



**City Of Hammond
Purchasing Department**

Turnout Fire Gear

RFP 15-46

**Sealed Bids Shall Be Received by The Purchasing Department,
City of Hammond
310 East Charles Street
P.O. Box 2788
Hammond, Louisiana 70404-2788**

**Until
10:00 A.M. June 12, 2015**

At Which Time All Bids Will Be Opened And Read Aloud

**Advertisement In The Official Journal, Daily Star, To Be
Published Two (2) Times**

May 29 & June 3, 2015

**For Additional Information Or Questions, Contact:
Ernest Peters, Sr.-Purchasing Agent- (985) 277-5632**

**Contact Chief John Thomas – 985-277-5800
for further information on Specifications.**

This is the Bid Package of:

Date: _____

Firm: _____

Address _____

City _____ **State** _____ **Zip Code** _____

Person to Contact: _____

Phone _____ **Fax** _____

E-mail _____

YOUR BID IS IMPORTANT TO US

HOWEVER, IF YOU DO NOT WISH TO BID THIS PROJECT, PLEASE RETURN THIS SHEET WITH YOUR COMPANY NAME MARKED "NO BID". THIS WILL NOT AFFECT FUTURE BIDS, BUT IS A MEANS IN VERIFYING THAT YOU DID RECEIVE NOTIFICATION FOR THIS BID.

RFP 15-46 Specifications

Furnish Firefighter Turnout Gear as per specifications for the period July 1, 2015 thru June 30, 2016.

	<u>1 – 5 Sets</u>	<u>6 – 10 Sets</u>
1.) Advance Coat	_____	_____
2.) 3" Lettering "HFD" Sewn on Shoulders	_____	_____
3.) 3" Lettering & Name Patch Snap on	_____	_____
4.) Advance Pant	_____	_____
5.) Thorogood Leather Boot Or comparable	_____	_____
6.) Bullard PX Helmet	_____	_____
7.) Helmet Emblems (1) Front & (2) Crescents	_____	_____
8.) Firefighter Elkskin Gloves	_____	_____
9.) P 84 Nomex Hood or comparable	_____	_____
10.) B80RS X-Large Gear Bag or comparable	_____	_____
TOTAL per set	_____	_____

Signature of Bidder _____

Instructions To Bidders

Special Note

BIDDERS ARE URGED TO PROMPTLY REVIEW THE REQUIREMENTS OF ALL SPECIFICATIONS AND SUBMIT QUESTIONS FOR RESOLUTION AS EARLY AS POSSIBLE DURING THE BID PERIOD. QUESTIONS OR CONCERNS MUST BE SUBMITTED IN WRITING TO THE PURCHASING AGENT DURING THE BID PERIOD AND SHALL BECOME PART OF YOUR BID PACKAGE. OTHERWISE, THIS WILL BE CONSTRUED AS ACCEPTANCE BY THE BIDDERS THAT THE INTENT OF THE SPECIFICATIONS IS CLEAR AND THAT COMPETITIVE BIDS MAY BE OBTAINED AS SPECIFIED HEREIN. PROTESTS WITH REGARD TO THE SPECIFICATION DOCUMENTS SHALL NOT BE CONSIDERED AFTER BIDS ARE OPENED.

Bid Packages are mailed only as a courtesy. The *City of Hammond* does not assume responsibility for bidders to receive bid packages. Bidders should rely only on advertisements in the local newspaper, website www.hammond.org or should personally pick up bid packages with specifications. Full information may be obtained, or questions answered, by contacting the *Purchasing Department, Hammond City Hall Complex, 310 East Charles Street* or by calling (985) 277-5632

These specifications are written in a manner to invite open competition. Any manufacturer's names, trade names, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive unless the invitation to bid states that only the brand name will be considered for reasons of compatibility, etc.

The Public Bid number, Bidder's name, address and bid opening date shall be clearly printed or typed on the outside of the bid envelope. Only one (1) bid shall be accepted from each bidder. Alternates shall not be accepted unless specifically requested in the bid specifications. Submission of more than one (1) bid or alternates not requested may be grounds for rejection of all bids by the bidder.

