



Royal Canadian Mounted Police
Gendarmerie royale du Canada

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Specification

Jacket, Windsuit, Bicycle

This document has 20 pages including the drawings.

This document was created in English.

The document is available in English and French.

English/Anglais
Français/French

The photograph on this page is for reference only.



Modifications

Date	Para. No's	Modifications
2017-05-26		New Specification

RCMP VIEWING SAMPLE

A viewing sample, when available, will be supplied to the successful bidder.

This will be used for the guidance of the manufacturer in all factors not covered by this specification or referred to therein. Variation from the specification may appear in the sample in which case the specification shall govern.

It may be obtained from:

Royal Canadian Mounted Police
ATTN: Uniform and Equipment Program
(440 Coventry Road, Warehouse Building)
1200 Vanier Parkway
Ottawa, Ontario
K1A 0R2

It will be sent “prepaid” and is to be returned “prepaid”.

The viewing sample shall be returned to the RCMP in the same condition as received by the manufacturer. Lost or damaged viewing samples shall be replaced by an identical item or the RCMP shall be reimbursed for the cost of an acceptable replacement.

SPECIFICATION
Jacket, Windsuit, Bicycle

1. Definitions

- 1.1 This specification shall govern the manufacture and inspection of the Jacket, Windsuit, Bicycle. The specific item covered under this specification with stock number is as follows:
- i. 8280 – Jacket, Windsuit, Bicycle/Blouson coupe-vent de cycliste
 - ii. 8281 000 - Jacket, Windsuit, Bicycle, Specials,/Blouson coupe-vent de cycliste, tailles spéciales
- 1.2 This specification, drawing, viewing sample, or other information issued in connection therewith, may only be used for specific enquiries, solicitations, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for R.C.M.P. Jacket, Windsuit, Bicycle.
- 1.4 This specification has been translated into French from this original English language document.

2. Applicable Specifications

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the solicitation, unless otherwise specified.
- 2.2 CAN/CGSB 4.2, Textile Test Methods; 9.2-M90 (R2013), 12.1-2016, 58-2004, 19.1-2004 R2013, 22-2004 (2013), 26.2-94 (R2012)
- 2.3 CSA-Z96-15 High-Visibility Safety Apparel
- 2.4 CAN/CGSB 4.131-93, Thread, Polyester, Polyester or Cotton Covered
- 2.5 CAN/CGSB 86.1-2003 Care Labelling of Textiles
- 2.6 ASTM Standard Practices; ASTM E1164-12e1, ASTM E308-15, ASTM E808-01 (2016), ASTM E809-08 (2013), ASTM D5169-98 (2015), ASTM D5170-98 (2015)
- 2.7 AATCC Test Methods; 16.3-2014, 135-2015

- 2.8 ISO 105-B02:2014
- 2.9 Dupont Stretch 074
- 2.10 RCMP Specification, G.S. 1045-266, Badges Woven Item – Badge, Shoulder, Cloth, Police

3. **General Requirements**

- 3.1 The article or material covered by this specification shall be free from material and manufacturing defects that may affect its appearance or serviceability. In all particulars not covered by this specification or contract documents, production shall be equivalent in all respects to the viewing sample.
- 3.2 **Design** – The Jacket, Windsuit, Bicycle shall be a loose fitting, waist length jacket designed with elastic waist and cuffs. The jacket is designed to meet CAN/CSA Z96-15 requirements for a Class 2, Level 2 garment. When worn in conjunction with the Trousers, Windsuit, Bicycle the ensemble meets CAN/CSA Z96-15 requirements for a Class 3, Level 2 garment. The lettering “RCMP”, “GRC”, and “Police” shall be retroreflective on the front and back of the garment.

4. **Detail Requirements**

4.1 **Components**

- 4.1.1 **Shell Material** – The shell material shall be 100% polyester, twill weave with mechanical (weft) stretch, $130\text{g/m}^2 \pm 8\text{g/m}^2$, fluorescent yellow-green and dark navy blue in colour meeting the requirements as outlined in Table I and Table II. Doubletex Inc. fabric Synergi SD2 with DWR (colours: fluorescent yellow-green #10899A and navy #285043) are known to meet the above requirements.
- 4.1.2 **Lining Material** – The lining material shall be 100% warp knitted polyester, $70\text{g/m}^2 \pm 8\text{g/m}^2$, white in colour, equal in all respects to the viewing sample.
- 4.1.3 **Collar Stiffener** – The collar stiffener shall be 3mm thick neoprene foam, as per viewing sample.
- 4.1.4 **Retroreflective Markings and Lettering** – The retroreflective markings shall be exposed, wide angle, retroreflective lens, silver material in the form of a heat transfer film, 5cm wide. The lettering on the front and back will be Arial Black

