

GUARDIAN

FALL PROTECTION



Product Name: 4-Way Plate Anchor

Part #: 00691

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 a Guardian Fall Protection 4-Way Plate 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 4-Way Plate Anchor, and all fall safety equipment used in combination with the 4-Way Plate Anchor.

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 and OSHA 1910 standards for fall protection. 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



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



Personal Fall Arrest: 4-Way Plate Anchor may be used to support a MAXIMUM 1 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: 4-Way Plate Anchor may be used to support a MAXIMUM 2 PFAS for use 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.

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

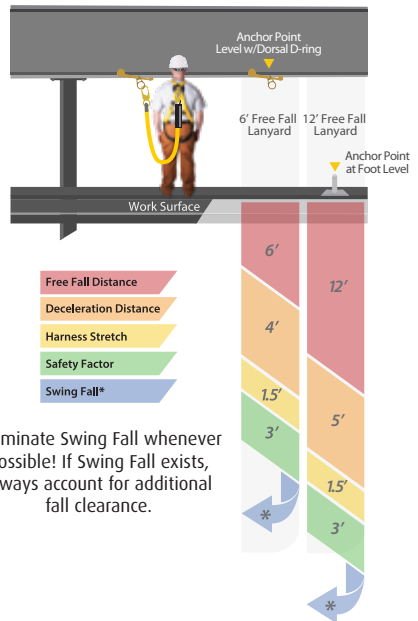
Limitations

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 3' 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.



*Eliminate Swing Fall whenever possible! If Swing Fall exists, always account for additional fall clearance.

Compatibility: When making connections with 4-Way Plate Anchor, 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 4-Way Plate Anchor 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. **NO.**

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



Connector directly to webbing. **NO.**

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



Connector directly to horizontal lifeline. **NO.**

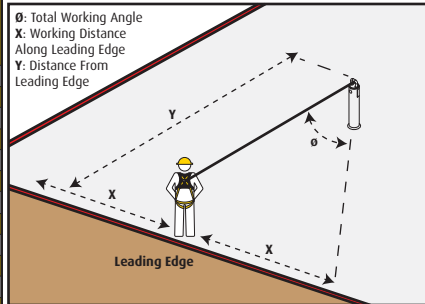
Two or more snap hooks or carabiners connected to each other. **NO.**



Correct Anchorage Positioning:

This chart details allowable working zones required to reduce risk of swing falls and improper side loading. ALWAYS adhere to information specified by chart.

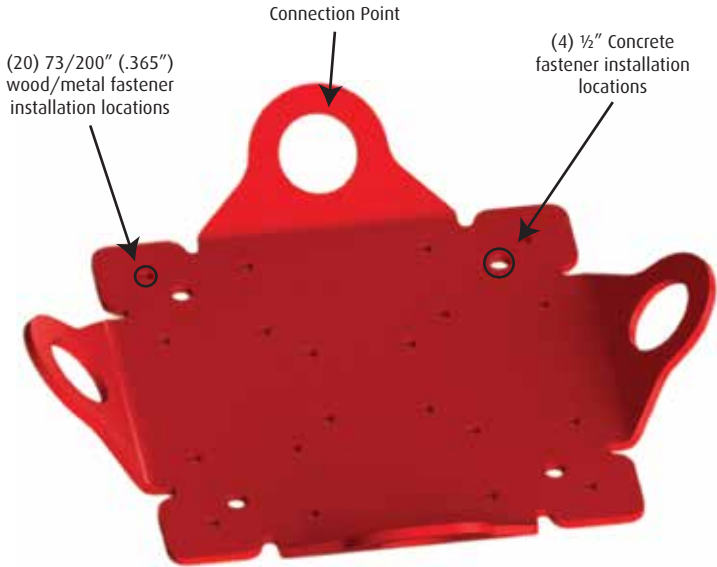
Anchor Distance From Leading Edge (Y)	Working Distance Along Roof Edge (Either Direction) (X)	Working Angle From Perpendicular (θ)
6'	8'	53°
10'	9' - 9"	45°
15'	11' - 7"	38°
20'	13' - 3"	33°
25'	14' - 6"	30°
30'	16'	28°
35'	17' - 2"	26°
40'	18' - 3"	24°
45'	19' - 4"	23°
50'	19' - 10"	21°
55'	21' - 4"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



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

Components and Specifications

Materials: Powder-coated steel.



