



USER INSTRUCTIONS

PERSONAL ENERGY ABSORBERS AND ENERGY ABSORBING LANYARDS

Complies with the ANSI Z359.13 standard and OSHA 29 CFR 1910 and 1926 regulations.

DeCoil™

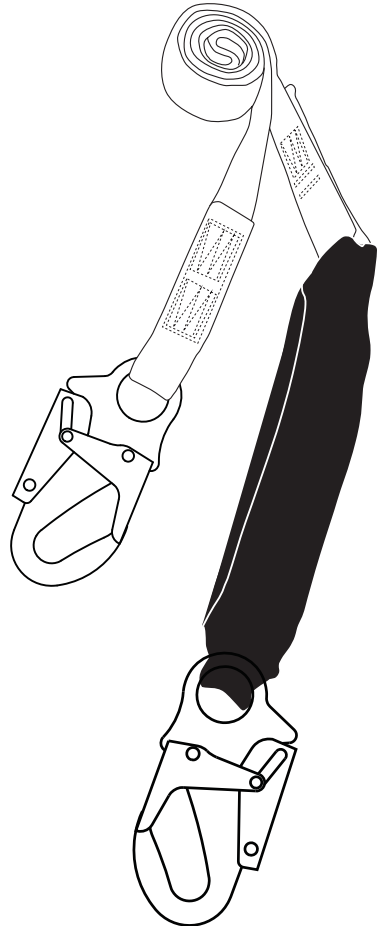
ENERGY ABSORBING LANYARD

DeCoil™ Stretch

ENERGY ABSORBING ELASTIC LANYARD



DCELL™ Compact Shock Pack Lite



(This manual applies to all lanyards with model numbers starting C3, C4, C5, C6, C8 and C9)

WARNING!

Compliant fall protection equipment must only be used as it was designed. Users MUST read and follow all user instructions provided with the product. Before using a fall arrest system, users must be trained in the safe use of the system, as required by OSHA 29 CFR 1910.30 and 1926.503, or local safety regulations. Misuse or failure to heed these warnings and instructions may result in injury or even death.

WORK SAFE! WORK SMART!

IF YOU HAVE ANY QUESTIONS ABOUT THE PROPER USE OF THE EQUIPMENT, SEE YOUR SUPERVISOR, USER INSTRUCTIONS, OR CONTACT WERNER CO. FOR MORE INFORMATION.

GENERAL SAFETY INFORMATION

These User Instructions are not to be removed except by the user of this equipment. Current User Instructions must always be available to the user.

WARNING!

1. *Failure to follow all instructions and limitations on the use of the Werner Co. Roofing Safety System may result in serious personal injury or death.*
2. *Minors, pregnant women and anyone with a history of either back or neck problems should not use this equipment.*
3. *Do not use or install equipment without proper training from a “competent person” as defined by OSHA 29 CFR 1926.32(f).*
4. *Personal Energy Absorbers and Energy Absorbing Lanyards are designed for a single user.*
5. *Not all fall protection components are rated for the same user weight capacity. Only use components rated for the same weight capacity.*
6. *Energy Absorbing Lanyards must not be wrapped around structural members and connected back onto themselves unless the lanyard has been specifically designed to do so.*
7. *Caution must be taken when using Personal Energy Absorbers and Energy Absorbing Lanyards near moving machinery, electrical hazards, sharp edges, or abrasive surfaces. Contact with these elements may cause equipment failure, personal injury, or death.*
8. *Do not expose Personal Energy Absorbers and Energy Absorbing Lanyards to chemicals or harsh solutions which may have a harmful effect.*
9. *Personal fall arrest systems, including Personal Energy Absorbers and Energy Absorbing Lanyards, must be inspected prior to each use for wear, damage and other deterioration. Defective components must be immediately removed from service in accordance with the requirements of OSHA 29 CFR 1910.140 and 1926.502.*
10. *Personal Energy Absorbers and Energy Absorbing Lanyards are designed to be used in temperatures ranging from -40°F to +130°F (-40°C to +54°C).*
11. *Striking objects horizontally due to the pendulum effect of a swing fall may cause serious injury or death.*
12. *Only lanyards designed for tie-back are approved for tie-back directly onto the webbing.*
13. *Never attach the unused leg of the lanyard back to the harness at any location other than the lanyard parking attachment.*
14. *Do not use if inspection reveals any defect, wear, damage, deterioration, inadequate maintenance, or unsafe condition. Do not use any equipment that has been subjected to the forces of arresting a fall or if any part of the load indicator warning is showing.*
15. *Only Werner Co., or persons or entities authorized in writing by Werner Co., may make repairs or alterations to the equipment.*
16. *Alterations or misuse may result in serious personal injury or death.*

