



User Instruction

Guide for

RoofGuard Classic

Freestanding Guardrail

Liftsafe Fall Protection Inc.

RoofGuard Classic User Manual

 RGC-UM-3.0

Table of Contents

<u>Section</u>	<u>Page Number</u>
1.0 Application	4
2.0 System Requirements	4
3.0 Components	5
4.0 System Layout	7
5.0 Installation	8
6.0 Detailed Inspection and Maintenance Log	12
7.0 Warranty	13
8.0 Notes	14



Warnings and Conditions

This system is part of a personal fall protection system. The user must read and follow all guidelines in this manual. These instructions must be provided to the user of this system.

The user must read and understand these instructions or have them explained to them prior to using the system.

Alterations or misuses of this system or failure to follow instructions may result in serious injury or death. If you have any questions on the use or care of this system peoples contact Liftsafe Fall Protection Inc. at

1-800-977-2005.





1.0 APPLICATION

1.1 The RoofGuard Classic system is designed to be installed on flat rooftops anywhere workers may be at risk of fall from an elevated surface while working; rooftops, mezzanines, or around openings, when workers should be protected by a physical barrier from the hazard.



2.0 System Requirements

2.1 The RoofGuard Classic system is designed to be used on flat roofs (up to 5% grade) where the baseplate can sit flat on the roof surface. Depending on the roof surface, a rubber pad or ultra-light paving stone may be used under the base plates to facilitate safe/stable contact with the roof surface. As freestanding systems rely on friction between the baseplates and the roofing materials, baseplates **MUST NOT** be set on ice or snow or other substances which may permit excessive sliding. Users **MUST** clear the area prior to placing the RoofGuard baseplates. If no parapet or curb is present at the roof edge, contact LFP for a review of the application.

2.2 The RoofGuard Classic railing system is designed to protect workers on rooftop areas near an opening into which they may fall. It is not intended to protect members of the public or large gatherings of people from a rooftop edge.



3.0 Components

3.1 Baseplates are cast in steel and hot dip galvanized for long-term outdoor use. Cone point stainless steel set screws secure the guardrail into the base plates.

3.2 Vertical posts are supplied with fittings and caps for a variety of configurations: by placing the fittings on a vertical post, the 5 common “post” assemblies are created.

RGC-POST-END: Used where the horizontal pipes end at a vertical post, at the ends of the system and ends of the tie-backs.

RGC-POST-90D: Used where the horizontal pipe make a 90-degree corner

RGC-POST-INT: Used where the pipe continues straight out on either side of the vertical post.

RGC-POST-TB: Used where the pipe continues straight out on either side of the vertical post, but there is a tie-back for stability.

RGC-POST-VAR: Used when the horizontal pipes meet at a vertical post at an angle between 90 and 180 degrees.

