

UPSIDE INNOVATIONS

STEP & PLATFORM
INSTALLATION MANUAL



STEP ASSEMBLY INSTRUCTIONS

REQUIRED TOOLS:

- Ratchet Handle for 9/16" Socket
- Socket Adapter Bit for Drill (if using drill to drive socket)
- 9/16" Standard Wrench
- 5/16" Hex Head Driver Bit
- Tape Measure
- 4' Level
- 3" C-Clamp (if layout has multiple platforms)

RECOMMENDED TOOLS:

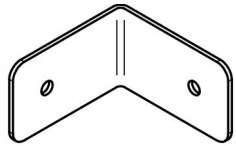
- Cordless Drill
- Extension Cords
- 9/16" Deep Well Socket
- Magnetic 5/16" Hex Head Driver Bit

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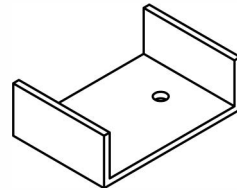
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COMMON HARDWARE PARTS

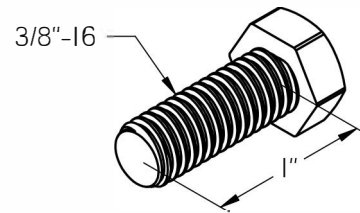
*SOME HARDWARE MAY NOT BE USED



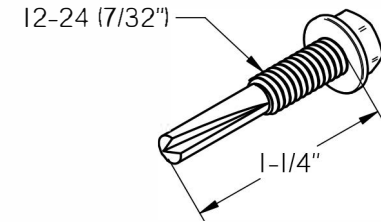
2-1/2" X 2-1/2" 90° BRACKET



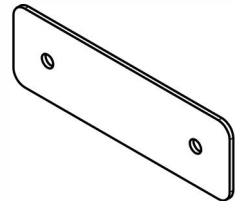
PLATFORM JOINT
HOOK BRACKET



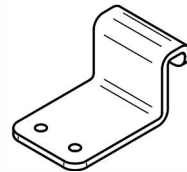
3/8"-16 X 1" HEX HEAD BOLT



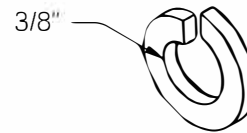
12-24 X 1-1/4" HEX HEAD
TEK SCREW



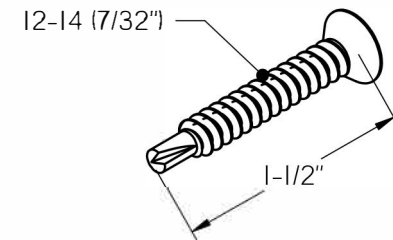
4-3/4" FLAT BRACKET



STEP KEY

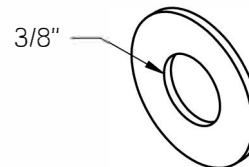


3/8" SPLIT LOCK WASHER

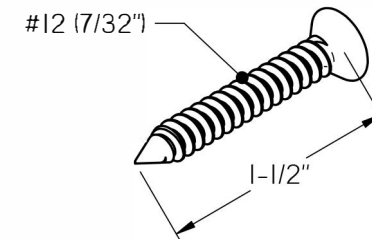


12-14 X 1-1/2" FLAT HEAD
PHILLIPS TEK SCREW

*RARELY USED

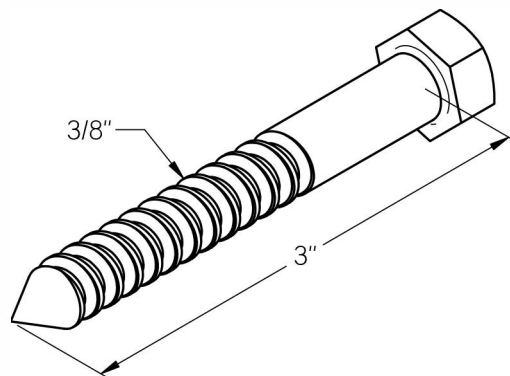


3/8" FLAT WASHER

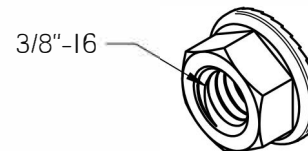


#12 X 1-1/2" FLAT HEAD
PHILLIPS WOOD SCREW

*RARELY USED

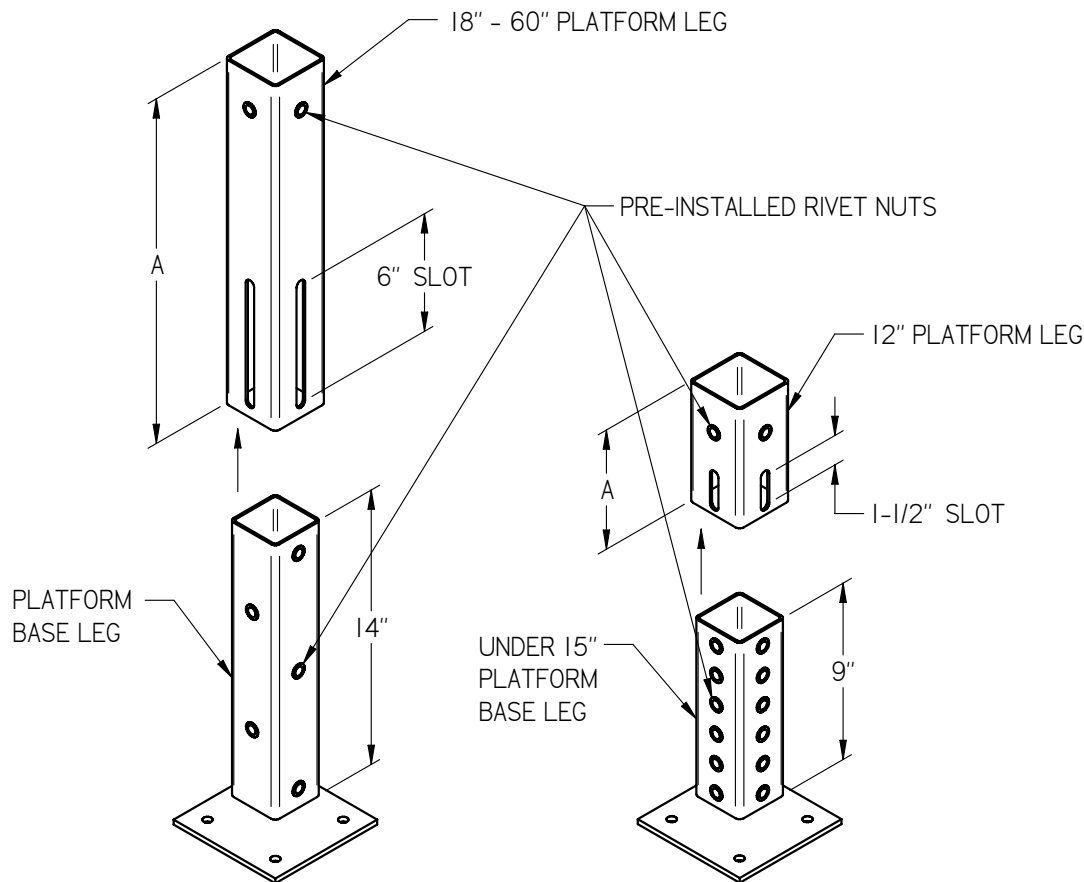


3/8" X 3" HEX HEAD LAG BOLT



3/8"-16 HEX SERRATED
FLANGE LOCK NUT

PLATFORM LEG SIZING



PLATFORM LEG SIZING CHART		
PLATFORM HEIGHT	LEG SIZE	ACTUAL LEG LENGTH (DIM. "A")
* 8" - 15.5"	12"	6-1/16"
* 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.

