STATE OF CALIFORNIA
Department of General Services - Office of Procurement
PURCHASE ORDER

Form GSOP 1-PIN (04/98)

Purchase Order No.	Rev.	Date
62106		6/30/2008

Supplier No.	Solicitation No.	Delivery Date	FOB Point	Invoice Terms
767230	56764	210 Days ARO	Destination	

STAY SAFE STORE
3941 PARK DR, STE 20 #297
EL DORADO HILLS, CA 95762
Attn: KEN SHOEMAKE, EXT 3

Phone: 888-782-7233

Ship To
CALIFORNIA HIGHWAY PATROL
SUPPLY SERVICES SECTION
3350 REED AVE.,
WEST SACRAMENTO, CA 95605

Charge To
CALIFORNIA HIGHWAY PATROL
FISCAL MANAGEMENT UNIT
PO BOX 242901
SACTO., CA 94298-2901

Agency Billing	Agency Purchase Estimate	Purchase Estimate	Revision
08076	76WE7104	67017	3

Agency Contact	Phone	Date Received
KATHY MURPHY-FREEMAN	916-375-2734	

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
				THE GENERAL PROVISIONS FOR NON-IT COMMODITIES ARE HEREBY INCORPORATED BY REFERENCE. THESE GENERAL PROVISIONS CAN BE OBTAINED BY PHONING (916) 375-4400 OR BY ACCESSING OUR WEBSITE AT:		
				www.documents.dgs.ca.gov/pd/modellang/GPnonIT0407.pdf		
				THE FOLLOWING INFORMATION IS PROVIDED FOR AGENCY USE ONLY:		
				PRIME CONTRACTOR: SB		
				FISCAL YEAR: 2007/2008		
1	100	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, LARGE LONG (44-46)	246.9800	24,698.00
2	70	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, LARGE X-LONG	246.9800	17,288.60
3	20	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, X-LARGE, SHORT	246.9800	4,939.60
4	100	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, X-LARGE (48-50)	246.9800	24,698.00
5	175	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, X-LARGE, LONG (48-50)	246.9800	43,221.50
6	120	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, X-LARGE, X-LONG	246.9800	29,637.60
7	10	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, XX-LARGE, SHORT	246.9800	2,469.80
8	60	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, XX-LARGE, REGULAR	246.9800	14,818.80

Sales and/or use tax to be extra unless noted above

Buyer	Phone	BOC Number
EVONNE ROGERS	916-375-4346	

STATE OF CALIFORNIA

Department of General Services - Office of Procurement

PURCHASE ORDER CONTINUATION

Form GSOP 2-PIN (04/98)

Purchase Order No.	*Revision*	*Date*	*Supplier No.*	*Supplier Name*
62106		6/30/2008	767230	STAY SAFE STORE

Item No.	*Quantity*	*Unit*	*Commodity Code*	*Description*	*Unit Price*	*Extension*
9	60	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, XX-LARGE, LONG	246.9800	14,818.80
10	75	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, XX-LARGE, X-LONG	246.9800	18,523.50
11	30	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, XXX-LARGE, REGULAR	246.9800	7,409.40
12	30	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, XXX-LARGE, LONG	246.9800	7,409.40
13	20	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) JACKET, RAIN, MALE, XXX-LARGE, X-LONG	246.9800	4,939.60
14	150	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, SMALL, WAIST 28-32, Inseam 30"	160.9800	24,147.00
15	25	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, SMALL, WAIST 28-32, INSEAM 31"	160.9800	4,024.50
16	20	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, SMALL, WAIST 28-32, INSEAM 32"	160.9800	3,219.60
17	150	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, MEDIUM, WAIST 32-36, INSEAM 30"	160.9800	24,147.00
18	100	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, MEDIUM, WAIST 32-36, INSEAM 31"	160.9800	16,098.00
19	100	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, MEDIUM, WAIST 32-36, INSEAM 32"	160.9800	16,098.00
20	130	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, LARGE, WAIST 36-40, INSEAM 31"	160.9800	20,927.40
21	100	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, LARGE, WAIST 36-40, INSEAM 32"	160.9800	16,098.00
22	60	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, LARGE WAIST 36-40, INSEAM 33"	160.9800	9,658.80
23	100	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, X-LARGE WAIST 40-44, INSEAM 32"	160.9800	16,098.00

