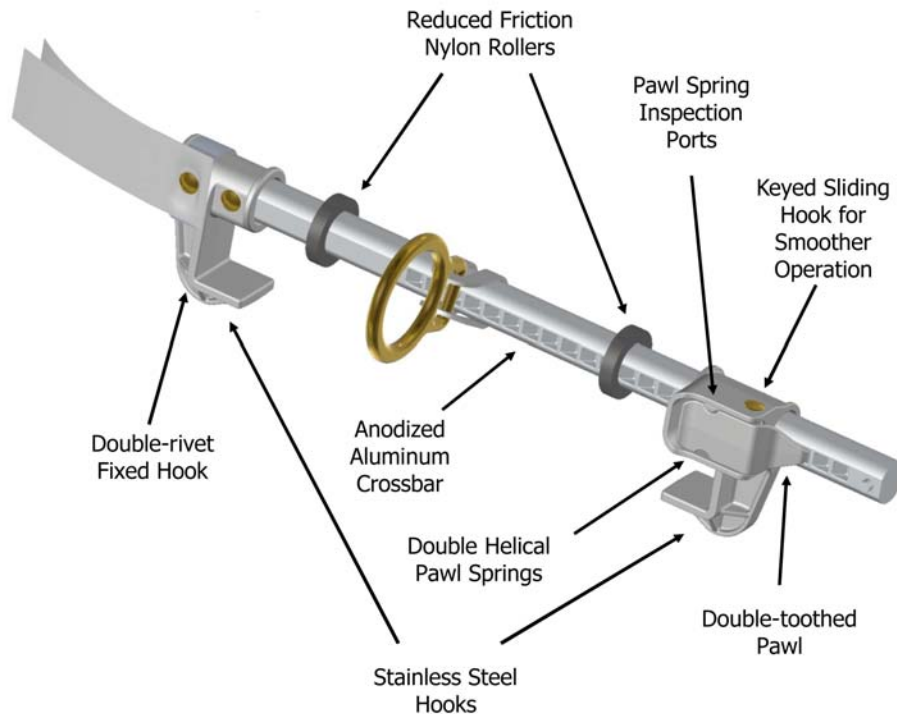


## User Instructions - FCP Beam Anchor No. 1702

*This document is intended to meet the Manufacturer's Instruction requirements as stated by ANSI Z359.1, and should be used as part of an employee training program as required by OSHA.*



FrenchCreek Production – Beam Anchor No. 1702

**ATTENTION:** This product serves as part of a fall protection system. All users must read, understand, and follow the manufacturer's instructions for each and every component of the system. All instructions must be followed for proper application, installation, use, and maintenance of this product. Changing the product, misuse of the product, or failure to follow instructions may result in serious injury or death.

If you have any questions concerning the application, installation, use, or maintenance of this product, please contact FrenchCreek Production.

## DESCRIPTION

The FCP Beam Anchor is an anchorage connector for a personal fall arrest system, designed for a temporarily installation on a Beam.

### Component materials:

Beam, beam end caps and D-ring holder: Zinc-dichromate plated steel.

Clamps and Latches: cast stainless steel.

D-ring: forged steel.

Latch springs: stainless steel.

Assembly hardware: zinc and nickel plated steel

## SPECIFICATIONS

### Dimensions:

Net weight: 4 lbs

Overall dimensions: 18 ½” x 4 ¾” x 1 7/16”

Beam flange width capacity: 3 ½” – 13 ¼”

Beam flange thickness capacity: 1 ¼”

## 1.0 APPLICATIONS

**1.1 PURPOSE:** The FCP Beam Anchor is an anchorage connector for use in a personal fall arrest system. The anchor can be used for fall arrest restraint, work positioning, personnel riding, or rescue / recovery.

**a. PERSONAL FALL ARREST:** Personal fall arrest systems typically include a full body harness and a connecting subsystem (energy absorbing lanyard). *Maximum permissible free fall distance is six feet.*

**b. RESTRAINT:** Used as a component of a restraint system, the FCP Beam Anchor can be mounted to prevent the user from reaching a fall hazard. Restraint systems typically include the use of full body harness, and a lanyard or restraint line. *No vertical free fall is permitted to occur in a restraint system application.*

**c. WORK POSITIONING:** Used as a component of a work positioning system, the FCP Beam Anchor can be mounted to support the user. Work positioning systems typically include a full body harness, positioning lanyard, and a back-up personal fall arrest system. *Maximum permissible free fall distance is two feet.*

**d. PERSONNEL RIDING:** Used as a component of a personnel riding system, the FCP Beam Anchor can be mounted to suspend or transport the user vertically. Personnel riding systems typically include a full body harness, bos'n chair or seat board, and a back-up personal fall arrest system. *No vertical free fall is permitted in a personnel riding system.*

