

City of Eastpointe

Invitation to Bid

Fire Department Turn-out Gear

City Council

Monique Owens, Mayor

Rob Baker

Harvey Curley

Cardi DeMonaco Jr.

Sarah Lucido

City Manager

Elke Doom

Bids for the purchase of Fire Department Turn-out Gear are due to the city clerk's office by 2:00 pm, Thursday, January 9, 2020. Bids must be submitted in a sealed envelope endorsed on the front "Turn-out Gear".

City of Eastpointe

Invitation to Bid

Purchase of Fire Department Turn-out Gear

The city will receive bids for the purchase of Fire Department Turn-out Gear until 2:00 p.m., on Thursday, January 9, 2020, in the City Clerk's Office, 23200 Gratiot Avenue, Eastpointe, MI 48021. At that time, all bids will be opened and read aloud in the City Council Chambers.

A copy of the bid specifications is available for pickup or review at the city clerk's office or on the city's website, www.cityofeastpointe.net.

The city of Eastpointe reserves the right to accept any bid, reject any and all bids and to waive any informalities in bidding and/or to accept the bid it considers to be the in the best interest of the city.

Brian Fairbrother
Deputy City Clerk

Advertised: December 23, 2019

City of Eastpointe

Fire Department Turn-out Gear

General Conditions

Prices are to remain valid for a period of 45 days from the date of bid opening.

Payment will be made within 30 days after final acceptance is made by the deputy fire chief.

The city will provide proof of tax exemption, if requested by the vendor or factory.

The successful bidder must provide a completed Form W-9 to the city's accounts payable department immediately after award of the bid.

Questions regarding the bid are to be directed to Deputy Fire Chief Nick Sage, at (586) 524-6707 or nsage@eastpointecity.org

All bids must be submitted on city of Eastpointe bid documents. Bid documents may be obtained from the city clerk's office, the city's website (cityofEastpointe.net) or MITN.

Bids for the purchase of Fire Department Turn-out Gear are due to the city clerk's office by 2:00 pm, Thursday, January 9, 2020. Bids must be submitted in a sealed envelope endorsed on the front "Turn-out Gear".

City of Eastpointe

Turn-out Gear Bid Specifications

The city will be accepting bids for the purchase of 23 jackets and 23 pairs of pants of fire department turn-out gear.

GENERAL SPECIFICATIONS

PROTECTIVE JACKET

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 firefighting. 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 (a.k.a. Kombat™ Flex with PBI® Technology)** outer shell shall be constructed of 60/40 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 **SSTO (SUPER SHELLTITE)** which is a durable water-repellent finish that also enhances abrasion resistance. Color of the garments shall be black.

_____ Comply _____ Exception

THERMAL INSULATING LINER - JACKET AND PANTS

The thermal liner shall be constructed of 6.7 oz. per square yard TENCATE **CALDURA® ELITE NOMEX® NANO**; one layer of Nomex Nano and one layer of 2.3 oz. per square yard Nomex® E-89™ spunlaced Nomex®/Kevlar® aramid blend, quilt stitched to a FR Rayon Para-Aramid nylon Face Cloth. An approximate 8 inch by 10 ½ inch pocket, constructed of thermal liner over-edged to a layer of moisture barrier material, shall be affixed to the inside of the jacket thermal liner on the left side by means of a single needle 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® black moisture barrier** - Type 2F, which is comprised of a CROSSTECH® membrane laminated to a Nomex® IIIA woven pajama check substrate. 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. 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

One strip of 5/8 inch wide FR hook and loop fastener tape shall secure the moisture barrier system to the shell. In addition, a minimum of 6 snap fasteners shall secure the thermal liner/moisture barrier to the outer shell along the length of the neck line under the top most collar (see Collar section). The top most collar shall be turned under and finished such that the snaps on the collar will not be able to contact the wearers skin. Snaps shall be protected from exterior heat by moisture barrier fabric. The remainder of the thermal liner/moisture barrier shall be secured with snap fasteners appropriately spaced on each jacket facing and snap fasteners at each sleeve end.

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 color coded 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. Major A outer shell structural seams, major B structural liner seams and 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.

