

**EN**

Original Instructions  
Version 2

**DRAPER**<sup>®</sup>

# FALL ARREST **LANYARD**

**82473**



**UK  
CA** **CE**

# 1. Preface

These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate or maintain this product.

This Draper Tools manual describes the purpose of the product and contains all the necessary information to ensure its correct and safe use. Following all the instructions and guidance in this manual will ensure the safety of both the product and the operator and increase the lifespan of the product.

All photographs and drawings within this manual are supplied by Draper Tools to help illustrate correct operation of the product.

Every effort has been made to ensure the information contained in this manual is accurate. However, Draper Tools reserves the right to amend this document without prior warning. Always use the latest version of the product manual.

## 1.1 Product Reference

**User Manual for:** 2m Fall Arrest Lanyard

**Stock No:** 82473

**Part No:** LA/F/B

## 1.2 Revisions

**Version 1:** August 2015

First release

**Version 2:** December 2022

General formatting and content updates

As our manuals are continually updated, always ensure that the latest version is used.

Please visit [drapertools.com/manuals](http://drapertools.com/manuals) for the latest version of this manual and the associated parts list, if applicable.

## 1.3 Understanding the Safety Content of This Manual



**WARNING!** – Situations or actions that may result in personal injury or death.



**CAUTION!** – Situations or actions that may result in damage to the product or surroundings.

**Important:** – Information or instructions of particular importance.

## 1.4 Copyright © Notice

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In all cases, this copyright notice must remain intact.

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# 3. Product Introduction

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## 3.1 Application

This product is a fall arrest lanyard with energy absorber for use when working at height or where a risk of free fall exists. It is suitable for use as a component of a fall arrest system to connect a safety harness to an anchor point. The lanyard limits free fall to a maximum of four metres (fall factor 2), depending on the position of the anchor point, and is designed to limit the force on the user's body to 6kN.

**Important:** This lanyard is **NOT** suitable for choke hitching.

This product may be used to arrest a single fall **ONLY**. **DO NOT** tamper with this product.

**Important:** Users **MUST** be competent and responsible or under the direct and visual control of a competent and responsible person.

Any other application beyond the conditions established for use will be considered misuse.

Draper Tools accepts no responsibility for improper use of this product or any consequence, direct, indirect or accidental, or any other type of injury or damage resulting from the use of this product.

Read this manual in full before attempting to use, inspect or maintain the product, and retain it for later use.

This product is an item of Personal Protective Equipment (one person only) in accordance with the PPE Regulation (EU) 2016/425 and complies with the following standards:

- EN 354-2010
- EN 355-2002

## 3.2 Limitations

The following limitations to the capability of this product must be recognised and considered before use.

**Important: DO NOT** use this product for applications beyond the capabilities of the equipment.

This product is a component of a fall arrest system and contributes to stopping a free fall when it occurs. It **DOES NOT** prevent free fall from occurring.

This lanyard has a fixed length of 1.82m before deployment of the energy absorber. Care and planning must be observed to ensure that suitably located anchor points are available and employed as appropriate to avoid or otherwise minimise the risk of free fall.

It is the responsibility of the user to ensure that there is sufficient fall clearance to avoid impact with the ground or other obstacles should free fall occur. The fall clearance must be calculated before each use according to the position of the anchor points relative to the connection to the harness. **ALWAYS** ensure that a sufficient safety clearance is included in the calculation. For more information, see **5.3 Required Ground Clearance**.

**Important:** If sufficient fall clearance cannot be guaranteed, **DO NOT** use this product. Another product with a more appropriate length must be used.

When used in environments in which additional physical and environmental hazards may reduce the effectiveness of this product, additional risk assessments and precautions must be observed to reduce the likelihood of injury to the user or damage to the equipment. Such hazards include, but are not limited to, extremes of temperature, prolonged exposure to weather, chemicals and corrosive environments, ultraviolet light, live electrical conductors, gases and explosive materials or vapours.