The method of delivery of bids is the responsibility of the bidder. All bids shall be received by the *Purchasing Department, Hammond City Hall Complex, 310 East Charles Street Hammond, Louisiana* on or before the specified bid opening date and time. Late bids shall not be accepted under ANY circumstances. It is the bidder's sole responsibility to insure that their bid has been delivered and accepted with ample time to meet all specified deadlines.

Normally, bid bonds will not be required on bids for materials, supplies, annual contracts or small labor contracts. If a bid bond is required, it will be specifically requested on the bid form and included in the specifications.

Bids shall be accepted only on the bid forms furnished by the *City of Hammond Purchasing Department*. The *City of Hammond* shall only accept bids from those bidders

in whose name the bid forms and or specifications were issued. Altered or incomplete bid forms, or use of substitute forms or documents, shall render the bid non-responsive and subject to rejection. The entire bid package, including the specifications and copies of any addenda issued shall be submitted to the *Purchasing Department* as THE BID.

All bids must be typed or written in **BLUE/BLACK INK**. Any erasures, strikeover and/or changes to prices shall be initialed by the bidder. Failure to initial shall be cause for rejection of the bid as non-responsive.

All bids shall be signed. Failure to do so shall cause the bid to be rejected as non-responsive.

Where one (1) or more vendor's exact products or typical workmanship is designated as the level of quality desired or equivalent, the *Purchasing Agent*, after study and review, reserves the right to determine the acceptability of any equivalent offered. The decision, after study and review, shall be final and binding.

If bidding "equivalent" products, specifications, illustrative literature and any deviations shall be submitted with bid. Representative samples shall be submitted upon request, if appropriate.

Liability:

The Contractor at all times during the term of the contract shall maintain and pay for property damage and public liability insurance with limits of at least (\$1,000,000.00) one million dollars inclusive of bodily injury and property damage for any one occurrence.

Prior to commencing work under this contract the Contractor must file with the City a "certificate of insurance" meeting aforementioned requirements with the City of Hammond named insured by added endorsement. All premiums and expense incurred with this insurance shall be paid for by the Contractor.

The Contractor shall assume the defense of and indemnify and save harmless the City and its Officers and Agents from all claims relating to work.

The Contractor shall be responsible for any and all damages or claims for damages or injuries or accidents done or caused by him or his employees, or resulting from the execution of the work, or any operations, or caused by reason of existence or location or condition of facilities or of any materials, supplies, or machinery used thereon or therein, or neglect or omission on his part, or all of the several acts or things required to be done by them, under and by these conditions, and covenants, and agrees to hold the City harmless and indemnified for all such damages and claims for damages.

The Contractor shall indemnify and save harmless the City from and against all losses and all claims, demands, payments, suits, actions, recoveries and judgments of every

nature and description made, brought or recovered against the City by reason of any act or omission of the Contractor, his agents or employees, in the execution of his work.

Worker's Compensation:

The Contractor shall, at all times, pay or cause to be paid, any assessment or compensation required to be paid pursuant to the Worker's Compensation Act. The Contractor shall, at the time of entering into a Contract with the City, provide satisfactory proof that all assessments or compensation payable to the Worker's Compensation Board have been paid and the City may, at any time during the performance or upon the completion of such Contract require a further declaration such Contract require a further declaration that such assessments or compensations have been paid.

Non-Discrimination:

By Submitting and signing this bid, Bidder certifies that he agrees to adhere to the mandates dictated by title VI and VII of the civil rights act of 1964, as amended; the Vietnam Era Veterans Readjustment Assistance Act of 1974; section 503 of the Rehabilitation act of 1973; section 202 of Executive Order 11246, as amended; and the Americans with Disabilities Act of 1990. Bidder agrees to keep informed of and comply with all Federal, State and Local Laws, Ordinances and Regulations which Affect His Employees or Prospective Employees.

**Bid Description:
Turnout Fire Gear**

As a qualified bidder for the project, I have carefully examined all of the Bidding Documents and have examined the conditions and specifications of the work to be done, and I hereby propose to furnish all labor, materials, equipment, tools, etc., as called for by the bidding specifications.

I hereby acknowledge that I have received the following Addenda and they are reflected

as part of this bid, Addenda # _____ Date _____

List by date and Addendum number

Bidder agrees to furnish material F.O.B. Delivered Hammond, La., described by the Bidding Specifications for the sum indicated:

(Amounts shall be shown in words and digits. In case of discrepancy, words shall govern.)

