MULTI NAUTIC®

QPF-495 SERIES ALUMINUM DOCK KIT WITH CEDAR

Assembly and Installation Guide

This manual will guide you through the steps to complete this dock project.
Please read the instructions carefully to ensure that the assembly
is carried out correctly and safely.
Make sure you have the Technical Specification Sheet for your model.

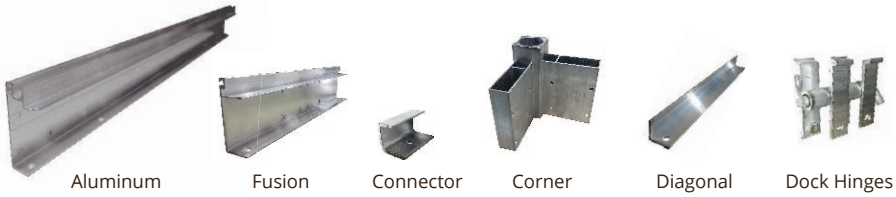
Should you encounter any difficulties with this product,
do not hesitate to contact our customer service at
1-800-585-1237
or by email at **info@multinautic.com**

ASSEMBLE - ENJOY - SHARE

MATERIAL

KIT CONTENT (see the Specification Sheet of each kit for the quantities of the parts included)

ALUMINUM FRAME PARTS



Aluminum Profiles | Fusion Plate | Connector Key | Corner Leg Holders | Diagonal Brace | Dock Hinges

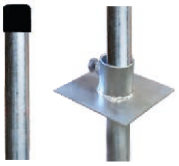
WOOD

Kiln-dried Premium Western Cedar and Screws

COMPLEMENTS

Foam Filled Floats

Anchor Chain Hook Kit



Posts, Caps and Base Plates

BOLT KITS

Bolt Kits with Large Flat Washer for Floats

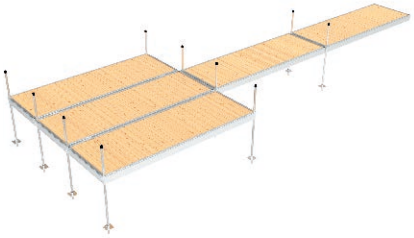
Hexagonal ⅜" x 4-½" | Round head ¼" x 2" | Hexagonal ⅜" x 1" | Round head ¼" x ¾" | Set Screws ½" x 5/8"

REQUIRED TOOLS FOR THE ASSEMBLY AND THE INSTALLATION

- > Cordless drill with :
  - wood drill bits 3/16", 1/2"
  - metal drill bits 7/16", 9/16", 11/64"
  - Phillips and square #2 bits
- > Wrench and ratchet with 7/16", 9/16" and 3/4" sockets
- > 1/4" Allen Key (hexagonal bit)
- > Tape measure
- > Pen
- > Saw
- > Sledgehammer

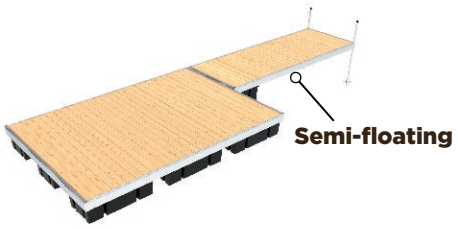
LAYOUT TYPES

The QPF-495 Aluminum Dock Series Kit allows for configurations that combine the most popular features: it is sturdy, modular and includes everything needed for assembly. The floating models have an medium freeboard of approximately 14" above the water. It is suitable for floating, stationary or even rolling installation. Its configuration can evolve according to your needs and it can be expanded or modified over the years. To avoid problems during assembly and installation, see page 6 before you begin, as proper planning is required. If you have not yet decided on the type of installation that will best suit your shoreline and your activities, here are guidelines to help you choose:



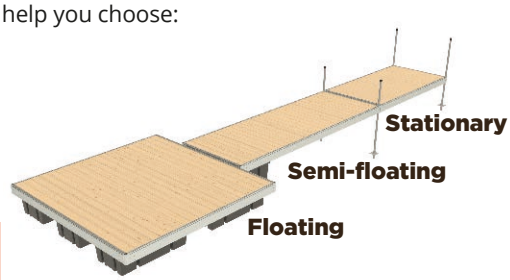
STATIONARY DOCK

1. This is the ideal option for shallow water. You can install a stationary dock in a maximum of about 4 feet of water otherwise installation will be difficult.
2. A stationary dock is recommended if bad weather causes waves of up to 3 feet. If this is the case, you will have to moor the boat away from the dock or use a boat lift.
3. A post (or stationary) dock is not recommended in a body of water that often fluctuates more than 2 feet in a short period of time. A floating dock would be more appropriate in this case, otherwise you may have to adjust the height of the dock several times during the season.
4. The stationary dock is usually installed without anchoring and you should not rely on it to keep your boat afloat during a storm, or to protect it from large waves created by other boats.



