

GUARDIAN

FALL PROTECTION

PERFORMANCE SAFETY GEAR



Product Name: Bull Ring Anchor

Product item #: 00484

Instruction Manual

Do not throw away these instructions!

Read and understand these instructions before using equipment!

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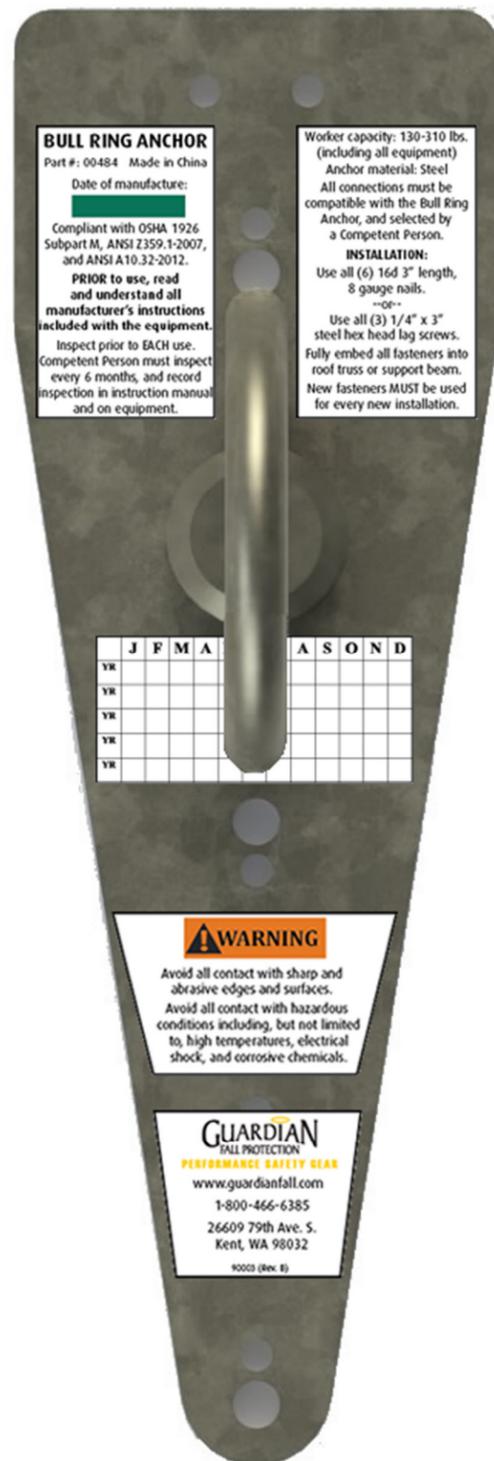
Introduction

Thank you for purchasing the Bull Ring Anchor. 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 Bull Ring Anchor, and all fall safety equipment used in combination with the Bull Ring Anchor.

DO NOT THROW AWAY THESE INSTRUCTIONS!

See following image for label locations:



Safety Information



The failure to understand and comply with safety regulations may result in serious injury or death. The regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgement 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 surfaces, 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 by 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.

Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6 feet. No free fall allowed for non LE-SRLs. SRLs must arrest falls within 54 inches.

Exposure of anchors to hazards including, but not limited to, flame, corrosive chemicals, electrical shock, sharp objects, machinery, and abrasive surfaces, must be considered before installation.

Weight applied to anchors must be calculated by a Competent Person.

Harnesses and connectors selected must be compliant with the manufacturer’s instructions, and must be of compatible size and configuration.

A preplanned 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 must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.

Training of Authorized Persons to correctly erect, disassemble, inspect, maintain, store, and use equipment must be provided by a Competent Person.

Maintenance of equipment must be done according to manufacturer’s instructions. Equipment instructions must be retained for reference.

Equipment must be stored in an environment absent of hazards including, but not limited to, heat, chemicals, excess light, excess moisture, or other harmful substances.

Results of inspections must be recorded in the inspection log.

Prior to EACH use, all equipment in a fall protection system must be inspected for any potential or existing deficiencies that may result in its failure or reduced functionality. IMMEDIATELY remove equipment from service if any deficiencies are found.

Equipment must be inspected by a Competent Person at least every six months. These inspections must be documented in instruction manual and on equipment.

Equipment that fails inspection in any way must immediately be removed from use, or repaired by an entity approved by the manufacturer.

No on-site repair of equipment is permitted unless explicitly permitted by Guardian Fall Protection.

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

Snaphooks, carabineers, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snaphooks and carabineers must be self-locking and self-closing, and must never be connected to each other.

Labels

WARNING All labels MUST be present and legible at all times.

