





























41112ASY

EQUIPTO

GENERATION IV MEZZANINE ASSEMBLY INSTRUCTIONS

MEZZANINE SIZES

		<u>LENGTH</u>						
		4'	6'	8'	10'	12'	16'	20'
<u>WIDTH</u>	4'							
	6'							
	8'							
	10'							

CATALOG NUMBERS

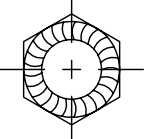
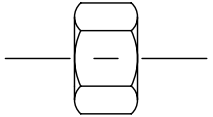
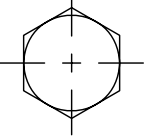
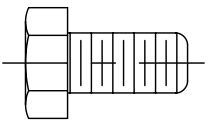
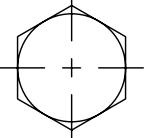
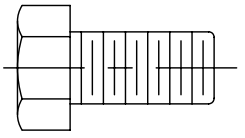
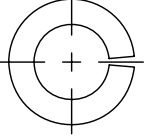
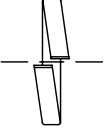
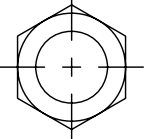
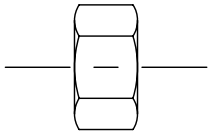
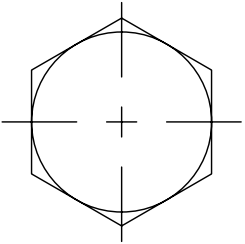
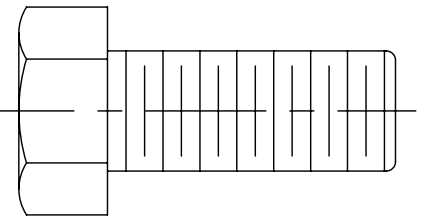
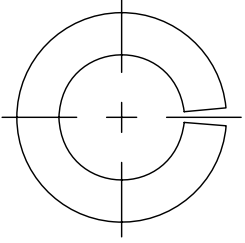
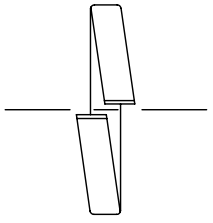
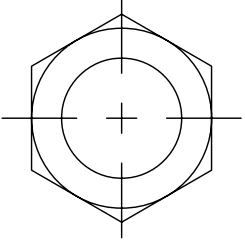
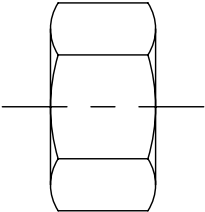
		<u>LENGTH</u>						
		4'	6'	8'	10'	12'	16'	20'
<u>HEIGHT</u>	<u>WIDTH</u>							
8'	4'	480404	480406	480408	480410	480412	480416	480420
	6'	480604	480606	480608	480610	480612	480616	480620
	8'	480804	480806	480808	480810	480812	480816	480820
	10'	481004	481006	481008	481010	481012	481016	481020
9'	4'	490404	490406	490408	490410	490412	490416	490420
	6'	490604	490606	490608	490610	490612	490616	490620
	8'	490804	490806	490808	490810	490812	490816	490820
	10'	491004	491006	491008	491010	491012	491016	491020
10'	4'	410404	410406	410408	410410	410412	410416	410420
	6'	410604	410606	410608	410610	410612	410616	410620
	8'	410804	410806	410808	410810	410812	410816	410820
	10'	411004	411006	411008	411010	411012	411016	411020
12"	4'	420404	420406	420408	420410	420412	420416	420420
	6'	420604	420606	420608	420610	420612	420616	420620
	8'	420804	420806	420808	420810	420812	420816	420820
	10'	421004	421006	421008	421010	421012	421016	421020

NOTE: FOR FLOORING ADD SUFFIX, PG=PERFORATED GRATING, SG=SOLID GRATING, BG=BAR GRATING, TD=TUFFDECK.


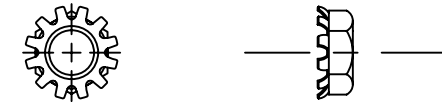
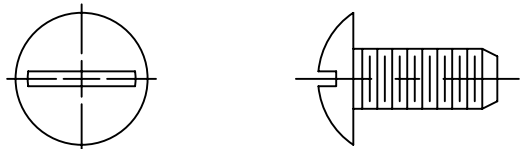
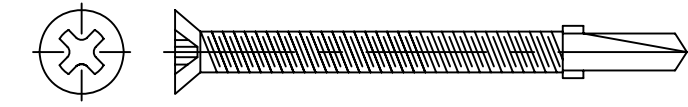
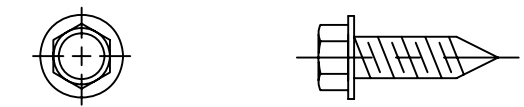
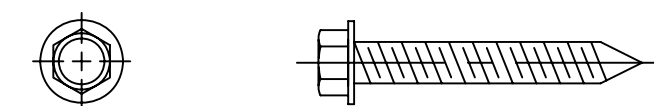
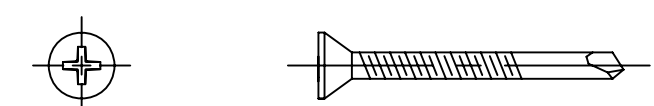
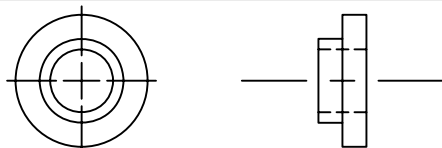

GENERAL ASSEMBLY INSTRUCTIONS

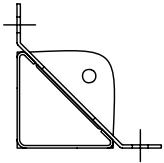
1. Check to determine which size mezzanine(s) you received in chart above. Check and get familiar with your installation drawing and with these assembly instructions before starting.
2. Begin assembly by constructing post configurations. Consult your installation drawing to determine what post configurations you need, and how many of each. (SEE PAGE 4)
3. Assemble the outer frame of your entire mezzanine using the required posts and beams. NOTE: Do not anchor posts to floor until specified. (SEE PAGES 6 THRU 9)
4. Install all diagonal braces on exterior corners of framework. (SEE PAGE 10)
5. Install all beam brackets and internal beams to finish the outer frame and floor support structure. (SEE PAGES 11 THRU 13) NOTE: If using overhang brackets see pages 14 and 15.
6. Plum and square all the post at this time. Tighten all hardware on framework, then anchor the posts to the floor. NOTE: Floor anchors to be furnished by others.
7. Assemble stairway and fasten in place on mezzanine framework.(SEE PAGE 16)
8. Install flooring on entire mezzanine framing. (SEE EITHER PAGE 17, 18 ,19, or 20)
9. Install all railing, kickplates, and dropgates where required. (SEE PAGE 21)
10. Check entire mezzanine to be sure all hardware is tightened.

HARDWARE LIST

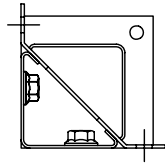
NUMBER	DESCRIPTION	HARDWARE – FULL SIZE	
#13051	LOCK NUT 5/16		
#13152	HEX HEAD BOLT 5/16" x 5/8"		
#13188	HEX HEAD BOLT 3/8" x 3/4"		
#13182	SPRING LOCKWASHER 3/8"		
#13191	HEX NUT 3/8"		
#13101	HEX HEAD BOLT 5/8" x 1 1/2"		
#13102	SPRING LOCKWASHER 5/8"		
#13103	HEX NUT 5/8"		

HARDWARE LIST (continued)

NUMBER	DESCRIPTION	HARDWARE – FULL SIZE
#13160	TRUSS HEAD MACHINE SCREW #10 x 3/8"	
#13061	KEPS SHAKEPROOF NUT #10	
#13154	TRUSS HEAD MACHINE SCREW 5/16" x 3/4"	
#13117	PHIL. FL. HD. TAP SCREW #12 x 2 1/2"	
#13114	HEX WASHER HEAD TEK SCREW #12 x 3/4"	
#13115	HEX WASHER HEAD TEK SCREW #12 x 1 1/2"	
#13116	PHIL FLAT HD TRAXX /3 SELF DRILLING SELF TAPPING SCREW #12 – 16 X 2"	
#13011	NYLON SHOULDER WASHER 1/4"	
#13042	COTTER PIN 1/8" x 1 1/2"	
PAGE 3		

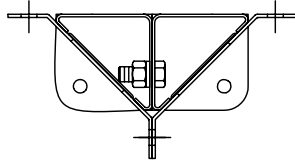


SINGLE POST



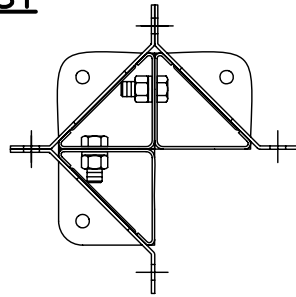
SQUARE POST

POST CONFIGURATIONS



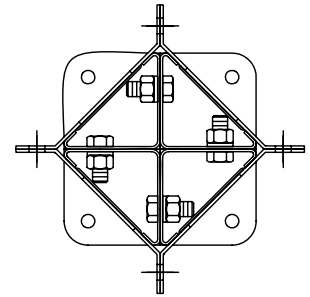
BI-POST

5/8" x 1 1/2" HEX HEAD BOLT (#13101), LOCKWASHER (#13102) HEX NUT (#13103). (2 EA. PER BI-POST REQ'D)



TRI-POST

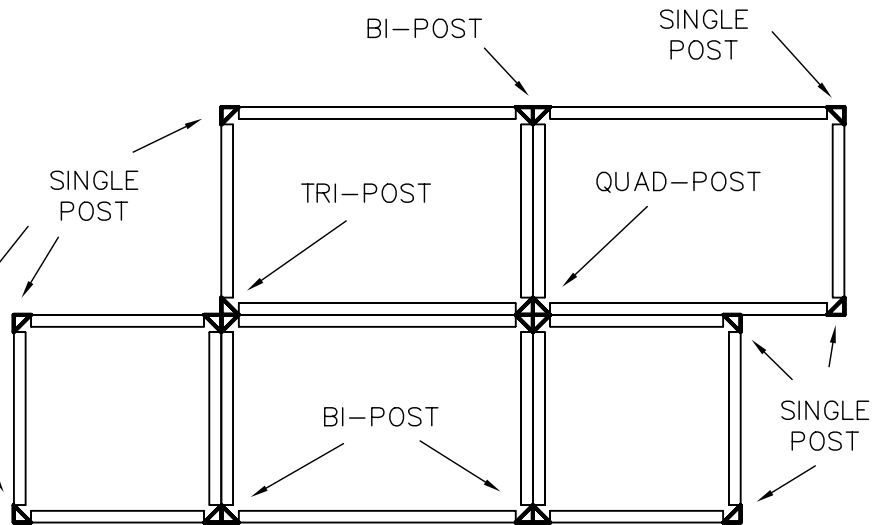
5/8" x 1 1/2" HEX HEAD BOLT (#13101), LOCKWASHER (#13102) HEX NUT (#13103). (4 EA. PER TRI-POST REQ'D.)



QUAD-POST

5/8" x 1 1/2" HEX HEAD BOLT (#13101), LOCKWASHER (#13102) HEX NUT (#13103). (8 EA. PER QUAD-POST REQ'D.)

SAMPLE FLOOR PLAN



POSTS

- 8'-0" HIGH = #5208
- 9'-0" HIGH = #5209
- 10'-0" HIGH = #5210
- 12'-0" HIGH = #5212

OPTIONAL SQUARE POSTS

- 8'-0" HIGH = #5218
- 9'-0" HIGH = #5219
- 10'-0" HIGH = #5220
- 12'-0" HIGH = #5222

NOTE:

DO NOT TIGHTEN HARDWARE ON POST ASSEMBLIES AT THIS TIME.
 IF YOU ARE REQUIRED TO FIELD CUT A POST AND USE EITHER A POST EXTENSION (#9510) OR A POST BASE (#7724) AS A FOOTPLATE CONTINUE TO PAGE 5. IF NOT SKIP TO PAGE 6.

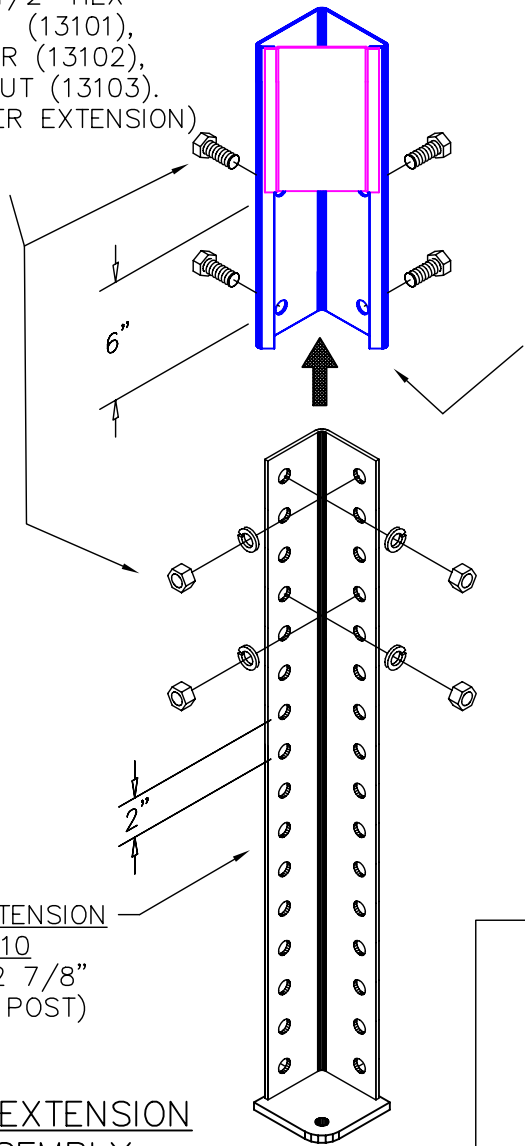
POST #5208
 4" x 8'-0"
 (2 PER BI-POST)

5/8" HEX HEAD BOLT (#31101, LOCKWASER, (#13102) AND NUT (#13103).

BI-POST ASSEMBLY

OPTIONAL POST EXTENSIONS AND FIELD MODIFIED POST

5/8" x 1 1/2" HEX
HEAD BOLT (13101),
LOCKWASHER (13102),
AND HEX NUT (13103).
(4 EACH PER EXTENSION)



POST EXTENSION
#9510
4" x 32 7/8"
(1 PER POST)

POST EXTENSION
ASSEMBLY

NOTE: IF YOU ARE NOT INSTALLING EITHER #9510 POST EXTENSION OR #7724 POST BASE AS A FOOTPLATE SKIP TO PAGE 6.

POST

- 8'-0" HIGH = #5208LF
- 9'-0" HIGH = #5209LF
- 10'-0" HIGH = #5210LF
- 12'-0" HIGH = #5212LF

THESE POST ARE LESS FOOTPLATES.(Bottom of post shown)

POST EXTENSION ASSEMBLY

1. Insert Post Extension into the bottom of a post that is less footplate.
2. Determine the height desired and fasten together using specified hardware.(2 on each side)

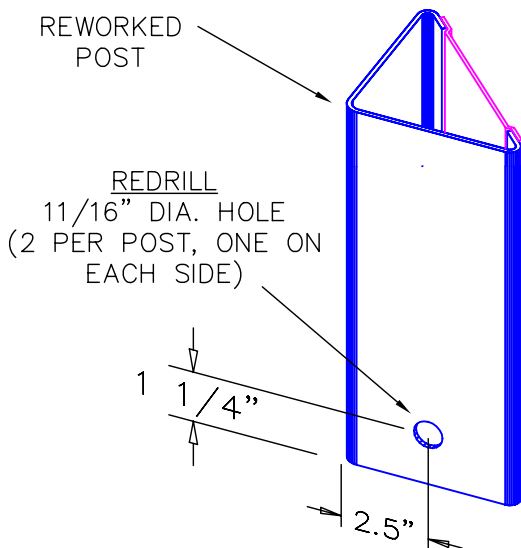
NOTE: Mezzanine Post may be extended up 24" in additional height on 2" increments.

WARNING

Before attempting to use Post Extensions on 16' and 20' span mezzanines, consult your local EQUIPTO sales representative.

FOOTPLATE ASSEMBLY

1. Cut Post to appropriate length, allowing for the 3/8" thick bolt on base.
2. Redrill two 11/16" diameter holes, one on each side. 1 1/4" from the bottom and 2" from the corner of the post as shown.
3. Rework the bottom web plate to 2 3/4" from the bottom of the post as shown.
4. Insert the bolt on base into the bottom of the post and fasten together with specified hardware.(2 per post base)

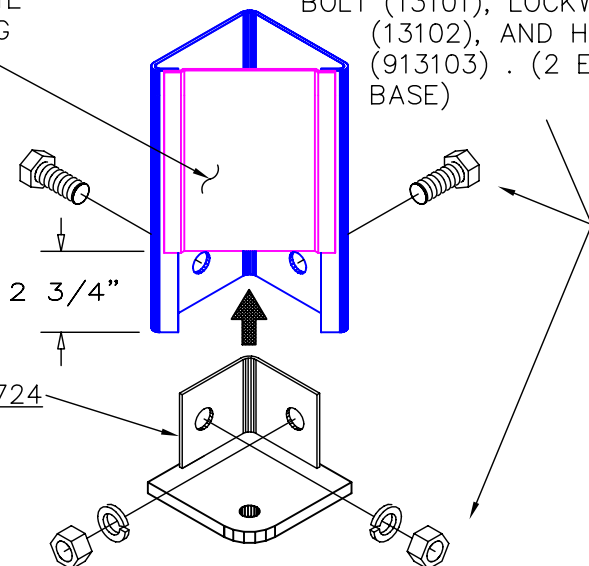


REDRILL
11/16" DIA. HOLE
(2 PER POST, ONE ON EACH SIDE)

REWORK
BOTTOM WEB PLATE
AFTER REWORKING
POST

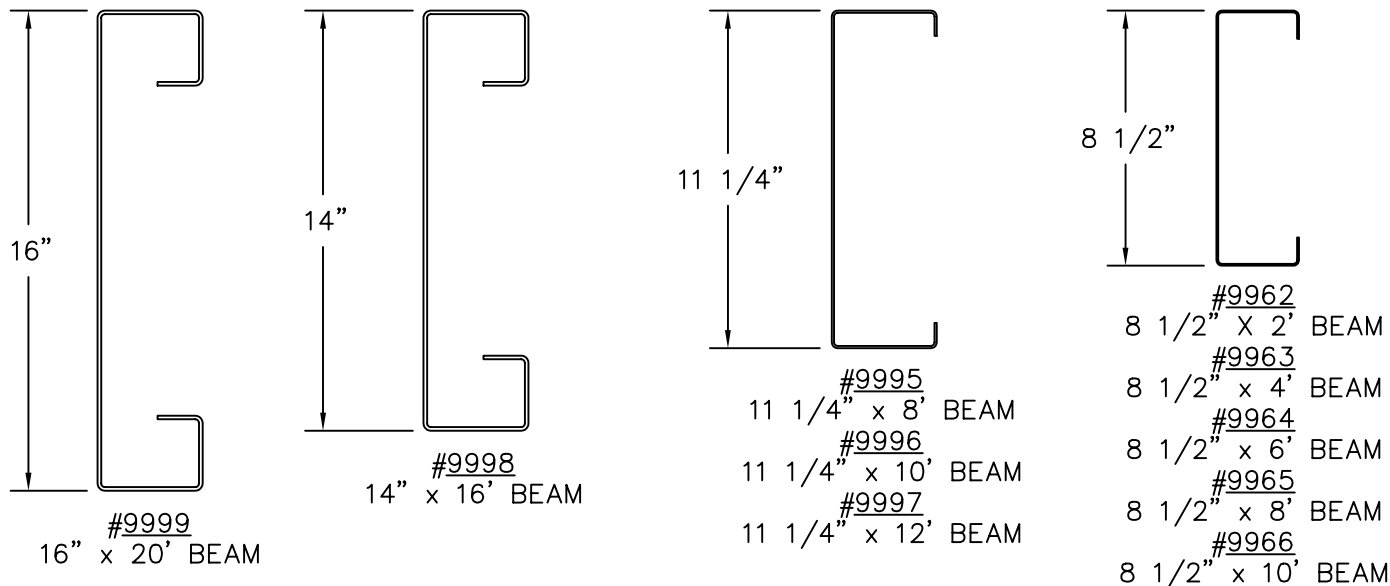
BOLT ON BASE #7724
4" x 2 1/2"

5/8" x 1 1/2" HEX HEAD
BOLT (13101), LOCKWASHER
(13102), AND HEX NUT
(913103) . (2 EA. POST
BASE)



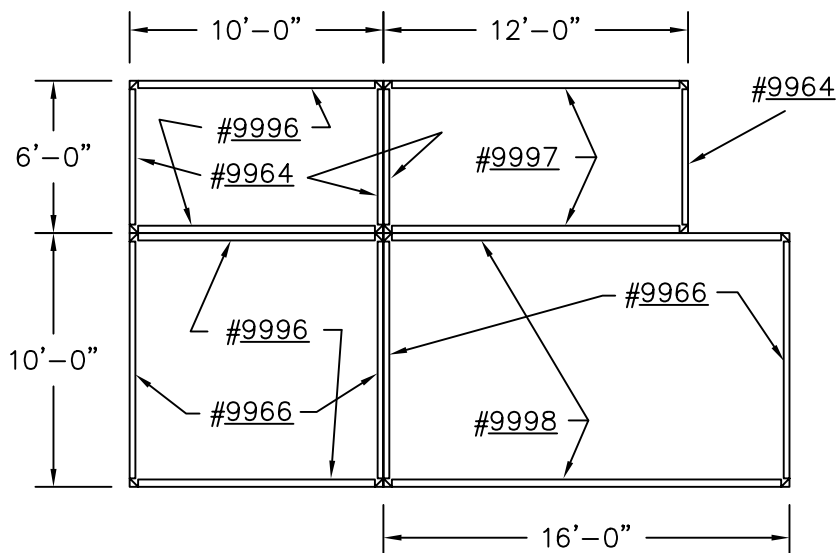
FIELD MODIFIED POST
FOOTPLATE ASSEMBLY

MEZZANINE BEAM SIZES



BEAM LENGTHS ARE NOMINAL – ACTUAL LENGTHS ARE 8 3/4" LESS THAN THE NOMINAL.