DETERMINE THE CORRECT PLATFORM LEG SIZE

- Locate where the legs will rest on the ground.
- Measure up to the threshold height of the door as shown in the picture.
- Use the chart to the left to select the correct leg size for each corner of the platform that requires a leg.
- All legs except for the 12" leg have $\pm 4.5"$ of adjustability from the nominal size.

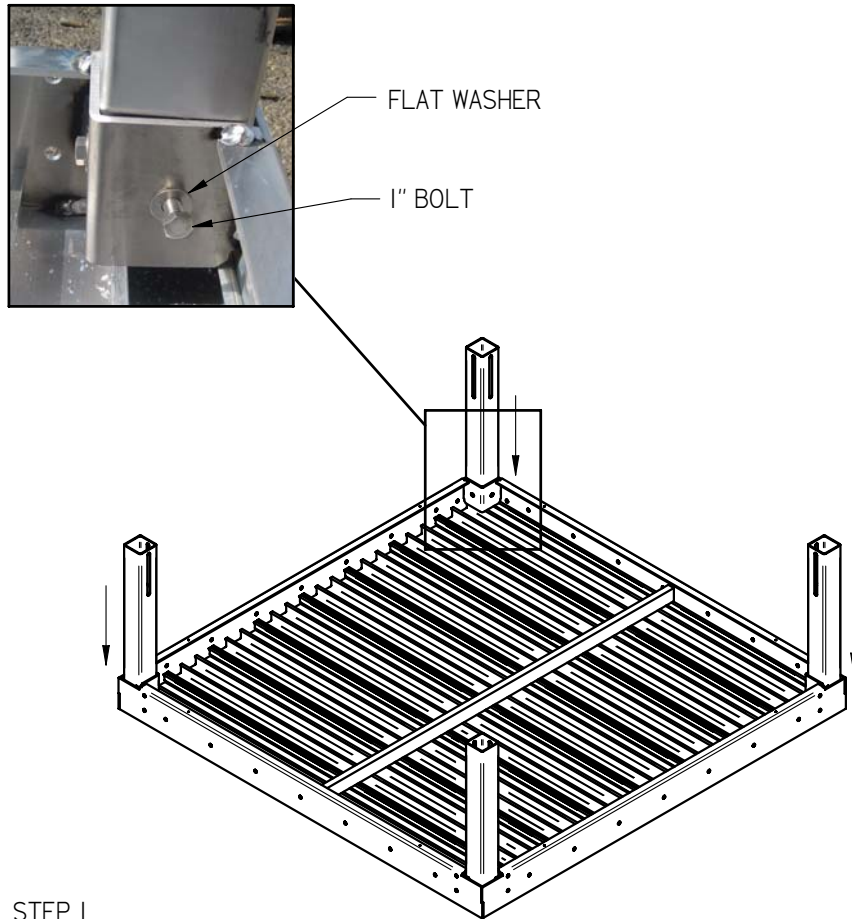


NOTE: THE FIRST PLATFORM SET UNDER THE DOOR WILL REQUIRE 4 LEGS. ADDITIONAL PLATFORMS WILL REQUIRE EITHER 2 LEGS OR 1 LEG DEPENDING ON ITS LOCATION.

Always start by setting the first platform at the door and working your way towards the ground.

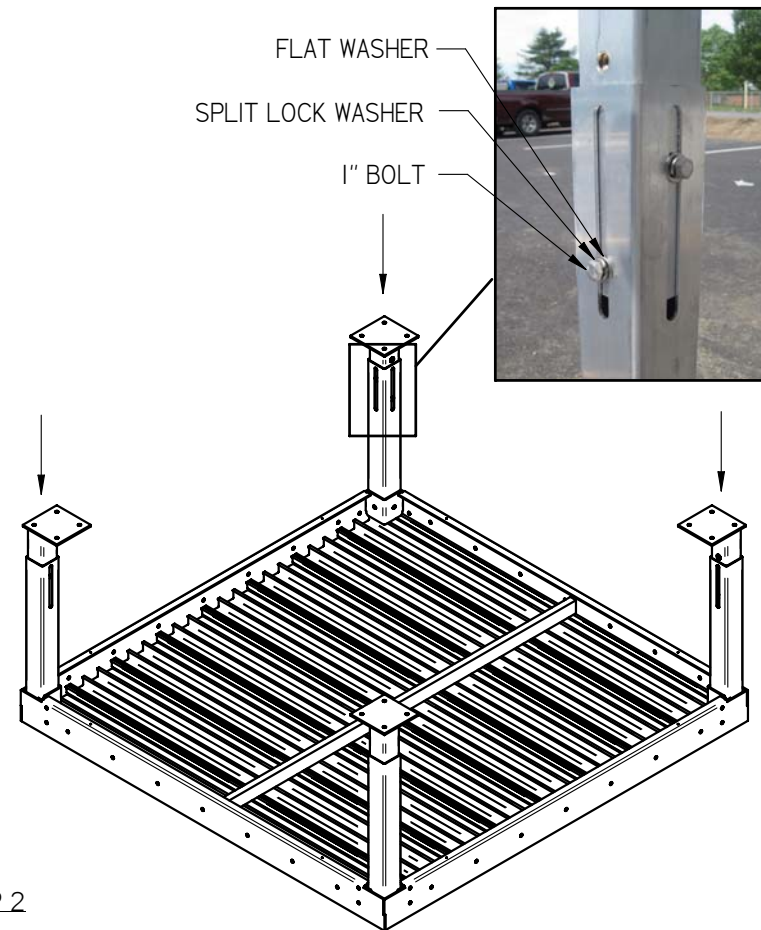
NOTE: TIGHTEN ALL BOLTS TO A TORQUE OF 25 FT-LB.