STATE OF CALIFORNIA

Department of General Services - Office of Procurement

PURCHASE ORDER CONTINUATION

Form GSOP 2-PIN (04/98)

Purchase Order No.	*Revision*	*Date*	*Supplier No.*	*Supplier Name*
62106		6/30/2008	767230	STAY SAFE STORE

Item No.	*Quantity*	*Unit*	*Commodity Code*	*Description*	*Unit Price*	*Extension*
24	20	EA	1096-000-0845-4	RAINWEAR PANT (AS DESCRIBED) PANTS, RAIN, MALE, X-LARGE, WAIST 40-44, INSEAM 35"	160.9800	3,219.60
25	20	EA	1096-000-0842-9	RAINWEAR COAT OR JACKET (AS DESCRIBED) PANTS, RAIN, MALE, SM, WAIST 28-32, INSEAM 29"	160.9800	3,219.60
					Total Value:	371,828.10

FOB DESTINATION:

FOR THE PURPOSE OF THIS AWARD, ONLY F.O.B. Destination will be accepted.

This Purchase order has been registered into the state contact and procurement registration system (https://www.scprs.dgs.ca.gov/). The registration number is 17600708325671.

ATTACHMENTS: #8405-08BS-003 OF TEN (10) PAGES, DATED MARCH 19, 2008

This purchase order is being awarded on July 30th, 2008 pursuant to Government Code Section 13332.17. Any encumbrances made pursuant to this purchase order shall be construed to have been made on the last day of the preceding fiscal year.

FOB DESTINATION:

For the purposes of this Award, only FOB Destination will be accepted.

CHANGE ORDERS:

This Purchase Order may be amended, modified, or terminated at any time by mutual agreement of the parties in writing, change orders amending, modifying or terminating the Purchase Order, including any modifications of the compensation payable, may be issued only by the State Procurement Officer. All such change orders shall be in writing and issued only upon written concurrence of the supplier. Termination, as that term is used in this section, does not include termination for default of the supplier.

STATE OF CALIFORNIA

DGS

Bid Specification
Rainwear, High-Visibility, Breathable

8405-08BS-003

1.0 SCOPE

This specification sets forth the requirements for safety reflective type breathable rainwear intended for use in inclement weather by California Highway Patrol (CHP) personnel. The rainwear shall be machine washable and enhance the visibility of the wearer under less than ideal conditions.

2.0 SPECIFICATIONS AND STANDARDS

Specifications and standards referenced in this document in effect on the opening of the Invitation for Bid form a part of this specification where referenced.

3.0 GENERAL REQUIREMENTS

The overall classification for the rainwear apparel (jacket and pants) supplied under this contract shall be classified as a performance Class 3, Level 2 ensemble according to ANSI/ISEA 107-2004 standards. When worn without the rain pants, the rain jacket shall be such that it remains classified as performance Class 3, Level 2 according to ANSI/ISEA 107-2004 standards.

The rainwear shall be waterproof and breathable by design and shall be guaranteed to keep the wearer dry. The construction shall be full cut to provide freedom of movement when worn over the normal CHP uniform. The rainwear shall allow access to traditional law enforcement accouterments and/or equipment on both the left side and right side of the jacket and front trouser pockets.

3.1. CONFIGURATION

3.1.1 Jacket:

3.1.1.1 The jacket shall have modified raglan shoulders and sleeves, a front closure with large storm fly overlap, and shall be zipped shut with a black Delrin zipper (#8 size) with two sliders for separation top and bottom. The large storm fly overlap of the jacket's front closure shall have a minimum of five snap fasteners, positioned equally and uniformly on the jacket.

3.1.1.2 Side vents shall be placed on each side of the jacket and shall be 14 inches in length starting at the hem of the jacket. Each side vent shall be closed by a single snap fastener tab at the hem of the jacket and a black Delrin zipper (#5 size). The zipper shall be positioned along the entire length of the side vent so as to ensure the vent is completely closed, when zipped shut. There shall be a flap of membrane, or "self,"

material covering the zipper to prevent water intrusion at the zipper.

