BUCKINGHAM MFG.

PN 91-14 Buck Boa
Instructions / Warnings:

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.

Using a properly adjusted Buck Boa with the Boa Prusik connected to a segmented pocket of the main lanyard offers a safety back up connection. If one side of the main lanyard between the user and the Boa Prusik were to be accidentally cut, the user will still be connected due to the Boa Prusik being connected to the opposite side of the Buck Boa Lanyard.

Buckingham's P/N 91-14 Buck Boa is designed to be used an Adjustable Positioning Lanyard (APL). It includes a progress capture prusik and pinto pulley combination that allows the user to easily tend slack with one hand making adjustment simple and easy. The Buck Boa also includes an internal Boa Prusik with a carabiner used to connect to one of the many segmented pockets of the main lanyard. The Boa Prusik is designed and intended to act as an enhanced lanyard safety feature to help reduce the chance of the user becoming disconnected from the tree if either side of the lanyard between the point of termination and the Boa Prusik was accidentally cut.

BUCK BOA PN 91-14 INCLUDES:

- Main Rope - 14' Length of 7/16" Wear Resistant Rope with 30" of Segmented Attachment Pockets
- One Eye to Eye Progress Capture Prusik (PN P9J8P-10-30) tied as a Valdotain Tresse Knot with Pinto Pully (PN 491146)
- One Buck Boa Prusik (PN P9J8U10Q1-31) tied as a Klemheist Knot
- Three 3600 lb. ANSI gate rated aluminum carabiners (PN 5555S10)

Buck Boa components / key features are shown below. Options, hardware and colors may vary from product shown (Fig. 1).

Fig. 1

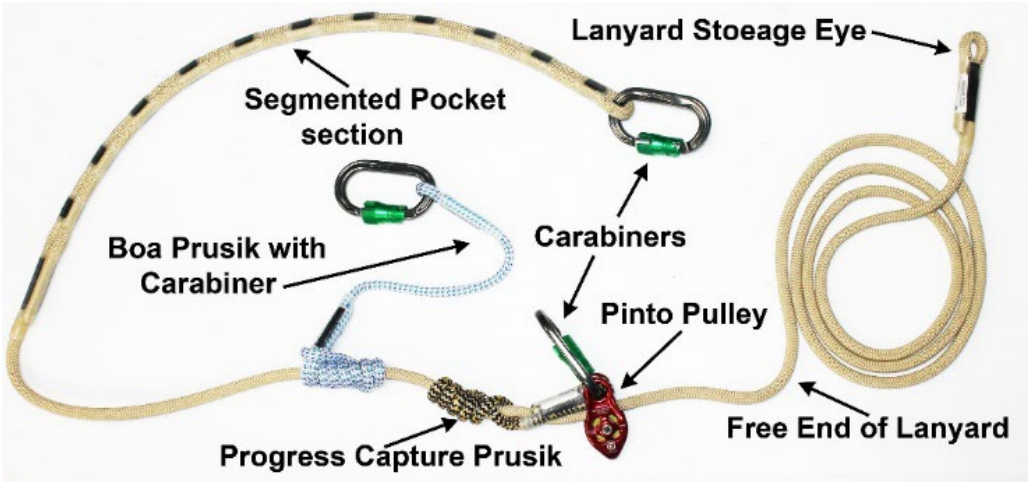


Fig 2a & 2b. Shows the locations of the Buck Boa lanyard that if cut, the user will still be connected by the Boa Prusik and the main section of the Boa Lanyard.