_____ DOLLARS (_____)

**\$ _____
Total Bid Price**

Signature of Bidder

Company

The above signature on this Sealed Bid certifies that bidder has carefully examined the instructions to bidders, terms and specifications applicable to and made a part of this Seal Bid Package. Bidder further certifies that the prices shown are in full compliance with the conditions, terms and specifications of this Sealed Bid.

GENERAL SPECIFICATIONS

SCOPE

This document specifies the design and materials used to manufacture jackets and trousers to be worn during STRUCTURAL FIREFIGHTING as covered by the NFPA 1971-2013 Standard. The protection offered by the garment covers the lower and upper section of the body excluding head, hands or feet. Garment sizing shall be done in accordance with NFPA 1500 and available for male and female. Generalized sizing such as small, medium, large, etc... shall be considered unacceptable.

COMPLY _____

EXCEPTION _____

CERTIFICATION

The design, materials, workmanship, construction and performance shall meet or exceed all National Fire Protection Association (NFPA) requirements as specified in NFPA 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2013 edition. The manufacturer shall supply the Certificates of Compliance from Underwriters Laboratories showing compliance to the standard.

COMPLY _____

EXCEPTION _____

ISO 9001

The manufacturer shall be ISO 9001:2008 certified, thus assuring quality control procedures in the manufacturing of bunker gear. Copy of this certification shall be supplied.

COMPLY _____

EXCEPTION _____

EXCEPTION

Bidder shall clearly state in this document if he complies with the section requirements or takes an exception. Any section that is not clearly identified will be taken as an exception. All alternatives to the exceptions shall be described and listed on a separate document and attached to this bid. No exceptions to this paragraph shall be accepted.

COMPLY _____

EXCEPTION _____

THL RATING

The composite of outer shell, thermal barrier and moisture barrier shall meet or exceed the minimum THL requirement of the latest edition of NFPA 1971. Manufacturer shall state on his bid the THL value of the proposed composite.

THL: _____

COMPLY _____

EXCEPTION _____

TPP RATING

The composite of outer shell, thermal barrier and moisture barrier shall meet or exceed the minimum TPP requirement of the latest edition of NFPA 1971. Manufacturer shall state on his bid the TPP value of the proposed composite.

TPP: _____

COMPLY _____

EXCEPTION _____

LABELING

The garments shall be labeled according to the applicable standards and regulations. A warning label shall be applied about use and protection of the garment. A human readable unique serial number shall be assigned to the jacket and pant. The unique serial number shall also be translated into bar code so it can be read by care and maintenance facilities.

COMPLY _____

EXCEPTION _____

PACKAGING

The garments shall be individually put in a bag that protects them from external elements including UV RAYS on ALL sides before being placed in a transportation box. The individual garment bags shall have a label that includes the garment identification. The same label shall also be affixed to the transportation box for easier processing by the department.

COMPLY _____

EXCEPTION _____

FOAM

Use of PVC or Silicone foam in the construction of the gear shall not be allowed as many problems may arise as of exposure of cell foam to intense heat. Problems that would shorten the gear life or expose the user to dangerous situations.

COMPLY _____

EXCEPTION _____

OUTER SHELL

The outer shell shall be approximately 7.0 oz/yd², constructed of Kevlar®/Nomex® in a 60/40 blend. The outer shell shall be constructed in a rip-stop weave. The outer shell shall have the Super Sheltite™ durable water-repellent finish. The outer shell color shall be gold.

COMPLY _____

EXCEPTION _____

MOISTURE BARRIER

The moisture barrier material shall be two-layer GORE® RT7100 moisture barrier – Type 3D, which is comprised of a GORE™ membrane laminated to a 3.0 oz/yd² Nonwoven substrate constructed of 100% Aramid fibers. The GORE™ membrane is of an enhanced bicomponent construction comprised of an expanded PTFE (polytetrafluoroethylene, for example Teflon®) matrix having a continuous hydrophilic (i.e. water-loving), oleophobic (i.e., oil hating) coating that is impregnated into the ePTFE matrix. For best seam sealing results, GORE® RT7100 moisture barrier seams should be sealed with GORE-SEAM® tape using a Series 6000 (or higher) GORE-SEAM™ sealing machine to afford comparable viral penetration resistance performance. The total weight of the moisture barrier shall be approximately 4.6 oz/yd².

