CEILING MOUNTED FOLDING ATTIC LADDERS

INSTALLATION INSTRUCTIONS

WARNING

Before you start installing your new Louisville Ceiling Mounted Folding Aluminum Attic Ladder, you must read and understand the following:

1. **Installation requires two people.**

2. **Do NOT open folding aluminum attic ladder until it is securely installed in the ceiling.**

3. **Check the ceiling height to make sure the ladder length is correct.** If the ladder is too short, return it to the point of purchase for an exchange. Under no circumstance is any folding attic ladder to be used when the ceiling–to-floor measurement exceeds the maximum ceiling height as indicated for the Ceiling Mounted Folding Aluminum Attic Ladder your are installing (See “Maximum Ceiling Height” column in Table 2 on Page 4)

4. This folding aluminium attic ladder is completely assembled and is ready for installation. **Do not disassemble it to install.**

5. The Hydroneumatic Cylinders (gas springs) are under pressure to ensure that the door will close tight. Use extreme caution when adjusting, checking or using this folding attic ladder. Never try to adjust or remove the Hydroneumatic Cylinders (gas springs) when the folding attic ladder is in the open position.

6. Prior to installation, check all nuts, bolts, and screws for proper tightness. Re-check these periodically after initial installation.

7. Make sure there is no wiring or piping that the saw or drill can come in contact with during installation.

8. Opening or standing on the folding aluminum attic ladder’s climbing sections prior to properly fastening to ceiling joists could cause serious bodily injury.

9. If the home has roof trusses, do not cut the ceiling joists without consulting an engineer for approval.

10. Before installation, read all the instruction labels on the folding attic ladder.

11. Improper installation of this folding aluminum attic ladder could put undue stress on its components and could result in failure and serious bodily injury.

12. Follow the “Adjusting Attic Ladder Height” instructions on the Critical Step Detail Page (see Page 9) for proper adjustable height instructions.

13. Do NOT use deck or sheetrock screws to install folding aluminum attic ladder.

Included with your Folding Aluminum Attic Ladder

Figure 1

ALUMINUM ELITE SERIES
AS229GS
AS259GS
AA229GS
AA259GS

No.	Item	Qty.
1	36” Pull Cord with T-Handle	1
2	Supporting Straps	4
3	Shim (4” x 6”)	1
4	Installation Bilingual Booklet	1
5	Roofing Nails – ⅞”	8
6	Nails – 16d	16
7	¾” Bolts	4
8	¼” Lock Nuts	4
9	¼” Washers	5
10	Aluminum Adjustable Shoe	2

Table 1

For Residential Use Only

INSTALLATION INSTRUCTIONS
FOR ALUMINUM MODELS (ELITE SERIES)

READ INSTRUCTIONS AND WARNINGS COMPLETELY BEFORE STARTING
IMPORTANT: Do not open folding attic ladder until instructed to in step number 9.

PEOPLE, TOOLS AND MATERIAL NEEDED:
- Two (2) people are required
- Stepladder
- Hammer
- Adjustable Wrench
- Tape Measure
- Hack Saw (for aluminum models)
- Drill
- Nails and/or ¼" dia. Lag screws
- Braces (same length and width of the joists)
- **Do NOT use deck or sheetrock screws to install folding attic ladder**

Model	Rough Opening	Actual Frame Dimensions	Fits Ceiling Heights "A"		Landing Space "B"	Swing Clearance "C"
			MIN	MAX		
AS229GS	22 ½" x 54"	21 ⅝" x 53 ½"	7' 9"	8' 9"	60 ⅝"	71"
AS259GS	25 ½" x 54"	24 ⅝" x 53 ½"	7' 9"	8' 9"	60 ⅝"	71"
AA229GS	22 ½" x 54"	21 ⅝" x 53 ½"	7' 9"	10'	69 5/16"	79"
AA259GS	25 ½" x 54"	24 ⅝" x 53 ½"	7' 9"	10'	69 5/16"	79"

Table 2

FOLDING ATTIC LADDER LOCATION:
Allow ample room for the swing clearance and the landing space of the folding aluminum attic ladder when it is opened (See Figure 2 and Table 2). Locate the folding aluminum attic ladder rough opening so that when you enter the storage area, you will have adequate head clearance.

