

# The Protector Ladder Installation and Operation Manual



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## Introduction

### What is the Protector Ladder?

The Protector Ladder is a fire escape ladder that can easily be installed outside your window. It is made out of rust-proof aluminum, which can be painted to match the trim of the house.

There are three models of the Protector Ladder as described in the following table:

Model No.	Ladder Range	Consists of...
ALP01-8	One Story (5' 6" to 8' 0")	Main Ladder (ALP01-8)
ALP01-16	Two Stories (9' 0" to 16' 0")	Main Ladder (ALP01-8) Extension (ALP01-EXT1)
ALP01-24	Three Stories (17' 0" to 24' 0")	Main Ladder (ALP01-8) 2 Extensions (ALP01-EXT1)

### Features of the Protector Ladder



- Made of high-grade aluminum.
- Is weather-resistant and strong.
- Can be easily folded or opened with the twist of a knob.
- Self-opening after twisting of release knob.
- Can be operated with a single arm.
- Quicker, safer and easier to use than rope or chain ladders.
- Can be painted to match the trim of the house.
- Can blend into any architectural style.
- Easy to install.
- Meets or exceeds the strength requirements of the National Fire Protection Association Standard 1931 for folding ladders.
- Can easily be opened by a child or elderly person.
- Always ready for your safe evacuation, but very inconspicuous.
- Available in one- and two-story models.
- Measures 15-1/2" when open, and a mere 5-1/4" when folded.
- Its burglar-resistant design prevents opening from the bottom.



# Installing the Protector Ladder

## Precautions to take while Installing the Protector Ladder

Two persons will be required for installation of the Protector Ladder.

Before installing the Protector Ladder—

- Select a window that is capable of being easily opened by all members of the family, especially the aged and children.
- The window should be wide enough to allow your family members to quickly and easily walk out during an emergency.
- The area around the window, especially on the inside, should be clear of any obstruction.
- Ensure that you protect your eyes by wearing safety glasses while installing the Protector Ladder.

## Items Included in the Protector Ladder Pack

The following is a list of items included in the Protector Ladder pack:

### ALP01-8 (Range 5'-6" to 8'-0"):

Name of the Item	Qty.
Ladder Section	1
¼" x 1 ½" SHLD Screw	2
#10 – 32 Nylon Lock Nut	2
Rubber Plug	2
Rung	1

### ALP01-16 (Range 9'-0" to 16'-0"):

Name of the Item	Qty.
Top Ladder Section	1
Ladder Extension Section	1
¼" x 1 ½" SHLD Screw	6
#10 – 32 Nylon Lock Nut	6
Rubber Plug	2
Rung	3
Splice Rails	2

**ALP01-24 (Range 17'-0" to 24'-0"):**

Name of the Item	Qty.
Top Ladder Section	1
Ladder Extension Section	2
¼" x 1 ½" SHLD Screw	10
#10 – 32 Nylon Lock Nut	10
Rubber Plug	2
Rung	5
Splice Rails	4

**Note:** Mounting hardware is not included in any of the packs. Contact a licensed contractor if you require assistance with the installation.

## Tools Required for Installation

The following table lists the tools needed for proper installation of the Protector Ladder:

Name of the Tool	Qty.
Slotted square blade screwdriver (flathead)	1
3/8" box wrench	1

## Assembling the Protector Ladder

The Protector Ladder needs to be assembled before it can be installed outside your window.

**To assemble the Protector Ladder:**

1. Lay the top assembly on a flat working surface. Turn the lock knob and fully open the assembly. If you have purchased an 8 foot ladder (model ALP01-8), proceed to step 3.
2. Position the splice rails as shown in *Figure 1* (see next page). Insert each splice rail into the top assembly until the holes in each splice rail are aligned. The openings on each splice rail must face inward towards each other and the holes must be aligned. Hole orientation must be the same as in *Figure 1*.
3. Rotate each rung into the channel opening and align the holes as shown in *Figure 2* (see next page). Ensure that the rungs are parallel to the factory installed rungs.

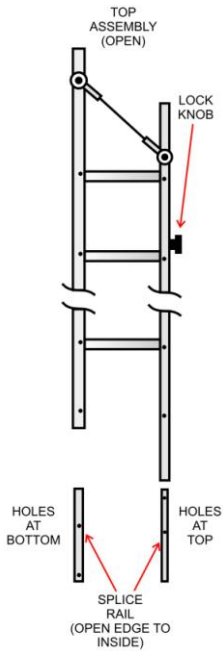


Figure 1.



