



Royal Canadian Mounted Police
Gendarmerie Royale du Canada

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Specification

Belt, Waist, Leather, Black

This document has 14 pages including the drawing.

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
1983-09-22	Page 5, para. 4.3	3 sizes added.
1989-04-18	Page 3, paras. 4.1.1.6	Colour changed to black.
2004-11-09	Para. 4.1.1.6	Flesh side to natural or black in colour.
2007-09-25	Para. 4.1.4, Drawing 1	Buckle dimension
2014-09-02	Para. 1.1 Para. 1.4 Paras. 2.2 - 2.5 Para. 3.2 (new) Para. 3.3 (deleted) Paras. 4.1.1, 4.1.1.2, 4.1.1.3, 4.1.1.4 Para. 4.1.2 Paras. 4.1.4, 4.1.4.1 Para. 4.4.3 Para. 4.4.5 Para. 5 (deleted) Drawing 1 Appendix A added	RCMP stock number added. New paragraph – Translation. New leather and thread standards. Design paragraph added. Paragraph deleted. Leather requirements amended; Certificate of Compliance required. New thread requirement; Certificate of Compliance required. Buckle detail amended; Certificates of Compliance required for metal content and finish. Creasing distance tolerance added. Stitch count added. Paragraph 5 deleted, following paragraphs renumbered. Measurement tolerances added; dimension detail amended. Appendix A, Certifications of Compliance.
2015-07-03	Para. 2.4 (Deleted) Para. 3.2 Paras. 4.1.1, 4.1.1.1, 4.1.1.2, 4.1.1.3 and 4.1.3(Deleted) Para. 4.1.4.1 (Deleted) Para. 4.4.1 to 4.4.4 (Combined) Para. 4.2 Para. 4.4.5 Para. 4.5 (Deleted) Para. 5 (Deleted) Appendix A (Deleted) Scale of Measurements (New)	Removed non-applicable Test Method. Reworked design description. All leather properties for belt and keeper were combined into Leather paragraph 4.1.1 & Table 1 (added). Subsequent paragraphs renumbered. All buckle requirements were joined into paragraph 4.1.3 Skiving, beveling, creasing and edge finishing were grouped into paragraph 4.3.1 entitled Cutting & Finishing. Size and Dimensions paragraph modified. Renumbered/Renamed to paragraph 4.3.2 Stitching & Assembly. All subsequent paragraphs renumbered. Updated Marking information - now paragraph 4.4 All subsequent paragraphs renumbered. Appendix A, information for Certificates of Compliance deleted. A Scale of Measurement page was added.

2018-08-29	<p>Title</p> <p>Para. 2.2</p> <p>Para. 4.1.1 - 4.1.3</p> <p>Para. 4.3.2</p> <p>Scale of Measurements</p> <p>Table I</p> <p>Table II (new)</p> <p>Drawings</p>	<p>Title modified to include colour name.</p> <p>Paragraph modified to include relevant standards.</p> <p>Paragraphs modified for updated information and clarity.</p> <p>Paragraph modified for stitch length.</p> <p>Scale of measurements and tolerances modified.</p> <p>Table updated with additional testing requirements.</p> <p>New table for metal composition of belt buckle.</p> <p>Drawings modified.</p>

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 & 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
Belt, Waist, Leather, Black

1. Definitions

- 1.1 This specification must govern the manufacture and inspection of Belt, Waist, Leather, Black. The specific item covered under this specification with stock number is as follows:
- i. 2460 – Belt, Waist, Leather, Black / Ceinture en cuir noire;
 - ii. 2461-005 – Belt, Waist, Leather, Black, Specials / Ceinture en cuir noire, tailles spéciales.
- 1.2 This specification, viewing sample, drawing 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 Belt, Waist, Leather.
- 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 **American Society for Testing and Materials (ASTM)**
- | | |
|------------------|--|
| B86-13 | Standard Specification for Zinc and Zinc-Aluminum Alloy Foundry and Die Castings |
| D2208-16 | Standard Test Method for Breaking Strength of Leather by the Grab Method |
| D5053-03 (R2015) | Standard Test Method for Colourfastness of Crocking of Leather |
| D6075-13 | Standard Test Method for Cracking Resistance of Leather |
- 2.3 **International Standards Organization (ISO)**
- | | |
|------------|---|
| 17131:2012 | Leather – Identification of leather by microscopy |
|------------|---|

- 2.4 **British Standard- European Standard (BS EN)**
15987:2015 Leather – Terminology – Key definitions for the leather trade
- 2.5 **U.S. Government Standard**
A-A-59826A Thread, Nylon.