COMPLY _____

EXCEPTION _____

SEALED MOISTURE BARRIER SEAMS

All moisture barrier seams shall be stitched and seams shall be sealed with a minimum one (1) inch GORE-SEAM® tape using a Series 6000 (or higher) GORE-SEAM™ sealing machine to afford comparable bacteriophage penetration resistance performance. Any seam tape narrower than one (1) inch shall be unacceptable because of the liquid penetration risk associated with narrower seam tape. Double rows of stitching shall not be acceptable as it reduces the surface area of the sealing tape on both sides of the seam.

COMPLY _____

EXCEPTION _____

THERMAL BARRIER

The thermal barrier shall consist of a Kevlar®/Nomex® twill weave face cloth constructed of 86% Aramid /14% FR Viscose containing at least 60% of filament Kevlar®. The facecloth shall weigh approximately 3.6 oz/yd² and be quilted with meta-aramid threads to 1 layer of 2.3 oz/yd² and 1 layer of 1.5 oz/yd² 100% aramid non-woven spunlace. The thermal barrier shall have a total weight of approximately 7.4 oz/yd². Bids offering other fiber blends or less than 60% filament Kevlar® shall not be considered.

COMPLY _____

EXCEPTION _____

ARA-SHIELD® REINFORCEMENT COLOR

All Ara-shield® (Polymer coated Kevlar® twill) reinforcements, where specified, shall be black in color.

COMPLY _____

EXCEPTION _____

HARDWARE

All zippers, snaps, or hook and loop shall be supplied by YKK. Snaps shall be prong type. Stitching of all hook and loop shall be either be done with a double row of stitching all around or with an "X" in the center.

COMPLY _____

EXCEPTION _____

COAT SPECIFICATIONS

OUTER SHELL CONSTRUCTION

All "Major A" seams shall be made of seam type LSbm-4, including stitch types #504, 401 and 301. The seaming process starts by aligning two pieces of fabric together and stitching them together with what is commonly referred to as a "5 thread overlock", using stitch type #516, consisting of stitch type 504 and 401. The seam is then folded over and top stitched with two (2) rows of lock stitch # 301. All seams shall be stitched with Nomex® thread and sewn to prevent stitches from coming apart by themselves if cut or worn. Stress points such as pockets, pocket flaps, collar, storm flap shall be bar-tacked for increased durability. The base jacket shall be approximately 32 inches (grading) and cut to assure increased overlap with the pants. The collar line, the collar, the sleeve lengths and the gussets shall be cut in proportion with the chest size of the jacket. The coat design shall include a tapered fit, through an athletic cut and shall be 4 inches shorter in the front than back.

A drag harness shall be installed in the jacket between the outer shell and the liner. The drag harness shall be made of 1" wide supple Kevlar® webbing to limit the abrasion on the moisture barrier. The webbing shall loop around the shoulders starting horizontally below the shoulders at the back, wrap around both shoulders at the front and exit through the outer shell at the back of the neck, below the collar seam. This design increases comfort and reduces the overall coat weight by reducing the amount of webbing between the outer shell and the liner. A flap made of outer shell shall be installed on the back of the jacket at the collar seam. The flap shall be shaped like an irregular pentagon with a rectangular base of six (6) inches wide by one inch and a half (1-1/2) long ending in a triangle. The length of the flap shall be three (3) inches. The flap shall open to give access to the strap of the drag harness. The flap shall be secured in closed position with the use of a hook and loop fastener two (2) inches by one inch and a quarter (1-1/4) with rounded corners and a box and cross stitching. A piece of reflective trim shall be sewn vertically on the center of drag rescue device flap to clearly identify the drag rescue device handle. The harness shall be held in place between the outer shell and the inner liner by strategically positioned loops under the arm, along the path of the harness to keep it in

the optimal position.