font dimensioned as per drawing #3. It shall meet all the retroreflective performance requirements outlined in Section 6, meeting Table 5 in the CAN/CSA Z96-15 High-Visibility Safety Apparel standard. All retroreflective markings and lettering shall meet a minimum coefficient of retro reflection, R_A , that are determined in accordance with the procedures defined in E808-01 (2016) and E809-08 (2013). 3M Scotchlite™ 8725N silver material in the form of a heat transfer film is known to meet these requirements.

4.1.5 **Shoulder Badges** – The RCMP stock item number 2135-108, Badge, Shoulder, Police shall be purchased from the RCMP.

4.1.6 **Slide Fastener - Front** – Shall be an open-end, separating, black in colour, injection molded, DA automatic Slider, Vislon® YKK 26500: VSOR 56 DA86 E 9/16 (only).

4.1.6.1 **Slide Fastener Lengths**

Jacket Length	CF Zipper Length
XS	21”
S	21 ½”
M	22 ½”
L	23”
XL	24”
2XL	25”
3XL	25 ½”

4.1.7 **Hook and Loop Tape** – Shall be woven nylon, black in colour, with a high life cycle. The combined hook and loop shall have no less than 8 P.S.I initial lengthwise shear strength when tested to ASTM D5169-98 (2015), standard test method for shear strength (dynamic method) of hook and loop touch fasteners. The initial peel strength shall not be less than 1 P.I.W when tested to ASTM D5170-98 (2015) standard test method for peel strength (T method) of hook and loop touch fasteners. After 1000 cycles the combined hook and loop shall be not less than 5 P.I.W with a minimum lengthwise shear of 4 P.S.I.

4.1.8 **Microphone Loop Grosgrain Ribbon** – The grosgrain ribbon shall be 100% nylon, black in colour, and 2.5 cm wide.

4.1.9 **Dome Fasteners** – The dome fasteners shall be a standard type 24 ligne fastener. All metal parts to be brass with a 15mm matte black, powdered coated cap, Universal SW61 (only).

- 4.1.10 **Thread** – The thread shall be polyester wrap, polyester core, Tex 50, Class B of matching colour, meeting CAN/CGSB 4.131-93.
- 4.1.11 **Elastic Sleeve Cuffs** – The elastic used for the sleeve cuffs shall be pre-shrunk, 3.8cm wide, knitted construction of superior quality.
- 4.1.12 **Elastic Hem** – The elastic used for the hem shall be pre-shrunk, 1.59cm wide, knitted construction of superior quality.
- 4.1.13 **Slide Fastener Pull** – The slide fastener pull shall be either nylon grosgrain ribbon, black in colour, 1cm wide, OR a round braided cord, black in colour, 2 to 3 mm in diameter, polyester or nylon.
- 4.2 **Size and Dimensions** – Jacket, Windsuit, Bicycle to this specification shall be supplied in the sizes specified by the RCMP and to the dimensions given in the scale of measurements and drawings forming part of this specification.
- 4.3 **Construction**
- 4.3.1 **Stitching** - All stitching shall be lockstitch. There shall be no less than three or more than four stitches per centimetre. The beginning and ending of all stitching shall be securely backstitch tacked, unless secured by other stitching.
- 4.3.2 **Body**
- 4.3.2.1 **Back** – The back body shall be made from the shell material, as specified in para. 4.1.1, in the fluorescent yellow-green colour. The back shall have a retroreflective pattern and retroreflective lettering meeting CAN/CSA Z96-15 requirements as outlined in para. 4.3.5 and 4.3.5.1. The ‘X’ shall be symmetrical on both sides of the lettering. The back when finished shall conform in every respect to the drawings.
- 4.3.2.2 **Front** – The jacket shall be equipped with a center front slide fastener as specified in para. 4.1.6, lengths as per para. 4.1.6.1. The front shall have a retroreflective pattern and retroreflective lettering meeting CAN/CSA Z96-15 requirements as outlined in para. 4.3.5 and 4.3.5.1. On the right hand side, there shall be an 8.5cm x 2.5cm piece of loop tape for the name tag. The left and right fronts shall be equipped with a piece of black grosgrain ribbon 2.5cm wide x 5.0cm long (finished) for the microphone strap. There shall be shoulder straps positioned over the shoulder seams and conforming to the dimensions in drawing #2. The front shall

have two inner pockets, with hook and loop tape closures that shall be dimensioned and positioned as per the viewing sample and drawings.