4. Insert bolts and tighten nuts with a wrench as shown in *Figure 3*.
5. To install the base section, slide the rails over the previously installed splice rails and align the holes as shown in *Figure 4* (see next page). Be sure to align the mounting holes on opposite sides of the locking knob.
6. Rotate the rung into the channel opening and align the holes as shown in *Figure 2*. Ensure that the rungs are parallel to the factory installed rungs.
7. Insert the bolts and tighten all nuts with the wrench. See *Figure 3*.
8. Select the base assembly. Slide the channel rails splice previously installed until the holes are aligned. See *Figure 4*, on the next page.
9. Install the rung as in step 6.
10. If necessary, cut the ladder to fit with a hacksaw. **BE SURE TO MAKE A STRAIGHT CUT.** (For more details, see *How to Determine Where to Cut the Ladder.*)
11. Install the bottom rung as in step 3.

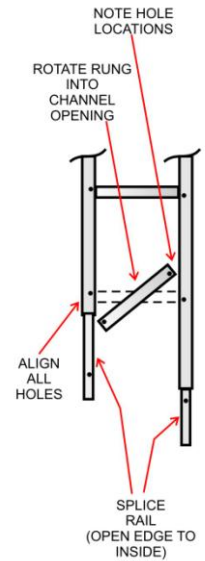


Figure 2.

12. Close and open the ladder assembly to check for smooth operation. Be sure that the locking mechanism is operating properly. Check the cable on the top assembly to ensure that it folds away from the top rung. Improper folding of the cable will prevent the ladder from closing.
13. Insert the end caps into the top assembly as shown in *Figure 5* (see next page). Lubricate the caps with a mixture of liquid soap and water, and drive in with a hammer.

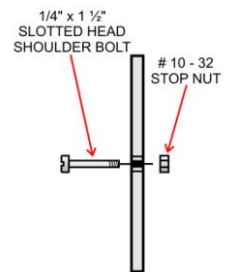
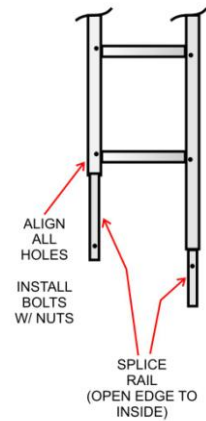
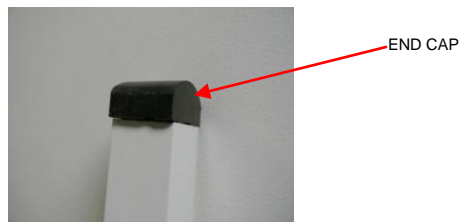


Figure 3.

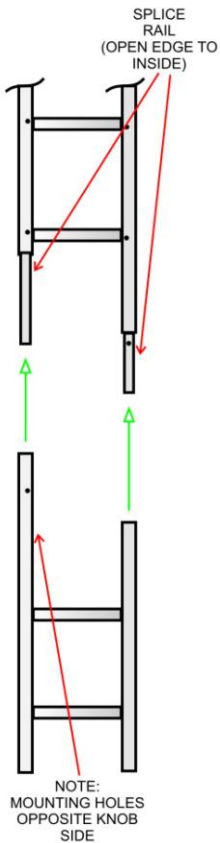


Figure 4.

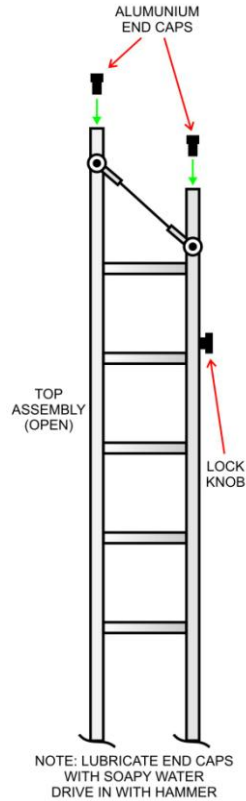


Figure 5.