CAUTION!

If an energy absorbing lanyard is used in conjunction with a cross-arm strap anchorage connector, other anchorage extension, horizontal lifeline, or extended D-ring, the additional length of the anchorage connector, extended D-ring, or sag from the lifeline must be taken into consideration during the clearance calculation process.

USE INSTRUCTIONS AND LIMITATIONS

IMPORTANT

Before use, the user must read and understand these User Instructions. Keep these User Instructions for reference.

PURPOSE

Personal Energy Absorbers and Energy Absorbing Lanyards are designed to be used as part of a complete personal fall arrest system, to help limit the fall arrest forces in the event of a fall.

Use INSTRUCTIONS

1. Failure to follow all instructions and limitations on the use of Personal Energy Absorbers and Energy Absorbing Lanyards may result in serious personal injury or death.
2. Before using a personal fall arrest system, employees must be trained in accordance with the requirements of OSHA 29 CFR 1910.30 and 1926.503 in the safe use of the system and its components.
3. Personal fall arrest systems, including the Full Body Harness, must be inspected prior to each use for wear, damage, and other deterioration. Defective components must be immediately removed from service in accordance with the requirements of OSHA 29 CFR 1910.140 and 1926.502.

1. The complete fall arrest system must be planned (including all components, calculating fall clearance, and swing fall) before using.
2. Users must have a rescue plan, and the means at hand to implement it, that provides for the prompt rescue of the user in the event of a fall, or assures that the user is able to rescue themselves.
3. Store the Roofing Safety System in a cool, dry, clean environment, out of direct sunlight, when not in use.
4. After a fall occurs on the system, immediately remove from service until a “competent person” can make the determination for reuse or disposal.

USE LIMITATIONS

1. CAPACITY AND FREE FALL: Personal Energy Absorbers and Energy Absorbing Lanyards are designed for users with a capacity (including clothing, tools, etc.) up to 310 lb (141 kg) total working weight, for 6 foot free fall applications.
2. CAPACITY AND FREE FALL: Personal Energy Absorbers and Energy Absorbing Lanyards designed for users with a capacity (including clothing, tools, etc.) up to 400 lb (181 kg) total working weight, for 6 foot free fall applications. It can also be used for users with a capacity (including clothing, tools, etc.) of 310 lb (141 kg) total working weight, for up to 12 foot free fall applications.

WARNING!

Not all fall protection components are rated for the same user weight capacity. Only use components rated for the same weight capacity.

