



Royal Canadian Mounted Police  
Gendarmerie royale du Canada

Doc. no: G.S. 1045-234  
Date: 2020-01-24

# Specification

## Balaclava, White

This document has 14 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 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 must govern.

It may be obtained from:

Royal Canadian Mounted Police  
ATTN: Uniform and Equipment Program  
(440 Coventry Road, Warehouse Building)  
73 Leikin Drive  
Ottawa, Ontario  
K1A 0R2

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

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

**SPECIFICATION**  
**Balaclava, White**

**1 Definitions**

- 1.1 This specification shall govern the manufacture and inspection of Balaclava, White. The specific items covered under this specification with stock number is as follows:
- i. 2370 Balaclava, White / Passe-Montagne, Blanc
- 1.2 This specification, pattern, 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 RCMP Balaclava, White.
- 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 **Canadian General Standards Board (CAN/CGSB);**
- |                           |  |
|---------------------------|--|
| 4.2 No. 5.1-M90 (R2013)   | Textile test methods – Unit mass of fabrics                                  |
| 4.2 No. 14-2005           | Textile test methods – Quantitative Analysis of Fibre Mixtures               |
| 4.2 No. 19.1-2004 (R2013) | Textile test methods – Colourfastness to washing, Accelerated test           |
| 4.2 No. 23-M90 (R2013)    | Textile test methods – Colourfastness to perspiration                        |
| 4.2 No. 58-2019           | Textile test methods – Dimensional change in domestic laundering of textiles |
| 86.1-2003                 | Care Labelling of Textiles   |
- 2.3 **General Services Administration – US Government**
- Commercial Item Description**
- |           |                        |
|-----------|------------------------|
| A-A-59989 | Thread, Polyester Spun |
|-----------|------------------------|

- 2.4 **American Society for Testing and Materials (ASTM)**
- |                         |  |
|-------------------------|--|
| D3512/D3512M-16         | Standard Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Random Tumble Pilling Tester |
| D3776/D3776M-09a (2017) | Standard Test Methods for Mass per unit Area (Weight) of Fabric  |
| D8007-15 <sup>e1</sup>  | Standard Test Method for Wale and Course Count of Weft Knitted Fabrics   |
- 2.5 **International Standards Organization (ISO)**
- |              |   |
|--------------|---|
| 105-E04:2013 | Colourfastness to perspiration                      |
| 7211-2:1984  | Determination of number of threads per unit length. |
| 4915:1991    | Textiles – Stitch types                             |

### 3 **General Requirements**

- 3.1 The article or material covered by this specification must 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 must be equivalent in all respects to the pattern and viewing sample.
- 3.2 **Design** – The Balaclava, White must be a shaped head covering constructed in a white knit material. The design includes an opening for the eyes and side openings for ventilation. In all areas not covered by the specification, the viewing sample must govern.

### 4 **Detail Requirements**

- 4.1 **Components**
- 4.1.1 **Shell Material** – The shell material must be 83% polyester, 17% Elastane, stretch knit with a napped back, white in colour. The shell material must meet the requirements outlined in Table I. Oratex style #X3313 has been known to meet the requirement.

- 4.1.2 **Thread** – The thread must be polyester staple spun, Tex 27, of matching colour to the shell material, meeting U.S. government Commercial Item Description A-A-59989.
- 4.2 **Size and Dimensions** – The Balaclava, White must be supplied in the sizes specified by the RCMP and to the dimensions given in the scale of measurements and drawings. The garment components must be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in Appendix A.
- 4.3 **Construction**
- 4.3.1 **Stitching** - Ball point needles must be used for stitching through all components. Using the specified thread, there must be no less than three and no more than four stitches per cm for all stitching with the exception of flat lock. Flat lock stitching must be no less than four and no more than five stitches per cm. All stitching must conform to the specified type outlined in ISO 4915. The stitching at the back between the centre and the side hood must be flat lock stitching. The joining seams at the front throat must be overlock type 512 or 514. The stitching at the hem and openings must be cover stitch type 406. The beginning and ending of all stitching must be securely backstitch tacked, unless secured by other stitching.
- 4.3.2 **Assembly of the balaclava** – The balaclava must be made in shell material as specified in para. 4.1.1. The centre back must be stitched to the side hood and the extension of the front throat using thread specified in para. 4.1.2 with flat lock stitching. The lower front of the side hood must be joined to the lower front throat using overlock stitch type 512 or 514. The balaclava must be dimensioned as per the pattern and the drawings.
- 4.3.3 **Hem and Openings** – The hem and the openings of the balaclava must be finished turning in the raw edge and finishing using a cover stitch type 406.
- 4.3.4 **Marking & Cleaning Instructions Label** – Each balaclava must have a typed label machine printed or stamped in English and French attached in accordance with the requirements outlined below. The label must be positioned and sewn to the lower right side front seam 4-5 cm from the finished hem. The text must be printed in permanent inks of a contrasting colour and must withstand at least 50 washes with no change in appearance. All text except for the RCMP stock number and size must be in size 6 font. The RCMP stock number and size must appear in size 8 font. The manufacturer’s identification must not appear anywhere on the garment except

where indicated on the garment label. The label must contain the following information in English and French. Any portion of a hand written label is not acceptable.

