

CONTRACT SUMMARY

CITY OF FORT LAUDERDALE
PROCUREMENT SERVICES DIVISION

Period Covered:
3/21/12 – 3/20/14

Contract No.:
214-10775

Master Blanket:
N/A

Awarded Vendor:

Municipal Equipment Company, LLC
2049 West Central Blvd.
Orlando, FL 32805

Delivery: 14 days
Payment Terms: Net 30

Attn: Robert Fenneman
407-843-3071
Fax 877-775-2448
Email: dwest@mecofire.com

Insurance Coverage Required: Yes No
Authorized for Purchases: \$50,000 Under Over
City Commission Approval: 3/20/12 Pur-04 CAR 12-0568
Extension Options: Yes No Years: 2, 1 year extensions

FIREFIGHTER PROECTIVE BOOTS

Fire Fighting Boots, Haix North America
501605/501606 Fire Hunter Xtreme

\$ 269.00 / each

Department Contract Co-Ordinator: Alexandra Rampy, Fire-Rescue, (954) 828-6805
Procurement Specialist: Richard Ewell, CPPB



**Municipal Equipment Company, LLC
Proposal**

214-10775

FIREFIGHTER PROTECTIVE BOOTS

Opens: June 10, 2011

2:00 PM

**City of Fort Lauderdale
For Fire/Rescue Department
Procurement Department**

CONTRACT
COPY



Serving Professional Firefighters



June 8, 2011

Index

Tab:

1. Comply Information
2. Certificate of Insurance
3. Haix Distributor Letter
4. Municipal's Letter of Interest
5. Business License and State of Florida Certificate
6. Underwriters Laboratories Certificate of Compliance
7. Manufacturer's Warranty
8. Examples of Labeling and Bar Code
9. Haix North America Product Specification
10. Haix ISO Certificate
11. Crosstech® Information
12. Sarta Technical Services Report on wear of Crosstech®
13. Haix User Instruction, Safety and Training Guide
14. Haix Catalog-USA 2011 edition

Request for Proposal

214-10775

FIREFIGHTER PROTECTIVE BOOTS

**Opens: June 10, 2011
2:00 p.m.**



Venice of America

City of Fort Lauderdale

***Issued for Fire/Rescue Department
By the Procurement Department***

**James Hemphill
(954) 828-5143
E-mail: jhemphill@fortlauderdale.gov**

Visit us on the web at www.fortlauderdale.gov/purchasing

(954) 828-5140

Comply Information

The comply information requested below is for evaluation of the materials or equipment to be supplied. Proposers are requested to respond by indicating the appropriate response, either 'Yes' or 'No'. A 'Yes' reply shall indicate the item will be supplied as specified. A 'NO' reply shall indicate the item will not be supplied as specified. Items that do not pertain to your offering should be indicated with a 'N/A' symbol. If your offering offers additional items/features please indicate those items, under the appropriate heading, with an "*" symbol or other such notation. Proposal should represent every deviation (itemized by subheading and number) to the specifications. A written explanation must be submitted referencing the specific paragraph number and adequately defining the exception submitted. Product brochures and literature suitable for evaluation should also be submitted. For evaluation, the City will assume that any line left blank (with no response) will not be furnished as specified.

Certification and Warranty

The manufacturer of the boot shall certify that all materials and construction shall either meet or exceed all requirements set forth in the National Fire Protection Association Standard #1971, 2007 edition.

Does your proposal comply with this requirement?
YES (✓) NO ()

All boots shall be tested and listed by Underwriter's Laboratories or Safety Equipment Institute (SEI). A current copy of the manufacturer's UL or SEI certification listings should accompany proposal.

Does your proposal comply with this requirement?
YES (✓) NO ()

A minimum 1 year warranty covering defects in workmanship and materials, as long as the boots are cared for in accordance with manufacturers recommendations, should be provided.

Does your proposal comply with this requirement?
YES (✓) NO ()

Warranty of the moisture barrier should be for a minimum of one year and should cover leakage directly attributed to normal wear in the structural firefighters line of duty.

Does your proposal comply with this requirement?
YES (✓) NO ()

A copy of all warranties should be included with the proposal package.

Does your proposal comply with this requirement?
YES (✓) NO ()

All costs associated with repair or replacement of a boot under warranty should be the responsibility of the vendor including shipping costs.

Does your proposal comply with this requirement?
YES (✓) NO ()

Labeling Requirements

Labels should be permanently and integrally printed onto materials that meet all the requirements for labels of NFPA Standards 1971 (revised 2007).

Does your proposal comply with this requirement?
YES (✓) NO ()

The boots should be clearly labeled to fully identify the manufacturing information, which shall include, at a minimum, a lot number and manufacturing date.

Does your proposal comply with all of these requirements?
YES (✓) NO ()

Labels should be permanently and integrally printed on materials that meet all the requirements for labels of NFPA 1971. The footwear should be clearly labeled to fully identify the major material content and should be labeled with the FEMSA-style DANGER label.

Does your proposal comply with all of these requirements?
YES (✓) NO ()

Care Instruction

The successful manufacturer should provide an Official User Information Guide.

Does your proposal comply with all of these requirements?

YES (✓) NO ()

This material should be packaged with each pair of boots along with a summary sheet describing boot specifications and production details. This written information is to be in complete compliance with all NFPA guidelines. Topics to include but not necessarily limited to: User Cautions, Cleaning Instructions, doffing and donning instructions, maintenance criteria, repairs/customer changes, warranty information, size, fit and protective overlap requirements, safety considerations, storage conditions, decontamination considerations, retirement considerations, etc.

Does your proposal comply with all of these requirements?
YES (✓) NO ()

Traceability Program

Successful bidding manufacturer should provide a bar code system on the boots that is interleaved 2 of 5 containing at a minimum individual serial numbers for tracking purposes. This bar code system should be incorporated into a tracking program that is NFPA 1851 compliant and has a Production Control # to be recorded on boot label.

Does your proposal comply with this requirement?
YES (✓) NO ()

Outer Shell Material

The outer shell shall be constructed of hydrophobic leather, combination of hydrophobic leather and Nomex®/Kevlar® rip-stop fabric, or a combination of rubber and Nomex®/Kevlar® rip-stop fabric that covers the shaft of the boot. No exceptions.

Does your proposal comply with this requirement?
YES (✓) NO ()

Moisture Barrier Material

The boot shall incorporate a moisture barrier composed of a laminate of Cambrelle®, with virgin Kevlar® felt and CROSSTECH® Footwear Fabric. Kevlar® and facecloth fabric located interior to the moisture barrier to prevent moisture wicking. All seams shall be butt stitched and sealed with CROSSTECH® tape. Since this material is available to all manufacturers on an equal basis, there shall be no exception to the moisture barrier material. No exceptions.

Does your proposal comply with all of these requirements?
YES (✓) NO ()

Indicate total moisture barrier weight of your offering: 350 GRAMS +/- 30 GRAMS

Protective Toe Cap

The boots should include a anatomically formed protective toe cap made of fire resistant, abrasion resistant rubber covering the entire frontal toe area and incorporating three horizontally extended durability bumper cleats to deter toe area abrasion and extend the life of the boot.

Does your proposal comply with all of these requirements?

YES (✓) NO ()

The toe cap should meet ASTM F2413-05 standard for personal protection – protective footwear.

Does your proposal comply with all of these requirements?

YES (✓) NO ()

Protective Flexible Midsole

The boots shall incorporate a stainless steel flexible bottom plate with full hard temper to meet ASTM F2413-05 standard for personal protection – protective footwear. No exceptions.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

Shin Protection

The boots shall incorporate some sort of shin protection on the front of the boot to protect firefighters from injury during firefighting operations.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

Pull-On Loops

Four (4) one piece, minimum 3/4" wide, fully reinforced, pull on leather straps fastened approximately below top line to exterior boot shaft.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

Stitching should not penetrate the moisture barrier.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

Straps should be replaceable by construction.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

Sole

The soles should be made of a nitrile rubber shell, be oil and fuel resistant, with self-cleaning treads. They shall be fire resistant with a minimum NBS abrasion of 120 and able to withstand extreme heat. In addition, they should provide excellent thermal insulation against heat and cold with a high-voltage resistance of 14kv.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

Sizing

Minimum sizing requirements should be;

(Full and half sizes)

Men's 5-16 (half sizes)

Women's 5-12 (half sizes)

Narrow, Medium, and Wide widths must be available in all sizes.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

GENERAL REQUIREMENTS

The successful manufacturer agrees to deliver to Fort Lauderdale Fire Rescue one complete set of sizing boots to be utilized in determining sizes for individual members. Fort Lauderdale Fire Rescue will maintain the sizing set for 60 days at which point they will be returned to the manufacturer. The successful manufacturer will also provide a representative to assist for at least 5 business days of sizing along with personnel from Fort Lauderdale Fire Rescue Support Services to ensure members of Support Services are fully trained on sizing members of the department.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

Boot Delivery

Upon receipt of a request along with purchase order for a set of boots, the vendor will have four weeks or 20 business days to deliver the boots to Fort Lauderdale Fire Rescue. Violations of this delivery schedule will be cause for immediate termination of the contract.

Does your proposal comply with all of these requirements?

YES (✓)

NO ()

- END OF SECTION-

PRICING PAGE

ITEM	EST. QTY	DESCRIPTION	UNIT PRICE	TOTAL PRICE (UNIT PRICE X EST. QTY)
1.	60 pair/yr.	Fire Fighting Boots per specifications Manufacturer <u>HAIX NORTH AMERICA</u> Model/Style: <u>501605/501606</u> <u>FIRE HUNTER XTREME</u>	<u>\$ 269.00</u>	<u>\$ 16,140.00</u>

PRICE SHALL INCLUDE DELIVERY AND ALL INCIDENTALS. NO ADDITIONAL COSTS MAY BE ACCEPTED, OTHER THAN THE COSTS STATED ON THIS PROPOSAL PAGE.

OPTIONAL ITEM For Informational Purposes - not to be considered in total price evaluation.

In addition, Fort Lauderdale Fire Rescue is desirous of an extended wear program that allows for out of warranty footwear to be returned to the manufacturer for complete refurbishment through a resole package. This package should include any necessary replacement or repair of stitching, toe caps, and soles. The footwear shall be cleaned, deodorized, and receive new insoles. The cost for such a program will be fixed for the life of the agreement and will include return shipping of the boots to Fort Lauderdale Fire Rescue Support Services Bureau.

Will your company provide such a program Yes No

What would the cost per pair of boots be for such a program THE PRICE VARIES DEPENDING UPON THE SERVICE REQUIRED.

BID/PROPOSAL SIGNATURE PAGE

How to submit bids/proposals: It is preferred that bids/proposals be submitted electronically at w.bidsync.com, unless otherwise stated in the bid packet. If mailing a hard copy, it will be the sole responsibility of the Bidder to ensure that the bid reaches the City of Fort Lauderdale, City Hall, Procurement Department, Suite 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, prior to the bid opening date and time listed. Bids/proposals submitted by fax or email will NOT be accepted.

The below signed hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the CITY and such acceptance covers all terms, conditions, and specifications of this bid/proposal.

Please Note: If responding to this solicitation through BidSync, the electronic version of the bid response will prevail, unless a paper version is clearly marked **by the bidder** in some manner to indicate that it will supplant the electronic version. All fields below **must** be completed. If the field does not apply to you, please note N/A in that field.

Submitted by: Robert J. Franceman 01/08/2011
(signature) (date)

Name(printed) ROBERT J. FRANCEMAN Title: President

Company:(Legal Registration) MUNICIPAL EQUIPMENT COMPANY, LLC

CONTRACTOR, IF FOREIGN CORPORATION, MAY BE REQUIRED TO OBTAIN A CERTIFICATE OF AUTHORITY FROM THE DEPARTMENT OF STATE, IN ACCORDANCE WITH FLORIDA STATUTE §607.1501 (visit <http://www.dos.state.fl.us/>).

Address: 2049 W. CENTRAL BLVD.

City ORLANDO State: FL Zip 32805

Telephone No. 407-843-3071 FAX No. 877-775-2448 Email: dwest@meoffice.com

Delivery: Calendar days after receipt of Purchase Order (section 1.02 of General Conditions): 14 DAYS

Payment Terms (section 1.04): NET 30 Total Bid Discount (section 1.05): N/A

Does your firm qualify for MBE or WBE status (section 1.09): MBE _____ WBE _____

ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal:

Addendum No.	Date Issued
1	6/6/11
2	6/8/11



City of Fort Lauderdale • Procurement Services Department
100 N. Andrews Avenue, #619 • Fort Lauderdale, Florida 33301
954-828-5933 FAX 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

RFP 214-10775
FIREFIGHTER PROTECTIVE BOOTS

ISSUED; June 6, 2011

1. The following questions have been responded to regarding specifications in the RFP:

In the bid after reference to the User Guide, there is a statement requesting that a summary sheet of boot specs be included in the boot boxes. As a manufacturer, we have developed our own User Guide instead of using the more generic FEMSA User guide. It covers all listed required elements. We do include a sample graphic of the NFPA label in the User Guide for each boot certified to NFPA. As an example, it lists the materials used in manufacture, the place of manufacture, what certifications it has, etc. Is this sufficient to meet the requirement of a boot spec summary?

Answer

Staff feels that that would be sufficient and meets the intent of the RFP specification.

Question 2

In the bid there is more than one reference to the requirement of a 1 year warranty on materials and workmanship. But under G4 in the bid point 1, "Warranties should include, but not be limited to the following: a lifetime warranty covering defects in workmanship and materials" I am confused as to whether there is a requirement for a 1 year warranty or a lifetime warranty. Please clarify.

Answer

Reference to lifetime warranty should be disregarded - 1 year warranty requirement remains.

Question 3

Questions:

In Section Part 1 - number 05

Question #1

1) - minimum qualifications are stated the construction of the outer upper portion of the boot being of a fabric make up. After the discussions at the pre bid conference on Thursday, June 2, is this still a no exception requirement, or is an



City of Fort Lauderdale • Procurement Services Department
100 N. Andrews Avenue, #619 • Fort Lauderdale, Florida 33301
954-828-5933 FAX 954-828-5576
purchase@fortlauderdale.gov

all leather boot acceptable?

Question #2

Is a Nomex/Kevlar Blend with Crosstech acceptable in place of the Virgin Kevlar?
Section 1 Part 1 Number 5 3)

Question #3

Is a Lenzi Puncture Protection insert in place of stainless steel bottom plate
acceptable? **(Submitted: Jun 6, 2011 10:00:16 AM EDT)**

Answer

1. Original Specifications remain unchanged.
2. Yes
3. No - it is not acceptable. Original specifications remain unchanged.

All other terms, conditions, and specifications remain unchanged.

This addendum should be signed and returned with the proposal response or
acknowledged on the BID/PROPOSAL SIGNATURE PAGE of the proposal.

James T. Hemphill
Sr. procurement Specialist

Company
Name:

MUNICIPAL EQUIPMENT COMPANY, LLC
(please print)

Bidder's
Signature:



Date:

6/08/2011



City of Fort Lauderdale • Procurement Services Department
100 N. Andrews Avenue, #619 • Fort Lauderdale, Florida 33301
954-828-5933 FAX 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 2

RFP 214-10775
FIREFIGHTER PROTECTIVE BOOTS

ISSUED; June 8, 2011

1. The following correction has been made regarding the answer to question number 3.2 (2nd question asked and responded to for question #3 below:

Question 3

Question #2

Is a Nomex/Kevlar Blend with Crosstech acceptable in place of the Virgin Kevlar?
Section 1 Part 1 Number 5 3)

Answer

2. Yes

CORRECTION: Regarding the answer to question #2 - The answer is no, the Nomex/Kevlar blend is not acceptable for this item. The specifications must remain the same as originally indicated.

All other terms, conditions, and specifications remain unchanged.

This addendum should be signed and returned with the proposal response or acknowledged on the BID/PROPOSAL SIGNATURE PAGE of the proposal.

James T. Hemphill
Sr. procurement Specialist

Company
Name:

MUNICIPAL EQUIPMENT COMPANY, LLC
(please print)

Bidder's
Signature:

Karl J. Genneman

Date:

6/08/2011

VARIANCES: State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. **HAVE YOU STATED ANY VARIANCES OR EXCEPTIONS BELOW? BIDDER MUST CLICK THE EXCEPTION LINK IF ANY VARIATION OR EXCEPTION IS TAKEN TO THE SPECIFICATIONS, TERMS AND CONDITIONS.** If this section does not apply to your bid, simply mark N/A in the section below.

Variances:

NO VARIANCES OR EXCEPTIONS TAKEN

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

NAME

RELATIONSHIPS

N/A

N/A

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.



CERTIFICATE OF LIABILITY INSURANCE

OP ID: BK

DATE (MM/DD/YYYY)

05/31/11

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER OLW 605 E. Robinson St., Suite 320 Orlando, FL 32801 Matthew West	407-425-3411	CONTACT NAME: Kristen Pino
	407-843-2632	PHONE (A/C, No, Ext): 407-425-3411
		FAX (A/C, No): 407-843-2632
		E-MAIL ADDRESS: kpino@olwinc.com
		PRODUCER CUSTOMER ID #: MUNIC-1
INSURED Municipal Equipment Co, LLC Bob Fenneman 2049 West Central Boulevard Orlando, FL 32805		INSURER(S) AFFORDING COVERAGE
	INSURER A : The Hartford	NAIC # 38261
	INSURER B : Maxum Indemnity Company	26743
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> GENERAL LIABILITY		GLP600903903	02/14/11	02/14/12	EACH OCCURRENCE \$ 1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person) \$ 5,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					PERSONAL & ADV INJURY \$ 1,000,000
	<input type="checkbox"/> POLICY	<input type="checkbox"/> PRO-JECT				GENERAL AGGREGATE \$ 3,000,000
		<input type="checkbox"/> LOC				PRODUCTS - COMP/OP AGG \$ 3,000,000
						Emp Ben. \$ 1,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY		21UECKK5978	02/14/11	02/14/12	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO					BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> SCHEDULED AUTOS					PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS					\$
	<input type="checkbox"/> NON-OWNED AUTOS					\$
	<input type="checkbox"/> UMBRELLA LIAB	<input type="checkbox"/> OCCUR				EACH OCCURRENCE \$
	<input type="checkbox"/> EXCESS LIAB	<input type="checkbox"/> CLAIMS-MADE				AGGREGATE \$
	<input type="checkbox"/> DEDUCTIBLE					\$
	<input type="checkbox"/> RETENTION \$					\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	<input type="checkbox"/> Y / <input type="checkbox"/> N	21WBCVX2986	05/22/11	05/22/12	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> N/A				E.L. EACH ACCIDENT \$ 100,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE \$ 100,000
						E.L. DISEASE - POLICY LIMIT \$ 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

CITYOFF

City of Ft Lauderdale
Procurement Dept
Attn: Mr. Jim Hemphill
100 N Andrews Ave, Rm #619
Ft Lauderdale, FL 33301

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2009 ACORD CORPORATION. All rights reserved.



