



# SAFEWAZE™

## FS805-KM

### 60'/80'/100' PORTABLE KERNMANTLE ROPE HORIZONTAL LIFELINE



Compliant with OSHA 1910, OSHA 1926 Subpart M  
ANSI A10.32

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## Introduction of FS805-KM & Scope of Use

Thank you for purchasing a SAFEWAZE™ FS805-KM Temporary Kernmantle Horizontal Lifeline. 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 FS805-KM, and all fall protection equipment used in conjunction with the FS805-KM.

The SAFEWAZE™ FS805-KM has been designed for your safety.

These temporary lifeline systems are designed to offer users a flexible anchorage between two structures. The lines can also be used to provide a temporary handrail or barrier system.

### FS805-KM



System	Recommended Users	Maximum Users
FS805-KM	1	2

## Applicable Safety Standards

When used according to instructions, this product meets or exceeds all applicable OSHA 1926.502 Subpart M, OSHA 1910, and ANSI A10.32 standards for fall protection. Applicable standards and regulations depend on the type of work being done, and also might 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).

## 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 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 safety regulations are complied with.**

## Product Specific Applications

**Personal Fall Arrest:** SAFEWAZE™ FS805-KM Horizontal Lifelines can be used as part of a complete Personal Fall Arrest System (PFAS) for a maximum of 2 users. The structure utilized for attachment must be capable of withstanding a load of 5,000 lbs in all directions permitted by the system. The maximum allowable free fall is 6 ft, with the maximum combined length of the fall arrester, lanyard extension, and D-ring being 36 inches.

# Limitations

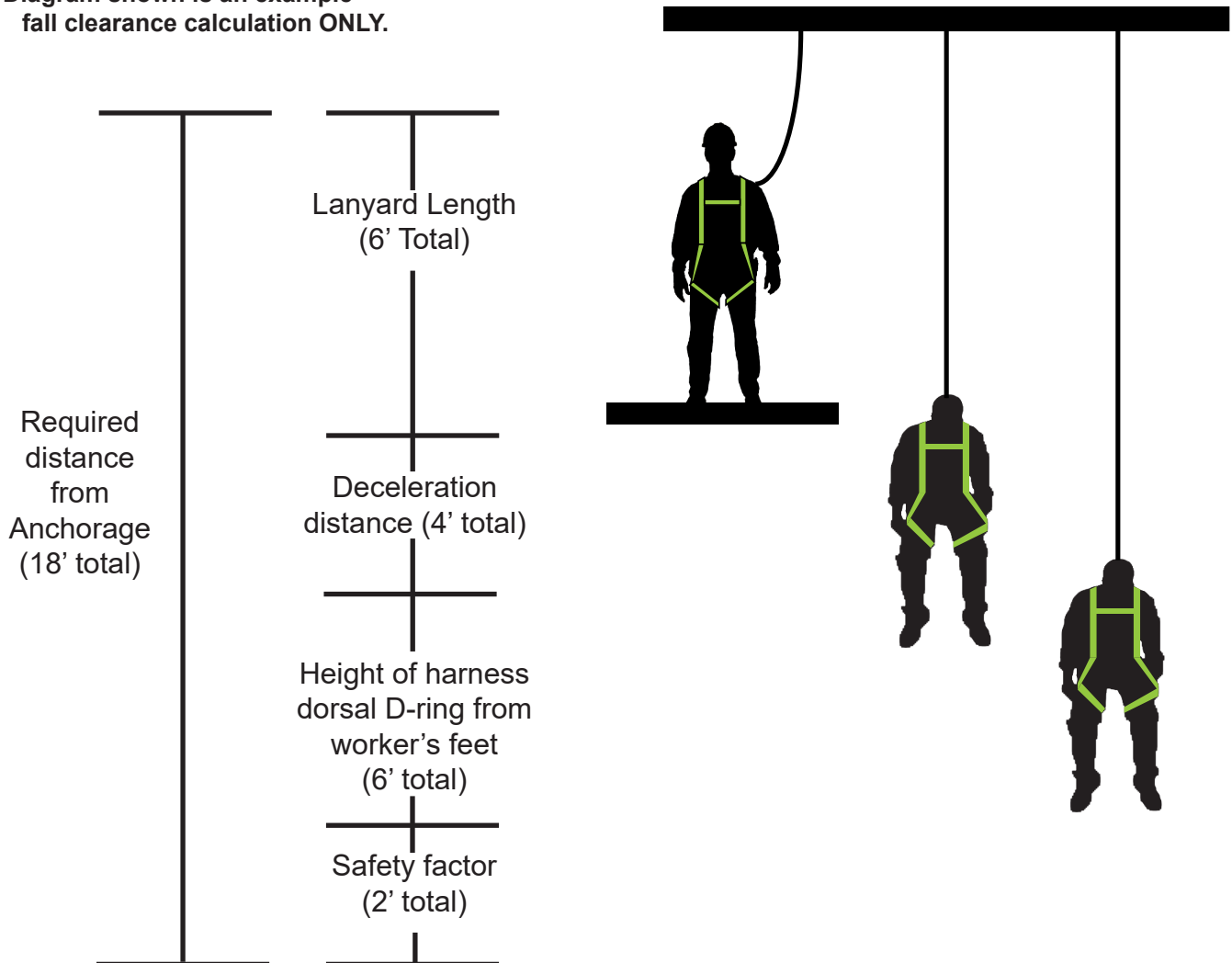
**Fall Clearance:** There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a MINIMUM 2' safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable factors. (See Figure 1)

