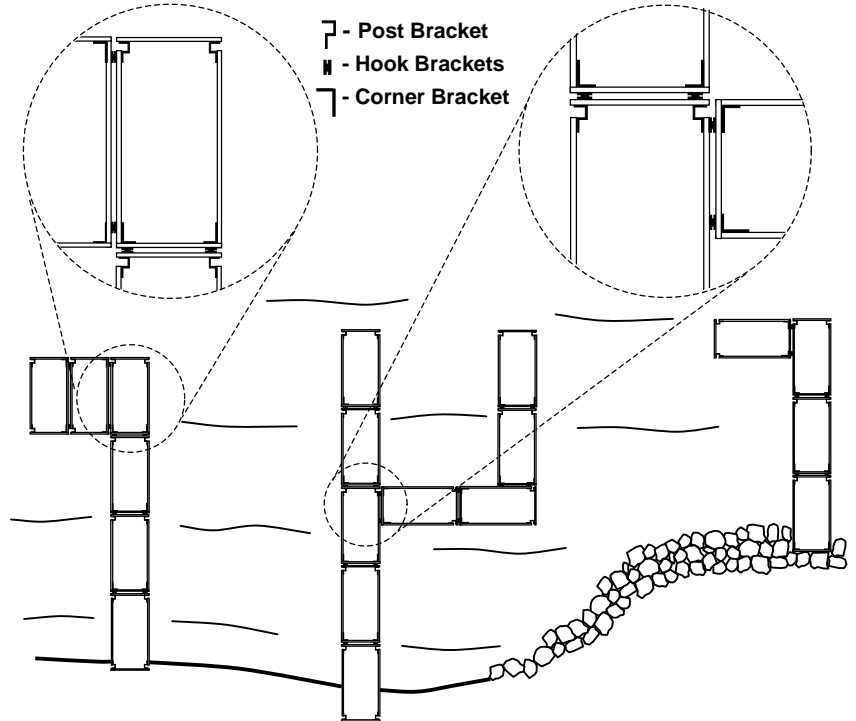
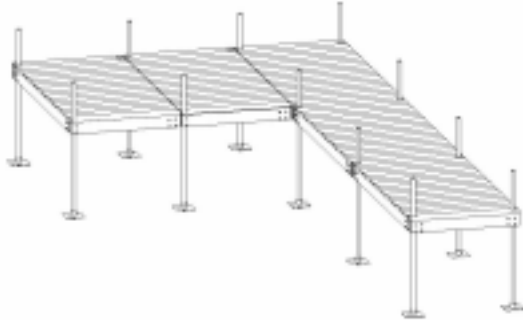


Jamix Dock Building Instructions

Thank you for selecting DockWare sectional dock hardware. DockWare is a unique dock bracket system. The dock support pipes are installed from the side of the frame, which makes installation and removal quick and easy. All hardware is recessed in the frame, which minimizes watercraft damage and injuries, and creates a clean nice looking dock. All dock frame corners are bolted with reinforcing hardware, which creates a strong frame. The same brackets are used for any dock configuration, which allows you to create your own dock design, and easily expand in the future.

Planning and Dock Layout

Planning is the most important part of constructing a dock or any project. The first step is to determine what functions you want to accomplish with your dock: a space for boat mooring/lift, a fishing spot, sunbathing etc. Layout possibilities are nearly limitless. Dock layout should be tailored to your unique shoreline. If the water depth drops off sharply a short dock is adequate, for shallow gradual depths a longer dock may be desired.



Material Selection

There are many material choices for building your dock. Wood is still the most common material for residential docks. For the frame 2x6 lumber is recommended for most applications. 5/4 x 6 material is recommended for wood decking. Cedar or treated lumber is commonly used. Most untreated pines, firs and spruces will not last long in the demanding dock application.

- *Western Red Cedar*

For dock frames western red cedar is perhaps the most common lumber used. Red cedar is naturally resistant to decay relative to pines and other softwoods. It is more resistant to warping, twisting and cupping compared with pressure treated wood. It is light with a density of about 20 lbs/ft³ or 1.1 lbs per foot for 2x6 material. If left untreated it will age to a silvery gray.

- *Pressure treated*

The most common dimensional pressure treated lumber sold in the US is southern yellow pine treated with chromated copper arsenate (CCA). The main draw for pressure treated lumber is it's low cost compared with cedar or redwood. It is also very resistant to decay. Pressure treated wood is more susceptible to warping and cracking relative to cedar. It is also almost twice as heavy as cedar. Avoid inhaling pressure treated wood dust or

smoke. A dusk mask should be used when working with treated wood and scraps should not be burned.

Weights of Common Dock Building Materials*

Material	Density lbs/ft ³	2x6 lbs/ft	5/4x6 lbs/ft
Western Red Cedar	20	1.1	.73
Pressure Treated Pine	37	2.0	1.4

*Nominal values listed, Actual values may vary due to moisture content lumber size, hardwood vs sapwood, age of tree etc.

Fasteners and Pipe

With DockWare all corner joints are bolted with hardware to form long lasting strong joints corner joints. 3/8-16UNC x 2-1/2" long carriage bolts with zinc plating or galvanized finish is recommended. For fastening the decking, screws are the best option with rib shank nails a second choice. Stainless steel is the most corrosion resistant but also expensive fastener choice. Many other coated steel fasteners will hold up well. The specific coatings are dependent on which type of wood/material you select to build the frame and decking. Consult with your local lumberyard or hardware store for decking fastener selection. 1-1/4" or 1-1/2" galvanized schedule 40 pipe is used to support the dock frame above the water. Pipe is available from most well drilling companies, steel outlets, and some home centers and marine dealers.