3.1.1.3 The end of the sleeves (cuffs) shall be hemmed and have cuff tabs attached, measuring 1-1/2 inches wide by 3 inches long. The cuff opening shall be adjusted by the attachment of the hook portion of a hook-and-loop fastener on the tabs, and a 1 inch wide by 5 inch long loop portion of a hook-and-loop fastener sewn approximately 1-1/4 inches from the end of the sleeve.

3.1.1.4 The jacket shall have a large storm-front-style collar and be made of self material. Over-edge stitching of the collar is not acceptable.

3.1.1.5 The jacket standard back length for a size medium (regular length) shall be 34 inches. Accordingly, the back and sleeve length shall increase or decrease as required. The jacket back shall be straight with a straight hem bottom and 1-1/4 inch turn-up, in accordance with Federal Standard 751, type EFb-1.

3.1.1.6 The jacket shall have two primary pockets positioned on the front of the jacket, evenly spaced, with one on each side of the front closure. These pockets shall measure approximately 8 inches deep by 8 inches wide with an opening of approximately 8 inches at the top of the pocket (±1/4 inch). A beveled flap, measuring 3 inches wide by 8-1/2 inches long (±1/4 inch), shall be positioned over the opening of each pocket. The flap closure shall close the pocket through the use of a hook-and-loop fastener strip measuring 1 inch wide by 4-6 inches long. The inside lining of the pocket shall be comprised of self material.

3.1.1.7 The primary pocket shall be sewn to the outside of the jacket in such a manner so as to create an opening between the pocket and the membrane underneath, resulting in a secondary pocket. The opening of the secondary pocket shall be positioned along the outside edge of the primary pocket, opposite the front closure, and measure approximately 6-1/2 inches (±1/2 inch). The interior of the secondary pocket shall be as large as the area created by the perimeter stitching of the primary pocket.

3.1.1.8 To maintain garment integrity and eliminate water intrusion where the stitching perforates the membrane, all stitching shall be seam-sealed on the interior of the jacket directly against the back of the outer membrane utilizing the same material as the membrane.

3.1.1.9 The jacket shall have a removable, quilted, insulated liner which is black in color and stitched to nylon face fabric. The upper half of the liner and the sleeves shall be lined with nylon taffeta to allow the liner to slide easily over the shoulders and shirt sleeves.

3.1.1.10 At each side where the liner meets the side vent of the jacket, the liner shall have a slit designed to allow the wearer access to duty belt accouterments and equipment through the side vent of the jacket. Working from the hem of the liner, the slit shall continue up along the entire side vent, ending at the topmost termination point of the side vent (see 3.1.1.2). The seam along the edge of the slit shall be finished with seam binding or other material so as to conceal the unfinished edge of the lining material.

3.1.1.11 The liner shall be secured to the interior of the jacket utilizing a single black Delrin zipper (no less than #3 size). The liner attachment zipper shall commence 4 inches from the bottom of the hem traversing up along the entire length of the liner edge before terminating at 4 inches from the bottom hem on the opposite side of the jacket. The liner shall also be secured at the cuff of each jacket sleeve through the use of nylon straps, 1/2 to 3/4 inch wide, sewn into the sleeve of the liner. The design of the straps shall be such that each strap is drawn through a nylon loop, 1/4 inch wide, with each nylon loop sewn into the cuff of the jacket. Once drawn through the loop, the strap shall attach to itself through the use of a single snap, ball-and-socket style fastener.

3.1.1.12 The hood shall be removable with a zippered "tuck-away" design. When worn, the hood shall be capable of being drawn around the face with a black, solid braided, round cord (drawstring), 1/8 inch thick and black Delrin barrel clamps. The drawstring shall pass through the barrel clamp and be knotted at the end to prevent fraying and passage through the barrel clamps.

3.1.1.13 The hood shall be secured to the jacket collar, within the zippered enclosure, by a strip of hook-and-loop fastener measuring 1/2 inch wide by 6 inches in length.