HAIX® North America

2320 Fortune Drive, Suite 120
Lexington, KY 40509

Phone 859-281-0111

Toll Free: 866-344-HAIX (4249)

Fax: 859-281-0113

Email: service-hna@haix.com
www.haix.com

June 6, 2011

James Hemphill
City of Ft. Lauderdale Procurement
100 N. Andrews Ave. Ste. 619
Ft Lauderdale, FL 33301
RFP-214-10775

To Whom It May Concern:

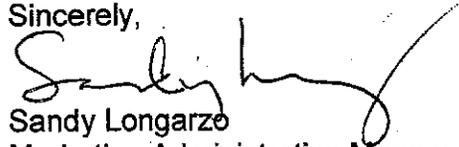
This letter is to inform the City of Ft Lauderdale Procurement that Municipal Equipment Company, LLC of Orlando, Florida is currently the sole stocking distributor in the State of Florida of the HAIX® Leather Fire Fighting boots manufactured by HAIX® Schuhe Produktions- und Vertriebs GmbH, Germany distributed by HAIX® North America, Inc.

Municipal Equipment maintains the appropriate backup stock of our products and is authorized to handle all warranty, factory repair or replacement issues upon prior approval of HAIX® North America, Inc.

HAIX® North America, Inc. is proud of our partnership with Municipal Equipment.

Please do not hesitate to call or write regarding this relationship.

Sincerely,


Sandy Longarzo
Marketing Administration Manager



June 8, 2011

Letter of Interest
Request for Proposal
214-10775
FIREFIGHTER PROTECTIVE BOOTS
City of Fort Lauderdale

A. Letter of Interest/Cover Letter: Municipal Equipment and Haix North America are pleased to submit our proposal for the Fort Lauderdale Firefighter Protective Boots. You will see that the experience of Municipal Equipment and Haix that we sell only the best quality long lasting Leather Structural Fire Fighting Boots and will provide the best in service.

B. With this letter we are submitting; Business License, Certificate of Insurance, Manufactures Certificate ISO 9001: 2000.

C. Company Profile: Municipal Equipment Company, LLC, 2049 West Central Boulevard, Orlando, Florida. Phone: 1800-228-8448 (407-843-3071) FAX: 1877-775-2448. The company is owned by Bob Fenneman bob@mecofire.com, Dale West is Vice President of Customer Service dwest@mecofire.com. The company is a local company with sales in Florida and Georgia only. Enclosed you will find the Florida Certificate showing the company as a legal entity in the State of Florida. Municipal has been in business for almost 40 years here in Florida and under current management 12 years.

D. Comply Information: We are submitting the Haix Fire Hunter Xtreme Leather Fire Fighting Bunker and we meet or exceed all the specification in the Proposal.



E. Quality & Features of Products Offered:

E1. The boot will be Haix Fire Hunter Xtreme model 501605 men and women 501606. Boot sizes available men's 5-16 & half sizes, women 5-12 & half sizes and available in Narrow, Medium, Wide and Extra Wide. This boot meets or exceeds the specification for this Proposal therefore we will not have any variances to the specification.

E2. Each member of the Fire Department will be sized with a complete sizing set by Municipal's Regional Sales Manager John Hogan 561-723-0108 jhog31863@aol.com or Haix Regional Manager Christian Jarehring 859-420-5453 cjarehring@haix.com.

E3. With this letter you will find Haix Manufactured Product Specification and Care Instructions for the boot we have proposed. Another feature of the Haix Leather Fire Fighting Boots, is after the useful life of the boot we have a program called from old to new again where the boot can be sent to a company, New Shoe and for a monomial charge the sole will be replaced, necessary stitching repairs, replace or repair toe cap, replace missing hardware, new Haix insole and clean, shampoo, polish and deodorize the boots using all original parts and materials making the boot look like brand new and in compliance (we think of this as a lifetime boot).



F. References:

1. City of Pompano Beach, Michael Fox, Michael.fox@copbfl.com, 954-830-2468.
2. Monroe County Fire Department, Harvey Hillman, hillman-harvey@monroecounty-fl.gov.
3. City of West Palm Beach, Capt. Ron Lauth, rpl450@aol.com, 561-804-4740, 772-766-3843.
4. Palm Beach County Fire Rescue, Chief Tolbert, ttolbert@pbcgov.org 561-616-6938.
5. Okeechobee County Fire Rescue, Lt. Bob Banfield, rbanfield@co.okeechobee.fl.us.
More references upon request.

G. Certification and Warranty:

G1. A letter from Haix is attached to certify the boots meet or exceed all the requirements of NFPA 1971, 2007 revision.

G2. Attached you will find as previously shown the Underwriters Laboratories Certificate of Compliance as the third party certification and the boots meet NFPA 1971 2007.

G3. Enclosed is a copy of the Haix one year warranty showing the terms and conditions.

G4. As stated above, enclosed is copy of the Haix detailed one year warranty.



G4. 1. & 2. It's our understanding the lifetime warranty and the warranty of the moisture barrier was waived through Amendment 1.

H. Delivery Schedule: In stock boots will be delivered within five to ten days after the Fire Fighter has been measured with a Purchase Order from the department. Stock outs will be delivered within 60 days of order. In almost every case Haix has had plentiful inventory. Stock outs have not been a problem with this boot.

I. Qualifications/Experience: Haix has been manufacturing hiking boots and shoes for over fifty years, but in 1992 Ewald Haimerl second generation cobbler for his father's shoe company and a German Fire Fighter developed the first Leather Fire Fighting Boot. The Haix boot company is a very dynamic manufacture of Fire Fighting Boots, continually up grading and improving their products.

Municipal Equipment has been selling fire fighting boots for almost forty years, first with structural rubber boots (still sells rubber today) and about fifteen years selling Leather Structural Fire Fighting Boots. We have an expertise in measuring and sizing the fire fighter the first time.

J. Required Documentation: Refer to the Haix letter dated June 6, 2011 NFPA 1951-2002 edition and Haix Fire Hunter Xtreme meets this requirement as the boots are manufactured to the NFPA 1971-2007 edition. NFPA 1851, 2008 edition Standard see user guide instructions to meet this requirement. NFPA 1971, 2007 edition UL Certificate attached. NFPA 1992, 2005 edition is shown on the attached UL Certificate.

K. Listing of Exceptions to Specification: Haix and Municipal Equipment take no exceptions or clarification to the requirement.



L. Cost/Financial Proposal: The cost of the Fire Hunter Extreme will be \$269.00 per pair of boots. This cost will be good for two years from date of contract and includes all shipping and handling costs.

M. Sample Boots for Field Testing: The three pair of boots were shipped June 7, 2011 as per the Proposal requirements. The boots were shipped to 100 North Andrews Avenue, Room 619, 6th floor, City Hall. Fort Lauderdale.

Thank you for the opportunity to participate in both the wear test of the Haix Leather Firefighting boots and the Proposal.

Sincerely,

A handwritten signature in black ink, which appears to read "Bob Fenneman". The signature is written in a cursive style with a large initial "B".

Bob Fenneman

CITY OF ORLANDO

ECONOMIC DEVELOPMENT
PERMITTING SERVICES

LOCAL BUSINESS TAX RECEIPT

(Formerly known as "Business License, changed per state law HB1299-2008)

2010-2011

Issued Date: 09/20/2010

Expiration Date: 09/30/2011

Case Number: BUS0009920-007

Business Name

MUNICIPAL EQUIPMENT CO
2049 W CENTRAL BLVD
ORLANDO, FL 32805

Business Owner

COMPANY LL
MUNICIPAL EQUIPMENT

Business Location:

2049 W Central Blvd

Business Type(s):

MERCNT 5096 WSALE MACHINERY

Fees:

Administration Fee	20.00
2011 Business Tax	866.75
Total Paid	\$886.75

NOTICE - THIS RECEIPT ONLY EVIDENCES PAYMENT OF THE LOCAL BUSINESS TAX PURSUANT TO CH. 205, FLORIDA STATUTES. IT DOES NOT PERMIT THE HOLDER TO OPERATE IN VIOLATION OF ANY CITY, STATE, OR FEDERAL LAW. CITY PERMITTING MUST BE NOTIFIED OF ANY MATERIAL CHANGE TO THE INFORMATION FOUND HEREIN BELOW. THIS RECEIPT DOES NOT CONSTITUTE AN ENDORSEMENT OR APPROVAL OF THE HOLDER'S SKILL OR COMPETENCY.

State of Florida

Department of State

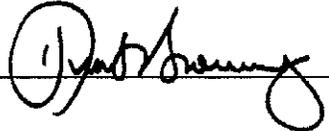
I certify from the records of this office that MUNICIPAL EQUIPMENT COMPANY, LLC is a limited liability company organized under the laws of the State of Florida, filed on December 28, 1999.

The document number of this limited liability company is L99000009278.

I further certify that said limited liability company has paid all fees due this office through December 31, 2011, that its most recent annual report was filed on March 21, 2011, and its status is active.

I further certify that said limited liability company has not filed Articles of Dissolution.

*Given under my hand and the Great Seal of
Florida, at Tallahassee, the Capital, this the
Seventh day of June, 2011*



Secretary of State



Authentication ID: 400208577324-060711-L99000009278

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.

<https://efile.sunbiz.org/certauthver.html>

Certificate of Compliance

Certificate Number **SA12414-20061221**
Report Reference **SA12414, Volume 1, Issue Date 2006-12-21**
Issue Date **2011-03-15**

Page 1 of 1



**Underwriters
Laboratories Inc.®**

Issued to: **Haix-Schuhe Produktions- und Vertriebs GmbH**
Auhofstrasse 10
Mainburg, 84048 GERMANY

*This is to certify that
representative samples
of*

**Protective Footwear for Structural Fire Fighting
And Hazardous Materials Emergencies**

Leather Boots in the Following Models:
Fire Hunter USA, Fire Hunter USA Ladies
Fire Hunter Xtreme, Fire Hunter Xtreme Ladies
Fire Hero Xtreme, Fire Hero Xtreme Ladies

*Have been investigated by Underwriters Laboratories Inc.® in accordance
with the Standard(s) indicated on this Certificate.*

**Standard(s)
for Safety:**

NFPA 1971-2007, Standard on Protective Ensembles for Structural Fire Fighting
NFPA 1992-2005, Standard on Liquid Splash-Protective Ensembles & Clothing for Hazardous Materials Emergencies
CAN/CSA-Z195-2009, Standard for Protective Footwear
ASTM F2413-2005, Standard Specification for Protective Footwear

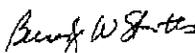
**Additional
Information:**

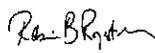
Classified in Accordance with Standard CAN/CSA-Z195-2009 for Grade 1 toe protection and sole puncture resistance.
Classified in Accordance with Standard ASTM F2413-2005 for Impact Class I/75, Compression Class C/75, and PR-Puncture Resistance.

Look for the UL Classification Mark on the product

Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow-Up Service.

The UL Classification Mark includes: UL in a circle symbol:  with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and, the product category name (product identity) as indicated in the appropriate UL Directory. See UL On-Line Certification Directory at www.ul.com for additional information.

Issued by: 
Beverly Wooten Stutts, Senior Project Engineer

Reviewed by: 
Robin B. Royster, Staff Engineer

MANUFACTURER'S LIMITED WARRANTY

HAIX Schuhe Produktions- und Vertriebs- GmbH, Germany, ("MANUFACTURER") warrants only that the Products shall be free from defects in materials and workmanship for a period of one year after the date of delivery, unless otherwise agreed to by MANUFACTURER in writing. If within the applicable warranty period, (i) the purchaser discovers any defects in the materials or workmanship of any of the Products and (ii) notifies MANUFACTURER in writing of such defects and returns the defective items to MANUFACTURER, MANUFACTURER shall repair or replace the defective items, or, at MANUFACTURER's sole option, refund the purchase price for each defective item. This warranty shall not apply to any of the following: (a) Products that have been repaired or altered by anyone other than MANUFACTURER approved personnel; (b) Products that have been damaged by negligence or accident or by other circumstances beyond the reasonable control of MANUFACTURER; or (c) Products that have been improperly used or maintained, or that have been subjected to abnormal conditions of use or maintenance not in conformity with MANUFACTURER's written instructions concerning use and maintenance. In no case whatsoever, including justified warranty claims, is the purchaser entitled to retain payments due, except upon the written consent of MANUFACTURER with respect to undisputed claims. No claims for warranty will be processed if received after the warranty period.

IN ALL EVENTS, THE LIABILITY OF MANUFACTURER, WHETHER BASED IN TORT, BREACH OF CONTRACT, BREACH OF WARRANTY, OR OTHERWISE, SHALL NOT UNDER ANY CIRCUMSTANCES EXCEED THE PRICE OF THE DEFECTIVE PRODUCTS IN QUESTION OR WITH RESPECT TO WHICH SUCH BREACH, DEFAULT, OR NEGLIGENCE IS CLAIMED. THE PURCHASER ACKNOWLEDGES THAT THE REMEDIES PROVIDED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER REMEDIES.

THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.

MANUFACTURER SHALL NOT BE LIABLE FOR MULTIPLE, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, DAMAGE OR LOSS OF OTHER PROPERTY OR PRODUCTS, LOSS OF PROFITS OR REVENUE, LOSS OF USE OF MACHINERY OR PARTS THEREOF, INABILITY TO PERFORM SPECIFIC PROJECTS, COST OF CAPITAL, INJURIES TO OR DEATH OF PERSONS OR DAMAGE TO PROPERTY OR CLAIMS RESULTING FROM A DEFECT IN THE PRODUCTS OR BREACH OF THIS WARRANTY.

This warranty gives the purchaser of Products specific legal rights. The purchaser may also have other legal rights, which vary from state to state. Some states do not allow the exclusion of incidental or consequential damages.

MANUFACTURER designates HAIX NORTH AMERICA, INC. as its representative to perform MANUFACTURER'S duties under this warranty provided that such designation does not relieve MANUFACTURER of his direct responsibilities hereunder nor make HAIX NORTH AMERICA, INC. a co-warrantor. All notices and returns of defective items shall be made to the following address:

HAIX NORTH AMERICA, INC.
2320 Fortune Drive, Suite 120
Lexington, Kentucky 40509
U.S.A.

CORP991993.2

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.

CLASSIFIED
 ASTM F2413-05
M/175/C75/M/75
PR
16 KR

PROTECTIVE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR FOR EMERGENCY MEDICAL OPERATIONS IN ACCORDANCE WITH NFPA 1999-08. ALSO CLASSIFIED IN ACCORDANCE WITH NFPA 1951-07, NFPA 1992-05, NFPA 1977-05, CAN/CSA Z195-09 AND ASTM F2413-05.

Special Fighter Xtreme
Article: 504204 Production Date: 02/2010

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: BULL LEATHER, CROSSTECH CAMBRILLE, RUBBER OUTSOLE
MADE BY: HAIKON Schuhe GmbH
Auhofstrasse 10
94048 Mainburg, GERMANY
CLEANING: HAND WASH WITH WARM WATER

THIS FOOTWEAR MEETS THE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR REQUIREMENTS OF NFPA 1999, STANDARD ON PROTECTIVE CLOTHING FOR EMERGENCY MEDICAL OPERATIONS, 2008 EDITION.
THIS UTILITY AND RESCUE AND RECOVERY PROTECTIVE ENSEMBLE FOOTWEAR ELEMENT MEETS THE REQUIREMENTS OF NFPA 1951, STANDARD ON PROTECTIVE ENSEMBLES FOR TECHNICAL RESCUE INCIDENTS, 2007 EDITION.
THIS WILDLAND FIRE FIGHTING PROTECTIVE FOOTWEAR MEETS THE FOOTWEAR REQUIREMENTS OF NFPA 1977, STANDARD ON PROTECTIVE CLOTHING AND EQUIPMENT FOR WILDLAND FIRE FIGHTING, 2005 EDITION.
THIS LIQUID-SPLASH PROTECTIVE FOOTWEAR MEETS THE BASIC REQUIREMENTS OF NFPA 1992, STANDARD ON LIQUID-SPLASH PROTECTIVE ENSEMBLE AND CLOTHING FOR HAZARDOUS MATERIAL EMERGENCIES, 2005 EDITION.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE		X

THE TECHNICAL DATA PACKAGE CONTAINS INFORMATION ON CHEMICALS AND SPECIFIC CHEMICAL MIXTURES FOR WHICH THIS FOOTWEAR IS CERTIFIED. CONSULT TECHNICAL DATA PACKAGE AND MANUFACTURERS INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
9 M

999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.

