



# **Product Name: G-Bolt**

Part #: 00235

## **Instruction Manual**

Do not throw away these instructions! Read and understand these instructions before using equipment!

Introduction	1
Applicable Safety Standards	1
Worker Classifications	1
Product Specific Applications	2
Limitations	2 - 3
Components and Specifications	3
Installation and Use	4
Maintenance, Cleaning, and Storage	5
Inspection	5
Inspection Log	5
Safety Information	6
Labels	7



## Introduction

Thank you for purchasing a Guardian Fall Protection G-Bolt. This manual must be read and understood in its entirety, and used as part of an employee training program as required by OSHA or any applicable state agency.

This and any other included instructions must be made available to the user of the equipment. The user must understand how to safely and effectively use the G-Bolt, and all fall safety equipment used in combination with the G-Bolt

User Information							
Date of First Use:							
Serial #:							
Trainer:							
User:							

# **Applicable Safety Standards**

When used according to instruction specifications, this product meets or exceeds all applicable OSHA 1926 Subpart M, OSHA 1910, ANSI 2359.18-2017, and ANSI A10.32-2012 standards for fall protection. This product has been tested in compliance with the requirements of ANSI/ASSE Z359.7. Testing only covers hardware and does not extend to the anchorage or substrate to which this product is attached. Applicable standards and regulations depend on the type of work being done, and also might include state-specific regulations. Consult regulatory agencies for more information on personal fall arrest systems and associated components.

## **Worker Classifications**



Understand the following definitions of those who work near or who may be exposed to fall hazards.

**Qualified Person:** A person with an accredited degree or certification, and with extensive experience or sufficient professional standing, who is considered proficient in planning and reviewing the conformity of fall protection and rescue systems.

**Competent Person:** A highly trained and experienced person who is ASSIGNED BY THE EMPLOYER to be responsible for all elements of a fall safety program, including, but not limited to, its regulation, management, and application. A person who is proficient in identifying existing and predictable fall hazards, and who has the authority to stop work in order to eliminate hazards.

**Authorized Person:** A person who is assigned by their employer to work around or be subject to potential or existing fall hazards.

It is the responsibility of a Qualified or Competent person to supervise the job site and ensure all applicable safety regulations are complied with.



# **Product Specific Applications**



Use of equipment in unintended applications may result in serious injury or death. Maximum 1 attachment per connection point.



**Personal Fall Arrest:** G-Bolt may be used to support a MAXIMUM 1 personal fall arrest system (PFAS) for use in Fall Arrest applications. Structure must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Maximum free fall is 6', or up to 12' if used in combination with equipment explicitly certified for such use. Applicable D-ring: Dorsal.



**Restraint:** G-Bolt may be used in Restraint applications. Restraint systems prevent workers from reaching the leading edge of a fall hazard. Always account for fully deployed length of lanyard/SRL. Structure must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. No free fall is permitted. Restraint systems may only be used on surfaces with slopes up to 4/12 (vertical/horizontal). Applicable D-rings: Dorsal, Chest, Side, Shoulder.



**Rescue/Confined Space:** G-Bolt may be used in Rescue/Confined Space applications. Rescue systems function to safely recover a worker from a confined location or after exposed to a fall. There are various configurations of Rescue systems depending on the type of rescue. Structure must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. No free fall is permitted. Applicable D-rings: Dorsal, Chest, Shoulder.

For all applications: worker weight capacity range (including all clothing, tools, and equipment) is 130-420 lbs.

## **Limitations**

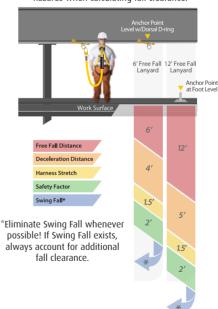
**Fall Clearance:** There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a MINIMUM 2' safety factor, deceleration distance, user height, length of lanyard/SRL, harness stretch and all other applicable factors.

Diagram shown is an example fall clearance calculation ONLY.

**Swing Falls:** Prior to installation or use, make considerations for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. Always work as close to in line with the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the event of a fall.

Fall clearance calculation shown based on standing worker falling directly in-line with anchor point.

Always consider potential swing fall and other hazards when calculating fall clearance.





