



**LIFTSAFE**  
FALL PROTECTION



**FACTORY**  
SUPPLY.COM

## **Rooftop Guardrail System**

Model Numbers:

**RGC-UM & RGC-TB**

### **Installation Manual:**

RoofGuard Warning Line Systems

Gargoyle Warning Line Systems

This Installation Manual is intended to meet the Manufacturer's Instructions requirements and should be used as part of an employee training program.

### **WARNINGS AND CONDITIONS**

These instructions must be provided to the installer of this system. The installer must read and understand these instructions and follow.

Failure to follow these instructions or the details of the unique layout drawing provided may result in serious injury or death. If you have any questions about this system's use or care, please contact the manufacturer: 1-800-977-2005.

Liftsafe Fall Protection Inc.  
RoofGuard Warning Line Instruction Manual  
RGC-UM-3.3

RoofGuard Warning Line Systems, Gargoyle Warning Line Systems  
Instruction Manual RGC-UM-3.3

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## WARNING

**IMPROPER USE OR INSTALLATION OF THIS EQUIPMENT MAY CAUSE INJURY OR DEATH**

**Failure to Read, Understand, and Follow the Installation Manual may result in injury or death**

- DO NOT** lean on the railing
- DO NOT** stand or climb on the railing
- DO NOT** use rail as a tie-off point
- DO NOT** use rail for lifting or hoisting
- DO NOT** install railing within 10-feet of any electrical lines
- DO NOT** use if any component is found defective or damaged
- DO NOT** attach banners, signs, or equipment to rail.
- DO NOT** apply an excess force to the top rail which could cause tipping

- DO** install on a clean, dry, flat surface per Installation Manual
- DO** read and follow this document (Installation Manual) and details on System Drawing

Roofguard and Gargoyle systems are designed and are to be used only for their intended purpose. The use of these guardrail systems or their components for any other purpose **may cause injury or death.**



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## 1 - Description of the system

The RoofGuard Warning Line system (sometimes called a bump line) is designed for accessing areas of a flat rooftop that are nearing the roof edge (but not within 2 metres) to provide a visual warning to workers that they are approaching a hazard. The system is freestanding, eliminating the need to pierce the roofing membrane, exposing the roof to leaks.

### 1.1 - Definitions

- Baseplate - Two “L” shapes that slide together to form the “X” shape with a square in the centre to insert the post.
- Cable - Supporting medium for the flags, hung off the posts. Minimum breaking strength (500 lbs.).
- Flags - High visibility marker to be secured to the cable at no more than 6 foot intervals.
- Post - 42” vertical pipe that is inserted into the baseplate to support the cable and flags.



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## 2 - Setup Requirements

- RoofGuard Warning Line systems have been designed to be freestanding and setup on a flat roof (no more than 5% slope - typical for flat roof drainage).
- Setup should be done with all workers following the safety regulations of their local jurisdiction.
- Baseplates will be set on rubber pads to protect fragile roof members (most membranes).
- Baseplates / underpads should be set only on clean, dry roof surfaces. Ensure the roof has been cleared of debris prior to setting up baseplates.
- Warning lines shall NEVER be setup closer than 2 metres (6 feet) to the roof edge or other falling hazard. In some cases (US non-roofing) the minimum edge may be higher - check local regulations.
- As the RoofGuard system is freestanding, these baseplates do not need to be secured to the roof, and no penetration of the roof membrane is necessary.



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### 3 - Installation of Warning Line System

1. Assemble both halves of base unit by inverting the two sections and lining up the laser cut slots so pieces fit together to form an "X" – centre should form a small 2" square.
2. Insert RoofGuard post into small square hole, aligning the drilled hole in the post with the holes in the base unit.
3. Insert 3/8" galvanized bolt through both the base and the post. Tighten with nut provided. Post assembly is now complete.
4. Position post into starting position with 30" x 30" rubber pad under base.
5. Insert shoulder nut eyebolt (3/8" x 2-1/2") through upper hole in post and tighten with nut.
6. Loop cable through eyebolt on end post and secure loop with malleable cable clip provided.
7. Before running cable through next post, insert proper number of flags required between posts onto cable (6 feet max spacing). Normal post spacing of 15 feet recommended to a maximum of 20 feet. For post spacing under 12 feet, only one flag in middle is required for that span. For spacing from over 12 feet up to 18 feet, 2 flags are required, and over 18 - feet to 20 feet, 3 flags are required between posts.
8. Next post is assembled as per details on points 1-3 above.
9. Run cable through eyebolt of next post, then loop it around and back through eyebolt again to give a positive connection to post. DO NOT JUST RUN CABLE THROUGH THE EYEBOLT AS A "PASS-THROUGH".
10. Insert flags onto cable again before running cable through next post.
11. Continue process until you get to the end of the system. Terminate the cable by forming a loop through the eyebolt and securing the loop with a wire rope clip.
12. Cable height at mid-point between posts should not dip below 34" above ground level.
13. Rubber pads should be positioned under each post assembly.



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#### 4 - OSHA US Requirements (commonly referenced in Canadian Jurisdictions)

- All warning lines must be flagged with high-visibility material at no more than 6-feet intervals.
- Warning lines must be rigged and supported so the lowest point (including sag) is no less than 34 inches from the walking/working surface and the highest point is no more than 39 inches from the walking/working surface.
- After being rigged with warning lines, stanchions shall be capable of resisting (without tipping over) a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the walking/working surface perpendicular to the warning line and in the direction of the floor, roof or platform edge.
- The rope, wire or chain serving as the warning line must have a minimum tensile strength of 500 pounds and, after being attached to the stanchions, must support (without breaking) the load applied to the stanchions.
- Warning lines must be attached to each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in the adjacent section before a stanchion tips over.
- US Non-Roofing projects require setup at least 15 feet from edge.
- Most Canadian Warning Line systems are required to be setup at least 2 metres (6 feet) from the roof edge / hazard - check provincial regulations for specific requirements for your area.



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When accessing the rooftop workers should do a preliminary visual check to ensure the warning line system is in place and has not been tampered with. Wildlife and larger birds may be able to tip over posts in some areas.

After high-wind events, (once conditions are suitable for rooftop access) workers should ensure that no damage has been done to the warning line system and that posts have not been toppled.

On an annual basis, a more thorough walk through of the system should be done to ensure the wire-rope connections to the posts are secure and that the flags are in good repair and are still high-visibility. Over time, some materials can fade or deteriorate. If flags or the cable system have deteriorated, they may need to be replaced.



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## **Fall Protection Warranty**

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.

**Please refer to website for more product warranty information.**



**LIFTSAFE**  
FALL PROTECTION

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