



Royal Canadian Mounted Police
Gendarmerie royale du Canada

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Specification

Cap, Cloth, Officer's

This document has 19 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.

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

CAP, CLOTH, OFFICER'S

1. Definition

- 1.1 This specification shall govern the manufacture and inspection of Cap, Cloth, Officer's.
- 1.2 This specification, 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 RCMP Cap, Cloth, Officer's.

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 CGSB, CAN 2-4.2, Textile Test Methods.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester
- 2.4 AATCC, Method 15, Colorfastness to Perspiration.
- 2.5 G.S. 1045-278, Cloth, Wool, Superfine.

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** - Cap, Cloth, Officer's shall be crown and peak military-type with superfine wool fabric headband and chin strap, and shall conform in every respect to the viewing sample.

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

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

4. **Detail Requirements**

4.1 **Materials**

4.1.1 **Shell** - English cap broadcloth, meeting the requirements outlined in Table II. Colour to match viewing sample.

Certificate of Compliance required.

4.1.2 **Crown, Bevels and Bottom Portion of Headband** - To be made of shell material specified in para. 4.1.1.

4.1.3 **Headband** - Shall be Cloth, Wool, Superfine, yellow in colour.

To be purchased from the R.C.M.P.

4.1.4 **Lining** - Shall be cloth, rayon, twill, in accordance with the viewing sample. The colour shall be scarlet as per the viewing sample.

4.1.5 **Laminated Lining** - Shall be 5mm polyester foam, equal in all respects to the viewing sample.

4.1.6 **Overlining** - Shall be a commercially available good quality transparent vinyl equivalent to the viewing sample.

4.1.7 **Badge Stay** - The badge stay shall be a commercial item, assembled and shaped as per the viewing sample and drawing.

4.1.8 **Grommet** - The grommet shall be of an approved commercially-available polyethylene extrusion, shaped, closed and finished in accordance with the viewing sample. The grommet ends shall butt together with a suitably sized short plug of similar material.

4.1.9 **Headband Stiffener** - Shall be a commercially available, high density (linear) polyethylene plastic material, black in colour. The stiffener band shall be extruded stripped, split or cut 57 +/-1.5 mm wide, with a thickness of 0.75 +/- 0.05 mm, length as required. The stiffener shall be tested for rigidity as follows:

Rigidity Test - Five headband stiffeners shall be joined into five circular bands. Each band shall be placed on a flat surface and covered by a lightweight metal plate approximately 23 cm square, weights shall be placed on the plate until the band collapses. The weight required to collapse the specimens shall not be less than 31.75 kg.

4.1.10 **Eyelets** - Shall be commercial type, brass or aluminum, black finish, 4 mm in length by 4 mm diameter before setting.

4.1.11 **Crown Seam Stay** - Shall be black, plain weave cotton canvas, 153-170 g/m² or a suitable alternative material acceptable to the RCMP.

4.1.12 **Peak and Chin Strap** - The top ply of the peak and the chin strap shall be a smooth high gloss polyurethane material 1.5 ± .075 mm in thickness, consisting of a homogenous 100% polyurethane structure containing no free plasticizers and highly scuff resistant and high flex life quality. Weight 796 ± 50 g/m² grain and gloss retention at 300° F (148° C). No significant change. The bottom ply of the peak shall be leather, top quality cowhide, vegetable or combination tanned and shall be not less than 2 mm nor more than 2.5 mm in thickness. Black plumper paper 0.58 +/-0.05 mm in thickness, treated to retain its original shape after being submitted to an immersion test, shall be used between the top and bottom plies of the peak. The peak edge binding shall be black vinyl chloride flexible plastic film, 0.3 mm in thickness, having a smooth finish approximate to the finish of the top ply. Other materials for the peak may be considered if the appearance, physical characteristics and performance is deemed equal to the above requirements to the satisfaction of the R.C.M.P. The peak shall come with the appropriate gold coloured mylar embroidery indicating the officer's rank in accordance with the drawing and viewing sample. Peaks with an embroidered bar are to be supplied by the manufacturer, peaks with a single and double row of embroidered maple leaves will be supplied by the RCMP. Other materials may be provided if they are an acceptable equivalent to the above requirement.

Certificate of Compliance required.

4.1.13 **Peak Pad** - To be made of shell material specified in Para. 4.1.1.

