



**Reliance Industries, LLC**

**User Instructions**  
**for**  
**Vertical Lifeline System Rope**  
**Model # 5010**

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# **User Instructions**

## **5010 Vertical Lifeline System Rope**



### Table of Contents

<b>GENERAL INFORMATION.....</b>	<b>3</b>
<b>MANUFACTURER’S NAME AND ADDRESS .....</b>	<b>4</b>
<b>PART NUMBER AND MODEL DESIGNATION .....</b>	<b>4</b>
<b>THE ROPE FOR VERTICAL LIFELINE SYSTEMS .....</b>	<b>5</b>
<b>INTENDED USE AND PURPOSE OF THE EQUIPMENT .....</b>	<b>5</b>
<b>PROPER METHOD OF INSTALLATION .....</b>	<b>5</b>
<b>SELECTION OF PERSONAL PROTECTIVE EQUIPMENT TO BE USED WITH THE ROPE FOR VERTICAL LIFELINE SYSTEMS .....</b>	<b>6</b>
<b>GENERAL CAUTIONS .....</b>	<b>6</b>
<b>INSPECTION, MAINTENANCE AND STORAGE .....</b>	<b>6</b>
<b>PROCEDURE FOR INSPECTION.....</b>	<b>7</b>
<b>CLEANING.....</b>	<b>8</b>
<b>FORMAL INSPECTION.....</b>	<b>9</b>
<b>INSPECTION CHECKLIST.....</b>	<b>10</b>

## **User Instructions**

### **5010 Vertical Lifeline System Rope**



## **General Information**

Anyone using this product must be familiar with and understand the instructions outlined in this manual. Failure to use these products in accordance with these instructions could result in serious injury or death.

The owner and user of this product must insure that this manual is stored in a manner that will make it available at any time to the user or installer for consultation or review.

If requested, this manual, along with the inspection log, must be presented to the manufacturer for review. When the Rope for a Vertical Lifeline System is returned to the manufacturer for any reason, this manual must also be enclosed.

This product must be used in accordance with all applicable federal OSHA and state safety regulations.

This product is to be used as a part of an approved personal fall arrest system and is not intended as a lifting device for materials or anchorage point for lifting materials or any other purpose not specifically outlined in this manual. If questions arise about the suitability of this product for any particular application, consult Reliance Industries Engineering at (303) 424-8650 for your particular application.

The ropes should always be handled in a manner that will protect them from damage or abrasion.

The use of this Rope in a manner not authorized by Reliance Industries, LLC may impair its' function and safety. In such cases Reliance Industries and its' authorized representatives will refuse to accept any liability for its' use.

It is the responsibility of the employer, as part of a total fall arrest, rescue and evacuation program, to retain the manufacturer's instructions and make them readily available to all users. The employer must provide adequate training in the proper use and care of this product prior to use.

## **User Instructions**

### **5010 Vertical Lifeline System Rope**



## **Manufacturer's Name and Address**

Reliance Industries, LLC  
PO Box 140008  
Denver, CO 80214

Tel.: (303) 424-8650  
Fax: (303) 424-8670

## **Part Number and Model Designation**

Model type: Rope for Vertical Lifeline Systems

Part Number: 5010-50

Ultimate Strength: 7500-lb minimum

Elongation: 3.5% at 1600-lb.

Material: 5/8-in. polyester/ultra blue polyolefin 3 strand rope  
Reliance Industries 3062-36 captive eye carabiner, Zn plated

## **User Instructions**

### **5010 Vertical Lifeline System Rope**



### **The Rope for Vertical Lifeline Systems**

The Rope for Vertical Lifeline Systems is a 5/8-in. rope with a carabiner on one end used as a vertical rope attachment point for a rope grab device.