## 3.3 Specification

Stock No.	82473
Part No.	LA/F/B
Model No.	JE311225C
Lanyard length (including connectors)	1.82m
Materials:	
Lanyard	Nylon webbing
Energy absorber	Nylon webbing
Hook	Metal
Karabiner	Metal
Gate openings:	
Hook	50mm approx.
Karabiner	18mm approx.

## 3. Product Introduction

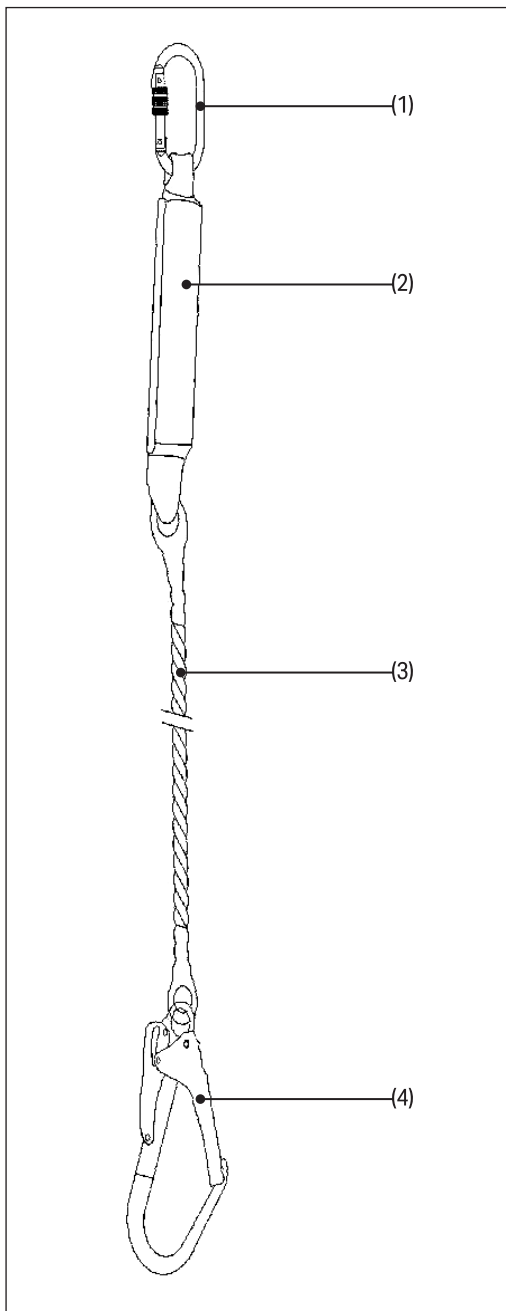
### 3.4 Identification

- (1) Karabiner
- (2) Energy absorber (EN 355)
- (3) Lanyard (EN 354)
- (4) Hook


Keep the product packaging for the duration of the warranty period in case the product needs to be returned for repair.



**WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.**



 **WARNING!** Applications for which this product is required are inherently dangerous. **DO NOT undertake any activity that requires the use of this product unless you fully understand and accept the risks involved and are confident in the correct and safe use of the equipment.**

 **WARNING!** Failure to comply with these safety instructions may result in serious injury or death.

## 4.1 General Safety Instructions for This Equipment

- **NEVER** use this product for any other purpose than that for which it was designed.
- **ONLY** techniques presented in this manual that are not crossed out or not otherwise indicated as incorrect are permitted when using this product.
  - Contact Draper Tools for support if you have any difficulty in understanding the information or images in this document.
- The total length of a sub-system with an energy absorber (before deployment), including lanyard, terminations and connectors **MUST NOT** exceed two metres.
- This lanyard **MUST NOT** be used for fall arrest purposes if no energy absorption capability is present.
  - **NEVER** use this product if the energy absorber has been previously deployed or appears to be weakened, damaged or used.
- **DO NOT** modify this product in any way without written consent to do so from the Draper Tools or the manufacturer.
- All product markings must remain visible and legible at all times.
- Any maintenance or repair **MUST** be carried out in accordance with these instructions.
- If the product is resold outside the original country of destination, the onward vendor must provide these or other sufficient instructions for use, maintenance and periodic examination in the language of the country in which the product will be used.

