THE CITY OF
EDINBURG

NOTICE TO BIDDERS

The City of Edinburg is soliciting sealed bids to be received by the City Secretary's Office located at 415 W. University Drive, Edinburg, Texas 78541. City of Edinburg normal business days are Monday through Friday between the hours of 8:00 a.m. to 5:00 p.m. and shall be closed on recognized holidays.

Bids will be received until **3:00 p.m. Central Time**, on **Monday, June 22, 2015**, shortly thereafter all submitted bids will be gathered and taken to the Edinburg City Hall Community Room, 1st Floor, to be publicly opened and read aloud. Any bid received after the closing time will not be accepted and will be returned to the bidder unopened. It is the responsibility of the bidder to see that any bid submitted shall have sufficient time to be received by the City Secretary's Office prior to the bid opening date and time. The receiving time in the City Secretary's Office will be the governing time for acceptability of the bids. Bids will not be accepted by telephone or facsimile machine. All bids must bear original signatures and figures. The Bid shall be for:

BID NO. 2015-86
FIREFIGHTER PROTECTIVE JACKETS AND PANTS

Bidders receiving a "NOTICE TO BIDDERS" and/or "REQUEST FOR PROPOSALS" notice in the mail or reading same in the newspaper are advised that the bidding documents can be downloaded from the City of Edinburg web page address: www.cityofedinburg.com, or may obtain copies of same by contacting the office of: LORENA FUENTES, PURCHASING AGENT, LOCATED AT 415 W. UNIVERSITY DRIVE, Edinburg, TX 78541 by calling (956) 388-1895 or by e-mailing your request to the following e-mail address: lfuentes@cityofedinburg.com

If you have any questions or require additional information regarding this bid, please contact Mr. Shawn Snider, Fire Chief at (956) 383-7691.

If Hand-delivering Bids: 415 West University Drive,
C/o City Secretary Department (1st Floor)

If using Land Courier (i.e., FedEx, UPS): City of Edinburg
C/o City Secretary
415 West University Drive
Edinburg, Texas 78541

If Mailing Bids: City of Edinburg
C/o City Secretary
P.O. Box 1079
Edinburg, TX 78540-1079

The City of Edinburg reserves the right to refuse and reject any or all bids and to waive any or all formalities or technicalities and to accept the bid deemed most advantageous to the City, and hold the bids for a period of **60** days without taking action.

Bids must be submitted in an envelope sealed with tape and prominently marked on the lower left hand corner of the bid envelope with corresponding bid number and title.

CITY OF EDINBURG
INSTRUCTIONS TO BIDDERS

DEVIATION FROM SPECIFICATION

Please read your specifications/requirements thoroughly and be sure that the SERVICES offered comply with all specifications/requirements. Any variation from the specifications/requirements must be clearly indicated by letter attached to your bid referencing variations on a point-by-point basis. If no exceptions are noted, and you are the successful bidder, it will be required that the SERVICES be provided as specified.

PURPOSE

1. The purpose of these specifications/requirements and bidding documents is for the purchase of FIREFIGHTER PROTECTIVE JACKETS AND PANTS for the City of Edinburg, Fire Department.

2. The SERVICES to be furnished under this bid shall be as specified in these bid documents. All specifications/requirements shown are at minimum. There is no intention to disqualify any bidder who can meet these specifications/requirements.

SUBMITTAL OF BID

Bids will be submitted in sealed envelopes upon the blank bid form attached hereto. Submit two (2) complete sets of the bid, one (1) original marked "**ORIGINAL,**" and one (1) copy marked "**COPY**". Each bid must be completely filled out and **SUBMITTED IN ORIGINAL FORM**, complete with all supporting documentation. Bids submitted by facsimile (fax) or electronically will **NOT** be accepted. Submittal of a bid in response to this solicitation for Bids constitutes an offer by the Bidder. Bids which do not comply with these specifications/requirements may be rejected at the option of the City. Bids must be filed with the City of Edinburg, before opening day and hour. No late Bids will be accepted. They will be returned to Bidder unopened (if properly identified).

If Hand-delivering Bids:	415 West University Drive, c/o City Secretary Department (1st Floor)
If using Land Courier (i.e., FedEx, UPS):	415 West University Drive, c/o City Secretary Department (1st Floor), Edinburg, Texas 78541
If Mailing Bids:	P.O. Box 1079, Edinburg, TX 78540-1079

PREPARATION OF BID

Bids MUST give full firm name and address of bidder, and be manually signed. Failure to do so will disqualify your bid. Person signing bid must show title or AUTHORITY TO BIND HIS/HER FIRM IN A CONTRACT.

Firm name and authorized signature must appear on each page that calls for this information. The legal status of the Respondent/Bidder whether corporation, partnership, or individual, shall also be stated in the bid. A corporation shall execute the bid by its duly authorized officers in accordance with its corporate by-laws and shall list the state in which it is incorporated. A partnership Respondent/Bidder shall give full names and addresses of all partners. All partners shall execute the bid. Partnership and Individual Respondent/Bidder shall state in the bid the names and addresses of all persons with a vested interest therein. The place of residence of each Respondent/Bidder, or the office address in the case of a firm or company, with county and state and telephone number, shall be given after the signature.

ALTERATIONS/AMENDMENTS TO BID

Bids **CANNOT** be altered or amended after opening time. Alterations made before opening time must be initialed by bidder guaranteeing authenticity. No bid may be withdrawn after opening time without acceptable reason in writing and only after approval by the City of Edinburg.

INSTRUCTIONS TO BIDDERS (Continued):

SALES TAX
State sales tax must not be included in the bid.

SUBSTITUTIONS
No substitutions or cancellations will be permitted without written approval of City of Edinburg.

NO BID RESPONSE
If unable to submit a bid, bidder should return inquiry giving reasons.

EXCEPTIONS
Any additions, deletions, or variations from the following specifications/requirements must be noted. The bidder shall attach to his/her bid sheet a list of any exceptions to the specifications/requirements if unable to do so, on specification sheet.

BRAND OR MANUFACTURER REFERENCE
Unless otherwise specified, any catalog or manufacturer's reference or brand name used in describing an item is merely descriptive, and not restrictive, and is used only to indicate type and style of product desired. Bids on alternate brands will be considered if they meet specification requirements. If a bidder quotes on equipment other than the one(s) specified in the bid, sufficient specifications and descriptive (pictured literature) data must accompany same to permit thorough evaluation. In the absence of these qualifications, he/she will be expected to furnish the product called for.

DELIVERY
Number of days required to deliver SERVICES after receiving order must be stated in the bid. Failure to so state will obligate bidder to complete service delivery within ONE day.

DELAY IN SERVICE DELIVERY
When delay can be foreseen, Bidder shall give prior notice to City of Edinburg. Bidder must keep City of Edinburg advised at all times of status of order. Default in promised service delivery (without acceptable reasons) or failure to meet specifications/requirements, authorizes the City of Edinburg to purchase such SERVICES elsewhere and charge increase in cost to defaulting vendor. Acceptable reasons for delayed delivery are as follows: Acts of God (floods, tornadoes, hurricanes, etc.), acts of government, fire, strikes, war; Actions beyond the control of the successful bidder.

SERVICE DELIVERED PRICING
Bids in units of quantity specified - extend and show total. In the event of discrepancies in extension, unit prices will govern. Bids subject to unlimited price increase will not be considered.

VALID BID TIME FRAME
The City may hold bids 60 days after bid opening without taking action. BIDDERS shall be required to hold their Bids firm for the same period of time.

RIGHT TO REJECT/AWARD
The City of Edinburg reserves the right to refuse and reject any or all Bids, and to waive any or all formalities or technicalities, and to make such awards of contract as may be deemed to be the best and most advantageous to the City of Edinburg.

INSTRUCTIONS TO BIDDERS (Continued):

MULTIPLE VENDOR CONTRACTS

Bidders are advised that the City of Edinburg may award Service Contracts to multiple vendors based on low bid per item basis. All items specified on the "Bid Form" **must** reflect the individual unit prices. The City of Edinburg reserves the right to award all items individually or in any combination thereof.

INDEMNIFICATION CLAUSE

The Bidder agrees to indemnify and save harmless the City, from all suits and actions of every nature and description brought against them or any of them, for or on account of the use of patented appliances, products or processes, and he shall pay all royalties and charges which are legal and equitable. Evidence of such payment or satisfaction shall be submitted upon request of the Purchasing Agent, as a necessary requirement in connection with the final estimate for payment in which such patented appliance, products or processes are used.

ADDENDA

Bidder shall carefully examine the bid forms, specifications/requirements, and instructions to Bidders. Should the bidder find discrepancies in, or omissions from bid forms, specifications/requirements, or other documents, or should he/she be in doubt as to their meaning, he/she should at once notify the Purchasing Agent (Edinburg City Hall, 956-388-8972) and obtain clarification by addendum prior to submitting any bid. Explanations, interpretations, and supplemental instructions shall be in the form of written Addenda which shall become a part of the Contract documents. Said Addenda shall be mailed, e-mailed, hand delivered and/or faxed, to all prospective Bidders. All Addenda issued in respect to this project shall be considered official changes to the original bid documents. Verbal statements in response to inquiries and/or requests for explanations shall not be authoritative nor binding. It shall be the Bidder(s) responsibility to ensure that they have received all Addenda in respect to this project. Furthermore, Bidders are advised that they must recognize, comply with, and attach a signed copy of each Addendum which shall be made part of their Bid Submittal. Bidder(s) signature on Addenda shall be interpreted as the bidder's "recognition and compliance to" official changes as outlined by the City of Edinburg and as such are made part of the original solicitation documents. Failure of any bidder to receive any such addendum or interpretation shall not relieve such Bidder from its terms and requirements. The City may issue a written addendum no later than five calendar days prior to the date bids must be received. Addendums are available online at www.cityofedinburg.com.

PAYMENT

The City of Edinburg will execute payment by mail in accordance with the State of Texas Pay Law after SERVICES have been provided and invoiced. No other method of payment will be considered.

SYNONYM

Where in this bid package ITEMS OR SERVICES is used, its meaning shall refer to the purchase of FIREFIGHTER PROTECTIVE JACKETS AND PANTS as specified.

ASSIGNMENT

Neither the Bidder's contract nor payment due to an awarded vendor may be assigned to a third party without the written approval of the Purchasing Department for the City of Edinburg.

BIDDER'S EMPLOYEES

Neither the Bidder nor his/her employees engaged in fulfilling the terms and conditions of this Purchase Contract shall be considered employees of the City. The method and manner of performance of such undertakings shall be under the exclusive control of the vendor on contract. The City shall have the right of inspection of said undertakings at any time.

INSTRUCTIONS TO BIDDERS (Continued):

INTERPRETATIONS

Any questions concerning the conditions and/or specifications/requirements with regards to this solicitation for Bids shall be directed to the designated individuals as outlined in the Request for Bids. Such interpretations, which may affect the eventual outcome of this request for Bids, shall be furnished in writing to all prospective Bidders via Addendum. No interpretation shall be considered binding unless provided in writing by the City of Edinburg in accordance with paragraph entitled "Addenda".

STATUTORY REQUIREMENTS

It shall be the responsibility of the successful Bidder to comply with all applicable State & Federal laws, Executive Orders and Municipal Ordinances, and the Rules and Regulations of all authorities having jurisdiction over the work to be performed hereunder and such shall apply to the contract throughout, and that they will be deemed to be included in the contract as though written out in full in the contract documents. (To include issues related to health, environmental, and safety to name a few.)

RIGHT TO WAIVE

City of Edinburg reserves the right to waive or take exception to any part of these specifications/requirements when in the best interest of the City of Edinburg.

COOPERATIVE PRICING

Bidders are advised that in addition to responding to our "local" solicitation for bids/Bids with Dealer pricing, vendors/contractors are encouraged to provide pricing on the below referenced items/products/services based on BuyBoard, TX-MAS, H-GAC and/or any other State of Texas recognized and approved cooperative which has complied with the bidding requirements for the State of Texas. If bidding other than or in addition to "dealer" pricing, kindly duplicate the bid forms for each bid being provided from a cooperative contract. Any and all applicable fees must be included. All cooperative pricing must be submitted on or before bid opening date and hour.

TIME ALLOWED FOR ACTION TAKEN

The City of Edinburg may hold bids **60** days after the opening of Bids without taking action. Bidders are required to hold their Bids firm for same period of time.

PREPARATION OF BID

The City of Edinburg shall not be held liable for any costs incurred by any bidder for work performed in the preparation of and production of a bid or for any work performed prior to execution of contract.

CONFIDENTIAL INFORMATION

Any information deemed to be confidential by the bidder should be clearly noted on the pages where confidential information is contained; however, the City cannot guarantee that it will not be compelled to disclose all or part of any public record under Texas Public Information Act, since information deemed to be confidential by the bidder may not be considered confidential under Texas Law, or pursuant to a Court order.

VERBAL THREATS

Any threats made to any employee of the City, be it verbal or written, to discontinue the providing of item/material/services for whatever reason and/or reasons shall be considered a breach of contract and the City will immediately sever the contract with the Vendor on contract.