### **Intended Use and Purpose of the Equipment**

The Rope for Vertical Lifeline Systems is but one component of a personal fall arrest system that is designed and intended to provide fall protection while moving vertically. This rope is NOT designed for nor to be used as a component of a horizontal lifeline system

### **Proper Method of Installation**

The Rope for Vertical Lifeline Systems is one component of a complete fall arrest system which must include a worker's personal protective equipment. The most common use for the rope is to attach a rope grab device to provide a worker's fall arrest anchorage as they move vertically. The rope should always be installed with the carabiner attached directly to an approved overhead anchorage. It is not permissible to tie the rope to an overhead structure or wrap the rope around a structure and use the carabiner to tie-back to the rope. Contact Reliance Engineering at 303-424-8650 for help in selecting bolt-on or weld-on anchor points when questions exist.

Anchorage used for the connection of the Rope for Vertical Lifelines must be capable of withstanding a static load in the direction of fall arrest of at least 3600-lb where certification of a Qualified person (such as a state registered Professional Engineer) exists, or 5000-lb without certification. When more than one person will tie off to the structure at a time, the above listed loads must be multiplied by the number of individual systems that will be attached to the structure at the same time. NOTE: Only one person is permitted to attach to each individual Rope for Vertical Lifeline System at any one time; multiple connections are NOT PERMITTED.

Care should be taken in selecting an appropriate anchor point. The anchor point should be selected to be as close to directly overhead as possible to help reduce the possibility of swing falls. Areas where sharp edges are present should also be avoided.

Also, consideration must be given to the available clearance distance present below a work area when attached to a Vertical Lifeline System. During fall arrest the Rope for Vertical Lifeline Systems will stretch. The amount of stretch possible is dependent on how long the rope is between the point of attachment of the worker and the anchor point. This distance must be added to the 42-in. that the personal fall arrest device (either a shock-absorbing lanyard or self-retracting lifeline) would elongate during fall arrest. For help in determining required clearance, please contact Reliance Engineering.

Once anchored, only approved rope grabs may be used by a worker to connect to the Rope; a worker is not permitted to tie himself to the Rope. Knots are never to be tied in the Rope as this also weakens the Rope.

See the instruction manual that comes with the Rope Grab for proper method of connection and use of the rope grab.

## **User Instructions**

### **5010 Vertical Lifeline System Rope**



## **Selection of Personal Protective Equipment to be Used with the Rope for Vertical Lifeline Systems**

When the Rope for Vertical Lifeline Systems is installed properly the location of the carabiner should be at or above the level of the worker's dorsal d-ring to help prevent free-fall. This is usually 5-ft. or higher above the walking/working surface. In this arrangement the worker should be wearing a full body harness and be attached using the appropriate rope grab device incorporating approved connectors.

Only a worker using a full body harness (no body belts) weighing 310-lb or less (including tools and clothing) is permitted to use this system.

## **General Cautions**

This product should be used only in accordance with these instructions, the instructions of any device to be used with the Rope for Vertical Lifeline Systems, and in accordance with all state, federal and local safety regulations. The worker must read, heed and understand all warnings and instructions called out in the labels and operating instructions. Any hazards to safe and proper operation must be eliminated prior to use.

The manufacturer is not responsible for damages resulting from an improper application or use of this product. Proper application means following the operating instructions, workplace geometry, workplace hazards and the conditions of inspection and maintenance.

The user must have a rescue plan, be trained in the use of this plan and the means at hand to implement it when using this equipment.

Damaged products and products having already been used for arresting a fall must be removed from service.

Whenever the structure, or general work area in which any Vertical Lifeline System is installed is altered, the suitability of the fall protection anchorage must be re-certified by a Qualified Person who must determine if the fall protection equipment will still function in an appropriate and safe manner. This Qualified Person should conduct periodic inspections at least once yearly.

## **Inspection, Maintenance and Storage**

The user of this product is responsible for the installation of inspection, maintenance and use of the Rope for Vertical Lifeline Systems. The user shall inspect equipment before each use to ensure that the equipment is in serviceable condition and operating correctly.

