Users Manual

Iss. 24.04.26

CE OSX® Attack

Lightweight, two-piece, multi-layer fire-fighters turnout gear

This manual is for the CE certified version of the Lakeland manufactured OSX Attack fire-fighters suit.

CE OSX Attack is fully tested and certified to the European standards:-

- *EN 469:2020: Protective Clothing for Firefighters – performance requirements for protective clothing for firefighting*
- *EN1149-5: 2018: Protective Clothing – Electrostatic Properties*
- *EN ISO 13688:2013+A1:2021 Protective Clothing – General Requirements*

This manual also provides information on the use and legal framework for use of fire-fighters clothing, summarises fabric specifications and design features, along with offering advice and guidance on donning, doffing, maintenance and care.

Know Your Maker

Like all Lakeland garments, the CE OSX Attack is manufactured only in Lakeland's own factories. No contracting-out of production is done, so Lakeland maintains full control of production and quality.

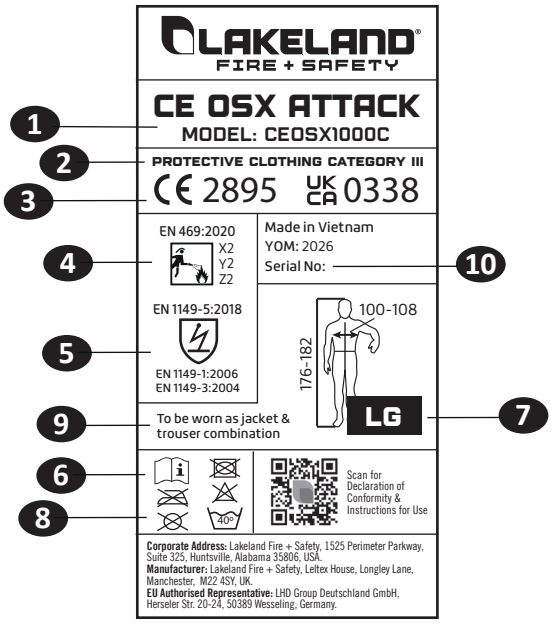
Lakeland Industries is one of the largest manufacturers in the world of Industrial protective clothing. The CE OSX Attack Fire-Fighters suit meets Lakeland high standards of fabric selection and design.

CONTENTS

1. CE Labelling Details
2. Legal Background
3. CE Standards & Tests
4. Summary of CE Test Results
5. Fabric Details & Specifications
6. Construction and Design
7. Garment Sizing
8. Other Use Guidelines
    a. Anti-Static
    b. Hi Visibility
9. Donning & Doffing
10. General Use Guidelines
11. Drag Rescue Device
12. Cleaning & Maintenance

Appendix 1: Cleaning & Maintenance Record

1. CE Labelling Details



1	**Model Number & Name**
2	**Protective Clothing Category III: Complex product**
3	**Number of Certifying Notified Body**
4	**Certified to EN 469:2020 and performance levels**
5	**Certified to EN 1149-5:2018**
6	**Refer to User Manual**
7	**Size Information**
8	**Care & wash Instructions (see detailed instructions in manual)**
9	**To be worn as part of an ensemble**
10	**Garment Serial number (record on cleaning & maintenance record)**

2. Legal background

- ***Note that it is always the users' final responsibility to determine the suitability of any PPE for any specific application. The manufacturer can only provide technical information about the performance and specification of the fabrics and garment and cannot guarantee suitability for any specific application***

- PPE Regulation (EU) 2016/425 was established in order to specify minimum standards for Personal Protective Equipment (PPE). It Defined three categories of PPE:-

  Category I: **Simple Design**
  - PPE NOT designed to protect against a hazard

  Category II: **Intermediate Design**
  - Neither Simple Nor Complex

  Category III: **Complex Design**
  - PPE designed to be worn or held to protect against a hazard

- The PPE Regulation (EU) 2016/425 places a legal requirement on employers to ensure that employees undertaking any hazardous task or working in any hazardous area must be provided with PPE that is suitably designed and CE certified to protect against all likely hazards.
- The Regulation requires that in such cases a full analysis of the hazards that may be encountered be assessed by suitably qualified personnel to produce a Risk Assessment, defining the hazard and identifying the types of PPE required.
- Lakeland CE OSX garments are classed as Category III. They are designed to protect against the heat encountered in fighting structural fires and to provide some protection against the risk of burns in the event of Flash Fire. It is not designed to protect against ALL of the hazards that might be encountered in structural fire-fighting.
- The CE OSX CE OSX Attack garment is certified to EN 469:2020.
- This garment consists of a jacket and pants and is only certified as a full ensemble or when worn together. The jacket and pants should not be worn separately in any hazardous situation.