INSTRUCTIONS TO BIDDERS (Continued):

MATHEMATICAL ERRORS
In the event that mathematical errors exist in any bid, unit prices/rates -v- totals, unit prices/rates will govern.

AUDIT
The City of Edinburg reserves the right to audit the vendor's books and records relating to the performance of this contract. The City of Edinburg, at its own expense, shall have the right at all reasonable times during normal business hours and upon at least twenty-four (24) hours' advance notice, to audit, to examine, and to make copies of or extracts from the books of account and records maintained by the vendor(s) with respect to the Supply/Service and/or Purchase Contract. If such audit shall disclose overpayment by City to vendor, written notice of such overpayment shall be provided to the vendor and the amount of overpayment shall be promptly reimbursed by vendor to the City. In the event any such overpayment is not paid within ten (10) business days after receipt of such notice, the unpaid amount of such overpayment shall bear interest at the rate of one percent (1%) per month from the date of such notice until paid.

PAST PERFORMANCE
Vendor's past performance shall be taken into consideration in the evaluation and award of Service Contract for the Purchase of SERVICES.

JURISDICTION
Contract(s) executed as part of this solicitation shall be subject to and governed under the laws of the State of Texas. Any and all obligations and payments are due and performable and payable in Hidalgo County, Texas.

VENUE
The parties agree that venue for purposes of any and all lawsuits, cause of action, arbitration, and/or any other dispute(s) shall be in Hidalgo County, Texas.

CONFLICT OF INTEREST
CHAPTER 176 OF THE TEXAS LOCAL GOVERNMENT CODE
Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that any vendor or person considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the vendor or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the records administrator of the City of Edinburg not later than the 7th business day after the date the person becomes aware of facts that require the statement be filed. See Section 176.006, Local Government Code. A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. For more information or to obtain Questionnaire CIQ go to the Texas Ethics Commission web page at www.ethics.state.tx.us/forms/CIQ.pdf.

IF YOU HAVE ANY QUESTIONS ABOUT COMPLIANCE, PLEASE CONSULT YOUR OWN LEGAL COUNSEL. COMPLIANCE IS THE INDIVIDUAL RESPONSIBILITY OF EACH PERSON OR AGENT OF A PERSON WHO IS SUBJECT TO THE FILING REQUIREMENT. AN OFFENSE UNDER CHAPTER 176 IS A CLASS "C" MISDEMEANOR.

INSTRUCTIONS TO BIDDERS (Continued):

AWARD
For purposes of this project, award will be contingent on approval of budget.

SPECIAL CIRCUMSTANCES
In the event that the City of Edinburg has an immediate need for a particular service(s) that is/are on contract and the successful vendor on contract is not able to meet the special service delivery needs of the City of Edinburg, the City of Edinburg reserves the right to purchase such services elsewhere to fulfill its' immediate need.

TERMINATION OF CONTRACT
The City of Edinburg reserves the right to terminate the contract if, in the opinion of the City of Edinburg, the successful vendor's performance is not acceptable, if the City is being repeatedly over charged, improperly charged, no funds are available, or if the City wishes, without cause, to discontinue this contract. Termination will be in written form allowing a 30-day notice. The bidder shall be afforded the same right to terminate this contract in the same manner.

INSURANCE REQUIREMENTS
Staff may waive insurance requirements for contracts $0 - $4,999.99, including but not limited to contracts for food, materials, supplies, and construction. Workers' Compensation in amounts which satisfy statutory coverage shall be required for construction projects.

The following insurance requirements will be included in all City contracts of $5,000 - $14,999.99. In contracts not involving building and construction projects, as that activity is defined in TEX. LABOR CODE §406.096, contractors may obtain alternative form of worker accident insurance with minimum limits of liability of $100,000 per claim.

Minimum Insurance Requirements	
Type of Coverage	**Limits of Liability**
Worker's Compensation	Statutory Coverage
Comprehensive General Liability (City named as additional insured) Bodily Injury	$250,000 each person/$500,000 each occurrence
Property Damage	$100,000 each occurrence/$100,000 aggregate or $500,000 combined single limits

The following insurance requirements will be included in all City contracts of $15,000 or more.

(1) The successful bidder will be required to carry the following insurance coverage and limits of coverage, as well as list the City as an additional insured to liability coverage as requested by the City. In addition, the successful bidder shall provide the City with evidence of coverage and furnish acceptable proof of payment of insurance premiums.

(2) The successful bidder will be required to secure and/or have insurance coverage in force with an admitted property and casualty insurance company licensed by the State of Texas to conduct business in the State of Texas.

INSTRUCTIONS TO BIDDERS (Continued):

(3) In contracts not involving building and construction projects, as that activity is defined in TEX. LABOR CODE §406.096, contractors may obtain alternative form of worker accident insurance with minimum limits of liability of $100,000 per claim.

Minimum Insurance Requirements	
Type of Coverage	**Limits of Liability**
Worker's Compensation	Statutory Coverage
Employer's Liability	Bodily Injury by Accident: $100,000 each accident Bodily Injury by Disease: $100,000 each employee/$500,000 policy limit
Comprehensive General Liability Bodily Injury	$250,000 each person/$500,000 each occurrence
Property Damage	$100,000 each occurrence/$100,000 aggregate or $500,000 combined single limits
Comprehensive Auto Liability Bodily Injury	$100,000 each person/$500,000 each occurrence
Property Damage	$100,000 each occurrence/$100,000 aggregate or $500,000 combined single limits
City's Protective Liability Bodily Injury	$250,000 each person/$500,000 each occurrence
Property Damage	$100,000 each occurrence/$100,000 aggregate or $500,000 combined single limits

Policies must name the City of Edinburg as an Additional Insured.

Certificates of insurance naming the CITY as an additional insured shall be submitted to the CITY for approval prior to any services being performed by Contractor. Each policy of insurance required hereunder shall extend for a period equivalent to, or longer than the term of the Contract, and any insurer hereunder shall be required to give at least thirty (30) days written notice to the CITY prior to the cancellation of any such coverage on the termination date, or otherwise. This Contract shall be automatically suspended upon the cancellation, or other termination, of any required policy of insurance hereunder, and such suspension shall continue until evidence that adequate replacement coverage is provided to the CITY. If replacement coverage is not provided within thirty (30) days following suspension of the Contract, the Contract shall automatically terminate.

If the contract amount is over twenty-five-thousand dollars ($25,000) for construction of the project, the successful bidder shall provide a bid guarantee, give a good and sufficient bond in the full amount of the contract price for the faithful performance of such contract, executed by a surety company authorized to do business in the State of Texas, in accordance with Article 5160, Vernon's Texas Civil Statutes, and amendments thereto. A payment bond in the full amount of the contract price to assure payment shall be required by law of all persons supplying labor and material in the execution of the project provided for in the contract documents.

INSTRUCTIONS TO BIDDERS (Continued):

A bid guarantee equivalent to five percent (5%) of the bid price will be required from each bidder. The "bid guarantee" shall consist of a firm commitment, such as a bid bond, certified check or other negotiable instrument accompanying a bid as assurance that the bidder will upon acceptance of his/her bid, execute such contractual documents as may be required within the time specified.

A performance bond on the part of the contractor for one-hundred percent (100%) of the contract price will be required. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

A payment bond on the part of the contractor for one-hundred percent (100%) of the contract price will be required. A "payment bond" is one executed in connection with a contract to assure payment, as required by law, of all persons supplying labor and material in execution of the work provided for in the contract documents.

CITY OF EDINBURG
REQUEST FOR BIDS FOR
FIREFIGHTER PROTECTIVE JACKETS AND PANTS

BID NO. 2015-86

BID OPENING DATE: June 22, 2015 at 3:00 p.m.

It is the intent of this Request for Bids to describe and ultimately make it possible for the City of Edinburg to purchase the below mentioned **FIREFIGHTER PROTECTIVE JACKETS AND PANTS.**

GENERAL REQUIREMENTS AND AGREEMENT FOR FIREFIGHTER PROTECTIVE JACKETS AND PANTS:

You are invited to submit a sealed bid for the FIREFIGHTER PROTECTIVE JACKETS AND PANTS as requested by the City of Edinburg, Fire Department. The specifications listed below are minimum requirements and are intended to govern, in general, the size and material desired. The City of Edinburg reserves the right to evaluate variations from these specifications.

ESTIMATED QUANTITIES NOT GUARANTEED:

The estimated quantities specified herein are not a guarantee of actual quantities, as the City does not guarantee any particular quantity of uniforms to be purchased. The quantities may vary depending upon the actual needs of the department. The quantities specified herein are good faith estimates and will be awarded on unit price.

Qty:
Spec #A - Up to 20 sets
Spec #B – Up to 20 sets

See attached Specifications #A and #B

CITY OF EDINBURG
BID FORM FOR
FIREFIGHTER PROTECTIVE JACKETS AND PANTS

BID NO. 2015-86

BID OPENING DATE: June 22, 2015 at 3:00 p.m.

I/We submit the following bid in **ORIGINAL FORM** for **FIREFIGHTER PROTECTIVE JACKETS AND PANTS** according to City of Edinburg requirements, less tax:

NOTE: In addition to responding to our "local" solicitation for bids/proposals vendors/contractors are encouraged to provide pricing on the above referenced items/products/services based on Buyboard, H-GAC, TXMAS and/or any other State of Texas recognized and approved cooperative which has complied with the bidding requirements for the State of Texas (any and all applicable fees must be included). All cooperative pricing must be submitted on or before bid/proposal opening date and hour.

CHECK ONE

☐ **BUYBOARD** ☐ **H-GAC** ☐ **TXMAS** ☐ **DEALER/LOCAL**
☐ **TX DIR** ☐ **TFC** ☐ **OTHER** _____
Specify

CONTRACT NUMBER: _____ (If applicable) COMMODITY NUMBER: _____ (If applicable)

ITEM	ESTIMATED QUANTITY	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	20	Sets of Protective Jackets and Pants as per Specifications #A	$	$
2	20	Sets of Protective Jackets and Pants as per Specifications #B	$	$
		Delivery date: _____/days		
3		**GRAND TOTAL**	$	$

BID FORM FOR FIREFIGHTER PROTECTIVE JACKETS AND PANTS (Continued):

All Addenda issued in respect to this project shall be considered official changes to the original bidding documents. It shall be the Bidder(s) responsibility to ensure that all Addenda have been received. Furthermore, bidders are advised that they must recognize, comply with, and attach a signed copy of each Addendum which shall be made part of their Bid Submittal. Bidder(s) signature on Addenda shall be interpreted as the vendor's "recognition and compliance to" official changes as outlined by the City of Edinburg and as such are made part of the original bidding documents.

Does the Company have an office located in Edinburg, Texas? Yes _____ No_____

Has the Company ever conducted business with the City of Edinburg? Yes _____ No_____

Respectfully submitted this ____ day of _____, 2015.

SIGNATURE: _____

TYPE/PRINT NAME: _____

TITLE: _____

COMPANY: _____

ADDRESS: _____

_____

TELEPHONE NO.: _____

FAX NO.: _____

EMAIL: _____

EDINBURG FIRE DEPARTMENT

P.O. Box 1079 • 212 West McIntyre Street
Edinburg, Texas 78539
Office: (956) 383-7691 • Fax: (956) 289-1853

GENERAL SPECIFICATIONS

Protective Jacket and Pants For Structural Fire Fighting

Specification #A Edinburg Fire Department

GENERAL SPECIFICATIONS
PROTECTIVE JACKET AND PANTS
FOR STRUCTURAL FIRE FIGHTING

SPECIFICATION # A
Edinburg Fire Department

SCOPE

This specification details design and materials criteria to afford protection to the upper and lower body, excluding head, hands, feet, against adverse environmental effects during structural fire fighting. All materials and construction will meet or exceed NFPA Standard #1971 and OSHA for structural fire fighters protective clothing.

_____Comply _____Exception

OUTER SHELL MATERIAL - JACKETS AND PANTS

The **Kombat Flex™** outer shell shall be constructed of 64/36 Kevlar®/PBI™ twill weave outer shell fabric with an approximate weight of 6.9 oz. per square yard. The Kombat Flex™ material shall be manufactured by TENCATE and must be treated with **SSTÔ (SUPER SHELLTITE)** which is a durable water-repellent finish that also enhances abrasion resistance. Color of the garments shall be natural/gold.