Other Considerations

Painting, Staining, or no surface treatment

A dock is a difficult environment for paint or stain. It is exposed to UV rays from the sun, rain, foot traffic, etc. A good stain applied every year or two will extend wood life and look great. Stain applied once and not maintained will not look so great over time. Another choice is to leave the wood age naturally. Wood will turn to a gray color over time and maintenance is not required every year or two.

Section Size

Docks built with DockWare may be built in many sizes. Sizing the length of each section is a trade off between individual section weight and minimizing the total number of sections to reach your desired dock length. A four-foot wide section allows enough room for two people to pass each other easily on the dock; however, it is about 14% heavier per unit of length than a 3-1/2 foot wide section. The tables below show approximate weights for various section sizes in western red cedar and green treated pine.

Weights of Dock Section Sizes – Western Red Cedar

Section Size - ft		Section Weight - lbs		
Width	Length	Frame	Decking	Total
3.5	8	37	41	78
4	8	39	46	85
3.5	10	44	51	95
4	10	46	58	102

Weights of Dock Section Sizes – Green Treated Pine

Section Size - ft		Section Weight - lbs		
Width	Length	Frame	Decking	Total
3.5	8	68	77	145
4	8	71	88	159
3.5	10	81	96	177
4	10	84	110	194

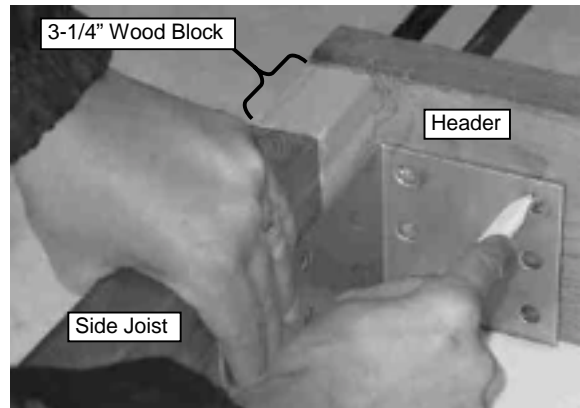
Tools Required

3/8" Drill with 3/8" Drill Bit, 1" drum sanding wheel and Bits for screws | Circular Saw or Chop Saw | Jigsaw | 1/4" hex key wrench | Hammer | Tape Measure | Socket wrench with 9/16" socket | 9/16" box end wrench | Pipe Cutter | Square | Pencil

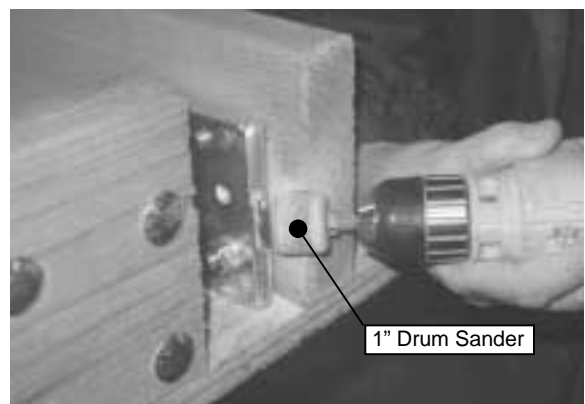
Building Instructions

- Cut lumber to length.
- Layout a dock section frame on a level surface. Shim open the two corners where the post brackets will be located using a 3-1/4" wood block between the header and side joists.

- Use the corner bracket to mark bolt hole locations in all four corners of the frame. The picture below shows marking for a corner where a post bracket is located. Note the 3-1/4" wood block. Use a straight edge to align side joist with end of header.



- Drill the bolt holes using a 3/8" drill bit. Note: When hardware is located on both sides of the bolt holes, such as for the hook bracket holes, it is important to drill perpendicular to the frame. A drill press or drill guide is useful.
- Install post, corner, and hook brackets to the frame with 3/8"x2-1/2" carriage bolts, nuts, and washers.
- Position the center joist in the middle of the section. Attach to each header with joist hangers and joist hanger nails.
- Make a groove on the post bracket header to allow clearance for the post bracket set screw using a drill with 1" diameter drum sander or jig saw.



- Screw decking boards to each end of the frame. Use two 2" screws into each joist.
- Space out all other decking boards with even gaps then screw to the frame with 2" screws.
- Cut 2 post clearance slots in the decking board over the post bracket as shown on decking top view drawing using a jig saw and/or hole saw.

Plan for 4x8 Dock Section
For 1-1/4" and 1-1/2" Pipe Brackets

Bill of Material for 4x8 section*			
	Item	Description	Qty
DockWare Section Kit	1	Jamix Post bracket	2
	2	Jamix Male hook bracket	2
	3	Jamix Female hook bracket	2
	4	Jamix Corner bracket	2
	5	Joist hanger – 2x6	2
	6	Joist hanger nails – galv.	20
DockWare Bolt Kit	7	Carriage Bolt 3/8-16 x 2 1/2"	32
	8	Nut 3/8-16	32
	9	Lock washer 3/8"	32
	10	Washer 3/8"	4
	11	Frame Joists - 2x6 x 8'	3*
	12	Frame Headers – 2x6 x 4'	2
	13	Decking - 5/4x6 x 4'	16*
	14	2" deck screws	~96*
	15	Support pipe	4-8'***
	16	Jamix foot pads	2

* Section Length and Width may be modified as desired.
** Water depth + about 3'

