

# 4' & 6' WIDE SHORE END RAMPS

## INSTALLATION INSTRUCTIONS

- 510-43302-00 4 x 6 Aluminum (Grey)
- 510-43304-00 4 x 6 Aluma Grain
- 510-43402-00 4 x 12 Aluminum (Grey)
- 510-43404-00 4 x 12 Aluma Grain
- 510-43502-00 6 x 8 Aluminum (Grey)
- 510-43504-00 6 x 8 Aluma Grain



### TOOLS REQUIRED

- DRILL
- 13/32" DRILL BIT
- 9/16" SOCKET WRENCH
- TORQUE WRENCH

## **4' WIDE RAMP PARTS LIST:**

510-43300-00 4 x 6 Cedar  
510-43302-00 4 x 6 Aluminum (Grey)  
510-43304-00 4 x 6 Aluma Grain  
510-43400-00 4 x 12 Cedar  
510-43402-00 4 x 12 Aluminum (Grey)  
510-43404-00 4 x 12 Aluma Grain

each ramp includes:

(2) 110-00032-00 Dock Ramp Bracket Weldment  
(1) 001-03900-01 Dock Ramp Hardware Kit (which includes:  
    (2) 001-71017-00 F.W. 3/8" SAE 18-8  
    (2) 001-74439-00 CB 3/8-16 x 2" SS 18-8  
    (2) 001-76349-00 Nut 3/8-16 Aluminum  
    (2) 001-70105-00 HHCS 3/8-16 x 1" SS 18-8

## **6' WIDE RAMP PARTS LIST:**

510-43500-00 6 x 8 Cedar  
510-43502-00 6 x 8 Aluminum (Grey)  
510-43504-00 6 x 8 Aluma Grain

each ramp includes:

(3) 110-00032-00 Dock Ramp Bracket Weldment  
(1) 001-03901-01 Dock Ramp Hardware Kit (which includes:  
    (3) 001-71017-00 F.W. 3/8" SAE 18-8  
    (3) 001-74439-00 CB 3/8-16 x 2" SS 18-8  
    (3) 001-76349-00 Nut 3/8-16 Aluminum  
    (3) 001-70105-00 HHCS 3/8-16 x 1" SS 18-8

# 4' WIDE RAMPS

## **Step 1**

- Locate dock ramp bracket weldment 3 5/8" from edge of dock to edge of bracket as shown in Fig. 1.
- Mark the center of the hole on the upper dock tube.
- Drill a 13/32" (.406) through the dock tube on the center you marked on the dock tube. Be sure to drill the hole perpendicular to the tube to insure proper fit between the bracket and dock tube.
- Insert the 3/8-16 x 2" carriage bolt through the dock bracket and dock tube and secure with the flat washer and 3/8" aluminum nut. Torque to 25 ft/lbs.
- Repeat the procedure for the dock ramp bracket weldment for the opposite side of the dock.
- Once the dock ramp brackets are installed the shore end ramp can be hooked on the brackets. Insert a 3/8 x 1" HHCS in each ramp hook. Torque to 5 ft/lbs.