**FIGURE 1**

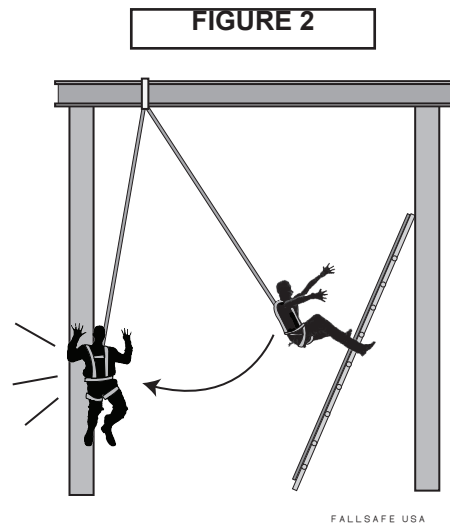
For all applications: worker weight capacity range (including all clothing, tools, and equipment) is 130-310 lbs

## Fall Clearance Diagram

\*\*\*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 even of a fall. (See Figure 2)



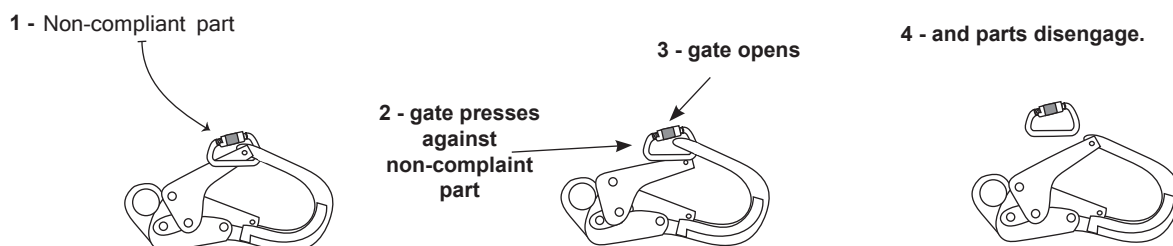
### COMPATIBILITY OF CONNECTIONS

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 SPECIALITY 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.

## 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.

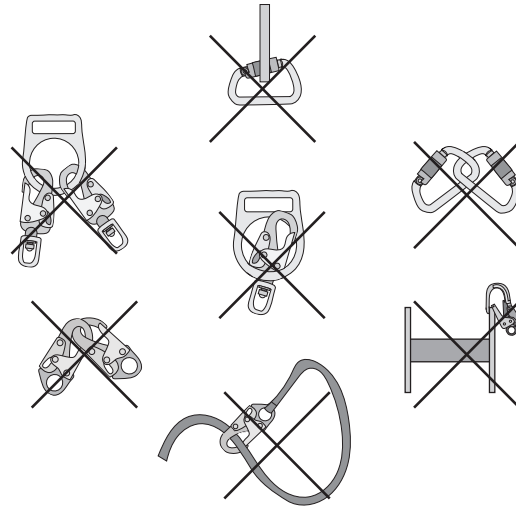
SAFEWAZE™ connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See figure 4 for examples of inappropriate connections. Do not connect snap hooks and carabiners:

- 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.