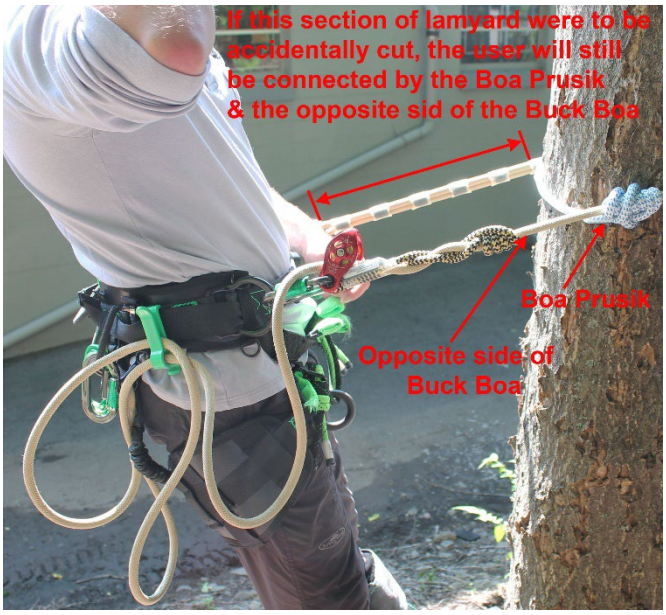


Fig. 2a

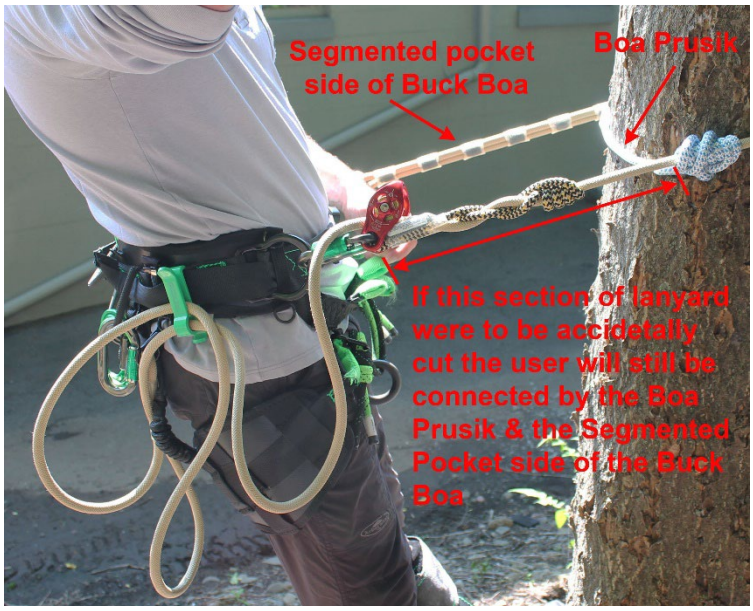


Fig. 2b

The Buck Boa has been tested to and meets the applicable performance requirements of ASTM F-887 for an Adjustable Positioning Lanyard and is designed to be used by a person with a maximum weight of 350 lbs. when fully equipped.

PRIOR TO USE:

- This equipment is intended for use by properly trained professionals only.
- Acquire relevant training and competence for using this system prior to first use.
- The Buck Boa is designed to be used only with a compatible and rated arborist saddle equipped with approved positioning / suspension attachment points.
- Know the job and the regulations governing requirements and select proper equipment.
- Manufacturer's instructions shall be provided to users with this product. Read and understand all instructions and warnings provided by Buckingham included with the product as well as all associated equipment before use.
- The Buck Boa must be properly inspected, installed, adjusted, and used in accordance with the manufacturer's instructions to function as designed and intended. Proper use of this device according to Buckingham's warnings and instructions is the user's responsibility. Death or serious injury may result to the user in the event that the device is used incorrectly.
- Ensure both Prusiks are properly tied, set and adjusted (see Figures below).
- Work at height is a high-risk activity. It is your responsibility to manage those risks. Failure to manage risks may result in serious injury or death.
- Understand the scope of application of each component and any limitations.
- Accept that there can be no claim for damages, injury or death resulting from misuse of equipment.
- Visually inspect this product, and all related equipment, before each use. See inspection criteria below. The inspection should include but not be limited to the following:

INSPECTION:

Rope Inspection:

- Inspecting your rope should be a continuous process of observation before, during, and after each use.
- Inspect rope fibers for signs of excessive wear, burns, cuts, abrasions, kinks, knots, hockling, ice buildup, broken strands in any given area of the rope. Both outer and inner fibers contribute to the strength of the rope. If either is worn, the rope will naturally be weakened. Open the rope strands and look for powdered fiber, which is one sign of internal rope wear.
- Be aware that the ropes included with this product are not cut proof or cut resistant.
- Do not use rope that shows signs of excessive wear such as but not limited to those shown in Fig. 3a through 3d.