Legal background …. Continued…

This garment will ONLY protect the parts of the body it covers. It will not protect the hands, feet or head and should be worn in conjunction with other suitable and CE certified PPE such as helmet, gloves and boots to ensure full and adequate protection. As a MINIMUM the following items will be required:-

- Firefighting suit (eg Lakeland CE OSX CE OSX Attack) certified to EN 469:2020
- Suspenders for the pants (Lakeland part 136R)
- Helmet certified to EN 433
- Fire Hood certified to EN13911
- Gloves certified to EN 659:2003
- Shoes or boots certified to EN 20344 and EN20345
- In addition suitable breathing apparatus and a safety harness are likely requirements
- All the above are available from Lakeland either separately or as a kit

CE Certification under the PPE Regulation (EU) 2016/425 for Personal Protective Equipment of the Lakeland CE OSX Attack garment has been conducted by Notified Body Number 2777:-

SATRA Technology Europe Ltd,
Bracetown Business Park, Clonee,
Dublin, D15 YN2P Ireland

UKCA Certification under the PPE Regulation (EU) 2016/425 for Personal Protective Equipment (as brought into UK law and amended) of the Lakeland CE OSX Attack garment has been conducted by Approved Body Number 0321:-

SATRA Technology Centre
Wyndham Way, Telford Way Industrial Estate,
Kettering NN16 8SD

CE and UKCA certification also requires approval and certification of the manufacturing Quality Assurance system. These garments are manufactured in Lakeland's factories under Module D approval:-

Approval carried out by (CE) **Shirley Technologies (Europe)** Ltd, Sky Business Centre, Unit 21, Block 1, Port Tunnel Business Park, Clonshaugh Business and Technology Park, Dublin. Ireland. **NB 2895** (UKCA) **BTTG Technologies** Unit 6, Wheel Forge Way, Trafford Park, Manchester, M17 1EH. UK. **AB 0338**

Authorised Representative in the EU:
LHD Group Deutschland GmbH
Herseler Str. 20-24
50389 Wesseling
Germany

Manufacturer: Lakeland Fire + Safety, Leltex House, Longley Lane, Manchester, M22 4SY, UK

3. CE Standards & Tests

EN 469: 2020 includes a series of tests to which a certified garments must be tested and achieve minimum performance requirements defined in the standards. These requirements include tests on the fabrics used, the garment construction and design and define minimum marking requirements.
A table of required testing and minimum performance requirements is shown below:-

Standard	Description	Minimum Requirements
Fabric & Hardware (zips, closures etc):-		
EN 15025	Flame Spread – outer material both on fabric and seam	Index 3 (EN 533): No hole formation in outer layer
EN 367	Heat Transfer – outer material – flame	Performance level 1 or 2
EN 6942	Heat transfer – outer materials – radiation	Performance Level 1 or 2
EN 13934-1 / EN1421-1	Tensile strength of outer material after exposure to radiant heat according to EN 6942	≥ 450N
ISO 17493	Heat resistance : 180°C / 5 mins	No ignition /No melting / shrink < 5%
EN 13934-1	Tensile Strength – outer material	≥ 450N
EN 13935-2	Seam Strength – outer material	≥ 300N
EN 4674-1 / EN 13937-2	Tear strength – outer material	≥ 30N
EN 24920	Surface wetting	Spray rate ≥ 4N
ISO 5077	Dimensional Change (all layers)	≤ ± 3%
ISO 6530	Resistance to penetration by (4) chemicals – all layers	Penetration = 0% Repellency >80%
EN 20811	Resistance to water penetration	Level 2: ≥ 20kPa
EN 31092	Water Vapour Resistance	Level 1:>30m^2 Pa/W Level 1:≤30m^2 Pa/W
EN1149-1	Static Electricity: Surface Resistivity	Max <2.5 x 10^9
Whole Garment Tests		
EN 469 – Annex D	Ergonomics performance	Minimum requirements
EN469 – Clause 4	Design Assessment	Minimum Requirments
EN 469 – cl 6.15	Thermal mannequin testing – 8s @ 84kW/M^2 - Optional	Result