BULL RING ANCHOR
Part #: 00484 Made in China
Date of manufacture:
[Redacted]
Compliant with OSHA 1926 Subpart M, ANSI Z359.1-2007, and ANSI A10.32-2012.
PRIOR to use, read and understand all manufacturer's instructions included with the equipment.
Inspect prior to EACH use. Competent Person must inspect every 6 months, and record inspection in instruction manual and on equipment.

Worker capacity: 130-310 lbs. (including all equipment)
Anchor material: Steel
All connections must be compatible with the Bull Ring Anchor, and selected by a Competent Person.
INSTALLATION:
Use all (6) 16d 3" length, 8 gauge nails.
--or--
Use all (3) 1/4" x 3" steel hex head lag screws. Fully embed all fasteners into roof truss or support beam. New fasteners MUST be used for every new installation.

For reference only. Background to be white.
Date of manufacture to be: mo/year

[Redacted]

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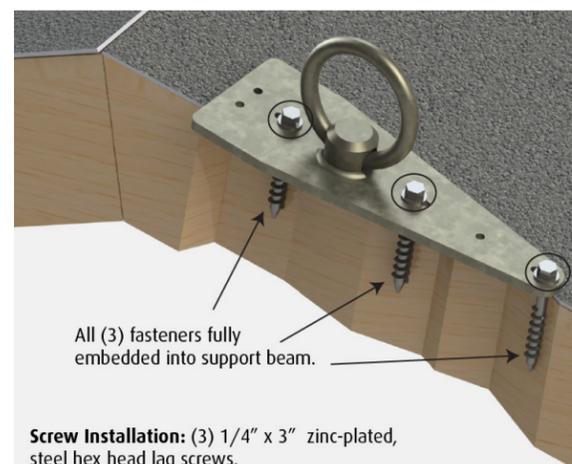
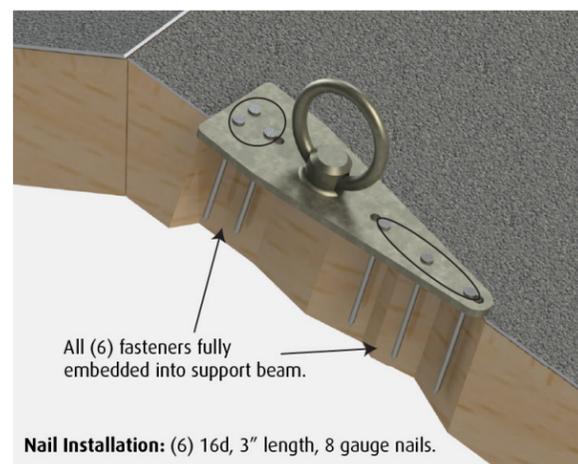
WARNING
Avoid all contact with sharp and abrasive edges and surfaces.
Avoid all contact with hazardous conditions including, but not limited to, high temperatures, electrical shock, and corrosive chemicals.

	J	F	M	A	M	J	J	A	S	O	N	D
YR												
YR												
YR												
YR												

DO NOT REMOVE LABELS—ALL LABELS MUST APPEAR AS INDICATED

Installation:

1. To install, use either six (6) 16d, 3" length, 8 gauge nails —OR— three (3) 1/4" x 3" zinc-plated steel hex head lag screws.
2. All (6) nails —OR— all (3) screws MUST be used.
3. Use proper hole locations for fasteners (see diagram on pg. 19).
4. All fasteners must be FULLY embedded into substrate, and continue through sheathing into a support structure that meets minimum load requirements.
5. DO NOT apply torque to fasteners.
6. New fasteners MUST be used for every new installation.
7. Prior to any new installation, ensure that the Bull Ring Anchor has not been damaged or warped by previous use or removal from substrate. If any damage or defects are found, IMMEDIATELY remove the Bull Ring Anchor from service.



Equipment must be inspected for defects including, but not limited to, the absence of required tags or markings, improper form/fit/function, evidence of cracks, sharp edges, deformation, corrosion, excessive heating, alteration, excessive wear, fraying, knotting, abrasion, and absence of parts.

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 all 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.