CLASSIFIED
 ASTM F2413-05
M/175/C75/M/75
PR
84 FF

PROTECTIVE FOOTWEAR FOR STRUCTURAL FIRE FIGHTING IN ACCORDANCE WITH NFPA 1971-07. ALSO CLASSIFIED IN ACCORDANCE WITH NFPA 1992-05, NFPA 1951-07, NFPA 1977-05, CAN/CSA Z195-09 AND ASTM F2413-05.

Fire Flash Xtreme
Article: 506005 Production Date: 02/2010

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, DURACOM, CAMBRILLE
MADE BY: HAIKON Schuhe GmbH
Auhofstrasse 10
94048 Mainburg, GERMANY
CLEANING: HAND WASH WITH WARM WATER

THIS STRUCTURAL FIRE FIGHTING PROTECTIVE FOOTWEAR MEETS THE FOOTWEAR REQUIREMENTS OF NFPA 1971, 2007 EDITION.
THIS UTILITY AND RESCUE AND RECOVERY PROTECTIVE FOOTWEAR ELEMENT MEETS THE REQUIREMENTS OF NFPA 1951, STANDARD ON PROTECTIVE ENSEMBLES FOR TECHNICAL RESCUE INCIDENTS, 2007 EDITION.
THIS WILDLAND FIRE FIGHTING PROTECTIVE FOOTWEAR MEETS THE REQUIREMENTS OF NFPA 1977, STANDARD ON PROTECTIVE CLOTHING AND EQUIPMENT FOR WILDLAND FIRE FIGHTING, 2005 ED
THIS LIQUID-SPLASH PROTECTIVE FOOTWEAR MEETS THE BASIC REQUIREMENTS OF NFPA 1992, STANDARD ON LIQUID-SPLASH PROTECTIVE ENSEMBLE AND CLOTHING FOR HAZARDOUS MATERIAL EMERGENCIES, 2005 EDIT

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE		X

THE TECHNICAL DATA PACKAGE CONTAINS INFORMATION ON CHEMICALS AND SPECIFIC CHEMICAL MIXTURES FOR WHICH THIS FOOTWEAR IS CERTIFIED. CONSULT TECHNICAL DATA PACKAGE AND MANUFACTURERS INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
9 M

999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.

CLASSIFIED
 ASTM F2413-05
M/175/C75
PR
84 PF

PROTECTIVE FOOTWEAR FOR STRUCTURAL FIRE FIGHTING IN ACCORDANCE WITH NFPA 1971-07. ALSO CLASSIFIED IN ACCORDANCE WITH NFPA 1992-05, CAN/CSA Z195-09 AND ASTM F2413-05.

Fire Hunter US
Article: 502002 Production Date: 02/2010

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, DURACOM, CAMBRILLE
MADE BY: HAIKON Schuhe GmbH
Auhofstrasse 10
94048 Mainburg, GERMANY
CLEANING: HAND WASH WITH WARM WATER

THIS STRUCTURAL FIRE FIGHTING PROTECTIVE FOOTWEAR MEETS THE FOOTWEAR REQUIREMENTS OF NFPA 1971-2007
THIS LIQUID-SPLASH PROTECTIVE FOOTWEAR MEETS THE BASIC REQUIREMENTS OF NFPA 1992-2005 STANDARD ON LIQUID-SPLASH PROTECTIVE ENSEMBLE AND CLOTHING FOR HAZARDOUS MATERIAL EMERGENCIES.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE		X

THE TECHNICAL DATA PACKAGE CONTAINS INFORMATION ON CHEMICALS AND SPECIFIC CHEMICAL MIXTURES FOR WHICH THIS FOOTWEAR IS CERTIFIED. CONSULT TECHNICAL DATA PACKAGE AND MANUFACTURERS INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
9 M

999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.

CLASSIFIED
 ASTM F2413-05
M/175/C75
PR
84 FF

PROTECTIVE FOOTWEAR FOR STRUCTURAL FIRE FIGHTING IN ACCORDANCE WITH NFPA 1971-07. ALSO CLASSIFIED IN ACCORDANCE WITH NFPA 1992-05, CAN/CSA Z195-09 AND ASTM F2413-05.

Fire Hunter Xtreme
Article: 501605 Production Date: 02/2010

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, DURACOM, CAMBRILLE
MADE BY: HAIKON Schuhe GmbH
Auhofstrasse 10
94048 Mainburg, GERMANY
CLEANING: HAND WASH WITH WARM WATER

THIS STRUCTURAL FIRE FIGHTING PROTECTIVE FOOTWEAR MEETS THE FOOTWEAR REQUIREMENTS OF NFPA 1971-2007
THIS LIQUID-SPLASH PROTECTIVE FOOTWEAR MEETS THE BASIC REQUIREMENTS OF NFPA 1992-2005 STANDARD ON LIQUID-SPLASH PROTECTIVE ENSEMBLE AND CLOTHING FOR HAZARDOUS MATERIAL EMERGENCIES.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE		X

THE TECHNICAL DATA PACKAGE CONTAINS INFORMATION ON CHEMICALS AND SPECIFIC CHEMICAL MIXTURES FOR WHICH THIS FOOTWEAR IS CERTIFIED. CONSULT TECHNICAL DATA PACKAGE AND MANUFACTURERS INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
9 M

999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.

CLASSIFIED
 ASTM F2413-05
M/175/C75
PR
85 RU

PROTECTIVE CLOTHING AND EQUIPMENT FOR WILDLAND FIRE FIGHTING IN ACCORDANCE WITH NFPA 1977-2005. ALSO CLASSIFIED IN ACCORDANCE WITH ASTM F2413-05.

Fire Hiker
Article: 201017 Production Date: 201017

THIS WILDLAND FIRE FIGHTING PROTECTIVE FOOTWEAR MEETS THE FOOTWEAR REQUIREMENTS OF NFPA 1977, STANDARD ON PROTECTIVE CLOTHING AND EQUIPMENT FOR WILDLAND FIRE FIGHTING, 2005 EDITION.

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, TEXTILE LINING, RUBBER OUTSOLE
MADE BY: HAIKON Schuhe GmbH
Auhofstrasse 10
94048 Mainburg, GERMANY
CLEANING: HAND WASH WITH WARM WATER

US-Size
9 M

999990901001

Made in Germany

Note: Labels for the ladies' boots are not shown above.



HAIX[®] North America, Inc. Product Specification Sheet

FIRE HUNTER[®] XTREME

Article #	501605
Sizes	men 5-16, half sizes ladies 5-12, half sizes
Widths	Narrow, Medium, Wide
Leg Height	14 inches
Manufacturer	HAIX [®] - Schuhe Produktions- und Vertriebs GmbH
Country of Origin	Germany
Product Abstract	Bunker boot, black, waterproof (to 10.5 inches measured from top of the insole), full leather, profiled rubber toe cap, large boot straps on both sides, shin protection, boot with non-slip, shock-absorbing rubber outsole and machine washable insole.

A booklet containing product details, antistatic information, and care instructions will be included with each pair of shoes.

Materials

Upper	Hydrophobic (treatment whereby water cannot penetrate the leather from the outside, but water vapor from foot perspiration can be released through the leather from the interior of the boot to the exterior of the boot), full grain cowhide, breathable, color black. Approx. 0.1 - 0.08 inches (2.5 - 2.7 mm) thick. Tested to be hydrophobic for a minimum of 120 minutes (dynamic test in the Penetrometer). Free of PCP, AZO and Chromium-VI.
Shaft closure (casing & top band)	Hydrophobic casing leather, breathable, color black. Approx. 0.04 - 0.05 inches (1.1 - 1.3 mm) thick. Tested to be hydrophobic for a minimum of 120 minutes (dynamic test in the Penetrometer).



	Free of PCP, AZO and ChromeVI. The casing is approx. 1.5 inch (40 mm) high.
Heel bend	Black edging leather, minimum 0.04 – 0.05 inches (1.0 - 1.2 mm) thick.
Shin protection	Memory foam between shaft and lining, 0.31 inches (8 mm) thick.
Pull-on loop	Two large pull-on loops at both sides made from upper leather, strengthened with textile strip.
Padding	Soft, reticulated foam.
Lining	4 layer waterproof laminate with permanently welded seams, abrasion resistance, and nonwoven. 1 st layer Thermobonded nonwoven 2 nd layer Bicomponent membrane based on ePTFE or at least similar 3 rd layer Functional nonwoven 4 th layer Backing fabric: knit monofilament
Inside back strap	A highly abrasion resistant non-woven material.
Thread	NOMEX [®] threads, with a minimum thickness of 30/3, water repellent, colour yellow.
Foot bed	Moisture-absorbing insole with steel joint and ankle support made from Texon T93 (fleece), 0.1 inch (2.5 mm) thick.
Ladder shank	Thickness \geq 1.4 mm, stainless, 3 ruffles, deflection at 400 lb (182 kg) acc. NFPA 1971-2007 not more than 1/4 inch (6 mm)
Insole	Anatomically formed, nonwoven, abrasion resistant, wicks moisture away from foot, machine washable at 86 °F.
Heel counter	Made of fibrous leather board, matching to the firefighting last.
Outsole	Oil and fuel resistant, non-slip and non-chalky rubber shell sole, contains PU damping wedge with reinforcing metal insert, self cleaning.

Technical Information

Outsole

- Toe spring of approx. 0.38 inches (10 mm) and a heel spring of approx. 0.5 inches (12 mm) ensure a natural stride.
- Shore hardness rubber outsole Shore A 65° at 73.4 °F (tolerance \pm 3).
- Main tread depth minimum 0.24 inches (5.5 mm); round tread groove base.
- Angular edging or the tread stake at the sole margin for high lateral stability.
- Light ladder heel treading in the joint area.



<ul style="list-style-type: none">• Highly heat resistant connection of the rubber sole with the PU wedge and the upper.
Steel mid sole <ul style="list-style-type: none">• Thickness \geq 0.5 mm• stainless• Puncture resistance acc. NFPA 1971-2007 > 1212 N (272 lbf)• Flex cracking resistance<ul style="list-style-type: none">○ acc. NFPA 1971-2007 > 1,000,000 Flexes○ acc. CAN/CSA-Z195-02 > 1,500,000 Flexes
Instep flex <ul style="list-style-type: none">• System offering a very good heel adaptation of the boot to different instep heights and widths.• With elastic insert which stretches when stepping into the boot and therefore enables the foot to get in.• This elastic insert encompasses the foot tightly in the instep area and pushes it against the rear cap.• During walking, a tight heel fit has to be guaranteed. The heel may not (or only at a minimum) move up and down inside the boot ("slipping" in the boot).
Heel and instep bend <ul style="list-style-type: none">• Guarantees a smooth movement when kneeling, bending, and operating a machine.• With padded leather as instep and heel bend.• With an equivalent puncture proof analogical to the rest of the upper in the instep area.
Pull-on loops <ul style="list-style-type: none">• With leather straps on both sides of the boots.• At least 1 inch (25 mm) broad having a length of approx. 10 inches (25 cm).
Reflective strip <ul style="list-style-type: none">• With an at least 20 mm wide reflection strip at the outside.• From the upper edge of the outer counter to the middle seam of the boot tube.
Toe protection cap <ul style="list-style-type: none">• Steel toe cap according to ASTM F2413-05.
Rubber toe cap <ul style="list-style-type: none">• The boot is equipped with a profiled rubber toe cap which is fixed with a seam at the end.• The seam is in a furrow which protects it from scrubbing.
Insole <ul style="list-style-type: none">• Surface layer material must withstand a minimum of 25,600 scrubbing cycles without scrubbing through.
Climate System <ul style="list-style-type: none">• Permits air circulation with every step.• At the upper leg height ending, there are at least 18 ventilation holes.



- Inner lining glued to upper only periodically to prevent detachment and allow full breathability of the leather.

Quality Assurance

Every shoe is equipped with a durable, long lasting, and legible label containing company specific data as serial number, size, and production site. Each shoe has a unique code number which permits tracking of the shoes in the production company and with consumers.

Extended Wear Program

Out of warranty HAIX® footwear can be completely refurbished through a resole package. This package includes any necessary replacement or repair of stitching, toe caps, and soles. Footwear will also be cleaned, deodorized, and receive new insoles. HAIX® footwear owners also have the option of a sole replacement only or a toe cap replacement only. All HAIX® footwear can be refurbished with original manufacturer parts

Waterproof quality

- Each 50th pair (and/or after each disturbance of the producing process) of welded seams must be checked using an imperviousness testing device.
- The welding seam must withstand a test pressure of 1 bar for at least 5 minutes. The test result is available upon demand.
- Daily, at least one pair of shoes is checked for its waterproof quality on a walking simulator.
- Over a period of 300,000 scrubbing cycles (approx. 24 hours) the shoe should not take on any water. Test results are available on demand. On prior agreement and on demand, technically adequate testing procedures (e.g. centrifuge) are also able to be used due to production organizational reasons.

Certification by Underwriter's Laboratories, Inc.

- NFPA 1971-2007, Standard for Protective Ensembles for Structural Fire Fighting
- NFPA 1992-2005, Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies
- CAN/CSA-Z195-2002, Standard for Protective Footwear
- ASTM F2413-05, Standard Specification for Protective Footwear



SCHADSTOFFGEPRÜFT

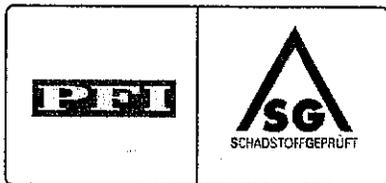
Type - Examination CERTIFICATE

No. 0904245-01-85-01e

Valid till : 2010-05-25

Name and address of the certificate holder: W.L. Gore & Ass. GmbH Aiblinger Str. 60 DE-83620 Feldkirchen	
Product specification:	Laminated fabric
Type:	Crosstech MS Cambrelle green Art. No. CMSC002001
Type identical articles:	-
Category:	Textile
Basis of testing:	SG-Standard 05/2009
Test report/test house:	0903647-01-31-01 PFI, QM-Certificate No. 003566 QM/IQNet + DQS
Remarks:	The materials are suitable in consideration of the toxicity as basing materials for the manufacture of medical devices class I in terms of the council directives 93/42/EWG from 14.06.1993.

The tested items listed above, are in accordance with the SG-criteria 01/2006. The certificate holder operates according to directive 89/686/EWG § 11 a or b a functional quality assurance system and has subject himself to a product control or alternatively a production supervision. The certificate holder is authorised to mark the above listed items with the SG-mark within the period of validity of this certificate. The SG-certificate order of 29.09.94 of the SG-institutes co-operation applies. Samples of the tested items are deposited at the certifying institute.



Freiwillige Prüfung nach SG-Prüfkriterienkatalog 05/2009

Certification Department of
TEST AND RESEARCH INSTITUTE
PIRMASENS e.V.

J. Reichelt

2009-05-26

Date of issue

Head of Certification Department



PRÜF- UND FORSCHUNGSINSTITUT PIRMASENS E.V.

CERTIFICATE

The certification authority of the PFI hereby certifies that the company

HAIX Schuhe Produktions- und Vertriebs GmbH
Auhofstraße 10
DE – 84048 Mainburg

for

- Development, producing and trading of Safety-, Protective- and Occupational Footwear -

has adopted and appliances a

Quality Management System.

A quality audit conducted by the PFI provided evidence that this quality management system fulfils the requirements of the following standard:

DIN EN ISO 9001 : 2000

This certificate is valid until: **2011-08-03**

Registration number: **0806603-01-81**

Pirmasens, 2008-08-04



TGA-ZM-15-94-00



Certification authority

K. E. Hauter

K.-E. Hauter

Lead quality auditor

J. Reichelt

J. Reichelt



Material description

date: 01.04.2009

rev.-nr.:009.en

Name of product	CROSSTECH® MS CAMBRELLE	
Application	TOF	
Part Nr.	CMSC002001	
Colour	Forest Green	
Construction	Shell fabric: Thermobonded Nonwoven	100%PA
	Middle layer: Functional nonwoven	100% PES
	Bicomponent Membrane based on ePTFE	
	Backing Fabric: Knit	100% PA
Features	Waterproof; breathable; high wicking capacity; Fast drying time; highest abrasion resistance; Extremely durable; medium thermal insulation; NFPA 1971 blood and body fluid and common chemical resistance;	
Prohibited substances	SG-Certificate PFI Meets the criteria of Öko-Tex Standard 100 Productclass II	
Dimension of the rolls	Usable width	142 cm
	Length	50 ± 10 m

Technical data

All technical information and advice is based on previous experience and given to the best of our knowledge, but does not give rise to any liability by Gore.

The product data was evaluated under ideal technical conditions.

Deviations depend on the conditions of the special application. Please note our assembling advice and warnings.

For best results please call our technical application personnel with specific details of the application. They will be glad to advise you.

W.L. Gore & Associates, 2009

Weight	[g/m ²]	350 ± 30	DIN EN 12127
Thickness	[mm]	1,9 ± 0,3	EN ISO 5084
Martindale abrasion face	[movements]	Dry: min. 500.000 Wet: min. 200.000	EN ISO 20344: 2004, 6.12.
Martindale abrasion backer knit	[movements]	Wet: min. 100.000	
Perspiration fastness		≥ 3	EN ISO 105-E04
Rub fastness		≥ 3	EN ISO 105-X12
Chemical penetration resistance		No penetration	NFPA1971 (2000), 5-4.6 ASTM F 903
Viral penetration resistance		No penetration	NFPA1971 (2000), 5-4.7 ASTM F 1671-97
Thermal insulation: R _{ct}	[10 ⁻³ m ² K/W]	> 44	DIN EN 31092; ISO 11092
Vapour permeability: R _{et}	[m ² Pa/W]	< 27	DIN EN 31092; ISO 11092
Resistance to water penetration	[mbar]	> 5000	DIN EN 20811



SATRA Technology Centre Ltd
Wyndham Way, Telford Way, Kettering
Northamptonshire, NN16 8SD
United Kingdom
Tel: +44 (0) 1536 410000
Fax +44 (0) 1536 410626
email: footwear@satra.co.uk



Firm: W L Gore & Associates GmbH
Hermann-Oberth Strasse 24
D-85640 PUTZBRUNN
Germany

Job reference: FWT0181354/1002/Z/2

Date: 13th May 2010

Samples received: 4th January 2010

Attention of: Heike Wolfrum

Testing completed: 21st January 2010

TECHNICAL SERVICES REPORT

Subject: GREEN FABRIC LAMINATE REFERENCE CROSSTECH MS CAMBRELLE FOR
EXTENDED MARTINDALE ABRASION TESTS

Conditions of Issue:

This report may be forwarded to other parties provided they are members of SATRA and that it is not changed in any way. It must not be given to non-members nor published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only and are not part of the reported results. All comments and interpretations are outside the scope of UKAS accreditation and are based on current SATRA knowledge.