THRESHOLD PLATFORM ASSEMBLY



STEP 1

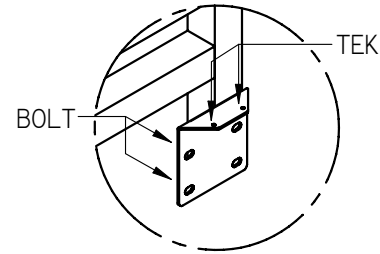
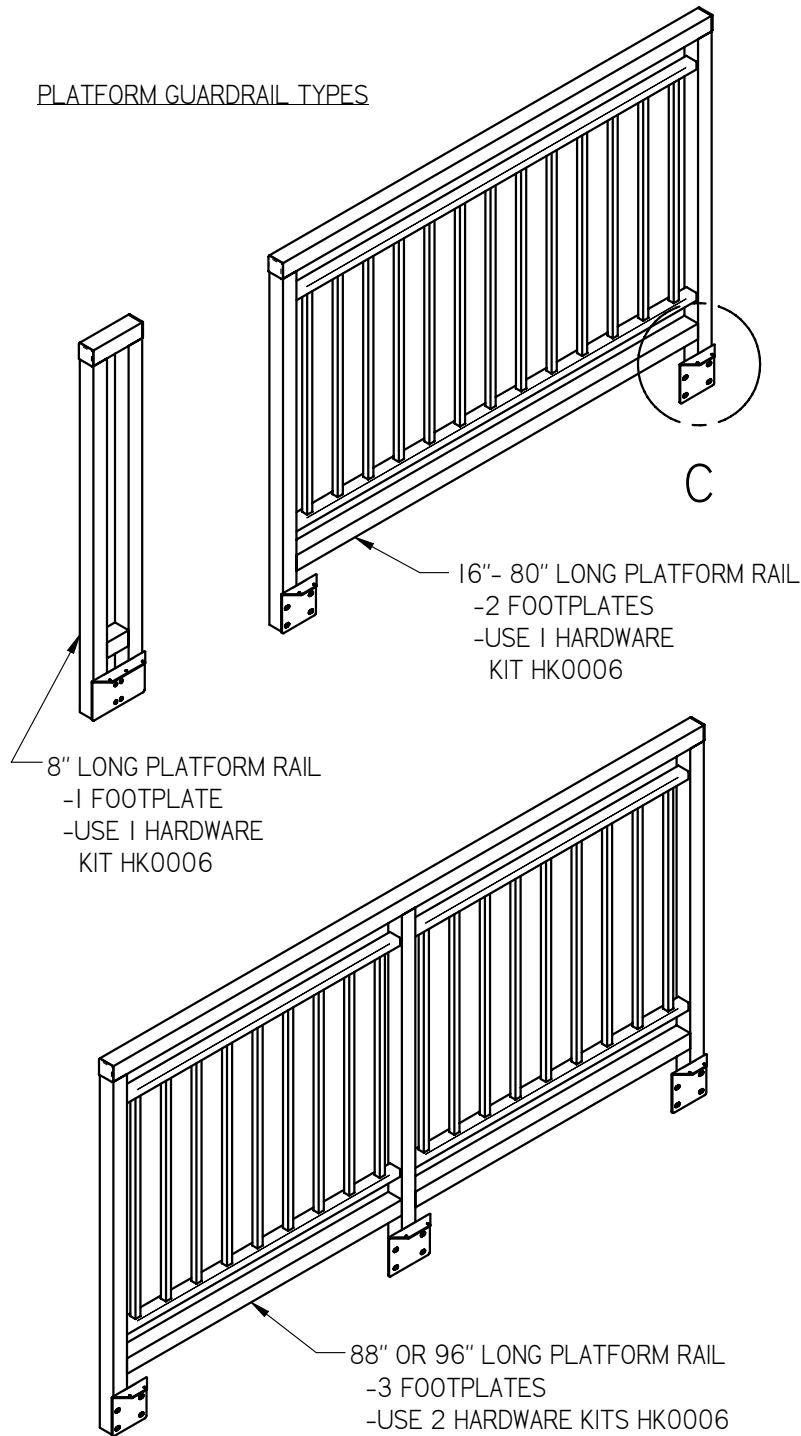
- Lay the platform upside down on the ground.
- Insert 4 platform legs into the corner pockets and make sure the holes align as shown in the picture.
- Use (2) 1" bolts with (2) flat washers to secure each leg to each pocket (found in hardware kit HK0005).
- The bolts will thread into the pre-installed rivet nuts in the ends of the platform legs.



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 (found in hardware kit HK0005) 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.

