

# INC. **4E**® FLOATING DOCK HARDWARE HOW TO GUIDE

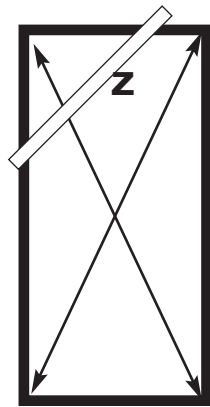
# USE BLUE LABELLED OR BLUE DOT ● COMPONENTS FOR FLOATING DOCK CONSTRUCTION

## HOW TO BUILD A 6' x 12' Floating Dock

### 1 Assemble main framework Drill holes for 93-122-F

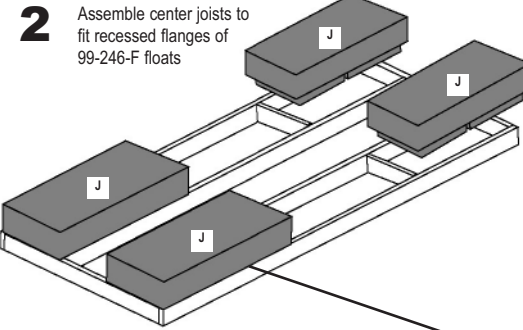
Description	QTY
A - Main dock frame: 2" x 8" x 144"	2
B - Center truss: 2" x 8" x 140 <sup>3/4</sup> "	1
C - End Cap: 2" x 8" x 69"	2
D - Inside Corner: 92-104-F	4
F - Backer Plate: 93-122-F	8
G - Joist Corner: 99-002-F	2
H - Washer Plate: 99-006-F	4
E - Carriage Bolt: 1/2" x 2 <sup>1/2</sup> "	40
V - Lock Washers: 1/2"	40
T - Nuts: 1/2"	40

Note: items E, V & T are all included in packages of 8 in Hardware Fastening Kit 85-100-F



### Squaring your Dock Structure

Lay the dock frame upside down on a flat surface in order to easily install floats. Check the squareness by measuring from corner to corner of the frame in an "X" pattern as shown. The measurement should be +/- 1/4" between each other. Lock the framework into square by temporarily securing a piece of lumber (Z) across one corner as shown below.

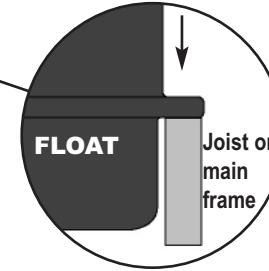


### 2 Assemble center joists to fit recessed flanges of 99-246-F floats

Description	QTY
J - Floats: 99-246-F	4
Float Fastener Kit: 85-125-F	3

For flush mount floats such as the Howell™ 400, 99-242-F, refer to Step 2a.

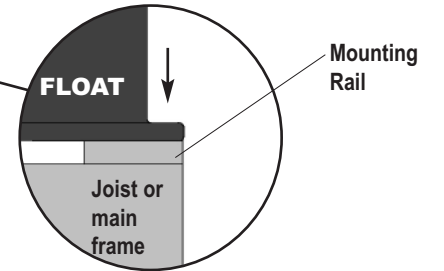
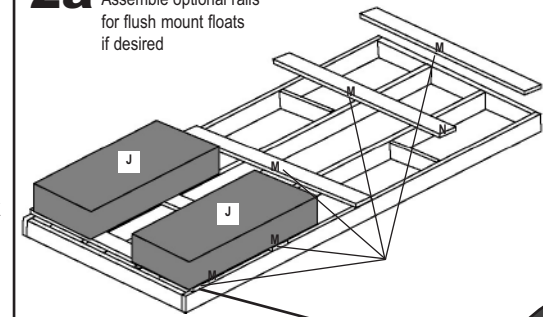
Lay floats into position on the dock framework and mark each mounting hole location. Drill 3/16" pilot holes at each location to be used.



