

# BUCKINGHAM MFG.

## INSTRUCTIONS / WARNINGS (BuckYard – Model No. 8XXXXX)

Warning: Do not use this product if you cannot understand and follow the instructions and warnings that come with it and complete all necessary functions.

- ◆ This equipment is intended for use by properly trained professionals only.
- ◆ Fall protection equipment, (i.e. fall arrest, work positioning belts, retrieval, suspension etc.) should not be resold or provided to others for re-use after use by original user as assurance cannot be granted that a used product meets criteria of applicable standards and is safe for use to a subsequent user.
- ◆ Manufacturer's instructions shall be provided to the user of this product. If additional copy is needed, contact supplier, Buckingham Mfg. Co. at 1-800-937-2825 or website at [www.buckinghammfg.com](http://www.buckinghammfg.com).
- ◆ Read, understand and follow all instructions and warnings attached to and/or packed with product before using this equipment.
- ◆ Employer - instruct employee as to proper use and warnings before use of equipment.
- ◆ Be certain this equipment is suitable for the intended use and work environment. It should only be used as personal protection equipment (PPE). If suitability for intended use is in doubt, contact supplier, consult a safety engineer or Buckingham Mfg. before using.
- ◆ ANSI Z359.13, CSA Z259.11, ANSI ITSDF B56.1-2020, ASTM F887, and applicable OSHA regulations are standards / regulations utilized by Buckingham Manufacturing Co. for various energy absorbing lanyards manufactured. Energy absorbing lanyards are labeled to these standards as they are applicable.

The table below outlines energy absorber requirements according to these standards / regulations.

Users weight includes that of any tools or clothing.

$X_{MAX}$  = maximum total deployment of the unit.

$D_m$  = deployment factor is the rate of energy absorber deployment per unit distance of freefall for the heaviest worker permitted.

Note: for lighter workers, the calculated deployment could be more than the actual deployment.

$X_{PEA}$  = amount of deployment of the energy absorber based on worker weight and free fall distance.

\* If the user's weight is in between weight increments listed below, the next highest weight bracket shall be used.

| STANDARD             | MAXIMUM ALLOWABLE FREE FALL | STATED CAPACITY RANGE                      | MAXIMUM ARREST FORCE | AVERAGE ARREST FORCE | MAXIMUM ELONGATION  |
|----------------------|-----------------------------|--|----------------------|----------------------|---|
| ANSI Z359.13         | 6 ft.<br>(1.83 m)           | 130 lbs. - 310 lbs.<br>(59 kg - 140.6 kg)  | 1800 lbs.<br>(8 kN)  | 900 lbs.<br>(4 kN)   | 48 in.<br>(1.2 m)   |
| ANSI Z359.13         | 12 ft.<br>(3.66 m)          | 130 lbs. - 310 lbs.<br>(59 kg - 140.6 kg)  | 1800 lbs.<br>(8 kN)  | 1350 lbs.<br>(6 kN)  | 60 in.<br>(1.5 m)   |
| CSA Z259.11 -17      | 1.83 m<br>(6 ft.)           | 68 kg - 158.8 kg<br>(150 lbs. - 350 lbs.)  | 8 kN<br>(1800 lbs.)  | 3.63 kN (817 lbs.)   | $X_{MAX}$ 1.6m (69 in)<br>* $X_{PEA}$ based on user weight:<br>68 kg (150 lb.) User<br>.41m (16.2")<br>100 kg (220 lb.) User<br>.68m (26.6")<br>127 kg (280 lb.) User<br>.96m (37.7")<br>158.8 kg (350 lb.) User<br>1.37m (54") |
| OSHA 1926.502(d)(16) | 6 ft.<br>(1.83 m)           | *** 310 lbs. Maximum<br>(140.6 kg) Maximum | 1800 lbs.<br>(8 kN)  | NA                   | 42 in.<br>(1.07 m)  |

\*\*\* If the system is used by an employee having a combined tool and body weight of 310 pounds (140 kg) or more, then the employer must appropriately modify the criteria and protocols of the Appendix to provide proper protection for such heavier weights, or the system will not be deemed to be in compliance with the requirements of OSHA 1926.502. (d)(16).