## 4.2 Component Compatibility

- **ALWAYS** ensure that components used within the same fall arrest system are compatible with each other.
  - Components are compatible if they have been designed to work together in such a way that their shape and size do not cause jamming or inadvertent opening of their gate mechanisms, regardless their orientation.  
**Important:** Components must also be compatible with the anchor points and other system components.
- This lanyard may **ONLY** be used with Safety Karabiner Draper Stock No. 84272 (supplied) and Safety Harness 84271.
  - The harness must be able to adjust to your body and fit snugly to reduce the risk of injury during a fall.
- Incompatible connections can cause accidental detachment or breakage or may impede the safety capabilities of other equipment.
- **DO NOT** combine components in any way where the safe function of any one item is interfered with or affected by the safe function of another.
- **ALWAYS** adhere to all instructions supplied with other components of the fall arrest system.

**Important:** Two separate lanyards, each with an energy absorber, should **NOT** be used side by side.

## 4.3 Connector Safety

- The hook and karabiner **MUST** be closed and locked during use.
- Due to the type of hook and karabiner connectors within this product, it should only be used where the connectors are not required to be attached and removed frequently during the working day.
  - If frequent attachment and removal is required, use more suitable equipment.
- Take care to avoid loading the hook or karabiner across their gates.
- The length of the connectors must be considered when calculating the required ground clearance as they will influence the length of the fall.
- Avoid situations that may reduce the strength of the connectors, such as connection to wide straps.

## 4. Safety Instructions and Obligations

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### 4.4 User Responsibility

- If the risk assessment carried out before the start of work shows that loading in the case of a use over an edge is possible, appropriate precautions should be taken.
- To avoid the risk of a fall, move away from areas where a fall hazard exists when adjusting the lanyard.
- Responsibility for actions and decisions while this product is in use rests **SOLELY** with the user.
- Before using this equipment, you must:
  - Read and understand these instructions in full.
  - Ensure that you are specifically trained in the proper and safe use of this product.
  - Ensure that you are adequately trained in the necessary rescue techniques.
  - Ensure you are fully aware of the capabilities and limitations of this product.
  - Familiarise yourself with and accept the risks associated with the application.
  - Ensure that your operation complies with applicable local regulations and additional standards relating to occupational safety.
- **DO NOT** use this equipment if you are not medically fit to work at height.
  - If required, consult your doctor or a trained medical professional to assess your fitness to absorb the forces of a fall arrest before using this product.
- **DO NOT** use this equipment if you are pregnant or suffer from any condition that may increase the likelihood of injury sustained during a fall arrest or that may prevent you from safely and correctly operating this equipment during normal or emergency operation.
- Calculate the required ground clearance before **EVERY** use, taking into account user height and weight.
- **ALWAYS** use a reliable anchor point.
- **NEVER** use this equipment to lift, hang or support equipment.
- Draper Tools recommends that this equipment is issued as a personal item so that users are familiar with the entire use history of the item.

### 4.5 Training

The undertaking of training specific to this equipment before use is **ESSENTIAL**. This product may only be used by competent and responsible personnel or those placed under the direct and visual control of a competent and responsible person. Acquisition of adequate training in appropriate techniques and methods of protection is the responsibility of the user. The user assumes all risk and responsibility for damage, injury or death that may occur during or following incorrect use of this product in any form.

If you are unable or unwilling to assume this responsibility or accept the associated risks, **DO NOT use this equipment.**



**Important:** Before use, read and understand all the safety information and instructions listed in this manual. The product must be thoroughly inspected before **EVERY** use; see **7. Inspection Instructions**.

## 5.1 Planning

Before using the product, carefully assess the requirements of the operation and complete the following tasks:

- Identify suitable anchor points; see **5.2 Reliable Anchor Points**.
- Calculate the required ground clearance; see **5.3 Required Ground clearance**.
- Establish an appropriate and reliable method of rescue in case of an emergency.

