

## Yates 828 Kevlar Tower Lanyard

The material used in the construction of the energy absorber is nylon/kevlar. Made in accordance with ANSI Z359.13-2009.

### Warning:

This equipment is part of a personal fall arrest, restraint, climbing, or rescue system. Work at height involves inherent and potentially unavoidable risks and hazards to yourself and any bystanders which can result in serious injury or death. Users are responsible for understanding the risks of using this equipment and accepting their responsibility to warn bystanders of potential safety hazards. These instructions must be provided to the user of this equipment and the user must fully read (or have them fully explained in a language understandable to the user), understand, and follow these instructions prior to use of this equipment. These instructions must be followed for proper use and maintenance of this equipment. Alterations or misuse of this equipment or failure to follow instructions may result in serious injury or death. It is the responsibility of the employer and the user of this equipment to assure that each user of this equipment is familiar with these instructions, trained in the correct care and use of this equipment, and the consequences of improper use of this equipment. This user information sheet should be retained in a permanent record after it is separated from the equipment, and a copy of it should be kept with the equipment. The user should refer to this user information sheet before and after each use of this equipment.

### Before Use

The techniques employed in the proper and safe use of this equipment may only be learned through personal instruction received from an instructor who is well-qualified in all phases of work at height. Such instruction will include an evaluation of your comprehension of, and ability to perform, the tasks required to safely and efficiently use this equipment. Never attempt its use until you have received such instruction and are believed competent by your instructor.

### The intended use of this equipment is as follows:

**Fall Arrest:** Fall arrest systems safely stop the user in a free fall from a height. Fall arrest systems typically include a full body harness, an energy absorbing lanyard, and a suitable anchorage. The maximum arresting force must not exceed 1,800 lbs. (8 kN).

**Fall Restraint:** Fall restraint systems prevent the user from reaching a fall hazard such as leading edge roof work.

**Capacity:** The 12 ft. energy absorbing lanyard is designed to protect a user from a 6 foot (1.8m) free fall and is for use by persons with a combined weight (clothing, tools, etc.) of no greater than 420 lbs. (190 kg).

The 12 ft. energy absorbing lanyard is designed to protect a user from a 12 foot (3.6m) free fall and is for use by persons with a combined weight (clothing, tools, etc.) of no greater than 310 lbs. (141 kg).

The minimum user weight of this product shall be no less than 130 lbs. (59 kg.).

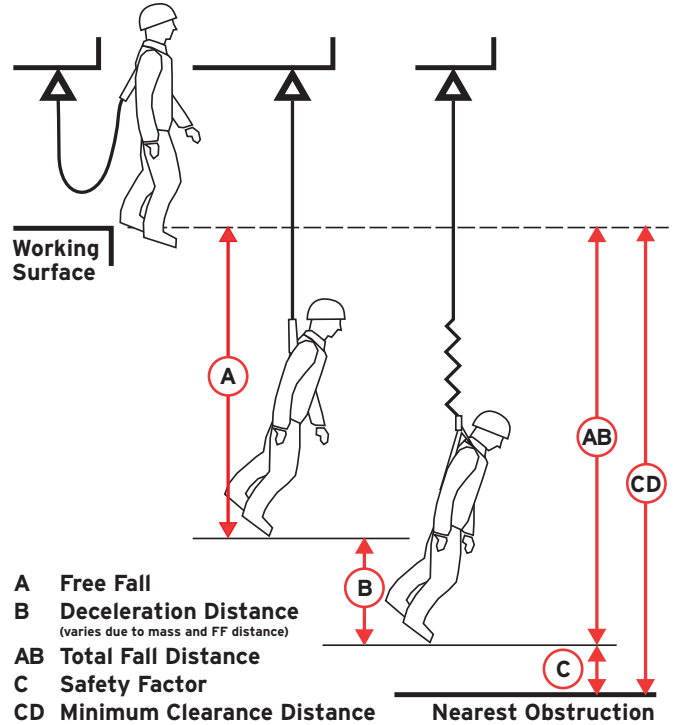
Personal fall arrest systems incorporating this equipment must be applied to limit the free fall to 12 feet (3.6 m) or less.

The maximum arrest force of the personal energy absorber when dynamically tested in accordance with the requirements of ANSI/ASSE Z359.13: less than 1800 lbs.

The average arrest force of the personal energy absorber when dynamically tested in accordance with the requirements of ANSI/ASSE Z359.13: less than 900 lbs.

The maximum elongation of the personal energy absorber when dynamically tested in accordance with the requirements of ANSI/ASSE Z359.13: 60 inches for 12 foot free fall lanyards.

### Clearance Calculation



### CD (minimum clearance distance) = A+B+C

Sufficient clearance must be below the user to arrest a fall to protect the user from striking the ground or other obstruction. The clearance required depends on several factors including

- Elevation of anchorage
- Free fall distance
- Body height
- Energy absorbing lanyard length
- Deceleration distance
- Movement of harness attachment element

### Swing Falls

Swing falls occur when the anchorage point is not directly above the point where a fall occurs. Users must minimize swing falls by working as close to and directly below the anchorage point as possible. Swing falls shall not be permitted if serious injury may occur.

Environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Lockout/tagout programs are an essential part of overall workplace safety and may reduce some of these hazards. Such hazards may include, but are not limited to:

- sharp edges
- chemicals
- high voltage
- moving machinery
- any type of stored energy
- dangerous equipment or machinery
- heat
- corrosives
- gases or vapors

## Inspection Procedures

Fully inspect this equipment prior to each use and additionally at a minimum of yearly by a competent inspector and recorded. Failure to properly inspect this equipment could result in product failure and serious injury or death.

## Records

The user of this equipment should keep a permanent record listing the date and results of each usage inspection. Such record should show, as a minimum, inspection for all of the following conditions visually and by feel:

- Cleanliness
- Freedom from corrosion
- Condition of nylon webbing
- Freedom from scratches, gouges and sharp edges
- User Information sheet present
- Dryness
- Freedom from distortion
- Broken or frayed stitching

## Inspection for Use

Visually and by touch, inspect this equipment for cracks, distortion, corrosion, gouges, sharp edges or rough areas on all metal parts and for cuts, tears, abrasion, melting or excessive fuzzing, soiling, or staining of the nylon webbing. Inspect for chemical or heat damage indicated by brown, discolored, or brittle areas. Inspect for ultraviolet damage indicated by discoloration and the presence of splinters or slivers on the webbing surface. Inspect stitching for pulled or cut stitches. Inspect all connectors and hooks to ensure smooth operation and full closure. Compare this equipment with a new model if necessary to determine its condition. Remove it from service if there is any doubt about its safety or serviceability. If inspection reveals an unsafe or defective condition, remove the equipment from service and destroy. This equipment is not repairable. No repairs or alterations are permitted.

The following items indicate the energy absorber has been subjected to impact loading and must be removed from service:

- Torn webbing
- Torn or broken cover
- Broken stitching
- Open end or ripped out stitching
- Measured length is more than 15 cm (6 in.) longer than the length marked on the label.

Remove this equipment from service and destroy if it has been subjected to the forces of arresting a fall.

The functional life of this equipment is determined by work conditions and maintenance. As long as the equipment passes inspection criteria, it may remain in service.

## Maintenance After Use

Carefully clean and dry this equipment to remove all dirt or foreign material and moisture. Do not force dry with heat. Minor sharp edges on any hardware may be smoothed with a fine abrasive cloth, before cleaning. Store in a clean, dry place away from direct sunlight and harmful fumes or vapors.

## Anchorage Requirements

Anchorage selected for use with the energy absorbing lanyards must have a strength capable of sustaining the static load requirements of the intended fall protection application:

Fall Arrest: In accordance with ANSI Z359.1, anchorage selected for fall arrest systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:

- 5,000 lbs. (22.2kN) for non-certified anchorages, or
- Two times the maximum average arresting force for certified anchorages

When more than one fall arrest system is attached to an anchorage, the strengths set forth above for fall arrest anchorages shall be multiplied by the number of systems attached to the anchorage.

Anchorage used for attachment of a personal fall arrest system (PFAS) shall be independent of any anchorage being used to support or suspend platforms, and capable of supporting at least 5,000 lbs. (22.2 kN) per user attached, or be designed, installed, and used as part of a complete PFAS which maintains a safety factor of at least two, and is supervised by a qualified person.

Anchorage selected for work positioning systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:

- 3,000 lbs. (13.3kN) for non-certified anchorages, or
- Two times the foreseeable force for certified anchorages

When more than one work positioning system is attached to an anchorage, the strengths set forth above for work positioning systems shall be multiplied by the number of systems attached to the anchorage.

Anchorage selected for fall restraint systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:

- 1,000 lbs. (4.5 kN) for non-certified anchorages, or
- Two times the foreseeable force for certified anchorages

When more than one restraint system is attached to an anchorage, the strength set forth above for fall restraint shall be multiplied by the number of systems attached to the anchorage.

Anchorage selected for rescue systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:

- 3,000 lbs. (13.3kN) for non-certified anchorages, or
- Five times the foreseeable force for certified anchorages

## Connector Compatibility

Compatible connections must be made when using this equipment and can vary depending upon application. Connectors must be compatible with anchorages and user harness attachment points by size, shape, and strength. Connectors must not be able to unintentionally disengage or inadvertently open under any orientation.

Connectors should be attached to the user's harness first, then to the suitable anchorage. Always connect the energy absorber end to the user's harness. The use of additional energy absorbers is not recommended.

In the case of a 100% tie-off twin leg lanyard do not attach the unused leg of the lanyard back to the harness at any location unless a specially designed lanyard retainer is provided for this purpose. Connection of both lanyard legs to separate anchorage points is acceptable. When moving from one anchorage point to the next (such as traversing a horizontal or vertical structure) do not connect to anchorage points that are further apart than the lanyard length. Never connect more than one person to a 100% tie-off twin leg lanyard at a time. Do not allow any lanyard to pass under arms or legs during use.

Applicable standards include: ANSI/ASSE Z359.1, ANSI/ASSE Z359.13, CSA Z259.11 OSHA 1910.66 and 1926.500 and any other and applicable regulations governing occupational safety.

## Use of this User Information Sheet

It is suggested that this user information sheet be retained in a permanent record after it is separated from the anchor strap, and that a copy of it be kept with the anchor strap.

It is suggested that the user refer to this user information sheet before and after each use of the anchor strap.

