

# UPSIDE INNOVATIONS

MODULAR LOADING DOCK STAIRS  
INSTALLATION MANUAL



## INCLUDED HARDWARE

### NOTE:

There are two styles of modular loading dock stairs.  
Both the OSHA-compliant and ADA-compliant styles  
have the same installation process.

### REQUIRED TOOLS:

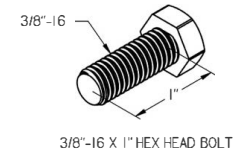
- Drill
- 9/16" Standard Socket with Extension
- Ratchet Handle for 9/16" Socket
- Socket Adapter Bit for Drill (if using drill to drive socket)
- 9/16" Standard Wrench
- Tape Measure

### RECOMMENDED TOOLS:

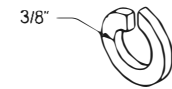
- Cordless Drill
- Hammer Drill
- 3/8" Masonry Bit
- Extension Cords
- Vise-Grip Style C-Clamp(s)
- Shop Vacuum

### TABLE OF CONTENTS:

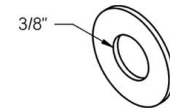
|                                       |   |
|---------------------------------------|---|
| Platform Leg Sizing .....             | 1 |
| Threshold Platform Assembly .....     | 2 |
| Step Assembly .....                   | 3 |
| Step and Platform Rail Assembly ..... | 4 |



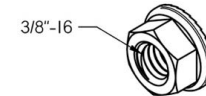
3/8"-16 X 1" HEX HEAD BOLT



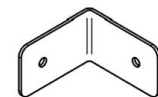
3/8" SPLIT LOCK WASHER



3/8" FLAT WASHER



3/8"-16 HEX SERRATED  
FLANGE LOCK NUT



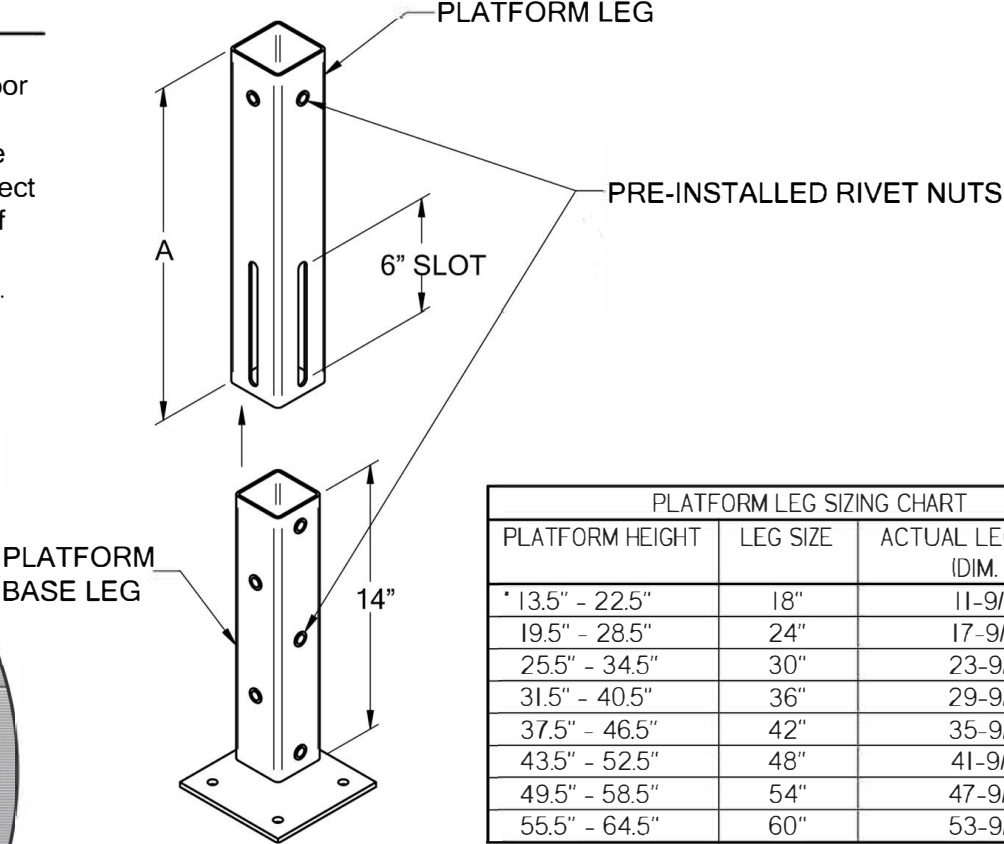
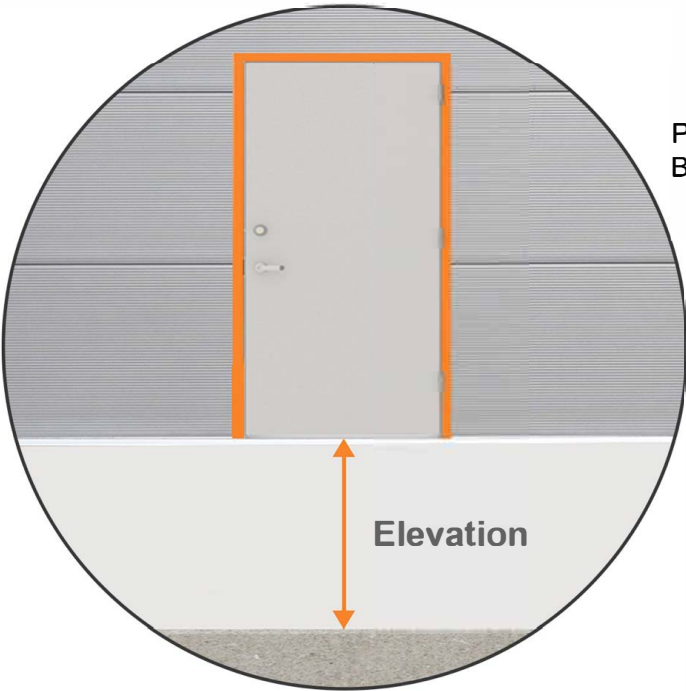
2-1/2" X 2-1/2" 90° BRACKET