- 4.3.3 **Collar** – The collar, measuring 4.5cm in height, shall be made of the shell material as specified in para. 4.1.1 in the navy colour. The collar shall have one layer of the collar stiffener as specified in para. 4.1.3, sandwiched between two layers of navy shell fabric. The collar shall be designed as per the drawings and sized as per the scale of measurements.
- 4.3.4 **Sleeve & Sleeve Cuffs** – The jacket shall have a one piece sleeve and each sleeve shall be equipped with a pen pocket. The sleeve and pen pocket shall be made of the shell material as specified in para. 4.1.1 in the fluorescent yellow colour. The cuff shall be made from material as specified in para. 4.1.1 in the navy colour. The cuff shall be fully elasticized using the elastic specified in para. 4.1.11. The elasticized area of the cuff shall have two rows of top stitching, equally spaced in the width of the cuff, to anchor the elastic. The sleeves, pen pocket, and cuff shall conform in all respects to the drawings and the viewing sample.
- 4.3.5 **Retroreflective Pattern** – The retroreflective material as specified in para. 4.1.4 shall be heat transferred to the shell material and positioned as per drawing #1. For letter placement, refer to drawing #3. The break shall be 10cm high, measuring 5cm vertically on both sides of center keeping the X symmetrical. The word POLICE shall be centered in the X and the words RCMP and GRC shall be above it as per drawing #3. The horizontal band extending from side to side shall align to meet with the bottom of the X. The front body shall have retroreflective material from the shoulder seam extending down the body to meet the horizontal band that extends from side to side. Each sleeve shall have one retroreflective band circling the sleeve, placed 9cm from the cuff as per drawing #1. All retroreflective material shall be permanently attached to the shell material by means of heat sealing. No stitching shall be employed in attaching the retroreflective material, and the heat-sealing shall endure for the life of the garment. There shall be no loose or unbonded edges, or loss of film. Retroreflective material shall not cover other retroreflective material in order to provide the best bond between the retroreflective material and the shell material.
- 4.3.5.1 **Retroreflective Lettering** – The font shall be Arial Black in retroreflective material as specified in para 4.1.4. On the back, the word POLICE shall be centered within the 10cm high break in the X and the words RCMP and GRC shall be above POLICE dimensioned and positioned as per drawing #1 and #3. The lettering RCMP shall be left justified in relation to POLICE and the GRC shall be right justified in relation to POLICE. On the front, 0.5cm below the name tag shall be

RCMP, GRC, and POLICE lettering, dimensioned and positioned as per drawing #3. The lettering RCMP shall be left justified in relation to POLICE and the lettering GRC shall be right justified in relation to POLICE. The front lettering shall be in line with the left side of the loop tape used to secure the name tag.

- 4.3.6 **Shoulder Straps** – Two shoulder straps shall be made from the shell material as specified in para. 4.1.1, in the fluorescent yellow colour, and dimensioned in accordance with drawing #2. They shall be sewn into the sleeve-head and positioned as per the viewing sample. The shoulder strap shall lay flat without pulling and be secured to the jacket shoulder with a dome fastener as specified in para. 4.1.9.
- 4.3.7 **Shoulder Badges** – The RCMP shoulder badge specified in para. 4.1.5 shall be sewn through the upper sleeve. The badge shall be centered on the sleeve-head 2.5 cm below the sleeve-head seam. The badge shall be attached with one row of stitching.
- 4.3.8 **Coat Hanger** – A coat hanger made from material as specified in para. 4.1.13 shall measure 6cm long and shall be centered at the back neckline.
- 4.3.9 **Slide Fastener Pull** – A slide fastener pull shall be constructed with material as specified in para. 4.1.13. The ribbon or cord shall be applied to the hole of the slide fastener in a way that allows the ribbon or cord pull to be removed easily without damage and reapplied. The cord pull should be 6.5 cm ± 0.5 cm in length when finished and attached to the slide fastener.
- 4.3.10 **Identification Label** – Each jacket shall have a durable blank label 7.5 cm x 2 cm applied separately below the marking and cleaning label used for the inscription of the wearers' name.
- 4.3.11 **Marking & Cleaning Instructions Label** – Each jacket shall have a durable label positioned and sewn to the bottom of the inside pocket bag as shown in drawing #2. The text shall be permanent inks of a contrasting colour and shall withstand the life of the garment with no apparent change in appearance. All text except for the RCMP stock number and size shall be in size 6 font. The RCMP stock number and size shall appear in size 8 font. The manufacturer's identification shall not appear anywhere on the garment except where indicated on the label. The label shall contain the following information in English and French:
1. Item name in English as written in para. 1.1.
 2. Item name in French as written in para. 1.1.