SAMPLE FLOOR PLAN



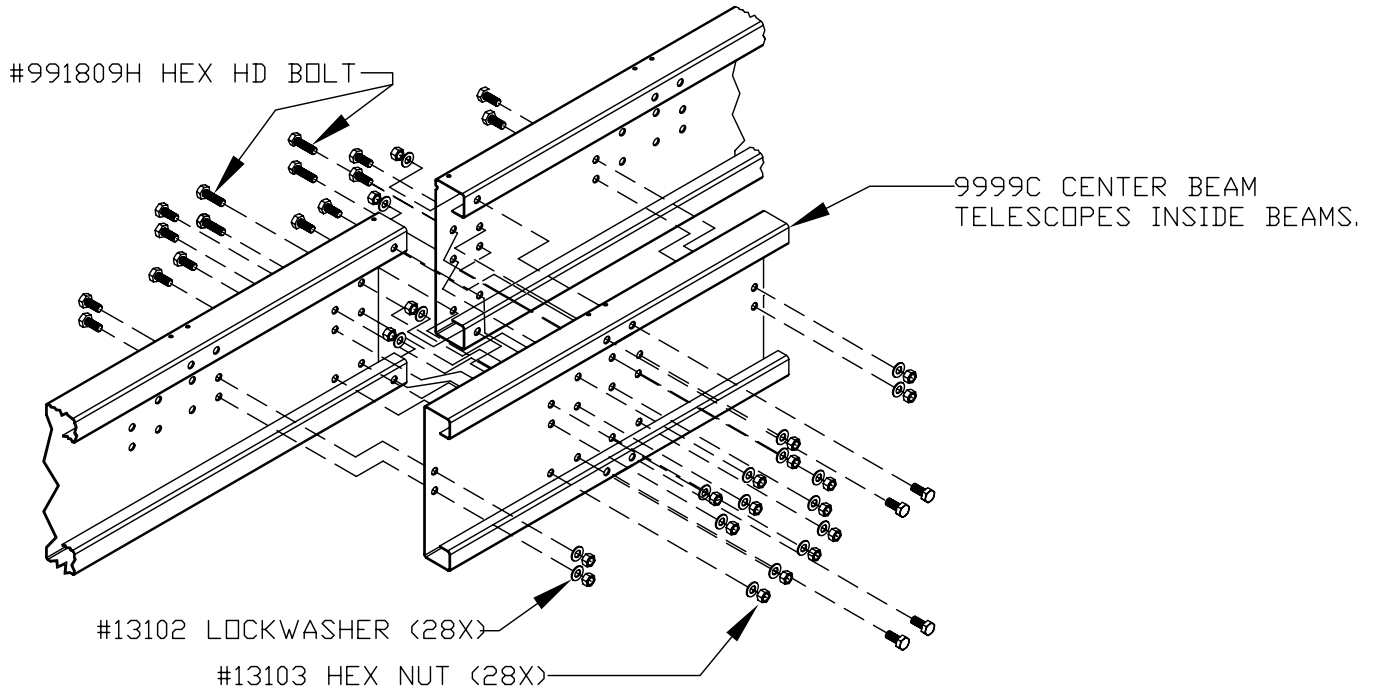
EXTERNAL FRAME ASSEMBLY INSTRUCTIONS

NOTE: HAND TIGHTEN ALL HARDWARE AT THIS TIME.

REFER TO YOUR INSTALLATION DRAWING OR PAGES 7 AND 8 TO DETERMINE WHICH BEAMS AND POST ASSEMBLIES TO USE. SEE PAGE 9 FOR DETAILS OF THESE INSTRUCTIONS.

1. Bolt the ends of one beam to the bolting plates of two posts or post assemblies.
NOTE: Position bolt heads to the inside of beam where another mezzanine bay is to be added or if you are using overhang brackets on that side.
2. Repeat Step 1 with opposite side posts and beam.
3. Stand up the two assemblies from steps 1 and 2 with the beams at the top. Fasten the ends of the two required beams to the two assemblies at the bolting plates.
4. If adding on another mezzanine bay remove the nuts and washer from the bolts on the first bay. Then position the external beam of the next bay over the bolts and replace the washers and nuts.
5. Repeat Step 1 for the second bay. Stand that assembly up and position the two other external beams into place as in Step 3.
6. Continue assembling External Frame until it is complete.
7. Fasten two tubular braces at each outer corner of the completed External Frame or where noted on your installation drawing.(SEE PAGE 10)
8. It would be beneficial at this time to plum and square the mezzanine posts and beams.

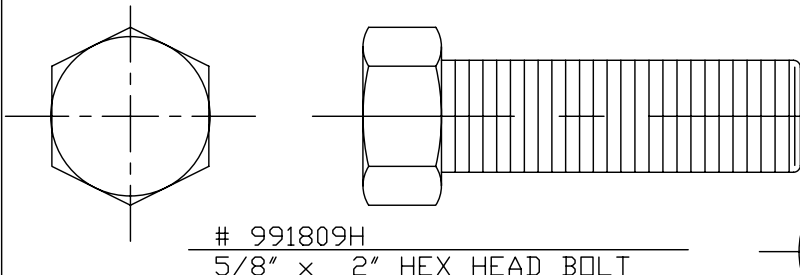
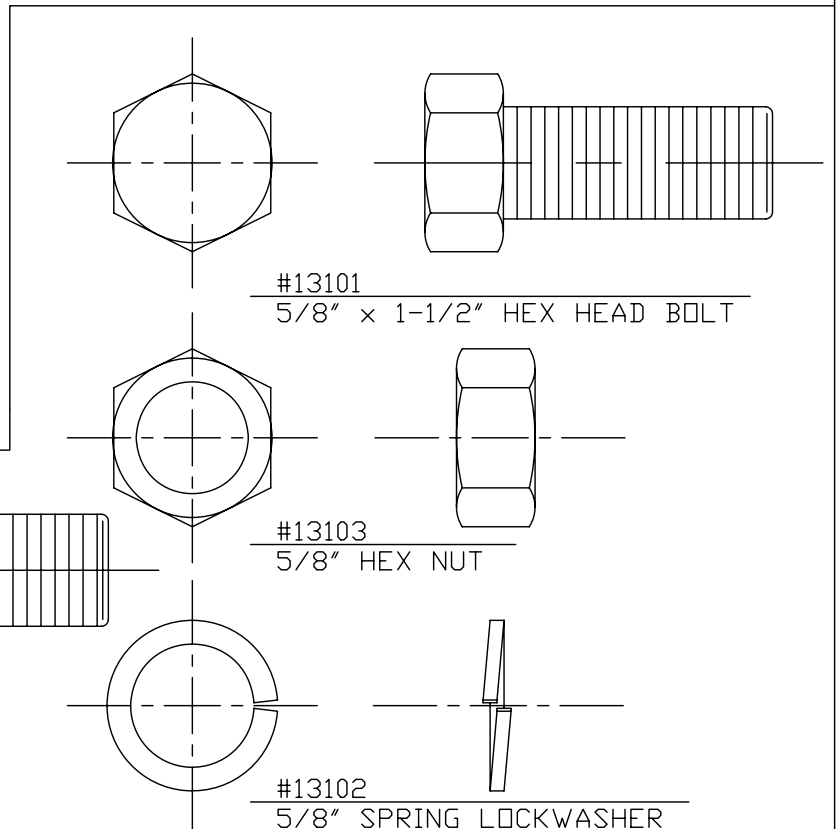
50-1ASY BEAM SPLICE ASSEMBLY INSTRUCTIONS

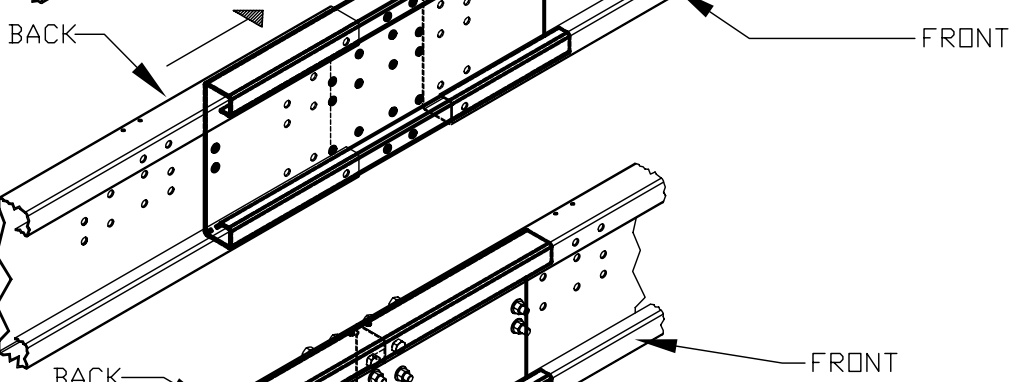
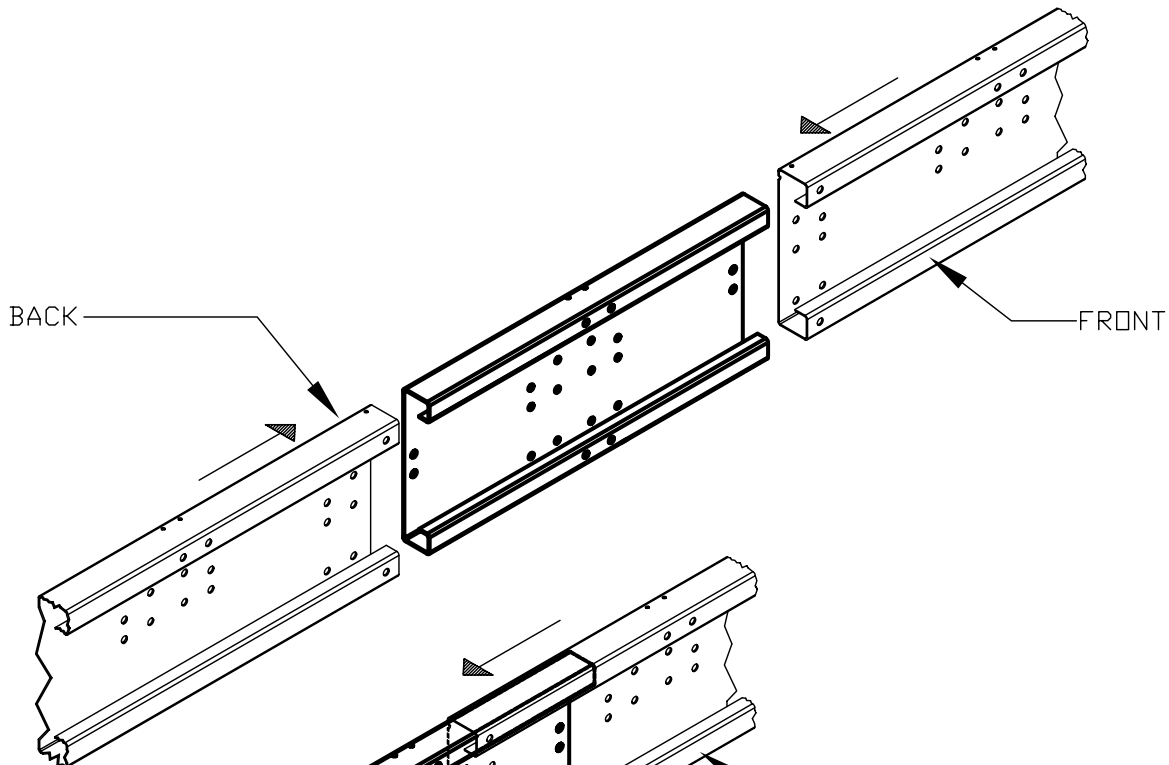


(1) SLIDE CENTER BEAM INTO PLACE AS SHOWN ON PAGE 2. (NOTE: CENTER BEAM TELESCOPES INTO LEFT AND RIGHT BEAMS SHOWN.)

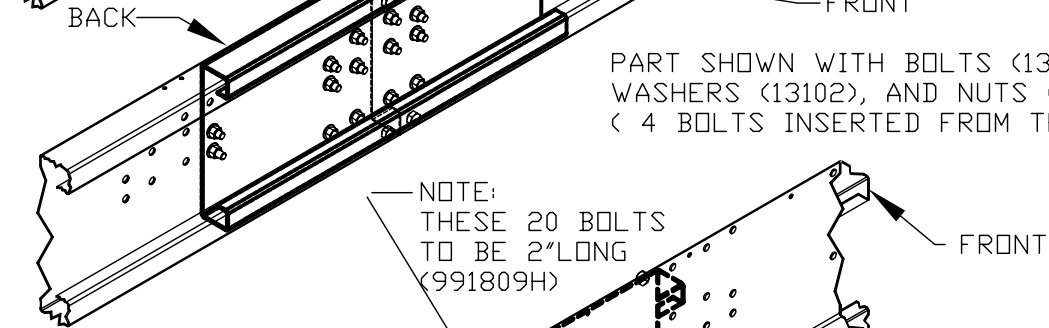
(2) WHEN HOLES IN THE CENTER BEAM ARE ALIGNED WITH THE HOLES IN THE LEFT AND RIGHT BEAMS, ATTACH THE (#13101) AND (#991809H) HEX HEAD BOLTS, WASHERS (13102) AND HEX NUTS (#13103) AND TIGHTEN.

(3) 20-2" LONG (#991809H) BOLTS HAVE BEEN FURNISHED FOR FACE TO FACE INSTALLATION. BALANCE OF BOLTS ARE 1-1/2" LONG (#13101)

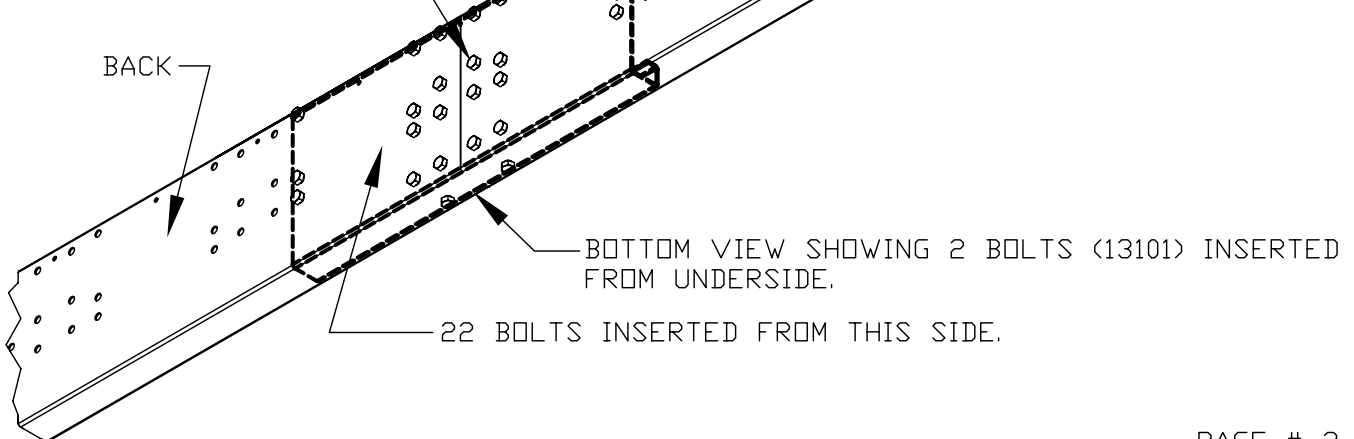




PART SHOWN WITH BOLTS (13101) AND (991809H),
WASHERS (13102), AND NUTS (13103) IN PLACE.
(4 BOLTS INSERTED FROM THIS SIDE).



NOTE:
THESE 20 BOLTS
TO BE 2" LONG
(991809H)



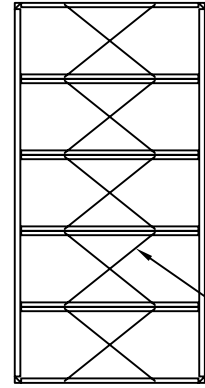
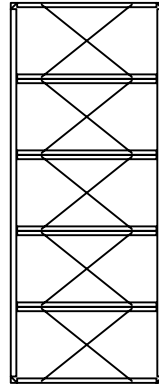
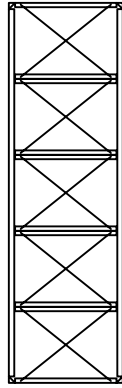
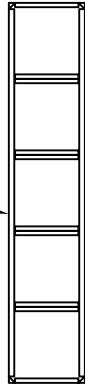
BOTTOM VIEW SHOWING 2 BOLTS (13101) INSERTED
FROM UNDERSIDE.

22 BOLTS INSERTED FROM THIS SIDE.

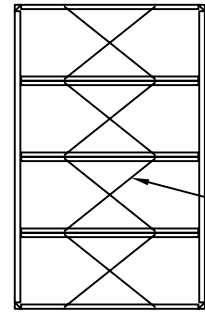
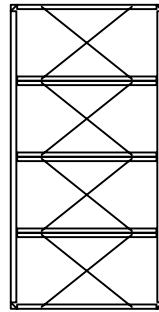
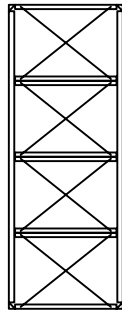
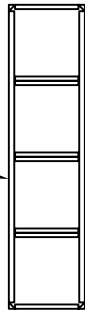
FRAMING AND FLOOR SUPPORT LAYOUTS 4' CENTERS

LENGTH

16" x 20'
BEAM
#9999

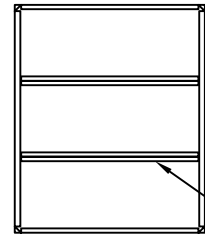
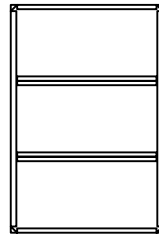
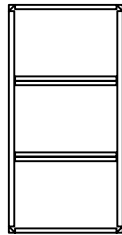
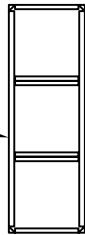


14" x 16'
BEAM
#9998

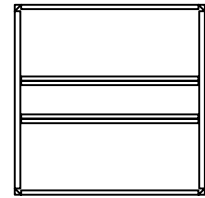
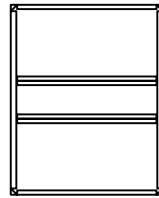
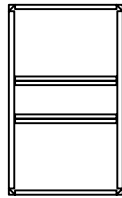
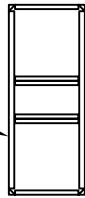


CROSS BRACES
#6442

11 1/4" x 12'
BEAM
#9997

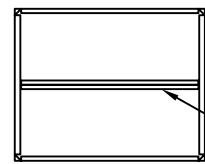
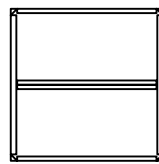
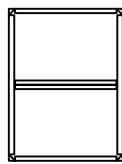
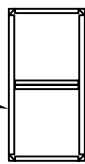


11 1/4" x 10'
BEAM
#9996



DOUBLE BEAMS

11 1/4" x 8'
BEAM
#9995



WIDTH

8 1/2" x 4'
BEAM
#9963

8 1/2" x 6'
BEAM
#9964

8 1/2" x 8'
BEAM
#9965

8 1/2" x 10'
BEAM
#9966

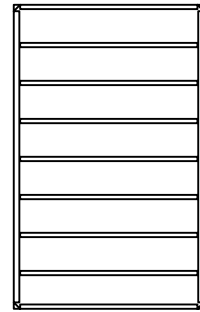
FRAMING AND FLOOR SUPPORT LAYOUTS 2' CENTERS

LENGTH

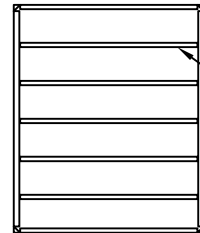
16" x 20'
BEAM
#9999



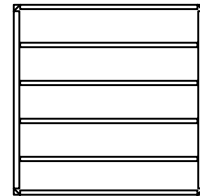
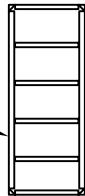
14" x 16'
BEAM
#9998



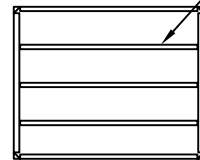
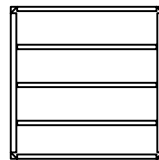
11 1/4" x 12'
BEAM
#9997



11 1/4" x 10'
BEAM
#9996



11 1/4" x 8'
BEAM
#9995



SINGLE BEAMS

8 1/2" x 4'
BEAM
#9963

8 1/2" x 6'
BEAM
#9964

8 1/2" x 8'
BEAM
#9965

8 1/2" x 10'
BEAM
#9966

WIDTH

BOLT HOLE FOR ALL BEAMS.

BOLT HOLE FOR 8 1/2", 14", & 16" HIGH BEAMS

BOLT HOLE FOR 11 1/4", 14", & 16" HIGH BEAMS

11 1/4" HIGH BEAM

POST

POST

POST AND BEAM ASSEMBLY FROM STEP 1.

8 1/2" HIGH BEAM

5/8" x 1 1/2" HEX HEAD BOLT (13101), LOCKWASHER (13102), AND HEX NUT (13103). (2 EA. PER END, EXCEPT 3 EA. PER END ON 14", AND 16" HIGH BEAMS)

8 1/2" HIGH BEAM

POST AND BEAM ASSEMBLY FROM STEP 1.