COMPLY _____

EXCEPTION _____

LINER CONSTRUCTION - ZIP-IN LINER

All "Major B" seams shall be made of seam type SSa-2, including stitch types #504 and #401. The seaming process shall start by aligning two pieces of fabric together and stitching them together with what is commonly referred to as a "5 thread overlock", using stitch type #516, consisting of stitch types #504 and #401. In addition, the moisture barrier seams shall be sealed according to the section entitled SEALED MOISTURE BARRIER SEAMS. The moisture barrier and thermal barrier component of the liner shall be sewn together at the edges using a piece of bias-cut neoprene and sewn together with one row of lock stitch, consisting of stitch type 301. All moisture barrier seams shall be stitched with Nomex® thread using 12 ± 1 stitches per inch. All thermal barrier seams shall be stitched with Nomex® thread using 10 ± 1 stitches per inch. All seams shall be oriented so that the edges of the thermal barrier and the moisture barrier sealing tape are inside the inner liner.

The liner shall be cut a maximum of three (3) inches shorter for the jacket and one (1) inch shorter for the sleeves. **The liner shall be attached to the outer shell by zipper or snap along the front closure of the jacket and shall be protected with a breathable moisture barrier facing.** The liner shall also attached by two (2) color coded tabs with snaps at each sleeve end.

Two additional layers of thermal barrier shall be sewn in the shoulder area for increased CCHR protection. An additional layer of neoprene shall be sewn to the thermal barrier under the arm reflective trim, to meet the Stored and Thermal Energy requirement. Should the manufacturer include a nonporous elbow reinforcement, the area under the elbow reinforcement shall also have a layer of neoprene sewn to the thermal barrier, to meet the Stored and Thermal Energy requirement.

COMPLY _____

EXCEPTION _____

SLEEVES

The sleeves shall be cut in proportion with the chest sizes. The outer shell shall include four (4) pieces per sleeve to improve comfort and range of motion. The liner shall also incorporate patterning features that complement the outer shell while reducing the number of seams. The wristlets shall be sewn to a waterwell which in turn shall be sewn the outer shell to avoid water penetration in the sleeve. The wristlet shall include the WRISTLET WATER EVACUATION SYSTEM™, with a shallow waterwell and two (2) water evacuation eyelets installed on each sleeve. This simple design is very light and allows liquids to drain quickly, helping to lower the risks associated with water infiltration and steam burn.

COMPLY _____

EXCEPTION _____

COLLAR

The collar shall measure three (3) inches high with a four (4) layers construction consisting of two (2) layers of outer shell, one (1) layer of thermal barrier and one (1) layer of breathable moisture barrier. The collar throat closure shall be a continuation of the coat storm flap ("L" shaped) to prevent any gaps in the throat area. The throat closure flap shall be attached to the left side of the collar using FR hook and loop fastener of 2" X 2" on the flap and 2" X 5" on the collar. Front storm flap shall be one piece continuous to prevent infiltration.

The collar shall have an internal hanging loop made of the specified outer shell. The loop shall measure a half inch (1/2) wide and have a usable width of three (3) inches.

COMPLY _____

EXCEPTION _____

ACTION BACK

The coat shall have an extensible gusset installed on each side of the upper back. These gussets shall measure a minimum of twelve (12) inches long and offer an extension of approximately (3) inches at the deepest part. The liner shall also include pleats that work together with the outer shell gussets to increase range of motion. The outer shell gussets shall have an elastic to ensure that the action back retracts when the arms are in the natural position. This feature is essential to help prevent accidentally getting caught in by the gusset. The extremities of these gussets shall be bartacked. Action backs that are not retractable shall not be acceptable.

COMPLY _____

EXCEPTION _____

COAT CLOSURE SYSTEM

The positive closure system shall consist of a heavy duty brass #10 zipper with Nomex® tape of approximately twenty (20) inches long graded to the size of the jacket. The positive closure shall be covered by a ONE PIECE storm flap and throat closure, to prevent any gaps in the throat area. The one piece flap shall measure approximately four inches and three quarters (4-3/4) wide and twenty four inches and three quarters (24-3/4) long and be shaped as a reversed "L". The storm flap and throat closure shall be constructed of four (4) layers: two (2) layers of outer shell, one (1) layer of moisture barrier and one (1) layer of thermal barrier. The flap shall be fastened to the front of the jacket by means of FR hook and loop fastener two (2) inches wide by twenty two inches and three eights (22-3/8) on the flap and two (2) inches by twenty one inches and five eights (21-5/8) on the front panel of the outer shell. The moisture barrier in storm flap shall be the SAME as the moisture barrier selected in the MOISTURE BARRIER section of this specification. Use of moisture barrier other than that specified in the MOISTURE BARRIER section shall not be acceptable.