- Approval to EN 469:2020 is indicated on the garment by the following pictogram:-

4. Summary of CE Test Results

- The Lakeland CE OSX Attack fire-fighters suit has been tested to the requirements of EN 469:2020 and achieved the following results:-

Test	***Description***	***Result***	
Fabric & hardware			
EN ISO 15025 Procedure A	Flame Spread on main fabric (outer & layers) / Wristlet material/ hardware	Pass	
EN ISO 6942	Residual Strength	Warp- 1253N Weft- 854N	
ISO 17493-180C	Heat Resistance	Outer – Pass MB – Pass T-Lining - Pass	
EN 13934-1 Outer Shell	Tensile Strength	Warp- 1307N Weft- 871N	
EN 13937-2 Outer Shell	Tensile Strength	Warp- 65.2N Weft- 51N	
EN 24920	Surface Wetting	Pass	
ISO 5007	Dimensional Change	Pass	
EN ISO 6530	Resistance to Penetration 1. 40% NaOH 2. 36% HCL 3. 30% H_2SO_4 4. 100% 0-xylene	**P% R%** 0% 98.9% Pass 0% 98.1% Pass 0% 98.2% Pass 0% 95.9% Pass	
EN 1149-1	Surface Resistivity	<2.5x10^9 Pass	
EN ISO 12127	Contact heat	10sec	X2
EN ISO 9151	Heat transfer flame	HTI_{24}>13sec HTI_{24}-12>4sec	
EN ISO 6942	Heat transfer radiation	$RHTI_{24}$>18sec $RHTI_{24}$-12>4sec	
EN ISO 811	Water penetration (grade)	>20kpa	Y2
EN ISO 11092	Water vapour resistance	R_{et}=30m^2.Pa/W	Z2
Whole Garment Tests			
EN 15025	Flame Spread – outer shell seam	Pass	
EN13935-2	Seam Strength – outer shell	575.5N (Pass)	
EN 469 – Annex D	Ergonomic Assessment	Pass	
EN 469 – Cl 4	Design Assessment	Pass	
EN 471 -Cl 5.1	Visibility Requirements		
EN 469 – Cl 6.15	Thermal Mannequin Testing	Summary of results in Appendix 2	

5. Fabric Details

- This garment is constructed using 3 fabric layers secured together in a single garment. The Three layers are as follows:-
  - **Outer Shell**: The outer layer of fabric. Constitutes the main defence against heat and flash fire
  - **Moisture Barrier**: The inner material that provides resistance against liquids and moisture
  - **Thermal Liner**: The inner layer offering protection against burn injury from heat
- The garment consists of a coat and pants and BOTH should be worn to ensure full protection.
- Undergarments worn beneath the Lakeland CE OSX Attack suit should not be of a fabric that will ignite, burn or melt when subjected to extreme heat
- These fabrics have been selected by Lakeland specifically for this garment to provide an excellent combination of protection, wearability and cost-effectiveness. Details and specifications of the fabrics used are shown in the table below;-

Layer	Fabric	Weight
Outer Shell	MPA 75% meta-Aramid 23% para-aramid 2% static control fibre	238 / M^2
Moisture Barrier	BMP 12% waterproof membrane laminated to 88% para-aramid felted thermal barrier	170g / M^2
Thermal Liner	FRML 50% modacrylic fibre 50% Lenzing fibre	120g / M^2
Total fabric weight		**528g / M^2**

6. Garment Construction & Design

- The seam used in construction is a Safety-Stitch using an FR para-aramid thread
- The Lakeland CE OSX CE OSX Attack fire-fighters suit also feature various required hardware such as zips, closures. Details are shown in the table below:-

Item	Description
Zipper	FR Delrin zipper
Snaps	FR Delrin snaps
Trim tape	3” lime / silver / lime FR Reflective trim
Cuffs	Knitted Kevlar cuff with thumbhole
Velcro	FR Velcro