Installation and Use

MINIMUM substrate requirements:

Wood: 3/4" CDX or better.

Metal: 24 gauge.

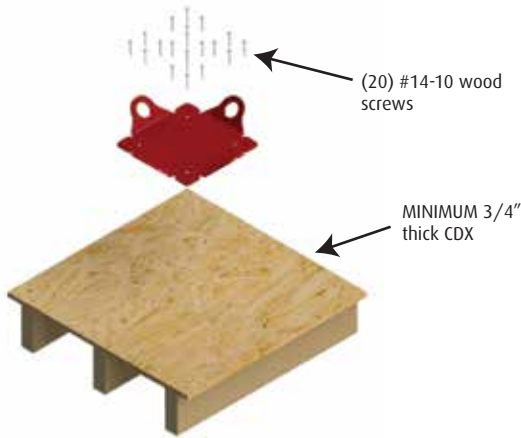
Concrete: 6", 2,500 psi.

Prior to installation, plan your system:

1. Selected installation location must be MINIMUM 6' from leading edge of fall hazard(s). Installation location must be free of debris, rot, rust, cracking, and hazardous materials.
2. Make considerations for eliminating or minimizing swing fall.
3. 4-Way Plate Anchor must lie flush with substrate.
4. Substrate must support minimum application loads as specified by this instruction manual.
5. Substrate must allow all fasteners to be fully embedded as specified by this instruction manual.

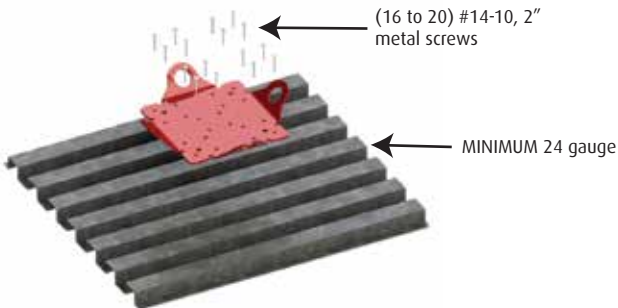
Wood Installation:

1. Use (20) #14-10 wood screws, or fasteners deemed compatible by a Competent Person, at all wood/metal fastener installation locations (see image on pg. 4).
2. All fasteners **MUST** be fully embedded in substrate.
3. **DO NOT** apply torque to fasteners.
4. All fasteners **MUST** be used.



Metal Installation:

1. Use (20) #14-10, 2" metal screws, or fasteners deemed compatible by a Competent Person, at all wood/metal fastener installation locations (see image on pg. 4).
2. All fasteners **MUST** be fully embedded in substrate.
3. **DO NOT** apply torque to fasteners.
4. Guardian Fall Protection recommends all (20) fasteners be used for installation, however a **MINIMUM 16** fasteners **MUST** be used. **ONLY** use fewer than 20 fasteners if valley exists in metal substrate that prevents all 20 fasteners from being fully embedded.



Concrete Installation:

1. Use (4) ½" concrete fastener installation locations (see image on pg. 4). Guardian Fall Protection recommends using ½" x 3½" Threaded ROD assemblies.
2. Follow manufacturer's fastener instructions for limitations and installation procedure.
3. All fasteners MUST be embedded in substrate a MINIMUM of 3½".
4. DO apply torque (specific to fastener manufacturer specifications) to secure anchor to substrate. Compact washer to anchor surface.



Anchor flush with substrate

MINIMUM 3½"
embedment



MINIMUM 6"

Washers compressed
against 4-Way Plate Anchor



Horizontal Lifeline (HLL) Applications:

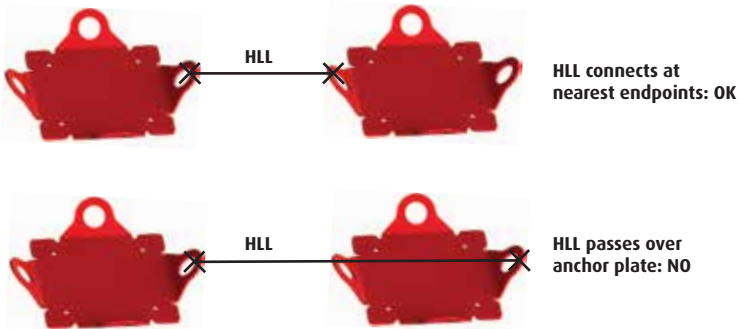
All stages of design, installation, and use of HLL MUST be done under the supervision of a Qualified Person. HLLs MUST be used in combination with complete and compatible PFAS, and achieve a 2:1 safety factor.