**Compatibility:** When making connections with G-Bolt, eliminate all possibility of roll-out. Roll-out occurs when interference between a hook and the attachment point causes the hook gate to unintentionally open and release. All connections must be selected and deemed compatible with G-Bolt by a Competent Person. All connector gates must be self-closing and self-locking, and withstand minimum loads of 3,600 lbs. See the following for examples of compatible/incompatible connections:

Connector closed and locked to D-ring. **OK.** 





Connector to integral lanyard.

Two or more snap hooks or carabiners connected to each other. No.







Connector directly to webbing. **NO.** 

Two connectors to same D-ring. **NO.** 





Application that places load on gate. **NO.** 

Incompatible or irregular application, which may increase risk of roll-out. NO.







Connector directly to horizontal lifeline. No.

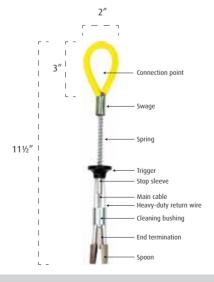
# **Components and Specifications**

Type A anchorage connector.

Minimum permitted service temperature: -30° F.

5,000 lb. MBS (minimum breaking strength).

Materials: Aluminum, polyurethane, aircraft cable, stainless steel, zinc-plated steel, and zinc-plated copper.





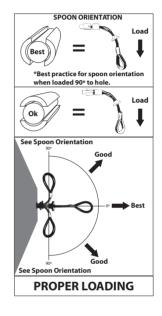
## Installation and Use

#### MINIMUM concrete thickness requirements:

- If installation location is between 6"-12" from any edge/corner: 12" thick, 3,000 psi.
- If installation location is greater than 12" from any edge/corner: 6" thick, 3,000 psi.
- Do not install if installation location is less than 6" from any edge/corner.
- Do not install into substrates other than concrete.

#### Prior to installation, plan your system:

- 1. Ensure all PFAS equipment is selected and deemed compatible with G-Bolt by a Competent Person.
- 2. Eliminate or minimize all risk of swing fall.
- 3. Ensure structure to which G-Bolt is to be installed, and on which work is to be performed, is free of all hazards, including, but not limited to, debris, rot, rust, sharp or abrasive edges and surfaces, and hazardous materials
- 4. A Qualified Person must determine that structure to which G-Bolt is to be installed is rated to withstand minimum required loads. There are no minimum or maximum spacing requirements for G-Bolt Anchors, provided structure is of sufficient strength.
- G-Bolt must never be loaded at angles beyond 90°.
   See diagram for permitted loading and best-practice spoon orientation.
- 6. G-Bolt is suitable for use in HLL applications.



#### Installation:

- 1. Drill a ¾" (20mm) diameter hole at least 3½" (89mm) deep. Hole must be straight and perpendicular to substrate. Ensure hole is of uniform diameter and free of peaks and valleys on the inner wall.
- 2. Blow hole clean with compressed air.
- 3. To install G-Bolt, place thumb inside the anchor loop and first two fingers around trigger. Squeeze thumb and fingers together until the trigger and spring fully compress.
- 4. Insert G-Bolt a minimum 3" (76mm) deep into installation hole and release the trigger. The stop sleeve must always be at least partially inserted into installation hole. Never force G-Bolt into hole if any resistance is encountered.
- 5. Apply a firm, quick outward force to G-Bolt to ensure it is set in installation location.
- 6. To remove G-Bolt, repeat process of compressing the trigger and spring, and pull out of installation hole.
- 7. Attach complete and compatible PFAS to Beamer Anchor D-ring. Maximum 1 connection permitted.
- 8. G-Bolt may be removed and reinstalled at multiple locations, provided all installation requirements are met. Always inspect hole prior to installation.



# Maintenance, Cleaning, and Storage

If G-Bolt fails inspection in any way, immediately remove it from service, and contact Guardian to inquire about its return or repair. Field serviceability testing is not required, and should not be done by the end user.

Cleaning after use is important for maintaining the safety and longevity of G-Bolt. Remove all dirt, corrosives, and contaminants from G-Bolt before and after each use. If G-Bolt cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean G-Bolt with corrosive substances.

When not in use, store equipment where it will not be affected by heat, light, excessive moisture, chemicals, or other degrading elements.

## Inspection

Prior to EACH use, inspect G-Bolt for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, and missing or illegible labels. IMMEDIATELY remove G-Bolt from service if defects or damage are found, or if exposed to forces of fall arrest.