COMPLY _____

EXCEPTION _____

POCKETS

The coat shall have an angled pocket on each side. The pocket shall be of a patch type with an vertical expansion pleat in the center. The pocket will have an horizontal opening and shall be closed by the mean of a matching flap fitted with hook and loop fasteners. Pocket size shall be approximately 6.5 inches by 10 inches. The pocket size shall grade witch the coat size and the lower pocket edge shall follow coat hem. Two (2) water evacuation eyelets shall be installed at the bottom of each pocket. Each pocket shall two (2) bartacks on each lower corner, one (1) bartacks on each top corner and one (1) bartacks on each side of the pocket flap for a total of eight (8) bartacks per pocket.

COMPLY _____

EXCEPTION _____

RADIO POCKET (8"X4"X2") (UNIT)

The coat shall have a radio pocket measuring eight (8) inches high by four (4) inches wide by two (2) inches deep constructed of the specified outer shell material. The pocket shall have at least one (1) drainage eyelet on the bottom. The radio pocket shall have two (2) bartacks on each lower corner and one (1) bartacks on each top corner for a total of six (6) bartacks per pocket.

COMPLY _____

EXCEPTION _____

RADIO POCKET FLAP

The flap shall be four (4) inches by three (3) inches and shall close with the use of FR hook and loop fastener of three (3) inches high by two (2) inches wide on the flap and two (2) inches by two (2) inches on the face of the radio pocket. The radio pocket flap shall have one (1) bartack on each side.

COMPLY _____

EXCEPTION _____

SHOULDER REINFORCEMENT

The coat shall have a shoulder reinforcements made of outer shell material. The reinforcement material shall be graded in proportion with the coat size. The reinforcements shall be stitched with two (2) rows of lock stitching to the outer shell.

COMPLY _____

EXCEPTION _____

CUFF REINFORCEMENT

The sleeve cuffs shall be reinforced with Ara-shield® (Polymer coated 100% Kevlar® twill weave) 2" inch in width with 1" on the inside and 1" on the outside and shall be sewn with two (2) rows of locked stitches.

COMPLY _____

EXCEPTION _____

REFLECTIVE TRIM PATTERN

The trim shall be "NFPA" style; one band (1) around the lower portion of the jacket, one band (1) around the back and chest area below the armpit, and one band (1) around each sleeve below the elbow. Trims shall have two (2) rows of lock stitching on each side of the trim.

COMPLY _____

EXCEPTION _____

REFLECTIVE TRIM TYPE

The retro-reflective trim shall be the three (3) inch wide Scotchlite™ Reflective Material - 9587, lime-yellow with silver center, from 3M™. This material is also commonly referred to as triple trim.

COMPLY _____

EXCEPTION _____

Outer Shell removable patch with Hook & loop (4"X17")

A patch for lettering constructed of shell fabric shall be installed on the back portion of the jacket and secured to the jacket with the use of hook and loop fastener. This patch shall measure approximately four (4) inches high by seventeen (17) inches wide. Hook fastener shall be sewn to the outer shell of the jacket to receive the removable patch.

COMPLY _____

EXCEPTION _____

WATERWELL

The coat sleeve shall have a neoprene waterwell sewn to the outer shell. The waterwell shall be approximately two (2) inches deep and prevent debris from entering the sleeve when the arms are raised. The waterwell shall be sewn into the cuff reinforcement and shall also be sewn to the outer shell approximately two (2) inches from the sleeve end. The waterwell shall also

have two (2) drainage eyelets to prevent accumulation of water when the arms are raised.

COMPLY _____ **EXCEPTION** _____

GLOVE INTERFACE

A long Nomex® knit wristlet with a thumb hole shall be attached to the waterwell.

COMPLY _____ **EXCEPTION** _____

MICROPHONE / P.A.S.S. LOOP

A loop for a microphone or P.A.S.S. alarm shall be installed above the radio pocket. The loop shall be one (1) inch high and have an opening of approximately one inch and three quarters (1-3/4) of usable space and be made of the specified outer shell. The loop shall be bartacked at each end to the front of the jacket.

