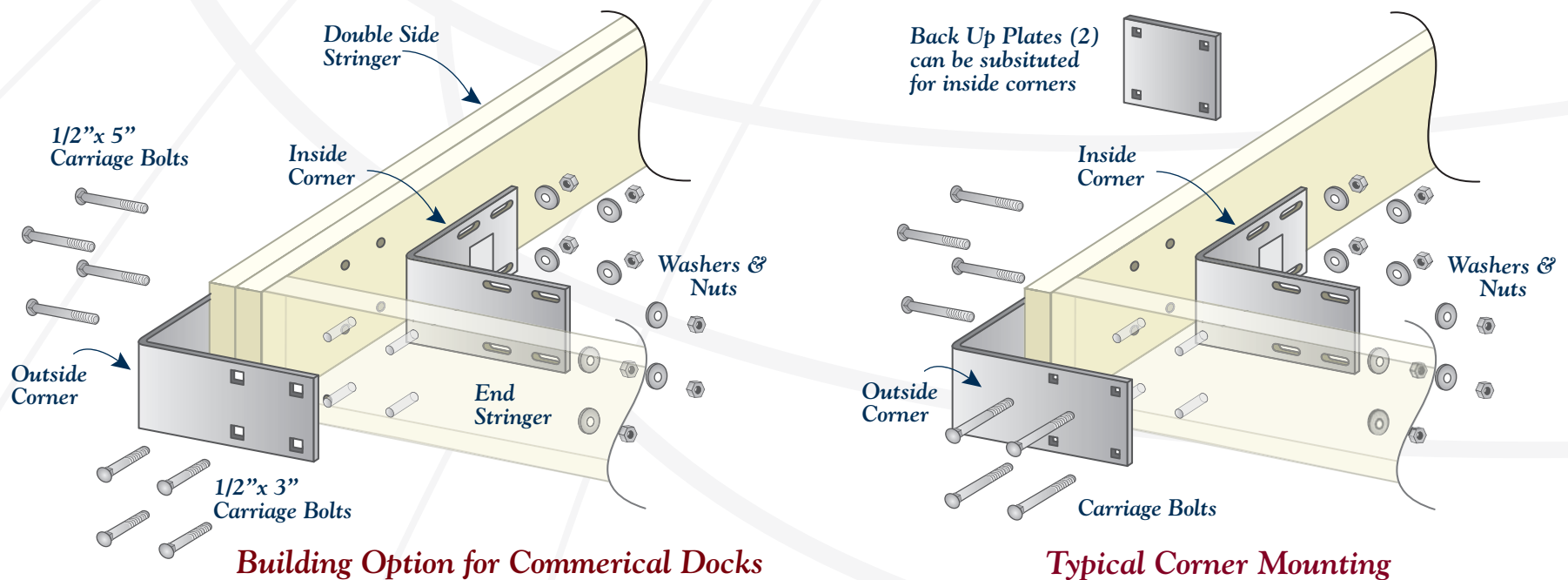


Tie Down Dock Hardware is designed for use with 1-1/2" thick lumber (minimum width 6"). Standard Grade hardware is mounted with 3/8" carriage bolts. Commercial Grade hardware is mounted with 1/2" carriage bolts. Male and female dock to dock connections are made with either 3/4" bolts with lock nuts or 3/4" connecting pins.