Ensure that applicable work area is free of all damage, including, but not limited to, debris, rot, rust, decay, cracking, and hazardous materials. Ensure that selected work area will support the application-specific minimum loads set forth in this instruction manual. Work area MUST be stable.

At least every 12 months, a Competent Person other than the user must inspect G-Bolt. Competent Person inspections MUST be recorded in inspection log in instruction manual and on equipment inspection grid label. The Competent Person must sign their initials in the box corresponding to the month and year the inspection took place.

During inspection, consider all applications and hazards G-Bolt have been subjected to.

# **Inspection Log**

Date	of	First	Use:			

Product lifetime is indefinite, as long as product passes all inspection requirements. User must inspect prior to EACH use. Competent Person other than user must complete formal inspection at least every 12 months. Competent Person to inspect and initial.

This inspection log must be specific to one G-Bolt. Separate inspection logs must be used for each G-Bolt. All inspection records must be made visible and available to all users at all times.

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If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE.



# **Safety Information**



Failure to understand and comply with safety regulations may result in serious injury or death. Regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgment or knowledge of federal or state standards.

Do not alter equipment. Do not misuse equipment.

Workplace conditions, including, but not limited to, flame, corrosive chemicals, electrical shock, sharp objects, machinery, abrasive substances, weather conditions, and uneven surfaces, must be assessed by a Competent Person before fall protection equipment is selected.

The analysis of the workplace must anticipate where workers will be performing their duties, the routes they will take to reach their work, and the potential and existing fall hazards they may be exposed to. Fall protection equipment must be chosen by a Competent Person. Selections must account for all potential hazardous workplace conditions. All fall protection equipment should be purchased new and in an unused condition.

Fall protection systems must be selected and installed under the supervision of a Competent Person, and used in a compliant manner. Fall protection systems must be designed in a manner compliant with all federal, state, and safety regulations. Forces applied to anchors must be calculated by a Competent Person.

Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6'. No free fall allowed for non-LE SRLs. Class A SRLs must arrest falls within 24"; Class B SRLs must arrest falls within 54".

Harnesses and connectors selected must be compliant with manufacturer's instructions, and must be of compatible size and configuration. Snap hooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snap hooks and carabiners must be self-locking and self-closing, and must never be connected to each other.

A pre-planned rescue procedure in the case of a fall is required. The rescue plan must be project-specific. The rescue plan must allow for employees to rescue themselves, or provide an alternative means for their prompt rescue. Store rescue equipment in an easily accessible and clearly marked area.

Training of Authorized Persons to correctly erect, disassemble, inspect, maintain, store, and use equipment must be provided by a Competent Person. Training must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.

NEVER use fall protection equipment of any kind to hang, lift, support, or hoist tools or equipment, unless explicitly certified for such use.

Equipment subjected to forces of fall arrest must immediately be removed from use.

Age, fitness, and health conditions can seriously affect the worker should a fall occur. Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces or perform set-up of equipment. Pregnant women and minors must not use this equipment.

Physical harm may still occur even if fall safety equipment functions correctly. Sustained post-fall suspension may result in serious injury or death. Use trauma relief straps to reduce the effects of suspension trauma.



## Labels



# GUARDIAN FALL PROTECTION

www.guardianfall.com

G-Rolt Anchor

Part #: 00235

Sorial #•

Prior to use, read and understand all manufacturer's instructions provided with equipment.

Do not remove labels.

Compliant with ANSI Z359.18-17, ANSI A10.32-12, OSHA 1910, & OSHA 1926 Subpart M. Type A anchorage connector. Capacity: 130-420 lbs. (including all equipment). 5,000 lb. MBS (min. breaking strength). Min. service temp.: -30° F. Maximum 1 connection. Refer to instructions for proper

installation and connection.

Avoid contact with sharp and abrasive edges and surfaces. NEVER make incompatible connections. 90942 (Rev. A) / Made in Taiwan



#### INSPECTION GRID

Product lifetime is indefinite as long as equipment passes pre-use and Competent Person inspections.

IMMEDIATELY REMOVE FROM SERVICE if equipment fails inspection.

Date of First Use:

User must inspect prior to EACH use. Competent Person must complete formal inspection every 12 months. Competent Person to inspect and initial.

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