Garment Design

OSX 1000CE Coat

- The Lakeland CE OSX Attack fighters suit consists of an 88cm (neck to base) coat with zip and snap front fastening, Drag Rescue Device (DRD), high collar, knitted Kevlar cuffs with thumbholes and FR reflective silver / lime trim
- The main design features are:-
  - 88cm coat
  - Front Zipper with storm flap with snap closures
  - High vertical collar with Velcro throat tab
  - Knitted Kevlar cuffs with thumbholes
    Two handwarm pockets with drainholes
  - One internal pocket on liner
  - One insert pocket under storm flap
  - Adjustable drawstring waistband
  - Micro clip on left breast
  - 2" lime/silver/lime FR aramid reflective trim to body, chest and arms

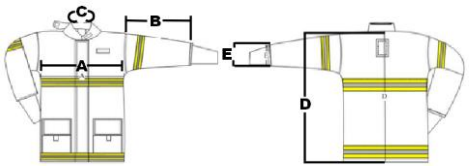
The CEOSX Attack coat is also available in a long version (103cm)

OSX 1000CE Pants

- The Lakeland CE OSX CE OSX Attack pant consists of pants with adjustable waist straps, waistband snaps for suitable suspenders (braces), cushioned knee-pads, leather-bound ankle openings, front FR zipper with Velcro and snaps for closure and two side patch pockets with drainholes
- The main features are listed below:-
  - 2 adjustable waist bands – one each side
  - Front FR zipper with snaps and Velcro
  - Black Arashield, cushioned kneepads
  - Steel snaps to waist for suspenders
  - Two patch pockets with drainholes and Velcro fastenings
  - 2" lime/silver/lime Fr aramid reflective strip to ankles

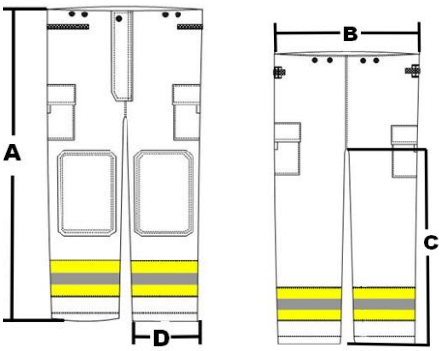
7. Garment Sizing

- Selection of the most appropriate size is important in optimising performance, comfort and protection.
- Garment Dimensions for different sizes are shown in the tables below:-
- Coat:-



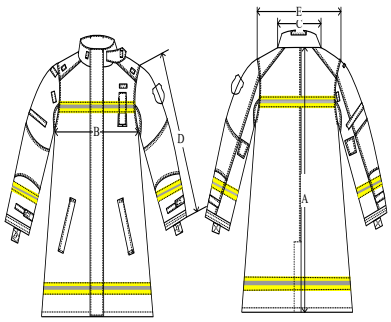
Garment Dimensions – Coat (cm)									
Size	**36**	**38**	**40**	**42**	**44**	**46**	**48**	**50**	**52**
	XS	**S**	**M**	**L**	**XL**	**2XL**	**3XL**	**4XL**	**5XL**
A.Chest	62	64	66	68	70	74	76	78	80
B.Sleeve	80	81	84	85	86	87	89	91	93
C. Collar	46	48	50	52	54	55	58	60	62
D. Back	88	88	88	88	88	88	88	88	88
E. Cuff	17	17	17	17	17	17	18	18	18

- Pants



Garment Dimension – Pants (cm)									
Size	**32**	**34**	**36**	**38**	**40**	**42**	**44**	**46**	**48**
	XS	**S**	**M**	**L**	**XL**	**2XL**	**3XL**	**4XL**	**5XL**
A.Length	103	103	103	104	104	105	105	106	106
B. Waist	44	46	50	52	56	58	60	62	64
C. Ins.leg	76	76	76	76	76	76	76	76	76
D. Ankle	29	29	29	30	30	31	31	32	32

- Long Coat



Garment Dimension – Long Coat (cm)						
Size	**32**	**34**	**36**	**38**	**40**	**42**
	XS	**S**	**M**	**L**	**XL**	**2XL**
A. Length	87	89	91	93	95	97
B. Chest	116	122	122	128	128	134
C. Collar	47	49	51	53	55	57
D. Sleeve	59.5	61	62.5	64	65.5	67
E. Shoulder	46	48	50	52	54	56

8. High Visibility Continued…

3. Heat resistance: the material must maintain the coefficient of retroreflection after treatment according to Clause 6.2 (Heat Transfer) and should not drip, ignite, melt or shrink more than 5%
4. Flame Spread: when tested according to Clause 6.1 (Flame Spread) there should be no hole formation.