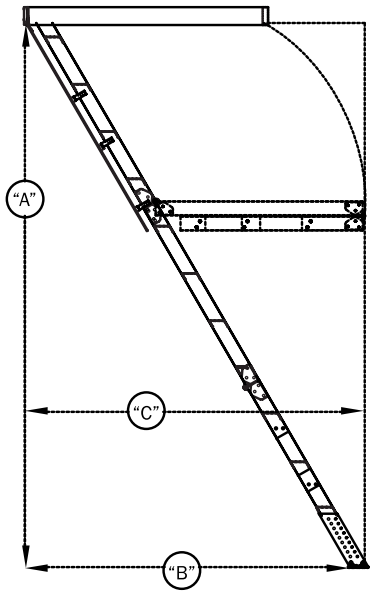

Figure 2

INSTALLATION INSTRUCTIONS FOR CEILING MOUNTED FOLDING ATTIC LADDER

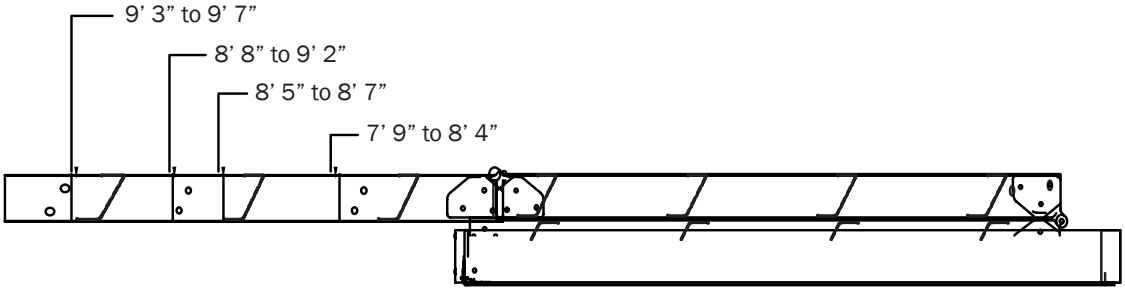

Figure 3

1. Open the cardboard box and remove the folding aluminium attic ladder.

2. For models AS229GS and AS259GS skip to Step 6.

3. For models AA229GS & AA259GS, unfold the top section as shown in Figure 3.

4. Double check your ceiling height and cut the section at the appropriate pre-marked cutting line for your ceiling height.

5. Fold the section back to its original position.

6. Make a rough opening in the ceiling, and frame to size as shown in Table 2.
   - If the folding aluminum attic ladder is wider than the spacing between ceiling joists, you should consult a structural engineer before installing, since cutting into a ceiling joist could weaken the structural integrity of your ceiling.

7. If you are cutting the ceiling joist, brace the area below the joist to be cut with heavy timbers to prevent this area of the ceiling from sagging (Figure 4). To maintain the structural integrity of the ceiling, the frame, two headers and a stringer (as shown in Figure 5) should be constructed of two-inch lumber and nailed securely to the ceiling joists.

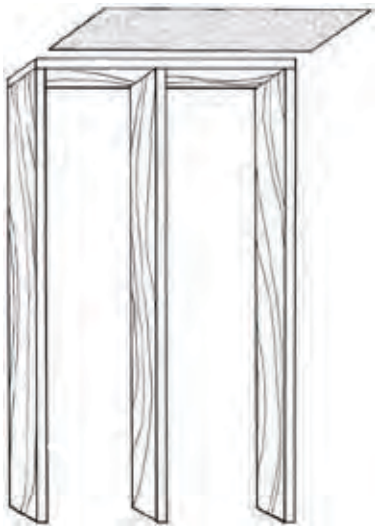

Figure 4

8. Install metal E-Z hang straps to the folding aluminum attic ladder (See Figure 6), prior to lifting folding aluminum attic ladder into rough opening.

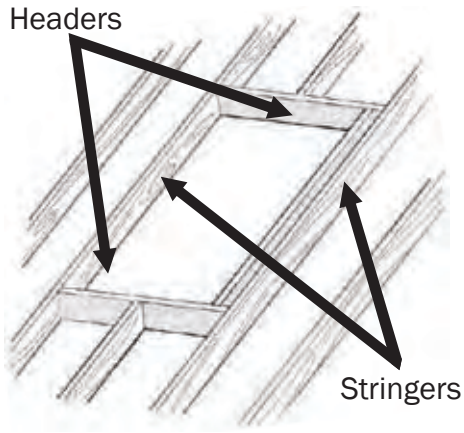

Figure 5

TEMPORARY SUPPORT STRAP INSTALLATION

Provided are four (4) E-Z Hang temporary support straps for installing this folding attic ladder.