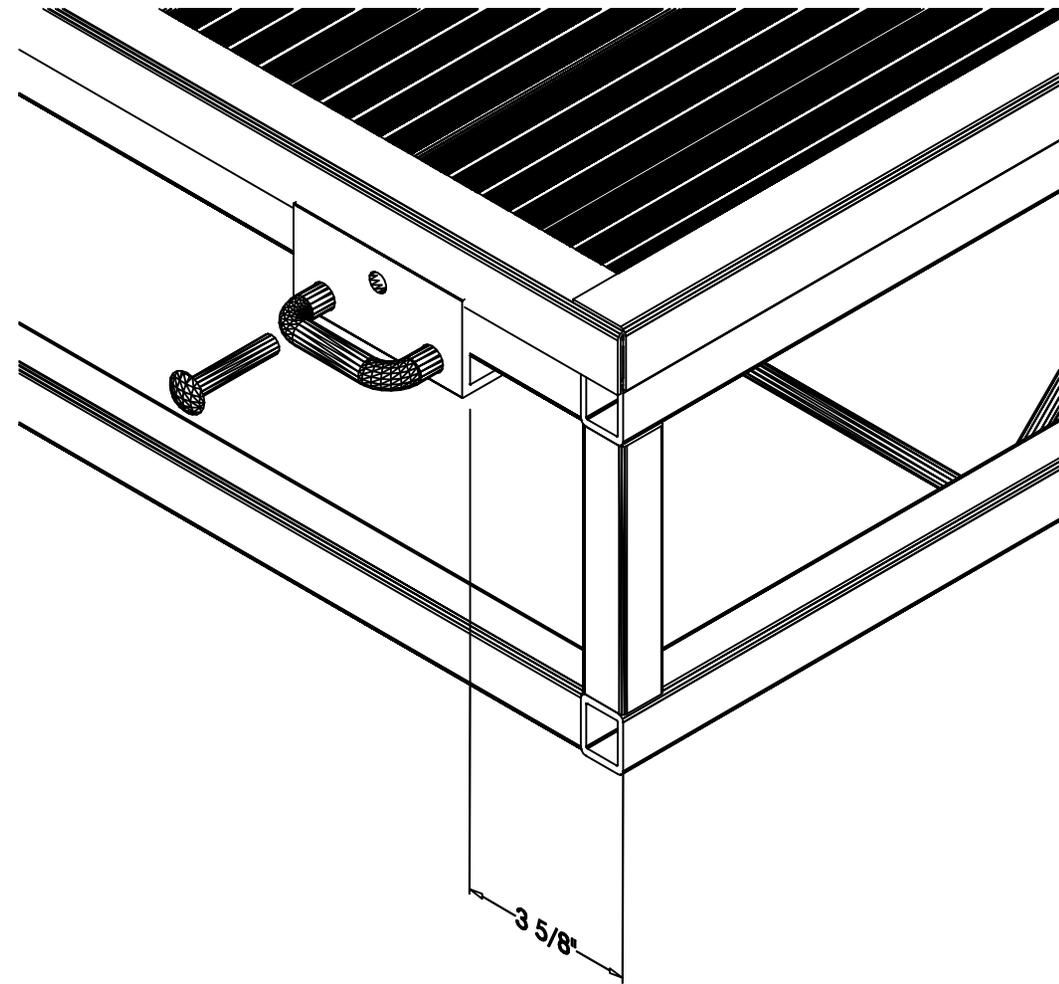


Fig. 1

# **6' WIDE RAMPS**

## ***Step 1***

- Locate dock ramp bracket weldment 3 5/8" from edge of dock to edge of bracket as shown in Fig. 1.
- Mark the center of the hole on the upper dock tube.
- Drill a 13/32" (.406) through the dock tube on the center you marked on the dock tube. Be sure to drill the hole perpendicular to the tube to insure proper fit between the bracket and dock tube.
- Insert the 3/8-16 x 2" carriage bolt through the dock bracket and dock tube and secure with the flat washer and 3/8" aluminum nut. Torque to 25 ft/lbs.
- Repeat the procedure for the dock ramp bracket weldment for the opposite side of the dock.
- Locate the center dock ramp bracket weldment 36 7/8" from edge of dock to edge of bracket as shown in Fig. 1.
- Mark the center of the hole on the upper dock tube.
- Drill a 13/32" (.406) through the dock tube on the center you marked on the dock tube. Be sure to drill the hole perpendicular to the tube to insure proper fit between the bracket and dock tube.
- Insert the 3/8-16 x 2" carriage bolt through the dock bracket and dock tube and secure with the flat washer and 3/8" aluminum nut. Torque to 25 ft/lbs.
- Once the dock ramp brackets are installed the shore end ramp can be hooked on the brackets. Insert a 3/8 x 1" HHCS in each ramp hook. Torque to 5 ft/lbs.