### NOTES:

- Buckingham's Energy Absorbing Lanyards are manufactured, tested and rated for use by a person with a maximum weight of 350 lbs. (158.8 kg) when fully equipped. At this weight rating, our product meets the maximum arrest force and elongation requirements of the above listed ANSI and OSHA standards/regulations.
- Specially Designed Buckingham Energy Absorbing Lanyards suffixed with "X4" are manufactured, tested and rated for use by a person with a maximum weight of 420 lbs. (190.5 kg) when fully equipped and only when used with an equivalently weight rated harness / accessories with free fall being limited to a maximum of 6 ft. (1.83 m). These units also meet the maximum arrest force and elongation requirements of the above listed OSHA regulations.

- Precise “useful life expectancy” for this product because of age is not specified, as the degree of use, the conditions under which it is used, and the degree of care and storage it is given determines useful life. It is the user’s responsibility to ensure all personnel support equipment passes inspection before each use as well as by a competent person other than the user at intervals of no more than 1 year. As a minimum, danger points outlined in these Instructions/Warnings should be recognizable. Should there be any question regarding the safety of any piece of personal protective equipment, we require that use be immediately discontinued, and the product(s) involved be properly disposed of and replaced.

### Warnings:

- ◆ Product must not be altered in any way.
- ◆ Only Buckingham Mfg. Co. or those people authorized in writing by Buckingham Mfg. Co. may make repairs to this equipment.
- ◆ In the event of a fall, the employee must have a rescue plan and the means to implement it.
- ◆ Never use an energy absorbing lanyard for positioning. Unit can open and extend, which could result in a fall.
- ◆ OSHA requires that impact force in a fall NOT exceed an 1800 lbf. limit with a harness. Keep connecting device slack to a minimum to stay under these limits.
- ◆ Buckingham’s BuckYard (Energy Absorbing Lanyard) is equipped with an impact load indicator label that is designed to deploy upon arresting a fall exposing this label making the text legible. If you can read the text, the Energy Absorbing Lanyard has been impact loaded. If a fall occurs or any evidence of wear, deterioration or impact loading as outlined is observed, immediately cease use, destroy the product and replace it with new equipment.
- ◆ Always attach BuckYard to designated rear D-ring attachment of a personal fall arrest system.
- ◆ If connecting to a personal fall arrest system by attaching directly through the web loop of the BuckYard carefully inspect the web loop to ensue no cuts, kinks, abrasions, burns, excessive swelling, excessive wear discoloration, charring, broken fibers, loose stitching and chemical or physical exposures exist.
- ◆ Energy absorbing lanyards should be considered as a part of a personal fall arrest system used in conjunction with a harness. Harnesses must be worn so the fall arrest attachment is centered in back near shoulder blade level. It is recommended that:
  - A connecting device and fall arrest attachment manufactured with a web loop be attached with a hitch or carabiner.
  - If using a locking snap hook to a web loop fall arrest attachment, the web loop must be protected by an integral wear piece to enhance visual inspection.
  - Web loop fall arrest attachments must be inspected before each use. The inspection should include, but not be limited to ensuring no: webbing cuts, kinks, abrasions, burns, excessive swelling, excessive wear, discoloration, charring, broken fibers, loose stitching and chemical or physical exposures exist.

Note: The use of a locking snaphook to a web loop fall arrest attachment without an integral wear piece is acceptable in emergency situations (i.e. rescue, evacuation, etc.) Attachment of a locking snap hook to a web loop fall arrest attachment with no wear piece can cause premature wear of the webbing and stitching. This degradation can cause the web loop layers to separate and be incapable of supporting your weight. Therefore, the web loop fall arrest attachment must be inspected before use. Additionally, connections used to attach to the fall arrest attachment must have a minimum gate rating of 3600 lbf. and meet ANSI Z359.12 requirements.