Tests marked † are not UKAS accredited.

A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.

Please note uncertainty of measurement has not been applied to the results in this report. SATRA uncertainty of measurement values are available on request.

Report signed by: Mark Southam
Footwear, Leathersgoods and Luggage Technologist
Footwear Technology - Testing
On behalf of SATRA Technology Centre Ltd



Technical Services Report



GREEN FABRIC LAMINATE REFERENCE CROSSTECH MS CAMBRELLE FOR EXTENDED MARTINDALE ABRASION TESTS

As requested we have carried out extended Martindale abrasion tests on the material submitted. The tests were carried out after conditioning the samples at $23\pm 2^{\circ}\text{C}$ and $50\pm 4\%$ rh. The results and our comments are given below.

MARTINDALE ABRASION. SATRA TM 31: METHOD A: 2003/EN ISO 20344: 2004: 6.12

As requested we have carried out 500,000 revs under dry conditions and 200,000 revs under wet conditions on the face side of the material, and 100,000 revs under wet conditions on the backer.

Test	Side tested	No of revs	Damage
Dry (1)	Face	500,000	Slight wear of fabric
Wet (2)	Face	200,000	Moderate wear of fabric
Wet (2)	Backer	100,000	Severe wear of knitted fabric

(1) The abradant was changed after every 100,000 revs

(2) The abradant was re-wetted every 12,800 revs, and changed after approximately every 50,000 revs

Firm: W L Gore & Associates GmbH
Job: FWT0181354/1002/Z/2
Date: 13th May 2010

Signed:

(Page 2 of 3)



Technical Services Report



TERMS AND CONDITIONS OF BUSINESS

1. **GENERAL**
Work done or services undertaken are subject to the terms and conditions detailed below and all other conditions, warranties and representations, expressed or implied are hereby excluded.
2. **PRICES**
Prices are based on current material and production costs, exchange rates, duty and freight and are subject to change without notice.
3. **DELIVERY ESTIMATES**
Delivery estimates are made in good faith and date from receipt of a written order and full information to enable us to proceed. While SATRA or its subsidiaries (hereafter referred to as "SATRA") make every effort to fulfil them, such estimates are subject to unforeseen events and if not maintained, cannot give rise to any claim. Offers "ex stock" are subject to prior sale.
4. **CANCELLATION AND RETURNS**
Cancellation of orders for goods, services, training or consultancy is only acceptable by prior agreement of SATRA and a charge will normally be made.
5. **CLAIMS**
Claims for errors, shortages etc should be notified within 10 days of date of receipt. In the event of goods damaged in transit, packing materials should be retained for examination; otherwise no liability can be accepted.
6. **PAYMENT TERMS**
Payment terms are net 21 days from date of invoice. Failure to comply with the terms of payment may result in delayed delivery of goods and services and a review of the Customer's credit account. Should the customer become subject to an administration order, or becomes bankrupt or goes into liquidation, SATRA has a right to cancel any contract and discontinue any work. SATRA reserves the right to adjust US Dollar and Euro sales price where customer exceeds credit terms and where the exchange rate has moved more than 10% since invoicing.
7. **RETENTION OF TITLE**
All goods remain the property of SATRA until paid in full. Under no circumstances will a customer's purchase order override our Retention of Title clause. In the case of software, the ownership of the software remains with SATRA. Payment of invoices in full will entitle the customer to use the software under licence until (a) they cease to be a member of SATRA or (b) they cease trading. In both instances, the licence shall then revert to SATRA.
8. **GUARANTEE**
All goods manufactured by SATRA are guaranteed both as regards material and workmanship. Any part returned carriage paid, within twelve months from date of supply and found defective, will be repaired or replaced at SATRA's option free of charge. SATRA admits no liability for loss, damage or delay consequent on any defect in any goods supplied by SATRA.
9. **TEST REPORTS**
Results given in test reports refer only to samples submitted for analysis and tested by SATRA. A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in a test report.
10. **TEST SAMPLES**
Unless otherwise agreed in advance, test samples will be disposed of 6 weeks after the date of the final report. If required, samples can be returned at the Customer's expense.
11. **RESPONSIBILITY**
Every effort is made to ensure accuracy in description, drawings and other information in correspondence, catalogues, etc but no warranty is given in this respect and SATRA shall not be liable for any error therein. SATRA carries out all tests and/or advises only on the basis that the same are carried out, made or given without any responsibility whether for negligence or otherwise. SATRA and its servants or agents will not be liable for any damage or loss direct or indirect of whatsoever kind, whether or not the same results directly or indirectly from negligence on the part of SATRA or its servants or agents.
12. **CONFIDENTIALITY**
Unless specifically excluded in the terms of an individual contract between SATRA and its Customer, the following shall apply to all reports, advice, drawings, photographs, specifications or data:
 - i. The above shall not be disclosed to third parties or used in litigation without the consent of SATRA.
 - ii. Where SATRA has given consent to disclosure, the Customer shall draw the attention of the third party to these terms of business and the basis on which SATRA undertakes test, reporting and advising. The Customer shall indemnify SATRA for any failure to do so.
 - iii. The above items are submitted to the Customer as confidential documents. Confidentiality shall continue to apply after completion of the business, but shall cease to apply to information or knowledge which may come into the public domain.
13. **CONSTRUCTION AND ARBITRATION**
The laws of England shall govern all contracts and the parties submit to exclusive jurisdiction of the courts of England, unless otherwise agreed.

Issue Date: 1st October 2009

Firm: W L Gore & Associates GmbH
Job: FWT0181354/1002/Z/2
Date: 13th May 2010

Signed:



USER INSTRUCTION, SAFETY AND TRAINING GUIDE

HAIX® NFPA Compliant Footwear Models

FIRE HUNTER® XTREME

FIRE HUNTER® AF

FIRE HUNTER® U.S.

SPECIAL FIGHTER® XTREME

FIRE FLASH® XTREME

FIRE HIKER

AIRPOWER® R1

AIRPOWER® R2

AIRPOWER® R7

AIRPOWER® 100

NFPA 1971: Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2007 Edition

NFPA 1992: Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies 2005 Edition

NFPA 1999: Standard on Protective Clothing for Emergency Medical Operations, 2008 Edition

NFPA 1951: Standard on Protective Ensembles for Technical Rescue Incidents, 2007 Edition

NFPA 1977: Standard on Protective Clothing and Equipment for Wildland Fire Fighting, 2005 Edition

NFPA 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire fighting and Proximity Fire fighting, 2008 Edition

ASTM F2413-05: Standard Specification for Performance Requirements for Foot Protection

CAN/CSA-Z195-09: Standard for Protective Footwear

⚠ DANGER

- **This Guide should be removed only by the end user! In the event this Guide becomes detached from the Footwear, turn this Guide in to the authorities responsible for the care and maintenance of the Footwear.**
- **You MUST read this Guide and all Footwear Safety, Cleaning, and information labels before wearing.**
- **Burns are a function of time and temperature. First degree skin burns can occur when skin reaches a temperature of as low as 118 degrees F.**
- **Fire burns at temperatures up to 2000 degrees F or higher.**
- **This Footwear provides limited protection against heat and flame. While wearing this Footwear, you may be burned without heat sensation or warning in some circumstances, and without any sign of damage to the Footwear.**

CAUTION
 Read the manufacturer's instructions, safety and training guide before wearing this footwear.

ASTM F2413-05
 M/1/75/075/Mc75
 FR

PROTECTIVE FOOTWEAR FOR
 STRUCTURAL FIRE FIGHTING IN
 ACCORDANCE WITH NFPA 1971-07,
 2007 EDITION. ALSO CLASSIFIED IN
 ACCORDANCE WITH NFPA 1951-07,
 NFPA 1992-05, NFPA 1977-05,
 CAN/CSA Z195-02 AND ASTM F2413-05.

Special Fighter Xtreme
 Article: 504234 Production Date:

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, CROSSBARK CAMBRELLÉ
 CAMBRELLÉ

MADE BY: HAIK, Gohlbe GmbH
 Industriestraße 4
 60309 Marburg, GERMANY

CLEANING: HAND WASH WITH WARM WATER

THIS FOOTWEAR MEETS THE
 LIMITED CHEMICAL FLASH
 FIRE PROTECTION FOR
 ESCAPE ONLY IN THE
 EVENT OF A CHEMICAL
 FLASH FIRE.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE.		X

THE TECHNICAL DATA PACKAGE
 CONTAINS INFORMATION ON
 CHEMICALS AND SPECIFIC
 CHEMICAL MIXTURES FOR WHICH
 THIS FOOTWEAR IS CERTIFIED.
 CONSULT TECHNICAL DATA PACKAGE
 AND MANUFACTURER'S INSTRUCTIONS

US-Size
 9 M
 Made in Germany

999990901001

CAUTION
 Read the manufacturer's instructions, safety and training guide before wearing this footwear.

ASTM F2413-05
 M/1/75/075/Mc75
 FR

PROTECTIVE FOOTWEAR FOR
 STRUCTURAL FIRE FIGHTING IN
 ACCORDANCE WITH NFPA 1971-07,
 2007 EDITION. ALSO CLASSIFIED IN
 ACCORDANCE WITH NFPA 1951-07,
 NFPA 1992-05, NFPA
 1977-05, NFPA 1977-05,
 CAN/CSA Z195-02 AND ASTM
 F2413-05.

Fire Flash Xtreme
 Article: 506005 Production Date:

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, CROSSBARK CAMBRELLÉ
 MADE BY: HAIK, AUHOFSTR. 4D
 84048 MAINBURG, GERMANY

CLEANING: HAND WASH WITH WARM WATER

DO NOT REMOVE THIS LABEL

THIS STRUCTURAL FIRE FIGHTING
 PROTECTIVE FOOTWEAR MEETS THE
 FOOTWEAR REQUIREMENTS OF NFPA
 1971, 2007 EDITION.

THIS UTILITY AND RESCUE AND
 RECOVERY PROTECTIVE FOOTWEAR
 ENSEMBLE MEETS THE REQUIREMENTS
 OF NFPA 1951, STANDARD ON
 PROTECTIVE ENSEMBLES FOR
 TECHNICAL RESCUE INCIDENTS,
 2007 EDITION.

THIS WILDLAND FIRE FIGHTING
 PROTECTIVE FOOTWEAR MEETS THE
 REQUIREMENTS OF NFPA 1977,
 STANDARD ON PROTECTIVE
 CLOTHING AND EQUIPMENT FOR
 WILDLAND FIRE FIGHTING, 2005
 EDITION.

THIS LIQUID-SPLASH PROTECTIVE
 FOOTWEAR MEETS THE BASIC
 REQUIREMENTS OF NFPA 1992,
 STANDARD ON LIQUID-SPLASH
 PROTECTIVE ENSEMBLE AND
 CLOTHING FOR HAZARDOUS
 MATERIAL EMERGENCIES, 2005
 EDITION.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE.		X

THE TECHNICAL DATA PACKAGE
 CONTAINS INFORMATION ON
 CHEMICALS AND SPECIFIC
 CHEMICAL MIXTURES FOR WHICH
 THIS FOOTWEAR IS CERTIFIED.
 CONSULT TECHNICAL DATA PACKAGE
 AND MANUFACTURER'S
 INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
 9 M
 Made in Germany

999990901001

CAUTION
 Read the manufacturer's instructions, safety and training guide before wearing this footwear.

ASTM F2413-05
 M/1/75/075
 FR

PROTECTIVE FOOTWEAR FOR
 STRUCTURAL FIRE FIGHTING IN
 ACCORDANCE WITH NFPA 1971-07,
 2007 EDITION. ALSO CLASSIFIED IN
 ACCORDANCE WITH NFPA 1951-07,
 NFPA 1992-05, NFPA
 1977-05, NFPA 1977-05,
 CAN/CSA Z195-02 AND ASTM
 F2413-05.

Fire Flash Xtreme
 Article: 506005 Production Date:

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, CROSSBARK CAMBRELLÉ
 MADE BY: HAIK, AUHOFSTR. 4D
 84048 MAINBURG, GERMANY

CLEANING: HAND WASH WITH WARM WATER

THIS STRUCTURAL FIRE FIGHTING
 PROTECTIVE FOOTWEAR MEETS THE
 FOOTWEAR REQUIREMENTS OF NFPA
 1971, 2007 EDITION.

THIS LIQUID-SPLASH PROTECTIVE
 FOOTWEAR MEETS THE BASIC
 REQUIREMENTS OF NFPA 1992,
 STANDARD ON LIQUID-SPLASH
 PROTECTIVE ENSEMBLE AND
 CLOTHING FOR HAZARDOUS
 MATERIAL EMERGENCIES.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE.		X

THE TECHNICAL DATA PACKAGE
 CONTAINS INFORMATION ON
 CHEMICALS AND SPECIFIC
 CHEMICAL MIXTURES FOR WHICH
 THIS FOOTWEAR IS CERTIFIED.
 CONSULT TECHNICAL DATA PACKAGE
 AND MANUFACTURER'S
 INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
 9 M
 Made in Germany

999990901001

CAUTION
 Read the manufacturer's instructions, safety and training guide before wearing this footwear.

ASTM F2413-05
 M/1/75/075
 FR

PROTECTIVE FOOTWEAR FOR
 STRUCTURAL FIRE FIGHTING IN
 ACCORDANCE WITH NFPA 1971-07,
 2007 EDITION. ALSO CLASSIFIED IN
 ACCORDANCE WITH NFPA 1951-07,
 NFPA 1992-05, NFPA
 1977-05, NFPA 1977-05,
 CAN/CSA Z195-02 AND ASTM
 F2413-05.

Fire Flash Xtreme
 Article: 506005 Production Date:

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, CROSSBARK CAMBRELLÉ
 MADE BY: HAIK, AUHOFSTR. 4D
 84048 MAINBURG, GERMANY

CLEANING: HAND WASH WITH WARM WATER

THIS STRUCTURAL FIRE FIGHTING
 PROTECTIVE FOOTWEAR MEETS THE
 FOOTWEAR REQUIREMENTS OF NFPA
 1971, 2007 EDITION.

THIS LIQUID-SPLASH PROTECTIVE
 FOOTWEAR MEETS THE BASIC
 REQUIREMENTS OF NFPA 1992,
 STANDARD ON LIQUID-SPLASH
 PROTECTIVE ENSEMBLE AND
 CLOTHING FOR HAZARDOUS
 MATERIAL EMERGENCIES.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE.		X

THE TECHNICAL DATA PACKAGE
 CONTAINS INFORMATION ON
 CHEMICALS AND SPECIFIC
 CHEMICAL MIXTURES FOR WHICH
 THIS FOOTWEAR IS CERTIFIED.
 CONSULT TECHNICAL DATA PACKAGE
 AND MANUFACTURER'S
 INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
 9 M
 Made in Germany

999990901001

CAUTION
 Read the manufacturer's instructions, safety and training guide before wearing this footwear.

ASTM F2413-05
 M/1/75/075
 FR

PROTECTIVE FOOTWEAR FOR
 STRUCTURAL FIRE FIGHTING IN
 ACCORDANCE WITH NFPA 1971-07,
 2007 EDITION. ALSO CLASSIFIED IN
 ACCORDANCE WITH NFPA 1951-07,
 NFPA 1992-05, NFPA
 1977-05, NFPA 1977-05,
 CAN/CSA Z195-02 AND ASTM
 F2413-05.

Fire Flash Xtreme
 Article: 506005 Production Date:

DO NOT REMOVE THIS LABEL
MADE IN GERMANY

MATERIAL: LEATHER, CROSSBARK CAMBRELLÉ
 MADE BY: HAIK, AUHOFSTR. 4D
 84048 MAINBURG, GERMANY

CLEANING: HAND WASH WITH WARM WATER

THIS STRUCTURAL FIRE FIGHTING
 PROTECTIVE FOOTWEAR MEETS THE
 FOOTWEAR REQUIREMENTS OF NFPA
 1971, 2007 EDITION.

THIS LIQUID-SPLASH PROTECTIVE
 FOOTWEAR MEETS THE BASIC
 REQUIREMENTS OF NFPA 1992,
 STANDARD ON LIQUID-SPLASH
 PROTECTIVE ENSEMBLE AND
 CLOTHING FOR HAZARDOUS
 MATERIAL EMERGENCIES.

ADDITIONAL REQUIREMENTS	Yes	No
LIMITED CHEMICAL FLASH FIRE PROTECTION FOR ESCAPE ONLY IN THE EVENT OF A CHEMICAL FLASH FIRE.		X

THE TECHNICAL DATA PACKAGE
 CONTAINS INFORMATION ON
 CHEMICALS AND SPECIFIC
 CHEMICAL MIXTURES FOR WHICH
 THIS FOOTWEAR IS CERTIFIED.
 CONSULT TECHNICAL DATA PACKAGE
 AND MANUFACTURER'S
 INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL

US-Size
 9 M
 Made in Germany

999990901001

Note: Labels for the ladies' boots are not shown above.

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.