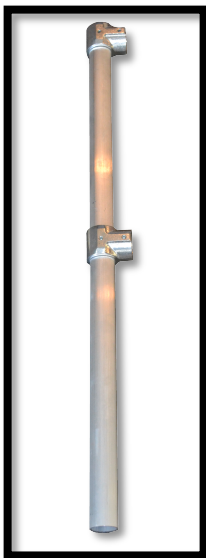


Figure 1
RGC-POST-END

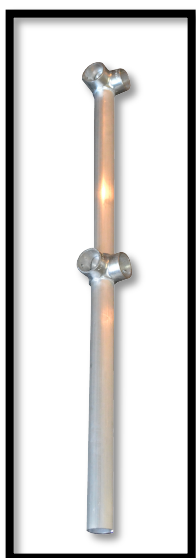


Figure 2
RGC-POST-90D

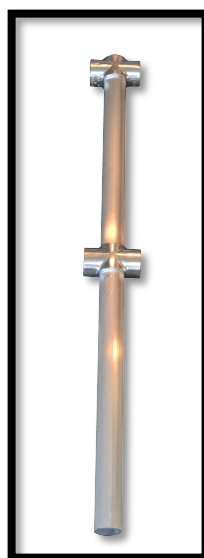


Figure 3
RGC-POST-INT

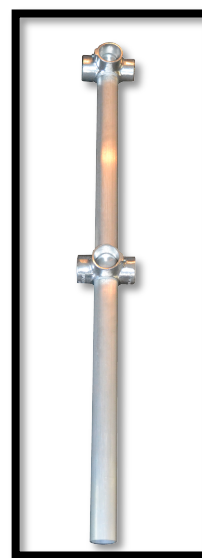


Figure 4
RGC-POST-TB

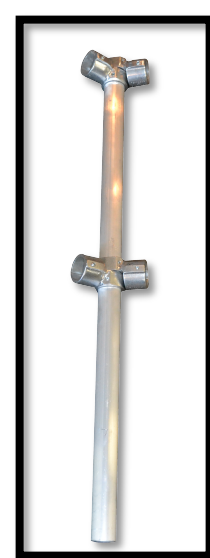


Figure 5
RGC-POST-VAR



3.3 Horizontal rails are available in two standard sizes, 6-foot & 9-foot. For other sizes, the aluminum pipe is suitable for cut-to-fit on-site. The 6 foot sections of rail are used for the tie-backs to provide the counter weight for the system. This may also be used along the leading edge where a 9-foot section is too long. The 9-foot sections of rail use a stiffener to connect the top/mid rail. This element may be omitted for some temporary construction projects, where the loading requirements are lower. For more permanent applications, the stiffener should be used.



Figure 6: Baseplate with set screws and assembly tool

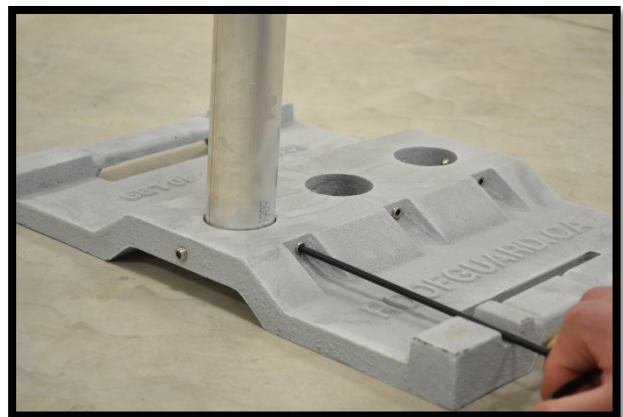


Figure 7: RoofGuard system during assembly



Figure 8: RoofGuard system during assembly

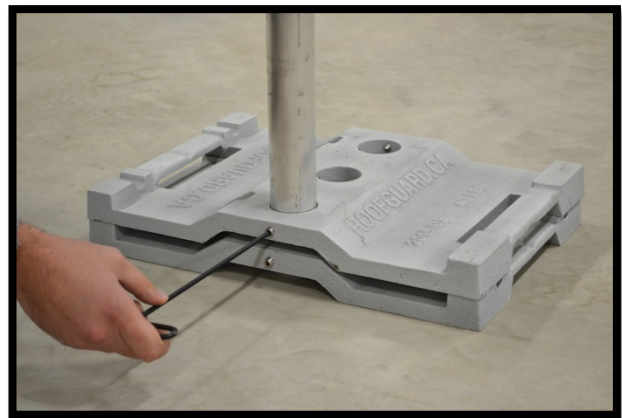


Figure 9: RoofGuard system during assembly

4.0 System Layout

4.1 Install bases and rails on a flat, clean and dry surface. Clean the area where base plates will be installed, if necessary, to ensure good contact with the roof surface.

4.2 If curb or parapet is 4” or more above the top of the base-plate, then bases can be positioned against the parapet. If curb or parapet is lower, contact LFP for a review of the application.