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. 2370 000)
4. Size of the article, combining the size designation referred to in the English and French contract documents. (Ex. L/G)
5. Date of manufacture, in numeric format year/month (Ex. 2018/11)
6. Your manufacturer identification (Company name or number).
7. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash - cold (30°C)	Laver à la machine – à l’eau froide (30°C)
	<b>Do Not</b> use fabric softener or chlorine bleach	<b>Ne pas</b> utiliser d’agent assouplissant ni d’agent de blanchiment
	Tumble dry- low ( <b>Do Not</b> use dryer sheets)	Sécher par culbutage – à basse température ( <b>Ne pas</b> utiliser d’assouplissant en feuilles)
	Steam iron - low	Repasser à vapeur - à basse température
	The use of cleaning symbols as per CAN/CGSB 86.1-2003 is acceptable as replacement to text.	

## 5 Quality Assurance Provisions

- 5.1 **Responsibility for Inspection** – Unless otherwise stipulated in the Contract, it is the 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 must use an independent commercial testing establishment.

- 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 must 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. 2).

- 6.1 **Centre Width (Forehead)** – The distance measured across the centre at the forehead. (A).
- 6.2 **Centre Back Width** – The distance measured across the centre back at the top of the throat extension. (B).
- 6.3 **Centre Back Width (Lower Neckline)** – The distance measured across the centre back at the lower neckline. (C).
- 6.4 **Back Length** – The length must be the distance measured from the bottom of the throat extension to the hem at back. (D).
- 6.5 **Neck Circumference (total circumference)** – When placed flat on the side, the neck must be the distance across the balaclava measured 11.5 cm above the hem. The result must be doubled to measure total circumference. (E).

<b>Scale of Measurements – Balaclava, White</b>					
SIZE	GARMENT MEASUREMENTS				
Small	7.3	10.2	15.9	13.3	44.5
Medium	7.6	11.1	16.5	13.6	47.5
Large	7.9	11.7	17.1	14	50.8
TOLERANCES ±	0.75	0.75	0.75	0.75	0.75
MEASUREMENT LOCATION	A	B	C	D	E

**NOTE:** All dimensions are in centimetres unless otherwise indicated.

**TABLE I**  
**Properties of Shell Material**

	<b>TEST</b>	<b>RCMP REQUIREMENTS</b>		<b>TEST METHOD</b>
1	Colour	White To match colour swatch provided by Uniform and Equipment Program		
2	Knit Construction			<ul style="list-style-type: none"> <li>• Visual</li> </ul>
3	Fiber Content	83% Polyester 17% Elastane $\pm$ 3%		<ul style="list-style-type: none"> <li>• CAN/CGSB-4.2 No. 14-2005</li> </ul>
4	Yarns per inch	Wales:	40 $\pm$ 3	<ul style="list-style-type: none"> <li>• ASTM D8007-15<sup>e1</sup></li> <li><b>OR</b></li> <li>• ISO 7211-2</li> </ul>
		Courses:	62 $\pm$ 3	
5	Mass	260 g/m <sup>2</sup> $\pm$ 8 g/m <sup>2</sup> (252 g/m <sup>2</sup> – 268 g/m <sup>2</sup> )		<ul style="list-style-type: none"> <li>• CAN/CGSB-4.2 No. 5.1-M90 (R2013)</li> <li><b>OR</b></li> <li>• ASTM D3776/D3776M-09a (2017)</li> </ul>
6	Dimensional Change to Domestic Washing <i>After 5 cycles</i>	Warp	5% max.	<ul style="list-style-type: none"> <li>• CAN/CGSB-4.2 No. 58-2019 Wash Procedure 2 and Dry Procedure D3</li> </ul>
		Weft	5% max.	
7	Colourfastness to Washing	Colour change	Grey Scale 4 or better	<ul style="list-style-type: none"> <li>• CAN/CGSB-4.2 No. 19.1-2004 (R2013) Test No.5</li> </ul>
		Staining cotton	Grey Scale 4 or better	
		Staining polyester	Grey Scale 4 or better	
8	Colourfastness - To Perspiration (Acid & Alkaline)	Acid	Colour Change: Gray Scale 4 or better Staining (Cotton & Polyester): Gray Scale 4 or better	<ul style="list-style-type: none"> <li>• CAN/CGSB-4.2 No. 23-M90 (R2013)</li> <li><b>OR</b></li> <li>• ISO 105-E04:2013</li> </ul>
		Alkaline	Colour Change: Gray Scale 4 or better Staining (Cotton & Polyester): Gray Scale 4 or better	
9	Pilling	after 120 min. - no less than 4		<ul style="list-style-type: none"> <li>• ASTM D3512/D3512M-16</li> </ul>