COMPLY _____ **EXCEPTION** _____

FLASHLIGHT HOLDER

The coat shall have an adjustable loop made of outer shell. The loop shall measure eleven (11) inches long and be attached to the outer shell with bartacks leaving an opening of approximately one inch and a half (1-1/2). The loop shall close onto itself with the use of hook and loop fastener. The coat shall also have a metal clip installed so the bottom of the clip is one inch and a half (1-1/2) above the loop with. The clip shall be installed on the outer shell with the use of a piece of outer shell folded back onto itself.

COMPLY _____ **EXCEPTION** _____

PANT SPECIFICATIONS

WAIST STYLE

The pant shall be of "Regular Waist" design.

COMPLY _____ **EXCEPTION** _____

OUTER SHELL CONSTRUCTION

All "Major A" seams shall be made of seam type LSbm-4, including stitch types #504, #401 and #301. The seaming process shall start by aligning two pieces of fabric together and stitching them together with what is commonly referred to as a "5 thread overlock", using stitch type #516, consisting of stitch types #504 and #401. The seam shall then be folded over and top stitched with two (2) rows of lock stitch consisting of stitch type #301. All seams shall be stitched with Nomex® thread using 9 ± 1 stitches per inch and sewn to prevent stitches from coming apart by themselves if cut or worn. Stress points such as pockets and pocket flaps shall be bar-tacked for increased durability.

The pant shall be made of multiple panels and provide complete range of motion. Each leg shall have four (4) panels each, consisting of one (1) Top-Front, one (1) Top-Back, one (1) Bottom-Front, and one (1) Bottom-Back panels.

COMPLY _____

EXCEPTION _____

LINER CONSTRUCTION

All "Major B" seams shall be made of seam type SSa-2, including stitch types #504 and #401. The seaming process shall start by aligning two pieces of fabric together and stitching them together with what is commonly referred to as a "5 thread overlock", using stitch type #516, consisting of stitch types #504 and #401. In addition, the moisture barrier seams shall be sealed according to the section entitled SEALED MOISTURE BARRIER SEAMS. The moisture barrier and thermal barrier component of the liner shall be sewn together at the edges using a piece of bias-cut neoprene and sewn together with one row of lock stitch, consisting of stitch type 301. All moisture barrier seams shall be stitched with Nomex® thread using 12 ± 1 stitches per inch. All thermal barrier seams shall be stitched with Nomex® thread using 10 ± 1 stitches per inch. All seams shall be oriented so that the edges of the thermal barrier and the moisture barrier sealing tape are inside the inner liner.

The liner shall be cut a maximum of three (3) inches shorter for the outer shell. A waist band shall be sewn to the inside of the outer shell. . A two (2) inch waist band made of thermal barrier and moisture barrier shall be sewn to the inside of the outer shell. **The liner shall be attached between the outer shell and the waist band with the use of snap or zipper.** The liner shall also be attached to the shell with two (2) tabs with snaps at each leg. The waist band shall be kept in position with the use of five (5) snaps positioned around the waist, further securing the liner to the outer shell.

Two additional layers of thermal barrier shall be sewn in the knee area for increased CCHR protection.

COMPLY _____

EXCEPTION _____

PANT CLOSURE SYSTEM

The positive closure system shall consist of a heavy duty YKK #10 brass Nomex® zipper of approximately ten (10) inches long. The storm flap shall be approximately three (3) inches wide and eleven (11) inches long and constructed of two (2) layers of outer shell material. The flap shall be fastened to the front of the pants by means of FR hook and loop fastener two (2) inches by ten inches and three quarter (10-3/4) on the flap and two (2) inches by ten inches and a half (10-1/2) on the right front panel of the outer shell. 360 degree moisture and thermal protection shall be afforded by overlapping the left and right side of the liner.