Figure 6: Inside of the ladder

### How to Determine Where to Cut the Ladder

If you need to shorten the ladder, use the following steps to determine where to cut the ladder:

1. Measure the distance from the bottom of your window to the ground.
2. Find that distance in the following chart (or the range which includes your measurement)
3. Locate the cut number on the ladder and mark it. (See *Figure 7*, on the next page.)
4. Make the cut.



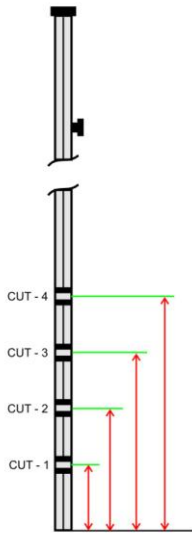


Figure 7.

Protector Model No.	Make Cut Here	Distance from bottom of window, or mount site, to ground
ALP01-8	NONE	5'-6" to 8'-0"
ALP01-16	NONE	13'-6" to 16'-0"
ALP01-16	CUT-1	12'-6" to 13'-5"
ALP01-16	CUT-2	11'-4" to 12'-5"
ALP01-16	CUT-3	10'-2" to 11'-3"
ALP01-16	CUT-4	9'-0" to 10'-1"

## Installing the Assembled Protector Ladder

### To install the assembled Protector Ladder:

**Note:** Carefully follow these steps to have a safe and secure installation. Due to the great variety of home construction styles in use today, these instructions can only serve as guidelines. Exact methods of installation for your home may vary in order to meet local building codes and the construction materials used on your residence. Contact a licensed contractor if you require assist with this installation.

**CAUTION:** Aluminum conducts electricity. Keep the ladder away from power lines or any other source of electrical current.

1. Install the Protector Ladder in a location that is easily accessible in case of an emergency, such as near a window, balcony, roof or any other convenient, accessible location. Ensure that the exit is unobstructed and usable so you can reach the Protector Ladder easily. Also ensure there are no obstructions to prevent the ladder from opening. For example, if a window is selected as the exit site, the window should be checked to ensure it is not painted shut or non-functional in any other manner.
2. Mount the Protector Ladder with the inside rail against the house. The release knob must be located between 12 and 24 inches above the window sill or exit point. Additionally, the bottom of the ladder must be 12 inches above the ground. It is important to securely attach the Protector Ladder securely to the side of your house or building so that it remains attached when in use. Hardware used to attach the ladder to the structure must be of at least 5/16" plated steel construction. One fastener should be used per slotted-hole on the inside ladder rail. When the ladder is open, the outside leg must NOT be obstructed or make contact with the ground.

Take care to ensure the ladder is securely installed into the reinforcing members of the structure.

**Note:** If this unit is to be used from a balcony or roof, the ladder release knob must be 36 to 48 inches above the balcony floor or roof top to allow for safe access onto the ladder.

3. After installing the ladder, you need to test it to ensure that it has been installed securely and will carry the desired load during its use. Open the Protector Ladder and attach a rope to the outside rail, just above the top-most rung. Attach a calibrated spring scale to the free end of the rope. Walk 8 feet away from the ladder with the rope and spring scale, then pull with a force of 75 pounds, as indicated on the spring scale. Then, walk back to the ladder, take up slack in the rope and re-position spring scale, quickly pull straight down until 100 pounds are indicated on the spring scale.