Follow instructions below to install straps.

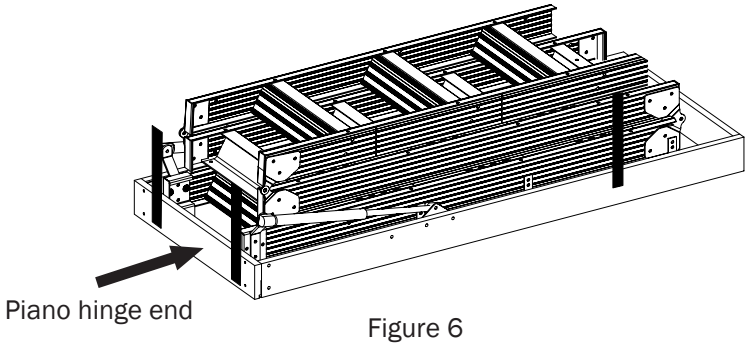

Figure 6

A. Place the folding aluminum attic ladder on the floor with the door opening on your right-hand side.

B. It is recommended to drill pilot holes to keep from splitting the frame boards. Using the 7/8" roofing nails and straps provided, attach one strap using two (2) of the roofing nails enclosed, on the outside of the folding aluminum attic ladder frame at the extreme right hand corner near the door stop blocks.

C. Attach the second strap outside the first strap on the far outside frame. (See Figure 6)

D. The third and fourth straps should be positioned on the piano hinge frame end on each corner opposite the door opening. (See Figure 6).

9. Position one person in the attic and position one person in the room below (the room the aluminum attic ladder will unfold into).

- The person in the room below will need to raise the folding aluminum attic ladder into the rough opening and position the folding aluminum attic ladder's door flush with the ceiling surface.

- When a stepladder is used, make sure that the user's weight and that of the folding aluminum attic ladder plus any tools does not exceed the load capacity of the stepladder (see notice labels on stepladder for safety information and load capacity).

- The person in the attic should then bend the metal "E-Z Hang" strapping at the four corners of the folding attic ladder over the adjoining ceiling joists and nail through the metal strapping to temporarily suspend the folding attic ladder.

- This is only for temporary support. DO NOT STAND on the climbing sections of the folding aluminum attic ladder while installing.

- CAREFULLY open the folding attic ladder door, but DO NOT unfold the climbing sections. While standing on the stepladder, center and square the folding aluminium attic ladder in the rough opening using shims (not provided).

10. Plywood shim provided with this unit is for final squaring only.

- If the space between the rough opening and the folding aluminum attic ladder frame exceeds a quarter of an inch of space, a piece of plywood or some other spacing material should be placed along the full length of the unit.

- Check to be sure that the folding aluminum attic ladder door is flush with the ceiling before final nailing.

- Be certain to install nails or ¼" diameter lag screws in the holes provided in the hardware pivot plates and in each corner next to the corner bracket as shown in Figure 7. Drill pilot holes to keep ladder frame from splitting.

- Once the folding aluminum attic ladder is positioned as desired, final nailing should be done through the folding aluminum attic ladder frame (see Figure 7). Always drill pilot holes to keep from splitting the frame boards.

11. Double check the instructions to make sure that the folding aluminum attic ladder is properly installed prior to use.

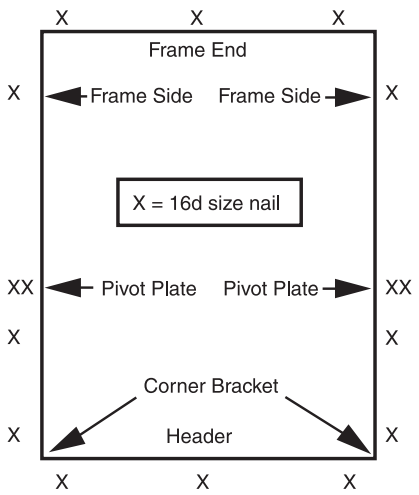

Figure 7

THE HYDRONEUMATIC CYLINDERS (GAS SPRINGS) ARE UNDER PRESSURE. USE EXTREME CAUTION WHEN ADJUSTING, CHECKING, OR USING.

12. For models AS229GS & AS259GS skip to CRITICAL STEP DETAIL PAGE.

13. Open the attic ladder, unfold the sections so the ladder looks like Figure 8.

14. Slide the adjustable shoe onto the bottom rail. Align the holes in the adjustable shoe with the closest set of holes in the side rails so that the shoes are flat on the ground and there are no gaps between the sections. See Figure 9.

