RHADC GUIDELINE FOR TYING YOUR BOAT

In order to facilitate the safety of members boats in their berths and the marina itself the Dock Committee has come up with these guidelines for securing your boat. These are common universal guidelines and ones which we expect members to comply with by August 1st, 2019. The Dockmaster will be making rounds to make sure that these guidelines are followed. This is to every members benefit.

Dock Line Sizing

The diameter and length of dock lines will vary depending on the size of your boat. RHADC recommends that:

- a boat 17 feet or less in length use 3/8 inch dock lines,
- a boat 18 to 24 feet in length use 1/2 inch dock lines,
- a boat 25 to 30 feet use 5/8 inch dock lines,
- a boat 31 to 40 feet use 3/4 inch dock lines,
- a boat 41 to 50 feet use 3/4 inch – 1 inch dock lines.

If the boat, for its length, is abnormally heavy or has a much higher wind profile, then increasing the diameter to the next size is advisable. Choosing dock lines much larger than the above recommendations is not recommended. Much larger dock lines will not load the dock lines sufficiently to take advantage of their elasticity to dampen shock loads to the boat and docks.

For fixed dock lines it is recommended that you:

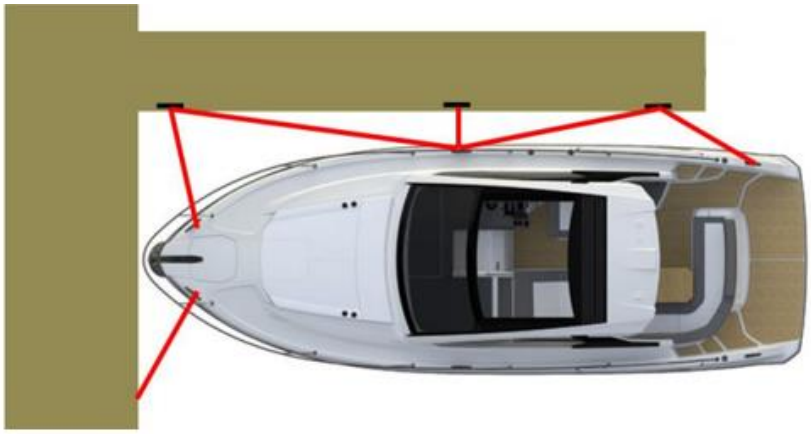
- use spring lines that are same length as your boat
- use bow and stern lines that are about 2/3 the length of your boat
- use a midship breast line that is 1/2 the length of your boat.

Local marine companies can and do custom lines for your boat for a fee, plus you can seek assistance from the Dockmaster.

Summary of Recommended Dock Line Arrangements

The following dock lines are recommended for all boats moored in berths at the Dinghy Club:

- two bow lines when docking bow-in, otherwise one bow line,
- two stern lines when docking stern-in and, where convenient, the twin stern lines should be crisscrossed if possible.
- forward and aft spring lines tied in the midship cleat arrangement when a midship cleat is available, otherwise tied from the boat's bow and stern cleats to a cleat or bull rail attachment point on the finger at or near the midpoint of the boat,
- a single midship breast line, attached to the finger as near as possible perpendicular to the longitudinal axis of the boat.



Dock Line Materials

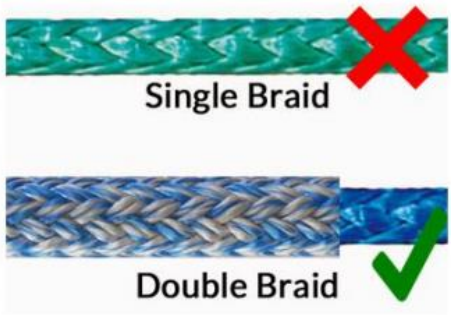
Dock lines should be made from a material that has elasticity that allows the line to stretch a small amount when put under load. A dock line that has no stretch will transmit shock forces to dock and finger cleats, and also to the boat's cleats. By stretching under load, the dock line will absorb some of the energy of the boat's movement.

Rope made from nylon is the only recommended dock line material. Nylon has high strength, elasticity, abrasion resistance, will not rot and has great resistance to the harmful effects of sunlight. Nylon dock lines most commonly will be either three-strand or double braided. Both are suitable for dock lines, but each has its advantages and disadvantages compared to the other. Rope made from polypropylene, particularly the popular yellow polypropylene rope, should not be used for dock lines. It has a relatively low breaking strength, is stiff and will loosen easily when tied around cleats, has low abrasion resistance and will deteriorate in sunlight. Rope engineered for use as running rigging (halyards, sheets, etc.) on sailboats is made to have very little, if any, stretch. This is the exact opposite of the elasticity that a good dock line should possess. It is common to see halyards and sheets, usually made of polyester blends, being repurposed as dock lines when they have reached the end of their life as running rigging. Do not use these ropes as dock lines. An old rope has seen lots of exposure to sunlight and heavy loads and has little inherent elasticity and therefore is not the correct choice to tie your precious boat to a dock.

Three strand and double braided nylon ropes are widely available and can be purchased with pre-spliced eyelets.

Three strand (or twisted) rope has many filaments of nylon twisted into a primary strand and then three of the primary strands are twisted into the final rope.

Double braided nylon rope has a nylon inner core and a nylon outer jacket with a smooth surface. Note that there is also single braided nylon rope. This rope has no core and is essentially a braided shell. **Single braid is not recommended for dock lines.**



Finally, inspect your dock lines on a regular basis and replace any line that looks damaged or chafed.