Ensure that the method of rescue is continually monitored throughout the operation so that you are aware if the method of rescue becomes compromised. **DO NOT** begin an operation without a safe method of rescue in place and acknowledged by others around you. Cease the operation **IMMEDIATELY** if your method of rescue becomes compromised.

## 5.2 Reliable Anchor Points

**Important:** It is essential that the chosen anchor points are positioned in such a way to minimise the likelihood of free fall and the potential for fall damage. The work should also be carried out in such a way to minimise this risk.

Anchor points are the fixtures at which the fall arrest system is fixed to the wall or platform. Where possible, anchor points should be located level to or above the point at which the harness is attached to the fall arrest system. This reduces the total ground clearance from a maximum of 4m to 2m or less. Anchor points should also be directly in line vertically with the body as much as possible to reduce the likelihood of swing falls.

Anchor points must be compatible with the hook of this product and allow the hook to be connected easily without impeding the safe operation of the gate or causing the potential for it to open inadvertently.

Anchor points must be able to withstand a minimum of 12kN (2,700lbf) of force from a fall. Use certified, permanently installed anchor points where possible.

**WARNING!** NEVER connect the lanyard directly (where the karabiner may slide) to a structure that has a gradient of greater than 15°.

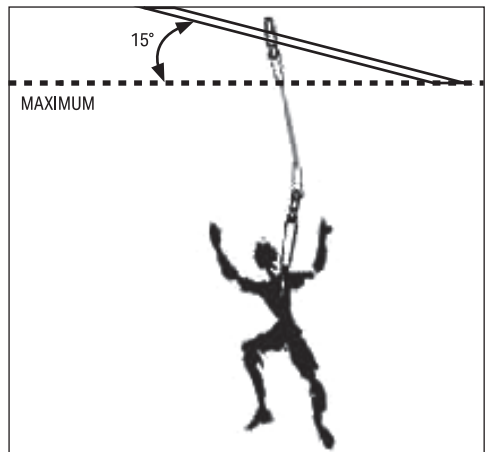


Fig. 1

# 5. Instructions for Use

## 5.3 Required Ground Clearance

**Important:** It is **ESSENTIAL** that the required ground clearance is calculated before **EVERY** use. The required ground clearance is the **minimum** distance required between the anchor point and the nearest lower level. There must be no obstacles present within this distance, ensuring that the user can fall unimpeded without impacting on the ground or other intermediate object.

Ground clearance is calculated between from the anchor point. The total required ground clearance is calculated by adding together the following values:

- **Lanyard length (LL):**  
The total vertical distance below the anchor point that the user will fall before the lanyard begins to arrest the fall. This lanyard is fixed at **1.82m** in length (round to 2m).
- **Deceleration distance (DD):**  
Accounts for the extension of the energy absorber and displacement and stretching of the harness.
- **User height (UH):**  
The height of the user.
- **Safety clearance (SC):**  
A minimum clearance value to prevent the user's feet from contacting the ground or platform. This value must be at least **1m**.

**Important:** These values are calculated using a body mass of 100kg. Where the body mass of the user exceeds this value or their height exceeds 2m, the calculation must take into account these differences. A greater safety clearance distance is required for users of over 100kg.

**Important:** Keep in mind that the free fall distance (the distance that the harness attachment travels from the start of the fall until the lanyard begins its arrest) will vary according to the position of the anchor point in relation to the working level. An increased free fall distance will apply greater force to the fall arrest system than one that is lower. This is known as Fall Factor.

**Important:** Also assess the likelihood of injury from swing falls in which the user does not fall directly downwards. Swing falls occur when the anchor point is not vertically aligned with the body, causing the user to arc towards around the anchor point when falling. Ensure that the surrounding area is free from any obstructions that might impede a swing fall.