- The reflective strip used on CE OSX OSX Attack meets these requirements:-

Requirement	OSX Attack Reflective Material
Min area of 0.13M^2	Coat : 0.25M 2 Pants: 0.06M2 **Total: 0.31M**
Coefficient of retro-reflection	Level 2
Performance of Retro-reflection after Heat and other Transfer treatment	Pass
Flame Spread Test	Pass

- OSX Attack meets the requirements for hi-visibility defined in EN 469

9. Donning and Doffing

WARNING : Correct donning and doffing of the OSX Attack garment can affect comfort and safety. It should be worn properly in order to ensure adequate protection. Also exercise caution when removing the garment which may be contaminated with hazardous materials

- **Donning the Pants**

1. Pull on the trousers and footwear so that the OSX Attack fabric completely covers the upper part of each boot. This may be accomplished more easily when sitting down if possible
2. Sit and/ or bend over in order to ensure a comfortable fit

3. Pull the waist up and fasten the fly and all covers ensuring no gaps remain

4. Adjust the side straps to ensure a comfortable fit

5. If using the Lakeland 136R suspenders, attach the suspender hooks to the metal pant tabs and adjust for comfort

- **Donning the Pants… continued…**

6. Ensure all other accessories are in place

- **Donning the Coat**

1. Pull on the OSX Attack coat and fasten up the front zipper.
2. Adjust and fasten the adjustable drawstring for a comfortable fit
3. Fasten the zipper flaps securely with the FR Velcro ensuring no gaps remain
4. Secure the collar in the upright position and fasten with the Velcro fastening
5. Check to ensure all areas are covered appropriately
6. Check to ensure the Drag Rescue Device (DRD) is stored correctly for future use
7. Check that the coat adequately overlaps the trousers in all situations. To do this:-
   - Stand with hands together reaching overhead as high as possible
   - Stand with hands together reaching overhead and bending body at waist to the front, sides and back as much as possible
   - In both cases ensure there are no gaps between the coat and trousers

- **Doffing the OSX Attack suit**
- Removal procedures may depend on whether the suit is contaminated during use:-
- In case of no contamination

1. Remove the coat and pants in the reverse order as described above
2. Closely inspect both coat and pants for signs of wear, damage or noticeable change in condition
3. If the suit shows signs of wear or damage, bring this to the attention of your superior, manager or employer. Any damage should be corrected before the garment is stored or re-used.

In case of possible contamination

Warning:- Avoid any unprotected body contact with any possibly harmful contaminants. For removal obtain assistance of a suitably trained person wearing suitable protective clothing that may include protective gloves, coverall and boots.

1. Avoid unprotected body contact with any contaminants

Doffing… Continued…

2. Gain the assistance of a suitably protected and trained person and remove the coat and pants in the reverse order
3. Place the contaminated garments in a sealable waterproof, leak-proof bag
4. Either
   a. Dispose of the garment in a suitable manner subject to local, national laws and according to the requirements of the contaminants involved, or:-
   b. Ensure the garment is adequately decontaminated and cleaned before storage or re-use

Modifications, Alterations and Markings

Modifying, changing, adding to, marking or altering the garment in any way may affect its protective properties and increase the risk of injury or death. Do not make any alterations without written approval of the manufacturer.

10. General Use and Advice

- This garment is designed to protect against the risk of injury from burns in fire-fighting situations when used in conjunction with other suitable integrated PPE. It is NOT designed to protect against heavy splashes of hazardous liquid chemicals or flammable liquids. Should the garment become contaminated with such liquids during use the wearer should withdraw as quickly as possible and remove the contaminated garment for disposal or decontamination and/or cleaning.
- Strenuous work in clothing which is heavy and/or of low breathability can result in extreme discomfort and heat stress in a short time. It is recommended that where possible users take frequent rests and work for periods of no more than 20 minutes without resting.
- European Published Document PD CEN/TR 14560:2003 provides guidelines for selection, use, care and maintenance of protective clothing against heat and flame. We recommend reference to this document for selection and care of garments. The document includes general advice and guidance on:-