There shall be an option for the outer shell to be constructed of TENCATE **"ULTRA®"** 60/20/20 Kevlar®/Nomex®/PBO blend material with an approximate weight of 7.5 oz. per square yard in a rip stop weave. The shell material must be treated with **SST™ (SUPER SHELLTITE)** which is a durable water-repellent finish that also enhances abrasion resistance. Color of the garments shall be either black gold, yellow, light gold, dark gold – to be determined by the department. **Bids offering this shell material without the SST™ will not be considered.**

_____Comply _____Exception

THERMAL INSULATING LINER - JACKET AND PANTS

The thermal liner shall be constructed of TENCATE **"QUANTUM 3D®" SL2i"**; a Kevlar filament and FR rayon/para-aramid/nylon, spun yarn Goldcheck™ face cloth quilted to one flat layer and one three dimensional layer of Nomex®/Kevlar® spunlace with a finished weight of approximately 7.7 oz. per square yard. A 7 inch by 9 inch pocket, constructed of self material and lined with moisture barrier material, shall be affixed to the inside of the jacket thermal liner on the left side by means of a lock stitch. The thermal liner shall be attached to the moisture barrier and bound together by bias-cut neoprene coated cotton/polyester around the perimeter. This provides superior abrasion resistance to the less expensive, less durable, "stitch and turn" method. Further mention of "Thermal Liner" in this specification shall refer to this section.

_____Comply _____Exception

MOISTURE BARRIER - JACKETS AND PANTS

The moisture barrier material shall be W.L. GORE **CROSSTECH® 3-layer moisture barrier – Type 4A**, which is comprised of a CROSSTECH® membrane laminated to a 3.3 ounce per square yard Nomex® IIIA woven pajama check substrate and a 1.8 ounce per square yard Nomex® woven fabric. The CROSSTECH® membrane is an enhanced bicomponent membrane comprised of an expanded PTFE (polytetrafluoroethylene, for example Teflon) matrix having a continuous hydrophilic (i.e. water loving) and oleophobic (i.e. oil hating) coating that is impregnated into the matrix. CROSSTECH® moisture barrier seams

shall be sealed with GORE SEAM® tape using a Series 6000 (or higher) GORE SEAM™ sealing machine to afford comparable bacteriophage penetration resistance performance. The moisture barrier material shall meet all moisture barrier requirements of NFPA 1971 which directly includes water penetration resistance, viral penetration resistance, and common chemical penetration resistance and indirectly includes total heat loss (THL) and thermal protective performance (TPP). The moisture barrier shall be sewn to the thermal liner at the edges only and bound with bias-cut neoprene coated cotton/polyester binding. Further mention of "Specified Moisture Barrier" in this specification shall refer to this section.

_____Comply _____Exception

SEALED MOISTURE BARRIER SEAMS

All moisture barrier seams shall be sealed with a minimum 1 inch wide sealing tape. One side of the tape shall be coated with a heat activated glue adhesive. The adhesive side of the tape shall be oriented toward the moisture barrier seam. The adhesive shall be activated by heat and the sealing tape shall be applied to the moisture barrier seams by means of pressure exerted by rollers for that purpose.

_____Comply _____Exception

METHOD OF THERMAL LINER/MOISTURE BARRIER ATTACHMENT FOR JACKETS AND PANTS

The thermal liner and moisture barrier shall be completely removable from the jacket shell. Two strips of 5/8 inch wide FR Velcro® fastener tape shall secure the thermal liner/moisture barrier to the outer shell along the length of the neck line under the collar (see Collar section). The remainder of the thermal liner/moisture barrier shall be secured with snap fasteners appropriately spaced on each jacket facing and Ara-Shield® snap fasteners at each sleeve end. One of the Ara-shield® snap tabs shall be a different color in the liner to correspond with color coded snap tabs for ease of matching the liner system to the outer shell after inspection or cleaning is completed.

The thermal liner and moisture barrier shall be completely removable from the pant shell. Nine snap fasteners shall be spaced along the waistband to secure the thermal liner to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of Ara-Shield® snap fasteners, 2 per leg. The Ara-shield® snap tabs shall be color coded to a corresponding snap tab in the liner for ease of matching the liner system to the outer shell after inspection or cleaning is completed.

_____Comply _____Exception

THERMAL PROTECTIVE PERFORMANCE

The assembled garment, consisting of an outer shell, moisture barrier and thermal liner, shall exhibit a TPP (Thermal Protective Performance) rating of not less than 35.

_____Comply _____Exception

STITCHING

The outer shell shall be assembled using stitch type #301, #401, #514 and #516. The thermal liners and moisture barriers shall be assembled using stitch type #301, #401, #504, #514, and #516. Stitching in all seams shall be continuous. Major A outer shell structural seams and major B structural liner seams, shall have a minimum of 8 to 10 stitches per inch. All major A seams shall be sewn with ball point needles only. All seams shall be continuously stitched only.

_____Comply _____Exception

JACKET CONSTRUCTION

BODY

The body of the shell and AXTION® liner system shall be constructed of three separate panels consisting of two front panels and one back panel. The body panels shall be shaped so as to provide a tailored fit thereby enhancing body movement and shall be joined together by double stitching with Nomex® thread. One-piece outer shells shall not be acceptable.

_____Comply _____Exception

SIZING

In order to insure that every member of the department can safely perform to the maximum of their ability without extra bulk and without restriction, Jackets and Pants shall be available in all sizes and dimensions as follows:

Jackets:

Gender:	Gender specific Mens and Womens patterns will be available.
Chest:	Even sizes
Back Length:	Mens 29", 32", 35", 40" Womens 26", 29"
Body Shape:	Straight and Tapered Note: The straight cut offers more fullness at the hips (i.e. jacket sweep) and is recommended when an IH Ready trouser is being spedified.
Sleeve:	1" increments

Jackets and Pants available in only one standard shape will not be acceptable.

_____Comply _____Exception

AXTION® BACK

The jackets shall include inverted pleats to afford enhanced mobility and freedom of movement in addition to that provided by the AXTION® sleeves. The outer shell shall have two inverted pleats (one each side) installed on either side of the back body panel. The inverted pleats shall begin at the top of each shoulder and extend vertically down the sides of the jacket to the hem. Maximum expansion of the pleats shall occur at the shoulder area and taper toward the hem.

The thermal liner shall have a single inverted pleat located at the upper middle of the back, corresponding to the added length in the shell provided by the AXTION® back pleats. It will be designed to expand with the outer shell pleats to provide maximum expansion.

The moisture barrier shall be designed with darts corresponding to the added length in the shell provided by the AXTION® back pleats. The darts are positioned at the shoulder blades of the moisture barrier, outside of the SCBA straps and work together with the outer shell and the thermal liner pleats in the AXTION® back providing maximum expansion. The moisture barrier darts will be seam sealed to assure liquid resistance integrity.

_____Comply _____Exception

LOGOS

The garment brand shall be identified by means of red FR Nomex thread embroidery on the top of the right

collar denoting "GLOBE" as the manufacturer. There shall be a reflective label specific to the garment style, measuring 1inch wide by 4 inches long, installed on the left pocket flap.

_____Comply _____Exception

DRAG RESCUE DEVICE (DRD)

A Firefighter Drag Rescue Device shall be installed in each jacket. The ends of a 1½ inch wide strap, constructed of black Kevlar® with a red Nomex® center stripe, will be sewn together to form a continuous loop. The strap will be installed in the jacket between the liner system and outer shell such that when properly installed will loop around each arm. The strap will be accessed through a portal between the shoulders on the upper back where it is secured in place by an FR strap. The DRD shall be removable for laundering. The access port will be covered by an outside flap of shell material, with beveled corners designed to fit between the shoulder straps of an SCBA. The flap will have a NFPA-compliant 3M Scotchlite™ reflective logo patch sewn to the outside to clearly identify the feature as the DRD (Drag Rescue Device). The DRD shall not extend beyond the outside flap. This device provides a quickly deployed means of rescuing a downed firefighter. Flimsy, rope-style DRD straps will not be considered.

_____Comply _____Exception

LINER ACCESS OPENING (JACKET)

The thermal liner and moisture barrier shall be completely removable from the jacket shell. Two strips of ⅝ inch wide FR Velcro® fastener tape shall secure the thermal liner/moisture barrier to the outer shell along the length of the neckline under the collar. This opening shall run the full length of the collar for the purpose of inspecting the inner surfaces of the jacket liner system. The remainder of the thermal liner/moisture barrier shall be secured with a minimum of four snap fasteners appropriately spaced on each jacket facing and four Ara-Shield® snap fasteners at each sleeve end. The outside perimeter of the AXTION® liner moisture barrier and thermal liner layers shall be bound together along the side and bottom edges with a bias-cut neoprene coated cotton/polyester binding for a finished appearance that prevents fraying and wicking of contaminants. Stitching used to secure the thermal liner and moisture barrier in place of the neoprene shall not be considered, since stitching is not able to provide the same level of abrasion resistance.

_____Comply _____Exception

RETROREFLECTIVE FLUORESCENT TRIM

The retroreflective fluorescent trim shall be lime/yellow 3M Scotchlite™ Triple Trim (L/Y borders with silver center). Each jacket shall have an adequate amount of retroreflective fluorescent trim affixed to the outside of the outer shell to meet the requirements of NFPA 1971 and OSHA..

The trim shall be in the following widths and shall be **High Visibility (HV) style**; 3 inch wide stripes - around the bottom of the jacket within approximately 1 inch of the hem, horizontally across the chest area approximately 3 inches below the armpit, around each sleeve below the elbow, around each sleeve above the elbow, across the shoulders on the back approximately 7½ inches below the neck seam, two vertical stripes on the back (one on each side) beginning at the top of the bottom band of trim and extending up to the bottom of the upper band of trim.

_____Comply _____Exception

REINFORCED TRIM STITCHING

All reflective trim is secured to the outer shell with Nomex® thread, using a locking chainstitch protected by our exclusive TrimTrax® system. Developed exclusively by Globe Manufacturing Co., LLC. this strip of 3/32-inch strong, durable, flame resistant black Kevlar® cording provides a bed for the stitching along each edge of

the retroreflective fluorescent trim surface and affords extra protection for the thread from abrasion. TrimTrax® has been proven to be 5 to 7 times more durable than single or even double rows of stitching, significantly reducing maintenance costs and providing more value and a longer service life. Two rows of stitching used to attach the trim in place of the TrimTrax® shall be considered an unacceptable alternative, since it has been proven that the two rows of stitching has insignificant impact on wear life. All trim ends shall be securely sewn into a seam for a clean finished appearance.

_____Comply _____Exception

SEWN ON RETROREFLECTIVE LETTERING

Each jacket shall have 3" lime/yellow 3M Scotchlite™ lettering on Row A reading: EDINBURG
Each jacket shall have an option for either 2" or 3" lime/yellow 3M Scotchlite™ lettering on a hanging letter patch reading: (FF NAME)

_____Comply _____Exception

LETTER PATCH

Hanging Letter Patch
The hanging letter patch shall be constructed of a double layer of Black Gemini XT outer shell material. The letter patch will attach to the rear inside hem of the jacket with a combination of snap fasteners and FR Velcro® hook & loop fastener tape.

_____Comply _____Exception

COLLAR & FREE HANGING THROAT TAB

The collar shall consist of a four-layer construction and be of two-piece design. The collar shall have a minimum of 3 rows of quilting. The outer layers shall consist of outer shell material, with a minimum of two-layers of specified moisture barrier sandwiched in between (see Moisture Barrier section). The rear inside ply of moisture barrier shall be sewn to the collar's back layer of outer shell at the edges only. The forward inside ply of moisture barrier shall be sewn to the inside of the collar at the edges only. The multi-layered configuration shall provide protection from water and other hazardous elements. The collar shall be of two piece design with the left and right halves of all component materials joined in the center by stitching, thereby permitting the collar to retain its proper shape and roll. The collar shall be minimum 3½ inches high and graded to size. The leading edges of the collar shall extend up evenly from the leading edges of the jacket front body panels so that no gap occurs at the throat area. The collar's back layers of outer shell and moisture barrier shall be joined to the body panels with two rows of stitching. Inside the collar, above the rear seam where it is joined to the shell shall be a strip of ⅝ inch wide FR Velcro® hook fastener tape running the full length of the collar. The collar's front layers of moisture barrier and outer shell shall have an additional strip of ⅝ inch wide hook fastener tape stitched to the inside lower edge and running the full length of the collar. These two inside strips of ⅝ inch wide FR Velcro® hook fastener tape sewn to the underside of the collar shall engage corresponding pieces of FR Velcro® loop fastener tape at the front and back neck area of the liner system.

The throat tab shall be a scoop type design and constructed of two plies of outer shell material with two center plies of moisture barrier material. The throat tab shall measure not less than 3 inches wide at the center tapering to 2 inches at each end with a total length of approximately 9 inches. The throat tab will be attached to the right side of the collar by a 1 inch wide by 1 inch long piece of Nomex® twill webbing. The throat tab shall be secured in the closed and stowed position with FR Velcro® hook and loop fastener tape. The FR Velcro® hook and loop fastener tape shall be oriented to prevent exposure to the environment when the throat tab is in the closed position. Two 1½ inch by 3 inch pieces of FR Velcro® loop fastener tape shall be sewn vertically to the inside of each end of the throat tab. Corresponding pieces of FR Velcro® hook fastener tape measuring 1 inch by 3 inches shall be sewn horizontally to the leading outside edge of the

collar on each side, for attachment and adjustment when in the closed position and wearing a breathing apparatus mask. In order to provide a means of storage for the throat tab when not in use, a 1 inch by 3 inch piece of FR Velcro® hook fastener tape shall be sewn horizontally to the inside of the throat tab immediately under the 1½ inch by 3 inch pieces of FR Velcro® loop fastener tape. The collar closure strap shall fold in half for storage with the FR Velcro® loop fastener tape engaging the FR Velcro® hook fastener tape.