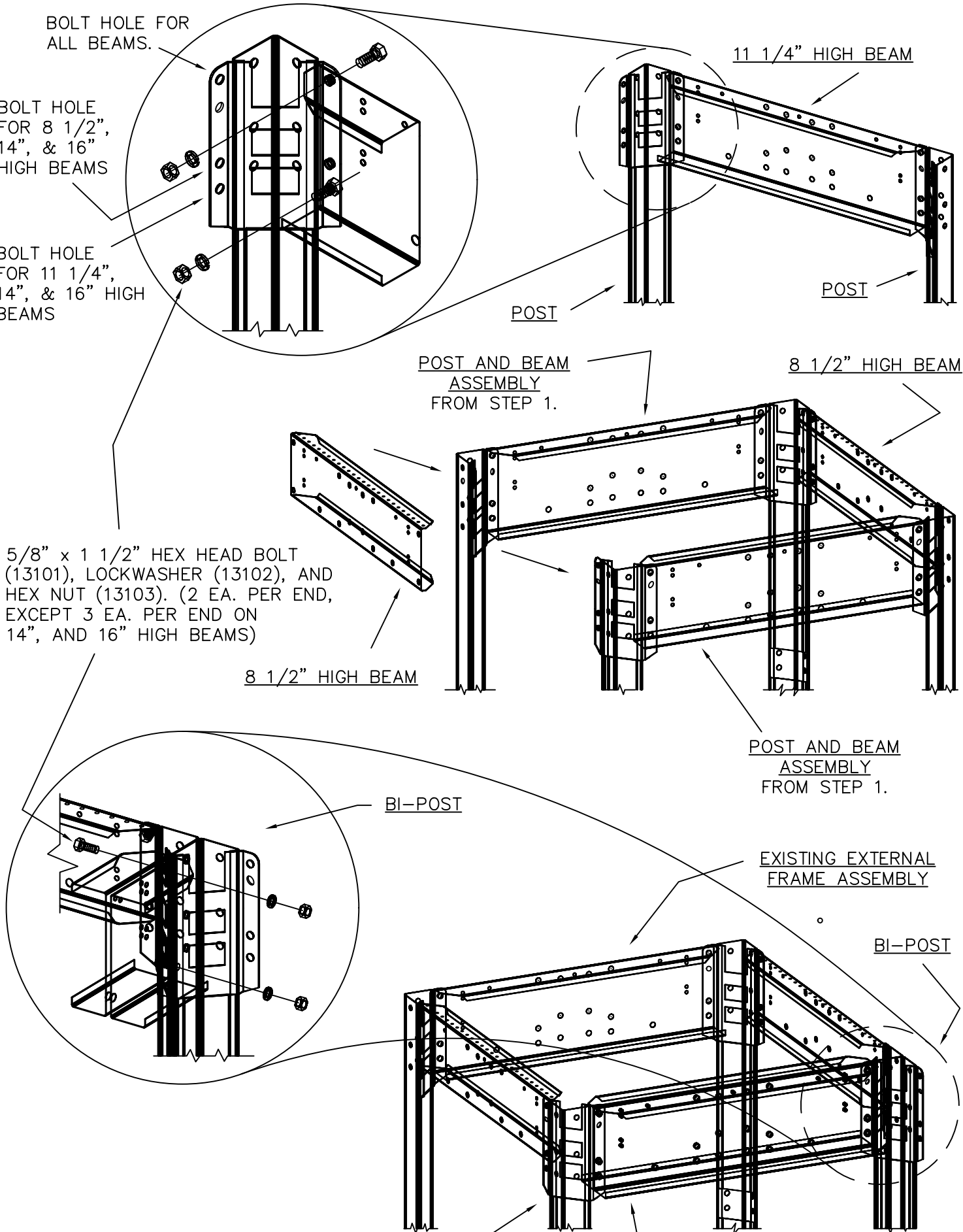
BI-POST

EXISTING EXTERNAL FRAME ASSEMBLY

BI-POST

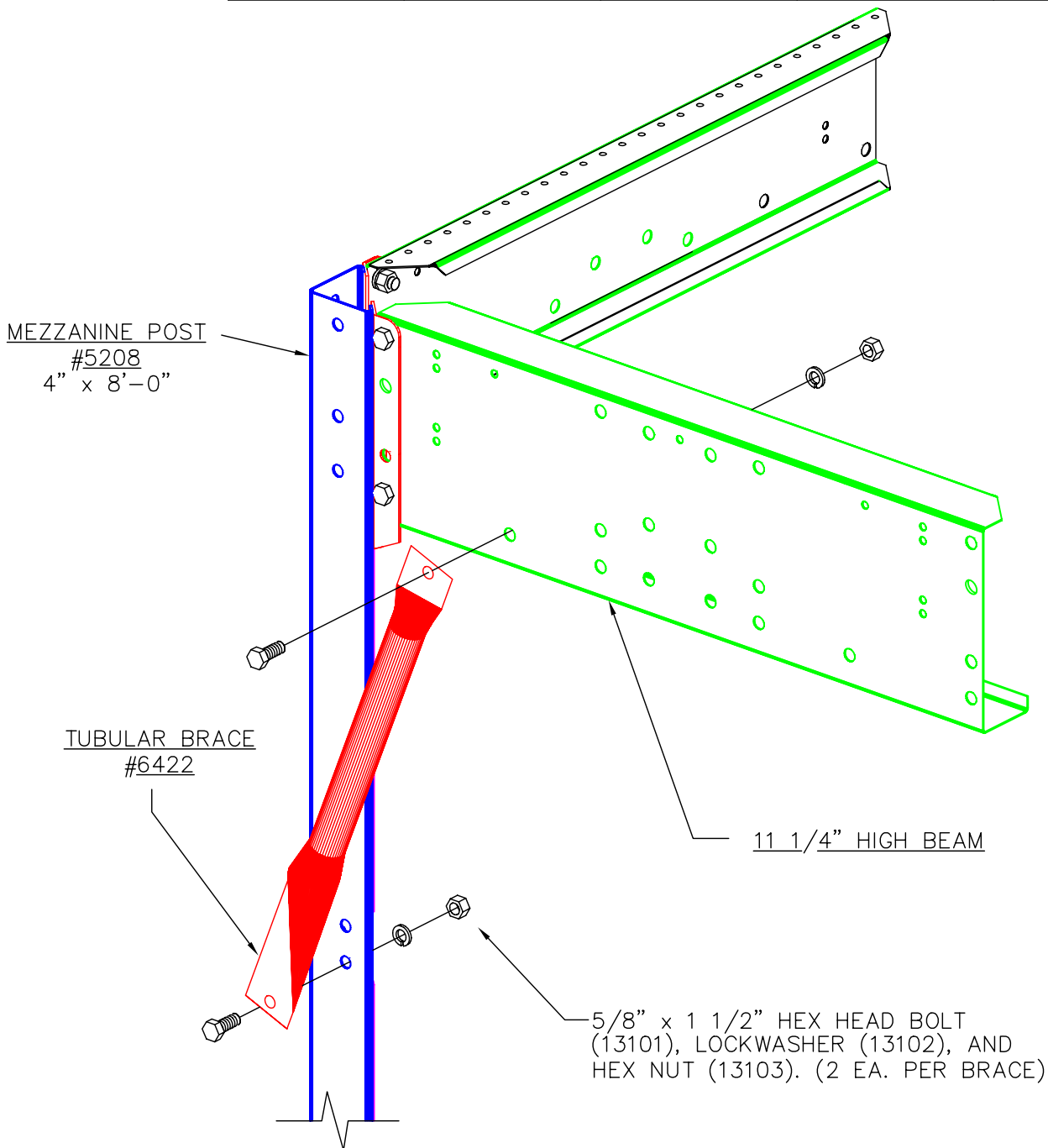
ADD-ON BEAM

BI-POST



TUBULAR BRACE ASSEMBLY

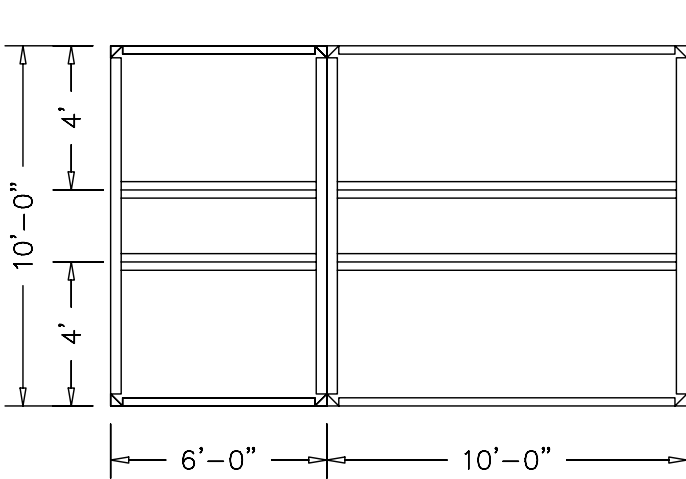
POST HEIGHT	BEAM HEIGHT			
	8-1/2"	11 1/4"	14"	16"
8'	#6422 28 15/32" c.c.	#6422 28 15/32" c.c.	#6402 23 15/16" c.c.	#6402 23 15/16" c.c.
9'	#6423 51 9/16" c.c.	#6423 51 9/16" c.c.	#6405 46 11/16" c.c.	#6405 46 11/16" c.c.
10'	#6423 51 9/16" c.c.	#6423 51 9/16" c.c.	#6405 46 11/16" c.c.	#6405 46 11/16" c.c.
12'	#6424 75 7/32" c.c.	#6424 75 7/32" c.c.	#6485 70 9/32" c.c.	#6485 70 9/32" c.c.



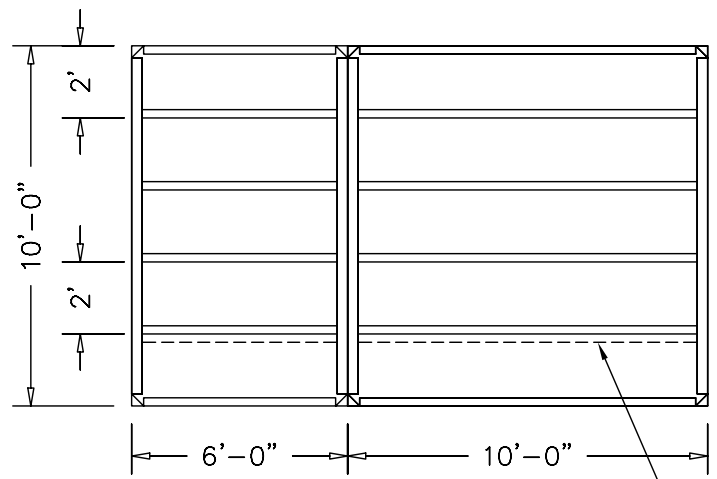
INTERNAL FLOOR SUPPORT STRUCTURE

1. Consult your installation drawing or pages 7 and 8 and your order to determine what beam configuration you have. Beams may be installed on 2' centers or on 4' centers.
NOTE: If you are using extension brackets #9970 or #9971 see pages 14 and 15 before proceeding to insure proper beam configuration.
2. Install all of the beam brackets in their proper positions depending on the beam centers. If you have mezzanines which are back to back install both sets of beam brackets at the same time. (SEE PAGES 11 AND 12)
3. Bolt the ends of the internal beams to the beam brackets. Install in pairs if your beams are on 4' centers.(SEE PAGE 12) Install only one beam if your beams are on 2' centers. For beams on 2' centers locate the position of the floor support angles. Install them where the ends of two pieces of tuffdeck meet. (SEE PAGE 13)
4. On internal beam pairs that are longer than 4' they must be bolted back to back.(SEE PAGE 12) On 16' and 20' span mezzanines that are 6', 8', and 10' wide you must install cross braces on top of the internal beams. (Not required if beams are on 2' centers – SEE PAGE 13)
5. Plum and square all the post and beams at this time. Tighten all hardware on framework, then anchor the post to the floor. NOTE: Floor anchors to be furnished by others.

WARNING: FAILURE TO ANCHOR ALL POSTS TO THE FLOOR WILL RESULT IN AN UNSAFE MEZZANINE.



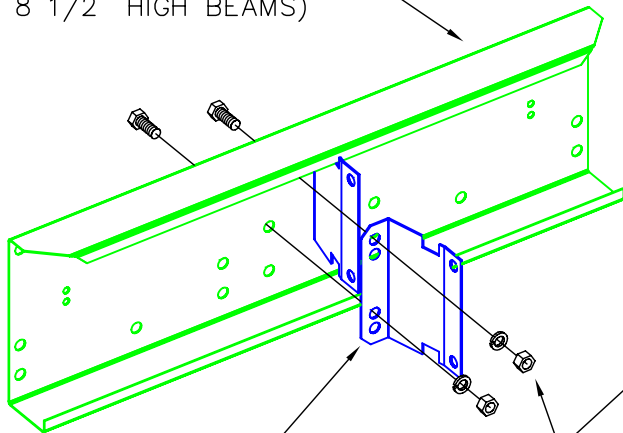
**FLOOR SUPPORT LAYOUT
BEAMS ON 4' CENTERS**



**FLOOR SUPPORT LAYOUT
BEAMS ON 2' CENTERS**

BEAM BRACKETS

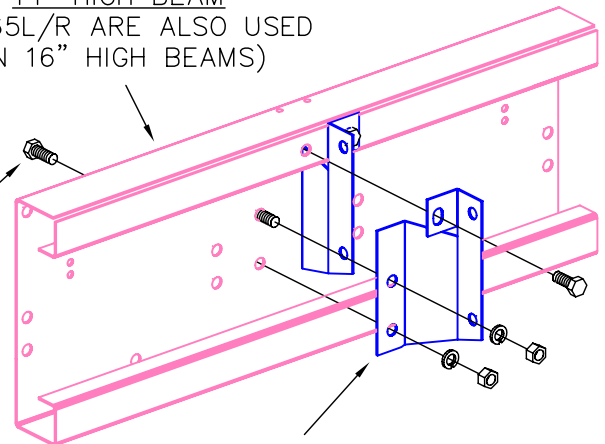
11 1/4" HIGH BEAM
 (#7664 ARE ALSO USED
 ON 8 1/2" HIGH BEAMS)



BEAM BRACKET
 #7664
 5 11/16" x 8"
 (2 PER LOCATION)

5/8" x 1 1/2" HEX HEAD
 BOLT, LOCKWASER, AND
 HEX NUT.
 (2 PER #7664 AND
 3 PER #7665L/R)

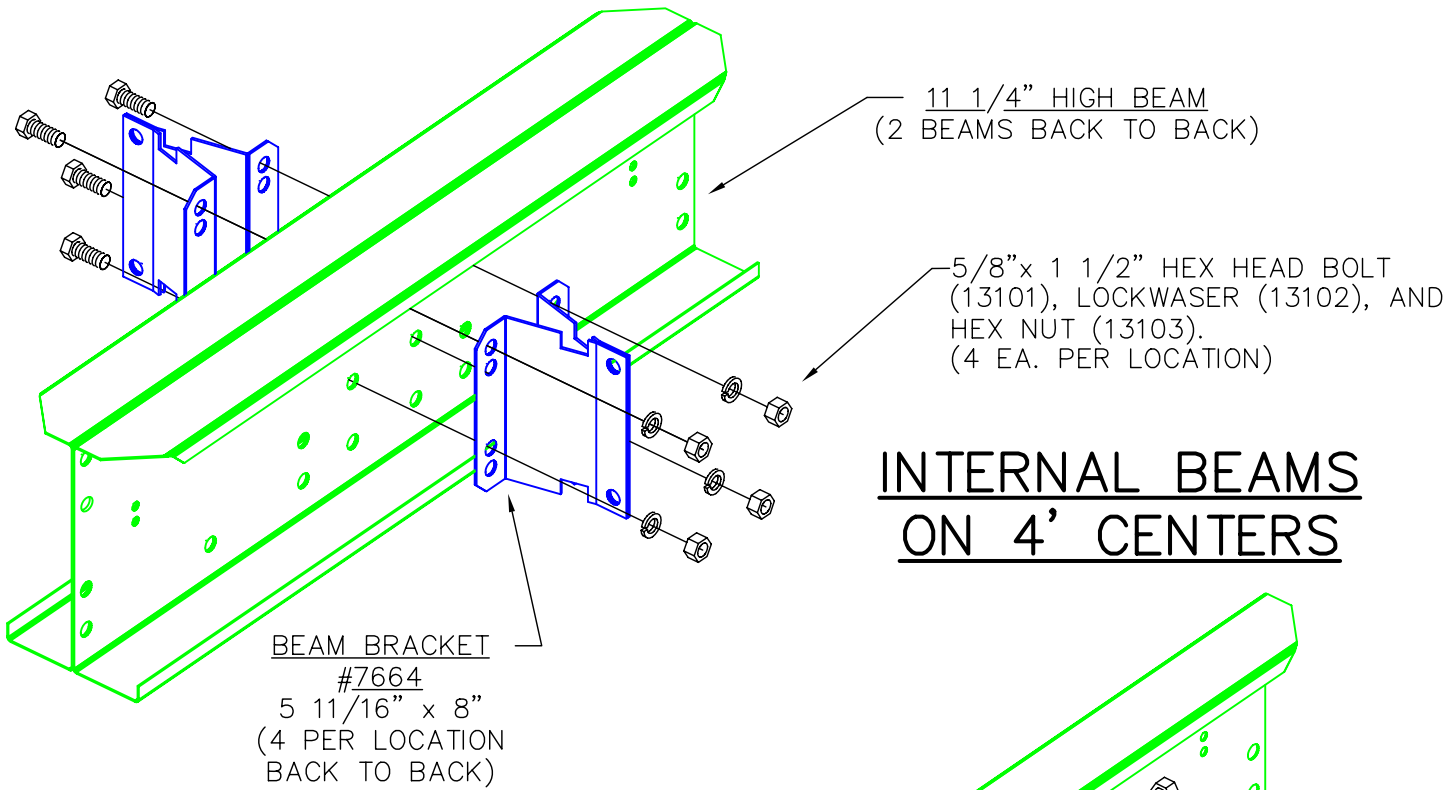
14" HIGH BEAM
 (#7665L/R ARE ALSO USED
 ON 16" HIGH BEAMS)



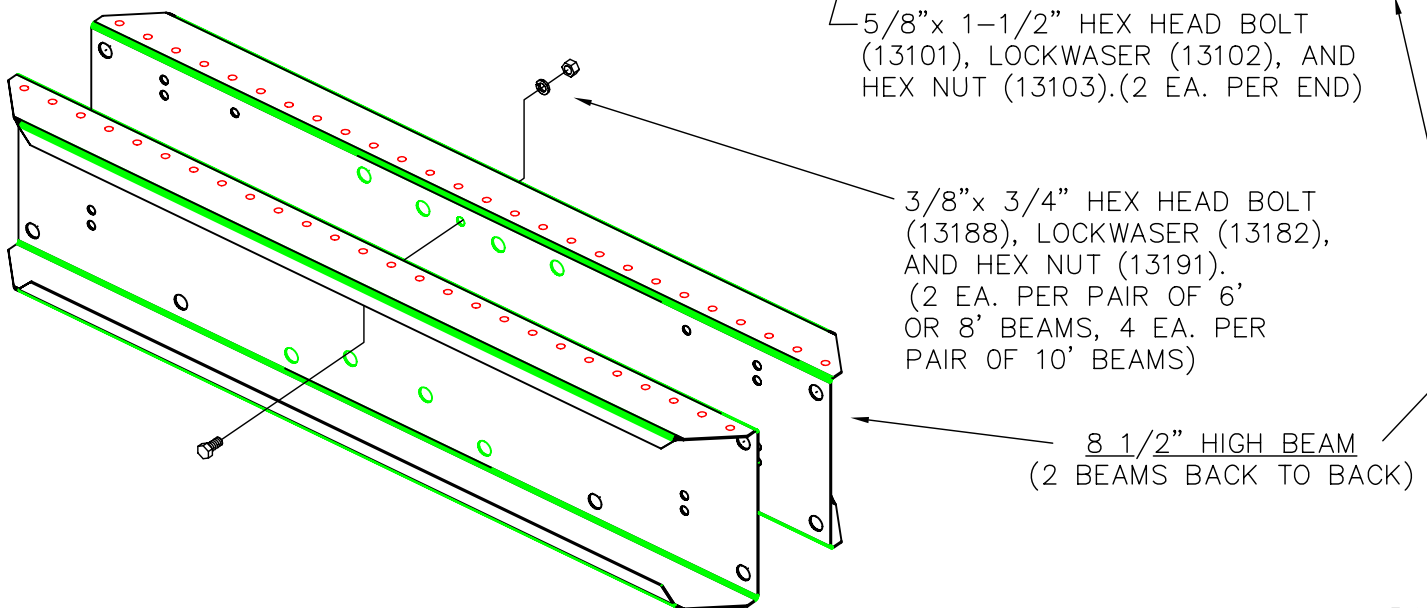
BEAM BRACKET
 #7665L/R
 5 11/16" x 8"
 (2 PER LOCATION)

FLOOR SUPPORT ANGLE,
 LOCATED AT THE ENDS OF
 TWO PIECES OF TUFFDECK.