The hem of the jacket and liner system shall be constructed with EXTENDED BACK (EB) panels incorporating all 3-layers of the system. The outer shell EB shall be constructed of two layers of specified outer shell material, double stitched to the hem. The liner EB shall be constructed with one layer each of specified thermal liner and moisture barrier materials, serge stitched to the liner hem. There shall be two Ara-Shield® snap tabs sewn to the bottom of the shell portion of the EB which shall attach to corresponding snaps on the liner portion of the EB. The EB shall extend approximately 6 inches lower in the back than the front of the jacket providing and maintaining proper overlap when bending or crawling.

_____ Comply _____ Exception

LOGOS

The garment brand shall be identified by means of FR Nomex thread embroidery on the top of the left collar denoting "GLOBE" as the manufacturer.

_____ Comply _____ Exception

DRAG RESCUE DEVICE (DRD)

A Firefighter Drag Rescue Device (DRD) shall be installed in each jacket. The ends of a 1 inch wide strap, constructed of Kevlar®, shall be sewn together to form a continuous loop. The strap shall 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 shall be covered by an outside flap of shell material, 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. ONE strips of 5/8 inch wide FR hook and loop fastener tape shall secure the thermal liner/moisture barrier to the outer shell along the length of the neckline under the collar. A minimum of 6 snap fasteners, to minimize gaps, 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

SIZING

The standard coat design shall be 6 inches longer at the rear hem than at the front hem and provide continuous and unbroken moisture barrier and thermal liner protection from the collar seam to the hem at the bottom of the jacket MEB. Each jacket length shall be determined by each individual's torso length to provide the jacket to pant interface as defined by NFPA 1500. Jacket design must interface properly with standard waist high turnout pants. To facilitate various body types the front jacket lengths shall be provided in the following lengths:

29 inches long (standard)

32 inches long (men's)

35 inches long (men's)

The jacket shall be available in even size chest measurements of two-inch increments, and shall range from a small size of 30 to a large size of 68. Generalized sizing, such as small, medium, large, etc., will not be considered acceptable. Sizing specifically for women shall also be available.

_____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 **NYC style**; 3-inch-wide stripes - around the bottom of the jacket within approximately 1 inch of the hem, around the back and chest area approximately 3 inches below the armpit, around each sleeve below the elbow, around each sleeve above the elbow.

_____Comply _____Exception

REINFORCED TRIM STITCHING

All sewn on 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: EFR

2" lime/yellow 3M Scotchlite™ lettering on Row G reading: Firefighter last name

_____Comply _____Exception

LETTER PATCH

Sew-On Letter Patch

Lettering on Row G will be on a sewn-on letter patch. The sewn-on letter patch shall be constructed of a layer of outer shell material.

_____Comply _____Exception

COLLAR & FREE HANGING THROAT TAB

The collar shall consist of a minimum four-layer construction and be of one-piece design. There shall be two layers of specified moisture barrier material sandwiched in between (see Moisture Barrier section) two layers of outer shell fabric.. 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, while maintaining thermal protection. The collar shall be a minimum of 3 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 outershell and moisture barrier shall be joined to the body panels with a minimum of two rows of stitching. Inside the collar, above the rear seam where the collar moisture barrier is joined to the shell, there shall be a full strip of 5/8 inch wide FR hook fastener tape running the full length of the collar on the moisture barrier , and a corresponding piece of 5/8 inch wide FR loop fastener tape running the full length of the collar on the outer shell. The collar 's inside outershell and moisture barrier layer shall have 6 snap fasteners (minimum) on lower edge of the collar. There shall be a series of corresponding snap fasteners on the thermal liner to engage the snaps on the collar, thus enclosing the liner access opening under the shell collar. These snaps shall be installed such that they do not penetrate from the outer shell through to the inner layers. The top of the thermal liner and moisture barrier shall be sandwiched between the underside of the top collar shell fabric and moisture barrier material, and the bottom collar shell fabric and moisture barrier material so as to reduce the possibility of liner detachment while donning and doffing.

A self-material fabric hanger loop shall be sewn at the top of collar.

The throat tab shall be a minimum of 4 layers, of 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 3½ inches wide at the center tapering to 1½ inches at each end with a total length of approximately 8½ inches. The throat tab shall be attached to the right side of the collar by a 1 inch wide by 1½ inch long piece of Nomex® twill webbing. The throat tab shall be secured in the closed and stowed position with FR hook and loop fastener tape. The FR hook and loop fastener tape shall be oriented to prevent exposure to the environment when the throat tab is in the closed position. A 1½ inch by 3 inch piece of FR loop fastener tape shall be sewn horizontally to the inside leading end of the throat tab and a 1 inch by 3 inch piece of FR hook fastener tape shall be sewn horizontally towards the opposite end of the throat tab.