A hanger loop constructed of a double layer of outer shell material shall be sewn to the top of the collar at the center.

_____Comply _____Exception

JACKET FRONT

The jacket shall incorporate separate facings to ensure there is no interruption in thermal or moisture protection in the front closure area. The facings shall measure approximately 3 inches wide, extend from collar to hem, and be double stitched to the underside of the outer shell at the leading edges of the front body panels. A breathable moisture barrier material shall be sewn to the jacket facings and configured such that it is sandwiched between the jacket facing and the inside of the respective body panel. The breathable film side shall face inward to protect it. There shall be wicking barrier constructed of Crosstech 2F moisture barrier material installed on the front closure system on the left and right side directly below the front facings to ensure continuous protection and overlap. The wicking barrier shall extend no more than a maximum of ¾" beyond the inner facing and false facing shall be unacceptable. The thermal liner and moisture barrier assembly shall be attached to the jacket facings by means of snap fasteners.

_____Comply _____Exception

STORM FLAP

A rectangular storm flap measuring approximately 3 inches wide and a minimum of 23 inches long (based on a 32" jacket) shall be centered over the left and right body panels to ensure there is no interruption in thermal or moisture protection in the front of the jacket. The outside storm flap shall be constructed of two plies of outer shell material with a center ply of breathable moisture barrier material. The outside storm flap shall be double stitched to the right side body panel and shall be reinforced at the top and bottom with bartacks.

_____Comply _____Exception

STORM FLAP AND JACKET FRONT CLOSURE SYSTEM

The jacket shall be closed by means of a 22 inch size #10 heavy duty high-temp smooth-gliding YKK Vislon® zipper on the jacket fronts and hook and dee rings on the storm flap. The teeth of the zipper shall be mounted on black Nomex® tape and shall be sewn into the respective jacket facings. The storm flap shall close over the left and right jacket body panels and shall be secured by means of four non-ferrous inward facing hook and dee rings. The dee rings shall be secured to the leading edge of the storm flap with two rivets. The dee rings shall be spaced evenly along the storm flap. Four inward facing hooks shall be attached to the left front body panel with three rivets for each hook. The rivets shall be reinforced on the inside of the body panel with a single circular piece of leather for each hook. The inward facing hooks shall be positioned in such a manner that they engage the dee rings when the storm flap is closed over the front of the jacket.

_____Comply _____Exception

CARGO/HANDWARMER EXPANSION (BELLOWS) POCKETS

Each jacket front body panel shall have a 2 inch deep by 8 inch wide by 8 inch high expansion pocket, double

stitched to it and shall be located such that the bottom of the pockets are at the bottom of the jacket for full functionality when used with an SCBA. Retroreflective trim shall run over the bottom of the pockets so as not to interrupt the trim stripe. Two rust resistant metal drain eyelets shall be installed in the bottom of each expansion pocket to facilitate drainage of water. *The expansion pocket shall be reinforced with a layer of Kevlar® approximately 5 inches up on the inside of the pocket.* The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material and shall measure 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The upper pocket corners shall be reinforced with proven backtacks and pocket flaps shall be reinforced with bartacks. The pocket flaps shall be closed by means of FR Velcro® fastener tape. Two pieces of 1 ½ inch by 3 inch FR Velcro® hook fastener tape shall be installed vertically on the inside of each pocket flap (one piece on each end). Two corresponding pieces of 1 ½ inch by 3 inch FR Velcro® loop fastener tape shall be installed horizontally on the outside of each pocket near the top (one piece on each end) and positioned to engage the hook fastener tape.

Additionally, a separate hand warmer pocket compartment will be provided under the expandable cargo pocket. This compartment will be accessed from the rear of the pocket and shall be lined with Nomex® Fleece for warmth and comfort. Shell material linings shall not be considered acceptable.

_____Comply _____Exception

AXTION® SLEEVES

The sleeves shall be of two piece construction and contoured, having an upper and a lower sleeve. Both the under and upper sleeve shall be graded in proportion to the chest size. For unrestricted movement, on the underside of each sleeve there shall be two outward facing pleats located on the front and back portion of the sleeve on the shell and thermal liner. On the moisture barrier, the system will consist of two darts, rather than pleats, to allow added length in the under sleeve. The moisture barrier darts will be seam sealed to assure liquid resistance integrity.

The pleats shall expand in response to upper arm movement and shall fold in on themselves when the arms are at rest. This expansion shall allow for greater multi-directional mobility and flexibility in the shoulder and arm areas, with little restriction or jacket rise. Neither stove-pipe nor raglan-style sleeve designs will be considered acceptable.

_____Comply _____Exception

SLEEVE CUFF REINFORCEMENTS

The sleeve cuffs shall be reinforced with a layer of black Dragonhide® material. The cuff reinforcements shall not be less than 2 inch in width and folded in half, approximately one half inside and one half outside the sleeve end for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the sleeve end; a single row of stitching shall be considered unacceptable. This independent cuff provides an additional layer of protection as compared to a turned and stitched cuff. Jackets finished with a turned and stitched cuff do not provide the same level of abrasion resistance and will be considered unacceptable.

_____Comply _____Exception

WRISTLETS / ELASTICIZED ADJUSTABLE SLEEVE WELLS

Each jacket shall be equipped with **Nomex® knit wristlets with thumb loops** not less than 4 inches in length and of double thickness. Nomex® knit is constructed of 96% Nomex® and 4% Spandex for shape retention. The color of the wristlets shall be grey.

The wristlets shall be sewn to the end of the liner sleeves. Flame resistant neoprene coated cotton/polyester impermeable barrier material shall be sewn to the inside of the sleeve shell approximately 5 inches from the sleeve end and extending toward the cuff forming the sleeve well. The neoprene sleeve well shall form an elasticized cuff end with an FR Velcro® tab providing a snug fit at the wrist and covering the knit wristlet. This

sleeve well configuration serves to prevent water and other hazardous elements from entering the sleeves when the arms are raised. The neoprene barrier material shall also line the inside of the sleeve shell from the cuff to a point approximately 5 inches back, where it joins the sleeve well and is double stitched to the shell. Four Ara-shield® snap tabs will be sewn into the juncture of the sleeve well and wristlet. The tabs will be spaced equidistant from each other and shall be fitted with female snap fasteners to accommodate corresponding male snaps in the liner sleeves. One of the Ara-shield® snap tabs shall be a different color in the liner to correspond with color coded snap tabs for ease of matching the liner system to the outer shell after inspection or cleaning is completed. This configuration will ensure there is no interruption in protection between the sleeve liner and wristlet.

_____Comply _____Exception

LINER ELBOW THERMAL ENHANCEMENT

An additional layer of thermal liner material shall be sewn to the elbow area of the liner system for added protection at contact points and increased thermal insulation in this high compression area. The elbow thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. Finished dimension shall be approximately 5 inches by 8 inches. All edges shall be finished by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding.

_____Comply _____Exception

LINER SHOULDER AND UPPER BACK THERMAL ENHANCEMENT

A minimum of one additional layer of thermal liner material shall be used to increase thermal insulation in the upper back, front and shoulder area of the liner system. This full-cut thermal enhancement layer shall drape over the top of each shoulder extending from the collar to the sleeve/shoulder seam, down the front approximately 5 inches from the juncture of the collar down the back to a depth of 7 inches to provide greater CCHR protection in this high compression area. The upper back, front and shoulder thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. The thermal enhancement layer shall have finished edges by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding. Smaller CCHR reinforcements shall not be considered acceptable since they provide far less area of coverage.

_____Comply _____Exception

UPPER BACK REINFORCEMENT

An additional layer of outer shell material shall be used to reinforce the upper back area of the jacket. The additional shoulder reinforcement layer shall also serve to increase thermal insulation to the upper back area. This reinforcement layer shall extend from shoulder seam to shoulder seam and from the juncture of the collar and back panel to a depth of 7½ inches. The upper back reinforcement layer will be double stitched to the back body panel with Nomex® thread.

_____Comply _____Exception

RADIO POCKET

Each jacket shall have a pocket designed for the storage of a portable radio. This pocket shall be of box type construction, double stitched to the jacket and shall have one drainage eyelet in the bottom of the pocket. The pocket flap shall be constructed of two layers of outer shell material measuring approximately 5 inches deep and ¼ inch wider than the pocket. The pocket flap shall be closed by means of FR Velcro® fastener

tape. A 1½ inch by 3 inch piece of FR Velcro® hook fastener tape shall be installed on the inside of the pocket flap beginning at the center of the bottom of the flap. A 1½ inch by 3 inch piece of FR Velcro® loop fastener tape shall be installed horizontally on the outside of the pocket near the top center and positioned to engage the hook fastener tape. In addition, the entire inside of the pocket shall be lined with neoprene coated cotton/polyester impermeable barrier material to ensure that the radio is protected from the elements. The impermeable barrier material shall also be sandwiched between the two layers of outer shell material in the pocket flap for added protection. The radio pocket shall measure approximately 3 inches deep by 3.5 inches wide by 9 inches high and shall be installed on the left chest. Trim shall run over the bottom of the radio pocket for an uninterrupted trim band on the chest.

_____Comply _____Exception

NOTCHED RADIO POCKET FLAP

The radio pocket flap shall be notched to accommodate the radio antenna on the left side as worn.

_____Comply _____Exception

MICROPHONE STRAPS

A strap shall be constructed to hold a microphone for a portable radio. It shall be sewn to the jacket at the ends only. The size of the microphone strap shall be 1 inch x 3 inches and shall be constructed of double layer outer shell material. There shall be four microphone straps on the jacket, the locations are as follows:

- Above the radio pocket.
- On the radio pocket flap.
- On the right chest
- On the right chest, above the trim next to the stormflap under the mask pocket.

_____Comply _____Exception

LARGE DETACHABLE BREATHING APPARATUS FACE MASK POUCH

An oval shaped pouch measuring approximately 4 inches deep by 9 inches wide by 15 inches high shall be constructed of outer shell material. Two metal drain eyelets shall be installed in the bottom of the pouch. The pouch closure shall consist of a heavy-duty zipper mounted on the left side of the pocket (as oriented to the wearer). The pouch shall be completely detachable from the jacket and shall accommodate a breathing apparatus facemask. A 1 inch loop, constructed of outer shell material, shall be sewn to the top of the pouch. A 1 inch diameter dee ring shall be captured within the loop. An inward facing metal helmet snap shall be riveted to a leather strap approximately 2 inches in length and of double thickness. The strap and helmet snap shall be mounted vertically to the front of the jacket with the helmet snap in the down position and shall engage the dee ring on the pouch. The detachable pouch shall be mounted on the right chest.

_____Comply _____Exception

EMBROIDERED TEXAS FLAG

Each jacket shall have a Nomex® embroidered Texas flag that measures approximately 2½ inches by 3½ inches installed on the left sleeve. Flags made of fabric other than Nomex® shall be considered unacceptable.

_____Comply _____Exception

CUSTOM PRINTED DEPARTMENT PATCH

The Globe custom patch is printed onto an FR Cotton fabric and features an image of the department patch provided. This vectored image depicts the patch in the exact shape and color as it is designed, portrayed onto a black background. The patch is sewn onto the garment using a rectangular stitch pattern that is sized according to the patch dimensions. The patch shall be installed on the right sleeve.

_____Comply _____Exception

PANT CONSTRUCTION

BODY

The body of the shell shall be constructed of four separate body panels consisting of two front panels and two back panels. The body panels shall be shaped so as to provide a tailored fit, thereby enhancing body movement, and shall be joined together by double stitching with Nomex® thread. The body panels and seam lengths shall be graded to size to assure accurate fit in a broad range of sizes.

_____Comply _____Exception

SIZING

The pant shall be available in even size waist measurements of two inch increments and shall be available in a range of sizes from 24 to 68. The pant inseam measurement shall be available in two inch increments. Generalized sizing, such as small, medium, large, etc., will not be considered acceptable. Sizing specifically for women shall also be available.

_____Comply _____Exception

LINER ACCESS OPENING (PANT)

The combined moisture barrier and the thermal liner shall be completely removable for the pant. The thermal liner and moisture barrier layers of the liner system shall be stitched together and bound around the cuffs, but each layer will be individually bound at the top of the waist. The binding shall be of Bias-Cut neoprene coated cotton/polyester material for a finished appearance that prevents fraying and wicking of contaminants. The thermal liner and moisture barrier layers are attached at the waist band with a snap one either side and one center snap. Additionally, there shall be four independent snap tabs that secure the moisture barrier layer to the shell to prevent any gapping. The bottom of the liner fly opening shall have a reinforcement of black Nomex® Twill which serves to prevent the liner from tearing in this area which is highly stressed as a result of the constant donning and doffing of the pants.