**e. RESCUE / RECOVERY:** Used as a component of a rescue / recovery system, the FCP Beam Anchor can be mounted to aid in the rescue or recovery of a worker. Rescue systems are not always standard or typical applications, and their configuration depends on the type of rescue. *No vertical free fall is permitted.*

**1.2 LIMITATIONS:** Consider the following application limitations before using this equipment:

**a. CAPACITY:** The FCP Beam Anchor is designed to be used by one person with a combined weight (including all clothing, tools, etc...) of no more than 400 lbs. DO NOT connect more than one personal fall protection system to this anchor in any standard or typical application. *Note: For emergency rescue / recovery systems it may be acceptable to connect more than one system, if the anchorage will support all anticipated loads.*

**b. FREE FALL:** The free fall distance may not exceed government regulations of 6 feet (ANSI Z359.1), or the manufacturer's guidelines, including the guidelines for subsystems. See all manufacturer instructions for more information. *Restraint systems must be rigged so that no vertical free fall is possible. Work positioning systems must be rigged so that free fall is limited to two feet or less. Personnel riding systems must be rigged so that no vertical free fall is possible. Rescue systems must be rigged so that no vertical free fall is possible.*

**c. FALL CLEARANCE:** Proper clearance must be present below the worker to arrest a fall and avoid striking a lower level, obstruction, or the ground. The clearance required is dependent on the following factors:

- Elevation of anchorage connector
- Length of connecting subsystem
- Deceleration distance
- Movement of harness attachment element (sliding D-ring)
- Worker height
- Free fall distance
- Length of connecting subsystem

*See personal fall arrest system manufacturer instructions for more information.*

**g. SWING FALLS:** The force of striking an object in a swing fall may cause serious injury or death. Swing falls occur when the anchor point is not directly over the head of the worker. Minimize swing falls by working below or in front of the anchor point. A swing fall will significantly increase all clearances required when using a self retracting lifeline or other variable length connecting subsystem. If you feel that a swing fall situation exists in your application, please contact FrenchCreek Production before proceeding. There may be other solutions to rectify the situation.

**e. PHYSICAL / ENVIRONMENTAL HAZARDS:** Additional precautions may be necessary to reduce injury to the user or damage to the system, in locations that present physical or environmental hazards. Hazards may include, but are not limited to: heat, chemicals, corrosive environments, high voltage power lines, gases, machinery, and sharp edges. Please contact FrenchCreek Production if you have questions about using this product where hazards may exist.

**f. TRAINING:** This equipment must be installed and used by persons trained in its correct application and use. See section 4.0.

**1.3 APPLICABLE STANDARDS:** For more information on personal fall arrest systems and their associated components, refer to all national standards including ANSI Z359.1, as well as local, state, and federal requirements.

## **2.0 SYSTEM REQUIREMENTS**

**2.1 PERSONAL FALL ARREST SYSTEM:** The FCP Beam Anchor must be used with FrenchCreek approved components and subsystems. Other components may be incompatible, which could directly affect the safety and reliability of the entire system. Personal fall arrest components used with this system must meet all applicable OSHA and ANSI requirements. The connecting subsystem between the harness and Anchor must limit fall arrest forces to 900 lbs. or less. An OSHA/ANSI compliant full body harness must be used with this system.

When a free fall greater than 6' and a maximum of 12' is possible, FCP recommends using a fall arrest system incorporating a FCP DT shock absorbing lanyard.

**2.2 COMPATIBILITY OF COMPONENTS:** FrenchCreek Production equipment is designed for use with FrenchCreek approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of the unit and may affect the safety and reliability of the complete system.

**2.3 COMPATIBILITY OF CONNECTORS:** Connectors are considered to be 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. Contact FrenchCreek Production if you have any questions about compatibility.

Connectors (snap hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22.2kN). Connectors must be compatible with the anchorage and other system components. The use of non-compatible connectors is prohibited, as they may unintentionally disengage. Self locking snap hooks and carabiners are required by ANSI Z359.1, OSHA, and CSAZ259.12.