NOTE: Bracket only supplied where two  
rails meet at a corner.

PLATFORM LEG SIZING

DETERMINE THE CORRECT PLATFORM LEG SIZE

- Locate where each leg will rest on the ground.
- Measure vertically up to the threshold height of the door as shown in the picture below.
- With the measurement taken in the previous step, use the left column of the Platform Leg Sizing Chart to select the correct leg size (middle column) for each corner of the platform that requires a leg.
- Legs have  $\pm 4.5"$  of adjustability from the nominal size.



| PLATFORM LEG SIZING CHART |          |                              |
|---------------------------|----------|------------------------------|
| PLATFORM HEIGHT           | LEG SIZE | ACTUAL LEG LENGTH (DIM. "A") |
| * 13.5" - 22.5"           | 18"      | 11-9/16"                     |
| 19.5" - 28.5"             | 24"      | 17-9/16"                     |
| 25.5" - 34.5"             | 30"      | 23-9/16"                     |
| 31.5" - 40.5"             | 36"      | 29-9/16"                     |
| 37.5" - 46.5"             | 42"      | 35-9/16"                     |
| 43.5" - 52.5"             | 48"      | 41-9/16"                     |
| 49.5" - 58.5"             | 54"      | 47-9/16"                     |
| 55.5" - 64.5"             | 60"      | 53-9/16"                     |