SEMI-FLOATING DOCK

1. A semi-floating dock is required in a floating dock configuration. It has floats at one end only to allow for a smooth transition from land (or a fixed dock) to the floating dock.
2. If the bottom of the lake or river goes down quickly, start your configuration with a semi-floating dock. This will adjust with the water level.
3. If the lake or river bottom does not drop quickly, use fixed docks near the shore and then transition to the floating dock in deeper water. You will need a semi-floating dock section to make the transition between them.



FLOATING DOCK

1. A floating dock is recommended in bodies of water deeper than 4 feet.
2. A floating dock is ideal for lakes and rivers where the water level fluctuates periodically. Because the dock floats, it will always be at the same level above the water.
3. A floating dock is not recommended in a body of water that produces waves of more than 3 feet because it could be damaged and, at the same time, damage the boat moored to it.

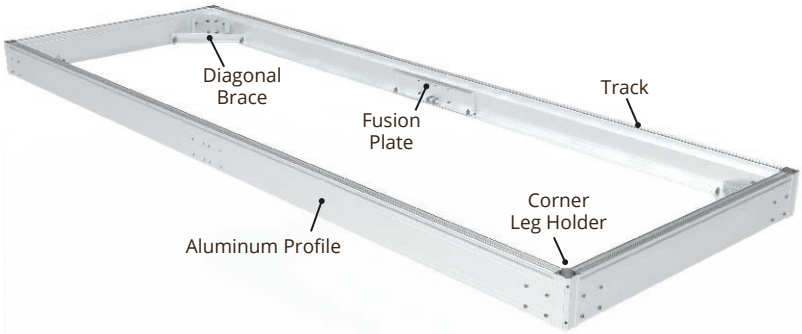
ADVICE FROM THE PROS

A good way to help you make the right choice of installation is to look at your neighbours' docks.
If they have been installed for a few years and are still in good condition, a similar choice could be good for you.

ALUMINUM FRAME

YouTube Multinautic QPF-495

Lay out the pieces to be assembled on the ground so you can see the steps to follow. To facilitate assembly, the structure is mounted upside down, with the cleat track at the bottom. You will turn the dock right side up once the structure is complete and the floats are installed.
Combine the aluminum pieces as shown below, using the Specifcation Sheet for your dock size as a guide. Screw the nuts by hand to start and once completed, tighten them. If it is difficult to insert a bolt in a hole, you can enlarge it by running a metal drill bit through it.

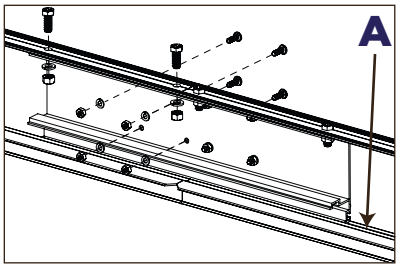


1 DOCK SIDES

Assemble the Aluminum Profiles by inserting the Fusion Plates into the opening (**A**). First, bolt in the walls then in the bases of the Extrusions.

Round head 1/4" x 3/4"

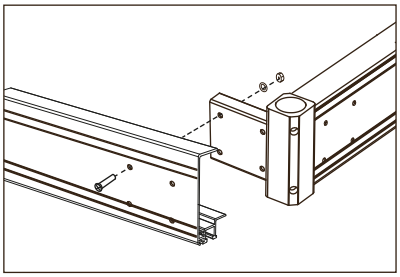
Hexagonal 3/8" x 1"

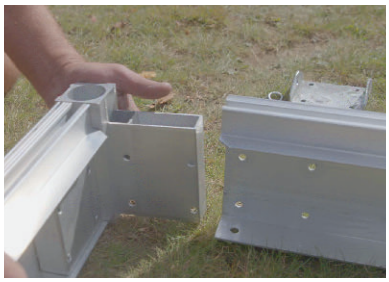


2 LEG HOLDERS

Insert the Leg Holders into the Side Extrusions and secure with the ¼" x 2" Round Head Bolts.