3. RCMP stock number - reference contract documents. (Ex. 8280 000)
4. Size and height group of the article, combining the size designation referenced in the English and French contract documents. (Ex. L/R - G/R)
5. Date of manufacture, in numeric format year/month (Ex. 2017/11)
6. Your manufacturer identification (Company name or number).
7. Print information as shown below.

1
2
3
4
5
6
7

Machine wash - warm (40°C)	Laver à la machine – à l’eau tiède (40°C)
Do Not use fabric softener or chlorine bleach	Ne pas utiliser d’agent assouplissant ou d’agent de blanchiment
Tumble dry- low	Séchage par culbutage – à température basse
Steam iron – low	Repassage à vapeur - à température basse
DO NOT DRY CLEAN.	NE PAS NETTOYER À SEC.
Jacket, when worn without 8282 Trousers, Windsuit, Bicycle: CAN/CSA Z96-15 Class 2, Level 2 Fluorescent Yellow-Green Jacket, when worn with 8282 Trousers, Windsuit, Bicycle: CAN/CSA Z96-15 Class 3, Level 2 Fluorescent Yellow-Green	Le blouson, lorsque porté sans le pantalon coupe-vent de cycliste 8282, doit respecter la Norme Z96-15 de la CAN/CSA Classe 2, Niveau 2 Jaune-vert fluorescent Le blouson, lorsque porté avec le pantalon coupe-vent de cycliste 8282, doit respecter la Norme Z96-15 de la CAN/CSA Classe 3, Niveau 2 Jaune-vert fluorescent

Note: The manufacturer’s identification shall not appear anywhere on the garment except on the garment label as indicated.

5. **Quality Assurance Provisions**

5.1 **Responsibility for Inspection** – Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the RCMP, Uniform and Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests specified in this specification or by demonstrating to the satisfaction of the RCMP, Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor shall use any independent, North American, ISO 9001 certified and ISO 17025 “Textile” certified testing facilities.

- 5.2 The RCMP, Uniform and Equipment Program reserves the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if it is found that articles previously rejected due to non-repairable defects are redelivered for inspection.
- 5.3 The contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

6. **Scale of Measurement Definitions and Location References**

(Refer to the Scale of Measurements and Drawing No. 4).

- 6.1 **Chest Circumference, Jacket Closed** – When placed flat, the chest circumference shall be the distance across the jacket, measured at 2.5 cm below the underarm seam. The result shall be doubled to measure total circumference. (A)
- 6.2 **Bottom Circumference, Jacket Closed, Relaxed** – When placed flat, the bottom circumference shall be measured across the jacket bottom, with the elastic relaxed. The result shall be doubled to measure total circumference. (B)
- 6.3 **Bottom Circumference, Jacket Closed, Stretched** – When placed flat, the bottom circumference shall be measured across the jacket bottom, with the elastic stretched. The result shall be doubled to measure total circumference. (C)
- 6.4 **Back Length from Collar Seam** – The back length shall be the distance measured from the collar seam to the hem on the back of the garment. (D)
- 6.5 **Front Length from Collar Seam** – The front length shall be the distance measured from the collar seam to the hem, on the front of the garment. (E)
- 6.6 **Sleeve Length from Centre Back Neck to Sleeve Hem** – The sleeve length shall be measured from the centre back neck at the neck seam, across the shoulder and to the hem of the sleeve. (F)
- 6.7 **Neckline Circumference (from edge to edge closed)** – The neckline circumference shall be measured from the centre of the front slide fastener, along the neck seam around the circumference of the neck to the centre of the front slide fastener. (G)
- 6.8 **Sleeve Length Overarm** - The overarm sleeve length shall be the distance from the armhole at the shoulder seam to the bottom edge of the sleeve cuff. (H)
- 6.9 **Sleeve Length Underarm** - The underarm sleeve length shall be the distance from the underarm at the underarm seam to the bottom edge of the sleeve cuff. (I)
- 6.10 **Width at elbow** – The sleeve shall be folded in half to the underarm seam. The elbow shall be measured across the width of the sleeve at the fold. (J)
- 6.11 **Width at cuff relaxed** – The sleeve cuff shall be measured at the bottom edge of the sleeve, with the elastic relaxed. (K)