The liner system of the pant shall incorporate a full length opening along the entire waistline for ease in inspecting the inner layers as well as performing the complete Liner Inspection. The thermal liner and moisture barrier shall be individually bound with a neoprene coated bias cut tape, and joined together with a snap at the center back. There shall be a minimum of 4 snap tabs sewn to the underside of the waistband, with corresponding snaps in the moisture barrier layer to secure the barrier to the shell. As described previously, the pant thermal layer snaps directly to the independent waistband by means of nine snap fasteners. There shall be no hook and loop used to close the liner access opening.

_____Comply _____Exception

RETROREFLECTIVE FLUORESCENT TRIM

The pant shall have a stripe of retroreflective fluorescent trim encircling each leg below the knee to

comply with the requirements of NFPA #1971 in 3 inch lime/yellow 3M Scotchlite™ Triple Trim (L/Y borders with silver center). Bottom of trim band shall be located approximately 3" above cuff. 3 inch lime/yellow 3M Scotchlite™ Triple Trim (L/Y borders with silver center) shall also run down the sides of the pant legs.

_____Comply _____Exception

REINFORCED TRIM STITCHING

All reflective trim is secured to the outer shell with Nomex® thread, using a locking chainstitch protected by our exclusive TrimTrax® system. Developed exclusively by Globe Manufacturing Co., LLC. this strip of 3/32-inch strong, durable, flame resistant black Kevlar® cording provides a bed for the stitching along each edge of the retroreflective fluorescent trim surface and affords extra protection for the thread from abrasion. TrimTrax® has been proven to be 5 to 7 times more durable than single or even double rows of stitching, significantly reducing maintenance costs and providing more value and a longer service life. Two rows of stitching used to attach the trim in place of the TrimTrax® shall be considered an unacceptable alternative, since it has been proven that the two rows of stitching has insignificant impact on wear life. All trim ends shall be securely sewn into a seam for a clean finished appearance.

_____Comply _____Exception

WAISTBAND

The waist area of the pants shall be reinforced on the inside with a separate piece of black aramid outer shell material not less than two inches in width. Neoprene coated cotton/polyester shall be sewn to the back of the waistband as a reinforcement to create a three-layer protection. The top edge of the waistband reinforcement shall be double stitched to the outer shell at the top of the pants. The lower edge of the waistband shall be serged and unattached to the shell to accept the thermal liner and moisture barrier. The top of the thermal liner and moisture barrier shall be secured to the underside of the waistband reinforcement so as to be sandwiched between the waistband reinforcement and outer shell to reduce the possibility of liner detachment while donning and to avoid pass through of snaps from the outer shell to the inner liner. The independent waistband construction affords greater comfort and fit than a turned and stitched method. Pants that do not include an independent waistband only serve to save the manufacturer both money and labor and shall be considered unacceptable.

_____Comply _____Exception

PANT CLOSURE SYSTEM

The exterior primary positive locking closure shall be an inward facing metal safety hook and dee ring. The safety hook shall be attached to a leather strap that is triple riveted to the right front body panel in the waist area A leather backed dee ring shall be riveted to the leading edge of the fly flap near the top. The snap hook shall engage the dee ring located on the fly flap when in the closed position.

_____Comply _____Exception

OPTIONAL ESCAPE BELT WITH BELT LOOPS

The pant shall have an integrated Escape Belt, which is independently certified as meeting the belt requirements of NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services. The Escape belt shall be comprised of Kevlar® webbing with a hook and an adjustable D-ring closure, graded for the waist size of the pants. The hook and dee closure system of the Escape Belt also serves as the positive front closure for the pants, eliminating redundant closure systems. The pants shall be equipped with a series of approximately 3 inch by 3 inch outer shell material belt loops spaced around the waist to accommodate the aramid belt.

Note: Selection of this option deletes the inward facing metal safety hook and dee ring described under the Pant Closure Section of the specification, as well as the take-up straps

_____Comply _____Exception

EXTERNAL / INTERNAL FLY FLAP

The pants will have a vertical outside fly flap constructed of two layers of outer shell material, with a layer of moisture barrier material sandwiched between. The fly flap shall be double stitched to the left front body panel and shall measure approximately 2 ½ inches wide, with a length graded to size based on waist measurement and reinforced with backtacks at the base. An internal fly flap constructed of one layer of outer shell material, thermal liner and specified moisture barrier, measuring approximately 2 inches wide, with a length graded to size based on waist, shall be sewn to the leading edge of the right front body panel. The inside of the right front body panel shall be thermally enhanced directly under the outside fly with a layer of moisture barrier and thermal liner material.

The underside of the outside fly flap shall have a 1½ inch wide piece of FR Velcro® loop fastener tape quadruple stitched along the full length and through the shell material only; stitching shall not penetrate the moisture barrier insert between the two layers to insure greater thermal protection and reduced water penetration. A corresponding strip of 1½ inch wide piece of FR Velcro® hook fastener tape shall be quadruple stitched to the outside right front body panel securing the fly in a closed position.

Appropriate snap fastener halves shall be installed at the leading edge of the waistband for the purpose of further securing the pants in the closed position.

There shall be an option for the outside fly flap to be closure to be a heavy duty zipper and 1½ inch wide by full length flame resistant hook and loop fastener tape. The teeth of the zipper shall be mounted on Nomex® cloth and shall be sewn into the leading edges of the respective left and right front body panels from the crotch area to the waist band. Flame resistant hook and loop fastener tape shall close the flap. The FR loop portion shall be sewn with four rows of stitching to the inside of the leading edge of the external fly flap. The corresponding portion of FR hook fastener tape shall be sewn with four rows of stitching to the right front body panel positioned to engage the loop portion when the external fly flap is in the closed position.

_____Comply _____Exception

AXTION® KNEE

The outer shell of the pant legs shall be constructed with horizontal expansion pleats in the knee area with corresponding darts in the liner to provide added fullness for increased freedom of movement and maximum flexibility. The pleats shall be folded to open outwardly towards the side seams to insure no restriction of movement. The AXTION® knee will be installed proportionate to the pant inseam, in such a manner that it falls in an anatomically correct knee location.

The thermal liner shall be constructed with four pleats per leg in the front of the knee. Two will be located above the knee (one on each side) and two will be located below the knee (one on each side). On the moisture barrier, the system will consist of two darts, rather than pleats, to allow added length in the under knee. The darts in the liner provide a natural bend at the knee. The pleats and darts in the liner work in conjunction with the expansion panels in the outer shell to increase freedom of movement when kneeling, crawling, climbing stairs or ladders, etc.

_____Comply _____Exception

LINER KNEE THERMAL ENHANCEMENT

A minimum of one additional layer of specified thermal liner and one additional layer of moisture barrier material, measuring a minimum of 9 inches by 11 inches, will be sewn to the knee area of the liner system for added CCHR protection and increased thermal insulation in this high compression area.. The knee thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. The thermal enhancement layer shall have finished edges by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding. Smaller CCHR reinforcements shall not be considered acceptable since they provide far less area of coverage.

_____Comply _____Exception

KNEE REINFORCEMENTS

The knee area shall be reinforced with a layer of black Dragonhide® material. The knee reinforcement shall be slightly offset to the outside of the leg to insure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure 9 inches wide by 12 inches high and shall be double stitched to the outside of the outer shell in the knee area for greater strength and abrasion resistance. Knee reinforcements of a smaller size do not provide the same protective coverage and shall be considered unacceptable. The knee reinforcement specified shall be removable without opening up any seams of the outer shell of the pant.

_____Comply _____Exception

PADDING UNDER KNEE REINFORCEMENTS

Padding for the knees shall be accomplished with one layer of **Silizone®** foam sewn to the liner, sandwiched between the thermal liner and moisture barrier.

_____Comply _____Exception

EXPANSION POCKETS

An expansion pocket, measuring approximately 2 inches deep by 10 inches wide by 10 inches high shall be double stitched to the side of each leg straddling the outseam above the knee and positioned to provide accessibility. *The lower half of each expansion pocket shall be reinforced with a layer of Kevlar® material on the inside*. Two rust resistant metal drain eyelets shall be installed on the underside of each expansion pocket to facilitate drainage of water. The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material and shall measure 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The pocket flaps shall be closed by means of FR Velcro® hook and loop fastener tape. Two pieces of 1½ inch by 3 inch FR Velcro® hook fastener tape shall be installed vertically on the inside of each pocket flap (one piece on each end). Two corresponding pieces of 1½ inch by 3 inch FR Velcro® loop fastener tape shall be installed horizontally on the outside of each pocket near the top (one piece on each end) and positioned to engage the hook fastener tape.

There shall be 3 inch lime/yellow 3M Scotchlite™ Triple Trim (L/Y borders with silver center) running vertically over the pockets and pocket flaps.

_____Comply _____Exception

6 PACK TOOL COMPARTMENT

A tool pocket constructed of Kevlar® material and measuring approximately 8 inches high by 10 inches wide will be installed on the inside of the right pocket with double stitching. The front pockets will

measure 6 inches high. Two separate rows of stitching will divide the tool pocket into six compartments, three in front (6 inches high) and three in back (8 inches high), measuring approximately 3 inches wide and set side-by-side.

_____Comply _____Exception

PANT CUFF REINFORCEMENTS

The cuff area of the pants shall be reinforced with a layer of black Dragonhide® material. The cuff reinforcements shall not be less than 2 inch in width and folded in half, approximately one half inside and one half outside the leg cuff for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the end of the leg for a minimum of two rows of stitching. This independent cuff provides an additional layer of protection over a hemmed cuff. Pants that are turned and stitched at the cuff, as opposed to an independent cuff reinforcement, do not provide the same level of abrasion resistance and shall be considered unacceptable.

_____Comply _____Exception

PADDED RIP-CORD SUSPENDERS & ATTACHMENT

On the inside waistband shall be attachments for the standard "H" style "Padded Rip-Cord" suspenders. There will be four attachments total – 2 front, 2 back. The suspender attachments shall be constructed of a double layer of black aramid measuring approximately ½ inch wide by 3-inches long. They shall be sewn in a horizontal position on the ends only to form a loop. The appearance will be much like a horizontal belt loop to capture the suspender ends.

A pair of "H" style "Padded Rip-Cord" suspenders shall be specially configured for use with the pants. The main body of the suspenders shall be constructed of 2 inch wide black webbing straps. The suspenders shall run over each shoulder to a point approximately shoulder blade high on the back, where they shall be joined by a 2 inch wide horizontal piece of webbing measuring approximately 8-inches long, forming the "H". This shall prevent the suspenders from slipping off the shoulders. The shoulder area of the suspenders will be padded for comfort by fully encasing the webbing with aramid batting and wrap-around black aramid.

The rear ends of the suspenders will be sewn to 2-inch wide elasticized webbing extensions measuring approximately 8-inches in length and terminating with thermoplastic loops. The forward ends of the suspender straps shall be equipped with specially configured black powder coat non-slip metal slides with teeth. Through the metal slides will be the 9 inch lengths of strap webbing "Rip-Cords" terminating with thermoplastic loops on each end. Pulling on the "Rip-Cords" shall allow for quick adjustment of the suspenders.

Threaded through and attached to the thermoplastic loops on the forward and rear ends of the suspenders will be black aramid suspender attachments incorporating two snap fasteners. The aramid suspender attachments are to be threaded through the suspender attachment loops on the inside waistband of the pants. The aramid suspender attachments will then fold over and attach to themselves securing the suspender to the pants.

_____Comply _____Exception

AXTION® SEAT

The rise of the rear pant center back seam, from the top back of the waistband to where it intersects the inside leg seams at the crotch, shall exceed the rise at the front of the pant by 2½ inches. The longer rear center back seam provides added fullness to the seat area for extreme mobility without restriction when stepping up or crouching and will be graded to size. This feature in combination with other design elements will maintain alignment of the knee directly over the knee pads when kneeling and crawling.

_____Comply _____Exception

TAKE UP STRAPS SYSTEM

The pants shall be equipped with two take up straps. The straps shall be constructed of 1 inch wide black Aramid twill and be positioned in the waist area on the outside of the garment; one on each side. Each take up strap shall be comprised of two sub-component straps. The rear strap component shall be constructed of black twill Nomex®. The rear strap shall measure 1 inch wide and 4 inches long, folded back to form a loop, and shall be backtacked to the pants. The loop shall hold a high temp thermoplastic buckle. The buckle shall point toward the front. The front strap component shall measure 1 inch wide by approximately 9 inches long (finished dimension). One end shall be folded back on itself to form a loop. A high temp thermoplastic slide fastener shall be captured within the loop. The front strap component shall be inserted through the buckle on the rear strap component, back through the slide fastener, and the end shall be backtacked to the pants. A pull-tab of 1 inch black Aramid twill shall be affixed to the slide fastener. The take up strap pull-tabs shall pull toward the front to allow for adjustment.

_____Comply _____Exception

REVERSE BOOT CUT

The outer shell pant leg cuffs will be constructed such that the back of the leg is approximately 1 inch shorter than the front. The liner will also have a reverse boot cut at the rear of the cuff and a concave cut at the front to keep the liner from hanging below the shell. This construction feature will minimize the chance of premature wear of the cuffs and injuries due to falls as a result of "walking" on the pant cuffs. Pants that have "cut-outs" in the back panel rather than a contoured boot cut shall be considered unacceptable.