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 viewing sample.
- 3.2 **Design** – The Belt, Waist, Leather, Black must be a black leather dress belt with a metal single prong belt buckle, seven adjustment prong holes and a permanent keeper.

4. **Detail Requirements**

4.1 **Components**

- 4.1.1 **Leather** – The leather must be full grain vegetable tanned from fresh or cured packer steer hides. Dry hides must not be used. The finished leather must be thoroughly tanned and be firm, tight fibred and mellow. Loose or pipy leather will not be accepted. It must be free from slaughter cuts, damaged grain, open scratches, open grub holes, brands or heavy fat wrinkles. Light well-healed over scratches or grub holes and light wrinkles that do not affect appearance will be accepted in the finished leather. The grain side must be stained black with a stain that will penetrate below the grain surface. A durable and colourfast finish must be applied on top of the stain. Reconstituted, split, pressed or patent leather will not be accepted. The finished leather must be firm and tight fibered with no signs of cracking. The flesh side must be free from loose flesh and must be buffed to a smooth natural finish. The leather thickness must measure from 2.9 mm to 3.3 mm for the belt and from 2 mm to 2.5 mm for the keeper. The leather must meet the physical requirements in Table I.

- 4.1.2 **Thread** – The thread must be twisted multifilaments bonded nylon, left twist, Type II, Class A, size FF (Tex 135) with a minimum breaking strength of 17.5 pounds in accordance with U.S. government standard A-A-59826A, black in color to match the leather.
- 4.1.3 **Buckle**
- 4.1.3.1 **Buckle – Metal Composition** – The base metal must be zinc alloy no. 3 for pressure die casting, conforming to the composition requirements in Table II.
- 4.1.3.2 **Buckle – Size** – The buckle must meet the size requirements in drawing 2.
- 4.1.3.3 **Buckle – Finish** – The buckle must be electroplated to a fine quality jewelry standard. The buckle must be adequately cleaned and polished prior to plating and have a bright nickel plating as an undercoating for the gold plating. A final electroplated, hard, 18k gold finish must be applied. The finish must be of the proper shade and must be no less than 0.2 µm thickness. The gold plating must be smooth, fine grained, and adherent and free from exposed base material or under plate. It must be free from blisters, pits, nodules, porosity, indications of burning, excessive edge build-up or other defects.
- 4.2 **Size & Dimensions** – The Belt, Waist, Leather, Black to this specification must be the distance from the inside edge of the buckle to the fourth prong hole, as illustrated in the drawing. The finished belt must conform to the dimensions given in the scale of measurements and drawing forming part of this specification.
- 4.3 **Construction**
- 4.3.1 **Cutting and Finishing** – The belt and keeper must be cut from leather as specified in para. 4.1.1. The buckle end of the belt must be taper skived reducing the end thickness to 1.5 mm to 1.8 mm. The skiving must start at the back end of the buckle tongue slot as per drawing 2. The belt must be bevelled on both edges and both sides with a bevel of 0.8 mm in width with a plus tolerance of 0.4 mm. The finished width of the belt must measure 3 cm. There must be a keeper 1 cm wide and dimensioned so that once buckled, the end of the belt fits easily through the keeper without being too tight or too loose. There must be seven (7) belt holes 5 mm in diameter and positioned as per Dimension B and C in drawing 1. Each edge of the belt and keeper must be creased on the grain side. The crease must be no less than 1 mm or more than 1.5 mm from the belt edge. The end portion and tip of the tongue must not be creased in accordance with the drawing. The edges of the belt

and keeper must be stained and filled with a wax type of black edging ink and then burnished to a solid smooth and durable edge, in full conformance with the viewing sample. Lacquer or varnish-type edge finishes must not be used.