3. FALL CLEARANCE: Ensure that enough clearance exists in your fall path to prevent striking an object. The amount of clearance required is dependent upon the type of connecting subsystem used (energy absorbing lanyard, self retracting lifeline), the anchorage location, and the amount of stretch in the harness.
4. MATERIALS: All Personal Energy Absorbers are made from polyester or nylon energy absorbing material.
5. CORROSION: Do not leave Personal Energy Absorbers and Energy Absorbing Lanyards in environments where corrosion of metal parts could take place as a result of vapors from organic materials. Use near seawater or other corrosive environments may require more frequent inspections to ensure corrosion damage is not affecting the performance of the product.
6. CHEMICAL HAZARDS: Solutions containing acids, alkali, or other caustic chemicals, especially at elevated temperatures, may cause damage to Personal Energy Absorbers and Energy Absorbing Lanyards. When working with such chemicals, frequent inspection of this equipment must be performed. Contact Werner Co. with any questions concerning the use of Personal Energy Absorbers and Energy Absorbing Lanyards around chemical hazards.
7. EXTREME TEMPERATURE: Personal Energy Absorbers and Energy Absorbing Lanyards are designed to be used in temperatures ranging from -40°F to +130°F (-40°C to +54°C). Protection should be provided for Personal Energy Absorbers and Energy Absorbing Lanyards when used near welding, metal cutting or similar activities. Contact Werner Co. with any questions concerning high temperature environments.
8. ELECTRICAL HAZARDS: Use extreme caution when working near high voltage power lines due to the possibility of electric current flowing through the Personal Energy Absorbers and Energy Absorbing Lanyards or connecting components.
9. HEALTH: Minors, pregnant women and anyone with a history of either back or neck problems should not use this equipment.
10. TRAINING: Do not use Personal Energy Absorbers and Energy Absorbing Lanyards without proper training from a “competent person” as defined by OSHA 29 CFR 1910.140(b) and 1926.32(f).
11. REPAIRS: Only Werner Co., or persons or entities authorized in writing by Werner Co., may make repairs or alterations to the equipment.

ANCHORAGE REQUIREMENTS

ANCHORAGES

All anchorages to which Personal Energy Absorbers and Energy Absorbing Lanyards attach must meet the requirements of OSHA 29 CFR 1910 and 1926. OSHA states:

Anchorage must be capable of supporting at least 5,000 pounds (22.2 kN) for each employee attached; or designed, installed, and used, under the supervision of a qualified person, as part of a complete personal fall protection system that maintains a safety factor of at least two.

ANSI Z359.2-2017 states that anchorages selected for fall arrest systems must have a strength capable of sustaining static loads applied in all permitted directions by the system:

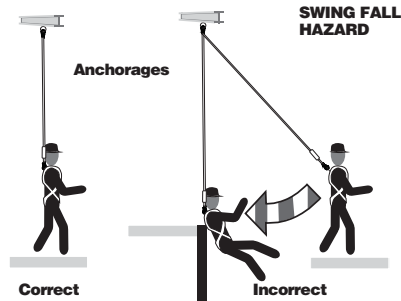
- (a) no less than 5,000 pounds (22.2 kN) for non certified anchorages; or
- (b) at least two times the maximum arresting force for certified anchorages;

When more than one fall arrest system is attached to an anchorage, the strengths set forth in (a) and (b) above shall be multiplied by the number of systems attached to the anchorage.

Anchorage should be located as vertically as possible above the user's head and be positioned as not to exceed the maximum allowable free fall of 6 feet (1.8 m) for the system.

SWING FALLS

To minimize the possibility of a swing fall, anchor as directly above the work area as possible. Striking objects horizontally, due to the pendulum effect, may cause serious injury. Swing falls also increase the vertical fall distance of a worker, compared to a fall directly below the anchorage connector. Swing falls may be reduced by using overhead anchorage connectors that move with the worker.



WARNING!

Striking objects horizontally due to the pendulum effect of a swing fall may cause serious injury or death.

CONNECTION REQUIREMENTS

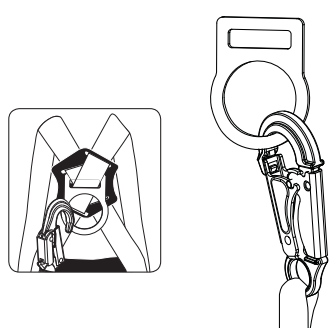
COMPATIBILITY LIMITATIONS

All connecting subsystems must only be coupled to compatible connectors. OSHA 29 CFR 1910.140 and 1926.502 prohibit snap hooks from being engaged to certain objects unless two requirements are met: snap hook must be a locking type and must be "designed for" making such a connection. Under OSHA "designed for" means that the manufacturer of the snap hook specifically designed the snap hook to be used to connect to the equipment in question. The following connections must be avoided because they can result in rollout* when a non-locking snap hook is used:

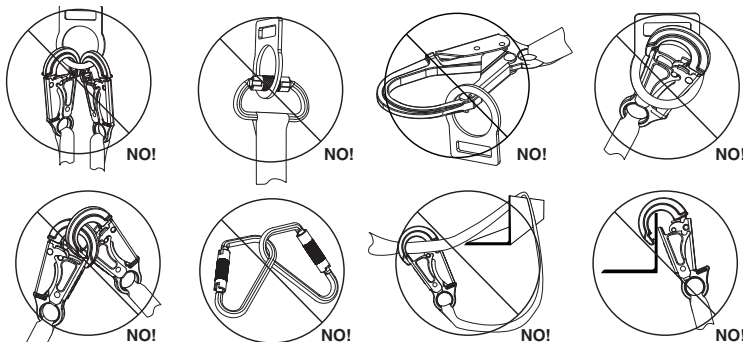
- Direct connection of a snap hook to horizontal lifeline.
- Two (or more) snap hooks connected to one D-ring.
- Two snap hooks connected to each other.
- A snap hook connected back on its integral lanyard.
- A snap hook connected to a webbing loop or webbing lanyard.
- Improper dimensions of the D-ring, rebar, or other connection point in relation to the snap hook dimensions that would allow the snap hook keeper to be depressed by a turning motion of the snap hook.

***Rollout:** A process by which a snap hook or carabiner unintentionally disengages from another connector or object to which it is coupled. (ANSI Z359.0)