PLATFORM GUARDRAIL TYPES

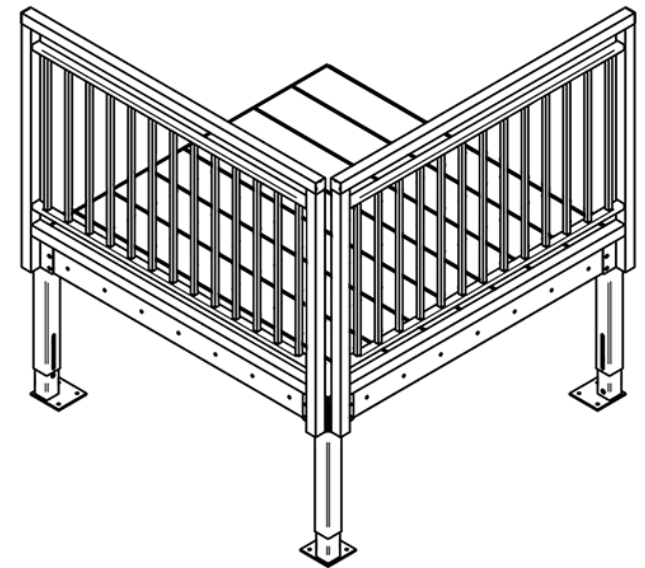


DETAIL C



TEK SCREW THROUGH
ALL HOLES INTO DECKING

PLATFORM GUARDRAIL ASSEMBLY

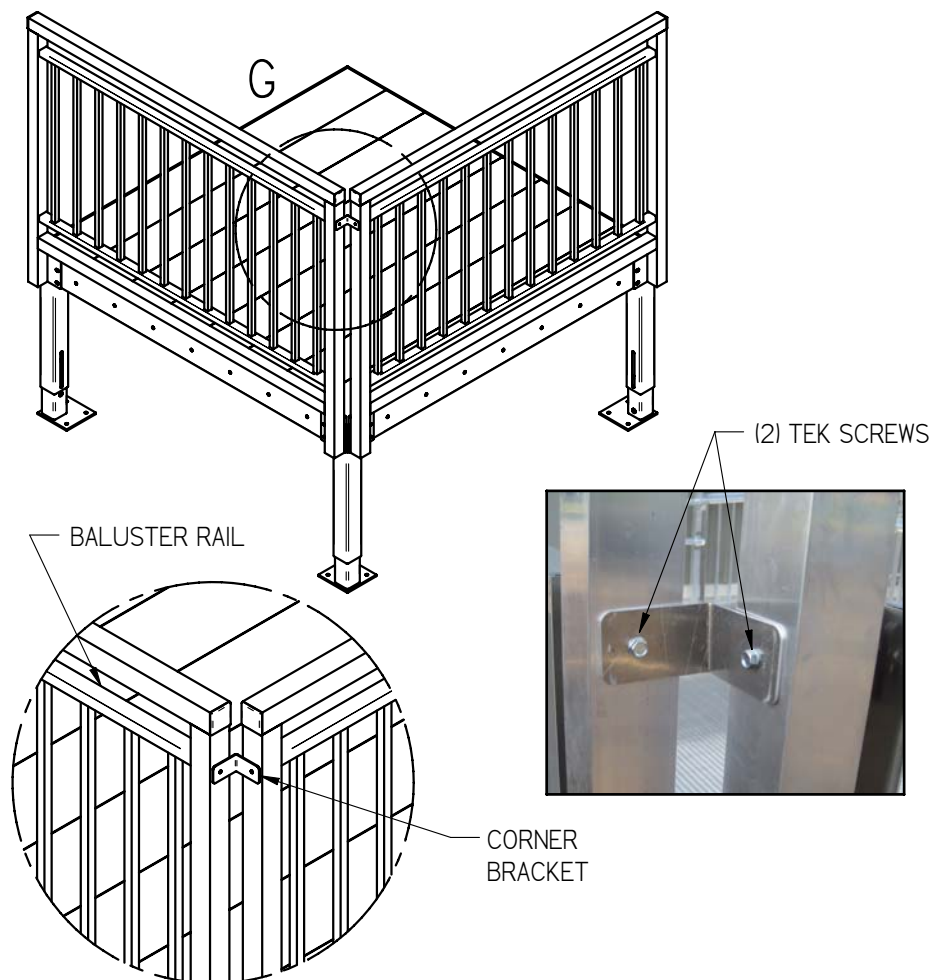


STEP 1

- All open sides of each platform must have a guardrail.
- Set the top flanges of the guardrail footplates on the top surface of the platform and align the bolt holes in the footplates with the holes in the platform edges. Use (2) 1" bolts, (2) flat washers and (2) flange nuts (found in hardware kit HK0006) to bolt each footplate to the platform edge as shown in DETAIL C.
- In some cases, holes will need to be drilled through the platform edge if they do not exist for a rail that does not take up the entire width of the platform side. Use the holes in the footplate as a template to drill (2) 7/16" holes in the platform edge.

STEP 2

- Use the 1-1/4" tek screws (also found in hardware kit HK0006) to attach the top of each guardrail footplate to the deck. Use the screw to drill through the decking surface using the small pilot holes in the footplates as a guide. See the picture above.

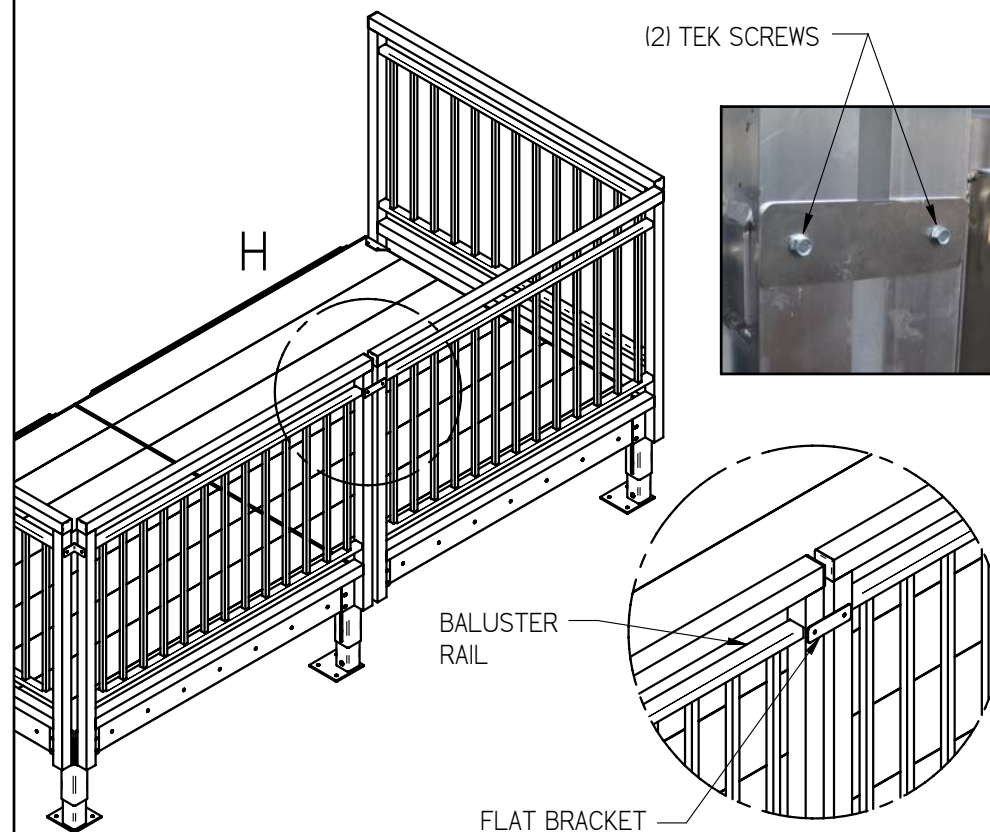


DETAIL G

CORNER BRACKETS

- Any two platform rails that meet at a corner should be connected by a corner bracket.
- Use a c-clamp to hold the corner bracket in place to one of the guardrail posts. The top of the bracket should be flush with the top of the baluster rail as shown in DETAIL G.
- Use a 1-1/4" tek screw (supplied in bulk) to secure the bracket to the adjacent rail. The hole in the bracket should be used as a drilling guide.
- Remove the c-clamp and use another 1-1/4" tek screw to secure the other side of the bracket where the clamp was initially.

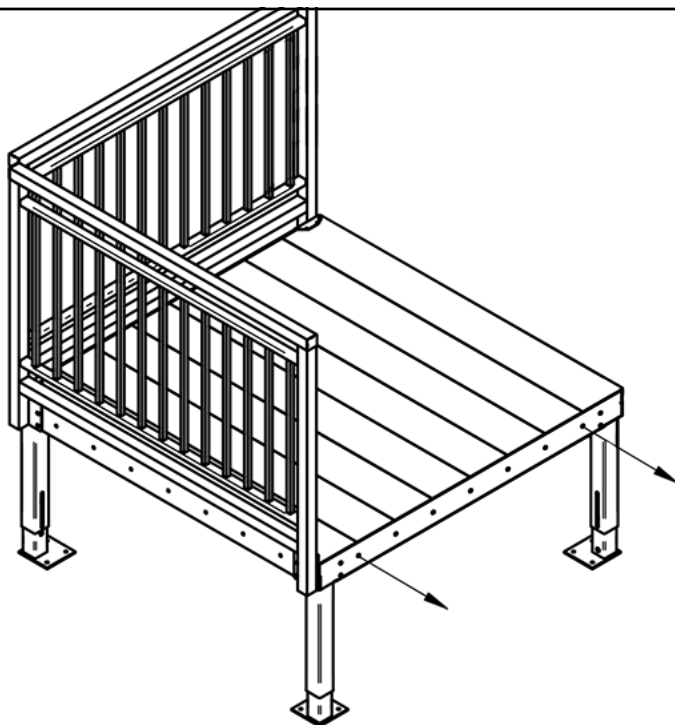
INSTALLING BRACKETS AND KEYS



DETAIL H

FLAT BRACKETS

- Any two platform rails that are aligned along platform edges should be connected by a flat bracket.
- Use a c-clamp to hold the flat bracket in place to one of the guardrail posts. The top of the bracket should be flush with the top of the baluster rail as shown in DETAIL H.
- Use a 1-1/4" tek screw (supplied in bulk) to secure the bracket to the adjacent rail. The hole in the bracket should be used as a drilling guide.
- Remove the c-clamp and use another 1-1/4" tek screw to secure the other side of the bracket where the clamp was initially.