## APPENDIX A

### **Sealed Pattern Identifier**

Pattern Titles: Balaclava, White

Patterns - Patterns are available from the RCMP, Uniform and Equipment Program. Firms requested to produce Pre-Award Samples will be provided with the base pattern only. The full set of patterns in individual sizes will be provided to the successful bidder after the contract is awarded. The bidder will receive the files electronically in a .DXF format unless paper is requested.

The patterns include seam allowances, drill holes and/or placement templates. All pieces must be cut in the direction indicated on the grain line of the pattern pieces. Manufacturers are required to make changes to the pattern, if necessary, in order to meet the scale of measurements and/or to suit the production process, however, the design and grade must not be affected or changed.

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

Pattern Pieces: 3 pattern components per file.

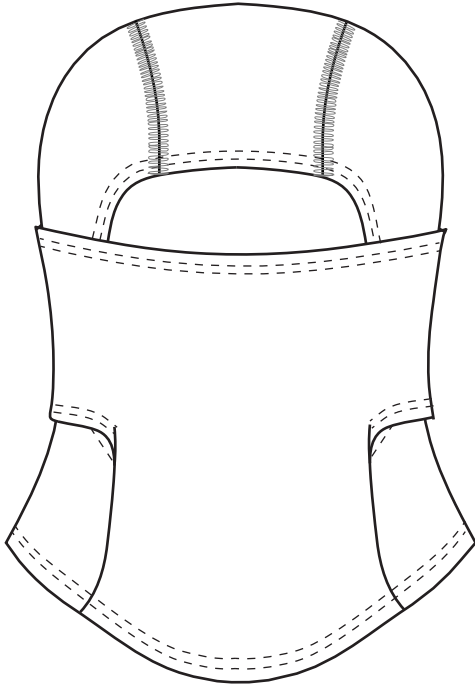
<b><u>Legend:</u></b>	
Shell Material	= Para. 4.1.1
Cut 1 Single	= Cut 1
Cut 1 Paired (RSU)	= Cut 2 = Right Side Up

<b>Pattern Components</b>	<b>Nomenclature</b>	<b>Quantity to be cut</b>	<b>Material</b>
# 1 of 3	Centre Back	1 Single	Shell Material (RSU)
# 2 of 3	Side Hood	1 Paired	Shell Material
# 3 of 3	Front Throat	1 Single	Shell Material (RSU)