COMPATIBLE CONNECTIONS

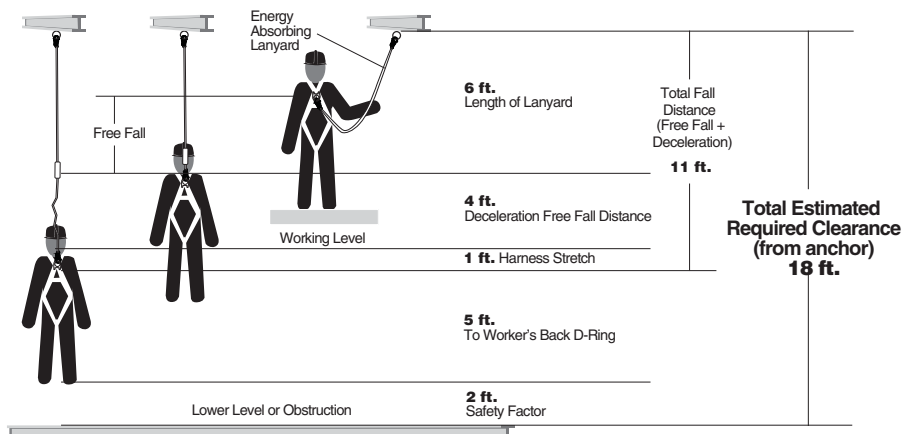


INCOMPATIBLE CONNECTIONS

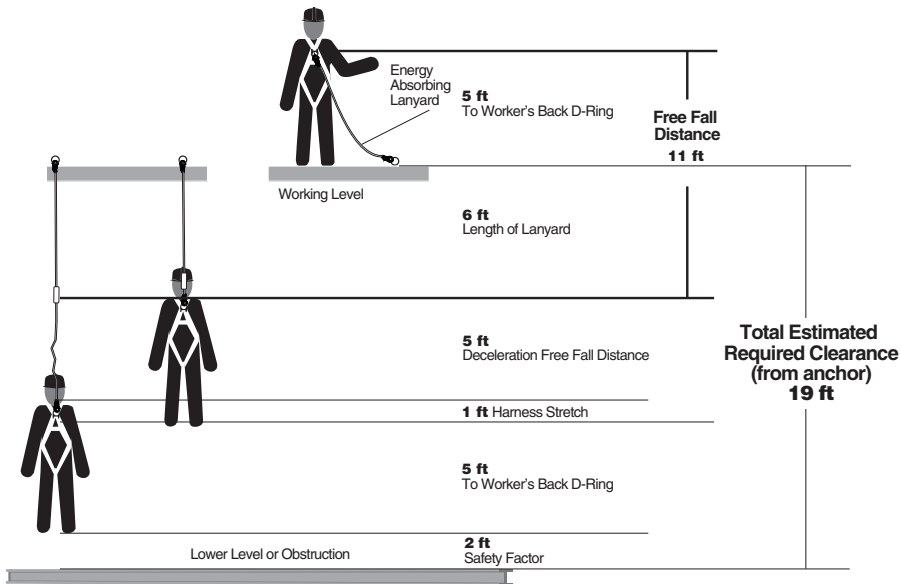


FREE FALL AND CLEARANCE REQUIREMENTS

REQUIRED CLEARANCE USING AN ENERGY ABSORBING LANYARD IN A 6 FOOT FREE FALL APPLICATION



REQUIRED CLEARANCE USING AN ENERGY ABSORBING LANYARD IN A 12 FOOT FREE FALL APPLICATION



CAUTION!

If an energy absorbing lanyard is used in conjunction with a cross-arm anchorage connector, other anchorage extension, horizontal lifeline, or extended D-ring, the additional length of the anchorage connector, extended D-ring, or sag from the lifeline must be taken into consideration during the clearance calculation process.

OPERATION

BEFORE EACH USE

WARNING!

Before using a personal fall arrest system, employees must be trained in accordance with the requirements of OSHA 29 CFR 1910.30 and 1926.503 and/or applicable local, state, governmental and jurisdictional agencies, in the safe use of the system and its components.

Personal fall arrest systems, including Personal Energy Absorbers and Energy Absorbing Lanyards, must be inspected prior to each use for wear, damage, and other deterioration. Defective components must be immediately removed from service in accordance with the requirements of OSHA 29 CFR 1910.140 and 1926.502 and/or applicable local governmental and jurisdictional standards.

Users must have a rescue plan, and the means to implement it, that provides for the prompt rescue of employees in the event of a fall or assures that employees are able to rescue themselves.

The user must read and understand these User Instructions, as well as the User Instructions for every component and subsystem of the personal fall arrest system.

Personal Energy Absorbers and Energy Absorbing Lanyards must be inspected prior to each use. See INSPECTION.

CONNECTING ENERGY ABSORBING LANYARDS

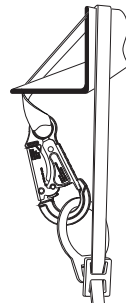
Energy Absorbing Lanyards with a shock pack must be connected with the shock pack end of the lanyard connected to the dorsal D-ring of the full body harness. The opposing end of the lanyard is to be connected to the anchorage connector.

CONNECTING PERSONAL ENERGY ABSORBERS

Personal Energy Absorbers should be connected to the dorsal D-ring of the full body harness first, then connected to the rest of the fall arrest system.

CONNECTING TIE-BACK ENERGY ABSORBING LANYARDS WITH A FLOATING D-RING

Place the Tie-Back Energy Absorbing Lanyard over the qualified anchor and attach the non-energy absorbing end of the lanyard to the floating D-ring. Ensure that the webbing is not twisted around the anchor and adjust so floating D-ring hangs below the anchor. **Snap hook must not contact anchor.** The energy absorbing end of the lanyard must be connected to the dorsal D-ring of the full body harness.



CONNECTING TIE-BACK ENERGY ABSORBING LANYARDS WITHOUT A FLOATING D-RING

Place the Tie-Back Energy Absorbing Lanyard over the qualified anchor and connect the tie-back snap hook directly to the webbing of the lanyard. **Never attach the traditional snap hook to the webbing of the lanyard.** Pull lanyard hand tight around anchor. Connect the energy absorbing end of the lanyard to the dorsal D-ring of the full body harness.

WARNING!

Only lanyards designed for tie-back are approved for tie-back directly onto the webbing.

