



Royal Canadian Mounted Police
Gendarmerie royale du Canada

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Specification

Carrier, External, Load Carrying

This document has 27 pages including the drawings.

This document was created in English.

The document is available in English and French.

English/Anglaise
Français/French

The photograph on this page is for reference only.



Modifications

Date	Para. No's	Modifications
2013-02-11		Original Specification
2013-06-21	Para. 4.1.1, 4.1.2 & 4.1.3 Para. 4.1.7.1 Para. 4.1.7.2 Para. 4.3.2.1 Para. 4.3.2.4 Appendix A Scale of Measurements Drawings #1-5	Added specific direction to refer to Appendix B for required documentation. Changed length of slide fastener. Specify new side slide fastener with longer pull tab. Modify stitching requirements of webbing through all layers of front flap. Methodology of waist strap modified to encapsulate elastic. Pattern piece added to cover elastic. Modified scale of measurements. Modified drawings to show both improved stitching of webbing and encapsulated elastic and scale of measurements.
2013-07-02	Para. 4.1.11 Para. 4.3.2.1 Appendix A Appendix B	Added fusing component and Certificate of compliance documentation. Added explanation for fused reinforced piece to bottom of front flap to prevent curling. Added pattern pieces for reinforced fusing. Revised Certificate of compliance definition and added fusing requirements to criteria.
2013-08-08	Para. 2.10 Para. 4.1.5.1 & 4.1.5.2 Para. 4.1.7.1 Para. 4.1.7.3 Table I Table IV	Added specification for nylon thread. Specified Class & Type. Corrected specification for nylon thread. Corrected typo in slide fastener style number. Added specific length of fastener by size. Corrected test method for Breaking and tear strength. Corrected values for breaking and tearing strength.
2013-08-13	Para. 4.1.7.3 Table I	Corrected description of slide fastener. Changed test method and values for tear strength.

RCMP VIEWING SAMPLE

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

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 & 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

CARRIER, EXTERNAL, LOAD CARRYING

1. Definition

- 1.1 This specification shall govern the manufacture and inspection of Carrier, External, Load Carrying.
- 1.2 This specification, patterns, viewing sample, drawing or other information issued in connection therewith, may only be used for specific enquiries, tenders, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for R.C.M.P. Carrier, External, Load Carrying.

2. Applicable Specifications

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the invitation to tender, unless otherwise specified.
- 2.2 CAN/CGSB 4.2 Textile Test Methods.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester.
- 2.4 CAN/CGSB 86.1-2003 Care Labeling of Textiles.
- 2.5 ASTM, American Society for Testing and Materials, Method D3787, D3776, D1777, D3786 and D4966.
- 2.6 AATCC-100 American Association of Textile Chemists and Colorists - Technical Manual.
- 2.7 FED-STD191-5206, Federal Standard, Textile Test Methods.
- 2.8 ISO 105, ISO 4920, ISO 6330, ISO 7211-2, ISO 11092, ISO 13937-1, International Standards Organization.
- 2.9 RCMP, G.S.1045-177 Vest, Soft Body Armour.
- 2.10 CAN/CGSB 4-GP-85Ma, Thread, Nylon.

3. General Requirements

3.1 The article or material covered by this specification shall be free from imperfections or blemishes such as 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** - Carrier, External, Load Carrying to this specification shall be a vest-like, garment which will be used to carry RCMP issue ballistic body armour panels as specified in Para. 2.9. The carrier will enable the user to wear Soft Body Armour over a shirt. The carrier will be dark blue in colour with encapsulated elastic waist strap with front closure and adjustable shoulder straps. Included are two side pockets, one chest front pocket and permanent POLICE identification markings, and accessory pouch attachment webbing in **Option 1**, front only and in **Option 2** front and back.

Note: There will be no side pockets on all short sizes due to lack of available landscape.