A corresponding piece of FR hook fastener tape measuring 1½ inches by 3 inches shall be sewn horizontally to the leading outside edge of the collar on the left side, for attachment and adjustment when in the closed position and wearing a breathing apparatus mask. The collar closure strap shall fold in half for storage with the FR loop fastener tape engaging the FR hook fastener tape.

_____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 2½ 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 ¼ inch 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 (6 inches for hook and dee inside/FR hook and loop fastener tape outside closure; aka #7C) 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 backtacks.

_____Comply _____Exception

STORM FLAP AND JACKET FRONT CLOSURE SYSTEM

The jacket shall be closed by means of FR hook and loop fastener tape on the jacket fronts and inward facing hook and dee rings on the storm flap. A 1½ inch by 23-inch piece of FR hook fastener tape shall be sewn to the leading edge of the right jacket front body panel on the outside with four rows of stitching. A corresponding 1½ inch by 23 inch piece of FR loop fastener tape shall be sewn with four rows of stitching to the leading edge of the left jacket facing on the underside and shall be positioned to engage the hook fastener tape when the

jacket is closed. The storm flap shall close over the left and right jacket halves 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. Four inward facing hooks shall be attached to the left front body panel with three rivets per hook. The rivets shall be reinforced on the inside of the body panel with a single circular piece of leather on 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

SEMI-EXPANSION (BELLOWS) POCKETS

Each jacket front body panel shall have a 8 inch wide by 8 inch high semi-expansion pocket double stitched to it and shall be located to provide accessibility. The leading edge of the pockets shall be sewn flush with the jacket. The rear of the pockets shall expand to a depth of 2 inches. *The semi-expansion pocket shall be reinforced with a layer of Kevlar® approximately 5 inches up on the inside of the pocket.* Two rust resistant metal drain eyelets shall be installed in the bottom of each semi-expansion pocket to facilitate drainage of water. The pocket flaps shall be constructed of two layers of outer shell material and shall measure approximately 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The pocket flaps shall be angled with the front edge 1” shorter than the back edge, the upper pocket corners shall be reinforced with proven backtacks, and pocket flaps shall be reinforced with backtacks. The pocket flaps shall be closed by means of FR hook and loop fastener tape. Two pieces of 1½ inch by 3 inch FR 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 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.

_____Comply

_____Exception

SLEEVES

The sleeves shall be of two-panel construction, contoured, drop shoulder design. The outer and under sleeve panels shall be double stitched together with Nomex® thread. The sleeves shall be contoured (curved) to follow the natural shape of the human arm unlike straight, tubular sleeve configurations. The drop shoulder design, along with the contoured sleeves shall provide for a high degree of uninhibited arm and shoulder movement. The same contoured, drop shoulder design shall be used in all layers of the garment (shell, moisture barrier, and thermal liner).

_____Comply

_____Exception

SLEEVE CUFF REINFORCEMENTS

The sleeve cuffs shall be reinforced with black Ara-Shield® 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 / SLEEVE WELLS

Each jacket shall be equipped with **Nomex® knit wristlets with thumb loop** not less than 4 inches in length and of double thickness. A loop of ½ inch wide black 6.0 oz. Brigade material shall be installed on each wristlet. This loop is designed to slip over the thumb and hold the wristlets from riding up the arm. The color of the wristlets shall be white, grey. The wristlets shall be sewn to flame resistant neoprene coated cotton/polyester material, which in turn shall be sewn to the inside of the sleeve shell approximately five inches from the sleeve cuff. This sleeve well configuration serves to prevent water and other hazardous elements from entering the sleeves when the arms are raised. The neoprene material shall also line the inside of the sleeve shell from the cuff to a point approximately five inches up, 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 SHOULDER THERMAL ENHANCEMENT

A minimum of one additional layer of thermal liner material shall be used to increase thermal insulation in the shoulder area of the liner system. This thermal enhancement layer shall drape over the top of each shoulder extending from the collar to the sleeve/shoulder seam, down the front a minimum 2 inches from the juncture of the collar down the back to a depth of a minimum of 2 inches to provide greater CCHR protection in this high compression area. 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

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 3 inches longer than the depth of the pocket and ¼ inch wider than the pocket. The pocket flap shall be closed by means of FR hook and loop fastener tape. A 1½ inch by 3-inch piece of FR 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 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 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 2 inches deep by 3 inches wide by 8 inches high and shall be installed on the left or right chest. Option of placement of radio pocket is to be determined at time of sizing.