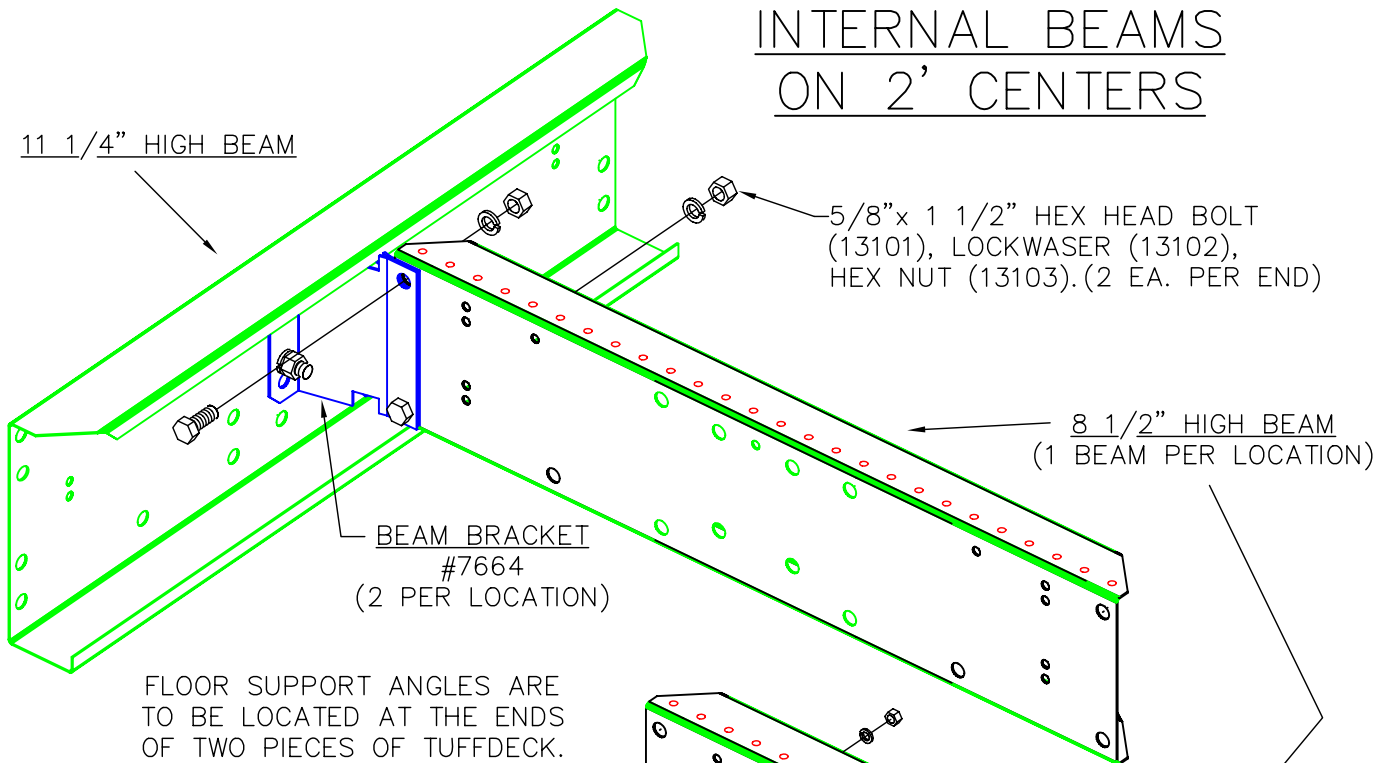
BACK TO BACK BEAMS



INTERNAL BEAMS BOLTED BACK TO BACK

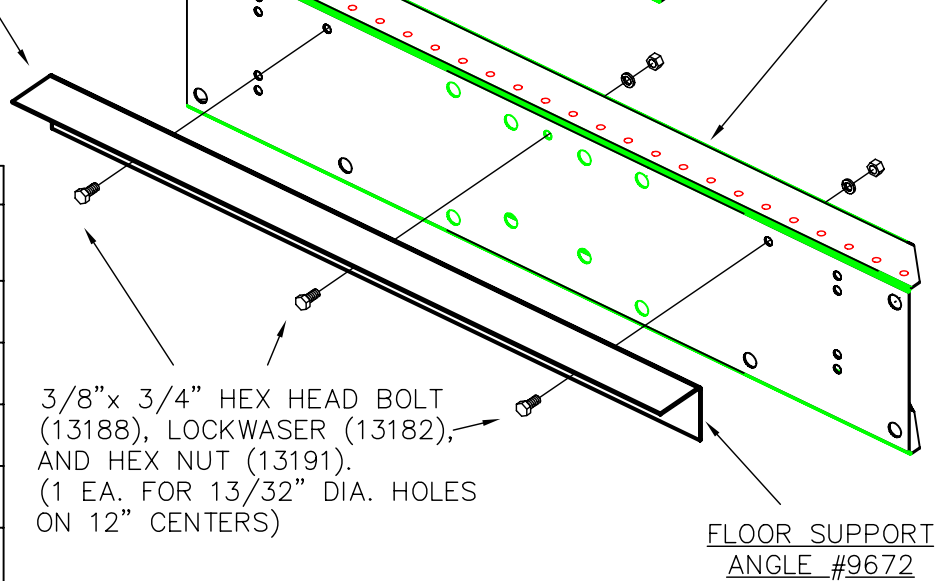


INTERNAL BEAMS ON 2' CENTERS



FLOOR SUPPORT ANGLES

FLOOR SUPPORT ANGLE SIZE CHART		
PART #	FLOOR SUPPORT SIZE	SPAN
#9671	2 3/4" x 11 1/4"	2'
#9672	2 3/4" x 35 1/4"	4'
#9673	2 3/4" x 59 1/4"	6'
#9674	2 3/4" x 83 1/4"	8'
#9675	2 3/4" x 107 1/4"	10'

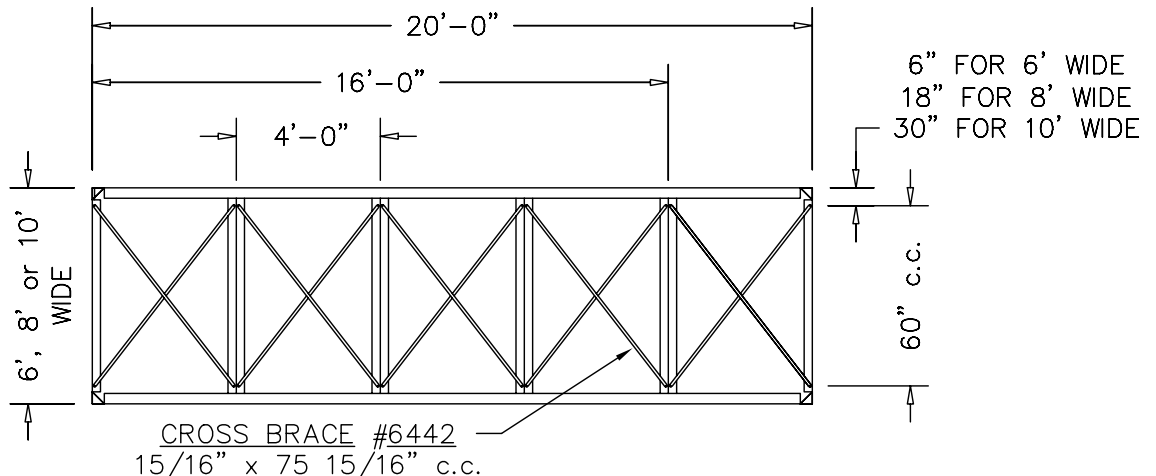


CROSS BRACES ON 16' AND 20' SPAN MEZZANINES

NOT REQUIRED IF USING TUFFDECK OR ROOFDECK AND TUFFDECK AS FLOORING.

NOTE:

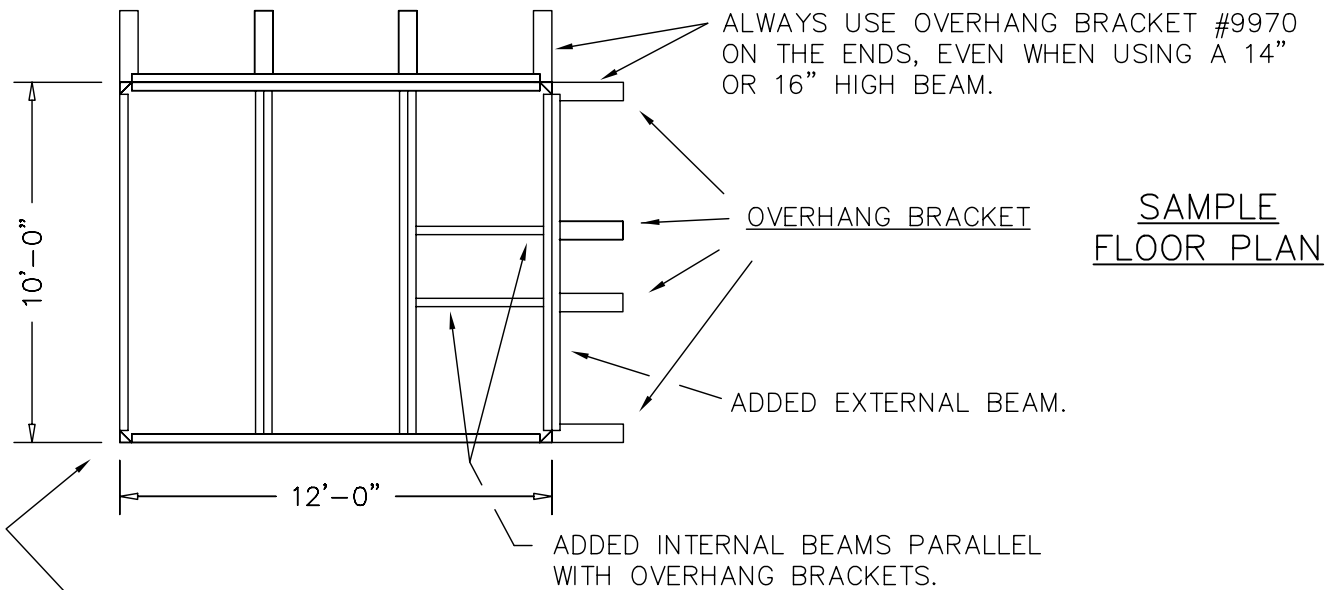
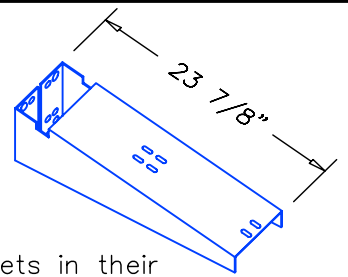
BRACES REQUIRED ON 16' AND 20' SPAN MEZZANINES ONLY. USE 5/16" x 5/8" HEX HEAD BOLT (13152) AND NUT (13051). (2 EA. PER BRACE) BRACES ARE TO BE PLACED ON TOP OF INTERNAL BEAMS.



OVERHANG BRACKET ASSEMBLY

NOTE: IF YOU ARE NOT INSTALLING OVERHANG BRACKETS SKIP TO PAGE 16.

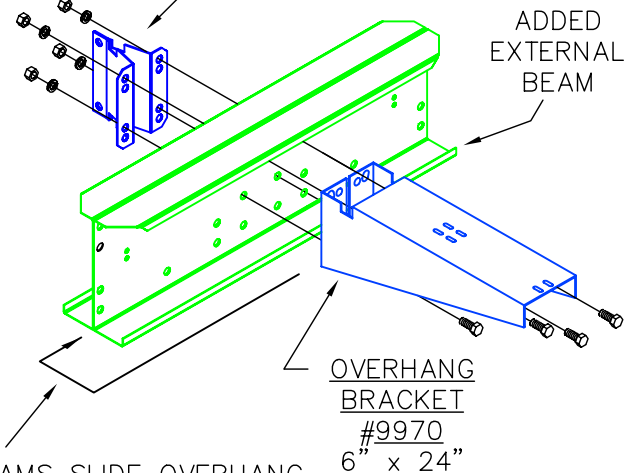
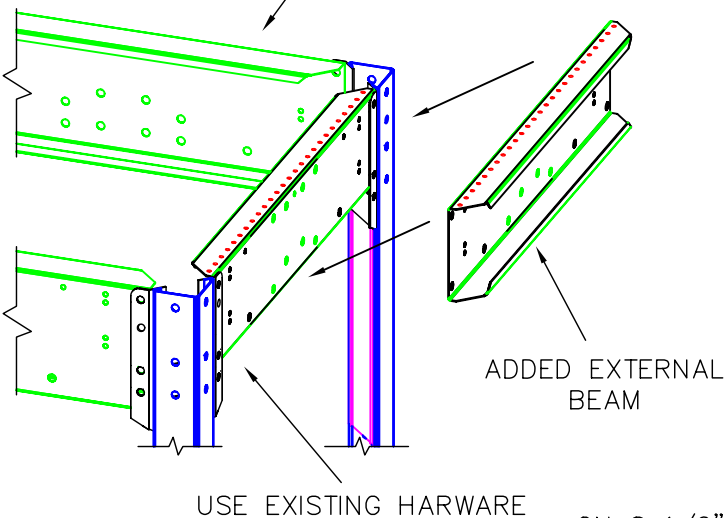
1. Another external beam is needed for support when using overhang brackets. Consult your installation drawing to determine what size external beam you need and install it using the hardware that is already in place.
2. Install all of the beam brackets (see pages 11 thru 13) and overhang brackets in their proper positions depending on the beam centers. Be sure to install a pair of beam brackets opposite each overhang bracket. NOTE: If using overhang brackets on 14" and 16" high beams one overhang bracket #9970 is required at each end of the beam. Overhang bracket #9971 is to be used in the rest of the locations along these beams.
3. Install the internal beams.(see pages 11 thru 13) If your overhang brackets are perpendicular to your internal beams you must install extra supports parallel to the overhang brackets.
4. On the first internal beam near the overhang brackets install beam brackets in line with each overhang bracket. Then install one internal beam in between these beam brackets in line with the overhang brackets.
5. Plum and square all the post and beams at this time. Tighten all hardware on framework, then anchor the post to the floor. NOTE: Floor anchors to be furnished by others.



EXTERNAL FRAME ASSEMBLY

5/8" x 1 1/2" HEX HEAD BOLT (13101), LOCKWASHER (13102), AND HEX NUT (13103). (4 EA. PER LOCATION)

INSTALL A PAIR OF BEAM BRACKETS (7665L/R) WITH EACH OVERHANG BRACKET.



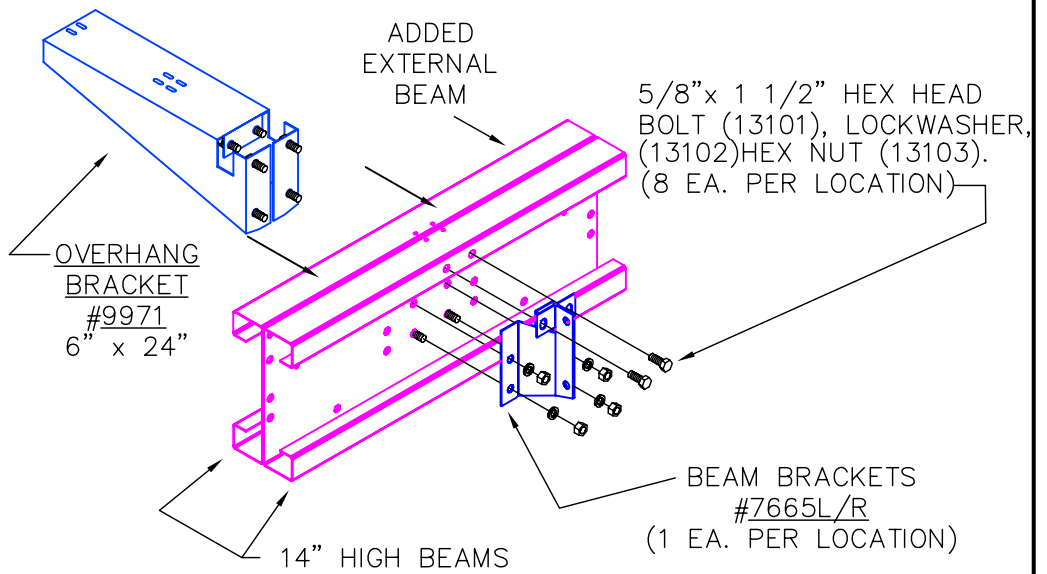
ON 8 1/2" HIGH BEAMS SLIDE OVERHANG BRACKETS INTO POSITION FROM ENDS.

OVERHANG BRACKET
ON
16" AND 14" HIGH
BEAMS

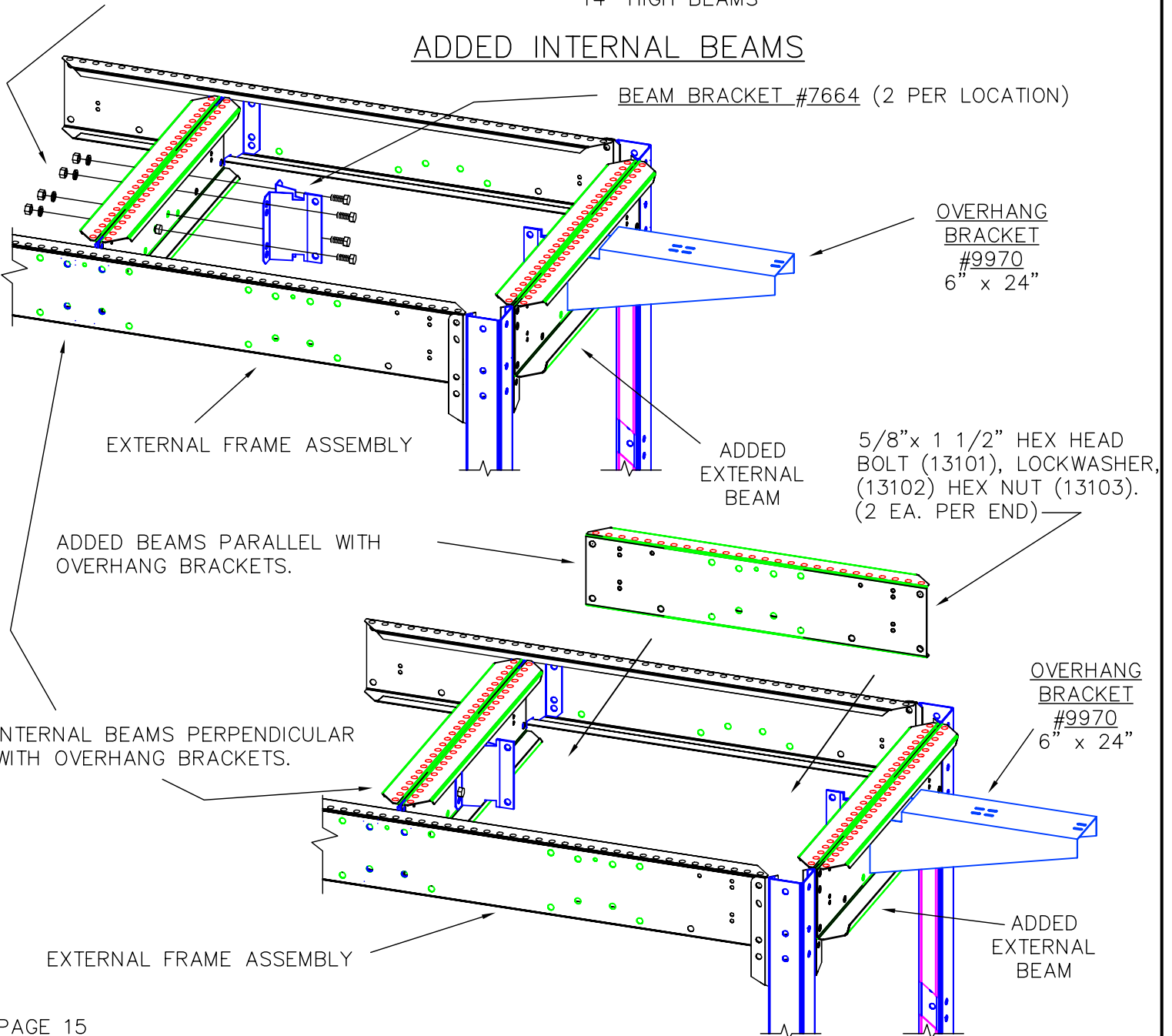
NOTE:

#7718 SHIM PLATE NEEDED FOR OVERHANG BRACKETS. ONE (1) AT POST LOCATIONS AND TWO (2) AT ALL OTHER LOCATIONS.

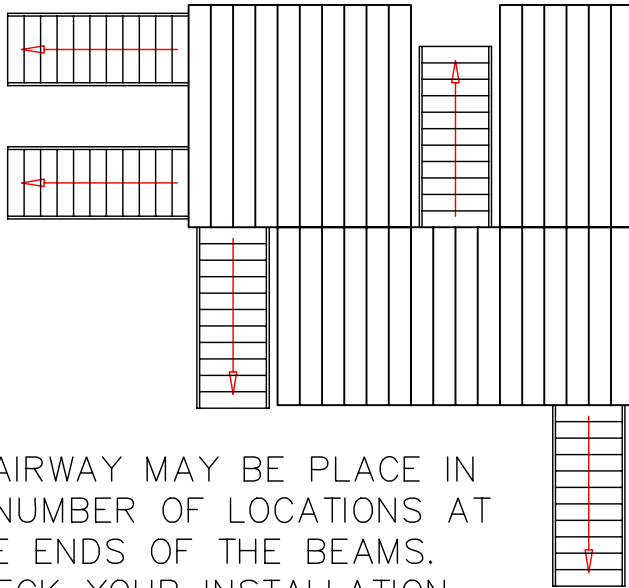
5/8"x 1 1/2" HEX HEAD BOLT (13101, LOCKWASHER (131102), AND HEX NUT (13103). (4 EA. PER LOCATION)



ADDED INTERNAL BEAMS



STAIRWAY ASSEMBLY



NOTE: STAIRWAY MAY BE PLACE IN A NUMBER OF LOCATIONS AT THE ENDS OF THE BEAMS. CHECK YOUR INSTALLATION DRAWING FOR YOUR STAIRWAY LOCATION.

INSTRUCTIONS

1. Determine where stairway is to be located in framing layout. All beams are punched for stairways.
2. Bolt #9556L/R top mounting angles to the beam where the stairs are to be located. (Mounting angles can be found in the stairway pack)
3. Assemble the stairway complete and install. See stairway instruction sheet #41334 or #41466.
4. Cover Plate #7717 is to be used when a stairway is mounted at the end of grating panels. It may be installed either before or after the grating is installed.

3/8" x 3/4" HEX HEAD BOLT (13188), LOCKWASHER (13182) AND HEX NUT (18191). (2 EA. PER BRACKET)

L.H. TOP MOUNTING ANGLE (#9556L)

MEZZANINE POST

11 1/4" HIGH BEAM

R.H. TOP MOUNTING ANGLE (#9556R)

NOTE: USE COVER PLATE #7717 ONLY WHEN STAIRWAY IS MOUNTED AT THE END OF THE GRATING PANELS.

USE TOP HOLES WHEN USING SOLID OR PERFORATED GRATING OR BAR GRATING AS FLOORING.

3/8" x 3/4" HEX HEAD BOLT (13188), LOCKWASHER (13182), AND HEX NUT (13191). (3 EA. PER PLATE)

COVER PLATE #7717

USE BOTTOM HOLES WHEN TUFFDECK IS TO BE USED AS FLOORING.

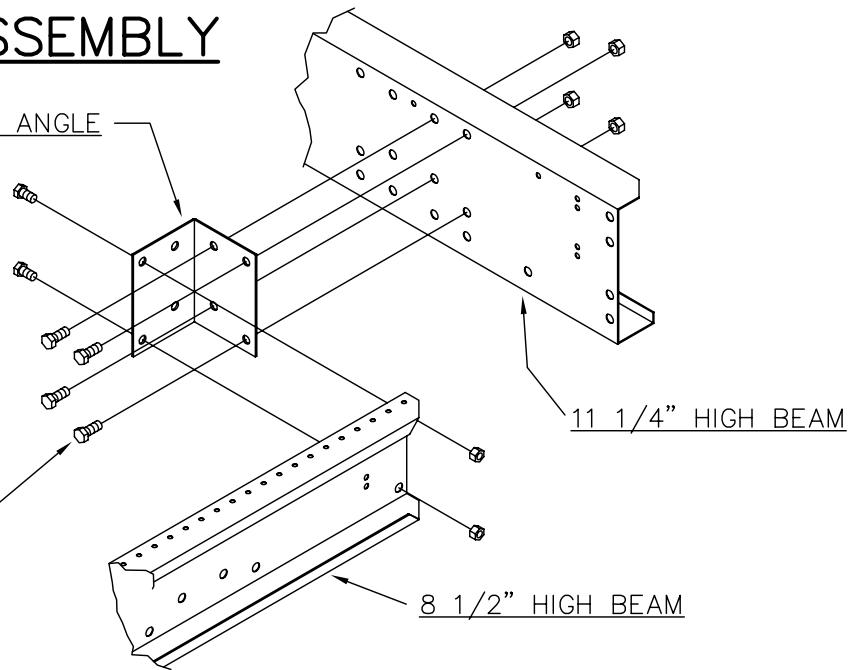
BEAM BOLTING ASSEMBLY

BEAM BOLTING ANGLE

NOTE:

USE THIS ASSEMBLY AS SPECIFIED IN YOUR MEZZANINE LAYOUT.