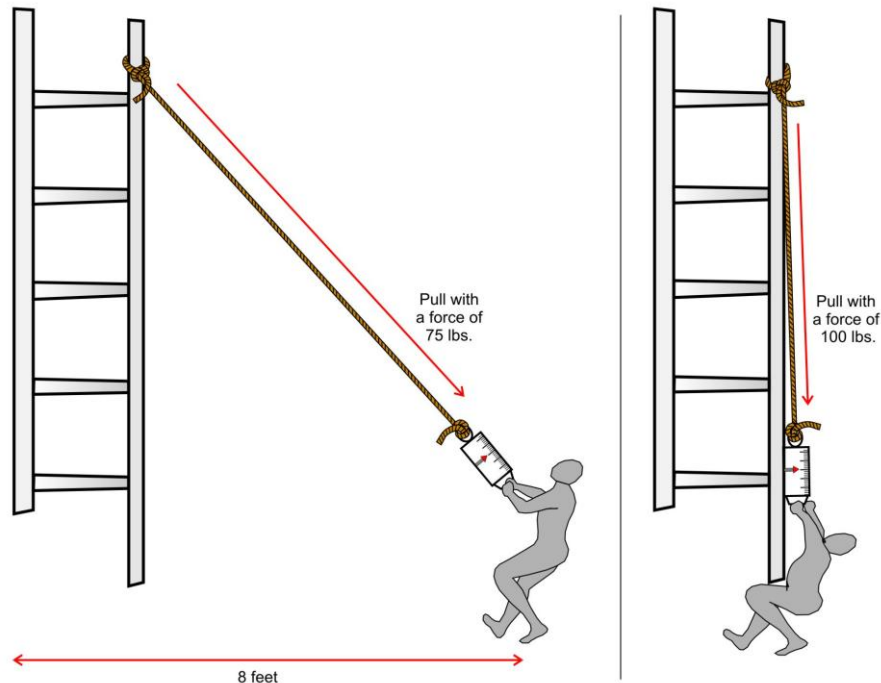


Figure 8: Testing the installation.

**Note:** Should you have any question or concerns regarding the installation of your Protector Ladder, you should contact a competent professional for advice, such as a licensed contractor, an engineer, etc.

## Using the Protector Fire Escape Ladder



- Do not overload the ladder.
- Open the window and push the release knob, to unlatch the rail. To open the ladder, pull the knob away from the wall till the ladder opens fully and locks in place.
- Carefully climb out of the window onto the window sill.
- Facing the ladder, place one foot on the rung closest to it. Reach out and firmly grab the rails or the rung at your eye level with both hands. When you have a firm grip, place your other foot on the rung as well, and pull yourself out of the window.
- Carefully climb down the ladder, moving one foot at a time, as follows: First, move your right foot down to the lower rung and move your right hand down. Then, move your left foot down and bring down your left hand.

**Note:** Whenever you move your feet, make sure that you grip the ladder tightly with both hands.

## Precautions while using the Protector Ladder

- Keep the area around the window, especially on the inside, clear of any obstruction.
- Make sure that the base of the ladder is always free from snow or ice.
- Do not overload the ladder.
- While climbing down, remember to hold on firmly to the ladder with both hands.

## Maintenance

- Keep the area around the window, especially on the inside, clear of any obstruction.
- Make sure that the base of the ladder is free from snow or ice.
- Every 4-6 months, check for damaged or missing parts. Open and close the ladder a couple of times, to ensure that it is in proper working order.
- If any part of the ladder is damaged, or if any parts are missing, contact the Aluminum Ladder Company for spares. It is not advisable to use parts purchased from others.

Your new Protector Ladder may be painted after installation. However, the following precautions must be followed:

- Paint the ladder in the closed position.
- Avoid getting paint on any part of the release knob, spring, or labeling.
- After painting, open the ladder and let the paint dry. Once dry, close the ladder and let it stand unopened for 48 hours.
- Open the ladder after 48 hours to ensure the paint does not bind the unit.

Check your Protector Ladder annually as follows:

1. Open and close the ladder a couple of times, to ensure smooth operation.
2. Spray a silicone lubricant on all steel parts.

**Warning:** Do not lubricate any white nylon parts.

3. Repeat the load test as described in Step 3 of the Installation Instructions. (See *Installing the Assembled Protector Ladder* for more details.)

## Exclusive Lifetime Limited Warranty

Calico Ladder Company products are to be free from defect in materials and workmanship, exclusive of corrosion, for the life of the product. The manufacturer's liability under this warranty shall be limited to the repair or replacement of any defective work or material FOB Calico Ladder Company's shop, and Calico Ladder Company shall be liable for no other damage or loss. The buyer's sole and exclusive remedy against Calico Ladder Company for any warranty claim concerning material or workmanship shall be for the repair or replacement of the parts or products.

No other remedy (including, but not limited to, incidental or consequential damages for loss of profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available to the buyer. After written approval by Calico Ladder Company, the part or product must be returned prepaid to Calico Ladder Company, Florence, SC. **The provisions of this warranty shall not apply to any Calico Ladder product which has been subject to misuse, negligence, alteration, accident or which has been repaired by someone other than the manufacturer.** There are no warranties or remedies for the breach thereof which extend beyond the description on the face hereof.

Please contact Calico Ladder Co. with any questions or concerns you may have.

Sincerely,

Calico Ladder Company  
1430 W Darlington St.  
Florence, SC 29501