Anchor

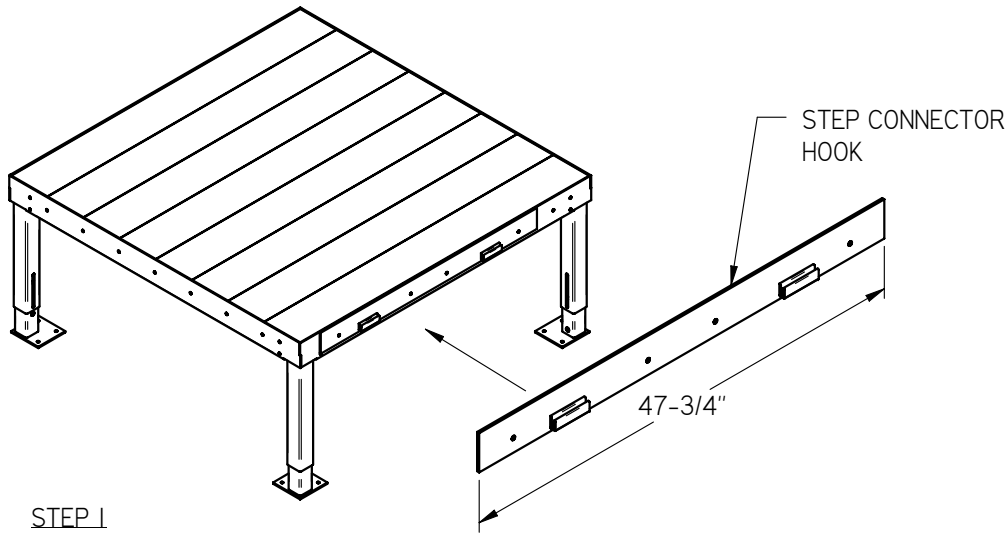
- Anchor the platform to the building to reinforce the structural integrity of the step system.
- Drill two 1/4" holes into the building through the outer holes in the platform edge. The locations are marked with arrows in the drawing above.
- Then insert the anchors through the platform edge holes into the drilled holes and tighten the bolts until the platform is secured to the building.



CONCRETE ANCHORING (IF REQUIRED)

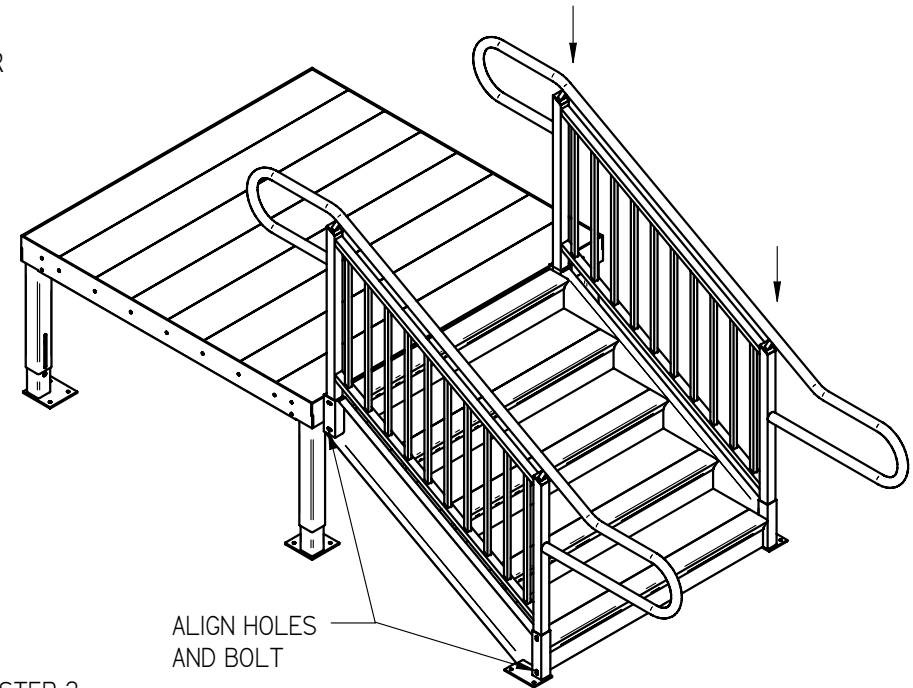
- If desired, the footplates can be anchored to a concrete surface or footing.
- Only one 3/8" x 3-3/4" anchor is necessary per footplate. Install the anchors according to the concrete anchor manufacturer's instructions.

STEP ASSEMBLY - 30" OR UNDER



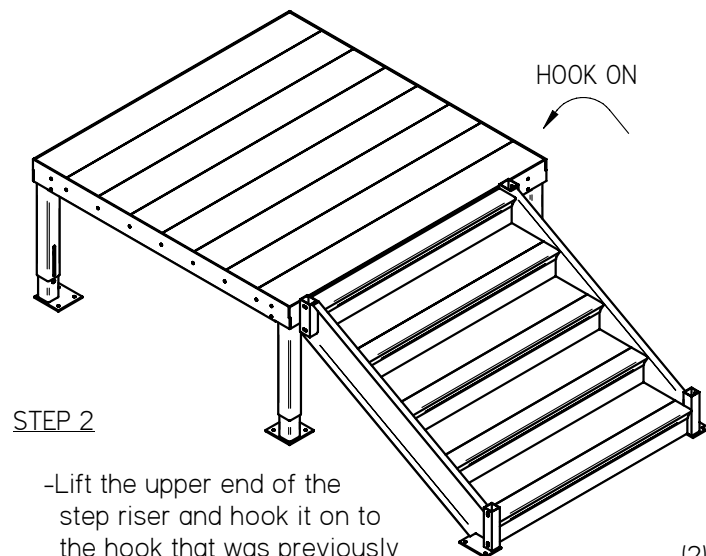
STEP 1

- Locate the step connector hook and bolt it to the platform on the side that the step will be installed. As shown, the step is off center of the platform, away from the building. Consult the job-specific layout to determine where the step should be connected to the platform.
- Use (4) 1" bolts with (4) flat washers and (4) flange nuts (found in hardware kit HK0007) to connect the plate to the platform side through the four holes. If holes in the platform edge are missing, they will need to be drilled through with a 7/16" drill bit.