### 2a Assemble optional rails for flush mount floats if desired

Description	QTY
J - 400 Float: 99-242-F	5
M - Optional float rails: 2" x 6" x 72"	7
N - Screws: #10 x 3"	80
Float Fastener Kit: 85-125-F	4

Lay floats into position on the mounting rails and mark each mounting hole location. Drill 3/16" pilot holes at each location to be used.



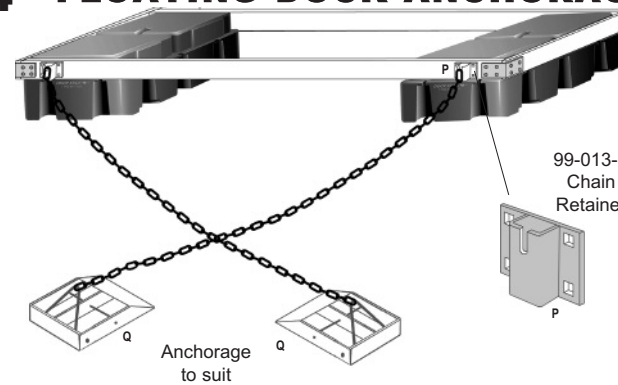
### 3 Assemble decking and connector hinges. (hinges if attaching to another dock structure or shore footing)

Description	QTY
O - Decking: 2" x 6" x 72"	26
L - Screws: #10 x 3"	156

NOTE: Decking lumber is milled to have one "cap" or "crown" surface which will allow water to flow away from the deck surface. When mounting the deck boards to the dock frame it is recommended to fasten the decking "cap" / "crown" up.

### 4 FLOATING DOCK ANCHORAGE

Description	QTY
P - Chain Retainer: 99-013-F	2
F - Washer Plate: 99-006-F	4
Galvanized chain: 5/16" x approx 48'	1
E - Hardware Fastener Kit: 85-100-F	1
Q - Anchorage: Min. 125lb ea.	2



### FLOTATION CAPACITY FORMULAE, REQUIRED # OF FLOATS

(Square Footage of Dock x 25\*) / Flotation Capacity per float = # of Floats required

Sample: (100ft<sup>2</sup> x 25) / 400 = 6.25 or 6 x Model 400 floats

\* based on an average required floatation of 25 lb. / sq. ft. of dock surface area.



## Dock Hardware and Fasteners you will need (referenced by item letter)



**92-104-F** Inside Corner. For lighter duty applications where an outside corner is not necessary.



**93-122-F** Backer Plate. Used to sandwich wood framing when another piece of hardware isn't used. prevents bolt loosening and pull-through.



**99-002-F** Joist Corner. Use to mount stringers with 99-006-F washer plates. Also use as a backer plate to prevent cleats from pulling out.



**99-006-F** Washer Plate.



**99-013-F** Chain Retainer. Holds chain up to 1/2" to secure the dock in position.



**Lag Bolts**



**Flat Washers**



**Carriage Bolts**



**Nuts**



**Lock Washers**



**Deck Screws**

8 pieces each included in Fastener Kit 85-125-F

8 pieces each included in Fastener Kit 85-100-F

**IMPORTANT:** DockEdge+ Inc. assumes no responsibility or liability for the accuracy or representation of the graphic illustrations shown in this hardware guide. These graphic illustrations are not intended to be architectural drawings, and are not to be substituted for engineered drawings. Each is intended as a guideline ONLY. DockEdge+ Inc. does not warrant the quantities and/ or bill of materials to be accurate in all uses and applications. Individual dock structures may vary by necessity, preference or design. It may be necessary to vary the amount of materials listed in this guide depending on dock size, material usage, necessity and/ or the severity of the conditions to which the dock structure is subjected to. All graphic illustrations are based on the use of conventional framework of 2" x 6" lumber and decking lumber. Freeboard may be adjusted by using 2"x8" or 2"x10" lumber. Substitutions in lumber and hardware placement may effect floatation.

