

# 020-4029 Post Anchor Instruction Manual



#### WARNING



This product is part of a personal fall arrest, work positioning, fall restraint, or rescue system. The manufacturer's instructions must be provided to users of this equipment. The user must follow the manufacturer's instructions for each component of the system. The user must read and understand these instructions before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this equipment. Alterations to this product, misuse of this product, or failure to follow instructions may result in serious injury or death.

#### **IMPORTANT**

Questions regarding the use, care, or suitability of this equipment for your application? Contact Safewaze.

#### **IMPORTANT**

Record initial usage of product on Page 2, and Page 10. Competent Person inspections are required to be documented in the Inspection Log Table on Page 10.

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## **User Information**

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

Do not throw away these instructions!

Read and understand these instructions before using equipment!



#### 1 - Introduction

Thank you for purchasing the Safewaze 020-4029. 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 manual and any other instructional material must be available to the user of the equipment. The user must understand how to safely and effectively use the 020-4029, and all fall protection equipment used in conjunction with the 020-4029.

## 2 - Decscription

The 020-4029 Post Anchor is a single point anchor with a total height of 18". The PFAS connection point is a Welded Eye located at the top of the post. The 020-4029 is designed for embedment and permanent use in a concrete application. The post comes equipped with 4 studs that extend downward from the baseplate for installation into concrete during pour operations. The concrete must be a minimum of 3,000 psi with a minimum thickness of 6". Concrete must be allowed to properly cure prior to use of the 020-4029. Use of the 020-4029 prior to curing of concrete can result in serious injury or death.

## 3 - Applicable Safety Standards

When used according to instructions, this product meets or exceeds all applicable OSHA 1926.502, 1910.140, 1910.66, standards for fall protection.

Applicable standards and regulations depend on the type of work being done and may also include state-specific regulations. Refer to local, state, and federal (OSHA) requirements for additional information concerning the governing of occupational safety regarding Personal Fall Arrest Systems (PFAS).

## 4 - Worker Classifications



Understand the definitions of those who work in proximity of or 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 hazards, and who has the authority to stop work 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.

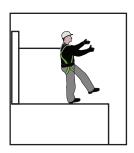
It is the responsibility of a Qualified or Competent Person to supervise the job site and ensure safety regulations are complied with.



## 5 - Specific Anchor Applications



**Personal Fall Arrest:** The 020-4029 is designed as an anchor point to support a maximum of 1 Personal Fall Arrest System (PFAS) when utilized for fall protection applications. The structure to which the anchor is attached must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Maximum allowable free fall is 6'.



**Restraint:** The 020-4029 is authorized for use in Restraint applications. The structure to which the anchor is attached 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). For Restraint applications, the allowable attachment points to harness are Dorsal D-ring, Chest D-ring, Side D-rings, and Shoulder D-rings.



**Work Positioning:** The 020-4029 is authorized for use in Work Positioning applications. Work Positioning allows a worker to be supported during suspension while freeing both hands to conduct work operations. The structure to which the Anchor is attached must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. Maximum allowable free fall is 2'. For positioning applications, the allowable attachment points to harness are the Side D-rings.



Rescue/Confined Space: The 020-4029 is authorized for use in Rescue/Confined Space applications. Rescue systems are utilized to safely recover a worker from a confined location or after exposure to a fall. Composition of rescue systems can vary based upon the type of rescue involved. The structure to which an Anchor is attached must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. NO free fall is permitted. For rescue applications, the allowable attachment points to harness are Dorsal D-ring, Chest D-ring and Shoulder D-rings.

All above referenced applications have a worker weight capacity range of ANSI 130-310 lbs (including all clothing, tools, and equipment), OSHA 420 lbs.

# 6 - Capacity

The 020-4029 is ANSI compliant with a specified single user weight capacity of 310 lbs. (Including Tools, Clothing etc.). This product is also OSHA compliant with a specified single user capacity of 420 lbs. (Including Tools, Clothing, etc.).

# 7 - Structure Requirements

The structure to which the 020-4029 is attached must be capable of withstanding a 90,000 in-lbs. (10,169 N m) moment, and a 5,000 lbs. (2,268 kg) vertical load. Installation of the 020-4029 must comply with local regulation standards and be approved by a Qualified Person before use.



Use care when selecting the anchorage installation location. Structural strength, obstructions in the users fall path, and swing fall hazards must all be considered prior to installation. A Qualified Person can determine if a structure is capable of withstanding the applied Maximum Arrest Force (MAF) of the Personal Fall Arrest System (PFAS) with a Safety Factor of at least two.