Round head 1/4" x 2" x 32



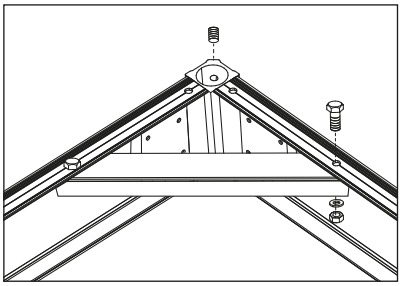


3 BRACES

Install the Corner Braces in the 4 corners. Place the Set Screws in the Leg Holders. They will be used to retain Posts or Fusion Connectors if required.

Hexagonal 3/8" x 1" x 8

Set Screws x 8

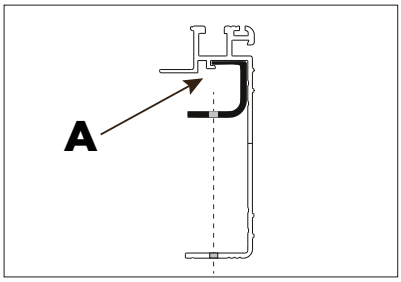


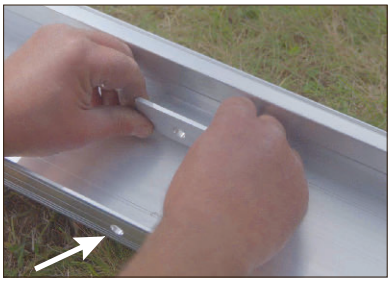
4 CROSS MEMBERS

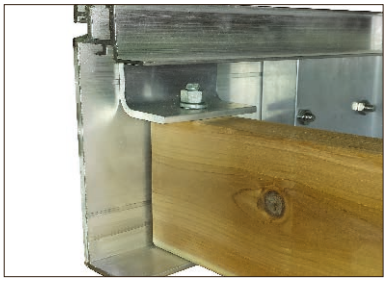
Mark the location of the Connector Keys (center) on the aluminum profiles as indicated on your Specification Sheet. These Connectors will be inserted into the opening (**A**) to install the internal structure. In the next step, you will drill the bottom edge to bolt the sub-structure.

Connector Keys

Hexagonal 3/8" x 4-½"



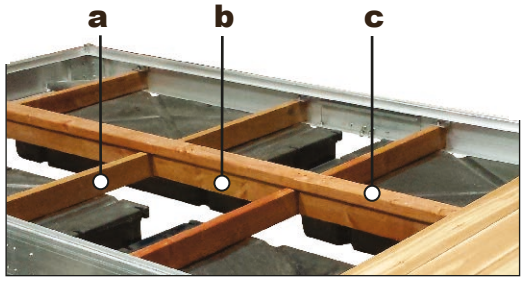




INSIDE STRUCTURE

The use of the Connector Key allows for a wide range of configurations. By drilling into the aluminum at the desired locations for the installation of the joists and some noggins, a variety of dock sizes can be achieved.

Aluminum is as easy to drill as wood and any 7/16" metal drill bit will do.

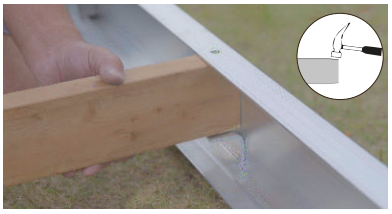


a	Joists
b	Noggins
c	Joining Beam

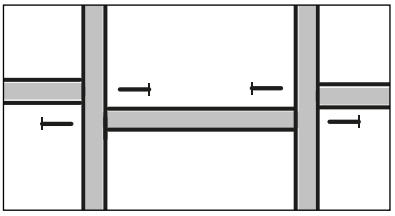
Connector Key

Have a tarp available to collect metal chips while drilling. Plan to work on a tarp to Please refer to the Specification Sheet associated with your dock section for their locations. It is provided with this Assembly Guide and is also available on our website www.multinautic.com.

> Mark the location of each of the Connector Keys to be installed according to the instructions in the Specifications Sheet for your model. Make the holes with a 7/16" drill bit. Use the groove in the aluminum edge as a drilling guide.



> Start by installing the Joists. Insert a Connector Key into the hole and insert the factory pre-drilled piece of wood.
Since wood is a natural material, the 2" x 4" may be a little too tight, so to make it easier to insert, lightly tap the end with a hammer. If, on the other hand, the end is not tight enough, add a washer to the 4 1/2" bolts between the wood and the aluminum edge to fill the gap rather than distorting the edge by tightening too much.

