



# USER INSTRUCTION MANUAL ENERGY ABSORBING LANYARDS

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODEL:

AFL403111, AFL403611, AFL401111, AFL401140, AFL401612, AFL408131, AFL408141, AFL408612, AFL402901, AFL402911, AFL402951, AFL408211, AFL408251, AFL408341, AFL408701, AFL408805, AFL408741 and AFL408845





Please read and understand the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use, care, and maintenance of this product. These instructions must be retained and be kept available for the user's reference at all times. Alterations or misuse of this product, or failure to follow instructions, may result in serious injury or death.

Note: The user is advised to keep this user instructions document for the life of the product.

 INTRODUCTION: The Energy Absorbing Lanyards are classed as Personal Protective Equipment (PPE) by the European PPE Regulation (EU) 2016/425 and have been shown to comply with this Regulation through the Harmonized European Standard EN 355:2002.

These E.A. Lanyards are designed to minimize the risk of/provide protection against the danger of falling from heights. However, always remember that no item of PPE can provide full protection and care must always be taken while carrying out the risk related activity.

#### 2. DESCRIPTION:

PRODUCT CODE	CATEGORY	PRODUCT DESCRIPTION	MAX LOAD RATED
AFL403111	Essential	Energy Absorbing Single Leg Twisted Rope Lanyard	100kg
AFL403611	Essential	Energy Absorbing Twin Twisted Rope Lanyard	100kg
AFL401111	Essential	Energy Absorbing Single Leg Webbing Lanyard	100kg
AFL401140	Essential	Energy Absorbing Single Leg Webbing Lanyard	100kg
AFL401612	Essential	Energy Absorbing Double Leg Webbing Lanyard	100kg
AFL408131	Elite	Energy Absorbing Single Leg Webbing Lanyard	100kg
AFL408141	Elite	Energy Absorbing Single Leg Webbing Lanyard	100kg
AFL408612	Elite	Energy Absorbing Double Leg Webbing Lanyard	100kg
AFL402901	Epic	Energy Absorbing Single Leg Kernmantle Rope Lanyard	100kg
AFL402911	Epic	Energy Absorbing Single Leg Kernmantle Rope Lanyard	100kg
AFL402951	Epic	Energy Absorbing Double Leg Kernmantle Rope Lanyard	100kg
AFL408211	Epic	Energy Absorbing Single Leg Elasticated Lanyard	140kg
AFL408251	Epic	Energy Absorbing Single Leg Elasticated Lanyard	140kg
AFL408341	Epic	Energy Absorbing Double Leg Elasticated Lanyard	140kg
AFL408701	Element	Energy Absorbing Single Leg Fire Resistant Lanyard	140kg
AFL408805	Element	Energy Absorbing Double Leg Fire Resistant Lanyard	140kg
AFL408741	Element	Energy Absorbing Single Leg Oil Repellent Lanyard	140kg
AFL408845	Element	Energy Absorbing Double Leg Oil Repellent Lanyard	140kg



3. PERFORMANCE AND LIMITATIONS OF USE: The lanyards have been tested in accordance with EN 355:2002, Flame Resistant Lanyards have been additionally tested against EN ISO 15025:2002, ISO 9150:1988 and have achieved following performance levels:

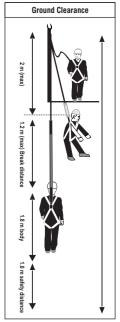
EN 355:2002 test	Result/Comment			
Clause 4.1 Design and Ergonomics	Achieves required performance requirement			
Clause 4.2 Materials & Construction	Achieves required performance requirement			
Clause 4.3 Static preloading	Achieves required performance requirement			
Clause 4.4 Dynamic performance	Achieves required performance requirement			
Clause 4.5 Static strength	Achieves required performance requirement			

EN ISO 15025:2002 FN ISO 9150:1988 The webbing of this product has passed strength test as per EN 361:2002 after being exposed to small molten metal splash test according to ISO 9150:1988 & the webbing has also been tested in accordance with EN ISO 15025:2002.

4. POSSIBLE USAGE: These energy absorbing lanyards when used as a component of a fall arrest system guarantees the full ability for the safe arresting of a fall from a height by reducing the Breaking Force measured at the anchorage point or the anchorage line to less than 6.0 kN. It can be used in conjunction with a full body harness.