3.3 In the event of any inconsistency in contract documents, specification, pattern, drawing, or viewing sample, the aforementioned shall prevail in the following order:

- (i) Contract
- (ii) Specification
- (iii) Pattern
- (iv) Drawing
- (v) Viewing Sample

4. Detail Requirements

4.1 **Material**

4.1.1 **Shell Material** – The shell material shall be a dark navy ripstop fabric meeting the requirements outlined in Table I.

See Appendix B for required documentation.

4.1.2 **Lining Material, Mesh** – The mesh lining shall be a black material, meeting the requirements of Table II.

See Appendix B for required documentation.

4.1.3 **Lining Material, Wicking/Moisture dissipating** – The lining material shall be a dark navy or black material meeting the requirements outlined in Table III.

See Appendix B for required documentation.

- 4.1.4 **Webbing, Accessory & Microphone Strap** – The webbing shall be a durable nylon webbing, luggage quality, black in colour measuring 2.54 cm (1 inch) wide. It shall have a minimum tensile strength of 1680 lbs. as per Federal Standard 191-5206 test method #4108 and be equal in all respects to viewing sample. **Certification of compliance must be provided.**
- 4.1.5 **Thread**
- 4.1.5.1 **Seam and Stitching Thread** - Shall be polyester wrap, polyester core, Tex 50, Class B, Type I of matching shade to the shell material, meeting CAN/CGSB 4.131-93. **Certification of compliance must be provided.**
- 4.1.5.2 **Reinforce Stitching Thread** - Shall be a nylon continuous filament bonded, Class A, Type II, Tex 45, meeting CAN/CGSB 4-GP-85Ma. It shall be black in colour. **Certification of compliance must be provided.**
- 4.1.6 **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 length-wise shear strength. The initial peel strength shall not be less than 1 P.I.W. and after 1000 cycles shall be not less than .5 P.I.W. with a minimum lengthwise shear of 4 P.S.I. Dimensions shall be as per drawings and pattern template. **Certification of compliance must be provided.**
- 4.1.7 **Slider Fastener**
- 4.1.7.1 **Horizontal Chest Pocket** – Shall be a 2-way closed end slide fastener, black in colour with Auto-locking sliders, two arranged in a head to head relation and one opening from the left and one opening from the right. YKK CIFMC 59 DSYG VP BTM 2 H-H (only) 24 cm (9½”) in length (only). **Certification of compliance must be provided (YKK Invoice).**
- 4.1.7.2 **Side Pockets** – They shall be one way closed end fastener with an Auto-locking slider, Enamel finish, black in colour, with long pull tab, YKK #12960 CIFC 59 DS6YG C5 5/8, length 13 cm (5”) (only). **Certification of compliance must be provided (YKK Invoice).**
- 4.1.7.3 **Interior Access Panel** – Shall be a 1-way closed end slide fastener, black in colour with an auto-locking slider. YKK 5CN 5/8 CHAIN DSB VP SLIDER (only). See sizing chart below. **Certification of compliance must be provided (YKK Invoice).**

Size 32-34	13" (33 cm)
Size 36-38	15" (38 cm)
Size 40-42	17" (43 cm)
Size 44-46	19" (48 cm)
Size 48-50	21" (53 cm)