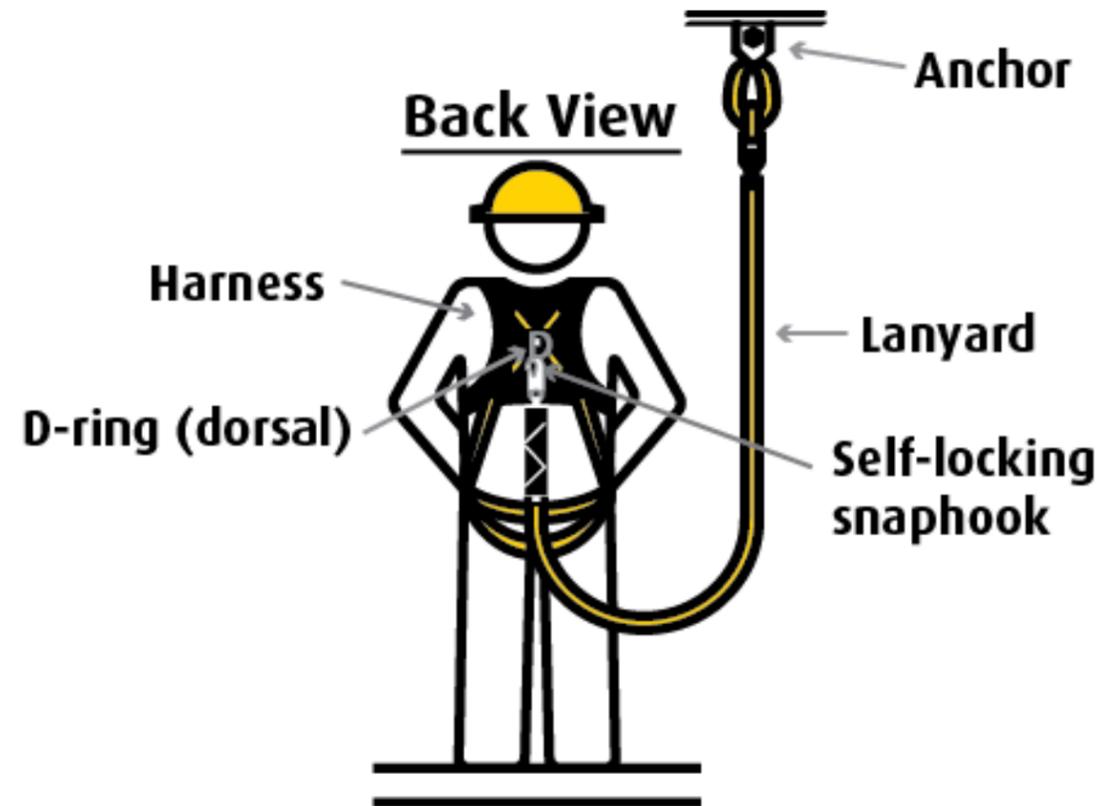
Allowable individual worker weight limit (including all equipment), unless explicitly stated otherwise: 130-310 pounds.

Basic Fall Protection System

Guardian products are, in most cases, independent components intended to be used in a complete Personal Fall Arrest System (PFAS). Unless otherwise specified, a PFAS must allow for a maximum arrest force of not more than 1,800 pounds, and must allow for a maximum free fall of no more than 6 feet.

A complete PFAS typically includes an anchor, safety harness, connecting lanyard —or— self-retracting lifeline (SRL), and connection devices.

See diagram on next page:



Anchorage Connector: There are various types and configurations of anchorage connectors. A single anchor must not be part of more than one PFAS unless explicitly certified for such purpose. Anchorage connectors must withstand a minimum 5,000 pound load without breaking, or must achieve a 2:1 safety ratio as determined by a Qualified Person.

Shock-Absorbing Lanyard -or- Self-Retracting Lifeline: These equipment options function to connect the harness to the anchorage connectors. There are various types and configurations of connecting devices. Ensure that all devices connecting the safety harness to the anchorage connector are approved by a Competent Person, and applicable for all job requirements.