- 4.1.14 **Sweat Band** - Shall be vegetable tanned, top grain sheepskin, 38 mm wide, 0.8 - 1.0 mm in thickness, table dyed to a light brown on the grain side, in accordance with the viewing sample. When tested in accordance with AATCC Method 15 for the effects of perspiration, the colour change and colour transfer shall be negligible. The leather shall be firm but not brittle, and no grain scars will be accepted. The sweatband shall be creased in accordance with the drawing and viewing sample.

Certification of compliance must be provided.

- 4.1.15 **Buttons** - Shall be 13mm brass tang RCMP buttons. To be purchased from the RCMP.

- 4.1.16 **Piping Filler** - Shall be kraft paper twine 1.5 mm diameter, or commercially available equivalent.

- 4.1.17 **Sewing Thread** – The thread must be polyester wrap, polyester core, Tex 50, Type 1, Class B of matching colour, meeting CAN/CGSB 4.131-93. Bonded nylon thread may be used in place of the polyester thread referenced above provided the minimum physical requirements are met.

Certification of compliance must be provided.

- 4.2 **Size and Dimensions** - Cap, Cloth, Officer's, to this specification shall be supplied in the sizes specified by the RCMP and to the dimensions given in the scale of measurements attached and forming part of this specification.

4.3 **Construction**

- 4.3.1 **Peak** - The top, bottom and plumper shall be cut of the materials specified in Para. 4.1.12 and shaped in accordance with the viewing sample. The appropriate gold coloured mylar embroidery indicating the officer's rank shall be attached to the top ply in accordance with the drawing and viewing sample. They shall be laminated together with latex or flexible glue. The outside edge of the peak shall be bound and stitched 1 mm from the folded edge of the binding strip. The binding shall finish 5 to 6 mm in width on top and bottom of the peak. The finish of the top ply of the finished peak shall be flexible and shall not peel, crack nor show evidence of delamination. The inside edge of the peak shall be skived and turned up to eliminate pressure on the head of the wearer of the cap. The peak shall be molded into a curved shape. The stiffness of the peak shall require a force of not less than 4.45 N to bend the peak through a 20 degree angle. All forage cap peaks shall be free from blemishes, staining, material residue build-up,

mold build-up or other such imperfections. Such 'residue' issues will be cause for rejection.

- 4.3.2 **Cutting** - The following cutting instructions must be strictly adhered to by the contractor.
- 4.3.2.1 The crown, body and bottom portion of the headband of each cap shall be cut from the same piece of material.
- 4.3.2.2 All component parts of each cap shall be marked to ensure a uniform shade and proper assembly throughout the cap.
- 4.3.3 **Crown** - Shall be made of a piece of shell material combined with material in accordance with Para. 4.1.5 and laminated to the underside by heat. After lamination, the shell material and lining, in accordance with Para. 4.1.4, shall be superimposed and stitched around together 5 mm gauge. The crown shall be shaped as per the viewing sample and dimensioned in accordance with the scale of measurements.
- 4.3.4 **Overlining** - A piece of overlining material specified in Para. 4.1.6 is to cover the crown area in accordance with the viewing sample.
- 4.3.5 **Piping** - Shall be un-laminated shell material 19 mm in width and 38 mm longer than the circumference of the crown. The ends shall be joined with a 6 mm seam, and the seam pressed open. The width of the material shall be folded in half to form two plies, and a filler specified in Para. 4.1.16 placed between the plies to form a piping.
- 4.3.6 **Badge Stay and Grommet** - The crown of each cap shall be fitted with a grommet in accordance with Para. 4.1.8 of appropriate size together with the assembled badge stay, in order that the crown and front body of the finished cap will be kept taut. The free end of the badge stay shall be properly secured to the centre front of the headband stiffener, as per the viewing sample.
- 4.3.7 **Body (Bevels)** - The body shall be made of four pieces of shell material laminated in the same manner as specified for the crown in Para. 4.3.3. The four pieces shall then be joined together with 6 mm seams and the seams pressed open. The body shall be shaped and dimensioned as per the viewing sample and scale of measurements.