- 6.12 **Length from collar to shoulder seam** – The distance measured along the shoulder seam from the neckline to the armhole. (L)

Scale of Measurements

SIZE DESIGNATION		BODY MEASUREMENTS		GARMENT MEASUREMENTS											
Height	Size	Chest		Chest Circumference Jacket Closed	Bottom Circumference Jacket Closed Relaxed	Bottom Circumference Jacket Closed Stretched	Back Length from Collar Seam	Front Length from Collar Seam	Sleeve Length from CB Neck to Sleeve Hem	Neckline Circumference from Edge to Edge Closed	Sleeve Measurements				Length from Collar to Shoulder Seam
		Inches	cm								Sleeve Length Overarm	Sleeve Length Underarm	Width at Elbow	Width at Cuff Relaxed	
Regular 170 - 179cm (5'7" - 5'10")	XS	35	89	104	80	102	62.5	49	82.5	41	61	51	18	10.5	14.5
	S	38	96	112	88	110	65	51	85	43	62.5	52	19	11	15.5
	M	41	104	120	96	118	67.5	53	87.5	45	64	53	20	11.5	16.5
	L	44	111.5	128	104	126	70	55	90	47	65.5	54	21	12	17.5
	XL	47	119	136	112	134	72.5	57	92.5	49	67	55	22	12.5	18.5
	2XL	50	126.5	144	120	142	75	59	95	51	68.5	56	23	13	19.5
	3XL	53	134	152	128	150	77.5	61	97.5	53	70	57	24	13.5	20.5
TOLERANCE: ±				1.5	1.5	1.5	1.5	1.5	1.5	0.5	1.0	1.0	0.5	0.5	0.5
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	I	J	K	L

NOTE: All dimensions are in centimetres unless otherwise indicated.

TABLE I
Properties of Shell Material – All Colours

	TEST	RCMP REQUIREMENT	TEST METHOD
1	Breaking Strength (N)	Warp: 450 Weft: 650	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No. 9.2-M90 (R2013)
2	Tear Strength (N)	Warp: 13 Weft: 24	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No.12.1-2016
3	Dimensional Change after machine washing	Warp: 2.0% max. Weft: 2.0% max.	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No. 58-2004 After 5 cycle (I) (F) OR • AATCC 135-2015 (1) (II) (Aiii)
4	Colourfastness To Washing	Grey Scale 4 or better	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No.19.1-2004 (R2013), test no. 2
5	Colourfastness To Crocking - Dry - Wet	Dry: Grey Scale 3 or better Wet: Grey Scale 3 or better	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No.22-2004 (2013)
6	Water Repellency - Initial - After 3 launderings	Initial: 100% After 3 launderings: no less than 90%	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No. 26.2-94 (R2012)
7	Stretch (%) Weft Only	Warp: N/A Weft: 18% ± 2%	<ul style="list-style-type: none"> • Dupont Stretch 074
8	Colour Fastness - To Light (Xenon)	Light fastness shall be equal or better than Grade 4 by Grey Scale for Colour change after 40 AATCC Fading Units.	<ul style="list-style-type: none"> • AATCC 16.3-2014 Test Option 3 OR • ISO 105-B02:2014