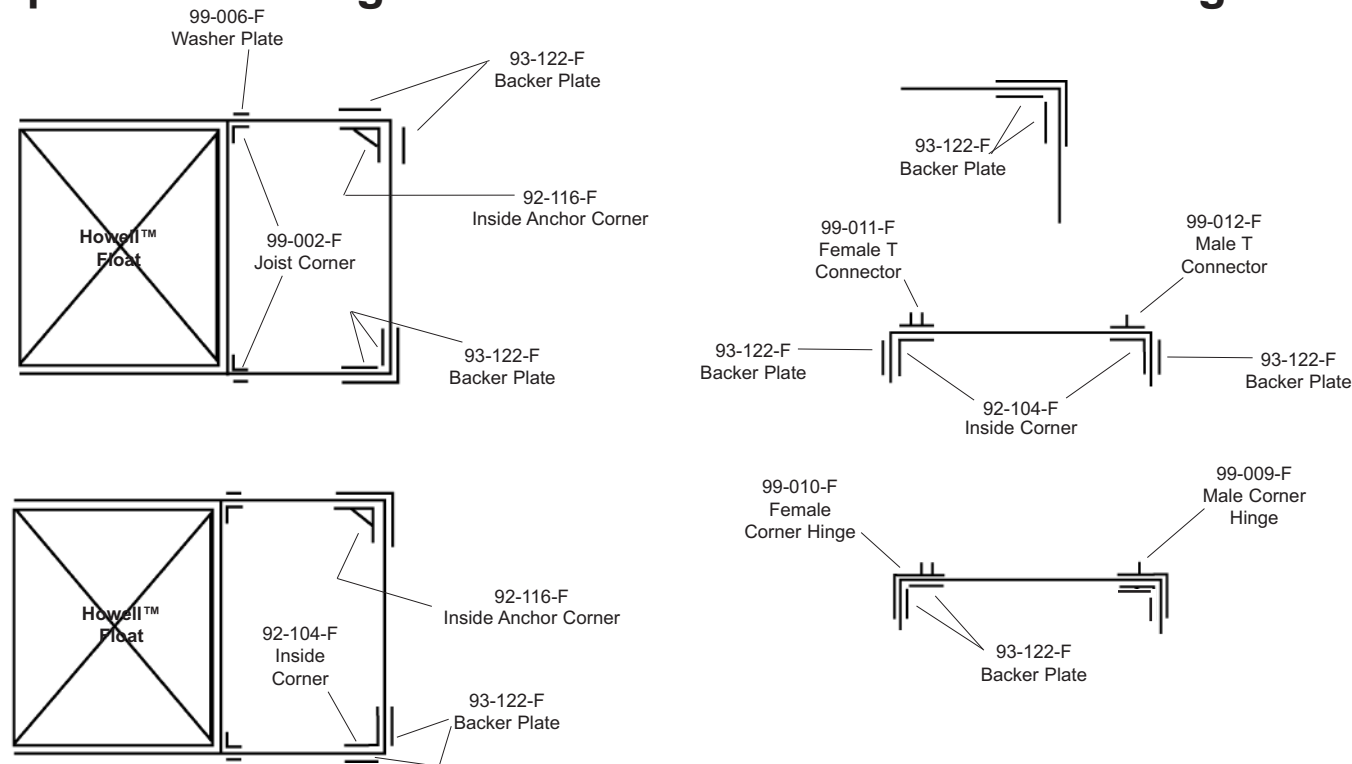
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## Tools Required for the average Dock Build