- Inspect the rope for broken stitching, frayed strands, and broken yarns. Check for pulled strands. A pulled strand should be re-threaded into the rope if possible, otherwise it may snag on a foreign object during use.
- Inconsistent texture or stiff areas can indicate excessive dirt or grit embedded in the rope or shock load damage.
- Inconsistent diameter (flat areas, bumps, or lumps). This condition indicates core or internal damage from overloading or shock loading.
- With use, all ropes become dirty. Inspect for areas of discoloration that could have been caused by chemical contamination and may result in the rope becoming brittle or stiff.
- Charred, glossy or glazed areas that generally indicate signs of heat damage.
- Inspect the threads of the stitched eye and segmented pockets for discoloration that could have been caused by chemical contamination and may result in the thread becoming brittle.
- Rope, or rope stitching and all ends are free of defects. Stitched eyes and segmented pockets have no loose, cut, or missing stitching, stitching has a protective cover (shrink tube) over the it, and the cover must not be damaged, missing or torn.
- If ice or snow build-up is noted, do not use this product until build-up is removed by thawing. Ensure the Buck Boa, hardware and coils of the prusiks are clean and free of packed snow or ice or of any debris. NOTE: Prior to and while in use, particularly in extreme weather conditions (i.e. blizzards, high winds, etc.) – guard against debris (pebbles, twigs, packed snow, ice, mud, etc.) becoming lodged in any of the component assemblies as well as any buildup on the ropes, as debris / build up could block or restrict proper function. If noted, ensure unit is cleared.
- Do not use the Buck Boa Lanyard or prusiks that have worn or torn covers that have the warning centers / cores exposed.

See photos below for examples of a variety of conditions indicated on the previous page (Colors may vary):

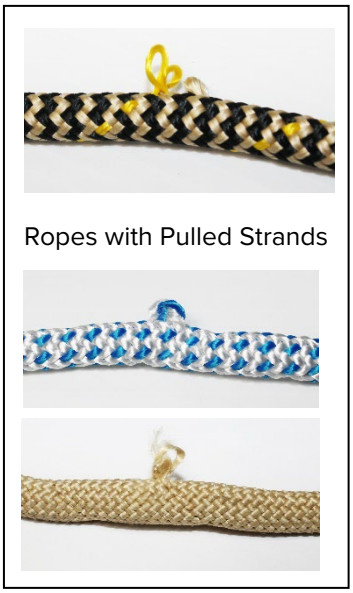


Fig. 3a

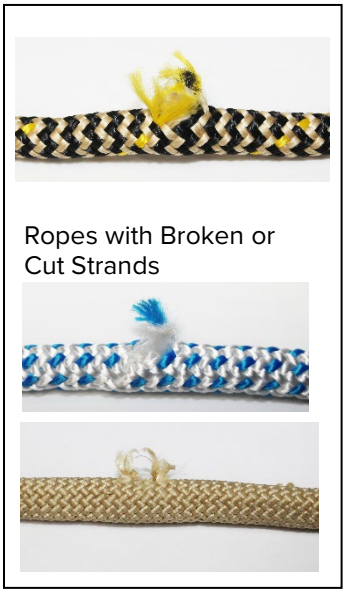


Fig. 3b

Fig. 3c

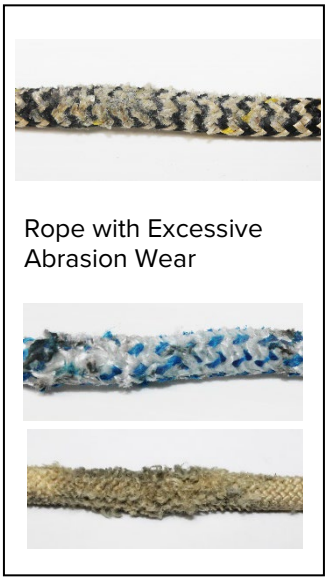


Fig. 3d

HARDWARE INSPECTION:

- All hardware, pulley and carabiners must be inspected, before and after each use.
- Inspections must ensure all surfaces of the hardware (pully and carabiners) to be free of cracks, sharp edges, distortion, corrosion, burrs and excessive wear.
- Ensure carabiner gates operate freely, smoothly, and close and lock completely.
- Inspect pulley to ensure sheave rotates freely.

