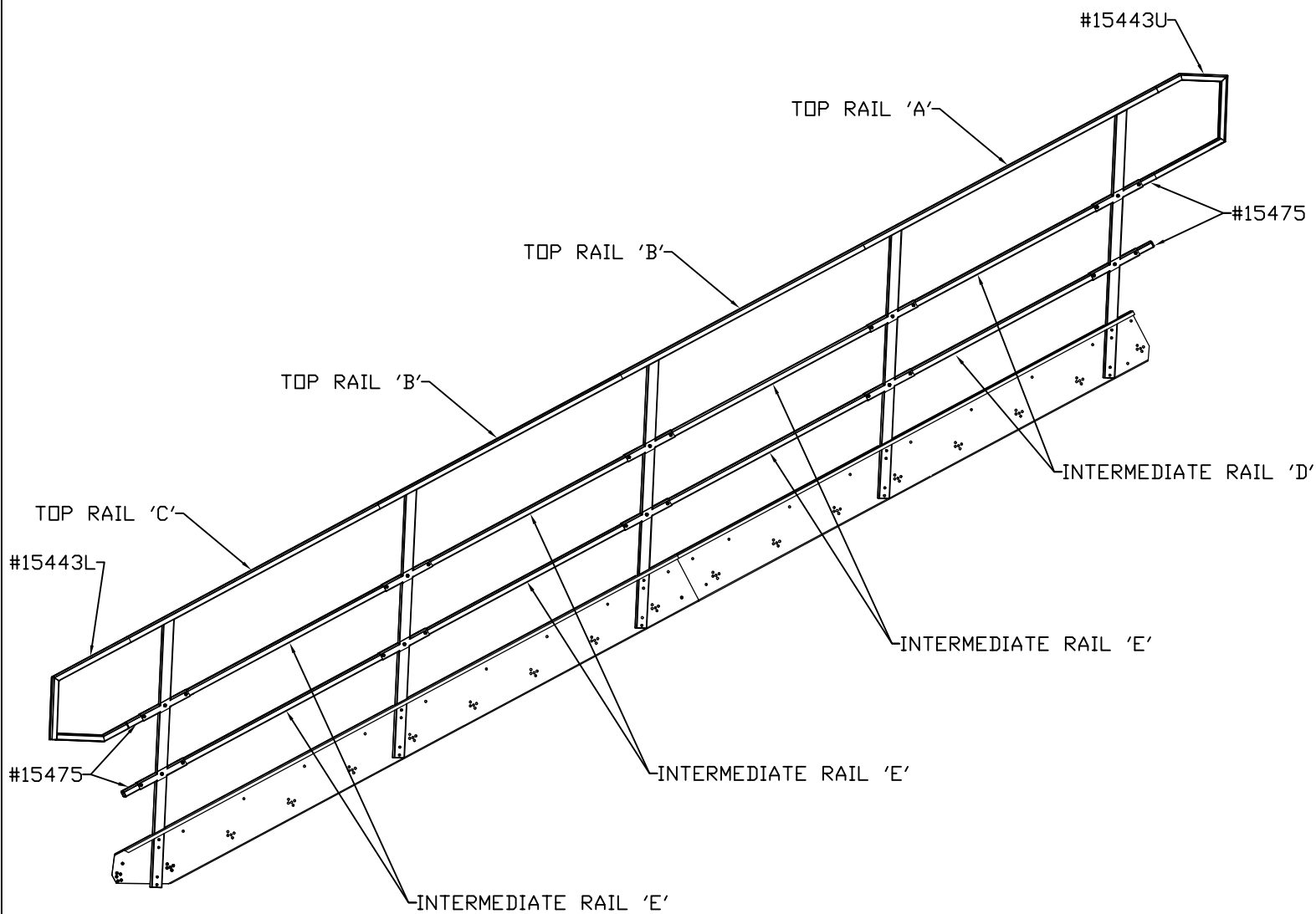
U13 - U15 RAILING CHART



STAIRWAY	'A'	LENGTH	'B'	LENGTH	'C'	LENGTH
U13	15457UR	63"	15447MR	52-5/32"	15471LR	53-9/16"
U15	15457UR	63"	15457MR	65-5/32"	15457LR	66-19/32"

STAIRWAY	'D'	LENGTH	'E'	LENGTH
U13	15460UR	45-1/32"	15472UL	48-23/32"
U15	15460UR	45-1/32"	15460LR	61-3/4"

U17 - U20 RAILING CHART



STAIRWAY	'A'	LENGTH	'B'	LENGTH	'C'	LENGTH
U17	15457UR	63"	15447MR	52-5/32"	15471LR	53-9/16"
U20	15457UR	63"	15457MR	65-5/32"	15457LR	66-19/32"

STAIRWAY	'D'	LENGTH	'E'	LENGTH
U17	15460UR	45-1/32"	15472UL	48-23/32"
U20	15460UR	45-1/32"	15460LR	61-3/4"