



ESSENTIAL
ELITE
EPIC
ELEMENT

USER INSTRUCTION MANUAL
ENERGY ABSORBING LANYARDS

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODEL:

AFL403111, AFL403110, AFL403611, AFL401111, AFL401612, AFL401070, AFL401109, AFL401140,
AFL401150, AFL401150(TB), AFL401160, AFL402901, AFL402911, AFL402951, AFL406650,
AFL406650(TB), AFL408211, AFL408226, AFL408266, AFL408251, AFL408341, AFL408381,
AFL402601, AFL402611, AFL402651, AFL408131, AFL408141, AFL408283, AFL408284, AFL408389,
AFL408389A, AFL408612, AFL408701, AFL408741, AFL408805, AFL408845, AFL408721, AFL408825,
AFL401765, AFL401865 and AFL401770

CE 0598
EN 355:2002

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.

- 1. 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. PERFORMANCE AND LIMITATIONS OF USE:** The lanyards have been tested in accordance with EN 355:2002, Heat 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 - 100 kg	Achieves required performance requirement
Clause 4.4 Dynamic performance - 140 kg	Achieves required performance requirement
Clause 4.5 Static strength	Achieves required performance requirement

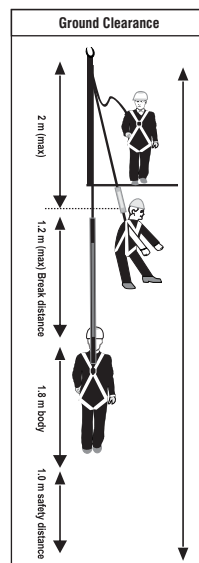
Testing of Webbing as per EN ISO 15025:2002, EN ISO 9150:1988 for Heat Resistant Lanyards-

The webbing of the Flanil Flame Resistant Lanyards has passed strength test as per EN 355:2002 after being exposed to small molten metal splash test according to EN ISO 9150:1988 and the webbing has also been tested in accordance with EN ISO 15025:2002.

- 3. 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.



4. DESCRIPTION:

PRODUCT CODE	CATEGORY	PRODUCT DESCRIPTION	MAX LOAD RATED
AFL403111	Essential	Energy Absorbing Single Leg Twisted Rope Lanyard	100kg
AFL403110	Essential	Energy Absorbing Single Leg Twisted Rope Lanyard	100kg
AFL403611	Essential	Energy Absorbing Double Leg Twisted Rope Lanyard	100kg
AFL401111	Essential	Energy Absorbing Single Leg Webbing Lanyard	100kg
AFL401612	Essential	Energy Absorbing Double Leg Webbing Lanyard	100kg
AFL401070	Essential	Energy Absorbing Double Leg Webbing Lanyard	100kg
AFL401109	Essential	Energy Absorbing Single Leg Webbing Lanyard	100kg
AFL401140	Essential	Energy Absorbing Single Leg Webbing Lanyard	100kg
AFL401150	Epic	Energy Absorbing Double Leg Elasticated Lanyard	140kg
AFL401150(TB)	Epic	Energy Absorbing Double Leg Elasticated Lanyard	140kg
AFL401160	Epic	Energy Absorbing Single Leg Webbing Lanyard	140kg
AFL402901	Epic	Edge Safe Energy Absorbing Single Leg Kernmantle Rope Lanyard	140kg
AFL402911	Epic	Edge Safe Energy Absorbing Single Leg Kernmantle Rope Lanyard	140kg
AFL402951	Epic	Edge Safe Energy Absorbing Double Leg Kernmantle Rope Lanyard	140kg
AFL406650	Epic	Energy Absorbing Double Leg Webbing Lanyard	140kg
AFL406650(TB)	Epic	Energy Absorbing Double Leg Webbing Lanyard	140kg
AFL408211	Epic	Energy Absorbing Single Leg Elasticated Lanyard	140kg
AFL408226	Epic	Energy Absorbing Single Leg Elasticated Lanyard	140kg
AFL408266	Epic	Energy Absorbing Single Leg Elasticated Lanyard	140kg
AFL408251	Epic	Energy Absorbing Single Leg Elasticated Lanyard	140kg
AFL408341	Epic	Energy Absorbing Double Leg Webbing Lanyard	140kg
AFL408381	Epic	Energy Absorbing Double Leg Elasticated Lanyard	140kg
AFL402601	Elite	Edge Safe Energy Absorbing Single Leg Kernmantle Rope Lanyard	140kg
AFL402611	Elite	Edge Safe Energy Absorbing Single Leg Kernmantle Rope Lanyard	140kg
AFL402651	Elite	Edge Safe Energy Absorbing Double Leg Kernmantle Rope Lanyard	140kg
AFL408131	Elite	Energy Absorbing Single Leg Webbing Lanyard	140kg
AFL408141	Elite	Energy Absorbing Single Leg Webbing Lanyard	140kg
AFL408283	Elite	Energy Absorbing Single Leg Elasticated Lanyard	140kg
AFL408284	Elite	Energy Absorbing Expandable Webbing Lanyard	140kg
AFL408389	Elite	Energy Absorbing Double Leg Elasticated Lanyard	140kg
AFL408389A	Elite	Energy Absorbing Double Leg Elasticated Lanyard	140kg
AFL408612	Elite	Energy Absorbing Double Leg Webbing Lanyard	140kg
AFL408701	Element	Energy Absorbing Single Leg Heat Resistance Lanyard	140kg
AFL408741	Element	Energy Absorbing Single Leg Oil Repellent Lanyard	140kg
AFL408805	Element	Energy Absorbing Double Leg Heat Resistance Lanyard	140kg
AFL408845	Element	Energy Absorbing Double Leg Oil Repellent Lanyard	140kg
AFL408721	Element	Energy Absorbing Single Leg Antistatic Lanyard	140kg
AFL408825	Element	Energy Absorbing Double Leg Antistatic Lanyard	140kg
AFL401765	Element	Energy Absorbing Single Leg Dielectric Lanyard	140kg
AFL401865	Element	Energy Absorbing Double Leg Dielectric Lanyard	140kg
AFL401770	Element	Energy Absorbing Single Leg Dielectric Lanyard	140kg

Length Available in 1.0m to 2.0m.