3.1.1.14 A badge holder shall be positioned on the center of the left breast of the jacket. The badge holder shall be a double-thickness strip of self material, measuring approximately 7/8 inch wide by 2 inches long, and shall be sewn to the jacket in a manner that creates an opening between the badge holder and the jacket. The badge holder shall be positioned 4 -1/4 inches from the front zipper and 7 inches down from the shoulder/neck joining seam (size large) and shall grade appropriately with size. To maintain garment integrity and eliminate water intrusion, the stitch shall be seam-sealed on the interior of the jacket, directly against the back of the outer membrane, utilizing the same material as the membrane. The badge holder holes shall be oriented vertically, spaced 1-1/8 inches apart (center-to-center), and reinforced with two metal eyelets. When the badge is worn, the badge holder shall be concealed completely behind the badge.

3.1.1.15 The jacket shall have microphone tabs (mic tabs) placed horizontally on each side of the upper chest area. The mic tabs shall be placed 3-1/2 inches down from the shoulder neck joining seam and 4 inches from the center front zipper (size large) and shall grade appropriately with size. The tabs themselves shall be 2 inches wide by 1 inch high and shall be box-tacked (1/4 inch tack) to the jacket fronts. The mic tabs shall be double-thickness, made from self material, folded and clean finished, tacked to the jacket, and the stitching shall be waterproof sealed on the interior of the jacket, directly against the back of the outer membrane, utilizing the same material as the membrane.

3.1.1.16 The jacket shall have two CHP departmental shoulder patches, one on each side, stitched and centered over the reflective stripe. The patches shall comply with CHP standards (Chapter 4 of Highway Patrol Guide 73.6, Uniform and Equipment Standards.) The patches shall be shield-shape, measuring 4 inches wide by 4-7/8 inches in height (±1/16 inch) (see Figure 1). The top of the patch shall be located on the sleeves 1/2 inch below the equivalent of where the sleeve seam would be and

centered on the reflective stripe. The patches shall be affixed to the jacket with colorfast black thread. To maintain garment integrity and eliminate water intrusion, the stitch shall be sealed on the interior of the jacket, directly against the back of the outer membrane, utilizing the same material as the membrane.

(Figure 1)

3.1.1.17 The specified reflective striping material (see section #3.2.3) shall be sewn to the jacket and all stitch holes taped with waterproof seam tape behind, utilizing the same material as the membrane. The reflective striping shall be positioned from the neck seam at each shoulder and down the sleeve vertically to intersect with the horizontal stripe above the cuff beginning 3 inches from the bottom of the sleeve hem. There shall be a horizontal stripe around the entire jacket beginning 3 inches from the bottom hem and clean finished at each side zipper. There shall also be a vertical stripe applied to the front fly and a horizontal stripe (across the back of the jacket only) under the armhole. All reflective tape shall be positioned on the jacket in a manner consistent with ANSI/ISEA 107-2004 standards for Class 3, Level 2, high-visibility apparel.

3.1.1.18 Sizes for all jackets are defined as follows:

Chest	32-34	36-38	40-42	44-46	48-50	52-54	56-58
Size	XS	S	M	L	XL	XXL	XXXL

Jacket Length	Short (32.5")	Regular (34")	Long (35.5")	X-Long (37")
Height	Under 5'8"	5'8" - 5'11"	5'11" - 6"2"	6'2" – Up

3.1.2 Pants:

3.1.2.1. The pant shall be waist high, elastic waistband type, with an overlap safety fly and front snap closure on both male and female garments.

3.1.2.2. The top of the pant fly shall be closed with a hook-and-loop fastener on the waistband. The loop-portion of the fastener shall be 1 inch wide by 3 inches in length and shall be placed horizontally on the portion of the waistband closest to the wearer, facing out, with

the edge of the fastener approximately 1/8 to 1/4 inches from the edge of the interior fly opening. A 1 inch by 1 inch strip of the hook-portion of the fastener shall be placed on the overlapping portion of the fly, facing in, with the edge of the fastener approximately 1/8 to 1/4 inches from the edge of the exterior fly opening.

An additional 1 inch by 1 inch hook-and-loop fastener shall be centered between the top of the waistband and the bottom of the fly opening, holding the fly closed.

3.1.2.3. A tunnel waistband shall be made to accommodate 1-1/2 inch wide, top-quality elastic. The elastic band shall extend from one adjustment tab (see 3.1.2.5), around the back portion of the pant, to the other adjustment tab, and be of sufficient quality to adjust the finished size of the pants by 4 inches. The elastic shall be sewn in with two rows of stitching running horizontally along the length of the elastic. The manner of stitching shall be such that allows the elastic to stretch.