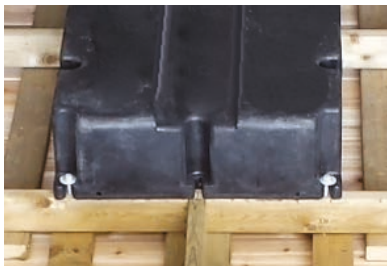


> Make sure the structure is straight by taking an "X" measurement from corner to corner. The 2 lenghts must be equal (+/- ¼").

> Fasten the Noggins with #10 x 3 ½" treated wood screws, alternating their position to facilitate the screwing. Note that during the decking installation, the Joining Beam will be screwed into these spacers. Their positioning is therefore important.

FLOATS

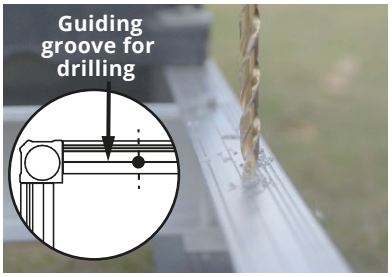
This model of dock is sold in pre-configured sets, including a whole range of accessories, or individually, leaving the owner the possibility of installing it on posts, on floats and/or on wheels. Depending on the format chosen, the Floats will be bolted into the wood or aluminum.



INSTALLATION IN WOOD STRUCTURE

> Place the Floats in the locations designated on the Specifications Sheet and mark the location of the holes in the Joists.

> Shift them and drill the wood with a 3/16" drill bit at the determined locations to avoid splitting when screwing.



> Install the Floats with the 3/8" x 4 1/2" Lag Bolts and Flat Washers.

INSTALLATION IN ALUMINUM FRAME

> 3/8" x 3-1/2" hex bolts are required to install the Floats into the aluminum. Only semi-floating dock kits will use the aluminum frame for the Float installation. Mark the locations and drill with a 7/16" drill bit.

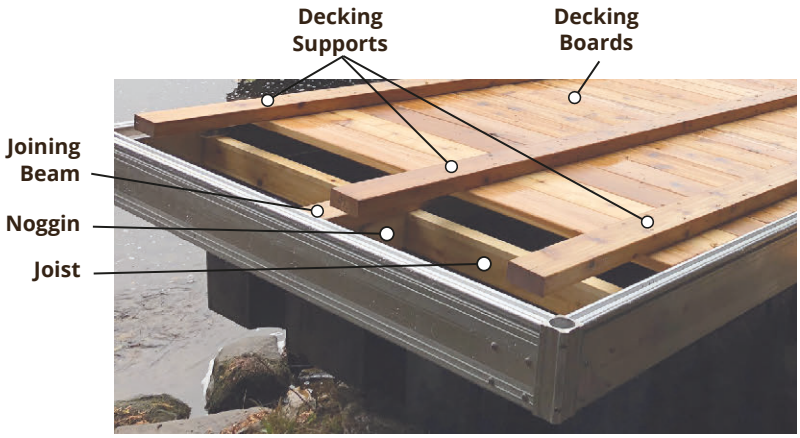
ANCHOR CHAIN HOOKS

A floating dock requires concrete blocks connected to the dock with chains (see "Anchoring Suggestions" page). Your kit includes 2 angle plates with hooks to hold and easily adjust the anchor chains. Drill the required holes in the aluminum bottom edge with a 9/16" drill bit for the included 1/2" bolts. Do not allow the chains to come in contact with the floats.

DECKING

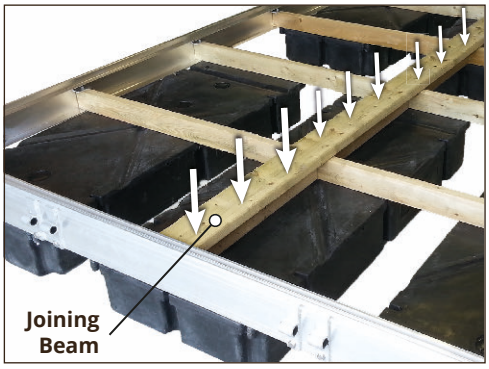
To install the decking, place the dock right side up with the aluminum track on top.

You will assemble the panels upside down and then turn them over. This way, you won't see the screw heads on the finished product.



1 Again, make sure the structure is straight by taking an "X" measurement from corner to corner. The 2 lenghts must be equal (+/- ¼").

2 Place the Joining Beam(s) and screw into the Noggins and Joists with a minimum of three (3x) 3 1/2" #10 screws per Nogging, all properly aligned.