**FIGURE 4 - INAPPROPRIATE CONNECTIONS**

## CONNECTION

### Number of Users

The SAFEWAZE™ FS805-KM Horizontal Lifeline is designed for up to two users at one time, per system, with a capacity up to 310 lbs per worker (141 kg) including clothing, tools, etc.

### Full Body Harnesses

Only SAFEWAZE™ Full Body Harnesses may be used with the SAFEWAZE™ FS805-KM Horizontal Lifeline.

### Self Retracting Lanyards (SRL's)

Only SAFEWAZE™ Self Retracting Lanyards are to be used with the SAFEWAZE™ FS805-KM Horizontal Lifeline. Attach the housing connector of the Self Retracting Lanyard to the O-ring on the rope of the SAFEWAZE™ FS805-KM Horizontal Lifeline. The opposing end of the Self Retracting Lanyard is connected to the primary dorsal D-ring of the full body harness. Never attach an additional energy absorbing lanyard, or Self Retracting Lanyard, to lengthen the lifeline.

Note: Never use combinations of components or subsystems that may affect, or interfere with the safe function of each other.

### Housing of the SRL to Harness

Lighter weight Self Retracting Lanyards may be attached by the housing connector directly to the primary dorsal D-ring of the full body harness. The opposing end is connected to the O-ring on the rope of the SAFEWAZE™ FS805-KM Horizontal Lifeline.