5/8" x 1 1/2" HEX HEAD BOLT (13101), LOCKWASHER (13102), HEX NUT (13103). (6 EA. PER BEAM ANGLE)

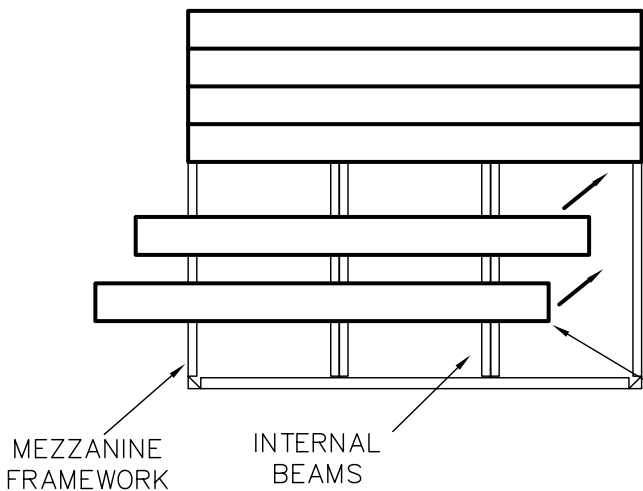


FLOORING: PERFORATED AND SOLID GRATING

INSTRUCTIONS

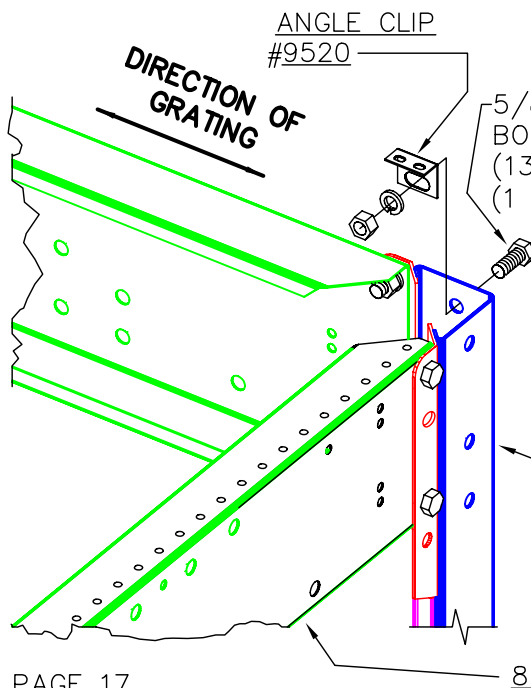
NOTE: ALL GRATING PANELS ARE TO INSTALLED PERPENDICULAR TO THE INTERNAL BEAMS.

1. Fasten an angle clip #9520 inside the top of all the post. Be sure the clips are positioned parallel with the direction of the grating panels.
2. Beginning on an outer edge of the mezzanine framework, position grating panel and bolt the ends to the top of the prepunched beam and the angle clip in the corners. After all the panels are in place tighten all hardware.



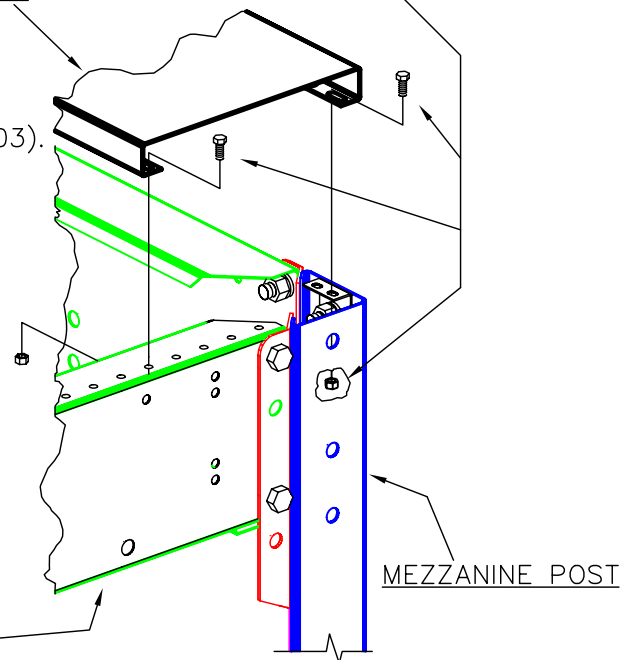
PERFORATED OR SOLID GRATING PANEL

5/16" x 5/8" HEX HEAD BOLT, (13152, AND HEX NUT (13051). (4 EA. PER PANEL)



5/8" x 1 1/2" HEX HEAD BOLT (13101), LOCKWASHER, (13102) AND HEX NUT (13103). (1 EA. PER CLIP)

MEZZANINE POST



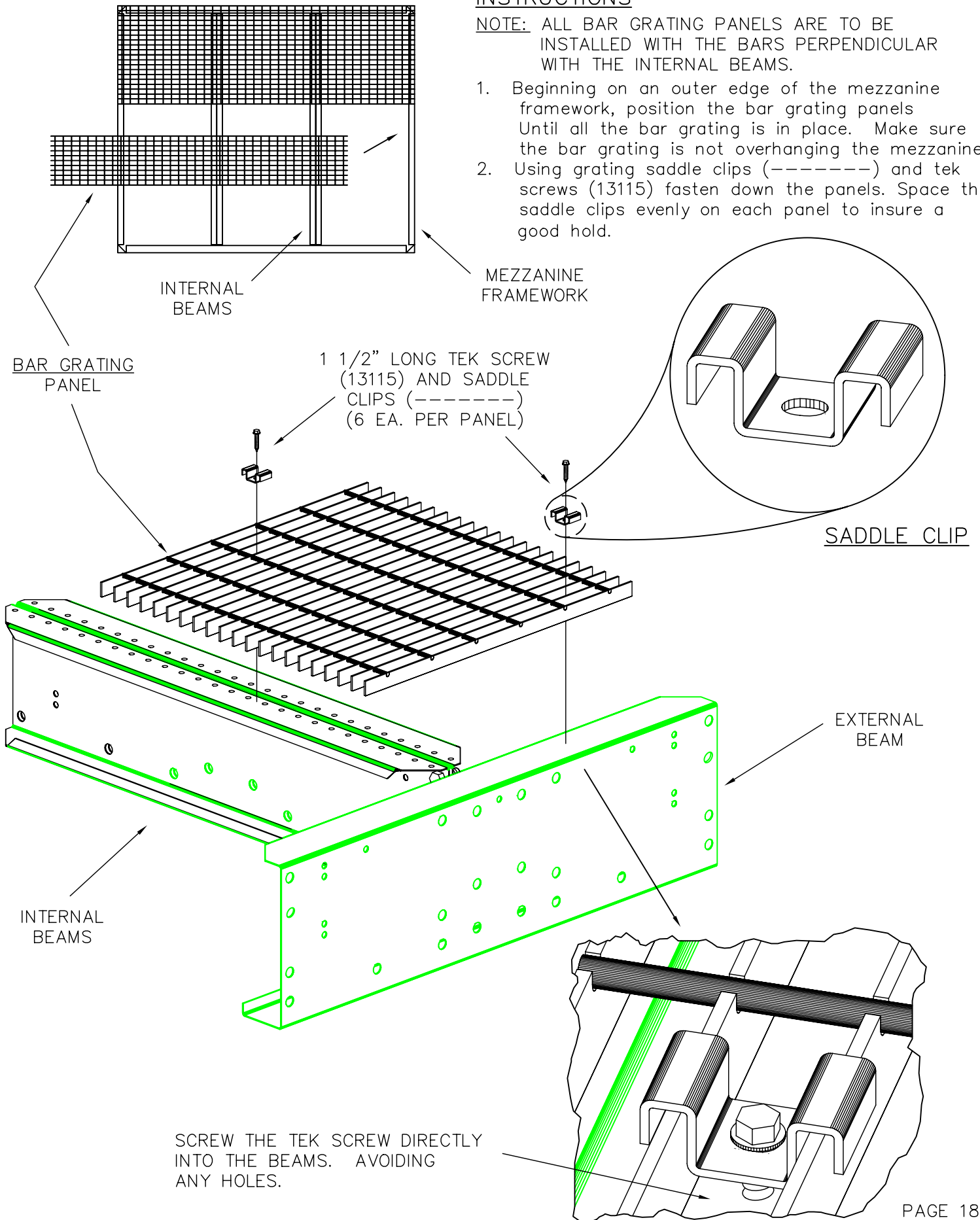
8 1/2" HIGH BEAM

FLOORING: BAR GRATING

INSTRUCTIONS

NOTE: ALL BAR GRATING PANELS ARE TO BE INSTALLED WITH THE BARS PERPENDICULAR WITH THE INTERNAL BEAMS.

1. Beginning on an outer edge of the mezzanine framework, position the bar grating panels. Until all the bar grating is in place. Make sure the bar grating is not overhanging the mezzanine.
2. Using grating saddle clips (-----) and tek screws (13115) fasten down the panels. Space the saddle clips evenly on each panel to insure a good hold.



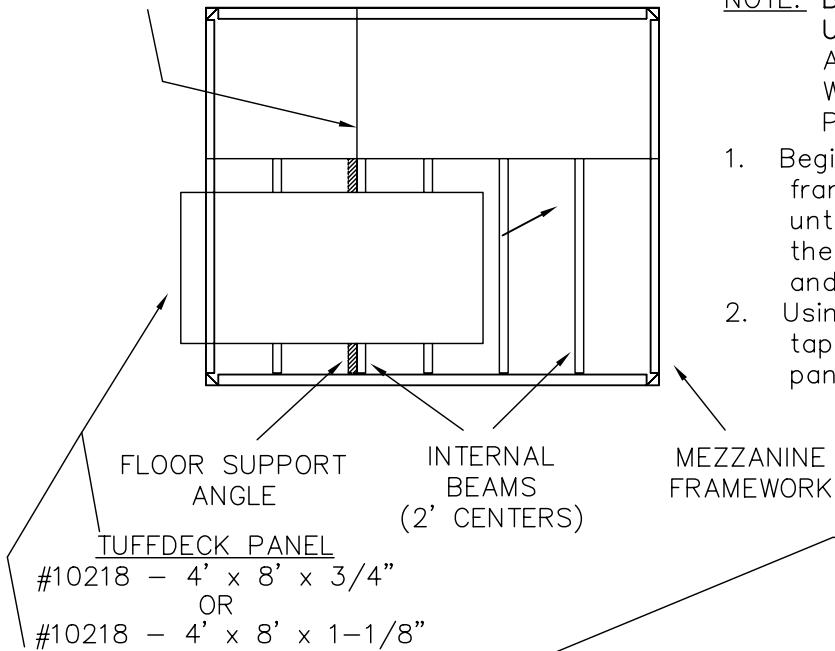
FLOORING: TUFFDECK

FLOOR SUPPORT ANGLES ARE LOCATED AT THE JOINT OF TWO PEICES OF TUFFDECK.

INSTRUCTIONS

NOTE: BEAMS MUST BE ON 2' CENTERS WHEN USING TUFFDECK AS FLOORING. ALL TUFFDECK PANELS ARE TO BE INSTALLED WITH THE TONGUE AND GROOVE EDGES PERPENDICULAR WITH THE INTERNAL BEAMS.

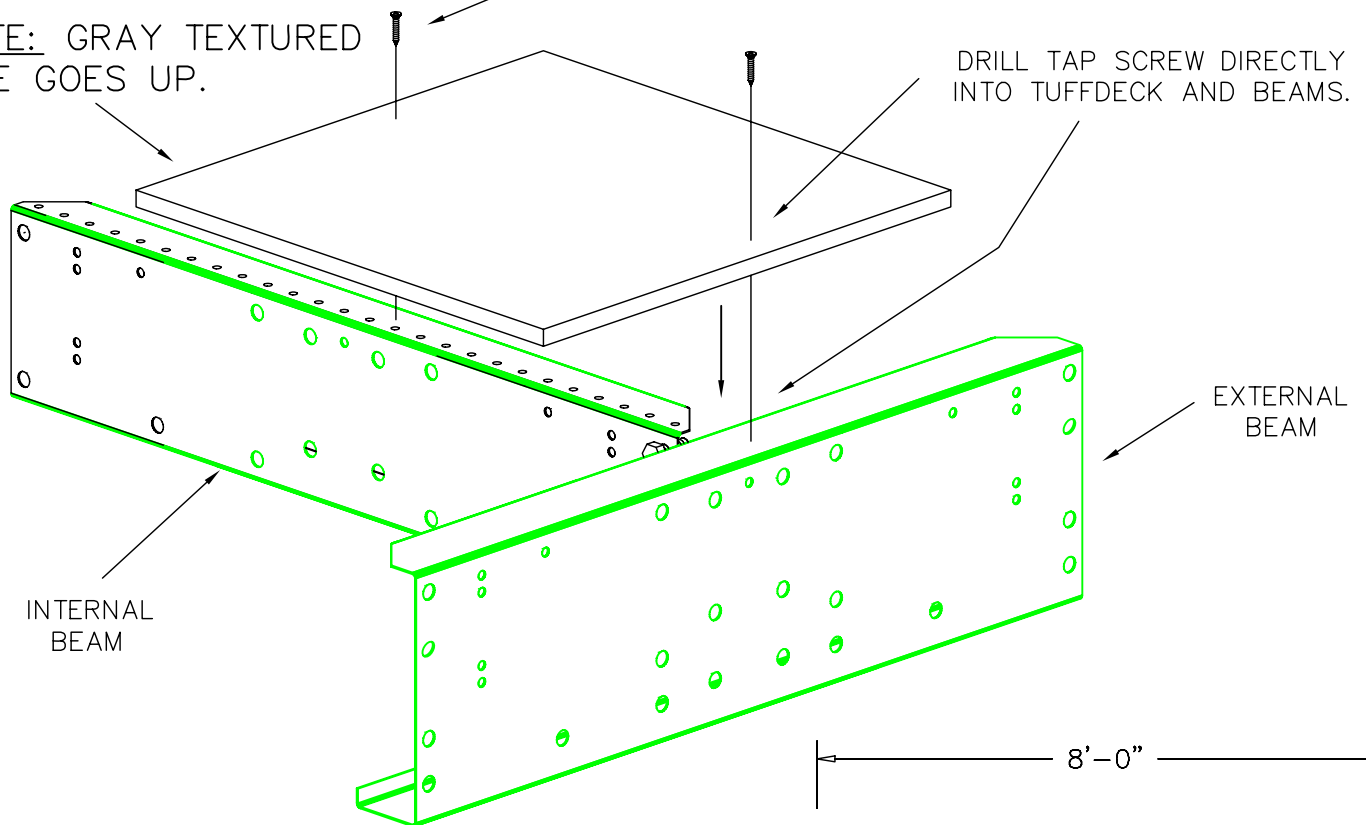
1. Beginning on an outer edge of the mezzanine framework, position the tuffdeck panels, until all the tuffdeck is in place. Make sure the tuffdeck is not overhanging the mezzanine and the tongue and grooves are tight together.
2. Using tap screws fasten down the panels. Three tap screws for each beam supporting a 4'x 8' panel (15 per panel, see detail).



2" LONG TAP SCREW (#13116) FOR 3/4" THICK OR 2-1/2" LONG TAP SCREW (#13117) FOR 1-1/8" THICK PANEL.

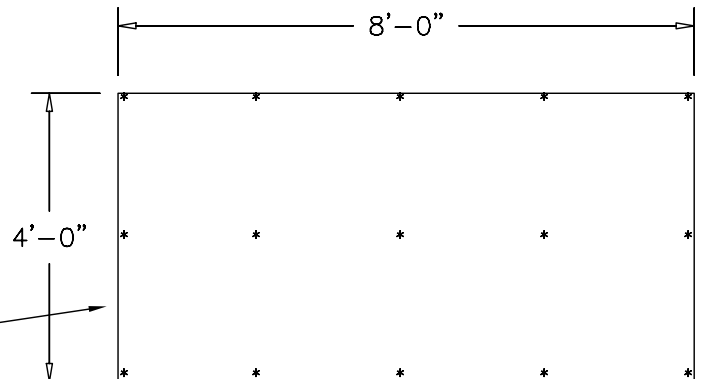
NOTE: GRAY TEXTURED SIDE GOES UP.

DRILL TAP SCREW DIRECTLY INTO TUFFDECK AND BEAMS.



INTERNAL BEAM

EXTERNAL BEAM



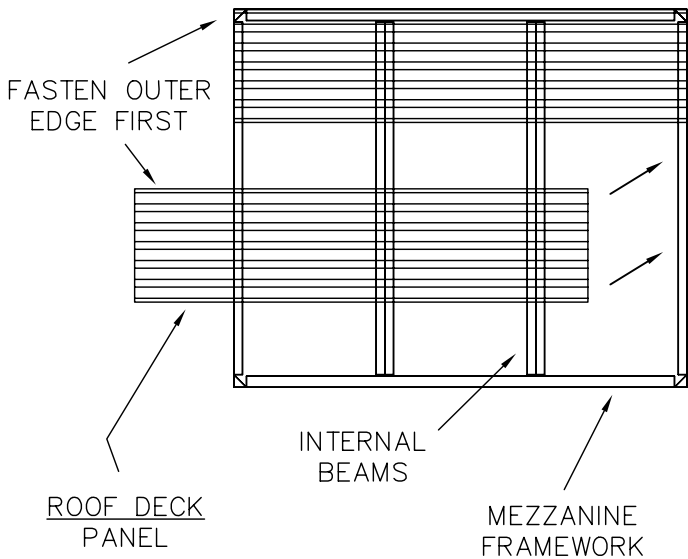
SUGGESTED FASTENING PATTERN FOR TUFFDECK PANEL #10218 OR #10217 4' X 8' PANEL. 15 TAP SCREWS.

FLOORING: ROOF DECK AND TUFFDECK

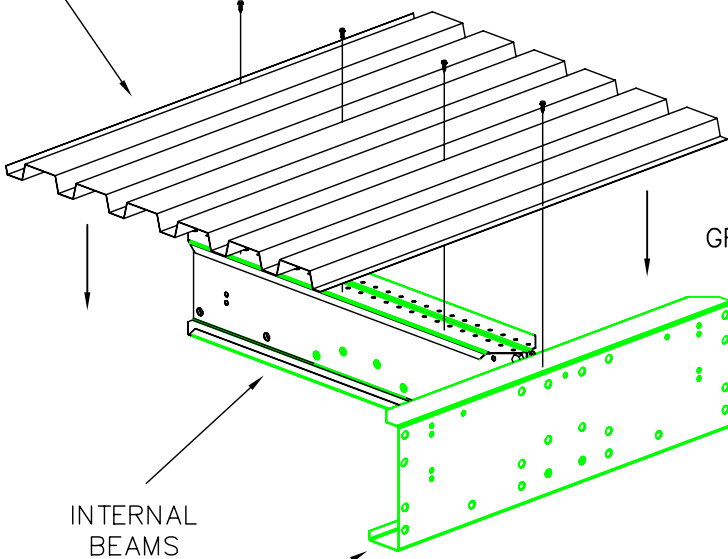
INSTRUCTIONS

NOTE: ALL ROOF DECK PANELS ARE TO BE INSTALLED PERPENDICULAR WITH THE INTERNAL SUPPORTS.

1. Beginning on an outer edge of the mezzanine framework position a roof deck panel. Fasten down outer edge before placing next panel. Place next panel on framework over lapping the previous panel. Fasten in place at overlap. Continue until all the roof deck is in place. Make sure the roof deck is not overhanging the mezzanine framework.
2. Using tap screws fasten down the panels every 12" on each beam.
3. Once the roof deck is secured beginning on an outer edge of the mezzanine framework position the tuffdeck panels with the tongue and groove edges perpendicular to the roof deck until all the tuffdeck is in place. Make sure the tuffdeck is not overhanging the mezzanine and the tongue and grooves are tight together.
4. Using bugle head tap screws fasten down the panels to the roof deck. Three screws across, every 2' along a 4' X 8' panel (SEE DETAIL).



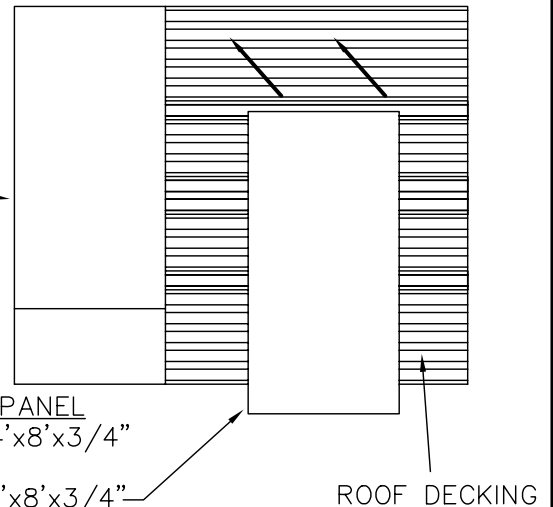
HEX WASHER HEAD TEK SCREW (13115) #12 x 3/4" (1 EVERY 12" EA. BEAM)



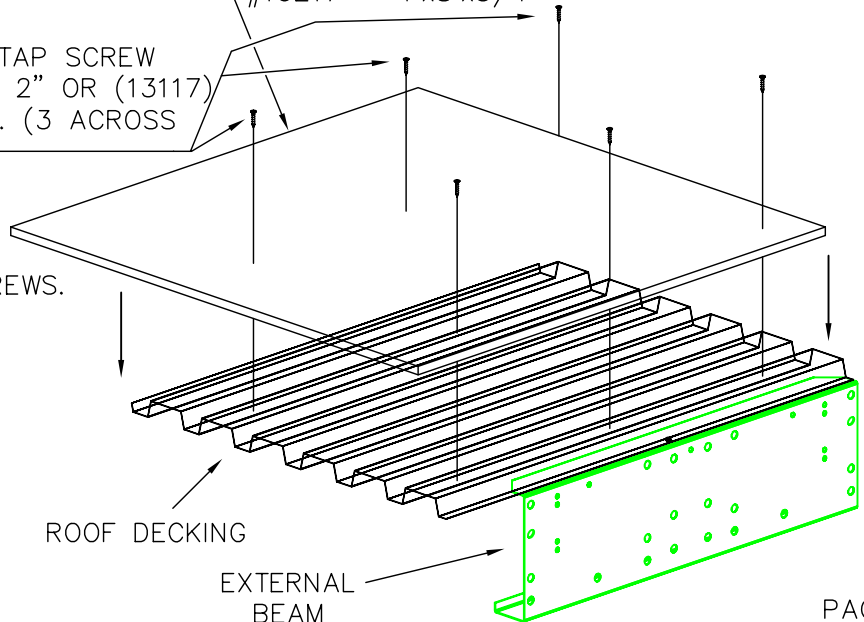
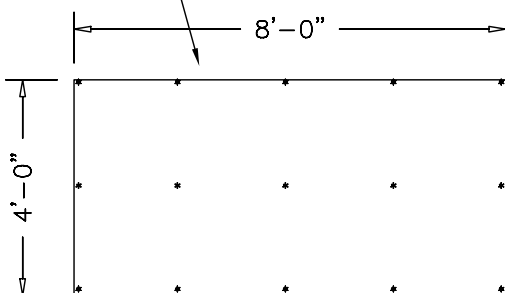
BUGLE HEAD TAP SCREW (13116) #12 X 2" OR (13117) #12 X 2-1/2". (3 ACROSS EVERY 24")

NOTE: GRAY TEXTURED SIDE GOES UP.