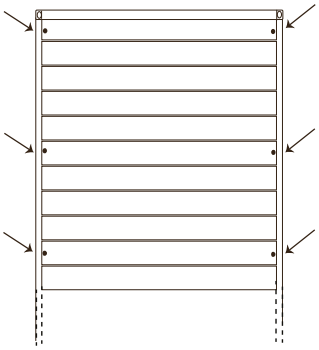


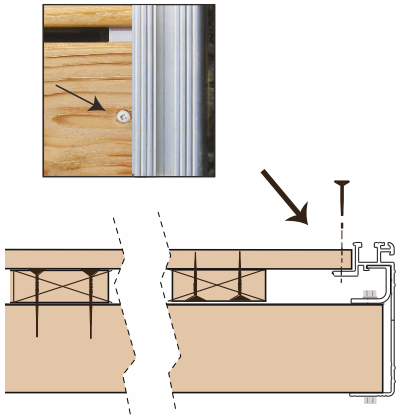
3 Place the Decking Boards on the aluminum frame, with their good side down, all aligned on the same side of the frame to form a straight panel.

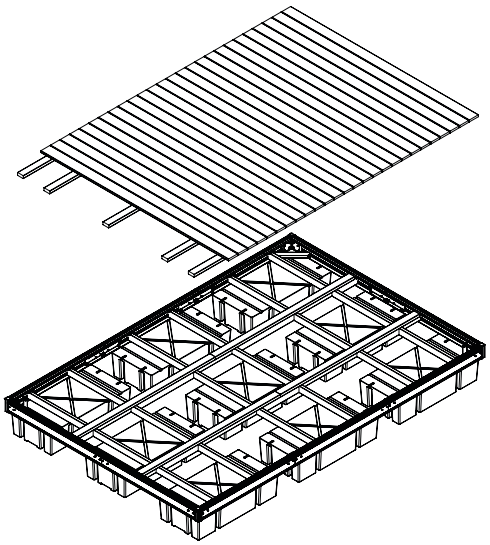
4 Place the Decking Supports on the Decking Boards according to the image on the Specification Sheet. Leave a 2.5" clearance to the dock sides and a maximum of 24" to each other. Be sure not to conflict with the Joining Beam(s).

5 Before screwing the Decking Supports into the Boards (two #8 screws per Board per Support), make sure that the spaces between the Boards are equal and that the Decking Supports are parallel.

6 Turn your panel right side up. Drill an 11/64" hole in the corner of the panel, through the wood and aluminum support lip and insert a #8 screw. Do the same at the other end of the board and repeat every 3 feet (more or less).
To lighten the handling of the docks, this decking installation step can be done when your docks are in the water.



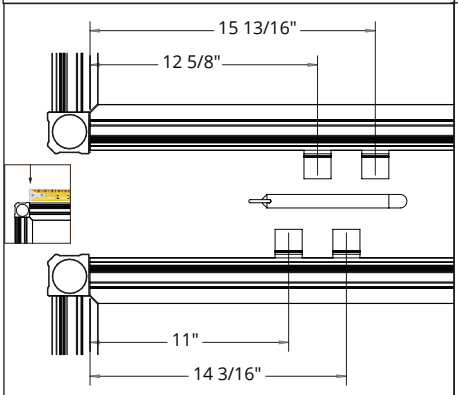
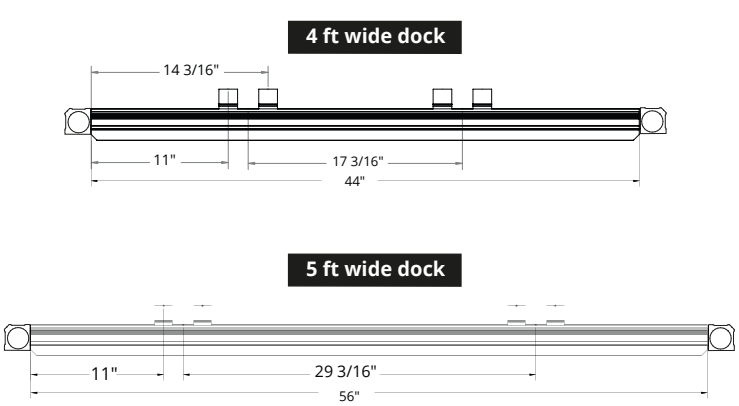
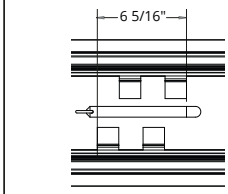
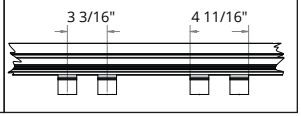