**2.4 CONNECTIONS:** Self-locking snap hooks & carabiners must be used with this equipment. Only use compatible connectors (in size, shape, & strength) that are suitable to each application. Ensure that all connectors are fully closed and locked before use. All connectors (snap hooks & carabiners) are designed to be used only as specified in the product's user's instructions. Only one snap hook or carabiner should be connected to the D-ring at any time. **A connection should not be made resulting in a load on the gate.**

**2.5 ANCHORAGE STRENGTH:** The anchorage strength required is dependent on the application. Following are anchorage strength requirements for specific applications:

**a. FALL ARREST:** The structure in which the FCP Beam Anchor is attached, must sustain static loads applied in the directions permitted by the fall arrest system of at least 3,600 lbs. with certification of a qualified person, or 5,000 lbs. without certification. See ANSI Z359.1 for the definition of certification. When more than one personal fall arrest system is attached to an anchorage, the strengths stated above must be multiplied by the number of personal fall arrest systems attached to the anchorage. From OSHA 1926.500 and 1910.66:

Anchorage used for the attachment of a personal fall arrest system should be independent of any anchorage being used to support or suspend platforms, and must support at least 5,000 lbs. per user attached, or be designed, installed, and used as part of a complete personal fall arrest system which maintains a safety factor of at least two, and is supervised by a qualified person.

**b. RESTRAINT:** The structure in which the FCP Beam Anchor is attached must sustain static loads applied in the directions permitted by the restraint system of at least 3,000 lbs. When more than one restraint system is attached to an anchorage, the strengths stated above must be multiplied by the number of restraint systems attached to the anchorage.

**c. WORK POSITIONING:** The structure in which the FCP Beam Anchor is attached must sustain static loads applied in the directions permitted by the work positioning system of at least 3,000 lbs., or twice the potential impact load, whichever is greater. When more than one work positioning system is attached to the anchorage, the strengths stated above must be multiplied by the number of work positioning systems attached to the anchorage.

**d. PERSONNEL RIDING:** The structure in which the FCP Beam Anchor is attached must sustain static loads applied in the directions permitted by the personnel riding system of at least 2,500 lbs. When more than one personnel riding system is attached to an anchorage, the strengths stated above must be multiplied by the number of personnel riding systems attached to the anchorage.

**e. RESCUE:** The structure in which the FCP Beam Anchor is attached must sustain static loads applied in the directions permitted by the rescue system of at least 2,500 lbs. When more than one rescue system is attached to an anchorage, the strengths stated above must be multiplied by the number of rescue systems attached to the anchorage.

<p><b>WARNING:</b> Mark or label the FCP Beam Anchor with its intended application. Use of this equipment for an application that does not meet the anchorage strength requirements stated above may result in serious injury or death.</p>
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### 3.0 INSTALLATION AND USE

**WARNING:** Do not alter or intentionally misuse this equipment. Consult FrenchCreek Production when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, and sharp edges.

**WARNING:** Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall arrest. Age and fitness seriously affect a worker's ability to withstand falls. Pregnant women or minors must not use FCP anchorage connectors.

**3.1 BEFORE EACH USE:** equipment must be inspected according to section 5.0 of this manual.

**3.2 PLAN:** Plan the use of your system BEFORE installation. Consider all factors that will affect your safety during use of this equipment. ***IMPORTANT: consider the following points when planning the use of your system:***

**a. ANCHORAGE:** Use anchorage capable of supporting the loads specified in section 2.5.

**b. SHARP EDGES:** Avoid working where unprotected or sharp edges may contact the anchor or any connecting subsystem (energy absorbing lanyard) or other components. If working around sharp edges is unavoidable, use protective covers on equipment to protection against abrasion or cutting.

**c. AFTER A FALL:** Components which have been subjected to the forces of arresting a fall must be removed from service and destroyed.

**d. RESCUE:** An onsite rescue team trained in the proper techniques, tools, and equipment is extremely ideal and beneficial on a worksite, in the event of a fall. Ongoing training should be provided to ensure proficiency in rescue. The employer must have a rescue plan established when using this equipment.

### 3.3 INSTALLATION:

**a.** Locate structural steel "I", "S" or "W" beam capable of withstanding a 5,000 lb. static load or meets OSHA 1926.502 requirements for a safety factor of two.

**b.** Push at back of clamp toward center D-ring until clamp clear the beam flange.

**c.** Place crossbar perpendicular to beam so that D-ring is centered on beam.

**d.** Check to be sure latch teeth are fully engaged in the locking slots of the crossbar. Test pull the unit to ensure that it cannot come off the beam by twisting or rocking, then attach lanyard or retractable to swiveling D-ring.