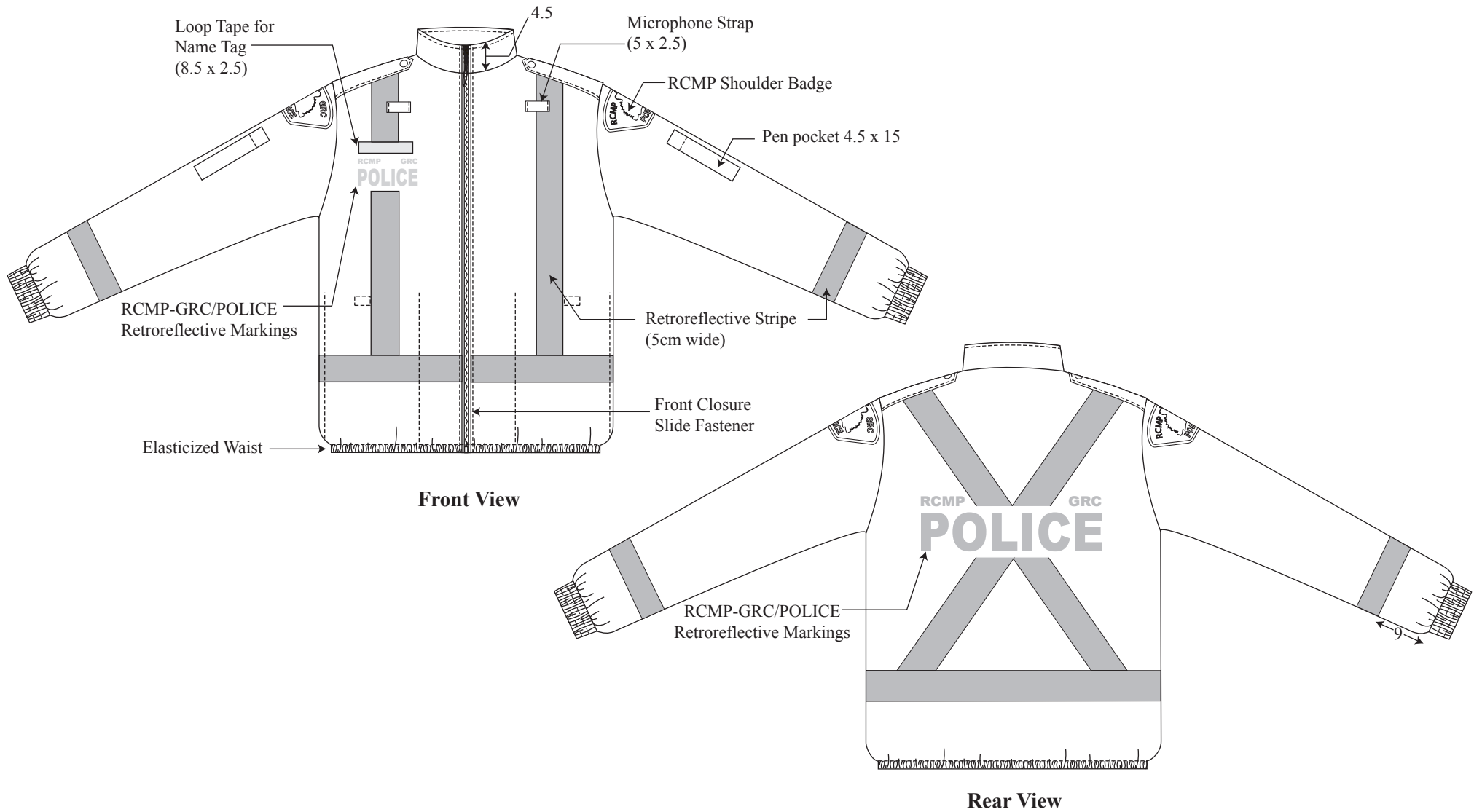
TABLE II
Properties of Shell Material
Fluorescent Yellow-Green Colour ONLY

CSA-Z96-15 High Visibility Apparel Requirements			
	TEST	RCMP REQUIREMENT	TEST METHOD
1	Background - Material Colour	<p><u>Initial:</u> CSA-Z96-15, Table 2A - Fluorescent yellow-green</p> <p><u>After colourfastness to light (AATCC 16.3-2014 Test Option 3, 40 AATCC Fading Units):</u> CSA-Z96-15, Table 2A - Fluorescent yellow-green</p>	ASTM E1164-12
2	Colour Fastness - To Light (Xenon)	Light fastness shall be equal or better than Grade 4 by Grey Scale for Colour change after 40 AATCC Fading Units.	<ul style="list-style-type: none"> • AATCC 16.3-2014 Test Option 3 <li style="text-align: center;">OR • ISO 105-B02:2014