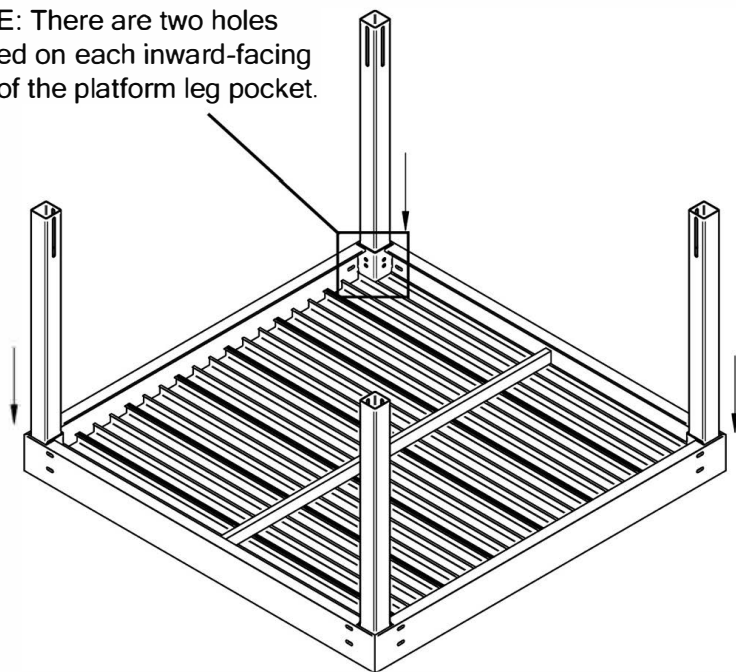
NOTE: In order to achieve some of the lower heights in this range, the base leg may have to be cut off in order to fit properly.

## THRESHOLD PLATFORM ASSEMBLY

To begin installing a step, start by determining the height of legs required for the first platform set under the door threshold as described on the previous page.

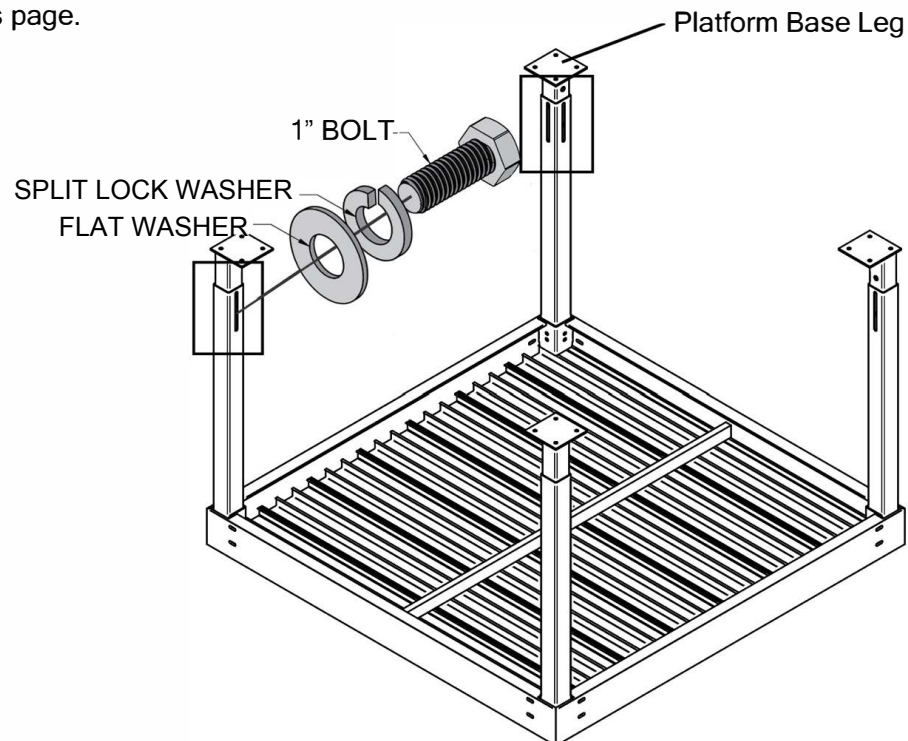
NOTE: TIGHTEN ALL BOLTS TO A TORQUE OF 25 FT-LB.

NOTE: There are two holes located on each inward-facing side of the platform leg pocket.