_____Comply _____Exception

NOTCHED RADIO POCKET FLAP

The radio pocket flap shall be notched to accommodate the radio antenna on the both sides for a dual antenna notch.

_____Comply _____Exception

MICROPHONE STRAP

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. The microphone strap shall be mounted above the radio pocket and shall be constructed of double layer outer shell material. An additional microphone

strap shall be sewn to jacket below the flashlight hook to be used in place of the flashlight hook, if desired. The microphone strap shall be 1-inch x 3 inches and be constructed of black Ara-Shield® material.

_____Comply _____Exception

SURVIVOR FLASHLIGHT HOLDER

Each jacket shall be equipped with a "Survivor" flashlight holder. An inward facing safety hook, attached to a double layer self-material strap, shall be double stitched in a vertical position to the upper chest. The inward facing safety hook will accommodate the clip portion of the flashlight. Below the safety hook will be a strap constructed of outer shell material measuring approximately 1 ¾ inches high and 9 inches wide, and will hold the barrel of the flashlight. The lower strap will be equipped with a 1 ½ inch by 2 ½ inch FR hook and loop closure at the front of the strap to facilitate easy removal of the flashlight. There shall be approximately 3 ½ inches between the upper safety hook and lower strap. The "Survivor" flashlight holder shall be sewn to the jacket on the opposite side of the radio pocket. Position of this pocket is to be determined at time of sizing.

_____Comply _____Exception

EMBROIDERED AMERICAN FLAG – RIGHT SLEEVE

Each jacket shall have a Nomex® embroidered American flag that measures approximately 2½ inches high by 3½ inches wide. Per Military protocol the field of stars shall be to the top right corner for installation on the right sleeve. Flags made of fabric other than Nomex® 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 mark.

_____Comply _____Exception

LABELS

Appropriate warning label(s) shall be permanently affixed to each garment. Additionally, the NFPA certification label 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

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

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 assets 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

LOANER GEAR

Vendor must be able to provide up to seven sets of loaner turnout gear in the event in which personnel's turnout gear must be sent out for decontamination cleaning.

_____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.

GENERAL SPECIFICATIONS

PROTECTIVE PANTS

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 firefighting. 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 (a.k.a. Kombat™ Flex with PBI® Technology)** outer shell shall be constructed of 60/40 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 **SSTO (SUPER SHELLTITE)** which is a durable water-repellent finish that also enhances abrasion resistance. Color of the garments shall be black.

_____ Comply _____ Exception

THERMAL INSULATING LINER - JACKET AND PANTS

The thermal liner shall be constructed of 6.7 oz. per square yard TENCATE **CALDURA® ELITE NOMEX® NANO**; one layer of Nomex Nano and one layer of 2.3 oz. per square yard Nomex® E-89™ spunlaced Nomex®/Kevlar® aramid blend, quilt stitched to a FR Rayon Para-Aramid nylon Face Cloth. An approximate 8 inch by 10 ½ inch pocket, constructed of thermal liner over-edged to a layer of moisture barrier material, shall be affixed to the inside of the jacket thermal liner on the left side by means of a single needle 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® black moisture barrier** - Type 2F, which is comprised of a CROSSTECH® membrane laminated to a Nomex® IIIA woven pajama check substrate. 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. 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

One strip of 5/8 inch wide FR hook and loop fastener tape shall secure the moisture barrier system to the shell. In addition, a minimum of 6 snap fasteners shall secure the thermal liner/moisture barrier to the outer shell along the length of the neck line under the top most collar (see Collar section). The top most collar shall be turned under and finished such that the snaps on the collar will not be able to contact the wearers skin. Snaps shall be protected from exterior heat by moisture barrier fabric. The remainder of the thermal liner/moisture barrier shall be secured with snap fasteners appropriately spaced on each jacket facing and snap fasteners at each sleeve end.

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 color coded 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. Major A outer shell structural seams, major B structural liner seams and 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

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

LINER ACCESS OPENING (PANT)

The thermal liner and moisture barrier layers of the pant liner system shall be constructed in such a way as to allow an access opening for interior inspection, service and replacement. The thermal liner and moisture barrier layers shall be stitched together for security and prevention of inadvertent use of one layer without the other. The liner system shall be reinforced at the base of the crotch by means of a strip of additional

material measuring approximately $\frac{3}{4}$ inches wide by 3 inches long. This reinforcing material shall be secured by the binding tape at the bottom of the fly opening, straddling the crotch seam. This reinforcement shall serve to prevent the liner from tearing in this high stress area, as a result of the constant donning and doffing of the pants.