4.3 The vertical posts of the RoofGuard System are supported by one baseplate, with the expectation of the RGC-End posts, which are used for counterweight, and are supported by 3 RoofGuard Baseplates stacked up on each other to provide the necessary weight to resist overturning and sliding. If the system was custom designed, please refer to the layout drawing provided with the system, as more weight may be required for custom applications.

4.4 Each end of the system shall have a TIE-Back perpendicular to the hazard (roof edge) extending 6-feet with 3 baseplates at the RGC-End Post. The tie-back shall NOT be along a leading edge itself; IE: the RGC-End Post shall not be within 6-feet of the roof edge unless part of a custom designed system – please refer to the custom layout drawing for guidance.

4.5 Intermediate tie-backs shall be placed at points no greater than 27-feet apart. At this point, the RGC-TB post will be used at the hazard edge. The tie backs are at this point connected to the two horizontal rails, the RGC-End post and 3 baseplates.

4.6 In case where the tie-backs must be shorter, the weights can be increased to accommodate the resistance required. **You must consult LFP and obtain an engineered layout drawing to indicate the weight plate distribution for irregular installations.**

4.7 Where required, use of the toe-board adapter will allow the use of 2x4” lumber toe-boards to be placed between the base plates. This will help prevent tools or materials from falling to a lower level.

5.0 Installation

5.1 When working near the roof edge, workers should be tied-off to an alternate fall protection system. Ideally workers should use a fall-restraint system utilizing a lifeline that will allow them to reach the edge, but not be long enough to be able to fall.

5.2 If toe-boards will be required, place the toe-board adapter on the top of the baseplate before placing the vertical posts into the desired holes. The lip of the toe board adapter shall be on the `outside` edge of the rail towards the hazard.

5.3 The RoofGuard Baseplate has 3 holes, and for RoofGuard Classic, any of the 3 holes is acceptable. Use of the center hole is typical, but for tight areas, or for convenience, an outside hole may be useful.

5.4 Once the bases are positioned as desired, insert the vertical rails. Secure the vertical rail to the Baseplate with the cone-point stainless steel set-screw.

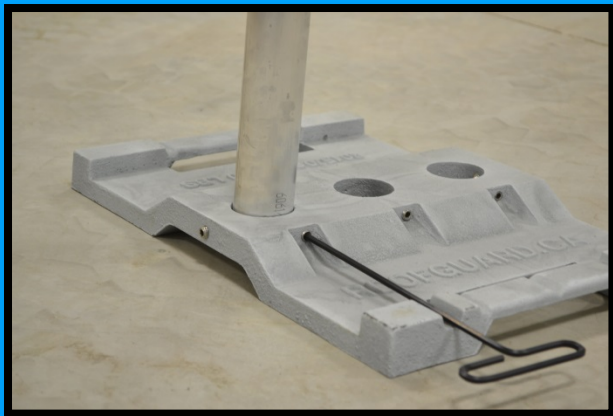


Figure 10 & 11
Installation of Baseplates

NOTE: Only one set screw is used per rail leg. The two outside holes of the Baseplate have 2 possible set screw positions, both may be used but only one is required, perpendicular to the rail it is holding

5.5 Use a 3/16” hex drive bit (provided) or wrench, and torque baseplate screws to 25ft-lbs. All set screws for stacked plates must be secured against the wall of the vertical posts.

5.6 Once torqued the set screw can be ‘marked’ with the blue crayon (provided) to provide a visual indicator that the screw has been secured and warn of tampering. (If the blue wax is removed, it may indicate a tool was re-inserted in the set-screw.)

5.7 If toe-boards are to be used, the lumber can be cut and placed under the toe-board adapter (from 5.2). The toe-board adapter can be lifted (sliding up the rails) to place the lumber, and then lowered back onto the top of the lumber. Using the three holes provided, secure the toe-board to the toe-board adapter with three #10 or #12 screws 1.5” or longer. Longer screws should not protrude from the lumber where they may introduce a hazard to workers.