### STEP 1

- Lay the platform upside down on the ground.
- Insert 4 platform legs into the corner pockets and make sure the holes align as shown in the picture.
- Use (2) 1" bolts with (2) flat washers to secure each leg to each pocket.
- The flat washer and 1" bolt assembly will thread into the pre-installed rivet nuts in the ends of the platform legs through the holes in the pockets closest to the decking.

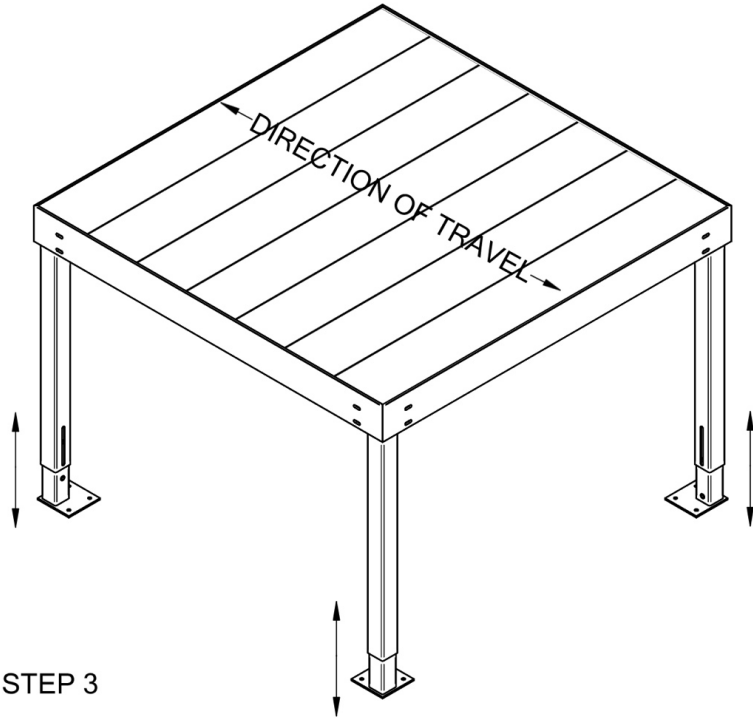


### STEP 2

- Insert 4 platform base legs into the platform legs and make sure the holes align with the slots as shown in the picture.
- Use (2) 1" bolts with (2) lock washers and (2) flat washers to secure each base leg to each platform leg at the desired height.
- The bolts will thread into the pre-installed rivet nuts in the base legs.
- This connection may need to be adjusted later in order to level the platform.

## STEP ASSEMBLY

NOTE: Decking direction should be oriented perpendicular to the most common direction of travel.

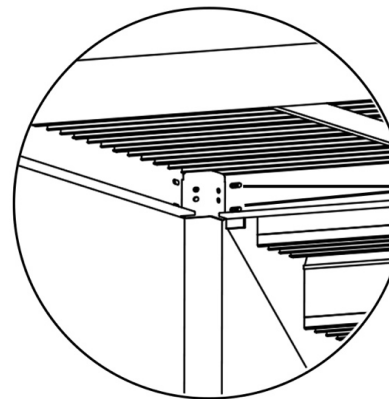
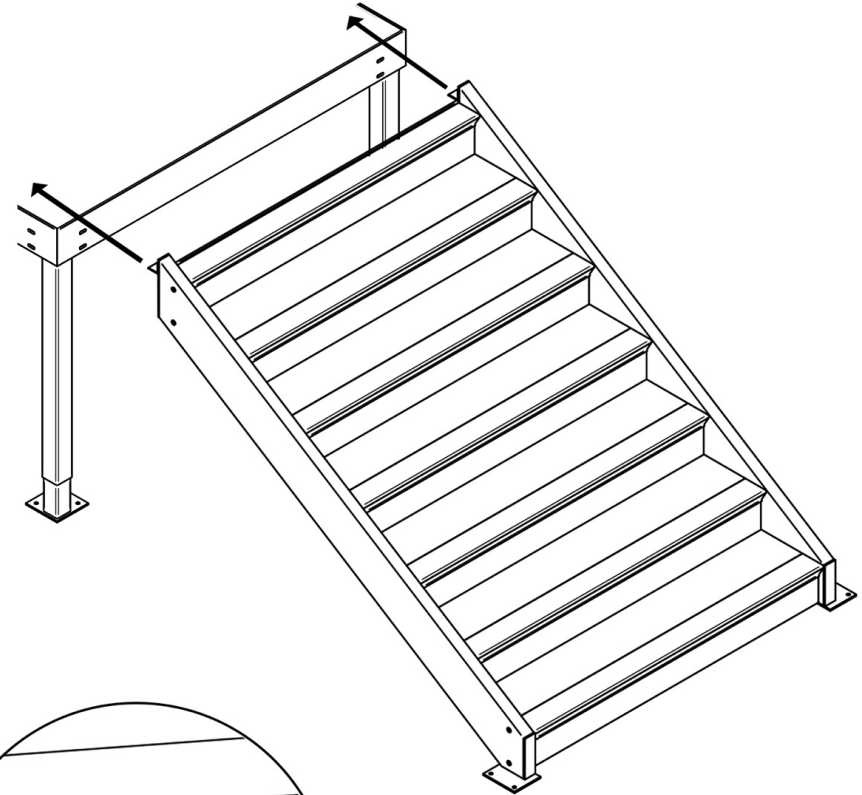