ASTM F2413-05
M/I/75/C/75
PR

PROTECTIVE FOOTWEAR FOR STRUCTURAL FIRE FIGHTING IN ACCORDANCE WITH NFPA 1971-07. ALSO CLASSIFIED IN ACCORDANCE WITH CAN/CSA Z195-02 AND ASTM F2413-05.

Fire Hunter AF

Article: 601601 Production Date:

THIS STRUCTURAL FIRE FIGHTING PROTECTIVE FOOTWEAR MEETS THE FOOTWEAR REQUIREMENTS OF NFPA 1971, 2007 EDITION.

MADE IN GERMANY.

MATERIAL: LEATHER, CROSSTECH, CAMBRELE
MADE BY: HAIX® AUFSTR. 10
84048 MANDLBERG, GERMANY

CLEANING: HAND WASH WITH WARM WATER

DO NOT REMOVE THIS LABEL

US-Size
9 M



999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.



ASTM F2413-05
M/I/75/C/75
PR

PROTECTIVE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR FOR EMERGENCY MEDICAL OPERATIONS IN ACCORDANCE WITH NFPA 1999-2008. ALSO CLASSIFIED IN ACCORDANCE WITH CAN/CSA Z195-09 AND ASTM F2413-05.

Airpower R1

Article: 605111 Production Date:

THIS FOOTWEAR MEETS THE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR REQUIREMENTS OF NFPA 1999, STANDARD ON PROTECTIVE CLOTHING FOR EMERGENCY OPERATIONS, 2008 EDITION.

DO NOT REMOVE THIS LABEL

MATERIAL: BULL LEATHER, CROSSTECH, CAMBRELE, RUBBER OUTSOLE

MADE BY: HAIX® Schuhe GmbH
Autohofstrasse 10
84048 Mandlberg, GERMANY

CLEANING: HAND WASH WITH WARM WATER

US-Size
9 M



999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.



ASTM F2413-05
M/I/75/C/75
PR

PROTECTIVE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR FOR EMERGENCY MEDICAL OPERATIONS IN ACCORDANCE WITH NFPA 1999-2008. ALSO CLASSIFIED IN ACCORDANCE WITH CAN/CSA Z195-02 AND ASTM F2413-05.

Airpower R2

Article: 605109 Production Date:

THIS FOOTWEAR MEETS THE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR REQUIREMENTS OF NFPA 1999, STANDARD ON PROTECTIVE CLOTHING FOR EMERGENCY OPERATIONS, 2008 EDITION.

DO NOT REMOVE THIS LABEL

MATERIAL: BULL LEATHER, CROSSTECH, CAMBRELE

MADE BY: HAIX® Schuhe GmbH
Autohofstrasse 10
84048 Mandlberg, GERMANY

CLEANING: HAND WASH WITH WARM WATER

US-Size
9 M



999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.



ASTM F2413-05
M/I/75/C/75
PR

PROTECTIVE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR FOR EMERGENCY MEDICAL OPERATIONS IN ACCORDANCE WITH NFPA 1999-2008. ALSO CLASSIFIED IN ACCORDANCE WITH CAN/CSA Z195-02 AND ASTM F2413-05.

Airpower R7

Article: 607616 Production Date:

THIS FOOTWEAR MEETS THE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR REQUIREMENTS OF NFPA 1999, STANDARD ON PROTECTIVE CLOTHING FOR EMERGENCY OPERATIONS, 2008 EDITION.

DO NOT REMOVE THIS LABEL

MATERIAL: BULL LEATHER, CROSSTECH, CAMBRELE, RUBBER OUTSOLE

MADE BY: HAIX® Schuhe GmbH
Autohofstrasse 10
84048 Mandlberg, GERMANY

CLEANING: HAND WASH WITH WARM WATER

US-Size
9 M



999990901001

Made in Germany

⚠ DANGER ⚠
You must read the User Instruction, Safety and Training Guide before wearing this footwear.



ASTM F2413-05
M/I/75/C/75
PR

PROTECTIVE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR FOR EMERGENCY MEDICAL OPERATIONS IN ACCORDANCE WITH NFPA 1999-2008. ALSO CLASSIFIED IN ACCORDANCE WITH CAN/CSA Z195-02 AND ASTM F2413-05.

Airpower 100

Article: 605010 Production Date:

THIS FOOTWEAR MEETS THE MULTIPLE-USE EMERGENCY MEDICAL FOOTWEAR REQUIREMENTS OF NFPA 1999, STANDARD ON PROTECTIVE CLOTHING FOR EMERGENCY OPERATIONS, 2008 EDITION.

DO NOT REMOVE THIS LABEL

MATERIAL: BULL LEATHER, CROSSTECH, CAMBRELE, RUBBER OUTSOLE

MADE BY: HAIX® Schuhe GmbH
Autohofstrasse 10
84048 Mandlberg, GERMANY

CLEANING: HAND WASH WITH WARM WATER

US-Size
9 M



999990901001

Made in Germany

NFPA 1971 - 2007 STRUCTURAL FIRE FIGHTING	NFPA 1971 - 2007 PROXIMITY FIRE FIGHTING	NFPA 1977 - 2005 WILDLAND FIRE FIGHTING	NFPA 1951 - 2007 TECHNICAL RESCUE	NFPA 1992 - 2005 LIQUID SPLASH/HAZ-MAT	NFPA 1999 - 2008 EMERGENCY MEDICAL	ASTM F2413-05 PROTECTIVE FOOTWEAR	CAN/CSA-Z195-2009 PROTECTIVE FOOTWEAR	Standard Model
X	N/A	N/A	N/A	X	N/A	X	X	FIRE HUNTER® XTREME
X	N/A	N/A	N/A	N/A	N/A	X	X	FIRE HUNTER® AF
X	N/A	N/A	N/A	X	N/A	X	X	FIRE HUNTER® U.S.
N/A	N/A	X	X	X	X	X	X	SPECIAL FIGHTER® XTREME
X	N/A	X	X	X	●	X	X	FIRE FLASH® XTREME
N/A	N/A	X	N/A	N/A	N/A	X	N/A	FIRE HIKER
N/A	N/A	N/A	N/A	N/A	X	X	X	AIRPOWER® R1
N/A	N/A	N/A	N/A	N/A	X	X	X	AIRPOWER® R2
N/A	N/A	N/A	N/A	N/A	X	X	X	AIRPOWER® R7
N/A	N/A	N/A	N/A	N/A	X	X	X	AIRPOWER® 100

X = CERTIFIED

N/A = NOT APPLICABLE

● = COMPLIANT, NOT CERTIFIED



TABLE OF CONTENTS

1	Introduction	5
2	Definitions	7
3	Safety Checklist	9
4	Proper Use of your HAIX® NFPA Compliant Footwear	10
5	Know your HAIX® NFPA Compliant Footwear: Construction, Features, and Function	12
6	Inspecting your HAIX® NFPA Compliant Footwear	18
7	Donning and Doffing: Putting on and Removing your HAIX® NFPA Compliant Footwear	20
8	Checking your HAIX® NFPA Compliant Footwear for Compatibility and Proper Fit	21
9	HAIX® NFPA Compliant Footwear Marking Considerations	22
10	Using your HAIX® NFPA Compliant Footwear Safely: How to Minimize the Risk of Injury	22
11	Cleaning, Decontaminating, and Disinfecting your HAIX® NFPA Compliant Footwear	28
12	Repair Methods for HAIX® NFPA Compliant Footwear	33
13	Storing your HAIX® NFPA Compliant Footwear	34
14	Retiring your HAIX® NFPA Compliant Footwear	35
15	Disposing of Retired HAIX® NFPA Compliant Footwear	36
16	Limited Warranty Information	37
17	Sources and for Further Information	39
18	Inspection, Cleaning, Repair, Retirement and Disposal Record	40

1 INTRODUCTION

Congratulations on purchasing your new HAIX® North America product!

Your HAIX® NFPA Compliant Footwear (referred to throughout this Guide as "Footwear" or "Boots") is designed to provide limited protection in various dangerous operations. It and its components are manufactured and certified under the performance requirements of the corresponding NFPA Standards (page 4)

This User Information and Safety Guide gives important instructions regarding the use, inspection, care, maintenance, storage and retirement of your HAIX® NFPA Compliant Footwear. No one except you (the end user) should remove this Guide from your HAIX® NFPA Compliant Footwear. Immediately upon receipt of your Footwear you should remove, carefully read, and save this Guide in a three-ring binder for future reference.

This Guide is a training tool to help you understand your NFPA Compliant hazardous material emergency Footwear and how to use it in the safest possible manner during various dangerous operations. Please take time to read it.



This Guide will train you to:

- **Put on your Footwear**
- **Wear your Footwear safely**
- **Inspect your Footwear**
- **Repair your Footwear**
- **Clean and Decontaminate your Footwear**
- **Store your Footwear**
- **Retire your Footwear**

For your personal safety be alert for important safety messages in this Guide:

⚠ DANGER

DANGER Indicates immediate hazards that will result in serious personal injury or death if not avoided, or if instructions, including recommended precautions, are not followed. The signal word "**DANGER**" is highlighted in red, both in this Guide and on labels affixed to your Footwear, to indicate the extreme hazard of the situation.

⚠ WARNING

WARNING Indicates potentially hazardous situations that could result in serious personal injury or death if not avoided, or if instructions, including recommended precautions, are not followed. The signal word "**WARNING**" is highlighted in orange on labels attached to your Footwear, and in black in this Guide.

⚠ CAUTION

CAUTION Indicates potentially hazardous situations or unsafe practices that could result in minor or moderate personal injury or product or property damage if instructions, including recommended precautions, are not followed. The signal word "**CAUTION**" is highlighted in gray in this Guide.



2 DEFINITIONS

Afterflame Time – The length of time for which a material, component, or chemical protective suit continues to burn after the simulated chemical flash fire has ended.

Biological Agent– Biological materials that are capable of causing disease or long-time damage to the human body.

Compliance/Compliant – Meeting or exceeding all applicable requirements of this standard.

Component(s) – Any material, part or subassembly used in the construction of the compliant product.

Ensemble Elements – The compliant products that provide protection to the upper and lower torso, arms, legs, head, hands, and feet.

Entry Fire Fighting–EXTRAORDINARILY specialized fire fighting operations that can include the activities of rescue, fire suppression, and property conservation at incidents involving fires producing very high levels of conductive, convective, and radiant heat; such as aircraft fires, bulk flammable gas fires, and bulk flammable liquid fires. Highly specialized thermal protection from exposure to extreme levels of conductive, convective, and radiant heat is necessary for persons involved in such EXTRAORDINARILY specialized operations and because direct entry into the flames is made. NFPA 1971 Compliant Footwear is NEVER to be used for entry fire fighting or any direct contact with flames or molten metals, and do not provide the required level of protection. Entry fire fighting is not structural fire fighting.

Exposure Incident – Specific contact of the following with blood or other potentially infectious materials: 1) eye; 2) mouth or other mucous membranes; 3) non intact skin; or 4) parenteral contact.

Follow-Up Program – The sampling, inspections, tests, or other measures conducted by the certification organization on a periodic basis to determine the conducted compliance of labeled or listed products that are being produced by the manufacturer to the requirements of this standard.

Footwear–The term Footwear used throughout this Guide refers ONLY to HAIX® NFPA Compliant Footwear. Footwear is an element of the protective ensemble designed to provide limited protection required by the NFPA Standards to the foot, ankle, and lower leg. Footwear is NOT Entry or Proximity Footwear.

Footwear Upper – That portion of the footwear above the sole, heel, or insole.

Hazardous Materials – A substance (solid, liquid, or gas) that when released is capable of creating harm to people, the environment, and property.

Hazardous Materials Emergencies – Incidents involving the release or potential release of hazardous materials.

Inner Liner – The liner portion of the NFPA Compliant Footwear consisting of the thermal liner layer and the moisture barrier layer sewn together.

Interface Area – An area of the body where the protective garment, helmet, gloves, and footwear, or SCBA facepiece meet. Interface area includes, but is not limited to, ...the trouser/footwear area.

Liquid Splash-Protective Footwear – the element of the protective ensemble, or the item of protective clothing that provides liquid chemical protection and physical protection on the feet, ankles, and lower legs.



Maintenance – Procedures for inspection, repair, and removal from service of liquid splash-protective ensembles or clothing.

NFPA–Acronym for National Fire Protection Association. A private sector, volunteer-based, standard-making organization that develops guidelines related to fire protection and prevention.

NFPA Compliant Footwear–(Also referred to in this Guide as NFPA Compliant Footwear). Means Footwear certified by a private, third party certification organization (for example, Underwriters' Laboratories) to meet at the time of manufacture the design and performance requirements of the valid NFPA Standards.

Protective Ensemble–Multiple elements of personal equipment designed in accordance with the NFPA Standards to provide a limited degree of protection for responders from adverse exposures to the inherent risks of structural fire fighting operations and certain other emergency operations. The elements of the protective ensemble are coats, trousers, coveralls, helmets, gloves, footwear, and interface components.

Proximity Fire Fighting–Specialized fire fighting operations that can include the activities of rescue, fire suppression, and property conservation at incidents involving fire producing very high levels of conductive, convective, and radiant heat such as aircraft fires, bulk flammable gas fires, and bulk flammable liquid fires. Specialized thermal protection from exposure to high levels of radiant heat, as necessary for persons involved in such operations due to the scope of these operations and the close distance to the fire at which these operations are conducted, although direct entry into flame is NOT made. These operations usually are exterior operations but might be combined with interior operations. Proximity fire fighting is not structural fire fighting but might be combined with structural fire fighting operations. Proximity fire fighting also is not entry fire fighting.

Useful Life – The period of time that NFPA Compliant Footwear, which has been properly cared for, can be expected to provide reasonable limited protection. Useful life of Footwear is normally three years, depending upon the conditions of wear, maintenance, and storage. Useful life is highly unlikely to be more than 5 years.



3 SAFETY CHECKLIST

Do not use this HAIX® NFPA Compliant Footwear until you have checked "YES" to the following:

1. Have you completed professional training in fire fighting techniques or in hazardous materials emergency incident operations involving liquids, the proper use of NFPA Compliant Footwear?
 Yes No
2. Have you read and understood all the instructions and warnings throughout this Guide as well as all the label on the Footwear?
 Yes No
3. Will you regularly inspect your Footwear inside and out for any tears, holes, thin spots, worn areas, color change, dirt, contaminants, leaks, embrittlement, or any other conditions discussed in Section 6 of this Guide?
 Yes No
4. Have you studied the limitations of your Footwear as described throughout this Guide?
 Yes No
5. Have you checked to make sure that your Footwear fits you properly in accordance with Section 8 of this Guide?
 Yes No
6. Have you, your safety officer, or another appropriate person made plans to ensure that your Footwear is used, inspected, maintained, stored, and retired according to instructions in this Guide?
 Yes No
7. Have you read, do you understand, and do you assume the risks and responsibilities listed in the Personal Responsibility Code? See FIG. 1 and back cover of this Guide.
 Yes No

If you answered **NO** to any of the questions, **DO NOT WEAR THIS FOOTWEAR** until you have read the appropriate sections of this Guide and have been properly trained by qualified instructors.

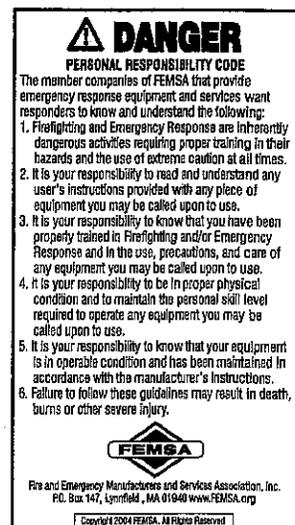


FIG. 1
Personal Responsibility Code
Also shown on back cover of this Guide.



4 PROPER USE OF YOUR HAIX® NFPA COMPLIANT FOOTWEAR; Protecting Health Care Workers from Occupational Exposure to Blood-Borne Pathogens.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor places the responsibility for selection, approval, maintenance, inspection and training in the proper use and limitations of safety gear on your department, team, or employer. (Code of Federal Regulations Volume 29, Section 1910.132, General Requirements of Subpart I, Personal Protective Equipment). By doing this, OSHA is recognizing a simple truth: how you use your protective clothing is beyond the manufacturer's control. Your department or employer controls the circumstances under which the protective ensemble will be used and is in the better position to assess the hazards at the emergency scene and to direct the appropriate selection and use of safety equipment including protective ensembles. Consistent with the OSHA regulations, your protective ensemble is offered for your department (paid or volunteer), team, or employer to evaluate and decide for itself whether or not the protective ensemble will provide an acceptable level of protection for any particular emergency operation. It is recommended that your department or employer conduct its own testing, evaluation and training in conjunction with qualified safety experts before issuing protective ensemble elements for use by its members. Whether to use protective ensemble in a particular incident, whether to enter a particular situation, whether to remain in a particular situation, and similar decisions are a matter to be decided by your department or employer at the scene on a case by case basis. Since, obviously, the manufacturer of your protective ensemble element cannot know in advance all of the many conditions existing at each scene, the appropriate use of your protective ensemble and its suitability for that use must be decided by your department or employer at each and every scene. The manufacturer makes no guarantees or warranties, express or implied, that your protective ensemble is fit for a particular purpose. (See Warranty Information on inside back cover.) Your protective ensemble must be used only under the direct supervision of your department or employer in a manner consistent with NFPA 1500 (Standard on Fire Department Occupational Safety Health Program), 29 CFR 1910.132 referenced earlier, and 29 CFR 1910.1030 (Protecting Health Care Workers from Occupational Exposure to Blood-borne Pathogens.)