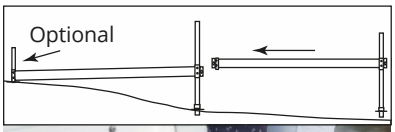
INSTALLATION

DOCK HINGES

The positioning of the Dock Hinges will be determined according to the size of the docks to be connected and the desired configuration. Please refer to the Specification Sheets of your docks to guide you in the location of the holes to be made with a 7/16" drill bit.
Since there are many constraints to consider at this stage, good planning is required. Some combinations are simple to make while others require more precision because of conflicts with Fusion Plates and Connector Keys.

Corner to Corner bolt positioning measurements	Positioning of bolts for 4 and 5 foot wide docks	Hinge dimensions
		Overall width  Center to center and outside width 

POSTS AND BASE PLATES



> To facilitate the installation of the dock, the posts can be inserted into the Corner Leg Holders beforehand; once in the water, you will adjust them to the right height.
> During installation, install the base plates on the posts, secure them with the hexagonal bolt, leaving about 6 in. of post underneath them (a little more if the lake bottom is muddy or a little less if it is a very hard bottom).
> Drive the posts in the lake bottom by pressing with your foot on the base plate or by hitting the pile with a sledgehammer.
> Adjust the dock height using the Corner Leg Holder Set Screws and tighten securely.
> Connect the second section to the first and so on.
> Multinautic® 1 11/16" posts can be cut. Allow about 16" to protrude above the dock for possible adjustments during the season.
> Install the protective caps.

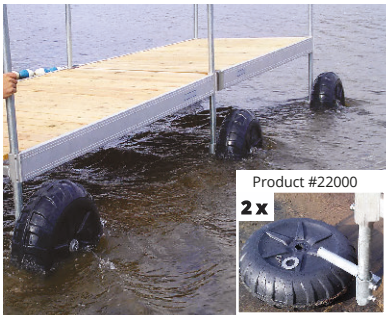
FUSION CONNECTORS

Fusion Connectors (product #21585) are designed to prevent the dock from opening and closing at the junction of 2 floating sections (under the action of waves or people) by immobilizing the dock hinges to create a more stable platform.

> These stabilizers **must not** be installed on a semi-floating section.
> They **must** be installed in combination with the dock hinges

After installation, be sure to tighten the Set Screws already placed in the Leg Holders. Check the bolts periodically.

SET OF WHEELS



You can add one or more sets of wheels (product #22000) to facilitate removals and installations or to move the dock forward or backward according to changes in water level. We recommend anchoring a wheeled dock with blocks and chain since the piles will not be driven into the ground (see pair of Anchor Chain Hooks, product #22063, on page 4).

PLEASE VISIT OUR WEBSITE MULTINAUTIC.COM TO LEARN HOW TO PREPARE YOUR DOCK FOR WINTERTIME.

ANCHORING SUGGESTIONS

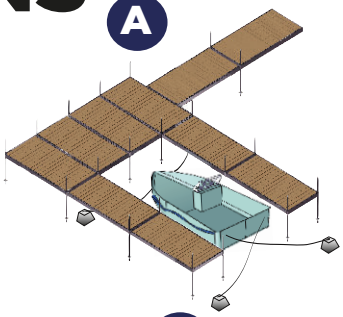
These drawings, plans and/or technical specifications are only general information and can in no way replace, in whole or in part, certified engineering drawings. Please refer to the "Important information and disclaimer" section of our website.

STATIONARY DOCK

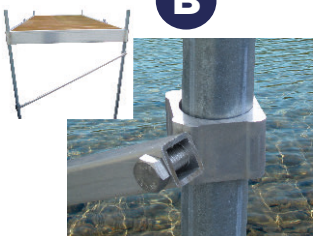
Normally, it is not necessary to anchor a fixed dock except in areas where high waves may hit the dock. Posts driven into the ground will ensure its stability.
You should, however, moor your boat in such a way that it cannot rub or bump on the docks, thus protecting the structure and the boat.

> Since your dock is in shallow water, it will be easy for you to install blocks to allow for detached mooring from the dock (**A**).
> For more demanding conditions, you can add diagonal braces (**B**).
> Some will prefer the installation of a boat lift.