TUFFDECK PANEL #10218 - 4'x8'x3/4" OR #10217 - 4'x8'x3/4"



SUGGESTED FASTENING PATTERN FOR TUFFDECK PANEL #10218 OR #10217 4'X8' PANEL. 15 BUGLE HEAD TAP SCREWS.



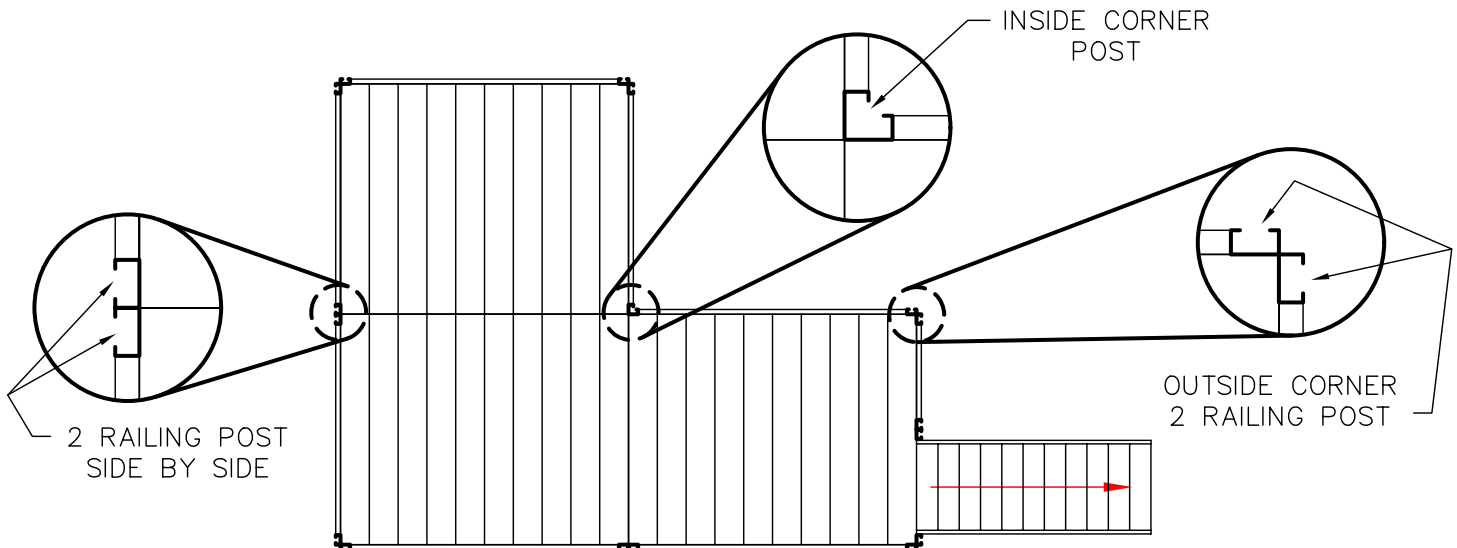
MEZZANINE RAILING SYSTEM

ASSEMBLY INSTRUCTIONS

NOTE: DO NOT TIGHTEN HARDWARE ON RAILING UNTIL SPECIFIED.

1. Fasten the railing posts to the mezzanine framework in their appropriate positions. (SEE PAGE 22)
2. Insert top post caps into the railing post and bolt in place. Where posts are side by side, bolt caps at the center with a common bolt and nut. Tighten all the post cap hardware at this time. (SEE PAGE 23)
3. Insert railing brackets in the ends of the railing channels. Position the flanges on the brackets to the side of the railing channel which has a gap in it. Bolt bracket into place. (SEE PAGE 23)
4. With the flanges pointing downward, position the railing channel assemblies between the railing posts in their proper locations and bolt into place. (SEE PAGE 24)
5. Fasten the kickplate end angles to railing post. (SEE PAGE 25)
6. Position the kickplates, with the flanges turned to the outside of mezzanine and bolt to the kickplate end angles. For kickplates 8' or longer bolt 2 kickplate angle clips along the bottom flange of the kickplate and to the external beam. Evenly place the angle clips for uniform support along the kickplate. (SEE PAGES 25 AND 26)
7. All the outer corner posts are to be held together with a post corner angle. Bolt the angle in place near the top of the posts. (SEE PAGE 26) Tighten all hardware.

RAILING LAYOUT



RAILING POST MOUNTED ON MEZZANINE POST

RAILING POST
#12425

NOTE: GRATING AND BEAM REMOVED
FOR CLARITY.

8 1/2" HIGH BEAM

POST

ON EXTERNAL BEAM

BOLTING CHANNEL
#10026
(2 PER RAILING POST)

5/8" x 1 1/2" HEX HEAD
BOLT, LOCKWASHER, AND
HEX NUT. (2 PER RAILING POST,
4 PER INSIDE RAILING POST)

FLOORING
(1 1/2" GRATING SHOWN)

INSIDE CORNER
RAILING POST
#12422

RAILING POST
#12425

8 1/2" HIGH BEAM

NOTE: GRATING REMOVED FOR CLARITY.
IF A RAILING POST IS MOUNTED IN THE
SAME LOCATION OF A BEAM BRACKET
THEY WILL HAVE COMMON HARDWARE.

NOTE: GRATING AND BEAM REMOVED
FOR CLARITY.

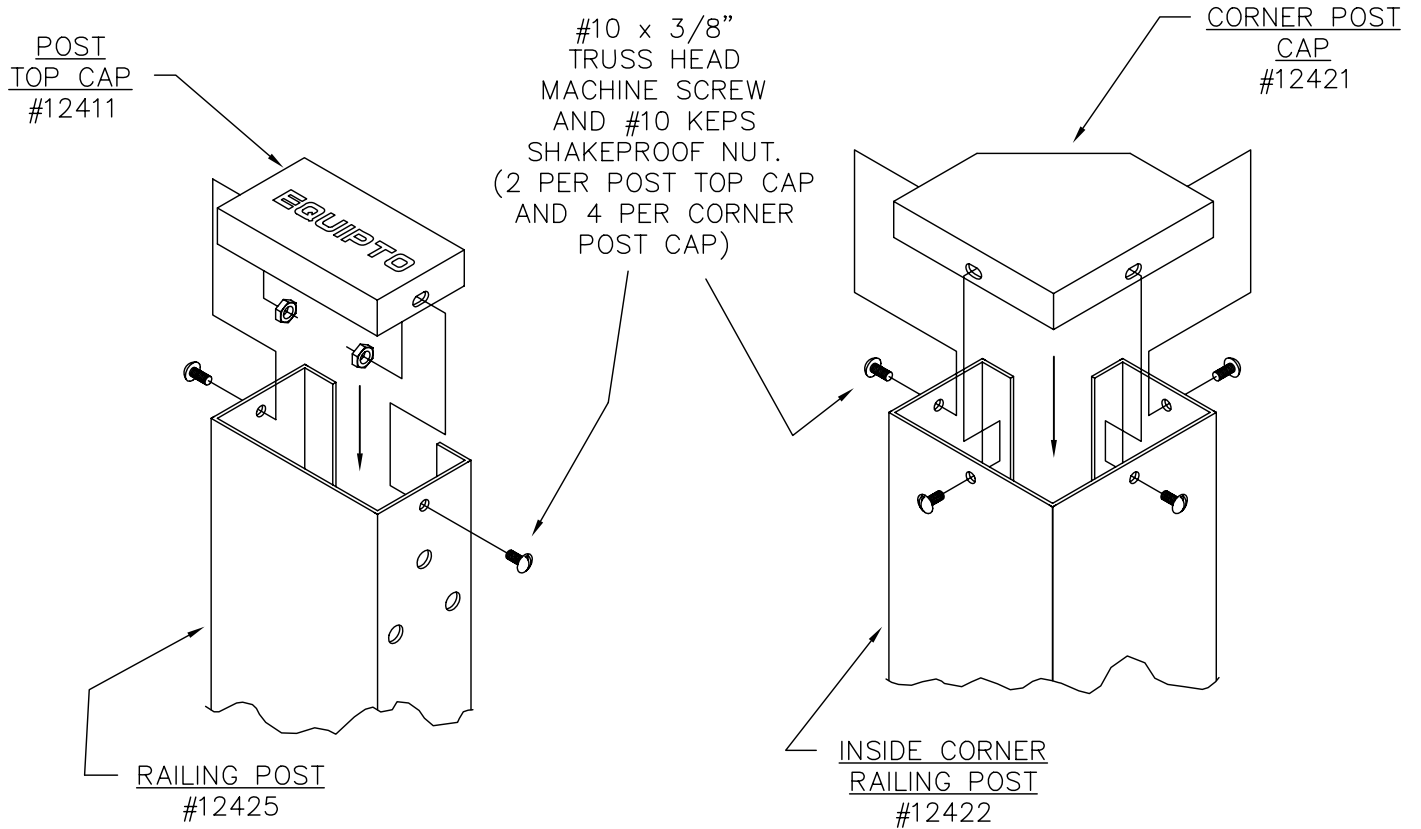
8 1/2" HIGH BEAM

INSIDE CORNER RAILING POST

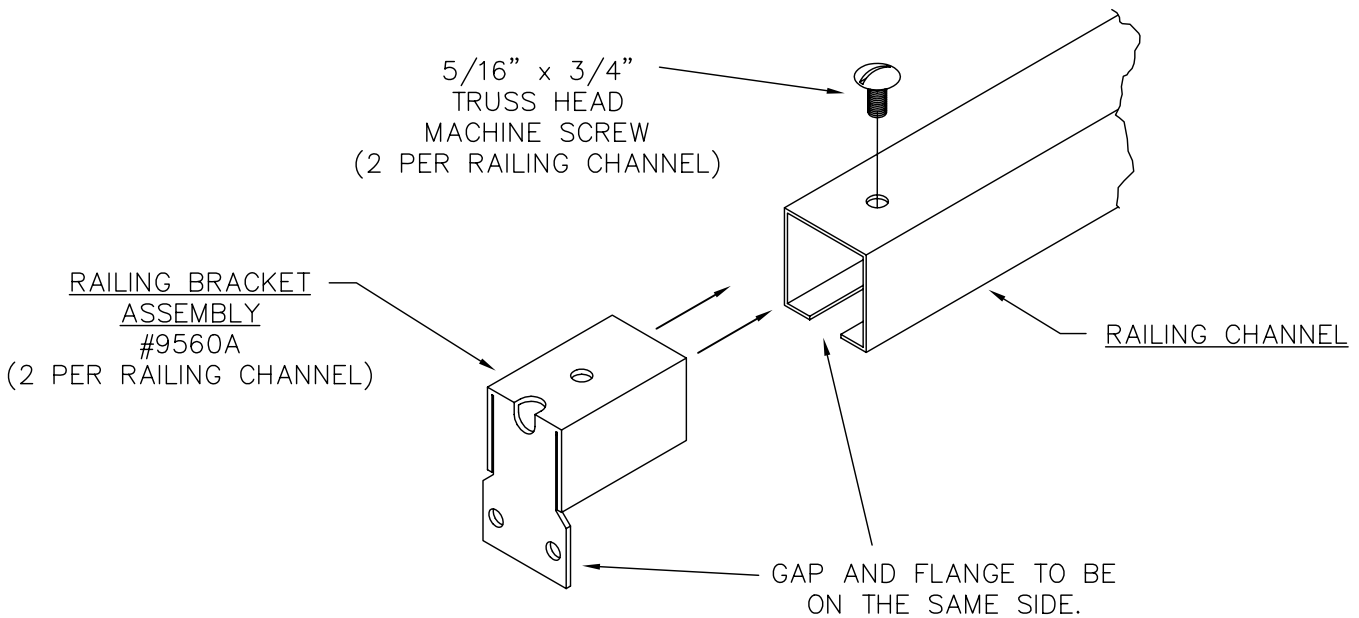
POST

CORNER POST CHANNEL
#10026
(2 PER INSIDE CORNER
RAILING POST)