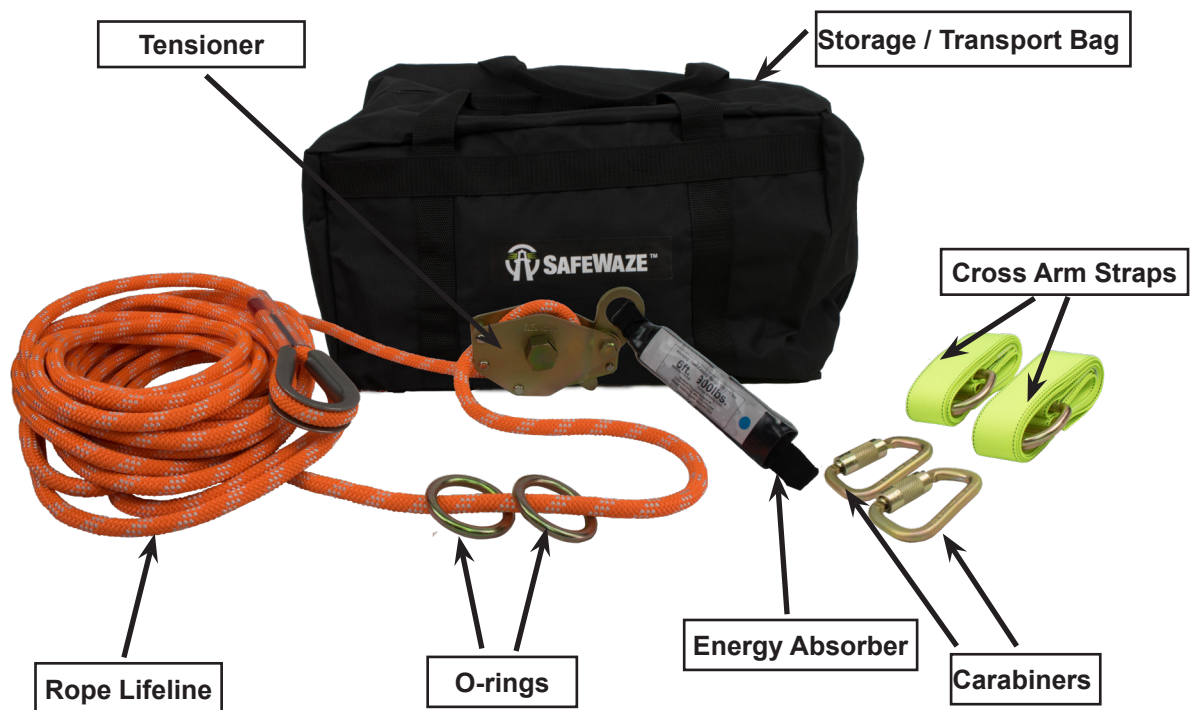
### Dual Leg Retractableables

Only SAFEWAZE™ Dual Leg Retractableables are to be used with the SAFEWAZE™ FS805-KM Horizontal Lifeline. Attach the Dual Leg Retractable directly to the dorsal D-Ring of the full body harness. Attach one leg of the Dual Leg Retractable to the O-ring on the rope of the SAFEWAZE™ FS805-KM Horizontal Lifeline, and the unused leg to an approved lanyard storage keeper on the harness.

Note: Never attach the unused leg of the lanyard back to the harness at any location other than a lanyard storage keeper.

When using Y-Lanyards to transition between fall protection systems, attach the unused leg of the lanyard to the new location before disconnecting the first lanyard leg. Connection of both lanyard legs to separate anchorage connectors while transitioning between systems is acceptable.

## Components and Specifications



## Installation and Use

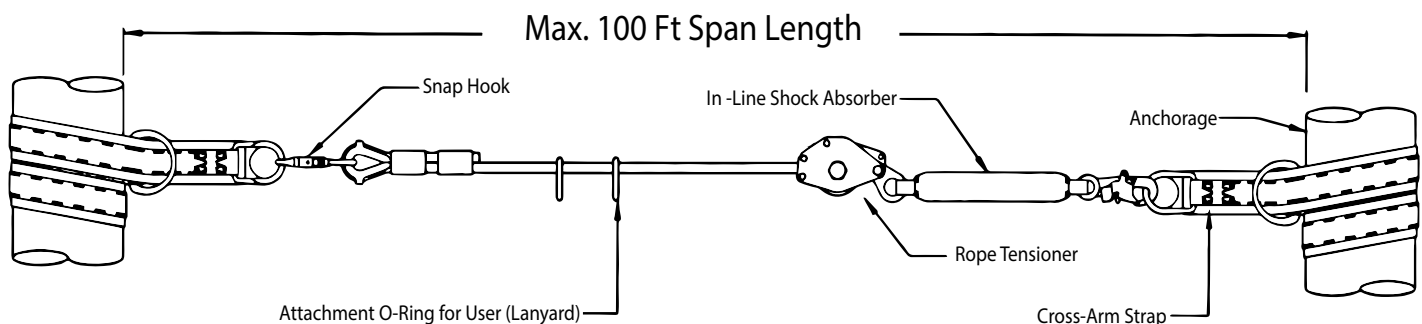
### Before Each Use

Users of personal fall arrest systems must have a rescue plan in place, if the user cannot rescue themselves, as well as the means to carry out the rescue.

The user must read and understand these User Instructions, as well as the User Instructions for every component/subsystem of the personal fall arrest system.

The entire SAFEWAZE™ FS805-KM Horizontal Lifeline system, and its subsystems, must be inspected prior to each use for wear, damage, and other deterioration. All snaphooks and carabiners must be able to self-close and lock. Check the operation of self retracting lanyards by pulling smoothly on the lifeline, then pull sharply on the lifeline to engage the locking mechanism. All webbing and rope must be inspected for tears, cuts, fraying, abrasion, unsplicing, discoloration, or other signs of wear and damage. Sewn terminations should be secure, complete, and not visibly damaged. All rope splices should be secure. System must be properly tensioned. No load indicators shall be deployed. Damaged and other deteriorated and defective components must be immediately removed from service, in accordance with the requirements of OSHA 29 CFR 1910.66 and 1926.502.

### Typical Installation



### System Installation

#### Step 1. Install Anchorage Connector

Wrap the Cross Arm Strap around the anchorage and pass the small D-ring end through the large D-ring end. Wrap as many times as necessary to achieve desired length. Only connect to the small D-ring of the Cross Arm Strap.