- 4.1.8 **Elastic, Waist Strap** – Shall be heavy duty nylon elastic, black in colour, 15 cm (6") wide with maximum elongation of 130% and recovery as per viewing sample. There shall be 2 layers of this elastic, as per drawing #3.
- 4.1.9 **Binding Tape** – Shall be heavy duty nylon grosgrain binding tape, black in colour 2.54 cm wide, 33 mm thickness, and be equal in all respects to viewing sample. **Certification of compliance must be provided (Raw goods manufacturer Invoice).**
- 4.1.10 **Neoprene Padding** – The neoprene padding shall be black in colour, meeting the requirements of Table IV, and be equal in all respects to viewing sample. **Certification of compliance must be provided.**
- 4.1.11 **Fusing** – Care shall be taken to ensure that the fusible interlining after application to the shell material shrink no more than the predicted shrinkage of the shell material. The fusible interlining shall have polyamide or a polyamide blend resin constructed in a dot pattern and sufficient in concentration for no delamination to occur after home laundering. The fusing procedures shall be those recommended by the fusible interlining supplier. The fusible interlining shall be plain weave, 100% cotton with a mass of 150 g/m² ± 8 g/m². It shall be black in colour and meet all requirements outlined above, and be equal in all respects to viewing sample. **Certification of compliance must be provided.**
- 4.2 **Size and Dimensions** – Carrier, External, Load Carrying 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. The garment components shall be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in Appendix A forming part of this specification.
- 4.3 **Construction**
- 4.3.1 **Stitching** - All stitching shall be lockstitch. There shall be not less than three nor more than four stitches per centimeter. 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 **Front Pouch** - The front pouch shall be made from the shell material specified in Para. 4.1.1, lined with the material specified in Para. 4.1.2 and 4.1.3, and shall be sized and shaped to the pattern and the scale of measurements. Shoulder strap portions shall extend over the shoulder in accordance with the drawings and pattern pieces. Each shoulder strap portion shall have hook tape for shoulder closure and adjustment on the front side of the carrier. Hook tape shall be placed on the face of the shell material at the shoulder edge as per Drawing #2. The hook tape shall be 19.5 cm long and the width shall measure 5 cm. The name tag shall be loop tape 8.5cm long by 2.5cm wide and positioned on right front as per patterns and Drawing # 2. The front of the external carriers shall have one large chest pocket with a horizontal opening, secured by the slide fastener specified in Para. 4.1.7.1, pocket depth to be 19 cm. Inside the chest pocket shall be a notebook pocket, dimensioned in accordance with Drawing #5 and pattern template, alongside a pen/pencil pocket, with an opening of 3.5 cm and 14.5 cm deep. The front shall have two side pockets, openings of 13.5 cm minimum, closed by the slide fastener specified in Para. 4.1.7.2. The lower front portion of the pouch shall have one piece of loop tape sewn on the center front, measuring 15 cm (6") deep and width dimensioned as per pattern template. This loop tape shall be positioned 2 cm above bottom edge, centered on front. The lower portion of the front flap shall be reinforced with a fused piece of shell material as specified in Para. 4.1.1 and 4.1.11. It shall be fixed to the bottom inside flap and continue the full width of flap. It shall be dimensioned according to patterns. This reinforced piece will be secured by stitching of bottom row of webbing. The front flap shall have 2 pieces of hook tape 15 cm (6") deep and width dimensioned as per pattern template, placed on the underside of flap, positioned according to Drawing #2. The front flap shall have 3 rows of webbing as specified in Para. 4.1.4. Each row of webbing shall be secured with vertical rows of reinforced stitching at intervals of 3.8 cm (1.5") across flap through all layers as per pattern template and Drawing #2. The reinforced stitching shall be done using thread as specified in Para. 4.1.5.2. **Care shall be taken to ensure that there are no broken or dropped stitches when reinforced stitching is done to secure webbing.** The inside of the front pouch shall be lined with two lining materials as specified in Para. 4.1.2 and 4.1.3. The upper shoulder portion shall be lined with mesh lining material as specified in Para. 4.1.2. The bottom edge of mesh lining shall be bound with the binding tape as specified in Para. 4.1.9 to ensure durability. The lower portion shall be lined with lining material as specified in Para. 4.1.3. The inside of the pouch shall have zippered opening to allow the insertion of ballistic panel as per Drawing #2. The zipper for this pouch shall be as specified in Para. 4.1.7.3. Inside the top of pouch at shoulder level are loop fastener strips to hold the ballistic panel in place. These loop fastener strips shall measure 10 cm by 5 cm and be positioned as per viewing sample and Drawing #6.
- 4.3.2.2 **Removable Shoulder Padding** – There shall be a removable shoulder pad for each shoulder strap, made with 2 layers of 2.5 mm neoprene as specified in Para. 4.1.10 and covered with nylon fabric, black in colour. These shoulder paddings are to be inserted in front shoulder strap, between the shell and the mesh lining. It

shall be sized as 4.8 cm wide by 21 cm long and be equal in all respects to viewing sample.