- 4.3.8 **Joining-Crown, Lining, Laminated Lining, Piping, Badge Stay and Bevels**
- Seam piping to crown, with the joins of the bevel located centre front, centre back and mid sides, the badge stay centred at the top of the front bevel seam, join these components together by seaming. Open the components together by seaming. Open the seam. Cover the seam with a strip of canvas specified in Para. 4.1.11. This strip of canvas shall be secured by stitching as closely as possible above and below the seam. This operation is necessary to obtain the desired roll effect. The piping shall protrude equally all around in accordance with the viewing sample.
- 4.3.9 **Eyelets** - Two eyelets specified in Para. 4.1.10 shall be placed on each side of the body bevels in accordance with the viewing sample.
- 4.3.10 **Headband Stiffener** - Shall be made of a piece of polyethylene material in accordance with Para. 4.1.9 and be approximately 3 cm longer than the headbands circumference measurement. The ends shall be joined by overlapping to the required measurement, and stitching 2cm gauge top and bottom.
- The inside of the stiffener shall be covered with a piece of lining material specified in para.4.1.4, measuring not less than 75 mm in width, length as required. The top edge of the lining shall overlap the top edge of the stiffener not less than 1 cm and stitched 6 mm gauge. During this operation, the raw end to the lining shall be folded under.
- The outside of the stiffener shall be covered with the combined bottom portion of the headband and the yellow headband specified in Para. 4.1.3, measuring not less than 8 cm in width, length as required. The ends shall be joined by seaming and the seam pressed open. The bottom edge shall be serged. The cover shall be positioned on the stiffener with the serged edge overlapping the bottom of the lining by not less than 13 mm, and the three plies seamed together. The cover shall be folded upwards so that the raw edge is level with the top of the stiffener. Stitch through 3 mm gauge.
- 4.3.11 **Joining - Band to Bevel** - With the headband seam in line with the front seam of the bevel, seam the top of the band to the bottom of the bevel.
- 4.3.12 **Peak Pad - Back Edge** - A piece of shell material or acceptable substitute measuring 30 mm in width and long enough to extend not less than 13 mm beyond both ends of the peak, shall be folded in half, raw edges overlapped, and stitched 3 mm gauge to the back of the peak. As an alternative method this binding may be sewn to the sweatband.

- 4.3.13 **Headband Finishing** - Shall be in accordance with the viewing sample.
- 4.3.14 **Securing Peak** - The peak specified in Para. 4.1.12 shall be centred on the front of the headband and with the headband overlapping the back edge of the peak 6 mm, stitched 3 mm gauge with 2.5 - 3 stitches per cm, using thread in accordance with Para. 4.1.17.
- 4.3.15 **Sweatband Badge Stay**
- 4.3.15.1 The bottom edge of the badge stay shall be securely tacked to the inner bottom portion of the headband using thread in accordance with Para. 4.1.17.
- 4.3.15.2 The sweatband specified in Para. 4.1.14 shall be cut 13 mm longer than the inside circumference of the headband. The bottom edge of the sweatband shall be placed 3 mm above the inside bottom edge of the headband to which it shall be hand felled with 2.5 -3 stitches per cm using the thread specified in Para. 4.1.17. Before felling, one end of the sweatband shall be trimmed off at an angle so that when sewn on, the straight end shall overlap the other end only 3 mm at the bottom. The overlap shall be centred with the back of the cap. A bow made of a piece of commercially available woven rayon tape 1 cm in width and equal in quality to that used in the viewing sample shall be securely sewn through the overlapping ends, 1cm below the top of the sweatband.
- 4.3.16 **Chin Strap Buttons** - A brass tang button specified in Para. 4.1.15 shall be positioned at each side of the cap, 13 mm behind the end of the peak and 1 cm above the bottom edge of the band.
- 4.3.17 **Chin Strap** - A chin strap of the material specified in Para. 4.1.12, constructed and dimensioned in accordance with the drawing shall be buttoned to the bottoms at each side of the cap.
- 4.3.18 **Sewing**
- 4.3.18.1 **Machine Sewing** - All seams and stitching shall be lockstitch with not less than 4 nor more than 5 stitches per cm. The ends of all stitching, also breaks in thread during seaming, shall be securely backstitch tacked, unless secured by other stitching.
- 4.3.18.2 **Sweatband** – Shall be as specified in accordance with Para. 4.3.15.2.