The liner system of the pant shall incorporate an opening along the back of the waistline for ease in inspecting the inner layers and to facilitate 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 on each of the front panels, along the waistband from the front fly opening to side seam. The back of the liner system will be allowed to remain open with two snaps on either side of the back seam to attach the moisture barrier layer to the thermal liner layer. As described previously, the pant thermal layer system 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

SIZING

The pants 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

RETROREFLECTIVE FLUORESCENT TRIM

The pants 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.

_____ Comply _____ Exception

REINFORCED TRIM STITCHING

All sewn on 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, cut on the bias (diagonally). The reinforcement shall be folded in half, for a finished bottom edge and shall have a finished width of not less than approximately 1½ inches. 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 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 by means of nine snaps, spaced equidistant along the length of the waistband reinforcement. Inserting the liner system between the waistband reinforcement and outer shell serves to reduce the possibility of liner detachment while donning and doffing. The independent waistband construction affords greater comfort and fit than a turned and stitched method. Pants that do not include an independent waistband or are not cut on the bias will not provide the same amount of stretch to the garment and shall be considered unacceptable.

_____Comply _____Exception

TAKE UP STRAPS

The pant shall be equipped with two take up straps. The straps shall be constructed of approximate ½ inch wide self-material 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. One strap shall measure approximately 5 inches long and shall be looped through and folded back through a metal buckle. The strap shall be stitched to itself just below the buckle and again at the opposite end for a finished length of approximately 2 inches. The buckle shall point toward the front. The adjustment strap component shall measure approximately 8 inches long (finished dimension). The adjustment strap component shall be inserted through the buckle and one end shall be stitched to the jacket with two rows of double-needle stitching. The take up adjustment strap shall pull toward the front to tighten. This shall allow for approximately 4 inches of adjustment per strap (8 inches overall).

_____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 threaded through an Ara-Shield® material strap. The strap shall measure a total of approximately 10 inches and shall be folded in half to create a double layer strap for the safety hook to be threaded through. The double layer strap shall be folded in half and stitched to the waist area using three heavy duty bar tacks, for a finished strap length of approximately 2 ½ inches. A 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.

The internal fly flap closure shall consist of 1½ inch wide by full-length FR hook and loop fastener tape. 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

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 ¾ inches wide, with a length graded to size based on waist measurement and reinforced with bartacks 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 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 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.

_____ 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 7 inches by 10 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 black Ara-Shield® material.

The knee reinforcement shall be centered on the leg to ensure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure approximately 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 for replacement without opening Major A seams of the outer shell of the pant.

The lower edge of the Ara-Shield® knee reinforcement shall be turned under so that the lower row of stitching is covered and protected from abrasion.

_____Comply _____Exception

PADDING UNDER KNEE REINFORCEMENTS

Padding for the knees shall be accomplished with two layers of Silizone® foam, sandwiched between the thermal liner and moisture barrier. The placement of Silizone® padding on the thermal versus the shell reduces bulk in the shell and also serves to protect the padding from abrasion and other wear issues that the outer shell is subject to. Pants with Silizone® knee padding on the shell as opposed to on the liner, do not provide the same level of bulk reduction and abrasion resistance and are not recommended.

_____Comply _____Exception

EXPANSION (BELLOWS) 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 out-seam above the knee and positioned to provide accessibility. *The lower half of each expansion pocket shall be reinforced with an additional layer of Kevlar® twill 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 approximately 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 backtacks. The pocket flaps shall be closed by means of FR hook and loop fastener tape. Two pieces of 1½ inch by 3 inch FR 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 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. The pocket location will be determined on an individual basis at time of sizing.

Sandwiched between the two outer shell layers at the bottom edge of the flap shall be a strip of **Silizone®** to aid in opening the pocket.