15. For ceiling heights of 8'-5", 8'-6", 8-7", 9'-5", 9'-6" & 9'-7" drilling the mounting holes is necessary. Using a ¼" drill bit and using the adjustable shoe as a template drill the two holes that are the most centered in the overlap with the adjustable shoe and the side rail. Make sure there are no gaps between any two sections and the shoe is flat on the ground.

16. Attach the adjustable shoes using (2) ¼" bolts, washers and locknuts per side.

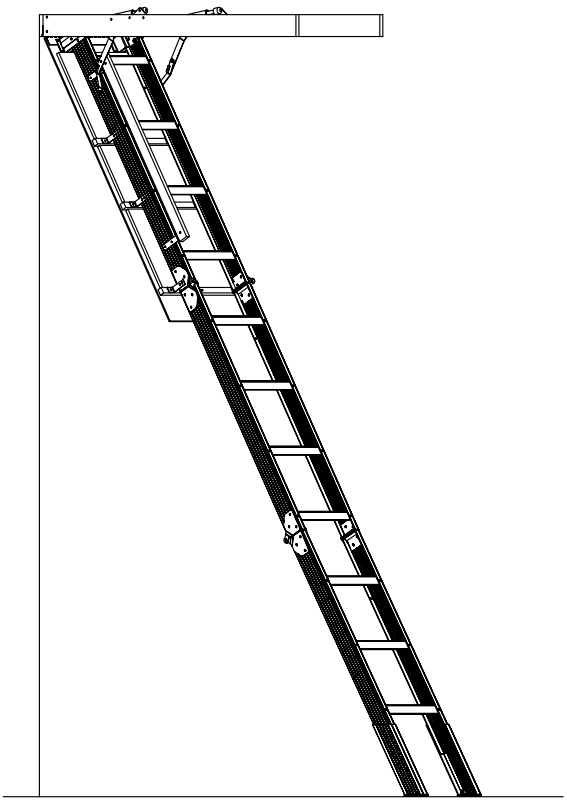

Figure 8

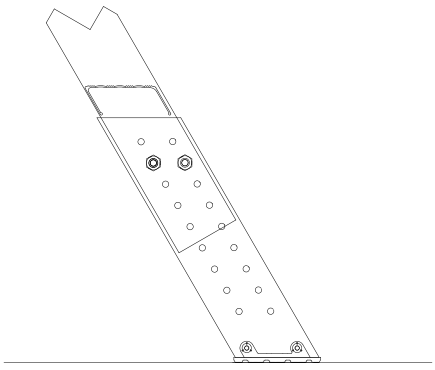

Figure 9

Critical Step Detail Page

(Models AS229GS & AS259GS)
Your safety is dependent upon following these instructions

ADJUSTING FOLDING ALUMINUM ATTIC LADDER TO CEILING HEIGHT

- Make sure you open the folding aluminum attic ladder door completely so that the force of the Hydroneumatic Cylinder will not try to close the folding aluminum attic adder door (see Figure 10).

- With the bottom section folded back out of the way press down on the climbing section to insure that the braces are fully extended and the Hydroneumatic Cylinder is compressed.

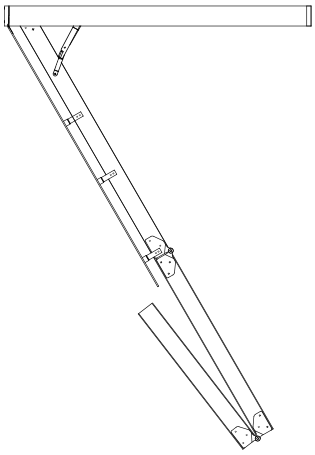

Figure 10

- With a straight edge mark the floor where the bottom section will be positioned once the ladder is cut off.

- Measure the distance from the bottom of the middle section for both “A” & “B” lengths.

- Subtract 1⅜” from these dimensions and record in the box (See Table 3).

- Measure and mark your “A” & “B” dimensions on the bottom section. This will give you where to cut the bottom section.