- 4.3.2.3 **Back Pouch** - The back pouch shall be made from shell material specified in Para. 4.1.1, lined with the material specified in Para. 4.1.2 and 4.1.3, and shall be sized and shaped to the pattern and the scale of measurements. Loop tape shall be applied to the body side of shoulder strap as per Drawing #3. The loop tape shall measure 22 cm long and the width shall measure 5 cm. The loop tape shall be placed in line with the piece edge. There shall be webbing as specified in Para. 4.1.4 sewn on top side of shoulder strap 1.25 cm from the edge. It shall be 6 cm long to fit across shoulder strap and sewn at each edge to create a loop. The inside of the back pouch shall be lined with two lining materials as specified in Para. 4.1.2 and 4.1.3. The upper shoulder portion shall be lined with mesh lining material as specified in Para. 4.1.2. The bottom edge of mesh lining shall be bound with the binding tape as specified in Para. 4.1.9 to ensure durability. The lower portion shall be lined with lining material as specified in Para. 4.1.3. The inside of the pouch shall have zippered opening to allow the insertion of ballistic panel as per Drawing #3. The zipper for this pouch shall be as specified in Para. 4.1.7.3. Inside the top of pouch at shoulder level are loop fastener strips to hold the ballistic panel in place. These loop fastener strips shall measure 10 cm by 5 cm and be positioned as per viewing sample and Drawing #6.

Option 1 There shall be no webbing across back of carrier.

Option 2 There shall be 3 rows of webbing as specified in Para. 4.1.4. Each row of webbing shall be secured with vertical rows of reinforced stitching at intervals of 3.8 cm (1.5") across the full width of the back. The reinforced stitching shall be done using thread as specified in Para. 4.1.5.2. **Care shall be taken to ensure that there are no broken or dropped stitches when reinforced stitching is done to secure webbing.** Each row of webbing shall be positioned as per viewing sample and pattern.

- 4.3.2.4 **Waist Strap** - The waist strap shall be made from material specified in Para. 4.1.1 and 2 layers of elastic as specified in Para. 4.1.8.1. The strap shall be sized and shaped to the pattern. The 2 layers of elastic shall be encapsulated with material specified in Para. 4.1.1 and joined to the side seam of back panel on one side and to the waist strap on the other side, as per drawing #3. This elastic is to be 15 cm (6") wide and 6 cm long and be completely enclosed. There shall be loop tape as specified in Para 4.1.6 measuring 16 cm by 20 cm sewn on front of waist strap. There shall also be loop tape measuring 2 cm by 15 cm sewn to the single top layer of the encapsulated elastic close to front side of waist strap. There shall be hook tape as specified in Para 4.1.6 measuring 16 cm by 20 cm sewn on back of waist strap. Refer to Drawing #3, inner view and viewing sample. This strap shall be sandwiched between front and front flap for closure. Refer to Drawing #1.

4.3.2.5 **‘POLICE’ Markings** - The front and rear portions of the external carrier shall have permanent POLICE marking either silkscreened or heat-applied, size and shape as indicated in the drawings and the viewing sample. Letter colour shall be White, equal to the viewing sample. This marking shall be able to withstand normal washing and drying without degradation of the colour or permanency. There shall be no loose or unbonded edges or corners.

4.4 **Sizes and Patterns** - There are fifteen standard sizes as follows:

32 - 34 S	32 - 34 R	32 - 34 T
36 - 38 S	36 - 38 R	36 - 38 T
40 - 42 S	40 - 42 R	40 - 42 T
44 - 46 S	44 - 46 R	44 - 46 T
48 - 50 S	48 - 50 R	48 - 50 T

RCMP patterns are available for these sizes. Special sizes will be manufactured to individual dimensions as required. **Note: There will be no side pockets on all short sizes due to lack of available landscape.**

4.5 **Marking & Cleaning Instructions Label** - Each vest shall have a label marked legibly and indelibly in English and French attached in accordance with the requirements outlined below. The cleaning instructions shall have all necessary and applicable care symbols for the garment and trim. All symbols shall appear according to the CAN/CGSB 86.1-2003 Care Labeling of Textiles. The label shall be placed at the back of the back panel in center front as per Drawing #3. Where the word ‘insert’ appears, enter only the information requested. (Example: *Insert: Size/Taille*, enter 40-42).