- ◆ Fall arrest anchor points must support a minimum of 5,000 lbf (22.2 kN) per attached worker and be independent of worker support.
- ◆ No fall protection system can guarantee that you will not sustain injuries should a fall occur. Therefore, BuckYards should be kept as short as possible to minimize free fall distance. OSHA requires that maximum length of energy absorbing lanyards provide for a fall of no greater than six (6) feet (1.8 m), allow no contact with any lower level and unit elongation not exceed 42" (1.07m).
- ◆ The fall arrest attachment point on the user should be in the middle of the back near shoulder blade level.
- ◆ When using a standard BuckYard, keep anchor point above rear fall arrest attachment. If climbing above anchor point, attach to a new anchor point higher up. If anchor point above the fall arrest attachment device is not available, BuckYard positioning must be such that free fall will be limited to a maximum of six (6') feet (1.8 m) or the specified overall length of the BuckYard, whichever is less and such that there will be no contact with a lower level. If anchor point is below fall arrest attachment a BuckYard with product number suffixed with X12 be used. See Fig. 1 for calculating fall distance / clearance for both standard and X12 BuckYards.

FC = Fall Clearance / Distance

LL = Lanyard Length

EL = Elongation Length

UH = User’s Height

SF = Safety Factor (accounts for harness stretch)

Example: With a standard 6’ Lanyard with 4’ Elongation Length used by a 6’ tall person.

$$FC = LL + EL + UH + SF$$

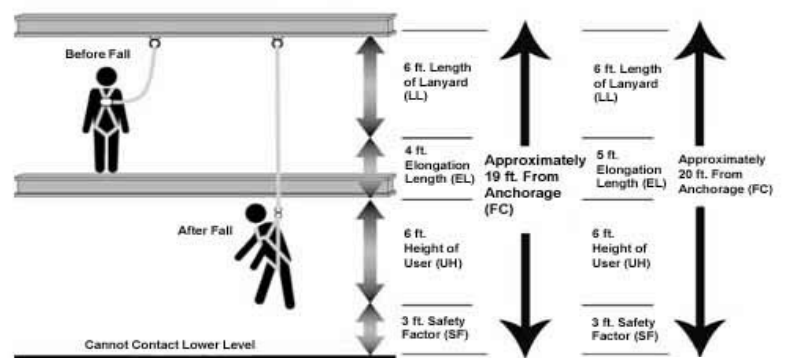
$$FC = 6' + 4' + 6' + 3' = 19'$$

**NOTE: The example shown below requires a special energy absorbing lanyard. Lanyard product number must be suffixed with X12.**

Example: With a 6’ Lanyard (suffixed X12) with 5’ Elongation Length used by a 6’ tall person.