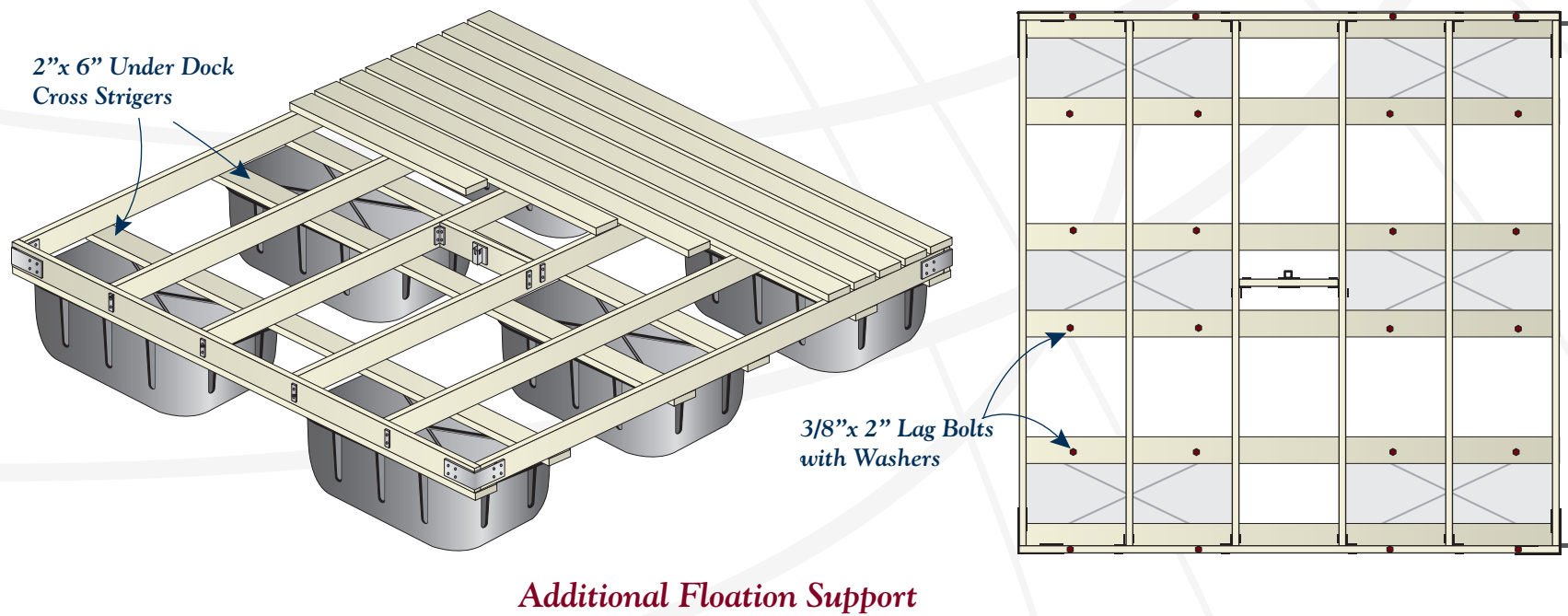
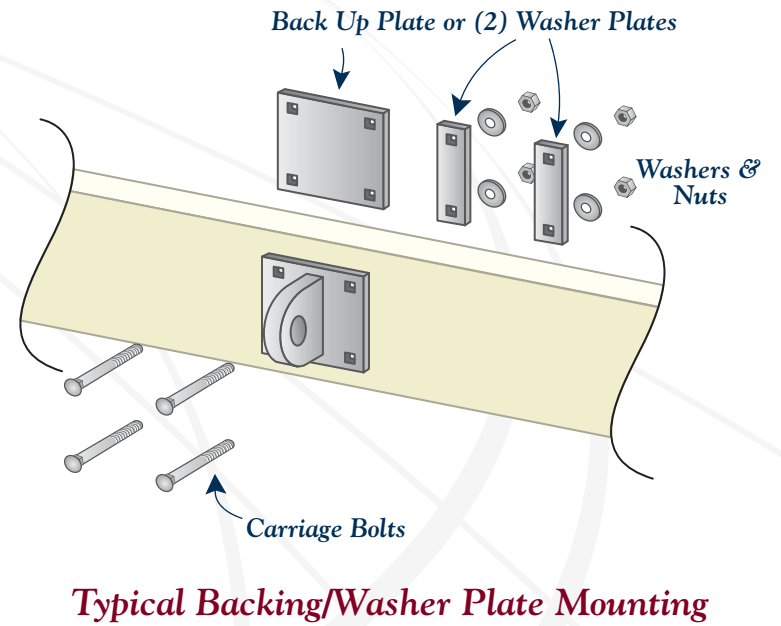
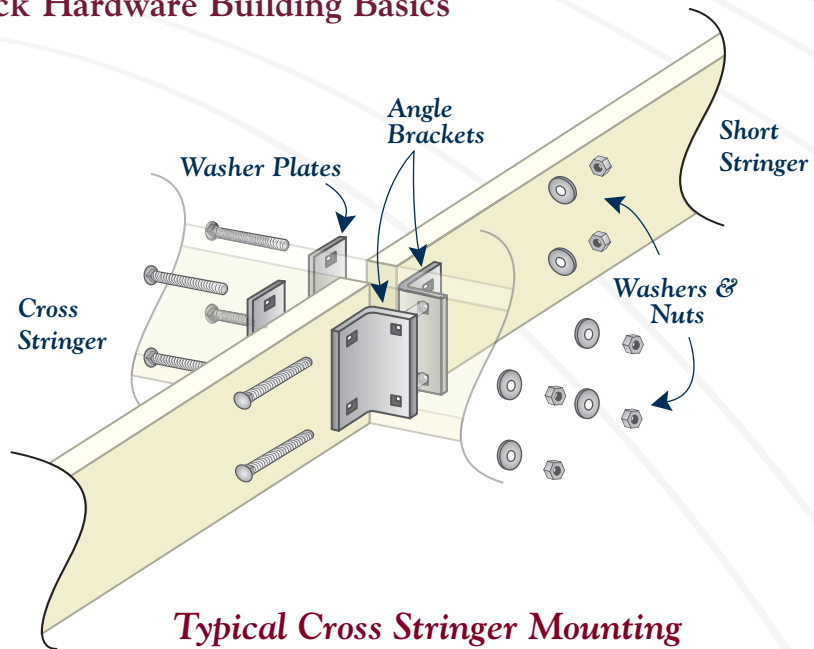
Design Notes:

Tie Down assumes no responsibility or liability for the completeness or accuracy of these drawings. Drawings are provided as a guideline only. Dimensions are approximate.

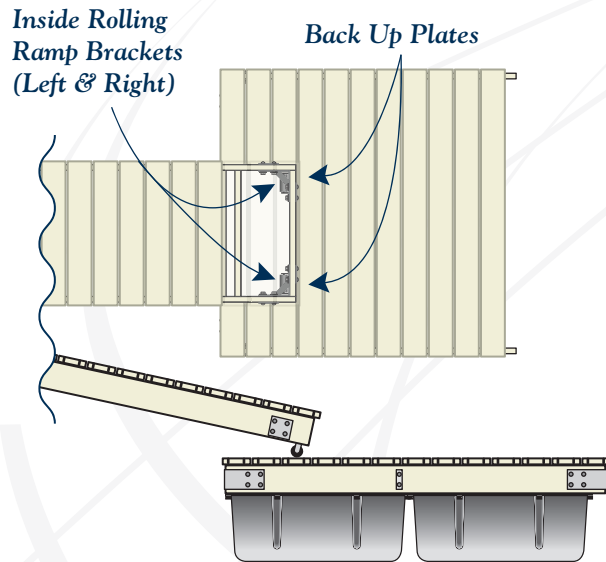
1. Variances do concur in lumber and component parts, so please check all measurements on dock hardware, float drums and lumber prior to drilling holes. Verify all dimensions length, width and thickness of lumber.
2. Commercial docks may be reinforced with double side stringers. If double side stringers are used, 3" must be added to the overall width of the dock including the deck boards. Carriage Bolt Sets must be altered accordingly.
3. As an option for side stringers, 2" x 10" and 2" x 12" lumber can be used. Should you use 3"x 8" or 3"x10" lumber as a substitute, measurements of cross and end stringers along with fasteners must be altered accordingly.
4. With additional framing for support 2x decking can be attached width ways. Using anything less than 2x lumber will also require additional support. Refer to main dock decking drawing for further details.
5. Refer to manufacturer's floatation chart for recommended number of floats to be used if using anything other than a 2'x4'x16" or 3'x4'x16".