#### 8 - 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, and all other applicable factors. (See Figure 1)

FIGURE 1

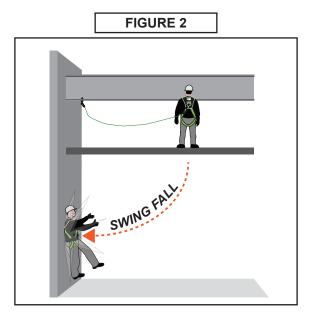
For all applications: worker weight capacity range (including all clothing, tools, and equipment) is ANSI 130-310 lbs., OSHA 420 lbs.

## **Fall Clearance Diagram**

\*\*\*Diagram shown is an example fall clearance calculation ONLY. Lanyard Length (6' - Minus Height of Post) (4.5' Total) Original Lanyard Working Length prior to a fall event with energy absorber deployment Deceleration/Elongation Required distance (5' Total) distance from Harness Stretch Anchorage (1' Total) (17.5' Total) Height of harness dorsal D-ring from worker's feet (5' Total) Safety factor (2' Total)



**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. (See Figure 2)



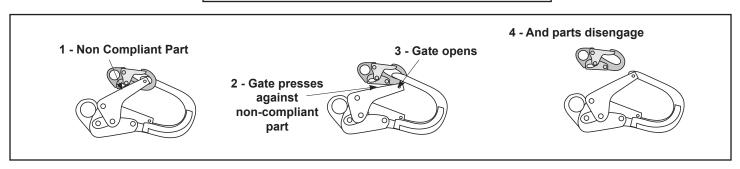
## 9 - Compatibility Of Connectors

Connectors are compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22.2 kN). Connectors must be compatible with the anchorage or other system components (see Figure 4). Do not use equipment that is not compatible. Non- compatible connectors may unintentionally disengage (see Figure 3). Connectors must be compatible in size, shape, and strength. Self-locking snap hooks and carabiners are required by ANSI Z359 and OSHA guidelines. Contact Safewaze if you have any questions about compatibility.



**NOTE**: SOME SPECIALTY CONNECTORS HAVE ADDITIONAL REQUIREMENTS. CONTACT SAFEWAZE WITH QUESTIONS.

#### FIGURE 3 - UNINTENTIONAL DISENGAGEMENT



Using a connector that is undersized or irregular in shape (1) to connect a snap hook or carabiner could allow the connector to force open the gate of the snap hook or carabiner. When force is applied, the gate of the hook or carabiner presses against the non-compliant part (2) and forces open the gate (3). This allows the snap hook or carabiner to disengage (4) from the connection point.



## 10 - Making Connections

Snap hooks and carabiners used with this equipment must be double locking and/or twist lock. Ensure all connections are compatible in size, shape, and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

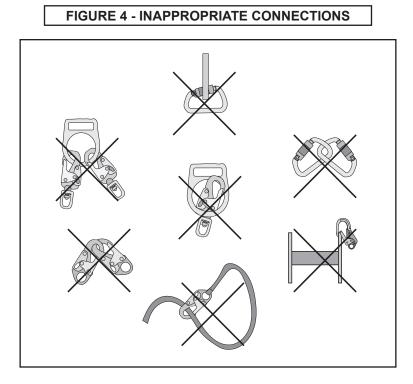
Safewaze connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See figure 4 for examples of inappropriate connections. Do not connect snap hooks and carabiners:

- To a D-ring to which another connector is attached.
- In a manner that would result in a load on the gate (with the exception of tie back hooks).
- NOTE: Large snap hooks must not be connected to objects which will result in a load on the
  gate if the hook twists or rotates, unless the snap hook complies with ANSI Z359.1-2007 or ANSI
  Z359.12 and is equipped with a 3,600 lb (16 kN) gate. Check the marking on your snap hook to
  verify its compatibility.



**NOTE:** Large throat snap hooks must not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates, unless the snap hook complies with ANSI Z359.1-2007 or ANSI Z359.12 and is equipped with a 3,600 lb (16 kN) gate. Check the marking on your snap hook to verify that it is appropriate for your application.

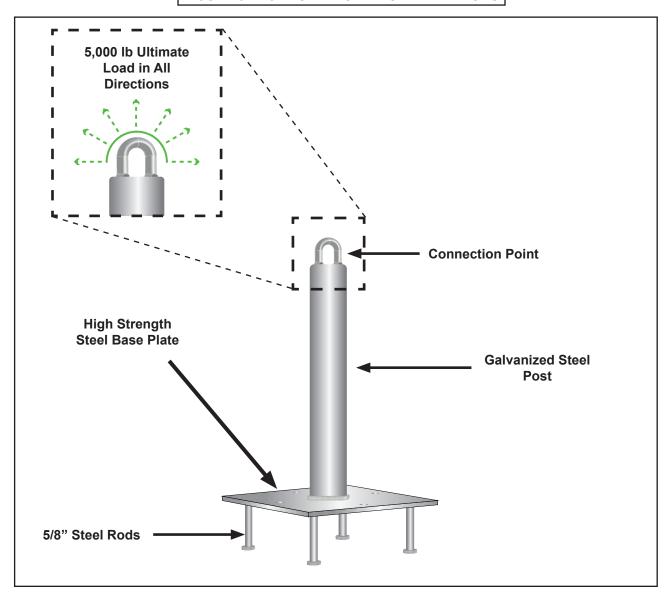
- In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.
- To each other.
- By wrapping the web lifeline around an anchor and securing to lifeline except as allowed for Tie Back models.
- To any object which is shaped or sized in a way that the snap hook or carabiner will not close and lock, or that roll-out could occur.
- In a manner that does not allow the connector to align properly while under load.