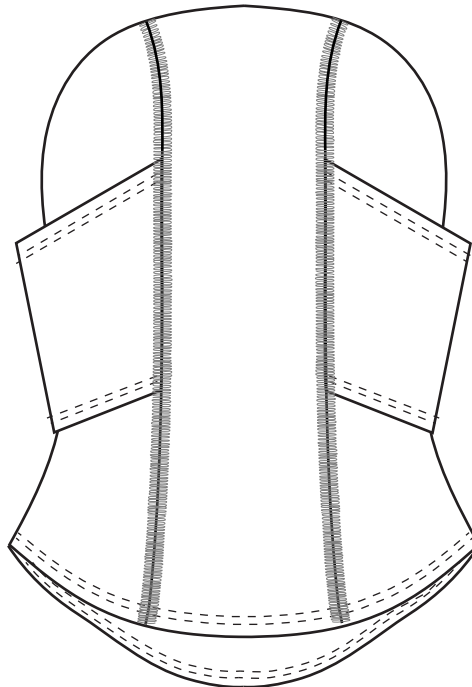
# Drawing 1

G.S. 1045-234

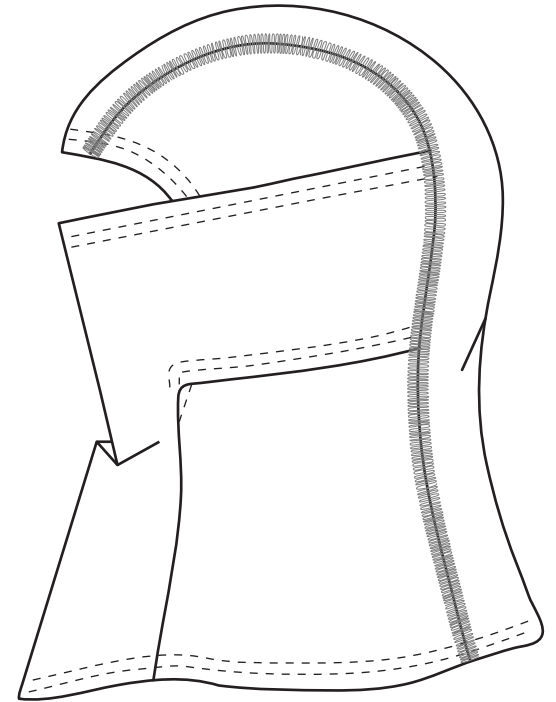
Balaclava, White



Front



Back



Side

NOT TO SCALE

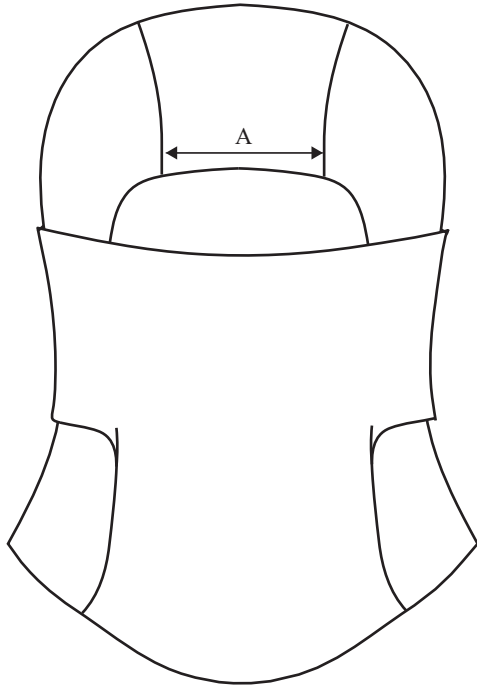
All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.

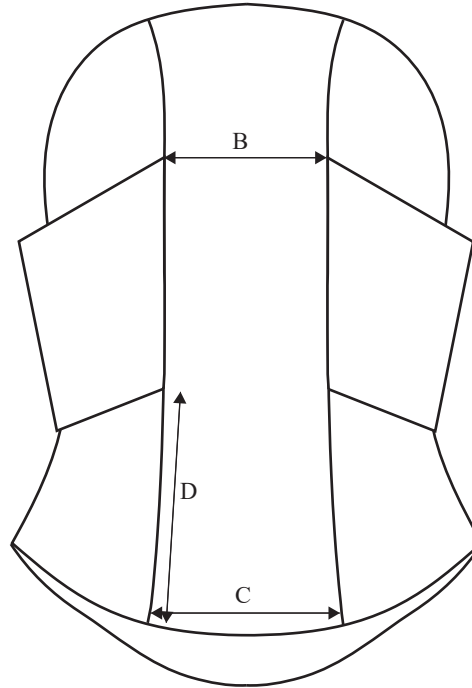
# Drawing 2

G.S. 1045-234

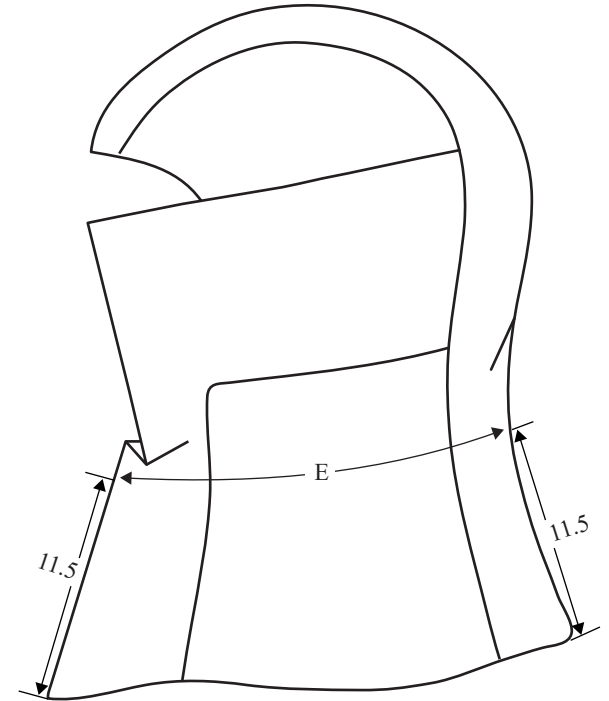
Balaclava, White  
Measurement Location



Front



Back



Side

NOT TO SCALE

All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.