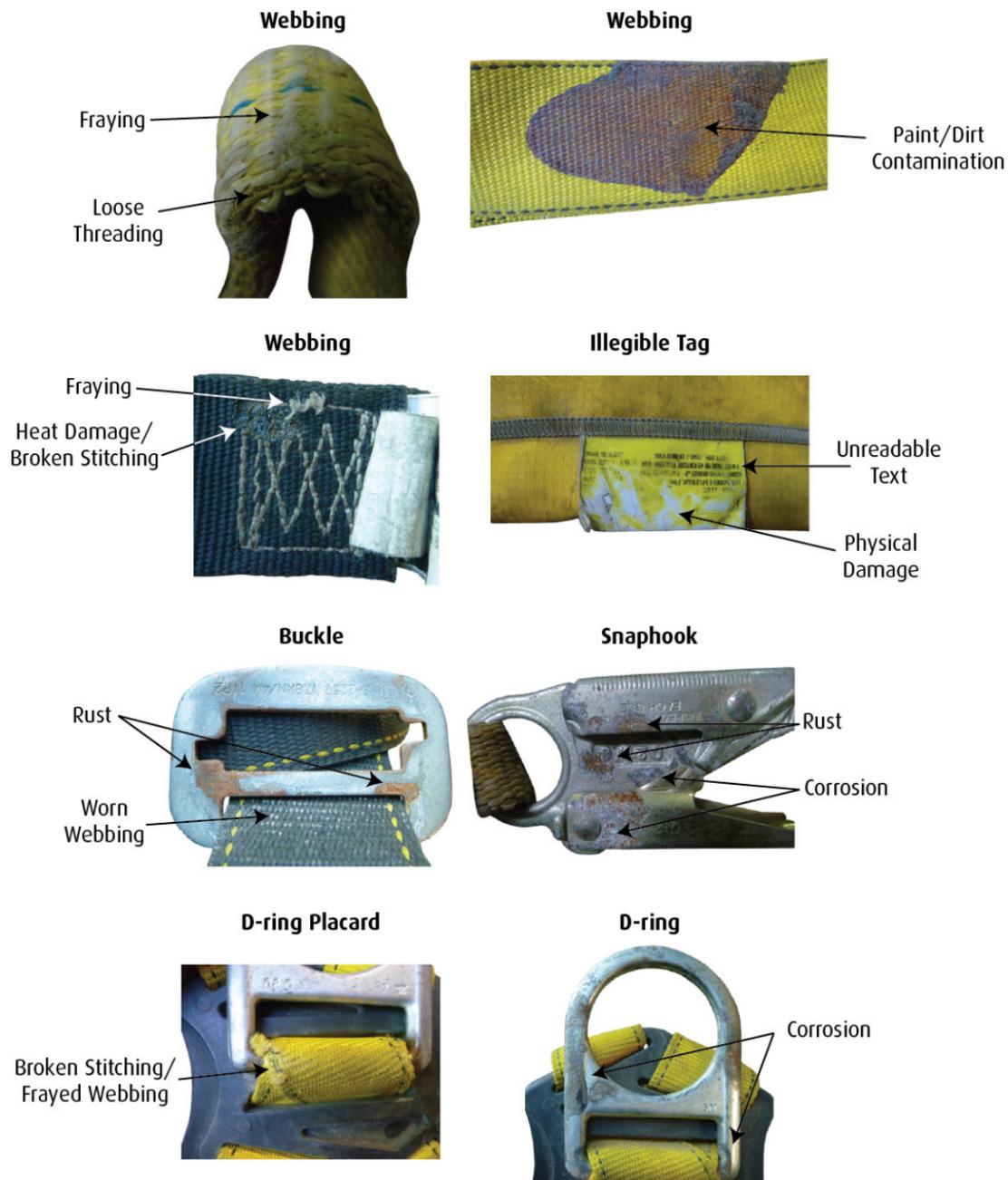
- Always read specific product instructions and labels for exact elongation distances and arrest forces.

Installation

WARNING The Bull Ring Anchor may be installed on wood surfaces ONLY.

Prior to installation:

1. Determine desired location of anchor; ensure location is free of debris, rot, decay, cracking, and hazardous materials.
2. Locate and record/mark solid roof support structures including, but not limited to, trusses, studs, and rafters, to which the Bull Ring Anchor may be affixed. Ensure all applicable structural components are capable of withstanding a MINIMUM load of 5,000 pounds.
3. Ensure that point of installation is a minimum of 2 feet from all leading edges.
4. Make considerations for eliminating or minimizing swing fall hazards. Swing falls significantly increase the clearance required to safely use the Bull Ring Anchor, and significantly increase the likelihood of serious injury or death in the event of a fall.
5. Ensure anchor will lie flush on substrate.
6. Ensure the shape of substrate allows for ALL fasteners to be deployed correctly per installation specifications.
7. Ensure all fasteners are those supplied by Guardian Fall Protection, or are deemed compatible by a Competent Person.



Safety Harness: There are various types and configurations of safety harnesses. Ensure that the safety harness used in a PFAS is approved by a Competent Person and applicable for all job requirements. Safety harnesses must have a minimum breaking strength of 5,000 pounds. The only applicable connection point for fall arrest is the dorsal D-ring.

• **Harness D-Ring Locations:**

- Back (dorsal): Should only be used for Personal Fall Arrest, Restraint, Work Positioning, and Rescue applications.
- Front (chest): Maximum arrest force is 900 pounds. Should only be used to assist with Restraint, Climbing, and Rescue applications.
- Side: Side mounted D-rings should only be used to assist with Restraint and Work Positioning applications.
- Shoulder: Shoulder mounted D-rings should only be used to assist with Restraint, Work Positioning, and Rescue applications.

See image on next page:



Ensure that the selected substrate is free of all damage including, but not limited to, debris, rot, decay, cracking, and hazardous materials. Ensure that selected substrate can support the application-specific minimum loads set forth in this instruction manual. The surface **MUST** be stable, and free of loose materials such as gravel or sand.