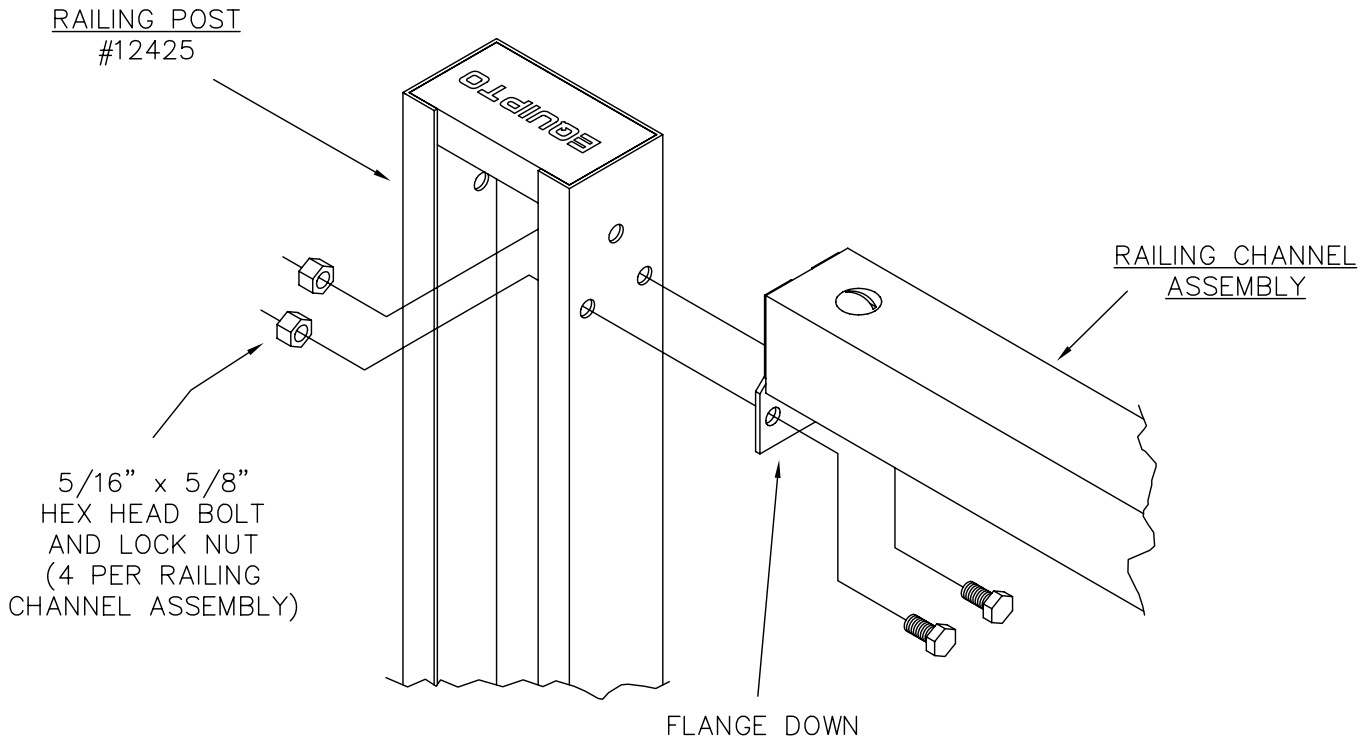
TOP POST CAP ASSEMBLIES



RAILING CHANNEL ASSEMBLY

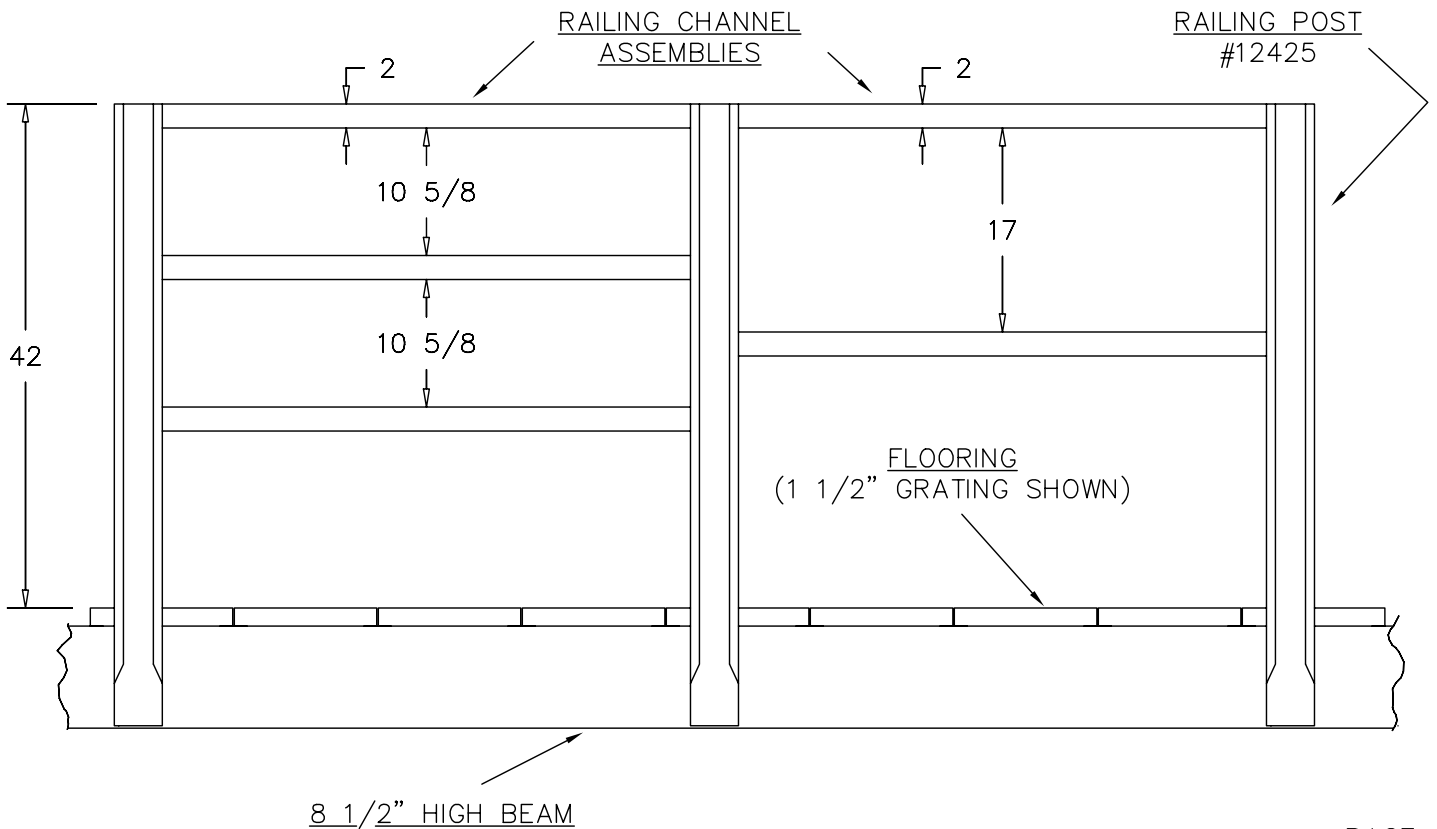


PLACEMENT OF RAILING CHANNEL ASSEMBLIES

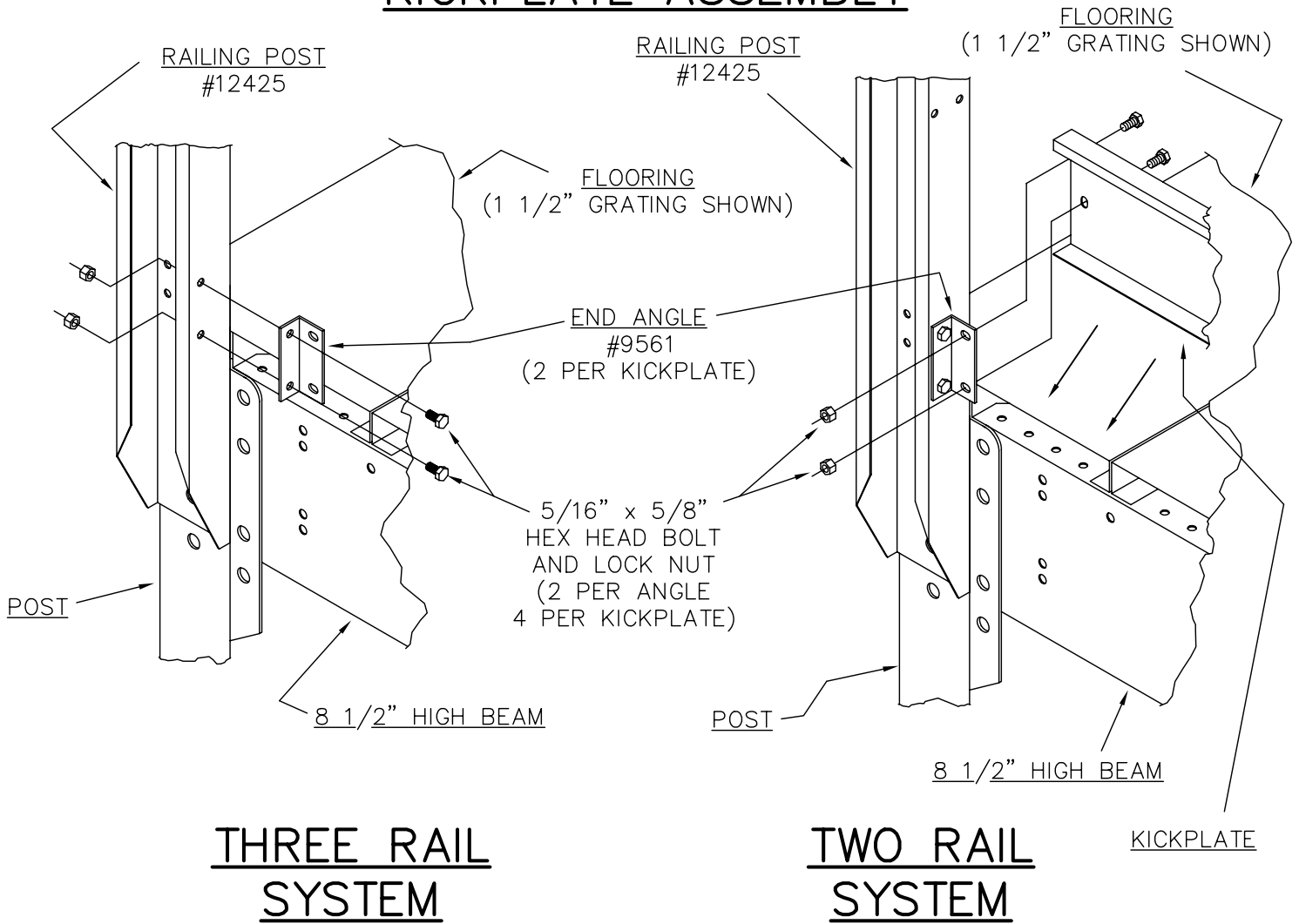


THREE RAIL SYSTEM

TWO RAIL SYSTEM

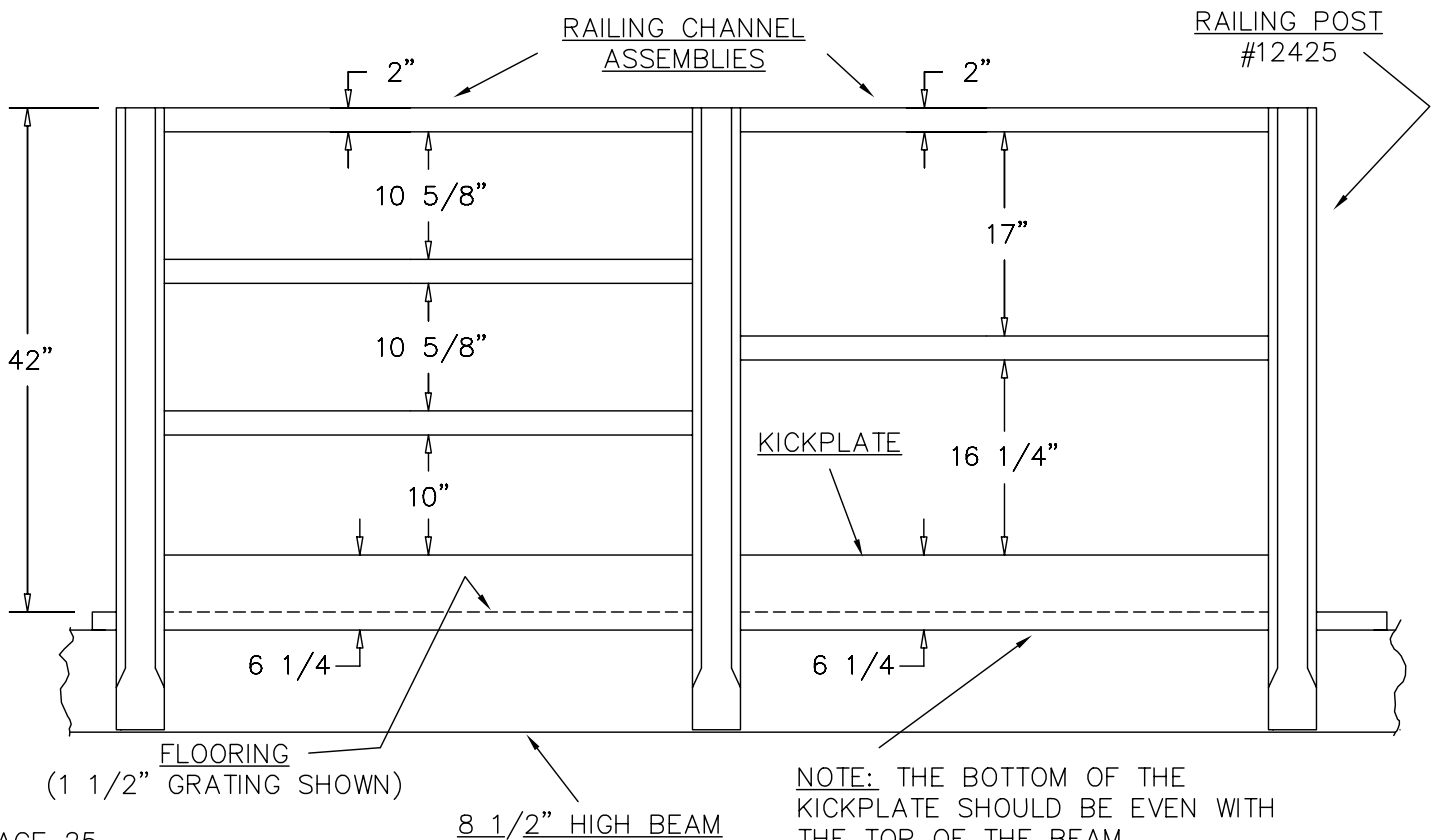


KICKPLATE ASSEMBLY

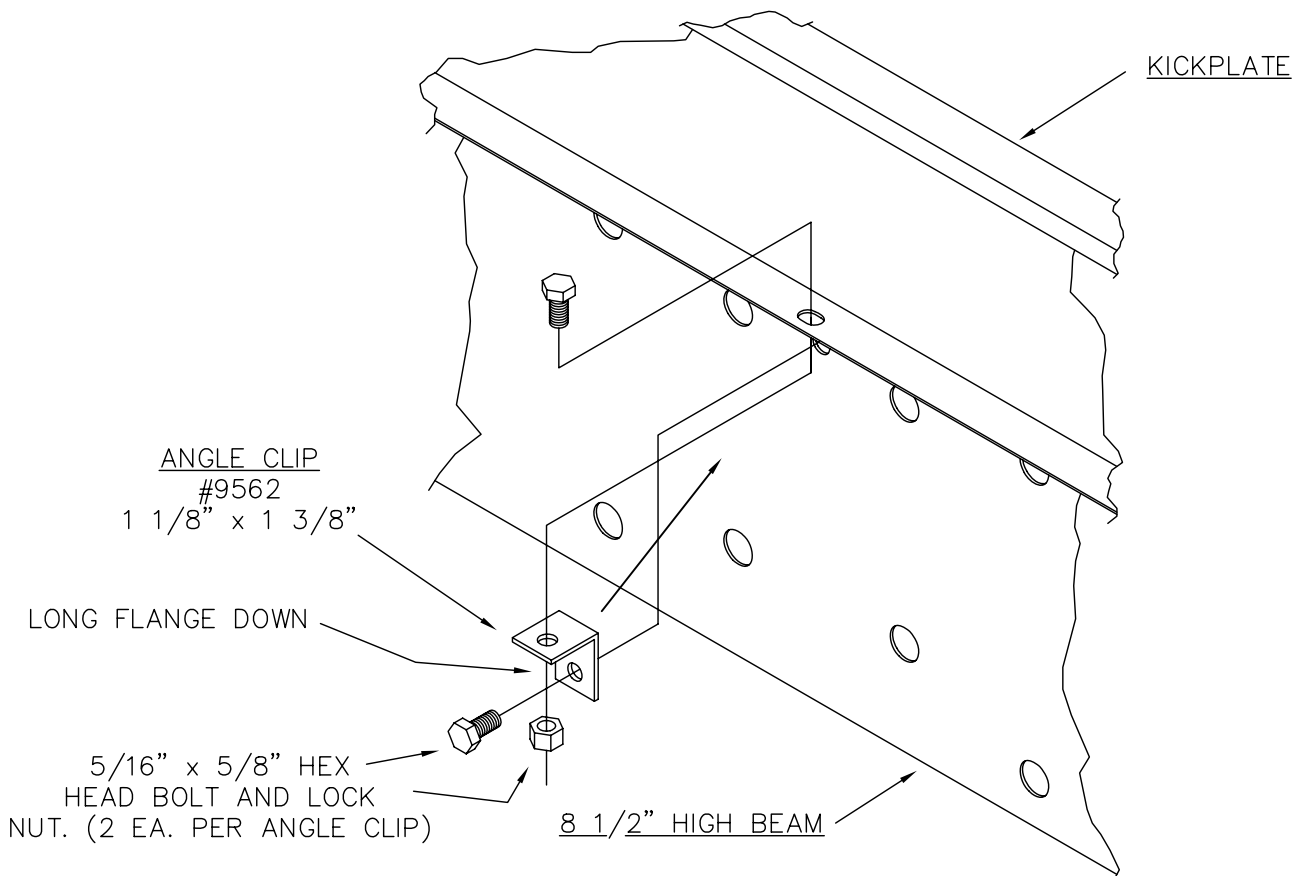


THREE RAIL SYSTEM

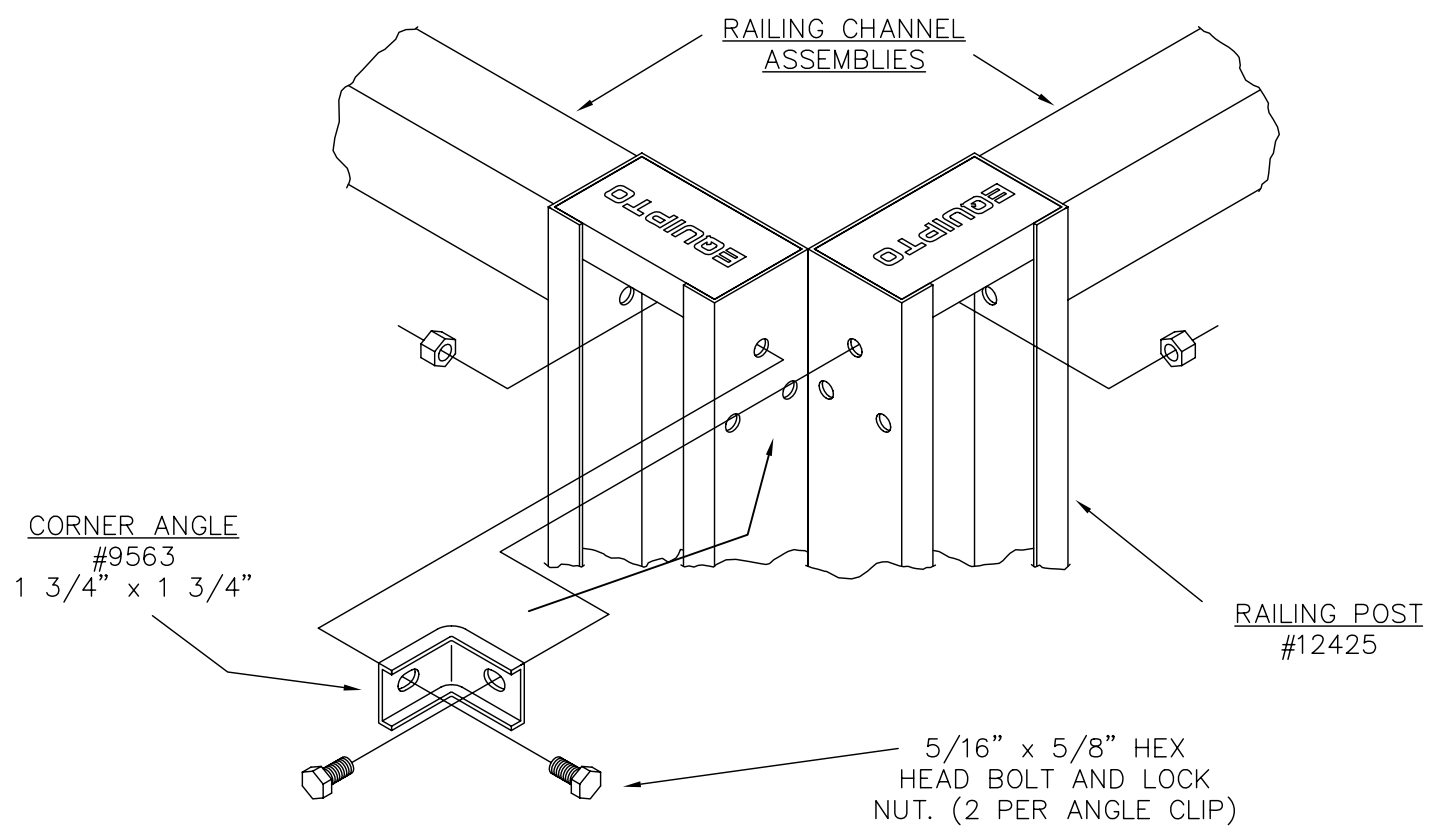
TWO RAIL SYSTEM



KICKPLATE ANGLE CLIP ASSEMBLY



OUTSIDE CORNER ANGLE ASSEMBLY



DROP GATES

NOTE: THE POST THAT IS TO HAVE THE PIVOT BRACKET ATTACHED TO IT CANNOT BE LESS THAN 44" FROM ANY CORNER ON THE MEZZANINE. DO NOT TIGHTEN HARDWARE UNLESS SPECIFIED.

1. Fasten the pivot bracket to the proper railing post. NOTE: The pivot bracket seats on the floor. (SEE PAGE 28)
2. Fasten the pivot bars and the proper gate guide at the bottom. NOTE: Be sure to use the proper holes. (SEE PAGE 28)
3. Seat drop gate inside pivot bracket. Slide the pivot shaft through the bracket and pivot bar holes. Insert cotter pin. (SEE PAGE 29)
4. Assemble the rail guide to the railing post. Note the rail guide flange goes through the gate guide slot. (SEE PAGE 29)
5. On 45" and 69" drop gates attach the gate stop and rail stop to the drop gate and appropriate railing post. (SEE PAGE 30)
6. On the 90" drop gate install the locking channels. One on the top and one on the bottom. Attach one to one half of the drop gate and the other one to the opposite half of the drop gate. (SEE PAGE 31)
7. On the 90" drop gate install the guide bars, 2 per each half of drop gate. (SEE PAGE 31) Tight all hardware and test the pivoting action.

45" DROP GATE

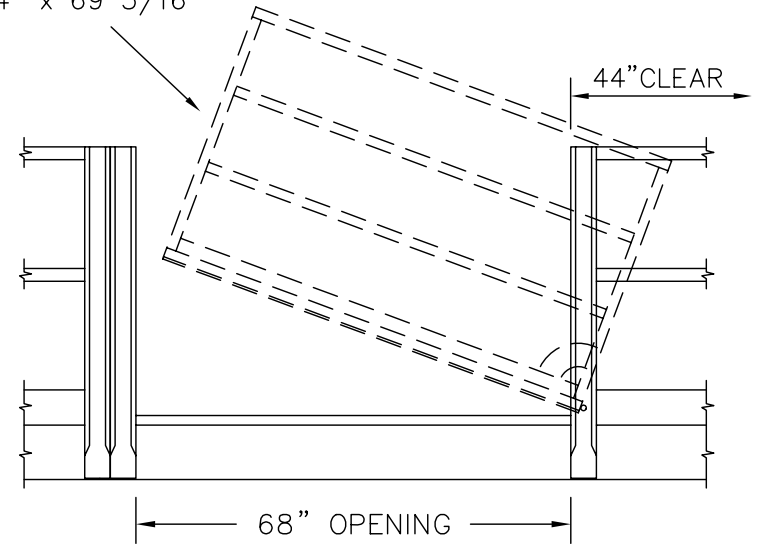
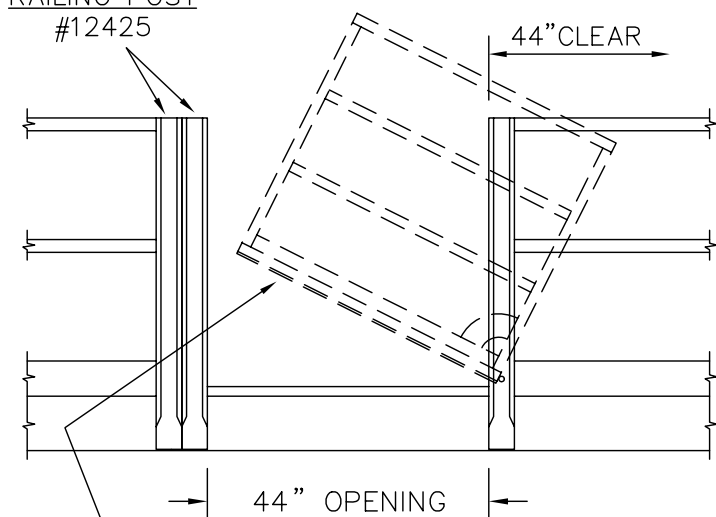
DROP GATE

#78141

41 3/4" x 69 5/16"

69" DROP GATE

RAILING POST
#12425



DROP GATE

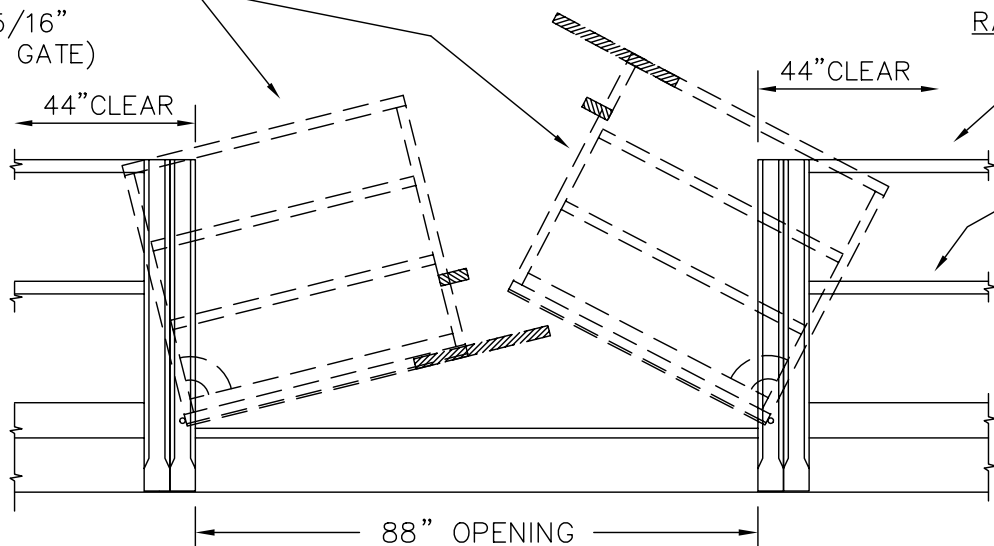
#78140

41 3/4" x 45 5/16"

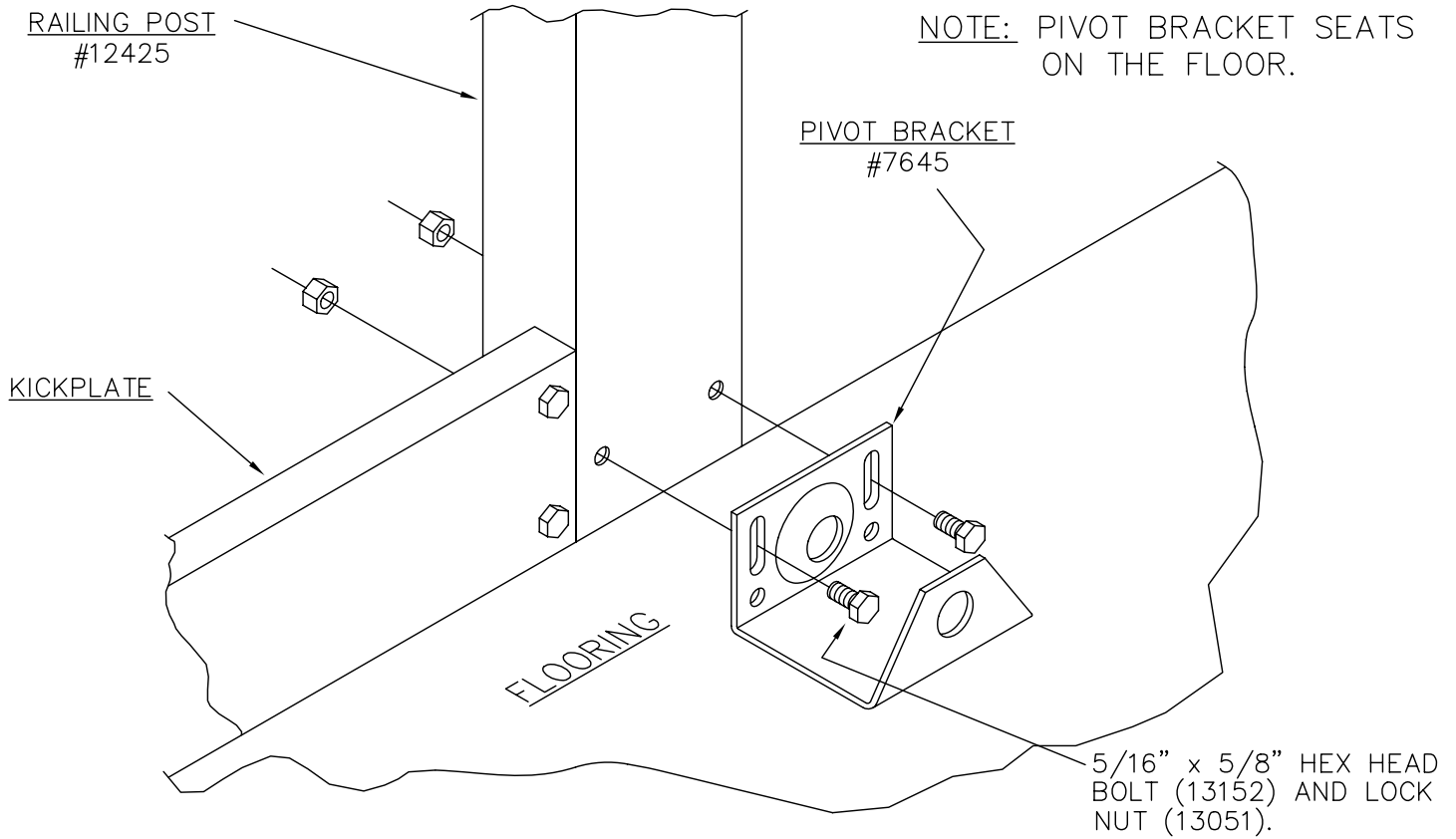
(2 PER 90" DROP GATE)