This Footwear is designed to provide **LIMITED** protection under the requirements of the NFPA Standards to the foot, ankle and lower leg against hazards in STRUCTURAL FIRE FIGHTING OPERATIONS, WILDLAND OPERATIONS, AND NON-FIRE RELATED RESCUE OPERATIONS, EMERGENCY MEDICAL OPERATIONS, AND VICTIM EXTRICATION, INCLUDING:

- heat and flame,
- liquid splash of 7 common fire ground chemicals
(See Section 10 of this Guide for more information),
- penetration of blood and other body fluids,
- environmental, including moisture and cold weather,
- physical hazards, including puncture, crushing, cuts and abrasion,
- rain and hose steam water



⚠ DANGER

DO NOT use this Footwear for the following:

- Proximity or entry fire fighting operations (See Definitions)
- Activities requiring direct contact with flames or molten metal
- Protection against all hazardous material, biological, or radiological agents.



Do not use for ANY proximity or entry fire fighting.

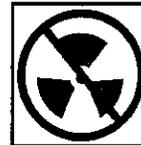
⚠ DANGER

Fire fighting personnel who are exposed to a flashover, backdraft, or other flame and high heat environments are at **EXTREME** risk for extensive burn injuries and death even while wearing their complete NFPA 1971 Structural Fire Fighter Protective Ensemble!



Do not use for direct contact with flames or molten metal.

Emergency response personnel can encounter many common liquids during normal performance of their duties. The reference to limited protection from liquid splash from 5 common fire ground chemicals should not be interpreted to mean that the Footwear is suitable or is permitted to be used for protection to the wearer during any hazardous materials situation.



Do not use for protection against hazardous radiological agents.

⚠ WARNING

Controlled lab tests in the NFPA Standard "cannot be deemed as establishing performance levels for all situations to which personnel can be exposed". You should always use extreme caution in all situations to avoid the risk of injuries.



Do not use for protection against hazardous biological agents.

⚠ WARNING

Protective properties in new NFPA Compliant Footwear will diminish as the product is worn and ages. To reduce the risk of injuries, you MUST follow the recommendations in this Guide for inspection and retirement of your Footwear to ensure that the Footwear is not used past its Useful Life.



Do not use for protection against hazardous chemical agents.

⚠ WARNING

If wearing a zippered style, you must fasten all closures during all times the Footwear is worn or there will be gaps in your protection, and wear will occur in the heel area, greatly decreasing the useful life of the Footwear and voiding the warranty.



5. KNOW YOUR HAIX® NFPA COMPLIANT FOOTWEAR: CONSTRUCTION, FEATURES, AND FUNCTION

In order to understand the limits of protection provided by your HAIX® NFPA Compliant Footwear, you should study its construction, features, and function.

5.1 OVERVIEW

HAIX® NFPA Footwear provides a limited barrier against penetration from sharp objects and liquids contacted on the fire grounds. Because it is made of special heat and flame resistant materials, hydrophobic leather, and rubber soles, it provides limited resistance to heat and flame for brief periods of time, without the boot combusting and burning.

5.2 LAYERED STRUCTURE

Your HAIX® NFPA Compliant Footwear is made with three primary layers: a leather outer layer, a moisture barrier, and an inner lining. The CAMBRELLE® inner lining and CROSSTECH® moisture barrier are secure inside the boot and are designed not to come out of the boot while doffing.

5.3 LEATHER OUTER LAYER

The outer layer consists of a hydrophobic, breathable leather that provides initial limited protection against, heat, flame, abrasions, and punctures.

5.4 INNER LAYER

The inner lining and moisture barrier are sewn together to make up the inner layer.

Moisture Barrier

The moisture barrier is a film or a coating on a substrate which reduces the amount of water from the environment that might penetrate to the inside of the Footwear. The moisture barrier is bonded to a woven or nonwoven substrate to give it strength and durability. All breathable moisture barriers have the ability to prevent liquid moisture from passing through, while allowing the passage of moisture vapor. This allows some body heat to escape the inner layers and move outside the footwear. This promotes the evaporative cooling of the fire fighter's feet, ankles, and lower legs

Inner Lining

The inner lining attached to the moisture barrier is a breathable fabric that protects the moisture barrier and absorbs perspiration, allowing it to pass through the moisture barrier and be pumped out of the holes in the top of the footwear by the natural pumping action of movement and walking.



OTHER IMPORTANT SAFETY FEATURES:

Sole: The nitrile rubber lug sole with self-cleaning tread is resistant to oil, fuel, heat, and acid.

Toe Protection System: The Footwear has stainless steel toes and a rubber toe cap to provide limited protection from puncture, crushing and abrasions.

Closure Systems: Zip/lacing systems are included on some models. When properly fastened, they reduce the amount of water that can enter the Footwear and prevent the Footwear from coming open during fire fighting or hazardous material operations.

Removable Insole: The anatomically formed absorbent insole can be removed to help promote drying. It is also washable and/or replaceable.

Puncture Resistant Bottom Plate: The Footwear has a flexible high-grade stainless steel plate (Steel Midsole) to resist puncture and penetration.

Leather Back Straps/Pull-on Loops: Provides a grasping mechanism to allow the user to more easily pull the Footwear on.

Label: Located on the inside of the lining, the label contains a statement indicating that the Footwear was manufactured in compliance with the applicable NFPA Standards and contains information regarding the date of manufacture, the serial number, and the name of the manufacturer.

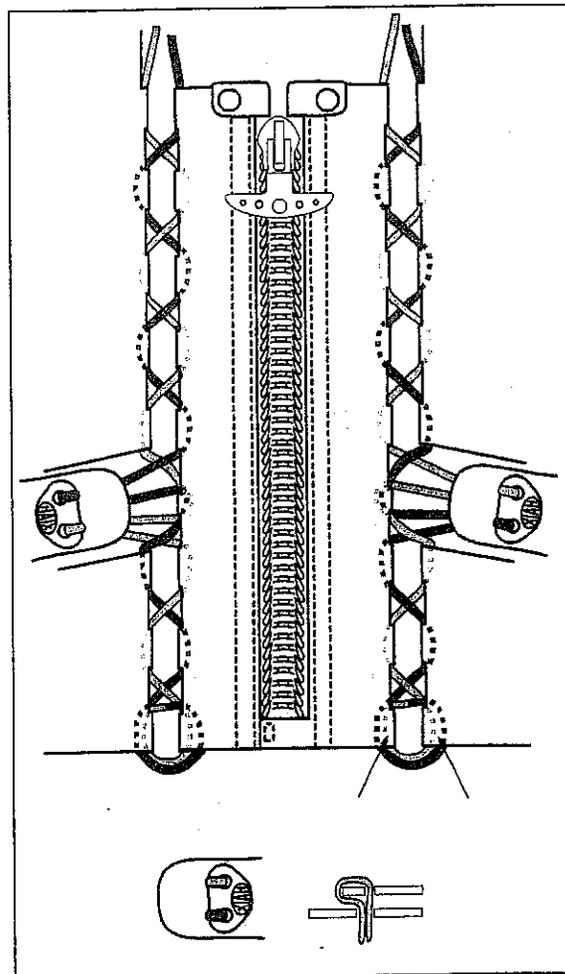


Feed laces from the starter lace holes downward to the bottom of the lacing system, then feed laces upward through the opposite holes to begin the upward lacing process.

Criss cross the laces upward to the TRE Fast Fix system. The left lace will feed into the lower part of the TRE Fast Fix system, the right lace should be laced to the location directly across from the upper part of the TRE Fast Fix system, and fed into the upper TRE Fast Fix unit.

Thread each lace from the rear of the leather attachment and through the TRE Fast Fix unit, then back through the same hole of the leather attachment. Each lace should be fed directly into the upper lace hole of the section it exited for the TRE Fast Fix System. Continue lacing in a criss cross pattern to the top of the boot.

Lastly, knot the laces on the inside.



FIRE FLASH® XTREME

Leather attachment



TRE Fast Fix Unit

Recommended Maintenance for the HAIX® patented Lacing System

Please use a hard nylon brush to clean the zipper teeth

Do not use a wire brush

If the zipper grip gets stuck, it can be released easily using a few drops of silicone or sewing machine oil

Please note: Zippers that have been forcibly damaged are not covered by our guarantee.



Thread the shoelace through the "start" eyelets from the rear. Continue to lace upwards, following the numbered arrows, to the top of the zipper system and tie a knot at the back of the uppermost eyelets.



AIRPOWER® R1

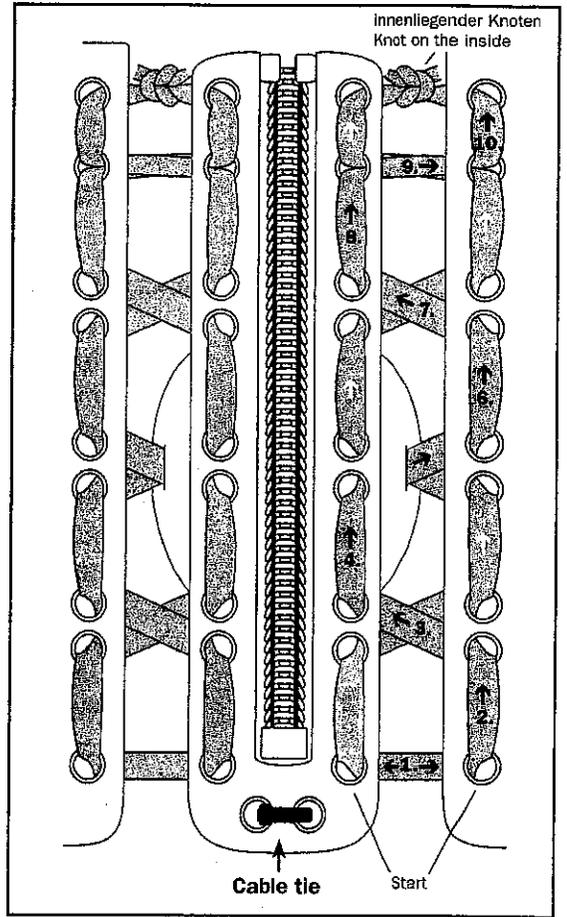


FIG. 2
Zipper Assembly



AIRPOWER® R2



AIRPOWER® 100



6 INSPECTING YOUR HAIX® NFPA COMPLIANT FOOTWEAR

6.1 PREPARATION

Read the Information Label (See Section 5 of this Guide for location).

6.2 FREQUENCY

You should inspect your Footwear at the following times: 1.) Upon receipt of your new Footwear or replacement component; 2.) At least monthly thereafter during the useful life of the Footwear; 3.) After exposure to heat, flames, chemicals, or fire fighting agents (including AFFF foam and water); 4.) After exposure to body fluids (including blood); and 5.) After washing, repair or decontamination. You must inspect your Footwear, at a minimum, at the above frequency intervals to detect more obvious damage and deterioration. In addition, you might sense deficiencies in thermal protection by feeling heat more quickly or more easily than before, or get wet from rain or hose streams leaking through the moisture barrier materials or seams. Whenever you detect a potential problem through your own inspection, or suspect that the protective qualities might be degraded, your Footwear should be inspected by trained personnel at the Fire Department or EMS Station or at a HAIX® North America Authorized Clean and Repair Center.

WARNING

Most performance properties of the Footwear and its components cannot be tested by the user in the field.

6.3 INSPECTION PROCESS AND CRITERIA

1. Criteria

Inspection of NFPA Footwear should be done in compliance with NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2008 Edition, Section 6.2.2.5 and 6.3.5.5

2. Preparation

- A. Wear appropriate protective gloves during inspection.
- B. Place Footwear on a clean surface in a brightly lighted area.

3. Outer Layers

- A. Leather Layer, Rubber Toe Cap, and Sole: Examine for dirt, thin spots, holes, tears, embrittlement, burns, abrasions, melted areas, and worn spots.
 - a. Discoloration could be a sign of overexposure to light or heat.
 - b. Embrittlement, cracking, or burns are a sign that other layers may be worn out or damaged and may need to be replaced.
 - c. If leather is punctured or cracked, the Footwear must be repaired by an HAIX® North America Authorized Clean and Repair Center, or retired and disposed of in accordance with



Disposal Procedures in this Guide.

- d. **Soles:** If one or more lugs on the sole is worn away, the Footwear needs to be resoled. All repairs must be done by HAIX® North America Authorized Clean and Repair Centers.
 - B. **Closure on zipper-closure Footwear:**
 - a. Check for functionality and corrosion.
 - b. Check that the zipper anchor and zipper loop are securely attached to the Footwear.
 - c. Check that laces are securely tied, and all extra lace is behind the attachment to avoid snagging
 - d. Check for signs of burns, melting, dirt, or other damage to the laces.
 - C. **Retroreflective Trim:**
 - a. Inspect Footwear for missing, burned, melted, or torn retroreflective trim.
 - b. Damaged trim should be replaced by a HAIX® North America Authorized Clean and Repair Center.
 - D. **Pull-on Boot Straps:** Examine all components to make sure they are securely attached to the Footwear.
 - E. **Stitching and Seams:** Examine all seams for loose threads, breaks, skipped stitches, or weakness.
3. **Inner Layer:**
- A. **Fabric:** Examine for dirt, thin spots, holes, tears, embrittlement, burns, abrasions, and worn spots.
 - a. Inspect by running your hands across the inner liner and feel for thin areas or ridges that indicate breakdown. Special attention should be given to the heel area.
 - b. Discoloration could be a sign of overexposure to light or heat.
 - B. **Stitching and Seams:** Examine all seams for loose threads, breaks, skipped stitches, or weaknesses.
 - C. **Label:** Locate and inspect the label on the inside of the Footwear. Check for legibility, abrasions or tears.
 - D. **Removable insole:** check that it is thoroughly dry and not worn or compressed.

HAIX® North America recommends using a HAIX® North America Authorized Clean and Repair Center for Footwear repair or inspection. For a list of centers, contact HAIX® North America at: Toll free 866-344-HAIX (4249).

⚠ DANGER

If during emergency operations, you perceive that water is passing through your Footwear from the outside, remove the Footwear from service and have it inspected by a HAIX® North America Authorized Clean and Repair Center. Passage of outside water means that the Footwear is damaged or deteriorated and must be replaced.

⚠ WARNING

If you find damage to your Footwear, you should ONLY send it to a HAIX® North America Authorized Clean and Repair Center for Evaluation, and Repair or Retirement.



6.4 RECORDKEEPING

HAIX® North America Authorized Clean and Repair Centers offer record keeping services in compliance with NFPA 1851. For manual records, record all inspections and your results on the *Inspection, Cleaning, Repair, Retirement, and Disposal Record* located in the back of this Guide. Maintain this form unless your organization has provided you with a comparable record keeping method for this purpose.

7 DONNING & DOFFING: PUTTING ON AND REMOVING YOUR HAIX® NFPA COMPLIANT FOOTWEAR

PREPARATION:

Before donning, check to make sure that the Footwear, including the inner layer and inner sole, is thoroughly dry, and that the inner sole is placed in the bottom of the Footwear. If there are laces, the laces must be tied securely. Before the first use of the zipper Footwear, adjust the fit by loosening the laces, pulling the Footwear onto foot, closing the zipper, then tightening the laces for a secure and comfortable fit. Tuck ends of laces between the lace system and tongue area.

DONNING (PUTTING ON YOUR FOOTWEAR)

For the pull-on style, use the pull-on straps and pull the Footwear securely onto your foot.

When using the zippered style, check to be sure the Footwear is unzipped, then pull the Footwear securely onto your foot and pull the zipper closed.

Check and adjust for comfortable, secure fit.

Before entering a hazard area, you must have a partner inspect the area where the Footwear interfaces with your trousers in order to assure proper overlap of all components of your NFPA Protective Ensemble, including Trousers and Footwear.

DOFFING (REMOVING YOUR FOOTWEAR)

- A. First, never remove Protective Ensemble until you are certain that you are safely removed from the hazard area. Always wear full NFPA Compliant Protective Ensemble during all phases of emergency operations.
- B. When you are ready to remove your NFPA Compliant Protective Ensemble, you should first remove your gloves and helmet.

WARNING

If wearing a zippered style, you must fasten all closures during all times the Footwear is worn or there will be gaps in your protection, and wear will occur in the heel area, greatly decreasing the useful life of the Footwear and voiding the warranty.



- C. Next, you should remove your SCBA cylinder and begin to remove your garments. Remove the coat first, then remove footwear by gently pulling off your Footwear. Pull the zipper completely downward and then remove the Footwear.
- D. If your Footwear is contaminated with hazardous chemicals, you should remove them using protective gloves and carefully avoiding any contact with contaminated parts of the Footwear. Be sure to place the Footwear in a plastic bag to allow safe handling. Bring this to the immediate attention of your fire department or employer.
- E. During and after doffing, always look for signs of chemicals, body fluids, or other contamination, and for signs of wear or damage. See Cleaning, Decontamination, and disinfecting Procedures, Section 11, and Inspection Procedures, Section 6 of this Guide.

8 CHECKING YOUR HAIX® NFPA COMPLIANT FOOTWEAR FOR COMPATIBILITY AND PROPER FIT

SIZE AND FIT

There are different styles of NFPA Compliant Footwear available from HAIX® North America. Make sure that you are wearing Footwear that fits securely and comfortably.

In order to determine the proper size, you must ensure that your foot size is measured either with the use of a Brannock device or by trying on sizing samples of the model you or your department are purchasing.

Footwear should have adequate room for toes to lay flat in the boot, and there should not be too much movement in the heel area. Failure to ensure the proper fit of your NFPA Compliant Footwear could result in serious injury. Footwear that does not properly fit will have a shortened useful life. If the Footwear does not seem to fit properly, you should check the size in the label to make sure it is your size, and to make sure it is your Footwear.

Make sure that the lower edges of your NFPA Compliant Trousers overlap the tops of your Footwear by 4-6 inches when standing. In addition, check to see if all layers of the Trousers overlap Footwear in any body position during use, including when crawling on the ground. Check NFPA Positions A and B. (FIGS. 3 and 4)

For the first use of the zipper Footwear, adjust the fit by loosening the laces, pulling on Footwear, closing zipper, then tightening the laces for a secure and comfortable fit. Tuck ends of laces between the lace system and tongue area.