RCMP-GRC # : <i>(insert)</i>	
Size/Taille : <i>(insert)</i>	
Date of manufacturer, in numeric format year/month (Ex. 2001 / 11)	
Manufacturer identification (Company name or number).	
RCMP Carrier, External, Load Carrying	Gilet pare-balles extérieur de transport de charges GRC
Machine wash – cool (30°C)	Laver à la machine – eau froide (30°C)
Do Not use fabric softener or chlorine bleach	Ne pas utiliser d’agent adoucissant ou d’agent de blanchiment
Tumble dry- low (Do Not use dryer sheets)	Séchage par culbutage – à basse température (Ne pas utiliser d’assouplissant en feuilles)
Steam iron - medium	Repassage à vapeur – à température moyenne
Do not dry clean	Ne pas nettoyer à sec

- 4.6 **Identification Label** - Each vest shall have a durable blank label 2 cm x 7.5 cm applied separately beside the marking and cleaning label used for the inscription of the wearers' name. As illustrated below.

Name/Nom:

5. **Delivery, Packing and Marking of Containers**

- 5.1 Unless otherwise specified the items shall be delivered to the Commissioner, R.C.M.P., Uniform & Equipment Program, Ottawa, Ontario, free of transportation charges and provincial tax.
- 5.2 Packing and marking of shipping containers shall be as specified in the invitation to tender.
- 5.3 A packing slip shall be enclosed showing contents of each shipment.

6. **Quality Assurance Provisions**

- 6.1 **Responsibility for Inspection** - Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the R.C.M.P., Uniform & 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 R.C.M.P., Uniform & Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor may use any commercial testing establishment acceptable to the R.C.M.P., Uniform & Equipment Program.
- 6.2 The R.C.M.P., Uniform & 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.
- 6.3 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.

7. **Methods of Measuring**

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

- 7.1 **Center Front Length** – The length shall be the distance measured from the base of the neckline at front to the hem. (A).
- 7.2 **Front Hem** – The hem shall be the distance across the vest bottom. (B).
- 7.3 **Front Width at Chest Pocket** – The width shall be measured across front at level of front chest pocket. (C).
- 7.4 **Front Side Wing Height** – The width shall be measured top to bottom of side wing. (D).
- 7.5 **Center Back Length** – The length shall be the distance measured from the base of the neckline at center back to the hem. (E).
- 7.6 **Back Hem** – The hem shall be the distance across the vest bottom of the vest and excluding the waist strap. (F).
- 7.7 **Back Width** – The width shall be measured across back at level of braid between mesh and lining material. (G).
- 7.8 **Back Side Wing Height** – The width shall be measured top to bottom of side wing. (H).

TABLE I
Shell Material

	REQUIREMENT	ACCEPTABLE TESTED METHODS
Colour	Dark Navy, to match swatch available from RCMP Uniform & Equipment Program	
Fibre Content	65% Polyester 35% Cotton	CAN/CGSB-4.2 Method 14-2005
Weave	Ripstop	Visual
Width	163 cm (min.)	
Mass	290 g/m ² ± 14g/m ²	CAN/CGSB-4.2 Method 5.1 ASTM D-3776
Yarns per cm	Warp: 42 min. Weft: 18 min.	CAN/CGSB-4.2 Method 6 ISO 7211-2
Breaking Strength - Grab Method	Warp: 1000 Newtons min Weft : 550 Newtons min	CAN/CGSB-4.2 Method 9.2-M90 (2004)
Tearing Strength - Rip Method	Warp: 45 Newtons min Weft: 25 Newtons min	CAN/CGSB-4.2 CAN/CGSB-4.2 Method 12.1-M90
Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 30,000 at 9 kPa	ASTM D-4966
Dimensional Change in Domestic Laundering (cool wash 40°C)	Warp: 2% max Weft: 2% max	CAN/CGSB-4.2 Method 58
Resistance to Surface Wetting - Spray Method	100 initial 90 after 5 washes or better	CAN/CGSB-4.2 Method 26.2 ISO 4920
Colourfastness - To Light	Equal to AATCC Standard L4 or better	CAN/CGSB-4.2 Method 18.3 ISO 105-B02
Colourfastness - To Crocking	Dry: Grade 4 or better Wet: Grade 3 or better	CAN/CGSB-4.2 Method 22 ISO 105-C01
Colourfastness - To Perspiration	Grade 4 or better	CAN/CGSB-4.2 Method 23 ISO 105-E-04
Colourfastness - To Laundering (cool wash 40°C)	Grade 4 or better	CAN/CGSB-4.2 Method 19.1