Please refer to Guardian Fall Protection’s Absorbinator instructions for complete details and regulations for Cable HLL applications, or contact Guardian for more information. HLL must possess integral shock absorbing functionality, or be used in combination with additional HLL shock absorber, such as the Absorbinator.

HLLs used in combination with the 4-Way Plate Anchor MUST limit end anchor loads to 2,500 lbs. or less to maintain a 2:1 safety factor.


When HLL is attached to connection point on 4-Way Plate Anchor, no other connections to the same anchor are permitted, with the exception of the continuation of the HLL system via the attachment of an additional cable run to a separate connection point. Multiple HLL spans MUST NEVER be connected to same connection point on the 4-Way Plate Anchor.

HLL must run between nearest connection points on 4-Way Plate Anchor, such that possibilities for incompatible or side-loaded connections are avoided. Never install HLL such that it passes over 4-Way Plate Anchor.



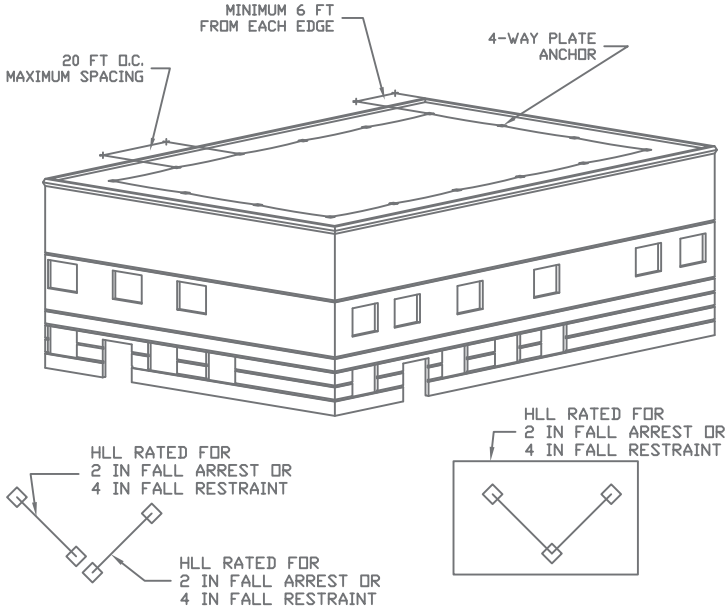
Calculating fall clearances in HLL applications is critical, and MUST be accounted for by the Qualified Person responsible for the installation of the system.

See diagram on pg. 8 for more details regarding the installation and use of HLLs in combination with the 4-Way Plate Anchor.

 WARNING	Increased Fall Arrest and Restraint capacities indicated on diagram on pg. 8 relate ONLY to use of 4-Way Plate Anchor in combination with HLL.
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MAXIMUM distance between 4-Way Plate Anchors when used in HLL applications: 20'.

4-WAY PLATE ANCHOR RECOMMENDED HORIZONTAL LIFELINE LAYOUT AND USE



NOTES:

1. INSTALL ALL 4-WAY PLATE ANCHORS A MINIMUM OF 6 FT (GUARDIAN RECOMMENDS 10 FT) FROM THE ROOF EDGE AND SPACE THEM A MAXIMUM OF 20 FT APART.
2. INSTALLATION AROUND THE PERIMETER OF THE LEADING EDGE AREAS IS RECOMMENDED TO ENSURE COMPLIANCE AND ALLOW THE USER TO EASILY SWITCH FROM ANCHOR TO ANCHOR.

WARNING:

ATTACH A MAXIMUM OF 4 WORKERS IN FALL RESTRAINT OR A MAXIMUM OF 2 WORKERS IN FALL ARREST PER CABLE RUN.