CONNECTING TWIN LEG LANYARDS

Twin Leg Lanyards are designed for single person use only and must be connected with the energy absorbing end of the lanyard connected to the dorsal D-ring of the full body harness. Do not connect the energy absorbing end of the lanyard to any anchorage connector. Attach one leg of the Twin Leg Lanyard to the anchorage connector and the unused lanyard leg to the lanyard parking attachment on the harness.



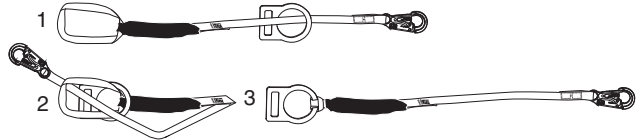
WARNING!

Never attach the unused leg of the lanyard back to the full body harness at any location other than an approved lanyard parking attachment.

When using Twin Leg Lanyards to move between fall protection systems, attach the unused leg of the lanyard to the new location before disconnecting the first lanyard leg. Connection of both lanyard legs to separate anchorage connectors while transitioning between systems is acceptable.

CONNECTING SOFT LOOP ENERGY ABSORBING LANYARDS

Place the soft loop of the Energy Absorbing Lanyard through the dorsal D-ring of the full body harness, then pass the hook of the Energy Absorbing Lanyard through the soft loop and pull entire Energy Absorbing Lanyard through until tight on the D-ring.



CONNECTING PERSONAL ENERGY ABSORBERS

Personal Energy Absorbers should be connected to the dorsal D-ring of the full body harness first, then connected to the rest of the fall arrest system.

INSPECTION

WARNING!

If inspection reveals any defect, inadequate maintenance, or unsafe condition, remove from service until a “competent” person, as defined by OSHA 29 CFR 1910.140(b) and 1926.32(f), can determine the need for authorized repair or disposal.

WARNING!

Any equipment that has been subjected to the forces of arresting a fall, or that has a deployed load indicator, must be removed from service until a “competent person” can determine the need for authorized repair or disposal.

FREQUENCY

WARNING!

Do not use if inspection reveals any defect, wear, damage, deterioration, inadequate maintenance, or unsafe condition. Do not use any equipment that has been subjected to the forces of arresting a fall, or if any part of the load indicator warning is showing.

All components of Personal Energy Absorbers and Energy Absorbing Lanyards must be inspected prior to each use, and annually by an OSHA defined “competent person” other than the user. Local, state, governmental and jurisdictional agencies governing occupational safety may require the user to conduct more frequent or mandatory inspections.

CRITERIA

- All components of the Personal Energy Absorber and Energy Absorbing Lanyard must be inspected.
- On SoftCoil™ Energy Absorbing Lanyards, inspect the load indicating stitch near the INSPECT!™ tag for any signs of deployment. In addition, verify the length of the lanyard for any signs of deployment.
- All markings must be legible and attached to the product.
- All equipment must be free of corrosion, chemical attack, alteration, excessive heating or wear.

- All snap hooks and carabiners on product must be able to self-close and lock. All hardware must be free of cracks, sharp edges, deformation, corrosion, or any evidence of defect.
- To inspect webbing, bend a 6 - 8 inch portion of the webbing into an upside down 'U' shape. Continue along all webbing and rope inspecting for tears, cuts, fraying, abrasion, discoloration, burns, holes, mold, pulled or broken stitches, or other signs of wear and damage. WebAlert™ Inspectable Webbing helps make wear and damage more visible. Sewn terminations should be secure, complete, and not visibly damaged.
- Cable must be inspected for kinks, broken strands, corrosion, abrasion, or other signs of wear and damage. Swaged terminations should be secure with the thimble tight, and not visibly damaged.



CLEANING, MAINTENANCE AND STORAGE

CLEANING

Cleaning maintenance may be performed by the user. Personal Energy Absorbers and Energy Absorbing Lanyards may be wiped down with a mild detergent and clean water solution, and rinsed with a dampened clean cloth to remove detergent. The hardware can also be wiped down to remove grease or dirt with a clean dry cloth.

MAINTENANCE

WARNING!

Only Werner Co., or persons or entities authorized in writing by Werner Co., shall make repairs or alterations to the equipment.