_____Comply _____Exception

ARA-SHIELD TOOL POCKET WITH FLAP

There shall be a tool pocket installed on the front of the opposite expansion pocket. The tool compartment shall be constructed of Ara-Shield® material and the flap of double layer outer shell material. The tool compartment shall be constructed of two pieces of Ara-Shield® material, the rear piece measuring approximately 8 inches by 9 ½ inches and the front piece approximately 6 ½ inches by 9 ½ inches. The tool compartment shall be divided into two equal compartments. The pocket flap shall measure approximately 4 ½ inches in height by 8 ¾ inches wide. There shall be a strip of 1 inch FR hook fastener tape single needle stitched to the bottom of the flap which shall correspond with a strip of 1 inch FR loop fastener tape single needle stitched approximately 1 ¼ inches down from the top of the tool compartment. The pocket location will be determined on an individual basis at time of sizing.

Sandwiched between the two outer shell layers at the bottom edge of the flap shall be a strip of **Silizone®** to aid in opening the pocket.

_____Comply _____Exception

EXPANSION POCKET REINFORCEMENTS

The lower half of the expansion pockets shall be reinforced on the outside with black Ara-Shield® material.

_____Comply _____Exception

PANT CUFF REINFORCEMENTS

The cuff area of the pants shall be reinforced with black Ara-Shield® material.

The cuff reinforcement shall not be less than 2 inch in width and folded in half, approximately one half inside and one half outside the end of the legs for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the outer shell 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 black Ara-Shield® material 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

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 mark.

_____Comply _____Exception

LABELS

Appropriate warning label(s) shall be permanently affixed to each garment. Additionally, the NFPA certification label 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

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

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 assets 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

LOANER GEAR

Vendor must be able to provide up to seven sets of loaner turnout gear in the event in which personnel's turnout gear must be sent out for decontamination cleaning.

_____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.

BID SPECIFICATIONS PROTECTIVE PANTS

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

SIZING

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

Pants:

Gender:	Gender specific Men's and Women's patterns
Waist:	Even sizes
Body Shape:	Men's Regular, Relaxed and Slim Relaxed is a fuller cut in the hips and thighs, like relaxed jeans. Slim is a more slender cut in the hips and thigh, like straight fit jeans.
	Women's
Inseam:	Even sizes

Pants available in only one or two standard shapes will not be acceptable.

_____ Comply _____ Exception

OUTER SHELL MATERIAL - PANTS

The **Kombat™ Flex (a.k.a. Kombat™ Flex with PBI® Technology)** 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 **SST™ (SUPER SHELLTITE)** which is a durable water-repellent finish that also enhances abrasion resistance. Color of the garments shall be black.

_____ Comply _____ Exception

THERMAL INSULATING LINER - PANTS

The thermal liner shall be constructed of 6.7 oz. per square yard TENCATE **CALDURA® ELITE NOMEM® NANO ELITE**; one layer of Nomex Nano and one layer of 2.3 oz. per square yard Nomex® E-89™ spunlaced Nomex®/Kevlar® aramid blend, quilt stitched to a FR Rayon Para-Aramid nylon Face Cloth. 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 - PANTS

The moisture barrier material shall be W.L. GORE **CROSSTECH® Black moisture barrier** - Type 2F, which is comprised of a CROSSTECH® membrane laminated to a Nomex® IIIA woven pajama check substrate. 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. 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 PANTS

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 on the shell shall be color coded to corresponding color coded snap tabs in the liner for ease of matching the liner system to the outer shell after inspection or cleaning is completed. There shall be no hook and loop used to close the liner access opening.

_____ 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. 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

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. In addition to the four body panels, there shall be a seamless, one-piece crotch gusset. The one-piece gusset allows for less bulk, comfort and more freedom of movement in this high stress area. The body panels, seam lengths and crotch gusset shall be graded to size to assure accurate fit in a broad range of sizes.

The front body panels will be wider than the rear body panels to provide more fullness over the knee area. This is accomplished by rolling the side leg seams (inside and outside) to the rear of the pant leg beginning at the knee. The slight taper will prevent premature wear of the side seams by pushing them back and away from the primary high abrasion areas encountered on the sides of the lower legs.

_____Comply _____Exception

CONTOURED SADDLE

The rise of the rear pant center back seam, including gusset, 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 approximately 8 inches. The longer rear center back seam provides added length in the seat for mobility without restriction when stepping up, kneeling, or crawling and maintains proper alignment of the knee, without twisting, directly over the kneepads when kneeling and crawling.

_____Comply _____Exception

LINER ACCESS OPENING (PANT)

The thermal liner and moisture barrier layers of the pant liner system shall be constructed in such a way as to allow an access opening for interior inspection, service and replacement. The thermal liner and moisture barrier layers shall be stitched together for security and prevention of inadvertent use of one layer without the other. The liner system shall have a reinforcement material sewn to the bottom of the fly opening. This reinforcement will serve to prevent the liner from tearing in that area from the constant donning and doffing of the pants.