5.8 Once all vertical posts are set, the horizontal rails can be placed into the fittings and secured with the hex drive bit (provided). To provide a visual indicator that the screw has been secured and warn of tampering mark set screw with crayon. (If the blue wax is removed, it may indicate a tool was re-inserted in the set-screw.)

5.9 Working from one end to the other, complete the assembly of the rails as per the layout drawing. Once complete, the system should be reviewed to ensure the design is as per the layout drawing and each set screw has been torqued and marked. At this point the system is safe and ready for use.

Image of Complete a Complete Classic RoofGuard System



Figure 13

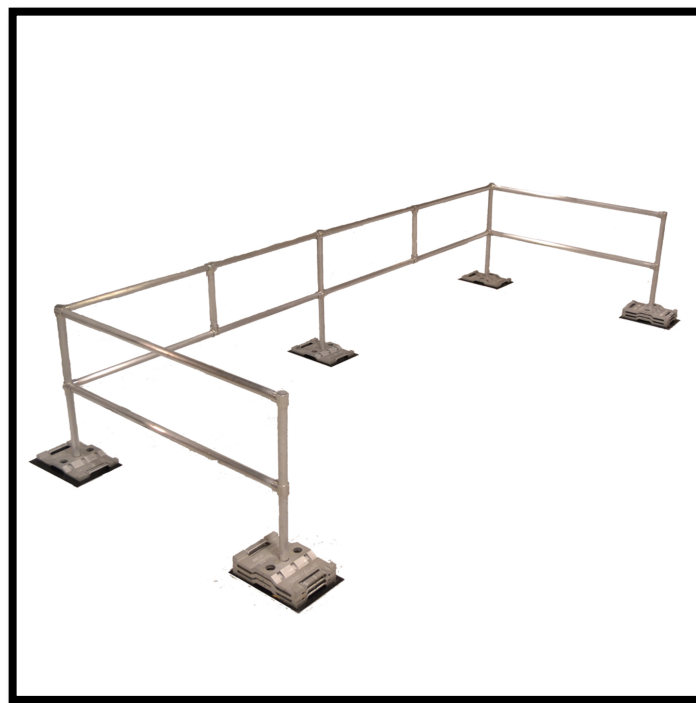


Figure 14



Warning – Do NOT lean on, or climb on guardrails.

Guardrails MUST NOT be used as an anchor for fall restraint or fall arrest, and shall not be used for hoisting or tie-off.

Attachment of banners / signs / equipment is not permitted.

Excess force applied to the top rail could cause tipping, resulting in injury or death.

OSHA Reference 29 CFR 1910.23 Guarding of floor and wall openings and holes

(a) (2) Every ladder-way floor opening or platform shall be guarded by a standard railing with standard toe-board on all exposed sides (except at entrance to opening), with passage through the railing either provided with a swing gate or offset so that a person cannot walk directly into the opening.





7.0 Liftsafe Fall Protection Warranty

Equipment offered by Liftsafe Fall Protection (LFP) is warranted against factory defects in workmanship and materials for a period of one year from date of installation or use by the owner, provided that this period shall not exceed 18 months from date of shipment. Upon notice in writing, LFP will promptly repair or replace all defective items. LFP reserves the right to elect to have any defective item returned to its plant for inspection before making a repair or replacement. This warranty does not cover equipment damages resulting from abuse, damage in transit, or other damage beyond the control of LFP. This warranty applies only to the original purchaser, and is the only one applicable to our products, and is in lieu of all other warranties, expressed or implied.

RoofGuard Classic

User Manual

8.0 Notes



Liftsafe Fall Protection

409 Harmony Road
Ayr, Ontario N0B 1E0

TF.: 1(800) 977-2005

T.: (519) 896-2430

F.: (519) 896-2085

E.: info@liftsafeinspections.com

W.: www.fallsafetyolutions.com