Other approved anchorage connectors may be used in place of the supplied Cross Arm Strap. See anchorage connector user instructions for proper installation.

#### Step 2. Connect Thimble End of Rope

Pass the thimble end of the rope through both O-rings and connect to the small D-ring of the Cross Arm Strap using the supplied carabiner.

## Installation and Use (Cont)

### Step 3. Lace Rope Through Tensioner

Rope is pre-laced through tensioner for ease of use. Do not attempt to disassemble the tensioner.

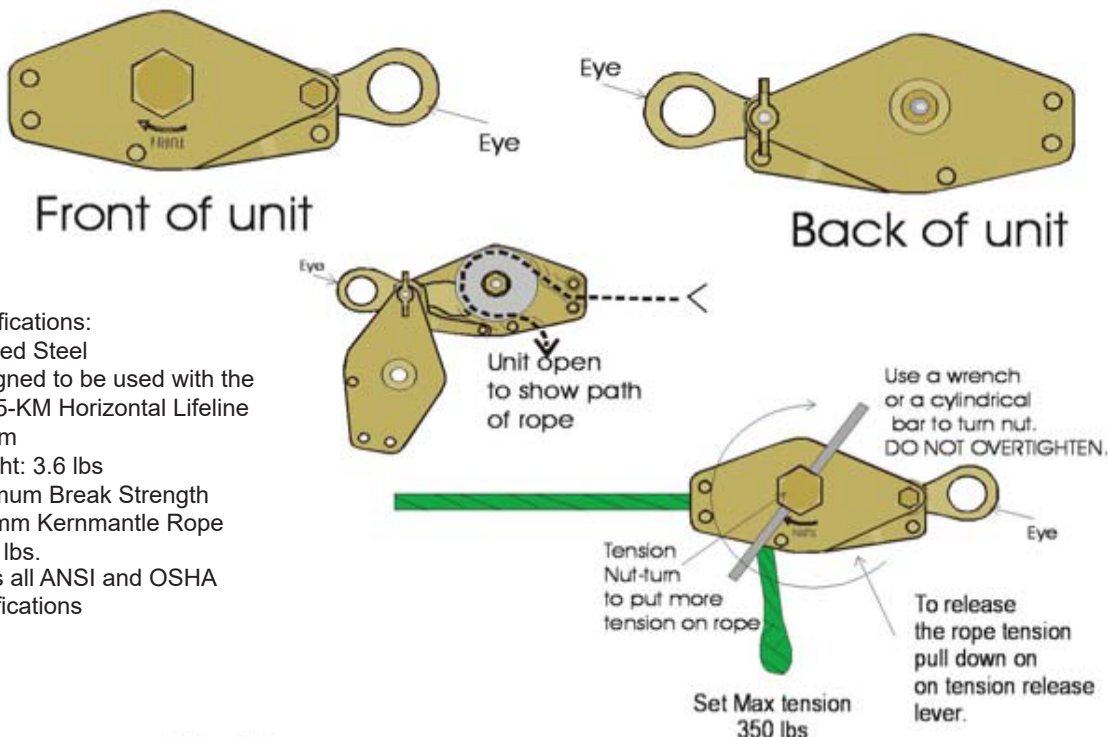
### Step 4. Connect In-Line Shock Absorber

Attach the In-Line Shock Absorber (shock absorber is pre-attached to Rope Tensioner) to the remaining end anchorage connector via the snap hook. Be sure to connect to the small D-ring of the Cross Arm Strap

### Step 5. Tension the System

Pull the spliced end of the rope through the tensioner by hand until the slack has been removed from the system. Use a wrench or metal bar to turn ratchet in the direction of the arrow until 350 lbs tension is reached. Do not over tension the system.