## User Instructions

### 5010 Vertical Lifeline System Rope



A Qualified Person capable of determining the suitability for use should perform twice yearly inspections of all ropes being used to assure not only the condition of the Lanyards but also the condition of the structures to which they are attached and the manner they are used.

In addition to this, the product must be identified and removed from service **IMMEDIATELY** after **ANY** fall arrest load has been applied until it has been inspected by a Qualified Person and re-certified for use.

The user must tag and remove equipment from field service that has been subjected to a fall arrest. An authorized inspection is then required to determine if the other components of the Personal Fall Arrest System are suitable for further use.

When any inspection reveals defects in, damage to, or inadequate maintenance of equipment, the equipment shall be tagged as “**UNUSABLE**” and be permanently removed from service or undergo adequate corrective maintenance by means of an authorized inspection before return to service.

### Procedure for Inspection

Carefully conducted inspections are necessary to ascertain the condition of the rope making up the Rope for Vertical Lifeline Systems before each days use, and a more thorough examination must be conducted by a Qualified Person on a twice yearly basis. The primary purpose of inspecting the rope is to allow for the removal from service those lanyards that contain defects or damage that could pose a hazard to continued normal operations. The individual making the inspection should be familiar with the lanyard, its’ method of operation and use, and the components making up the lanyard.

The visual inspection of the rope begins with an examination of the carabiner. The carabiner should be examined for cracks, loose fittings, or deformation. The carabiner gate should freely open and fully close and lock when released. Any carabiner that has a gate the does not fully close and lock when released must immediately be removed from service.

Looking at the rope, if ANY of the following defects are observed, the rope should be tagged “**UNUSABLE**” and immediately removed from service:

- Distortion of the rope, such as kinking, crushing, bird-caging, strand displacement, etc.
- Areas of weld strike or melting
- General fraying
- Reduction of the outer diameter of the rope due to wear or pinching
- Evidence of any heat damage from any cause
- Cut strands
- Loosening of the tucks at the carabiner end splice

## **User Instructions**

### **5010 Vertical Lifeline System Rope**



### **Cleaning**

Prior to use, the polyester rope may be cleaned using a mild soapy solution to remove dirt. The snaphook may be cleaned if necessary with a solvent based oil such as WD-40 that do not contain chlorine or chemicals corrosive to steel or zinc. Spraying with a light oil and wiping clean will ensure that the snaphook is free of debris and well lubricated.



**User Instructions**  
**5010 Vertical Lifeline System Rope**



**Formal Inspection**

**Buyer/client:**

**Product description: Rope for Vertical Lifeline Systems**

**Model No. 5010**

**Year of Manufacture:**

**Date of purchase:**

**Date of first use:**

**Name of user:**

This formal inspection grid and log has to be filed at the buyers department of occupational health and safety and is to be sent along with the product for the annual formal inspection through a competent person. Only completely inspected products are subject of the product warranty and liability of the distributor and manufacturer.

Inspected according to specifications outlined by manufacturer:

By:	Date:	By:	Date:
Stamp	Signature	Stamp	Signature
By:	Date:	By:	Date:
Stamp	Signature	Stamp	Signature
By:	Date:	By:	Date:
Stamp	Signature	Stamp	Signature

The inspector confirms with his signature the compliance of his inspection with all specifications as outlined by the manufacturer and as required by standards and regulations pertaining to occupational health and safety and fall protection.

**User Instructions**  
**5010 Vertical Lifeline System Rope**



**Inspection Checklist**

Rope for Vertical Lifeline Systems , Model No.: 5010

	1. Year	2. Year	3. Year	4. Year	5. Year	6. Year
	Date	Date	Date	Date	Date	Date
By a qualified person:	Inspector	Inspector	Inspector	Inspector	Inspector	Inspector

**Rope for Vertical Lifeline Systems :**

No Corrosion						
No deformation						
Functioning condition						
Carabiner present						
Carabiner closes and locks						
No cuts or abrasions in rope strands						
End eye splice intact						
Attachment structure strong enough						

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