

How to Raft Up Safely and Securely

Background:

Coming alongside and tying up to another boat is a lot of fun but can be daunting until a skipper builds up confidence. This guide is intended to give skippers a plan so appropriate advance preparations can be made. Skippers who take the time to learn the correct rafting technique will find that multiple boat rafting opens up many enjoyable social occasions and also helps greatly with improving manoeuvring confidence in tight marina situations.

Equipment Needed:

The process is much easier and safer for people and property if the boat owner has the appropriate mooring equipment onboard and ready to go. Don't rely on the other boat to have the equipment as they may already have another boat alongside or be poorly equipped themselves.

As a minimum you will need the following items ready and in good condition;

- 4 x spring and stern lines – minimum length 5 metres
- 1 x longer bow line – minimum length 8 metres
- Two large ball or cylindrical fenders of no less than 30cm diameter. 40-50cm is ideal. These are in addition to the smaller fenders most boats carry on their bow rail. Have 2m hanging ropes permanently spliced to your fenders.

Mooring lines should never be thin, nylon craypot style ropes but rather soft and highly flexible mooring rope of 20mm min. diameter. These provide some 'give' and are easy for the receiving boat to catch and fix quickly to cleats.

The competent skipper always keeps their ropes readily available, furled carefully and clear of knots. This avoids chaos at critical moments.



HANDY TIP: *Black mooring lines look good and don't dirty as they age like white lines.*

HANDY TIP: *Ask the chandlery shop to splice a permanent loop in one end of all your mooring lines so you or the receiving boat can quickly drop them on a cleat. Make the shorter lines with a small soccer ball size loop while the longer bow line should have a much larger loop, which has the added benefit of making it easy for your crew to drop over and release from piles when coming alongside jetties and the like.*

Preparation:

Before coming alongside prepare the boat in clear water in advance of arriving at the raft up. This will also give you the chance to advise any crew what their specific duty is.

1. Remove all the ropes and fenders you will need from their storage location.
2. Place the large fenders in position forward and aft. The forward fender should be a metre or so aft from the point where the bow begins to sharpen (where the hull side is relatively vertical). The aft fender should be hung independently of and slightly forward of the aft cleat to avoid interference with the mooring lines.
3. Get the bow line ready for throwing. This means bringing one end under the bow rail and putting a loose wrap around your bow cleat. The remainder is looped and placed on the deck so it is easy and effective to throw.
4. Get the first spring line ready. This will be fixed around your aft cleat (this is where the permanent loop comes in handy) and run forward along the side deck to the approximate location of your midship cleat.
5. Get the stern and second spring lines ready and placed on the deck near the aft cleat.



HANDY TIP: *Learn how and teach your crew to secure fenders with a cow or clove hitch knot onto a rail. These are easy knots to learn and highly useful for items that must be secured quickly yet be easily removed or adjusted.*

Coming Alongside:

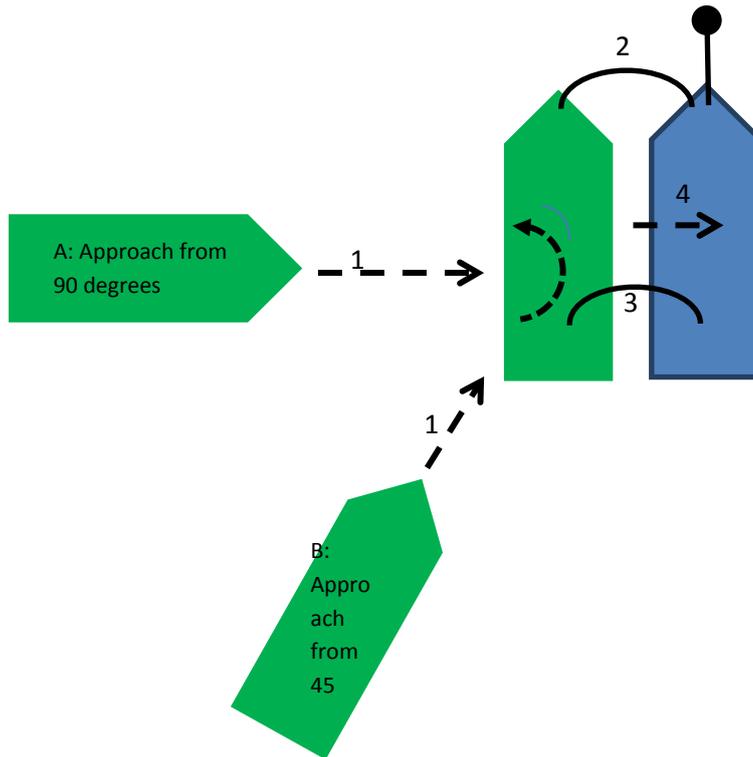
1. With your crew and fenders in position make sure the boat already moored or rafted is ready to receive you.
2. If the boat is on a mooring approach from behind on an approximate 45 degree angle aiming for the bow area of the waiting boat. Note any wind-induced swing and time your run accordingly. For Opening Day style rafting along the jetty approach from a squarer angle.
REMEMBER: You don't need to try and make contact only get your boat approximately parallel within about 2-4 metres of the other boat. As your skill improves this distance will naturally reduce.
3. This is where your crew are very important. The person holding the bow line needs to toss the looped rope over to the waiting person on the other boat as soon as they are confident of making the distance. Once the end-loop is placed on the waiting boat's bow cleat bring in any slack and fasten but do not over-tighten yet.
4. With the bow line secure the skipper can now hold position and bring in the stern a little if needed. Ideally the crew will be able to also throw over the stern line at this point.
5. Once there is a bow and stern line in place the skipper's job is almost done as the boat can then be hauled by rope alongside to minimise any potential damage that close manoeuvring can often cause. The skipper need merely to keep the positions of the two boats aligned with some forward thrust, especially if it is windy.
6. Now the preparation of the first spring line becomes very important. The loose end is passed over and fixed to the mid ship cleat of the waiting boat as soon as possible. Make fine adjustments so the transoms of both boats are held in line.
7. Now the final adjustment of the bow and stern lines can be made and last of all the second spring added.
8. The second spring is often overlooked but very critical to the boats sitting well and keeping separation. The second spring works in exactly the opposite direction of the first spring and should be drawn tight so both spring lines are under tension.
9. Finally, adjust the position and height of the fenders so they are in contact between both boats sitting under the gunnel of the lowest boat. Use your other fenders for added protection if needed.



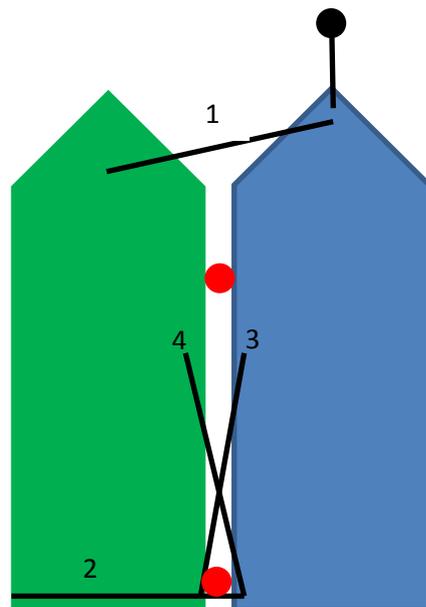
HANDY TIP: *Short mooring lines should be avoided at all times whether you are alongside the refuelling jetty or rafted up. This will typically occur at the transom where the two mooring points may only be 30cm apart. This is not enough line to provide 'give' in the case of a passing wave. In the worst case lines can break or tear cleats from the deck. In this situation skippers should run the stern line across the boat to the other cleat which provides the needed length and achieves the same mooring purpose.*

The Method:

Approach

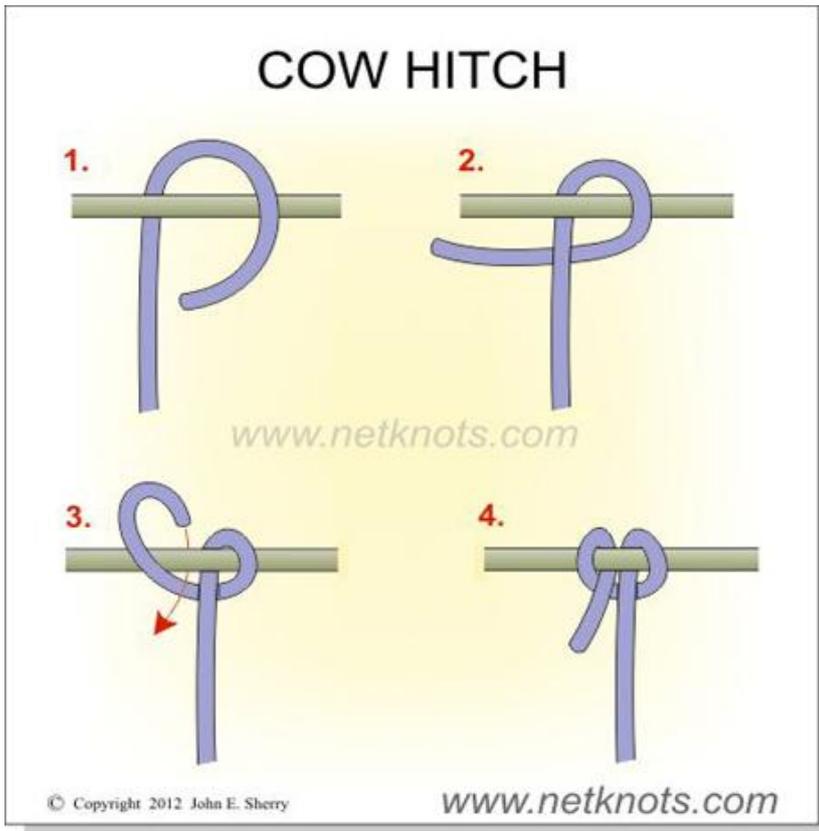


Tying Up

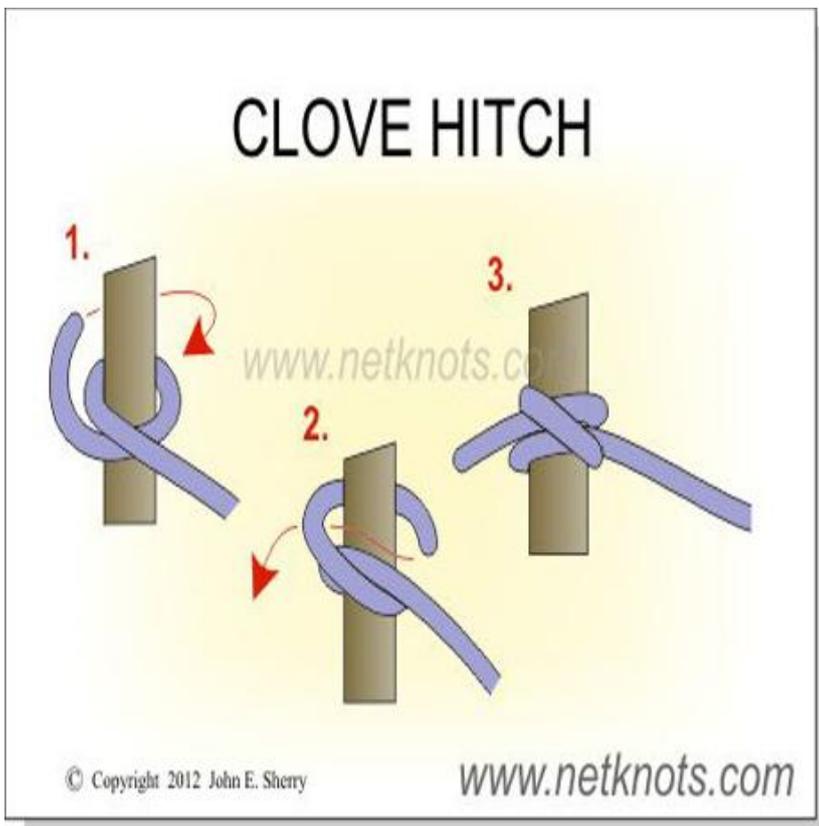


Knots for Hanging Fenders:

Cow Hitch



Clove Hitch



It's Fun:

