

# BUCKINGHAM MFG.

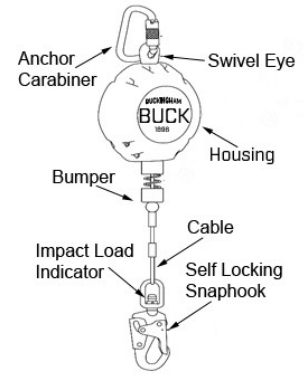
PN 5206Q – Series

## SHARP EDGE RETRACTABLE SYSTEM 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.

### APPLICATIONS

- The 5206Q - Series, Self-Retractable Lanyards (SRL) are designed for use as part of a complete fall-arrest system as required by OSHA. As supplied, the stand alone PN 5206Q - Series SRL meets the OSHA 1910.140 Subpart I & 1926.502 Subpart M Regulations and can be used by a single user with a maximum weight of 310 lbs. when fully equipped. When these SRLs are used in conjunction with the Buckingham harness (PN 603S8Q224) (manufactured with a permanently attached BuckSorber II (PN 400000X12) with a specially designed 18" extension strap) it becomes an Engineered Sharp Edge Fall Arrest System. Note: Harness with BuckSorber II & 18" Extension Strap are supplied separately. When properly configured as Buckingham's Engineered Sharp Edge Fall Arrest System, this device meets the testing requirements of ANSI Z359.14-21 as a Class 2 device. This device is suitable for horizontal use only when properly configured as an Engineered Sharp Edge Fall Arrest System. There are numerous types of unprotected sharp edges that may cause damage to the cable of this system. This system has **not** been tested with all edge substrates and is not approved for use on all edges. Sharp edge testing was completed in accordance with ANSI Z359.14-21. If there is any doubt of which edge is an approved edge when using the Engineered Sharp Edge System, consult a safety officer or contact Buckingham Manufacturing.
- ANSI Z359.14-2021 requires a Class 2 device to have an arrest distance of less than 42" and an average arrest force of less than 1350 lbs. with a maximum peak arresting force of 1800 lbs. The arrest distances described above apply only to overhead anchorage connection applications. For non-overhead anchorages see the Fall Clearance section below for how to calculate Minimum Required Fall Clearance (MRFC). The maximum free fall distance for non-overhead usage is 6 ft. (1.83m).



PN 5206Q1

| Class 2 SRL Testing Requirements, per ANSI Z359.14-21       |                   |
|---|-------------------|
|   | <b>Class 2</b>    |
| <b>Maximum Average Arresting Force</b>                      | ≤ 1,350lbs. (6kN) |
| <b>Maximum Arresting Force</b>                              | ≤ 1,800lbs. (8kN) |
| <b>Maximum Arrest Distance (Overhead Applications Only)</b> | 42" (1.07m)       |
| <b>Maximum Free Fall Distance</b>                           | 72 in. (1.83m)    |

- Individuals using this unit must be properly trained and instructed on how to use the device / system properly. They must also read, understand, and follow these instructions, all related equipment's instructions, as well as any instructions or warnings attached to those products.

- Each SRL's 3/16" diameter steel cable has a permanently attached self-locking snaphook with integral impact load indicator. The self-locking snaphook must be attached to the connection eye at the free end of the 18" extension strap. The other end of extension strap is connected to an energy absorbing pack known as the BuckSorber II. The BuckSorber II is then connected to the rear fall arrest attachment of the full body harness. Using this system only as previously described creates an effective Engineered Sharp Edge Fall Arrest System.



**PN 603S8Q224 - Confined Space Harness**

- Under normal working conditions, the worker can draw the cable in and out of the unit's housing as desired. The unit's self-retracting feature keeps the cable taut and out of the worker's way during use and recoils the cable when disconnected from the worker. The unit's brake system will not engage if the unit is not under load. In the event of a fall, the braking system brings the worker to a decelerated stop and holds him in place.

## INSPECTION PROCEDURES

1. As required by ANSI Z359.14 the SRL shall be inspected by an authorized person or rescuer before each use. Additionally, inspections shall be conducted by a competent person other than the user. The competent person shall use Appendix A (shown below) to determine appropriate inspection intervals.
2. Inspection by a factory authorized inspection agency at regular intervals as noted below are also required.

| ANSI Z359.14 APPENDIX A - INSPECTION REQUIRMENTS |  |  |   |
|--|--|--|---|
| Type of Use                                      | Application Examples   | Conditions of Use  | Inspection Frequency<br>(by a Competent Person) |
| Infrequent to Light                              | Confined Space, Factory Maintenance                            | Good storage conditions, indoor / infrequent outdoor use, room temperature, clean environment        | Annually  |
| Moderate to Heavy                                | Transportation, Residential Construction, Utilities, Warehouse | Fair storage conditions, indoor / extended outdoor use, all temperatures, clean or dusty environment | Semi-annually to Annually                       |
| Severe to Continuous                             | Commercial Construction, Oil and Gas, Mining                   | Harsh storage conditions, prolonged or continuous outdoor use, all temperatures, dirty environment   | Quarterly to Semi-annually                      |

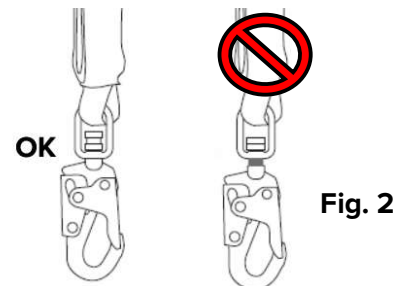
**NOTE:** Gloves should be worn when inspecting or handling the cable.

3. Prior to each use inspect the entire length of cable by pulling it out in 2 to 4 foot intervals and then giving the cable a quick, hard, downward tug. The cable should stop and lock. Upon completion of this inspection, allow the cable to retract back into the housing slowly ensuring it remains taut under slight tension. While the cable is retracting, slowly inspect to ensure no abrasive wear, mechanical damage, rotational damage, heat damage, bending fatigue, cuts, kinks, broken strands, bird-caging, foreign substances, or other damage exist (See Fig. 1).

4. Inspect the external connector swivel eye, the anchorage connection carabiner, and the self-locking snaphooks for damage or deformation and that the gates open, snap closed and lock easily and smoothly. Inspect the self-locking snaphooks to be sure that the impact load indicator has not been deployed (snap swivel section shows a red warning band Fig. 2). Be certain both the carabiner and self-locking snaphook gates are free of burrs, functioning properly, clean and not bent. Also, inspect the retractable unit housing to ensure no breaks, distortion, cracks, loose or missing screws or other damage exist. Ensure that all connecting hardware is properly fastened and is secure.
5. Make sure bumper / stopper is clean and free of cuts and cracks and all labels are intact and legible.
6. Inspect all associated equipment used with this Engineered System as stated with the supplied manufacturer's instructions.
7. If any evidence of wear or deterioration as outlined is observed, immediately cease use. 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.
8. Documentation of equipment inspections shall be maintained by the employer. This documentation shall include, at a minimum, the identity of the equipment, inspection date, name of the competent person conducting the inspection and the results of the inspection.



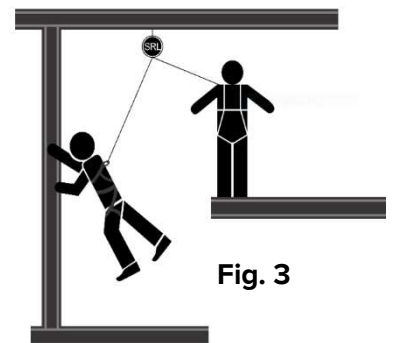
**Examples of Cable Damage**



## INSTALLATION PROCEDURES

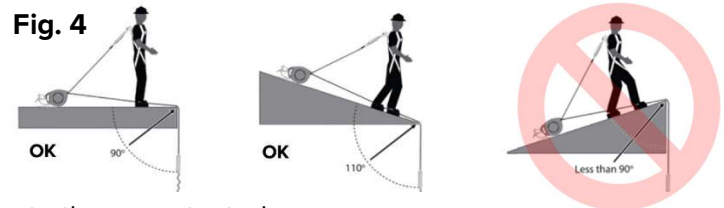
**⚠WARNING - NEVER use this Self Retracting Lanyard without a thorough inspection before each use.**

1. For Sharp edge applications use the SRL only with approved components and subsystems as listed above. Using the SRL with non-approved components and subsystems will reduce the safety and reliability of the system and render it as a **non-compatible** Engineered Sharp Edge Fall Arrest System.
2. Before use, ensure that you plan your fall protection system by taking into account all limitations and factors outlined in these and all associated instructions. Your fall protection system plan should encompass all factors that may affect your safety before, during, and after a fall.
3. This device is designed for use with one person only. Never use this device to support multiple workers. Also, do not use this SRL or the Engineered Sharp Edge Fall Arrest System if the total workload is outside of the rated capacities of 130 - 310 lbs. (58.9 – 140.6 kg).
4. Be aware of workers sharing the workspace to avoid becoming tangled with another worker. Steer clear of objects that could fall and impact the lifeline.
5. Inspect the work area and clear all debris and other material that could cause injuries or interfere with the operation of the device. Make sure the cable, extension strap and shock absorber are always clear of any electrical lines or other energized sources.
6. Ensure the anchorage provides the Minimum Required Fall Clearance (MRFC) in the fall path below the working / walking surface to prevent contact with a lower level or obstructions if a fall occurs. Rig to prevent or minimize swing fall hazards that occur when the anchorage is not positioned directly above the point at which the fall occurs (see Fig. 3). To minimize swing falls, anchorage points should be directly overhead or work as close to the anchorage point as possible.



7. The SRL may be attached to an overhead anchor (above the harness dorsal D-Ring) or a non-overhead anchor (below the harness D-Ring). A non-overhead anchor may be as low as foot level and may only be utilized when the SRL is properly configured as part of Buckingham's Engineered Sharp Edge Fall Arrest System. Never use anchorages located below the user's feet. In sharp edge applications, do not attach the SRL in a manner that situates the edge higher than the unit. The angle of the working surface must be 90° or more with respect to vertical, never less (Fig.

4). Non-overhead anchorage points are at an increased risk of abrasion hazards due to the increased contact between the cable and the edge. Use of a foot level anchorage should be a last resort when no other anchorage option exists. Keep the cable between the user and anchorage connection point as close to perpendicular to the unprotected edge as possible.



8. Attach the SRL using the supplied approved carabiner (attached to the swivel eye of the SRL) to a suitable anchor as defined in the current OSHA regulations. The anchorage must be capable of supporting 5,000 lbf. (22.2kN) per attached worker and be independent of worker support. For sharp edge applications ensure the SRL is aligned in a proper horizontal position. The use of a cradling device may be required.

9. Avoid using the SRL on unprotected edges, sharp metals cut with abrasive disks, or flame cut metals. Use caution when working near abrasive surfaces / edges, such as those present on concrete and stone, which may grind the cable, extension strap or shock absorber during a fall. In sharp edge applications, only use Sharp Edge SRL's or Engineered Systems designed for those applications.

## OPERATION PROCEDURES

1. Complete all actions listed in the "Inspection Procedures" section.
2. Attach the self-locking snaphook (connected to the cable) to the connection eye of the 18" extension strap located at the back of the full body harness. Always visually check that the self-locking snaphook freely engages into the connection eye and the keeper is completely closed with each use. Never rely solely on the feel or sound of a self-locking snaphook gate engaging. Never connect a snaphook directly to webbing unless the manufacturer's instructions specifically allow such a connection. For additional details concerning harness connection points, consult the harness manufacturer's instructions.
3. Once connected, you can move about the work area, with the cable extending and retracting along the working length as applicable. Avoid sudden movements, which may unintentionally activate the braking mechanism. Do not allow the cable to become slack – if it does, immediately remove the SRL from service for inspection. When properly used, this Self Retractable Lanyard (SRL) affords the user the fall-arrest protection required by OSHA. This device is only to be used to provide fall arrest protection.
4. If a fall occurs, the braking mechanism will engage, and the cable will stop paying out. The red indicator band on the snaphook will also become visible. Additionally, the energy absorber may deploy to limit fall arrest forces on the user. Remove any equipment from service that was subject to fall arrest forces, and store it separate from other units.
5. In situations where falls over an edge may occur, the SRL must be used in conjunction with the appropriate equipment qualifying it as Buckingham's Engineered Sharp Edge Fall Arrest System.

6. When used as an Engineered Sharp Edge Fall Arrest System, special precautions must be taken as follows:

- The allowable angle of redirection of the cable portion of the SRL at the edge over which a fall might occur shall be at least 90° (measured between the two sides formed by the redirected cable). (See Fig. 4).
- The anchor point may be situated at the same height as the edge at which a fall may occur or above the edge. Anchor points below the edge are dangerous because they cause the cable to redirect at an angle sharper than 90° (see Fig. 4).
- Never work on the far side of an opening opposite of the anchorage point (see Fig. 5).
- Do not allow the cable, extension strap or shock absorber to drape over an edge during normal work as this may abrade, damage, or otherwise compromise the cable, extension strap or shock absorber (see Fig. 6).

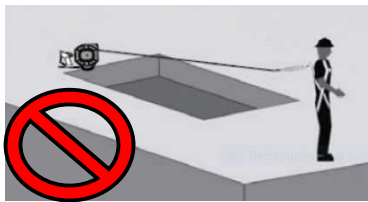


Fig. 5

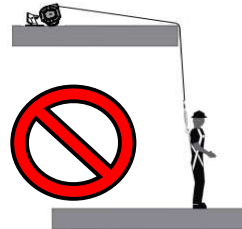


Fig. 6

- Refer to Installation procedures for limitations regarding to the allowable work area relative to the anchorage point, including factors such as swing fall and abrasion on the line at the edge.
- In the event of a fall over a sharp edge, special rescue measures may be required.

## FALL CLEARANCE CALCULATIONS:

### Overhead Anchorage

- The SRL may be anchored anywhere in the allowable attachment area, which ranges from a height above the user to level with the Dorsal D-ring of the full body fall arrest harness (Fig. 7).
- The Minimum Required Fall Clearance (MRFC) for this application is calculated using four factors, measured from the walking-working surface:
  - Maximum Deceleration Distance (3.5 feet, based on product testing / ANSI Z359.14)
  - D-Ring Shift and Harness Stretch (1.5 feet, see Buckingham harness instructions)
  - Swing Fall (4 foot maximum swing fall)
  - Safety Factor (2 feet per: <https://www.osha.gov/otm/section-5-construction-operations>)
- Table 1 below was calculated using SRL test data and includes all four factors listed above to determine the MRFC. Use the attached figures and table below as a guideline to determine the users MRFC. To calculate MRFC:
  - Select the users Lateral Offset Distance from the top row of Table 1.
  - Select the users Anchorage Height from the first column of Table 1.
  - The MRFC required when falling with these distances will be the cell value at the intersection of the top row and first column.

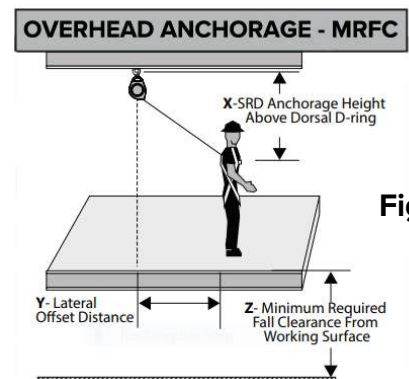


Fig. 7

**Warning:** The shaded areas of the table represent distances not allowable for use due to extended Swing Fall. Do not work in these shaded areas as serious injury or death may result.

**TABLE 1**

| SRL Anchorage Height Above D-Ring (X) | Lateral Offset Distance (Y) |     |     |     |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|-----------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
|                                       | ft                          | 0   | 2   | 4   | 6    | 8    | 10   | 12   | 14   | 16   | 18   | 20   | 22   | 24   |
| 60                                    | 7.0                         | 7.5 | 7.5 | 7.5 | 7.5  | 8    | 8    | 8.5  | 9    | 9.5  | 10   | 10.5 | 11   | 12   |
| 55                                    | 7.0                         | 7.5 | 7.5 | 7.5 | 7.5  | 8    | 8    | 8.5  | 9    | 9.5  | 10   | 11   | 11.5 | 12.5 |
| 50                                    | 7.0                         | 7.5 | 7.5 | 7.5 | 7.5  | 8    | 8    | 8.5  | 9    | 9.5  | 10.5 | 11   | 12   | 12.5 |
| 45                                    | 7.0                         | 7.5 | 7.5 | 7.5 | 7.5  | 8    | 8.5  | 9    | 9.5  | 10   | 10.5 | 11.5 | 12.5 | 13   |
| 40                                    | 7.0                         | 7.5 | 7.5 | 7.5 | 7.5  | 8    | 8.5  | 9    | 9.5  | 10.5 | 11   | 12   | 13   | 14   |
| 35                                    | 7.0                         | 7.5 | 7.5 | 8   | 8    | 8.5  | 9    | 10   | 10.5 | 11.5 | 12.5 | 13.5 | 14.5 |      |
| 30                                    | 7.0                         | 7.5 | 7.5 | 8   | 8.5  | 9    | 9.5  | 10.5 | 11   | 12   | 13.5 | 14.5 | 15.5 |      |
| 25                                    | 7.0                         | 7.5 | 7.5 | 8   | 8.5  | 9    | 10   | 11   | 12   | 13   | 14.5 | 15.5 | 17   |      |
| 20                                    | 7.0                         | 7.5 | 7.5 | 8   | 9    | 9.5  | 10.5 | 11.5 | 13   | 14   | 15.5 | 17   | 18.5 |      |
| 15                                    | 7.0                         | 7.5 | 8   | 8.5 | 9    | 10.5 | 11.5 | 13   | 14   | 15.5 | 17   | 19   | 20.5 |      |
| 10                                    | 7.0                         | 7.5 | 8   | 9   | 10   | 11.5 | 13   | 14.5 | 16   | 18   | 19.5 | 21.5 | 23   |      |
| 5                                     | 7.0                         | 7.5 | 8.5 | 10  | 11.5 | 13.5 | 15   | 17   | 19   | 21   | 23   | 25   | 27   |      |
| 0                                     | 7.0                         | 9   | 11  | 13  | 15   | 17   | 19   | 21   | 23   | 25   | 27   | 29   | 31   |      |

**Use Table 1 To Calculate Minimum Required Fall Clearance**

|   |  |
|---|--|
| 2 foot increments along the Y-axis represents the Lateral Offset Distance the user is working away from being directly under the SRL. | 5 foot increments up the X-axis represent the SRL Anchorage Height above the user's Dorsal D-Ring. |
|---|--|

**For Overhead Anchorage**

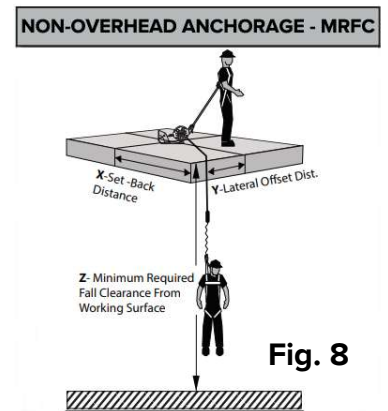
Example:  
 If the user needs to work 10 feet away from directly underneath the SRL, the SRL needs to be anchored at least 15 feet above the user's Dorsal D-Ring. Minimum Required Fall Clearance (MRFC) is 10.5 feet at maximum allowable swing fall.

Example:  
 If the only Anchorage for the SRL is at Dorsal D-Ring height, 0 feet above the user's Dorsal D-Ring, the maximum allowable work zone is 4 feet away from the SRL. Minimum Required Fall Clearance (MRFC) is 11 feet at maximum allowable swing fall.

**Key to Work Zone Areas:**  = Allowable Use Area       = Not Allowed Use Area

**Non-Overhead Anchorage**

- The SRL, when used as part of Buckingham’s Engineered Sharp Edge Fall Arrest System, may be anchored at or above foot level but never below (See Fig. 8).
- The Minimum Required Fall Clearance (MRFC) for this application is calculated using five factors, measured from the walking-working surface:
  - Maximum Deceleration Distance (10 Feet, based on product testing)
  - Dorsal D-Ring Height (5 feet average per: <https://www.osha.gov/otm/section-5-construction-operations>)
  - D-Ring Shift and Harness Stretch (1.5 feet, see Buckingham harness instructions)
  - Swing Fall (4 feet maximum swing fall)
  - Safety Factor (2 feet per <https://www.osha.gov/otm/section-5-construction-operations>)
- Table 2 below was calculated using SRL test data and includes all five factors listed above to determine the MRFC. Use the attached figures and table below as a guideline to determine the users MRFC. To calculate MRFC:
  - Select the users Lateral Offset Distance from the top row of Table 2.
  - Select the Setback Distance of the SRL from the edge, from the first column of Table 2.
  - The MRFC required when falling over an edge with these distances will be the cell value at the intersection of the top row and first column.



**Warning:** The shaded areas of the table represent distances not allowable for use due to extended Swing Fall. Do not work in these shaded areas as serious injury or death may result.

TABLE 2

| SRL Setback Distance from Edge(X) | Lateral Offset Distance (Y) |      |      |      |      |      |      |      |      |      |      |      |      |    |
|-----------------------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|----|
|                                   | ft                          | 0    | 2    | 4    | 6    | 8    | 10   | 12   | 14   | 16   | 18   | 20   | 22   | 24 |
| 0                                 | 18.5                        | 20.5 | 22.5 | 24.5 | 26.5 | 28.5 | 30.5 | 32.5 | 34.5 | 36.5 | 38.5 | 40.5 | 42.5 |    |
| 5                                 | 18.5                        | 19   | 20   | 21.5 | 23   | 25   | 26.5 | 28.5 | 30.5 | 32.5 | 34.5 | 36.5 | 38.5 |    |
| 10                                | 18.5                        | 19   | 19.5 | 20.5 | 21.5 | 23   | 24.5 | 26   | 27.5 | 29.5 | 31   | 33   | 34.5 |    |
| 15                                | 18.5                        | 19   | 19.5 | 20   | 20.5 | 22   | 23   | 24.5 | 25.5 | 27   | 28.5 | 30.5 | 32   |    |
| 20                                | 18.5                        | 19   | 19   | 19.5 | 20.5 | 21   | 22   | 23   | 24.5 | 25.5 | 27   | 28.5 | 30   |    |
| 25                                | 18.5                        | 19   | 19   | 19.5 | 20   | 20.5 | 21.5 | 22.5 | 23.5 | 24.5 | 26   | 27   | 28.5 |    |
| 30                                | 18.5                        | 19   | 19   | 19.5 | 20   | 20.5 | 21   | 22   | 22.5 | 23.5 | 25   | 26   | 27   |    |
| 35                                | 18.5                        | 19   | 19   | 19.5 | 19.5 | 20   | 20.5 | 21.5 | 22   | 23   | 24   | 25   | 26   |    |
| 40                                | 18.5                        | 19   | 19   | 19   | 19.5 | 20   | 20.5 | 21   | 22   | 22.5 | 23.5 | 24.5 | 25.5 |    |
| 45                                | 18.5                        | 19   | 19   | 19   | 19.5 | 20   | 20.5 | 21   | 21.5 | 22   | 23   | 24   | 24.5 |    |
| 50                                | 18.5                        | 19   | 19   | 19   | 19.5 | 19.5 | 20   | 20.5 | 21   | 22   | 22.5 | 23.5 | 24   |    |
| 55                                | 18.5                        | 19   | 19   | 19   | 19.5 | 19.5 | 20   | 20.5 | 21   | 21.5 | 22.5 | 23   | 24   |    |
| 60                                | 18.5                        | 19   | 19   | 19   | 19.5 | 19.5 | 20   | 20.5 | 21   | 21.5 | 22   | 22.5 | 23.5 |    |

**Use Table 2 To Calculate Minimum Required Fall Clearance**

2 foot increments along the Y-axis represents the Lateral Offset Distance the user is working away from being directly under the SRL

5 foot increments down the X-axis represent the SRL Setback Distance from the nearest edge.

Example:  
If the user needs to work 10 feet away from the SRL along the edge (Lateral Offset Distance), the SRL needs to be anchored back at least 15 feet above the edge. Minimum Required Fall Clearance (MRFC) is 22 feet at maximum allowable swing fall.

Example:  
If the only available Anchorage for the SRL is at the edge (0 feet Setback Distance), the maximum allowable work zone is 4 feet laterally along the edge from the SRL. Minimum Required Fall Clearance (MRFC) is 22.5 feet at maximum allowable swing fall.

**Key to Work Zone Area:**  = Allowable Use Area  = Not Allowed Use Area

- Once work is completed detach the self-locking snaphook and allow the cable to slowly retract back into housing. If unit is mounted out of reach, always attach a tag line. Never let the lifeline freewheel back into the housing.

Product labels shown below for reference:

Label located in label pack near Snaphook:



Max Arrest Distance (Overhead Applications Only): 42' (12.07m)  
Max Average Arrest Force: 1,350 lbf (6 kN)  
Max Arrest Force: 1,800 lbf (8 kN)  
Max Free Fall Distance: 6' (1.83m)  
See instructions for installation Setback Distance and Minimum Required Fall Clearances for the Engineered Sharp Edge System. This table is also appended to this label.

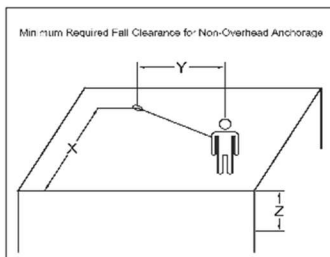
This Device Meets the Testing Requirements of ANSI Z359.14-21 as a Class 2 SRL, ONLY when properly configured as Buckingham's Engineered Sharp Edge Fall Arrest System (Connected to the extension strap with energy absorber on Buckingham's PN 60358Q224 Harness)

Suitable for horizontal use when properly configured as Buckingham's Engineered Sharp Edge Fall Arrest System. Read and follow all instructions / warnings before use. Inspect & test lock & retraction function before each use according to the manufacturer's instructions. Only use with Buckingham's 60358Q224 Harness. Remove from service if subjected to fall arrest or impact load indicator is visible (see instructions). Connect SRL to appropriate anchorage and the snaphook end to the eye of the harness fall arrest extension strap. Anchorage point must be elevated to the highest extent possible given working conditions to limit the risk associated with a potential fall. Fall Arrest PPE shall always be the last method to avoid fall hazards based on the hierarchy of controls (ANSI A55P Z359.2). When using this device, the user shall make every effort to utilize an overhead anchorage, minimizing risks associated with a non-overhead anchorage. Not suitable for use as or with a horizontal lifeline.

5206Q1-30 Label Z3120923.rmt

**INSPECTION DATE**

| YEAR | QTR-1 | QTR-2 | QTR-3 | QTR-4 |
|------|-------|-------|-------|-------|
| 1    |       |       |       |       |
| 2    |       |       |       |       |
| 3    |       |       |       |       |
| 4    |       |       |       |       |
| 5    |       |       |       |       |



| Set-Back Distance (X) | Distance off Axis of Anchorage (Y) |      |      |      |      |      |      |      |      |      |      |      |    |  |
|-----------------------|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|----|--|
|                       | 0                                  | 2    | 4    | 6    | 8    | 10   | 12   | 14   | 16   | 18   | 20   | 22   | 24 |  |
| 0                     | 18.5                               | 20.5 | 22.5 |      |      |      |      |      |      |      |      |      |    |  |
| 5                     | 18.5                               | 19   | 20   | 21.5 |      |      |      |      |      |      |      |      |    |  |
| 10                    | 18.5                               | 19   | 19.5 | 20.5 | 21.5 |      |      |      |      |      |      |      |    |  |
| 15                    | 18.5                               | 19   | 19.5 | 20   | 20.5 | 22   |      |      |      |      |      |      |    |  |
| 20                    | 18.5                               | 19   | 19   | 19.5 | 20.5 | 21   | 22   |      |      |      |      |      |    |  |
| 25                    | 18.5                               | 19   | 19   | 19.5 | 20   | 20.5 | 21.5 | 22   |      |      |      |      |    |  |
| 30                    | 18.5                               | 19   | 19   | 19   | 20   | 20.5 | 21   | 22   | 22.5 |      |      |      |    |  |
| 35                    | 18.5                               | 19   | 19   | 19   | 19.5 | 20   | 20.5 | 21.5 | 22   |      |      |      |    |  |
| 40                    | 18.5                               | 19   | 19   | 19   | 19.5 | 20   | 20.5 | 21   | 22   | 22.5 |      |      |    |  |
| 45                    | 18.5                               | 19   | 19   | 19   | 19.5 | 19.5 | 20.5 | 21   | 21.5 | 22   |      |      |    |  |
| 50                    | 18.5                               | 19   | 19   | 19   | 19.5 | 19.5 | 20   | 20.5 | 21   | 22   | 22.5 |      |    |  |
| 55                    | 18.5                               | 19   | 19   | 19   | 19.5 | 19.5 | 20   | 20.5 | 21   | 21.5 | 22.5 |      |    |  |
| 60                    | 18.5                               | 19   | 19   | 19   | 19.5 | 19.5 | 20   | 20.5 | 21   | 21.5 | 22   | 22.5 |    |  |

**Clearance Required (Z) – Includes 2 Foot Safety Margin**

WARNING! WORKING IN THIS ZONE MAY RESULT IN SERIOUS INJURY OR DEATH.

**Warning Card Packed  
with SRL:**

**WARNING: This Class 2 self-retracting device, when attached to a foot-level anchorage, poses significant risk of injury. The user, the competent person and/or qualified person should all acknowledge that normal use of this device MAY NOT PREVENT A SERIOUS INJURY.**