A



B

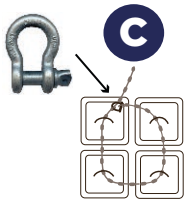


FLOATING DOCK

A floating dock system is required to have anchor blocks at the end of the dock, or approximately every 30 feet. When the dock is subjected to lateral pressures created by water, wind or boats, the blocks hold the dock in place. You should evaluate their positioning to avoid interfering with docking or swimming. Chain hooks must be installed at each anchorage point.

> To launch them into the water, concrete blocks will be deposited and bundled on the floating dock section. To protect the dock surface, place a cardboard or piece of wood on the dock before placing the blocks.
> The chain will then be attached to the blocks (**C**). Calculate the width of the dock plus the depth for each chain to create the necessary "**X**", but do not cut it right away.
> Once your floating dock section is over the first location you have determined, you will tilt the group of blocks into the water (**D**). Beware of chain movements that will quickly follow the blocks as they fall!
> Then hook this chain to the attachment in the opposite corner without tension.
> Cut the chain, keeping an extra 2 ft. to allow for adjustments.
> Repeat the steps on the opposite side and this time tighten the chain as much as possible.

C



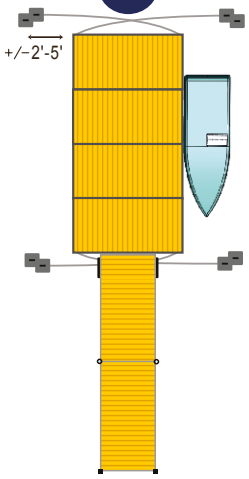
D

ANCHORING MATERIAL

Your local concrete products dealer will probably have heavy enough weights to serve as anchors or they can make them for you from unused concrete. Be sure to comply with municipal by-laws regarding the use of concrete at the bottom of the water. You may have to choose a different material. Your hardware dealer will provide you with the necessary chain.

> Different types of soil, such as clay, can affect the stability of your anchors, so be careful. Muddy soil will provide a good grip for anchoring.
> The chain used to connect the blocks to the dock should be made of galvanized steel, size 5/16" and grade 30 (regular). Choose galvanized shackles for underwater fastening. Avoid zinc-plated quick links for this use.
> Blocks should weigh about 125 lbs. each and be rather square (+/- 1' x 1' x 1') to avoid movement on the bottom of the water (filling a bucket with cement is not a good idea since it will roll on the bottom of the water). If you make your own blocks, make an attachment point by placing a piece of chain with a bolt or a knot at its end for a better grip in the concrete.
> Note that the concrete will lose about one third of its weight once underwater. This is why we recommend as much (below).

E



MINIMUM ANCHORAGE EXAMPLES IN CALM WATER AREAS

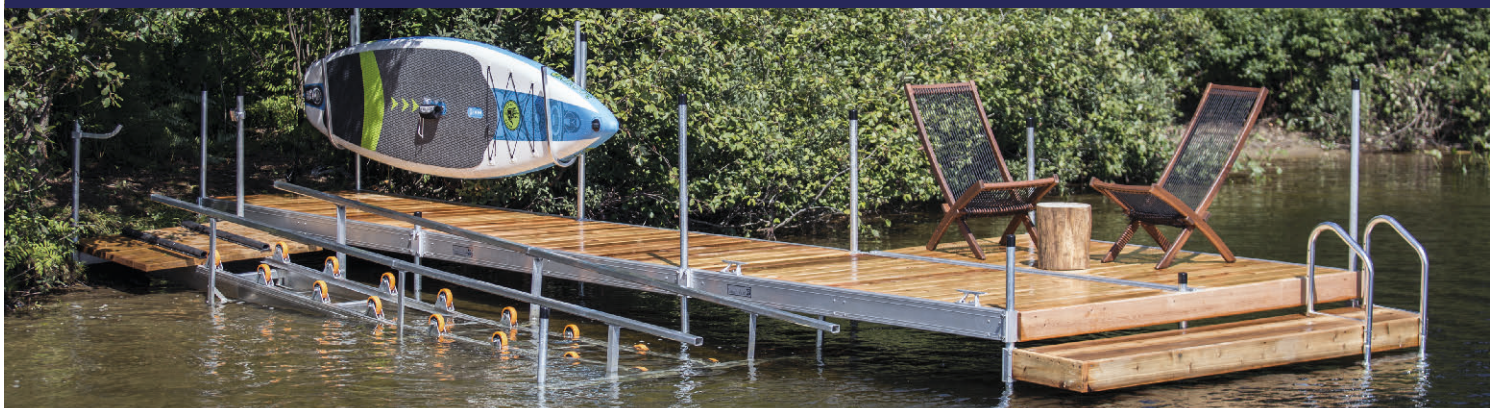
It's advisable to anchor the dock at the 4 corners of the section where the boats will be moored (**E**). If you plan to accommodate other boats during the season, estimate your needs accordingly.