_____Comply _____Exception

THIRD PARTY TESTING AND LISTING PROGRAM

All components used in the construction of these garments shall be tested for compliance to NFPA Standard #1971 by Underwriters Laboratories (UL). Underwriters Laboratories shall certify and list compliance to that standard. Such certification shall be denoted by the Underwriters Laboratories certification label.

_____Comply _____Exception

LABELS

Appropriate warning label(s) shall be permanently affixed to each garment. Additionally, the label(s) shall include the following information.

Compliance to NFPA Standard #1971
Underwriters Laboratories classified mark
Manufacturer's name
Manufacturer's address

Manufacturer's garment identification number
Date of manufacture
Size

_____Comply _____Exception

ISO CERTIFICATION / REGISTRATION

The protective clothing manufacturer shall be certified and registered to ISO Standard 9001 to assure a satisfactory level of quality. Indicate below whether the manufacturer is so certified and registered by checking either "Yes" or "No" in the space provided.

_____Yes _____No

BETTER BUSINESS BUREAU:

The manufacturer is accredited by the Better Business Bureau, showing a commitment to ethical and principled business practices.

_____Comply _____Exception

WARRANTY:

The manufacturer shall warrant these jackets and pants to be free from defects in materials and workmanship for their serviceable life when properly used and cared for.

_____Comply _____Exception

HOOK AND LOOP SUPPORT PROGRAM

Support program shall cover hook or loop tape that has begun to fray or otherwise degrade from normal wear. This program shall remain in effect for a period of five years from the original date of manufacture of the garment. This support program shall cover the repair or replacement, without charge, of any hook and/or loop on the garments produced by the manufacturer providing the garments are otherwise serviceable.

This support program does NOT cover damage from fire, heat, chemicals, misuse, accident or negligence. Failure to properly care for garments will serve to void this support program.

_____Comply _____Exception

SIZING BY VENDOR:

Both male and female sizing samples shall be available.

_____Comply _____Exception

GARMENT TRAINING AND SUPPORT

OSHA requires employees be trained on the capabilities and limitations of their Personal Protective Equipment. The selected vendor shall provide the following:

On-site care and maintenance training shall be provided by the manufacturer. Training shall be in compliance with NFPA 1851, current edition, at the conclusion of which each participant shall receive a certificate of completion.

An on-site OSHA mandated training class on the Knowing the Limits of Your PPE shall be provided at no charge. The training shall include structural firefighting coat, pant and boots.

_____Comply _____Exception

BAR-CODE/RECORD KEEPING INTERFACE

A 1 dimensional barcode, in the interleaved 2 of 5 format shall be printed on the label of each separable layer of the garment.

This barcode shall represent the serial number of the garment. The manufacturer shall be able to provide a detailed list of each asset of a drop-shipped order, and shall include the following:

- Brand
- Order Number
- Serial Number
- Style Number
- Color
- Description
- Chest/Waist Size
- Jacket/pant Length
- Sleeve Length
- Date of Manufacture
- Mark-For Data

This information shall be able to be imported into the manufacturers web-based system designed to facilitate the organization and tracking of assests in accordance with the cleaning and inspection requirements of OSHA and NFPA 1851.

_____Comply _____Exception

PPE RECORD KEEPING

The manufacturer shall make available and no-charge, a password protected data based backed website that does not care whose brand of PPE assets are being recorded. The website shall have the functionality to allow the manufacturer to import all of the pertinent data into the department's account so that the initial data entry by fire department personnel is eliminated.

The website shall allow for the department to use a barcode scanner, if desired, to scan the Interleaved 2 of 5 barcode found in the gear by going to the Search the Serial Number page in PPE record keeping program, and scanning the asset's barcoded serial number.

_____Comply _____Exception

EXCEPTIONS TO SPECIFICATIONS

Any and all exceptions to the above specifications must be clearly stated for each heading. Use additional pages for exceptions, if necessary.

COUNTRY OF ORIGIN

Jackets and Pants shall be manufactured in the United States.

EDINBURG FIRE DEPARTMENT

P.O. Box 1079 • 212 West McIntyre Street
Edinburg, Texas 78539
Office: (956) 383-7691 • Fax: (956) 289-1853

GENERAL SPECIFICATIONS

Protective Jacket and Pants For Structural Fire Fighting

Specification #B Edinburg Fire Department

Scope

Yes | No

The purpose of the clothing is to provide protection during structural fire fighting operations where there is a threat of fire or when certain physical hazards are likely to be encountered, such as during non-fire-related rescue operations, emergency medical operations, and victim extrication.

Standard

Yes | No

All garments produced shall meet or exceed the criteria set forth in the current edition of NFPA 1971 PROTECTIVE CLOTHING FOR STRUCTURAL FIRE FIGHTING, FED-OSHA CFR 1910, Subpart L, OSHA 29 CFR Part 1910.1030 and/or the requirements of CAL-OSHA title 8, Article 10.1, Para. 3406.

All components and composites used in the construction of garments shall be third party tested, certified and listed for compliance to NFPA 1971. The label of the third party tester shall denote certification.

The manufacturer shall be registered to the ISO Standard 9001 to assure a satisfactory level of quality.

USER GUIDE INFORMATION

Yes | No

Each garment shall include a User Information Guide with information required by NFPA 1971.

This guide shall include:

(a) Pre-use information:
- Safety considerations.
- Limitations of use.
- Garment marking recommendations and restrictions.
- A statement that most performance properties of the garment cannot be tested by the user in the field.
- Warranty information.

(b) Preparation for use:
- Sizing/adjustment.
- Recommended storage practices

(c) Inspection:
- Inspection frequency and details.

(d) Don/Doff:
- Donning and doffing procedures.
- Sizing and adjustment procedures.
- Interface issues.

(e) Use:
- Proper use consistent with NFPA 1500, Standard on Fire Department, Occupational Safety and Health Program, and 29 CFR 1910, 132.

(f) Maintenance and Cleaning:
- Cleaning instructions and precautions with a statement advising users not to use garments that are not thoroughly cleaned and dried.
- Inspection details.
- Maintenance criteria and methods of repair where applicable.
- Decontamination procedures for both chemical and biological contamination.

(g) Retirement and Disposal
- Retirement and disposal criteria and considerations.

(h) Drag Rescue Device (DRD)
· Use, inspection, maintenance, cleaning and retirement of the DRD.

Tracking Label System

Yes | No

There shall be a PDF417, two dimensional bar code label permanently affixed to each garment for tracking purposes. The bar code shall contain a minimum of the following information:

a. unique serial number
b. item description (brand, model, material color)
c. lot information (date of mfg., size, etc.)
d. material description
e. the standard to which the garment is compliant

The bar code shall be able to withstand customary wash and wear cycles. The PDF417 bar code must incorporate a minimum of a 30% "error correction" capability.

Sizes

Yes | No

Coats shall be made available in even chest sizes with corresponding sleeve lengths available in short, regular, and long. Pant sizes shall be made available in even waist sizes with inseam lengths available in extra short, short, regular and long. Male and female sizing available.

Warranty

Yes | No

Each garment shall have a limited lifetime warranty against defects in material and workmanship.

Composite Performance

Yes | No

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Thermal Protective Performance (TPP) of not less than 43 when tested in accordance with NFPA 1971 standard.

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Total Heat Loss (THL) of not less than 270 when tested in accordance with NFPA 1971 standard.

The Heat Transfer Index rating shall be 25 seconds for the shoulder when measured at 2 psi (pounds per square inch) and 25 seconds for the knee when measured at 8 psi.

Stress Points

Yes | No

All outer shell stress points, including top and bottom pocket corners, pocket flap corners, top and bottom of storm flap/fly shall be reinforced using a 42 stitch minimum bar tack.

Labeling

Yes | No

Each garment shall have a garment label(s) permanently and conspicuously attached stating at least the following language, as well as detailed warning instructions provided by the manufacturer.

Do Not

THIS GARMENT MEETS THE GARMENT REQUIREMENTS OF NFPA 1971, STANDARD ON PROTECTIVE ENSEMBLE FOR STRUCTURAL FIRE FIGHTING, 2013 EDITION

MADE IN THE U.S.A.

Packaging

Each Coat and Pant shall be packaged in a dark plastic bag in order to provide protection during shipping and prior to first use

LION Fire Academy

Online training shall be available meeting NFPA 1500 training requirements on the safe use of the (garments, helmet, boots, gloves, hood). This online training shall include:

- Personal Responsibility of the Individual Fire
- Purpose and Limitations
- Structural PPE Construction, Features, and Functions
- Routine Inspection
- Donning and Doffing
- Proper Fit and Overlap
- Using Your PPE Safely
- How Fire Fighting Affects the
- Routine Cleaning of PPE
- Assembly and Disassembly of PPE
- Storage
- Useful Life and Retirement of PPE

Additionally online training satisfying NFPA 1851 training requirements on advanced inspection, advanced cleaning and basic repairs (turnouts and helmets) shall be available.

Acquisition Regulation

In the past seven-year period has your firm, or any of its principals, been convicted or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property?

_____YES _____NO

Detailed Description / Specification **Meets Requirements?** ____

Janesville® V-Force® Bi-Swing Coat

Coat Model / Design Yes | No

COAT CONSTRUCTION: The coat is designed of a 3-panel construction in all layers of our innovative V-fit design. For optimum comfort and mobility an inverted pleat on each side where back front and back body panel pieces meet shall be incorporated. Each pleat shall begin at the back of each shoulder and shall extend vertically down the side of the coat. A combination moisture barrier/thermal liner shall include a corresponding 1" inward dynamic fold approximately 1.5" from each sleeve seam at the shoulder. This fold shall provide for coat expansion when extending arms forward and shall interface

with the inverted pleats of the outer shell to maximize mobility and function of the outer shell and thermal liner. Sleeves shall be of raglan design in the front and set in design in back.

Coat Model / Design Yes | No

When measured at the center of the back from the collar seam to the hem bottom, the coat shall measure 32" or 35" long for male; 29" or 32" long for female.

Drag Rescue Device Yes | No

The Fire Fighter Recovery Harness™ shall be constructed of a one and one-half inch wide KEVLAR® strap that shall be installed between the outer shell and the thermal liner. This harness shall have a hand loop (16" in circumference) that exits the outer shell through a 2" polymer coated aramid reinforced slot on the back of the coat just below the collar and is held in place by means of a piece of 1.5" x 2" hook on the strap and a piece of 1" x 2" loop attached to the outer shell. This strap is then secured under a 2.25" x 5.25" flap that is sewn in at the neck /collar area. Two pieces 1" x 2" loop shall be set vertically on shell to align with two pieces of 1" x 2" hook set vertically to the underside of the flap. The harness is also held in proper alignment by means of a 2" x 2" piece of loop placed on the inside of the outer shell underneath the chest trim that corresponds to a piece of 1.5"x 2" hook located on the harness. Two 1" x 3.5" self-fabric straps with 1" x 2" hook on one end and 1" x 2" loop on other end shall be set to coat in the shoulder cap area to keep straps in proper position for use. The loop handle shall have a silver retro-reflective LION logo patch.

Fire Fighter Recovery Harness™ provides mechanical leverage for dragging a downed and incapacitated structural firefighter from a life-threatening environment. The design of the harness enables the rescuer to drag the downed firefighter in line with the axis of the firefighter's skeletal frame, in order to decrease the risk of further injury.

Coat Shell Attachment Yes | No

There shall be a 1" x 2" self fabric strap with one end sewn to the coat shell & opposite end loose with one female non-logo snap. One male snap shall be centered on the liner at the bottom rear panel to align with the female snap.

Coat Outer Shell Material Yes | No

The outer shell shall be constructed of +/- 7.0 oz./sq. yd. 70% "PBI Dominant" PBI®/KEVLAR® spun yarns/30% 600 denier KEVLAR® filament in a twill weave with extremely durable FPE water resistant Teflon® FPE alloy finish. Color shall be natural (gold).

Coat Liner & Moisture Barrier Yes | No

THERMAL LINER: The thermal liner shall be comprised of Glide™ high-lubricity, stress reducing, filament/spun face cloth weighing 3.6 oz/sq/yd. The Kevlar filament yarns shall represent no less than 60% of the face cloth's composition and shall be positioned in the warp direction of the weave in order to optimize their slippery characteristics on the face. Nomex spun yarns, with superior wicking characteristics, shall be used to promote moisture management within the garment. The Glide™ face cloth shall be quilted to one layer spunlace aramid (85%NOMEX®/15% KEVLAR®) weighing approximately 2.3 oz./sq. yd. and one layer of apertured (11-13 apertures/sq. inch) spunlace aramid (85% NOMEX®/15% KEVLAR®) weighing approximately 1.5 oz./sq. yd. both layers shall be treated with a Teflon® finish to promote minimal moisture

storage in the garment as well as promote rapid drying (Total weight +/- 7.3 oz./sq. yd.).