**Required ground clearance: 6.5m**

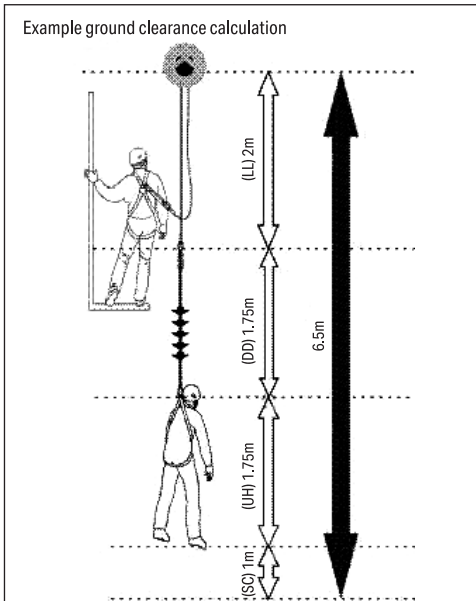


Fig. 2

## 5.4 Connecting to the Harness

**Important: ONLY** the karabiner is to be connected to the harness.

The karabiner (1) must be connected to one of the fall arrest points on the harness (**sternal or dorsal** points **ONLY**). Determine the most appropriate connection point for the operation and user.

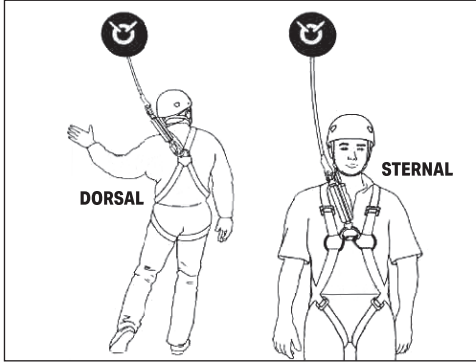


Fig. 3

**WARNING!** NEVER connect a fall arrest system to the ventral point. This is not a fall arrest point.

To attach the karabiner to the harness:

1. Unscrew the locking sleeve and depress the gate to open it.
2. Hook the karabiner around the chosen fall arrest point on the harness and release the gate.
3. Tighten the locking sleeve around the gate and nose so that the gate can no longer open without intervention.

**Important: ALWAYS** check the security of the karabiner before beginning the operation.

## 5.5 Connecting to the Anchor Point

**Important: ONLY** the hook is to be connected to the external anchor point. **ONLY** connect the fall arrest system to suitably positioned and reliable anchor points for which the required ground clearance can be accommodated.

To attach the hook to an anchor point:

1. Depress and hold the gate release lever at the back of the hook.
2. Squeeze the gate to open it and pass the hook through the chosen anchor point.
3. Release the gate and the release lever and check that the gate can no longer open without intervention.

**Important: ALWAYS** check the security of the hook attachment to the anchor point before beginning the operation.

## 5.6 Obligations During Use

Maintain and monitor all risks and safety conditions during the operation.

- Regularly verify that the gates of the karabiner and hook are securely locked by pressing them gently with your hand.

**WARNING!** NEVER open or adjust the connectors until it is safe for you to do so and you have relocated to an area where there is no risk of falling.

- Stay alert to objects and surfaces that may damage any part of the fall arrest system, including sharp, abrasive or heated surfaces.

**Important:** Take steps to avoid the fall arrest system coming into contact with surfaces that may impede or damage the fall arrest system and reassess your operation if necessary.

- As far as possible, keep the anchor point directly in line with your body to avoid swing falls.

Stop the operation immediately if your safety or the safe function of this equipment becomes compromised.

## 6. Maintenance Instructions

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**Important:** This equipment must be regularly cleaned to ensure that it remains in good working condition. Poor product care can compromise the integrity of the equipment and reduce its capability during a fall arrest.

**Important:** These instructions must be strictly adhered to in order to maintain the integrity of this equipment.

- Clean the nylon lanyard with water and mild soap.



**CAUTION! DO NOT use chemicals, solvents or aggressive substances to clean the product.**

- Wipe the metal connectors with a clean, dry cloth **ONLY**.
- When the equipment becomes wet, either during use or as a result of cleaning, allow all parts to dry naturally.