Drawing # 1

G.S. 1045-317

Windsuit, Bicycle, Jacket



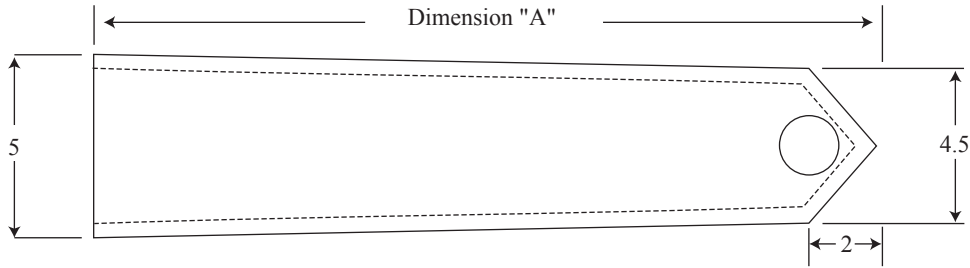
NOT TO SCALE

All measurements are shown in centimeters unless otherwise indicated
± 0.5 cm tolerance acceptable unless otherwise indicated.

Drawing # 2

G.S. 1045-317

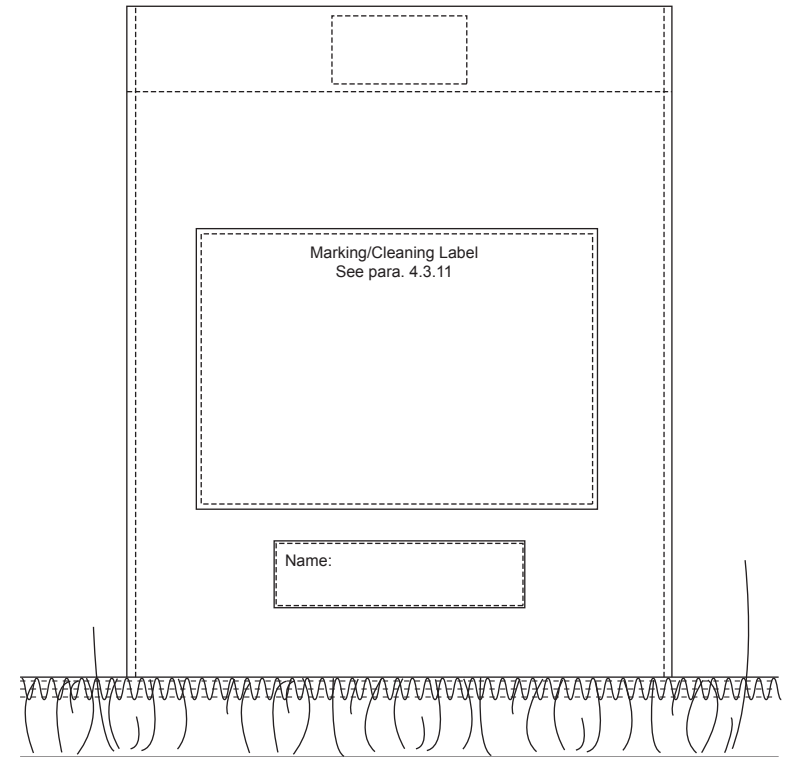
Windsuit, Bicycle, Jacket



Shoulder Strap Detail

Jacket Size (All Heights)	Dimension "A"
X-Small	14
Small	15
Medium	16
Large	17
X-Large	18
2X-Large	19
3X-Large	20

TABLE I
Shoulder Strap Length
(Finished)



Pocket, Interior View

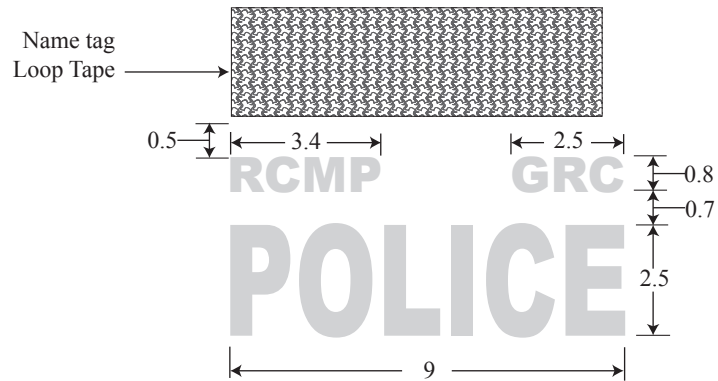
NOT TO SCALE

All measurements are shown in centimeters unless otherwise indicated
± 0.5 cm tolerance acceptable unless otherwise indicated.