NOTE:

A TERMINATED CABLE RUN SHARING A MULTI-DIRECTIONAL ANCHOR WITH ANOTHER RUN IS CONSIDERED ONE RUN.

ANCHOR NOTES:

1. GUARDIAN FALL PROTECTION FALL PROTECTION ANCHORAGES ARE DESIGNED TO BE USED WITH ANSI Z359.1 APPROVED FALL PROTECTION EQUIPMENT.
2. FALL PROTECTION ANCHORAGES ARE DESIGNED FOR AN ULTIMATE LOAD OF 6,000 LBS. WITHOUT FRACTURE OR DETACHMENT. CONTACT A GUARDIAN FALL PROTECTION REPRESENTATIVE FOR CERTIFICATION TO USE AS A WINDOW WASHING TIE-BACK ANCHOR.
3. GUARDIAN FALL PROTECTION DESIGNS THE ANCHOR TO STRUCTURE CONNECTION. THE ABILITY OF THE STRUCTURE TO WITHSTAND THE DESIGN LOADS IS TO BE CHECKED BY OTHERS.

	GUARDIAN FALL PROTECTION 26609 79th AVE SOUTH KENT, WA 98032 (800) 466-6385 WWW.GUARDIANFALL.COM
	<h3>INSTALLATION DETAILS</h3>
	PRODUCT: 4-WAY PLATE ANCHOR
	SHOWN: 4-WAY PLATE ANCHOR (#00691)

Maintenance, Cleaning, and Storage

If 4-Way Plate Anchor 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 4-Way Plate Anchor. Remove all dirt, corrosives, and contaminants from 4-Way Plate Anchor before and after each use. If 4-Way Plate Anchor cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean 4-Way Plate Anchor 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 4-Way Plate 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 4-Way Plate Anchor 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 6 months, a Competent Person other than the user must inspect 4-Way Plate Anchor. **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 4-Way Plate Anchor have been subjected to.

Inspection Log

Date of First Use: _____.

Product lifetime is indefinite as long as it passes pre-use and Competent Person inspections. User must inspect prior to EACH use. Competent Person other than user must complete formal inspection at least every 6 months. Competent Person to inspect and initial.

This inspection log must be specific to one 4-Way Plate Anchor. Separate inspection logs must be used for each 4-Way Plate Anchor. All inspection records must be made visible and available to all users at all times.

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

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

6035 S. 231st St. 1-800-466-6385 90008
Kent, WA 98032 www.guardianfall.com (Rev. D)

4-Way Plate Anchor
Part #: 00691

Date of Manufacture: [REDACTED] Made in China

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

Compliant with OSHA 1926 Subpart M and OSHA 1910 regulations.
Materials: powder-coated steel.

Worker capacity: 130-310 lbs. (including all equipment), or up to 420 lbs. if used with equipment explicitly certified for such use.

Prior to EACH use, inspect for corrosion, deformation, cracking, rust, alteration, and any other conditions that may affect functionality. IMMEDIATELY remove from use if defects or damage are found.

INSPECTION GRID

User must inspect prior to EACH use. Competent Person must complete formal inspection every 6 months. Competent Person to inspect and initial.

Date of First Use: _____ Product lifetime is indefinite as long as it passes pre-use and Competent Person inspections.

YR	J	F	M	A	M	J	J	A	S	O	N	D
20__												
20__												
20__												
20__												
20__												

If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE

DO NOT REMOVE LABELS

! WARNING

Only make compatible connections. Refer to instructions for connection and installation specifications.

Avoid hazardous conditions including, but not limited to, flame, corrosive chemicals, electrical shock, machinery, abrasive surfaces, sharp edges, weather, and uneven surfaces.

DO NOT use as overhead anchor. DO NOT cross-load.

Anchor load **MUST** be perpendicular to leading edge.

DO NOT attach multiple HLL spans to same connection point.

IMMEDIATELY remove anchor from service if subjected to forces of fall arrest.

Anchor MAXIMUM:
1 Fall Arrest System
-or-
2 Restraint Systems

If used with 2 Restraint systems, systems **MUST NOT** attach to same connection point.

DO NOT REMOVE LABELS