Every 6 months, a Competent Person other than the user must inspect the Bull Ring Anchor. **Competent Person inspections MUST be recorded in the inspection log at the end of this manual, as well as on the equipment itself. On the equipment, 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 the Bull Ring Anchor has been subjected to.

Connections: All connectors including, but not limited to, self-locking snaphooks, carabiners, D-rings, O-rings, and Oval rings, must be capable of withstanding a tensile load of 5,000 pounds without breaking when loaded in the directions allowed by the PFAS. Only use self-locking and self-closing snaphooks and carabiners with Guardian Fall Protection compatible equipment.

- Gates of all connectors must withstand a MINIMUM of 3,600 pounds.
- All components of a PFAS must be present and correctly applied to achieve sufficient fall protection.
- All weight-bearing elements must be made of synthetic materials that are resistant to both rot and corrosion.

WARNING Snaphooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of rollout and excess load on the gate must be eliminated. All snaphooks and carabiners must be self-locking and self-closing, and must never be connected to each other.

See the following images for examples of potential damage that would require a product to be removed from service:

Maintenance, Cleaning, and Storage

Repairs to the Bull Ring Anchor can only be made by a Guardian Fall Protection representative or an entity authorized by Guardian. Contact Guardian for all maintenance and repair needs at: 1-800-466-6385. If the Bull Ring Anchor fails inspection in any way, immediately remove it from service, and contact Guardian to inquire about its return or repair.

Cleaning after use is important for maintaining the safety and longevity of the Bull Ring Anchor. Remove all dirt, corrosives, and contaminants from the Bull Ring Anchor before and after each use. If the Bull Ring Anchor cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry, or allow to dry in an environment absent of excessive heat and light.

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

Inspection

KEEP INSTRUCTIONS AVAILABLE FOR REFERENCE. Record the date of first use on the product inspection label.

Prior to EACH use, inspect the Bull Ring Anchor 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 the Bull Ring Anchor from service if defects or damage are found.

General Applications

Guardian Fall Protection products are used for a variety of applications, which include, but are not limited to, Work Positioning, Personal Fall Arrest, Restraint, Rescue/Confined Space Entry, and Fall Protection/Climbing.

These terms should be understood as follows:

Work Positioning: A system that allows the worker to be supported while in suspension and work freely with both hands. Typical work positioning systems include a secure anchorage connector, full body harness, positioning lanyard, and a back-up PFAS. Maximum permissible free fall is 2 feet.

- Applicable D-rings: Side, Shoulder.



Personal Fall Arrest System: A system that employs multiple pieces of equipment to arrest a worker in free fall. The planning of the system must consider all potential and existing hazards, the possibility for swing fall, and provide adequate fall clearance. The planning of the system must account for the prompt rescue of the worker. Unless explicitly stated otherwise, the worker weight range for all fall arrest systems is 130-310 pounds (including all equipment).

- Applicable D-ring: Dorsal.



Restraint: Restraint systems must prevent workers from reaching the leading edge of a fall hazard. No vertical free fall is permitted. Restraint systems typically include a full body harness, a lanyard or lifeline, and a secure anchorage connector. Restraint systems may only be used on surfaces with slopes up to 4:12 (vertical:horizontal).

- Applicable D-ring: Dorsal, Chest, Side, Shoulder.



Rescue/Confined Space Entry: A system capable of safely recovering a worker from a confined location or after exposed to a fall. There are various configurations for rescue systems depending on the type of rescue. No vertical free fall is permitted.

- Applicable D-rings: Dorsal, Chest, Shoulder.



Fall Protection/Climbing: A system, used in combination with a self-retracting lifeline, or vertical lifeline attached to the chest D-ring, that allows the worker to work freely with both hands while climbing a fixed structure such as a ladder.

- Applicable D-rings: Dorsal, Chest.



Capacity

WARNING Failure to adhere to Capacity specifications may result in serious injury or death.

Refer to **Specific Product Application** (pg. 12) for limitations based on application.

Refer to **Correct Anchorage Positioning chart** (pg. 14) for work zone allowances.

The Bull Ring Anchor is designed to be used by an individual weighing 130-310 pounds (including all clothing, tools, and equipment), or up to 420 pounds when used with equipment explicitly certified for such weight. The Bull Ring Anchor **MUST NOT** be used as a component of more than one PFAS. All gates of selected connectors must withstand a **MINIMUM** load of 3,600 pounds. Maximum allowable free fall is 6 feet, unless used in combination with equipment certified for extended free fall.

WARNING The Bull Ring Anchor is to be considered a temporary anchor **ONLY**. When installing this anchor into a new surface, **ALWAYS** use new fasteners.