COMPLY _____

EXCEPTION _____

POCKETS

The pant shall be equipped with two (2) bellow pockets measuring approximately ten (10) inches high by ten (10) inches wide and two (2) inches deep on all sides of the pocket. The flap shall exceed the pocket by ¼” on each side and be 3-1/2” High. The flap shall close with the use of two FR hook and loop fastener on each side of the flap 2”H X 2”W and two 2”H X 2”W on the face of the pocket. Two (2) water evacuation eyelets shall be installed at the bottom of each pocket. Each pocket shall two (2) bartacks on each lower corner, one (1) bartacks on each top corner and one (1) bartacks on each side of the pocket flap for a total of eight (8) bartacks per pocket.

COMPLY _____

EXCEPTION _____

KNEE REINFORCEMENT

The knee area shall be designed to enhance mobility with the use of darts and pleats in the outer shell. The knee area shall be molded and articulated to better shape the knee in order to increase flexibility, mobility and comfort. The knee area shall be reinforced by a rectangular piece of Ara-shield® (Polymer coated Kevlar® twill) graded in length in proportion with the pant size and shall be double stitched to the outer shell.

COMPLY _____

EXCEPTION _____

CUFF REINFORCEMENT

The pant cuffs shall be reinforced with Ara-shield® (Polymer coated 100% Kevlar® twill weave). The reinforcement material shall be 2” inch in width (finished) and shall be sewn with two (2) rows of locked stitches. The outside edge of the reinforcement shall be turned inside to prevent premature abrasion of the outer shell.

COMPLY _____

EXCEPTION _____

REFLECTIVE TRIM PATTERN

The trim shall be positioned around the lower portion of the leg between the cuff and the knee. Trims shall have two (2) rows of lock stitching on each side of the trim.

COMPLY _____

EXCEPTION _____

REFLECTIVE TRIM TYPE

The retro-reflective trim shall be the three (3) inch wide Scotchlite™ Reflective Material - 9587, lime-yellow with silver center, from 3M™. This material is also commonly referred to as triple trim.

COMPLY _____

EXCEPTION _____

SUSPENDERS

The pants shall be equipped with Deluxe H-style removable suspenders. The suspenders shall be constructed of two (2) inch wide heavy-duty cotton webbing. The horizontal component of the suspenders forming the H back shall be made of elastic material to increase comfort when bending forward. The suspenders shall be attached to the pant by passing the ends through specially positioned loops around the waist of the pant and folding each end over onto itself while securing the Hook and Loop fasteners 1-1/2" x 2" sewn with a box and cross pattern. A quick adjust metal "ladderlock" buckle shall be installed on the front of the suspender to tighten or release the suspenders quickly. In addition, a shoulder padding made of neoprene shall be sewn to the shoulder area of the suspenders. The padding shall measure a minimum of 8 inches long by the width of the webbing. The suspenders shall be cut in proportion to the size of the fire fighter measurements and completely removable for ease of cleaning.

COMPLY _____

EXCEPTION _____

KEVLAR® BELT

The removable Kevlar® belt shall be made of two (2) inch wide webbing. The webbing shall be passed through five (5) belt loops fixed on the pants. The belt shall include an adjustable plastic buckle. The buckle components shall be sewn to the webbing using lockstitch and bartacks. The belt loops shall be made of outer shell and shall be installed at the waist area of the pants. Each belt loop shall have an opening of two and a half (2-1/2) inches and shall be secured to the pant with lock stitching and bartacks.

COMPLY _____

EXCEPTION _____

Tunnel and belt loops combo system

Two self fabric tunnels shall be installed on the pants at waist height. Each tunnel shall be installed on the sides of the pants leaving a space in the back area. Each tunnel shall measure approximately 12 inches by 3 inches and will grade with pant size. Two loops shall be installed on top of the tunnel in the front section and two shall be install directly on the pants in the back section. This tunnel shall be suited to be fitted with the Kevlar belt.

COMPLY _____

EXCEPTION _____

Zippered leg

The outer shell fabric shall be equipped with a fifteen (15) inches #10 Nomex-brass zipper on the out-seam of each leg. The zipper shall covered with flaps made of outer shell fabric tab. The lining shall have a (7) inch wide triangular gusset.

COMPLY _____

EXCEPTION _____

Zippered leg

The outer shell fabric shall be equipped with a fifteen (15) inches #10 Nomex-brass zipper on the out-seam of each leg. The zipper shall covered with flaps made of outer shell fabric tab. The lining shall have a (7) inch wide triangular gusset.

COMPLY _____

EXCEPTION _____