MOISTURE BARRIER: CROSSTECH® 3-Layer membrane laminated between a NOMEX® pajama check and a NOMEX® woven fabric; weighing 7.0 oz./sq. yd.

The liner shall have one 8.5" x 8.5" internal pocket which shall be made of black outer shell material. The liner pocket shall be located on the left side of coat liner.

Quilt Thermal Liner Construction: The two-piece moisture barrier shall be completely sewn to the thermal liner at its perimeter with the breathable membrane oriented inward toward the thermal liner and away from the outer shell. All moisture barrier seams shall be sealed as required by NFPA 1971. The moisture barrier/thermal liner shall finish no more than 1" from the cuffs and 2" from the hem.

The vented moisture barrier features a circumferential opening at the torso mid section with a two-inch overlap and bartack reinforcement. Venting the moisture barrier allows increased heatloss performance while maintaining protection.

MOISTURE BARRIER/THERMAL LINER ATTACHMENT: Completely Removable: The moisture barrier/thermal liner shall be completely detachable from the outer shell for ease of cleaning by the use of hook and loop, zippers, and snaps. There shall be a zipper and two snaps down each front facing, hook and loop shall also be located around the entire neck opening. In addition, there will be a snap for alignment along the bottom of the liner, and one snap and hook and loop at each sleeve end.

All moisture barrier seams shall be sealed as required by NFPA 1971.

Reflective Trim Yes | No

All trim shall be sewn with four rows lockstitch 301, minimum six stitches/inch for most secure trim attachment.

Ventilated Trim shall be of 3" Scotchlite II (triple trim) of lime/yellow perforated with 0.08 mm holes (114 per square inch) to provide a conduit for the release of vapor that can occur when moisture is heated and the trim compressed.

Viz-a-V™ Pattern: One 3" strip shall be set full circumference at the bottom sweep of the outer shell; one 3" strip shall be set around each sleeve approximately 2" from bottom of sleeve cuff; one 3" strip shall be set full circumference at the chest; one 3" strip shall be set around each sleeve just above the elbow; two 3" V shaped vertical strips shall be set at an angle from hem trim to back chest trim of the coat.

Reflective Trim Extra Yes | No

Reflective Trim set vertical down flap of fallen man harness, 4 rows lockstitch.

Trim shall be of 3" Ventilated Scotchlite II (triple trim) of lime/yellow

Ventilated Trim shall be of 3" Scotchlite II (triple trim) of lime/yellow perforated with 0.08 mm holes (114 per square inch) to provide a conduit for the release of vapor that can occur when moisture is heated and the trim compressed.

Detailed Description / Specification **Meets Requirements?**

Coat Collar Yes | No

MOISTURE BARRIER/THERMAL LINER CONSTRUCTION: The liner collar shall be a layer of self material and a layer of CROSSTECH® Black. The design shall be compatible with the outer shell so that the liner does not buckle, pull, or otherwise restrict body motion. The left and right fronts of the liner collar shall be attached to the facings at the front closure of the outer shell. The neck of the liner collar shall be secured to the neck of the outer shell collar such that when donning the coat an arm may not be accidentally caught between the outer shell and its inner linings. A 4" wide CROSSTECH® Black and 1.75" self-material extension shall be sewn the full length of the neck with two pieces of 1" loop for attachment to shell collar. The self material extension shall overlap the shell collar to prevent exposure of the hook and loop. Collar closure shall be provided by FR hook and loop 1.5" x 4", with hook portion sewn on right side of collar, and loop portion sewn on left, set horizontal.

COLLAR: The 3" split collar shall consist of two piece construction shaped for comfort. The collar shall be configured such that when the collar is raised it shall remain standing while providing continuous thermal and moisture protection around the neck and face. To ensure this protection, the two layers of outer shell collar shall be fully lined with a layer of CROSSTECH® Black. The shell collar shall provide proper interface with the liner to insure no moisture penetration through the collar seam to the inside of coat. The shell collar shall have two pieces 1" hook along top edge for liner attachment. The collar shall be attached to the liner facing using 1" hook. Collar shall be of such design so as not to interfere with SCBA face masks, or helmet.

Hanger Loop Yes | No

An external hanger loop constructed of a double layer of outer shell material and reinforced with two 42-stitch bartacks shall be provided on the outside of the coat at the collar seam. It shall be designed to provide long service and shall not tear or separate from the coat when the coat is hung by the hanger loop, loaded evenly with a weight of 80 lbs. and allowed to hang for one minute.

Coat Inner Yoke Reinforcement Yes | No

A layer of Semper Dri™ (3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to two layers of NOMEX®/Kevlar® spunlace (Total weight +/- 6.0-6.8 oz./sq. yd)) shall be positioned between the moisture barrier and thermal liner for extra thermal protection in a high heat and compression area of the coat. It shall be sewn to the inside of the upper back portion of the thermal liner across the upper back from the back shoulder and collar seams 7" down, over the tops of shoulders and down the front approximately 4" ending at the armhole.

Coat Shoulder Reinforcement Yes | No

A 4" wide area at the top of the shoulders extending 6" from the collar seam shall be capped with outer shell material for abrasion resistance and thermal protection.

Coat Elbow Reinforcement Yes | No

The sleeve shall have an insert throughout all layers that shall provide a natural bend in the sleeve. This elbow shall include cut outs, shaped pieces, and darts to create free movement with few restrictions. The insert shall consist of black polymer coated aramid for abrasion resistance and thermal protection.

In addition to reinforcement, elbows shall be padded using one layer of uninterrupted 1/8" thick, fire retardant closed-cell foam. The reinforcement material shall be oriented between the outer shell and elbow insert reinforcement.

Coat Cuff Reinforcement Yes | No

The extended cuff of the sleeve shall be reinforced with a binding of black polymer coated aramid not less than 3" in total width for abrasion resistance and thermal protection. One leather tab with female snap fastener shall be set in the cuff to attach outer shell to liner.

Coat Wristlets Yes | No

An internal wristlet shall consist of a 2-ply knit of 48% NOMEX®/48% KEVLAR® and 4% Spandex for superior recovery. Wristlet to be combination of natural and bronze colors producer dyed by DuPont, and with extremely durable Teflon® water resistant alloy not less than 8" extending completely over the palm with a thumbhole preventing the wristlet from sliding back. Wristlets shall be double stitched and bound to the moisture barrier/thermal liner providing extended thermal and slash protection.

Coat Water Well Yes | No

A combination Semper Dri™ (3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to two layers of NOMEX®/Kevlar® spunlace (Total weight +/- 6.0-6.8 oz./sq. yd)) and three layer CROSSTECH® moisture barrier leader shall be sewn no more than 1" back from the combination liner sleeve end. This leader shall be approximately 4" in length and end with a gathering of 1" elastic. This sleeve well shall prevent water and hazardous materials from entering the sleeve when arms are in a raised position.

The combination liner sleeve ends shall be inserted into the outer shell sleeve ends by means of lining up the snaps then attaching the loop fastener of the combination liner sleeve end with the hook fastener of the outer shell cuff. This method of combination liner attachment shall prevent any gaps from occurring between the combination liner and sleeve well during a full range of motion. The combination liner shall extend to within 1" of the sleeve end.

Coat Closure System Yes | No

THERMAL FRONT PANEL CONSTRUCTION: There shall be continuous thermal and moisture protection around the entire torso including the storm flap. To ensure this protection, as well as reduce potential for wicking moisture to inside of liner, both right and left inside front facings of the coat outer shell shall incorporate outer shell fabric and

Detailed Description / Specification **Meets Requirements?**

Gore RT7100™ PTFE moisture barrier, extending from collar to hem.

COAT FRONT CLOSURE DESIGN: The complete outer shell coat front closure design shall consist of a FRONT CLOSURE SYSTEM completely protected by an OUTSIDE STORM FLAP which shall have its own, independent STORM FLAP CLOSURE SYSTEM.

STORM FLAP: A storm flap measuring not less than 2.5" wide, nor less than 22" in length shall be set on the outside of the right side of the coat opening for maximum thermal protection and clear drainage. The inner lining of the storm flap shall be Gore RT7100 PTFE moisture barrier meeting all requirements for moisture barriers sandwiched between two layers of outer shell fabric.

FRONT/STORM FLAP CLOSURES: The front closure shall consist of a thermoplastic zipper with a 1 3/4" polymer coated aramid tab added to left bottom for fast closure and exit. There shall be four standard snap hooks, each securely riveted with three leather reinforced rivets to the left front coat, to engage dee rings on the storm flap. Dee rings shall each be securely riveted with two leather reinforced rivets, along the leading outside edge of the storm flap. The snap hooks and dee rings shall be spaced with the first hook at the top of the coat and the other three snap hooks and dee rings evenly spaced along the front of the coat.

Liner Inspection System Yes | No

There shall be an 11" opening located on the coat liner system at the center right front of the liner. This opening will provide the ability to completely invert the coat liner to properly view the integrity of the entire liner system. There shall be one piece 1" x 4" FR loop sewn to the back side of the liner system with a piece of 1.5" x 3" FR hook sewn to the inside of the outer shell to ensure proper alignment when installing the liner system into the outer shell. This Liner Inspection System is completely hidden when the liner is properly installed into the outer shell.

Coat Options Yes | No

*** Accessories that will be included with the Coats; listed below, if any...

Mic Tab Yes | No

There shall be a 1" X 3" triple layer self -fabric mic tab attached with bar tacks on each side. Bar tacks shall be a minimum 42-stitch bar tack

Item Location for Above Yes | No

Shall be located on the left chest above radio pocket

Flashlight Strap Yes | No

There shall be a 1.25"x 8.5" self fabric flashlight holder x-stitched to the outer shell of coat. Strap shall have 1"x 2" hook applied to one end of the strap and 1"x 2" loop applied to opposite end of strap.

There shall be a 703 hook applied to outer shell 5" above the self fabric strap. It shall be securely fastened to the coat by means of a self fabric strap looped through the end of the 703 hook and bartacked to the outer shell.

Item Location for Above Yes | No

Shall be located on right chest

Emblem Yes | No

There shall be a 2"x3" American Flag patch, with stars in the upper left corner, sewn to the coat.

Item Location for Above Yes | No

Shall be located on the left sleeve.

Sewn On Lettering Yes | No

There shall be 3" lime yellow Scotchlite letters, sewn-on across the yoke; to read - EDINBURG

Lettering Patches Yes | No

There shall be one 5"x18" contoured 2-layer self-fabric one-line Letter Patch attached to hang from back hem via hook & loop and upper-corner snaps.

Sewn On Lettering Yes | No

There shall be 3" lime yellow Scotchlite letters, sewn-on to the hanging patch for 1ST INITIAL + LAST NAME.

Coat Pockets Yes | No

Coat pocket

Turn-Out Pockets Yes | No

9" x 9" Semi-bellow and handwarmer pocket combination that expands by means of side and bottom gussets to a thickness of 2" in back only and 0" in front. The pocket shall be set at the bottom of the coat hem and reflective trim shall be set on each pocket.

There shall be a 6" opening on the rear side of the bellow of the pocket

Semi bellow pocket shall be lined 4.5" up outside pocket with poly coated aramid. Handwarmer pocket shall be lined inside with Semper Dri™ thermal liner material.

Pocket and flap shall be set with stitch 301, seam Ssb-2 with each corner of pocket opening and top corners of flap reinforced with bar tacks for additional strength. Drainage of moisture to be provided by brass eyelets.

Each pocket flap shall measure 10" wide by 3" high in front and 5" high in rear. Each flap shall incorporate a 1" by 2" polymer coated aramid pull tab for easy opening. The corner under this tab shall be reinforced with two layers of Lite-N-Dri™ for stability.

A hook and loop closure system shall be set with two pieces of 1.5" x 3" loop fastener set horizontally on the outside edge of the pocket opening with corresponding 1.5" x 3" hook fastener set vertically on the underside of the flap.

Item Location for Above Yes | No

Shall be located on left and right of the front bottom.

Turn-Out Pockets Yes | No

One 3.5" wide x 9" deep full bellows radio pocket that expands by means of side and front gussets to a thickness of 2" in front and back.

Pocket and flap shall be set with stitch 301, seam Ssb-2 with the top and bottom pocket corners and top corners of flap reinforced with a minimum 42-stitch bar tack. A brass eyelet shall provide drainage of moisture.

Pocket flaps shall be 4.5"x 5".

Pocket shall be fully lined all 3 sides inside pocket with polycotton lining.

Pocket flap shall close to the pocket top using 1 piece of 1"x 2" loop on pocket horizontally and 1 piece of 1"x 2" hook on flap vertically.

Pocket flap shall include a notch on the flap to accomodate an antenna.

Item Location for Above Yes | No

Shall be located on the left side of the chest.

Janesville® V-Force® Pant w/ Belt

Pant Model / Design Yes | No

PANT CONSTRUCTION: The pant shall have a low rise waist V-Fit™ design.

