



Royal Canadian Mounted Police  
Gendarmerie royale du Canada

Doc. no: G.S. 1045-083  
Date: 2013-03-04

# Specification

## Cloth, Tape, Polyester

This document has 10 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: Quality Control  
(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**

### **CLOTH, TAPE, POLYESTER**

#### **1. Definition**

- 1.1 This specification shall govern the manufacture and inspection of Cloth, Tape, Polyester.
- 1.2 This specification, viewing sample, 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 Cloth, Tape, Polyester.

#### **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 FTMS 191A, Method 4108, Federal Testing Method Standard
- 2.4 AATCC – 132, American Association of Textile Chemists and Colorists – Technical Manual.

#### **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** - The finished product shall meet all requirements and inspections covered by this specification. No departure from this specification shall be permitted unless authorized by the RCMP.
- 3.3 In the event of any inconsistency in contract documents, or specification, the aforementioned shall prevail in the following order:
  - (i) Contract
  - (ii) Specification
  - (iii) Viewing Sample

#### 4. Detail Requirements

- 4.1 **Certification** – Test data must be provided, from an independent testing facility as specified in Para. 6.1, for the requirements in Para. 4.2 to 4.11 and 4.15.1 to 4.15.4. All requirements and test methods are provided below.
- 4.2 **Width** - 35mm +/- 1mm (CAN/CGSB-4.2, Method 4.1-2008)
- 4.3 **Weave** - 2/2 Right hand (Z) twill, 2 ends as one.
- 4.4 **Fiber Content** - The warp and weft yarns shall be 100% Polyester, 2 ply, 167 decitex textured polyester.  
(CAN/CGSB-4.2, Method 14.18-M91)
- 4.5 **Mass** – Shall be 11-12.5 g/linear meter  
(CAN/ CGSB-4.2 Method 5.1-M90)
- 4.6 **Fabric Count (Yarns per cm)** - Not less than 36 in the warp and not less than 33 in the weft.  
(CAN/CGSB-4.2 Method 6-M89).
- 4.7 **Dimensional Change in Wetting** - Not more than 1.5 percent in warp or weft.  
(CAN/CGSB-4.2 Method 25.1-97 Tensionless pressing at 110 C).
- 4.8 **Dimensional Change in Dry Cleaning** - Not more than 2 percent in warp or Weft after 3 dry cleaning cycles.  
(CAN/CGSB-4.2 Method 30-M90, 200 °C pressing).
- 4.9 **Dimensional Change in Domestic Laundering** - Not more than 1.5 percent in warp or weft.  
(CAN/CGSB-4.2 Method 58-2004, washing procedure V, dry procedure C).
- 4.10 **Dimensional Change in Pressing** - Not more than 1.5 percent in warp or Weft Open head steaming.  
(CAN/CGSB-4.2 Method 25.2-M89).
- 4.11 **Breaking Strength** - Not less than 1700 N  
(FTMS 191A Method 4108 July 20, 1978)
- 4.12 **Dye** – The material shall be yarn dyed. **Certificate of Compliance required.**
- 4.13 **Finishing** - The tape shall be subjected to a calendering treatment with rollers at a temperature of 180 degrees Celsius in a damp atmosphere. **Certificate of Compliance required.**
- 4.14 **Colour** – The viewing sample of the officer’s stripe (G.S.1045-278) will be used for colour reference only or as otherwise specified in the purchase documents.

The colour shall be evaluated under CIELab, illuminant Daylight 65 at 10° observer. Viewing sample available from R.C.M.P. Quality Control.

