From: Tim Myatt

Sent: Wednesday, November 15, 2023 1:37 PM

To: Brinkmann Operations

Subject: Framing Roof Anchor Install Reminder

Attachments: Guardian.pdf

Brinkmann has had a trend recently of butterfly type anchors not being installed correctly. Subcontractors have not been installing adequate fasteners and have been sideloading the anchor. In an effort to limit the risk of injuries and near misses please see the installation manual attached. Pre-planning the locations of anchor points, ensuring adequate fasteners, and complying with angle to avoid sideloading are the top three steps to take to eliminate this hazard.

*The following is for the Guardian 0455. Please review the manufacturer's information for other styles or brands.

Anchor Fastening Wood Install: - Into truss or support beam. Use (12) fasteners (6 per side) in center column of fastener installation holes.

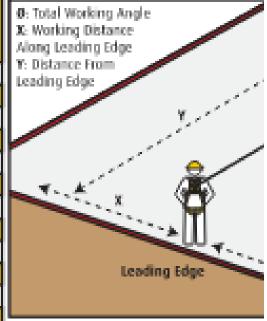
- Into field (not positioned over truss or support beam). Use (32)

fasteners in all fastener installation holes.

Wood Substrate Fastener Requirements: 16d nails, or #12, 2" wood deck screws.

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 (0)			
6'	O.	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.



Thank you,

Tim Myatt Safety Director



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Product Name: Temper Anchor

Part #: 00455

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 Temper 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 Temper Anchor, and all fall safety equipment used in combination with the Temper Anchor.

User Information							
Date of First Use:							
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 Z359.18-2017, 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: Temper 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: Temper Anchor 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.

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.

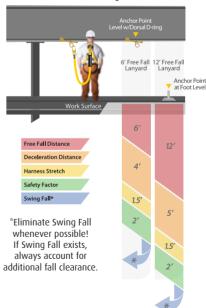
Diagram shown is an example fall clearance calculation ONLY.

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

Compatibility: When making connections with Temper 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 Temper 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:

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.





Connector closed and locked to D-ring. OK.



Two connectors to same D-ring. NO.



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

















Connector to integral lanyard. NO.

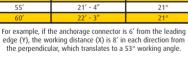
Connector directly to webbing.

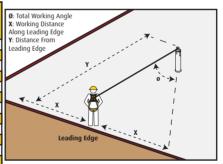
Connector directly to horizontal lifeline. NO.

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 (Ø)				
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°				
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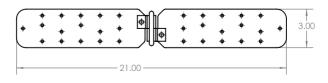
Components and Specifications

Type A anchorage connector.

Minimum permitted service temperature: -30° F.

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

Materials: zinc-plated steel.





Installation and Use

MINIMUM substrate thickness requirements:

- · Wood: 3/4" (total combined).
- · Metal: 20g.
- · Concrete: 4" thick and 4,000 PSI.

Substrate fastener requirements:

- · Wood: 16d nails, or #12, 2" wood deck screws.
- Metal: #12, 2" metal deck screws.
- Concrete: 1/4" x 23/4" concrete screws.

Compatible roof pitch:

- Installed over roof peak: 0/12 12/12.
- Installed on flat surface: 0/12 vertical/sheer. Never install past sheer (such as on underside of beam or slab).

1. Determine installation location for Temper Anchor; ensure location is free of debris, rot, decay, cracking, and hazardous materials. NEVER install on substrate incapable of withstanding minimum loads required by application.



NEVER load anchor improperly. Prior to installation, refer to anchorage positioning chart (pg. 3) to ensure installation location will satisfy intended work application(s).



- 2. Make considerations for eliminating or minimizing swing fall hazards.
- 3. Ensure all fasteners are those supplied by Guardian Fall Protection, or are deemed compatible and equivalent by a Competent Person.
- 4. Temper Anchor MUST install flush against substrate. All fasteners MUST be fully embedded in substrate. Install in accordance with appropriate substrate detail.
- 5. Temper Anchor may be used in combination with a horizontal lifeline (HLL) system, but only if HLL is installed in parallel with long end of anchor plate. All set-up, installation, and use of HLLs must be done under the supervision of a Qualified Person.



Wood install:

- Into truss or support beam. Use (12) fasteners (6 per side) in center column of fastener installation holes.
- Into field (not positioned over truss or support beam). Use (32) fasteners in all fastener installation holes.

Metal install:

- Use (16) fasteners (8 per side). On each side, install in center column of fastener installation holes, in 1 hole left of center, and in 1 hole right of center.





Concrete install:

- Use (8) fasteners (4 per side). Distribute fasteners evenly across Temper Anchor.
- 5. Attach complete and compatible PFAS to Temper Anchor Connection Point.



4 per side, evenly distributed.



NEVER over-torque screws. Excessive torque may cause damage to screws and result in unsafe installation. OK for use in multiple installation applications. Always use new fasteners for each new installation. Removal of anchor from initial location may cause warping/damage. NEVER reinstall anchor if damage exists or it will not lie flush against substrate.

Maintenance, Cleaning, and Storage

If Temper 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 Temper Anchor. Remove all dirt, corrosives, and contaminants from Temper Anchor before and after each use. If Temper Anchor cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean Temper 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 Temper Anchor for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, broken stitching, fraying, and missing or illegible labels. IMMEDIATELY remove Temper 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 12 months, a Competent Person other than the user must inspect Temper 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 Temper 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 12 months. Competent Person to inspect and initial.

This inspection log must be specific to one Temper Anchor. Separate inspection logs must be used for each Temper Anchor. 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