- 4.3.2 **Stitching and Assembly** – The stitching must be lockstitch using the thread specified in para. 4.1.2. The assembled belt must be stitched between crease lines, as shown in the drawing. The number of stitches must be between 2 and 3 per centimeter. The loose thread ends must be trimmed off close to the leather. Burning or "flaming off" the thread ends is not permitted. The rows of stitching must be pounded down by means of a smooth flat faced riveting type of hammer.
- 4.4 **Marking** – Each belt must be identified by stamping or printing using contrasting permanent inks, on the body side of the belt; or alternatively by adding a permanent label affixed by stitching, at the buckle end backing of the belt; with the following information legibly marked:
1. The size, using only Imperial Designation. (Ex: 34)
 2. The RCMP stock number – reference the contract document (Ex: 2460 343)
 3. The manufacturer's identification (Company name or number)
 4. The date of manufacture - in numeric format year/month (Ex.: 2001/11)

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 R.C.M.P., Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor must use a commercial testing establishment acceptable to the RCMP, Uniform and Equipment Program.
- 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.

<u>SCALE OF MEASUREMENTS FOR BELT, WAIST, LEATHER, BLACK</u>			
Belt Size	Dimensions		
	The distance measured from the inside of the buckle to the fourth prong hole	The distance between prong holes	The distance measured from the center prong hole to the end of the tongue
	cm	cm	cm
24	64	2	13
26	69	2	13
28	74	2	13
30	79	2	13
32	84	2	13
34	89	2	13
36	94	2.5	15
38	99	2.5	15
40	104	2.5	15
42	109	2.5	15
44	114	2.5	15
46	119	3	17
48	124	3	17
50	129	3	17
52	134	3	17
54	139	3	17
56	144	3	17
58	149	3	17
60	154	3	17
TOLERANCES ±	0.5 cm	0.2 cm	0.5 cm
MEASUREMENT LOCATION	A	B	C

Table I Leather Requirements			
	Property	Requirement	Test Method
1	Identification of Leather	Full Grain bovine	<ul style="list-style-type: none"> • ISO 17131: 2012
2	Crocking	Good	<ul style="list-style-type: none"> • ASTM D5053-03 (2015)
3	Cracking, 11 mm mandrel	None	<ul style="list-style-type: none"> • ASTM D6075-13 (Procedure 1, Para. 4.1.1)
4	Belt Assembly Breaking Strength	Minimum: 1000 N	<ul style="list-style-type: none"> • ASTM D2208-16 <p><u>With following modifications:</u></p> <ul style="list-style-type: none"> • Attach a U-shaped bracket to the upper moveable component of the tensile tester. Position the bracket perpendicular to the lower clamp. Place the specimen in the testing machine with the belt buckle positioned in the U-bracket and the belt leather in the lower grip. Secure the belt buckle in bracket using a steel pin 12 ± 2 mm in diameter. • Run test with uniform separation speed of 100 ± 20 mm/min • Report individual and average results of 3 specimens. • Report the location and type of breaking behaviour. <p>Potential breaking behavior:</p> <ul style="list-style-type: none"> • Breaking of the buckle (either pin of the buckle or buckle itself) • Breaking of the belt at the buckle area (where a thickness restriction is observed); • Breaking of the seam; • Breaking of the leather at the seam; • Breaking of the belt
		Note: The length of the specimens must include the belt buckle	