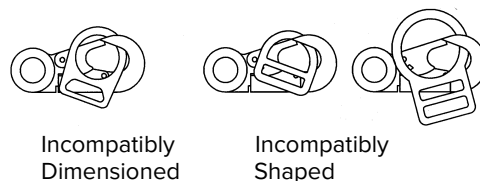
$$FC = LL + EL + UH + SF$$

$$FC = 6' + 5' + 6' + 3' = 20'$$



**Figure 1**

- ◆ Always work directly under fall arrest anchor point to avoid swing fall injuries (pendulum effect).
- ◆ Never wrap a BuckYard around a beam, sharp structural member or use where contact of the webbing with sharp edges, corners or abrasive surfaces are likely as the material could be cut or damaged. Sharp and abrasive surfaces may include but not be limited to (sheet metal, steel, concrete, block, stone, laminated materials etc.)
- ◆ Avoid contact of this equipment with high temperature surfaces, welding, or other heat sources, electrical hazards or moving machinery.
- ◆ Avoid contact of this equipment with chemicals which may damage the material. If in doubt, contact supplier or Buckingham Mfg. Co.
- ◆ Use PPE only for the specific purpose for which it is designed and intended.
- ◆ Never use this product as a tie back type lanyard as the length will be shortened and result in altering its energy absorption / extension properties.
- ◆ Always visually check that the snap hook/carabiner freely engages D-ring or anchor point and the keeper / gate is completely closed with each use. Never rely solely on the feel or sound of the snap hook/carabiner engaging.
- ◆ Use this product only with a harness compliant to applicable regulations / standards (e.g. OSHA / ANSI Z359.11/ ASTM F-887 / CSA Z259.11-17).
- ◆ Before each use and additionally, by a competent person other than the user at intervals of no more than one year, check that: 1) unit is free of burns, cuts, abrasions, kinks, knots, broken strands and excessive wear. 2) snap hooks, carabiners and D-rings are not distorted or cracked and display no excessive wear. 3) snaphook/carabiner keepers / gates are not bent, free of burrs, clean and functioning properly. 4) outer cover has no broken stitches, tears, stretch marks or other evidence of impact loading. 5) the impact load indicator label has not been deployed (text showing). If the unit does not pass this inspection or you have questions regarding its continued usability, either mark it as "unusable", remove it from service, destroy, discard and replace immediately or forward to your supervisor or the manufacturer for their review.
- ◆ Ensure each snap hook / carabiner is positioned so that its keeper / gate is never load bearing.
- ◆ For personal use only. NOT for towing or hoisting.
- ◆ Unless the snap hook is a locking type and designed for the following connections, snap hooks should not be engaged:
  - ◆ directly to webbing, rope or wire rope,
  - ◆ to each other - they are not intended to be used that way and could twist apart,
  - ◆ to a D- ring to which another snap hook or other connector is attached,
  - ◆ to a horizontal lifeline,
  - ◆ to any object which is incompatibly shaped or dimensioned in relation to the snap hook such that the connected object could depress the snap hook keeper / gate a sufficient amount to cause it to release. (see illustration).
- ◆ Before each use ensure snap hook / carabiner locking mechanism is functioning properly.
- ◆ Lubricate lock mechanism and keeper / gate on both sides of snap hook at least weekly or as often as required to maintain smooth operation (no binding) with light weight lubricant such as WD-40®.
- ◆ Never disable locking mechanism of the snap hook/carabiner, punch holes in or alter a connecting device in any way.
- ◆ Ensure there is no pressure on the snap hook locking mechanism sufficient to depress it as this will, due to its length, render it incompatible with currently designed D-rings and make it very susceptible to rollout.
- ◆ Never knot BuckYard. Knots can reduce the strength of the unit up to 50% and reduce the effectiveness of the energy absorption / extension.
- ◆ Never work without independent fall-arrest protection if there is danger of a fall.
- ◆ Product covered under these instructions / warnings should not be resold / redistributed or re-used after use by original user.



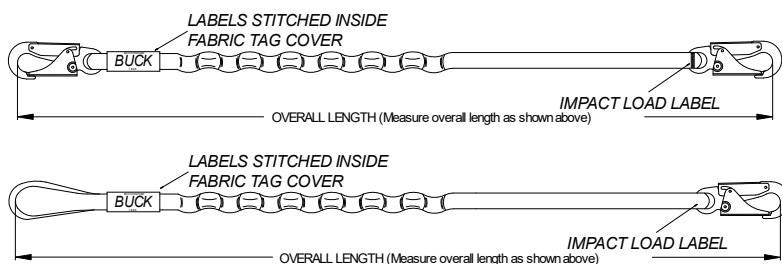
**Special Instructions pertaining to Dual Lanyards:** The Dual Lanyard is designed to provide continuous fall protection, by means of one lanyard leg always being connected to an anchor point while your climbing / working position is being changed. Product may vary from that shown (energy absorber, hardware, etc.).

Connect to a new fall arrest anchor point with one lanyard leg, while staying connected to the original fall arrest anchor point with the adjacent lanyard leg. Once connected to the new anchor point disconnect from the original anchor point and repeat this procedure until your desired work position is reached. Note: never attach both legs of the BuckYard dual lanyard to an anchor point that is at the same level.

**Warning:** Dual lanyards must be used in a manner in which the energy absorber pack is not by-passed as this will render it ineffective as an energy absorbing lanyard and in the event of a fall, result in impact forces exceeding OSHA requirements.