Note: For information purposes, Doubletex “Panamera” SD35S in colour #28606Y Dark Navy meets this Specification. Other Manufacturers’ fabrics shall be acceptable provided test data is submitted to verify compliance.

TABLE II
Mesh Lining Material

	REQUIREMENT	ACCEPTABLE TESTED METHODS
Colour	Black, to match swatch available from RCMP Uniform & Equipment Program	
Fibre Content	100% Polyester	CAN/CGSB-4.2 Method 14-2005
Knit	Mesh	Visual
Width	152 cm (min.)	
Mass	$275 \text{ g/m}^2 \pm 14 \text{ g/m}^2$	CAN/CGSB-4.2 Method 5.1 ASTM D-3776
Yarns per cm	Wales: 9.5 ± 2 Courses: 11 ± 2 .	CAN/CGSB-4.2 Method 6 ISO 7211-2
Instron Ball Burst (psi)	130 min	ASTM D-3787
Dimensional Change in Domestic Laundering (cool wash 40°C)	Warp: 2% max Weft: 2% max	CAN/CGSB-4.2 Method 58
Wicking Treatment	Warp: 47 sec/in (max) Weft: 60 sec/in (max)	INDA IST 10.1 (95)
Antimicrobial Treatment	70% killed within 1 hour 99% killed within 24 hours	AATCC 100-2004 Tested for s. aureus, e. coli, k. pneumonia
Thickness	0.0789 ± 0.0079	ASTM D-1777

TABLE III
Lining Material

	REQUIREMENT	ACCEPTABLE TESTED METHODS
Colour	Dark Navy or Black, to match swatch available from RCMP Uniform & Equipment Program	
Fibre Content	100% Polyester 70 denier (min.)	CAN/CGSB-4.2 Method 14-2005
Knit	Warp Knit (pique)	Visual
Width	152 cm (min.)	
Mass	144 g/m ² ± 7g/m ²	CAN/CGSB-4.2 Method 5.1 ASTM D-3776
Yarns per cm	Wales: 14.6 ± 2 Courses: 13.4 ± 2.	CAN/CGSB-4.2 Method 6 ISO 7211-2
Mullen Burst (psi)	175 min	ASTM D-3786-87
Dimensional Change in Domestic Laundering (cool wash 40°C)	Warp: 2% (max) Weft: 2% (max)	CAN/CGSB-4.2 Method 58
Wicking Treatment	Warp: 35 sec/in (max) Weft: 45 sec/in (max)	INDA IST 10.1 (95)
Antimicrobial Treatment	70% killed within 1 hour 99% killed within 24 hours	AATCC 100-2004 Tested for s. aureus, e. coli, k. pneumonia
Colourfastness - To Crocking	Dry: Grade 4 or better Wet: Grade 4 or better	CAN/CGSB-4.2 Method 22 ISO 105-C01
Colourfastness - To Laundering (cool wash 40°C)	Grade 4 or better	CAN/CGSB-4.2 Method 19.1

