

RETROFIT SAFETY RAILING SYSTEM

Installation and Maintenance Instructions

These are recommended guidelines. Locally accepted and/or mandated regulations and codes must be followed in addition to these instructions.

Required Tools

- 9/16" Open End Wrench
- 9/16" Hexagonal Socket
- Socket Driver or Impact Driver
- Only for Hatches without pre-drilled holes
- 7/16" Drill, 1/8" Drill
- Drill Driver
- Phillips Head Driver Bit

COMPONENTS INCLUDED:



(1) Gate (I)



(2) Self-Closing Hinges with (J)
(8) Self-Drilling Screws (K)



(1) 1/4" - 20 Locking Knob (L)



(4) Corner Brackets (B)



(6) Square Tubing Plug (C)

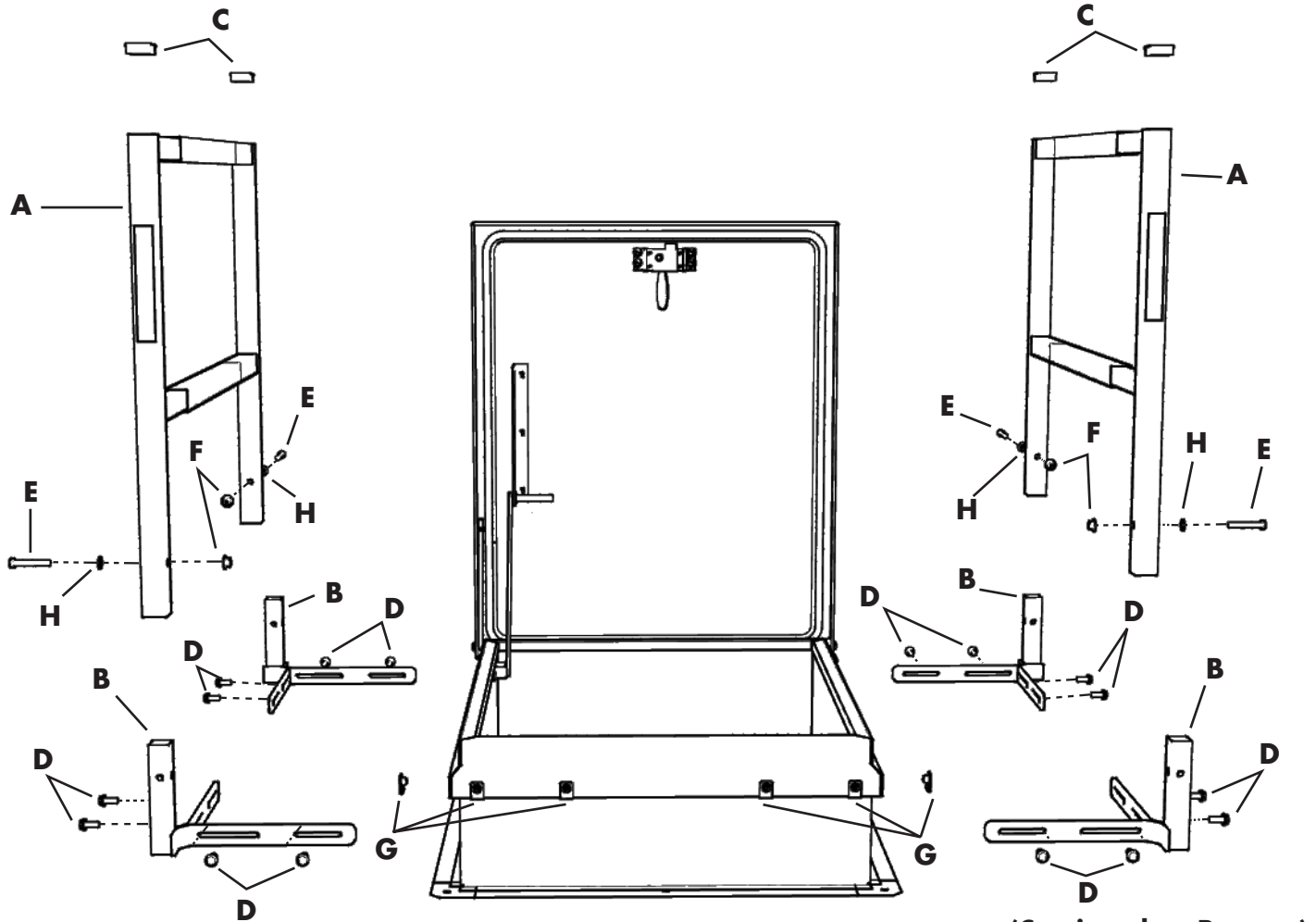
(16) 3/8" X 1" Flanged Bolt (D)

(4) 3/8" X 2.5" Bolt (E)

(4) 3/8" Flanged Lock Nut (F)

(16) 3/8" Clip on Nut (G)

(4) 3/8" Washer (H)



(Continued on Reverse)

5030 Corporate Exchange Blvd SE
Grand Rapids, MI 49512
(800) 624-8642 | milcorinc.com

MILCOR[®]

Overview: The Retrofit Safety Rail system is designed for use as a safety accessory to an existing roof hatch. It is universal to fit Curbs from 30" to 60" in length/width

Side Rail Installation:

1. Remove all components from the packaging and be sure you have everything listed above.
2. **Position Corner Bracket (B) to Curb (Figure 1).**
3. **The Corner Bracket (B) includes pilot-hole slots. If slots align with holes already in the curb proceed to Step 4.**
 - **Position Curb Post (B) to Curb with lower edge flush with bottom of Curb cap (Figure 1).**
 - **Use slots in Corner Bracket (B) as a template to mark hole locations. Use 7/16" bit to drill any required holes (4 bolts required for each Corner Bracket) (Figure 1).**
4. Clip-On Nuts (G) are provided to improve speed and ease of installation.
 - Install Clip On nut on each mounting hole.
5. Secure Corner Bracket (B) to Curb cap. Install 3/8"x1" Bolts (D) through in the corner bracket (B) through the curb cap and into the Clip On Nut (or Flange Nut) Note: hand tighten all bolts until assembly is complete.
6. Repeat Steps 2-5 for all 4 corners.
7. Install Side Rails (A).
 - Position the Side Rails (A) so the Milcor Label is oriented to the front (Figure 2).
 - Adjust (Telescope) Side Rail (A) to the required length so the Legs of the rails align with the Posts on the Corner Brackets (Figure 2).
 - Secure Side Rail by installing 2.5" Bolts (E), washers (H) and flange nuts (F). Hand tighten all fasteners.
8. Repeat step #7 for the other Side Rail (A).
9. Use 9/16" wrench to tighten all bolts.
10. Repeat steps 9 thru 14 for the other side of the hatch.
11. Install square tubing plug (C) in the top 4 openings of the side rails (A).

Figure 1:
Corner Bracket Positioning

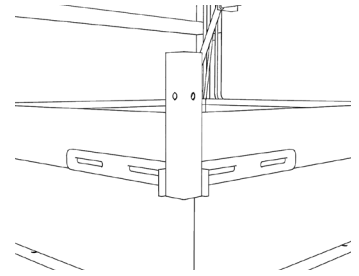
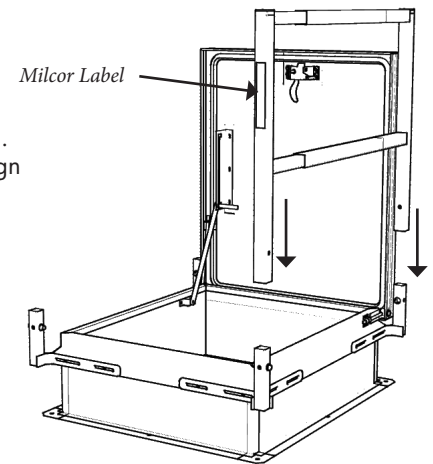


Figure 2:
Mounting Side Rails



Gate Installation:

It is important to note that the gate can be configured for both left and right hand operation depending on which side of the gate the hinges are mounted to (front/back), and which side of the railing system the hinges are attached. The locking knob MUST always end up on the bottom portion of the gate. The assembly will need to be taken apart and the half with the locking knob flipped to make the change from LH to RH.

1. Install square tubing plug (C) in the top 2 openings of the gate (I).
2. Use hinge (J) as template for marking holes on the gate (I).
3. Install hinges (J) 2" from the top and bottom of gate and mark holes (Figure 1).
4. Drill marked holes with 1/8" drill.
5. Use the provided screws (K) to attach hinges to gate.
6. With both hinges (J) installed on gate (I) the top hole can be marked on the railing (A).
7. Hold the gate (I) flush with the top of the railing (A) (Figure 2).
8. Mark the upper hole of the top hinge (J).
9. Drill the marked hole with 1/8" drill.
10. Install first screw (K).
11. Rotate the gate (I) until it is flush with the top of the rail (A) on the opposite side of the hatch.
12. Mark the remaining holes and drill with 1/8" drill.
13. Install provided screws (K).
14. Adjust length of gate (I) so the stop plate engages with side rail (A).
15. Tighten Locking Knob (L) (Figure 2).
16. Adjust spring tension so the gate closes without assistance.
 - a) see instructions included w/hinges for adjustment procedure.

Figure 1: Locating First Hinge

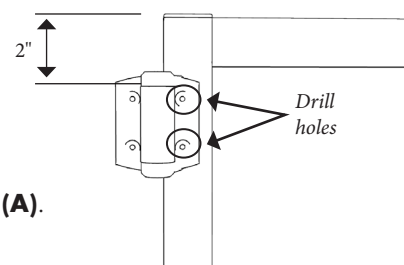
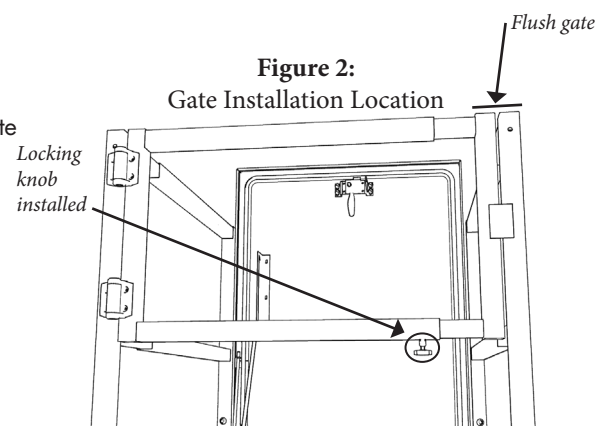


Figure 2:
Gate Installation Location



Maintenance:

The fasteners for the Retrofit Safety Railing System are of corrosion-resistant construction and should be regularly inspected and tightened.