Drawing # 3

G.S. 1045-317

Windsuit, Bicycle, Jacket



**Reflective Markings,
Right Chest Front**



Reflective Markings, Back

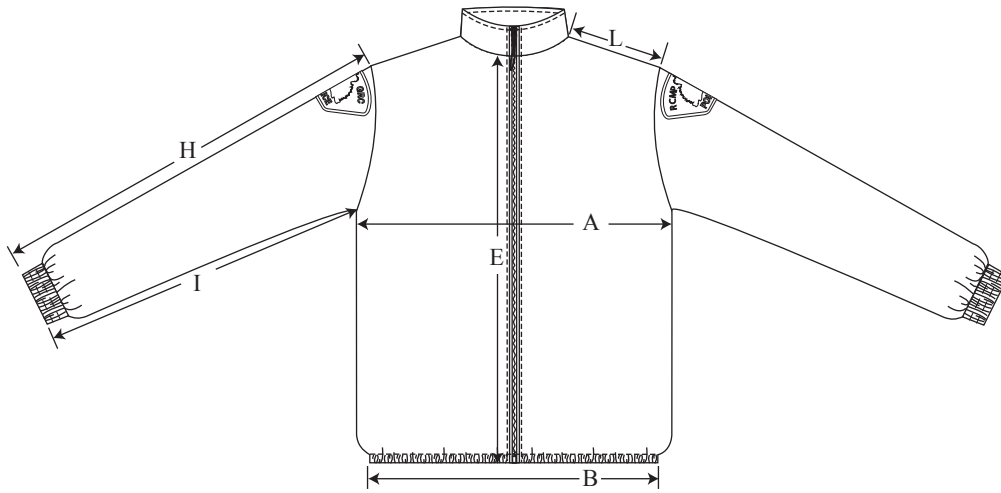
NOT TO SCALE

All measurements are shown in centimeters unless otherwise indicated
± 0.5 cm tolerance acceptable unless otherwise indicated.

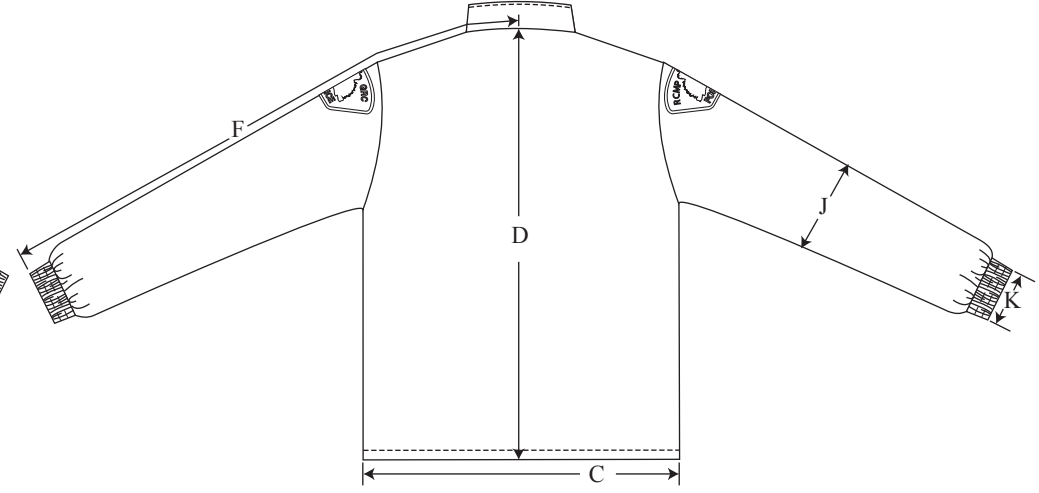
Drawing # 4

G.S. 1045-317

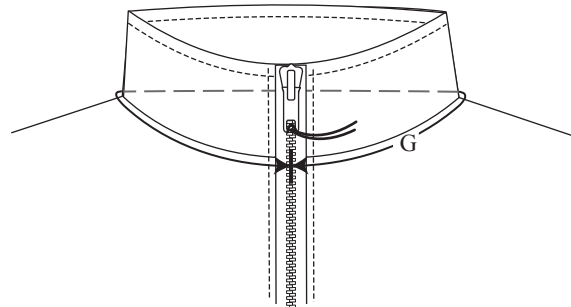
Windsuit, Bicycle, Jacket
Measurement Location Chart



Jacket, Front View



Jacket, Back View



NOT TO SCALE