- All fasteners **MUST** be inserted fully into the roof truss or support beam.
- All of selected nails or screws **MUST** be used.

WARNING Failure to adhere to the requirements for **MINIMUM** substrate thickness may result in serious injury or death.

Wood (CDX plywood or better) MUST allow for full embedment of all fasteners.

MINIMUM substrate thickness: 3"

Components and Specifications

Bull Ring Anchor and all provided fasteners, unless specified otherwise, are made from 100% steel.

Fasteners:

Six (6) 16d, 3" length, 8 gauge nails.

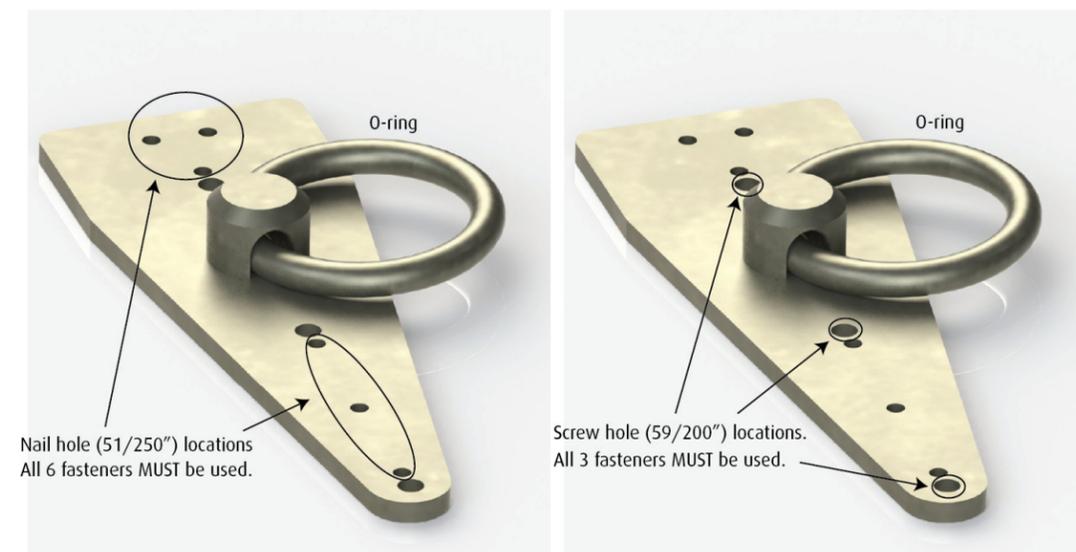


—or—

Three (3) 1/4" x 3" zinc-plated, steel hex head lag screws.



Fasteners must be those supplied by Guardian Fall Protection, or be deemed compatible by a Competent Person.



Specific Product Applications

Personal Fall Arrest: The Bull Ring Anchor may be used in Personal Fall Arrest applications to support a **MAXIMUM** of 1 PFAS. Structure must withstand loads applied in the directions permitted by the system of at least 5,000 pounds. Maximum allowable free fall is 6 feet unless used in combination with equipment explicitly certified for extended free fall.

Restraint: The Bull Ring Anchor may be used for Restraint applications. Structure must withstand loads applied in the directions permitted by the system of at least 1,000 pounds. No vertical free fall is allowed.

Rescue/Confined Space: The Bull Ring Anchor may be used for Rescue/Confined Space applications. Structure must withstand static applied in the directions permitted by the system of at least 3,000 pounds. No vertical free fall is allowed.

Work Positioning: The Bull Ring Anchor may be used in Work Positioning applications. Structure must withstand loads applied in the directions permitted by the system of at least 3,000 pounds.

Climbing: The Bull Ring Anchor **MUST NOT** be used in Climbing applications.