STEP 3

- Insert the step guardrail posts into the upper and lower pockets on the step riser until the pre-installed rivet nuts in the posts align with the slots in the pockets.
- Use (8) 1" bolts with flat washers (found in hardware kit HK0003) to secure the four posts to the four pockets. Thread the bolts into the rivet nuts in the step rail posts through the slots in the upper and lower pockets on the step riser.



STEP 2

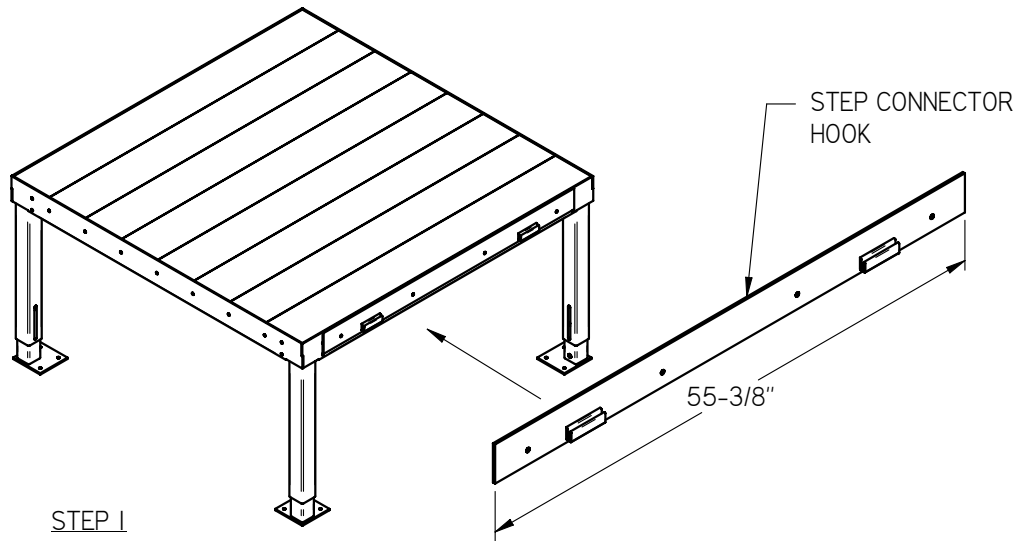
- Lift the upper end of the step riser and hook it on to the hook that was previously bolted on the platform.



(2) TEK SCREWS — STEP KEY

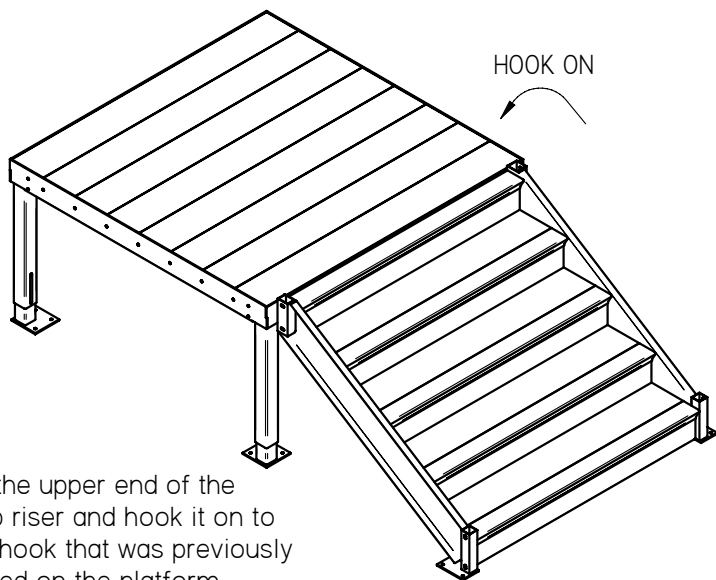
STEP 4

- At the top of each step, two step keys are required to secure the step to the platform.
- Orient the key as shown against the back side of the upper pockets on the step riser.
- Use (2) 1-1/4" tek screws (supplied in bulk) to secure the step key to the platform decking. The holes in the key should be used as a drilling guide.



STEP 1

- Locate the step connector hook and bolt it to the platform on the side that the step will be installed. As shown, the step is on center of the platform. Consult the job-specific layout to determine where the step should be connected to the platform.
- Use (4) 1" bolts with (4) flat washers and (4) flange nuts (found in hardware kit HK0007) to connect the plate to the platform side through the four holes. If holes in the platform edge are missing, they will need to be drilled through with a 7/16" drill bit.

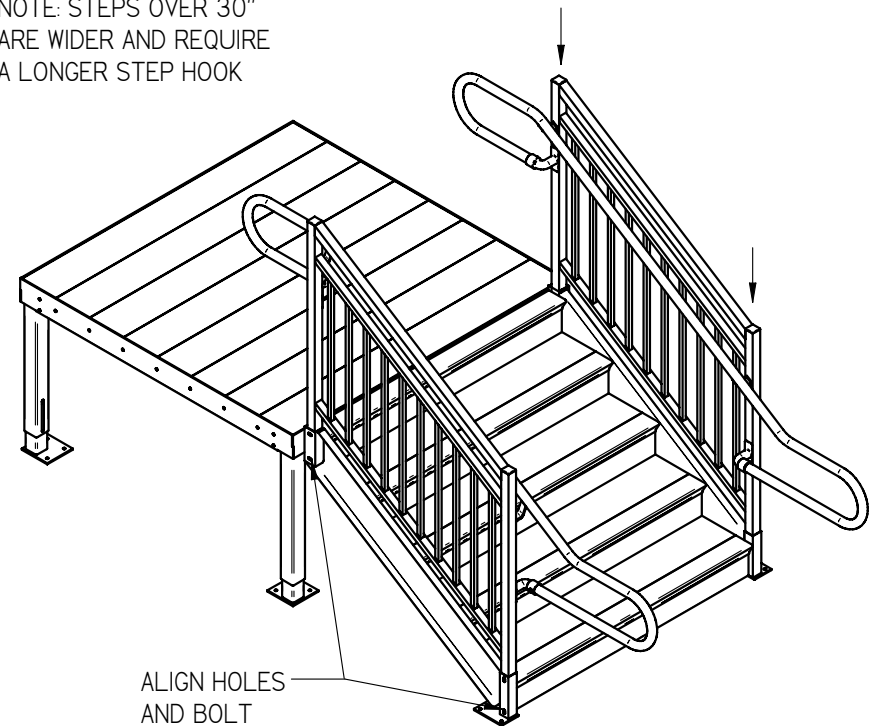


STEP 2

- Lift the upper end of the step riser and hook it on to the hook that was previously bolted on the platform.