90" DROP GATE

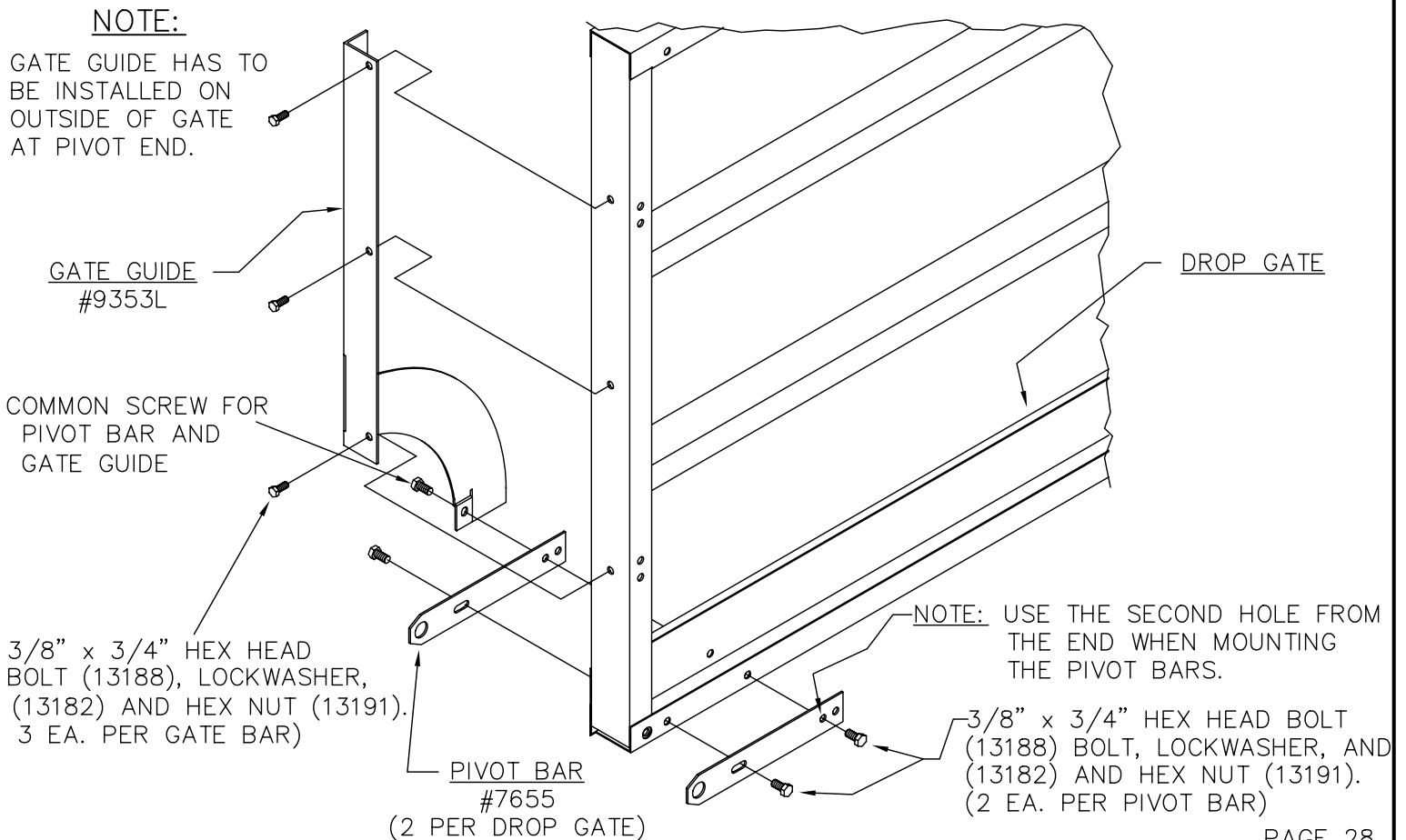
RAILING CHANNELS



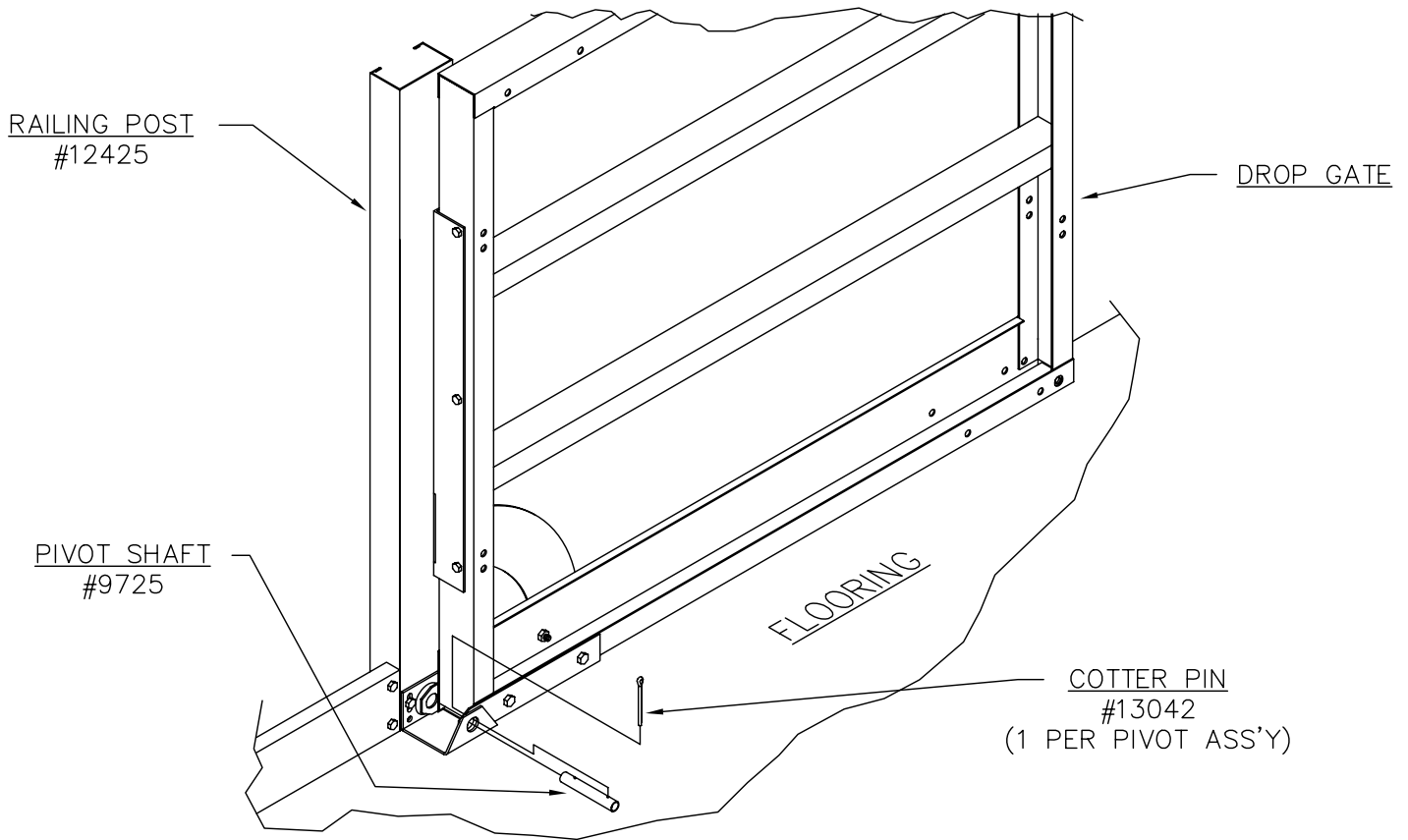
PIVOT BRACKET ASSEMBLY



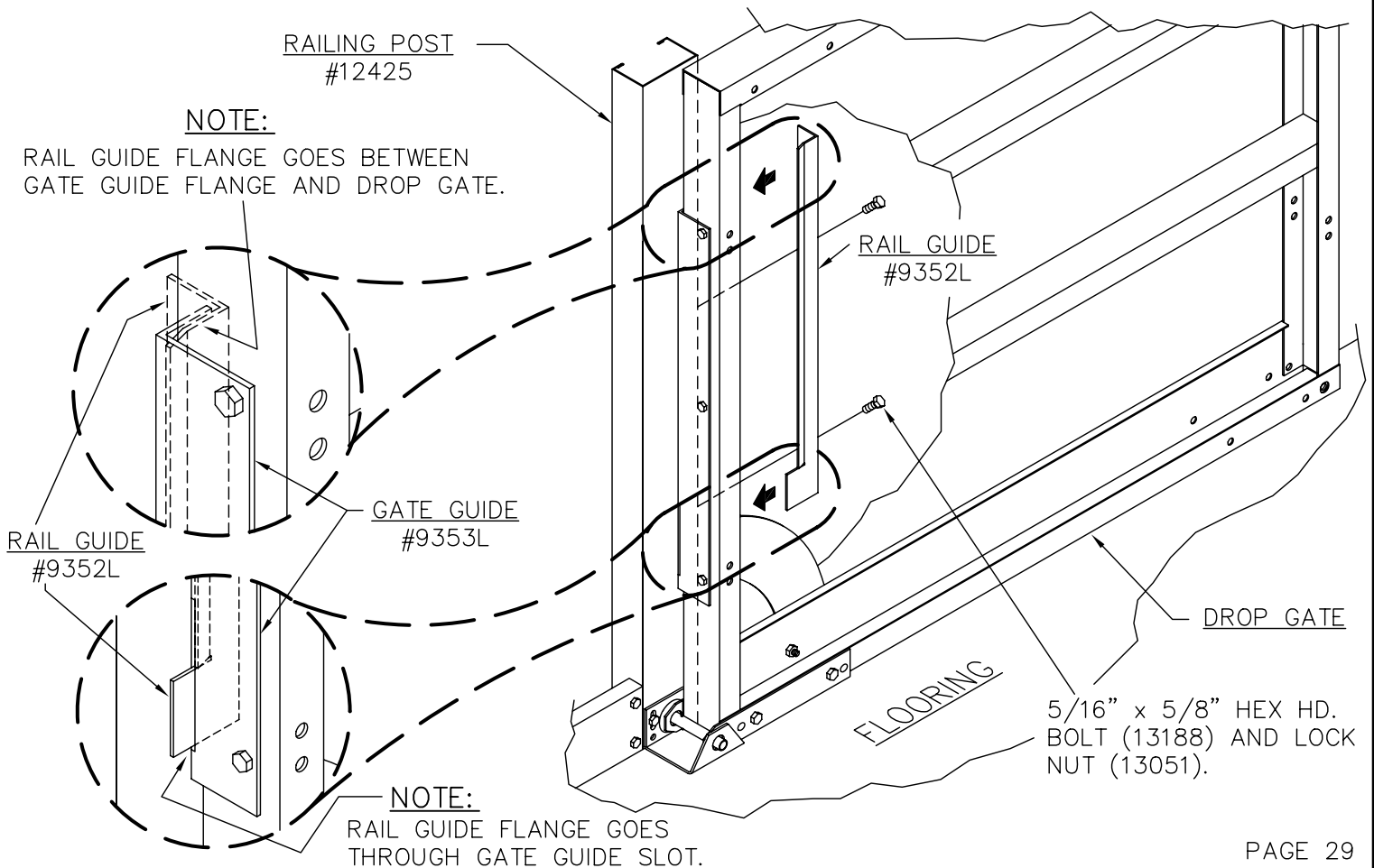
PIVOT BARS AND GATE GUIDE ASS'Y



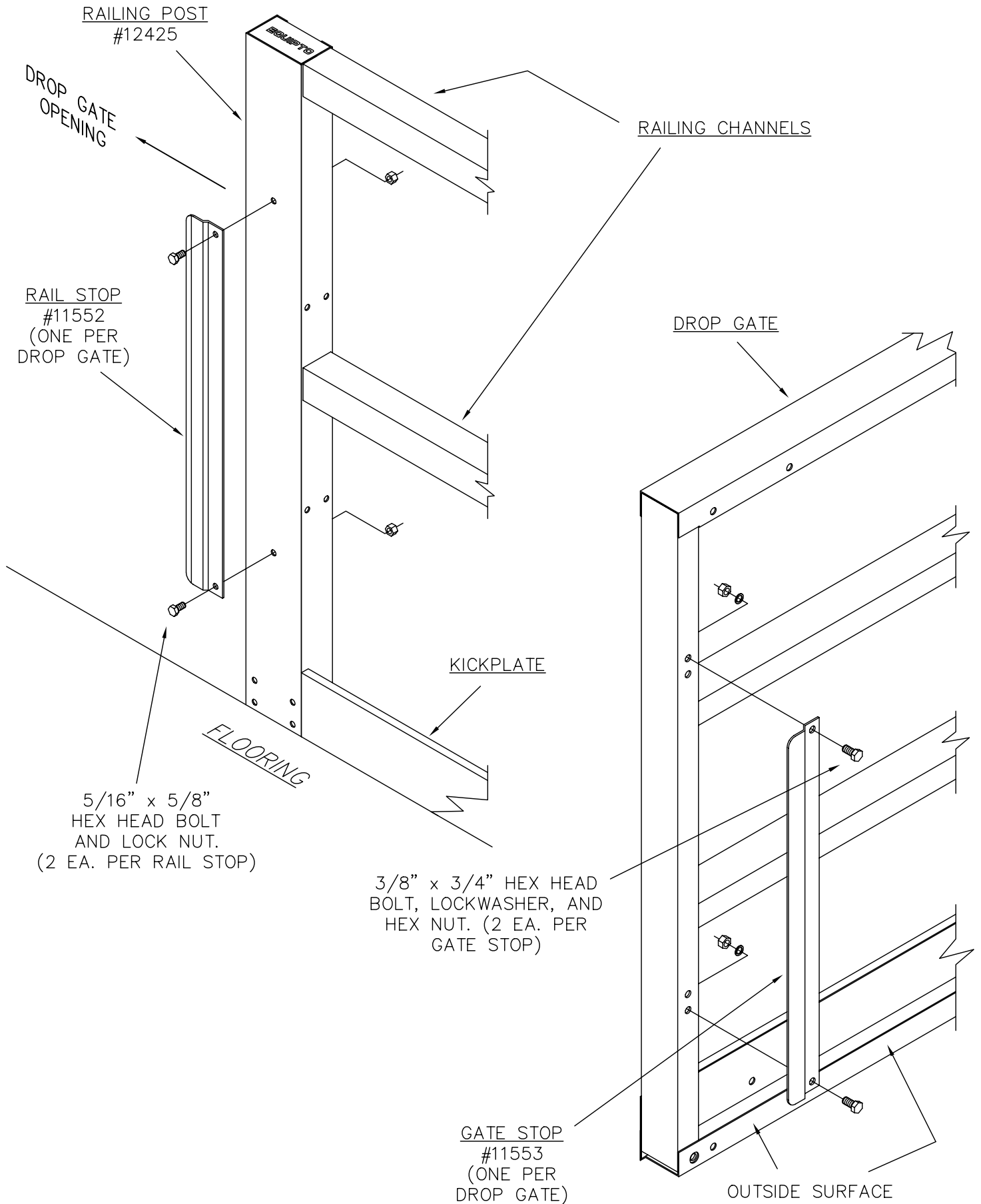
DROP GATE ATTACHMENT



RAIL GATE ASSEMBLY



GATE STOP AND RAIL STOP FOR 45" AND 69" DROP GATES



LOCKING CHANNELS AND GUIDE BARS FOR 90" DROP GATES

LOCK CHANNEL
#10054
(1 PER HALF OF
90" DROP GATE)

3/8" x 3/4 HEX HEAD BOLT
(13188), LOCKWASHER (13182),
AND HEX NUT (13191).(4 EA. PER
LOCK CHANNEL)

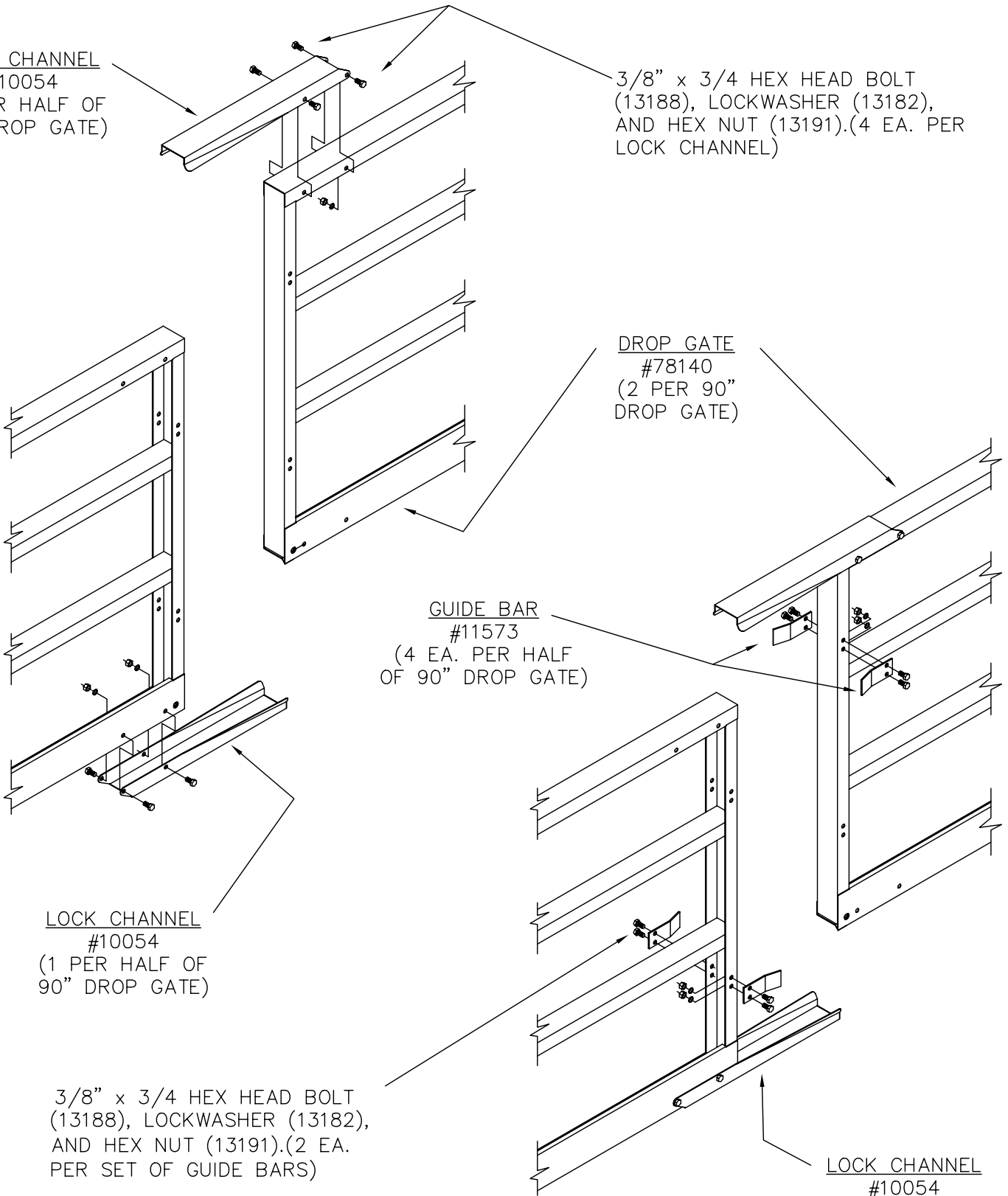
DROP GATE
#78140
(2 PER 90"
DROP GATE)

GUIDE BAR
#11573
(4 EA. PER HALF
OF 90" DROP GATE)

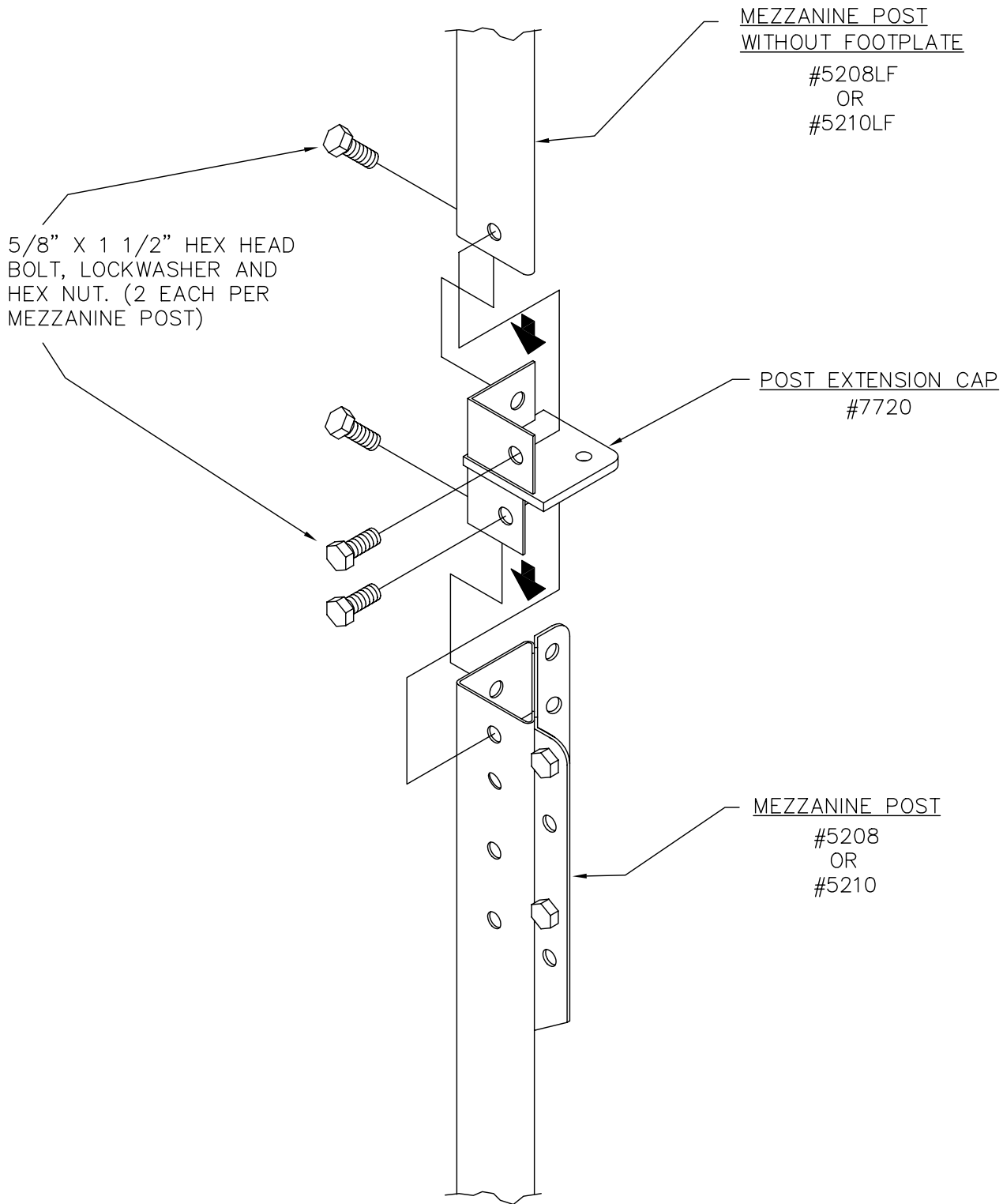
LOCK CHANNEL
#10054
(1 PER HALF OF
90" DROP GATE)

3/8" x 3/4 HEX HEAD BOLT
(13188), LOCKWASHER (13182),
AND HEX NUT (13191).(2 EA.
PER SET OF GUIDE BARS)

LOCK CHANNEL
#10054



DOUBLE STACKING MEZZANINE



NOTE:

GRATING MUST BE MITERED AT POST.