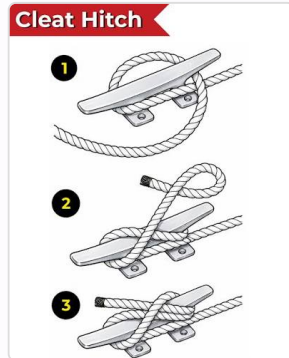


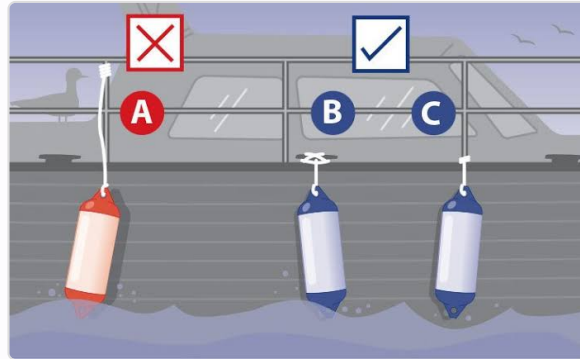
1. THE PERFECT CLEAT HITCH



A proper cleat hitch uses friction and proper turns, not excessive knotting.

1. **Full Turn Around Base:** Wrap the line completely around the cleat's base. This absorbs load and gives control.
2. **Figure-Eight:** Bring the line diagonally over the top of the cleat to the opposite horn, then back across.
3. **Locking Half Hitch:** Make a small loop, twist it into a half hitch, and drop it over one horn to lock it in place.
4. **Check Lead Angle:** Ensure the pull is fair and direct, without sharp twisting.

2. PROPER FENDER PLACEMENT



Fender lines protect the hull when the boat moves against pilings, seawalls, or neighboring boats.

- **Correct Height:** Position so the thickest part of the fender protects the actual contact zone between the boat and dock.
- **Attachment Points:** Attach to cleats, rails, or dedicated hooks where they hold position without allowing excessive wandering.
- **Line Sizing:** Use line strong enough to handle the fender securely, resist wear, and hold knots cleanly without slipping.

3. CRITICAL MISTAKES

Poor cleating and fender setups contribute directly to failure, lost fenders, and structural damage.

CLEAT HITCH FAILURES

- **Too Many Wraps:** Extra turns can jam the line and make it harder to release.
- **No Full Turn:** Makes the line harder to control under load.
- **Sloppy Finish:** A messy loop or tucked bitter end is not a proper locking half hitch.
- **Tying a Knot:** Turning a hitch into a bulky knot defeats the purpose of fast, secure line handling.

FENDER LINE FAILURES

- **Undersized Line:** Wears quickly, slips, and is difficult to secure.
- **Wrong Length:** Lines tied too short leave the lower hull exposed; tied too long, they drag in the water.
- **Poor Attachment:** Tying to a point that allows excessive shifting or sliding away from the impact area.
- **Chafe:** Movement against a hard edge eventually cuts the line.