FLOATING DOCK HARDWARE ASSEMBLY

DOCK SYSTEM BASICS

The Dock Edge hardware system is designed for use with 1-1/2" thick lumber (minimum width 6")
All hardware is mounted with carriage bolts
Always use backer plates or other piece of hardware when bolting through wood along with lock washers. This will eliminate the bolt pulling into or through the wood. This will allow the nuts to become loose and fall off
Proper chaining of a dock is critical. Use proper dock anchors (min250lbs per anchor) and cross chains. If there is no water fluctuation chains may be pulled taut by having a few people stand on the corner while you tighten chain.
Use a piano hinge or other arrangement for decking boards over anchor chain corners for easy access for adjustment

HARDWARE PLACEMENT GUIDE

All male and female dock-to-dock 3/8" connections are made with either ¾" bolts with lock nuts or ¾" connecting pin (32070)
For joining dock sections use any of the following: (35277), (35278), (35284) or (35286)
Outside female corner (35284) features two ½" welded tabs. Use with a male outside corner (35286)
Outside male corner features one ½" welded tab. Use with a female outside corner to connect docks end to end
Joint requires ¾" bolt set or connector pin (32070)
Use Outside corner ends (35275) at ends of fingers and docks. Ideal for swim floats and ski jump corners
Inside corner (35272) should be used with and outside corner (35275) or can be used with a backer on the outside (75878)
Use heavy duty angle (35273) for all cross supports
Female T connector (35278) has two welded ½" tabs. Use to bolt to the side of dock to attach fingers and ramps.
Male T connector (35277) has one welded ½" tab and it must be used with the female T connector (35278) to attach fingers and ramps. Use two washer plates (35279) with each angle.
Chain Retainer (35283) bolts to the side of the dock. Use weights and chains to hold

dock in place. Accommodates ¼", 3/8" and ½" chain.
Pipe holder (35281) mounts to the outside of the dock. Carriage bolt is required for attaching. Use 2" pipe to hold dock in place. Can also use (35274) on the inside
Anchor chain holder (35272) use to anchor dock in place of the chain retainer. Hides the chain and ensures no interference with chain as it runs under the dock
All floats are attached to dock using carriage bolts with washer. Fastened from below upwards through slot on floats into the stringer

HOW TO CALCULATE FLOATATION

Weight of wood and hardware = 5-7lbs per square foot (based on 2 x 6 cedar)
Weight of people and furniture = variable
Dock with floats should average sinking 20-30% into the water leaving 70-75% remaining floatation for "variable" before dock submerges
Dock square footage multiplied by 25 divided by floatation capacity = amount of floats required
Dock weight divided by floatation capacity = % dock (float) will sink with no people on it yet
Dock weight divided by floatation required x float height = # inches dock (float) will sink with no people on it yet

EXAMPLES:

Dock 4' x 10' sq. ft. @ 6 lbs per square foot = 240lbs
Variable – 4 people @ 150 lbs = 600lbs
FLOATATION REQUIRED = 840lbs

Thus 40 sq. ft. x 25 lbs per square foot divided by the capacity of the dock float (Howell 400) = 3

Three 400 floats @ 400lbs each flotation = 1200 lbs

Float will sink 20% or 3.42"
This design would be useful as a walkway for docking only – float height 12" and should be anchored for lateral stability

Dock 6' x 10' sq. ft. = 60 sq. ft. @ 6 lbs per sq. ft = 360lbs
Variable - 5 people @ 150 lbs. = 750lbs
FLOATATION REQUIRED = 1110lbs

Thus 60 sq. ft. x 25lbs per square foot divided by

the capacity of the dock float (Howell 550) = 3

Three Howell 550 floats @ 550lbs each = 1650 lbs flotation

Float will sink 22% or 5.2”
This design is a stable configuration useful for medium size docking and joining sections for combo walkway dock and can be built in longer lengths.

Dock 8’ x 10’ = 80 sq. ft. @ 6lbs per sq. ft. = 480lbs
Variable - 5 people @ 150lbs = 750lbs
FLOTATION REQUIRED = 1230lbs

Thus 80 sq. ft. x 25lbs per square foot divided by the capacity of the dock float (Howell 400) = 5

Five 400 floats @ 400lbs each = 2000lbs flotation

Float will sink 24% or 4.7”

This design would be useful for dock/floating dock accommodating more people and accessories.

4 x Howell @ 550lbs = 2200lbs floatation could be used to accommodate additional weight and raise dock for easier boat access, float height 16”

Dock 10’ x 12’ = 120 sq. ft. @ 6lbs per sq. ft. = 720lbs
Variable – 7 people @ 150lbs = 1050lbs
FLOATATION REQUIRED = 1770lbs

Thus 120 sq. ft. x 25lbs per square foot divided by the capacity of the dock float (Howell 550) = 5

Five Howell 550 floats @ 550lbs each = 2750lbs flotation

Float will sink 26% or 6.5”

This design would be useful for dock/floating patio application float height 16”

Adding 1 more 550 float = 3300lbs allowing for more people, chairs, accessories chairs, etc. and keeping dock high so boat wake, wave action does not splash over top.

Float will sink approx. 22% or 5.2”