NOTE: STEPS OVER 30" ARE WIDER AND REQUIRE A LONGER STEP HOOK

STEP ASSEMBLY - OVER 30"



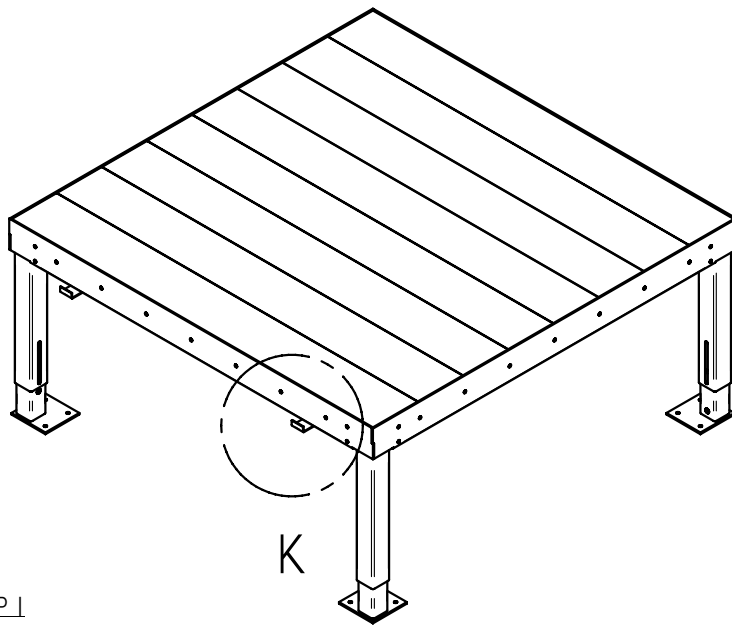
STEP 3

- Insert the step guardrail posts into the upper and lower pockets on the step riser until the pre-installed rivet nuts in the posts align with the slots in the pockets.
- Use (8) 1" bolts with flat washers (found in hardware kit HK0003) to secure the four posts to the four pockets. Thread the bolts into the rivet nuts in the step rail posts through the slots in the upper and lower pockets on the step riser.
- Steps over 50" high will have three posts per guardrail instead of two as shown. Hardware kit HK0004 will need to be used for steps over 50" since it will require 4 extra bolts and washers.

STEP 4

- See step 4 on page 8 for instructions on installing step keys.

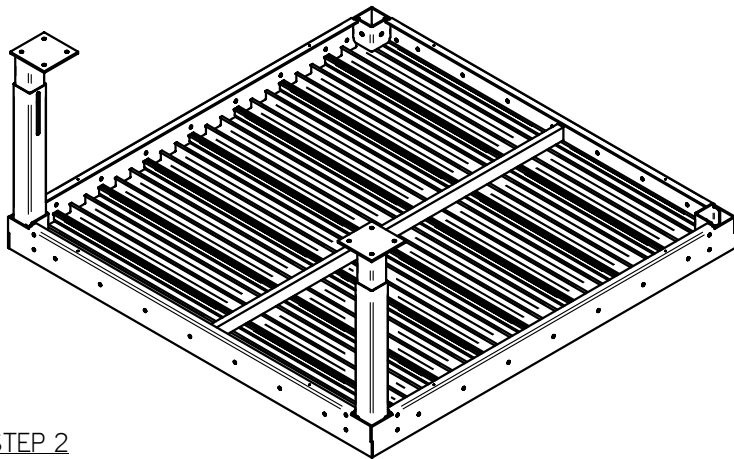
ADDITIONAL PLATFORMS ASSEMBLY



STEP 1

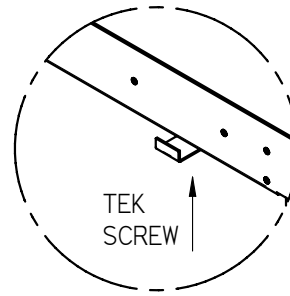
-To prepare for an additional platform, locate two platform joint hook brackets and tek screw them on to the edge of the platform through the two pilot holes in the bottom of the platform edge with 1-1/4" tek screws as shown in DETAIL K.

NOTE: IT IS USUALLY EASIER TO TEK SCREW THE BRACKETS TO THE PLATFORM WHEN IT IS UPSIDE DOWN ON THE GROUND.

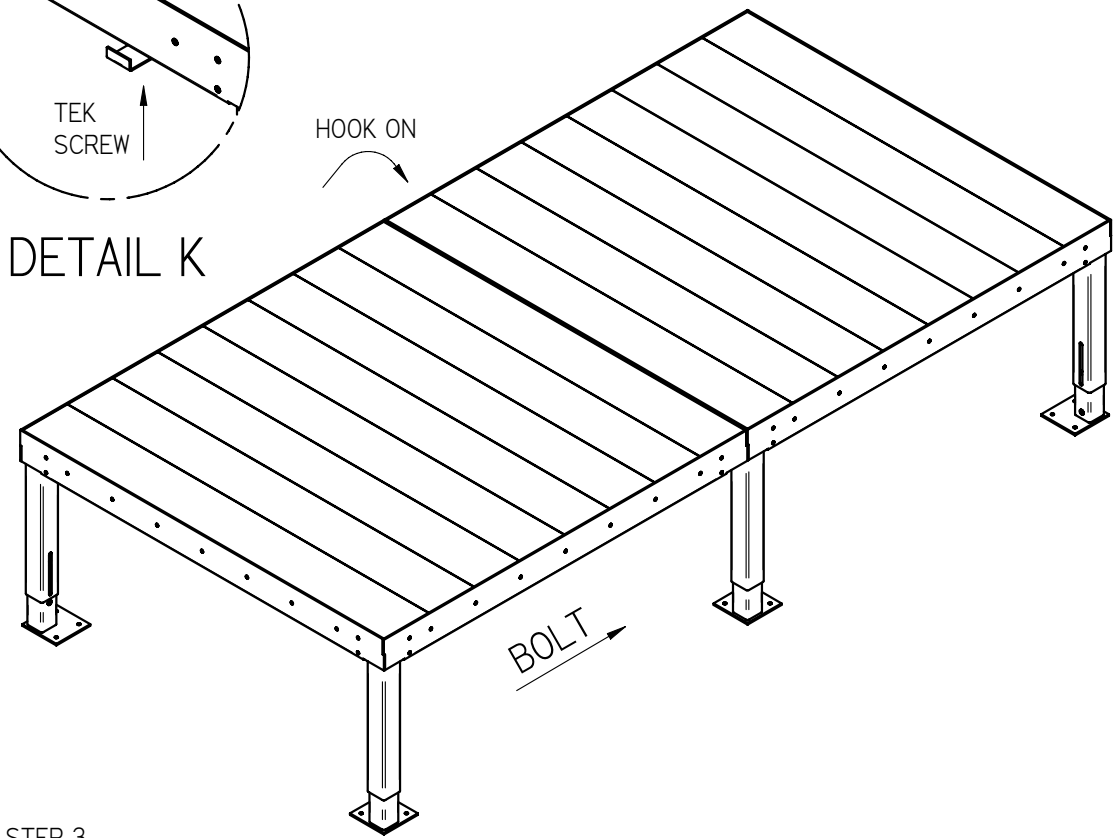


STEP 2

-Prepare the second platform by adding two appropriately sized legs to the corners opposite of the side that will be joined with the existing platform.