**Failure to follow all manufacturer's instructions and warnings may result in serious injury or death.**

SRL Card 92923  
PN 230479

**Label located on  
Housing of Retractable:**

MEETS OSHA 1910.140 Subpart I & 1926.502 Subpart M  
WEIGHT CAPACITY RANGE:130-310lb  
THIS SRL MUST BE USED IN CONJUNCTION WITH BUCKINGHAM HARNESS 603S8Q224,  
AND BE CONNECTED TO THE HARNESS EXTENSION STRAP WITH ENERGY ABSORBER,  
TO BECOME AN ENGINEERED SHARP EDGE FALL ARREST SYSTEM THAT MEETS  
THE TESTING REQUIREMENTS OF ANSI Z359.14-21 AS A CLASS 2 SRL  
P/N: 5206Q1-30 MATERIAL: 3/16" STEEL CABLE  
LENGTH: 30' MFG. DATE: 12/23 SERIAL NO:  
MAX. FALL ARREST DISTANCE (Overhead Applications Only): 42"  
MAX. AVG. ARREST FORCE: 1,350 LBS  
MAX. ARREST FORCE: 1,800 LBS  
SEE INSTRUCTIONS FOR INSTALLATION SETBACK DISTANCE AND  
MINIMUM CLEARANCES REQUIRED  
Suitable for horizontal use when properly configured as Buckingham's Engineered Sharp Edge Fall Arrest System.  
Remove from service if subjected to fall arrest. Read & follow all instructions/warnings before use.  
Inspect & test lock & retraction function before each use according to the manufacturers instructions.  
Use only with Buckingham's 603S8Q224 Harness. Remove from service if impact load indicator  
is visible (see instructions). Connect SRL to appropriate anchorage and the snaphook end to the eye of the harness  
fall arrest extension strap. Exposure to sharp or serrated structural edges may damage this device, and should  
be avoided at all times. Anchorage point must be elevated to the highest extent possible given working conditions  
to limit the risk associated with a potential fall. Fall Arrest PPE shall always be used as a last resort based on the  
hierarchy of controls (ANSI/ASSP Z359.2). When using this device, the user shall make every effort to utilize an  
overhead anchorage, minimizing risks associated with a non-overhead anchorage.

5206Q1-30 Label 120823.fmt

## WARNINGS

- Manufacturer's instructions shall be supplied to users with this product. Retain these instructions for future reference.
- Read, understand and follow all instructions and warnings, attached to and/or packed with this unit as well as that of all associated equipment before each use.
- Improper use of this equipment could result in serious injury or death.
- Inspect and test before each use to ensure unit operates properly (all occupational protection equipment associated with this system must be inspected and thoroughly tested before each use). The entire system should be removed from service if any part/component shows damage, excessive wear, evidence of impact loading or does not function properly.
- Before each use, inspect that the impact load indicator located within the snaphook has not been activated. If visible, remove product from service.
- Remove this product from service if it has been subjected to the forces of arresting a fall or affecting a rescue.
- Units that have been subjected to the forces of arresting a fall or affecting a rescue shall be removed from service, tagged "UNUSABLE" and either disposed of or serviced in accordance with the manufacturer's recommendation.
- This product is intended for use by properly trained personnel only.
- Employer - instruct employee as to proper use and warnings before use of equipment.
- 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.
- Never use any occupational protective equipment for anything other than its intended use.
- DO NOT use this device near live electrical lines and/or other energized sources.
- Ensure that a written rescue plan, and the means to implement it are available when using this equipment.
- This device must be attached to a compatible fall-arrest anchorage capable of supporting 5,000 lbf (22.2kN) per attached worker and be independent of worker support. If unsure of anchorage requirements consult a Competent Person. Always use locking type connectors for attachment to anchorage.
- Before installation, always identify and eliminate (when possible) hazards from the work area, including those which may interfere with or damage your fall protection equipment. Examples of hazards include overhead hazards (cranes, power lines, etc.), surface hazards (cables, hoses, etc.), and obstruction hazards (vertical columns, other workers, etc.).
- A clear fall path is necessary in order for the SRL to positively lock. Do not use the SRL in applications that have an obstructed fall path.
- Never use these units for fall protection when working on surfaces that may collapse such as but not limited to grain, cement, and powders in tanks or silos. These units may not sense that you are sinking / falling and you may sink in and suffocate. A working surface that is stable must be provided for such applications.
- Never exceed the maximum free fall distance for your fall protection.