**CAUTION! DO NOT apply direct heat to dry the equipment.**

- Transport the equipment in bag provided and take all necessary precautions to protect the equipment from moisture, chemicals, UV light, heat, sharp edges and impact forces during transportation.
- Store the product in a clean and dry environment, out of direct sunlight and out of reach of children.
- Ensure that the storage environment and procedures protect the equipment from factors that may affect the condition of the equipment, including moisture, sharp edges, vibrations and exposure to ultraviolet light.

## 7. Inspection Instructions

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**Important:** The safety of users is subject to the continued efficiency and durability of this equipment. The equipment must be inspected before every use and, additionally, an in-depth examination must be carried out at least once every twelve months. Where the equipment is frequently used or used in harsh conditions, in-depth inspections should be carried out more regularly.

All inspections must be carried out by a competent and trained individual. All periodic in-depth inspections must be documented, with any findings recorded. The name and signature of the inspector must also be recorded, along with a deadline for the next periodic in-depth inspection. See **12. Record Sheet** for an example equipment control card.

**Important:** This is a **single-use product**. Retire the equipment if it shows any evidence of previous use to arrest a fall.

Inspections must cover all aspects of the equipment, including the lanyard, energy absorber, connections, and any other parts of the fall arrest system. Visually examine the equipment for at least the following:

- Evidence of previous use to arrest a fall, including tearing or stretching of the energy absorber or its plastic retainer
- Absence of the plastic retainer for the energy absorber
- Excessive wear or stretching

- Fraying or separation of the attachment loops for the hook and karabiner
- Cuts and abrasions
- Mould, mildew or corrosion
- Exposure to chemicals or aggressive substances
- Evidence of ink or paint on the nylon webbing
- Burns or damage from exposure to heat
- Deformity or discolouration
- Alterations
- All safety markings are legible and unambiguous

**Important:** **ALL** safety markings must remain legible throughout the lifetime of the equipment.

Withdraw the equipment from service immediately if the equipment exhibits any of the above or there any reason to doubt that the equipment is safe for use. **DO NOT** use it again until a competent person has confirmed in writing that it is safe to do so. Repairs may only be carried out by Draper Tools and their authorised agent and strictly in accordance with these instructions.

If it cannot be made safe for use, retire the equipment.

**Important:** Retired equipment must be destroyed to avoid the risk of reuse.

**Important:** This product may be used to arrest one fall **ONLY**. Once the energy absorber has been deployed, **DO NOT** use this equipment again.

Draper Tools recommends that this equipment is issued as a personal item to one user only to ensure that the user is completely aware of the history of the item and assumes full responsible for its condition and safety.

### 8.1 Expected Lifespan

The potential lifespan of this product is as follows:

- **Lanyard and energy absorber (nylon, plastic):** 10 years from the date of manufacture (see product marking)
- **Hook and karabiner (metal):** Indefinite

The actual lifetime of the product ends when it meets one of the retirement criteria (see **8.2 Knowing when to Retire the Product**) or when it is judged to be obsolete. The actual lifetime is influenced by a number of factors, including the intensity, frequency and environment of use; user competence; the appropriateness of storage arrangements and the quality of product maintenance during its lifetime.

**Important:** Exceptional events may terminate the life of the product. These include, but are not limited to, deployment or damage of the energy absorber, and exposure to chemicals, extreme temperatures, sharp edges and heavy loads.

Inspect the equipment frequently and regularly for signs of deployment, damage and deterioration; see

### 7. Inspection Instructions.

### 8.2 Knowing when to Retire the Product

This equipment should be immediately retired if any of the following conditions occur:

- It fails to pass an inspection before or during use, or a periodic in-depth inspection.
- It has been subjected to a major fall or load.
- It the energy absorbed has been deployed or released from its retainer.
- It is more than 10 years old.
- Its full history is not known.
- There is any doubt over the integrity of the product.

**Important:** Retired equipment must be destroyed immediately to prevent further use.

### 8.3 Product Obsolescence

The equipment may be judged to be obsolete and retired before the end of its actual lifetime. This may occur in situations including:

- Changes in applicable standards or legislation
- Development of new equipment or techniques
- Incompatibility with or replacement by other equipment

Where obsolete equipment is no longer recommended for use, dispose of it to prevent further use.