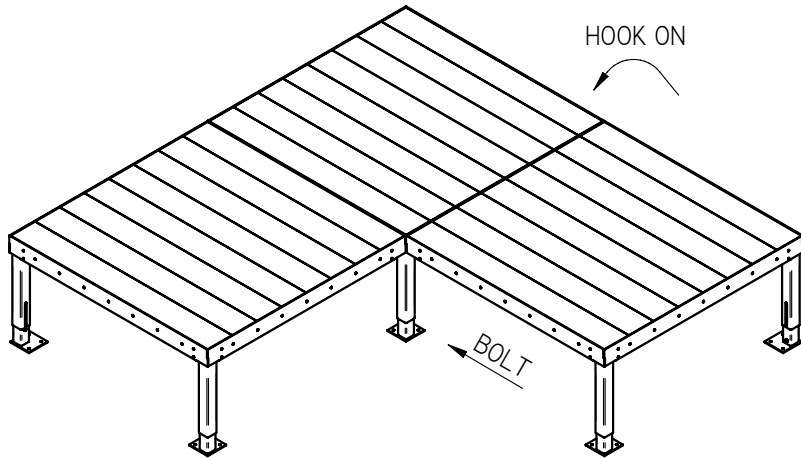
DETAIL K



STEP 3

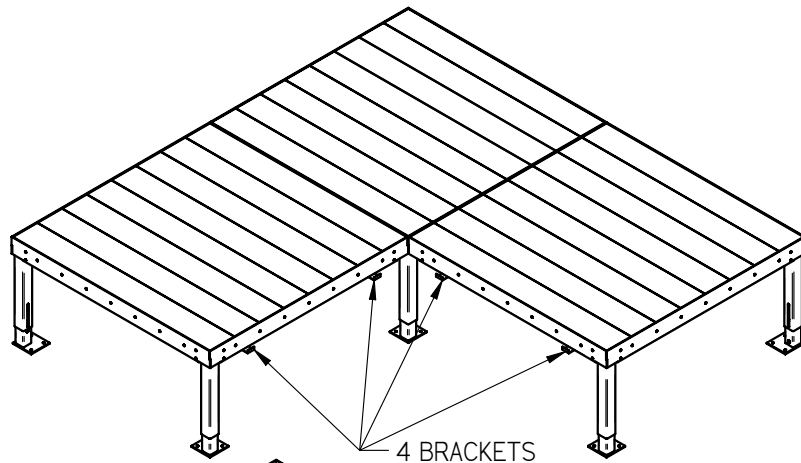
- Hook the second platform on to the platform joint hook brackets on the existing platform and align the platform sides.
- Climb under the platforms and bolt the two platforms together through four evenly spaced holes in the platform edges with (4) 1" bolts, (4) flat washers and (4) flange nuts (found in hardware kit HK0007).
- Make sure the platform is level in both directions and adjust the legs if necessary.
- Continue in the same manner for a long run of platforms.

NOTE: THE PLATFORMS MUST BE BOLTED TOGETHER. THE BRACKETS ARE ONLY TO BE USED TO TEMPORARILY HOOK ONE PLATFORM TO ANOTHER WHILE BOLTING.

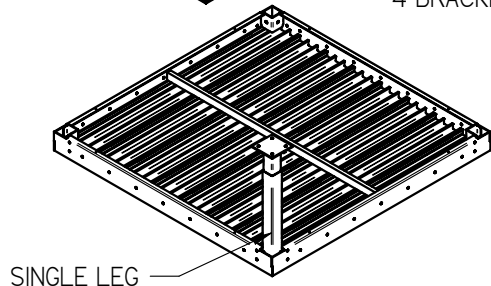


STEP 4 (IF REQUIRED)

- If additional platforms are required extending outward from the building, tek screw two more platform joint hook brackets to the existing platform and prepare another platform with two legs (shown in step 2 on the previous page).
- Hook the additional platform on and bolt through the edges (shown in step 3).

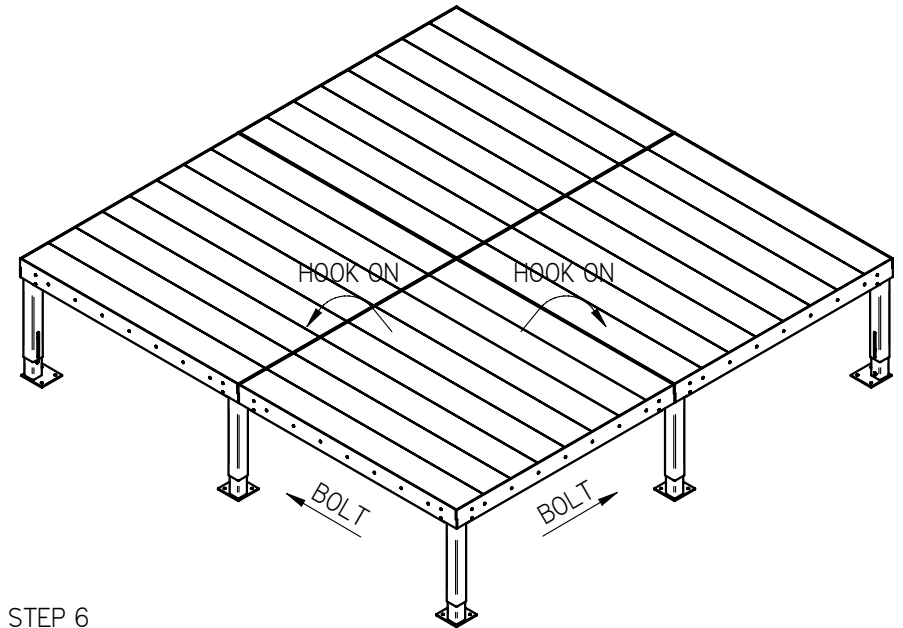


STEP 5 (IF REQUIRED)



- To prepare for a platform bolting to 2 other platforms, tek screw 4 platform joint hook brackets in the locations shown above.
- This platform will require only one leg as shown since the other three corners will be supported by existing legs.

ADDITIONAL PLATFORMS ASSEMBLY



STEP 6

- Bolt the single leg platform to the two existing platforms through the holes in BOTH of the mating platform edges with (4) 1" bolts, (4) flat washers and (4) flange nuts each (use 2 hardware kits HK0007).
- To make this platform larger, continue in the same manner using the diagram below to determine how many legs to use on each platform extending outward from the building.