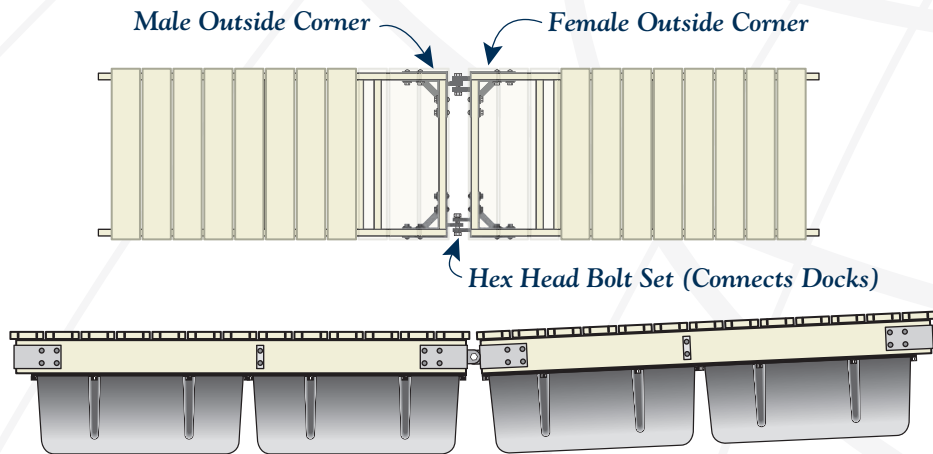
Dock Hardware Building Basics



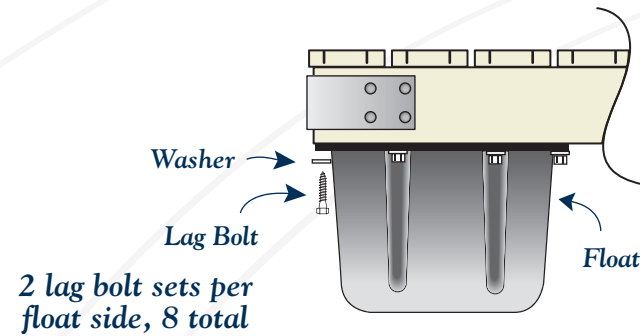
Dock Hardware Building Basics



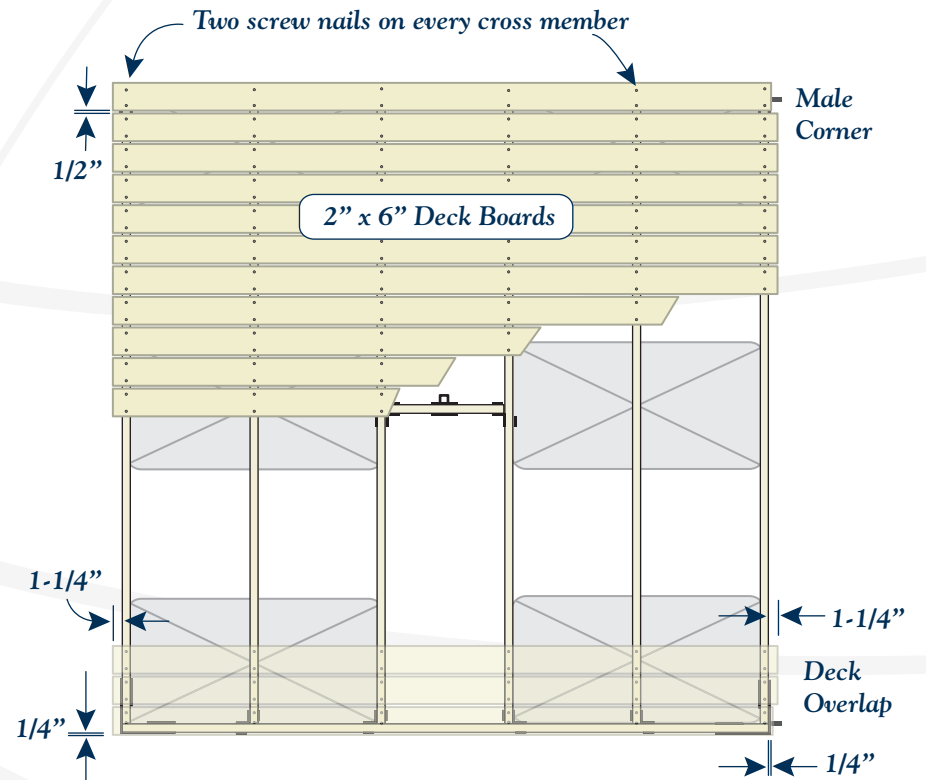
Typical Rolling Ramp Installation



Typical Dock To Dock Mounting Installation



Typical Float Mounting



Deck Boards Installation