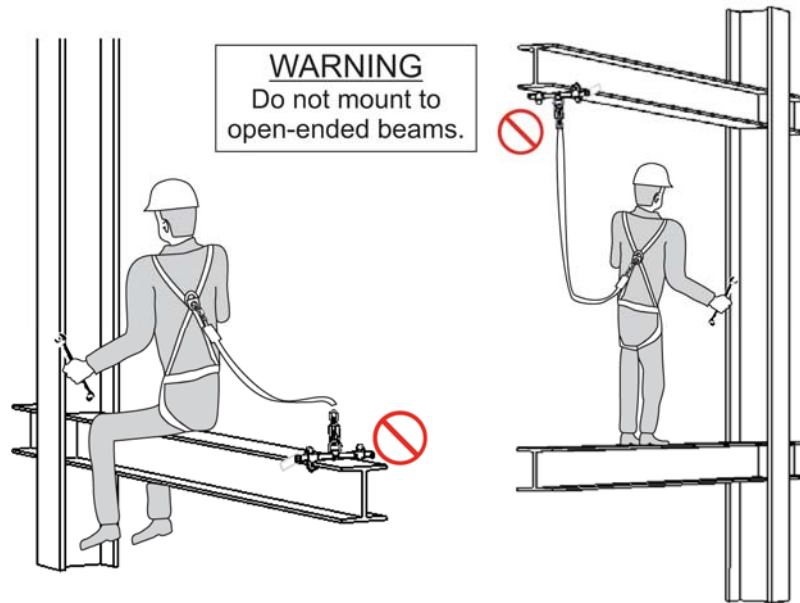
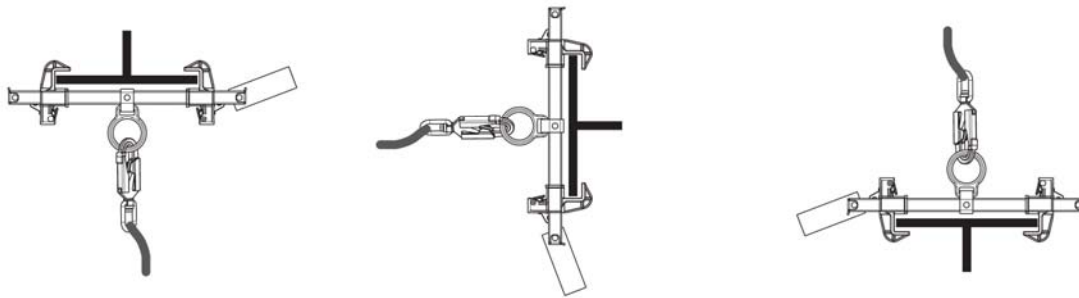
**e.** Always readjust when switching to a new beam to ensure anchorage.

**WARNING:** Do not use and immediately remove from service if inspection reveals signs that the anchor is unsafe or in a defective state or condition.

**WARNING:** Do not mount to open-ended beams, which may allow the anchor to disengage.

**CAUTION:** If using anchor at foot level it will be necessary to use a special lanyard designed for 12ft. falls.

Acceptable installation orientations for sliding beam anchor with standard 6ft lanyard.



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**3.4 MAKING CONNECTIONS:** When using a snap hook to connect to the FCP Beam Anchor, ensure that a roll-out cannot occur. Roll-outs occur when interference between the hook and mating connector causes the hook gate to unintentionally open and release. Self locking snap hooks and carabiners should always be used to reduce the possibility of roll-out. Do not use hooks or connectors that will not completely close over the attachment object.

## 4.0 TRAINING

**4.1** It is the responsibility of all users of this equipment to fully understand these instructions, to become trained in the proper methods concerning the application, installation, use, maintenance, and removal of this product, and to be aware of the consequences of improper methods concerning the application, installation, use, maintenance, and removal of this product. *This document is not a substitute for a comprehensive training program. Training should be provided on an ongoing basis to ensure user proficiency. Training programs should NEVER incorporate an actual fall hazard.*

## **5.0 INSPECTION**

**5.1 PRIOR TO EACH INSTALLATION:** Inspect the Beam anchor before each use. The Beam anchor must be seated firmly against the Beam. Inspect D-ring, and mounting plate for any signs of wear, deformation, deterioration, corrosion, or any other visual signs of damage.

### **5.2 INSPECTION STEPS:**

**Please follow the following Steps:**

- 1.** Inspect the Beam Anchor for damage: Look for cracks, dents, corrosion, or deformities. Look for bending or wear on the cross-member, D-ring, and legs adjustment mechanism. Ensure that all parts are present, secure, and in good working order.
- 2.** Inspect the Adjustable / Locking Ratchet mechanism, ensure that the adjustable leg is working properly and that the two are properly attached and secure.
- 3.** Record the inspection date and all results in an inspection / maintenance log.

**5.3** If your inspection reveals an unsafe or defective condition, remove the unit from service, or return the unit to FrenchCreek Production for further inspection or repair.

## **6.0 MAINTENANCE, SERVICING, STORAGE**

**6.1 CLEANING:** Periodically clean the Beam Anchor using water and a mild soap solution. Do not use acids or other caustic chemicals that may damage the system or the system components.

**6.2 USER EQUIPMENT:** Maintain, service, and store harness and personal fall arrest components according to all manufacturer instructions.