## 9. Spares, Returns and Disposal

For spare parts, servicing, and repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent.

Draper Tools will endeavour to hold any spare parts, if applicable, for seven years from the date that it sells the final matching stock item.

Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

# 10. Explanation of Symbols



Read the instruction manual



Total length (undeployed)



Warning!



UK Conformity Assessed



Compliant with EN 354

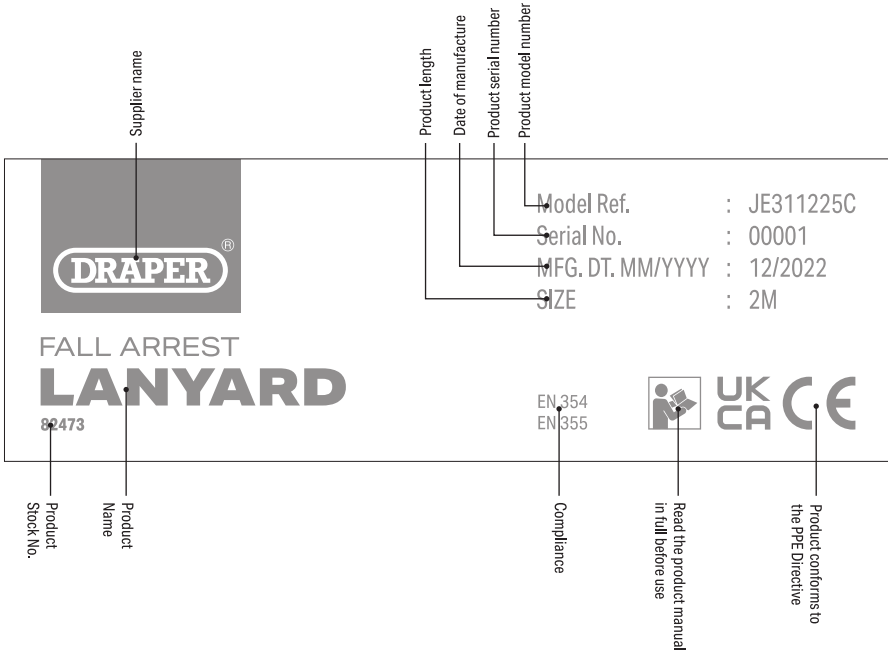


European conformity



Compliant with EN 355

# 11. Product Marking



EC type examination of notified body involved with the design stage and production control phase are performed by:

CCQS Certification Services Limited  
(Notified Body no. 2834)

Block 1 Blanchardstown Corporate Park, Ballycoolin Road,  
Blanchardstown, Dublin, DK AKK1, Ireland

# 12. Record Sheet

<b>Fall Arrest Lanyard</b>							
Manufacturer	Name						
	Contact details						
Date of manufacture		Potential lifetime expiry date		Date of purchase		Date put into service	
Model		Serial Number		Name of user			

<b>Other information</b>							

Inspection		Reason for entry	Examiner	Result	Comments	Signature	Next Inspection
No.	Date						
1							
2							
3							
4							
5							
6							
7							
8							

This record must be kept with the corresponding equipment (traceable by the serial number) for the full duration of the life of the product.

## Contact Details

### **Draper Tools**

Draper Tools Limited  
Hursley Road  
Chandler's Ford  
Eastleigh  
Hampshire  
SO53 1YF  
UK

**Website:** [drapertools.com](http://drapertools.com)

**Email:** [sales@drapertools.com](mailto:sales@drapertools.com)

**Product Helpline:** +44 (0) 23 8049 4344

**Telephone Sales Desk:** +44 (0) 23 8049 4333

**General Enquiries:** +44 (0) 23 8026 6355

**General Fax:** +44 (0) 23 8026 0784

### **Delta International**

Delta International BV  
Oude Graaf 8  
6002 NL  
Weert  
Netherlands

Please contact the Draper Tools Product Helpline for repair and servicing enquiries.