> Small boats under 15' such as canoes, kayaks, rowboats or personal watercraft,
(maximum of 2 boats) at least 250 lbs. per chain, on each side;
> Pleasure craft less than 19' or approximately 2500 lbs,
(maximum of 1 boat) at least 375 lbs. per chain, on each side;
> Pleasure boat less than +/- 23' or +/- 4000 lbs. for water skiing or wakeboarding,
(maximum of 1 boat) at least 500 lbs. per chain, on each side;
> Pontoon with a canvas roof, (which can catch in the wind),
at least 650 lbs. per chain, on each side.

WARNING

These examples are intended to guide you as best as possible in planning your project. But some areas may require more anchors or a different method; we cannot list them all here. We cannot be held responsible for any incidents or damage that may occur as a result of using the techniques suggested in this document or on our website.

Discover a whole range of accessories and ramps on Multinautic.com



Suggestions of complementary products for your QPF-495™ Dock

Choice of dock ladders
> made of aluminum or steel
> straight or angled
> swinging or detachable
> load capacity of 250 or 400 lbs

Mooring Accessories
> Aluminum & PVC 30 in. adjustable Vertical Bumpers
> Aluminum Mooring Cleats with "T" Head Bolts
> PVC Bumpers for dock sides, dock corners, dock posts
> Nylon Dock Lines

Installation Accessories
> Diagonal Brace #22034 or 22035 (4 or 5 ft dock)
> Additional Posts (4, 6 or 8 ft.) and Base Plates for special configurations
> 24 in. Dock Wheels with galvanized steel Hubs

Complements for leisure and safety
> Kayak or SUP Storage Racks
> Low Deck for easy access to water, boards and kayaks
> Kayak Launcher for safe and easy onboarding
> Small boat and PWC Mooring Ramp Kits

SHOULD YOU ENCOUNTER ANY DIFFICULTIES WITH THIS PRODUCT, DO NOT RETURN IT TO THE STORE.
PLEASE CONTACT OUR CUSTOMER SERVICE AT 1-800-585-1237 TOLL-FREE

Limited Warranty

Multinautic® hereby warrants to the original consumer purchaser only that this product will be free, in normal use, of any defects in materials and workmanship for a period of one (1) year from the consumer's original date of purchase directly from Multinautic® or from a Multinautic® authorized reseller. At its sole option, Multinautic® will repair or replace the defective product and promptly return it to you. In order for this warranty to be valid, the consumer must, at the time the product is returned, provide proof of purchase in the form of the original purchase receipt directly from Multinautic® or from a Multinautic®-authorized reseller. If Multinautic® elects to replace the defective product, then Multinautic® reserves the right to replace the defective product with another product of the same model or a model of at least comparable quality and features in Multinautic®'s sole determination. A reimbursement cannot exceed the amount paid by customer and is limited to the replacement of the defective product.

If you believe this product is defective within the warranty period, call Multinautic® for a Return Authorisation Number (RAN), carefully repack the unit, insure it and return it with proof of purchase, postage prepaid, to Multinautic® at 2330, Jean-Adam, St-Sauveur, QC, Canada, J0R 1R2. Write the RAN on the shipping label. Any product sent without RAN will be refused and returned freight collect to sender.

This warranty is not transferable. This warranty does not apply in cases of abuse or misuse of the product, use contrary to Multinautic®'s instructions, an act of God, negligent use, purchase from a party other than a Multinautic® authorized reseller, unauthorized repair, or modification of the product.

ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED TO THE EXTENT PERMITTED UNDER APPLICABLE LAWS AND, TO THE EXTENT NOT PERMITTED, ARE HEREBY LIMITED TO THE DURATION AND TERMS OF THIS WARRANTY. MULTINAUTIC® ALSO HEREBY DISCLAIMS ALL LIABILITY FOR INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES. Some states or provinces do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state or province to province. This warranty does not restrict the rights of the consumer mandated under applicable laws. THIS WARRANTY SUPERSEDES ALL OTHER WARRANTIES THAT ARE ASSOCIATED WITH THIS PRODUCT.