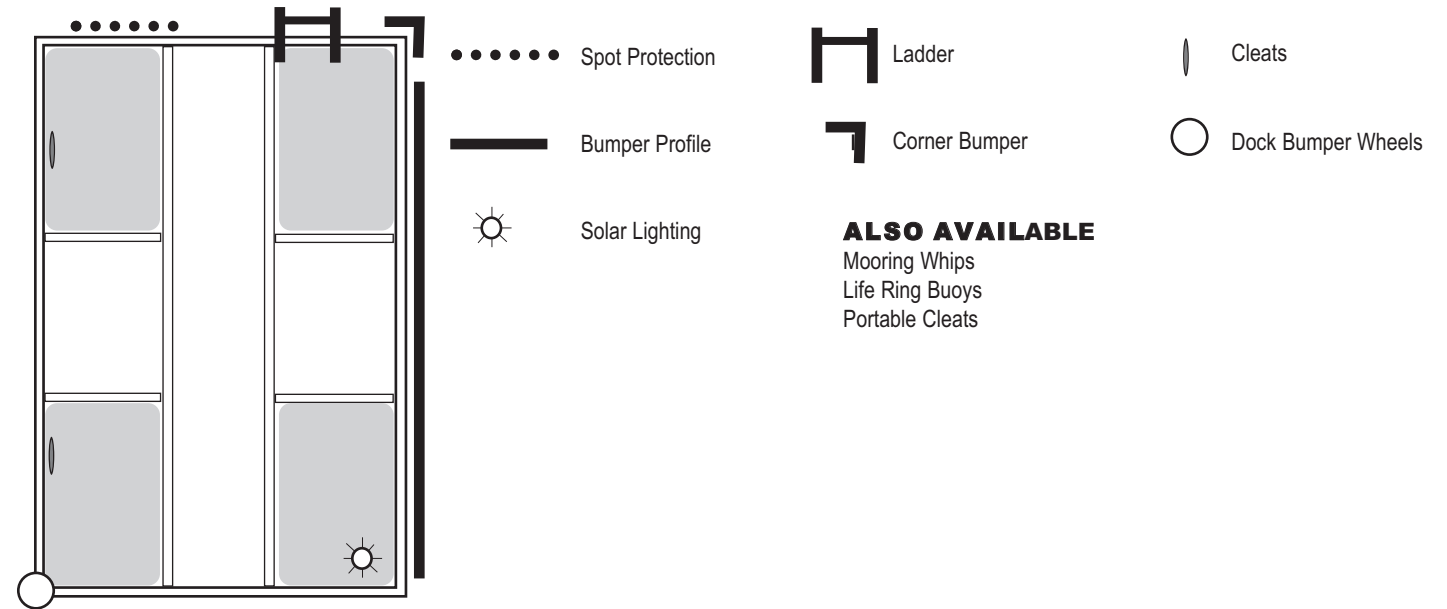
(excludes sizing/ cutting of structural wood members)

- Electric Drill
- 1/2" drill bit or auger
- 3/8" Socket wrench
- 9/16" socket
- 9/16" wrench
- #2 Robertson (square) bit drive for decking screws
- Pencil
- 3/16" drill bit