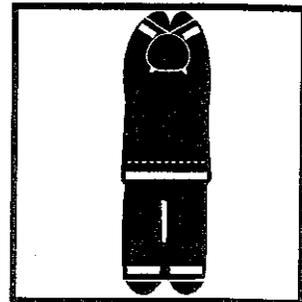


FIG. 3
NFPA Position A

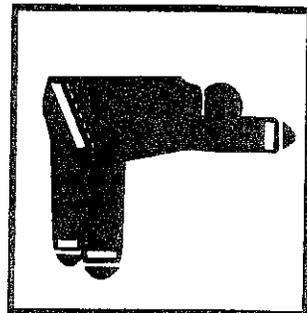


FIG. 4
NFPA Position B



⚠ DANGER

Never wear NFPA Compliant Footwear that fits improperly. If you have a question, or there is a problem with the fit of the Footwear, contact your safety officer for assistance. Wearing Footwear that does not fit properly could reduce protection and result in severe burns, cuts, or abrasions, or dangerously restrict your ability to avoid injuries in an emergency situation.

9 HAIX® NFPA COMPLIANT FOOTWEAR MARKING CONSIDERATIONS

- 9.1 The Footwear Information Label indicates the date of manufacture and the serial number of your HAIX® NFPA Compliant Footwear.
- 9.2 Do not apply letters, emblems, trim, and/or other types of identification that may penetrate the moisture barrier. Do not write on the inner lining, which is attached to the moisture barrier. Indelible inks could damage the film or coating.

NEVER MARK ON THE LABEL ON YOUR FOOTWEAR!

⚠ WARNING

Do not apply letters, emblems, trim and/or other types of identification that may penetrate the moisture barrier. Do not write on the inner lining. Damage to the moisture barrier could result in the penetration of water into your Footwear, reducing protection and resulting in scalding or burns.

10 USING YOUR HAIX® NFPA COMPLIANT FOOTWEAR SAFELY: HOW TO MINIMIZE THE RISK OF INJURY

The Footwear is designed in compliance with NFPA Standards to protect the user against specific hazards associated with operations and non-fire related rescue operations, emergency medical operations, and victim extrication. This section indicates the hazards associated with these activities, and specific warnings concerning the proper safe usage of your Footwear.

10.1 PREPARATION

Before beginning any emergency operation where there is fire or a threat of fire, your Footwear should be donned according to the procedures in Section 7 of this Guide, and checked by another person for proper overlap at the interface areas.

⚠ DANGER

Always wear clean and thoroughly dry Footwear in any fire fighting operation. Soiled or contaminated Footwear may be combustible, causing serious burns to the wearer if exposed to high heat or flame.

Always use your NFPA Compliant Footwear consistent with NFPA 1500, Standard on Fire Department Occupational Safety and Health Program and Title 29, Code of Federal Regulations, Part 1910.132.



FIRE CHARACTERISTICS

10.2 FIRES ARE INHERENTLY DANGEROUS, UNPREDICTABLE ENVIRONMENTS.

Temperatures can range upwards of more than 2000° F in a matter of seconds. It is important to understand these conditions in order to maximize your protection and to understand the limited ability of your Footwear to protect you from all hazards that may be present in a fire.

10.3 BURN HAZARDS: TYPES OF HEAT TRANSFER

There are three types of heat transfer: conduction, convection, and radiation. **Conduction** is the direct transfer of heat through contact with a hot object. **Convection** is the transfer of heat through a medium; for example, air. **Thermal radiation** is the transfer of heat in the form of light energy, directly from flames or reflected from hot surfaces. Fire fighters experience all three types of heat in a fire, and must understand their effects on NFPA Compliant Footwear.

Conduction: The danger of being burned by conductive heat while wearing NFPA Compliant Footwear is frequently underestimated. You can be burned by conductive heat when you contact heated surfaces or objects. This very real hazard is significantly increased if your Footwear is wet, either from damage to the moisture barrier, or from outside water entering from the top opening. Water can provide a conductive bond between surfaces that might not otherwise touch, increasing the chances of heat conduction. Water is a very poor insulator; it conducts heat with dangerous and totally unpredictable efficiency!

DANGER

Moisture in protective footwear can reduce insulation and lead to scalding burns! Always make sure your footwear is dry before wearing it in any emergency situation. Dry your footwear and the inner sole between runs to reduce the risk of serious burn injuries. Inspect your footwear for holes, and always secure the closures to prevent the penetration of moisture from the fire environment. Follow Inspection, Maintenance, Storage, Repair, Retirement, and Disposal Instructions in this Guide to make sure that the Footwear is not worn out or in an unsafe condition.

Convection: Convected heat travels through the air, even if there is no immediate appearance of fire. Convected heat can elevate the temperature of your Footwear to a point at which conductive heat burns can easily occur, particularly if your Footwear is wet or damp.

Thermal Radiation: Thermal Radiation is the transfer of heat in the form of light energy into a material, directly from flames or reflected from hot objects. Factors that affect the speed of radiant heat transfer include the temperature difference between two surfaces, their distance from each other, and the reflectivity of each surface. (FIG. 5)

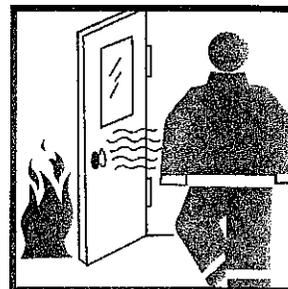


FIG. 5
Radiant heat from hot surfaces and flames can cause burns



⚠ DANGER

- You may have very little or no warning time from feeling heat or pain before skin begins to burn at 118° F.
- You need to be constantly aware of the buildup of heat in the surrounding environment and in your Garments and be ready to escape to a cool area where you can remove hot Garments quickly to avoid burns.

⚠ DANGER

Contact with hot objects can severely reduce insulation and result in scalding and burning without heat sensation or warning in some circumstances. If you feel tingling, immediately move to a cooler location. Failure to react immediately could cause you to be burned.

⚠ DANGER

Convected or Radiant heat can penetrate quickly into your Footwear. Dangerous levels of heat may be present inside or outside a structure despite the lack of flames, and burns can occur at relatively low temperatures. If you feel thermal radiation burns developing, escape to a cool, safe place immediately and remove Footwear. You may be burned without any warning signals or sustaining any damage to your Footwear.

10.4 BURNS

Burns are a function of time and temperature. The higher the temperature of the heat source and the longer the exposure time, the greater the severity of burns.

FIRST DEGREE BURNS begin when the temperature of skin reaches 118° F.

SECOND DEGREE BURNS occur when the skin reaches approximately 131° F.

THIRD DEGREE BURNS occur when skin temperature reaches approx. 152° F.

In terms of heat flux, unprotected skin will receive a second-degree burn after only a 30-second exposure at .45 watts per square centimeter. Studies have shown that flame temperatures of low intensity, like wastebasket fires, can reach almost 1300° F, with a heat flux in excess of over four watts per square centimeter and with air temperatures ranging up to 750° F. (For more information, see the study by J. Randall Lawson, listed in Reference Section). Thus, even small fires can generate several times the level of heat to cause severe burns to emergency responders who do not wear their protective clothing and footwear in a secure manner.

⚠ DANGER

Prolonged or repeated exposures to heat will increase Footwear temperatures and can cause burns even after the emergency responder is no longer exposed to high temperatures. Minimize exposure to heat by using water to cool the environment or by escaping quickly after a short period of time. Failure to follow these instructions will result in burns to your feet, ankles, or lower legs.

⚠ DANGER

The buildup of heat in NFPA Compliant Footwear can lead to burns without any sign of damage to the footwear. Never wait for signs of footwear damage to warn of imminent burns. Always be aware of your surrounding environment and be ready to escape if you begin to feel tingling or burning sensations.



⚠ DANGER

Fire fighters who are exposed to a flashover, backdraft, or other flame and high heat environments are at **EXTREME** risk for extensive burn injuries and death even while wearing their NFPA Compliant Structural Fire Fighting Footwear.

⚠ WARNING

Do not confuse the component testing requirements that are part of NFPA Standards with the conditions in which fire fighting personnel work. For example, the requirement that certain components must not melt, drip, or separate when exposed to convected heat temperatures of 500° F for 5 minutes is in no way intended to indicate that emergency responders face that condition in their work, or could be expected to withstand that condition **EVEN WHILE WEARING NFPA Compliant FOOTWEAR CORRECTLY** without suffering serious injury or death.

⚠ WARNING

Your NFPA Footwear is made of different types of materials that may absorb heat at different rates. Some parts may be much hotter than other parts. Avoid contact of skin with outer Footwear surfaces during and after fire fighting operations, until you are certain that the Footwear is a safe temperature.

10.5 HEAT STRESS: A SIGNIFICANT CAUSE OF RESPONDER INJURIES

Physical work in a warm or hot environment causes a rise in the temperature inside the body. To protect the body against heat, the heart begins to beat faster so that more blood can be moved to the skin surface. Blood vessels near the skin dilate so that they can carry more blood. In this way, blood in the interior of the body can be brought out near the body's surface and cooled. Most importantly, the body produces sweat that evaporates off the skin to provide cooling. Those natural responses do not work very well for any or all of the following conditions: the ambient air temperature is at least 75 degrees or higher, the garment's insulation blocks the transfer of heat away from the body, the garment blocks the evaporation of sweat, or the exertion of the muscles produces more heat than the system can remove. When the body temperature gets elevated too high, the results can be heat stress, heat exhaustion, or heat stroke.

⚠ WARNING

Overexertion in hot conditions while wearing an NFPA Compliant Protective Ensemble, including Footwear, can lead to heat exhaustion or heat stroke. Symptoms of heat exhaustion are a general feeling of weakness, dizziness, rapid pulse, low blood pressure while standing or sitting, and/or a headache. The skin may feel moist or clammy. If you feel symptoms, get to a cool place, remove your complete protective ensemble, and drink fluids. Failure to seek attention could lead to severe coma or death.



▲ WARNING

Symptoms of **heat stroke** are hot, dry skin with no sweating, very high body temperatures, weakness, dizziness, rapid breathing, nausea, unconsciousness, and sometimes mental confusion. If you feel any of the above symptoms at any time, get to a cool area immediately, remove your complete NFPA Protective Ensemble, including Footwear, drink fluids and seek medical attention. Failure to seek attention could lead to coma or death. Immediate cooling is essential for survival in heat stroke cases.

10.6 HEART ATTACKS: A RESULT OF OVEREXERTION

During Structural fire fighting operations, the heart beats faster because of the need to move more blood to the working muscles. This blood carries more oxygen to the muscles so that they can handle the increased workload.

Another factor in increasing the rate of the heart is the presence of adrenaline, the "fight or flight" hormone, in the responder's body during an emergency. The adrenaline present in your system causes the heart to pump even faster than during normal activity.

All of these factors could place too much stress on the heart, leading to a heart attack. The heart simply cannot handle the load placed on it.

▲ WARNING

You must be physically fit to safely perform strenuous work under stressful conditions. Regular cardiovascular exercise, abstaining from cigarette smoking, proper training, a healthy diet, and avoidance of obesity, can help to reduce the risk of heart attack.

10.7 LIQUID PENETRATION AND HAZARDOUS MATERIALS

LIMITED Protection against liquid penetration from 7 common chemicals

The NFPA 1992 Compliant Footwear's moisture barrier is tested for resistance against penetration from liquid splash by only 7 common hazardous liquid chemicals after 1 hour exposures. These chemicals are battery acid, acetone, ethyl acetate, 50 w/w sodium hydroxide, 93.1 percent w/w sulfuric acid, Tetrahydrofuran, Dimethylformamide, Nitrobenzene.

The NFPA 1971 Compliant Footwear's moisture barrier is tested for resistance against penetration from liquid splash by only 5 common fire ground chemicals after 1 hour exposures. These chemicals are 1. AFFF Foam; 2. battery acid (37 percent w/w sulfuric acid); 3. hydraulic fluid, phosphate ester base; 4. surrogate gasoline fuel C (a 50/50 percent by volume of toluene and iso-octane); and 5. a solution of 65 % chlorine.

These liquids are tested because they are considered to be the most common chemicals encountered in structural fire fighting and hazardous materials emergency incident operations. Footwear provides limited protection against incidental contact with these materials encountered during routine operations



⚠ WARNING

Over time, as the Footwear is worn and ages, the moisture barrier's protection against penetration of the 5 common fire ground chemicals and 7 common hazardous liquid chemicals listed in this section will become more limited. See Section 14 of this Guide on Useful life.

No Protection Against Hazardous Materials Exposure

In addition, fire fighters face potential exposure to an almost unlimited number of other potentially hazardous chemicals in their operations.

⚠ WARNING

Your HAIX® NFPA Compliant Footwear is NOT designed to protect against exposures to hazardous materials operations. You MUST use appropriate protective equipment in situations involving liquid or vapor hazardous materials.

⚠ WARNING

If you experience accidental or incidental exposure to a hazardous material, you need to follow the precautions in Section 11 of this Guide regarding Cleaning and Decontamination in order to limit exposure to yourself and others.

10.8 ELECTROCUTION

⚠ DANGER

Your Footwear provides NO PROTECTION AGAINST ELECTROCUTION. When entering a rescue site, you should NEVER touch live wiring, especially if your Footwear is wet. Never allow equipment you are operating to contact live wiring. Any of these hazards could result in serious injuries or death.

10.9 BLOODBORNE PATHOGENS

Your Footwear is designed to protect your feet, ankles, and lower legs from the hazards of exposure to bloodborne pathogens present in body fluids. Exposure incidents are specific contact of the following with blood or OPIM (Other Potentially Infection Materials): eye; mouth or other mucous membranes; non-intact skin; or parenteral contact. Make sure face, mouth, eyes, nose, and non-intact skin are covered. Avoid contact with sharps. Use Body Substance Isolation Procedures when handling Footwear exposed to body fluids. Washing Footwear according to the Procedures in Section 11 of this Guide will generally eliminate hazards of exposure to body fluids arising from incidental contact. For heavier levels of exposure, disinfecting Footwear will substantially reduce hazards arising from exposure of Footwear to potentially hazardous body fluids. See Section 11 of this Guide for more information.



10.10 ADDITIONAL FACTORS AFFECTING SAFETY

The following additional factors may affect the limited protection provided by the NFPA Compliant Footwear:

- **Conditions at an incident beyond the scope of the limited purposes of this Footwear;**
- **Unauthorized modifications, repairs or replacement of components of the Footwear not otherwise in compliance with HAIX® North America specifications; and**
- **The addition of accessories that are not third party certified to the NFPA Standard, or not approved by HAIX® North America as compatible with NFPA Compliant Footwear. If you have questions about whether accessories will degrade the performance of your Footwear below the NFPA Standard, contact HAIX® North America or a HAIX® North America Authorized Clean and Repair Center.**

11 CLEANING, DECONTAMINATING, AND DISINFECTING YOUR HAIX® NFPA COMPLIANT FOOTWEAR

11.1 HAZARDS OF DIRTY FOOTWEAR: WHY CLEANING AND DECONTAMINATING ARE IMPORTANT

You can be exposed to many hazardous substances while involved in hazardous materials emergency operations. These substances can contaminate your Footwear, and cause harm to you after your body contacts your Footwear. This section tells you how to wash and decontaminate your Footwear to reduce these hazards.

Routine Fire Ground Contaminants: Many fire combustion products—including hydrocarbons, polynuclear aromatic compounds, metals such as cadmium and chromium, acids and soot — are hazardous to the fire fighter. These substances can become embedded in your Footwear, penetrate the inner layer, and enter the body through ingestion, absorption, inhalation, and parenterally. In addition, particulates and other products of combustion can reduce the flame resistance of your Footwear and increase your Footwear's ability to conduct electricity. To reduce the risk of long-term harm from hazardous substances present in the products of fire combustion, or hazardous chemicals, you **MUST** wash your Footwear.



Hazardous Chemicals:

If you experience accidental or incidental exposure to a hazardous chemical, you need to follow the precautions in this Section on Washing and Decontamination to limit exposure and risk of harm to yourself and others.

⚠ WARNING

To reduce the risk of harm from hazardous substances present at a building collapse, damaged vehicle, or hazardous chemicals, you **MUST** wash your Footwear.

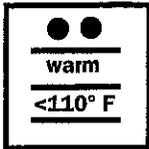
Bloodborne Pathogens: You are also at risk of exposing your Footwear to body fluids that may contain bloodborne pathogens. Following proper washing procedures described later in this section will reduce the risk of infection from these hazards.

11.2 FREQUENCY

NFPA Compliant Footwear should be cleaned

- 1) at least every six months or;
- 2) as soon as possible after contamination or exposure to smoke, blood or body fluids, hazardous substances or hazardous liquid chemicals .





water temperature



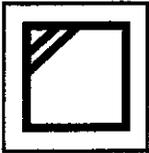
do not machine wash



no chlorine bleach



air dry



in the shade



never tumble dry



never dry-clean

⚠ WARNING

Always clean your HAIX® NFPA Compliant Footwear separately from other items. Never clean your Footwear at home, or at public laundry facilities to avoid the spread of chemical contamination or hazardous combustion products to other laundry.

⚠ WARNING

Never use chlorine bleach or chlorinated detergents to wash your Footwear. Even small amounts of chlorine will seriously reduce your Footwear's protective qualities and could lead to serious injury or death.

⚠ WARNING

Never use high velocity power washers or pressure hoses for washing Footwear. These tools can severely damage the raw materials and seams, compromising the protection of the Footwear.

11.3 CLEANING

Before cleaning, make sure you comply with all state, federal, and local guidelines for handling effluents from utility sinks. Appropriate protective gloves should be worn.

Hand Scrub NFPA Footwear in a utility sink with warm water and a wet shoe brush or another soft brush such as a small nailbrush or a soft-bristle toothbrush. The brush should be soaked with water to remove dirt and other soils. Do not use heavy abrasion and/or scrubbing.