3.1.2.4. The waistband shall have belt loops made of membrane material (double thickness) commencing 4 inches from the fly on each side, and positioned at evenly spaced intervals around the entire waistband. There shall be a minimum of 7 belt loops per garment with each belt loop measuring no more than 1 inch wide and no less than 1/2 inch wide. The belt loops shall be uniform in width, no closer than 3 inches on center to one another, and shall be sewn to the waistband in such a manner so as to create an opening that is no more than 2 inches and capable of accommodating a 1-1/2 inch belt.

3.1.2.5. An adjustment system shall be placed on the outside of the waistband, on both sides of the pant, positioned at the side hip of the wearer when properly worn, and utilizing a hook-and-loop fastener. The adjustment tab shall be a strip of membrane material 1-1/2 inches wide and 1-3/4 inches long with a 1 inch wide by 1 inch long strip of the hook-portion of the hook-and-loop fastener at the end of the tab. The other end of the adjustment tab shall be permanently sewn to the waistband. To complete the adjustment system, a strip of the loop-portion of the hook-and-loop fastener shall be horizontally attached to the waistband, commencing at the point where the adjustment tab is sewn into the waistband and measuring 1 inch wide and 4 inches in length.

3.1.2.6. The rain pant shall contain two vertical side pocket openings (without lining), one on each side, to allow for access to undergarment pockets. The pocket welt shall measure 8-3/4 inches wide and 1-3/4 inches long, covering a cut-through opening of 7-1/2 inches to 8-1/2 inches. The open edge of the welt shall be topstitched. The top and bottom of the welt shall be tacked. The pant leg cuff shall terminate in a 1 inch hem, EFb-1 (±1/16 inch).

3.1.2.7. The rain pant shall also contain two set-in hip pockets. The hip pockets shall be made of membrane material measuring 7-1/2 inches wide and 9-1/4 inches long, with a beveled corner flap measuring 7-3/4 inches wide and 3 inches long (±1/4 inch).

The pocket closure shall be with a 1 inch hook-and-loop fastener 4-1/2 inches long. The flap shall be set 5 inches down from the top of the pant, and shall be centered in the

back panel. The position of the flap shall be adjusted proportionally for larger or smaller sizes.

3.1.2.8. The specified reflective striping material (3.2.3) shall be sewn to the pant and all stitch holes taped with waterproof seam tape behind. The reflective striping shall be positioned vertically along each outer leg seam and also horizontally around each leg cuff beginning 3 inches from the bottom hem. All reflective tape shall be positioned on the pants in a manner consistent with ANSI/ISEA 107-2004 standards for Class 3, Level E, high-visibility apparel.

3.1.2.9. The rain pants shall contain two side vents; one on the outside seam of each pant leg. The side vents shall begin at the approximate bottom of the knee cap of the wearer, when properly worn, and shall continue through the cuff of the pant leg. The vent openings shall be a minimum of 15 inches in length.

Closure for both side vents shall be accomplished by a black Delrin zipper (size #5) that is positioned so as to ensure the side vent is completely closed, when zipped shut.. The cuff of the pants shall have a tab with a snap fastener designed to be drawn across the opening of the side vent and snapped in place, when the vent is zipped shut. The tab shall contain the socket portion (female end) of the snap fastener, shall be 1 inch wide by 2 inch long, shall be made of membrane material, and shall affixed to the pant leg at the forward edge of the side vent opening.

One ball portion (male end) of the snap shall be affixed to the pant leg, aft of the side vent opening and 2 inches from the side vent so as to secure the snap fastener to the pant cuff, flush with the hem. A second ball portion (male end) of the snap shall be affixed to the pant leg, 2 inches aft of the first snap (total of 4 inches from the side vent opening). This will allow the cuff of the pant leg to be drawn in 2 inches for a tighter fit around the footwear, if desired.