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.

Note: The user is advised to follow above cleaning instructions rigorously.

• **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 unfit or in case of any wear and tear, dispose the lanyard immediately.

Follow the steps for Disposal:

- Segregate the equipment in three different crates for placing components in them respectively as- Textile, Metal and Plastic.
- Inspect the wear & tear present on the lanyard.
- Now, using a sharp pair of scissors first cut the Textile and dismantle the lanyard.
- Now remove the metal & plastic components separately from the lanyard.
- Put the Textile, Plastic & Metal components in their respective plastic crates.
- Once segregation done, arrange to send them for recycling or disposal (as appropriate) through authorized agencies as per local or national law.

12. WARNING:

- It is essential to verify that the medical condition of the user is fit 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.
- If the risk assessment carried out before the start of work shows that there is a possibility of a user loading over an edge, appropriate precautions must be taken.
- A lanyard should not be used for fall arrest purposes without energy absorption.
- A user must minimise the amount of slack in the lanyard near a fall hazard.
- A user must understand allowed or disallowed configuration of the lanyards when combined with an energy absorber, e.g. two separate lanyards each with an energy absorber should not be used side by side.

13. WARRANTY:

All KStrong products are manufactured under strict quality control and tested in accordance with relevant international standards to ensure reliability, durability, and user safety.

KStrong warrants that its products are free from manufacturing defects in material and workmanship for a period of two (2) years from the date of purchase, unless otherwise specified. This warranty applies under normal conditions of use, storage and maintenance as described in the User Instruction Manual (UIM).

Warranty Conditions - This warranty is valid only when:

- The product has been used strictly in accordance with manufacturer guidelines and safety instructions.
- The product has been installed, maintained and inspected by trained and competent personnel.
- The product has not been altered, modified or repaired by any unauthorized party.
- The product has not been exposed to misuse, negligence or abnormal conditions (e.g., chemical contamination, fire, impact or excessive loading).
- The product is registered with KStrong at the time of purchase or installation, where applicable.

Exclusions - This warranty does not cover:

- Abnormal wear and tear resulting from irregular use.
- Damage due to improper installation, storage or maintenance.
- Products that have been subjected to a fall arrest or load event.
- Unauthorized modifications or repairs.
- Consequential or incidental damages arising from product failure.

Once a product has been involved in a fall or impact, it must be removed from service and inspected by an authorized KStrong representative before any decision regarding reuse or replacement is made.

Warranty Claims - To make a warranty claim:

- The client must notify KStrong or the authorized distributor in writing, providing full details of the issue, including proof of purchase, serial number and system identification.
- The product must be returned to KStrong or its designated service centre for inspection and evaluation.
- If the defect is confirmed to be due to manufacturing defects, KStrong will, at its sole discretion, repair or replace the product free of charge.

KStrong reserves the right to determine the validity of all warranty claims and its decision shall be considered final and binding.

Disclaimer

This warranty is in addition to, and does not affect the consumer's statutory rights under applicable local laws.

KStrong liability under this warranty is limited strictly to the repair or replacement of the defective product and does not extend to any indirect, incidental or consequential damages.

14. 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
- Identification of the manufacturer and address
- Type or product code
- Month & Year of Manufacture
- Pictogram that indicates to read the instructions
- UID for Traceability
- Material
- Length (Available in 1.0m to 2.0m)
- Number of the standard

MARKING

(ii) **KSTRONG®**
UNRIVALED SAFETY.

**ELITE EDGE SAFE ENERGY
ABSORBING SINGLE LEG
KERNMANTLE ROPE LANYARD**

(iii) Model : AFL402601

(iv) DOM : MM/YYYY

(vii) Material : Polyester

(viii) Length : 1.8 m

(vi) UID : XXXXXXXXXXXX

(i) **CE 0598**

EN 355:2002, VG 11RFU CNB/P/11.074

(v) **140 kg**

Max. Rated Load
(Including all tools)

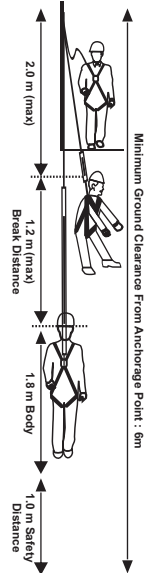




Edge-Safe
Tested

QR CODE

KStrong Asia Pte Ltd
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Singapore 189969.
KStrong.com Made In India



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 its proper use. Users are required to complete and record the pre-use inspection as outlined in this UIM. Failure to follow these inspection and usage requirements significantly increases the user's liability exposure, as improper or undocumented use may not be supported during an incident investigation and could affect warranty or service outcomes. The manufacturer is not liable or responsible for any loss, damage, or injury caused or incurred by any person due to improper usage or installation of this product.

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*Updates to the UIM are part of our regular revision cycle to keep the manual current and aligned with evolving best practices. While the UIM has always been compliant with the equipment's intended design and safety requirements, periodic updates are important to ensure continued clarity, accuracy, and optimal user guidance.

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