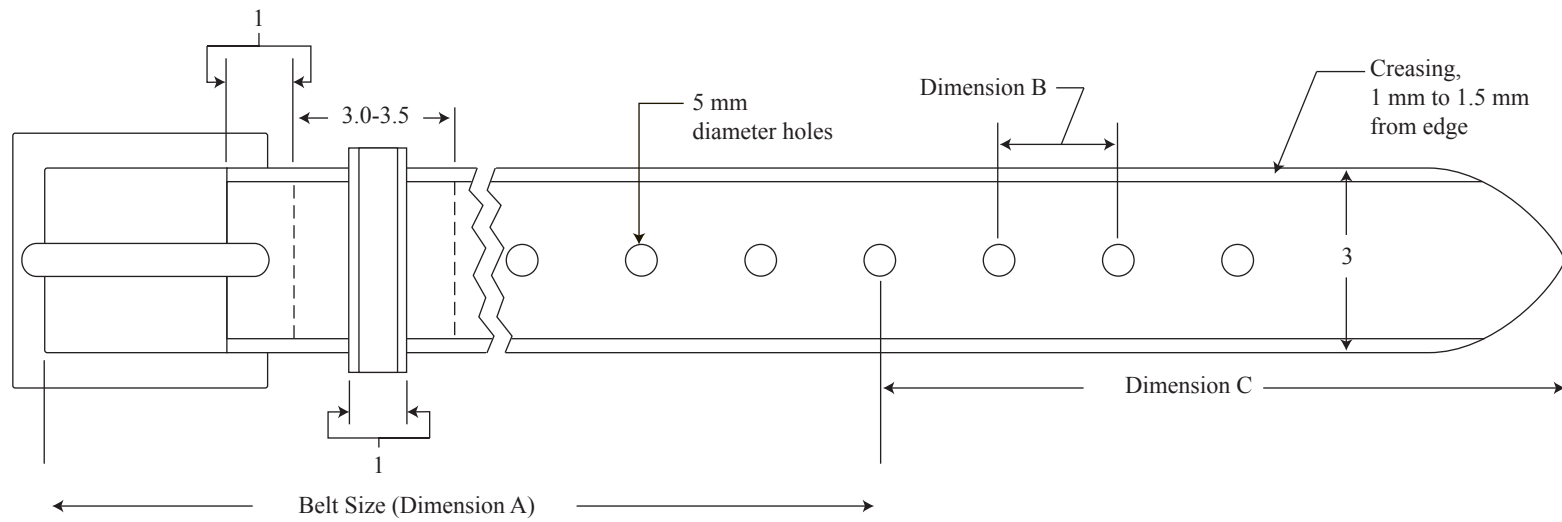
Table II Metal Composition	
Tested to ASTM B86-13	
Composition Requirements	% by Weight
Aluminium	3.7-4.3
Magnesium	0.02-0.06
Copper	0.1 max
Iron	0.05 max
Lead	0.005 max
Cadmium	0.004 max
Tin	0.002 max
Zinc*	remainder

*determined arithmetically by difference

Drawing 1

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Belt, Waist, Leather, Black



Front View

NOT TO SCALE

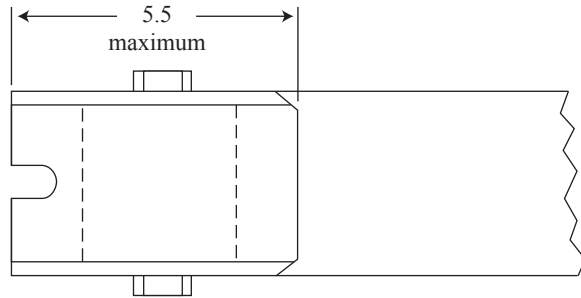
All measurements are shown in centimeters unless otherwise indicated.

± 0.5 cm tolerance acceptable unless otherwise indicated.

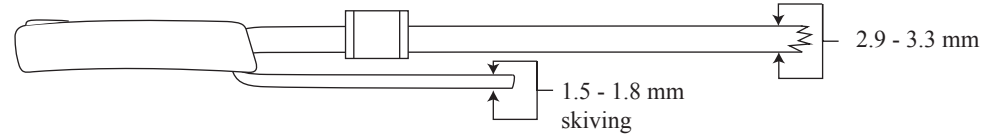
Drawing 2

G.S. 1045-122

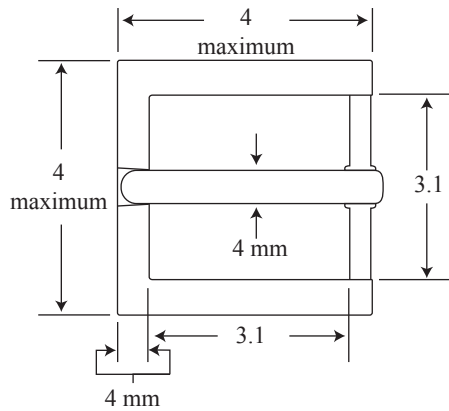
Belt, Waist, Leather, Black



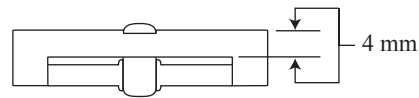
Back View
(shown without buckle attached)



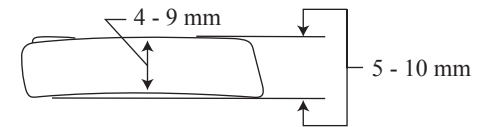
Side View
(shown without stitching)



Top View



Front View



Side View

Buckle

NOT TO SCALE

All measurements are shown in centimeters unless otherwise indicated.
± 0.2 cm tolerance acceptable unless otherwise indicated.