Do not use any Personal Energy Absorbers and Energy Absorbing Lanyards that requires maintenance. Cleaning and maintenance may be performed by the user.

Snap hooks may require periodic lubrication. Do not apply oil, grease, or other contaminants on the webbing. Use a dry lubricant that has proper resistance to temperature extremes, moisture, and corrosion. Do not over-lubricate.

STORAGE

WARNING!

Store Personal Energy Absorbers and Energy Absorbing Lanyards in a cool, dry, clean environment, out of direct sunlight to help avoid UV degradation, when not in use.

Personal Energy Absorbers and Energy Absorbing Lanyards should be stored in a cool, dry place out of direct sunlight when not in use. Do not store where damage from environmental factors such as heat, light, excessive moisture, oil, chemicals and their vapors, or other degrading elements may be present.

Do not store damaged equipment or equipment in need of maintenance in the same area as product approved for use. Equipment that has been stored for an extended period must be inspected as defined in these User Instructions prior to use.

PERFORMANCE

All Personal Energy Absorbers and Energy Absorbing Lanyards have a maximum arrest force of 1,800 lbs (8kN). Reference chart indicates the deployment distance of 6 foot free fall Personal Energy Absorbers and Energy Absorbing Lanyards according to the user weight and free fall distance. For additional design information please contact Werner Co.

| FREE FALL DISTANCE USER WEIGHT | 1 Foot (0.3m) | 2 Foot (0.6m) | 3 Foot (0.9m) | 4 Foot (1.2m) | 5 Foot (1.5m) | 6 Foot (1.8m) |
|-----------------------------------|------------------|-------------------|-------------------|-------------------|--------------------|--------------------|
| 130 lbs (59 kg) | 3 inches (76mm) | 5 inches (127mm) | 8 inches (203mm) | 10 inches (254mm) | 13 inches (330mm) | 15 inches (381mm) |
| 150 lbs (68 kg) | 3 inches (76mm) | 6 inches (152mm) | 9 inches (229mm) | 12 inches (305mm) | 15 inches (381mm) | 18 inches (457mm) |
| 170 lbs (77 kg) | 4 inches (102mm) | 7 inches (178mm) | 11 inches (279mm) | 14 inches (356mm) | 18 inches (457mm) | 21 inches (533mm) |
| 190 lbs (86 kg) | 4 inches (102mm) | 8 inches (203mm) | 12 inches (305mm) | 16 inches (406mm) | 20 inches (508mm) | 24 inches (610mm) |
| 210 lbs (95 kg) | 5 inches (127mm) | 10 inches (254mm) | 14 inches (356mm) | 19 inches (483mm) | 23 inches (584mm) | 28 inches (711mm) |
| 230 lbs (104 kg) | 6 inches (152mm) | 11 inches (279mm) | 16 inches (406mm) | 21 inches (533mm) | 26 inches (660mm) | 31 inches (787mm) |
| 250 lbs (113 kg) | 6 inches (152mm) | 12 inches (305mm) | 18 inches (457mm) | 24 inches (610mm) | 29 inches (737mm) | 35 inches (889mm) |
| 270 lbs (122 kg) | 7 inches (178mm) | 13 inches (330mm) | 20 inches (508mm) | 26 inches (660mm) | 33 inches (838mm) | 39 inches (991mm) |
| 290 lbs (132 kg) | 8 inches (203mm) | 15 inches (381mm) | 22 inches (559mm) | 30 inches (762mm) | 37 inches (940mm) | 44 inches (1118mm) |
| 310 lbs (141 kg) | 9 inches (228mm) | 17 inches (432mm) | 25 inches (635mm) | 33 inches (838mm) | 41 inches (1041mm) | 48 inches (1219mm) |

All measurements are approximate. Reference chart provided is in accordance with ANSI Z359.6. When tested in accordance with the requirements of the OSHA 29 CFR 1910 Appendix C Subpart M, 6FF Personal Energy Absorbers and Energy Absorbing Lanyards have a clearance of 42 inches or less.