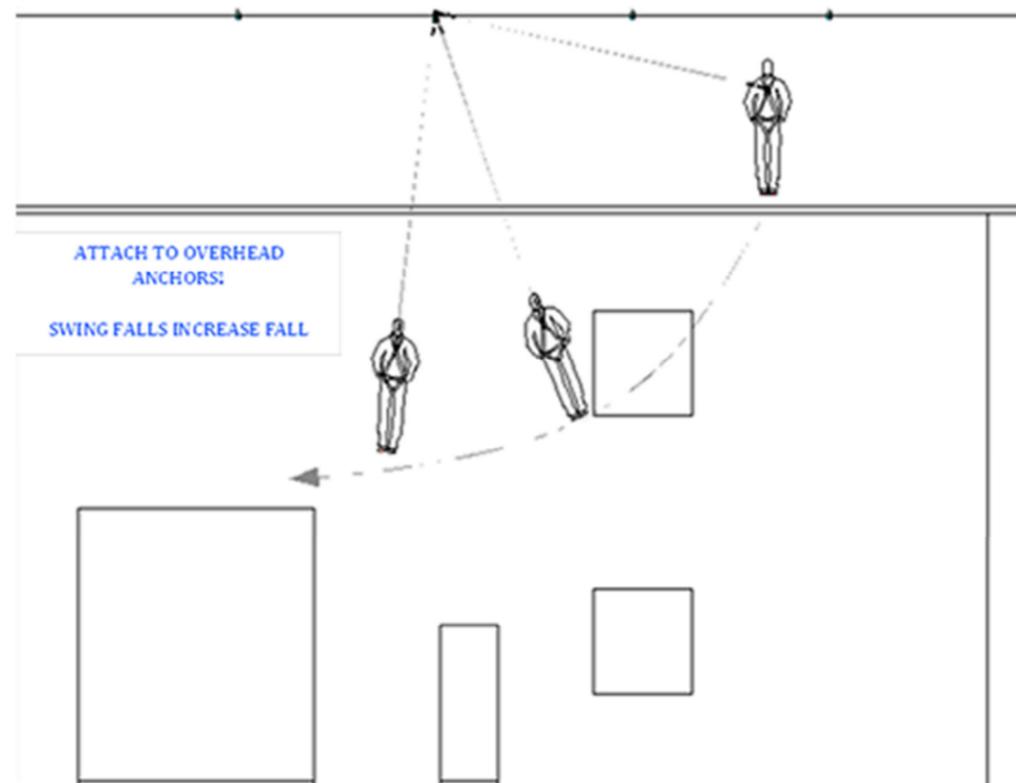
WARNING Use of equipment in unintended applications may result in serious injury or death. Maximum 1 attachment per connection point.

Limitations

Swing Fall

Swing falls occur when the anchorage connector is not directly above the point where a fall occurs. Striking an object in a swing fall may cause serious injury or death. Minimize risk of swing falls by working as close to the anchorage connector as possible. Swing falls will significantly increase the clearance required when a self-retracting lifeline or other variable length connecting system is used.

See: **Correct Anchorage Positioning** diagram (pg. 14) for Working Distance limitations.



- A snaphook connected to a webbing loop or webbing lanyard.



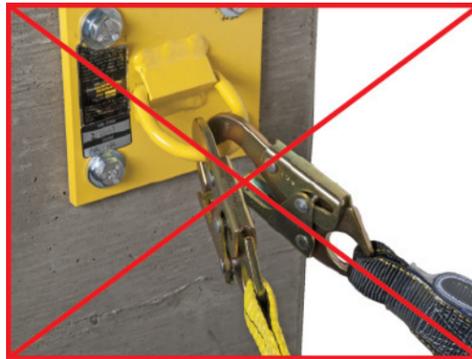
- In an application that places load on the gate.



- In an application that employs irregular or incompatible attachments.



- 2 or more snaphooks connected to 1 D-ring.



- 2 or more snaphooks/carabiners connected to each other



- A snaphook connected back on its integral lanyard.



