



Dock Mounting Guide

LDR-FDL-5-N 5-Step Retractable Short Base Ladder Mounting Guide



Figure 1: LDR-FDL-5-N 5-step retractable ladder.

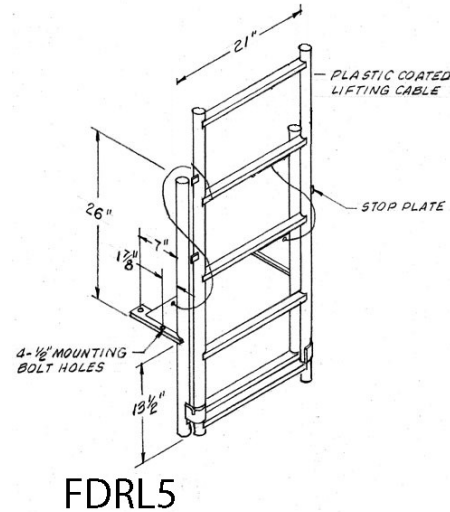


Figure 2: Reference drawing showing bracket, stop plate, lifting cable, and mounting holes.

Important Safety Note

This guide is a general mounting reference. The dock structure must be sound and capable of supporting the ladder, user weight, and repeated climbing force. For commercial marinas, public docks, or questionable dock framing, have the installation reviewed by a qualified dock builder, contractor, or engineer. **IMPORTANT:** Verify site conditions before installation.

1. Confirm the Mounting Location

Choose a dock edge where the ladder can slide down into the water and retract upward without obstruction. The steps should face outward toward the water, with the curved handrails positioned at the dock edge for safe entry and exit.

- Keep the ladder clear of boats, cleats, rub rail, dock floats, framing, seawalls, and other obstructions.
- Confirm there is enough water depth below the ladder for safe use when the ladder is lowered.
- Verify that the lifting cable and stop plate shown in Figure 2 can operate freely.

2. Verify the Dock Structure

The ladder should be mounted to a reinforced dock edge, structural frame member, or properly backed deck area. Do not rely on thin or unsupported decking boards alone.

- Use a backing plate, structural blocking, or dock framing support if the mounting area is not strong enough by itself.
- Through-bolting is recommended whenever the underside of the dock is accessible.
- Inspect wood or composite decking for rot, cracking, soft spots, or movement before drilling.

3. Reference Dimensions From the Drawing

Reference Item	Dimension / Note
Overall ladder width shown	Approx. 21 inches
Height from mounting base area shown	Approx. 26 inches
Short base depth shown	Approx. 13 1/2 inches
Mounting holes	Four 1/2-inch mounting bolt holes
Lifting feature	Plastic coated lifting cable
Travel control	Stop plate shown on ladder side

Always verify the actual ladder and dock layout before drilling. Manufacturing tolerances, dock material, and mounting conditions may vary.

4. Recommended Tools and Materials

- Drill and correctly sized drill bits
- Measuring tape and pencil or marker
- Level or straight edge
- Socket set or wrenches
- Marine-grade stainless steel bolts, flat washers, lock washers or lock nuts
- Backing plate or structural blocking, if needed
- Marine sealant for drilled holes in wood or composite dock surfaces

5. Mounting Steps

1. **Position the ladder at the dock edge.** Place the ladder so the steps face the water and the handrails line up with the dock edge. Make sure the unit is straight and centered in the intended location.
2. **Test the ladder movement before drilling.** Raise and lower the ladder to confirm it slides freely. Make sure the stop plate, cable, and side rails do not contact the dock, floats, or nearby equipment.
3. **Use the mounting base as a template.** Once positioned, mark all four mounting holes on the dock surface or structural mounting member. The drawing identifies these as four 1/2-inch mounting bolt holes.
4. **Drill the mounting holes.** Drill through the marked locations using the proper bit size for the selected hardware. If drilling into wood or composite material, seal the drilled holes with marine-grade sealant.
5. **Install backing support if required.** If the ladder is not mounted directly to strong framing, add a backing plate or structural blocking under the dock to spread the load and prevent loosening over time.
6. **Bolt the ladder in place.** Install bolts through the ladder mounting plate and dock. Use flat washers at the top and bottom, then secure with lock washers or lock nuts. Tighten evenly without crushing decking or deforming aluminum components.
7. **Complete the final operation test.** Lower and raise the ladder several times. Confirm the ladder is secure, slides properly, retracts properly, and does not rock or shift at the mounting base.

6. Final Safety Inspection

- Apply downward and side-to-side pressure to confirm the ladder is firmly attached.
- Confirm there is no movement at the mounting plate or dock connection.
- Recheck all fasteners after the first few uses and periodically throughout the season.
- Inspect the lifting cable, stop plate, steps, welds, and mounting hardware as part of routine dock maintenance.

Customer Installation Reminder

For best performance, mount the LDR-FDL-5-N to a reinforced dock edge using through-bolted stainless steel hardware. The ladder must be able to lower and retract freely, and the dock surface must be structurally sound before use.