### STEP 3

- Set the platform against the building just below the threshold (1/4" maximum).
- Use a 4' level to determine if the platform is level in both directions.
- If adjustments need to be made, loosen the (2) 1" bolts that connect the base leg to the platform leg and telescope the base leg up or down to the appropriate height and retighten the bolts.
- A bolt may need to be completely removed if it runs into the end of the slot.
- Reinstall the bolt in another hole that will appear at the opposite end of the same slot and retighten.

### STEP 4

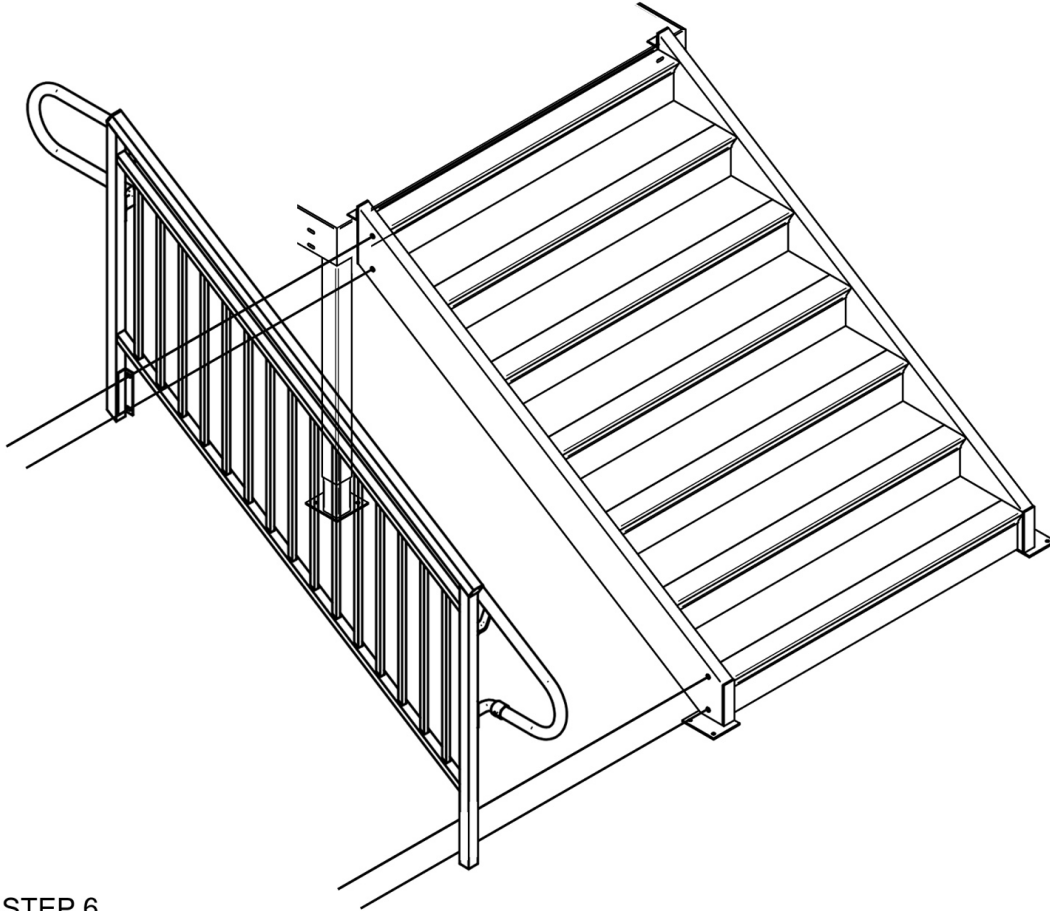
- Set the step riser assembly on the edge of the platform. (There are two L-shaped pieces welded to the top of the step stringer that rest on the top of the platform.)



### STEP 5

- From underneath the platform, use (4) 1" bolts with (4) flat washers to secure the step riser assembly to the platform through the four holes into the pre-installed rivet nuts.

## STEP & PLATFORM RAIL ASSEMBLY

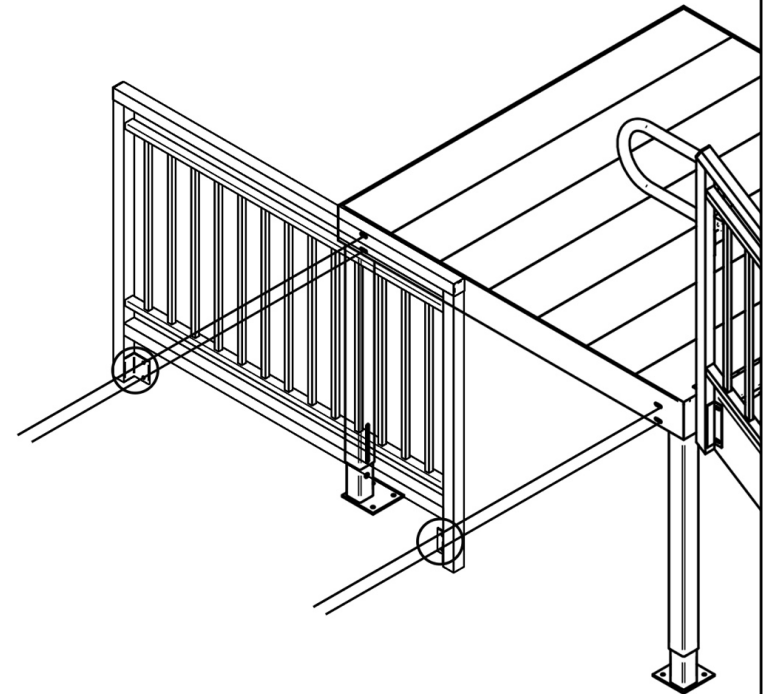


### STEP 6

- Using (4) 1" bolts and (4) flat washers for each step rail, bolt the step rail angle mounts to the side of the stringer into the pre-installed rivet nuts.
- Repeat for the opposite side step rail.