## Optional Floating Dock Hardware and Connector Hinge Placement



## Dock Accessories



### ALSO AVAILABLE

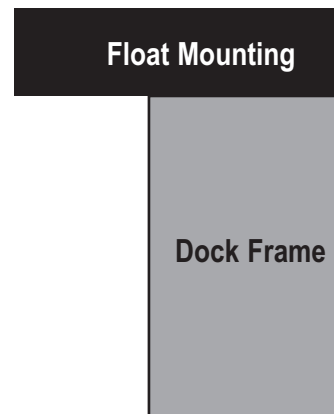
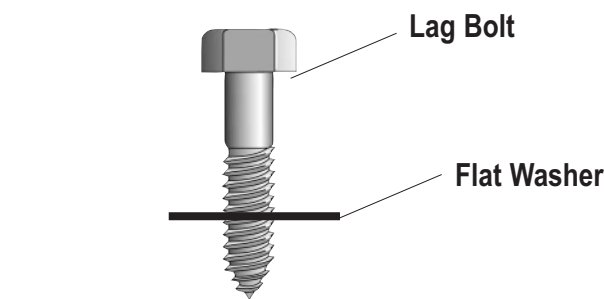
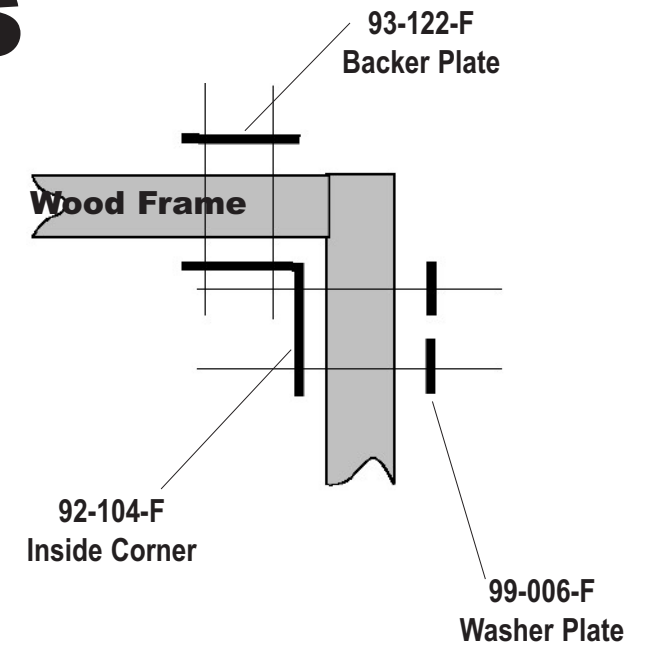
- Mooring Whips
- Life Ring Buoys
- Portable Cleats

## Hardware Requirements for other dock sizes

Description	Product #	Quantity Required				
		10 x 10 Dock	12 x 12 Dock	6 x 20 Dock	8 x 20 Dock	10 x 20 Dock
Joist Corner	99-002-F	24	24	56	56	82
Inside Corner	92-104-F	4	4	2	4	4
Washer Plate	99-006-F	16	16	24	24	32
Chain Retainer	99-013-F	2	2			
Backer Plate	93-122-F	8	8	8	6	6
Howell 550 Float*	99-246-F	4	6	6	8	10
Howell 400 Float (alternate)	99-242-F	6	8	8	10	12
Hardware Fastener Kit	85-100-F	15	15	17	21	28
<i>(8 pack Carriage Bolts, Lock Washers &amp; Nuts)</i>						
Float Fastener Kit	85-125-F	4	6	6	8	9
<i>(8 pack Lag Bolts &amp; Flat Washers)</i>						
Male Corner Hinge	99-009-F			1 or 2		
Female Corner Hinge	99-010-F			1 or 2		
Connector Pin	96-111-F			2	2	2
Male T Connector	99-012-F				1 or 2	1 or 2
Female T Connector	99-011-F				1 or 2	1 or 2

## IMPORTANT TIPS

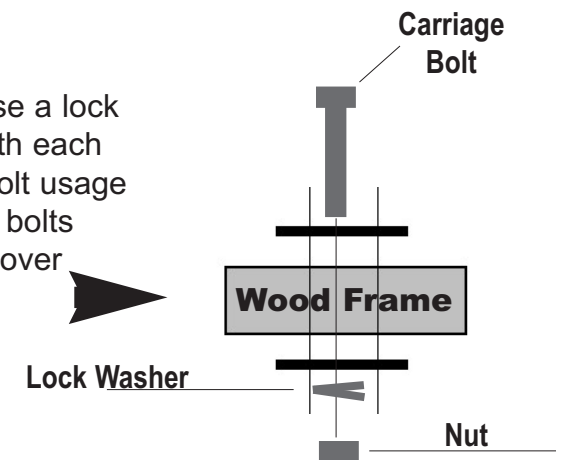
**Always** use washer plates (99-006-F), backer plate (93-122-F) or mating hardware components together. Framework of the dock structure should be sandwiched between hardware pieces at all joint locations as shown. (sample only, other configurations possible)



**Always** drill pilot holes for lag bolt installation.

**Always** use a large flat washer at each lag bolt installation as shown

**Always** use a lock washer with each carriage bolt usage to prevent bolts loosening over time.



**DOCK EDGE** <sup>INC.</sup>

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