TABLE IV
Neoprene Material

	REQUIREMENT	Certificate of Compliance
Fibre Content	100% Nylon Outer Surface 10% Nylon/ 90% Neoprene (Inner content)	
Thickness	2.5 mm	
Breaking Strength	5.5 kg/ cm ²	
Tearing Strength	1.8 kg/ cm ²	
Elongation	400%	

APPENDIX A

Sealed Pattern Identifier

Pattern #: G.S. 1045-360
 Title: Carrier, External, Load Carrying

Paper Patterns - Paper patterns are available from the RCMP, Uniform & Equipment Program, Ottawa Ontario, under Pattern # G.S. 1045-360. Firms requested to produce Pre-contract Award Samples will be provided with the base pattern only. The full set of patterns either in individual sizes or as a graded nest will be provided to the successful bidder after the contract is awarded.

The paper patterns include placement some templates for hook and loop and retroreflective material. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed. No seam allowance is required.

All patterns are the property of the RCMP and must be returned upon completion of the contract.

Pattern Pieces - This design has 23 pattern components.

Legend:

Cut 1 Single = Cut 1
 Cut 1 Paired = Cut 2

Pattern Components	Nomenclature	Quantity to be cut	Material
# 1 of 23	Back	1 Single	Shell Material
# 2 of 23	Front	1 Single	Shell Material
# 3a of 23	Front Flap (Size 32-34)	1 Single	Shell Material
# 3b of 23	Front Flap (Size 36-38)	1 Single	Shell Material
# 3c of 23	Front Flap (Size 40-42)	1 Single	Shell Material
# 3d of 23	Front Flap (Size 44-46)	1 Single	Shell Material
# 3e of 23	Front Flap (Size 48-50)	1 Single	Shell Material
# 4 of 23	Flap Reinforcement	1 Single	Shell Material
# 5 of 23	Top Welt	1 Single	Shell Material
# 6 of 23	Pocket Welt	1 Paired	Shell Material
# 7 of 23	Pocket Bag - Side	1 Paired	Shell Material

# 8 of 23	Pocket- Notebook/w pen slot	1 Single	Shell Material
# 9 of 23	Side Flap Loop	1 Paired	Shell Material
# 10 of 23	Side Flap Hook	1 Paired	Shell Material
# 11 of 23	Front Shell Pocket	1 Single	Shell Material
# 12 of 23	Front Shell Pocket Facing	1 Single	Shell Material
# 13 of 23	Side Elastic Cover	1 Paired	Shell Material
# 14 of 23	Back – Lower Lining	1 Single	Lining Material
# 15 of 23	Back – Upper Lining	1 Single	Lining Material
# 16 of 23	Front – Lower Lining	1 Single	Lining Material
# 17 of 23	Front – Upper Lining	1 Single	Lining Material
# 18 of 23	Zip Ends	2 Paired	Lining Material
# 19 of 23	Back – Upper Mesh	1 Single	Mesh Material
# 20 of 23	Front – Upper Mesh	1 Single	Mesh Material
# 21 of 23	Flap Reinforcement	1 Single	Fusing
# 22 of 23	Shoulder Padding	2 Paired	Neoprene
# 23 of 23	Shoulder Padding - Lining	2 Paired	Nylon Lining

Note: Pattern piece for edge binding not included.

APPENDIX B

Certification & Evaluation Criteria

Appendix B contains definitions of compliance and certification requirements for all materials specified in this document. The evaluation criteria is a reference list and shall be used by RCMP Uniform & Equipment Program Section to ensure all documentation is received and meets the requirements outlined in this specification.

Definitions:

Certification of compliance: Compliance certification documents shall be based on testing from a raw goods manufacturer from an in-house or independent, third-party accredited laboratory acceptable to the RCMP to verify performance requirements as specified in this specification or where indicated an invoice from the raw good manufacturer is also acceptable.

Test Report: Test report documents shall include the test method, test conditions and test results performed by an independent, third-party accredited laboratory acceptable to the RCMP to verify requirements as specified in this specification.