If any evidence of wear or deterioration as outlined is observed, immediately cease use, destroy the product, and replace it with new equipment. Should any unusual conditions not outlined above be observed or you have reasonable doubt about a particular condition, remove the equipment from service and notify your Supervisor, Safety Director, or contact Buckingham Mfg. Co. for clarification.

USE:

- Use only with an approved arborist saddle and climbing gear in good condition.
- Inspect the Buck Boa and all associated equipment before each use.
- Wrap the Boa around the tree, and connect the carabiner attached to the pulley to the opposite side saddle D-ring (Fig 4).
- Connect the carabiner attached to the segmented pocket side of the Boa Lanyard to one of your saddle D-rings. (normally the left side D-ring is used for right handed users).
- Adjust the length of the Boa to the circumference of the tree. To tighten, lean slightly into the tree to relieve pressure and then grasp the free end of the Boa (on the progress capture side and pull it forward until slack is removed (Fig. 5). Stow the remaining tail of the Boa to your saddle so there is no chance of it becoming entangled with your body.
- To loosen, Lean slightly into the tree to relieve pressure on the Boa, loosen the Valdotain Tresse / Prusik and slowly lean back away from the tree (Fig. 6). Once in position, reset the Valdotain Tresse / Prusik and stow the remaining tail of the Boa to your saddle so there is no chance of it becoming entangled with your body.

Fig. 4

Fig. 5

Fig. 6

- Disconnect the carabiner attached to the Boa Prusik from its stowed position on the Pinto Pulley, and then re-connect it to one of the pockets on the segmented section of the Boa (Fig. 7).
- Adjust the Boa Prusik so that it is snug to the tree (Fig. 8).

Fig. 7

Fig. 8

- Make final adjustment to the Boa before climbing, the Boa Prusik may need to be connected to a different segmented pocket due to tree diameter.
- Climb to your desired work location.
  NOTE: The Boa prusik may be adjusted loosely while climbing but must always be snug to the tree during sawing operations.

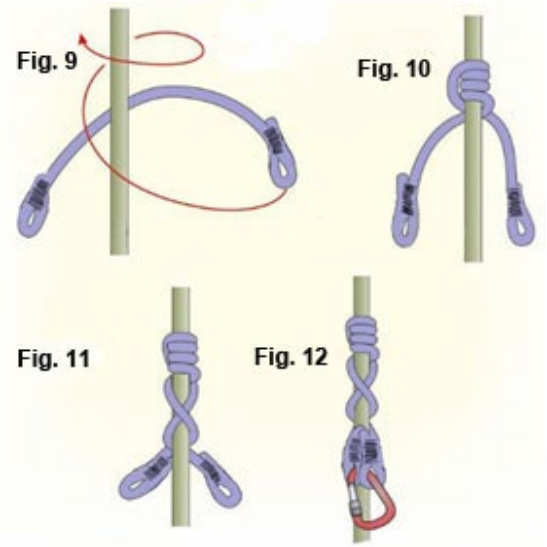
FRICTION HITCH REPLACEMENT

NOTE: Friction hitch / prusik cords are a consumable wear part. Expect to see signs of wear. Expect to replace prusik cords regularly. Regular monitoring is essential e.g., pre-use checks, weekly inspections, thorough examinations and after exceptional circumstances. The concentration of high temperatures, in association with abrasion, is likely to damage the prusik fibers. Inspect all fibers for damage. Look especially at the section of cord used to make the top coils of the friction hitch.

Replacement friction hitches are supplied separately by Buckingham Mfg. Use only compatible replacement friction hitches (manufactured from approved friction hitch cord) supplied by Buckingham Mfg. Use only friction hitch PN P9J8P-10-30 and P9J8U10Q1-31 for use with the Buck Boa.

How To Tie The Valdotain Tresse

- Position the Prusik behind the Buck Boa main rope (Fig. 9)
- Make 4 wraps around the main rope (Fig. 10).
- After the fourth wrap, bring the tails down even with each other (Fig. 11).
- Cross the tails in front and then again in back of the main rope. Total of 6 wraps (Fig. 12).
- Join the stitched eyes together and place into the slot of the Pinto Pulley and connect with a carabiner (Fig. 12) (Pully not shown below for clarity).