## 11 - Components and Specifications

#### FIGURE 5 - COMPONENTS AND SPECIFICATIONS



### 12 - Installation and Use

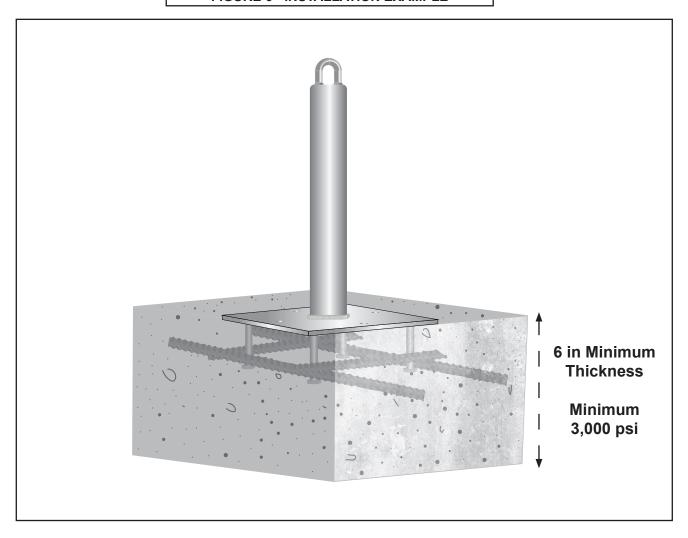
For installation of the 020-4029, the concrete must be a minimum thickness of 6 inches. The concrete must also be reinforced and a minimum of 3,000 psi.

To install, select the desired placement location prior to concrete pour. Ensure that anchor 5/8" threaded rods are completely embedded in the concrete, and the baseplate is sitting level on the surface. Verify that the rods do not protrude beyond the bottom of the concrete pour. In an instance where the studs protrude beyond the bottom of the pour, the 020-4029 must not be used and removed.

Do not use the 020-4029 until the concrete is allowed to cure. Failure to allow the concrete to properly cure could result in serious injury or death.

Edge setback in the desired installation location of the substrate should be designed and approved by a Qualified Person or Professional Engineer.





## 13 - Inspection

User must inspect the 020-4029 prior to each use for damage or deficiencies, including, but not limited to, cracking, rust, corrosion, deformation, alteration, sharp edges, damage due to excessive heat, and missing or illegible labels.

Ensure that work area for intended installation of the 020-4029 is free from damage or conditions that would make the area unsuitable for installation. The user must ensure that the structure to which the 020-4029 is intended to be fastened to will support the application specific loads covered in this manual.

A Competent Person other than the user must inspect the 020-4029 at least annually. These Competent Person inspections must be recorded in the Inspection Log included in this manual and in the Inspection Table included on the product label.

While conducting inspections, the Competent Person must consider all applications and hazards that the equipment may have been subjected to while in use.



## 14 - Inspection Log

Date of First Use:	
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Product lifetime is indefinite so long as it passes pre-use and Competent Person inspections. User must inspect prior to each use. Competent Person other than the user must complete formal inspection at least annually. Competent person to inspect and initial table below:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

## If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE

## 15 - 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 judgement or knowledge of federal or state WARNING 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 inspection 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 potentially hazardous workplace conditions. All fall protection equipment should be purchased in new and 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'. 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 is required in the event a fall occurs. 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, inspect, disassemble, 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.

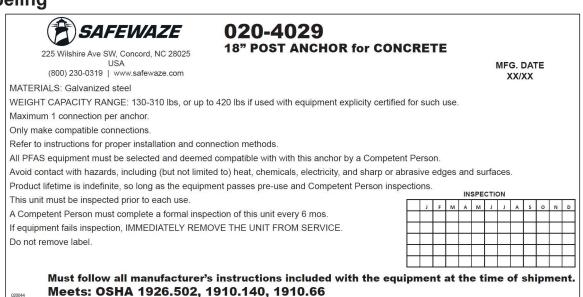
NEVER use fall protection equipment of any kind to hang, lift, support, or hoist tools or equipment, unless explicitly certified for such use.

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.

# 16 - Labeling







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