- 4.15 **Colour Fastness – Test Data required.**
- 4.15.1 **To Light** - At least equal to AATCC Standard L 5. (CAN/CGSB-4.2 Method 18.3-97).
- 4.15.2 **To Crocking – Dry & Wet (Water)** - No more staining than grey scale 4-5 for dry crocking, and grey scale 4 for wet crocking. (CAN/CGSB-4.2 Method 22-2004).
- 4.15.3 **To Washing** – There shall be no more change in shade than grey scale 4-5 and no more staining than grey scale 4. (CAN/CGSB-4.2 Method 19.1-2004, Test 2).
- 4.15.4 **To Dry Cleaning** - There shall be no more change in shade than grey scale 4 and no more staining than grey scale 4-5. (AATCC 132-2004).
- 4.16 **Packaging** - The tape shall be packaged in rolls of 50m. Splicing of the tape is not permitted but smaller rolls of 25m (minimum) will be acceptable for 10% of the total quantity. The tape shall be rolled with face side rolled inside and the twill direction shall be bottom left to top right (**“Z” twill**) when unrolled.
- 4.17 **Defects** - All defects (imperfections or blemishes) affecting appearance or serviceability, clearly visible under normal inspection conditions as defined below, shall be strung (flagged) on one edge using colour fast strings. The number of defects in shall not exceed 10 per 100 linear meters of tape (9 per 90 etc.). Allowance for every string shall be made and deducted from gross piece meters on the basis of 0.20 meters for each defect, except where two or more defects represent a single local condition of the material, in which case only the more serious defect shall be counted. A continuous defect shall be counted as one defect for each warp wise 0.20 meter or fraction thereof, in which it occurs. A further 0.20 meter deduction from the gross piece meter shall be made when splicing of a piece occurs.

**Normal Inspection Conditions** - Viewed under lighting conditions of day light 65.

**NOTE: A complete inspection report on every dye lot must be provided based on above criteria. Each report (dye lot) shall itemize defects/splices by piece number. Each inspection report shall be forwarded to RCMP, PD &SS prior to shipping of lot. Failure to comply shall be cause for rejection of shipment.**

4.18 **Outright Rejection** – At the discretion of the RCMP Quality Control, if the following conditions are prevalent throughout it shall be a cause for rejection of the full piece.

- mill creases/calendar marks
- edge to edge shading
- staining
- tears, holes or marks
- weak or tender fabric

4.19 **Piece Marking** - Each piece shall have a ticket attached to the selvedge at one end. The ticket shall be made of heavy cardboard with a reinforced eyelet for attaching a cord or bar coded ticket. Another identical label shall be attached or stick to the outside of the wrapping. Both tickets shall be legibly printed with the following information:

- i) Nomenclature
- ii) Specification Number
- iii) RCMP Stock Number
- iv) Contract Number
- v) Colour
- vi) Piece Number
- vii) Piece Width
- viii) Gross Total (including allowance)
- ix) Net Total
- x) Date of Manufacture
- xi) Manufacturer's Identification

## 5. **Preparation for Delivery**

5.1 Unless otherwise specified the items shall be delivered to the Commissioner, R.C.M.P., Quality Control Section, Ottawa, Ontario, free of transportation charges, Provincial 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, Quality Control that the material and services being supplied conform to this tender, contract and specification. This shall be accomplished by performing the tests specified in this specification. The contractor must use any independent, North American, ISO 9001 certified and ISO 17025 "Textile" certified testing facilities. Certification will be required.

Note: CTT Group Inc., Quebec, is known to meet this requirement.

- 6.2 **Test Methods** - The methods of test shall be as specified with each requirement.

- 6.3 The RCMP, Quality Control reserves the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. Inspection may be done during manufacture and is subject to testing and approval by the RCMP Quality Control. Imperfections shall be assessed in accordance with current RCMP practice. If the cloth is found to be inferior to the viewing sample or not in accordance with this specification, the entire delivery may be rejected. The entire delivery may also be rejected if it is found that materials previously rejected due to non-repairable defects are redelivered for inspection.

- 6.4 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.



### Evaluation Criteria

The evaluation criteria is a reference list used by RCMP Quality Control Section to ensure all required documentation has been received and meets the requirements outlined in this specification.

**Definitions:**

**Certificate of Compliance:** Compliance certification documents shall be based on testing from a raw goods manufacturer from an in-house or independent laboratory acceptable to the RCMP to verify performance requirements as specified in this specification.

**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. Failure to provide the requested documentation shall be cause for rejection. Failure to meet the requirements when tested by the RCMP Quality Control Section shall be cause for rejection.