## Important Notice:

- Total length of a sub system with a lanyard including an energy absorber, terminations and connectors shall not exceed 2m.
- The strength of the anchor device should be greater than 18KN (for Textile) & 12KN (for Metal) and the anchor point should be situated above the user's head.
- Connect the lanyard to the anchorage point using the connector provided at one end. (If connector not provided, use karabiners complying to EN 362:2004). The other end on the side of the energy absorber should be connected to the attachment element of the full body harness.
- To optimize protection, in some instances it may be necessary to use the lanyard with suitable other components. In this case before carrying out the risk related activity, consult your supplier to ensure that all components are compatible and suitable for your application.
- The arrest distance should be double the total length of the lanyard plus 1.75m break distance to allow tearing of the webbing inside.
- User must ensure that from anchorage point to next obstacle in the path must be at least more than 6 m distance to avoid collision during fall arrest.





5. PRE-CHECK USE: Since all lanyards are made of polymers, the performance of which gets affected by temperatures, effect of sharp edges, electrical conductivity, chemical reagents, cutting, abrasion, UV degradation etc, it is advised to consult your supplier for use in above extreme conditions.

Ensure before & during use that a rescue plan is in place to rescue the user after a fall has occurred.

The lanyards should only be used by a trained and/or otherwise competent person or the user should be under the direct supervision of such a person.

#### 6. MATERIAL USED:

- Energy Absorbing Twisted Rope Lanyards-Polyamide
- Energy Absorbing Webbing Lanyards-Polyester
- Flame Resistant Energy Absorbing Webbing Lanyards-Aramid
- Energy Absorbing Kernmantle Rope Lanyards-Polyamide

#### 7. ANCHORAGE STRENGTH:

The strength of the anchor device should be greater than 18kN (for Textile) & 12kN (for Metal).

#### 8. INSTRUCTIONS FOR MAINTENANCE:

## Cleaning Procedure:

In case of minor soiling, wipe the lanyard with cotton cloth or a soft brush. Do not use any abrasive material. For intensive cleaning wash the lanyard in water at a temperature not more than 40°C using a neutral detergent (pH7). Do not use acid or basic detergents.

## Drying Procedure:

If the lanyard becomes wet, either from by in use or when due to cleaning, it should be allowed to dry naturally and shall be kept away from direct heat.

## Storage & Transport Procedure:

When not in use, store the lanyard in a well-ventilated area away from extremes of temperature. Never place heavy items on top of it. If possible, avoid excessive folding and preferably store it hanging vertically. If the product is wet, allow it to dry fully before placing it into storage. It is preferred that the product be transported in its original packing. However if not available, it may be stored in an air tight bag & transported.

#### 9. PERIODIC EXAMINATION:

- The lanyards need to periodically examined because the safety of the user depends upon the continued efficiency & durability of the lanyard.
- It is important to examine it at least once in every 12 months.
- Periodic examination is to be conducted by a competent person and strictly in accordance with the manufacturer's periodic examination procedures.
- Periodic examination also requires checking the legibility of the product markings.

## 10. INSTRUCTIONS FOR REPAIR:

 If the product becomes damaged, it will NOT provide the optimum level of protection, and therefore it should be immediately removed from service. Never use the damaged product. Repairing is permitted, provided that it is either done by the manufacturer or a competent repair centre or individual approved by the manufacturer.



## 11. HOW TO DISPOSE OF A LANYARD:

When the lanyard becomes unfits or in case of any wear and tear, dispose the lanyard immediately.

#### Follow the steps for Disposal:

- Make the three plastic crates namely-Textile, Metal & Plastic for placing the respective components of the lanyard.
- Spread the lanyard on a table / flat surface.
- Inspect the wear & tear present on the lanyard.
- If any wear and tear is observed, dispose the lanyard using a sharp scissor; first cut the Textile and dismantle the lanyard.
- Put the Textile, Plastic & Metal components in their respective plastic crates.