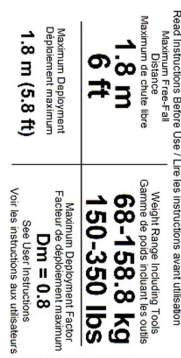
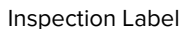
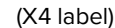
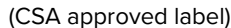


**Hardware may vary from that depicted in the illustration**



Proper maintenance and storage of your equipment will prolong its useful life and contribute toward its performance. Storage areas should be clean, dry, and free of exposure to corrosive elements, fumes, etc. BuckYards are constructed of web material and should be cleaned with water and mild soap (a dish washing soap that removes grease (i.e. dawn)) and be allowed to dry thoroughly without using excessive heat. Your equipment should be stored and transported so that it does not come into contact with, but not limited to, moisture, ultra violet rays, extreme temperatures, oil, chemical agents or their vapors or other degrading elements. Warnings pertaining to cleaning, storage and transportation should be strictly adhered to. **NOTE:** Ensure proper fit / size of product before use. This product cannot be returned unless it is in new / unused condition.

(Standard product label)



**Warning: User Capacity Range 130-310 lbs.**

**6ft. 900lbs.**

Maximum Free Fall      Average Arresting Force

Maximum Deployment Distance 48"

Forces may increase when cold and/or wet

**Read Instructions Before Use**

**Warning: User Capacity Range 130-310 lbs.**

**12ft. 1350lbs.**

Maximum Free Fall      Average Arresting Force

Maximum Deployment Distance 60"

Forces may increase when cold and/or wet

**Read Instructions Before Use**

Standard BuckYard 48" Maximum  
Deployment Distance

BuckYard suffixed with 'X12'  
60" Maximum Deployment Distance

Impact Load Indicator Label



## STATEMENT of OBSOLESCENCE:

Precise “useful life expectancy” or “shelf life” for this product is not specified, as the degree of use, conditions of use, and the degree of care and storage determines useful life. All users maintain responsibility to select proper equipment for the job, be properly trained in its use, and ensure all personnel support equipment passes inspection before each use. Upon evidence of defects, damage or deterioration, all equipment shall be removed from service immediately and tagged or marked as unusable or destroyed. Additionally, all equipment shall be inspected on a regular basis not to exceed one year by a Competent Person, as defined by OSHA/ANSI, to verify that the equipment is safe for use. In the event of any question or concern regarding the condition of such equipment, users shall remove the equipment from service for further inspection. All users must comply with OSHA/ANSI/ASTM standards prior to and in using such equipment. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

## INTERNATIONAL USERS:

Notwithstanding the above, please know that certain international jurisdictions require manufacturers of equipment to provide customers with a maximum useful lifespan (sometimes referred to as a “Statement of Obsolescence”). To the extent required, Buckingham personal protective equipment manufactured from synthetic fiber materials including but not limited to items such as webbing and/or rope are subject to a maximum useful lifespan of ten (10) years from the date of manufacture. As stated above proper usage, storage, maintenance, and care impacts the useful lifespan of equipment. Extreme circumstances may require that product must be retired after only one use. This statement is made in conformance and compliance with BS EN 365:2004. International users must ensure that product inspections are completed by Competent Persons as defined by international standards including but not limited to British Standard (“BS”). If equipment fails any inspections, it must be immediately withdrawn from service and destroyed. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

## OUR GUARANTEE:

We guarantee the equipment we manufacture to be free from defects in material and workmanship. We will repair any equipment deemed to be defective which is returned to us by the original purchaser. However, this guarantee is void if any product is changed or altered in any way, or if the product is used in a manner other than for which it is intended. This express guarantee supersedes all other expressed or implied guarantees, obligations or liabilities. There are no implied warranties of merchantability or fitness for a particular purpose and as such, all implied warranties are specifically disclaimed.

## LIMITATION ON LIABILITY:

In no event will Buckingham or buyer be liable to the other for lost revenues, lost profits or any other indirect, consequential, special or punitive losses or damages, however caused, whether in action for breach of contract, strict liability, tort, or otherwise, even if advised of the possibility of such losses or damages. In no event will Buckingham’s liability exceed the total amount paid by the buyer to Buckingham for the product or equipment giving rise to such claim(s).

Please see other terms and conditions relating to this product at <https://buckinghammfg.com/terms-conditions/>

## REGISTRATION:

Before use of the product, ensure to register and confirm the product at [www.buckinghammfg.com/register](http://www.buckinghammfg.com/register).

**BUCKINGHAM MFG.**  
**BINGHAMTON, NY**  
**[www.buckinghammfg.com](http://www.buckinghammfg.com)**  
**1-800-937-2825**