All certificates and test reports that verify the performance of materials used in manufacturing the finished item shall be retained by the manufacturer and shall be made available to ensure that all items meeting the requirements have completed all of the testing and certification required by this specification. Failure to provide the requested documentation shall be cause for rejection. Failure to meet the requirements when tested by the RCMP Uniform & Equipment Program Section shall be cause for rejection.

Certification & Evaluation Criteria

Para. Title/Test	Certification of Compliance	Test Report	Pass/Fail
Webbing (Para. 4.1.4)	Required		
Thread (Para. 4.1.5.1 & 4.1.5.2)	Required		
Hook and Loop (Para. 4.1.6)	Required		
Slide Fasteners (Para. 4.1.7.1, 4.1.7.2 & 4.1.7.3)	Required		
Binding Tape (Para. 4.1.9)	Required		
Fusing (Para. 4.1.11)	Required		
TABLE I			
Fibre Content		Required	
Mass		Required	
Yarns per cm		Required	
Breaking Strength - Grab Method		Required	
Tearing Strength - Rip Method		Required	
Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)		Required	
Dimensional Change in Domestic Laundering (cool wash 40°C)		Required	
Resistance to Surface Wetting - Spray Method		Required	
Colourfastness - To Light		Required	
Colourfastness - To Crocking		Required	
Colourfastness - To Perspiration		Required	
Colourfastness - To Laundering (cool wash 40°C)		Required	

TABLE II			
Fibre Content		Required	
Mass		Required	
Yarns per cm		Required	
Instron Ball Burst (psi)		Required	
Dimensional Change in Domestic Laundering (cool wash 40°C)		Required	
Wicking Treatment		Required	
Antimicrobial Treatment		Required	
Thickness		Required	

Para. Title/Test	Certification of Compliance	Test Report	Pass/Fail Table I
TABLE III			
Fibre Content		Required	
Mass		Required	
Yarns per cm		Required	
Mullen Burst (psi)		Required	
Dimensional Change in Domestic Laundering (cool wash 40°C)		Required	
Wicking Treatment		Required	
Antimicrobial Treatment		Required	
Colourfastness - To Crocking		Required	
Colourfastness - To Laundering (cool wash 40°C)		Required	
TABLE IV			
Fibre Content	Required		
Thickness	Required		
Breaking Strength	Required		
Tear Strength	Required		
Elongation	Required		

Scale of Measurements – Carriers, External, Load Carrying

Size	GARMENT MEASUREMENT							
Size	Center Front Length	Front Hem	Front Width at Chest Pocket	Front Side Wing Height	Center Back Length	Back Hem	Back Width at Braid	Back Side Wing Height
32 - 34 S	32.6	42.75	27.3	18.25	36.4	42.75	27.5	18.25
36 - 38 S	33.2	47.75	29.1	18.25	37	47.75	29.4	18.25
40 - 42 S	33.9	52.75	30.9	18.25	37.7	52.75	31.2	18.25
44 - 46 S	34.5	57.75	32.8	18.25	38.3	57.75	33	18.25
48 - 50 S	35.2	62.75	34.6	18.25	39	62.75	34.9	18.25
32 - 34 R	37.6	42.75	27.3	22	41.4	42.75	27.5	22
36 - 38 R	38.2	47.75	29.1	22	42	47.75	29.4	22
40 - 42 R	38.9	52.75	30.9	22	42.7	52.75	31.2	22
44 - 46 R	39.5	57.75	32.8	22	43.3	57.75	33	22
48 - 50 R	40.2	62.75	34.6	22	44	62.75	34.9	22
32 - 34 T	40.6	42.75	27.3	24	44.4	42.75	27.5	24
36 - 38 T	41.2	47.75	29.1	24	45	47.75	29.4	24
40 - 42 T	41.9	52.75	30.9	24	45.7	52.75	31.2	24
44 - 46 T	42.5	57.75	32.8	24	46.3	57.75	33	24
48 - 50 T	43.2	62.75	34.6	24	47	62.75	34.9	24
Tolerances ±	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm
Measurement Location	A	B	C	D	E	F	G	H

NOTE: All measurements are in centimeters unless otherwise indicated.