

Low-Profile Floating Dock Assembly Instructions

Transal

## Safety/Caution:

- Always use caution while assembling the pier and while actively using the pier.
- \* Wear protective gloves and appropriate safety glasses when assembling the product.
- \* Be aware of pinch points between frames, around hinges and near piling sleeves.
- \* Due to the nature of floating docks, the pier may shift or fluctuate in moving water, be mindful of footing while walking on the deck surface. All dock surfaces can be slippery when wet, use caution.
- \* Please visit our FAQ section at <u>www.patriotdocks.com</u> for more information and details about floating docks.

### Important Capacity Guidelines:

- \* Manufacturer recommends at least two 48x24x12" floats per 8' dock frame. As a reference of buoyancy, a 200 lb. load over any single 48x24x12" float will submerge the float half way, a 400 lb. load will submerge the float completely. Consider adding more floats to increase buoyancy. A third float can be added to the middle portion of the frame (hole drilling required).
- \* It is common for floating docks to be left in frozen water. Warranties do not apply to damage caused by ice. Each situation should be considered carefully before leaving the pier in frozen water.
- Dock packages include the basic number of components to get started. Patriot's dock frame design allows for the flexibility to add length or change the configuration as desired. Additional parts may be required for certain configurations and applications.
- \* Patriot Low Pro Frames have multiple float mounting locations and are compatible with most major float retailers.

## **General Locations for Floats, Pilings and Hinges**



# **Step 1: Frame Assembly**



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# Step 3: Installing Hardware

**Rectangular Floats** are to be mounted on both ends of the 4'x8' Low-Pro Frame using four J-bolts with fender washers and nylock nuts. **The fender washer is used under the flange of the float**.

**Hinges** can be mounted to the 4' face of the Low-Profile frame, or, there are mounting locations on either end of the 8' face of the frame (used for adding fingers to the dock configuration). The hinge brackets should be installed with the welded round tube orientated upward. Hinge brackets are fastened using M10x60mm bolts with nylock nuts. After mounting the Hinge brackets , bring the two hinged faces together, aligning the 1" I.D. tubes while inserting the 3/4" I.D. x 4' Hinge Pipe. Install M6x30mm bolts and nuts to secure the Hinge Pipe in place.

Piling Sleeves are mounted at any of the frame's two-hole patterns using two M10x60mm bolt/nut.



# **Anchoring Details and Recommendations**

The manufacturer provides general guidelines to anchoring a floating dock. One should be aware of local regulatory restrictions. Due to the large degree of variation between floating dock applications and locations, carefully consider the details of your floating dock application when determining how to best anchor the pier. There are multiple ways to anchor a floating pier in place, each with its own pros and cons. Here we provide details and some general guidelines for each method.

**Sleeve and Piling:** This method of anchoring uses our available 1-1/2" Piling Sleeve to travel up and down on a 1-1/2" i.d. schedule 40 galvanized pipe. This is a ridged method of anchoring and is great for water depths up to 4' deep. This method requires little maintenance as the sleeves should move freely along the pipes with fluctuating water levels. Longer pipe is available for deeper applications but one should consider using the following chain and deadman weight method or a combination of both. Pipe can be driven into place on its own or through the Foot Plate Base for added stability. Auger bases are also commonly used to allow the pilings to be turned into the lake bottom. Pilings should be driven at least 12" into the lake bottom and deeper if a boat is to be moored to the floating pier.

Chain and Deadman Weights: This style of anchoring is a great all around method, especially useful in deeper water. The 1-1/2" Piling Sleeve is also used as the tie off point for the anchor chain. It is recommended that 5/16" galvanized chain and galvanized shackles be used as leads for the deadman weights. Chain leads should have a length twice that of the water depth. Floating docks will require between 500lbs—1500lbs of anchor weight depending on dock size and water conditions. Anchors should be placed at least every 32' of dock length and at key perimeter points as needed.





### **Decking Installation**

PN10868

PN10867

Lastly, after the dock has been assembled completely, installed in the water and leveled throughout, then the pier is ready for the decking to be installed. The most efficient way to set the decking in place is to start at the shore end of the dock and set each panel in place, working towards the lake end. Removal is the opposite of installation.



To assemble the **aluminum deck panel**, lay out the deck boards, slide stinger onto boards. Position stringer approx. 12" from edge. Repeat with other stringer on opposite side. Ensure board ends are flush. Tighten set screws to secure panel.

**PN10868:** Aluminum Deck Lockers can be installed on the panel to secure the decking to the frame.

\*Sold Separately\*

To assemble the **poly deck panel**, lay out deck boards. Align stringer with pre drilled hole on bottom side of poly board. Roughly 11-3/4" from edge. Secure with included screw.

**PN10867: Deck Locker** - Use the optional Deck Locker to secure the 4x4' poly deck panel onto the dock frame.



The Cedar Deck Panel is simply set in place. The cedar panels are sold untreated and can be installed as is. To extend the service life of the cedar deck, a water repellant sealant can be applied (for best results, do not use colored stain).

The Cedar Decking does not utilize a deck locker mechanism but it is recommended that the panels be secured to the frame in some capacity. (zip-ties are commonly used)

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When installing Aluminum Deck Panels, first apply the adhesive backed Rubber or Cork Insulator to the aluminum frames. The Insulator is installed down the length of the 8' Side Rails and down the length of the Center Support Tubes. **(Only used with Aluminum Decking) The Rubber Insulator is not to be installed in the direction of the 4 ft. width, only lengthwise.** 



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#### **Optional Accessories include:**

Handrail Assembly (PN10933 & PN10934) - Add handrails at desired locations for extra safety. Available in 4' and 8' lengths.

(#1) - <u>Corner Bracket</u> (PN10390) - The steel corner brackets are used in high stress areas of the pier. They bolt inside the corner of the lowpro frame to help resist twisting in the frame.

(#2) - Additional <u>Floats</u> (PN10862) - Add additional floats to increase buoyancy. Each float has a 390 lbs buoyancy rating. Floats mount to the Low-pro frame using the Float Mounting Bracket set (PN10849) A third float can be added to the low-pro frame (hole drilling required).

(#3) - Additional Piling Sleeves (PN10938) - Add more pilings to increase stability and to ensure firm anchoring.

(#4) - Piling Pipe (PN10813 & PN10814) - Use 1-1/2" I.D. Schedule 40 pipe as pilings in shallow water. Available in 6' and 8' lengths.

(#5) - Vinyl Pipe Caps (PN10823) - Used to cap the top of the piling pipe for a clean, finished look.

(#6) - <u>Auger Base</u> or <u>Foot Plate</u> Stanchion (PN10806 & PN10811) - Use the Auger Base or Foot Plate Stanchion on the end of the piling pipe to help stabilize the piling pipe. The piling pipe can be sleeved through the Foot Plate and be driven into the lake bottom.

(#7) - Side Ballast Float (PN10864) - Used to increase the overall floating dock width to 5' and adding 145lbs. of buoyancy each. Also acts as a bumper.

<u>Wheels with mounting brackets</u> (PN10821 Wheel, PN10874 /PN10423 Mounting bracket and axle) The wheels can be added to the pier to allow for rolling the dock in or out of the water. The wheels are attached to the dock frame using the Shore End Support bracket and Axle attachment



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