How To Tie The Klemheist Knot

- Tie the Klemheist Knot between the segmented pocket section and the Valdotain Tresse (Fig. 13)
- Place the large loop of the Boa Prusik on top of the Buck Boa main rope with the end of the eye stitching perpendicular to the Buck Boa main rope (Fig. 14).
- Make a wrap around the main line and under the stitched eye with the loop on the right (Fig. 15) (should have 4 coils showing).
- Make two more loops from top to bottom (Fig 16.) (should have 8 coils showing).
- Bring the left side loop up to the stitched eye loop (Fig. 17).
- Feed the free end eye through the left loop (Fig. 18) (total of 8 wraps).
- Pull the free end taught so the second stitched eye is completely through the left loop (Fig. 19).
- Connect the carabiner through the small eye on the free end of the Boa Prusik (Fig 19).

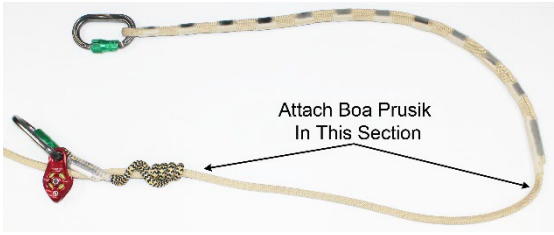


Fig. 13

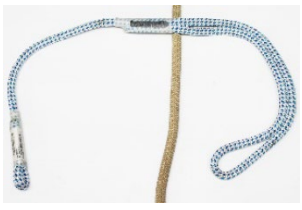


Fig. 14

Fig. 15

Fig. 16

Fig. 17

Fig. 18

Fig. 19

WARNINGS

- This equipment is intended for use by properly trained professionals only. Do not use without proper training.
- Completely read, understand, and follow all instructions, warnings, and guidelines pertaining to this and all associated equipment before use. Failure to do so could result in your serious injury or death. Should questions arise concerning the proper use or condition of your equipment, contact Buckingham Manufacturing Co. at 1-800-937-2825.
- All affixed labels should be left in place and all instructional material kept for future reference.
- Employer - instruct employee as to proper use and warnings before use of equipment.
- When attaching the carabiner it is critical to capture one side of the double strand rope and not attach the carabiner through the stitched section. The carabiner must only attach through one segmented attachment point on the SuperSaver Rope, never attach through multiple segmented attachment points (Fig. 20).

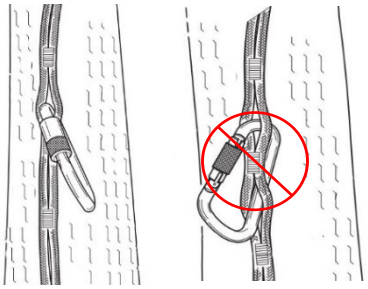


Fig. 20

- As outlined by OSHA 1926.502 (e)(2) positioning devices shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 lbf. (13.3 kN), whichever is greater versus fall arrest anchor points which must support a minimum of 5,000 lbf. (22.2 kN) per attached worker and be independent of worker support.
- Be certain this equipment is suitable for the intended use and work environment. If suitability for intended use is in doubt, consult a safety engineer or contact Buckingham Mfg. before using.
- 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.
- Before use the first time, the user should carry out a suspension test in a safe place slightly elevated to ensure that the equipment is the correct size, has sufficient adjustment and is of an acceptable comfort level for the intended use.
- Before use of the equipment, consideration should be given as to how any necessary rescue could be safely achieved.
- Stow the free end of the Buck Boa to your saddle so it cannot make contact with your feet or lower legs and or become entangled.
- This product is to be used for positioning and suspension only, **NOT FOR FALL ARREST**. Therefore, it may be necessary to supplement arrangements for work positioning / suspension with collective means (i.e. safety nets) or personal means of protection against falls from a height (i.e. fall arrest system).
- The Buck Boa is to be used for climbing purposes only. Use it and PPE equipment only for the specific purpose for which it is designed and intended. Do not use it for towing or hoisting equipment or material.
- This product is designed to be used by a person with a maximum weight of 350 lbs. when fully equipped.
- Remove equipment from service and destroy and discard if subjected to impact loading. Even though no visible signs may be present, internal damage may have occurred thus reducing its strength and margin of safety.
- Be aware of this device's position / placement at all times in relation to the operations being performed. Use extreme caution when performing operations such as cutting, drilling, sawing, etc. Always perform this type of work well above this device to avoid the potential of tool contact, causing damage which may result in a fall, serious injury or death).
- Use only with saddle, harness and equipment meeting standards for intended use.
- Only Buckingham Mfg. Co. or those people authorized in writing by Buckingham Mfg. Co. may make repairs / modifications to this equipment.
- Before each use check that: 1) prusiks are properly tied. 2) unit and prusiks have no damaged, missing or torn stitching or shrink tube, are free of burns, cuts, abrasions, kinks, knots, broken strands, excessive wear or evidence of impact loading. 3) D-rings & Pulley are not bent, distorted, cracked, corroded or show signs of excessive wear. Remove from service, destroy and discard unit if it does not pass this inspection and replace immediately.
- Never wrap a Buck Boa around a sharp structural member. 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 sharp edged or pointed tools, hand saws, chainsaws, hand tools, abrasive surfaces, high temperature surfaces, welding or other heat sources electrical hazards, chemicals, moving machinery etc. Sharp and abrasive surfaces may include but not be limited to (sheet metal, steel, concrete, block, stone, laminated materials etc.)
- Do not use this system near energized power lines.