3.1.2.9 Waist sizes for all pants are defined as follows:

Waist	26"-28"	28"-30"	30"-34"	34"-38"	38"-42"	42"-46"	46"-up
Size	XS	S	M	L	XL	XXL	XXXL

Inseam Length	Short (28")	Regular (30")	Long (32")	X-Long (34")
Height	Under 5'8"	5'8" - 5'11"	5'11" - 6"2"	6'2" – Up

3.2. MATERIAL SPECIFICATIONS

3.2.1 Jacket and Pant Material:
100% Polyester laminated with ePTFE. The Jacket and Pants shall be Fluorescent Yellow and shall be compliant with ANSI/ISEA 107-2004 standards for Class 3, Level 2 high visibility safety apparel.

Both the jacket and pant shall have an inside layer comprised of 100% Polyester Tricot lining fabric which is black in color. The outershell shall be treated with a durable water

repellent finish.

3.2.2 Insulated Jacket Liner:
The liner fabric (body) shall be comprised of 100% nylon taffeta plain weave, 70 denier continuous filament yarns with 34 filaments, quilted to 100% polyester insulation(with scrim or treated to prevent fiber migration), The insulation liner shall weigh no less than 300 grams/sq yd in the body and 235 grams/sq yd in the sleeves.

3.2.3 Reflective Tape:
The reflective tape shall be compliant with ANSI/ISEA 107-2004 standards for Class 3, Level 2 high visibility safety apparel and shall be silver/white in color.

The 2" wide reflective tape shall be backed by a 2-1/2 inch black grosgrain ribbon. The tape shall be placed in the center of the ribbon.

3.2.4 Snaps:
Any snaps used shall be heavy-duty ball and socket type. Each snap shall be universal, 24 ligne prong-style fastener (metal or Delrin snaps). Metal snaps shall be black anodized to prevent rusting with solid color plastic caps. All snaps shall be black in color and guaranteed not to tear, split or separate from the garment under normal use.

3.2.5 Interlining:
The interlining shall be White Harotex Buckram (stiffener), or equivalent, material. This material shall be placed in the following areas:

a) *Jacket*—In the full size of the pocket flap; in the full size of the cuff adjuster, minimum of 3/4 inch wide.
b) Pants—The entire waistband of the pant shall be interlined with the exception of the elasticized area.

3.3. WORKMANSHIP

3.3.1 All major seams shall be two-needle, full felled construction. Other seams shall be single needle lock stitched. All seams (anywhere the stitching perforates the membrane) shall be sealed on the inside of the garment, directly against the back of the membrane, with the same material as the membrane to ensure they are 100 percent waterproof. The sealed seam shall be class LSc2 and stitch type 301 or a comparable seam and stitch.

3.3.2 The reflective tape attachment shall be stitched, permanent, and waterproof sealed behind with material matching the membrane. The reflective tape shall be continuous. Splices or segmented sections are not acceptable and will be rejected. All wrinkles created as a result of the tape attachment shall be repaired.

3.3.3 The ends of the stitches shall be bartacked or backstitched, 1/2 inch minimum, or crossed by another seam. Reinforcements such as bartacking, rivets, or grommets shall be provided at stress points. The stitching of the rainwear shall be accomplished

with a polyester or cotton polyester thread (minimum size 50 strength). The thread color shall match and be compatible with the fabric.

3.3.4 The rainwear shall be free from defects that will affect appearance and serviceability. All letters, characters, configuration features, etc., are to be uniform in size, shape, depth, color and displaying a uniform appearance.

3.3.5 All components shall be installed through two thicknesses of material or have a reinforcing insert of comparable strength. Metal shall be black anodized to prevent rusting/discoloration.

3.4. PERFORMANCE

3.4.1 Moisture Vapor Transmission Rate:
ASTM E96-00 Procedure B: 600 g/sq.m/24 hours, min. (Appendix A, Test Condition #1)
ASTM E96-05 Procedure BW: 3600 g/sq.m/24 hours, min. (Appendix A, Test Condition #2)

3.4.2 Tear Resistance:
ASTM D1424-96, Elmendorf, min: 8.0 lb. Warp, 8.0 lb Fill

3.4.3 Water Repellency:
AATCC 22-2001, min: 90 initial, 70 after 5 laundry cycles.

3.4.4 High Pressure Water Permeability:
BS 3424: Part 26: 1990: After DEET Insect Repellent – No Leakage (Appendix A, Test Condition #4)

3.4.5 Reflective Tape:
The reflective tape shall be Scotchlite, or equivalent, and comply with the requirements of section 8, Table 5, of ANSI/ISE 107-2004.