### Rope Tensioner Operation



#### Specifications:

- Painted Steel
- Designed to be used with the FS805-KM Horizontal Lifeline System
- Weight: 3.6 lbs
- Minimum Break Strength of 16mm Kernmantle Rope 9,807 lbs.
- Meets all ANSI and OSHA specifications

## FS805-KM Fall Clearance Chart

SAFEWAZE Required Clearance for Up to 2 Users Maximum 100 ft span		
Span Length in Feet (m)	Fall Clearance with 6ft Energy Absorbing Lanyard in feet (m) ONE USER	Fall Clearance with 6ft Energy Absorbing Lanyard in feet (m) TWO USERS
1-10 (.30-3.05)	19'-1" (5.82)	19'-5" (5.92)
11-20 (3.35-6.10)	19'-5" (5.92)	21'-5" (6.53)
21-30 (6.40-9.14)	19'-9" (5.97)	23'-4" (7.11)
31-40 (9.45-12.20)	21'-3" (6.48)	25'-9" (7.85)
41-50 (12.50-15.24)	22'-6" (6.86)	27'-11" (8.51)
51-60 (15.54-18.30)	23'-10" (7.26)	30'-2" (9.20)
61-70 (18.59-21.34)	25'-1" (7.65)	32'-4" (9.86)
71-80 (21.64-24.38)	26'-4" (8.03)	34'-6" (10.52)
81-90 (24.69-27.43)	27'-7" (8.41)	36'-8" (11.18)
91-100 (27.74-30.48)	28'-10" (8.79)	38'-10" (11.84)

## FS805-KM Fall Clearance Chart

SAFEWAZE Required Clearance for Up to 2 Users Maximum 100 ft span		
Span Length in Feet (m)	Fall Clearance with Safewaze SRD in feet (m) ONE USER	Fall Clearance with Safewaze SRD in feet (m) TWO USERS
1-10 (.30-3.05)	8'-2" (2.49)	9'-7" (2.92)
11-20 (3.35-6.10)	8'-5" (2.57)	10'-3" (3.12)
21-30 (6.40-9.14)	8'-10" (2.69)	11'-6" (3.51)
31-40 (9.45-12.20)	9'-4" (2.84)	12'-9" (3.89)
41-50 (12.50-15.24)	11'-3" (3.43)	15'-6" (4.72)
51-60 (15.54-18.30)	13'-2" (4.01)	18'-3" (5.56)
61-70 (18.59-21.34)	15'-1" (4.60)	21'-0" (6.40)
71-80 (21.64-24.38)	17'-0" (5.18)	23'-9" (7.24)
81-90 (24.69-27.43)	19'-0" (5.79)	26'-6" (8.08)
91-100 (27.74-30.48)	20'-11" (6.38)	29'-3" (8.92)

## Inspection and Maintenance

### Inspection

Inspect the device for corrosion and/or damage.

Check the Housing Plates for signs of distortion.

Inspect both the webbing and rope for cuts, abrasions and contamination.

Check carabiners for proper operation, signs of corrosion, distortion or damage.

### Frequency

All components of the SAFEWAZE™ FS805-KM Horizontal Lifeline must be inspected prior to each use, and annually by a “competent person” (other than the user), as defined by OSHA.

### Criteria

If inspection reveals any defect, inadequate maintenance, or unsafe condition, remove from service until a “qualified person” as defined by OSHA 1926.32(m) can determine the need for authorized repair or disposal.

### Maintenance

Any SAFEWAZE™ FS805-KM Horizontal Lifeline components requiring maintenance must be tagged “unusable” and removed from service.

Cleaning maintenance may be performed by the user.

Repairs to the product may only be made by the manufacturer or entities authorized in writing by the manufacturer.

**THIS DEVICE MUST ONLY BE SERVICED BY A TRAINED AND COMPETENT INDIVIDUAL!  
NEVER ATTEMPT TO SERVICE THIS UNIT OR TAMPER WITH ITS FUNCTION IN ANY WAY!**



### Storage

When not installed, the SAFEWAZE™ FS805-KM Horizontal Lifeline should be stored in a cool, dry place out of direct sunlight. Do not store in areas where damage from environmental factors such as heat, light, excessive moisture, oil, chemicals and their vapors, or other degrading elements may be present. Do not store damaged equipment or equipment in need of maintenance in the same area as product approved for use. Equipment that has been stored for an extended period must be inspected as described in these User Instructions prior to use.