- ♦ Never use the Buck Boa on a compromised, dead, leaning, diseased, unstable, loose barked tree. For use only on trees / limbs that have been identified and determined capable of supporting your intended load by a specifically trained and competent user.
- ♦ Use only connectors (snaphook / carabiners) having a minimum gate rating of 3600 lbf. and meeting the ANSI Z359.12 requirements.
- ♦ Do not use the Buck Boa during inclement weather or unsafe conditions including, but not limited to, thunderstorms threatening and/or present, winds, lightning, rain, snow, sleet, icy conditions, and/or any other atmospheric condition which may impede the user's ability to operate the product in a safe manner as a safe manner as outlined in these instructions.
- ♦ In adverse environments, the function of the Buck Boa may be affected. Use caution to ensure that the friction hitches grabs reliably and that carabiner gates close and lock. Ice, mud, rain, cold, snow and tree exudates are examples of localized or climatic conditions that may demand greater attention from the user. Beware, tree exudates may create conditions similar to those made by lubricants or adhesives. Contamination of ropes with tree exudates may lead to rope hardening and reduce friction hitch grab reliability. Maintain ropes so that their function is reliable. Ideally, ropes should always be dry, clean and equally flexible along their entire length.
- ♦ Always visually check that: 1) each carabiner freely engages anchor points or work positioning and or suspension points, 2) carabiner gate is completely closed with each use. **Never** rely solely on the feel or sound of a carabiner gate engaging.
- ♦ Make sure each carabiner is positioned so that its gate is **never** load bearing.
- ♦ Never use combinations of components or sub systems, or both, which may affect or interfere with the safe function of each other.
- ♦ Never disable locking gate on a carabiner, punch holes in or alter a connecting device in any way.
- ♦ Know and follow the ANSI Z133.1-2017 Standard. To obtain a copy of the ANSI Z133 -12 Standard, call NAA at 1-800-733-2622 or ISA at 1-888-ISA-TREES.

Cleaning / Maintenance / Storage

- Proper maintenance and storage of your equipment will prolong its useful life and contribute toward its performance. Clean rope with water and mild soap (a dish washing soap that removes grease (i.e. Dawn)) and allow to air dry thoroughly without using excessive heat or sunlight.
- If necessary, hardware may be cleaned with a lightweight oil such as WD-40® that does not contain chlorine or chemicals corrosive to steel or zinc.
- Lubricate carabiner gates and pulley at least weekly or as often as required to maintain smooth operation (no binding) with light weight lubricant such as WD-40®.
- Do not store near solvents or corrosive chemicals or at extreme temperatures. This product should be stored in a clean and dry environment out of direct sunlight and away from extreme climate conditions. Ropes should be stored on racks or hooks to provide ventilation and should never be stored on concrete or dirt surfaces.
- Apart from visual examination of product before and after each use, it should be inspected at least twice a year by a competent person capable of determining the suitability for use.

NOTE: Ensure proper fit / size of product before use. This product cannot be returned unless it is in new / unused condition.

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.

Patent Pending

BUCKINGHAM MFG.
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