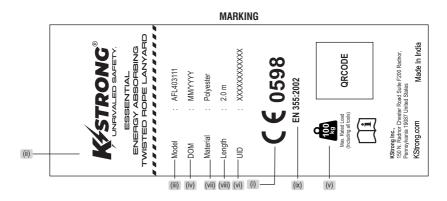
## 12. WARNING:

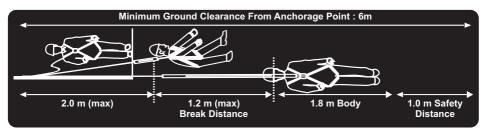
- It is essential to verify that the medical condition of the user is 
   It to use the lanyards in normal & emergency use.
- Do not make any alterations or additions to the equipment without the manufacturer's prior written consent and that
  any repair shall only be carried out in accordance with the manufacturer's procedures.
- While using the lanyard, ensure that the fall is not more than 2m i.e. the distance between the anchor point & the final
  position of the user after the fall has occurred.
- Lanyard should be the personal property of its user.
- It is important to check before use any dangers that may arise by the use of combinations of items of the equipment in
  which the safe function of any one item is affected by or interferes with the safe function of another.
- Carry out a pre-use check of the lanyard, to ensure that it is in a serviceable condition & operates correctly before it is
  used.
- Inspect all the rope or webbing of lanyard for cuts/abrasion marks. Also check all connectors of the lanyard for proper mechanical functioning & effects of corrosion or mechanical deformation if any on parts of the connectors in the lanyard.
- Withdraw from use any lanyard for which any doubt arises about its condition for safe use or in the event, a fall has been arrested by it.
- If the lanyard is used in a fall arrest system, it is advisable to connect only to the dorsal attachment D-Ring of the harness.
- If lanyard is used in fall arrest system, it is essential for safety that the anchor device or anchor point is always
  positioned, and the work carried out in such a way, as to minimize both the potential for falls and potential fall
  distance. Ensure that the anchor point is above the user's head.
- Only a full body harness complying to EN 361:2002 shall be used as a body holding device within the fall arrest system.
- If used within fall arrest systems, it is essential to verify the free space required beneath the user at the work place before each occasion of use, so that, in the case of a fall, there will be no collision with the ground or other obstacles in the fall path.
- A rescue plan shall be in place to deal with any emergencies that could arise during the work.
- It is essential for the safety of the user that if a product is re-sold outside the original country of destination the reseller shall provide instructions for use for maintenance, for periodic examination and for repair in the language of the country in which the product is sold.
- The equipment shall not be used outside its limitation, or for any purpose other than that for which it is intended.
- The device should be used with appropriate combinations only. The user should not make any combination which
  compromises safe function of any other devices used in combination or entire fall protection system or rescue
  system. Connectors to be used as per EN 362, fall arrest blocks as per EN 360, full body harness as per EN 361 etc.



## 13. MARKING ON PRODUCT: The Energy Absorbing Lanyard is marked with:

- The CE mark showing that the product meets the requirement of the European PPE Regulation (EU) 2016/425 and the number of the ongoing assessment body
- (ii) Identification of the manufacturer and address
- (iii) Type or product code
- (iv) Month & Year of Manufacture
- (v) Pictogram that indicates to read the instructions
- (vi) UID for Traceability
- (vii) Material
- (viii) Length
- (ix) Number of the standard







**LIFESPAN:** The estimated product Lifespan is 10 years from the date of manufacture. The following factors can reduce the Lifespan of the product: intense use, contact with chemical substances, specially aggressive environments, extreme temperature exposure, UV exposure, abrasions, cuts, violent impacts, bad use or maintenance.

**DISCLAIMER:** Prior to use, the end user must read and understand the manufacturer's instructions supplied with this product at the time of shipment and seek training from their employer's trained personnel on the proper usage of the product. Manufacturer is not liable or responsible for any loss, damage or injury caused or incurred by any person on grounds of improper usage or installation of this product.

		EQUIPMENT RECORD			
Product					
Model & type/Identification		Trade Name		Identification number	
Manufacturer		Address		Tel, email into use	
Year of manufacture		Purchase Date		Date first put into use	
Other relevant info	ormation (eg. document nu	mber)			
	PERIODIC	EXAMINATION AND RE	PAIR HISTORY		
Date	Reason for entry (periodic examination or repair)	Defects noted, repairs carried out and other relevant information	Name and signature of competent person		Periodic examination next due date

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#### Certification Body:

SATRA Technology Europe Ltd, Bracetown Business Park, Clonee, Dublin D15 YN2P Ireland (Notified Body 2777)

## Ongoing Assessment Body:

SGS Fimko Oy, Takomotie 8, FI-00380 Helsinki, Finland (Notified Body 0598)

For EU Declaration, visit https://kstrong.com/asia/eu-declaration-form/



KStrong Inc. 150 N. Radnor Chester Road Suite F200 Radnor, Pennsylvania 19087 United States Contact number : 1-833-KSTRONG

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