The liner system of the pant shall incorporate an opening along the back of the waistline for ease in inspecting the inner layers and to facilitate 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 on each of the front panels, along the waistband from the front fly opening to side seam. The back of the liner system will be allowed to remain open with two snaps on either side of the back seam to attach the moisture barrier layer to the thermal liner layer. As described previously, the pant thermal layer system 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 pants 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.

_____Comply _____Exception

REINFORCED TRIM STITCHING

All sewn on 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

ELASTICIZED WAISTBAND

The pant design facilitates the transfer of the weight of the pant to the hips instead of shoulders and suspenders. The two rear outer-shell body panels, beginning at the pant side seams, shall incorporate an elasticized waist insert, running from the side seam towards the back of the trouser for an approximate distance of 4 inches. The rear elasticized waist inserts shall be integral to the shell of the pant and the

elasticized portions shall be covered by the outer shell fabric of the pant.

The waist area of the pants shall be reinforced on the inside with a separate piece of black aramid outer shell material, cut on the bias (diagonally). The reinforcement shall be folded in half, for a finished bottom edge and shall have a finished width of not less than approximately 1½ inches. 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 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 by means of nine snaps, spaced equidistant along the length of the waistband reinforcement. Inserting the liner system between the waistband reinforcement and outer shell serves to reduce the possibility of liner detachment while donning and doffing. The independent waistband construction affords greater comfort and fit than a turned and stitched method. Pants that do not include an independent waistband or are not cut on the bias will not provide the same amount of stretch to the garment and shall be considered unacceptable.

_____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 2¾ inches wide, with a length graded to size based on waist measurement and reinforced with bartacks 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 underside of the outside fly flap shall have a 1½ inch wide piece of FR loop fastener tape quadruple stitched full length along the shell material only; stitching shall not penetrate the moisture barrier insert between the two shell fabric layers to insure greater thermal protection and reduced water penetration. A corresponding strip of 1½ inch wide piece of FR hook fastener tape shall be quadruple stitched to the outside right front body panel securing the fly in a closed position.

_____Comply _____Exception

CLOSURE

PANT SNAP

The exterior primary positive locking closure shall be an inward facing metal safety hook and dee ring. The safety hook shall be threaded through an Ara-Shield® material strap. The strap shall measure a total of approximately 10 inches and shall be folded in half to create a double layer strap for the safety hook to be threaded through. The double layer strap shall be folded in half and stitched to the waist area using three heavy duty bar tacks, for a finished strap length of approximately 2½ inches. A 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

SELF MATERIAL TAKE UP STRAPS (PANT)

The pant shall be equipped with two take up straps. The straps shall be constructed of approximate ½ inch wide self-material 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. One strap shall measure approximately 5 inches long and shall be looped through and folded back through a metal buckle. The strap shall be stitched to itself just below the buckle and again at the opposite end for a finished length of approximately 2 inches. The buckle shall point toward the front. The adjustment strap component shall measure approximately 8 inches long (finished dimension). The adjustment strap component shall be inserted through the buckle and one end shall be stitched to the pant with two rows of double-needle stitching. The take up adjustment strap shall pull toward the front to tighten. This shall allow for approximately 4 inches of adjustment per strap (8 inches overall).

_____Comply _____Exception

ARTICULATED KNEE

The outer shell of the pant legs shall be constructed with horizontal pleats in the knee area with corresponding darts in the liner. In order to provide increased freedom of movement and maximum flexibility, extra material is built into the knee area and this additional fullness is contained by stitching down the pleats on the inside of the shell. The knee reinforcement shall 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 darts per leg in the front of the knee. Two shall be located above the knee (one on each side) and two shall be located below the knee (one on each side). On the moisture barrier, the system shall 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 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, shall 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

CATHEDRAL KNEE REINFORCEMENTS

The knee area shall be reinforced with black Ara-Shield® material.

The cathedral shaped knee reinforcement shall be centered on the leg to ensure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure a minimum of approximately 7 inches wide by 12 inches high at the highest point and shall be double stitched to the outside of the outer shell in the knee area for greater strength and abrasion resistance. The articulated cathedral knee reinforcement shall be cut and stitched to the shell in such a way that there shall be an arch at the top of the reinforcement, tapering down the sides of the reinforcement with a squared off bottom. Knee reinforcements of a smaller size do not provide the same protective coverage and shall be considered unacceptable.