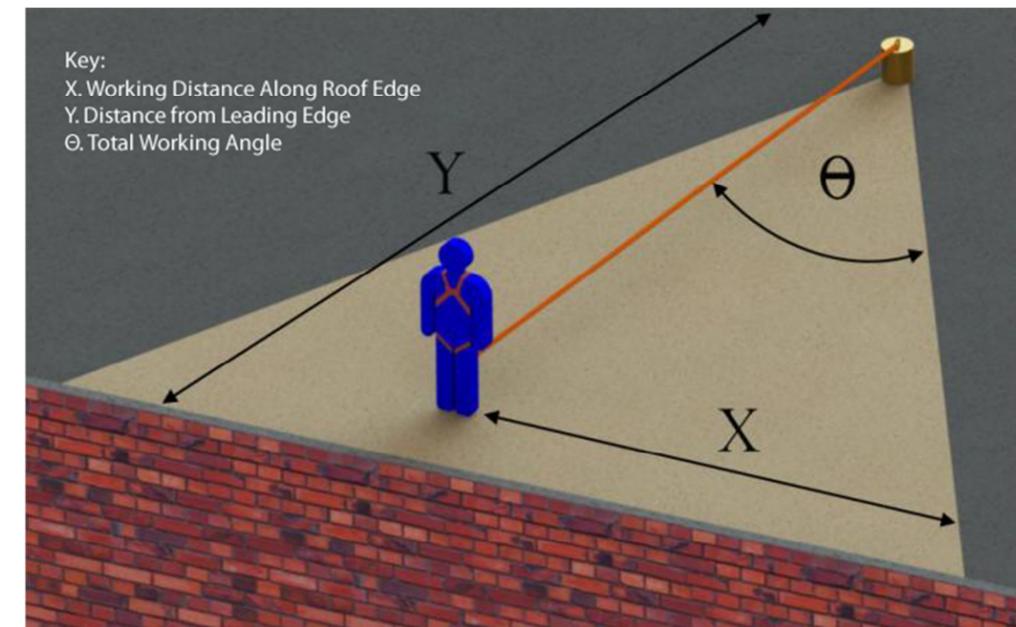
Correct Anchorage Positioning

SINGLE ANCHOR POINTS

Note: This chart details allowable working zones for swing fall based on ANSI Z359.6-2009:

5.3 Swing Falls. In fall arrest systems, anchorages shall be located directly above the worker(s) to eliminate swing falls, wherever it is reasonably practical to do so. Where it is not reasonably practical to prevent swing falls, the swing-drop distance shall not exceed 4.0 ft (1.22m).

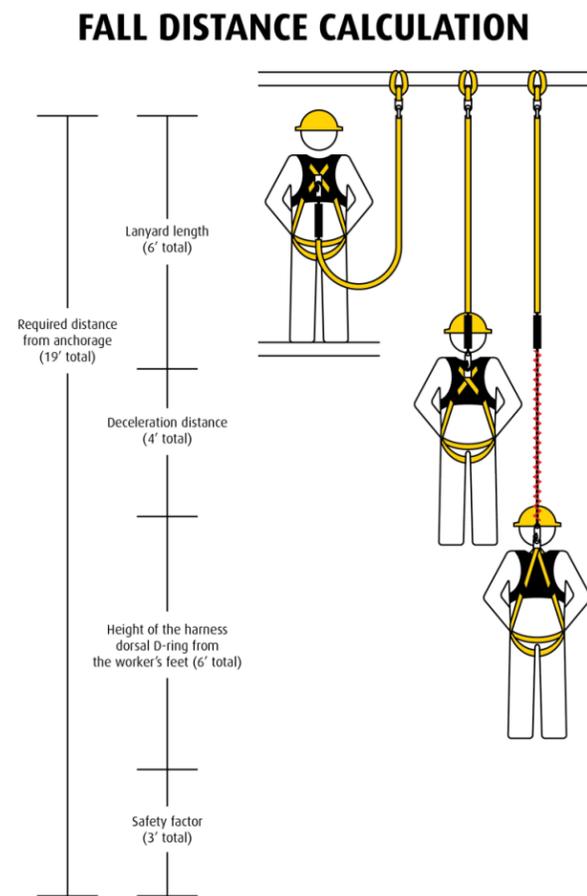
Distance from Leading Edge (Y)	Working Distance Along Roof Edge (Either Direction) (X)	Working Angle From Perpendicular (θ)
6'	8'	53 Degrees
10'	9'-9"	45 Degrees
15'	11'-7"	38 Degrees
20'	13'-3"	33 Degrees
25'	14'-8"	30 Degrees
30'	16'	28 Degrees
35'	17'-2"	26 Degrees
40'	18'-3"	24 Degrees
45'	19'-4"	23 Degrees
50'	19'-10"	21 Degrees
55'	21'-4"	21 Degrees
60'	22'-3"	21 Degrees



For example, if the anchorage connector is 6 feet from the leading edge (Y), the working distance (X) is 8 feet in each direction from the perpendicular, which translates to a 53° working angle (θ).

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, make considerations including, but not limited to, deceleration distance, movement of D-ring, free fall distance, user height, elevation of work space, length of connecting lanyard or self-retracting lifeline, and lanyard/energy absorber elongation. **Diagram shown is an example fall clearance calculation ONLY. Worker height, length of lanyard, and other factors are case-specific and MUST be accounted for accordingly.**



WARNING Immediately remove product from use if it is exposed to forces of fall arrest.

Free fall: Fall arrest systems used in combination with the Bull Ring Anchor must be configured to limit potential free fall as much as possible. Unless explicitly stated otherwise, the maximum allowable free fall is 6 feet.

Compatibility

Guardian Fall Protection equipment is designed to be used with Guardian approved components. Please contact Guardian if you have any questions regarding compatibility. Making substitutions without approval from Guardian may lead to injuries and/or death by compromising the safety and reliability of the complete system. A Competent Person can make a determination regarding the compatibility of equipment of different manufacturers. All gates must withstand minimum loads of 3,600 pounds.

Snaphooks and carabiners must be securely closed and locked once coupled to an associated connector.



WARNING The following connections should NEVER be made.

- Direct connection of a snaphook to a horizontal lifeline