### STEP 7

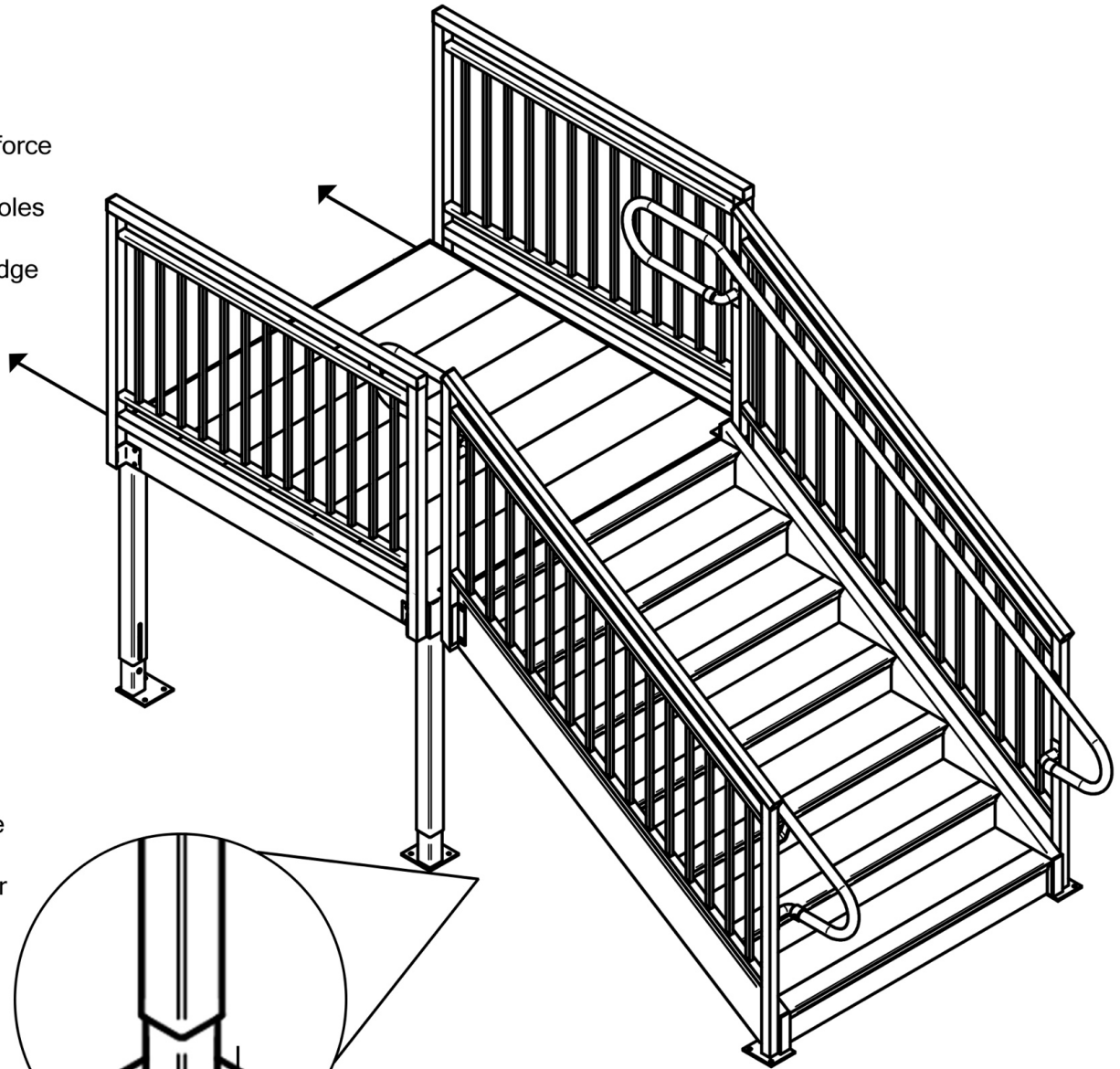
- All open sides of each platform must have a guardrail.
- Align the bolt holes in the angle mounts (circled in diagram below) with the holes in the platform edges. Use (4) 1" bolts, (4) flat washers, and (4) flange nuts to bolt the angle mounts to the edge of the platform.



## ANCHORING

### STEP 8

- Anchor the platform to the building in order to reinforce the structural integrity of the step system.
- Drill two holes into the building through the outer holes in the platform edge.
- Insert the provided anchors through the platform edge holes into the drilled holes and tighten until the platform is secured to the building.



### STEP 9 (Optional)

- If desired, the footplates can be anchored to concrete. Only one 3/8" x 3-3/4" anchor needs to be used per footplate.
- Install the anchors according to the concrete anchor manufacturer's instructions.