- DO NOT use this unit if the total working load exceeds 310 lbs. (140.6 kg).
- This device is NOT to be used for towing or lifting.
- **Use only Buckingham harness PN 603S8Q224 with a permanently attached BuckSorber II AND 18” extension strap when using this SRL as an Engineered Sharp Edge Fall Arrest System.**
- This unit is NOT intended to be used for suspension.
- Do not use this device if the cable does not retract or the brake does not function when tested.
- The cable must be kept clean and free of foreign matter.
- Do not use if the cable has cuts, kinks, abrasions, broken strands or excessive wear.
- Do not create knots in the cable.
- Never expose workers to fall hazards during training.
- Avoid prolonged use in caustic or corrosive environments.
- Do not allow the cable to remain outside the housing when not in use.
- Ensure appropriate rigging methods are used to provide a Fall Clearance in excess of the Minimum Required Fall Clearance (MRFC) to avoid contact with objects below.
- Always minimize swing falls by working directly under the anchorage or as close to the anchorage point as possible (In overhead anchorage applications). The worker must be vertically in line with this device to avoid swing-fall injuries (pendulum effect).
- When work being performed dictates that this device must be used horizontally as part of the Sharp Edge Engineered Fall Arrest System, avoid anchoring near an edge or working with a lateral offset from your anchorage as this will increase swing fall potential.
- Anchorage shall always be positioned such that the user will be incapable of contact with any obstructions that are below the user. This includes potential swing falls.
- Always keep the anchorage as high as possible to minimize potential fall distance.
- Always use locking snap hooks and locking carabiners.
- Always wear gloves and appropriate Personal Protective Equipment when inspecting installing, or using the device / system, and handling the cable.
- Attach the self-locking snaphook of this unit only to the rear fall-arrest extension strap with BuckSorber II on the PN 603S8Q224 OSHA compliant full body harness.
- Never rely on the feel or sound of a self-locking snaphook gate engaging. Always visually check that the snaphook freely engages the harness fall arrest attachment and that the gate is completely closed with each use.
- Never allow cable to retract uncontrollably. Always use a tag line to allow slow return of the cable to housing.
- This system has **not** been tested with all edge substrates and is not approved for use on all edges.
- Avoid allowing the cable, Extension Strap or BuckSorber II to pass over unprotected edges, corners or abrasive surfaces as those materials could be cut or damaged. Sharp and abrasive surfaces may include but not be limited to (steel, sheet metal, steel, metals cut with abrasive disks, or flame cut metals, concrete, block, stone, laminated materials etc.)
- Fall Arrest PPE shall always be the last method to avoid fall hazards based on the hierarchy of controls (ANSI/ASSP Z359.2). When using this device, the user shall make every effort to utilize an overhead anchorage, minimizing risks associated with a non-overhead anchorage.
- For sharp edge applications, use only Buckingham’s Engineered Sharp Edge Fall Arrest system specifically designed for Sharp Edge applications.
- Avoid contact of this equipment with high temperature surfaces, welding, or other heat sources, electrical hazards or moving machinery.
- This device is not to be used in horizontal applications unless properly configured as part of Buckingham’s Sharp Edge Fall Arrest System.
- This device is not suitable for use as or with a horizontal lifeline. Per ANSI/ASSP Z359.0, a Horizontal Lifeline is defined as “A component of a horizontal lifeline subsystem, consisting of a flexible line with connectors or coupling means at both ends for securing it horizontally between two anchorages or anchorage connectors.”
- SRL equipped with a swivel must be mounted to the attachment points in a way to avoid any exposure of the swivel mount to transverse or bending loads. This is EXTREMELY important in the case of a fall.
- Be aware of workers sharing the workspace. Never cross the cable of another worker or allow it to become entangled with one another’s cable during use which may prevent the cable from retracting or being taut. Steer clear of objects that could fall and impact the cable.

- Never allow the cable of this unit to pass under or get wrapped around the legs, arms, neck or torso of the user or other workers.
- Never clamp off or stand on the cable nor allow the cable to become slack when in use.
- For use with one person only. Never use this device to support multiple workers.
- The braking action of this fall-arrest device requires a minimum speed to engage. The user may not reach sufficient speeds for the SRL to positively lock in certain applications such as confined spaces, or if work is taking place on slowly shifting material. The fall-arrest function will not operate if footing is on loose or sliding material such as sand or grain.
- Avoid sudden movements, which may unintentionally activate the braking mechanism.
- Never work with the SRL anchorage below your feet, increased fall distance will result.
- Lubricate only the gates of the carabiner and self-locking snaphook, do not lubricate, adjust, repair or modify any part of this device. All repairs must be made only by the manufacturer or persons, or entities authorized in writing by the manufacturer.
- All components of this Engineered System must be inspected by a competent person.
- Do not use this device if any instruction or warning is not fully understood. Telephone Buckingham Sales Department at (800) 937-2825 for clarification.
- Product covered under these instructions / warnings should not be resold / redistributed or re-used after use by original user.

## **STORAGE AND MAINTENANCE PROCEDURES**

1. A written log of all servicing and inspection dates for this device should be maintained by the company safety officer or other competent individual.
2. SRLs which are in need of scheduled maintenance shall be tagged “UNUSABLE” and removed from service. Maintenance refers to any act of cleaning, repair, resetting etc. of equipment.
3. SRLs which are damaged or in need of maintenance should not be stored in the same location as usable equipment.
4. DO NOT leave this unit for extended periods of time in an environment, such as a sewage or fertilizer plant, where corrosion may take place. Avoid use with acids, alkaloids or other caustic chemicals, especially at elevated temperatures. Additionally, avoid use in areas that contain high concentrations of ammonia. When used near sea water or other similar environments, more frequent inspections may be necessary to monitor potential corrosive damage.
5. When not in use, store the SRL in a clean, dry and cool environment out of direct sunlight. Position the unit so that any excess water if any, is allowed to drain out. After a prolonged period of storage, thoroughly inspect the unit before use.
6. Clean the exterior of the case as well as the retractable cable with water and mild soap/detergent, rinse with water and let thoroughly air dry. DO NOT use harsh chemicals. Clean labels as required.
7. Lubricate the carabiner and self-locking snaphook gates at least weekly or as often as required to maintain smooth operation (no binding) with light weight lubricant such as WD-40®. Never attempt to lubricate, adjust, repair or modify any other part of this device. Self-Retracting Lanyards (SRL) must be returned to Buckingham for inspection and recertification at least annually, or more frequently, depending on the device’s use, operating conditions, or whenever subjected to a severe free fall.

**NOTE:** Ensure proper size of product before use. This product can not 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](http://www.buckinghammfg.com/register).

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

Information contained in these written instructions supersedes all other information (written, audio, video etc.) produced by Buckingham Mfg. prior to the revision date of this document.