Do not use saddle soaps or soaps that contain fats.

Do not use chlorine bleach. Do not use detergent. Use water temperatures less than 110° F.

The removable insole can also be washed as necessary. Machine wash the insoles in cold water on delicate cycle. Air dry the insoles before returning to the Boots.

11.4 DRYING

Air dry NFPA Footwear, removing the insole. Drying racks for hanging NFPA Footwear provide maximum air exposure and reduce drying time.

Do not dry Footwear in direct/indirect sunlight or fluorescent light. Do not machine dry. Do not dry NFPA Footwear in front of open windows, hot ovens, or radiators. The Footwear's form will change, and the leather might become brittle. Allow the boots to dry slowly.

11.5 POLISHING

To prolong the wearlife and maintain the leather exterior of your NFPA Footwear, apply a professional grade silicone-based shoe polish. Those that contain petroleum-based products may be flammable; these products will significantly reduce the flame and/or heat resistance of your NFPA Footwear and therefore are not suitable.



⚠ WARNING

Never use petroleum-based shoe polish, because it will significantly reduce the flame and/or heat resistance of your HAIX® Footwear. Use of petroleum-based products may result in serious injuries.

⚠ WARNING

Do not dry your leather NFPA Compliant Footwear near heaters or radiators. Treat Footwear with the same care as other fine quality leather products. Force drying will cause the foot form to change and the leather to crack. It will also cause damage to the moisture barrier, possibly exposing you to significant amounts of water and hazardous contaminants, which may result in serious injuries.

⚠ WARNING

Do not dry Footwear in direct/indirect sunlight or in fluorescent light. Light will severely reduce the strength of the seams, and will discolor and greatly reduce the strength and protective qualities of the components of the Footwear.

11.6 CONTRACT CLEANING

HAIX® North America has made available a network of professional clean and repair centers that are factory approved to provide cleaning for HAIX® North America NFPA Compliant Footwear. HAIX® North America recommends that only a HAIX® North America Authorized Clean and Repair Center be used for contract cleaning. For contract cleaning please call HAIX® North America toll free at (866) 344-HAIX (4249).

11.7 DECONTAMINATION AND DISINFECTION

Applicable Standard. You must read and have facilities and procedures in compliance with NFPA 1581, *Standard for Fire Department Infection Control Program - 2005 Edition.*

⚠ CAUTION

Personnel involved in the handling, sorting, bagging, transporting, and laundering of contaminated NFPA Compliant Footwear must wear utility gloves and appropriate protective clothing and equipment to prevent occupational exposure during these activities.



Preparation. Remove contaminated and infected NFPA Compliant Footwear from wearer and from service before beginning. Footwear should remain out of service until decontaminated and disinfected. Wear protective gloves and appropriate protective clothing and equipment while decontaminating and disinfecting.

⚠ WARNING

To reduce the risk of harm from hazardous substances present in the products of fire combustion, hazardous chemicals, and blood or body fluids, you MUST clean, and if necessary, decontaminate or disinfect your NFPA Compliant Footwear after each exposure to such hazardous substances.

A. Hazardous Substances Present in the Products of Fire Combustion (Soot, Smoke, and Debris).

To reduce the risks associated with exposure to the hazardous substances found in the products of fire combustion, you MUST clean, dry, and store your Footwear according to the procedures in this User Guide.

B. Hazardous Chemicals

1. Footwear at the scene should be handled to limit further exposure to hazardous chemicals, and exposure to others. Contaminated Footwear should be handled in accordance with federal, state and local regulations.
2. KNOWN MATERIALS: Contact the source of the materials, your local HAZMAT Team, or the Health Department to determine whether the contaminants are hazardous materials. If the contaminant is known, contact a HAIX® North America Authorized Clean and Repair Center to determine the feasibility of decontamination.
3. UNKNOWN MATERIALS: If the contaminant is not known, any NFPA Compliant Footwear should remain out of service until the materials are identified. Always demand MSDS information and be prepared to share your findings with the HAIX® North America Authorized Clean and Repair Center to decontaminate the Footwear.
4. If your Footwear cannot be decontaminated, it must be retired and disposed of in accordance with federal, state, and local regulations.

⚠ WARNING

Only a trained expert in decontamination should attempt to decontaminate NFPA Compliant Footwear. Contact a HAIX® North America Authorized Clean and Repair Center to seek assistance in determining whether decontamination is possible, and the name of the appropriate organization to perform decontamination.



11.8 LAUNDRY SAFETY

In the health care field, Laundry and House Keeping Personnel are considered to be among those at risk to not only hazardous materials, but also to bloodborne pathogens primarily by exposure to sharps. Your fire department should have a Bloodborne Pathogens Written Exposure Control Plan. Part of this plan is decontamination, disinfection, and cleaning of Footwear, and it should include cleaning procedures and housekeeping safety procedures. You should follow all appropriate federal, state, and local regulations. See NFPA 1851-2005, Chapter 7. Universal Precautions should always be observed, when handling soiled or contaminated Footwear.

A. Blood and Body Fluids

1. **Disinfecting Products.** You must use disinfectants approved by and registered with the U.S. Environmental Protection Agency and shall also be registered as tuberculocidal. You must use disinfectants that are compatible with NFPA Compliant Footwear. If you have questions concerning the use of a particular disinfectant, contact a HAIX® North America Authorized Clean and Repair Center.
2. **Disinfecting Procedure for Blood and Body Fluids**
Small incidental areas: Use an appropriate disinfectant available for Footwear. Always follow the instructions of the disinfectant manufacturer regarding product usage.
Large areas: If Footwear has large areas of coverage of blood or body fluids, place and transport Footwear in bags to prevent leakage. Contact a HAIX® North America Authorized Clean and Repair Center to arrange for disinfection.

- B. Transporting of Footwear contaminated with blood or body fluids must be done in accordance with federal, state and local regulations.

12 REPAIR METHODS FOR HAIX® NFPA COMPLIANT FOOTWEAR

WARNING

Before any repairs are made to your NFPA Compliant Footwear, it must be cleaned, decontaminated, and disinfected in accordance with this Guide. It is a violation of OSHA guidelines to expect workers to alter or repair soiled and possibly contaminated or infected Footwear.

All repairs to Footwear should be done at HAIX® North America Authorized Clean and Repair Centers, or by an expert trained by HAIX® North America. Unauthorized repairs made to Footwear invalidates all warranties and may expose wearer to hazardous or life threatening conditions. For a list of HAIX® North America Authorized Clean and Repair Centers, call HAIX® North America at: Toll free (866) 344-HAIX (4249).



13 STORING YOUR HAIX® NFPA COMPLIANT FOOTWEAR

Between incidents, and for longer-term storage, store your Footwear out of direct and indirect sunlight and fluorescent light and away from sharp objects.

Use fans to provide good ventilation to dry Footwear that may have absorbed water or sweat after a run and to assist in the removal of fire ground combustion products that may not have been removed by washing.

Moisture in your Footwear reduces your insulation, comfort, and overall protection during Structural fire fighting operations.

Failure to dry your Footwear will result in the growth of mildew and bacteria which could lead to skin irritation, rashes, or may affect the protective qualities of the Footwear.

Always clean and dry your Footwear in accordance with Section 11 of this Guide and before placing in long-term storage.

⚠ WARNING

Avoid storing your Footwear in temperature extremes. **Repeated cycles of heating and cooling can reduce the protective qualities and useful life of the Footwear.** See Section 14 of this Guide for limitations on useful life.



FIG. 6
Never store your Footwear in direct sunlight, indirect sunlight, or in fluorescent light.

⚠ WARNING

NEVER STORE YOUR FOOTWEAR IN DIRECT SUNLIGHT, INDIRECT SUNLIGHT, OR IN FLUORESCENT LIGHT (**FIG. 6**). Exposure to light (particularly light in the sun's rays and fluorescent light) will severely weaken and damage components such as the moisture barriers, NOMEX® laces and thread in your Footwear after only A FEW DAYS. Damage caused by exposure to light cannot be repaired, nor will the manufacturer cover such damage in its warranty. (See Warranty Information, Section 16 of this Guide.)

⚠ CAUTION

Never store your Footwear in living quarters with personal belongings, or within the passenger compartment of a vehicle. Prolonged exposure to contaminants remaining in the Footwear may increase the risk of cancer or other diseases.



14 RETIRING YOUR HAIX® NFPA COMPLIANT FOOTWEAR

14.1 USEFUL LIFE AND RETIREMENT

NFPA performance requirements are based on new, unworn Footwear. Useful life is the period of time that NFPA Compliant Footwear, which have been properly used and cared for, can be expected to provide reasonable limited protection. Useful life is **normally 3 years** depending upon boot construction materials and conditions of wear, maintenance, and storage. **Useful life is highly unlikely to be more than 5 years.** A general rule provided in the annex of the *NFPA 1851 Standard on Selection, Care and Maintenance of Personal Protective Equipment (2005)* is that Footwear should be retired when the costs of repair would exceed 50% of the replacement cost. The useful life of Footwear will vary according to type and frequency of use, the weight, and type of materials used in the Footwear. **However, Footwear more than 5 years old and made to earlier versions of the NFPA Standard are highly likely to have exceeded its useful life and should be retired!**

Your NFPA Compliant hazardous materials emergency Footwear should be assessed at each regular inspection described in Section 6 of this Guide to determine whether it has exceeded its useful life and must be retired.

The following factors affect the useful life of your Footwear:

- A. **Age and frequency of use** - Footwear used at the busiest stations will not last as long as at less busy stations.
- B. **Number and type of previous repairs** - Footwear repaired many times in the same places from on-duty damage will generally wear out sooner than less frequently damaged or repaired Footwear.
- C. **Type of work the wearer performed** - For example, toe areas of the Footwear that are used in crawling operations generally will wear out more quickly than other areas.
- D. **The length of exposure to extreme heat and the intensity of the heat** - Exposure to extreme heat can cause the leather outer layer and the inner lining to become brittle. Also repeated cycles of low level, long-term exposure to heat can also damage moisture barrier materials.
- E. **The length of exposure to hazardous chemicals** - If the exposure to hazardous chemicals is severe, and decontamination is ineffective, the Footwear may not be safe for further use.
- F. **The length of exposure to direct or indirect sunlight, or other light sources such as fluorescent light** - Tests and fire department surveys show that exposure to direct/indirect sunlight or fluorescent light causes the moisture barrier, and any Footwear component made with aramid fibers such as thread and laces, to become brittle, weak or degraded.

• NFPA performance requirements are based on new, unworn Footwear and Composites. Useful life varies depending on conditions of wear, maintenance, and storage.

• Footwear more than five (5) years old and made to earlier versions of the NFPA Standard are **highly likely to have exceeded their useful life and must be retired!**

CAUTION

Most performance properties of the Footwear and its components cannot be tested by the user in the field.



- G. **Footwear more than 5 years old** and made to earlier versions of the NFPA standard are highly likely to have exceeded their useful life and must be retired.
- H. Damage caused by use of non-authorized replacement parts such as: insoles, zipper inserts, laces.
- I. Replacement of zippers worn improperly, incompletely zipped or damaged by heavy wear and tear;
- J. Damage or wear to inner or outer heel area by zipper-style Footwear worn without proper sealing of zippers;
- K. Damage to inner liner by donning or doffing zipper Footwear without first properly unzipping.
- L. Footwear not properly cleaned and polished.

If you have questions about whether to retire your Footwear, contact a HAIX® North America Authorized Clean and Repair Center.

Trained professionals with in-depth knowledge of Footwear and their limitations should handle the details of a retirement program. **If you have any questions about the useful life and retirement of your HAIX® Footwear, get assistance before wearing your Footwear into any emergency situation!**

15 DISPOSING OF RETIRED HAIX® NFPA COMPLIANT FOOTWEAR

15.1 DISPOSAL

Retired uncontaminated Footwear must be destroyed to prevent its unauthorized or mistaken use. Cut the uncontaminated, retired Footwear into pieces and dispose of properly. One suggested method of disposal is a landfill.

Retired Footwear that is contaminated with blood or body fluids or hazardous chemicals should be placed in a plastic bag and properly disposed of. You should follow federal, state, and local regulations governing disposal of contaminated materials.

⚠ WARNING

Never use retired Footwear for training purposes. Use of retired Footwear in hazardous situations could result in serious injury.



16 LIMITED WARRANTY INFORMATION

HAIX® North America warrants that its Footwear meets or exceeds all applicable NFPA standards in effect at the time of their manufacture and further warrants that such products are free from any defect in workmanship or any patent material defect.

Conditions of use are outside the control of HAIX® North America. It is the responsibility of the user to inspect and maintain the products to assure they remain fit for their intended purpose. In order to maximize the useful life of these products and maintain the warranty, the products are to be used only by appropriately - trained personnel following proper procedures and in accordance with the product's warning, use, inspection, maintenance, care, storage, and retirement instructions.

HAIX® North America shall honor warranty claims on HAIX® North America NFPA boots for a period of one (1) year. The warranty time period begins on the date that the equipment was delivered to the original retail purchaser, or three months after the product is sent to a North American HAIX® North America Dealer.

EXCEPT AS SET FORTH ABOVE, HAIX® NORTH AMERICA MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE.

Under the above warranties, HAIX® North America will repair or replace, at its option, any product which does not meet the above warranties. Such repair or replacement will be the purchaser's sole remedy and HAIX® North America will not be responsible for any incidental, consequential, or other damages based upon or arising in any way from any breach of the warranties contained herein or the purchaser's use of such product.

This warranty only applies to products, parts or other components which are returned to HAIX® North America or a HAIX® North America authorized Repair Center with prior authorization and proof of purchase and which, upon examination, HAIX® North America agrees are defective under the conditions of this warranty.

Product includes the footwear itself and any parts or labor furnished by HAIX® North America in conjunction with the sales, delivery or servicing thereof.



DEFECTS IN WORKMANSHIP AND/OR MATERIALS:

Examples of Defects in Workmanship and/or Materials are poorly finished stitching which comes undone in normal use; components which are not properly attached or do not function properly in normal use; or irregularity in materials which degrades product performance.

16.1 EXCEPTIONS TO LIMITED WARRANTY

The following are excluded from the provisions of this limited warranty:
(Note that this list is not all inclusive)

- A. Damage caused by improper cleaning or maintenance (for example, use of bleach or petrochemicals to clean);
- B. Any repairs not made by a HAIX® North America authorized repair center;
- C. Damage caused by the use of non-authorized replacement parts or accessories such as insoles, zippers, inserts, laces or lace replacements;
- D. Damage from routine exposure to common fire scene hazards;
- E. Loss of trim reflectivity due to normal wear;
- F. Detachment of reflective trim due to thread abrasion or heat exposure;
- G. Replacement of zippers which have been damaged by improper use;
- H. Damage or excessive wear due to zipper equipped footwear being worn with the zipper fully or partially unzipped;
- I. Damage which results from putting on or taking off footwear before unzipping the zipper where applicable;
- J. Any damage which results from the zipper being used without a zipper anchor;
- K. Re-soling by other than a HAIX® North America authorized repair center.



17 SOURCES AND FOR FURTHER INFORMATION

International Fire Service Training Association, (IFSTA). 1998. Essentials of Fire Fighting. 4th Edition, (1998 Edition)

Lawson, James R. "Thermal Performance and Limitations of Bunker Gear." Fire Engineering, August, 1998, 37-56

National Fire Protection Association 1971: Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2007 Edition

National Fire Protection Association 1992: Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies 2005 Edition

National Fire Protection Association 1999: Standard on Protective Clothing for Emergency Medical Operations, 2008 Edition

National Fire Protection Association 1951: Standard on Protective Ensembles for Technical Rescue Incidents, 2007 Edition

National Fire Protection Association 1977: Standard on Protective Clothing and Equipment for Wildland Fire Fighting, 2005 Edition

National Fire Protection Association 1851: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire fighting and Proximity Fire fighting, 2008 Edition

National Institute for Occupational Safety and Health. 1989. Guidelines for Prevention of Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Health-Care and Public-Safety Workers.

Occupational Safety and Health Administration. 1991. Occupational Exposure to Bloodborne Pathogens: Final Rule. 29 CFR Part 1910.1030, Federal Register.

Occupational Safety and Health Administration. Occupational Safety and Health Standards, Subpart I: Personal Protective Equipment", 29 CFR 1910.132

Southern Area Fire Equipment Research (SAFER). 1994. PPE Care and Use Guidelines.

TRI/Environmental. 1994. Decontamination of Structural Fire Fighting Protective Clothing and Equipment, Draft Final Report.

Veghte, James H, Ph.D. 1988. Fire Fighters' Protective Clothing: Design Criteria. 2nd Edition.

West KH:, 1992. Infectious Disease Handbook for Emergency Care Personnel, 2nd Edition. Cincinnati: ACGIH, Cincinnati, Ohio.

National Fire Protection Association. 2001 NFPA 1851: Standard for Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles. (2007 Edition)

For Further Information, contact

HAIX® NORTH AMERICA INC.

2320 Fortune Dr. Suite 120

Lexington, KY 40509

Phone 859-281-0111

Toll free 866-344-HAIX (4249)

Fax 859-281-0113, www.haix.com



DANGER

PERSONAL RESPONSIBILITY CODE

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. It is your responsibility to read and understand any user's instructions provided with any piece of equipment you may be called upon to use.
3. It is your responsibility to know that you have been properly trained in Firefighting and/or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufacturers and Services Association, Inc.
P.O. Box 147, Lynnfield, MA 01940 www.FEMSA.org

Copyright 2004 FEMSA. All Rights Reserved



HAIX® North America INC.

2320 Fortune Dr. Suite 120
Lexington, KY 40509
Phone 859-281-0111,
Toll free 866-344-HAIX (4249),
Fax 859-281-0113, www.haix.com