3.4.6 Seam Tape Durability:
FED-STD-191A 5516 – After 10 laundry cycles – No Leakage (Appendix A, Test Condition #3)

3.4.7 Laundering:
AATCC 61-2001-1A: Color change: Class 4.0 minimum.
Staining: Class 3.0 minimum

3.4.8 Crocking:
AATCC 8-2001: Dry - Class 4.0, minimum.
Wet – Class 3.0, minimum.

3.4.9 Insulated Liner Performance:
Weight: 1.80 oz. yd.2 (±0.25 oz./yd.2).
Breaking Strength (lb.): Warp: 125 (min.); Filling: 85 (min.).

Tearing Strength (lb.): Warp: 3.5 (min.); Filling: 2.1 (min.).
Shrinkage: Warp: 2% (max.); Filling: 2% (max.).

3.5. LABEL

3.5.1 Each piece of rainwear shall have a label which complies with Code of Federal Regulations, 16-CFR 303.1-45, Rules and Regulations under the Textile Fiber Products Identification Act.

3.5.2 The label shall be durable for the appropriate number of cleaning processes.

3.5.3 The label shall be attached to the interior of the jacket, visually accessible and, at minimum, contain the following information:

- Name, trademark or other means of identification of the manufacturer,
- Identification of brand of material used,
- Country of origin,
- Size designation,
- Care/laundering instruction,
- Space for Name and ID number of wearer to be written, if desired.

3.5.4 A separate label shall be attached to the insulated liner, visually accessible and, at minimum, contain the same information as the jacket label.

APPENDIX A — TEST CONDITIONS

1. The knit side of the laminated cloth shall face the water. The free stream air velocity shall be 550 ± 50 fpm as measured at least 2 inches from any surface. The test shall be for 24 hours and weight measurements shall be taken only at the start and completion of the test. At the start of the 24 hour test period, the air gap between the water surface and the back of the specimen shall be 3/4 ± 1/16 inch. Five specimens shall be tested. The test chamber shall be 73.4 ± 1°F and relative humidity shall be 50 ± 2%. The face of the rim of the test dish shall project 1/32" into the tunnel.

2. The knit side of the laminated cloth shall face the water. The free stream air velocity shall be 550 ± 50 fpm as measured at least 2 inches from any surface. The test shall be for 2 hours and weight measurements shall be taken only at the start and completion of the test. Five specimens shall be tested. Specimens shall be sealed in any manner which prevents wicking and/or leakage of water out of the cup. The test chamber shall be 73.4 ± 1°F and relative humidity shall be 50 ± 2%. The face of the rim of the test dish shall project 1/32" into the tunnel.

3. A minimum of 3 straight seams and 2 cross-over seams should be tested after ten (10) home laundry cycles and remain waterproof (no leakage) when tested at 1.1 psi for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 4.5 inch diameter test area since the seam tape process can damage the fabric adjacent to the tape. The test may be performed using any device which tests the same specimen area at the equivalent pressure. In case of dispute, the apparatus described in FED-STD-191A Method 5516 shall be used. Laundry testing should be performed in accordance with the procedure specified in Machine Cycle 3, Wash Temperature III, and Drying Procedure Aiii of ANSI/AATCC 135.

4. Place a 6" x 6" piece of blotting paper on a flat surface and cover with a 10" x 10" test specimen with the face side up. Weigh out 2.0 ± 0.1 grams of solid contaminant or pipette 2.0 ml of liquid contaminant. Place the contaminant on the center of the specimen and cover with a 6" x 6" piece of glassine paper. Place a 4 pound weight on the glassine paper directly over the contaminated area. Allow the weight to remain on the specimen for 30 minutes. Remove the weight and glassine paper and allow the specimen to sit undisturbed for an additional 30 minutes. Wipe off any excess contaminant using a fresh piece of blotting paper and test for water permeability as follows: The water pressure shall be applied to the knit side of the laminated cloth from below the test specimen. The maximum pressure of 25 psi shall be attained in 2 minutes ± 20 seconds and shall be applied for 3 minutes. Leakage is defined as the appearance of water any place within the test area.