The lower edge of the Ara-Shield® knee reinforcement shall be turned under so that the lower row of stitching is covered and protected from abrasion.

_____Comply _____Exception

PADDING UNDER KNEE REINFORCEMENTS

Padding for the knees shall be accomplished with two layers of **Silizone®** foam, sandwiched between the thermal liner and moisture barrier. The placement of Silizone® padding on the thermal versus the shell reduces bulk in the shell and also serves to protect the padding from abrasion and other wear issues that the outer shell is subject to. Pants with Silizone® knee padding on the shell as opposed to on the liner, do not provide the same level of bulk reduction and abrasion resistance and are not recommended.

_____Comply _____Exception

EXPANSION (BELLOWS) 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 out-seam above the knee and positioned to provide accessibility. *The lower half of each expansion pocket shall be reinforced with an additional layer of Kevlar® twill 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 approximately 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 backtacks. The pocket flaps shall be closed by means of FR hook and loop fastener tape. Two pieces of 1½ inch by 3 inch FR 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 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. The pocket location will be determined on an individual basis at time of sizing.

Sandwiched between the two outer shell layers at the bottom edge of the flap shall be a strip of **Silizone®** to aid in opening the pocket.

_____Comply _____Exception

ARA-SHIELD TOOL POCKET WITH FLAP

There shall be a tool pocket installed on the front of the opposite expansion pocket. The tool compartment shall be constructed of Ara-Shield® material and the flap of double layer outer shell material. The tool compartment shall be constructed of two pieces of Ara-Shield® material, the rear piece measuring approximately 8 inches by 9 ½ inches and the front piece approximately 6 ½ inches by 9 ½ inches. The tool compartment shall be divided into two equal compartments. The pocket flap shall measure approximately 4 ½ inches in height by 8 ¾ inches wide. There shall be a strip of 1 inch FR hook fastener tape single needle stitched to the bottom of the flap which shall correspond with a strip of 1 inch FR loop fastener tape single needle stitched approximately 1 ¼ inches down from the top of the tool compartment. The pocket location will be determined on an individual basis at time of sizing.

Sandwiched between the two outer shell layers at the bottom edge of the flap shall be a strip of **Silizone®** to aid in opening the pocket.

_____Comply _____Exception

EXPANSION POCKET REINFORCEMENTS

The lower half of the expansion pockets shall be reinforced on the outside with black Ara-Shield® material.

_____Comply _____Exception

PANT CUFF REINFORCEMENTS

The cuff area of the pants shall be reinforced with black Ara-Shield® material.

The cuff reinforcement shall not be less than 2 inch in width and folded in half, approximately one half inside and one half outside the end of the legs for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the outer shell 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 black Ara-Shield® material 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

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 mark.

_____ Comply _____ Exception

LABELS

Appropriate warning label(s) shall be permanently affixed to each garment. Additionally, the NFPA certification label 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

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.

Both male and female sizing samples shall be on hand for use when sizing. The vendor shall be available to perform all sizing requirements within 96 hours of written notice. Measuring with a tape measure is not acceptable.

_____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 assets 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

LOANER GEAR

Vendor must be able to provide up to seven sets of loaner turnout gear in the event in which personnel's turnout gear must be sent out for decontamination cleaning.

_____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.

City of Eastpointe

Fire Department Turn-out Gear

Bid Form

Our bid to provide 23 sets (pant & coat) of Turn-out Gear according to the aforementioned instruction to bidders and bid specifications is as follows:

Check one of the following:

- Our bid meets all the provisions of the bid specifications stated herein.

- Our bid meets all of the provisions of the bid specifications stated herein except for the following item(s):

Price per pant \$ _____ X 23 pants = \$ _____ (a)

Price per jacket \$ _____ x 23 jackets = \$ _____ (b)

TOTAL (a+b) \$ _____

Name of Vendor: _____

Business Address: _____

Name/Title of Authorized Representative: _____

Office telephone #: _____ Cell #: _____

Email address: _____

Signature of Authorized Representative: _____

Date: _____

Bids for the purchase of Fire Department Turn-out Gear are due to the city clerk's office by 2:00 pm, Thursday, January 9, 2020. Bids must be submitted in a sealed envelope endorsed on the front "Turn-out Gear".