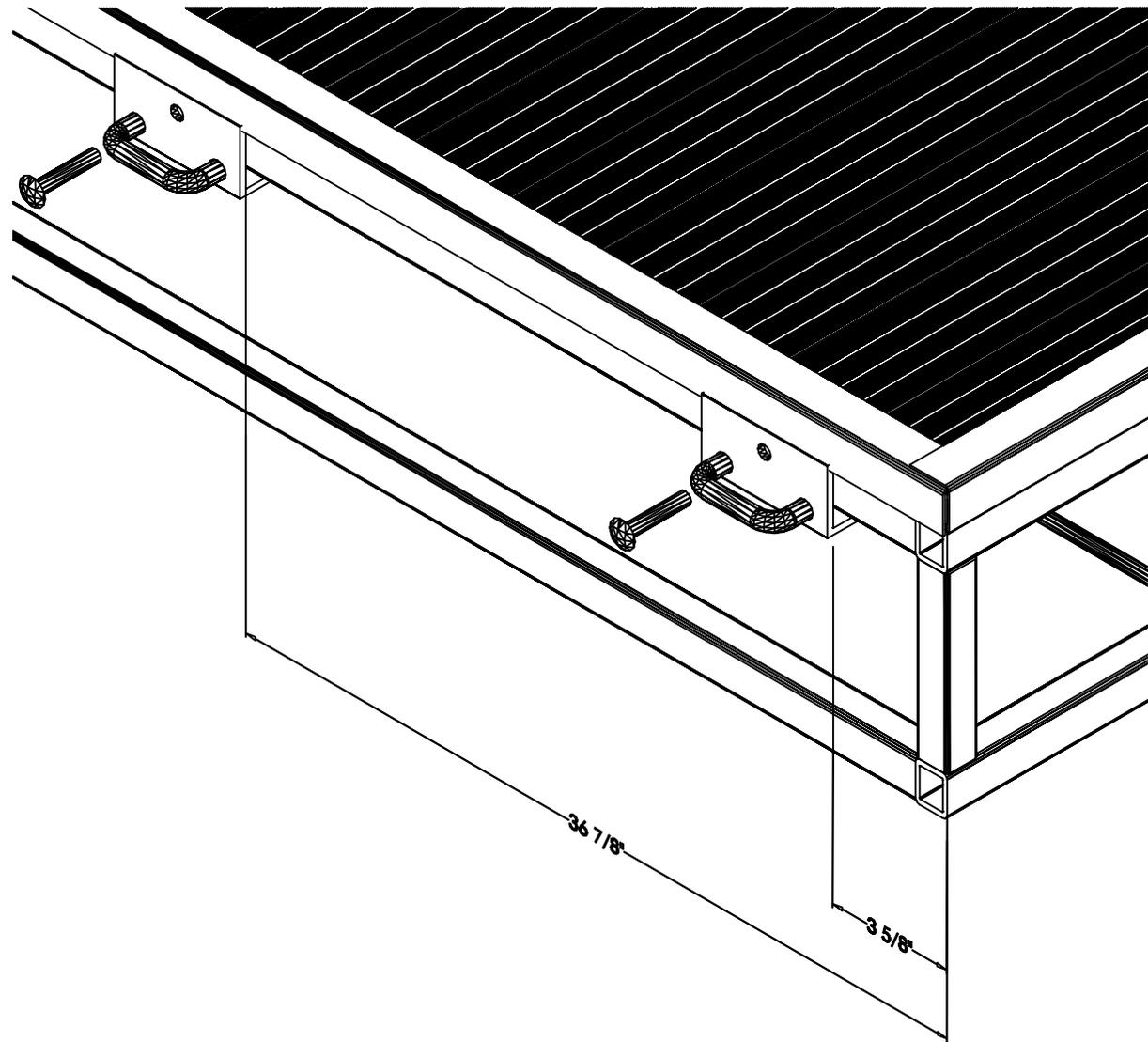


Fig. 1