General Use and advice continued…

- Conducting a risk assessment and identifying the levels of protection needed
- Testing of clothing
- Training
- Storage, inspection, maintenance cleaning and record-keeping
- The document also includes a summary of EN standards for protective clothing

11. Drag Rescue Device

The Lakeland CE OSX Attack Fire-Fighters suit includes an integrated Drag Rescue Device (DRD)

This consists of an internal harness secured to a pull tab located between the shoulders. The straps are inside the outer layer of the coat. The DRD is intended to enable an incapacitated user to be dragged to safety by a colleague with the minimum of injury and effort. The DRD is an emergency device only and is not designed as a safety harness for everyday use or for vertical rescue operations or to enable a wearer to be raised or lowered.

If the DRG is used and before storage or re-use of the garment ensure the straps are correctly fed back into the garment and the pull tab is correctly located in position flush with the access hole in between the shoulder blades.

12. Anti- Static Properties

·The person wearing the electrostatic dissipative protective clothing shall be properly earthed. The resistance between the person's skin and earth shall be less than 108 Ω, e.g. by wearing adequate footwear on dissipative or conductive floors or by wearing an earthing bracelet

·Electrostatic dissipative protective clothing shall not be open or removed whilst in presence of flammable or explosive atmospheres or while handling flammable or explosive substances;

·Electrostatic dissipative protective clothing is intended to be worn in Zones 1, 2, 20, 21 and 22 (see EN 60079-10-1 [7] and EN 60079-10-2 [8]) in which the minimum ignition energy of any explosive atmosphere is not less than 0,016 mJ;

·Electrostatic dissipative protective clothing shall not be used in oxygen enriched atmospheres, or in Zone 0 (see EN 60079-10-1 [7]) without prior approval of the responsible safety engineer;

·The electrostatic dissipative performance of the electrostatic dissipative protective clothing can be affected by wear and tear, laundering and possible contamination; electrostatic dissipative protective clothing shall be worn in such a way that it permanently covers all non-complying materials during normal use (including bending movements).

13. Cleaning & Maintenance

Warning: It is important to maintain the cleanliness of your Fire-fighters clothing. Soiled or contaminated garments are a hazard to fire-fighters as contaminants may be flammable, toxic or carcinogenic and may have lower protective performance. Even a garment which may look clean could have such contaminants lodged within the fibres or weave of the fabrics and this may affect the protective performance of the garment.

- Contaminated garments may suffer reduce d protective performance in the following ways:-
  - Soiled protective garments typically reflect less heat. Fabric saturated with hydrocarbons may tend to absorb rather than reflect radiant heat
  - Protective garments heavily contaminated with hydrocarbons will tend to conduct electricity, possibly increasing the danger when entering an area where electrical wiring may still be live
  - Protective garments contaminated by flammable substances such as oils, grease or hydrocarbons from soot and smoke can ignite and cause increased injury even though the fabric is normally flame resistant
  - Fabric can become weakened and tear more easily
  - Seams can become damaged or loose
  - Flame retardant or water repellent treatments may be removed or affected
  - Hi visibility materials and trim can be adversely affected
- ***Clean garments will offer better protection and correct cleaning can add to the life of the garment. Garments should therefore be cleaned after every use.***

Types of cleaning

- Routine Cleaning
  Light cleaning of the garment performed by the end user without removing the garment from service
- Advanced Cleaning
  Thorough cleaning of the garment by washing using cleaning agents. Normally the garment will need to be taken out of service.
- Contract Cleaning
  Cleaning conducted by an external specialist facility

Continued….

Cleaning Continued…

- Specialist Cleaning
  Cleaning to remove a hazardous material or contamination of body fluids. This requires specialised, specific procedures and / or specialised cleaning agents.