RADIAL INSEAM BAND: A radial banded insert runs continuously from the top of knee on one leg, through the crotch area to the top of the opposite knee. The elimination of crotch seams reduces tension in the crotch area to give added comfort and helps to alleviate stress to extend the useful life of the gear. Also there is an added insert piece in the design to help ensure that when the firefighter is kneeling or bending the leg of the garment bends in alignment with the leg so that the knee of the firefighter centers on the knee pad of the pant. It also helps to eliminate rubbing of the inseams of each leg against each other when the firefighter is working so that the risk of abrasion of the seams is minimized.

WAISTBAND: The waist of the pants shall be reinforced on the inside with 1-ply of outer shell fabric material not less than 1.5" in width. The pant waist shall be contour shaped for better comfort and hemmed to provide strength with the independent waistband, which shall then be double stitched to the outer shell.

Belts Yes | No

There shall be a removable two inch wide KEVLAR® belt with 2" self-locking thermoplastic buckle with quick-release mechanism.

Detailed Description / Specification	**Meets Requirements?**

Belt Loops Yes | No

There shall be 5 self-fabric belt loops, each made using 2 separate 1"x 3" straps that close with 1" x 2" hook & loop. 3 loops bartacked even at waist and 2 at crotch

Pant Outer Shell Material Yes | No

The outer shell shall be constructed of +/- 7.0 oz./sq. yd. 70% "PBI Dominant" PBI®/KEVLAR® spun yarns/30% 600 denier KEVLAR® filament in a twill weave with extremely durable FPE water resistant Teflon® FPE alloy finish. Color shall be natural (gold).

Pant Liner & Moisture Barrier Yes | No

THERMAL LINER: The thermal liner shall be comprised of Glide™ high-lubricity, stress reducing, filament/spun face cloth weighing 3.6 oz/sq/yd. The Kevlar filament yarns shall represent no less than 60% of the face cloth's composition and shall be positioned in the warp direction of the weave in order to optimize their slippery characteristics on the face. Nomex spun yarns, with superior wicking characteristics, shall be used to promote moisture management within the garment. The Glide™ face cloth shall be quilted to one layer spunlace aramid (85%NOMEX®/15% KEVLAR®) weighing approximately 2.3 oz./sq. yd. and one layer of apertured (11-13 apertures/sq. inch) spunlace aramid (85% NOMEX®/15% KEVLAR®) weighing approximately 1.5 oz./sq. yd. both layers shall be treated with a Teflon® finish to promote minimal moisture storage in the garment as well as promote rapid drying (Total weight +/- 7.3 oz./sq. yd.).

MOISTURE BARRIER: CROSSTECH® 3-Layer membrane laminated between a NOMEX® pajama check and a NOMEX® woven fabric; weighing 7.0 oz./sq. yd.

MOISTURE BARRIER/THERMAL LINER CONSTRUCTION: Design shall be compatible with the outer shell so that the liner does not buckle, pull, or otherwise restrict body motion. To deter the wicking of moisture up the thermal liner leg the bottom nine inches of each thermal leg shall be constructed of Semper Dri™ (3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to two layers of NOMEX®/Kevlar® spunlace (Total weight +/- 6.8 oz./sq. yd.)). The waist of the moisture barrier/thermal liner shall be secured to the waist of the outer shell such that when donning the pant a leg may not be accidentally caught between the outer shell and its inner linings along the waist and between the legs of the pant. For added thermal protection to the knee, an additional layer of 1/8" thick, fire retardant closed-cell foam shall be positioned between the moisture barrier and thermal liner at the knee.

Quilt Thermal Liner Construction: The moisture barrier shall be completely sewn to a Teflon® treated NOMEX® facecloth at its perimeter. The moisture barrier substrate/facecloth combination will be sewn to the quilted thermal liner at its perimeter with the breathable membrane oriented inward toward the thermal liner and away from the outer shell. The quilted thermal liner will be oriented toward the wearer. All moisture barrier seams shall be sealed as required by NFPA 1971. The moisture barrier/thermal liner shall finish no more than 3" from the pant cuffs.

Completely Removable: The moisture barrier/thermal liner shall be completely detachable from the outer shell for ease of cleaning by using snaps and hook and loop. Nine evenly spaced snaps shall secure the liner to the integral waistband; Two snaps shall be set in leather leg tabs at each leg end.

Reflective Trim Yes | No

All trim shall be sewn with four rows lockstitch 301, minimum six stitches/inch for most secure trim attachment.

Ventilated Trim shall be of 3" Scotchlite II (triple trim) of lime/yellow perforated with 0.08 mm holes (114 per square inch) to provide a conduit for the release of vapor that can occur when moisture is heated and the trim compressed.

Pant trim shall be applied as follows: one strip set full circumference around the bottom of the cuff 3" from the bottom cuff.

Reflective Trim Extra Yes | No

All trim shall be sewn with four rows lockstitch 301, minimum six stitches/inch for most secure trim attachment.

Ventilated Trim shall be of 3" Scotchlite II (triple trim) of lime/yellow perforated with 0.08 mm holes (114 per square inch) to provide a conduit for the release of vapor that can occur when moisture is heated and the trim compressed.

Pant trim shall be applied as follows: one strip extending from top of knee centered at outseam position to top of cuff trim.

Pant Fly Closure Yes | No

STORM FLY/CLOSURE: The outer shell shall have a sewn on overlapping fly front running the full length of the fly on the left side. The flap shall not be less than 2.5" wide at the waistband. The bottom of the fly shall be reinforced with a 42 stitch bartack.

The storm fly shall be held closed along its length by means of a hook and loop fastener closure 1.5" minimum width, along the leading edge for a distance of not less than 6" from the bottom of the fly closure to the waist area for proper alignment and secure closure. Velcro stitching will be double rows. Additionally, one snap shall be positioned at the inside top of the fly. Pant closure shall be provided by a thermo plastic zipper.

The storm fly shall be outer shell material, lined with a 4." strip of CROSSTECH® (Type 2F) moisture barrier material.

THERMAL FLY ASSEMBLY: A 3/4" wide x 9" long loop fastener shall be sewn to the moisture barrier/thermal liner to engage corresponding hook fastener on the underside of the outside storm fly and facing.

WAISTBAND: The waist of the pants shall be reinforced on the inside with one ply of outer shell fabric material not less than 1.5" in width. The pant waist shall be contour shaped for better comfort and hemmed to provide strength with the independent waistband, which shall then be double stitched to the outer shell.

Take Up Straps Yes | No

There shall be two waist straps sewn and bar tacked 2 ½" down from the top of the

waistband. One strap shall be installed on the right side and one on the left side constructed out of one piece of shell material folded to two layers and sewn to form a 1/2" wide strap. Each strap shall be a minimum of 8 ½" in length. These take-up straps shall have a 5/8" nickel plated postman style slide buckle which shall be attached by a piece of shell material six (6) inches in length folded to form two layers. The strap is sewn to form an attachment strap approximately three (3) inches in length designed for quick take-up adjustment.

Pant Knee Reinforcement Yes | No

V-FIT™ KNEE: The knee shall have an insert throughout all layers that shall provide a natural bend in the leg. This knee shall include cut outs, shaped pieces, and darts to create free movement with few restrictions. The insert shall consist of black polymer coated aramid for abrasion resistance and thermal protection. For added thermal protection, an additional layer of uninterrupted 1/8" thick, fire retardant closed-cell foam shall be positioned between the moisture barrier and thermal liner.

In addition to reinforcement, knees shall be padded using one layer of uninterrupted 1/8" thick, fire retardant closed-cell foam. This reinforcement material shall be oriented between the outer shell and knee insert reinforcement.

Pant Cuff Reinforcement Yes | No

The cuff area of the pant shall be reinforced with a binding of black polymer coated aramid not less than 2" in total width for greater strength, abrasion resistance, and thermal protection. In addition a 3" x 3 ½" piece of reinforcement material shall be sewn on the inseam area of the pant leg above the pant cuff and below the pant trim, in order to provide extra abrasion protection. The material used on the kick shield shall match the material used on the pants cuffs.

Boot Cut Yes | No

The back portion of the cuff will gradually curve upward from each side seam to a maximum of 2" at the center back of the pant leg to prevent wear on the back of the cuff.

Leg Tabs Yes | No

Two black leather leg tabs 3/4" wide x 1 3/4" long with female snaps shalll be bartacked 2" up from bottom edge on inside of the pant cuff with one on the inseam and one on the outseam.

Liner Inspection System Yes | No

There shall be an opening located on the pant liner system to the right side of the waist separating the thermal barrier and moisture barrier, approximately 10" in length. This opening will provide the ability to completely invert the pant liner to properly view the integrity of the entire liner system. There shall be a piece of 1" x 3" FR loop sewn to the moisture barrier 3" over from beginning of opening and a corresponding piece of 1" x 3" FR hook sewn to the inside of the outer shell to ensure proper alignment when installing the liner system into the outer shell. This Liner Inspection System is completely hidden when the liner is properly installed into the outer shell.

Pant Options

Yes | No

*** Accessories that will be included with the Pants; listed below, if any...

Pant Pockets

Yes | No

Pant pocket

Turn-Out Pockets

Yes | No

9" wide x 10" high, outside full bellows pockets that expand by means of side and bottom gussets to a thickness of 2" in front and back.

Pockets shall be fully lined with KEVLAR® twill on all 4 sides inside of pocket; two layers of KEVLAR® lined self-fabric on shell inside pocket. First layer 6.5" high, second layer 4.5" high. Both layers stitched in 3" increments to create six tool compartments.

Pocket and flap shall be set with stitch 301, seam Ssb-2 with the top and bottom pocket corners and top corners of flap reinforced with bar tacks for additional strength. Drainage of moisture is to be provided by brass eyelets.

Pocket flaps shall be 5" x 10"

A hook and loop fastener closure system shall be set with 2" x 9" loop fastener horizontally on the pocket and three pieces of 1.5" x 3" hook fastener vertically on the underside of the flap.

Item Location for Above

Yes | No

Shall be located on the right thigh.

Turn-Out Pockets

Yes | No

10" wide x 10" deep outside full bellows pockets that expand by means of side and bottom gussets to a thickness of 2" in front and back.

Pockets shall be fully lined on three sides with KEVLAR® twill on inside of pocket.

Pocket and flap shall be set with stitch 301, seam Ssb-2 with the top and bottom pocket corners and top corners of flap reinforced with bar tacks for additional strength. Drainage of moisture to be provided by brass eyelets.

Pocket flap shall be 11"x 5.

A hook and loop fastener closure system shall be set with 1.5" x 10" loop fastener horizontally on the pocket and (2) pieces of 1.5" x 2.75" hook fastener vertically on the underside of the flap.

Item Location for Above

Yes | No

Shall be located on the left thigh.

Suspender Tabs Yes | No

Four 2" wide self material suspender tabs with 1.75x3" leather reinforcement shall be attached to waist with two on the front and two on the back. Each tab shall have two male and two female logo snaps. Each tab shall be reinforced with two bartacks on each tab.

Suspenders Yes | No

SCOPE
A highly engineered 42" black suspender designed for greater range of mobility and reduced stress allowing for four points of attachment, using self-fabric, leather-reinforced suspender tabs with snaps, to a V-Force™ , traditional or contoured waist bunker pant. The shoulder pads shall have a one-inch wide lime/yellow Scotchlite strip located the entire length facing outward

DESIGN
Two 8"front pull straps shall be constructed as follows: 2" wide non-elastic polyester webbing shall be fed through 2" metal loops and secured with a two-needle lock-stitch at one end. A black military finish steel double dee ring shall be fed through the webbing. The other end of the webbing shall be fed through a 2" wide thermo-plastic dee ring and secured with a two-needle lock-stitch. The dee ring shall function as a pull strap for easily adjusting the suspenders for proper fit.

Two 18"shoulder straps shall be constructed as follows: 2" wide non-elastic polyester webbing shall be fed through the top half of the steel double dee ring and secured with a two-needle lock-stitch. Two 7" back straps made of 2" wide elastic webbing shall be joined with a 2" overlap at the end of each shoulder strap with a single-needle lock stitch. The end of each back strap shall be fed through a 2" metal loop and secured with a two-needle lock stitch.

One 2 1/2" horizontal back strap made of 2" wide elastic webbing shall be set perpendicular between the two shoulder straps and back straps at the point of overlap, secured with a single-needle lock-stitch, and reinforced with a two-needle lock-stitch "X" through the joining straps.

Four 2" wide self-fabric suspender tabs with leather reinforcement, using 2 male and 2 female logo snaps for suspender attachment, shall be required on pants for use of these suspenders. Two self-fabric suspender tabs shall be attached to the back of the pant and to the front of the pant and reinforced with two bartacks each tab. Each self-fabric tab attached to the pants shall be fed through each 2" metal loop on the suspenders.

Each shoulder strap shall be encapsulated with a 2.25" wide x 13" long sheath of padding constructed of 1/8" thick fire-retardant closed-cell foam laminated to Nomex pajama check substrate. Shoulder pads shall start 1" up from the cross point of the horizontal back strap ("H" cross) and be bartacked at each end so they do not slide forward. The straps shall have a one-inch wide lime/yellow Scotchlite strip located the entire length, facing outward.