- 4.3.18.3 **Securing Peak** - Shall be as specified in Para. 4.3.14.
- 4.3.19 **Pressing and Finishing** - Each cap shall be blocked, steamed properly shaped and finished to the satisfaction of the RCMP. Care shall be taken to ensure that all caps are allowed to dry thoroughly prior to being packaged for shipment.
- 4.3.20 **Marking** - Each cap shall be legibly and indelibly marked in accordance with good commercial practice with the following information:
- Contractor's Identification
 - Letters RCMP-GRC
 - Date of Manufacture – Year and month in numerical format – e.g. YYYY/MM.
 - Size of Cap and circumference in imperial and metric
 - RCMP Stock Number
- 4.3.21 **Pre-Punching of Headbands** - The headband shall be punched with a hole 3 mm in diameter in accordance with the drawing and viewing sample. It will be most important to accurately position the punch hole to insure correct badge positioning. The hole is to be positioned 12 mm below the crown/headband seam and accurately centred on the middle seam.

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

- 5.1 Unless otherwise specified the items shall be delivered to the Commissioner, RCMP, Uniform & Equipment Program, Ottawa, Ontario, free of transportation charges, provincial tax and federal tax where applicable.
- 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 RCMP, 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 RCMP, Uniform & Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor may use his own facilities or any commercial testing establishment acceptable to the RCMP, Uniform & Equipment Program.

- 6.2 The RCMP, 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 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-reparable 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.

Table I**Scale of Measurements - Cap, Cloth, Officer's**

Size Designation		Cap Measurements						
Size	Inside Circumference of headband cm	Full finished length of crown mm	Full finished width of crown mm	Depth of Body in Line With:			Depth of headband mm	Finished depth of peak underside mm
				Front Seam mm	Side Seams mm	Back Seam mm		
6	48	242	235	54	50	50	57	50
6 ¹ / ₈	49	245	238	54	50	50	57	50
6 ¹ / ₄	50	248	241	54	50	50	57	50
6 ³ / ₈	51	251	244	54	50	50	57	50
6 ¹ / ₂	52	254	248	54	50	50	57	50
6 ⁵ / ₈	53	257	251	54	50	50	57	50
6 ³ / ₄	54	260	254	54	50	50	57	50
6 ⁷ / ₈	55	264	257	54	50	50	57	50
7	56	267	260	54	50	50	57	50
7 ¹ / ₈	57	270	264	54	50	50	57	50
7 ¹ / ₄	58	273	267	54	50	50	57	50
7 ³ / ₈	59	276	270	54	50	50	57	50
7 ¹ / ₂	60	279	273	54	50	50	57	50
7 ⁵ / ₈	61	283	276	54	50	50	57	50
7 ³ / ₄	62	286	279	54	50	50	57	50
7 ⁷ / ₈	63	289	281	54	50	50	57	50
Tolerance +/-	3 mm	3 mm	3 mm	1.5 mm	1.5 mm	1.5 mm	3 mm	1.5 mm

Table II**Shell Fabric**

Property	Requirement	Test Method
Material	83% wool/17% cotton	---
Mass	370 g/m ² minimum	CAN/CGSB 2-4.2 Method 5.1
Woven fabric Count (yarns per cm)		CAN/CGSB 2-4.2 Method 6
- Warp	13 minimum	
- Weft	13 minimum	
Weave	2/2 Twill	---
Breaking Strength		
- Warp	1068 N minimum	CAN/CGSB 2-4.2 Method 9.1
- Weft	845 N minimum	
Colour Fastness		
- to crocking (dry & wet)	No more than grey scale 5	CAN/CGSB 2-4.2 Method 22 M90
- to light	Equal to AATCC L7	CAN/CGSB 2-4.2 Method 18.3 M97 ISO 105-B02:1994

Appendix A

Certification & Testing Criteria

Appendix A contains the definitions for certificate of compliance and test reports that are required for this specification. The tables of requirements shall be used by the manufacturer and RCMP Uniform & Equipment Program to ensure proper documentation is received and meets the requirements outlined in this specification.

Certification of compliance: Compliance certification documents must 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 supplier is also acceptable.

Certification & Evaluation Criteria

Para. Title/Test	Certification of Compliance	Pass/Fail
Shell Material (Para. 4.1.1 & Table I)	Required	
Peak & Chin Strap (Para. 4.1.12)	Required	
Sweatband (Para. 4.1.14)	Required	
Thread (Para. 4.1.17)	Required	