Routine Cleaning

Light soiling can be managed by regular routine cleaning after every use where the garment remains uncontaminated and is relatively clean. Routine maintenance and cleaning immediately after use can remove much of the contamination before it has “set in”. Suitably qualified personnel should examine the garment after use and evaluate the level or type of cleaning required. Basic routine cleaning can be undertaken as follows:-

1. Gently brush away any dry debris
2. Gently rinse off any other debris with water. Do not use heavy scrubbing or praying with pressure jets
3. Where necessary use a soft bristle brush to gently scrub the garment then rinse off with water again

Hand Washing

Where necessary additional hand washing can be conducted as part of a routine cleaning procedure. Such hand washing should be conducted in suitable utility sink, ensuring that suitable personal protective equipment such as protective cloves and eye / face protection:-

1. Pre-treat heavily soiled or spotted areas
   Warning:- DO NOT use chlorine bleach, chlorinated solvents, active ingredient cleaning agents or solvents without the manufacturers approval
2. Do not use a water temperature of more than 40^{o}C
3. Use a mild detergent with a pH range of not less than 6.0pH and not greater than 10.5pH
4. Scrub the garment softly with a soft bristle brush
5. Thoroughly rinse the garment
6. Inspect the garment and if necessary re-wash or submit it for advanced cleaning procedures
7. Dry the garment following drying guidelines below

Advanced Cleaning

Garments should be submitted for advanced cleaning at least once every 12 months. Such cleaning must be conducted by suitably trained personnel or by an independent qualified cleaning service provider. The label affixed to the inside of the garment may give any specific cleaning or washing instructions

Machine Washing

- Machine washing is the most effective method for cleaning garments. It is the most effective means of loosening and removing dirt, soot and other debris.
- The procedure for domestic machine washing is described in ISO 6330
  - Standard Wash
  - Temperature preferably 40°C – maximum 60°C
  - If heavily soiled pre-wash at 40°C
  - Use a mild detergent of not less than pH 6.0 and not greater than 10.5pH
- The basic machine washing procedure is described below:-
  - Do Not overload the machine
  - Pre-treat heavily soiled or spotted areas. DO NOT use chlorine bleach, chlorinated solvents, active ingredient cleaning agents or solvents without the manufacturer's approval
  - Fasten all zips, closers, hooks, snaps, loops, velcro and zippers
  - Do not exceed a water temperature of 40°C.
  - Use mild detergents or washing agents with a pH of not less than 6.0pH and not more than 10.5pH
  - Do not use a machine that exceeds an acceleration of 100Gs (980m/s^2)
  - Follow the machine manufacturers specific instructions for the proper settings or program selection for the garments being washed
  - After washing inspect the garments and re-wash if necessary
  - Dry the protective garments following drying procedures below

Contract and Specialist Cleaning

If contract or specialist cleaning is required in order to clean heavily soiled or contaminated garments it is responsibility of qualified personnel in your organisation or of your employer to ensure that the service provider is suitable qualified to ensure that correct procedures are followed.

Drying Procedures

- Unless any specific drying instructions are indicated by the care label affixed to the garment then follow the general guidelines below.
- Air drying is the most appropriate method for drying garments. It causes no mechanical damage and little or no shrinkage. Ideally use a specific drying room which includes suitable floor drains and uses fans to re-circulate the air in the room and exchange it with the external environment.
- Overall drying time for air drying will depend on the effectiveness of the drying environment. Using a dedicated drying room as described above with reduce drying time. Using simple ambient temperature to dry a garment will take longer.
- Care should be taken if using machine drying as mechanical damage can occur. Avoid using high basket temperatures.
- <u>Air Drying</u>
  - Hang the garment in an area with good ventilation
  - Do not dry in direct sunlight
  - Ensure the garment is fully dry before re-storage
- <u>Machine Drying</u>
  - Do not exceed the stated capacity of the machine
  - Fasten all closures, snaps, hooks, loops, Velcro and zippers.
  - Select a "no heat" or "air dry"" option if available
  - In the absence of such an option use a temperature setting of no higher than 40°C.
  - Discontinue the use of a heat cycle prior to the removal of all moisture from the garment
  - Complete the drying process using a "no heat" setting or by removing the garment from the machine and using an air drying method.

Storage

- The CE OSX Attack fire fighters suit should be stored in a cool and dry environment. Ensure garments are clean and fully dry before storage and ensure they are not stored packed together too tightly. Do not store in contact with direct sunlight.

Warning: A complete record, using the card attached in Appendix 1, should be kept of the use and cleaning of the Lakeland CE OSX Attack Fire protective garment.

Appendix 1: Cleaning Record

Garment Cleaning & Maintenance Record

User…….

Date of First Use…… Serial Number……

Date Washed	Comments & Recomendations	Signed

Date Inspected	Comments / Repairs	Signed