Para.	Title/Test	Test Methods CAN/CGSB-4.2	Requirement	Test Report Results	Pass or Fail	
4.1	Lab Facility Used		Certified Independent Test Facility			
4.2	Width	Method 4.1-2008	35 mm ±1 mm			
4.3	Weave		2/2 Right Hand "Z" twill, 2 ends as one			
4.4	Fiber Content (Analysis of Fibers)	Method 14.18-M91	100% Textured Polyester			
4.5	Mass (g/linear metre)	Method 5.1-M90(2004)	11 – 12.5 g/linear metre			
4.6	Woven Fabrics - Construction (Yarns per cm)	Method 6-M89	<b>No less than</b>	<b>No less than</b>		
			Warp	36	Warp	
			Weft	33	Weft	
4.7	Dimensional Change in Wetting	Method 25.1-97 (Tensionless pressing at 110°C)	<b>No more than</b>	<b>No more than</b>		
			Warp	1.5%		
			Weft	1.5%		
4.8	Dimensional Change in Dry Cleaning (3 cycles)	Method 30-M90 (200°C pressing)	<b>No more than</b>	<b>No more than</b>		
			Warp	2%		
			Weft	2%		
4.9	Dimensional Change in Domestic Laundering	Method 58-2004 (Washing Procedure V and drying procedure C)	<b>No more than</b>	<b>No more than</b>		
			Warp	1.5%	Warp	
			Weft	1.5%	Weft	

Para.	Title/Test	Test Methods CAN/CGSB-4.2	Requirement	Test Report Results	Pass or Fail	
4.10	Dimensional Change in Pressing	Method 25.2-M89 (2004) (Open head steaming)	<b>No more than</b>	<b>No more than</b>		
			Warp	1.5%	Warp	
			Weft	1.5%	Weft	
4.11	Breaking Strength (Tensile)	FTMS 191A Method 4108	<b>No less than</b>	1700 N	<b>No less than</b>	
4.12	Dye		Yarn Dyed	Certificate of Compliance Required		
4.13	Finish		Calendared at 180 degrees Celsius	Certificate of Compliance Required		
4.14	Colour		As per viewing sample			
4.15.1	Colourfastness to Light	Method 18.3-97	<b>equal to or better than</b> AATCC Standard L5			
4.15.2	Colourfastness to Crocking	Method 22-2004	<b>No more Staining than Grey Scale</b>	<b>No more Staining than Grey Scale</b>		
			<u>Dry:</u> Warp	4 - 5	<u>Dry:</u> Warp	
			<u>Dry:</u> Weft	4 - 5	<u>Dry:</u> Weft	
			<u>Wet:</u> Warp	4	<u>Wet:</u> Warp	
			<u>Wet:</u> Weft	4	<u>Wet:</u> Weft	
4.15.3	Colourfastness to Laundering	Method 19.1-2004 Test 2	<b>No less than Grey Scale</b>	<b>No less than Grey Scale</b>		
			Colour Change	4 - 5	Colour Change	
			<u>Staining:</u>		<u>Staining:</u>	
			Acetate	4	Acetate	
			Cotton	4	Cotton	
			Nylon	4	Nylon	
			Polyester	4	Polyester	
			Acrylic	4	Acrylic	
Wool	4	Wool				
4.15.4	Colourfastness to Dry Cleaning	AATCC 132-2004	<b>No less than Grey Scale</b>	<b>No less than Grey Scale</b>		
			Colour Change	4	Colour Change	
			<u>Staining:</u>		<u>Staining:</u>	
			Acetate	4 - 5	Acetate	
			Cotton	4 - 5	Cotton	
			Nylon	4 - 5	Nylon	
			Polyester	4 - 5	Polyester	
			Acrylic	4 - 5	Acrylic	
Wool	4 - 5	Wool				
4.16	Packaging	50m per roll. Splicing of tape is not permitted. Rolls of 25 metres minimum will be acceptable for 10% of shipment. Tape shall be rolled "Z" twill face inside.				
4.17	Defects	Less than 10 defects per every 100 linear meters (9 for 90 meters etc.)				