# Inspection Log

DATE	CONDITION OF SYSTEM	INSPECTED BY:



## Labels


**MODEL #: SW-PR60 | HORIZONTAL KERNMANTLE ROPE LIFELINE**  
 322 Industrial Court  
 Concord, NC 28025  
 (704) 262-7893  
 www.safewaze.com  
  
 SW-PR60

**SERIAL #: 11600000**    **MFG DATE: 04/2017**    **MATERIALS: Polyester cover; nylon core; steel hardware**

**MUST FOLLOW ALL MFG'S INSTRUCTIONS INCLUDED WITH THE EQUIPMENT**  
**Meets: OSHA 1926.502**



- LENGTH: 60 ft
- DIAMETER: 5/8 in (16 mm)
- ELONGATION: 5% at 1,000 lbf
- INSPECT BEFORE EACH USE
- AVOID CONTACT WITH SHARP EDGES AND ABRASIVE SURFACES
- ONLY MAKE COMPATIBLE CONNECTIONS
- DO NOT REMOVE LABEL


**MODEL #: SW-PR80 | HORIZONTAL KERNMANTLE ROPE LIFELINE**  
 322 Industrial Court  
 Concord, NC 28025  
 (704) 262-7893  
 www.safewaze.com  
  
 SW-PR80

**SERIAL #: 11600000**    **MFG DATE: 04/2017**    **MATERIALS: Polyester cover; nylon core; steel hardware**

**MUST FOLLOW ALL MFG'S INSTRUCTIONS INCLUDED WITH THE EQUIPMENT**  
**Meets: OSHA 1926.502**



- LENGTH: 80 ft
- DIAMETER: 5/8 in (16 mm)
- ELONGATION: 5% at 1,000 lbf
- INSPECT BEFORE EACH USE
- AVOID CONTACT WITH SHARP EDGES AND ABRASIVE SURFACES
- ONLY MAKE COMPATIBLE CONNECTIONS
- DO NOT REMOVE LABEL


**MODEL #: SW-PR100 | HORIZONTAL KERNMANTLE ROPE LIFELINE**  
 322 Industrial Court  
 Concord, NC 28025  
 (704) 262-7893  
 www.safewaze.com  
  
 SW-PR100

**SERIAL #: 11600000**    **MFG DATE: 04/2017**    **MATERIALS: Polyester cover; nylon core; steel hardware**

**MUST FOLLOW ALL MFG'S INSTRUCTIONS INCLUDED WITH THE EQUIPMENT**  
**Meets: OSHA 1926.502**

- LENGTH: 100 ft
- DIAMETER: 5/8 in (16 mm)
- ELONGATION: 5% at 1,000 lbf
- INSPECT BEFORE EACH USE
- AVOID CONTACT WITH SHARP EDGES AND ABRASIVE SURFACES
- ONLY MAKE COMPATIBLE CONNECTIONS
- DO NOT REMOVE LABEL

  
**SAFEWAZE™**  
 322 Industrial Court  
 Concord, NC 28025  
 (704) 262-7893  
 www.safewaze.com  
  
 FS811

**MODEL #: FS811 | 6 FT CROSS ARM STRAP**  
**SERIAL #: 11601922**    **MFG DATE: 03/2017**

**MUST FOLLOW ALL MFG'S INSTRUCTIONS INCLUDED WITH THE EQUIPMENT**  
**Meets: OSHA 1926.502 and ANSI Z359.1**

- MATERIALS: Polyester webbing; steel hardware
- MAX WEIGHT CAPACITY: 310 lbs
- AVOID CONTACT WITH SHARP EDGES AND SURFACES
- ONLY MAKE COMPATIBLE CONNECTIONS
- INSPECT BEFORE EACH USE
- ANY UNIT WHICH HAS SEEN FALL ARREST FORCES MUST BE REMOVED FROM SERVICE
- DO NOT REMOVE LABEL
- MINIMUM BREAKING STRENGTH: 5000 lbf / 22.25 kN

01203





SAFEWAZE™  
322 Industrail Court  
Concord, NC 28025

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Web: [safewaze.com](http://safewaze.com)