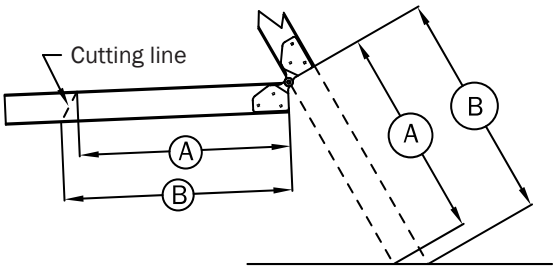

Figure 11

	Left Rail	Right Rail
“A” minus 1⅜”		
“B” minus 1⅜”		

Table 3

- Slide the adjustable shoe onto the bottom rail. Drilling the mounting holes is necessary.

17. Using a ¼” drill bit and using the adjustable shoe as a template drill the two holes that are the most centered in the overlap with the adjustable shoe and the side rail. Make sure there are no gaps between any two sections (See Figure 12).

18. Attach the adjustable shoes using (2) ¼” bolts, washers and locknuts per side.

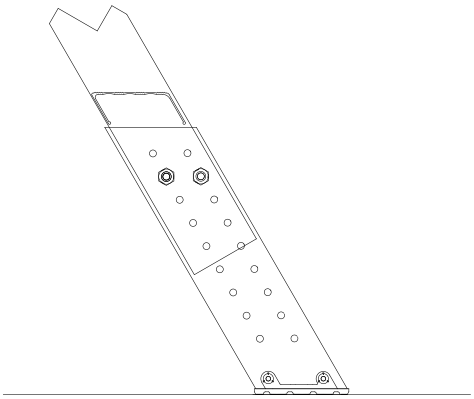

Figure 12

Check the length after installing the adjustable shoes over aluminum ladder rails.

- No gaps between sections and both feet flat on the floor should be the result (See Figure 13).

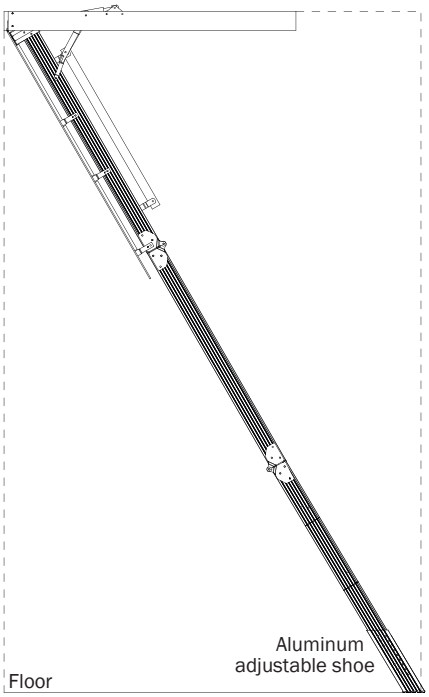

Figure 13

1. If the aluminum attic ladder looks like Figure 14 or 15, the attic ladder was not trimmed properly or the adjustable shoes were not installed properly. Double check your “A” & “B” measurements, the aluminum attic ladder is not safe to use.

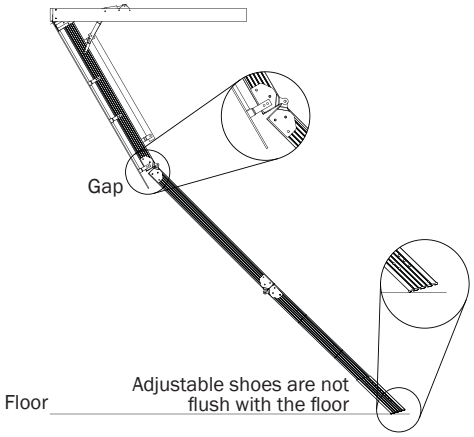

Figure 14

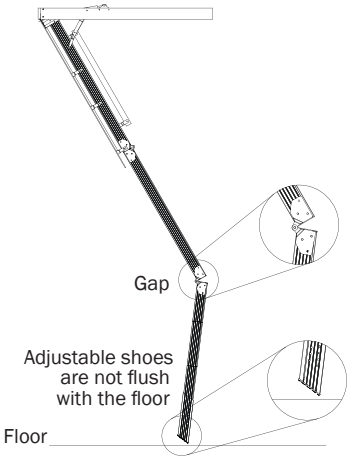

Figure 15

2. To install trim molding, leave a ⅜” clearance between the door panel and the trim at the piano hinge end.

Replacement Parts

Item Number	Item	Replacement Part No.
1	Hydroneumatic Cylinder	F7171
2	Right Brace	F7337-RH-63
3	Left Brace	F7337-LH-63

For Replacement Parts:
Call Customer Service at 1-800-666-2811